REFERENCE: U-5725/R-3822

PROJECT: 50162 /37765

SEE SHEET 3 FOR PLAN SHEET LAYOUT AT TIME OF INVESTIGATION

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LINE	STATION	PLAN	PROFILE
-L-	10+00 TO 100+00	4-10	-
-LI-	10+00 TO 108+86	4, 11-18	-
-Y1-	10+00 TO 16+90	4,11	-
-Y2-	10+00 TO 12+96	7	-
-Y3-	8+10 TO 30+18	7, 14, 19	20
-Y4-	10+00 TO 17+12	10	-
-Y5-	10+00 TO 14+41	12	-
-Y6-	10+00 TO 12+50	17	-
-Y7-	10+00 TO 11+80	17	-

CROSS SECTIONS

LINE	STATION	SHEETS
-L-	10+00 TO 100+00	21-97
-LI-	10+00 TO 108+50	98-183
-Y1-	10+00 TO 14+00	184-185
-Y2-	10+00 TO 12+50	186
-Y3-	10+00 TO 30+00	187-200
-Y4-	10+00 TO 17+00	201-202
-Y5-	10+00 TO 14+00	203-205
-Y6-	10+00 TO 12+00	206-208

APPENDICES

APPENDIX	TITLE	SHEETS
A	BORE LOGS	209-264
B	SOIL TEST RESULTS	265-271
C	LI_4000_STI CONSOLIDATION TEST RESULTS	272-284

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

ROADWAY SUBSURFACE INVESTIGATION

COUNTY *HALIFAX*

PROJECT DESCRIPTION *NC 125 FROM I-95 TO OLD FARM ROAD SOUTH, SR 1627 (THREE BRIDGES ROAD) FROM NC 125 TO PREMIER BOULEVARD*

INVENTORY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5725/R-3822	1	284

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF PREPARING THE SCOPE OF WORK TO BE INCLUDED IN THE REQUEST FOR PROPOSAL. 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.

SOIL AND ROCK BOUNDARIES WITHIN A BOREHOLE ARE BASED ON GEOTECHNICAL INTERPRETATION UNLESS ENCOUNTERED IN A SAMPLE. INTERPRETED BOUNDARIES MAY NOT NECESSARILY REFLECT ACTUAL SUBSURFACE CONDITIONS BETWEEN SAMPLED STRATA AND BOREHOLE INFORMATION MAY NOT NECESSARILY REFLECT ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS. 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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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	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	< 4	
	LOOSE	4 TO 10	
	MEDIUM DENSE	10 TO 30	
	DENSE	30 TO 50	
	VERY DENSE	> 50	N/A
GENERALLY SILT-CLAY MATERIAL (COHESIVE)	VERY SOFT	< 2	< 0.25
	SOFT	2 TO 4	0.25 TO 0.5
	MEDIUM STIFF	4 TO 8	0.5 TO 1.0
	STIFF	8 TO 15	1 TO 2
	VERY STIFF	15 TO 30	2 TO 4
	HARD	> 30	> 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		
	- MOIST - (M)	SOLID; AT OR NEAR OPTIMUM MOISTURE
OM — 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
∇ - 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
- [ ] CASING [ ] W/ ADVANCER
- [ ] TRICONE _____" STEEL TEETH
- [ ] TRICONE _____" TUNG.-CARB.
- [ ] CORE BIT
- [ ] _____

HAMMER TYPE:
- [X] AUTOMATIC
- [ ] MANUAL

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

HAND TOOLS:
- [ ] POST HOLE DIGGER
- [X] HAND AUGER
- [X] 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: FILE "R3822_U5725_MERGED FINAL.TIN", PROVIDED ON 9-29-2017, WAS USED TO DETERMINE TOP OF GROUND ELEVATIONS AT BORING LOCATIONS ELEVATION: FEET

NOTES:

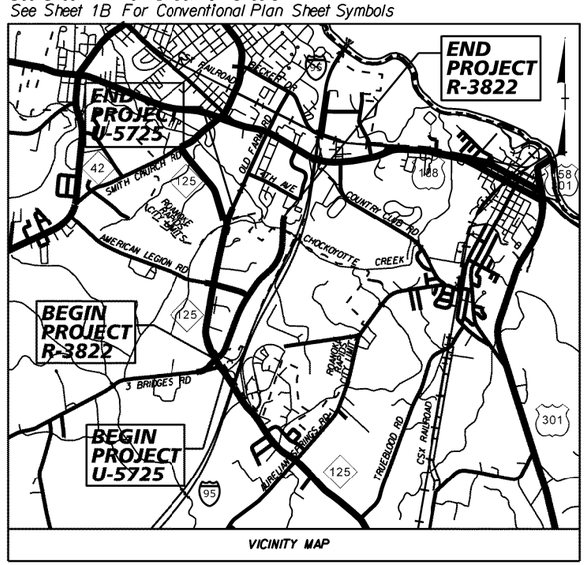
FIAO= FILLED IMMEDIATELY AFTER DRILLING

DATE: 8-15-14

CONTRACT: TIP PROJECTS: U-5725/R-3822

$DATE$

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



25% PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HALIFAX COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5725/R-3822	3	284

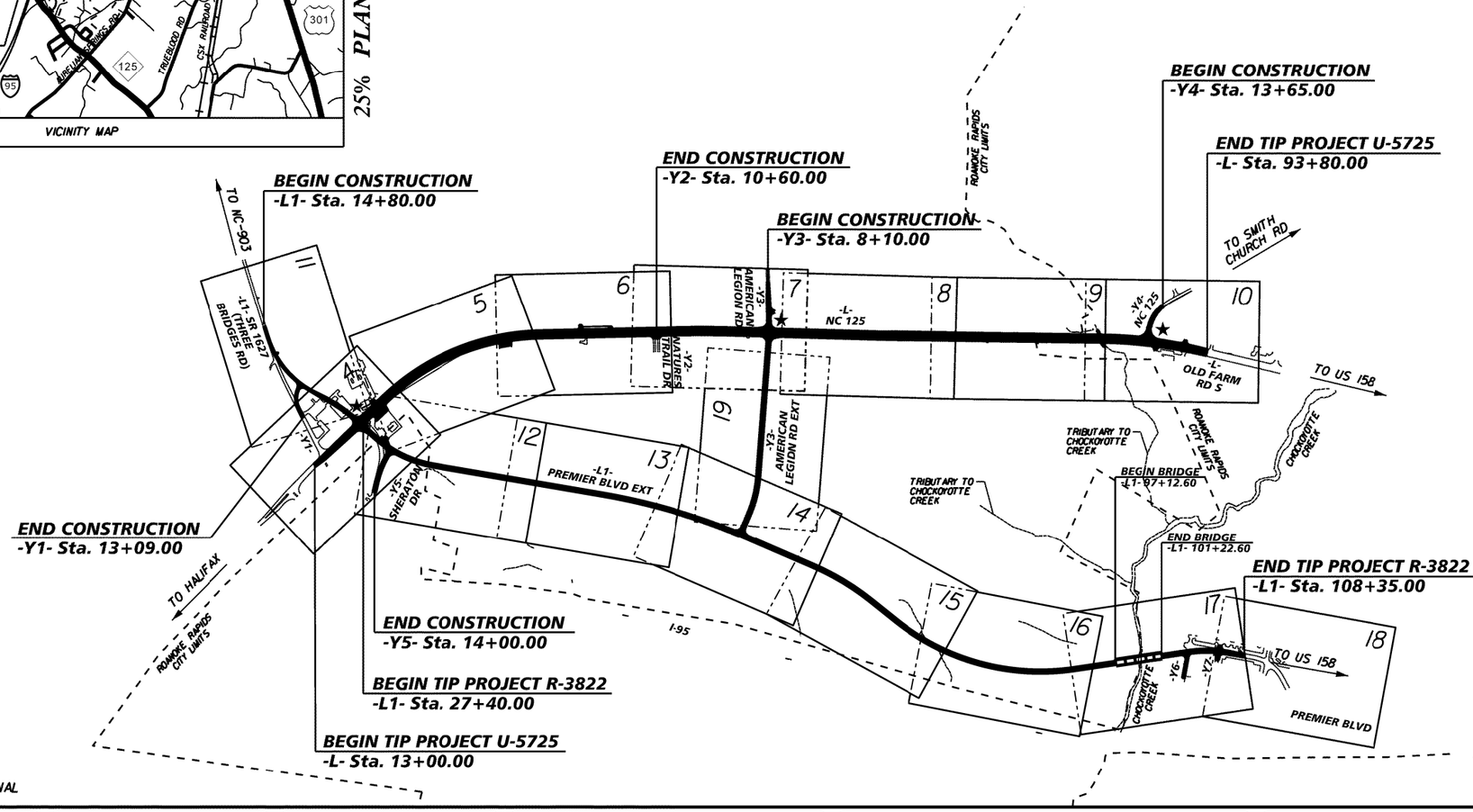
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
50162.1.1		P.E. (U-5725)
37765.1.6		P.E. (R-3822)

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

LOCATION: NC 125 FROM I-95 TO OLD FARM ROAD SOUTH, SR 1627 (THREE BRIDGES ROAD) FROM NC 125 TO PREMIER BOULEVARD

TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING, SIGNALS, AND STRUCTURES

NC GRID
NAD 83/95



★ PROPOSED TRAFFIC SIGNAL

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

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II
A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF ROANOKE RAPIDS

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

5 2.5 0 5 10
PROFILE (VERTICAL)

U-5725 DESIGN DATA

AADT 2017 = 10400
AADT 2040 = 15100
K = 10%
D = 55%
T = 3%*
V = 50 MPH
* (TTST 1% + DUAL 2%)
FUNCTIONAL CLASSIFICATION:
RURAL ARTERIAL
REGIONAL TIER

R-3822 DESIGN DATA

AADT 2017 = 0
AADT 2040 = 3200
K = 8%
D = 55%
T = 3%*
V = 40 MPH
* (TTST 1% + DUAL 2%)
FUNCTIONAL CLASSIFICATION:
LOCAL
SUB-REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-3822 = 1.455 MILES
LENGTH STRUCTURE TIP PROJECT R-3822 = 0.078 MILES
TOTAL LENGTH TIP PROJECT R-3822 = 1.533 MILES
LENGTH ROADWAY TIP PROJECT U-5725 = 1.530 MILES
TOTAL LENGTH TIP PROJECT U-5725 = 1.530 MILES

PLANS PREPARED FOR THE NCDOT BY:

Kimley»Horn ©2017
NC LICENSE #F-0102
421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NORTH CAROLINA 27601
PHONE: (919) 677-2000

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

MATTHEW WEST, PE
PROJECT ENGINEER

RACHEL ABROMAITIS, PE
PROJECT DESIGN ENGINEER

MATT CLARKE, PE
PROJECT ENGINEER
NCDOT HIGHWAY DIVISION 4

HYDRAULICS ENGINEER

SIGNATURE: *P.E.*

ROADWAY DESIGN ENGINEER

SIGNATURE: *P.E.*

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

ESP Associates, P.A.

February 8, 2018

STATE PROJECT: 50162.1.1 (U-5725)/37765.1.5 (R-3822)
COUNTY: Halifax
DESCRIPTION: Widening of NC 125 (-L-) from I-95 to Old Farm Road/Premier Boulevard Extension (-L1-) from NC 125 to South of US 158
SUBJECT: Geotechnical Inventory

Project Description

NC 125 Widening (U-5725)

This proposed project is located in Roanoke Rapids, North Carolina. It begins at Station 13+00, which is approximately 1,150 feet north of I-95, and continues to Station 93+80, which is approximately 530 feet north of the intersection of NC 125 and Old Farm Road for a total project length of approximately 1.5 miles. The project area is primarily rural with primarily single-family homes and cultivated fields.

Proposed is the addition of two new lanes to the existing two-lane roadway. The location of the proposed widening in relation to the existing roadway varies along the length of the project. The proposed maximum embankments heights for this portion of the project are approximately 15 feet while the proposed maximum cut depths are approximately 5 feet. Intersections along the project include Three Bridges Road (-L1-), Natures Trail Road (-Y2-), American Legion Road Extension (-Y3-), and NC 125 (-Y4-).

This geotechnical investigation was confined to the areas of proposed construction.

Premier Boulevard Extension (R-3822)

This project is located in Roanoke Rapids, North Carolina. It begins at Station 14+95, which is approximately 1,185 feet west of NC 125 (-L-), and continues to Station 108+35, which is approximately 430 feet south of the existing end of Premier Boulevard for a total project length of approximately 1.8 miles. The project area is primarily rural with primarily woods and cultivated fields.

Proposed is the construction of a new two-lane roadway. The proposed maximum embankments heights for this portion of the project are approximately 15 feet while the proposed maximum cut depths are approximately 10 feet. Intersections along the project include -Y1-, Sheraton Drive (-Y5-), American Legion Road Extension (-Y3-), -Y6-, and -Y7-. This geotechnical investigation was confined to the areas of proposed construction.

This geotechnical investigation was confined to the areas of proposed construction.

Initial site scoping and the beginning of boring layout was performed on October 12, 2017. The field bridge/roadway investigation was performed from October 16 through November 15, 2017 and December 18 through 22, 2017. Standard Penetration Test borings were advanced with a CME 550X drill machine equipped with an automatic hammer. Hand auger borings with bridge probe rods were also performed at selected locations. Representative soil samples were collected for visual classification in the field and for laboratory analyses.

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

Alignment	Station(±)
-L-	13+00 to 93+80
-L1-	14+80 to 108+35
-Y1-	10+00 to 13+10
-Y2-	10+00 to 11+40
-Y3-	10+00 to 30+19
-Y4-	13+65 to 17+12
-Y5-	10+00 to 14+00
-Y6-	10+00 to 12+30
-Y7-	10+00 to 10+80

Physiography and Geography

The project corridor is located on the eastern edge of the Eastern Slate Belt physiographic province and on the western edge of the Coastal Plan physiographic province. The Eastern Slate Belt lies to the east of the Raleigh and Kiokee metamorphic belts and is composed dominantly of lower grade metamorphosed greenschist facies metavolcanic rocks, metasedimentary rock, and several post-metamorphic plutons. Rock was only encountered during this investigation in the borings performed for the culvert (centerline at -L- Station 84+52) on NC 125, and in the borings for the bridge over Chockoyotte Creek (-L1- Stations 97+13 to 101+23). The rock encountered consisted of metamorphosed quartz diorite.

The Geologic Map of North Carolina (1985) shows the project corridor area to have coastal plain sediments interwoven with the above Eastern Slate Belt materials. The Coastal Plain materials within the project area are Undivided Coastal Plain materials deposited during transgressive-regressive cycles caused by eustatic sea level fluctuations and generally consist of sand, clayey sand, and clay. Residual soils (Eastern Slate Belt Materials) were only encountered on -L- from Station 81+25± to 87+25±, on -L1- from Stations 85+75± to 86+75±, 92+25± to 95+75, and 96+75± to 104+75±, in the borings for the bridge on -L- over Chockoyotte Creek, and on -Y6- from Stations 10+25± to 10+75±. The residual soils generally consist of sands, silts, and clays

The topography along the project corridor consist of gently rolling hills. The proposed roadway along NC 125 (-L-) generally slopes down from the beginning (south end) of the project to the end (north end) of the project with elevations ranging from approximately 165 feet (MSL) to approximately 105 feet (MSL), while the proposed roadway along Premier Boulevard Extension (-L-) generally slopes down from the beginning (west end) of the project to the end (north end) of the project with elevations ranging from approximately 160 feet (MSL) to approximately 85 feet (MSL). Swampy areas is present on -L- between Stations 81+00± and 87+00±, and on -L1- between Stations 39+00± and 41+00±, 94+50± and 99+00±, and 100+00± and 101+50±.

Soil Properties

Soils encountered within this project area have been divided into five categories: alluvial deposits, artificial fill, roadway embankment, coastal plain soils, residual soils, and weathered rock.

Asphalt pavement (either existing roadway or drive/parking areas) was present at the existing ground surface at the following borings: L_4100, L_4500, L_5350, Y5_1059RT. The asphalt encountered within the roadway borings ranges in thickness from 3 inches to 8.5 inches with 6 inches of ABC stone underlying the asphalt at boring Y5_1059RT. The pavement design investigation performed for this project and issued under separate cover indicates that the existing asphalt pavement within the existing NC 125 roadway within the project limits ranges from 4 to 9.5 inches in thickness with base stone thicknesses ranging from 0 to 7.5 inches.

Surficial organic soils were encountered in Borings L_2123, L_2300, L_2500, L_2700, L_2900RT, L_3100, L_5100, L_5500, L_6500, L_6700, L_6900, L_7100, L_7300, L_7900, L_8220, L_8700, L1_2270, L1_2800, L1_3200, L1_3600, L1_3800, L1_4200, L1_4400, L1_4600, L1_8216, Y3_1300, Y3_2100, and Y5_1050LT to depths ranging from 0.3 feet to 1.3' below the existing ground surface. Minor amounts (less than 4 inches) of topsoil was encountered in other borings.

Soils identified as alluvial deposits were encountered in borings L_8100, L_8220, CULV1-A, CULV1-B, L_8700 LT, L_8700RT, L1_3400, L1_4000, L1_8000, the borings for the bridge on -L1- over Chockoyotte Creek, and Y4_1550. The alluvial deposits range in depth from 1.7 feet to 10 feet below the existing ground surface and generally consist of very soft to medium stiff, sandy silt (A-4), clayey silt (A-5), sandy clay (A-6), and silty clay (A-7), and of very loose to medium dense, silty sand (A-2-4), and clayey sand (A-2-6). Organic contents within the alluvial materials range from a trace to highly organic (muck) and gravel/cobbles are common.

Artificial fill material was encountered in borings CULV1-A, L_8700, L1_2800, L1_3000, L1_8000, L1_10300, L1_10502, L1_10700, and Y6_1050LT. Artificial fill is fill material placed outside of the roadway embankment by entities other than the NCDOT and thus without the quality and compaction controls inherent in roadway embankment construction. The artificial fill extended to depths ranging from approximately 1.2 feet to approximately 10 feet below the existing ground surface and sampled as soft to medium stiff, silty clay (A-6 and A-7-5), and very loose to medium dense sand (A-1-b), silty sand (A-2-4) and clayey sand (A-2-6). Gravel was present within some of in the sampled artificial fill, and the higher blow counts within the artificial fill were influenced by the gravel. Moderate amounts of organics were present within the artificial fill at Boring Y6_1050LT.

Roadway embankment soils were encountered in Borings L_1700, L_4100, L_4500, L_5350, L_7900, and Y5_1059RT. Where encountered, the roadway embankment ranged in thickness from approximately 1.5 feet to approximately 5.3 feet, and was composed of medium stiff to stiff, sand clay (A-6), and loose to medium dense, coarse sand (A-1-b) and silty sand (A-2-4). Roadway embankment soils are present underlying the majority of the existing NC 125 (-L-) roadway. The pavement design investigation performed for this project and issued under separate cover indicates that the existing roadway embankment soils under NC 125 generally consist of sandy clay (A-6) and silty sand (A-2-4).

Soils classified as Undivided Coastal Plain were encountered in all borings drilled for this project with the exception of Borings L_8220, CULV1-A, CULV1-B, and the borings for the bridge on -L1- over Chockoyotte creek. The coastal plain soils consisted of very soft to hard, clayey silt (A-5) and silty clay (A-7-5), and very loose to dense sand (A-1-b and A-2-4) and clayey sand (A-2-6). Plasticity indexes within the clay soils ranged from slightly to highly plastic. All borings with the exception of Borings L_8220, CULV1-A, CULV1-B, L_8700RT, L1_8600, L1_9400, the borings for the bridge on -L1- over Chockoyotte Creek, and Boring L1_10300 were terminated in coastal plain soil.

Soils classified as residual consisted of soft to hard, sandy silts (A-5), sandy clays (A-6), and silty clays (A-7) , and medium dense to dense silty sand (A-2-4). Borings L1_8600, L1_9400, and L1_10300 were terminated in residual soil.

Weathered rock is defined as material that has weathered from the parent bedrock and that exhibits SPT N values greater than 100 blows per foot but less than 60 blows per 0.1 foot. The weathered rock on this project is Metamorphosed Quartz Diorite and was encountered underlying the residual soil on -L- at depths ranging from approximately 6 feet to approximately 16.5 feet. At the borings drilled for the bridge on -L1- over Chockoyotte creek, weathered rock was encountered either directly underlying the alluvium or underlying the residual soils at depths ranging from approximately 6 feet to approximately 27 feet. Boring EB2-B was terminated in weathered rock

Rock Properties

Crystalline rock is visible along the project corridor in as rock outcrops in the creek on -L- (approximately Station 84+52). Strikes and dips for the rock outcrops could not be measured due to the limited amounts of rock exposed. Crystalline rock was encountered either directly underlying the residual soil or underlying weathered rock in Borings L_8220, CULV1-A, CULV1-B, and L-8700RT at depths ranging from approximately 8.5 feet to approximately 17.5 feet. Crystalline rock was also encountered in the borings drilled for the bridge on -L1- over Chockoyotte Creek directly underlying the residual soil or underlying the weathered rock at depths ranging from approximately 10 feet to approximately 39 feet. The crystalline rock along the project corridor classifies as a Metamorphosed Quartz Diorite.

Groundwater Properties

Ground water data was collected in November and December, 2017. Ground water depths ranged from 1± to 13± feet below the existing ground surface, and groundwater elevations ranged from 140± to 77± feet above sea level.

Areas of Special Geotechnical Interest

1) The following sections contain soft, cohesive soils within 3 feet of the proposed subgrade which have the potential to cause embankment/subgrade and/or slope stability problems during construction:

Alignment	Station(±)
-L-	71+75 to 74+25
-L-	76+25 to 78+25
-L-	80+25 to 81+75
-L-	83+75 to 85+75
-L1-	17+25 to 22+25
-L1-	22+75 to 25+25
-L1-	31+75 to 35+25
-L1-	71+75 to 75+25
-L1-	76+25 to 77+75
-L1-	79+25 to 81+25

2) The following sections contain soils with greater than 4 percent organic content (including topsoil greater than 4 inches thick) which have the potential to cause embankment/subgrade and or slope stability problems during construction:

Alignment	Station(±)
-L-	20+75 to 32+75
-L-	50+75 to 51+25
-L-	53+75 to 55+25
-L-	55+75 to 56+25
-L-	63+25 to 68+75
-L-	69+25 to 73+25
-L-	80+75 to 87+25
-L1-	20+75 to 23+75
-L1-	27+75 to 28+75
-L1-	30+25 to 40+75
-L1-	41+25 to 47+75
-L1-	79+75 to 82+25
-L1-	103+25 to 104+25
-Y3-	20+25 to 21+75
-Y5-	10+25 to 10+75
-Y6-	10+25 to 10+75

3) The following sections contain high plasticity soils within 3 feet of the proposed subgrade which have the potential to cause embankment/subgrade and or slope stability problems during construction:

Alignment	Station(±)
-L-	22+75 to 28+25
-L-	54+25 to 55+75
-L-	56+75 to 58+25
-L-	74+25 to 76+25
-L1-	74+75 to 75+75
-L1-	76+25 to 77+25
-Y3-	16+25 to 21+75

4) The following sections contain wet to saturated soils within 3 feet of the proposed subgrade which have the potential to cause embankment/subgrade and or slope stability problems during construction:

Alignment	Station(±)
-L-	71+75 to 74+25
-L-	76+25 to 82+25
-L1-	16+75 to 22+25
-L1-	32+75 to 35+25
-L1-	71+25 to 77+75
-L1-	79+25 to 81+25
-Y5-	10+00 to 10+75

5) The following sections contain groundwater within 6 feet of the proposed grade:

Alignment	Station(±)
-L-	77+75 to 82+75
-L1-	71+25 to 81+75
-L1-	101+30 to 103+25

6) The following section contain artificial fill material. Artificial fill is fill material placed outside of the roadway embankment by entities other than the NCDOT and thus without the quality and compaction controls inherent in roadway embankment construction. The artificial fill encountered extended to depths ranging from approximately 2 feet to approximately 8 feet below the existing ground surface. Even though significant quantities of deleterious material was not encountered in the artificial fill sampled in the borings drilled for this project, there is a high probability of these materials within portions of the artificial fill (such as mentioned in Section 2 above):

Alignment	Station to Station (±)	Offset (±)
-L-	18+25 to 18+75	80’ RT to +110’ RT
-L-	86+75 to 87+25	65’ LT to +150’ LT
-L1-	27+75 to 28+25	11’ LT to +50’ RT
-L1-	29+75 to 30+25	36’ LT to 30’ RT
-L1-	79+75 to 81+25	30’ Lt to +50’ RT
-L1-	102+75 to 108+00	+60’ Lt to +60’ RT
-Y6-	10+00 to 12+30	+60’ Lt to +60’ RT

APPENDIX A – UNDISTURBED AND BULK SAMPLES

SAMPLE NO.	ALIGNMENT	STATION	OFFSET	SAMPLE DEPTH (FT)	SAMPLE TYPE
ST-1	-L1-	40+00	CL	8.3-10.1	Consolidation
UD-1	-L-	36+00	25’ LT	0.0-3.0	Standard Proctor and CBR
UD-2	-L-	73+00	25’ RT	0.0-3.0	Standard Proctor and CBR

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421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

5/14/2021

REVISIONS

$DATE$

-L-

PI Sta 12+22.01
Δ = 5° 06' 49.7" (RT)
D = 1° 54' 35.5"
L = 267.76'
T = 133.97'
R = 3,000.00'

PI Sta 29+17.86
Δ = 41° 55' 36.6" (RT)
D = 2° 51' 53.2"
L = 1,463.52'
T = 766.26'
R = 2,000.00'
e = 4.0
R_{sr} = 192'

-LI-

PI Sta 25+10.02
Δ = 13° 12' 00.6" (RT)
D = 4° 46' 28.7"
L = 276.46'
T = 138.85'
R = 1,200.00'
e = 3.2
R_{sr} = 64'

PI Sta 31+76.35
Δ = 32° 06' 43.9" (LT)
D = 5° 43' 46.5"
L = 560.46'
T = 287.81'
R = 1,000.00'
e = 3.6
R_{sr} = 108'

NAD 83 / NA 2011

-L- POT Sta. 10+00.00

BEGIN TIP PROJECT U-5725
-L- POC Sta. 13+00.00

MATCHLINE -Y1- STA 13+50
SEE PLAN SHEET 11

MATCHLINE -LI- STA 23+50.00
SEE PLAN SHEET 11

N 73° 35' 33.3" E
-Y1-

N 39° 45' 55.7" E
-LI- PC Sta. 23+71.18

-LI- PT Sta. 26+47.64

BEGIN 2'-6" C&G
-LI- STA 26+11.01
SEE DETAIL X,
SHEET XX-X

-L- Sta.18+29.18 =
-LI- Sta.27+03.30

-L1- SR 1627
(THREE BRIDGES RD)

BEGIN CONCRETE
MONOLITHIC ISLAND
-L- STA 16+73.00

END CONCRETE
MONOLITHIC ISLAND
-L- STA 17+52.00

LI_2400

LI_2619

L_2123

L_1700

L_1905

LI_2800

-L- NC 125

N 37° 10' 24.6" W

-L- POT Sta.14+06.01 =
-Y1- POT Sta.16+89.67

-L- PC Sta. 10+88.04

-L- PT Sta. 13+55.80

BEGIN 2'-6" C&G
-L- STA 17+36.82
SEE DETAIL X,
SHEET XX-X

N 32° 03' 34.9" W

N 52° 57' 56.3" E

-LI- PC Sta. 28+88.54

-L1- PREMIER BLVD EXT

END CONCRETE
MONOLITHIC ISLAND
BEGIN 1'-6" C&G
-L- STA 19+73.65

BEGIN CONCRETE
MONOLITHIC ISLAND
-L- STA 18+93.00

-L- PC Sta. 21+51.60

BEGIN TIP PROJECT R-3822
-L1- POT Sta. 27+40.00

MATCHLINE -LI- STA 30+00.00
SEE PLAN SHEET 12

MATCHLINE -L- STA 22+00.00
SEE PLAN SHEET 5

2017 ADT / 2040 ADT	-LI- SR 1627 (THREE BRIDGES RD)	DHV = 10%, DIR = 55%, TTST = 1%, DUAL = 2%
2800 / 3900		
9600 / 15100	1000 / 1400	1800 / 2200 — 10400 / 14400
-L- NC 125: DHV = 10%, DIR = 55%, TTST = 1%, DUAL = 2%	0 / 2100	0 / 600 — -L- NC 125: DHV = 9%, DIR = 60%, TTST = 1%, DUAL = 2%
	0 / 3000	
	-LI- PREMIER BLVD EXT: DHV = 8%, DIR = 60%, TTST = 1%, DUAL = 2%	

~~SEE SHEET NO. 20 FOR -L- PROFILE~~
~~SEE SHEET NO. 24 FOR -L1- PROFILE~~
~~SEE SHEET NO. 27 FOR -Y1- PROFILE~~

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RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

5/14/22

REVISIONS

$DATE$

-L-
PI Sta 29+17.86
Δ = 41° 55' 36.6" (RT)
D = 2° 51' 53.2"
L = 1,463.52'
T = 766.26'
R = 2,000.00'
e = 4.0
R_{ss} = 192'

NAD 83 /NA 2011

25

30

-L- NC 125

L_2300

L_2500

L_2700

L_2900LT

L_2900RT

L_3100

L_3300

18" RCP-IV

24" RCP-IV

CB

2'-6 C&G

1'-6 C&G

5' SIDEWALK

15'R

EXISTING R/W

CABLE (CHARTER)

MATCHLINE -L- STA 22+00.00
SEE PLAN SHEET 4

MATCHLINE -L- STA 34+00.00
SEE PLAN SHEET 6

SEE SHEET NO. 20 FOR -L- PROFILE

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RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

5/14/22

REVISIONS

-L-
PI Sta 29+17.86
Δ = 41° 55' 36.6" (RT)
D = 2° 51' 53.2"
L = 1,463.52'
T = 766.26'
R = 2,000.00'
e = 4.0
R_{sup} = 192'

35 40 45

MATCHLINE -L- STA 34+00.00
SEE PLAN SHEET 5

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

L_3500 L_3699 L_3900 L_4100 L_4300 L_4500

N 9° 52' 01.7" E

-L- NC 125

-L- PT Sta. 36+15.12

100' BAY TAPER 250' STORAGE LENGTH

WOODS GRASS PAVED ISFD DELAPIDATED WD. BLD. 2SFD 2 CAR G PORCH GUY

5' SIDEWALK 2'-6" C&G 1'-6" C&G 20' DR

SEE SHEET NO. 21 FOR -L- PROFILE

$DATE$

Kimley»Horn
421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

5/14/2021

REVISIONS

$DATE$

-L-
PI Sta 50+34.10
Δ = 2° 50' 55.7" (RT)
D = 0° 47' 36.9"
L = 358.98'
T = 179.53'
R = 7,220.00'
e = NC

NAD 83 /NA 2011

45

50

55

10

-L- POT Sta. 46+12.32 =
-Y2- POT Sta. 10+00.00

-L- PC Sta. 48+54.57

-L- PT Sta. 52+13.56

-L- POT Sta. 55+90.19 =
-Y3- PI Sta. 12+50.00

BEGIN CONSTRUCTION
-Y3- POT Sta. 8+10.00

250' STORAGE LENGTH

330' STORAGE LENGTH

100' BAY TAPER

450' STORAGE LENGTH

160' TAPER

100' BAY TAPER

230' STORAGE LENGTH

450' STORAGE LENGTH

L_4676

L_4900

L_5100

L_5350

L_5500

L_5700

L_4500

Y3_1300

-L- NC 125

N 9° 52' 01.7" E

N 12° 42' 57.4" E

S 80° 19' 17.4" E

S 80° 22' 25.6" E

S 74° 28' 51.4" E

-Y2- NATURES TRAIL DR

-Y3- AMERICAN LEGION RD

-Y3- AMERICAN LEGION RD EXT

END 2'-6" C&G
-Y2- STA 10+60.00

BEGIN 2'-6" C&G
-Y2- STA 10+60.00

END CONSTRUCTION
-Y2- POT Sta. 10+60.00

END 2'-6" C&G
-Y3- STA 11+40.35
SEE DETAIL X,
SHEET XX-X

BEGIN 2'-6" C&G
-Y3- STA 11+53.99
SEE DETAIL X,
SHEET XX-X

END CONCRETE
MONOLITHIC ISLAND
-L- STA 55+27.00

END 1'-6" C&G
BEGIN CONCRETE
MONOLITHIC ISLAND
-L- STA 54+46.21

BEGIN CONCRETE
MONOLITHIC ISLAND
-L- STA 56+58.00

END CONCRETE
MONOLITHIC ISLAND
BEGIN 1'-6" C&G
-L- STA 57+38.78

BEGIN SIDEWALK
-L- STA 56+17.85

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

MATCHLINE -L- STA 58+00.00
SEE PLAN SHEET 8

MATCHLINE -Y3- STA 16+00.00
SEE PLAN SHEET 19

2017 ADT / 2040 ADT	-Y3- AMERICAN LEGION RD	DHV = 10% DIR = 65% TTST = 1% DUAL = 4%
-L- NC 125	10400 / 15000	DHV = 10% DIR = 55% TTST = 1% DUAL = 2%
-L- NC 125	9300 / 13500	DHV = 10% DIR = 55% TTST = 1% DUAL = 2%
-Y3- AMERICAN LEGION RD	2900 / 5100	
-Y3- AMERICAN LEGION RD	2000 / 3000	
-Y3- AMERICAN LEGION RD	900 / 1600	
-Y3- AMERICAN LEGION RD	0 / 300	
-Y3- AMERICAN LEGION RD	0 / 200	
-Y3- AMERICAN LEGION RD	0 / 1000	
-Y3- AMERICAN LEGION RD EXT		DHV = 10% DIR = 55% TTST = 1% DUAL = 2%

~~SEE SHEET NO. 21 FOR -L- PROFILE~~
~~SEE SHEET NO. 28 FOR -Y2- PROFILE~~
~~SEE SHEET NO. 28 FOR -Y3- PROFILE~~

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Kimley»Horn
421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, N.C. 27601

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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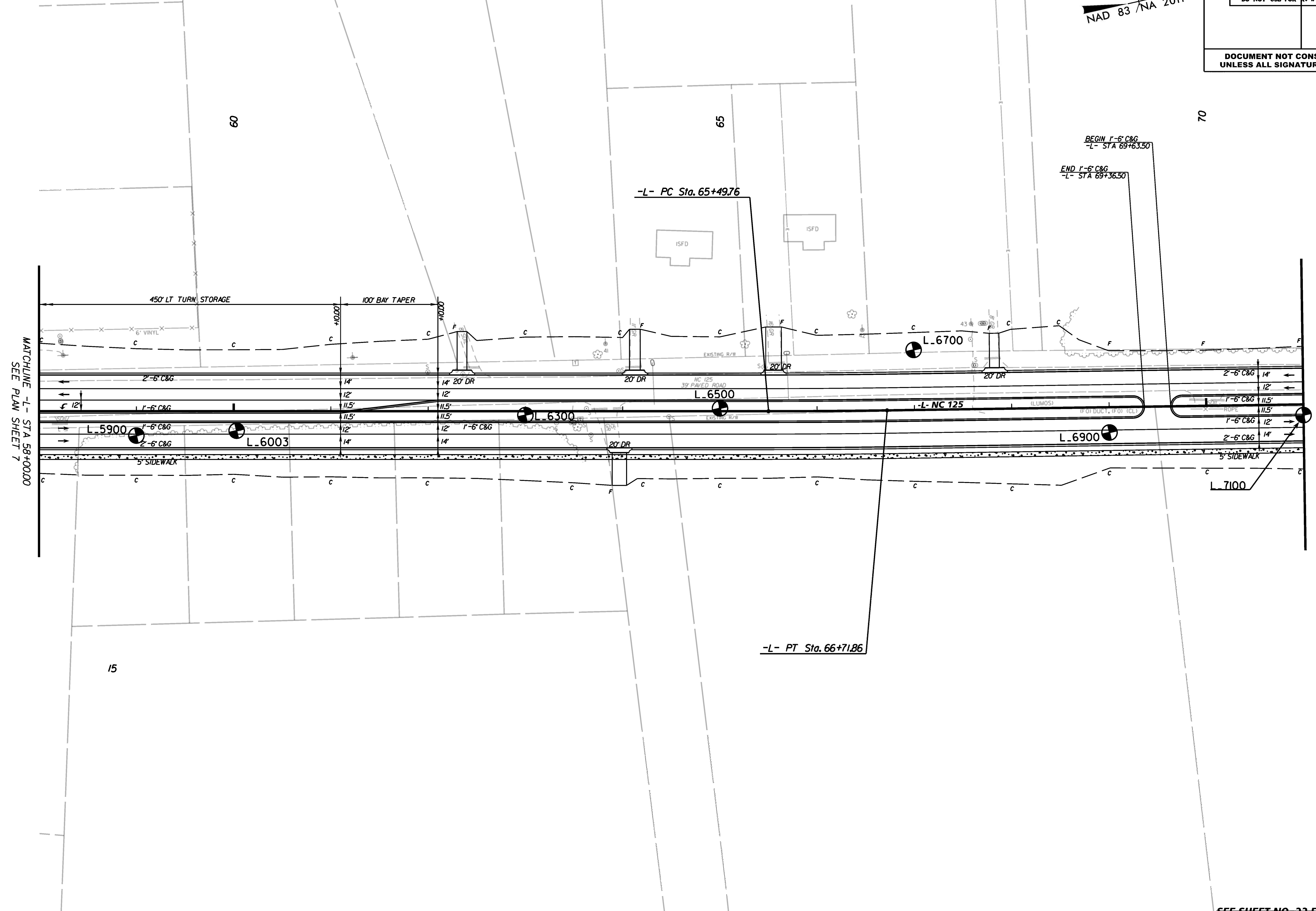
-L-
PI Sta 66+10.81
Δ = 0° 49' 23.0" (LT)
D = 0° 40' 26.6"
L = 122.10'
T = 61.05'
R = 8,500.00'
e = NC



REVISIONS

$DATE$

5/14/99

SEE SHEET NO. 22 FOR -L- PROFILE

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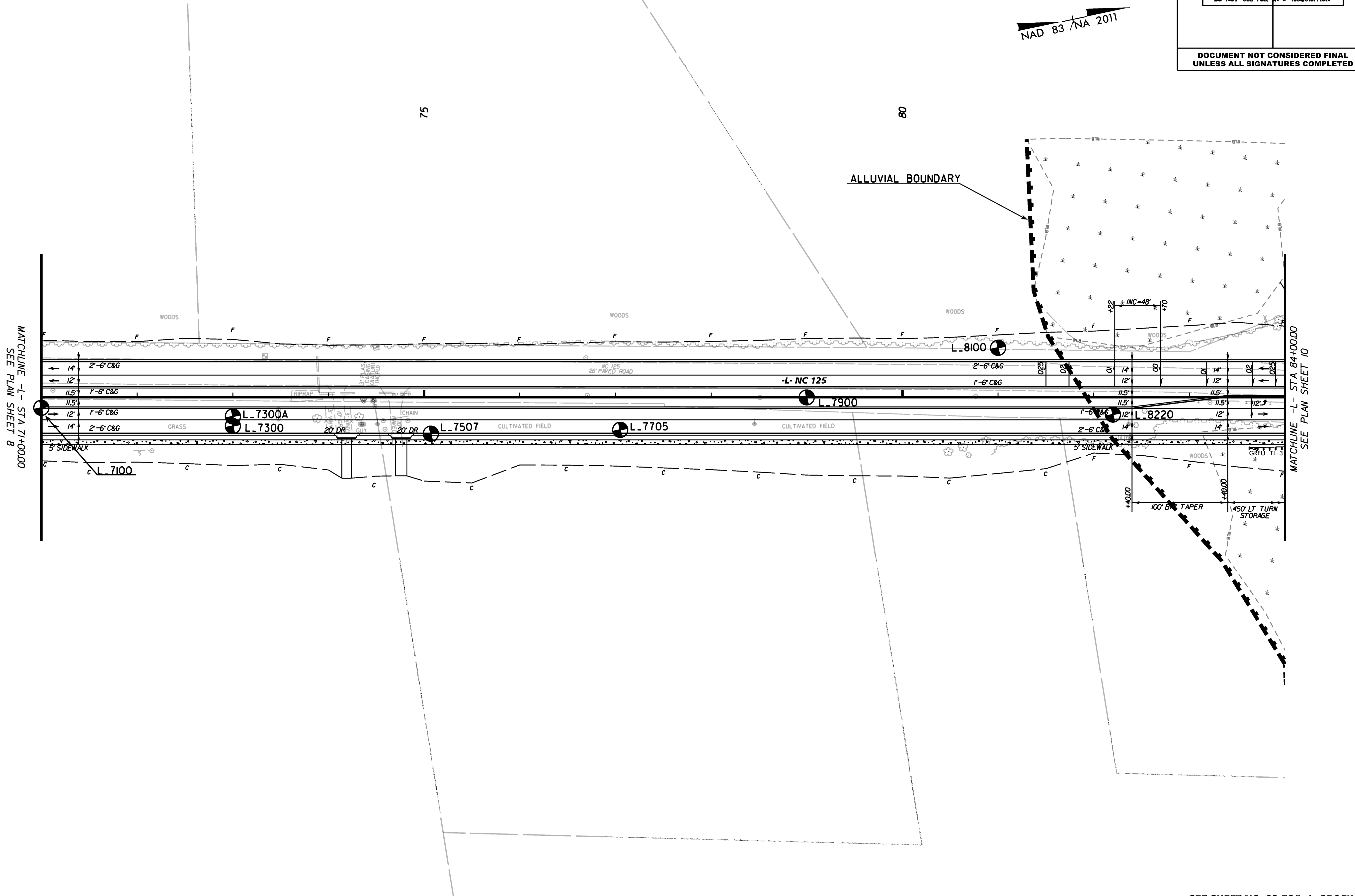
RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



REVISIONS

5/14/99

$DATE$

SEE SHEET NO. 22 FOR -L- PROFILE

-L-	-Y4-	
PI Sta 88+87.76	PI Sta 12+36.98	PI Sta 14+50.78
△ = 12° 35' 34.1" (RT)	△ = 1° 18' 03.4" (LT)	△ = 41° 37' 20.1" (LT)
D = 1° 25' 56.6"	D = 5° 43' 46.5"	D = 15° 54' 55.8"
L = 879.14'	L = 222.71'	L = 299.22'
T = 441.35'	T = 111.35'	T = 158.86'
R = 4,000.00'	R = 1,000.00'	R = 360.00'
e = RC	e = 3.8	e = 3.8
R_{av} = 120'	R_{av} = 76'	R_{av} = 76'

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RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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NAD 83 /NA 2011

REVISIONS

5/14/2021

$DATE$

MATCHLINE -L- STA 84+00.00
SEE PLAN SHEET 9

-Y4- PC Sta. 12+25.63
-Y4- PT Sta. 12+48.33
S 18° 28' 12.9" E
-Y4- PC Sta. 12+91.92
-Y4- NC 125
S 11° 10' 09.5" E
-Y4- POT Sta. 10+00.00
-Y4- PT Sta. 15+91.14
S 66° 05' 33.0" E
N 11° 53' 34.4" E
-L- PC Sta. 84+46.41
ALLUVIAL BOUNDARY
BEGIN 2'-6" C&G
-Y4- STA 15+94.37
SEE DETAIL x,
SHEET XX-x
BEGIN CONSTRUCTION
-Y4- POC Sta. 13+65.00
BEGIN 2'-6" C&G
-Y4- STA 15+73.04
SEE DETAIL x,
SHEET XX-x
100' BAY TAPER
200' STORAGE
Y4_1550
CULVI_A
L_8700LT
CULVI_B
L_8700RT
-L- NC 125
2'-6" C&G
1'-6" C&G
5' SIDEWALK
20' DR
30°R
25°R
80°R
END 1'-6" C&G
-L- STA 87+90.00
450' LT TURN STORAGE
590' LANE SHIFT
-L- POC Sta. 88+50.13 =
-Y4- POT Sta. 17+12.45
ALLUVIAL BOUNDARY
OLD FARM ROAD SOUTH
EX PAVED WIDTH
PAVED
ISBK BUS
END 2'-6" C&G
TIE TO EXIST
-L- STA 91+50.00
END SIDEWALK
-L- STA 91+61.39
-L- PT Sta. 93+25.56
END TIP PROJECT U-5725
-L- POT Sta. 93+80.00
END 2'-6" C&G
TIE TO EXIST
-L- STA 93+80.00
-L- OLD FARM RD S
N 24° 29' 08.5" E
2' PLAS. (ASTURY) (RCPU)
TO KATHRYN DRIVE
25' PAVED ROAD
24' PAVED
19' GR
EXIST 046
EXIST 022
85
90
95
10
15

5/14/99

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421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, N.C. 27601

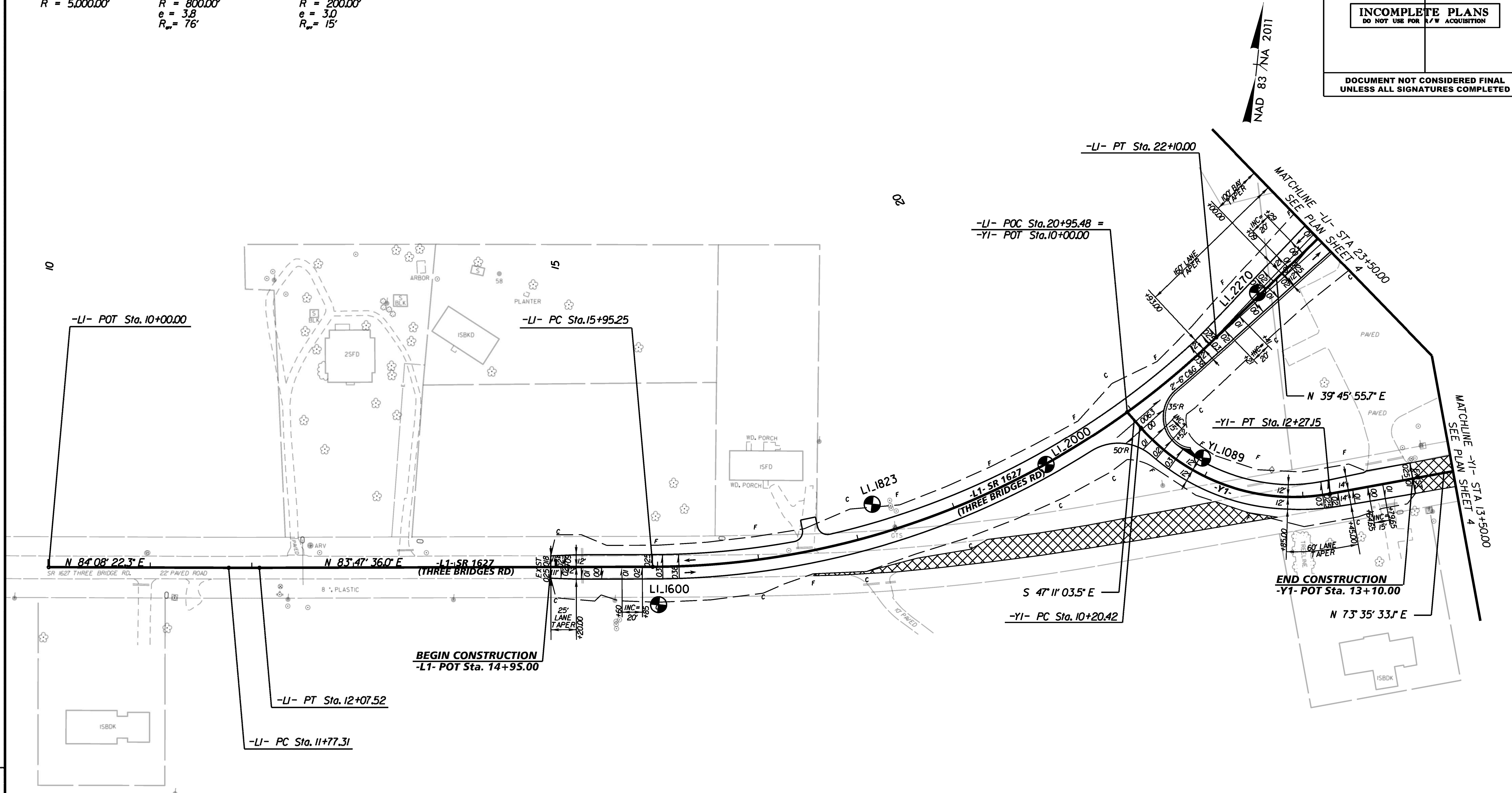
PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	11
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L1-	-L1-	-Y1-
PI Sta 11+92.42	PI Sta 19+18.70	PI Sta 11+34.09
Δ = 0°20' 46.2" (LT)	Δ = 44°01' 40.4" (LT)	Δ = 59°13' 23.4" (LT)
D = 1°08' 45.3"	D = 7°09' 43.1"	D = 28°38' 52.4"
L = 30.21'	L = 614.75'	L = 206.73'
T = 15.10'	T = 323.45'	T = 113.67'
R = 5,000.00'	R = 800.00'	R = 200.00'
	e = 3.8	e = 3.0
	R_{wr} = 76'	R_{wr} = 15'

REVISIONS



NAD 83 /NA 2011
-L1- POT Sta. 10+00.00
-L1- PC Sta.15+95.25
-L1- PT Sta. 22+10.00
-L1- POC Sta.20+95.48 =
-Y1- POT Sta.10+00.00
MATCHLINE -L1- STA 23+50.00 SEE PLAN SHEET 4
MATCHLINE -Y1- STA 13+50.00 SEE PLAN SHEET 4
N 39° 45' 55.7" E
-Y1- PT Sta. 12+27.15
N 84° 08' 22.3" E
N 83° 47' 36.0" E
-L1- SR 1627 (THREE BRIDGES RD)
L1_1600
L1_1823
L1_2000
L1_2270
Y1_1089
S 47° 11' 03.5" E
-Y1- PC Sta. 10+20.42
END CONSTRUCTION
-Y1- POT Sta. 13+10.00
N 73° 35' 33.5" E
BEGIN CONSTRUCTION
-L1- POT Sta. 14+95.00
-L1- PT Sta. 12+07.52
-L1- PC Sta. 11+77.31

SEE SHEET NO. 23 FOR -L1- PROFILE
SEE SHEET NO. 27 FOR -Y1- PROFILE

$DATE$

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PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

5/14/22

REVISIONS

$DATE$

-LI-
PI Sta 31+76.35
Δ = 32° 06' 43.9" (LT)
D = 5° 43' 46.5"
L = 560.46'
T = 287.81'
R = 1,000.00'
e = 3.6
R_{mv} = 108'

-Y5-
PI Sta 11+75.62
Δ = 18° 53' 27.6" (LT)
D = 7° 09' 43.1"
L = 263.77'
T = 133.09'
R = 800.00'
e = 3.0
R_{mv} = 69'

NAD 83 /NA 2011

-LI- POC Sta. 30+58.52 =
-Y5- POT Sta. 10+00.00

-LI- PT Sta. 34+49.00

MATCHLINE -LI- STA 30+00.00
SEE PLAN SHEET 4

100' BAY TAPER

+35.00

5' SIDEWALK

2'-6" C&G

LI_3016

50'R

Y5_1059RT

Y5_1050LT

LI_3200

LI_3400

LI_3600

LI_3800

LI_3900

LI_4000

LI_4097

LI_4200

-L1- PREMIER BLVD EXT

N 20° 51' 12.4" E

INC= 30'

WOODS

ALLUVIAL BOUNDARY

MATCHLINE -LI- STA 42+00.00
SEE PLAN SHEET 13

S 46° 46' 24.1" E

-Y5- PC Sta. 10+42.53

-Y5- SHERATON DR

END 2'-6" C&G
TIE TO EXIST
-Y5- STA 14+00.00

-Y5- PT Sta. 13+06.30

BEGIN 2'-6" C&G
TIE TO EXIST
-Y5- STA 14+00.00

S 65° 39' 51.7" E

END CONSTRUCTION
-Y5- POT Sta. 14+00.00

-Y5- POT Sta. 14+41.44

~~SEE SHEET NO. 24 FOR -L1- PROFILE~~
~~SEE SHEET NO. 29 FOR -Y5- PROFILE~~

5/14/22

REVISIONS

-LI-
PI Sta 55+85.50
Δ = 13° 41' 29.0" (RT)
D = 1° 02' 30.3"
L = 1,314.28'
T = 660.28'
R = 5,500.00'
e = NC

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PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	13
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

45 50 55

-LI- PC Sta. 49+25.21

WOODS

CULTIVATED FIELD

MATCHLINE -LI- STA 42+00.00
SEE PLAN SHEET 12

5' SIDEWALK
2'-6" C&G
14'
19'
14'
2'-6" C&G

-L1- PREMIER BLVD EXT

LI_4200 LI_4400 LI_4600 N 20° 51' 12.4" E LI_4800 LI_5000 LI_5200 LI_5400

5' SIDEWALK
2'-6" C&G
14'
19'
14'
2'-6" C&G

MATCHLINE -LI- STA 55+00.00
SEE PLAN SHEET 14

WOODS

CULTIVATED FIELD

~~SEE SHEET NO. 25 FOR -L1- PROFILE~~

$DATE$

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RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	14
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

5/14/22

REVISIONS

$DATE$

MATCHLINE -Y3- STA 27+00.00
SEE PLAN SHEET 19

-Y3- PT Sta. 28+17.94

S 56° 03' 08.2" E

Y3 2700

Y3 2900

-Y3- AMERICAN LEGION RD EXT

BEGIN SIDEWALK
-LI- STA 62+03.90

-L1- PREMIER BLVD EXT

N 34° 32' 41.4" E

LI 5600

LI 5800

LI 6000

LI 6200

LI 6400

LI 6600

LI 6800

MATCHLINE -LI- STA 55+00.00
SEE PLAN SHEET 13

MATCHLINE -LI- STA 68+00.00
SEE PLAN SHEET 15

-LI- PT Sta. 62+39.49

-LI- POC Sta. 61+72.18 =
-Y3- POT Sta. 30+18.58

CULTIVATED FIELD

WOODS

BRUSH

5' SIDEWALK

2'-6" C&G

-LI-	-Y3-
PI Sta 55+85.50	PI Sta 26+58.52
Δ = 13° 41' 29.0" (RT)	Δ = 18° 25' 43.3" (RT)
D = 1° 02' 30.3"	D = 5° 43' 46.5"
L = 1,314.28'	L = 321.64'
T = 660.28'	T = 162.22'
R = 5,500.00'	R = 1,000.00'
e = NC	e = 3.6
	R_{mv} = 90'

2017 ADT / 2040 ADT	-Y3- AMERICAN LEGION RD EXT	DHV = 10% DIR = 55% TTST = 1% DUAL = 2%
	0 / 1000	
0 / 3000	0 / 400	0 / 600
-L1- PREMIER BLVD EXT DHV = 8% DIR = 60% TTST = 1% DUAL = 2%		0 / 3200 -L1- PREMIER BLVD EXT DHV = 8% DIR = 55% TTST = 1% DUAL = 2%

~~SEE SHEET NO. 25 FOR -L1- PROFILE~~
~~SEE SHEET NO. 29 FOR -Y3- PROFILE~~

5/14/2021

REVISIONS

$DATE$

-L1-

PI Sta 71+45.37	PI Sta 85+81.84
Δ = 15° 15' 37.8" (RT)	Δ = 47° 06' 17.6" (LT)
D = 2° 36' 15.7"	D = 2° 51' 53.2"
L = 585.96'	L = 1,644.27'
T = 294.72'	T = 871.80'
R = 2,200.00'	R = 2,000.00'
e = RC	e = 2.6
R_{ss} = 75'	R_{ss} = 78'

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421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	15
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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70 75 80

-L1- PT Sta. 74+36.60

-L1- PC Sta. 77+10.04

-L1- PC Sta. 68+50.64

MATCHLINE -L1- STA 68+00.00
SEE PLAN SHEET 14

MATCHLINE -L1- STA 81+00.00
SEE PLAN SHEET 16

LI_6800 LI_7000 LI_7200 LI_7400 LI_7600 LI_7800 LI_8000

-L1- PREMIER BLVD EXT

5' SIDEWALK
2'-6" C&G
20' DR
INC= 30'

N 49° 48' 19.2" E

ALLUVIAL BOUNDARY

CULTIVATED FIELD

~~SEE SHEET NO. 26 FOR -L1- PROFILE~~

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PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	16
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

5/14/22

REVISIONS

-LI-
PI Sta 85+81.84
Δ = 41° 06' 17.6" (LT)
D = 2° 51' 53.2"
L = 1,644.27'
T = 871.80'
R = 2,000.00'
e = 2.6
R_{sp} = 78'

85

90

-LI- PT Sta. 93+54.31

MATCHLINE -LI- STA 81+00.00
SEE PLAN SHEET 15

MATCHLINE -LI- STA 94+00.00
SEE PLAN SHEET 17

CEM

CULTIVATED FIELD

BRUSH/CUTOVER

WOODS

5' SIDEWALK

2'-6" C&G

LI_8216

LI_8400

LI_8600

LI_8800

LI_9000

LI_9200

LI_9400

-L1- PREMIER BLVD EXT

ALLUVIAL BOUNDARY

20' ROANOKE RAPIDS SANITARY DISTRICT EASEMENT
DB 1711 PG 411

N 2° 42' 01.6" E

$DATE$

~~SEE SHEET NO. 26 FOR -L1- PROFILE~~

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RALEIGH, N.C. 27601

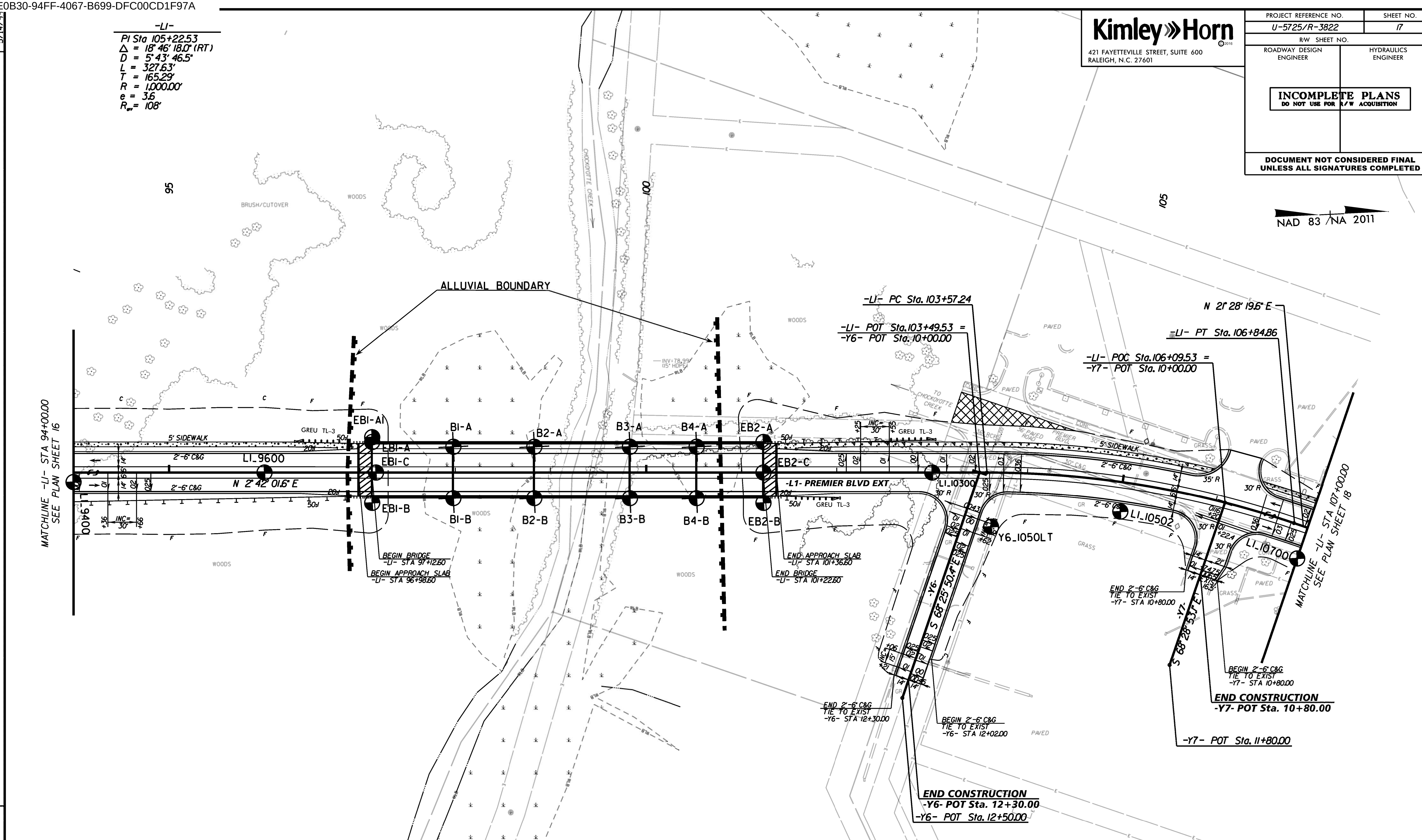
PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	17
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

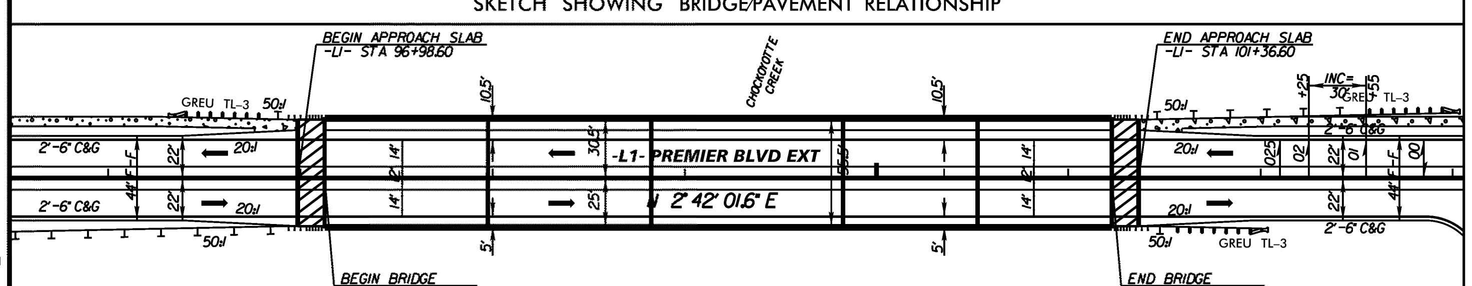
REVISIONS

5/14/99



-L1-
PI Sta 105+22.53
Δ = 18° 46' 18.0" (RT)
D = 5° 43' 46.5"
L = 327.63'
T = 165.29'
R = 1,000.00'
e = 3.6
R_wr = 108'
NAD 83 / NA 2011
ALLUVIAL BOUNDARY
MATCHLINE -L1- STA 94+00.00 SEE PLAN SHEET 16
MATCHLINE -L1- STA 107+00.00 SEE PLAN SHEET 18
EB1-A
EB1-C
EB1-B
B1-A
B1-B
B2-A
B2-B
B3-A
B3-B
B4-A
B4-B
EB2-A
EB2-C
EB2-B
L1_9400
L1_9600
L1_10300
L1_10502
L1_10700
Y6_1050LT
N 2° 42' 01.6" E
-L1- PREMIER BLVD EXT
5' SIDEWALK
GREU TL-3
BEGIN BRIDGE -L1- STA 97+12.60
BEGIN APPROACH SLAB -L1- STA 96+98.60
END APPROACH SLAB -L1- STA 101+36.60
END BRIDGE -L1- STA 101+22.60
-L1- PC Sta. 103+57.24
-L1- POT Sta. 103+49.53 = -Y6- POT Sta. 10+00.00
-L1- POC Sta. 106+09.53 = -Y7- POT Sta. 10+00.00
-L1- PT Sta. 106+84.86
N 21° 28' 19.6" E
-Y6- S 68° 25' 50.4" E
-Y7- S 68° 28' 53.1" E
END 2'-6" C&G TIE TO EXIST -Y6- STA 12+30.00
BEGIN 2'-6" C&G TIE TO EXIST -Y6- STA 12+02.00
END 2'-6" C&G TIE TO EXIST -Y7- STA 10+80.00
BEGIN 2'-6" C&G TIE TO EXIST -Y7- STA 10+80.00
END CONSTRUCTION -Y6- POT Sta. 12+30.00
-Y6- POT Sta. 12+50.00
END CONSTRUCTION -Y7- POT Sta. 10+80.00
-Y7- POT Sta. 11+80.00
CHOCKOYOTTE CREEK
WOODS
BRUSH/CUTOVER
PAVED
GRASS

SKETCH SHOWING BRIDGE/PAVEMENT RELATIONSHIP



~~SEE SHEET NO. 27 FOR -L1- PROFILE~~
~~SEE SHEET NO. 29 FOR -Y6- PROFILE~~
~~SEE SHEET NO. 29 FOR -Y7- PROFILE~~

$DATE$

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421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	18
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83/NA 2011

5/14/99

REVISIONS

$DATE$

N 21° 28' 19.6" E

END 2'-6" C&G AND SIDEWALK TIE TO EXIST -L1- STA 108+35.00

END TIP PROJECT R-3822
-L1- POT Sta. 108+35.00

-L1- POT Sta. 108+85.84

MATCHLINE -L1- STA 107+00.00
SEE PLAN SHEET 17

INC= 30'

-L1- PREMIER BLVD

-L1-

60' LANE TAPER

END 2'-6" C&G TIE TO EXIST -L1- STA 108+35.00

~~SEE SHEET NO. 27 FOR -L1- PROFILE~~

5/14/22

REVISIONS

$DATE$

-Y3-
PI Sta 26+58.52
Δ = 18° 25' 43.3" (RT)
D = 5° 43' 46.5"
L = 321.64'
T = 162.22'
R = 1,000.00'
e = 3.6
R_{ss} = 90°

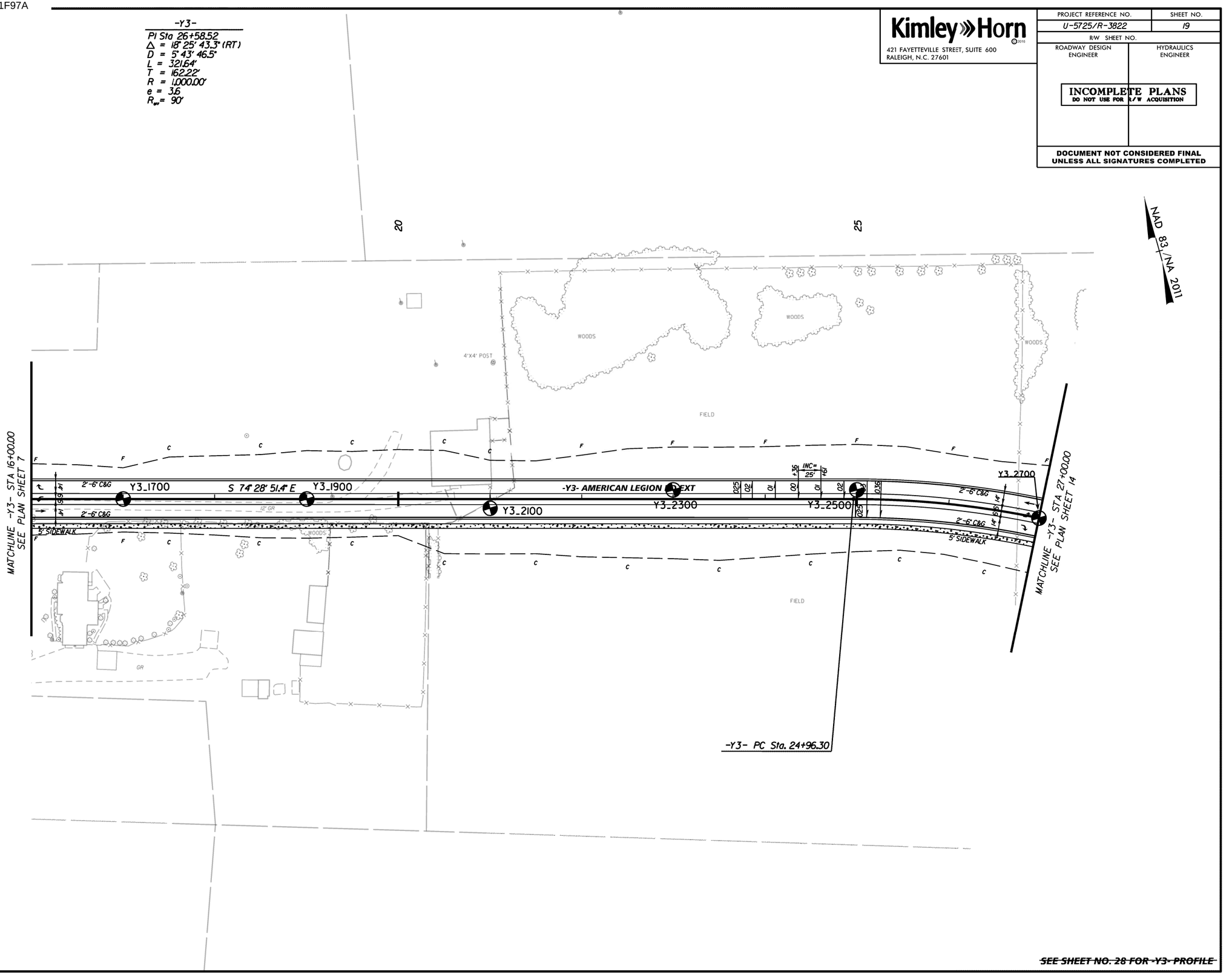
Kimley»Horn ©2018
421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	19
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

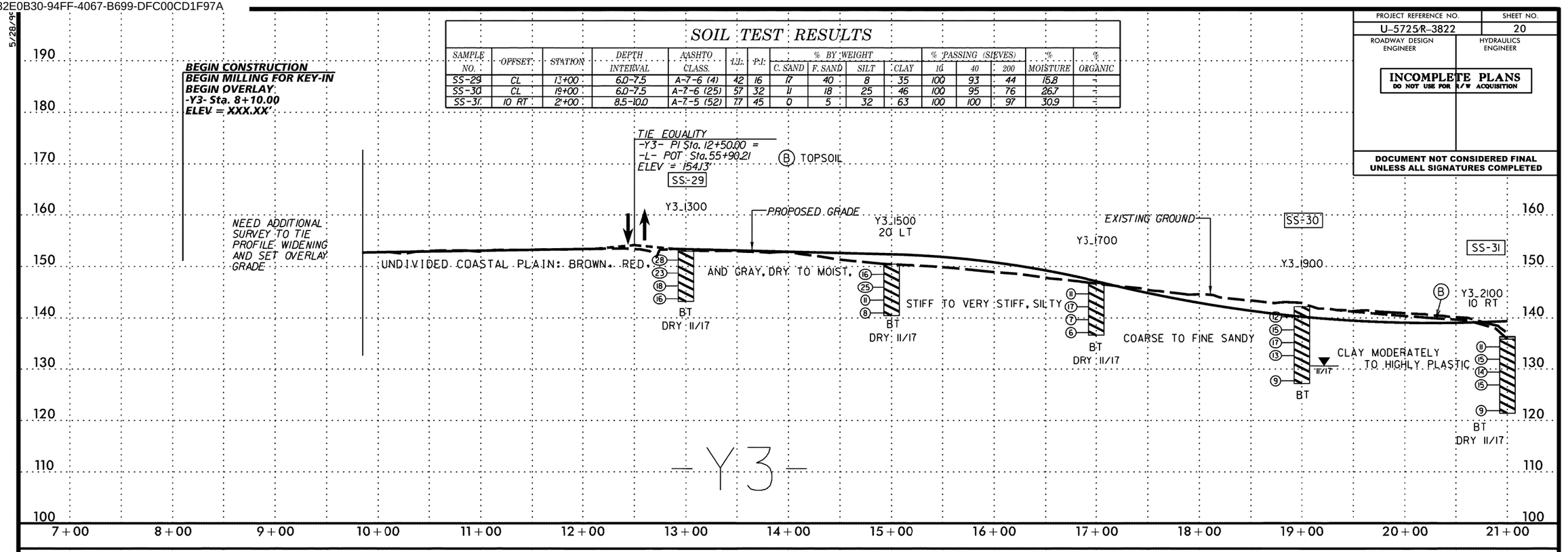
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

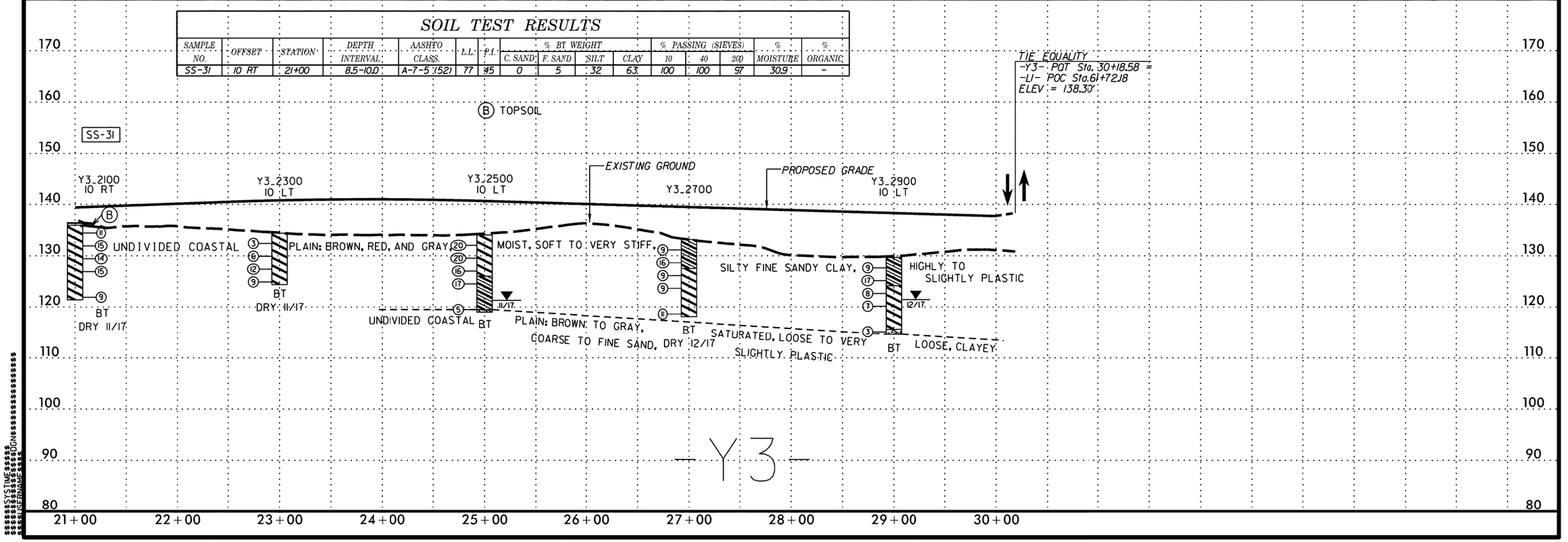
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83/NA 2011



~~SEE SHEET NO. 28 FOR -Y3- PROFILE~~





PROJECT REFERENCE NO.	SHEET NO.
U-5725/R-3822	20

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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-29	CL	13+00	6.0-7.5	A-7-6 (4)	42	16	17	40	8	35	100	93	44	15.8	-
SS-30	CL	19+00	6.0-7.5	A-7-6 (25)	57	32	11	18	25	46	100	95	76	26.7	-
SS-31	10 RT	21+00	8.5-10.0	A-7-5 (52)	77	45	0	5	32	63	100	100	97	30.9	-

SOIL TEST RESULTS

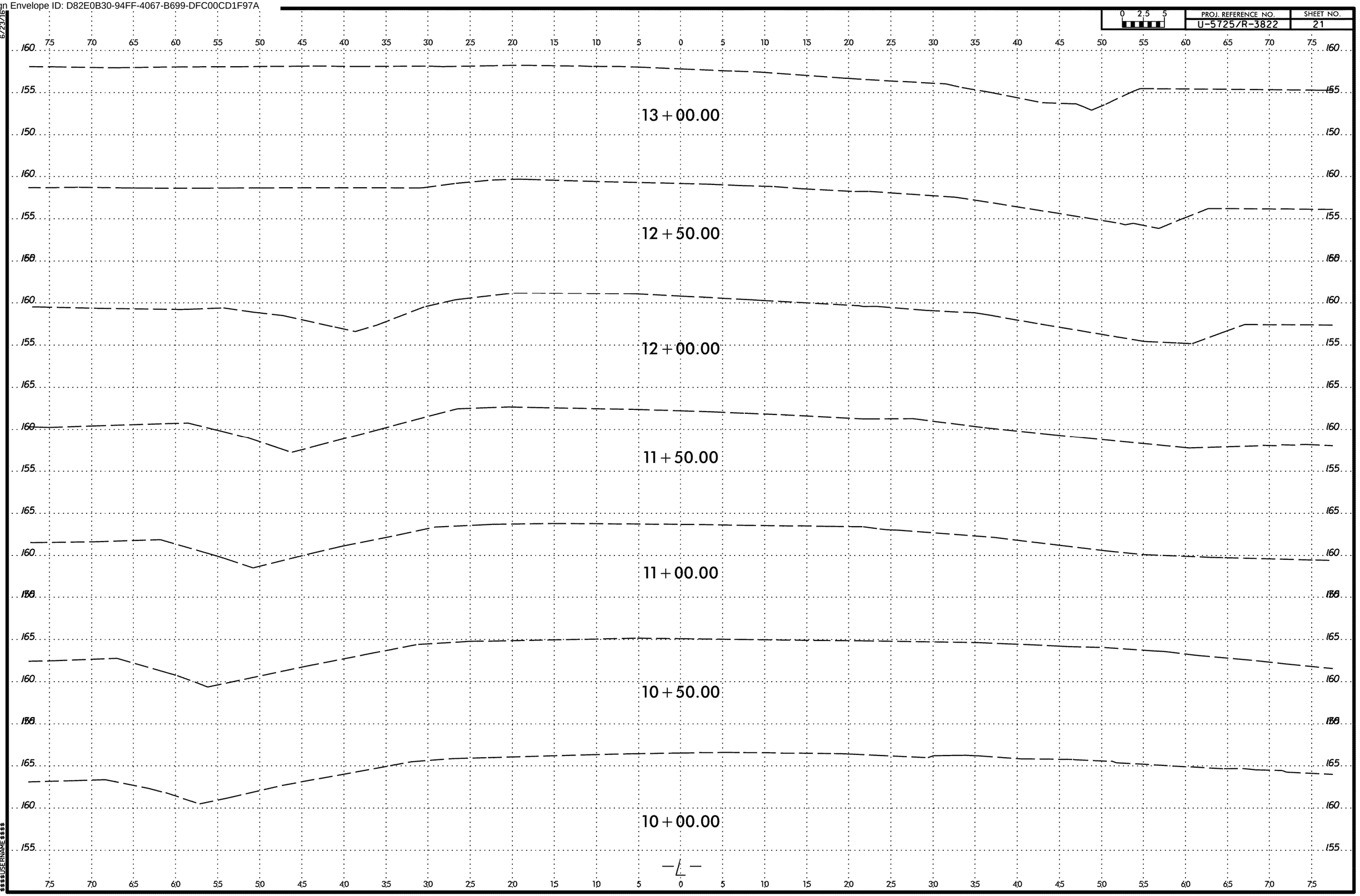
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	% BY WEIGHT F. SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-31	10 RT	21+00	8.5-10.0	A-7-5 (52)	77	45	0	5	32	63	100	100	97	30.9	-

5/28/9

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	21



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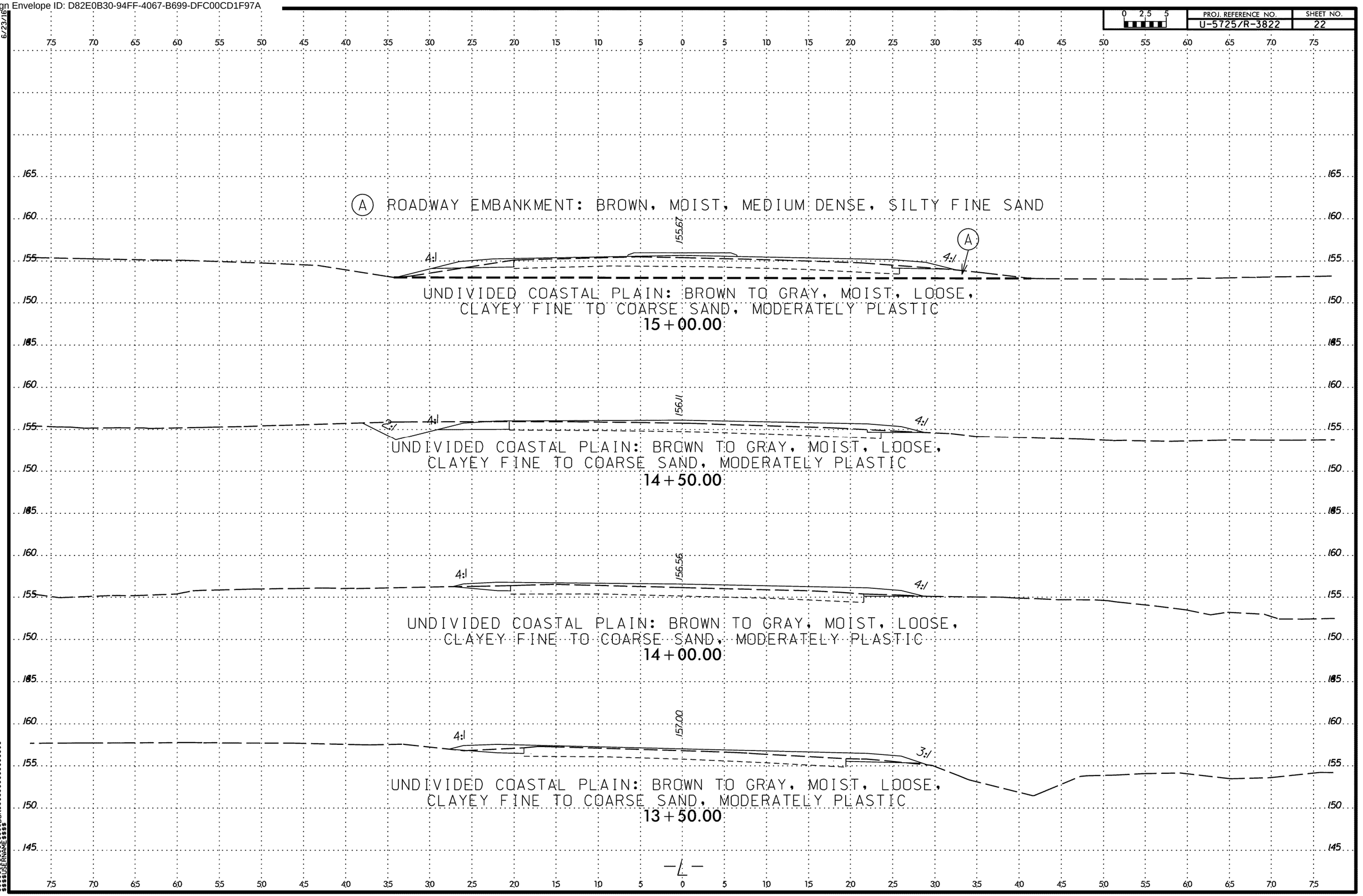
6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	22



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$$$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$$
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6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	23

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

165 160 155 150 145

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, SILTY FINE SAND

155.25

4:1

Ⓐ

2:1

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, MOIST, LOOSE,
CLAYEY FINE TO COARSE SAND, MODERATELY PLASTIC

16+50.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, SILTY FINE SAND

155.18

4:1

Ⓐ

4:1

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, MOIST, LOOSE,
CLAYEY FINE TO COARSE SAND, MODERATELY PLASTIC

16+00.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, SILTY FINE SAND

155.32

4:1

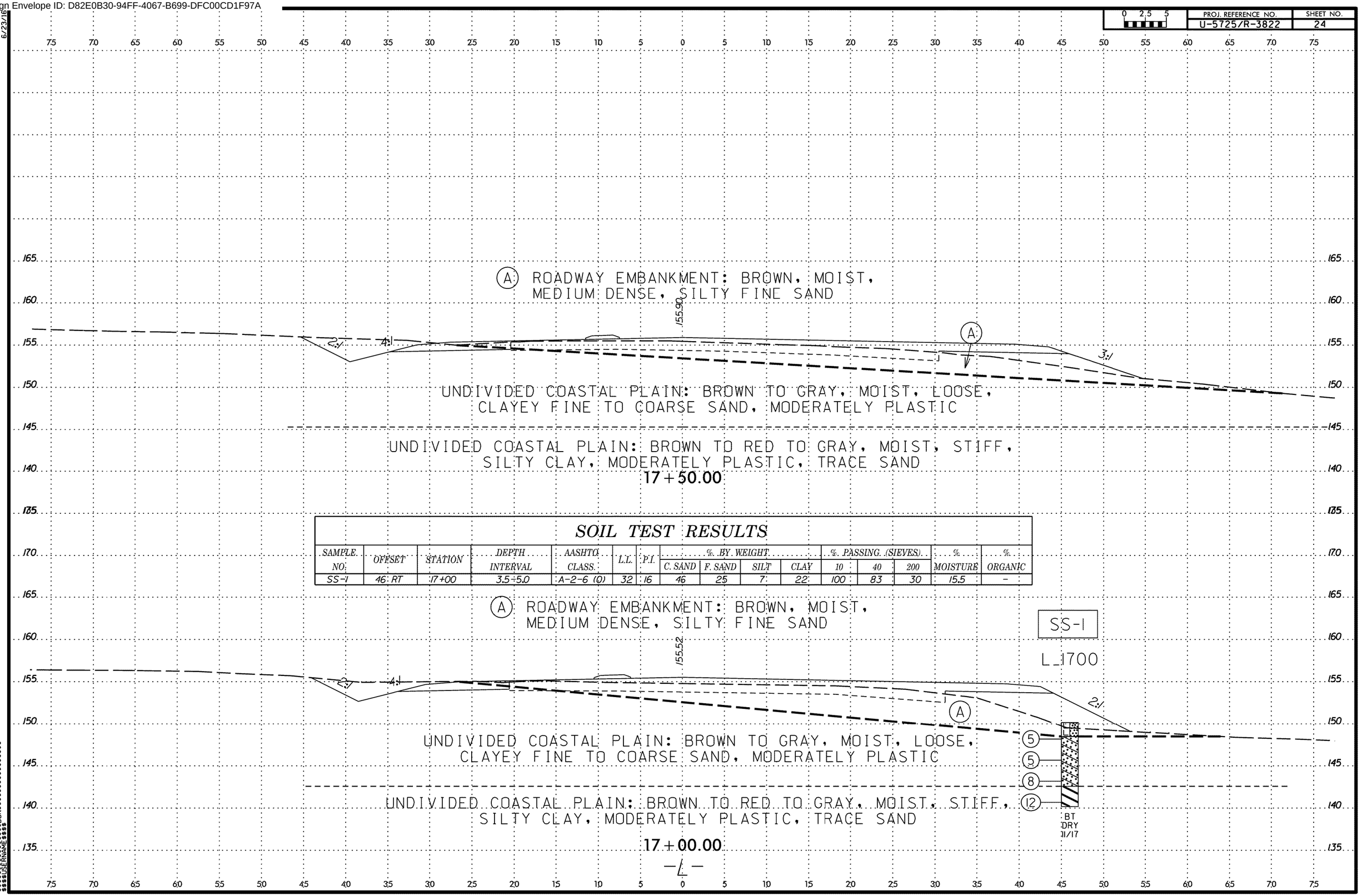
Ⓐ

4:1

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, MOIST, LOOSE,
CLAYEY FINE TO COARSE SAND, MODERATELY PLASTIC

15+50.00

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



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-1	46 RT	17+00	3.5-5.0	A-2-6 (0)	32	16	46	25	7	22	100	83	30	15.5	-

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	25

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

170 165 160 155 150 145 140

INTERSECTION WITH
-L1- SR-1627
(THREE BRIDGES RD)

INTERSECTION WITH
-L1- SR-1627
(THREE BRIDGES RD)

156.27

UNDIVIDED COASTAL PLAIN: BROWN TO TAN BROWN, MOIST,
MEDIUM DENSE TO DENSE, CLAYEY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: GRAY TO BROWN, MOIST, MEDIUM STIFF
TO STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

18+00.00

-L-

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

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	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

220 210 200 190 180 170 160 150 140 130

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-18	50 LT	26+19	1.0-2.5	A-2-4 (0)	23	9	29	41	6	24	100	93	33	9.9	-

Note: Station and Offset are on -L1-

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

(B) TOPSOIL

(1) ARTIFICIAL FILL: BROWN, MOIST, VERY LOOSE, SILTY COARSE TO FINE SAND

SS-18

L1_2619
18+71

13
16
30
12

BT
DRY
12/17

INTERSECTION WITH
-L1- SR-1627
(THREE BRIDGES RD)

INTERSECTION WITH
-L1- SR-1627
(THREE BRIDGES RD)

A

B

L1_2800
18+37

3
5
11
8

1

BT
DRY
12/17

UNDIVIDED COASTAL PLAIN: BROWN TO TAN BROWN, MOIST, MEDIUM DENSE TO DENSE, CLAYEY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: GRAY TO BROWN, MOIST, MEDIUM STIFF TO STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

18+50.00

-L-

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	27

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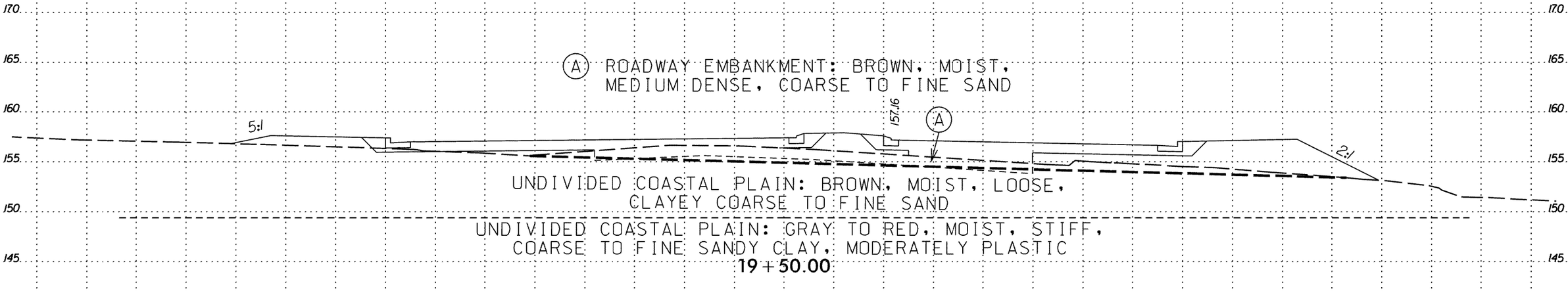
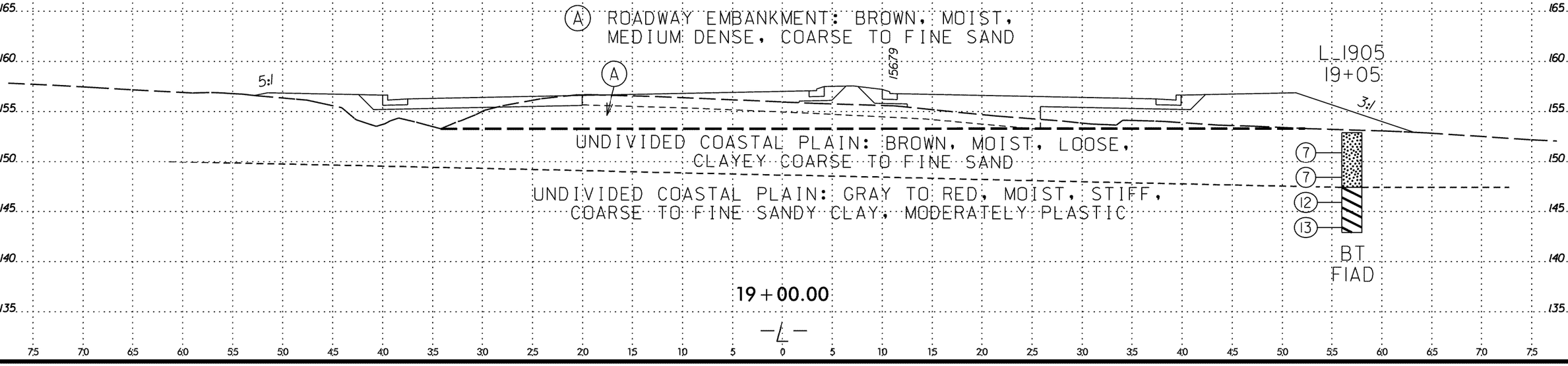
170 165 160 155 150 145 140 135



SOIL TEST RESULTS

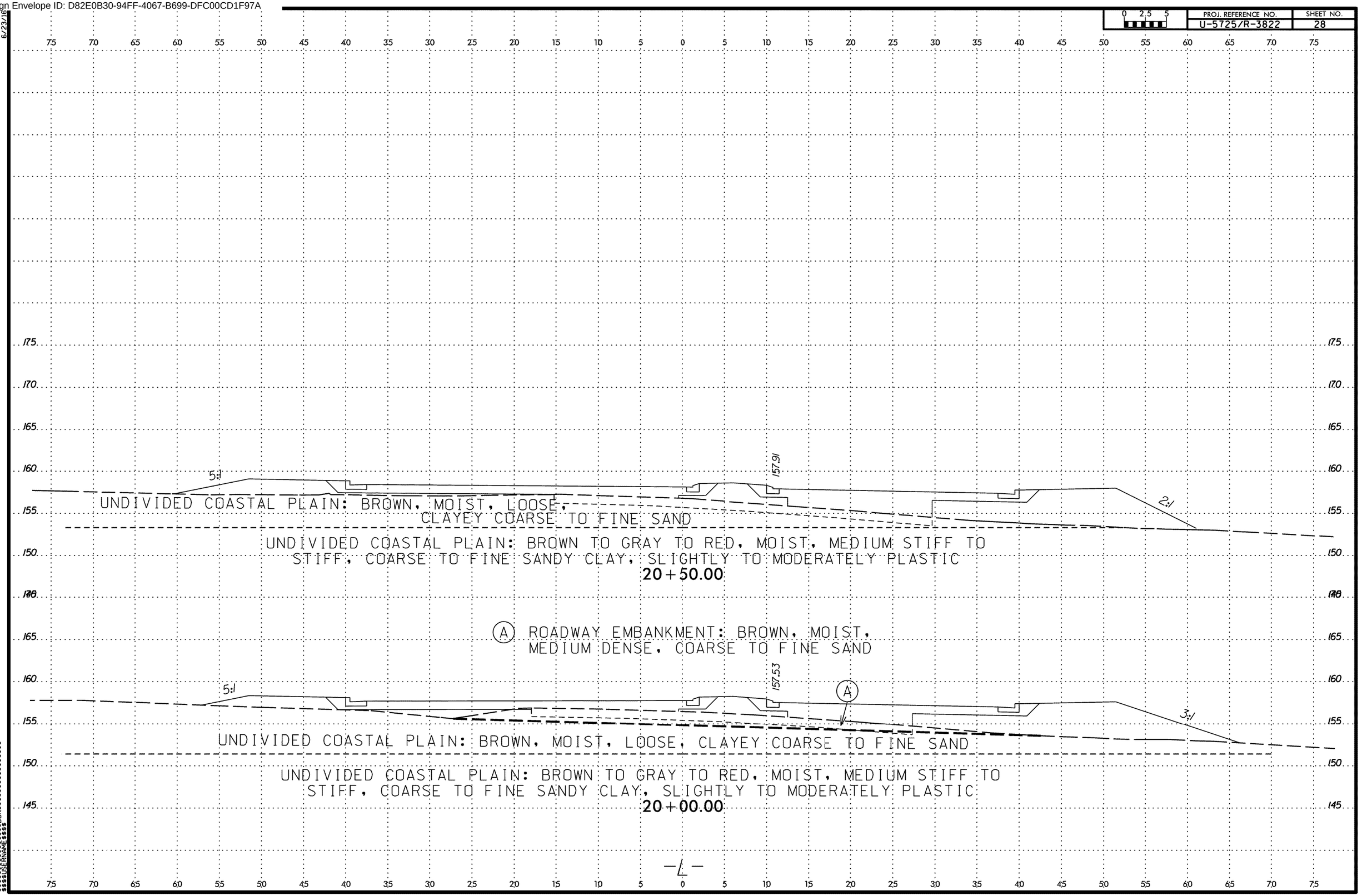
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-2	57' RT	19+05	1.0-2.5	A-2-4 (0)	NP	NP	41	42	4	13	100	91	19	7.5	-



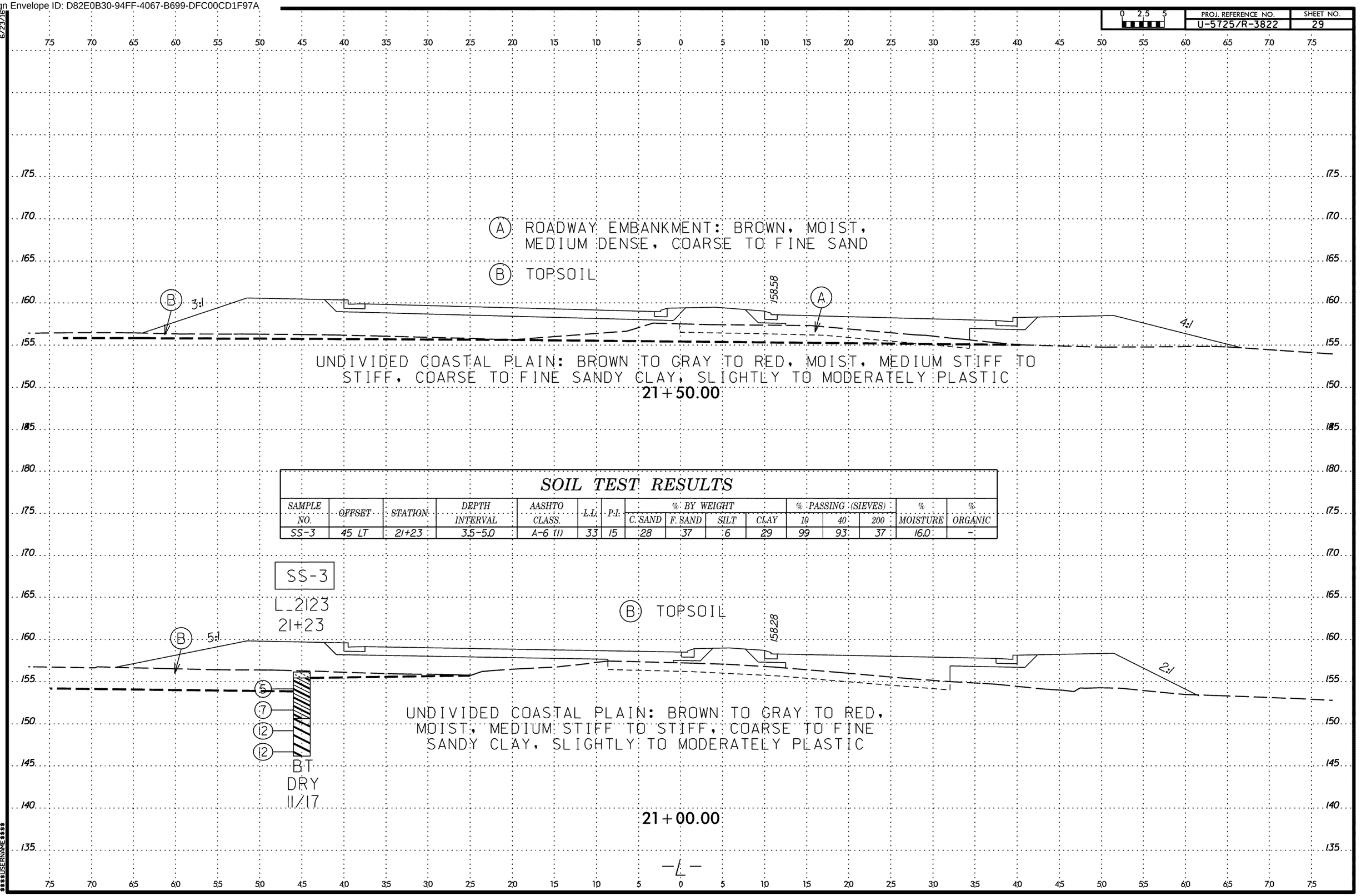
$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	28

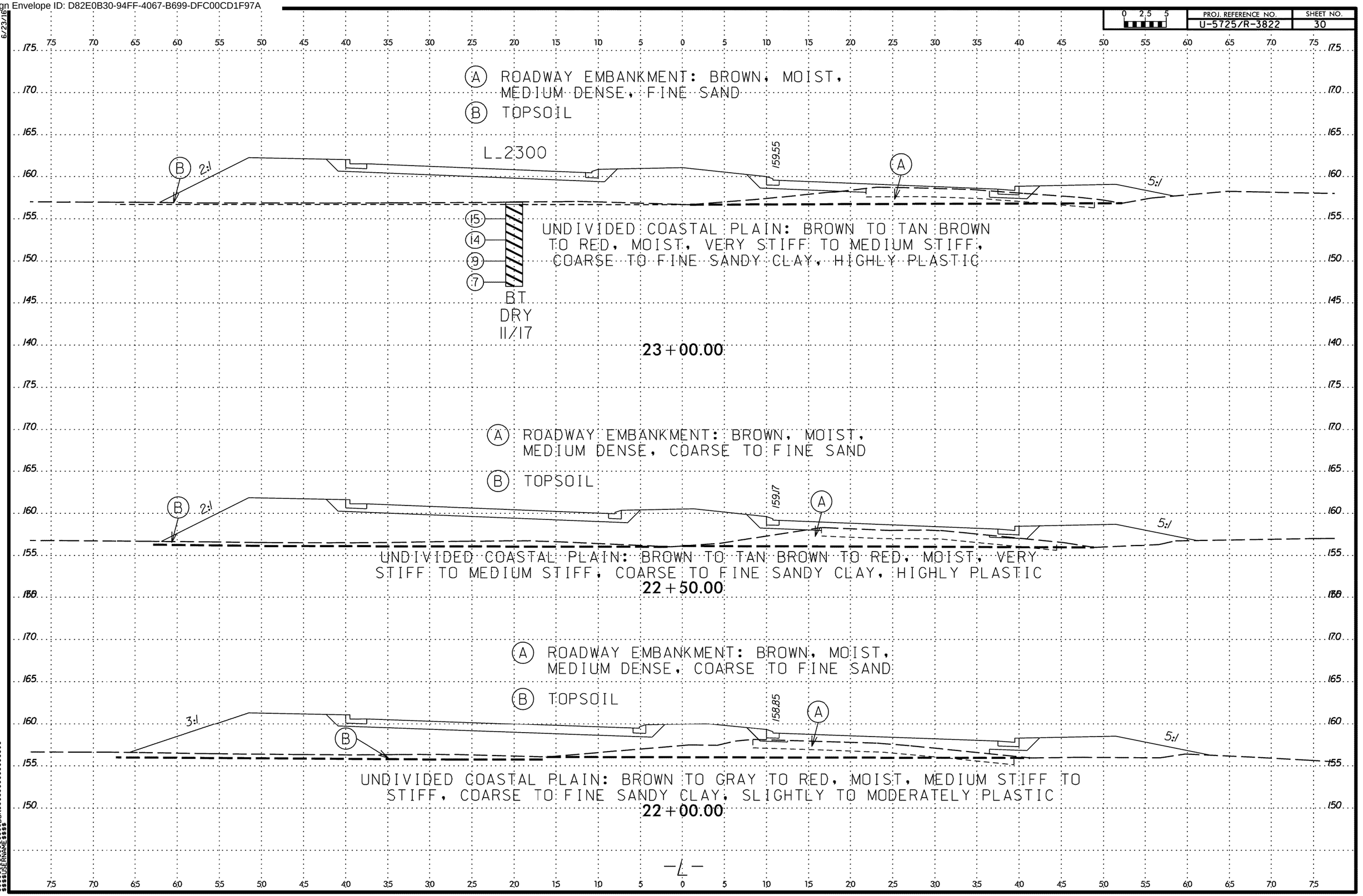


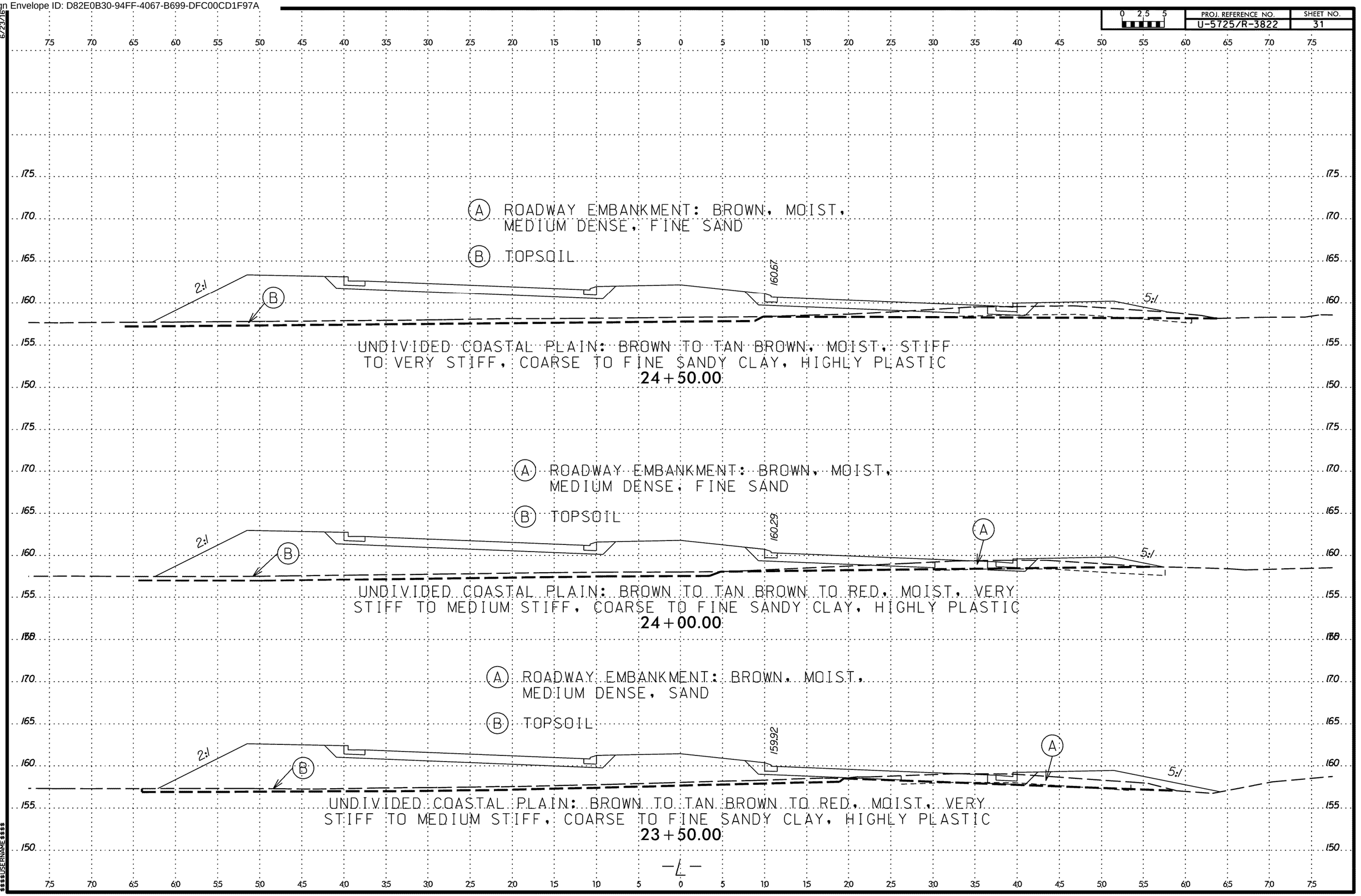
$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$



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-3	45 LT	21+23	3.5-5.0	A-6 (1)	33	15	28	37	6	29	99	93	37	16.0	-





6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	31

24+50.00

24+00.00

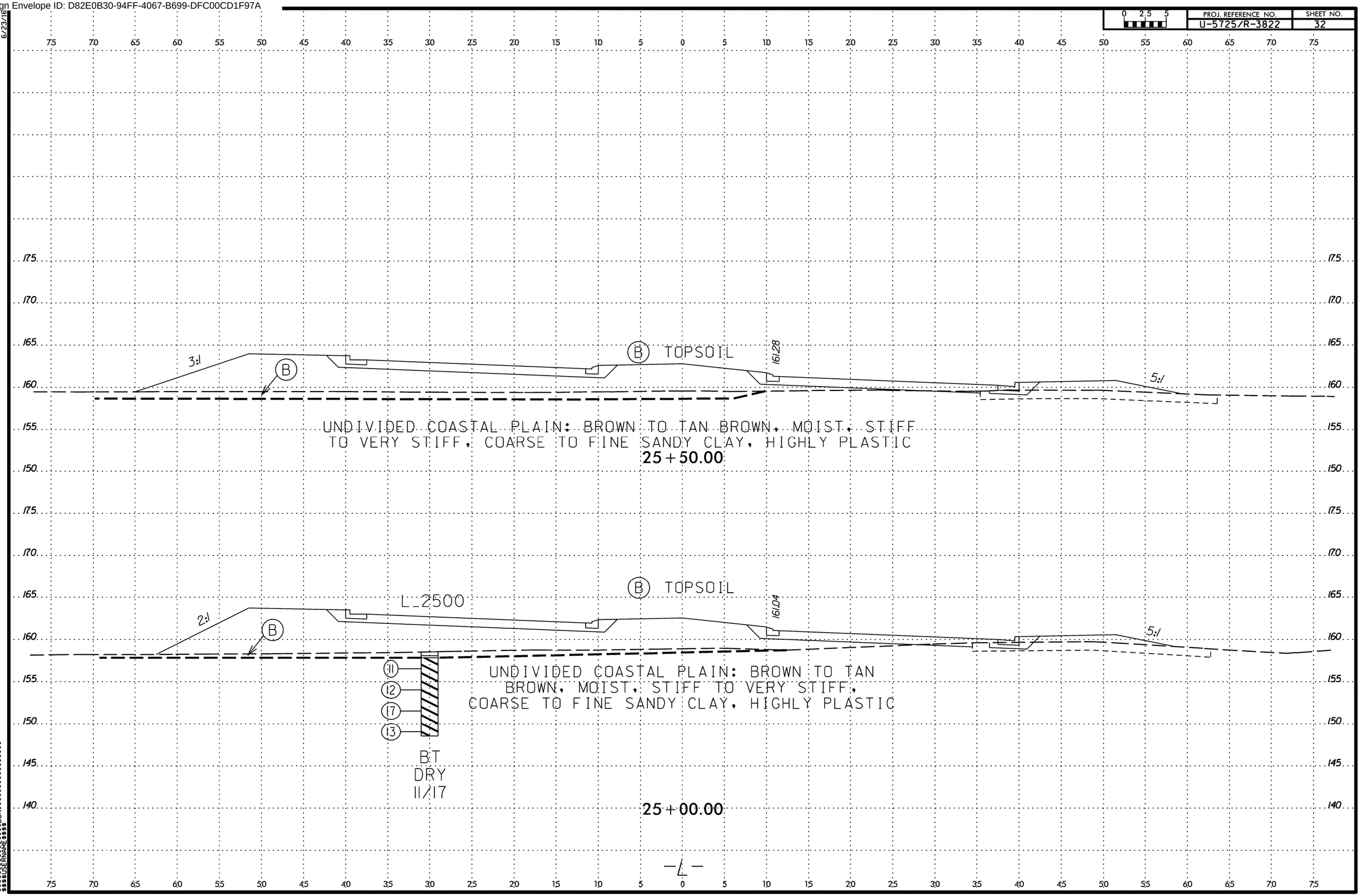
23+50.00

-L-

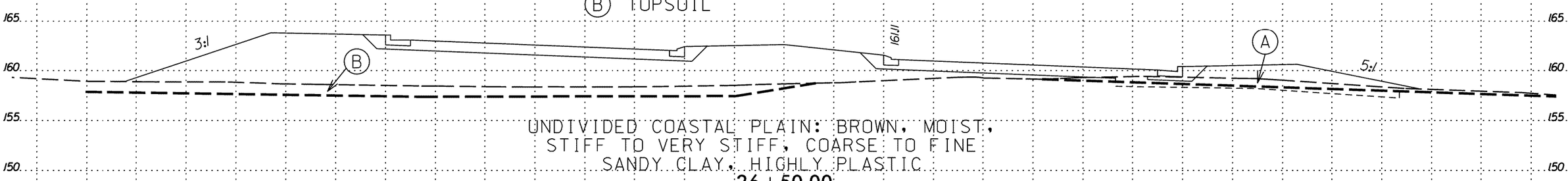
$$$$SYSTIME$$$$
$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$$
$$$USERNAME$$$$

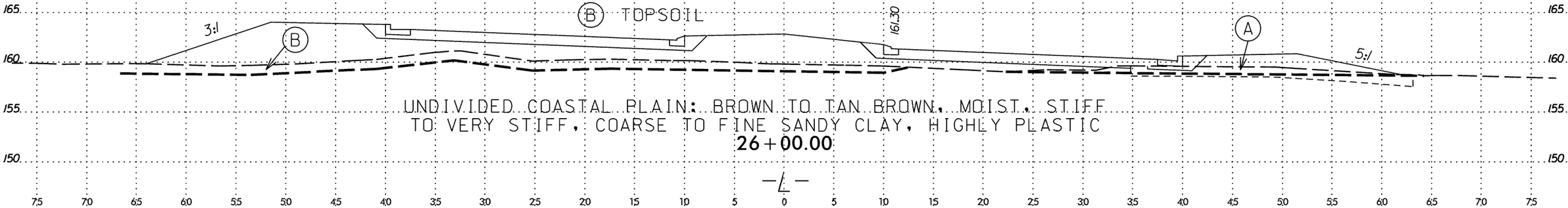
6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	32



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

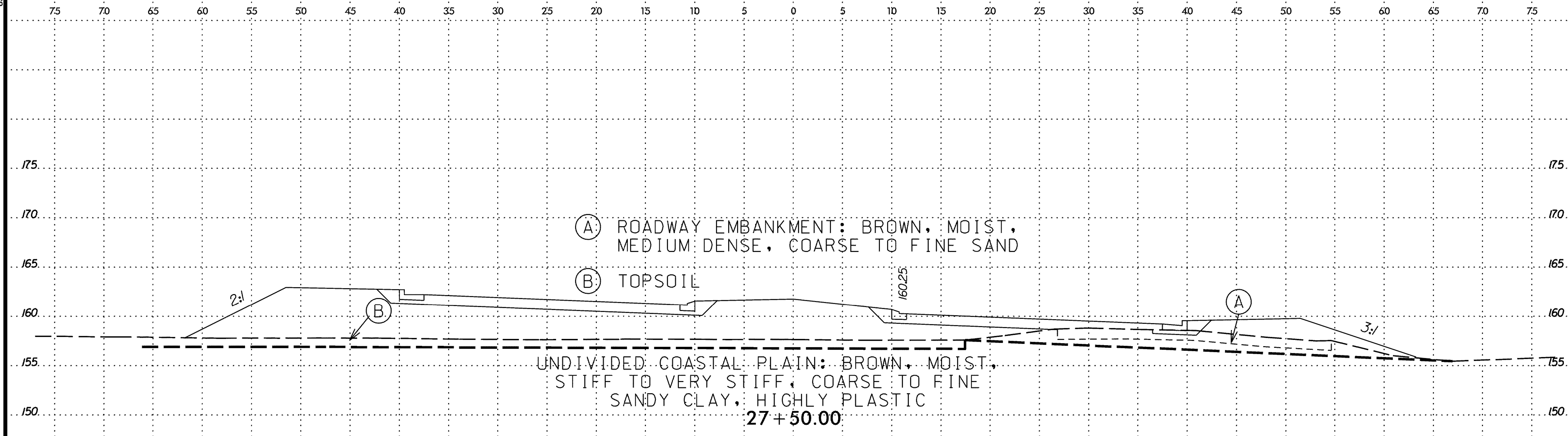




26+50.00

26+00.00

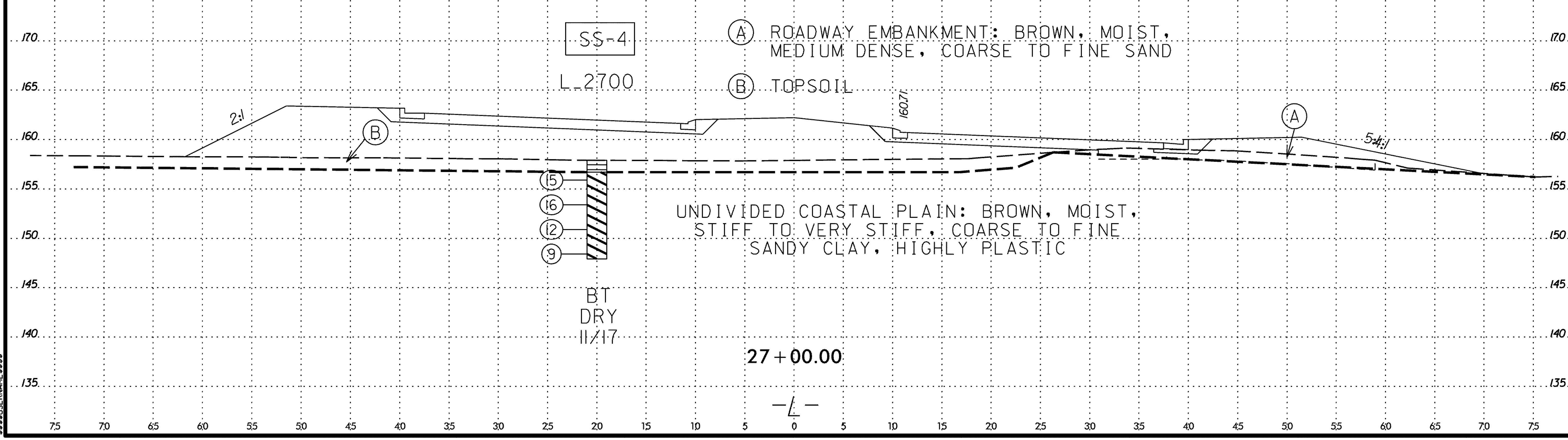
-L-



27+50.00

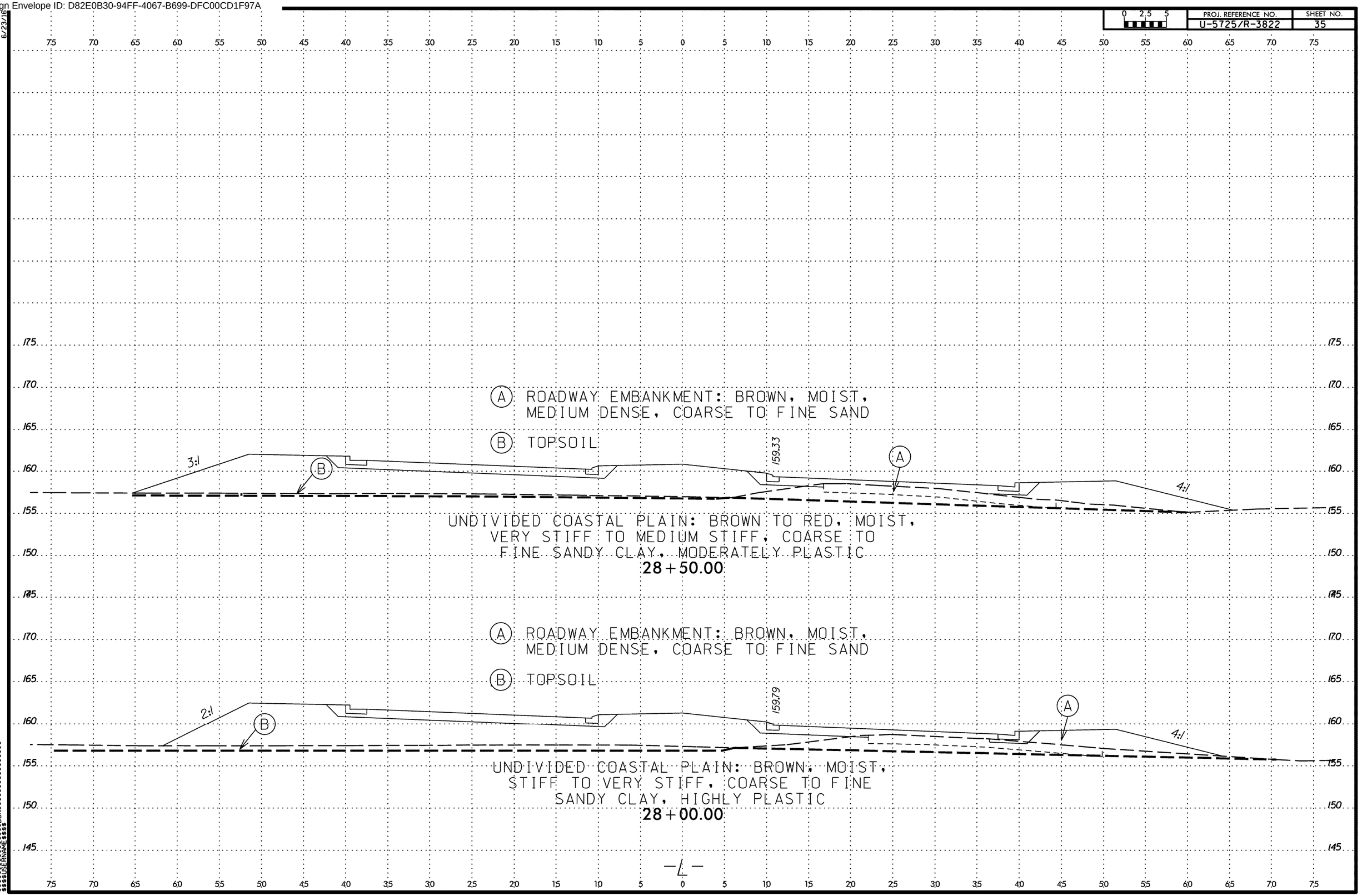
SOIL TEST RESULTS

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-4	20' LT	27+00	3.5-5.0	A-7-6 (10)	49	29	17	35	7	41	98	90	49	21.8	-



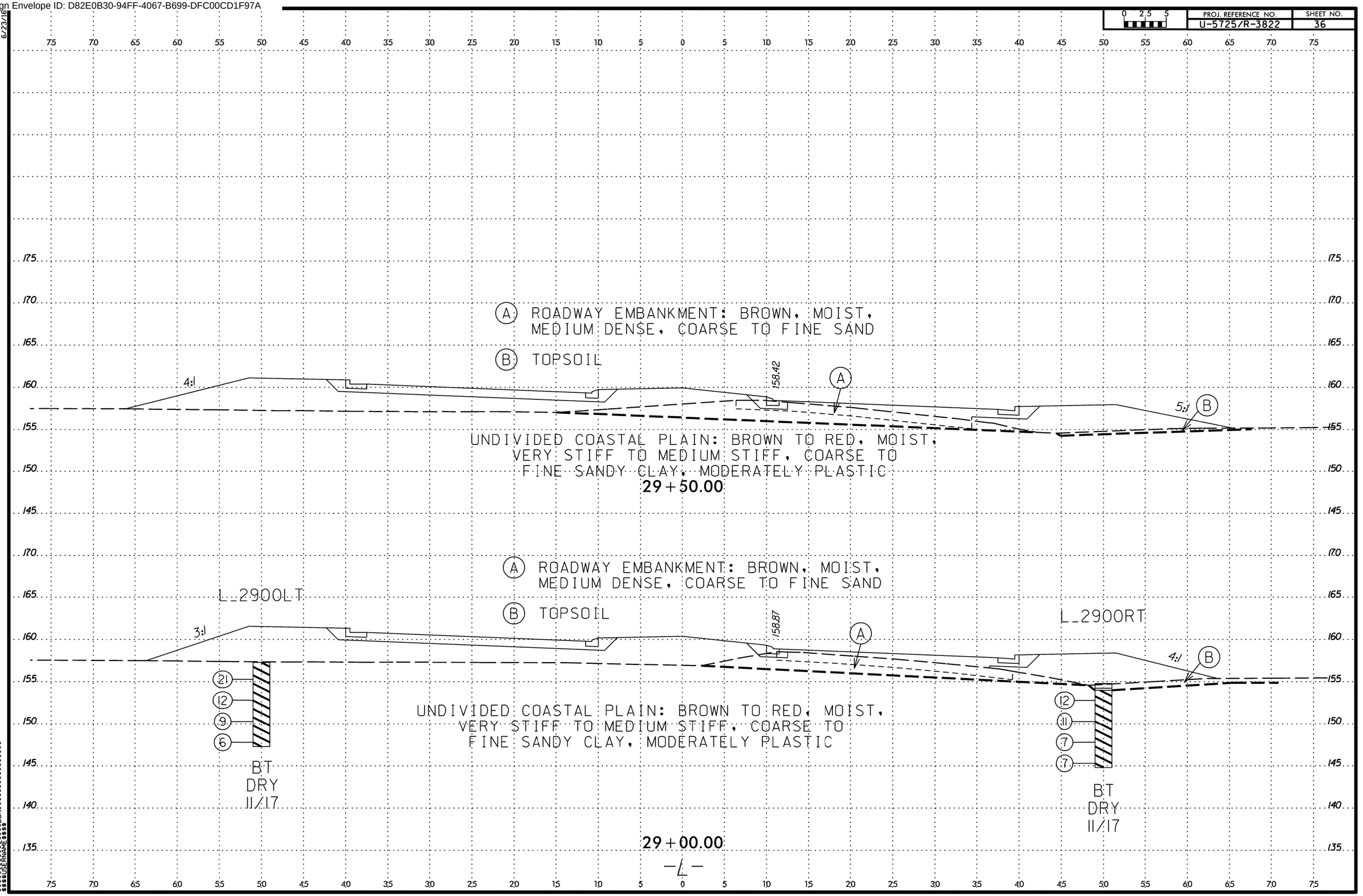
27+00.00

-L-



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

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	36



PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	37

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

Ⓑ TOPSOIL

UNDIVIDED COASTAL PLAIN: RED TO BROWN, DRY TO MOIST, MEDIUM STIFF TO VERY STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

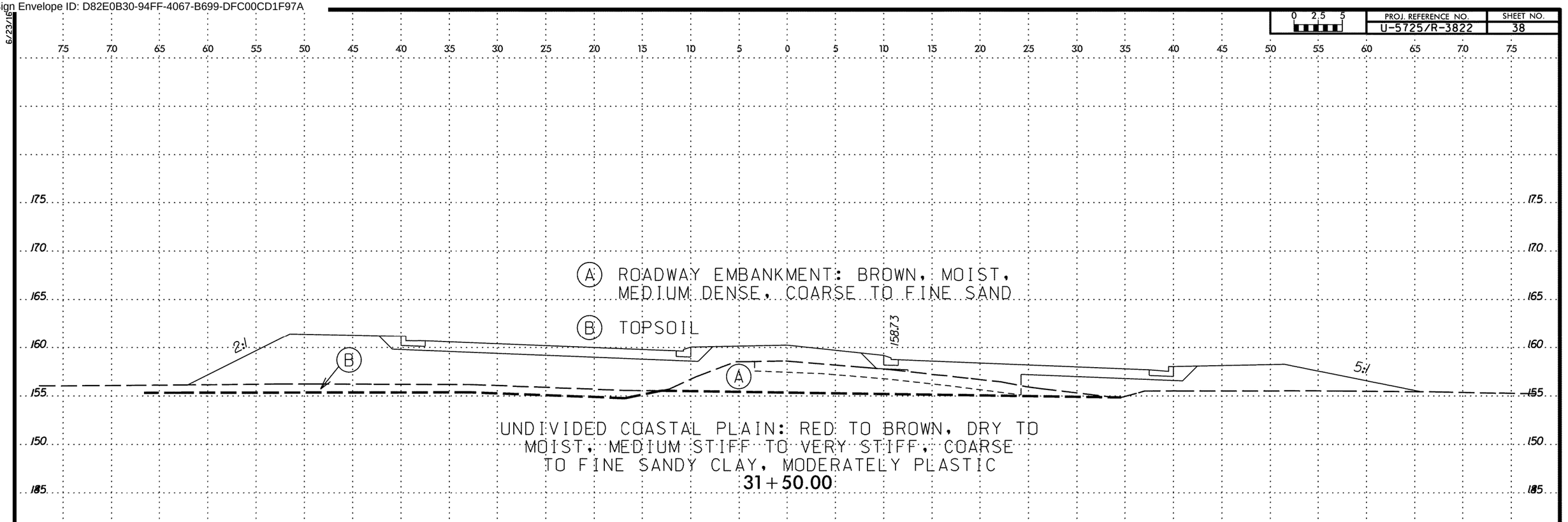
30+50.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

Ⓑ TOPSOIL

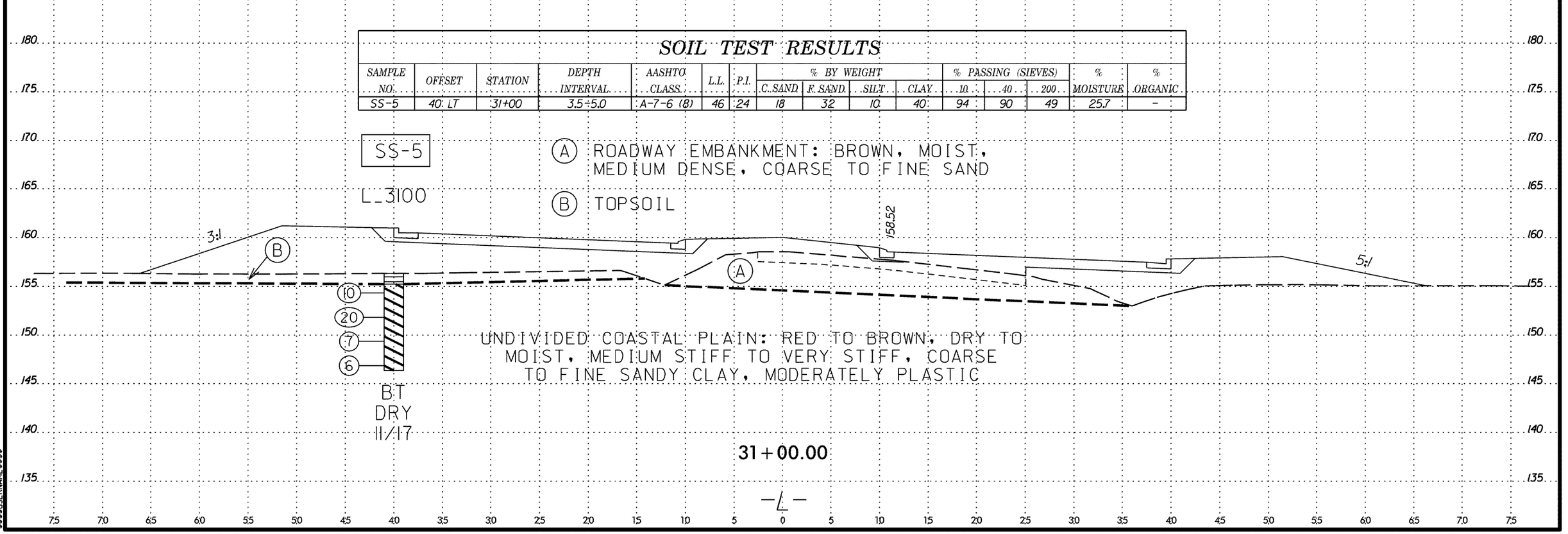
UNDIVIDED COASTAL PLAIN: BROWN TO RED, MOIST, VERY STIFF TO MEDIUM STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

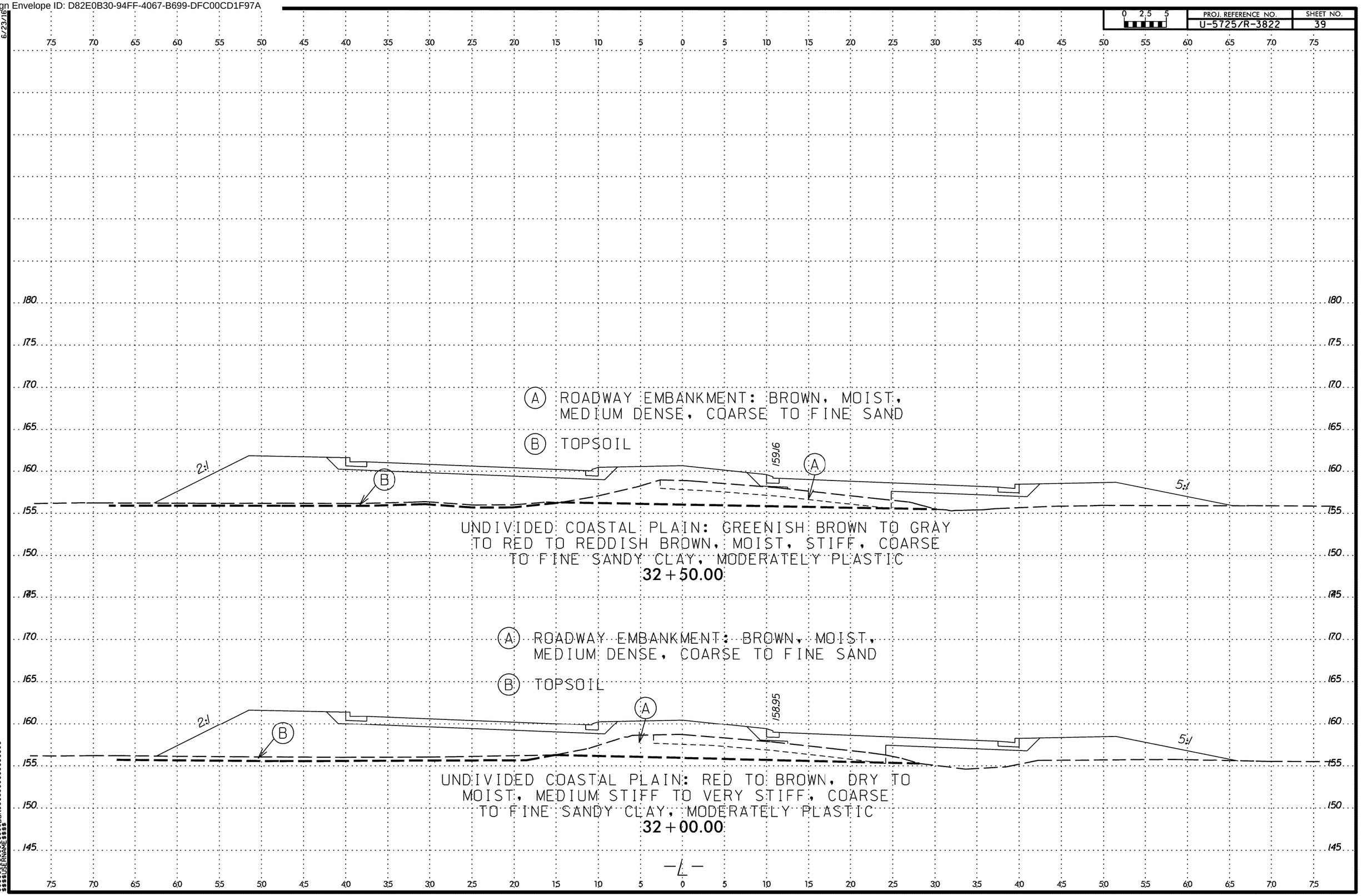
30+00.00



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-5	40' LT	31+00	3.5-5.0	A-7-6 (8)	46	24	18	32	10	40	94	90	49	25.7	-





6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	40

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

170 165 160 155 150 145 140 135

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

160.24

2:1

4:1

UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO GRAY TO RED TO REDDISH BROWN, MOIST, STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

34+00.00

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

159.68

2:1

5:1

UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO GRAY TO RED TO REDDISH BROWN, MOIST, STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

33+50.00

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

(C) PAVEMENT - PARKING LOT

159.37

2:1

5:1

L_3282
32+82

(12) (14) (9) (9)

BT
DRY
11/17

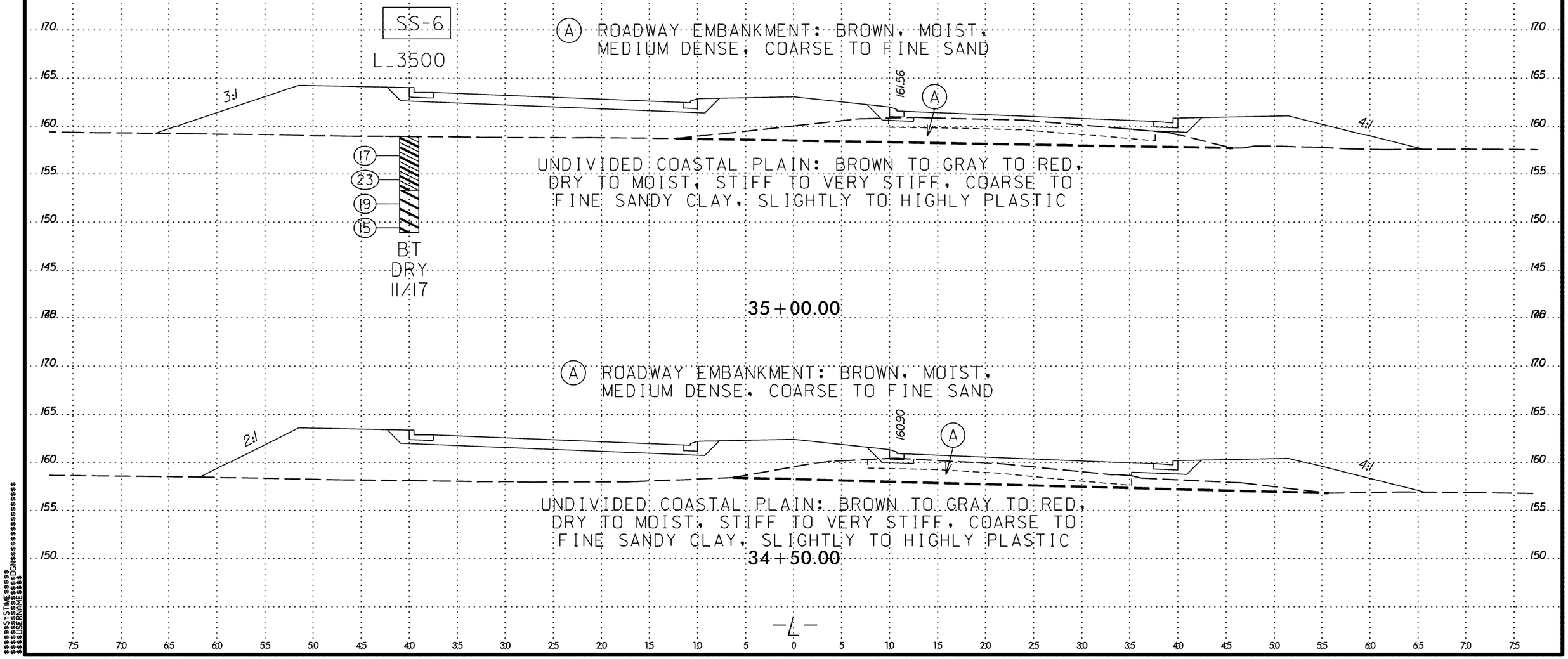
UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO GRAY TO RED TO REDDISH BROWN, MOIST, STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

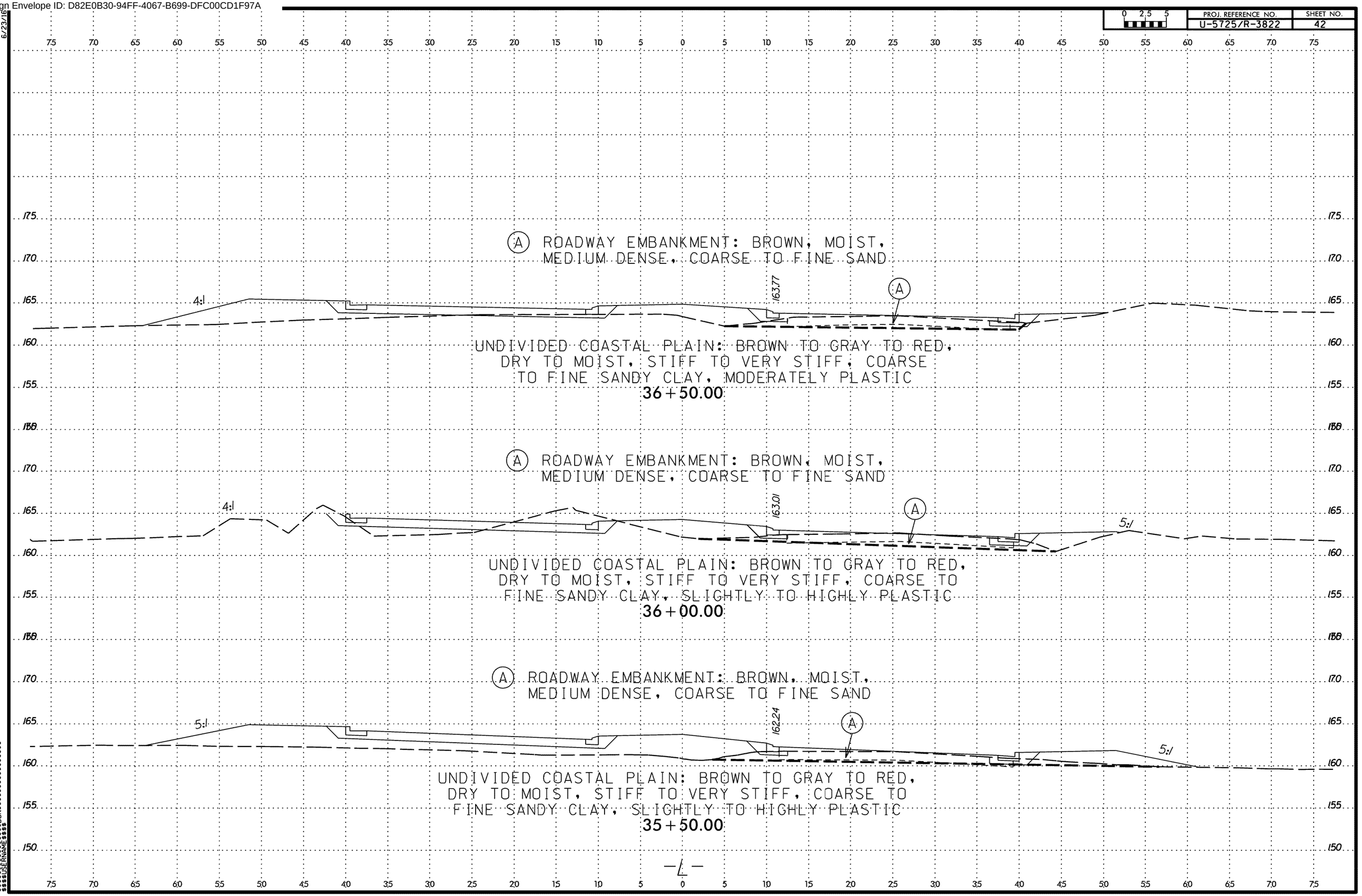
33+00.00

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

SOIL TEST RESULTS

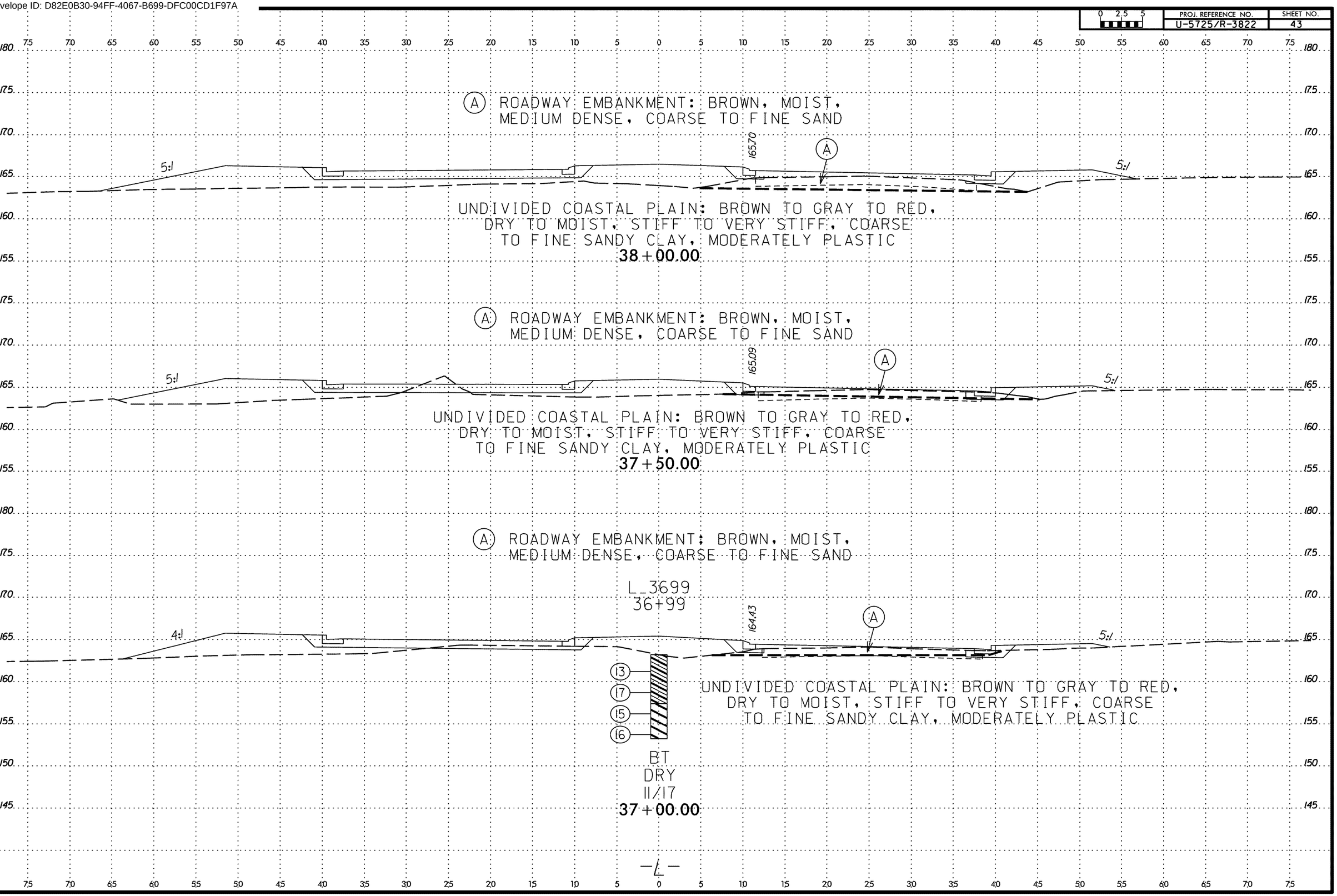
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-6	40 LT	35+00	6.0-7.5	A-7-6 (29)	67	43	8	28	10	54	100	99	69	23.3	-





6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	43



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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	44

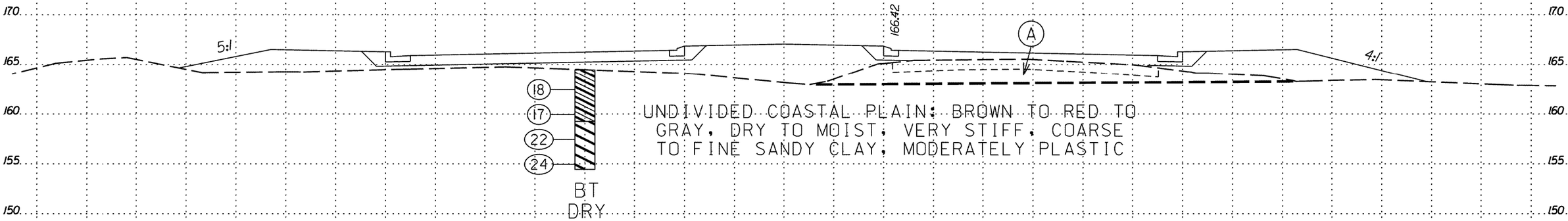
SOIL TEST RESULTS

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-7	20 LT	39+00	1.0-2.5	A-6 (4)	39	19	30	30	8	32	100	83	44	11.9	-

SS-7

L_3900

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

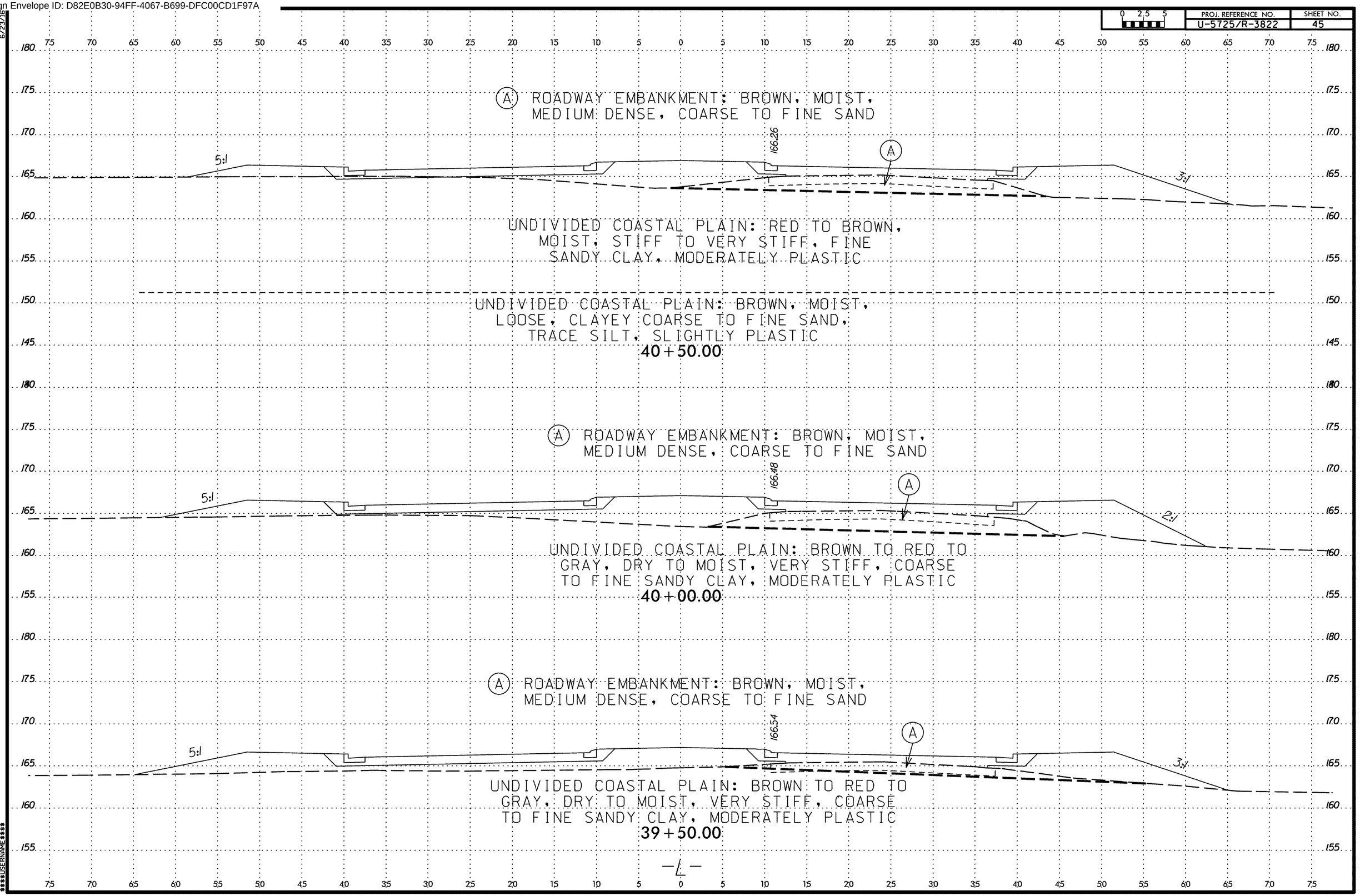


UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY, DRY TO MOIST, VERY STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY, DRY TO MOIST, VERY STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

-L-

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



PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	45

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, STIFF TO VERY STIFF, FINE SANDY CLAY, MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, LOOSE, CLAYEY COARSE TO FINE SAND, TRACE SILT, SLIGHTLY PLASTIC

40+50.00

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY, DRY TO MOIST, VERY STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

40+00.00

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY, DRY TO MOIST, VERY STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

39+50.00

-L-

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	46

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

180 175 170 165 160 155 150 145 140

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

5:1

165.60

Ⓐ

2:1

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, STIFF TO VERY STIFF, FINE SANDY CLAY, MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, LOOSE, CLAYEY COARSE TO FINE SAND, TRACE SILT, SLIGHTLY PLASTIC

41+50.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

L_4100

5:1

165.93

Ⓐ

2:1

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, STIFF TO VERY STIFF, FINE SANDY CLAY, MODERATELY PLASTIC

10

19

7

BT
FIAD

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, LOOSE, CLAYEY COARSE TO FINE SAND, TRACE SILT, SLIGHTLY PLASTIC

41+00.00

—L—

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

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, LOOSE, COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: BROWN TO RED, DRY TO MOIST, VERY STIFF TO HARD, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN TO RED, MOIST, LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

42 + 50.00

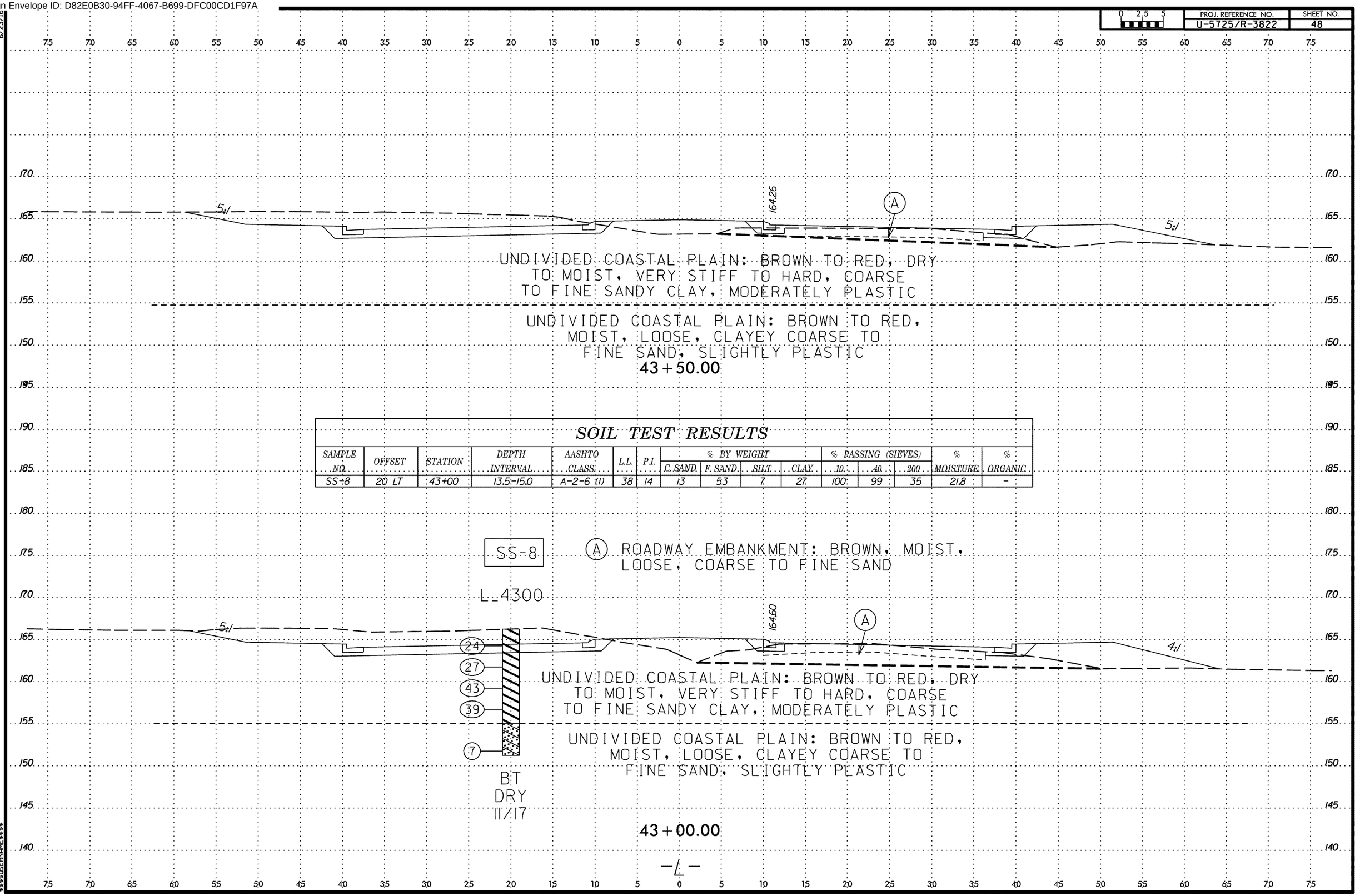
Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, STIFF TO VERY STIFF, FINE SANDY CLAY, MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, LOOSE, CLAYEY COARSE TO FINE SAND, TRACE SILT, SLIGHTLY PLASTIC

42 + 00.00

-L-



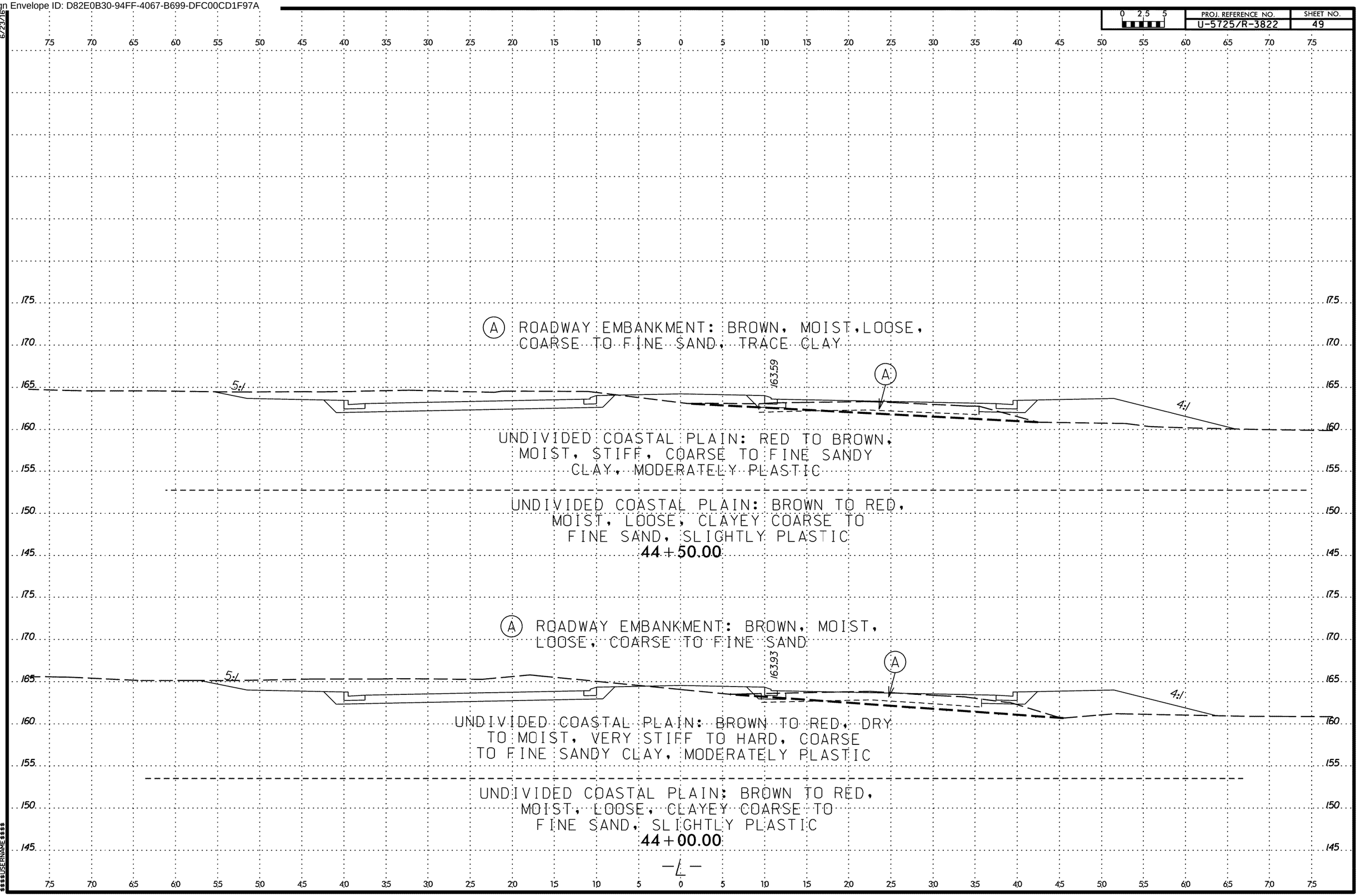
SOIL TEST RESULTS

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-8	20 LT	43+00	13.5-15.0	A-2-6 (1)	38	14	13	53	7	27	100	99	35	21.8	-

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	49



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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	50

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

175 170 165 160 155 150 145

(A) ROADWAY EMBANKMENT: BROWN, MOIST, LOOSE, COARSE TO FINE SAND, TRACE CLAY

162.92

5:1

4:1

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

UNDIVIDED COASTAL PLAIN: TAN BROWN TO RED, DRY, MEDIUM DENSE, SILTY CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

45+50.00

(A) ROADWAY EMBANKMENT: BROWN, MOIST, LOOSE, COARSE TO FINE SAND, TRACE CLAY

L_4500

163.26

5:1

4:1

(4) (13) (9)

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

UNDIVIDED COASTAL PLAIN: BROWN TO RED, MOIST, LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

BT
FIAD

45+00.00

—L—

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

DocuSign Envelope ID: D82E0B30-94FF-4067-B699-DFC00CD1F97A

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	51

46+50.00

46+00.00

-L-

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

175 170 165 160 155 150 145 140

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE COARSE TO FINE SAND, TRACE CLAY

161.59

4:1

5:1

UNDIVIDED COASTAL PLAIN: RED TO GRAY, DRY, VERY STIFF TO HARD, COARSE TO FINE SANDY SILTY CLAY, MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: TAN BROWN TO RED, DRY, MEDIUM DENSE, SILTY CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

47+50.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE COARSE TO FINE SAND, TRACE CLAY

L_4676

161.92

5:1

5:1

18
33
25
12

BT
DRY
11/17

UNDIVIDED COASTAL PLAIN: RED TO GRAY, DRY, VERY STIFF TO HARD, COARSE TO FINE SANDY SILTY CLAY, MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: TAN BROWN TO RED, DRY, MEDIUM DENSE, SILTY CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

47+00.00

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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	53

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

170 165 160 155 150 145

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE COARSE TO FINE SAND

161.02

2:1

5:1

(A)

UNDIVIDED COASTAL PLAIN: REDDISH BROWN, DRY TO MOIST, VERY STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: GRAY TO REDDISH BROWN TO TAN BROWN, MOIST TO SATURATED, MEDIUM DENSE TO VERY LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

48+50.00

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE COARSE TO FINE SAND, TRACE CLAY

161.25

2:1

5:1

(A)

UNDIVIDED COASTAL PLAIN: RED TO GRAY, DRY, VERY STIFF TO HARD, COARSE TO FINE SANDY SILTY CLAY, MODERATELY PLASTIC

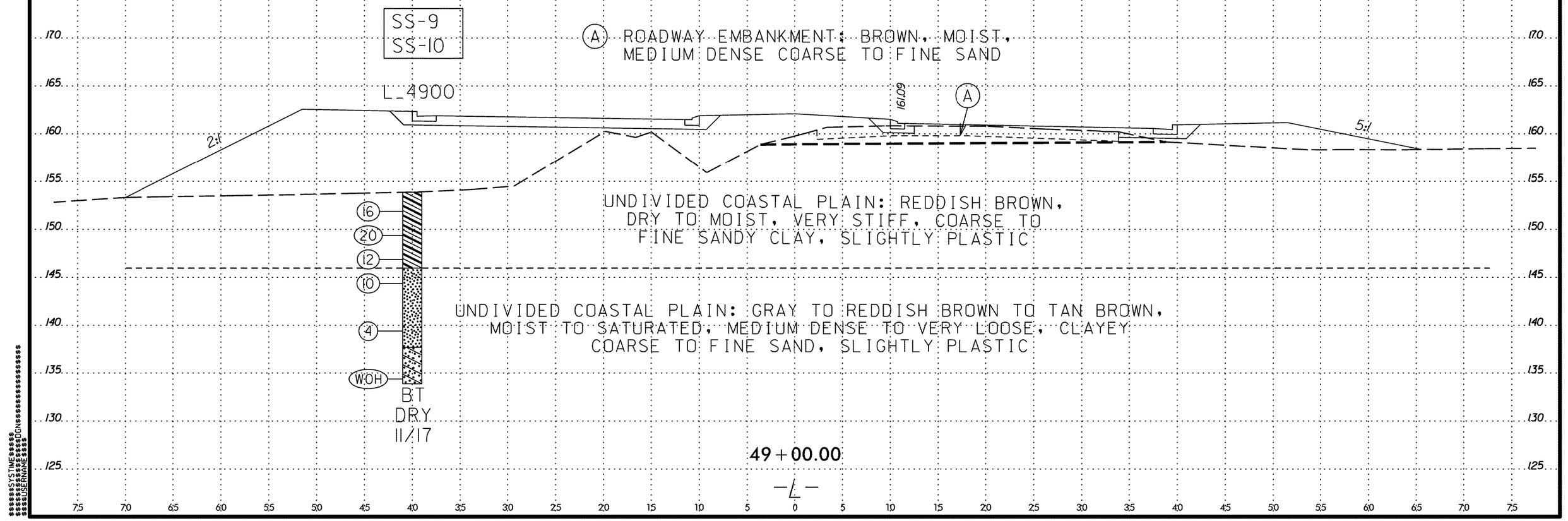
UNDIVIDED COASTAL PLAIN: TAN BROWN TO RED, DRY, MEDIUM DENSE, SILTY CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

48+00.00

$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DON$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-9	40 LT	49+00	3.5-5.0	A-6 (2)	38	12	12	47	7	34	100	98	43	18.7	-
SS-10	40 LT	49+00	8.5-10.0	A-2-5 (0)	42	10	66	10	8	16	99	53	25	13.2	-



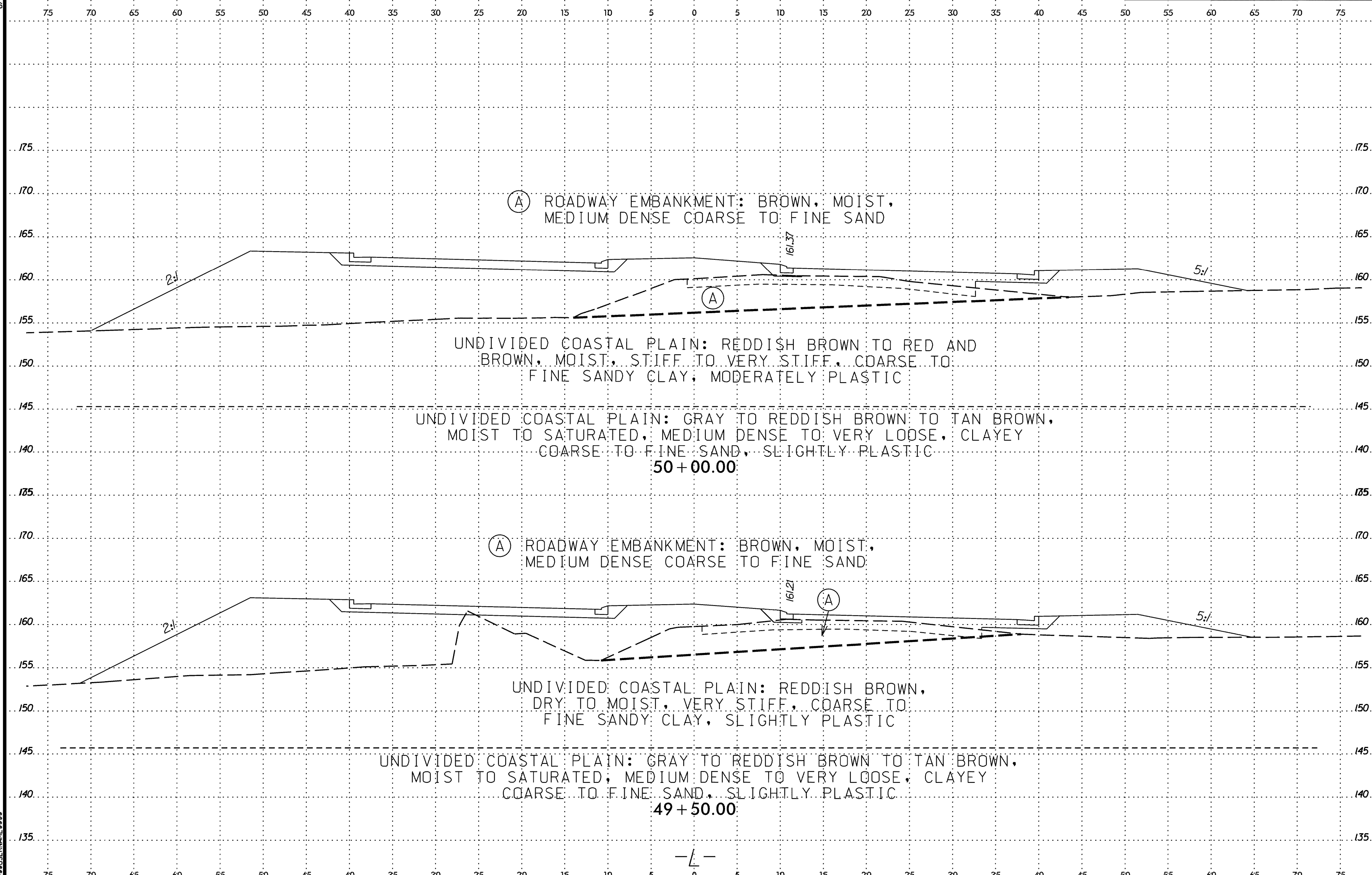
49+00.00

-L-

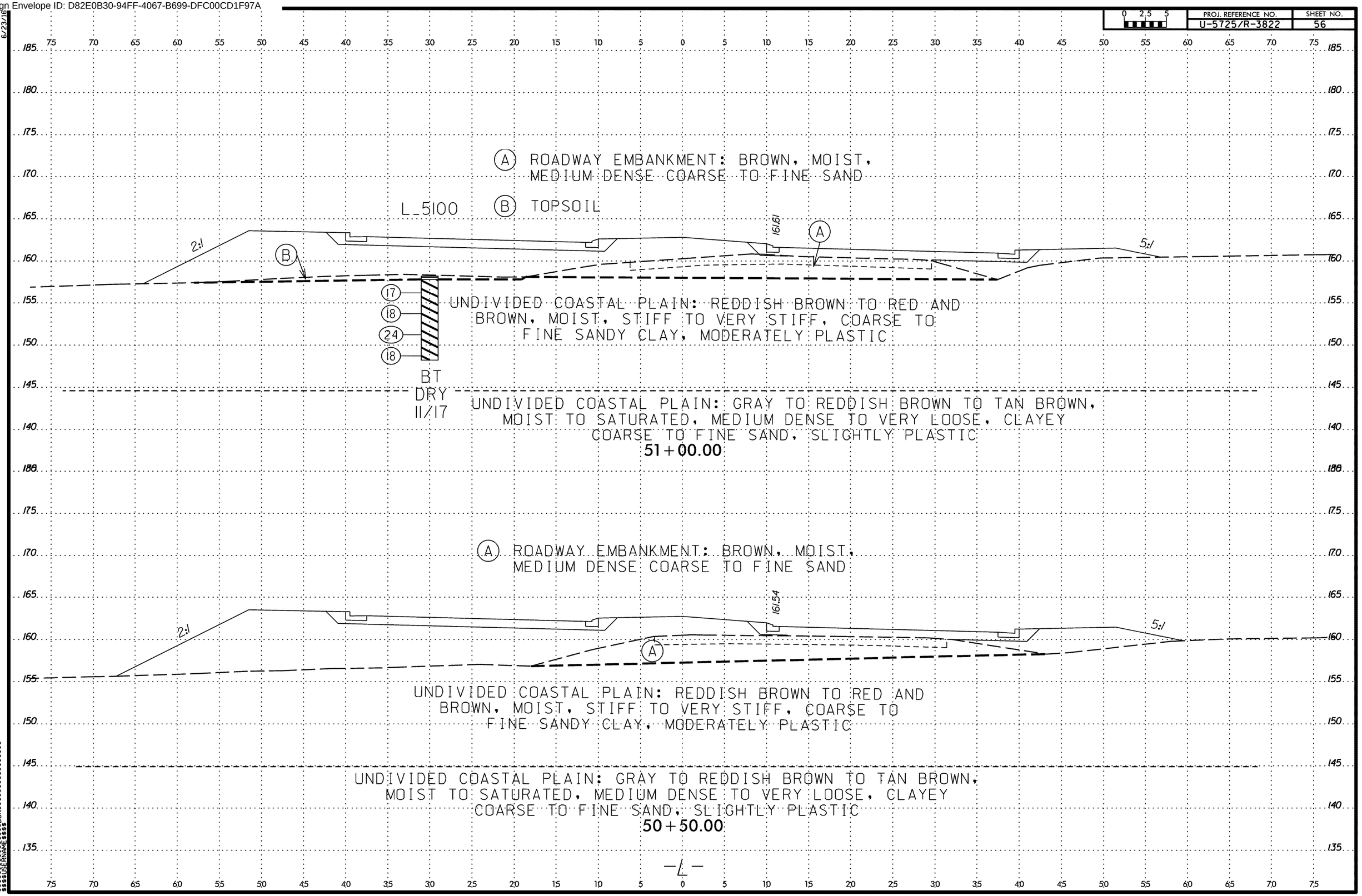
$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	55



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



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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	57

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

170 165 160 155 150 145 140 135

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

4:1

Ⓐ 161.20

5:1

UNDIVIDED COASTAL PLAIN: REDDISH BROWN TO RED AND BROWN, MOIST, STIFF TO VERY STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: GRAY TO REDDISH BROWN TO TAN BROWN, MOIST TO SATURATED, MEDIUM DENSE TO VERY LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

52+00.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE COARSE TO FINE SAND

3:1

161.54 Ⓐ

5:1

UNDIVIDED COASTAL PLAIN: REDDISH BROWN TO RED AND BROWN, MOIST, STIFF TO VERY STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: GRAY TO REDDISH BROWN TO TAN BROWN, MOIST TO SATURATED, MEDIUM DENSE TO VERY LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

51+50.00

—L—

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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	58

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

170 165 160 155 150 145 140 135

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

5:1 Ⓐ 159.91 5:1

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, VERY STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, LOOSE TO MEDIUM DENSE, CLAYEY FINE SAND, SLIGHTLY PLASTIC

53+00.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

5:1 Ⓐ 160.66 5:1

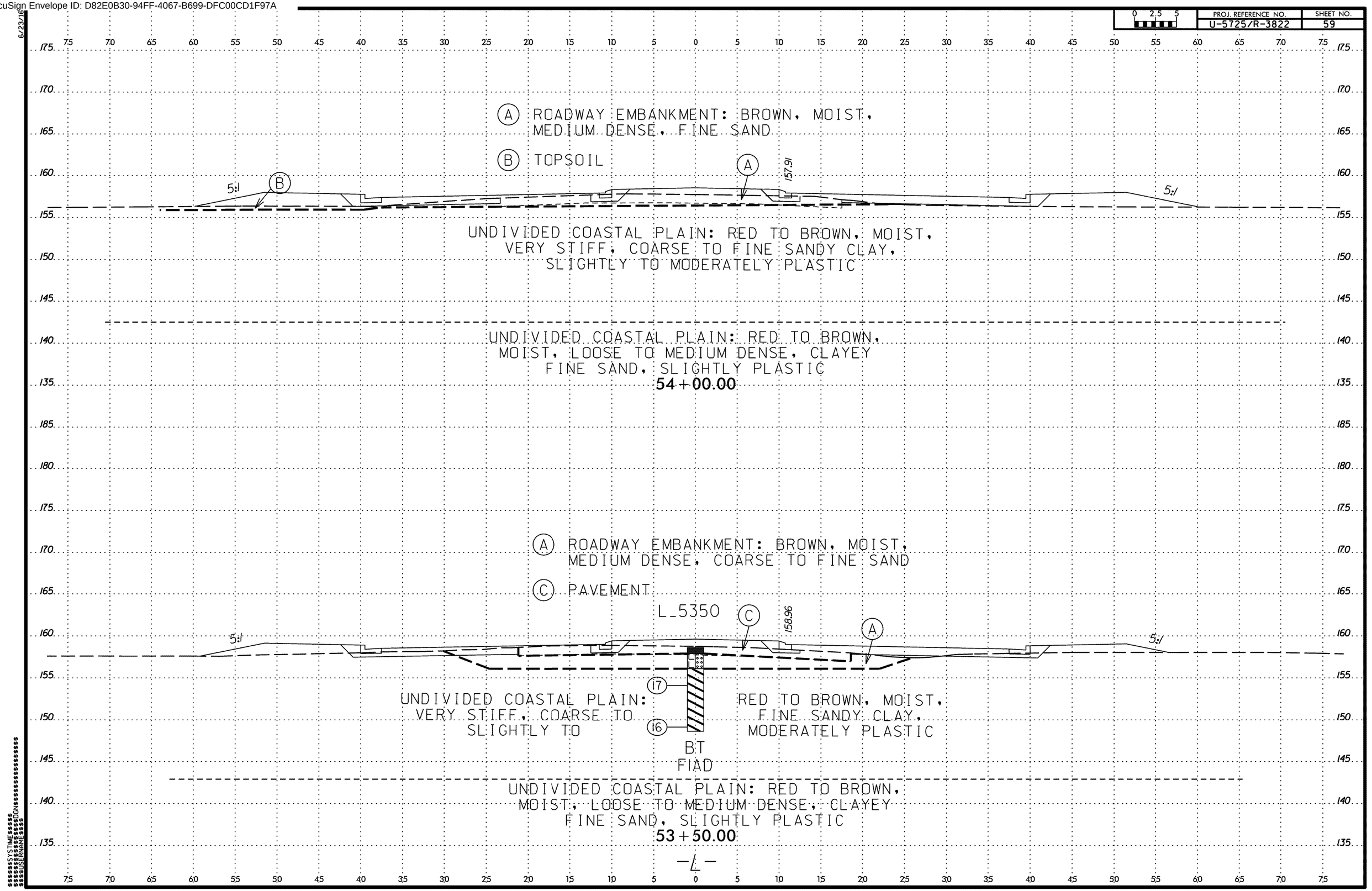
UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, VERY STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: GRAY TO REDDISH BROWN TO TAN BROWN, MOIST TO SATURATED, MEDIUM DENSE TO VERY LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

52+50.00

—L—

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



6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	59

54+00.00

53+50.00

-L-

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

SOIL TEST RESULTS

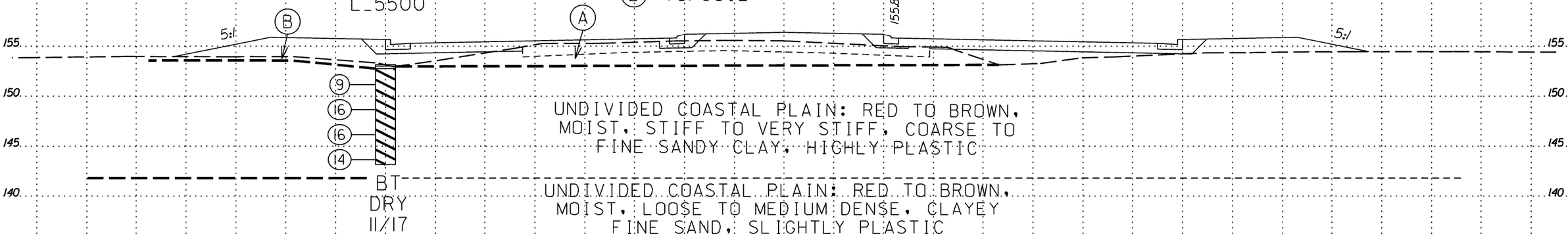
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	% BY WEIGHT F. SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-11	40 LT	55+00	3.5-5.0	A-7-6 (10)	48	26	23	28	9	40	100	91	51	21.0	-

SS-11

L 5500

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

(B) TOPSOIL



BT
DRY
11/17

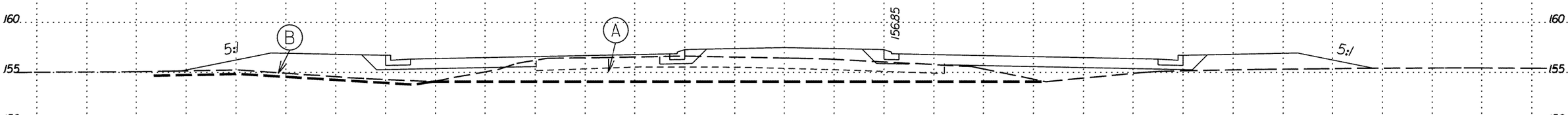
UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, STIFF TO VERY STIFF, COARSE TO FINE SANDY CLAY, HIGHLY PLASTIC

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, LOOSE TO MEDIUM DENSE, CLAYEY FINE SAND, SLIGHTLY PLASTIC

55+00.00

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

(B) TOPSOIL



UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, STIFF TO VERY STIFF, COARSE TO FINE SANDY CLAY, HIGHLY PLASTIC

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, LOOSE TO MEDIUM DENSE, CLAYEY FINE SAND, SLIGHTLY PLASTIC

54+50.00

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	61

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

170 165 160 155 150 145 140 135 130

INTERSECTION WITH
-Y3- SR-1683
(AMERICAN LEGION RD)

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

INTERSECTION WITH
-Y3- SR-1683
(AMERICAN LEGION RD)

15474

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, STIFF TO VERY STIFF, COARSE TO FINE SANDY CLAY, HIGHLY PLASTIC

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, LOOSE TO MEDIUM DENSE, CLAYEY FINE SAND, SLIGHTLY PLASTIC

55+50.00

-L-

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	62

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-29	*CL	*13+00	6.0-7.5	A-7-6 (4)	42	16	17	40	8	35	100	93	44	15.8	-

*Note: Station and Offset are on -Y3-

SS-29

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

(B) TOPSOIL

INTERSECTION WITH -Y3- SR-1683 (AMERICAN LEGION RD)

INTERSECTION WITH -Y3- SR-1683 (AMERICAN LEGION RD)

Y3_1300
55+88

153.69

28
23
18
16

UNDIVIDED COASTAL PLAIN: BROWN TO RED, DRY TO MOIST, VERY STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

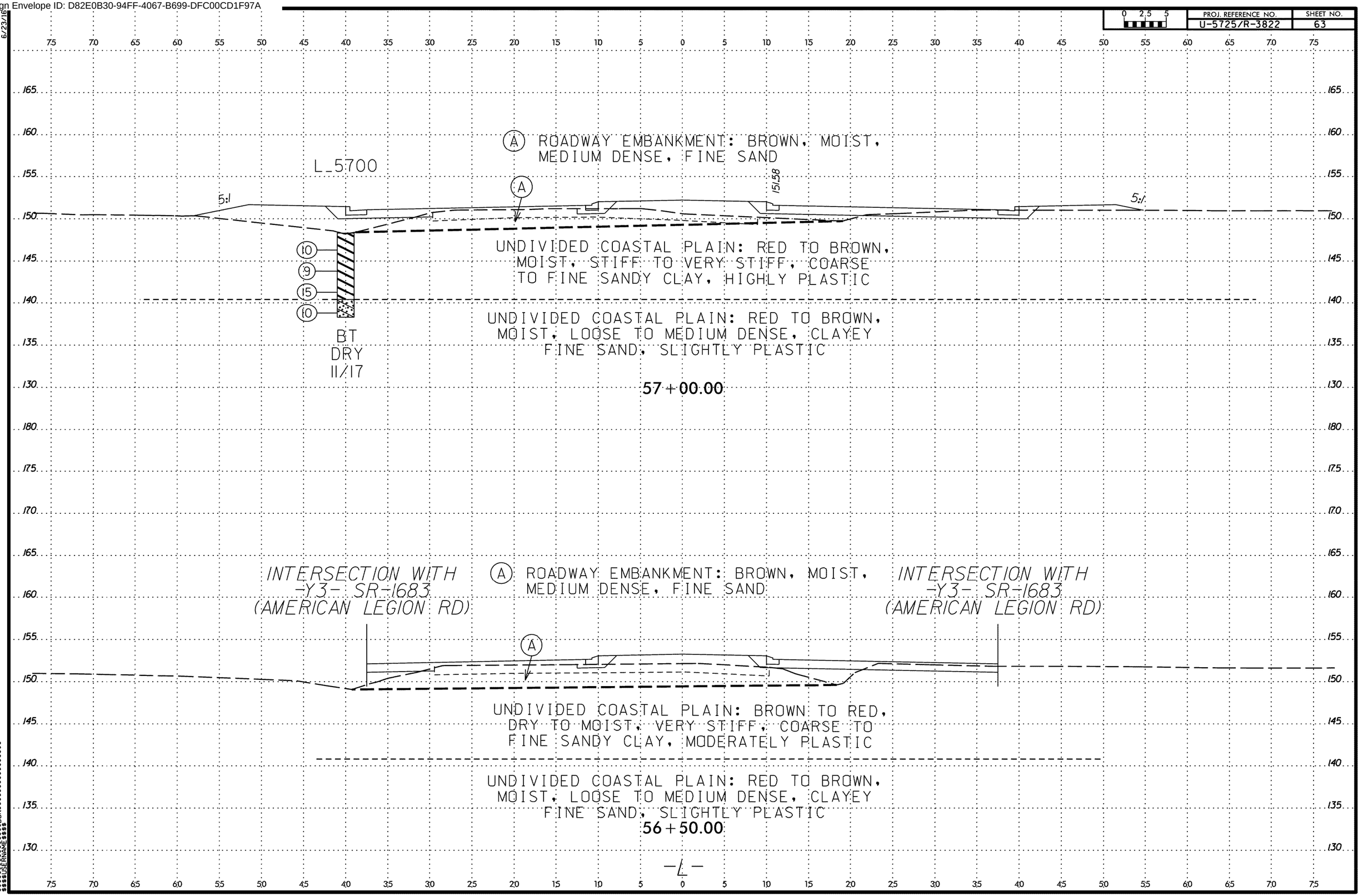
BT
DRY
11/17

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, LOOSE TO MEDIUM DENSE, CLAYEY FINE SAND, SLIGHTLY PLASTIC

56+00.00

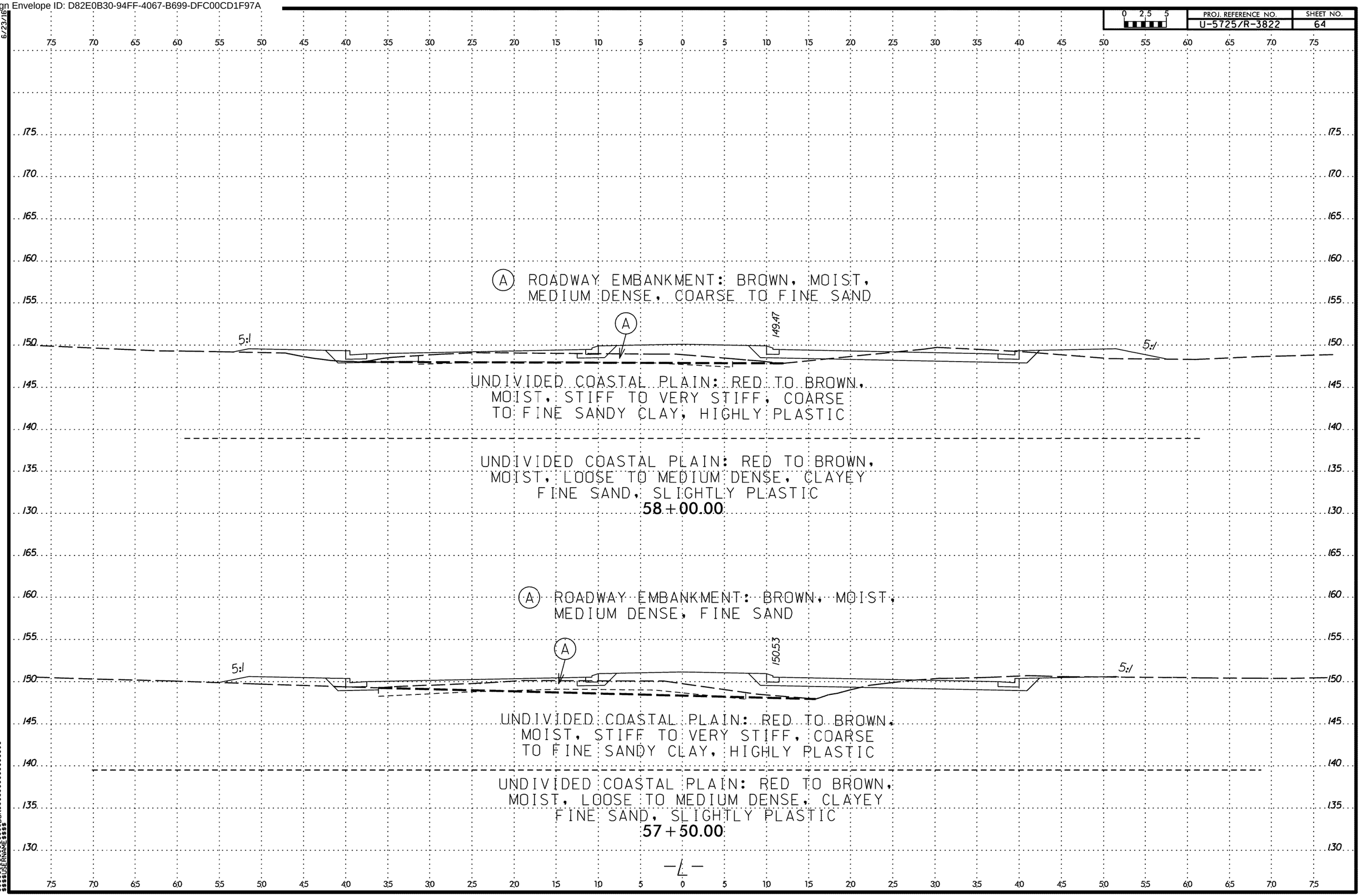
-L-

$$$$$$SYSTIMESSSSS
$$$$$$$$$$$$$$$$DGNSSSSSSSSSSSSSSSSSS
$$$$USERNAMESSSS



6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	64



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

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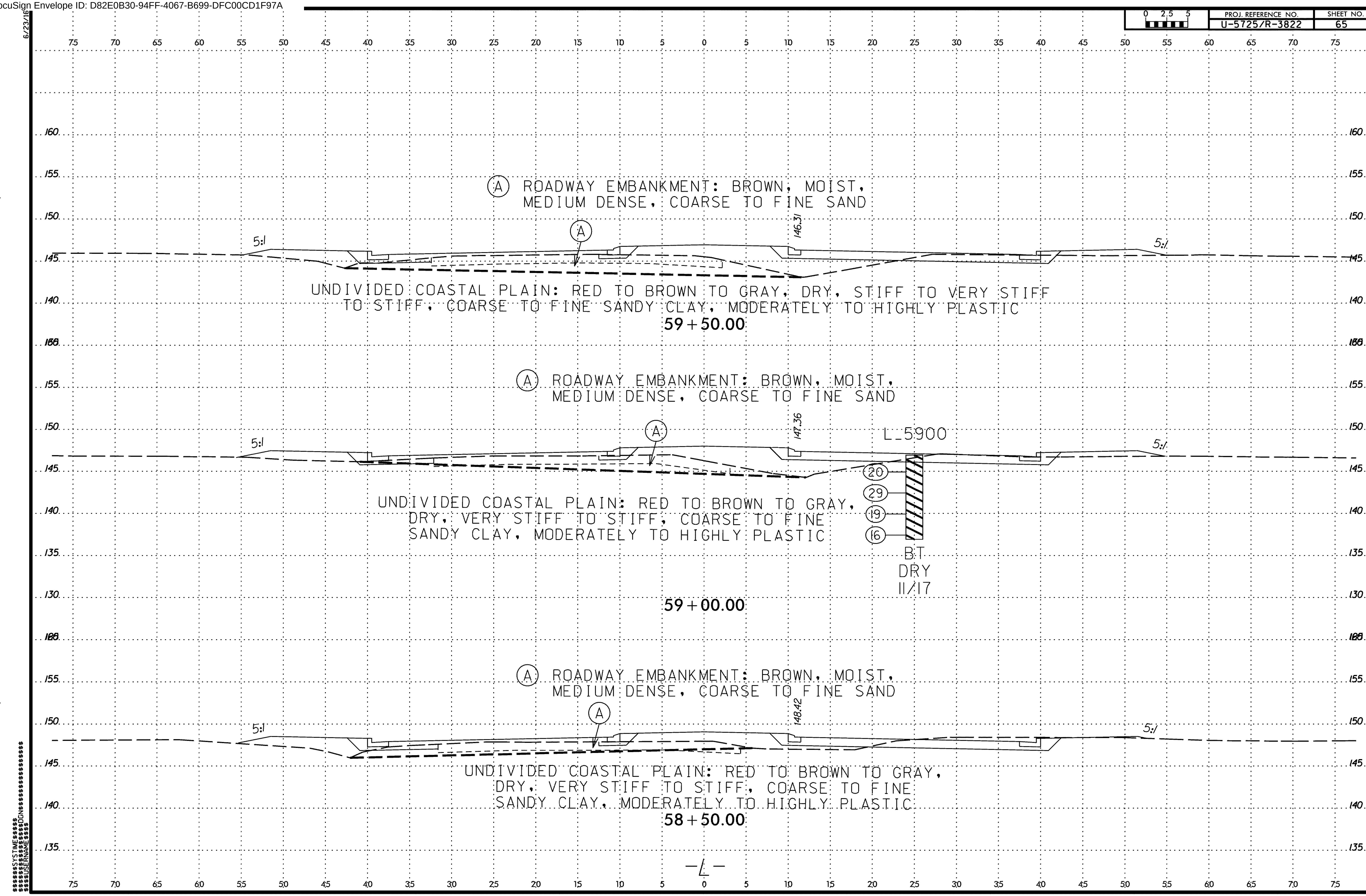
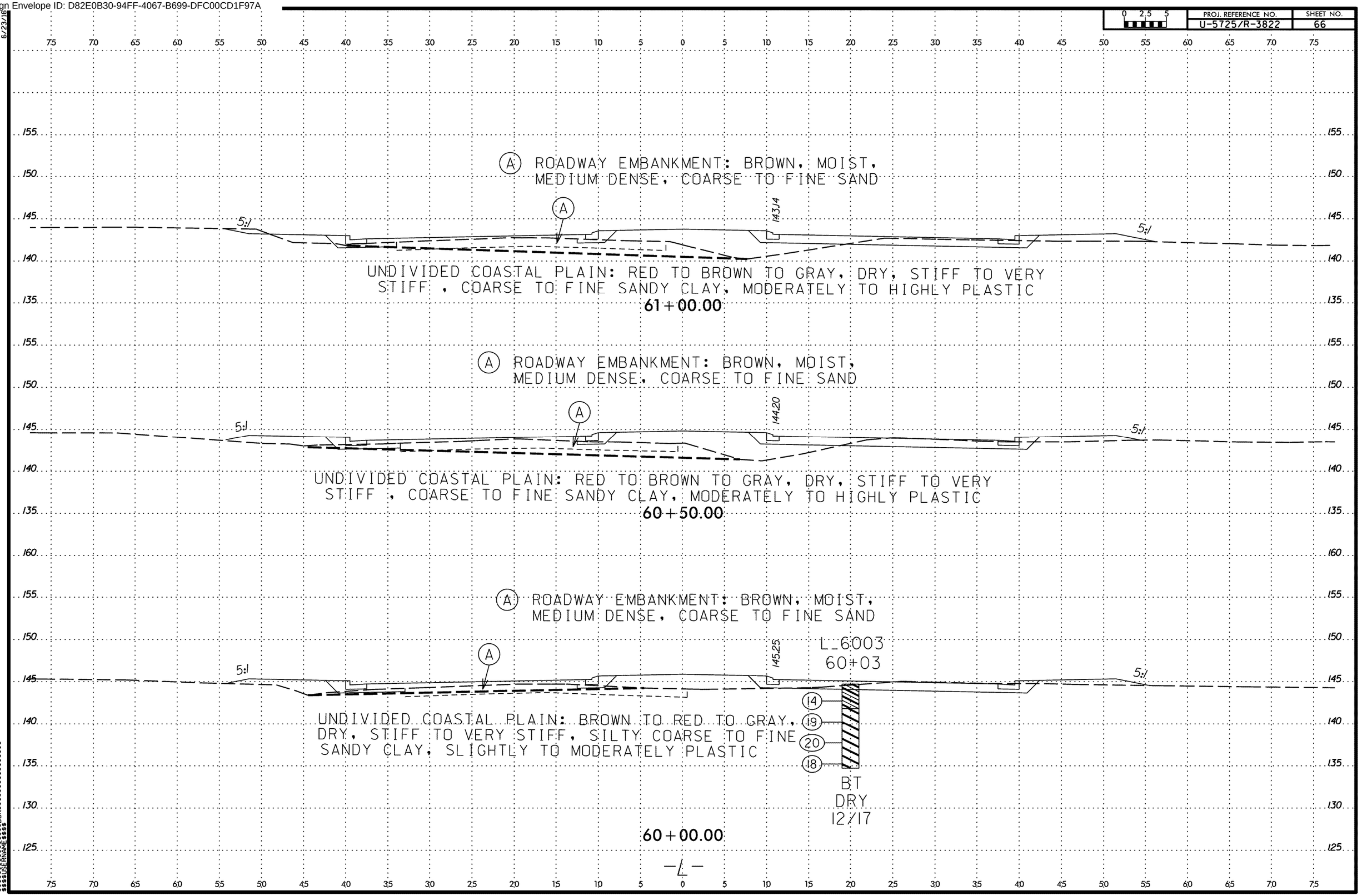
PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	65



6/23/16
0 2.5 5
Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND
146.31
5:1
UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, DRY, STIFF TO VERY STIFF TO STIFF, COARSE TO FINE SANDY CLAY, MODERATELY TO HIGHLY PLASTIC
59+50.00
Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND
147.36
L_5900
20
29
19
16
BT
DRY
11/17
UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, DRY, VERY STIFF TO STIFF, COARSE TO FINE SANDY CLAY, MODERATELY TO HIGHLY PLASTIC
59+00.00
Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND
148.42
UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, DRY, VERY STIFF TO STIFF, COARSE TO FINE SANDY CLAY, MODERATELY TO HIGHLY PLASTIC
58+50.00
-L-
$$$$SYSTIME$$$$
$$$$$$$$DGN$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$



61+00.00

60+50.00

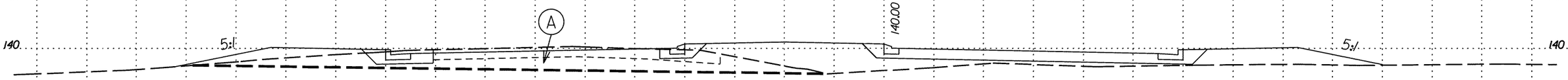
60+00.00

-L-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

150 145 140 135 130 155

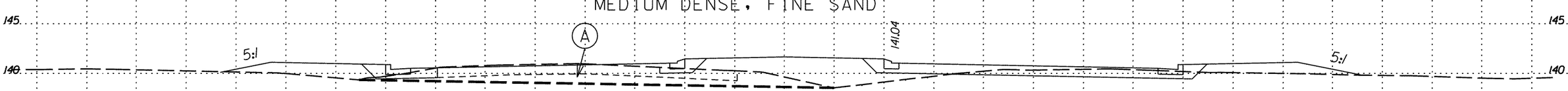
(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND



UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, MOIST, MEDIUM STIFF TO STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

62+50.00

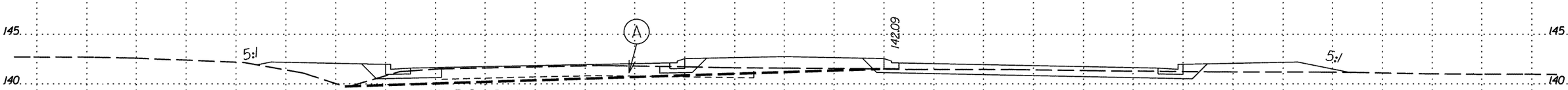
(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND



UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, MOIST, MEDIUM STIFF TO STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

62+00.00

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND



UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, DRY, STIFF TO VERY STIFF , COARSE TO FINE SANDY CLAY, MODERATELY TO HIGHLY PLASTIC

61+50.00

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

6/23/16

0 2.5 5

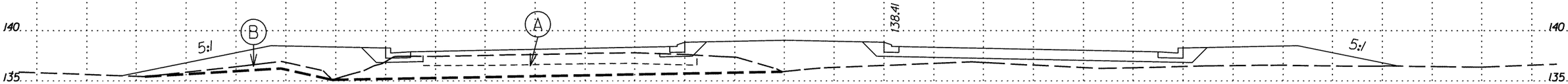
PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	68

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

155 150 145 140 135 130 188 155 150 145 140 135 130 125 120

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

Ⓑ TOPSOIL

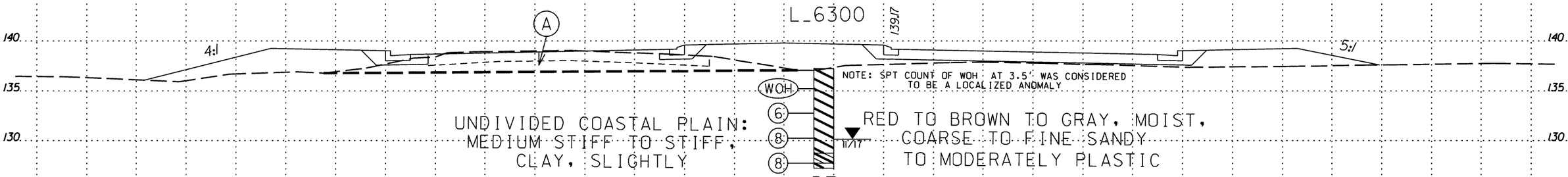


UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, MOIST, VERY SOFT TO STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

63+50.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

L_6300



NOTE: SPT COUNT OF WOH AT 3.5' WAS CONSIDERED TO BE A LOCALIZED ANOMALY

UNDIVIDED COASTAL PLAIN: MEDIUM STIFF TO STIFF, CLAY, SLIGHTLY

RED TO BROWN TO GRAY, MOIST, COARSE TO FINE SANDY TO MODERATELY PLASTIC

63+00.00

$$$$$$SYSTIMES$$$$$$
$$$$$$$$$$$$$$$$$$$$DGNS$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$$

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	69

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

Ⓑ TOPSOIL

UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, MOIST, STIFF TO VERY STIFF, FINE SANDY SILTY CLAY, SLIGHTLY TO HIGHLY PLASTIC

64 + 50.00

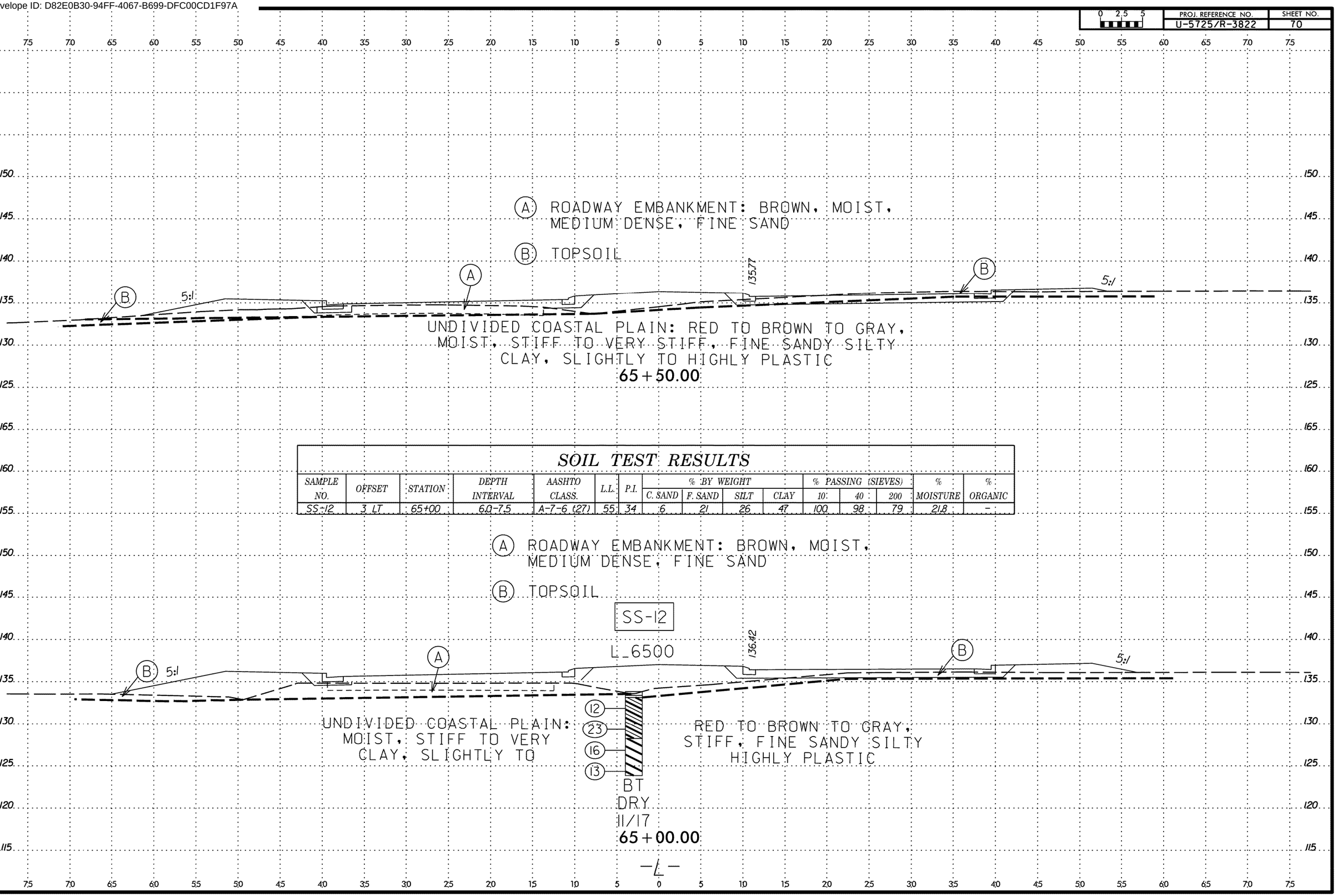
Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

Ⓑ TOPSOIL

UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, MOIST, STIFF TO VERY STIFF, FINE SANDY SILTY CLAY, SLIGHTLY TO HIGHLY PLASTIC

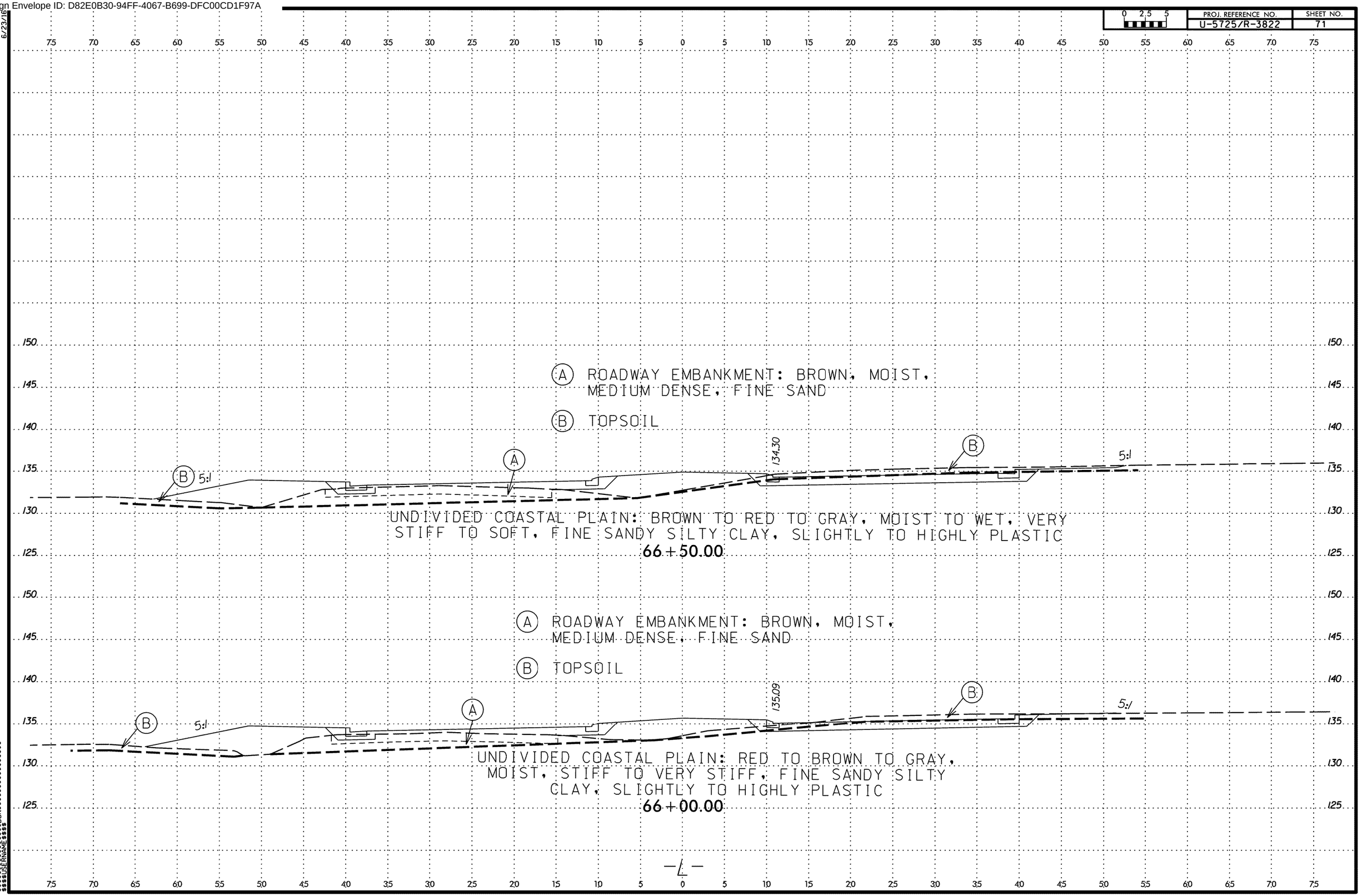
64 + 00.00

-L-

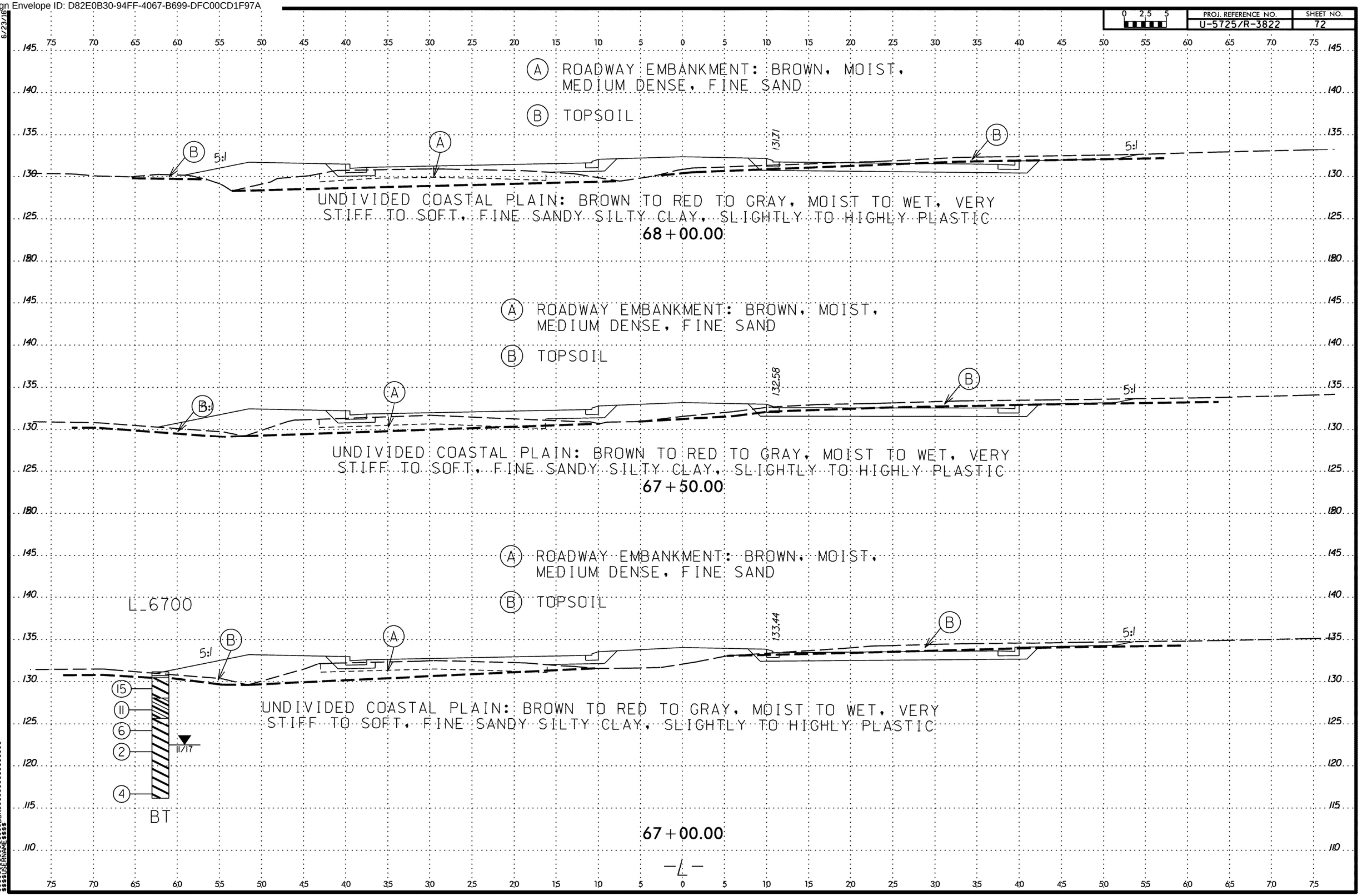


SOIL TEST RESULTS

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-12	3 LT	65+00	6.0-7.5	A-7-6 (27)	55	34	6	21	26	47	100	98	79	21.8	-



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



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	73

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

155 150 145 140 135 130 125 120 115 110 105

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

Ⓑ TOPSOIL

Ⓑ 5:1 Ⓐ 130.09 L_6900 Ⓑ 5:1

UNDIVIDED COASTAL PLAIN: GRAY TO RED TO BROWN, MOIST TO WET, STIFF TO SOFT, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

12 12 6 4

BT
DRY
12/17

69+00.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

Ⓑ TOPSOIL

Ⓑ 5:1 Ⓐ 130.85 Ⓑ 5:1

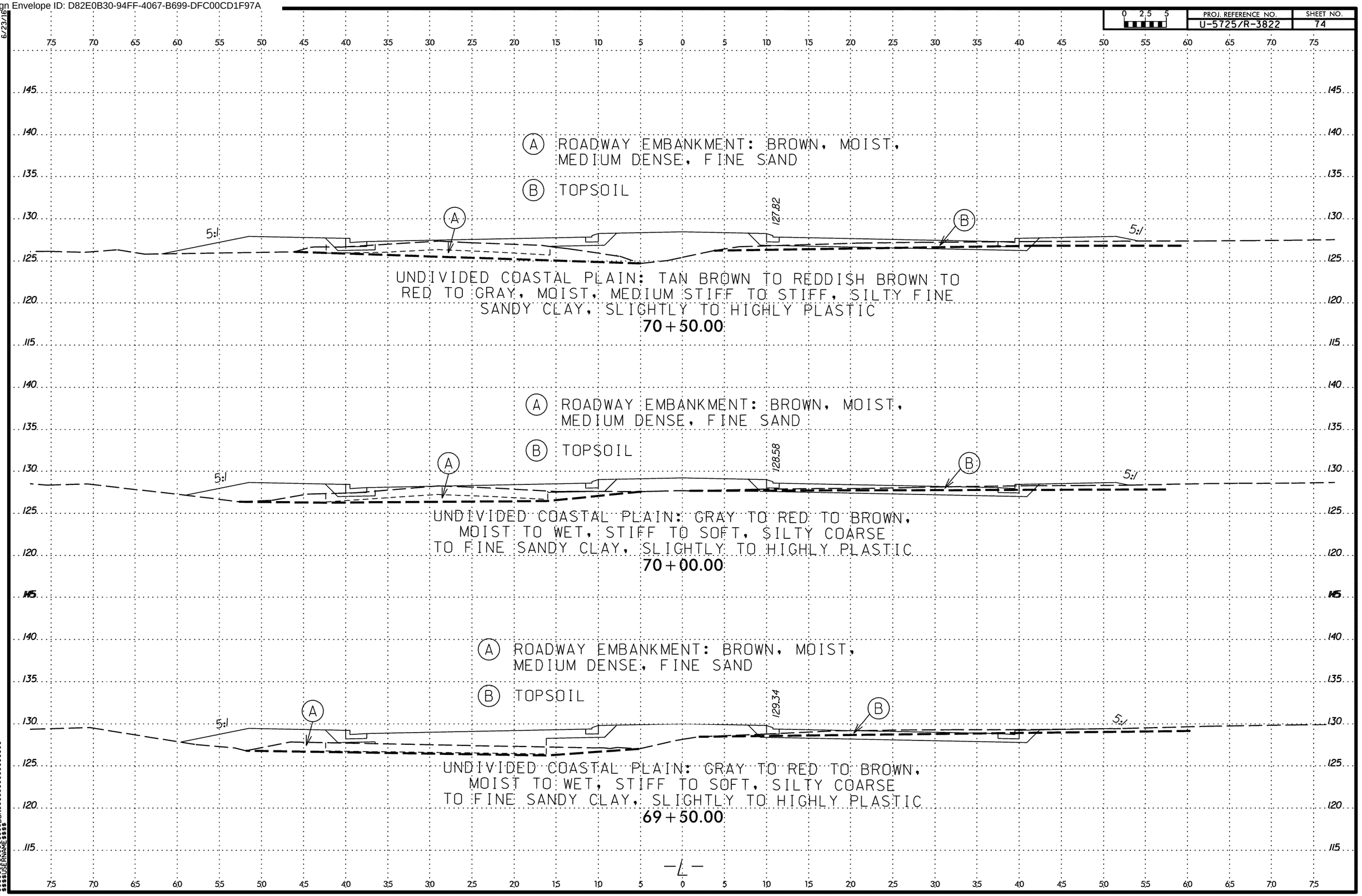
UNDIVIDED COASTAL PLAIN: GRAY TO RED TO BROWN, MOIST TO WET, STIFF TO SOFT, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

68+50.00

—L—

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



DocuSign Envelope ID: D82E0B30-94FF-4067-B699-DFC00CD1F97A

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	74

70+50.00

70+00.00

69+50.00

-L-

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	75

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

140 135 130 125 120 115 110

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

(B) TOPSOIL

126.31

5:1

UNDIVIDED COASTAL PLAIN: TAN BROWN TO REDDISH BROWN TO RED TO GRAY, MOIST, MEDIUM STIFF TO STIFF, SILTY FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

71+50.00

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

(B) TOPSOIL

L_7100

127.07

5:1

UNDIVIDED COASTAL PLAIN: RED TO GRAY, MOIST, MEDIUM SANDY CLAY, SLIGHTLY

13 13 8 10

11/17

BT

TAN BROWN TO REDDISH BROWN TO STIFF TO STIFF, SILTY FINE TO HIGHLY PLASTIC

71+00.00

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	76

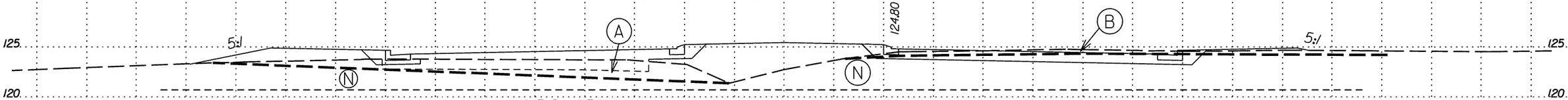
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

150 145 140 135 130 125 120 115 160

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

(B) TOPSOIL

(N) UNDIVIDED COASTAL PLAIN: GRAYISH BROWN TO GRAY TO BLACK, WET, SOFT TO MEDIUM STIFF, CLAYEY SILT, SLIGHTLY PLASTIC, TRACE ORGANICS



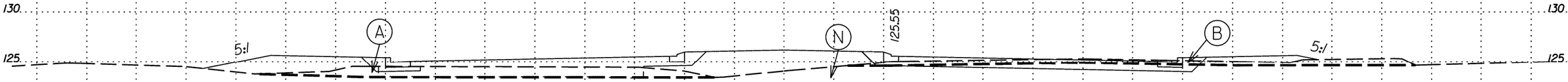
UNDIVIDED COASTAL PLAIN: GRAY, MOIST, MEDIUM STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC, TRACE GRAVEL

72+50.00

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

(B) TOPSOIL

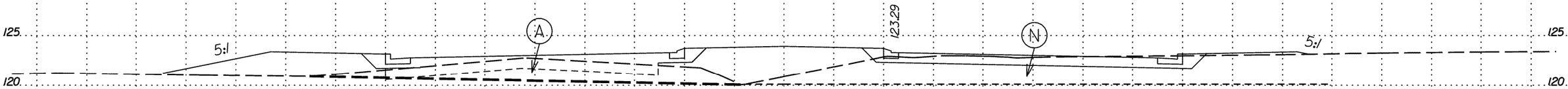
(N) UNDIVIDED COASTAL PLAIN: GRAYISH BROWN TO GRAY TO BLACK, WET, SOFT TO MEDIUM STIFF, CLAYEY SILT, SLIGHTLY PLASTIC, TRACE ORGANICS

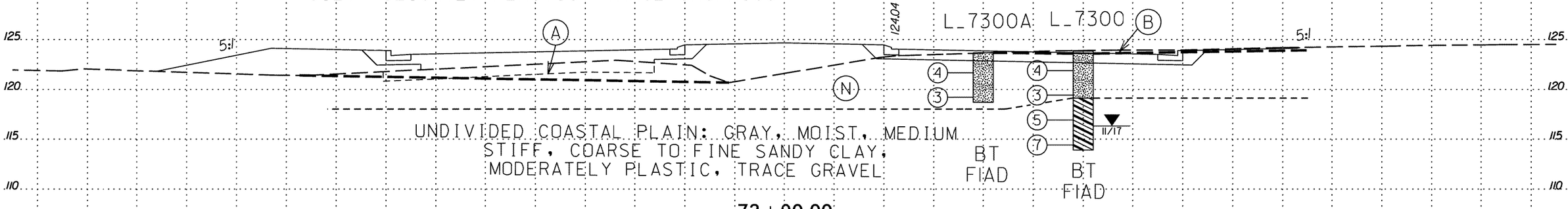


UNDIVIDED COASTAL PLAIN: TAN BROWN TO REDDISH BROWN TO RED TO GRAY, MOIST, MEDIUM STIFF TO STIFF, SILTY FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

72+00.00

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





Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

Ⓝ UNDIVIDED COASTAL PLAIN: GRAYISH BROWN TO GRAY TO BLACK, WET, SOFT TO MEDIUM STIFF, CLAYEY SILT, SLIGHTLY PLASTIC, TRACE ORGANICS

UNDIVIDED COASTAL PLAIN: GRAY, MOIST, MEDIUM STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC, TRACE GRAVEL

73+50.00

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-13	30 RT	73+00	1.0-2.5	A-4 (2)	21	5	3	20	53	24	100	98	84	23.8	-

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

Ⓑ TOPSOIL

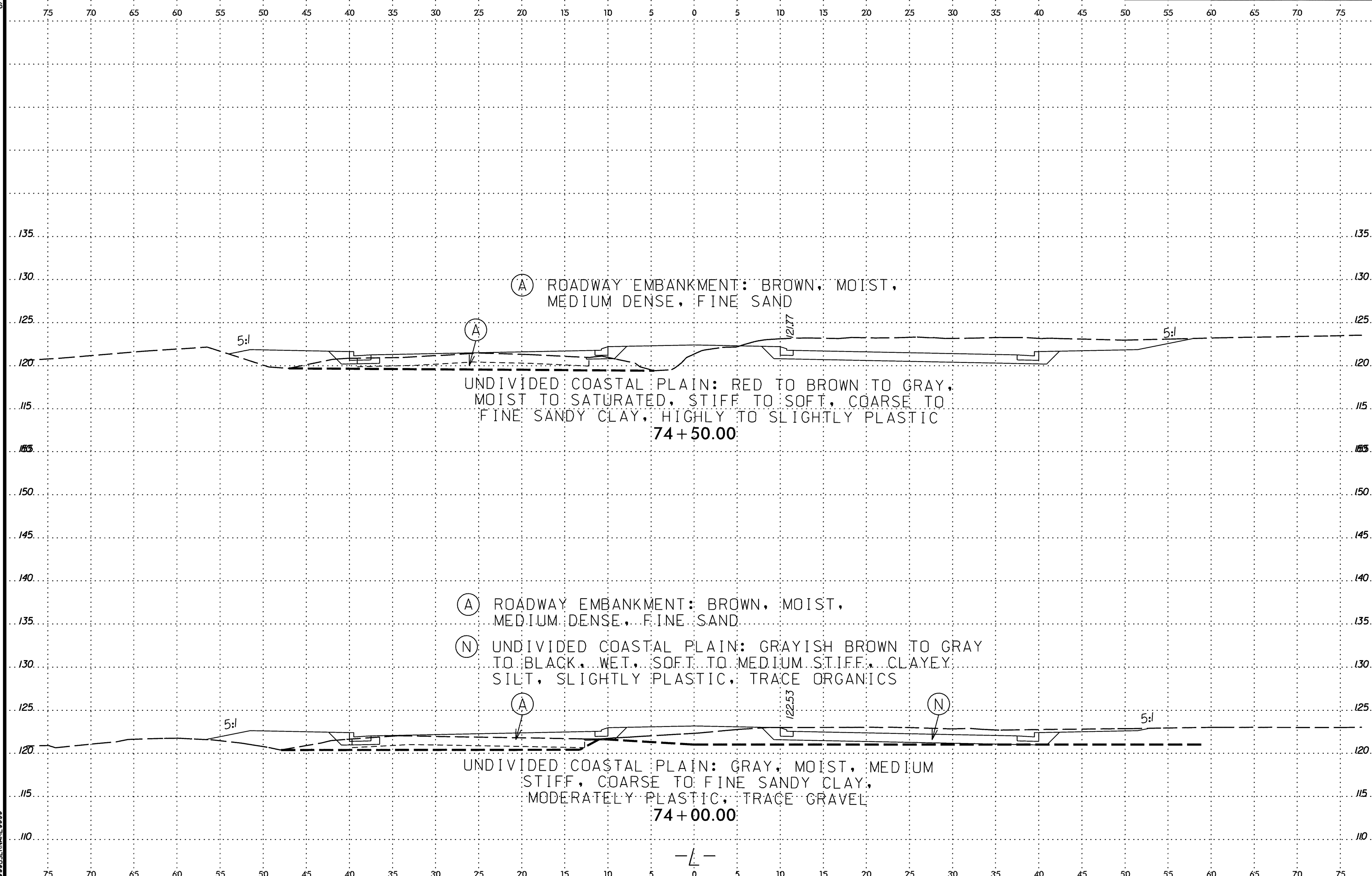
Ⓝ UNDIVIDED COASTAL PLAIN: GRAYISH BROWN TO GRAY TO BLACK, WET, SOFT TO MEDIUM STIFF, CLAYEY SILT, SLIGHTLY PLASTIC, TRACE ORGANICS

SS-13

UNDIVIDED COASTAL PLAIN: GRAY, MOIST, MEDIUM STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC, TRACE GRAVEL

73+00.00

-L-


(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND
5:1
(A)
121.77
5:1
UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, MOIST TO SATURATED, STIFF TO SOFT, COARSE TO FINE SANDY CLAY, HIGHLY TO SLIGHTLY PLASTIC
74+50.00
(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND
(N) UNDIVIDED COASTAL PLAIN: GRAYISH BROWN TO GRAY TO BLACK, WET, SOFT TO MEDIUM STIFF, CLAYEY SILT, SLIGHTLY PLASTIC, TRACE ORGANICS
5:1
(A)
122.53
(N)
5:1
UNDIVIDED COASTAL PLAIN: GRAY, MOIST, MEDIUM STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC, TRACE GRAVEL
74+00.00
-L-

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	79

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

135 130 125 120 115 110

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

5:1

(A)

120.26

5:1

UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, MOIST TO SATURATED, STIFF TO SOFT, COARSE TO FINE SANDY CLAY, HIGHLY TO SLIGHTLY PLASTIC

75+50.00

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

L_7507
75+07

5:1

(A)

121.02

5:1

(14)
(12)
(7)
(6)
(2)

BT
DRY
12/17

UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, MOIST TO SATURATED, STIFF TO SOFT, COARSE TO FINE SANDY CLAY, HIGHLY TO SLIGHTLY PLASTIC

135 130 125 120 115 110 105 100

75+00.00

—L—

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

130 125 120 115 110 105

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

(A)

5:1

11.75

5:1

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY, SATURATED TO MOIST, VERY SOFT TO VERY STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC, TRACE GRAVEL

76+50.00

140 135 130 125 120 115 110 105

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

(A)

5:1

19.51

5:1

UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, MOIST TO SATURATED, STIFF TO SOFT, COARSE TO FINE SANDY CLAY, HIGHLY TO SLIGHTLY PLASTIC

76+00.00

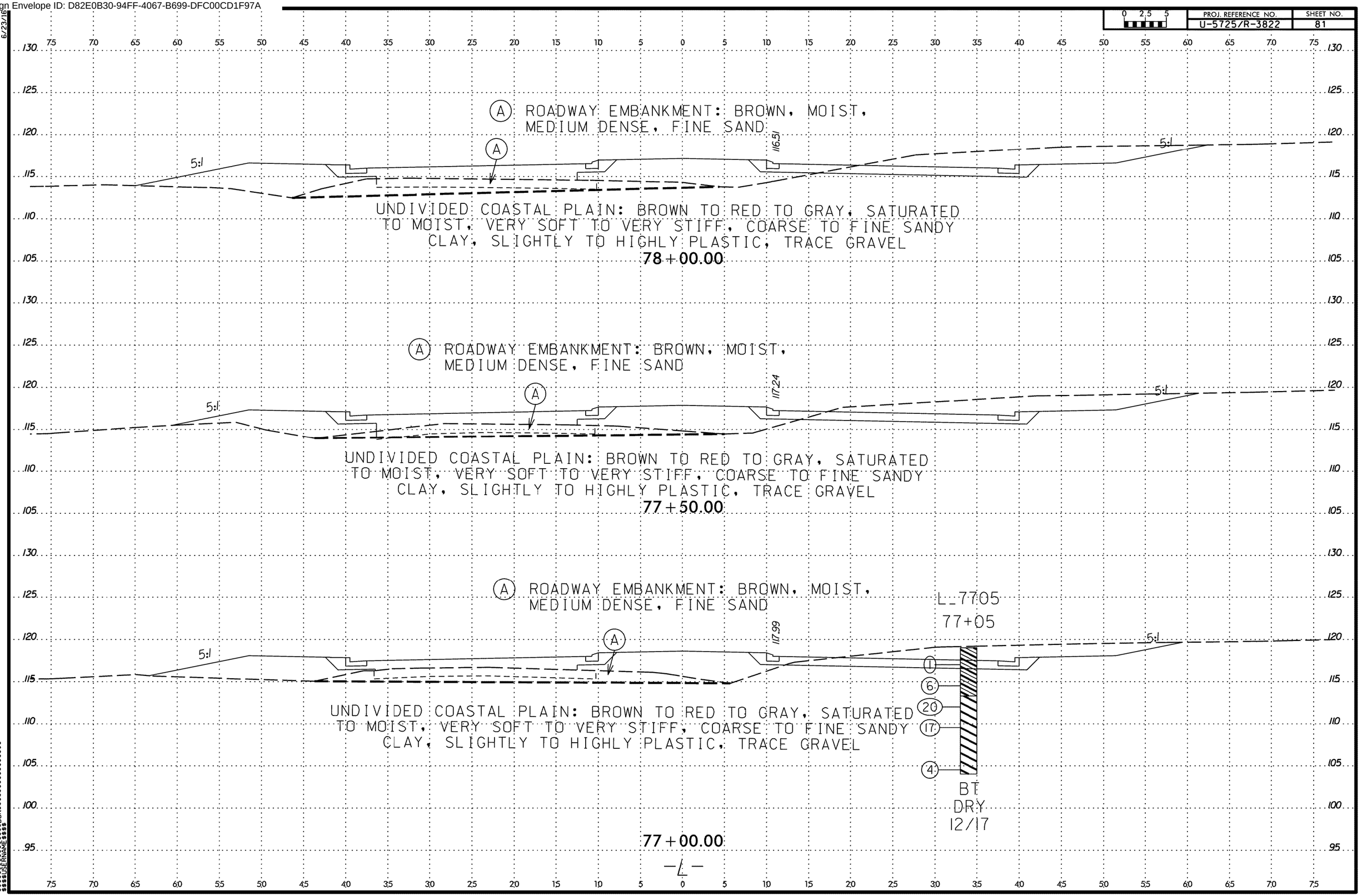
—L—

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

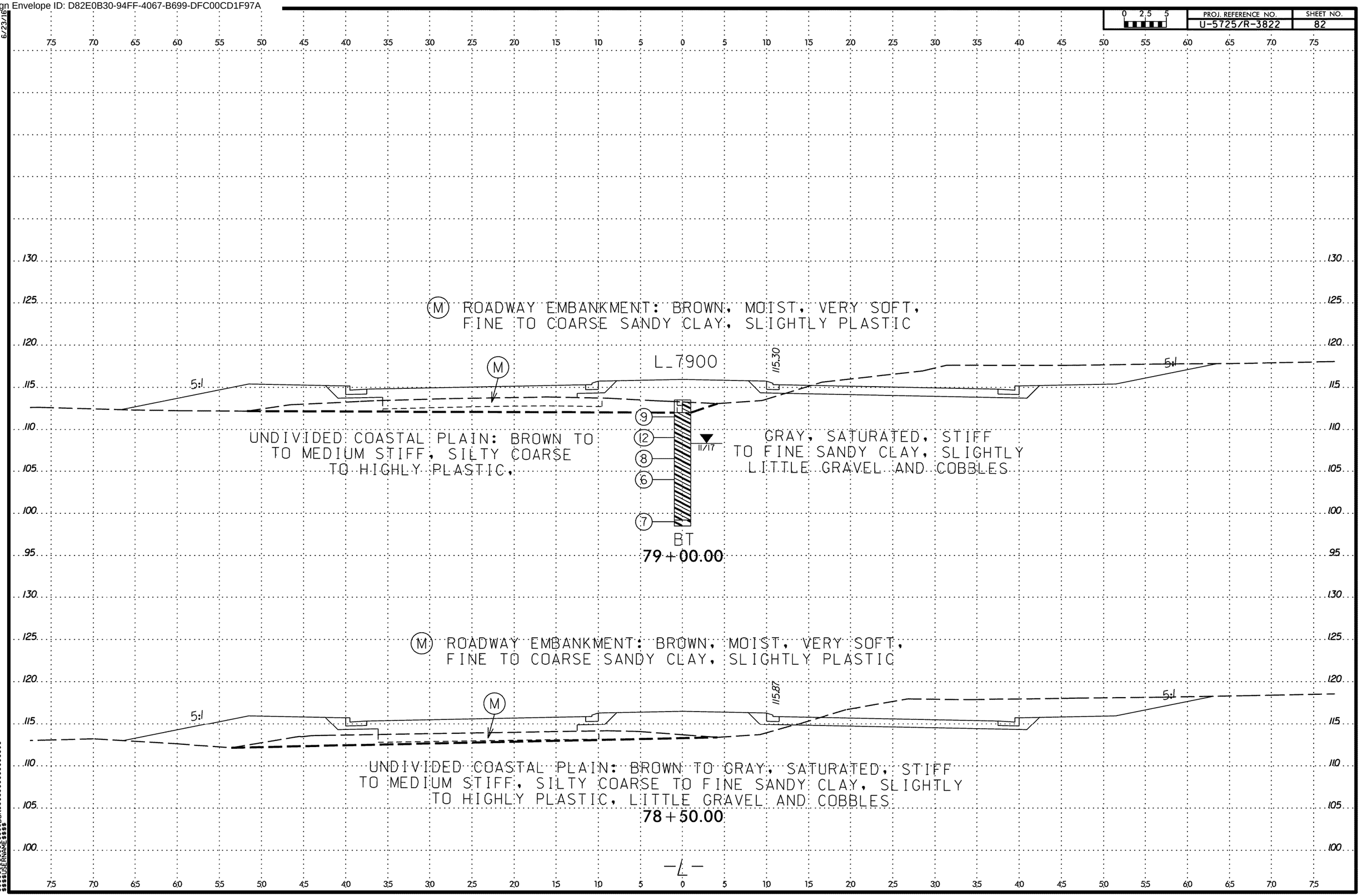
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$

$$$$USERNAME$$$$

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



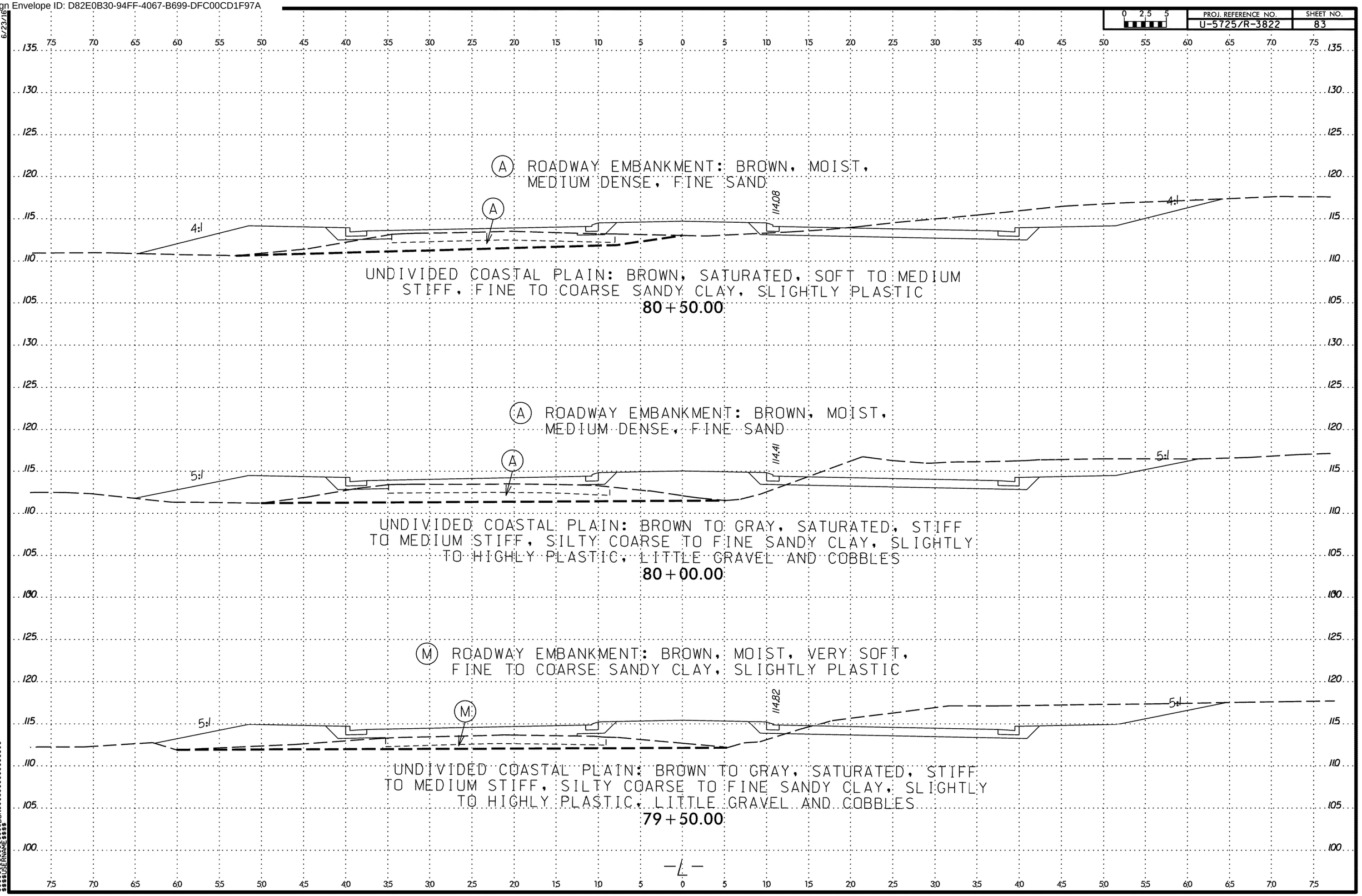
$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$



PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	82

79+00.00

78+50.00



PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	83

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

UNDIVIDED COASTAL PLAIN: BROWN, SATURATED, SOFT TO MEDIUM STIFF, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC

80+50.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, SATURATED, STIFF TO MEDIUM STIFF, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC, LITTLE GRAVEL AND COBBLES

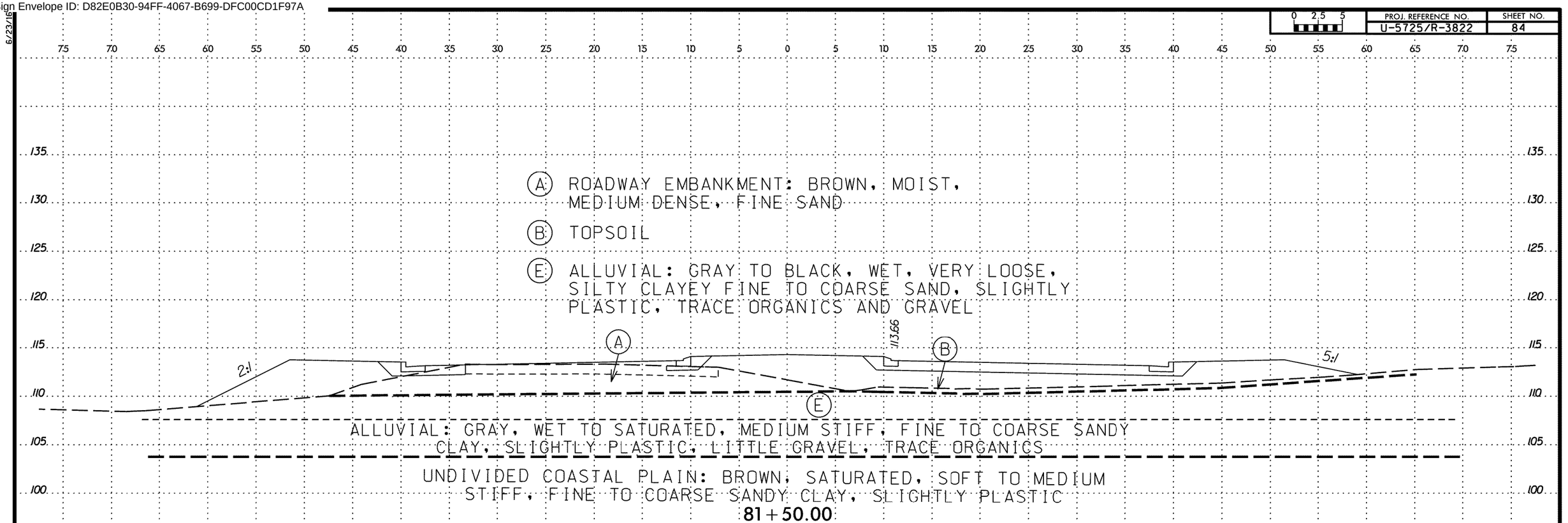
80+00.00

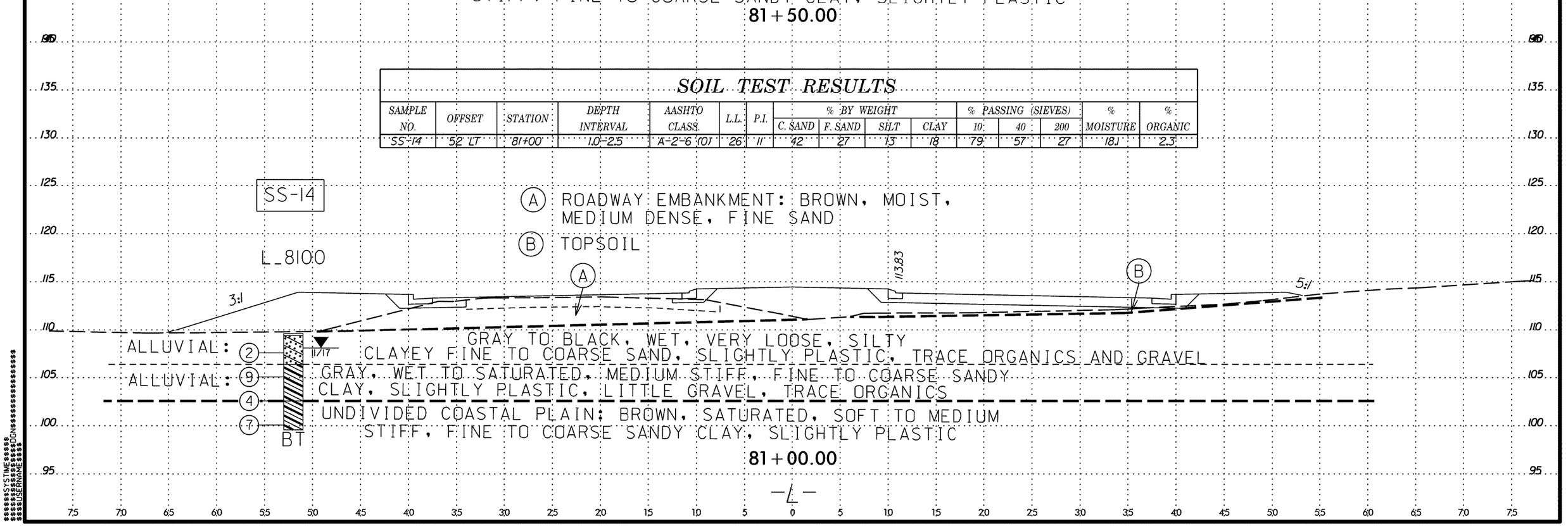
Ⓜ ROADWAY EMBANKMENT: BROWN, MOIST, VERY SOFT, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, SATURATED, STIFF TO MEDIUM STIFF, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC, LITTLE GRAVEL AND COBBLES

79+50.00

-L-





Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

Ⓑ TOPSOIL

Ⓔ ALLUVIAL: GRAY TO BLACK, WET, VERY LOOSE, SILTY CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC, TRACE ORGANICS AND GRAVEL

ALLUVIAL: GRAY, WET TO SATURATED, MEDIUM STIFF, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC, LITTLE GRAVEL, TRACE ORGANICS

UNDIVIDED COASTAL PLAIN: BROWN, SATURATED, SOFT TO MEDIUM STIFF, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC

81+50.00

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-14	52 LT	81+00	1.0-2.5	A-2-6 (0)	26	11	42	27	13	18	79	57	27	18.1	2.3

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, FINE SAND

Ⓑ TOPSOIL

ALLUVIAL: GRAY TO BLACK, WET, VERY LOOSE, SILTY CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC, TRACE ORGANICS AND GRAVEL

ALLUVIAL: GRAY, WET TO SATURATED, MEDIUM STIFF, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC, LITTLE GRAVEL, TRACE ORGANICS

UNDIVIDED COASTAL PLAIN: BROWN, SATURATED, SOFT TO MEDIUM STIFF, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC

81+00.00

-L-

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	85

(A) ROADWAY EMBANKMENT: RED TO BROWN, MOIST FINE SAND OVER FINE SANDY CLAY, SLIGHTLY PLASTIC

(B) TOPSOIL

(F) RESIDUAL: BROWN TO GRAY, WET, SOFT, SILTY CLAY, MODERATELY PLASTIC, TRACE SAND

ALLUVIAL: GRAY, WET, MEDIUM STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

WEATHERED ROCK: METAMORPHOSED QUARTZ DIORITE

CRYSTALLINE ROCK: METAMORPHOSED QUARTZ DIORITE

82 + 50.00

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

(B) TOPSOIL

(F) RESIDUAL: BROWN TO GRAY, WET, SOFT, SILTY CLAY, MODERATELY PLASTIC, TRACE SAND

ALLUVIAL: GRAY, WET, MEDIUM STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

WEATHERED ROCK: METAMORPHOSED QUARTZ DIORITE

CRYSTALLINE ROCK: METAMORPHOSED QUARTZ DIORITE

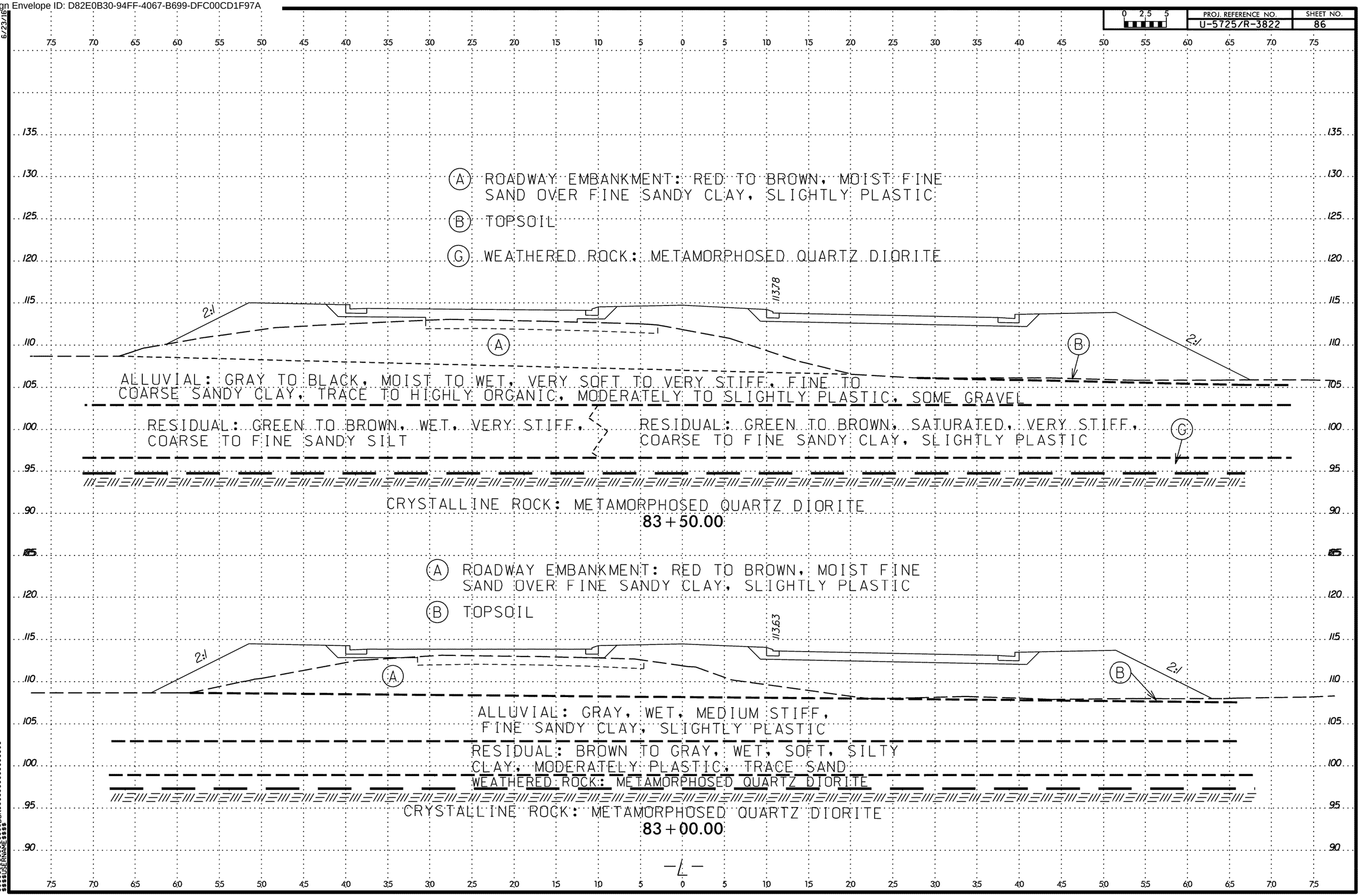
82 + 00.00

-L-

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	86



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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	87

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

130 125 120 115 110 105 100 95 90 85

(B) TOPSOIL

(G) WEATHERED ROCK: METAMORPHOSED QUARTZ DIORITE

3:1

114.00

2:1

ROADWAY EMBANKMENT: RED TO BROWN, MOIST FINE SAND OVER FINE SANDY CLAY, SLIGHTLY PLASTIC

ALLUVIAL: GRAY TO BLACK, MOIST TO WET, VERY SOFT TO VERY STIFF, FINE TO COARSE SANDY CLAY, TRACE TO HIGHLY ORGANIC, MODERATELY TO SLIGHTLY PLASTIC, SOME GRAVEL

RESIDUAL: GREEN TO BROWN, WET, VERY STIFF, COARSE TO FINE SANDY SILT

RESIDUAL: GREEN TO BROWN, SATURATED, VERY STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

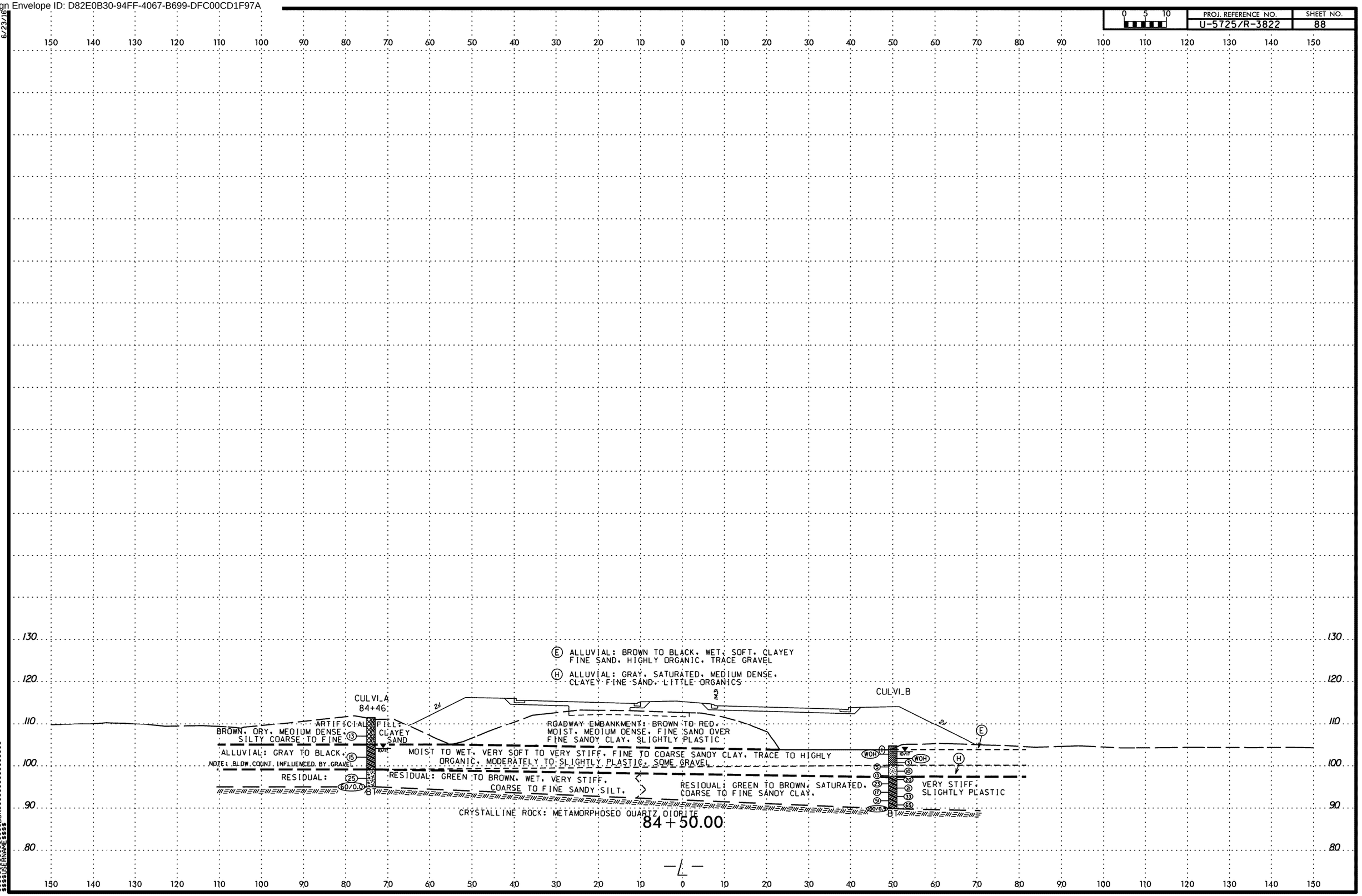
CRYSTALLINE ROCK: METAMORPHOSED QUARTZ DIORITE

84+00.00

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

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	88



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	89

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

125 120 115 110 105 100 95 90 85

G WEATHERED ROCK: METAMORPHOSED QUARTZ DIORITE

115.29

2:1

ROADWAY EMBANKMENT: BROWN TO RED,
MOIST, MEDIUM DENSE, FINE SAND OVER
FINE SANDY CLAY, SLIGHTLY PLASTIC

2:1

ALLUVIAL: GRAY TO BLACK, MOIST TO WET, VERY SOFT TO VERY STIFF, FINE TO COARSE
SANDY CLAY, TRACE TO HIGHLY ORGANIC, MODERATELY TO SLIGHTLY PLASTIC, SOME GRAVEL

RESIDUAL: GREEN TO BROWN, SATURATED, VERY STIFF,
COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

G

CRYSTALLINE ROCK: METAMORPHOSED QUARTZ DIORITE

85+50.00

114.72

2:1

ROADWAY EMBANKMENT: BROWN TO RED,
MOIST, MEDIUM DENSE, FINE SAND OVER
FINE SANDY CLAY, SLIGHTLY PLASTIC

2:1

ALLUVIAL: GRAY TO BLACK, MOIST TO WET, VERY SOFT TO VERY STIFF, FINE TO COARSE
SANDY CLAY, TRACE TO HIGHLY ORGANIC, MODERATELY TO SLIGHTLY PLASTIC, SOME GRAVEL

RESIDUAL: GREEN TO BROWN, SATURATED, VERY STIFF,
COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

CRYSTALLINE ROCK: METAMORPHOSED QUARTZ DIORITE

85+00.00

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	90

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

130
125
120
115
110
105
100
95
90
85

Ⓑ TOPSOIL

Ⓖ WEATHERED ROCK: METAMORPHOSED QUARTZ DIORITE

115.96

2:1

2:1

ROADWAY EMBANKMENT: BROWN TO RED, MOIST, MEDIUM DENSE, FINE SAND OVER FINE SANDY CLAY, SLIGHTLY PLASTIC

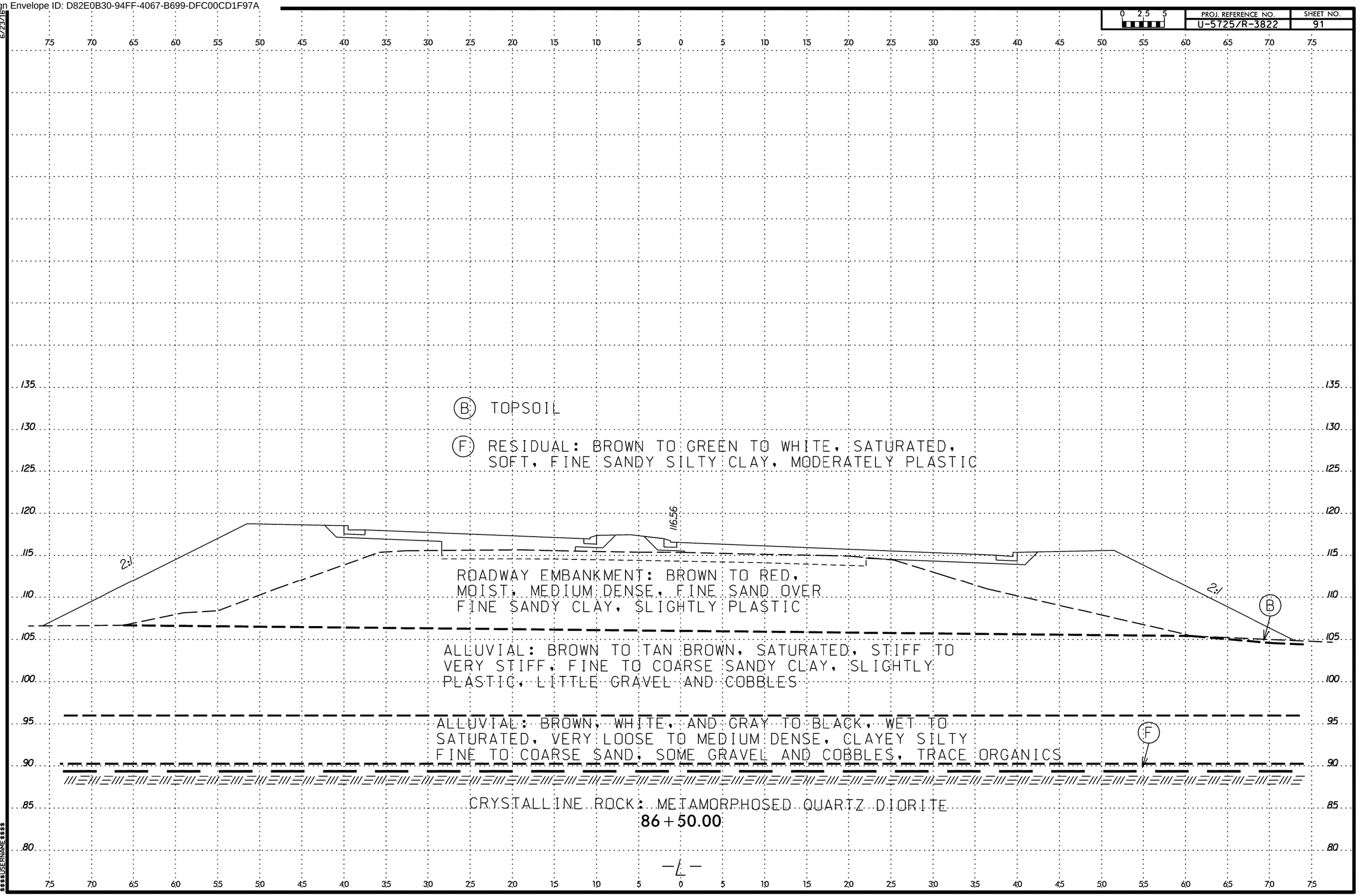
ALLUVIAL: BROWN, WHITE, AND GRAY TO BLACK, WET TO SATURATED, VERY LOOSE TO MEDIUM DENSE, CLAYEY SILTY FINE TO COARSE SAND, SOME GRAVEL AND COBBLES, TRACE ORGANICS

RESIDUAL: BROWN TO GREEN TO WHITE, SATURATED, SOFT, FINE SANDY SILTY CLAY, MODERATELY PLASTIC

CRYSTALLINE ROCK: METAMORPHOSED QUARTZ DIORITE

86+00.00

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

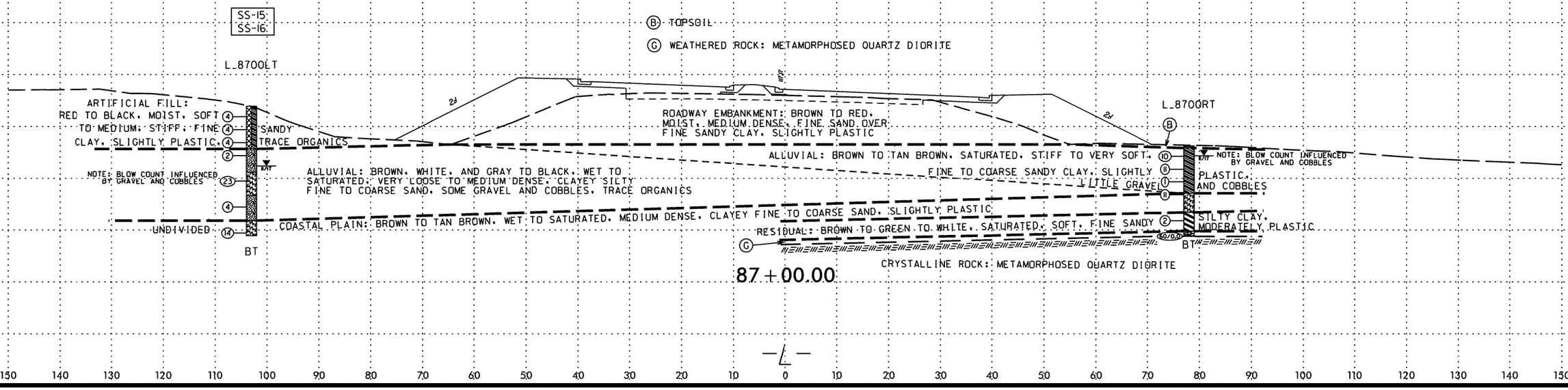


6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	92

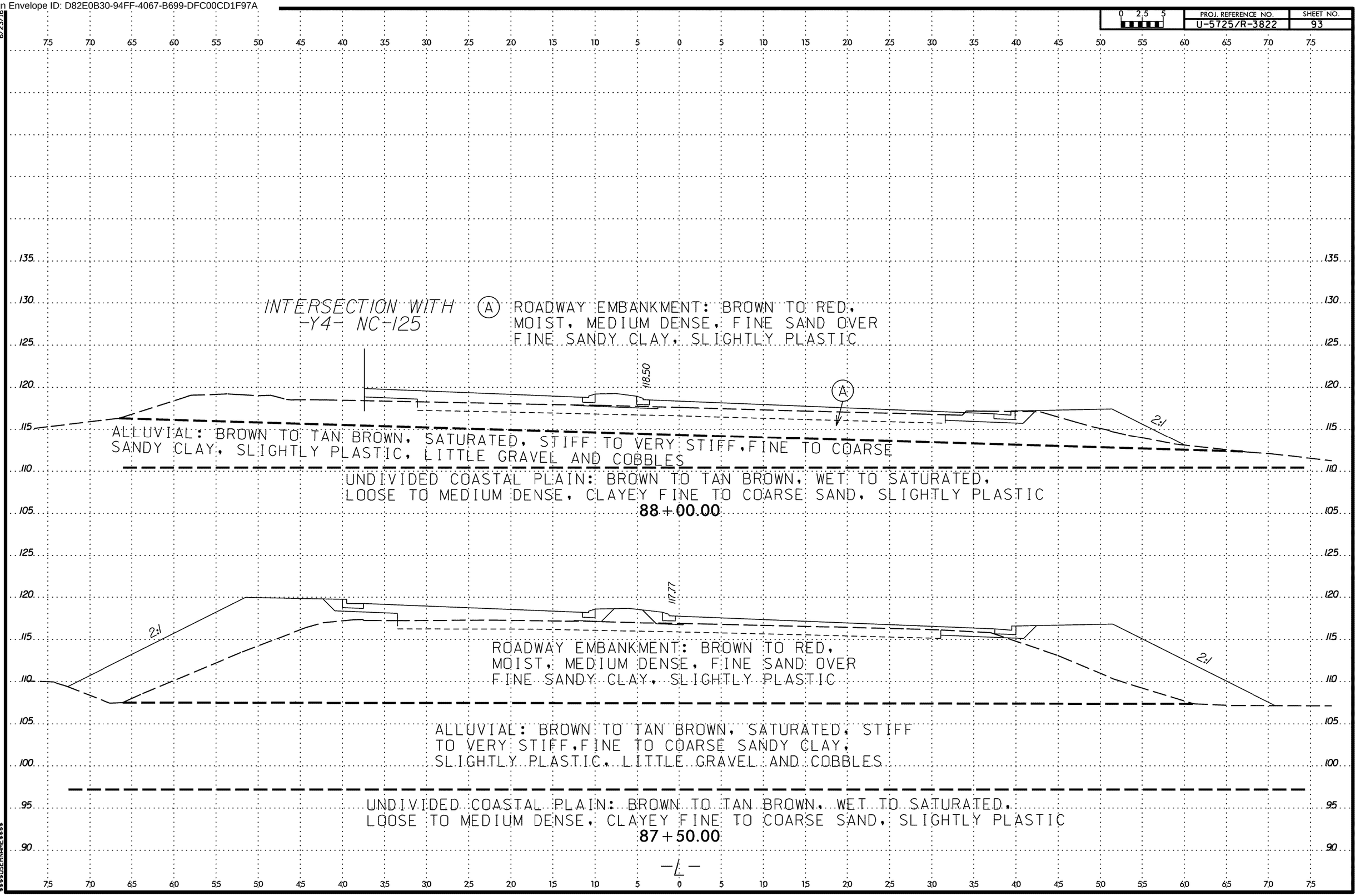
SOIL TEST RESULTS

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-15	103 LT	87+00	8.5-10.0	A-2-4 (0)	NP	NP	50	27	15	8	86	62	24	13.8	1.5
SS-16	103 LT	87+00	18.5-20.0	A-2-4 (0)	NP	NP	69	20	6	5	89	52	11	19.4	-



6/23/16

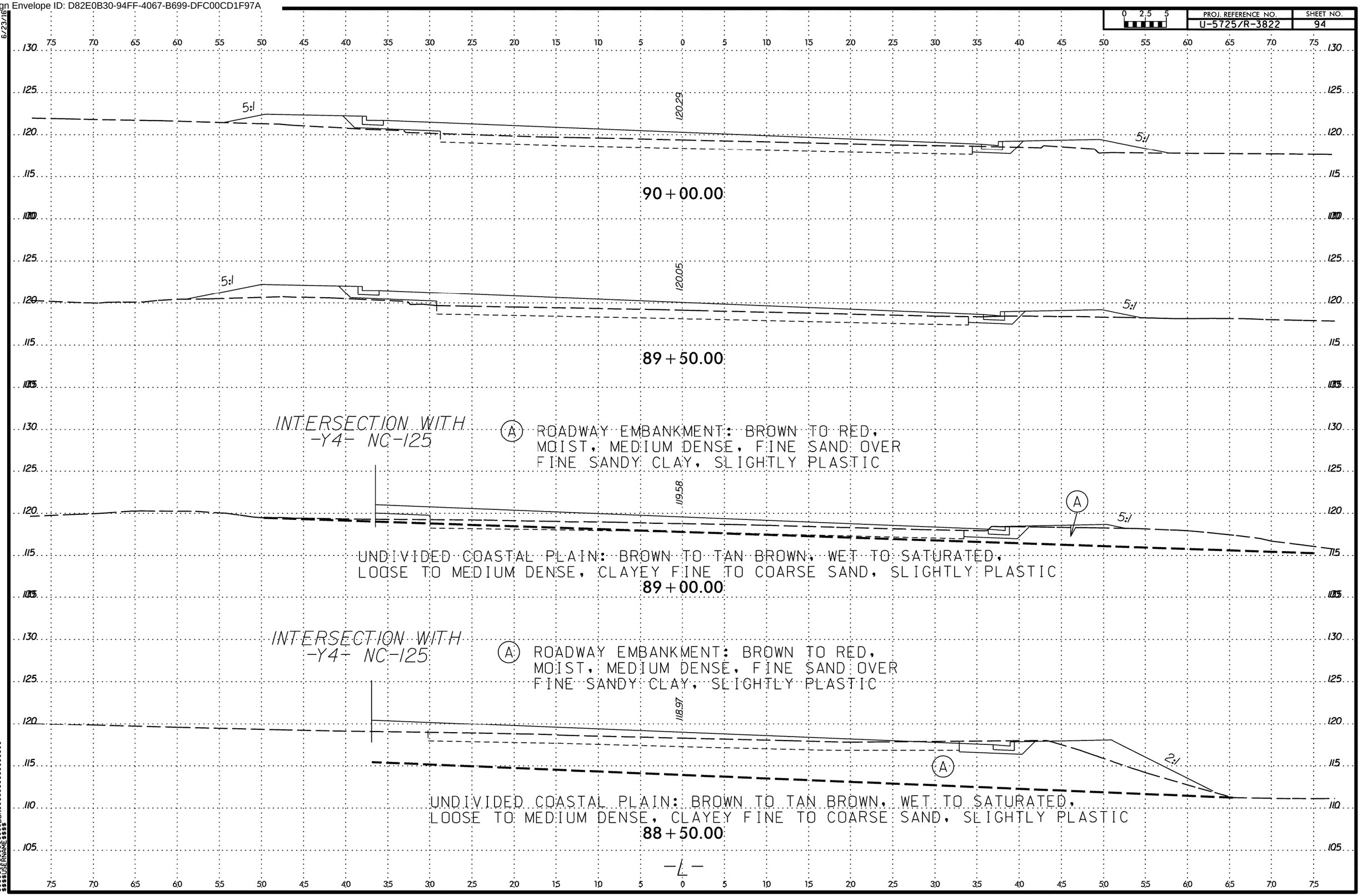
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	93



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

6/23/16

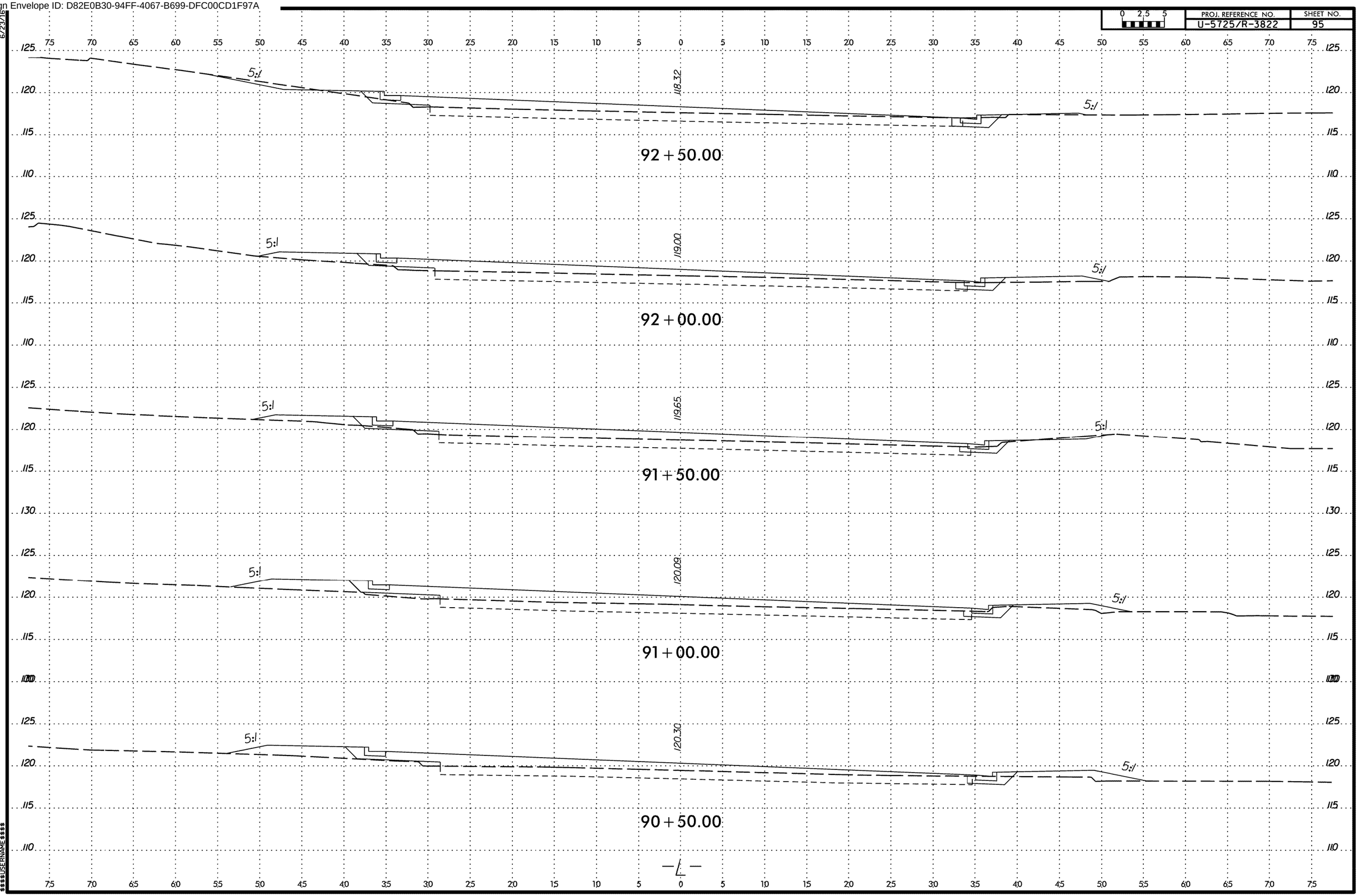
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	94



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	95



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	96

95+50.00

95+00.00

94+50.00

94+00.00

93+50.00

93+00.00

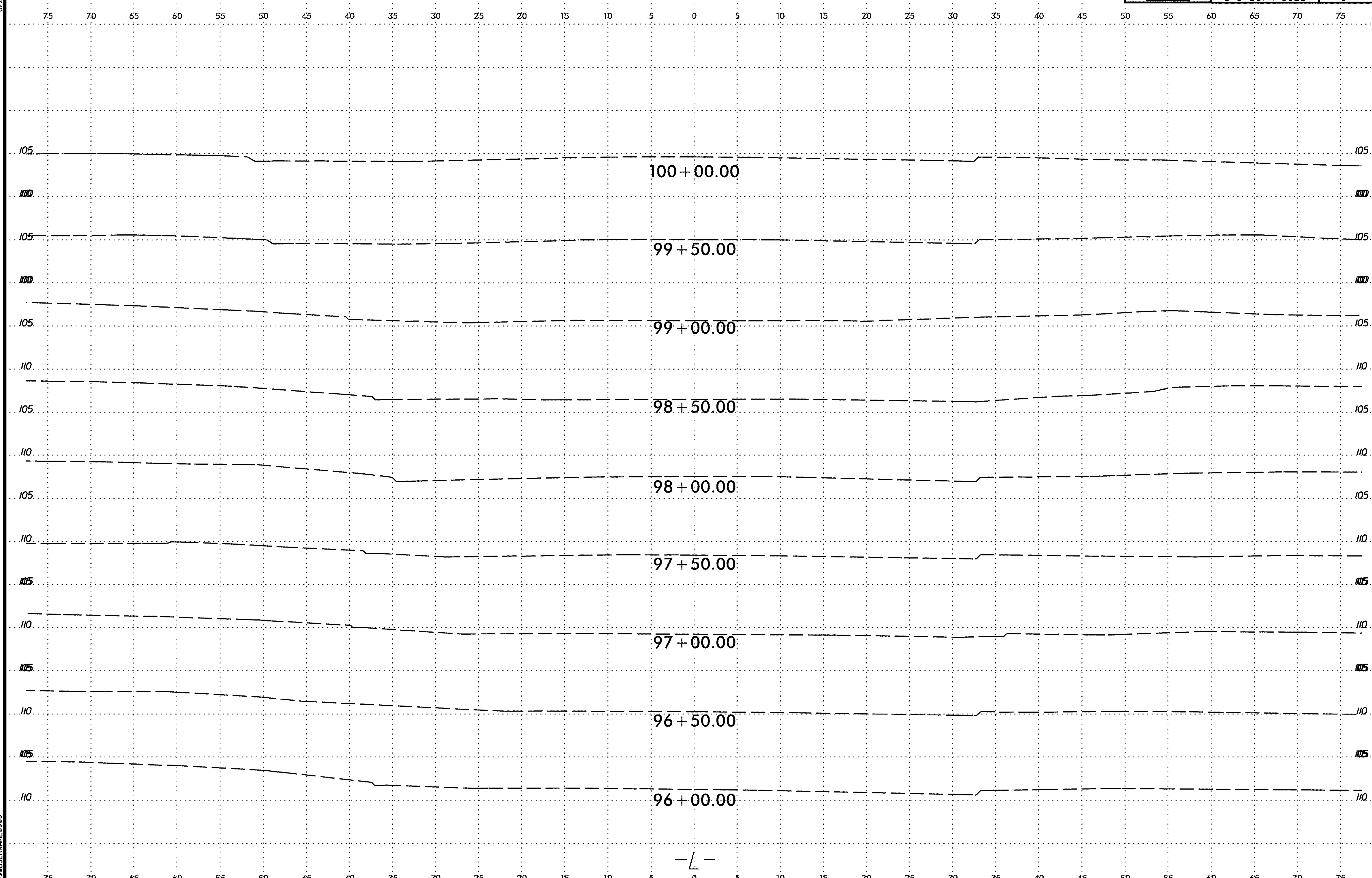
116.28

117.43

5:/

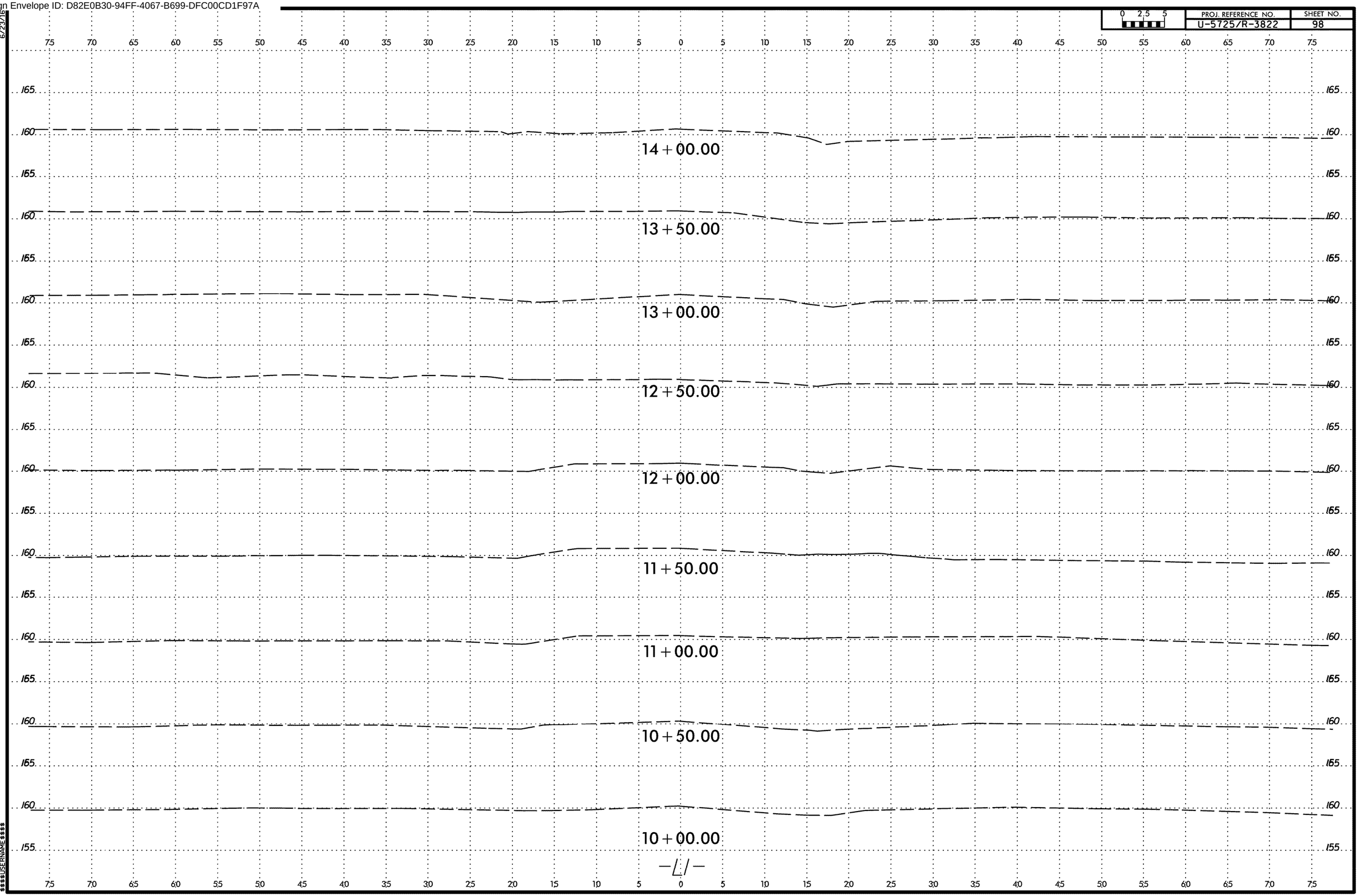
$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	97



6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	98



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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	99

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

175 170 165 160 155 150 145 140 135

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

160.2

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY, MOIST, MEDIUM STIFF TO VERY STIFF, SILTY FINE SANDY CLAY, MODERATELY PLASTIC

15+50.00

(A) ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

160.16

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY, MOIST, MEDIUM STIFF TO VERY STIFF, SILTY FINE SANDY CLAY, MODERATELY PLASTIC

15+00.00

14+50.00

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	100

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

180 175 170 165 160 155 150 145 140 135

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

160.55

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY, MOIST, MEDIUM STIFF TO VERY STIFF, SILTY FINE SANDY CLAY, MODERATELY PLASTIC

16+50.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

160.55

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY, MOIST, MEDIUM STIFF TO VERY STIFF, SILTY FINE SANDY CLAY, MODERATELY PLASTIC

LI_1600

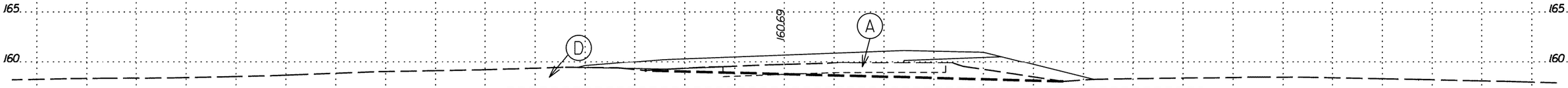
8 10 23 21

BT
DRY
12/17

16+00.00

-L1-

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



Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

Ⓓ UNDIVIDED COASTAL PLAIN: BROWN, WET, VERY LOOSE, SILTY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY, MOIST, MEDIUM STIFF TO VERY STIFF, FINE SANDY CLAY, MODERATELY TO HIGHLY PLASTIC

17+50.00

Ⓐ ROADWAY EMBANKMENT: BROWN, MOIST, MEDIUM DENSE, COARSE TO FINE SAND

Ⓓ UNDIVIDED COASTAL PLAIN: BROWN, WET, VERY LOOSE, SILTY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY, MOIST, MEDIUM STIFF TO VERY STIFF, SILTY FINE SANDY CLAY, MODERATELY PLASTIC

17+00.00

-L-

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	102

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

170 165 160 155 150 145 140 135

158.97

UNDIVIDED COASTAL PLAIN: BROWN, WET, VERY LOOSE, SILTY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO
GRAY, MOIST, MEDIUM STIFF TO VERY STIFF,
FINE SANDY CLAY, MODERATELY TO HIGHLY PLASTIC

18+50.00

LI_1823
18+23

159.75

UNDIVIDED COASTAL PLAIN: BROWN, WET, VERY LOOSE, SILTY COARSE TO FINE SAND

3 10 15 9 6

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO
GRAY, MOIST, MEDIUM STIFF TO VERY STIFF,
FINE SANDY CLAY, MODERATELY TO HIGHLY PLASTIC

BT
DRY
12/17

UNDIVIDED COASTAL PLAIN: BROWN, MOIST,
STIFF, FINE SANDY CLAYEY SILT

18+00.00

-L/-

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

DocuSign Envelope ID: D82E0B30-94FF-4067-B699-DFC00CD1F97A

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	103

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	104

Ⓑ TOPSOIL

Ⓓ UNDIVIDED COASTAL PLAIN: BROWN, WET TO MOIST, LOOSE, SILTY CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

155.39

Ⓓ Ⓑ

UNDIVIDED COASTAL PLAIN: GRAY, MOIST, STIFF, COARSE TO FINE SANDY CLAY, HIGHLY PLASTIC

21+50.00

INTERSECTION WITH -Y1-

Ⓑ TOPSOIL

155.47

Ⓑ

UNDIVIDED COASTAL PLAIN: BROWN, WET TO MOIST, LOOSE, SILTY CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: GRAY, MOIST, STIFF, COARSE TO FINE SANDY CLAY, HIGHLY PLASTIC

21+00.00

INTERSECTION WITH -Y1-

155.91

UNDIVIDED COASTAL PLAIN: BROWN, WET TO MOIST, LOOSE, SILTY CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: GRAY, MOIST, STIFF, COARSE TO FINE SANDY CLAY, HIGHLY PLASTIC

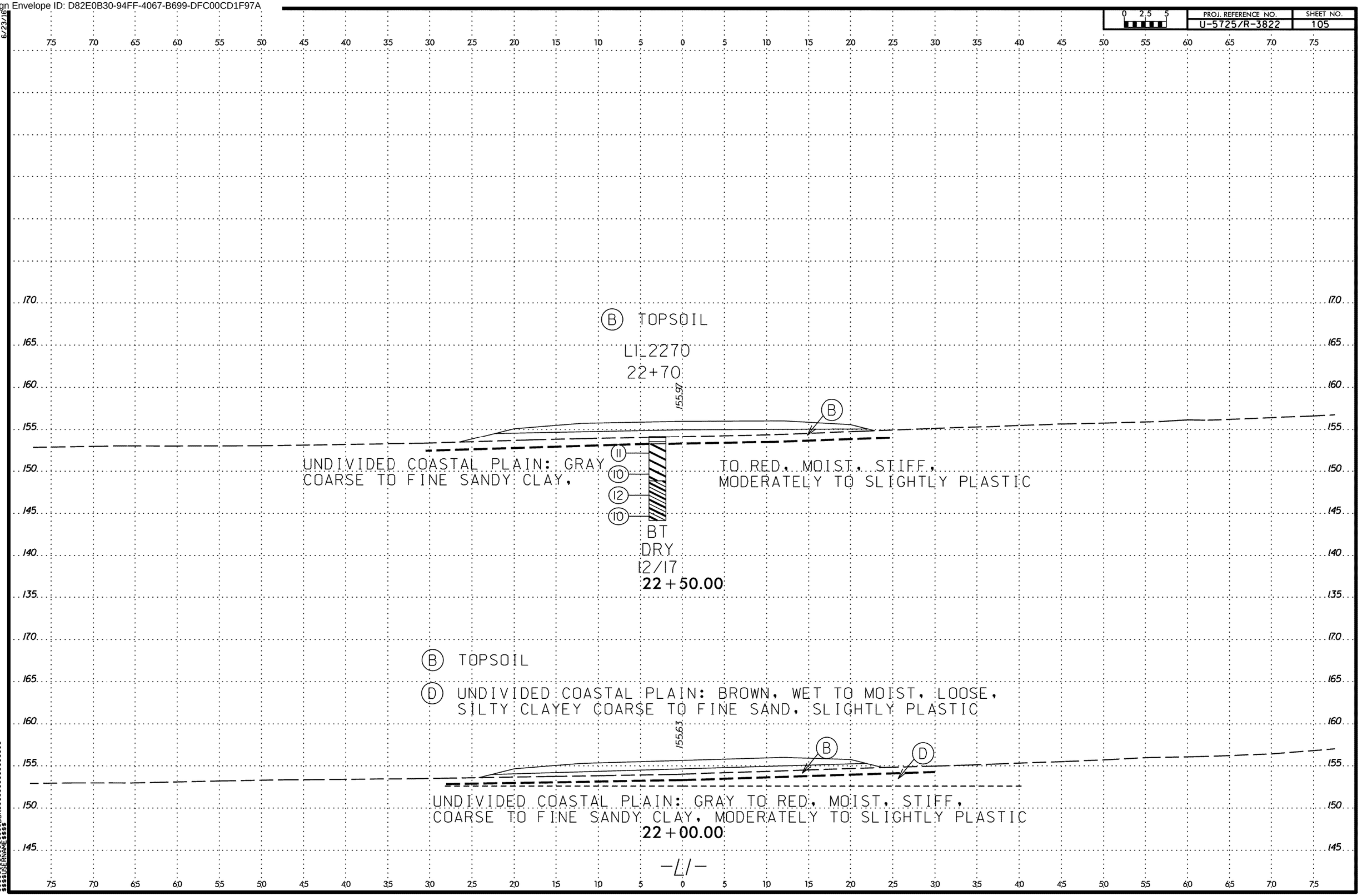
20+50.00

-L1-

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

$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$

$$$$USERNAME$$$$



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

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	106

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	107

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

165 160 155 150 145 180 175 170 165 160 155 150 145 140

157.32

UNDIVIDED COASTAL PLAIN: BROWN TO TAN BROWN, MOIST, VERY LOOSE TO LOOSE, COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

24+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-17	32 RT	24+00	3.5-5.0	A-3 (1)	NP	NP	23	73	1	3	100	89	8	6.3	÷

SS-17

156.99

LI-2400

UNDIVIDED COASTAL PLAIN: BROWN TO TAN BROWN, MOIST, VERY LOOSE TO LOOSE, COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

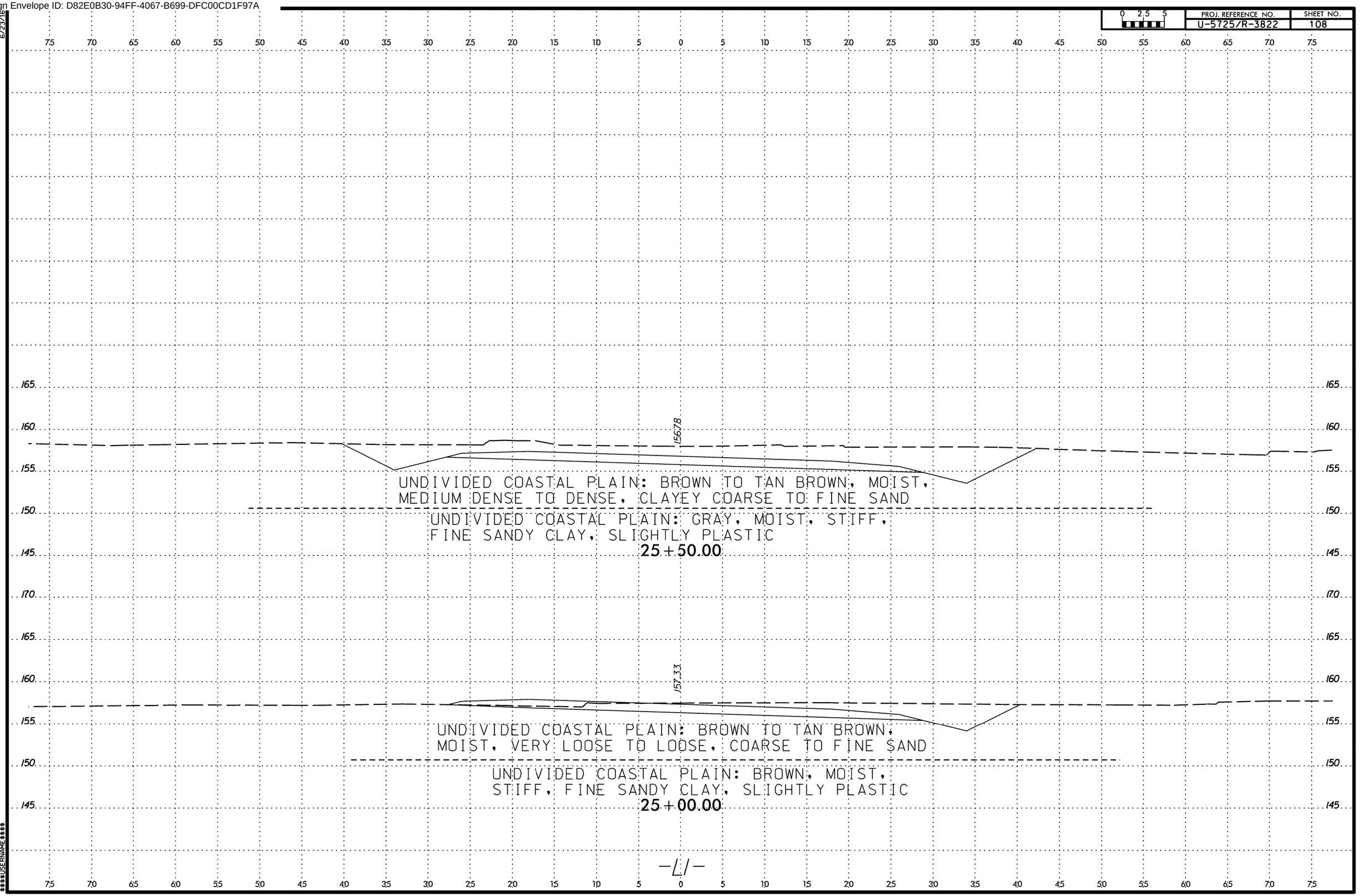
3 5 9 11

BT
DRY
12/17

24+00.00

-L1-

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



6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	109

INTERSECTION WITH
-L- NC-125

27+00.00

155.5

UNDIVIDED COASTAL PLAIN: BROWN TO TAN BROWN, MOIST, MEDIUM DENSE TO DENSE, CLAYEY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: GRAY, MOIST, STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

26+50.00

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-18	50 LT	26+19	1.0-2.5	A-2-4 (0)	23	9	29	41	6	24	100	93	33	9.9	-

SS-18

LI_2619
26+19

13
16
30
12

BT
DRY
12/17

156.00

UNDIVIDED COASTAL PLAIN: BROWN TO TAN BROWN, MOIST, MEDIUM DENSE TO DENSE, CLAYEY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: GRAY, MOIST, STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

26+00.00

-L/-

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	110

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-2	*57 RT	* 19+05	1.0-2.5	A-2-4 (0)	NP	NP	41	42	4	13	100	91	19	7.5	-

* Note: Station and Offset are on -L-

SS-2

L_1905
27+67

155.56

4:1

4:1

(7)
(7)
(12)
(13)

BT
FIAD

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, LOOSE, CLAYEY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: GRAY TO RED, MOIST, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

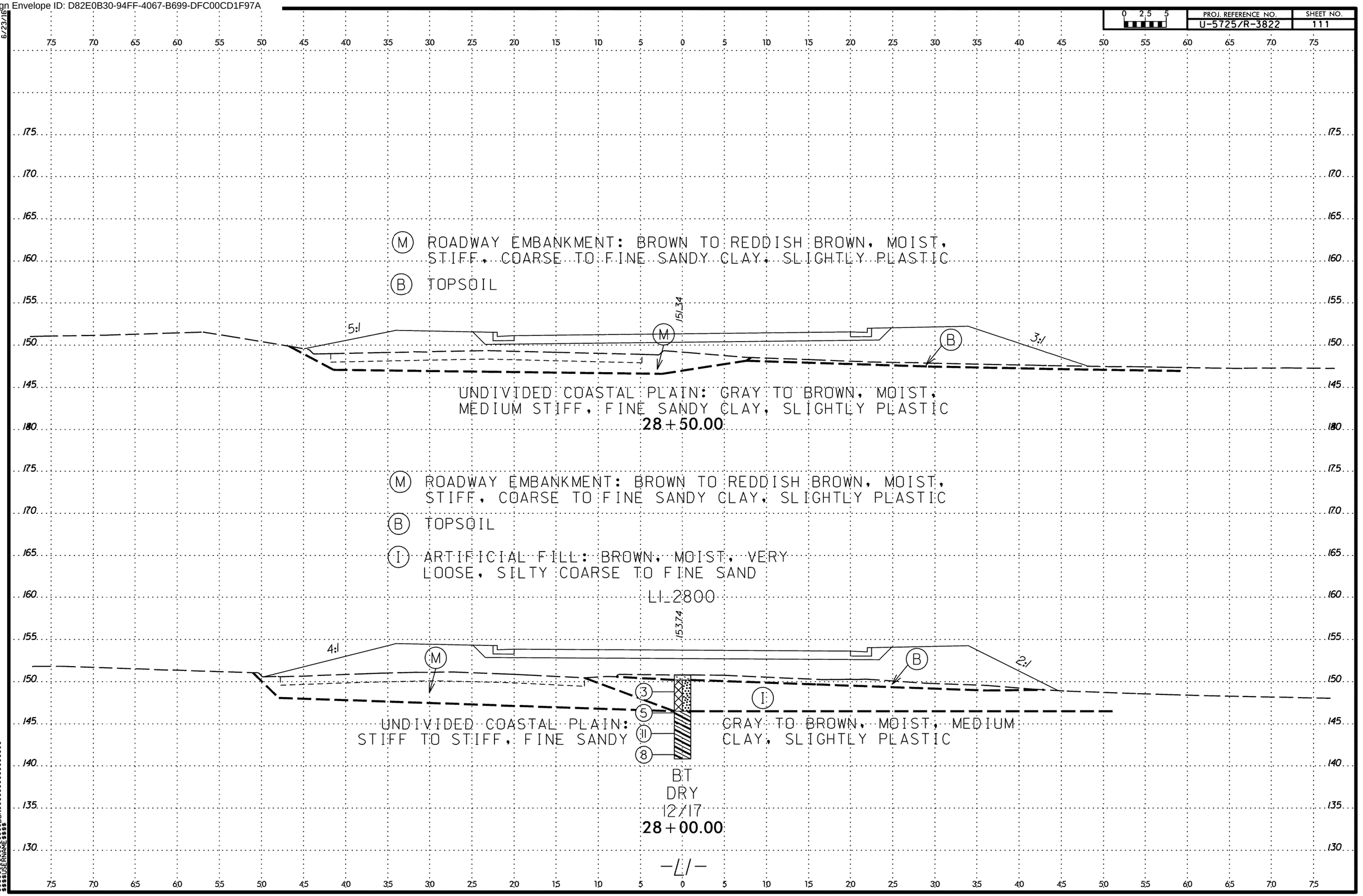
27+50.00

-L/-

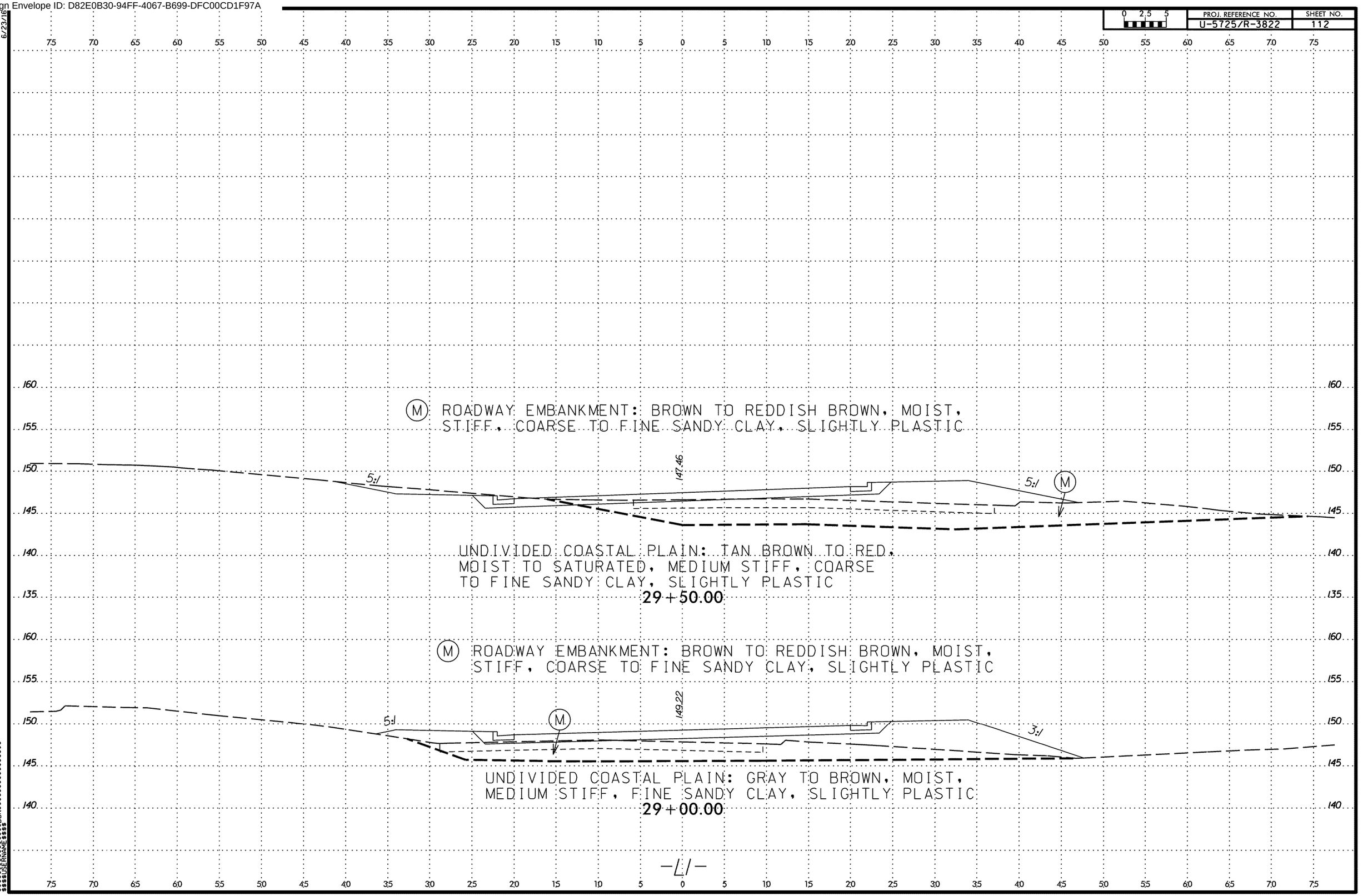
$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

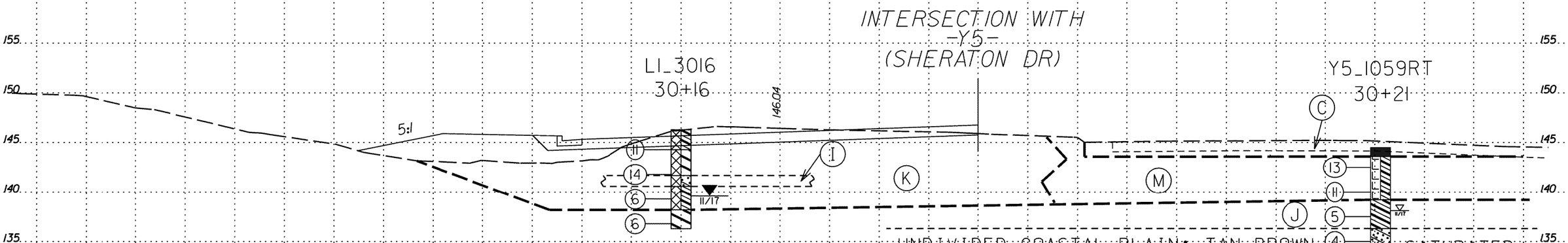
6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	111



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





0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	113

Ⓜ ROADWAY EMBANKMENT: BROWN TO REDDISH BROWN, MOIST, STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

Ⓒ PAVEMENT

Ⓙ UNDIVIDED COASTAL PLAIN: TAN BROWN TO RED, MOIST TO SATURATED, MEDIUM STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

Ⓘ ARTIFICIAL FILL: GRAY TO DARK BROWN, MOIST, MEDIUM DENSE, CLAYEY FINE SAND, TRACE ORGANICS

Ⓚ ARTIFICIAL FILL: REDDISH BROWN TO GRAY TO DARK BROWN, MOIST, STIFF TO MEDIUM STIFF, SILTY COARSE TO FINE SANDY CLAY, TRACE ORGANICS, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: TAN BROWN, SATURATED, LOOSE, CLAYEY FINE SAND, SLIGHTLY PLASTIC

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

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-33	*30 LT	* 10+50	3.5-5.0	A-2-7 (0)	53	19	62	8	5	25	93	55	29	21.1	-

*Note: Station and Offset are on -Y5-

SS-33

INTERSECTION WITH -Y5- (SHERATON DR)

Y5_1050LT
30+87

(B) TOPSOIL

144.24

5:1

UNDIVIDED COASTAL PLAIN: BROWN TO TAN BROWN, MOIST TO WET, MEDIUM DENSE TO VERY LOOSE, CLAYEY FINE TO COARSE SAND, MODERATELY PLASTIC

14
9
2
3
5

11/17

BT

UNDIVIDED COASTAL PLAIN: TAN BROWN TO RED, WET, MEDIUM STIFF, SILTY CLAY, HIGHLY PLASTIC

31+00.00

INTERSECTION WITH -Y5- (SHERATON DR)

(B) TOPSOIL

144.96

5:1

UNDIVIDED COASTAL PLAIN: BROWN TO TAN BROWN, MOIST TO WET, MEDIUM DENSE TO VERY LOOSE, CLAYEY FINE TO COARSE SAND, MODERATELY PLASTIC

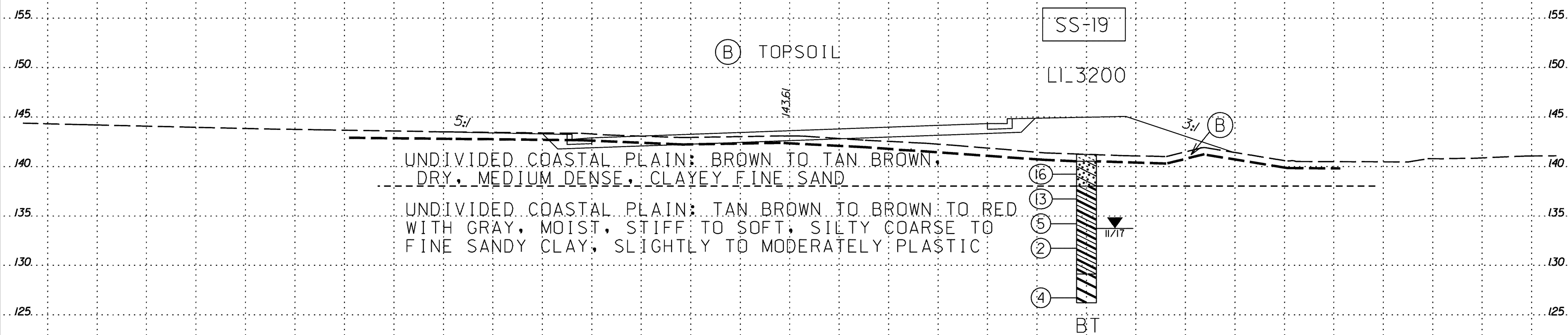
30+50.00

-L1-

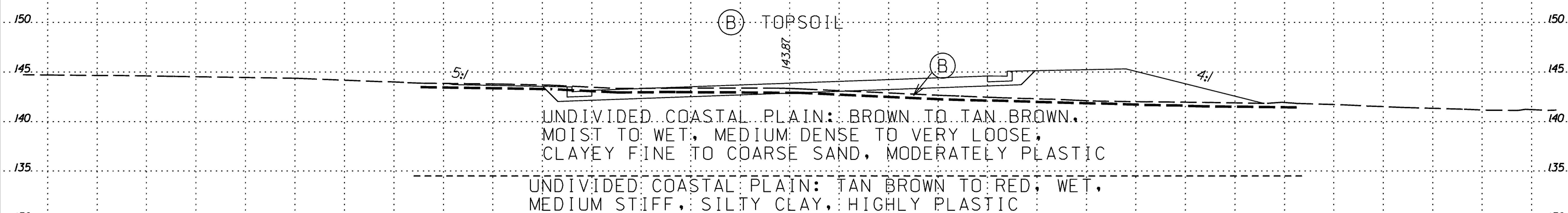
$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

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-19	30 RT	32+00	13.5-15.0	A-7-6 (15)	46	24	12	22	23	43	100	97	69	37.9	-



32+00.00

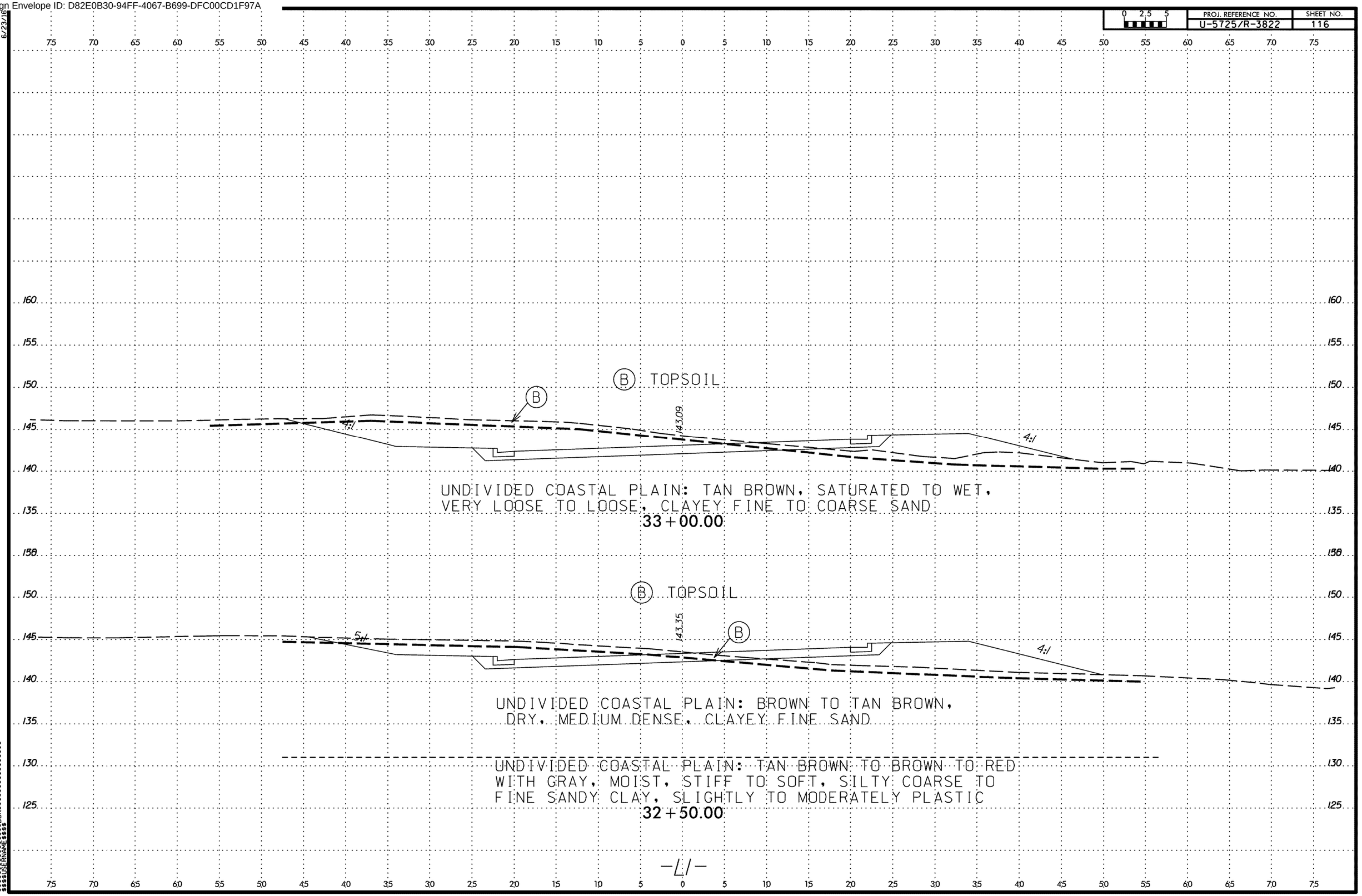


31+50.00

-L1-

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	116



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	117

B TOPSOIL

L ALLUVIAL: BLACK TO GRAY, WET TO SATURATED, VERY SOFT, CLAYEY FINE TO COARSE SANDY SILT, TRACE ORGANICS

UNDIVIDED COASTAL PLAIN: TAN BROWN, SATURATED TO WET, VERY LOOSE TO LOOSE, CLAYEY FINE TO COARSE SAND

142.83

5:1

2:1

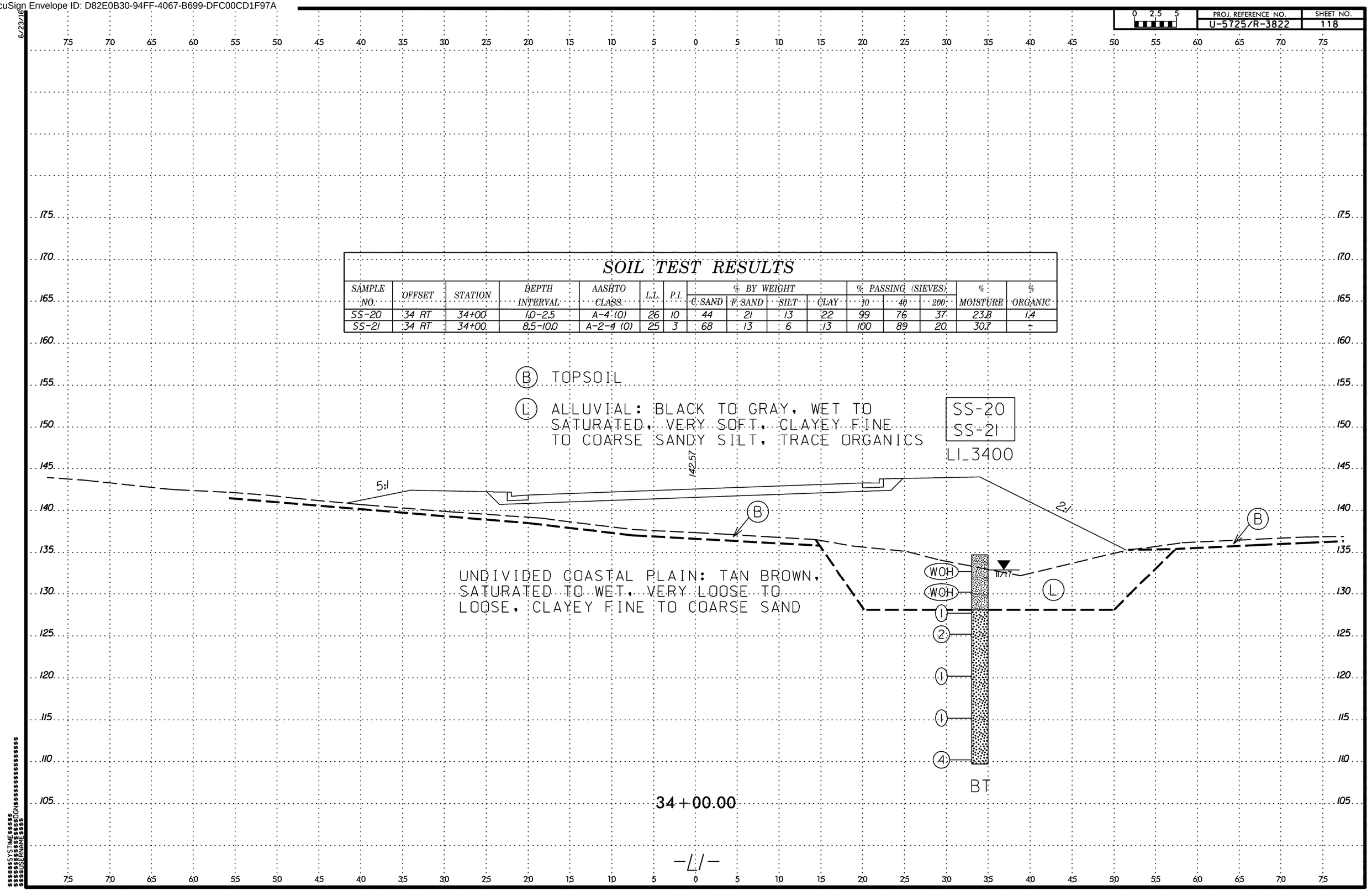
33+50.00

-L1-

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

SOIL TEST RESULTS

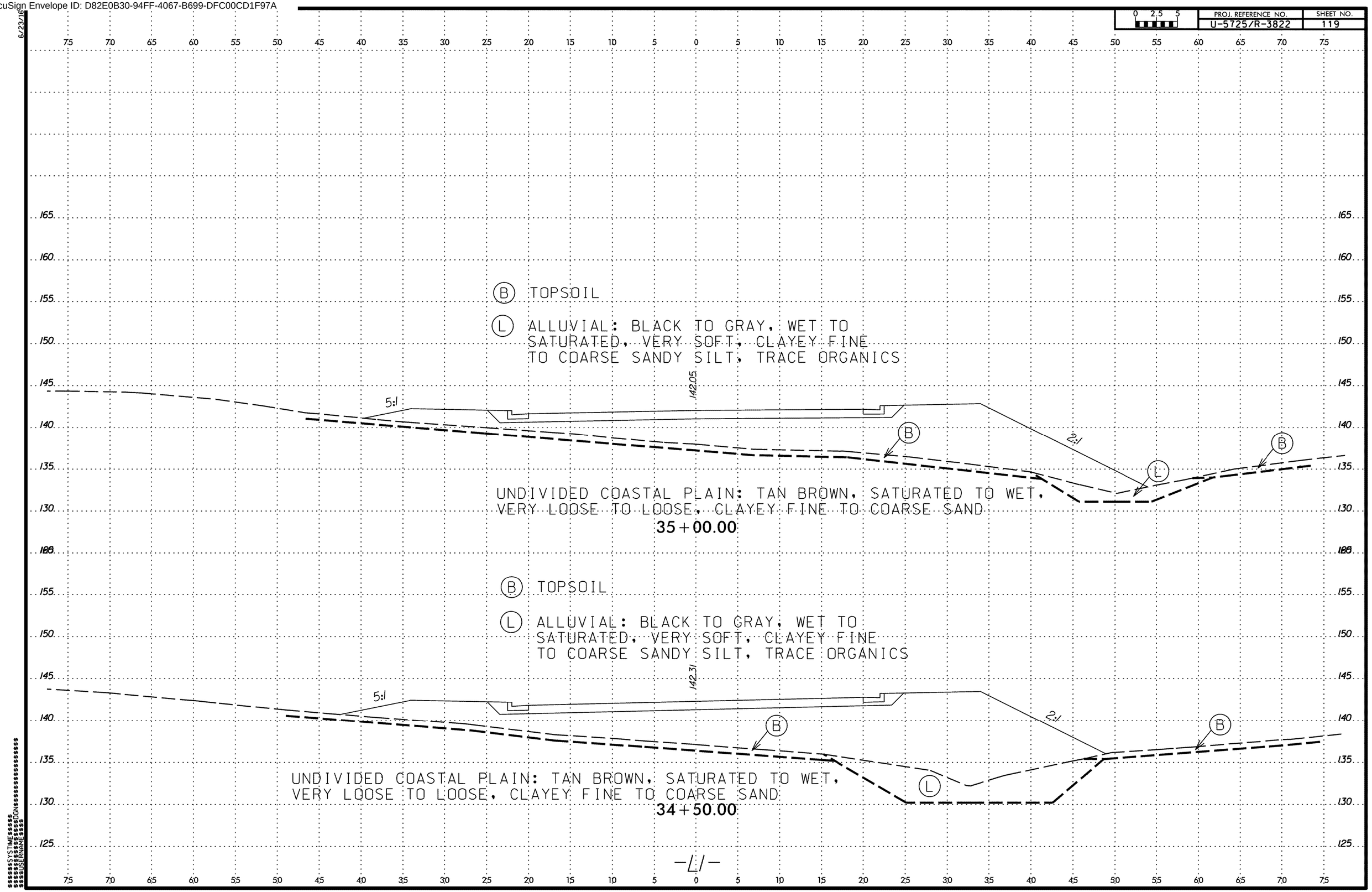
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-20	34 RT	34+00	1.0-2.5	A-4 (0)	26	10	44	21	13	22	99	76	37	23.8	1.4
SS-21	34 RT	34+00	8.5-10.0	A-2-4 (0)	25	3	68	13	6	13	100	89	20	30.7	-



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	119



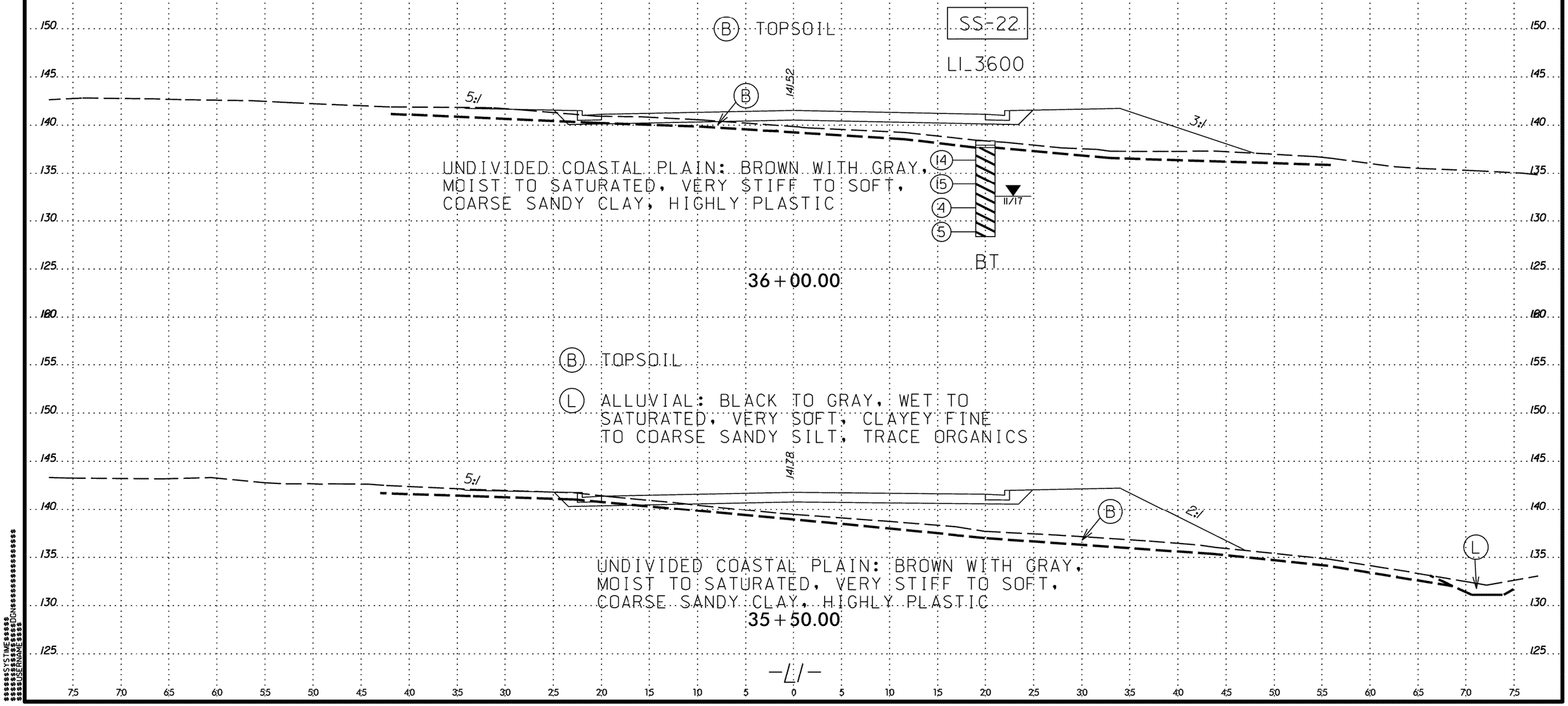
$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	120

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-22	20 RT	36+00	1.0-2.5	A-7-5 (9)	76	39	52	8	5	35	99	61	40	18.6	-



-L/-

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	121

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

150 145 140 135 130 125

Ⓑ TOPSOIL

141.20

4:1 5:1 Ⓑ Ⓑ

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, DRY TO MOIST, VERY STIFF TO STIFF, SILTY FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

37+50.00

Ⓑ TOPSOIL

141.07

4:1 Ⓑ Ⓑ 3:1

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, DRY TO MOIST, VERY STIFF TO STIFF, SILTY FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

37+00.00

Ⓑ TOPSOIL

141.26

5:1 Ⓑ 3:1

UNDIVIDED COASTAL PLAIN: BROWN WITH GRAY, MOIST TO SATURATED, VERY STIFF TO SOFT, COARSE SANDY CLAY, HIGHLY PLASTIC

36+50.00

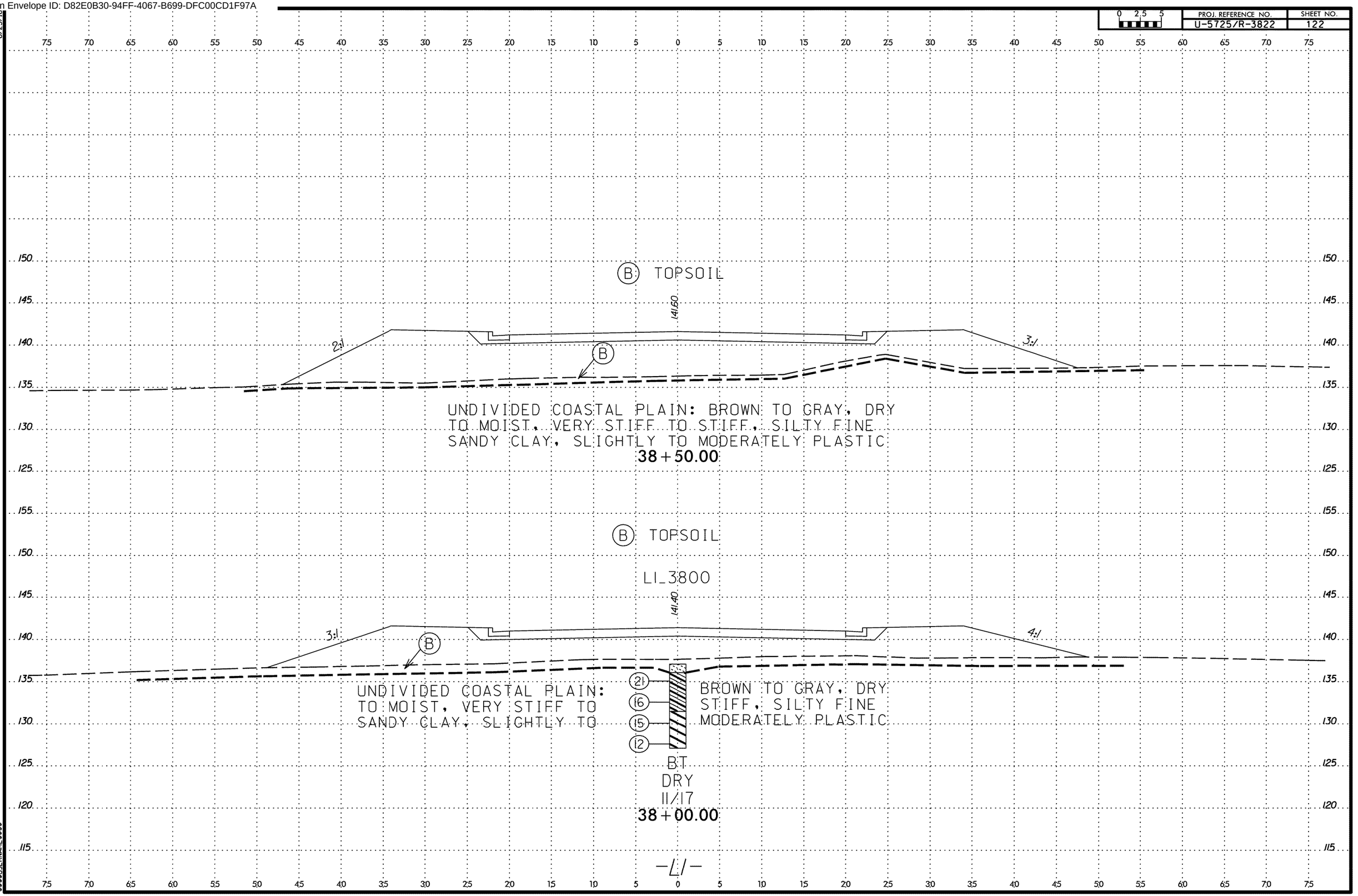
—L1—

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

6/23/16

0 2.5 5

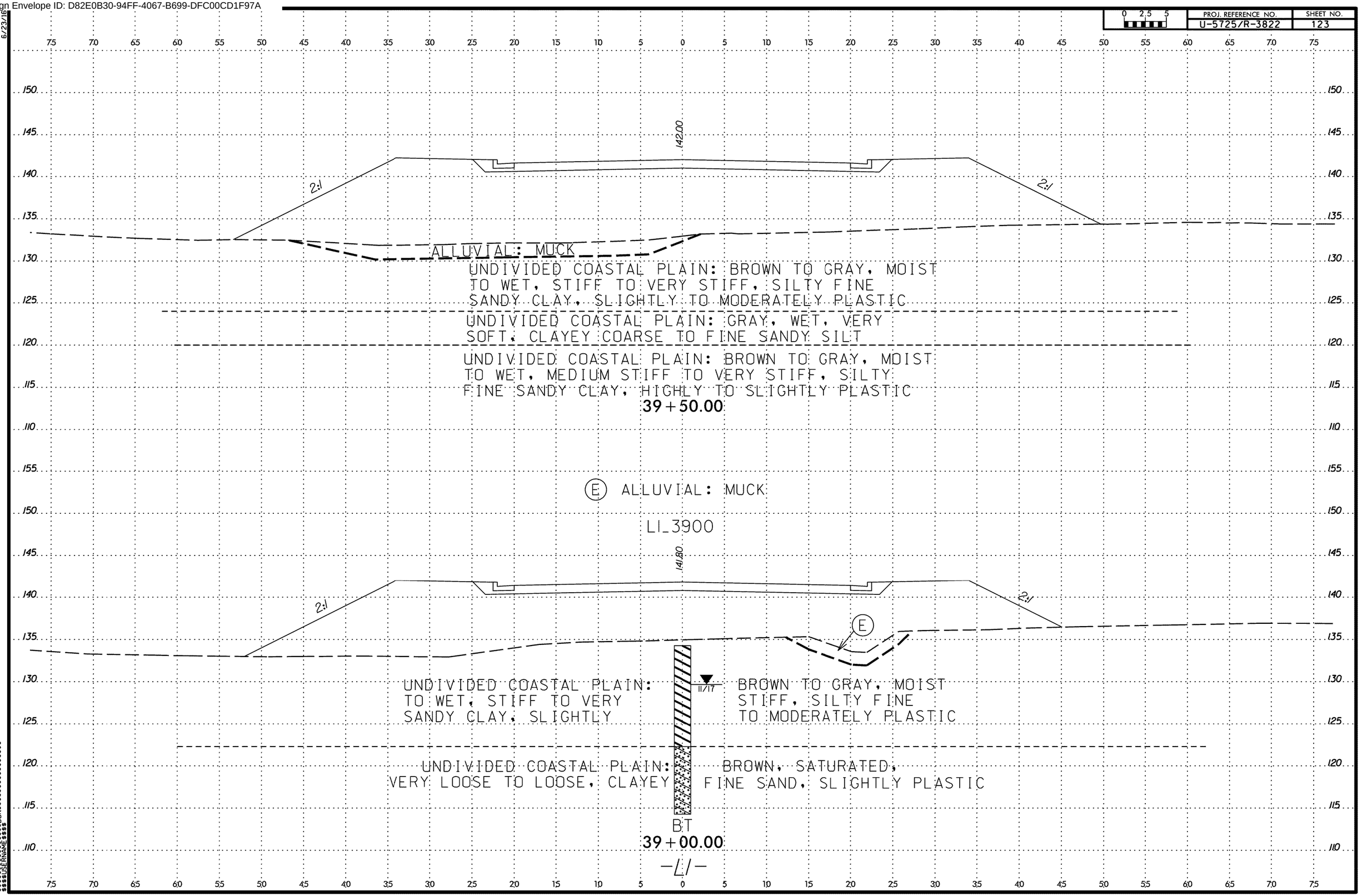
PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	122



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

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	123



6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	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-23	CL	40+00	3.5-5.0	A-7-6 (16)	49	22	6	29	23	42	100	99	71	21.4	-
ST-1	CL	40+00	8.3-10.1	A-4 (0)	22	4	31	35	13	21	100	90	38	27.8	-

SS-23
ST-1

LI_4000

142.20

2:1

2:1

UNDIVIDED COASTAL PLAIN:
GREENISH BROWN TO RED TO GRAY,
WET, MEDIUM STIFF TO STIFF,

ALLUVIAL:

MUCK

11/17

FINE SANDY CLAY, MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN:
SOFT, CLAYEY COARSE TO

GRAY, WET, VERY
FINE SANDY SILT

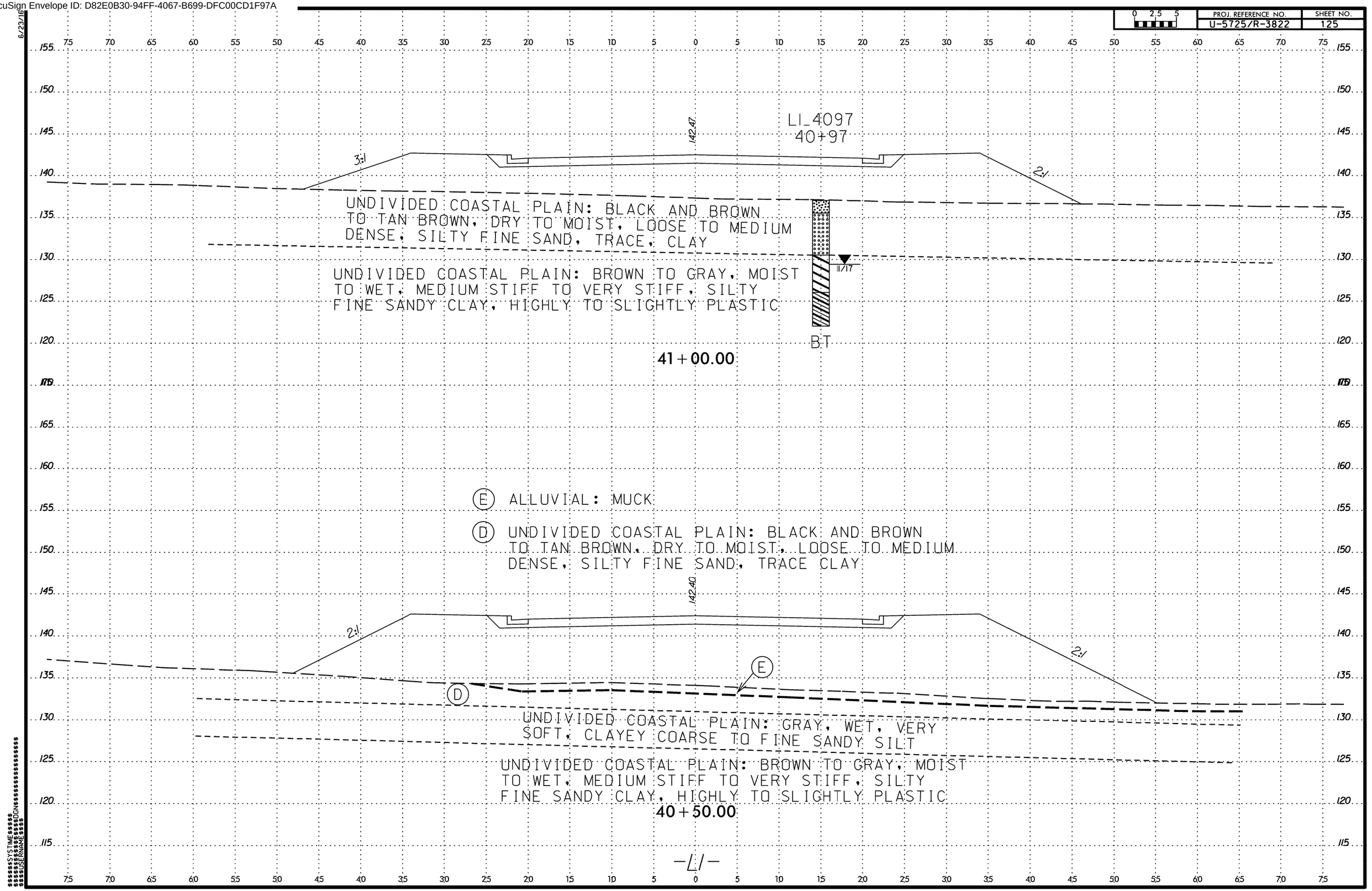
ST-1

UNDIVIDED COASTAL PLAIN:
VERY LOOSE TO LOOSE,
TO FINE SAND,

GRAY, SATURATED,
CLAYEY COARSE
SLIGHTLY PLASTIC

BT
40+00.00

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



6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	126

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

160 155 150 145 140 135 130 125 120 115

Ⓑ TOPSOIL

Ⓓ UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO GRAY, DRY, MEDIUM DENSE, CLAYEY FINE SAND, SLIGHTLY PLASTIC

142.15

L1_4200

5:1

2:1

Ⓑ

Ⓓ

UNDIVIDED COASTAL PLAIN: GRAY TO BROWN TO REDDISH BROWN, DRY TO MOIST, STIFF, FINE SANDY CLAY, HIGHLY TO SLIGHTLY PLASTIC

⑫ ⑪ ⑩ ⑪

BT
DRY
11/17

42+00.00

Ⓑ TOPSOIL

142.33

5:1

2:1

Ⓑ

UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO GRAY, DRY, MEDIUM DENSE, CLAYEY FINE SAND, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: GRAY TO BROWN TO REDDISH BROWN, DRY TO MOIST, STIFF FINE SANDY CLAY, HIGHLY TO SLIGHTLY PLASTIC

41+50.00

-L1-

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

6/23/16

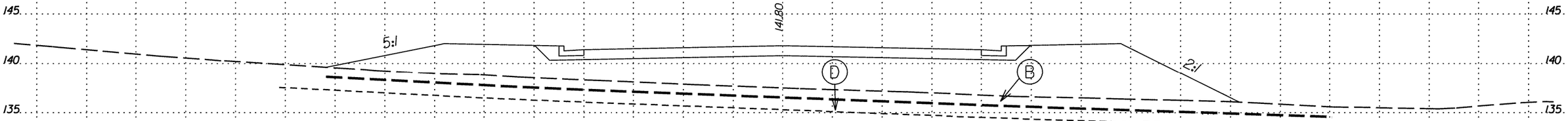
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	127

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

160 155 150 145 140 135 130 125

Ⓑ TOPSOIL

Ⓓ UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO GRAY, DRY, MEDIUM DENSE, CLAYEY FINE SAND, SLIGHTLY PLASTIC

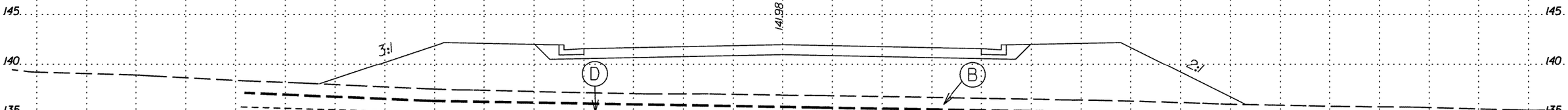


UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO RED AND GRAY, DRY TO MOIST, STIFF TO VERY STIFF, SILTY FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

43+00.00

Ⓑ TOPSOIL

Ⓓ UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO GRAY, DRY, MEDIUM DENSE, CLAYEY FINE SAND, SLIGHTLY PLASTIC



UNDIVIDED COASTAL PLAIN: GRAY TO BROWN TO REDDISH BROWN, DRY TO MOIST, STIFF, FINE SANDY CLAY, HIGHLY TO SLIGHTLY PLASTIC

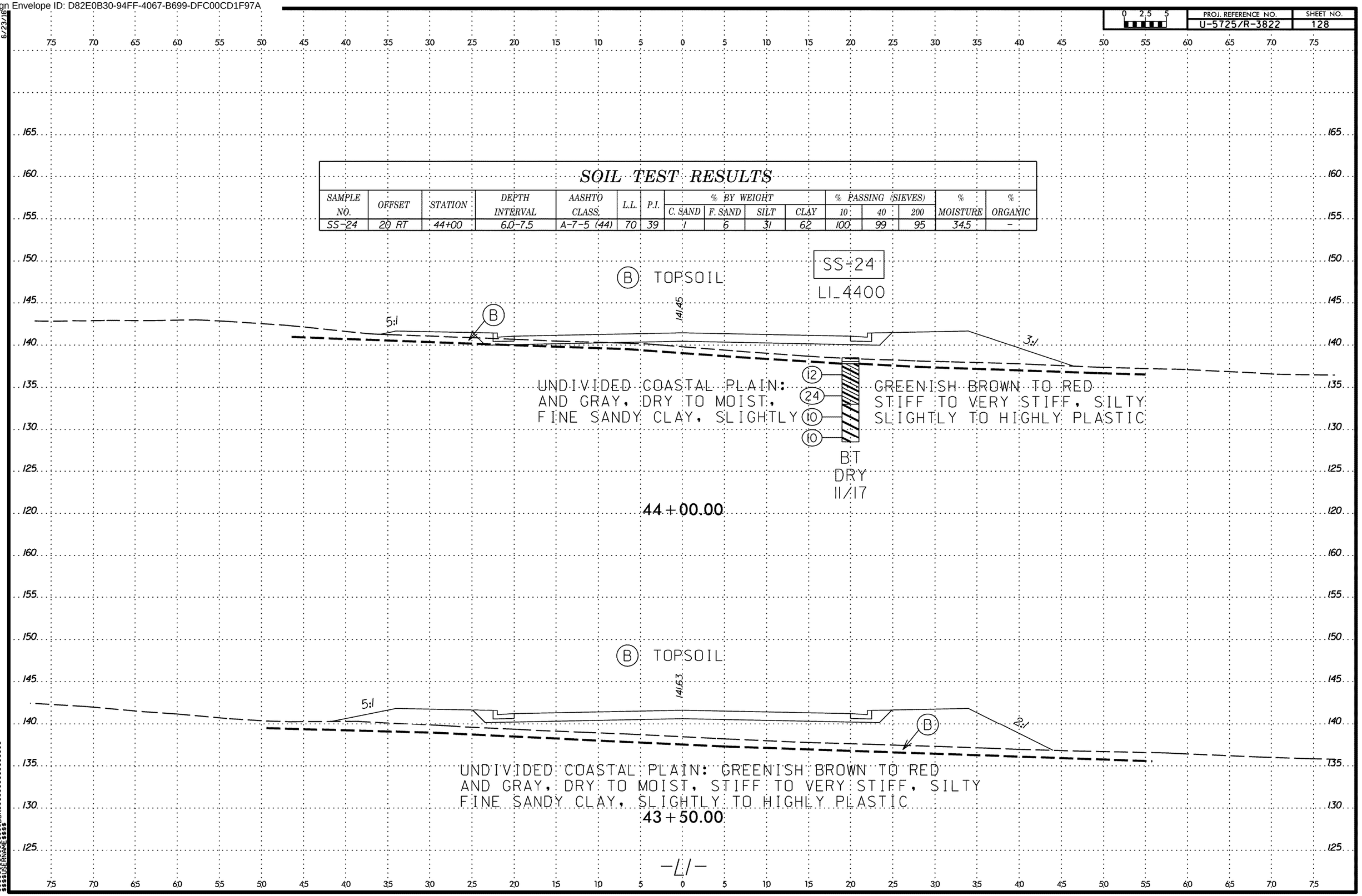
42+50.00

-L1-

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

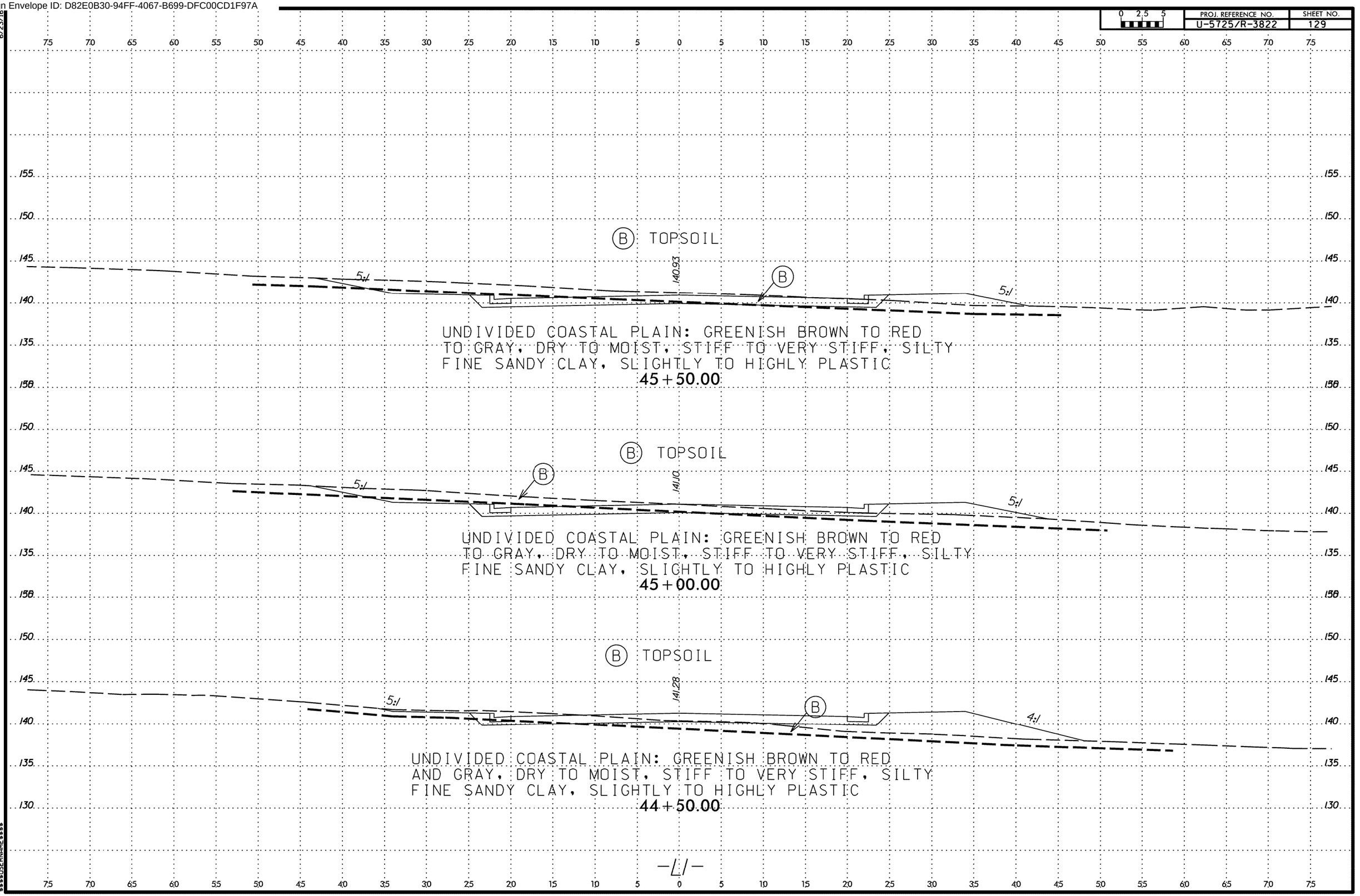
SOIL TEST RESULTS

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-24	20 RT	44+00	6.0-7.5	A-7-5 (44)	70	39	1	6	31	62	100	99	95	34.5	-



PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	129

6/23/16



Ⓑ TOPSOIL

UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO RED TO GRAY, DRY TO MOIST, STIFF TO VERY STIFF, SILTY FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

45+50.00

Ⓑ TOPSOIL

UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO RED TO GRAY, DRY TO MOIST, STIFF TO VERY STIFF, SILTY FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

45+00.00

Ⓑ TOPSOIL

UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO RED AND GRAY, DRY TO MOIST, STIFF TO VERY STIFF, SILTY FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

44+50.00

B TOPSOIL

140.40

5:1

5:1

UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO RED TO GRAY, DRY TO MOIST, STIFF TO VERY STIFF, SILTY FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

47+00.00

B TOPSOIL

140.58

5:1

5:1

UNDIVIDED COASTAL PLAIN: GREENISH BROWN TO RED TO GRAY, DRY TO MOIST, STIFF TO VERY STIFF, SILTY FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

46+50.00

B TOPSOIL

LI_4600

140.75

5:1

5:1

UNDIVIDED COASTAL PLAIN: TO GRAY, DRY TO MOIST, FINE SANDY CLAY,

29
24
15
12

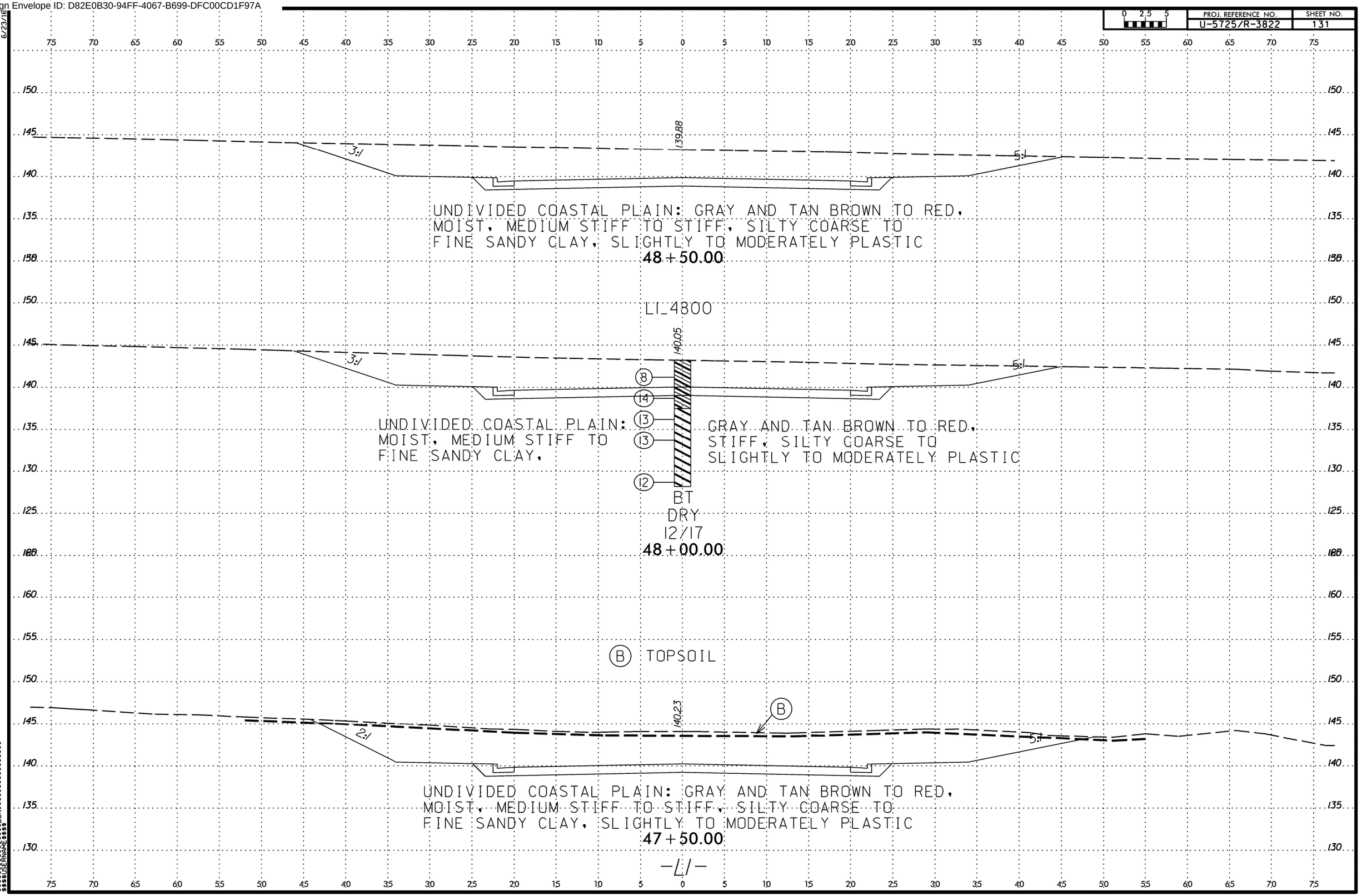
GREENISH BROWN TO RED STIFF TO VERY STIFF, SILTY SLIGHTLY TO HIGHLY PLASTIC

BT
DRY
11/17

46+00.00

-L1-

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



6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	132

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

155 150 145 140 135 130 125 120 115

L1_5000

139.35

5:1 5:1

(7) (13) (12) (19) (13)

UNDIVIDED COASTAL PLAIN: TO BROWN, MOIST, MEDIUM COARSE TO FINE SANDY CLAY,

TAN BROWN AND GRAY TO RED STIFF TO VERY STIFF, SILTY SLIGHTLY TO MODERATELY PLASTIC

BT
DRY
12/17
50+00.00

139.53

4:1 5:1

UNDIVIDED COASTAL PLAIN: GRAY TO RED TO BROWN, MOIST, MEDIUM STIFF TO VERY STIFF, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

49+50.00

139.70

4:1 5:1

UNDIVIDED COASTAL PLAIN: GRAY AND TAN BROWN TO RED, MOIST, MEDIUM STIFF TO STIFF, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

49+00.00

-L1-

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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	133

LI_5200

139.35

5:1 5:1

(11) (14) (13) (14)

UNDIVIDED COASTAL PLAIN: TAN BROWN TO BROWN TO GRAY TO RED, MOIST, STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

BT
DRY
12/17

52+00.00

139.18

5:1 5:1

UNDIVIDED COASTAL PLAIN: TAN BROWN TO BROWN TO GRAY TO RED, MOIST, STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

51+50.00

139.05

5:1 5:1

UNDIVIDED COASTAL PLAIN: TAN BROWN AND GRAY TO RED TO BROWN, MOIST, MEDIUM STIFF TO VERY STIFF, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

51+00.00

139.18

5:1 5:1

UNDIVIDED COASTAL PLAIN: TAN BROWN AND GRAY TO RED TO BROWN, MOIST, MEDIUM STIFF TO VERY STIFF, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

50+50.00

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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	134

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

145 140 135 130 125 120

139.88

3:1 4:1

UNDIVIDED COASTAL PLAIN: TAN BROWN, MOIST, STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: TAN BROWN TO BROWN TO RED TO GRAY, MOIST, MEDIUM DENSE, SILTY CLAYEY FINE SAND, SLIGHTLY PLASTIC

53+50.00

139.71

4:1 5:1

UNDIVIDED COASTAL PLAIN: TAN BROWN, MOIST, STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: TAN BROWN TO BROWN TO RED TO GRAY, MOIST, MEDIUM DENSE, SILTY CLAYEY FINE SAND, SLIGHTLY PLASTIC

53+00.00

139.53

5:1 5:1

UNDIVIDED COASTAL PLAIN: TAN BROWN TO BROWN TO GRAY TO RED, MOIST, STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

UNDIVIDED COASTAL PLAIN: TAN BROWN TO BROWN TO RED TO GRAY, MOIST, MEDIUM DENSE, SILTY CLAYEY FINE SAND, SLIGHTLY PLASTIC

52+50.00

-L/-

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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	135

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

145 140 135 130 125 120 115

140.24

2:1

2:1

UNDIVIDED COASTAL PLAIN: TAN BROWN, MOIST, STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: TAN BROWN TO BROWN TO RED TO GRAY, MOIST, MEDIUM DENSE, SILTY CLAYEY FINE SAND, SLIGHTLY PLASTIC

54+50.00

LI-5400

140.06

2:1

3:1

UNDIVIDED COASTAL PLAIN: (9) (12) TAN BROWN, MOIST, STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: (12) (13) TAN BROWN TO BROWN TO RED TO GRAY, MOIST, MEDIUM DENSE, SILTY CLAYEY FINE SAND, SLIGHTLY PLASTIC

BT
DRY
12/17

54+00.00

-L1-

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

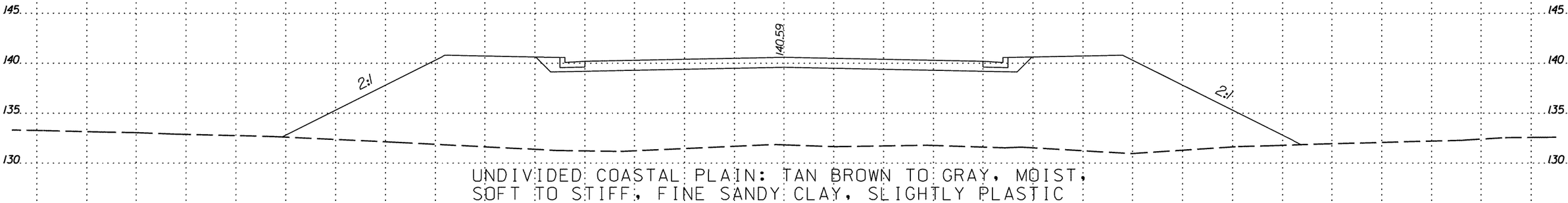
6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	136

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

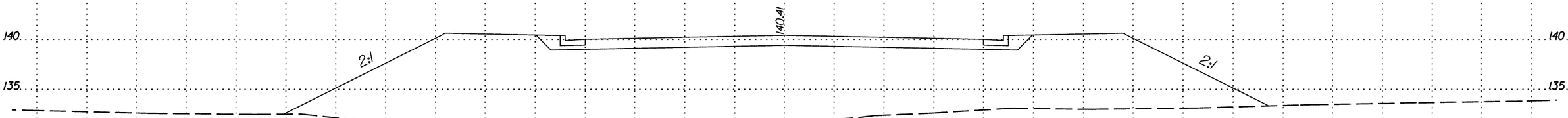
145 140 135 130 125 120 115



UNDIVIDED COASTAL PLAIN: TAN BROWN TO GRAY, MOIST, SOFT TO STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: GRAY TO LIGHT GRAY TO TAN BROWN, MOIST TO SATURATED, MEDIUM DENSE TO VERY LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

55+50.00



UNDIVIDED COASTAL PLAIN: TAN BROWN, MOIST, STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: TAN BROWN TO BROWN TO RED TO GRAY, MOIST, MEDIUM DENSE, SILTY CLAYEY FINE SAND, SLIGHTLY PLASTIC

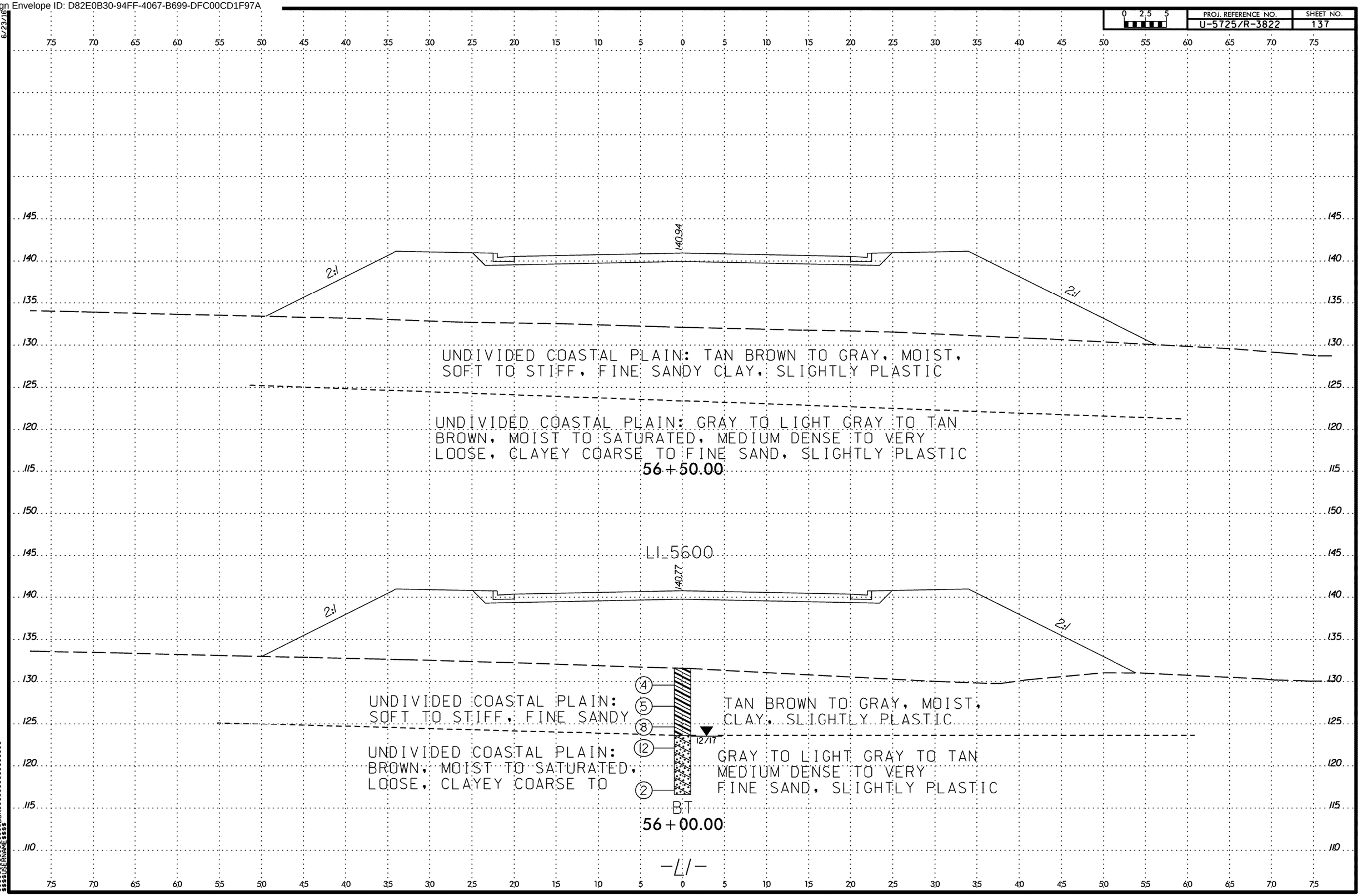
55+00.00

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	137



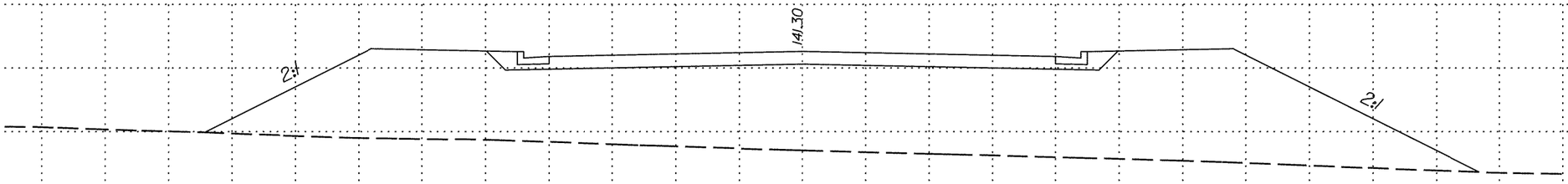
$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	138

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

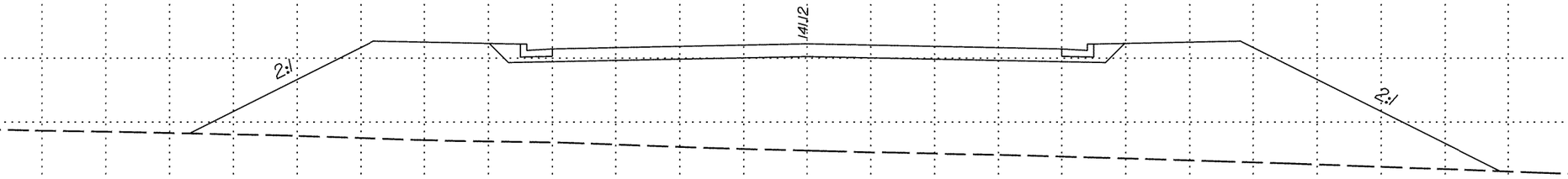
150 145 140 135 130 125 120 115



UNDIVIDED COASTAL PLAIN: TAN BROWN TO GRAY TO RED, MOIST, STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: TAN BROWN TO GRAY, SATURATED, LOOSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC

57+50.00



UNDIVIDED COASTAL PLAIN: TAN BROWN TO GRAY, MOIST, SOFT TO STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: GRAY TO LIGHT GRAY TO TAN BROWN, MOIST TO SATURATED, MEDIUM DENSE TO VERY LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

57+00.00

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

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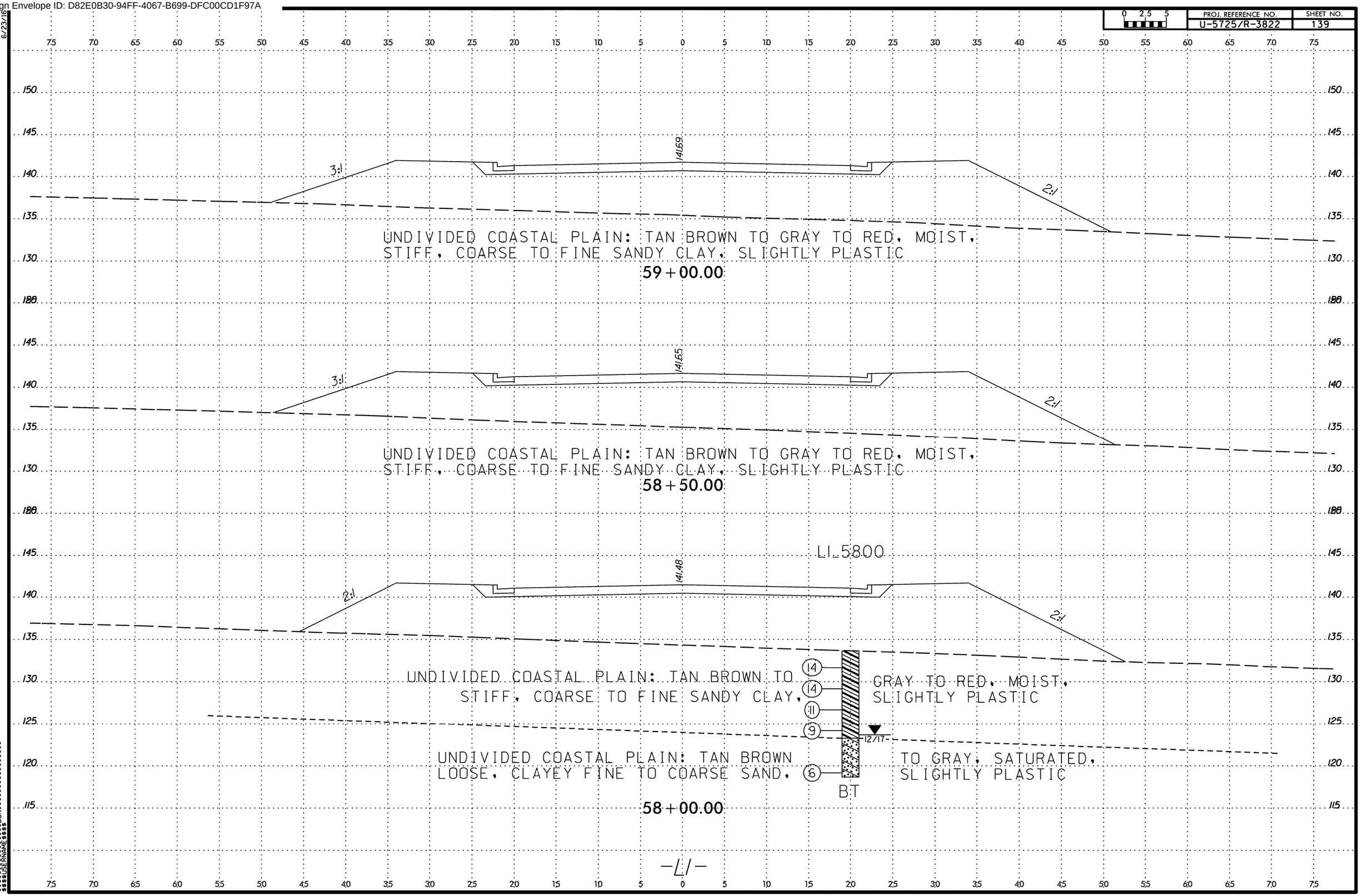
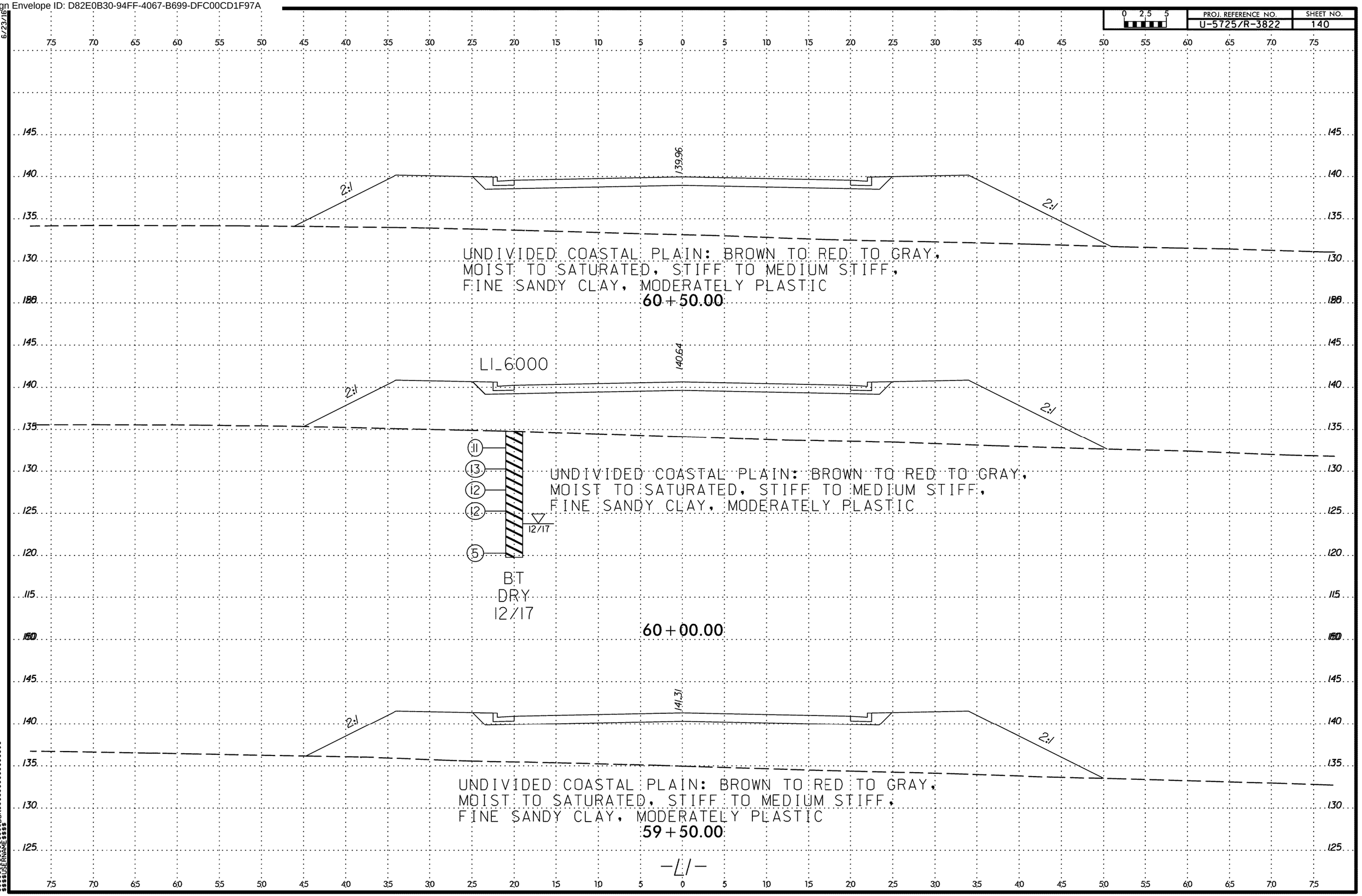
6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	139



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



6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	141

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

155 150 145 140 135 130 125 120

INTERSECTION WITH
-Y3- SR-1683
(AMERICAN LEGION RD)

138.60

2:1

UNDIVIDED COASTAL PLAIN: RED TO GRAY TO BROWN,
MOIST, STIFF TO VERY STIFF, COARSE TO FINE
SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC

61+50.00

139.28

2:1

2:1

UNDIVIDED COASTAL PLAIN: BROWN TO RED TO GRAY,
MOIST TO SATURATED, STIFF TO MEDIUM STIFF,
FINE SANDY CLAY, MODERATELY PLASTIC

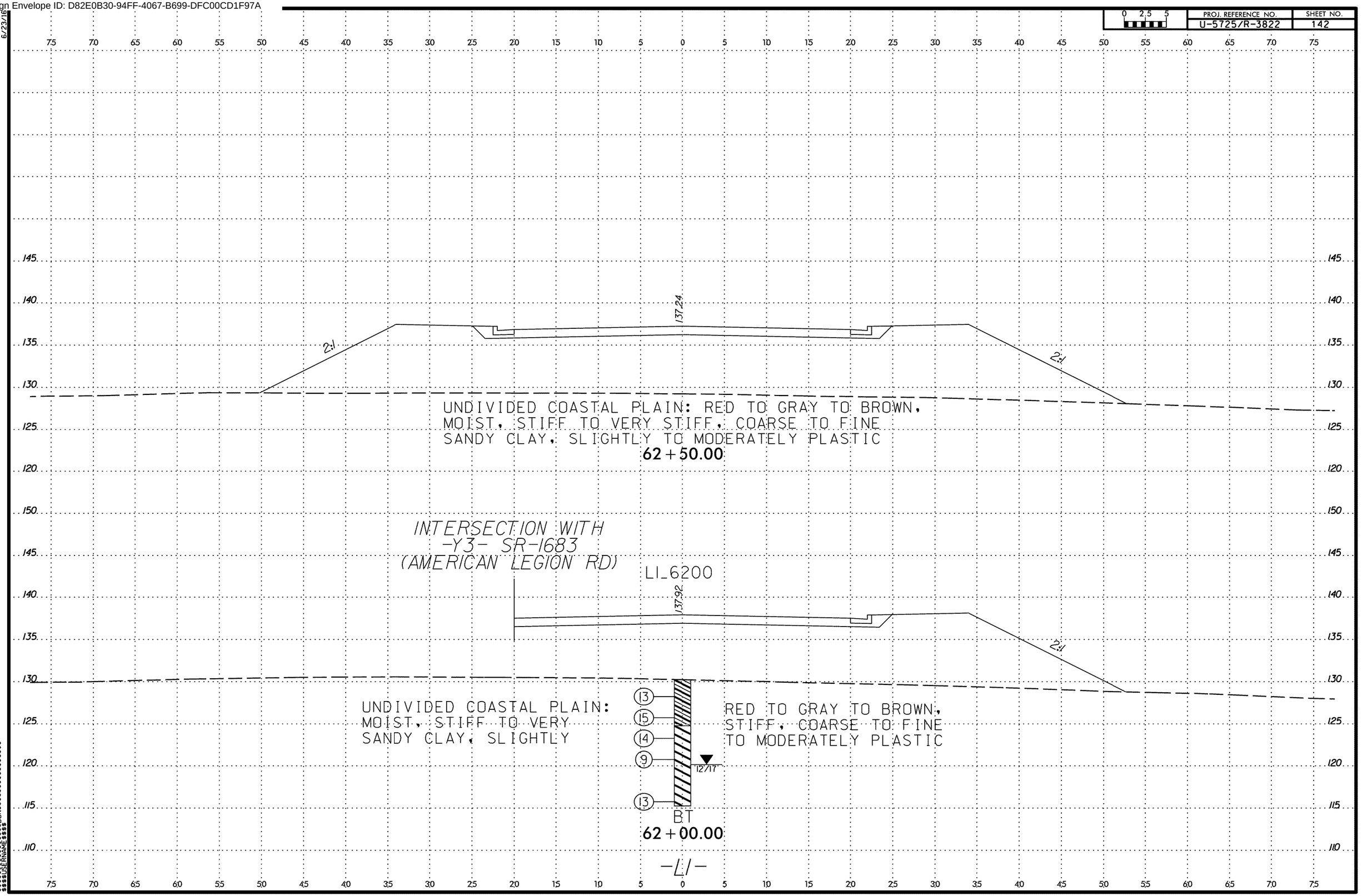
61+00.00

-L1-

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	142

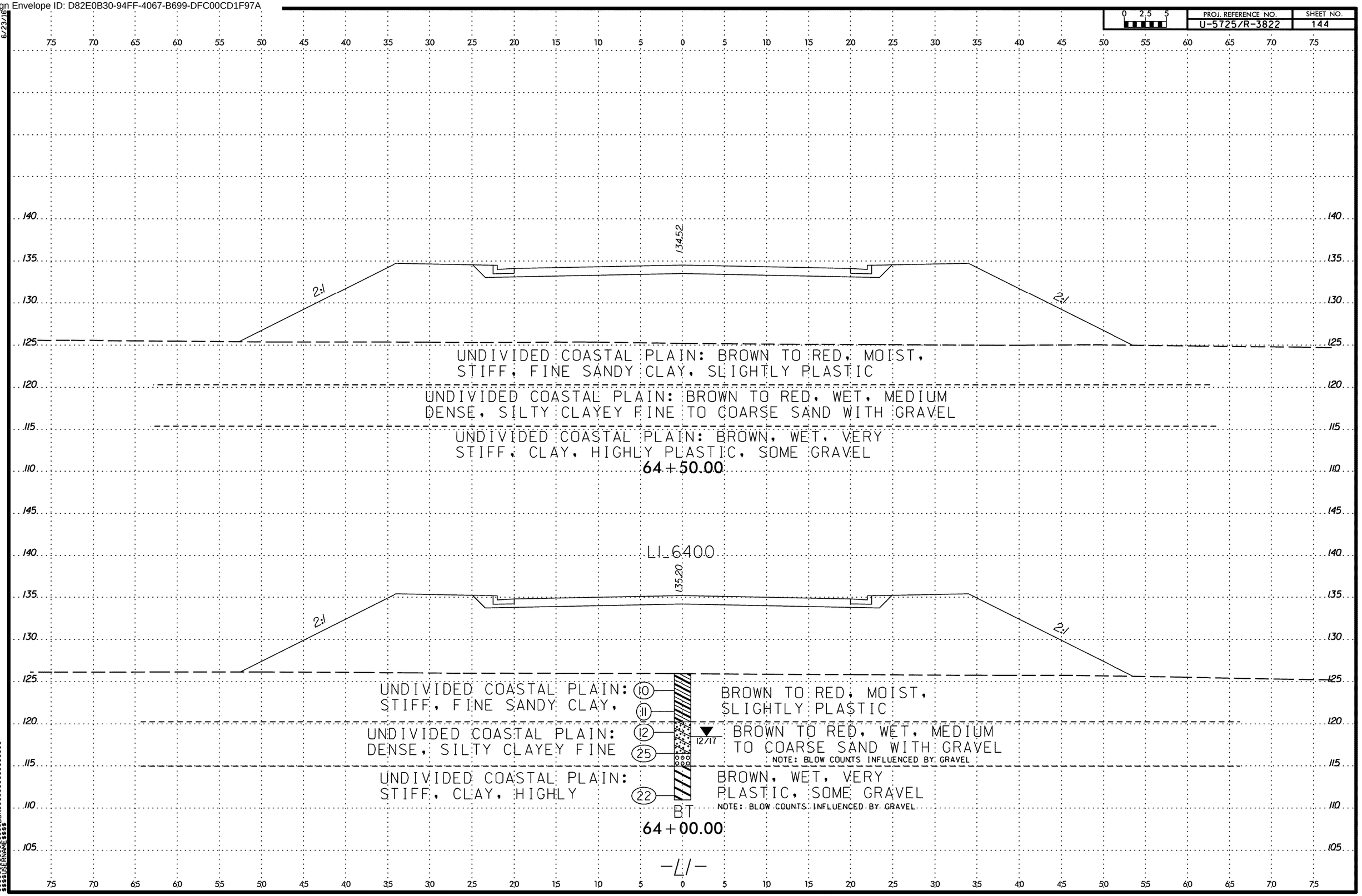


$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	143

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	144



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	145

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

140 135 130 125 120 115 110 105

133.16

2:1 2:1

UNDIVIDED COASTAL PLAIN: BROWN TO RED, MOIST, STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, LOOSE, SILTY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: BLACK TO BROWN, SATURATED, LOOSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC, SOME GRAVEL

65+50.00

133.84

2:1 2:1

UNDIVIDED COASTAL PLAIN: BROWN TO RED, MOIST, STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN TO RED, WET, MEDIUM DENSE, SILTY CLAYEY FINE TO COARSE SAND WITH GRAVEL

UNDIVIDED COASTAL PLAIN: BROWN, WET, VERY STIFF, CLAY, HIGHLY PLASTIC, SOME GRAVEL

65+00.00

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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	146

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

140 135 130 125 120 115 110 105 100

131.80

2:1

2:1

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, LOOSE, SILTY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, WET, MEDIUM STIFF TO SOFT, FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: BLACK TO BROWN, SATURATED, LOOSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC, SOME GRAVEL

66+50.00

132.48

LI_6600

2:1

2:1

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, LOOSE, SILTY COARSE TO FINE SAND (8)

UNDIVIDED COASTAL PLAIN: BROWN (7) TO GRAY, WET, MEDIUM

STIFF TO SOFT, FINE SANDY (3) 12/17 CLAY, SLIGHTLY PLASTIC

(5)

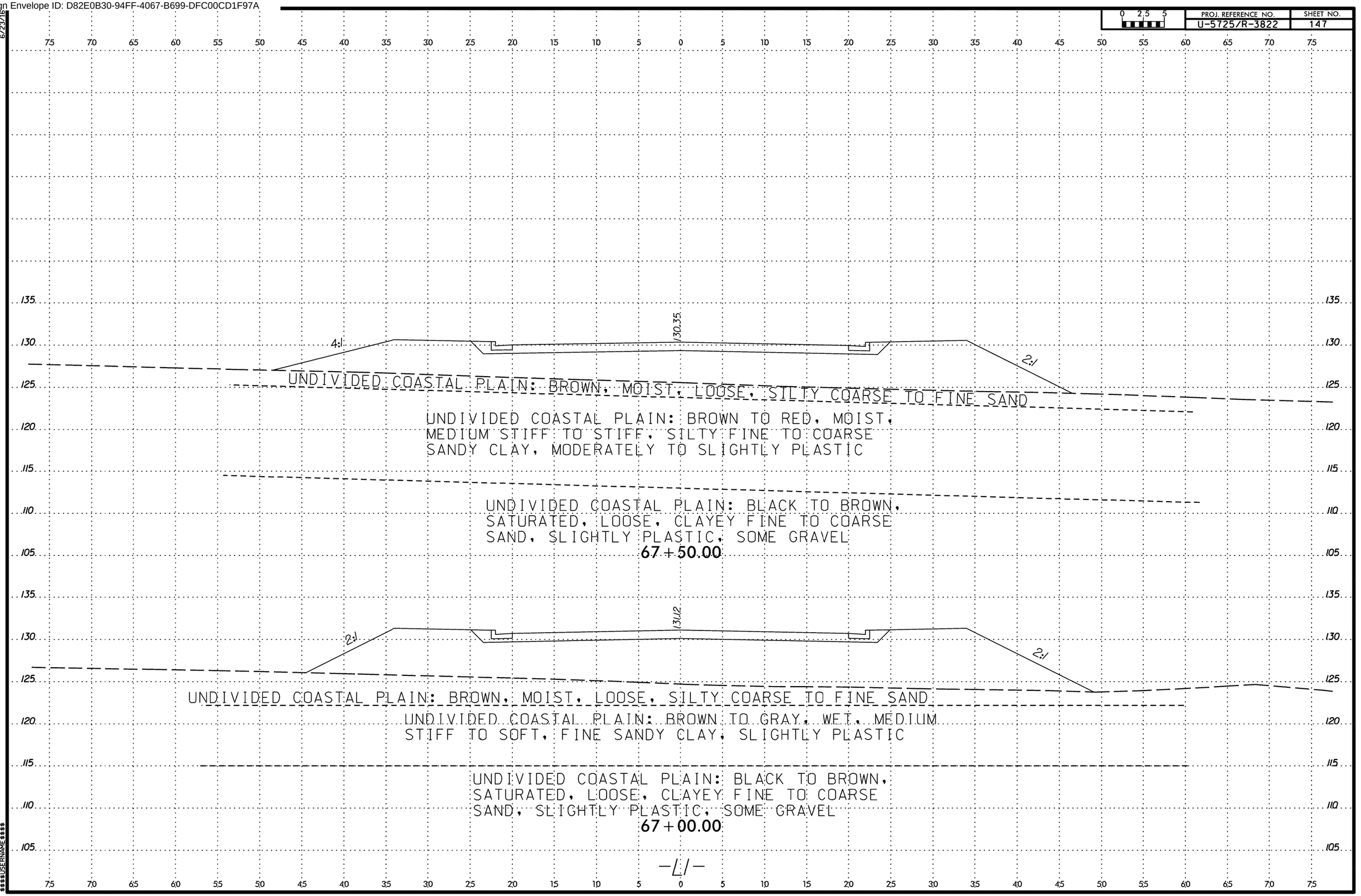
UNDIVIDED COASTAL PLAIN: BLACK TO BROWN, SATURATED, LOOSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC, SOME GRAVEL (5)

BT

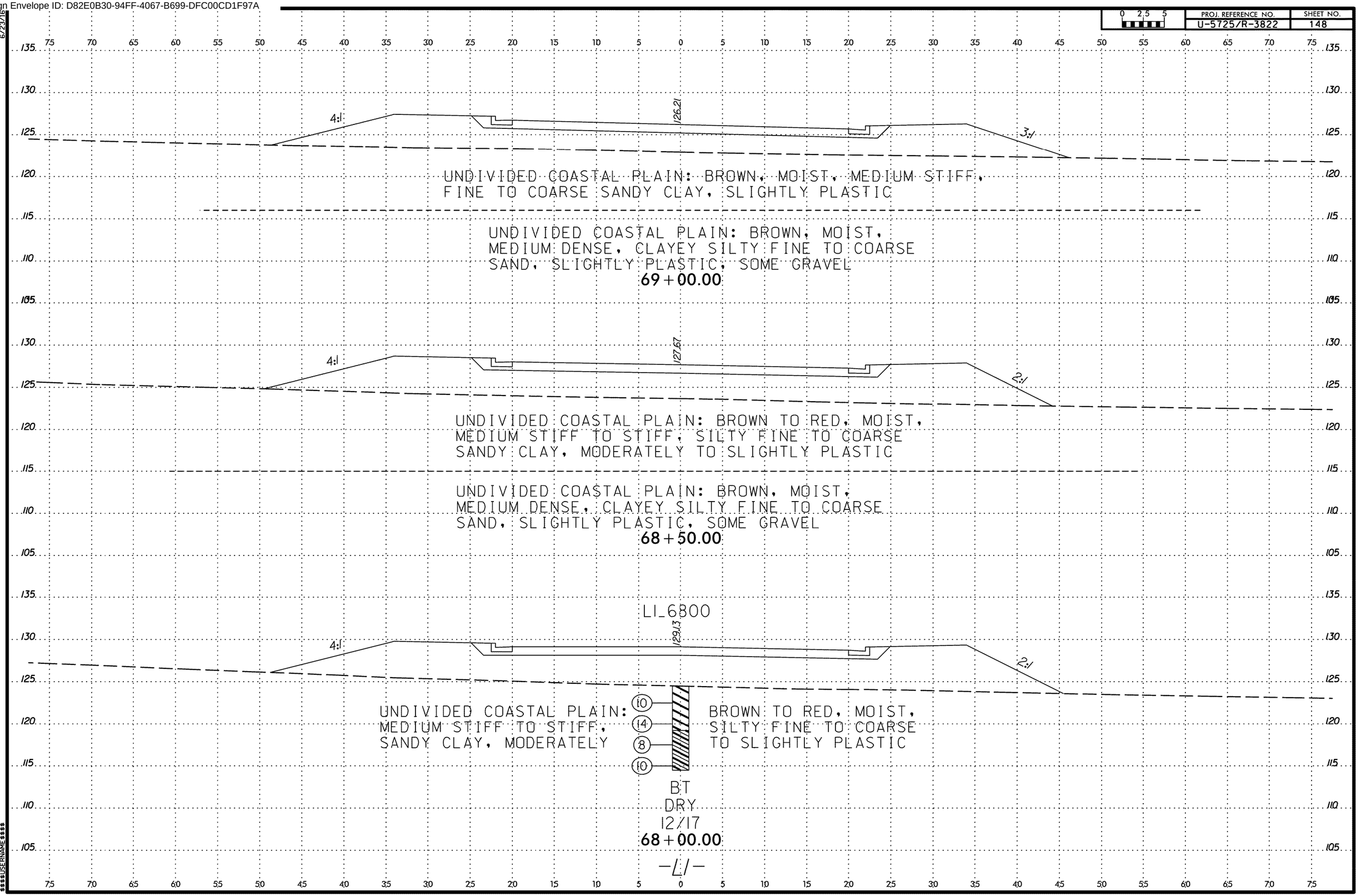
66+00.00

-L1-

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



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



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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	149

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

130 125 120 115 110 105 100

5:1

12183

5:1

UNDIVIDED COASTAL PLAIN:
BROWN, MOIST, MEDIUM STIFF, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN, MOIST,
MEDIUM DENSE, CLAYEY SILTY FINE TO COARSE
SAND, SLIGHTLY PLASTIC, SOME GRAVEL

70+50.00

LI_7000

5:1

12329

5:1

UNDIVIDED COASTAL PLAIN:
BROWN, MOIST, MEDIUM STIFF, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN:
MEDIUM DENSE, CLAYEY
SAND, SLIGHTLY

8
11
20
20

BROWN, MOIST,
SILTY FINE TO COARSE
PLASTIC, SOME GRAVEL

BT
DRY
12/17

70+00.00

5:1

12475

4:1

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, MEDIUM STIFF,
FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN, MOIST,
MEDIUM DENSE, CLAYEY SILTY FINE TO COARSE
SAND, SLIGHTLY PLASTIC, SOME GRAVEL

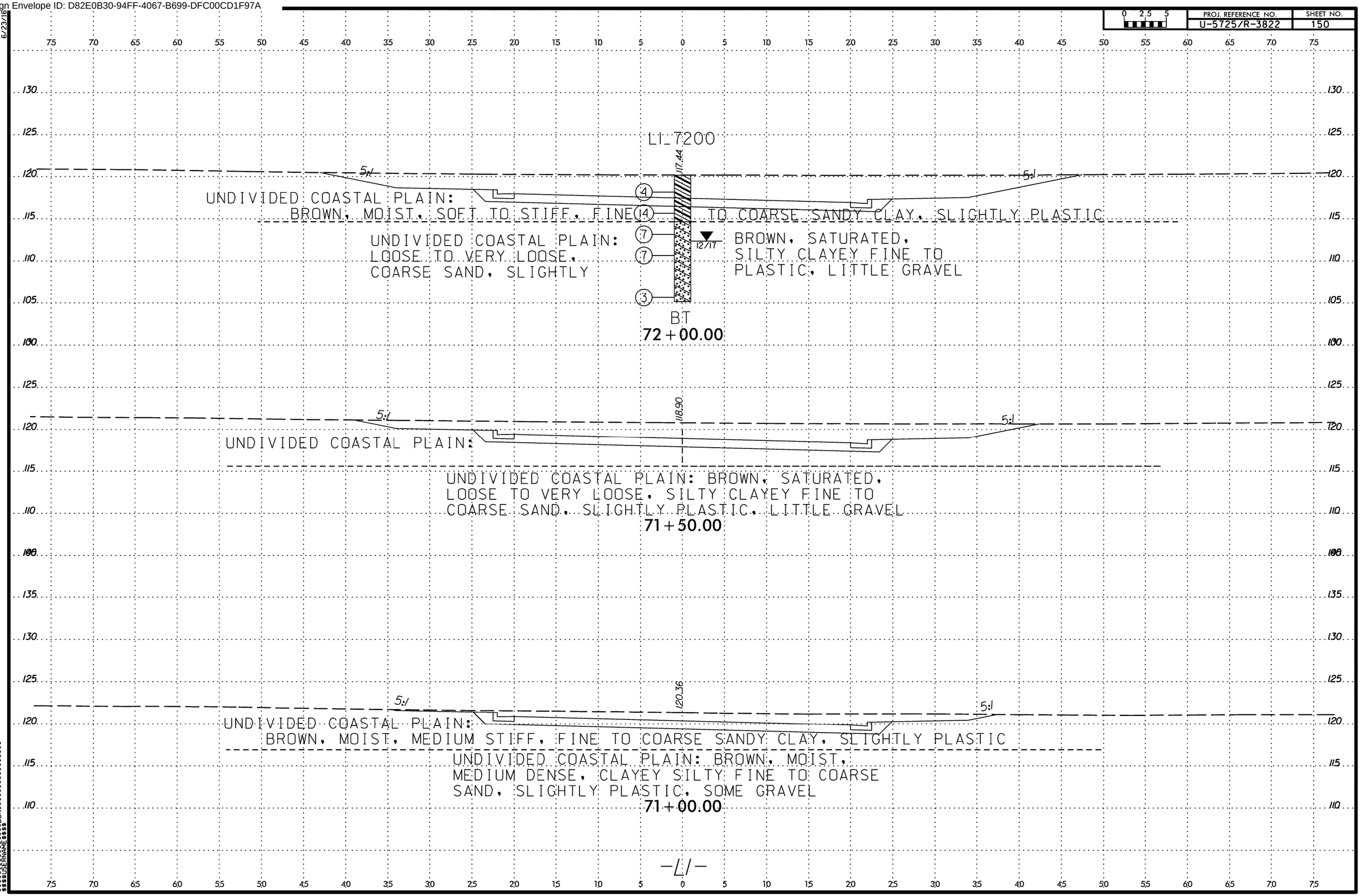
69+50.00

-11-

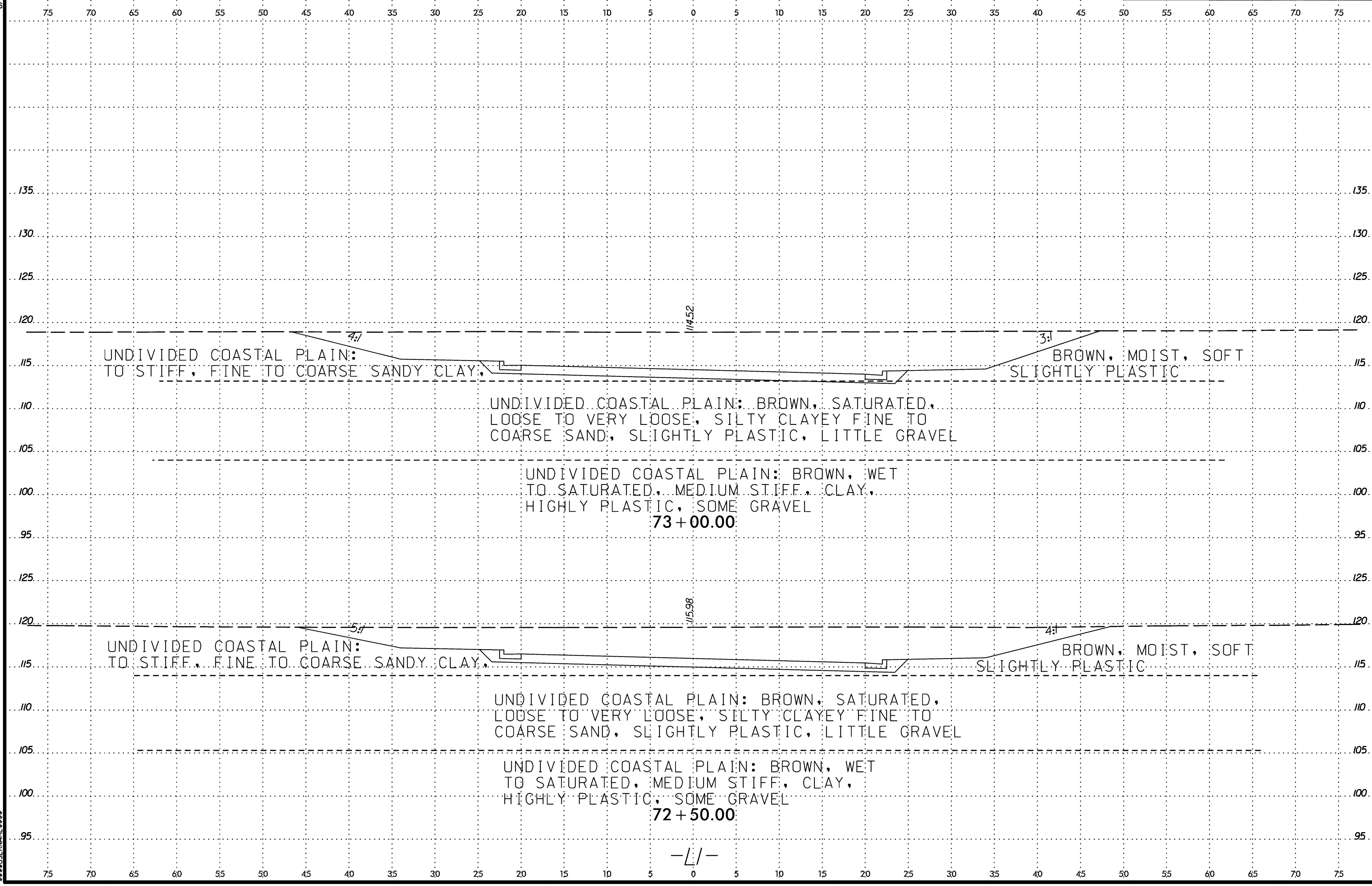
$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

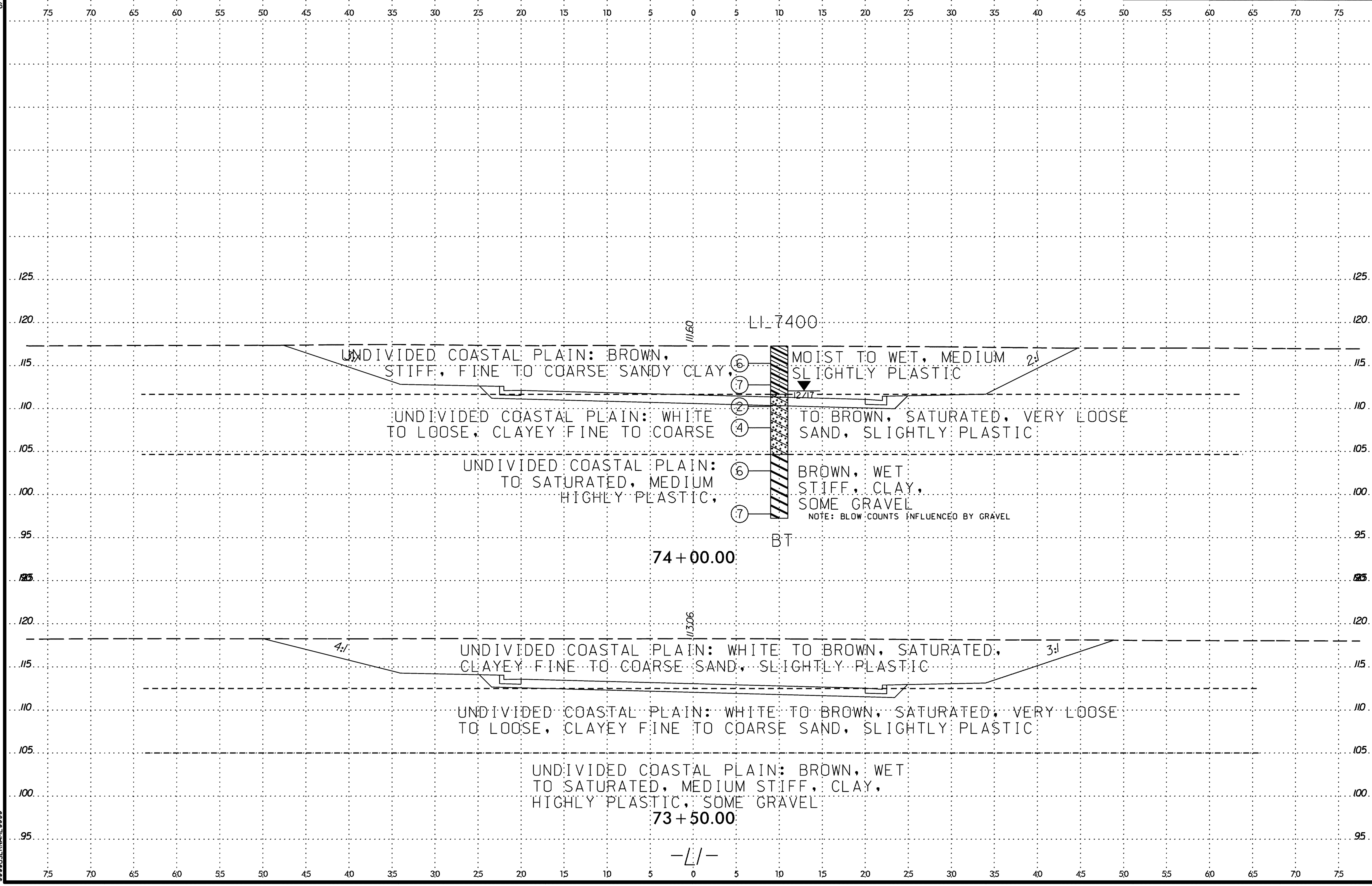
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	150



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


0 2.5 5
114.52
4:1
3:1
UNDIVIDED COASTAL PLAIN: BROWN, MOIST, SOFT TO STIFF, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC
UNDIVIDED COASTAL PLAIN: BROWN, SATURATED, LOOSE TO VERY LOOSE, SILTY CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC, LITTLE GRAVEL
UNDIVIDED COASTAL PLAIN: BROWN, WET TO SATURATED, MEDIUM STIFF, CLAY, HIGHLY PLASTIC, SOME GRAVEL
73+00.00
115.98
5:1
4:1
UNDIVIDED COASTAL PLAIN: BROWN, MOIST, SOFT TO STIFF, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC
UNDIVIDED COASTAL PLAIN: BROWN, SATURATED, LOOSE TO VERY LOOSE, SILTY CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC, LITTLE GRAVEL
UNDIVIDED COASTAL PLAIN: BROWN, WET TO SATURATED, MEDIUM STIFF, CLAY, HIGHLY PLASTIC, SOME GRAVEL
72+50.00
-L-

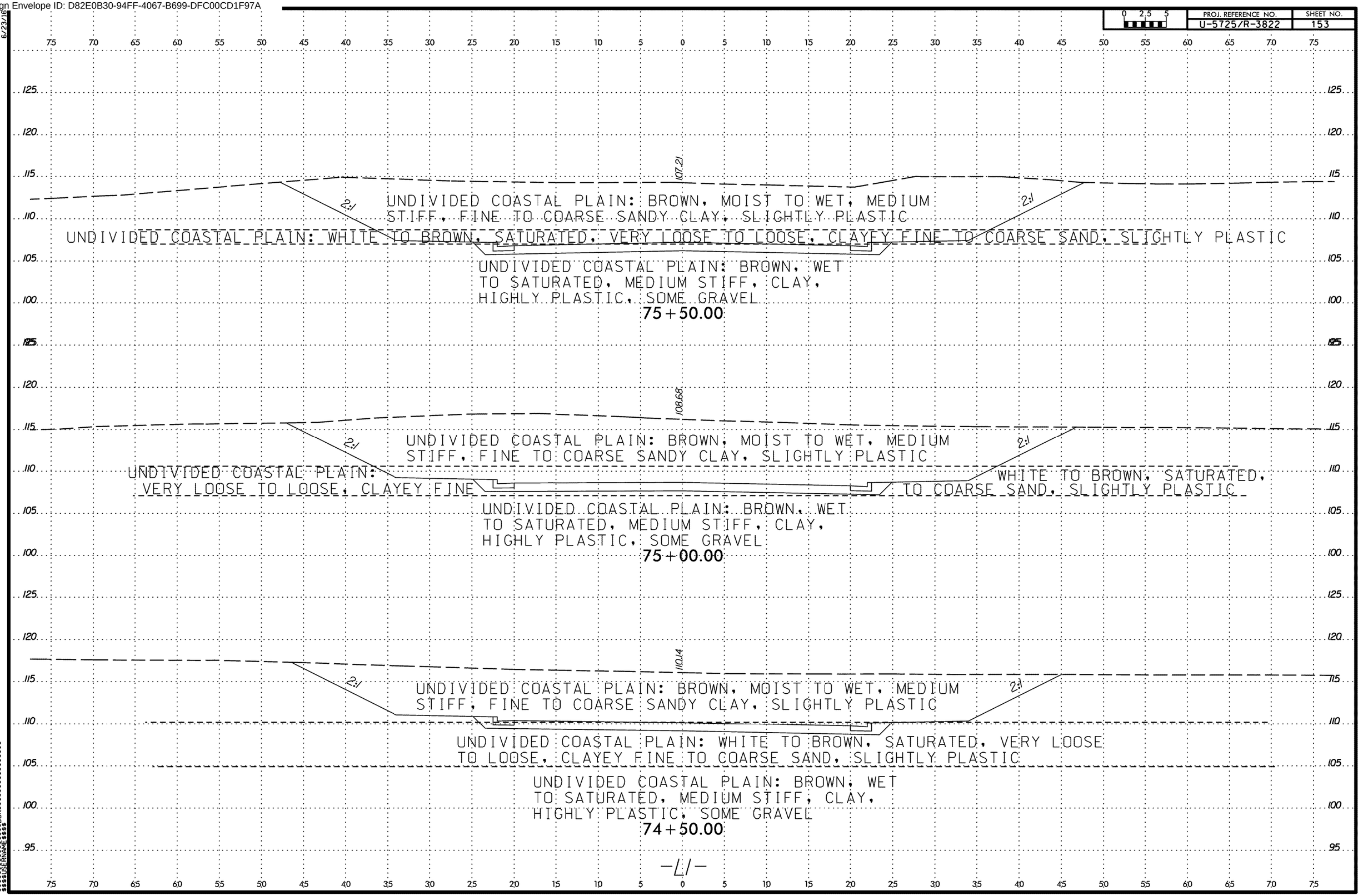
$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$


LI_7400
111.60
UNDIVIDED COASTAL PLAIN: BROWN, MOIST TO WET, MEDIUM STIFF, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC
12/17
UNDIVIDED COASTAL PLAIN: WHITE TO BROWN, SATURATED, VERY LOOSE TO LOOSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC
UNDIVIDED COASTAL PLAIN: BROWN, WET TO SATURATED, MEDIUM STIFF, CLAY, HIGHLY PLASTIC, SOME GRAVEL
NOTE: BLOW COUNTS INFLUENCED BY GRAVEL
BT
2:1
3:1
74+00.00
113.06
4:1
3:1
UNDIVIDED COASTAL PLAIN: WHITE TO BROWN, SATURATED, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC
UNDIVIDED COASTAL PLAIN: WHITE TO BROWN, SATURATED, VERY LOOSE TO LOOSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC
UNDIVIDED COASTAL PLAIN: BROWN, WET TO SATURATED, MEDIUM STIFF, CLAY, HIGHLY PLASTIC, SOME GRAVEL
73+50.00
-L/-

DocuSign Envelope ID: D82E0B30-94FF-4067-B699-DFC00CD1F97A

6/23/16

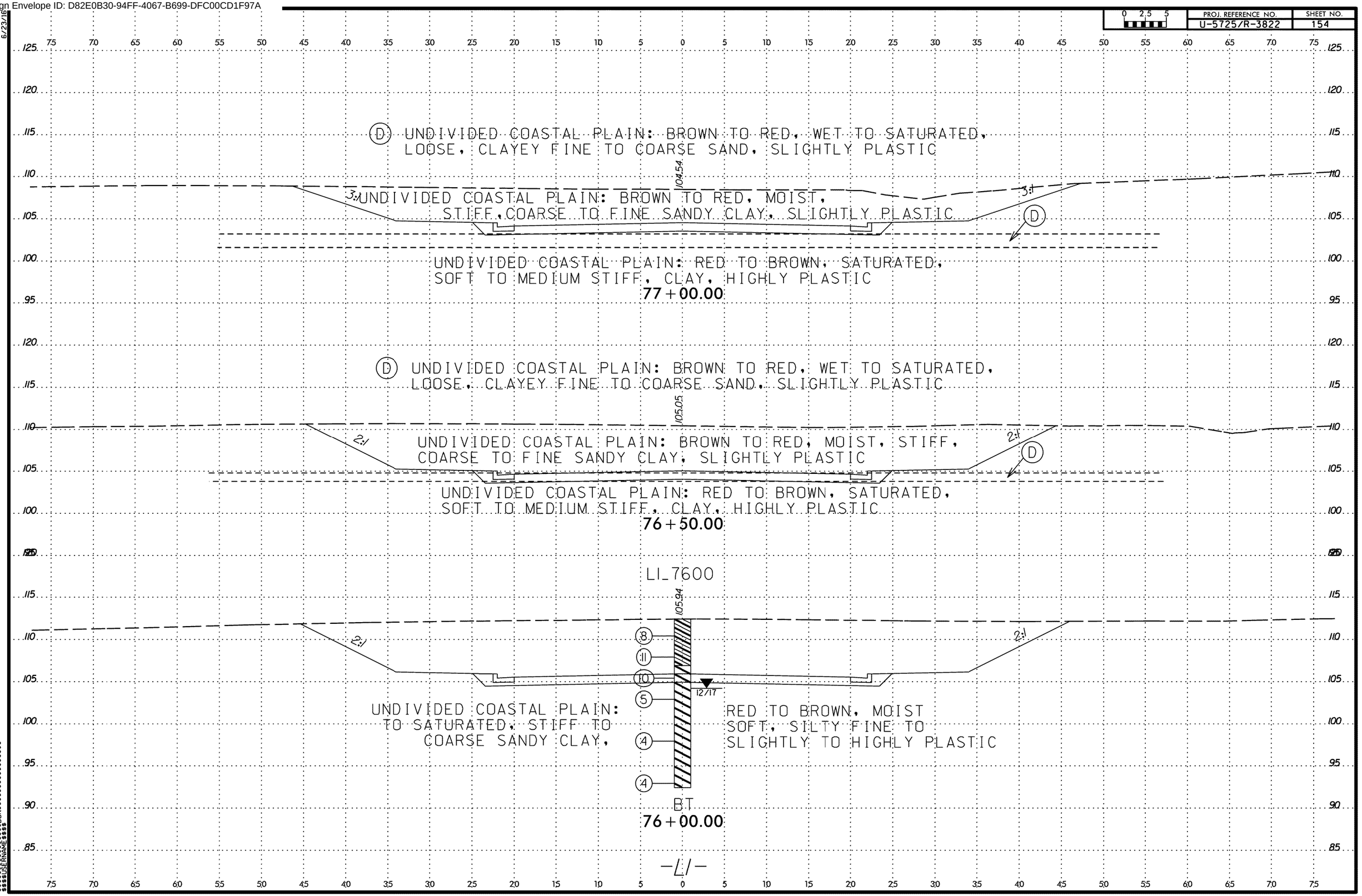
PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	153



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	154



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	155

UNDIVIDED COASTAL PLAIN: BROWN TO RED, MOIST, STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN TO RED, WET TO SATURATED, LOOSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: RED TO BROWN, SATURATED, SOFT TO MEDIUM STIFF, CLAY, HIGHLY PLASTIC

78+50.00

(D) UNDIVIDED COASTAL PLAIN: BROWN TO RED, WET TO SATURATED, LOOSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC

LI_7800

UNDIVIDED COASTAL PLAIN: BROWN TO RED, MOIST, STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: SOFT TO MEDIUM STIFF, RED TO BROWN, SATURATED, CLAY, HIGHLY PLASTIC

BT

78+00.00

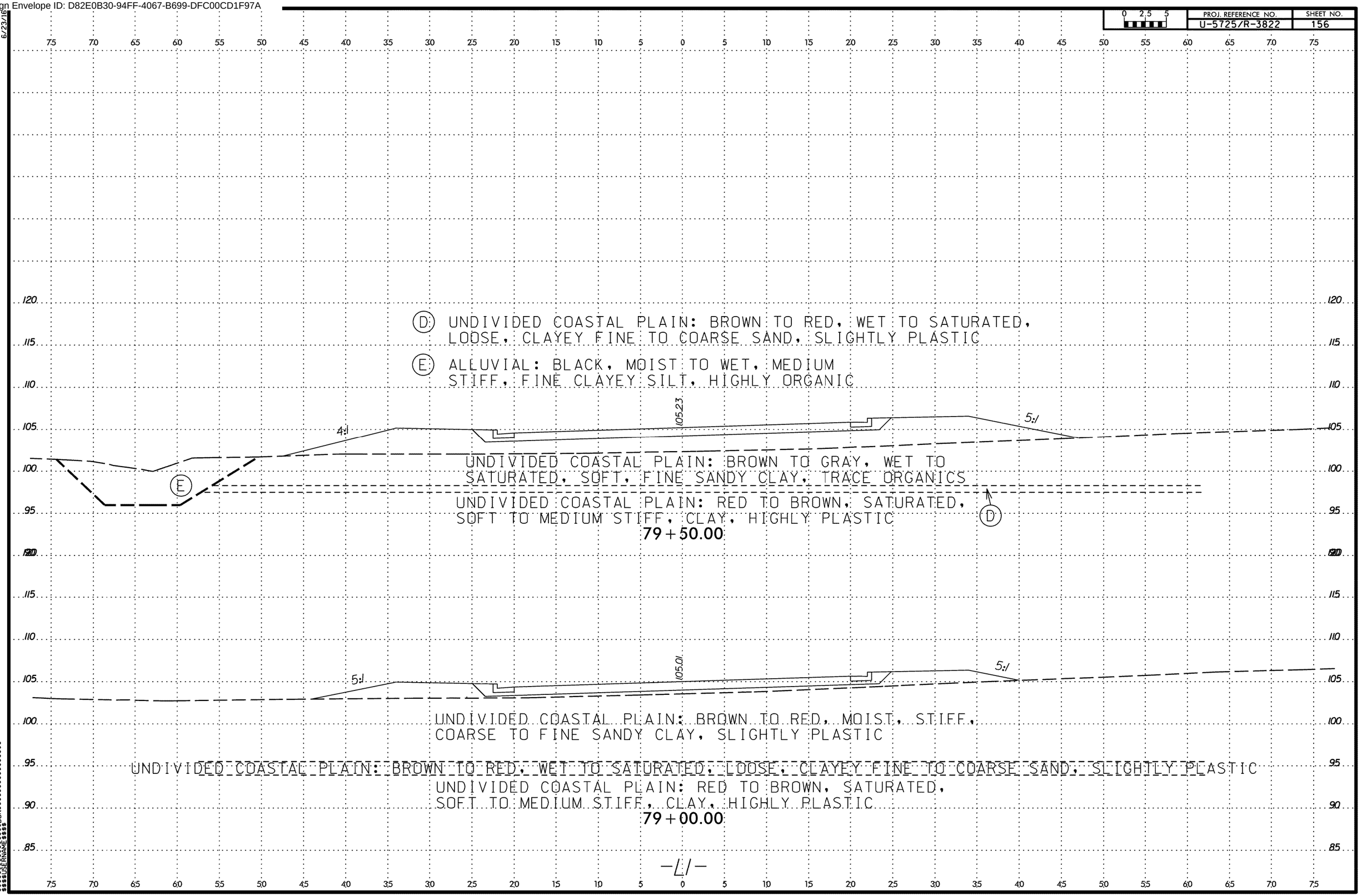
UNDIVIDED COASTAL PLAIN: BROWN TO RED, MOIST, STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN TO RED, WET TO SATURATED, LOOSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: RED TO BROWN, SATURATED, SOFT TO MEDIUM STIFF, CLAY, HIGHLY PLASTIC

77+50.00

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



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	157

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

115 110 105 100 95 90 85

(I) ARTIFICIAL FILL: CULTIVATED FIELD
(BROWN FINE SANDY CLAY)

105.65

3:1 2:1

(I)

ALLUVIAL: BLACK, MOIST TO WET, MEDIUM STIFF,
FINE SANDY CLAYEY SILT, HIGHLY ORGANIC

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, WET TO SATURATED,
SOFT, FINE SANDY CLAY, SLIGHTLY PLASTIC, TRACE ORGANICS

80+50.00

(E) ALLUVIAL: BLACK, MOIST TO WET, MEDIUM
STIFF, FINE SANDY CLAYEY SILT, HIGHLY ORGANIC

(I) ARTIFICIAL FILL: CULTIVATED FIELD
(BROWN FINE SANDY CLAY)

LT 8000

105.44

3:1 3:1

(I)

(E)

4
6
2
2

12/17

UNDIVIDED COASTAL PLAIN:
SOFT, FINE SANDY CLAY,

BROWN TO GRAY, WET TO SATURATED,
SLIGHTLY PLASTIC, TRACE ORGANICS

BT

80+00.00

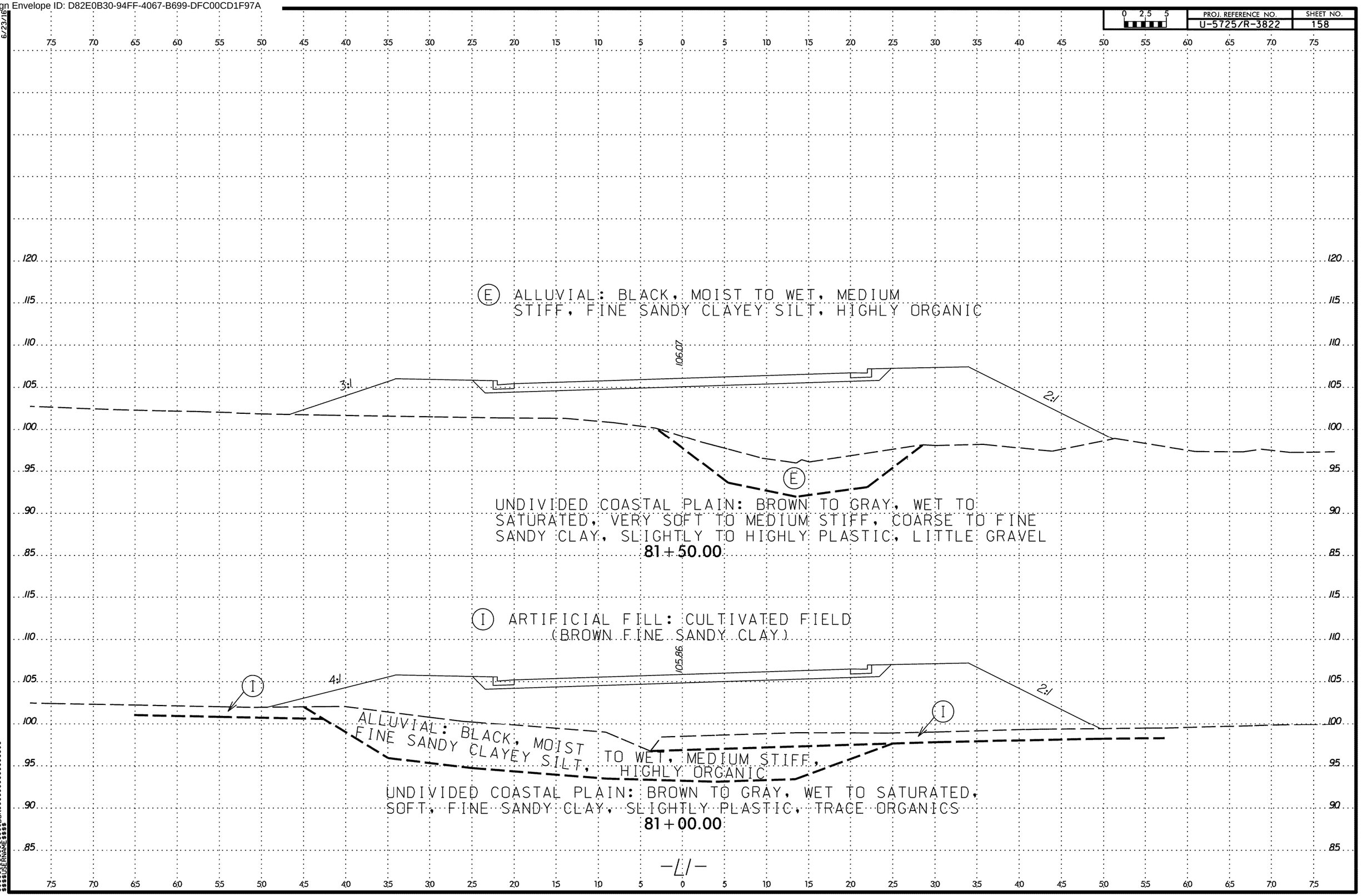
-L1-

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

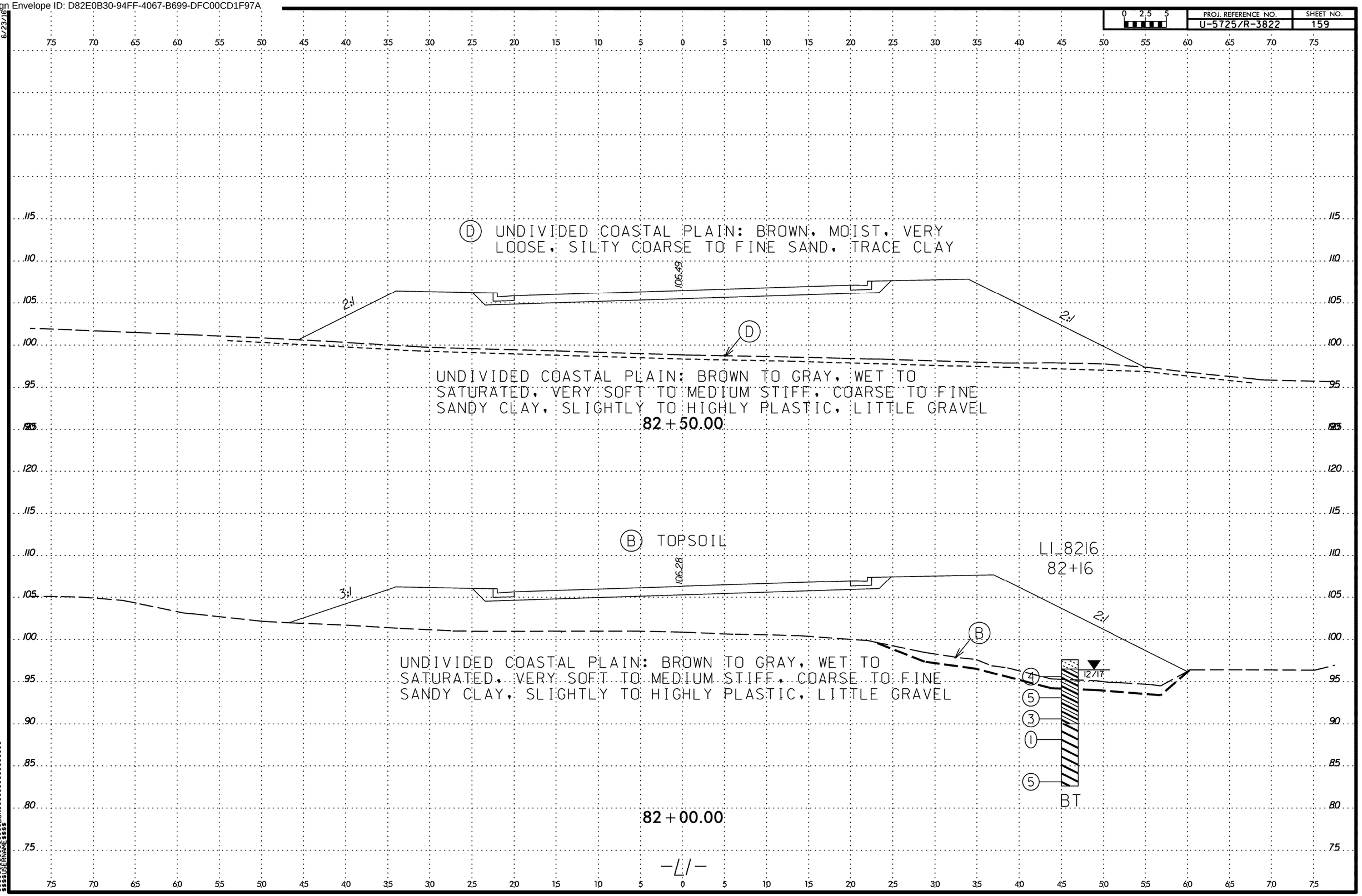
6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	158



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



75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

120 115 110 105 100 95 90 85 80

(D) UNDIVIDED COASTAL PLAIN: BROWN, MOIST, VERY LOOSE, SILTY COARSE TO FINE SAND, TRACE CLAY

106.89

2:1

2:1

(D)

UNDIVIDED COASTAL PLAIN: TAN BROWN TO GRAY, MOIST TO SATURATED, SOFT TO STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, SATURATED, MEDIUM DENSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY TO HIGHLY PLASTIC, LITTLE GRAVEL

83+50.00

(D) UNDIVIDED COASTAL PLAIN: BROWN, MOIST, VERY LOOSE, SILTY COARSE TO FINE SAND, TRACE CLAY

106.70

2:1

2:1

(D)

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, WET TO SATURATED, VERY SOFT TO MEDIUM STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC, LITTLE GRAVEL

83+00.00

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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	161

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

115 110 105 100 95 90 85 80 75

106.38

2:1

2:1

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, VERY LOOSE, SILTY COARSE TO FINE SAND, TRACE CLAY

UNDIVIDED COASTAL PLAIN: TAN BROWN TO GRAY, MOIST TO SATURATED, SOFT TO STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY, SATURATED, MEDIUM DENSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC, LITTLE GRAVEL

84+50.00

LI_8400

106.76

2:1

2:1

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, VERY LOOSE, SILTY COARSE TO FINE SAND, TRACE CLAY

UNDIVIDED COASTAL PLAIN: MOIST TO SATURATED, SOFT FINE SANDY CLAY, SLIGHTLY

UNDIVIDED COASTAL PLAIN: SATURATED, MEDIUM DENSE, COARSE SAND, SLIGHTLY

(3) (10) (2) (20) (11)

TAN BROWN TO GRAY, TO STIFF, COARSE TO TO HIGHLY PLASTIC

BROWN TO GRAY, CLAYEY FINE TO PLASTIC, LITTLE GRAVEL

BT

FIAD

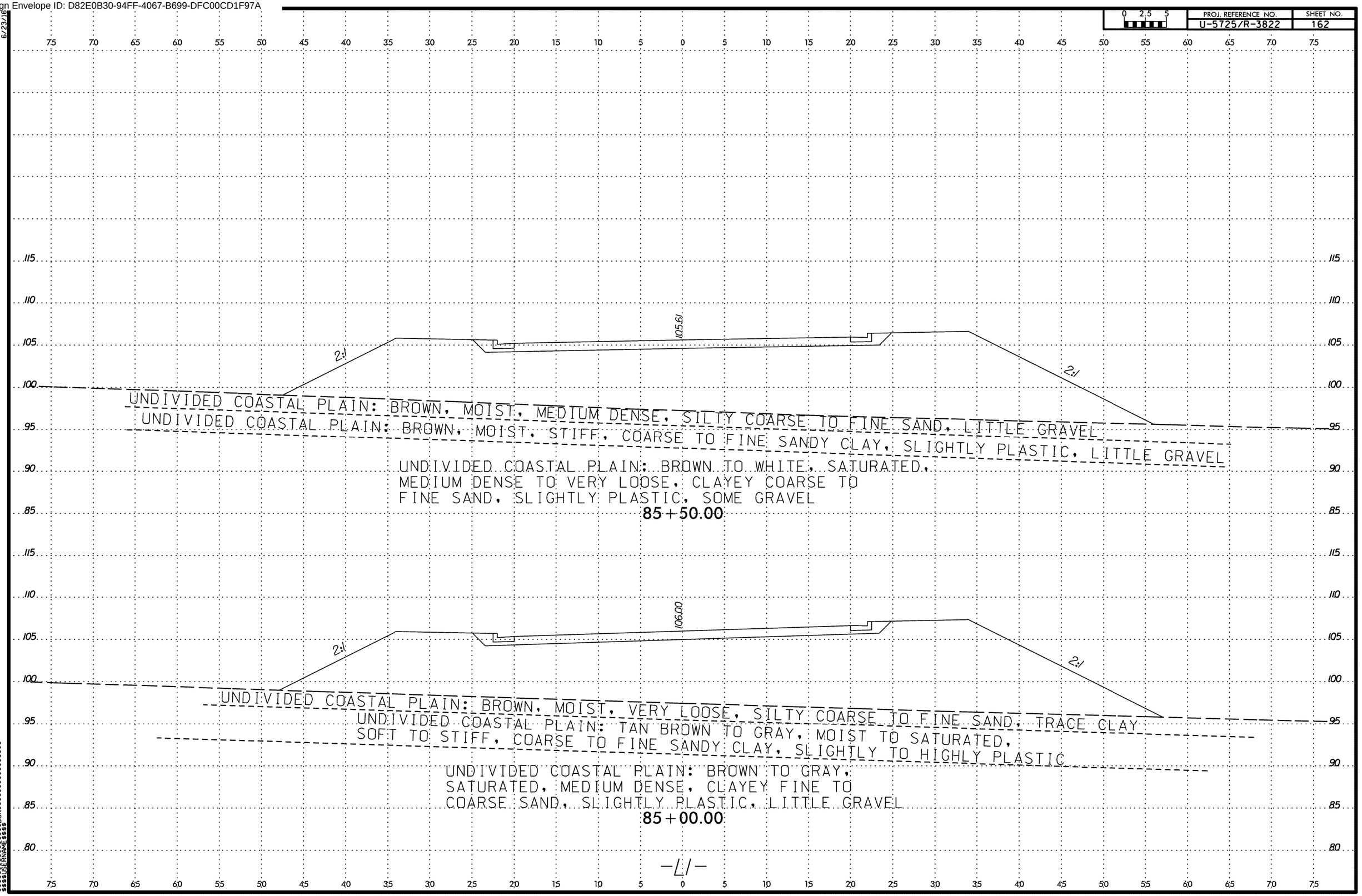
84+00.00

-L/-

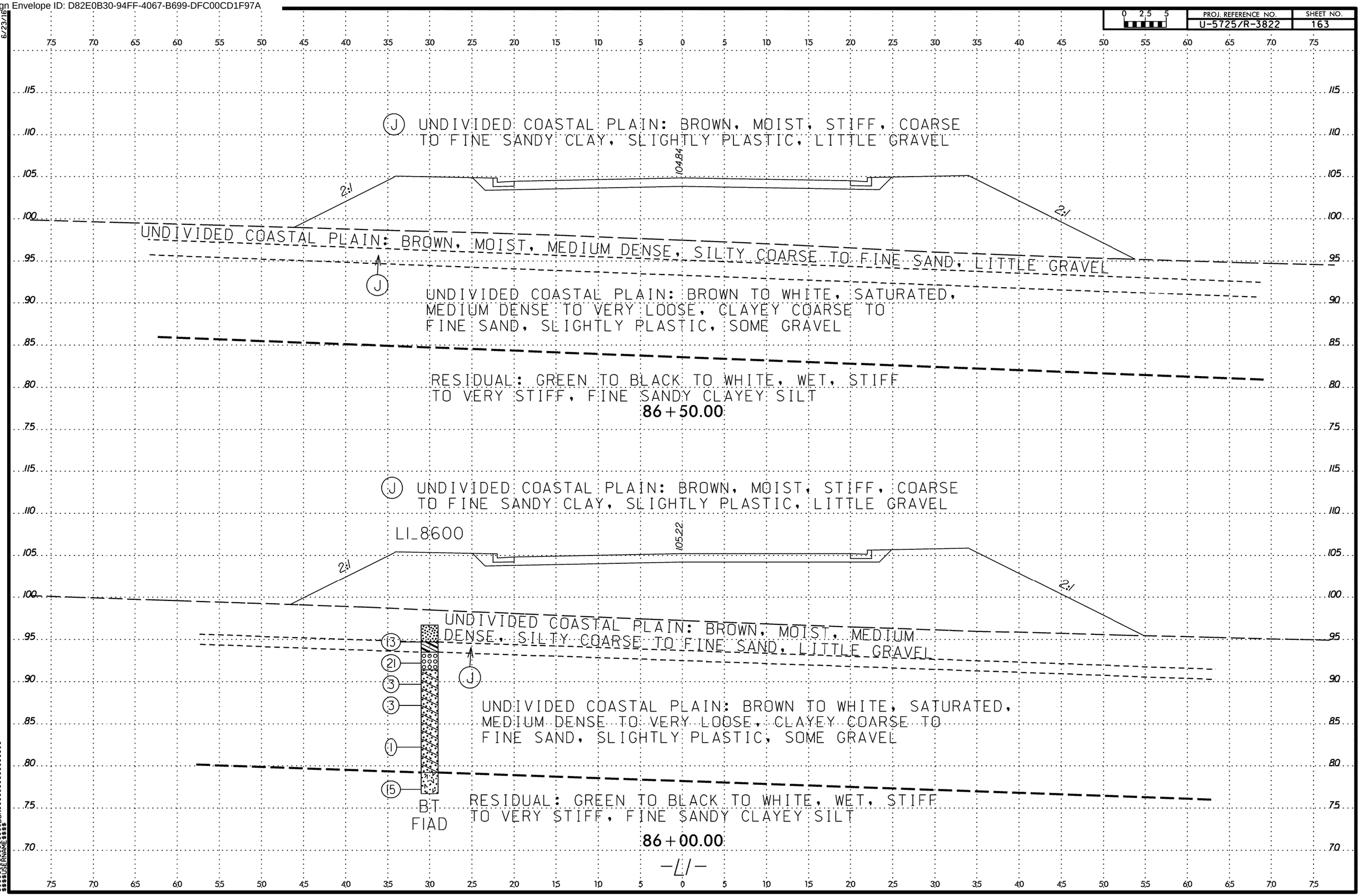
$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	162



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



0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	163

Ⓙ UNDIVIDED COASTAL PLAIN: BROWN, MOIST, STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC, LITTLE GRAVEL

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, MEDIUM DENSE, SILTY COARSE TO FINE SAND, LITTLE GRAVEL

UNDIVIDED COASTAL PLAIN: BROWN TO WHITE, SATURATED, MEDIUM DENSE TO VERY LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC, SOME GRAVEL

RESIDUAL: GREEN TO BLACK TO WHITE, WET, STIFF TO VERY STIFF, FINE SANDY CLAYEY SILT

86+50.00

Ⓙ UNDIVIDED COASTAL PLAIN: BROWN, MOIST, STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC, LITTLE GRAVEL

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, MEDIUM DENSE, SILTY COARSE TO FINE SAND, LITTLE GRAVEL

UNDIVIDED COASTAL PLAIN: BROWN TO WHITE, SATURATED, MEDIUM DENSE TO VERY LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC, SOME GRAVEL

RESIDUAL: GREEN TO BLACK TO WHITE, WET, STIFF TO VERY STIFF, FINE SANDY CLAYEY SILT

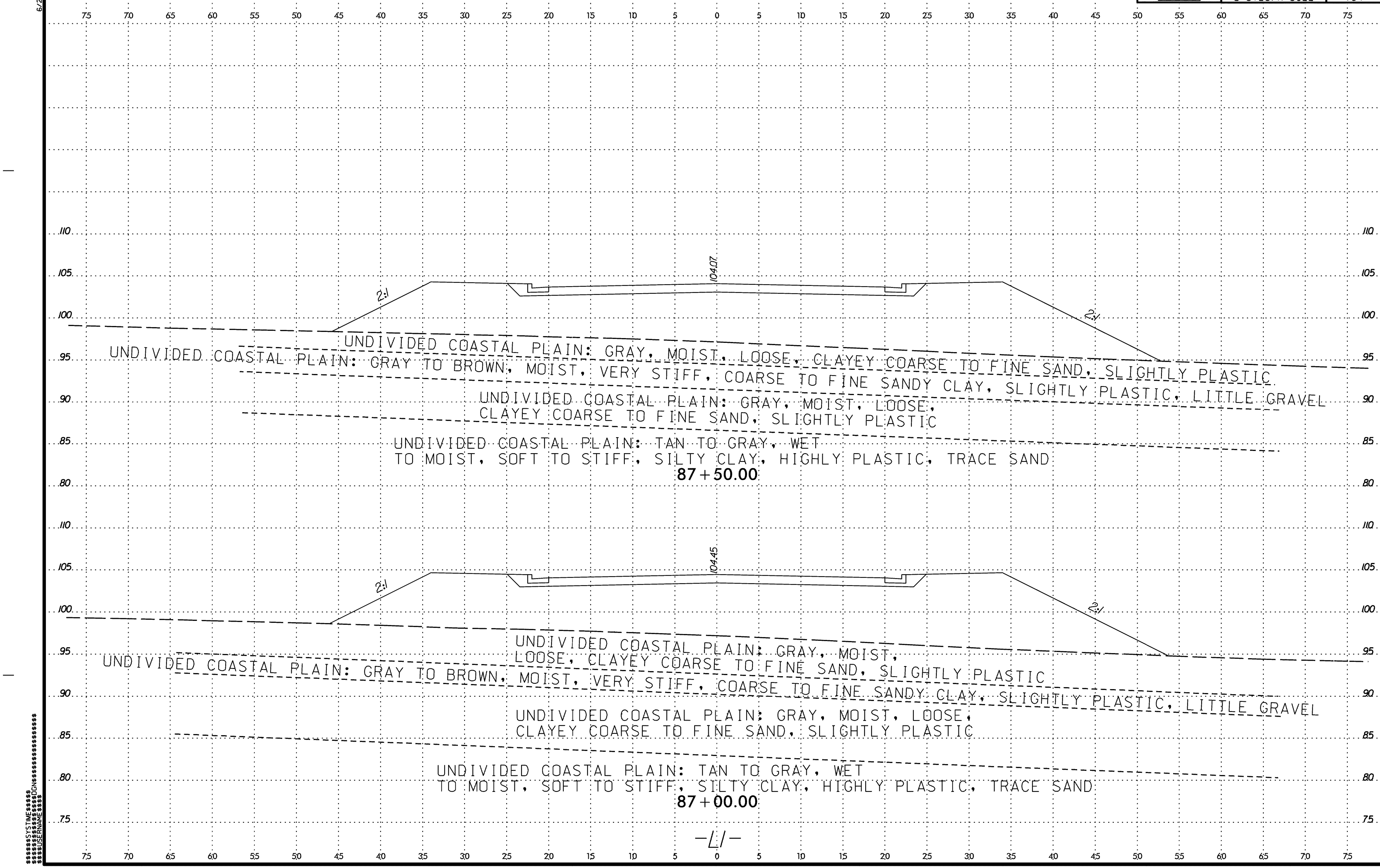
86+00.00

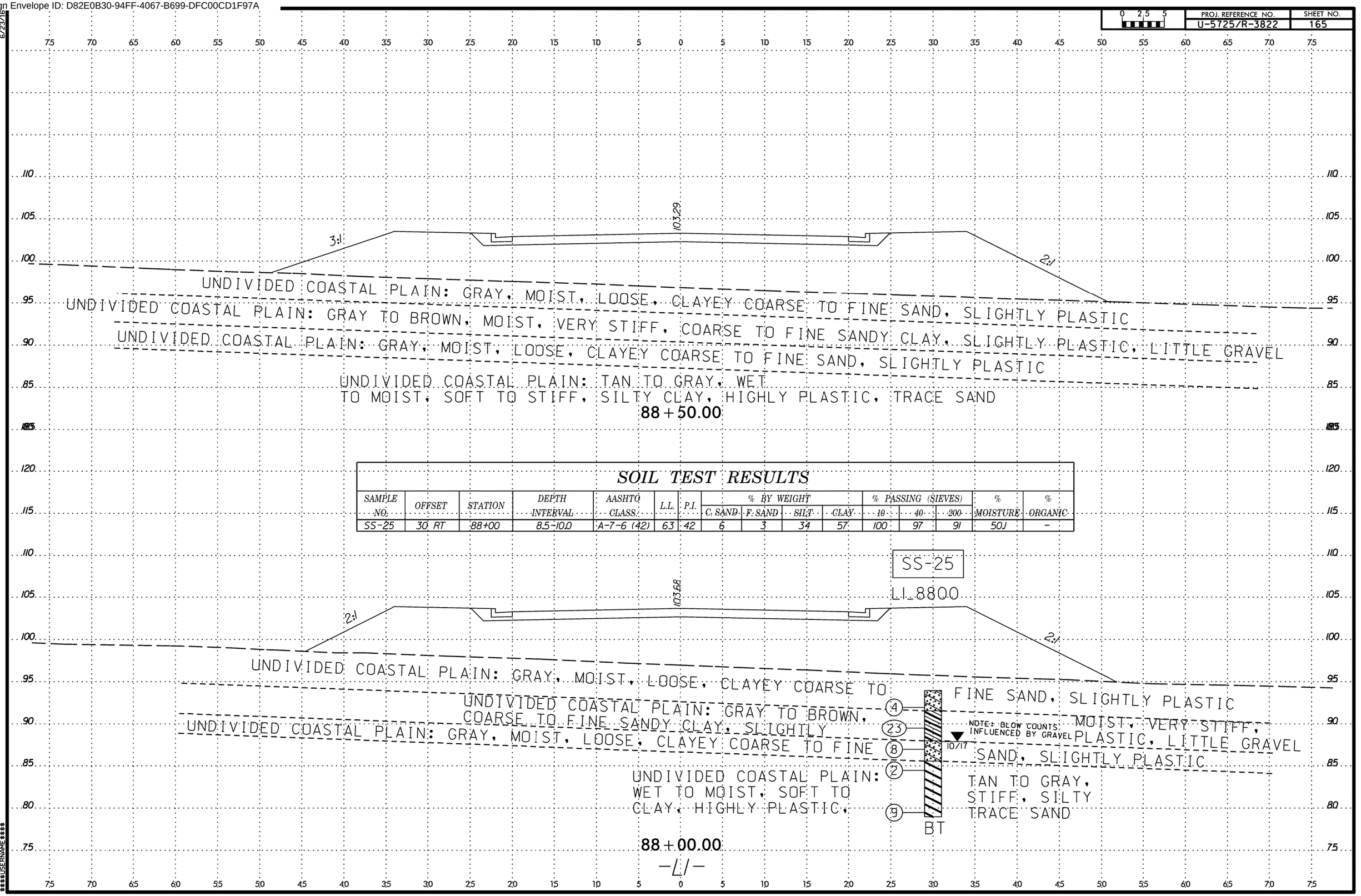
-L/-

6/23/16

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

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	164





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-25	30 RT	88+00	8.5-10.0	A-7-6 (42)	63	42	6	3	34	57	100	97	91	50.1	-

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	166

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

110 105 100 95 90 85 80

1025.2

4:1 2:1

UNDIVIDED COASTAL PLAIN: TAN BROWN, DRY, DENSE, CLAYEY COARSE TO FINE SAND, SOME GRAVEL

UNDIVIDED COASTAL PLAIN: GRAY TO TAN, MOIST, MEDIUM STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC, TRACE GRAVEL

UNDIVIDED COASTAL PLAIN: TAN, SATURATED, LOOSE SILTY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: GRAY, WET, SOFT TO VERY STIFF, FINE SANDY CLAY, SLIGHTLY PLASTIC, LITTLE GRAVEL

89+50.00

1029.1

4:1 2:1

UNDIVIDED COASTAL PLAIN: GRAY, MOIST, LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: GRAY TO BROWN, MOIST, VERY STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC, LITTLE GRAVEL

UNDIVIDED COASTAL PLAIN: GRAY, MOIST, LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

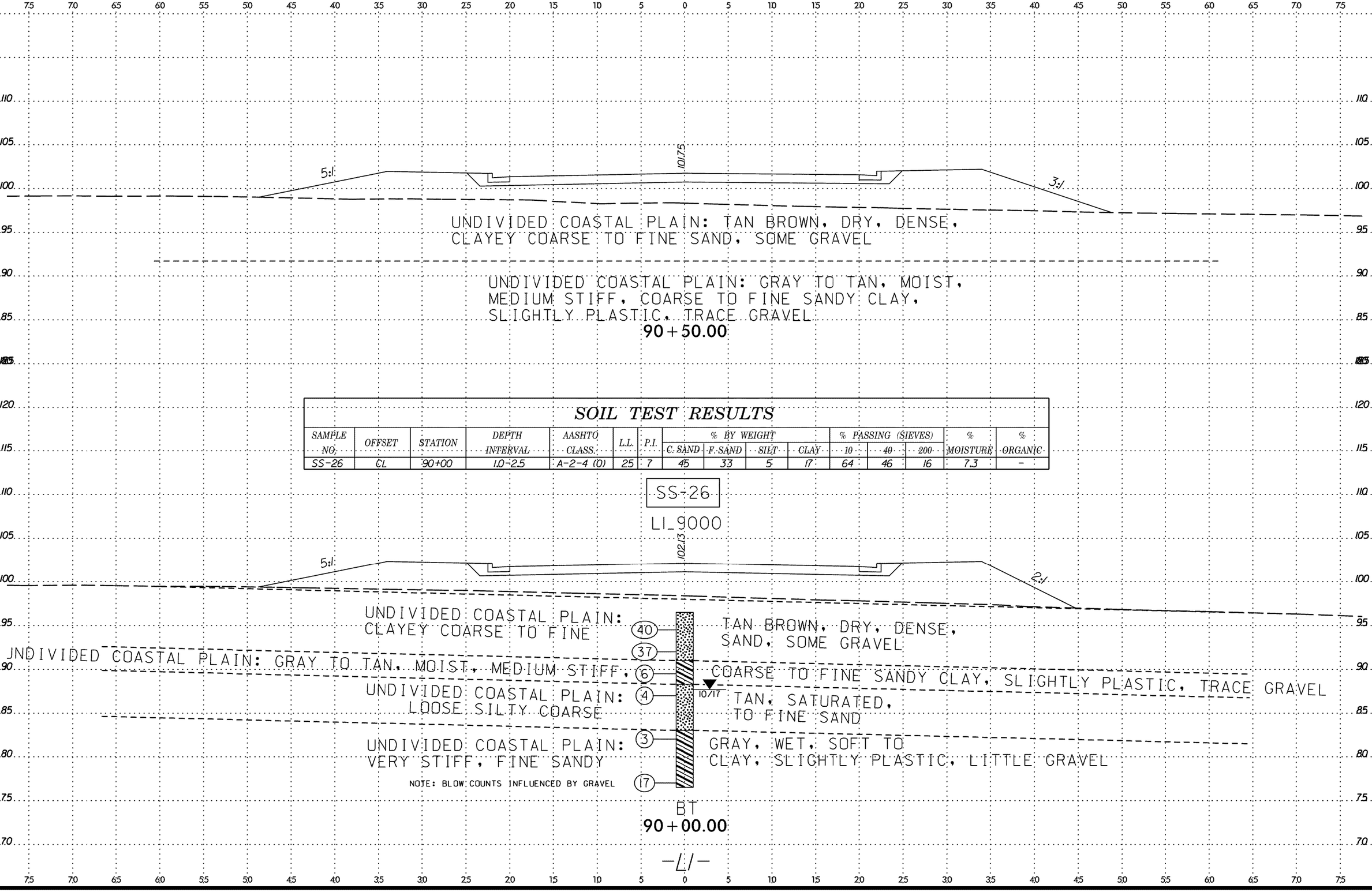
UNDIVIDED COASTAL PLAIN: TAN TO GRAY, WET TO MOIST, SOFT TO STIFF, SILTY CLAY, HIGHLY PLASTIC, TRACE SAND

89+00.00

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

-L1-

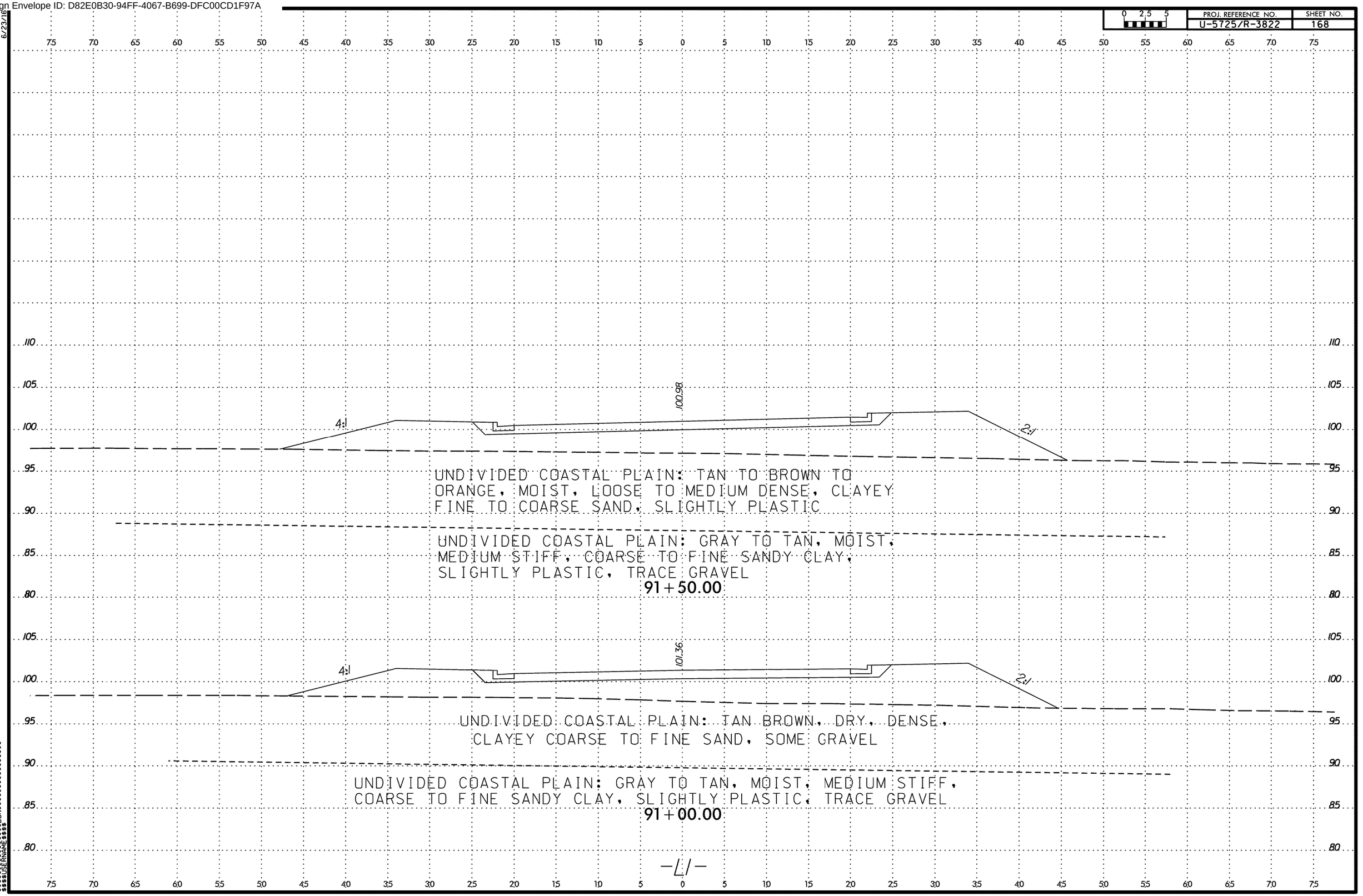
6/23/16



SOIL TEST RESULTS

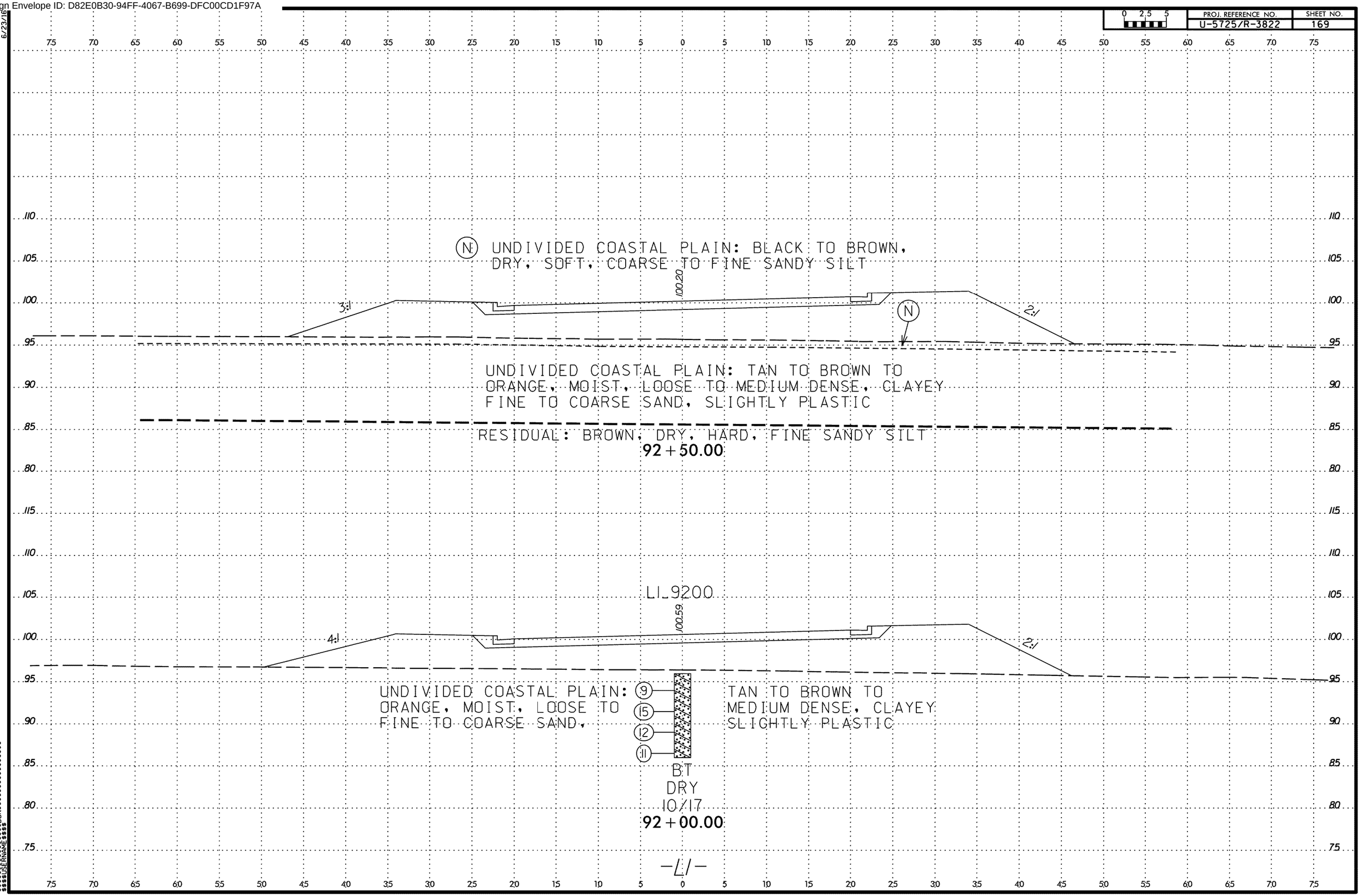
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-26	CL	90+00	1.0-2.5	A-2-4 (0)	25	7	45	33	5	17	64	46	16	7.3	-

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



6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	169



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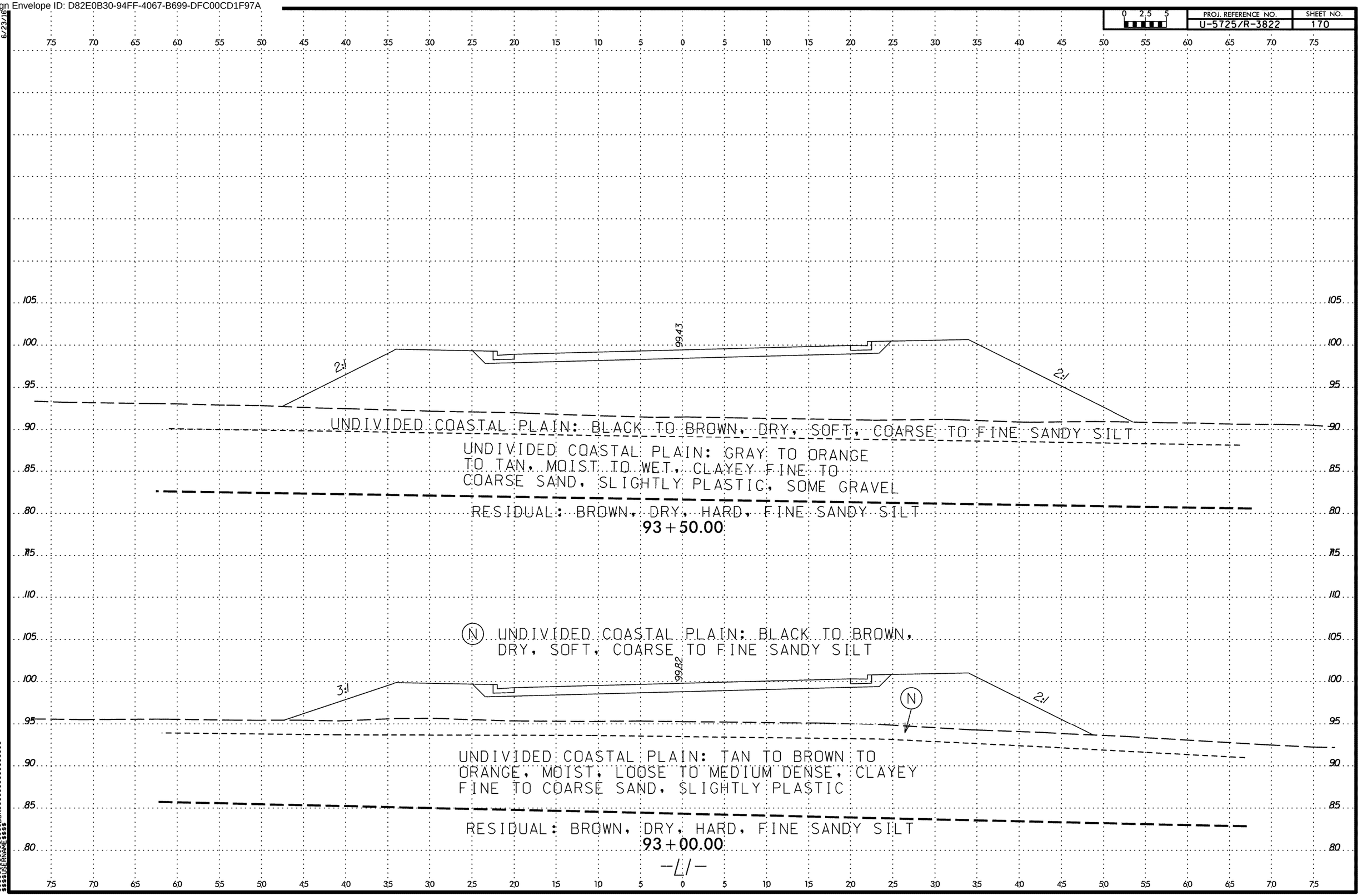
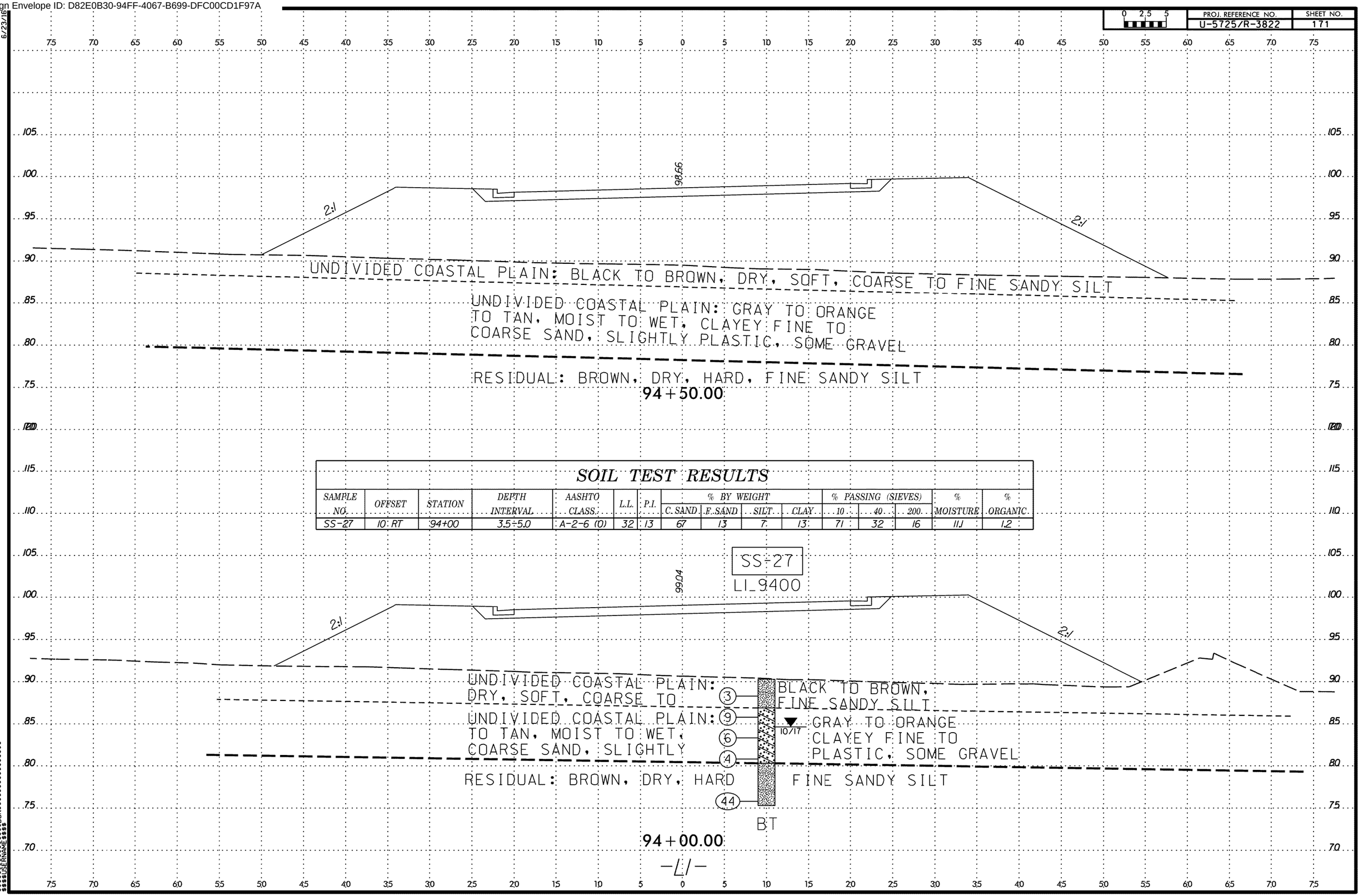
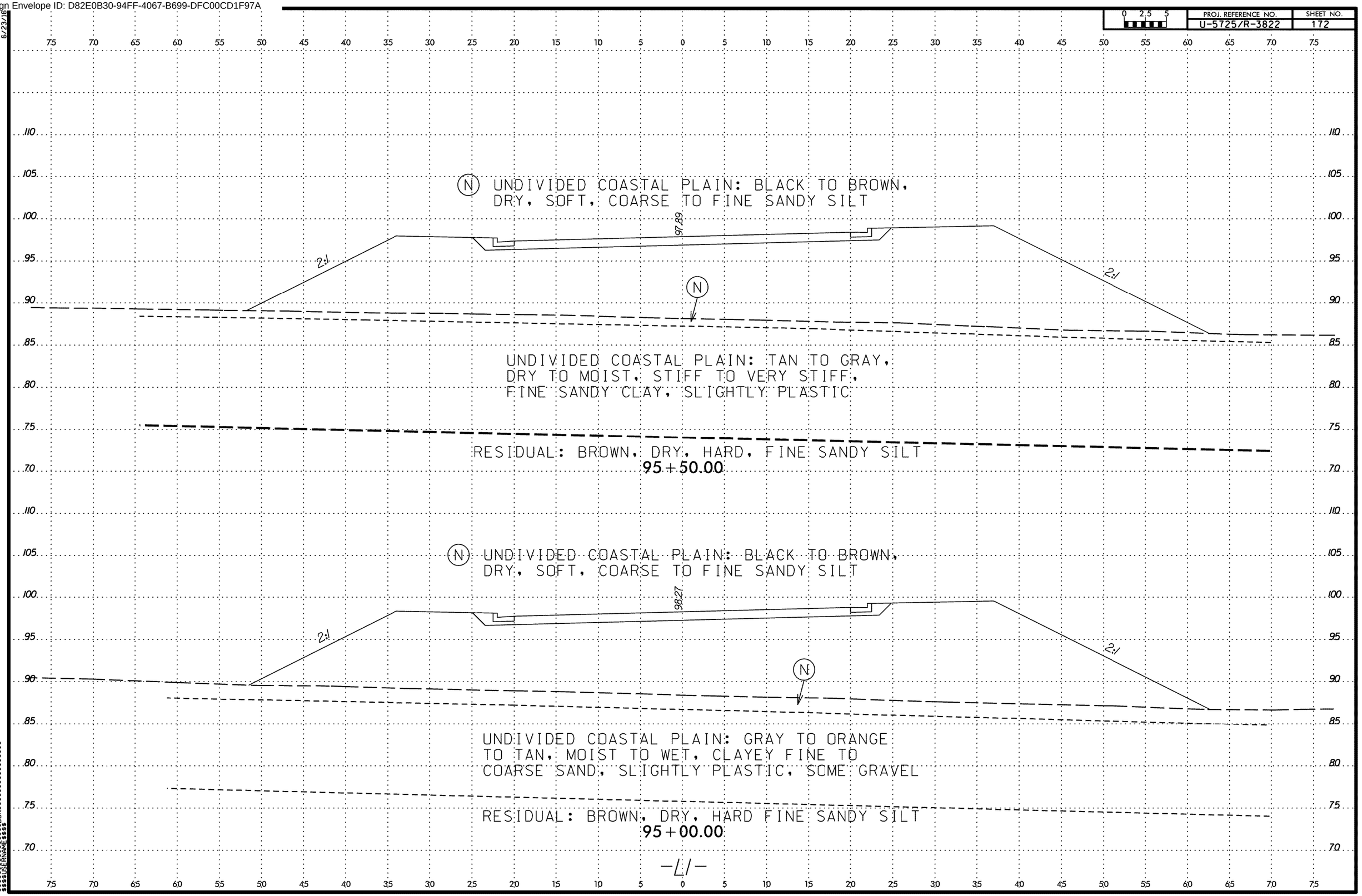




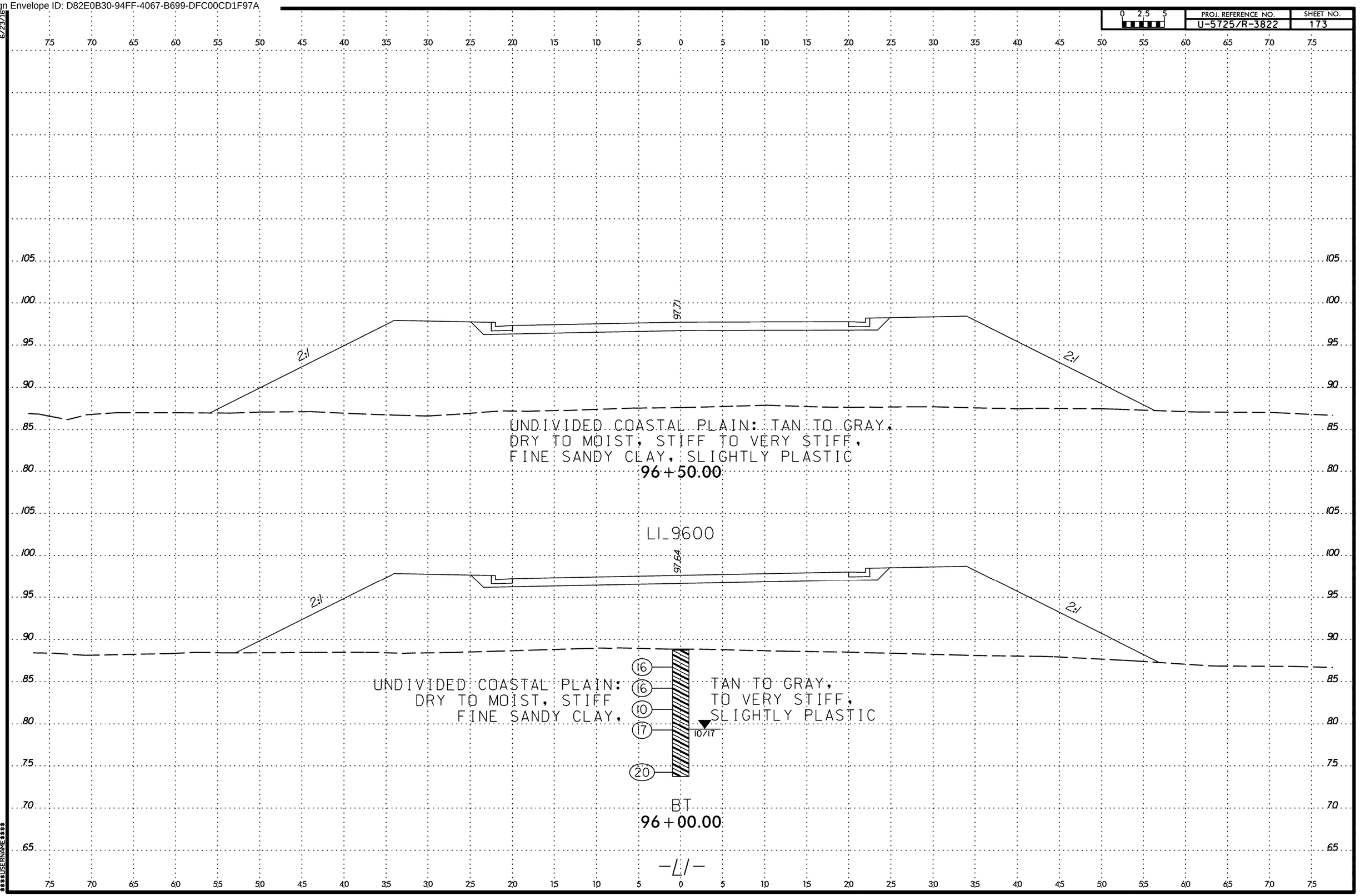
SOIL TEST RESULTS

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-27	10' RT	94+00	3.5-5.0	A-2-6 (0)	32	13	67	13	7	13	71	32	16	11.1	1.2



6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	173



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	174

98.14

97.93

FOR BRIDGE CROSS SECTION REFER TO R-3822 STRUCTURE SUBSURFACE INVESTIGATION
-BRIDGE ON PREMIER BLVD. EXTENSION OVER CHOCKOYOTTE CREEK-

97+50.00

(G) WEATHERED ROCK: METAMORPHOSED QUARTZ DIORITE

EBI-A1 97+13
EBI-A 97+13
EBI-C 97+17
EBI-B 97+13

ALLUVIAL: TAN TO STIFF, COARSE TO SLIGHTLY PLASTIC, RESIDUAL: (G)
GRAY, DRY TO MOIST, FINE SANDY CLAY, (12) LITTLE GRAVEL
RESIDUAL: GRAY TO MEDIUM WHITE AND WEATHERED CRYSTALLINE ROCK:
ALLUVIAL: TAN, WET, TO VERY DENSE, FINE SAND AND (54)
TAN TO ORANGE BROWN STIFF TO VERY STIFF, CLAY, SLIGHTLY (26)
BROWN, MOIST, HARD, SANDY SILT (26)
ROCK: METAMORPHOSED (73)
MEDIUM DENSE SILTY COARSE TO GRAVEL/COBBLES
NOTE: BLOW COUNTS INFLUENCED BY GRAVEL
WITH ORANGE MOTTLING, MOIST, COARSE TO FINE SANDY PLASTIC
COARSE TO FINE QUARTZ DIORITE
METAMORPHOSED QUARTZ DIORITE

10/17 (5) 60/0.0 BT
10/17 60/0.0 BT
10/17 60/0.0 BT
10/17 100/0.8 60/0.1 BT

97+00.00

-L1-

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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	175

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

105 100 95 90 85 80

98.79

FOR BRIDGE CROSS SECTION REFER TO R-3822 STRUCTURE SUBSURFACE INVESTIGATION
-BRIDGE ON PREMIER BLVD. EXTENSION OVER CHOCKOYOTTE CREEK-

99+00.00

98.57

FOR BRIDGE CROSS SECTION REFER TO R-3822 STRUCTURE SUBSURFACE INVESTIGATION
-BRIDGE ON PREMIER BLVD. EXTENSION OVER CHOCKOYOTTE CREEK-

98+50.00

98.36

FOR BRIDGE CROSS SECTION REFER TO R-3822 STRUCTURE SUBSURFACE INVESTIGATION
-BRIDGE ON PREMIER BLVD. EXTENSION OVER CHOCKOYOTTE CREEK-

98+00.00

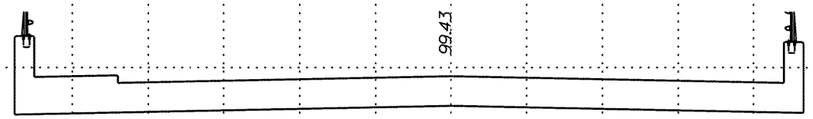
-L1-

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

6/23/16

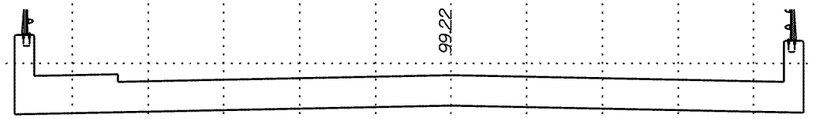
0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	176



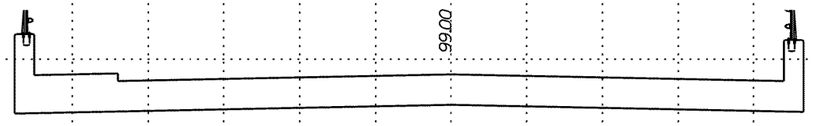
FOR BRIDGE CROSS SECTION REFER TO R-3822 STRUCTURE SUBSURFACE INVESTIGATION
-BRIDGE ON PREMIER BLVD. EXTENSION OVER CHOCKOYOTTE CREEK-

100+50.00



FOR BRIDGE CROSS SECTION REFER TO R-3822 STRUCTURE SUBSURFACE INVESTIGATION
-BRIDGE ON PREMIER BLVD. EXTENSION OVER CHOCKOYOTTE CREEK-

100+00.00



FOR BRIDGE CROSS SECTION REFER TO R-3822 STRUCTURE SUBSURFACE INVESTIGATION
-BRIDGE ON PREMIER BLVD. EXTENSION OVER CHOCKOYOTTE CREEK-

99+50.00

-L/-

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	177

B TOPSOIL

E ALLUVIAL: BLACK AND GRAY, WET, SOFT TO MEDIUM STIFF, COARSE TO FINE SANDY SILTY CLAY, HIGHLY ORGANIC, SLIGHTLY PLASTIC

99.64

EB2-A
101+23

EB2-C
101+23

EB2-B
101+23

E

B

10/17

RESIDUAL: ORANGE BROWN TO VERY STIFF, COARSE CLAY, SLIGHTLY PLASTIC

11

24

TO GRAY, MOIST TO WET, TO FINE SANDY SILTY BROWN TO ORANGE BROWN WET, TO DENSE, CLAYEY SAND

RESIDUAL:

100/0.7

WEATHERED ROCK:

60/0.0

100/0.9

BT

CRYSTALLINE ROCK:

METAMORPHOSED QUARTZ

METAMORPHOSED QUARTZ DIORITE

MEDIUM STIFF AND WHITE, MOIST TO SILTY COARSE TO FINE

100/0.7

60/0.0

BT

DIORITE

17

30

MEDIUM DENSE LITTLE ROCK FRAGMENTS

32

RESIDUAL: BROWN, FINE SANDY

77

RED TO GREENISH MOIST TO DRY, HARD, CLAYEY SILT

100/0.9

100/0.3

100/0.2

100/0.2

BT

101+00.00

-L/-

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

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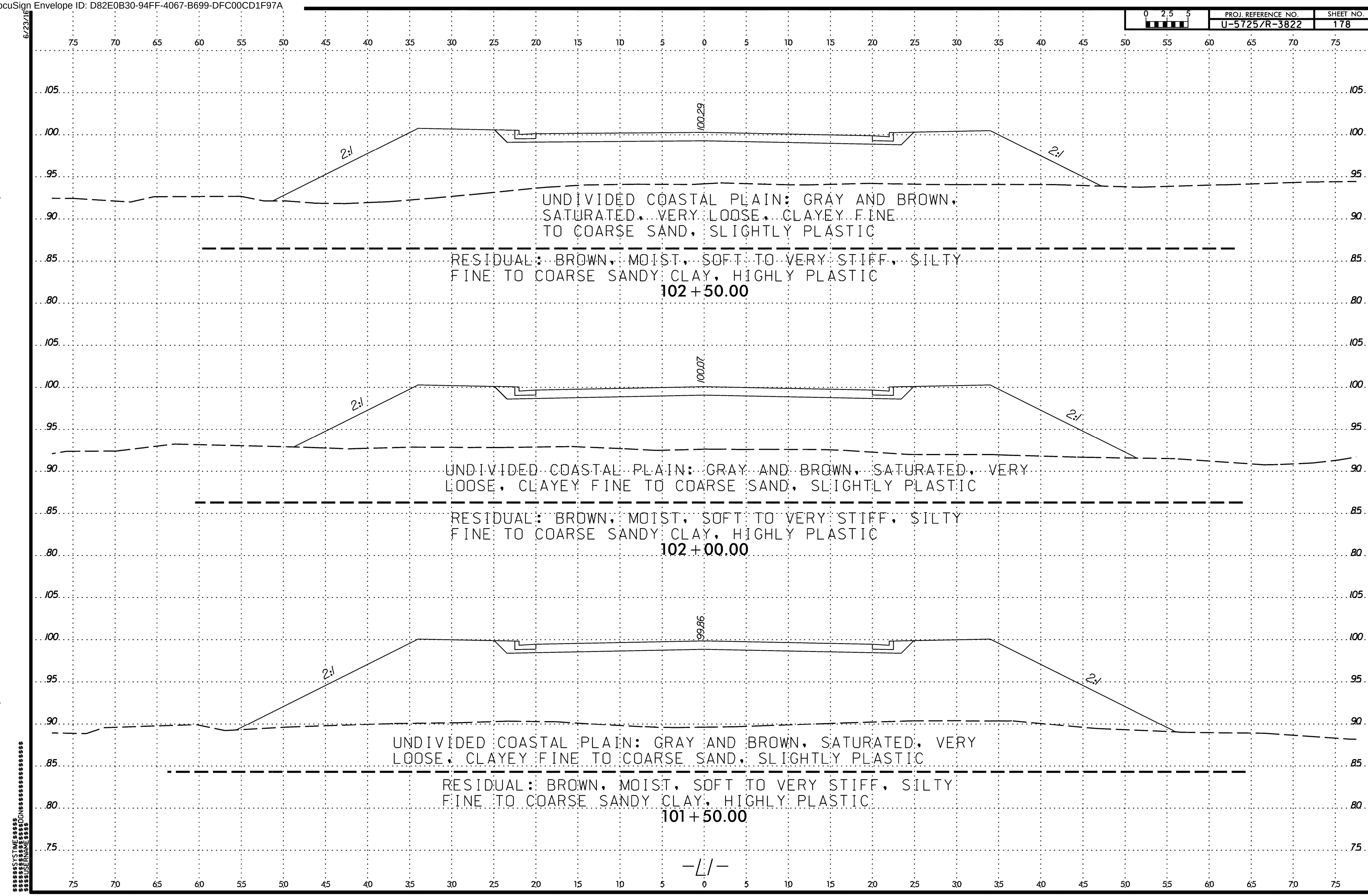
PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	178



6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	179

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-28	CL	103+00	13.5-15.0	A-7-6 (14)	52	30	28	18	24	30	100	86	56	17.8	-

SS-28

INTERSECTION WITH -Y6-

L1_10300

100.50

2:1

ARTIFICIAL FILL: GRAY TO BROWN, WET, MEDIUM (29) 10/17 DENSE, CLAYEY FINE TO COARSE SAND AND GRAVEL

ARTIFICIAL FILL: TAN BROWN, MOIST, MEDIUM STIFF, (6) FINE TO COARSE SANDY CLAY, HIGHLY PLASTIC,

UNDIVIDED COASTAL PLAIN: GRAY AND BROWN, SATURATED, (2) VERY LOOSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC

(2) RESIDUAL: BROWN, MOIST, SOFT TO VERY STIFF,
SILTY FINE TO COARSE SANDY CLAY, HIGHLY PLASTIC

(16)

BT

103+00.00

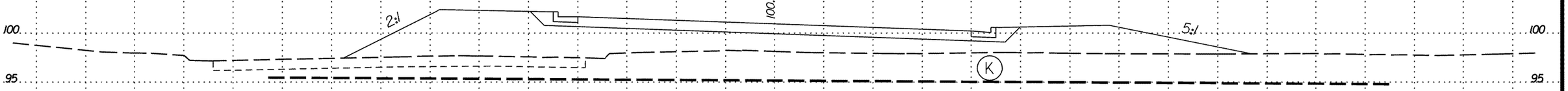
-L1-

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

120 115 110 105 100 95 90 85 80 75

(K) ARTIFICIAL FILL: BROWN TO BLACK, MOIST, MEDIUM STIFF, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC, MODERATELY ORGANIC



UNDIVIDED COASTAL PLAIN: GRAY, WET TO MOIST, MEDIUM STIFF, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC, SOME, GRAVEL TRACE ORGANICS

RESIDUAL: REDDISH BROWN TO BROWN, MOIST, VERY STIFF, FINE SANDY SILT

104+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-34	*30' LT	*10+50	8.5-10.0	A-7-6 (4)	46	25	52	10	14	24	98	73	39	32.1	-

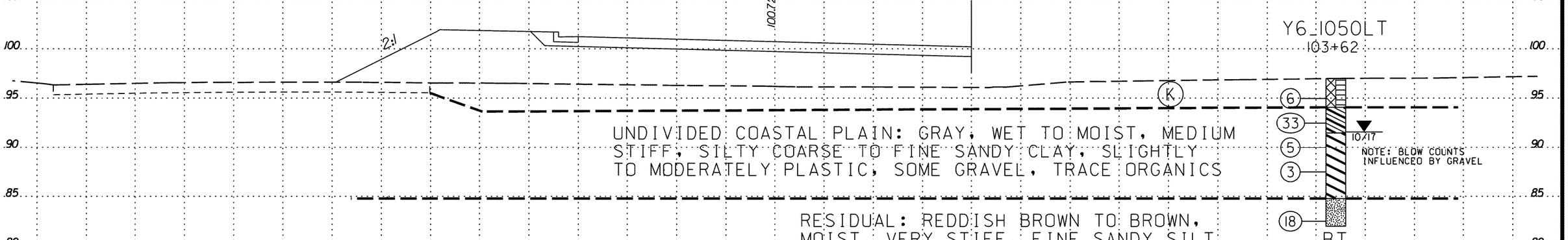
*Note: Station and Offset are on -Y6-

(K) ARTIFICIAL FILL: BROWN TO BLACK, MOIST, MEDIUM STIFF, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC, MODERATELY ORGANIC

INTERSECTION WITH -Y6-

SS-34

Y6_1050LT
103+62



UNDIVIDED COASTAL PLAIN: GRAY, WET TO MOIST, MEDIUM STIFF, SILTY COARSE TO FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC, SOME GRAVEL, TRACE ORGANICS

RESIDUAL: REDDISH BROWN TO BROWN, MOIST, VERY STIFF, FINE SANDY SILT

103+50.00

-L/-

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

120 115 110 105 100 95 90 85 80

(I) ARTIFICIAL FILL: BLACK TO BROWN, MOIST, MEDIUM DENSE, SILTY FINE TO COARSE SAND

(K) ARTIFICIAL FILL: REDDISH BROWN, MOIST, MEDIUM STIFF TO STIFF, FINE SANDY CLAYEY SILT, TRACE GRAVEL

LT 10502
105+02

5:1 10141 5:1

27 10 9 8

UNDIVIDED COASTAL PLAIN: GRAY TO BROWN, MOIST, STIFF, SILTY CLAY, MODERATELY PLASTIC, TRACE ORGANICS

UNDIVIDED COASTAL PLAIN: GRAYISH BROWN, MOIST, LOOSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: TAN BROWN TO GRAY, MOIST, MEDIUM STIFF TO STIFF, FINE TO COARSE SANDY CLAY, SLIGHTLY PLASTIC

BT
DRY
10/17

105+00.00

(K) ARTIFICIAL FILL: REDDISH BROWN TO BLACK AND BROWN, MOIST, MEDIUM STIFF, FINE SANDY CLAYEY SILT, AND MEDIUM DENSE, SILTY FINE TO COARSE SAND

4:1 10115 5:1

UNDIVIDED COASTAL PLAIN: GRAY TO BROWN TO TAN BROWN, MOIST, MEDIUM STIFF TO STIFF SANDY CLAY, AND LOOSE, CLAYEY COARSE TO FINE SAND, MODERATELY TO SLIGHTLY PLASTIC

RESIDUAL: REDDISH BROWN TO BROWN, MOIST, VERY STIFF, FINE SANDY SILT

104+50.00

-L1-

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

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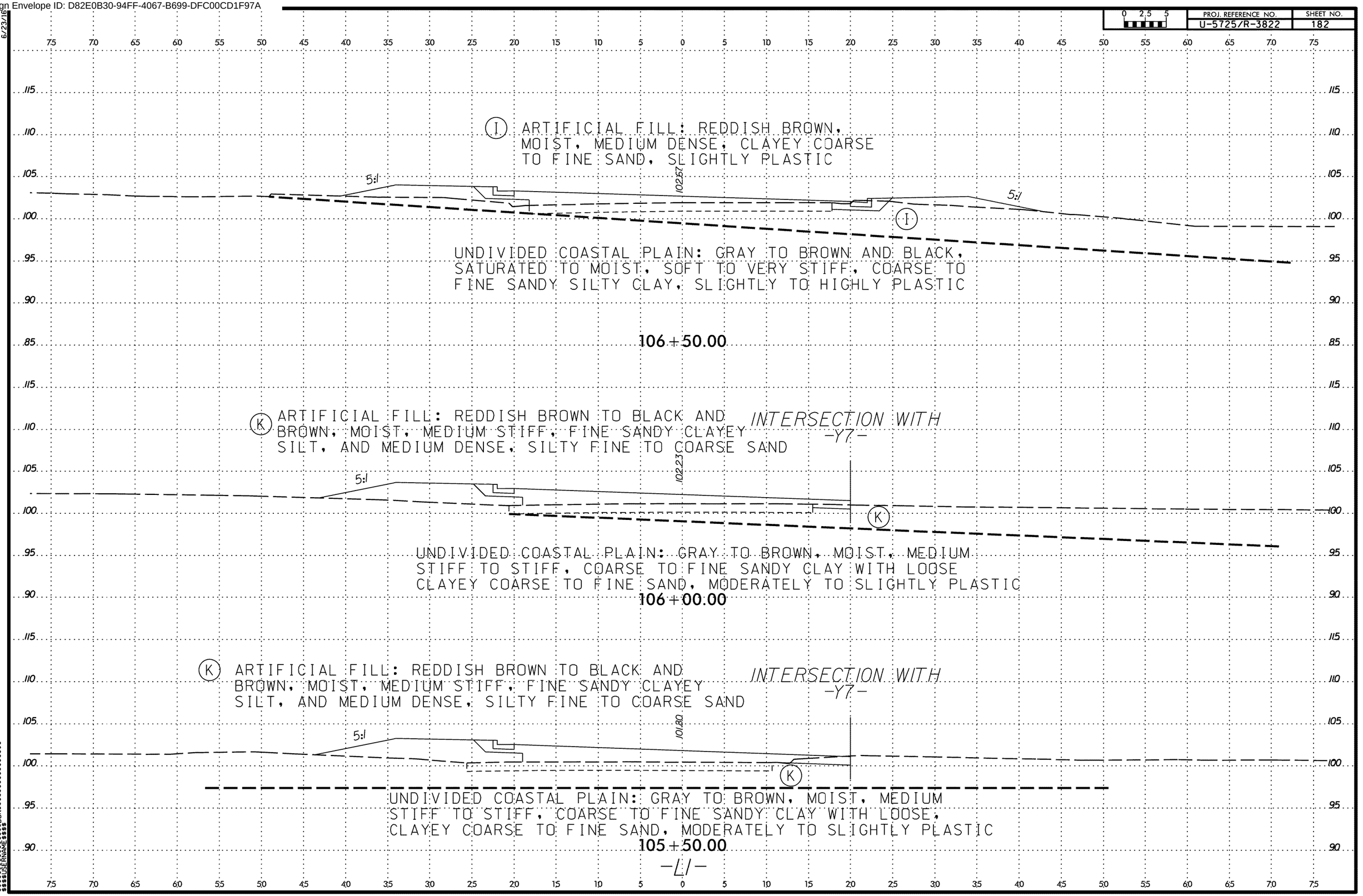
PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	182



Ⓘ ARTIFICIAL FILL: REDDISH BROWN, MOIST, MEDIUM DENSE, CLAYEY COARSE TO FINE SAND, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: GRAY TO BROWN AND BLACK, SATURATED TO MOIST, SOFT TO VERY STIFF, COARSE TO FINE SANDY SILTY CLAY, SLIGHTLY TO HIGHLY PLASTIC

106+50.00

Ⓚ ARTIFICIAL FILL: REDDISH BROWN TO BLACK AND BROWN, MOIST, MEDIUM STIFF, FINE SANDY CLAYEY SILT, AND MEDIUM DENSE, SILTY FINE TO COARSE SAND

UNDIVIDED COASTAL PLAIN: GRAY TO BROWN, MOIST, MEDIUM STIFF TO STIFF, COARSE TO FINE SANDY CLAY WITH LOOSE CLAYEY COARSE TO FINE SAND, MODERATELY TO SLIGHTLY PLASTIC

106+00.00

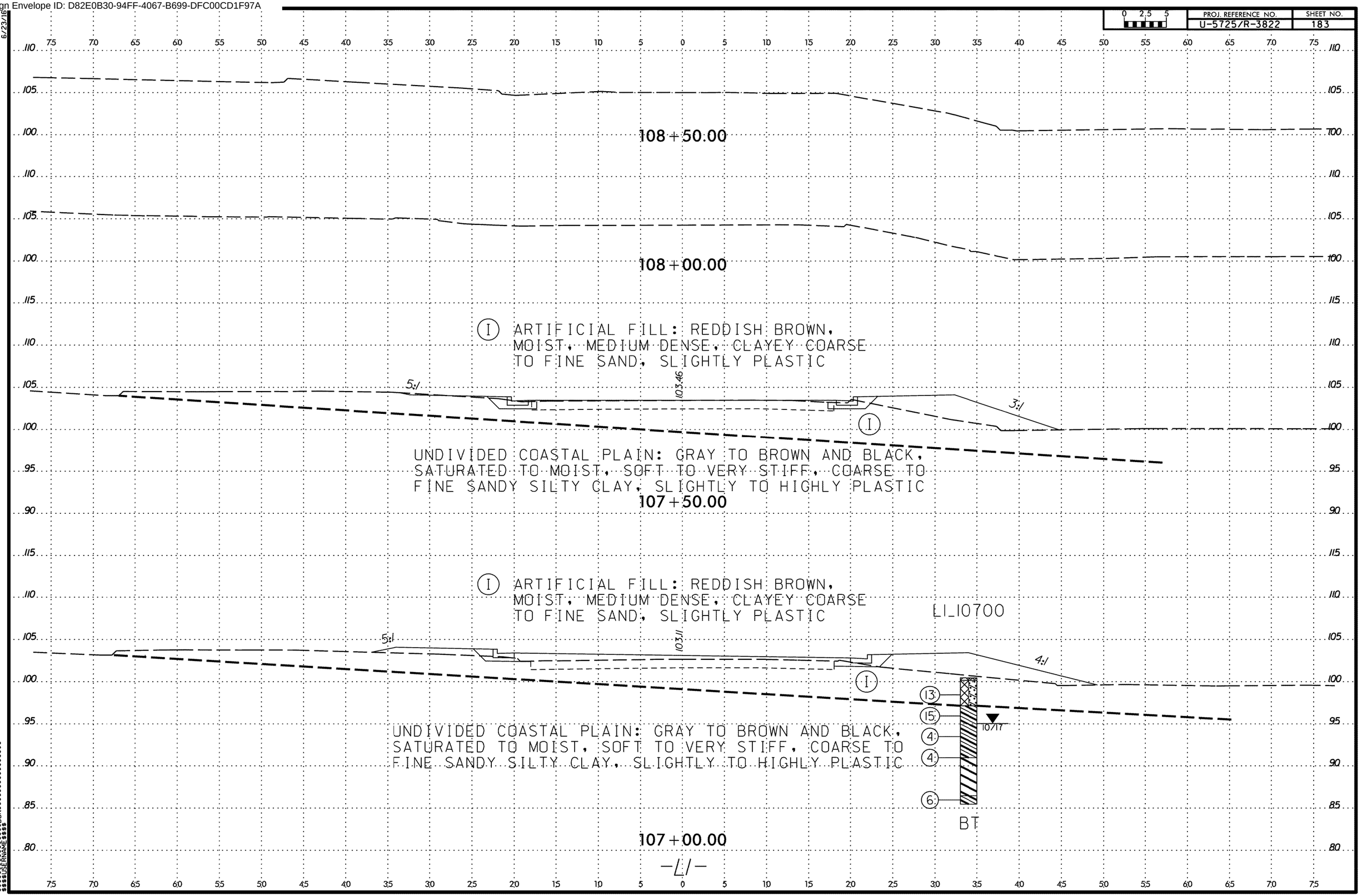
Ⓚ ARTIFICIAL FILL: REDDISH BROWN TO BLACK AND BROWN, MOIST, MEDIUM STIFF, FINE SANDY CLAYEY SILT, AND MEDIUM DENSE, SILTY FINE TO COARSE SAND

UNDIVIDED COASTAL PLAIN: GRAY TO BROWN, MOIST, MEDIUM STIFF TO STIFF, COARSE TO FINE SANDY CLAY WITH LOOSE, CLAYEY COARSE TO FINE SAND, MODERATELY TO SLIGHTLY PLASTIC

105+50.00

-L1-

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	183



$$$$$$$SYSTIMES$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

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PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	184

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	185

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

165 160 155 150 145

14+00.00

13+50.00

159.98

2:1 4:1 4:1

UNDIVIDED COASTAL PLAIN: BROWN AND WHITE, MOIST, LOOSE TO MEDIUM DENSE, SILTY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: GRAY AND BROWN, MOIST, STIFF TO MEDIUM STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

13+00.00

160.30

2:1 4:1

UNDIVIDED COASTAL PLAIN: BROWN AND WHITE, MOIST, LOOSE TO MEDIUM DENSE, SILTY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: GRAY AND BROWN, MOIST, STIFF TO MEDIUM STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

12+50.00

160.46

4:1 4:1

UNDIVIDED COASTAL PLAIN: BROWN AND WHITE, MOIST, LOOSE TO MEDIUM DENSE, SILTY COARSE TO FINE SAND

UNDIVIDED COASTAL PLAIN: GRAY AND BROWN, MOIST, STIFF TO MEDIUM STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY TO HIGHLY PLASTIC

12+00.00

-Y/-

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

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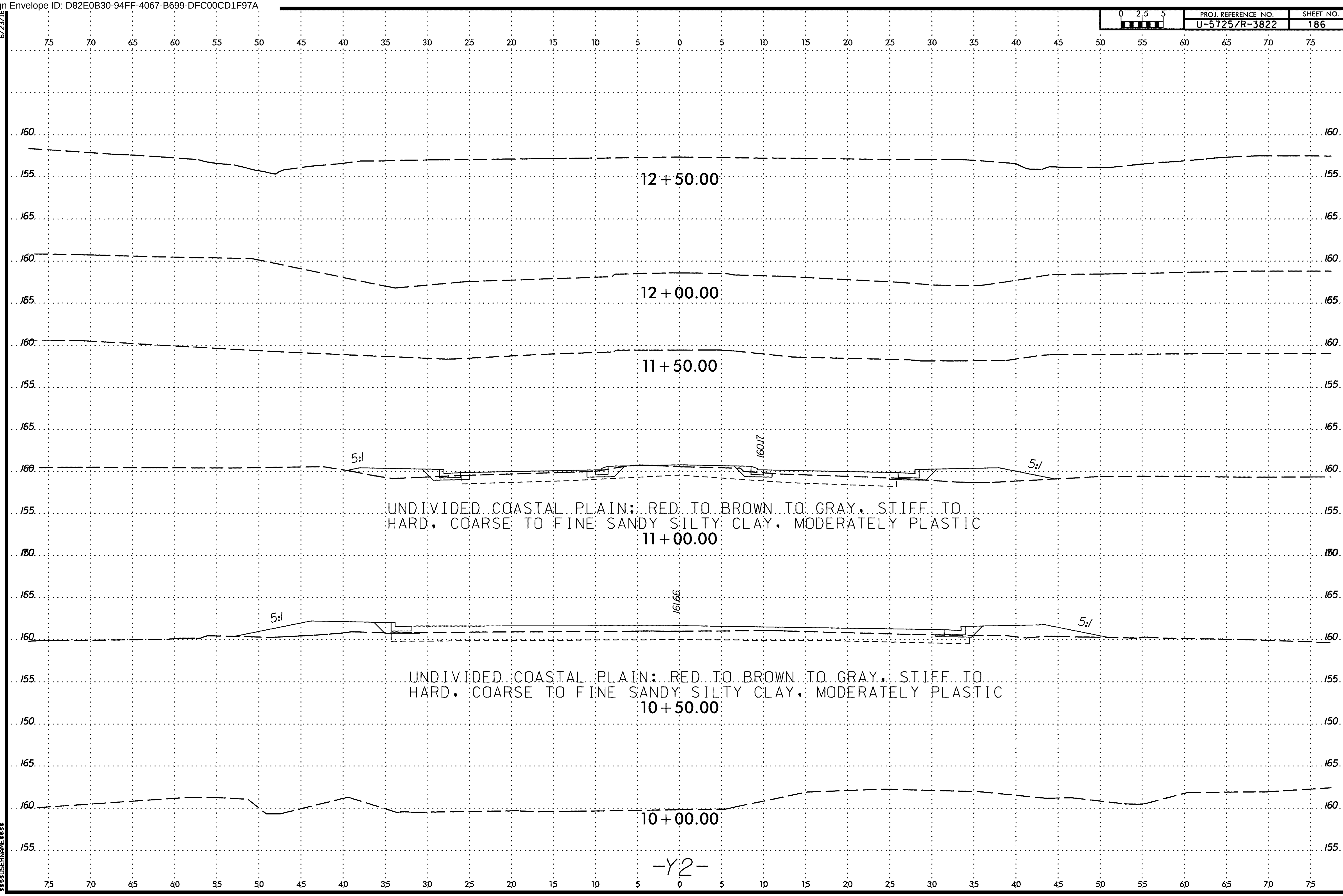
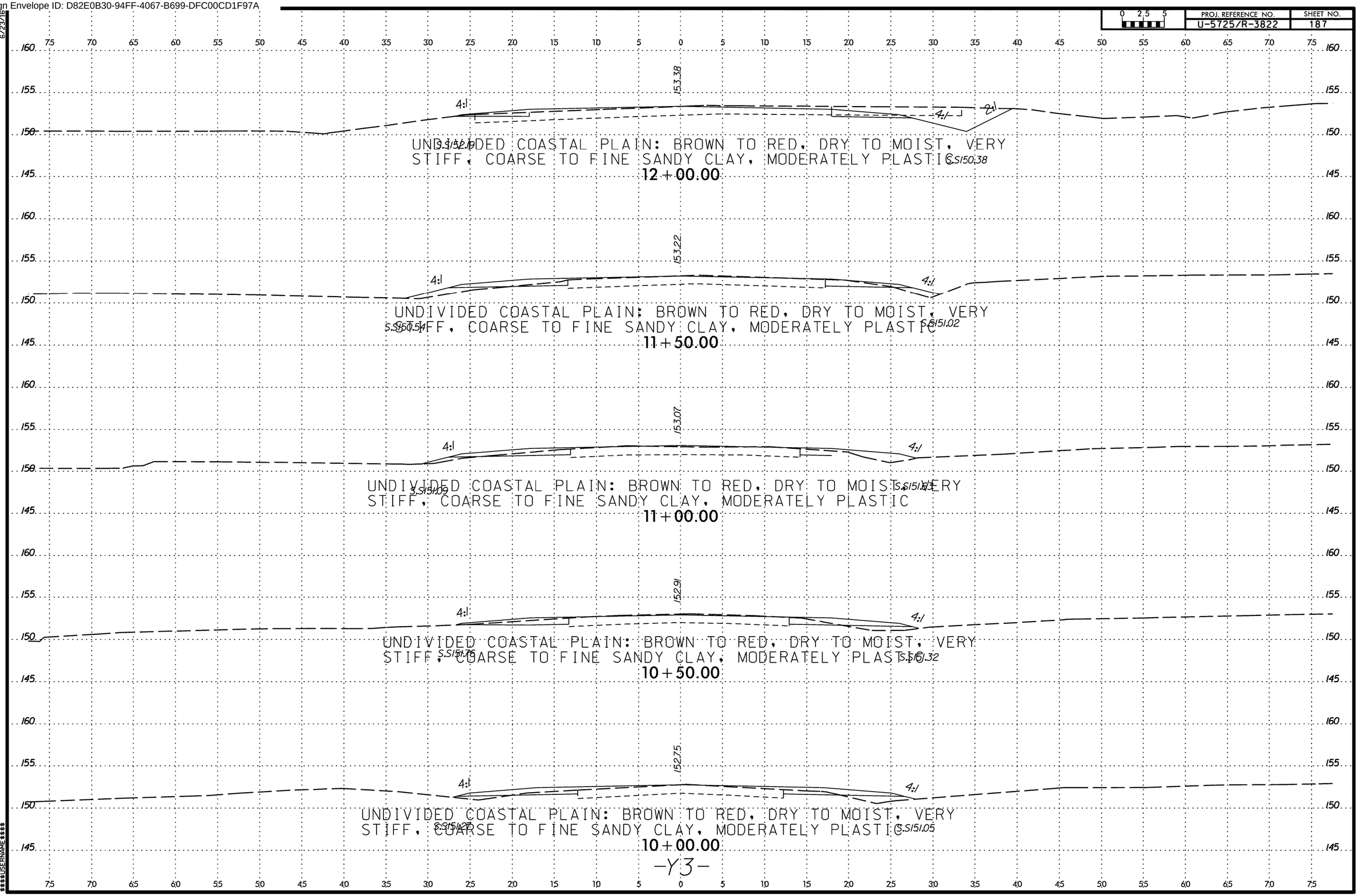
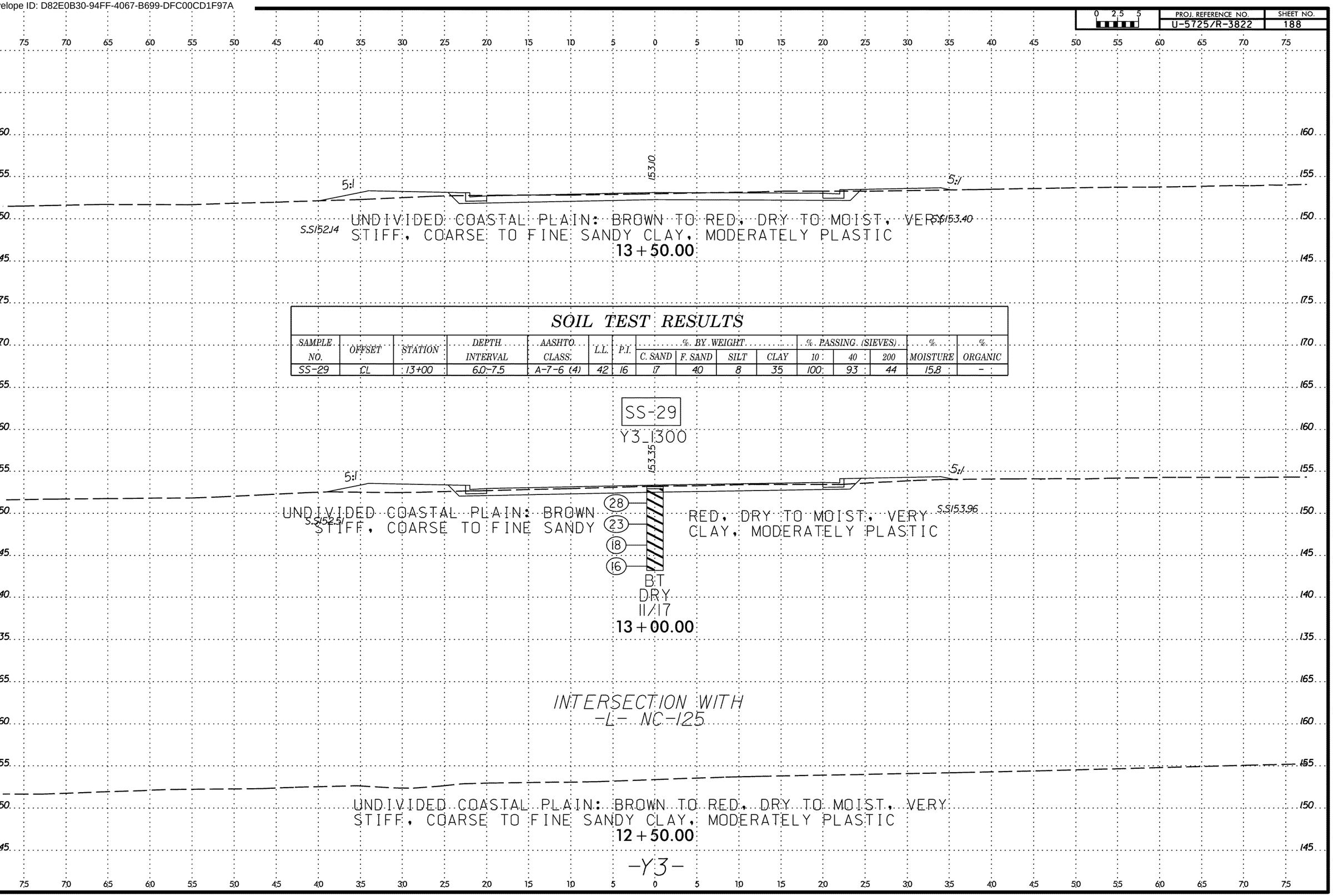


0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	187





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-29	CL	13+00	6.0-7.5	A-7-6 (4)	42	16	17	40	8	35	100	93	44	15.8	-

6/23/16

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

160 155 150 145 140 135

151.84

5:1 5:1

S.SI49.79

S.SI50.44

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, VERY STIFF TO MEDIUM STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

15+50.00

Y3_1500

152.35

5:1 5:1

S.SI50.16

S.SI51.32

16 25 11 8

BT
DRY
11/17

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, VERY STIFF TO MEDIUM STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

15+00.00

152.60

5:1 5:1

S.SI50.51

S.SI52.16

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, VERY STIFF TO MEDIUM STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

14+50.00

152.85

5:1 5:1

S.SI51.75

S.SI52.92

UNDIVIDED COASTAL PLAIN: BROWN TO RED, DRY TO MOIST, VERY STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

14+00.00

-Y3-

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	190

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

155 150 145 140 135 130 125 165 160 155

Y3_1700

147.13

5:1 5:1

S.S147.03 S.S146.60

(11) (17) (7) (6)

UNDIVIDED COASTAL PLAIN: MOIST, VERY STIFF TO COARSE TO FINE SANDY

RED TO BROWN TO GRAY, MEDIUM STIFF, SILTY CLAY, HIGHLY PLASTIC

BT
DRY
11/17

17+00.00

149.22

5:1 5:1

S.S148.08 S.S147.97

UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, MOIST, VERY STIFF TO MEDIUM STIFF, SILTY COARSE TO FINE SANDY CLAY, HIGHLY PLASTIC

16+50.00

150.79

5:1 5:1

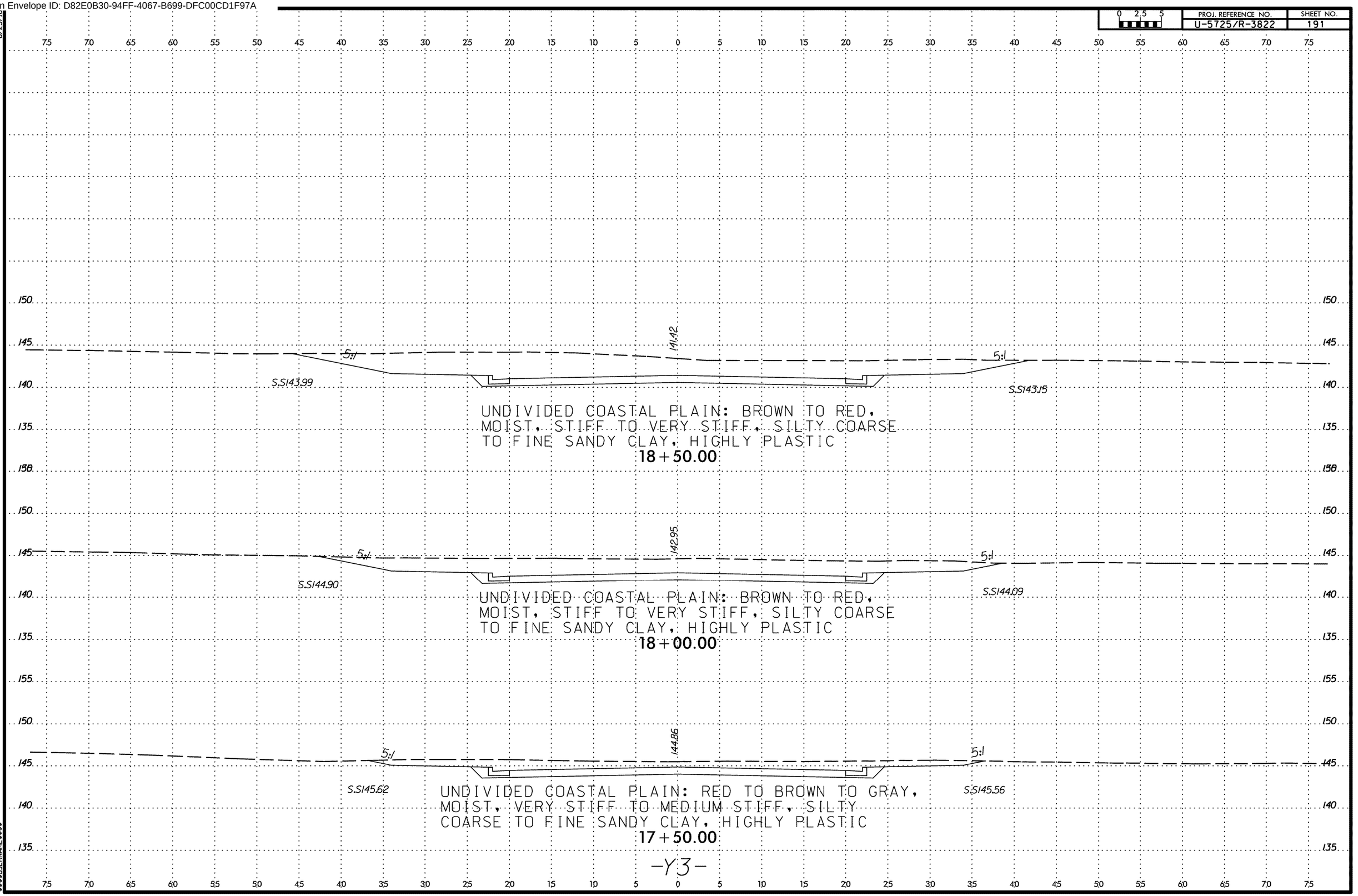
S.S149.24 S.S149.21

UNDIVIDED COASTAL PLAIN: RED TO BROWN, MOIST, VERY STIFF TO MEDIUM STIFF, COARSE TO FINE SANDY CLAY, MODERATELY PLASTIC

16+00.00

-Y3-

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



UNDIVIDED COASTAL PLAIN: BROWN TO RED, MOIST, STIFF TO VERY STIFF, SILTY COARSE TO FINE SANDY CLAY, HIGHLY PLASTIC

18+50.00

UNDIVIDED COASTAL PLAIN: BROWN TO RED, MOIST, STIFF TO VERY STIFF, SILTY COARSE TO FINE SANDY CLAY, HIGHLY PLASTIC

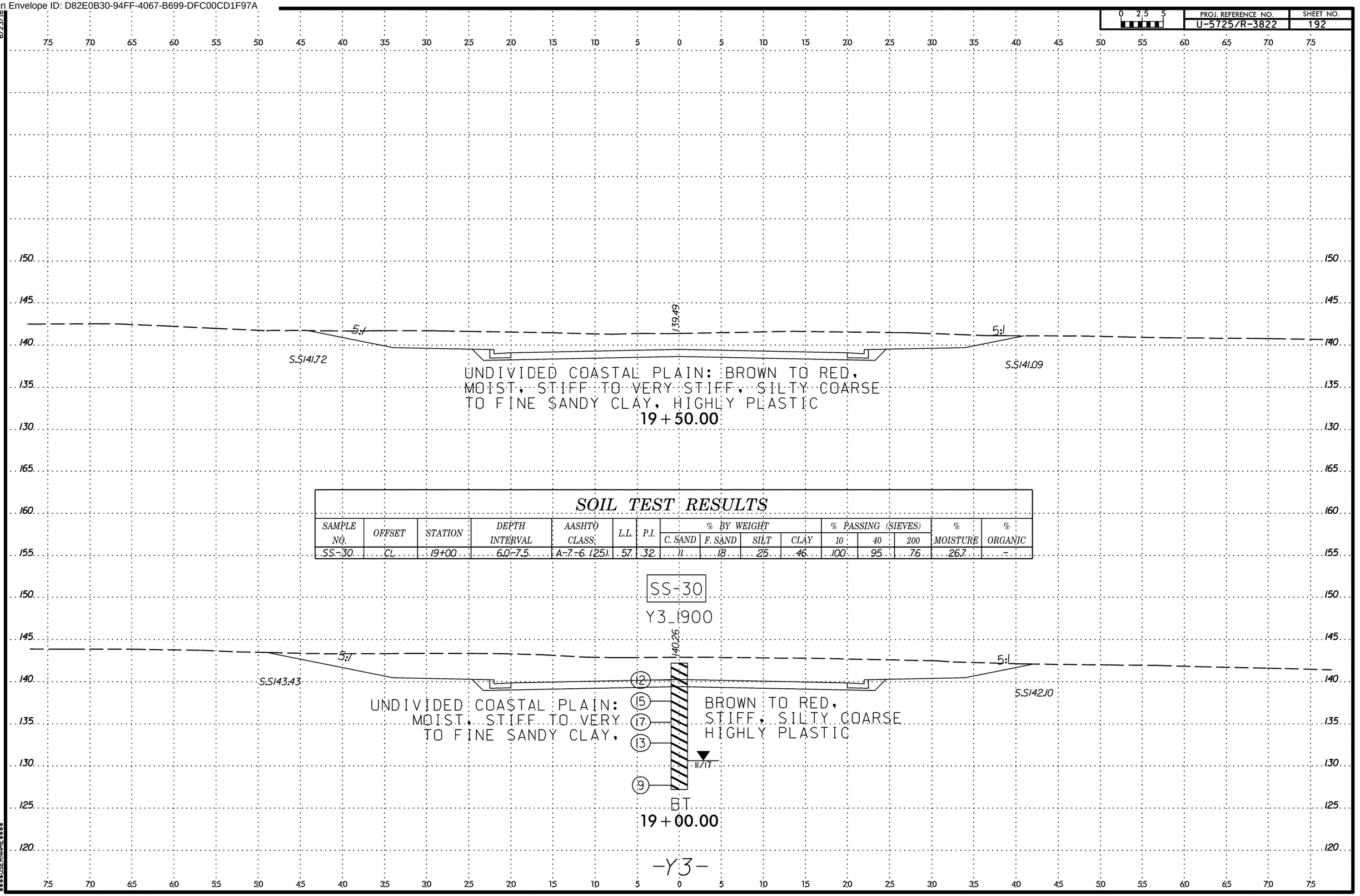
18+00.00

UNDIVIDED COASTAL PLAIN: RED TO BROWN TO GRAY, MOIST, VERY STIFF TO MEDIUM STIFF, SILTY COARSE TO FINE SANDY CLAY, HIGHLY PLASTIC

17+50.00

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	192



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-30	CL	19+00	6.0-7.5	A-7-6 (25)	57	32	11	18	25	46	100	95	76	26.7	-

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	193

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

160 155 150 145 140 135 130

B TOPSOIL

139.08

5:1 S.SI40.15

B

5:1 S.SI38.43

UNDIVIDED COASTAL PLAIN: GRAY TO RED WITH BROWN, MOIST, STIFF TO VERY STIFF, SILTY CLAY, HIGHLY PLASTIC

20+50.00

185 150 145 140 135 130

139.09

5:1 S.SI40.60

5:1 S.SI40.36

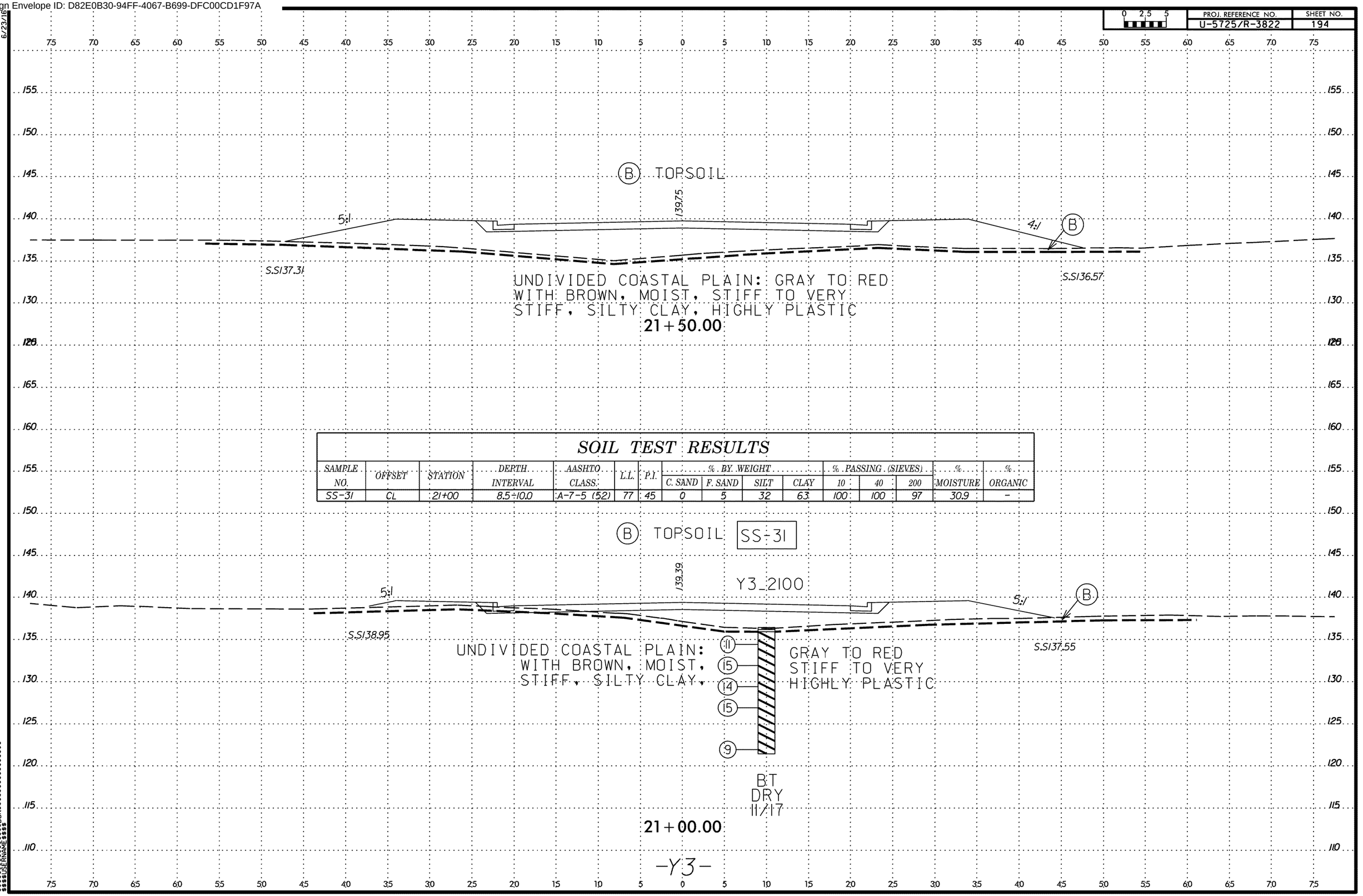
UNDIVIDED COASTAL PLAIN: GRAY TO RED WITH BROWN, MOIST, STIFF TO VERY STIFF, SILTY CLAY, HIGHLY PLASTIC

20+00.00

-Y3-

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

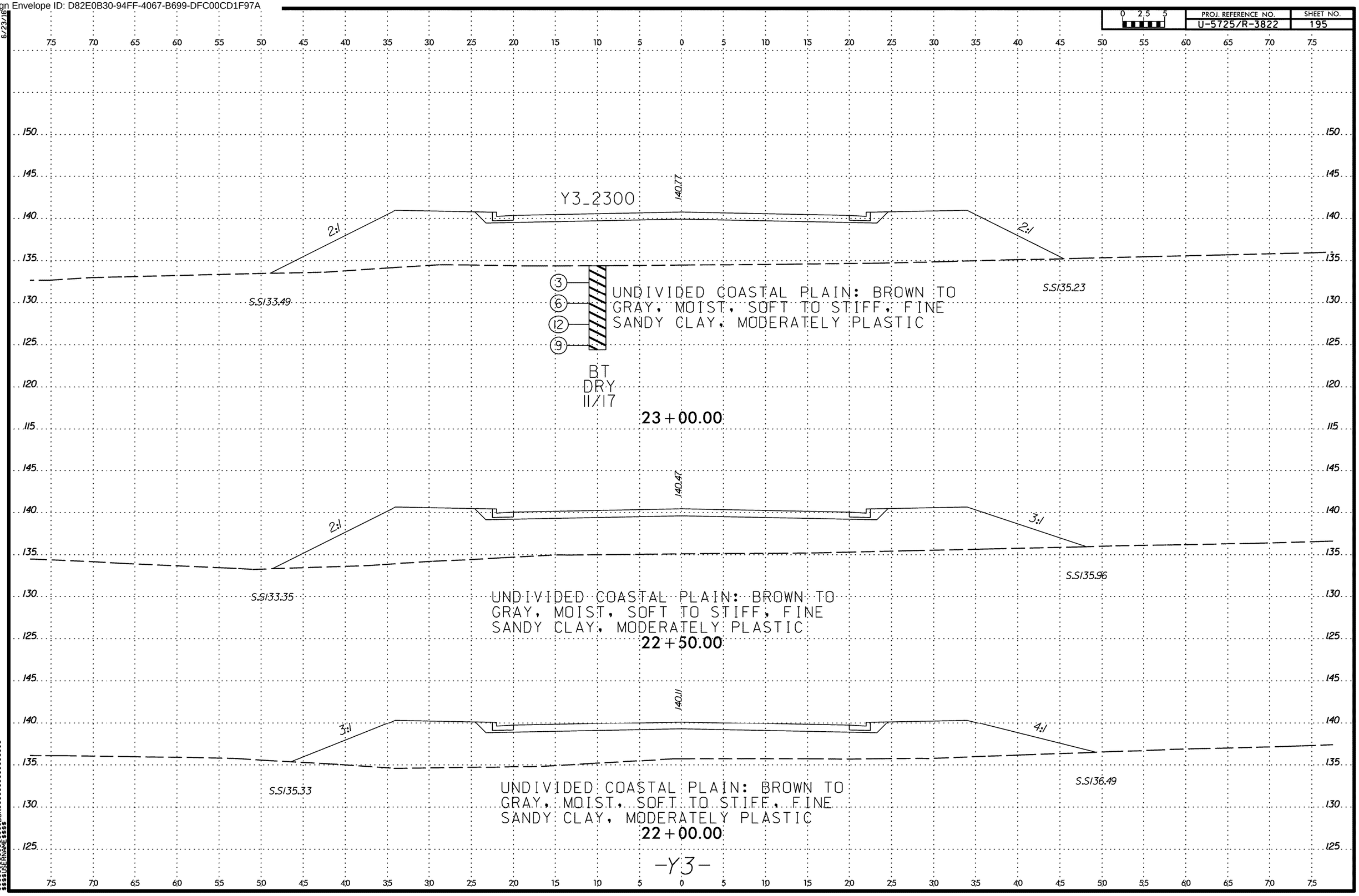


SOIL TEST RESULTS

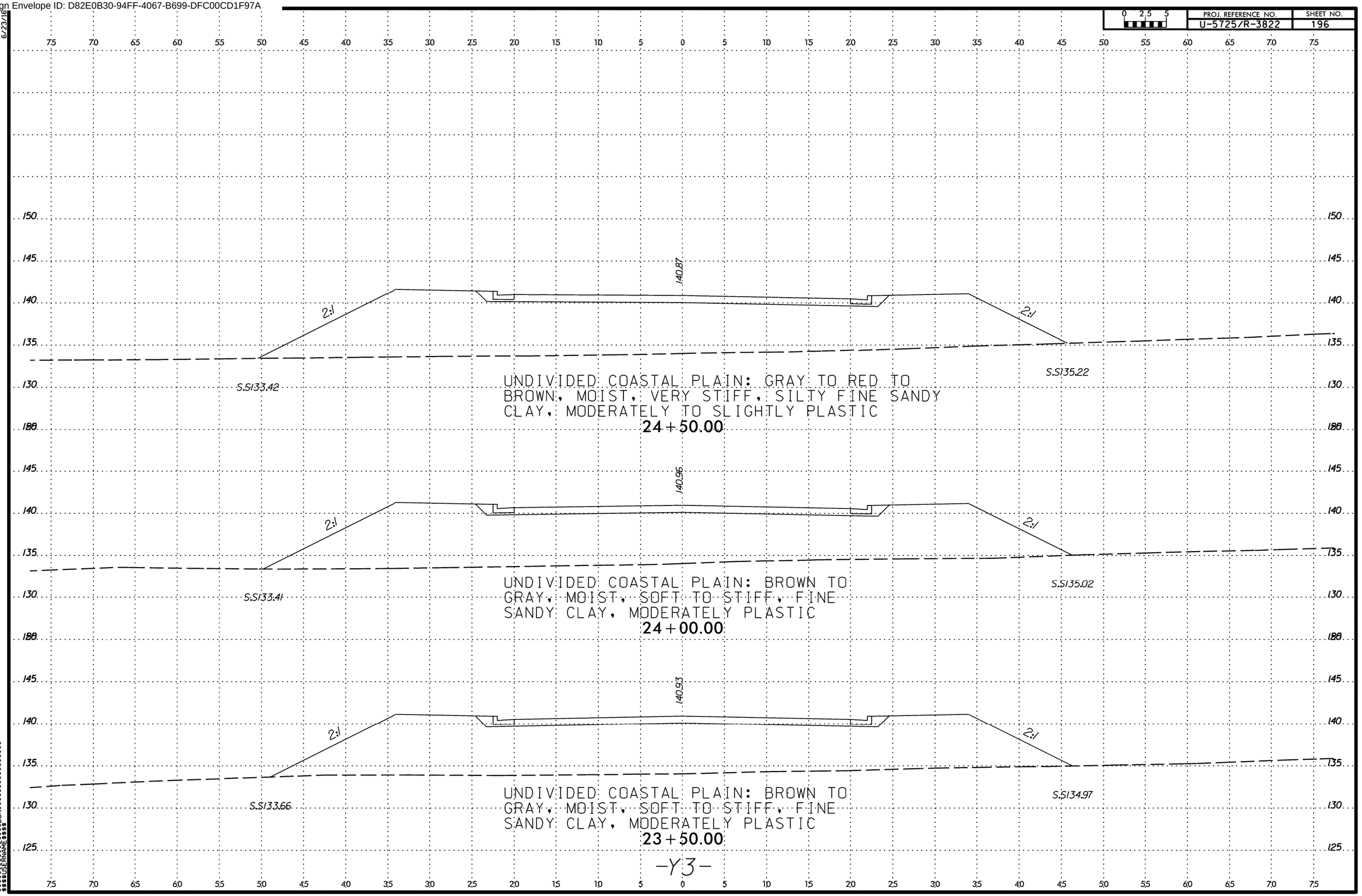
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-31	CL	21+00	8.5÷10.0	A-7-5 (52)	77	45	0	5	32	63	100	100	97	30.9	-

6/23/16

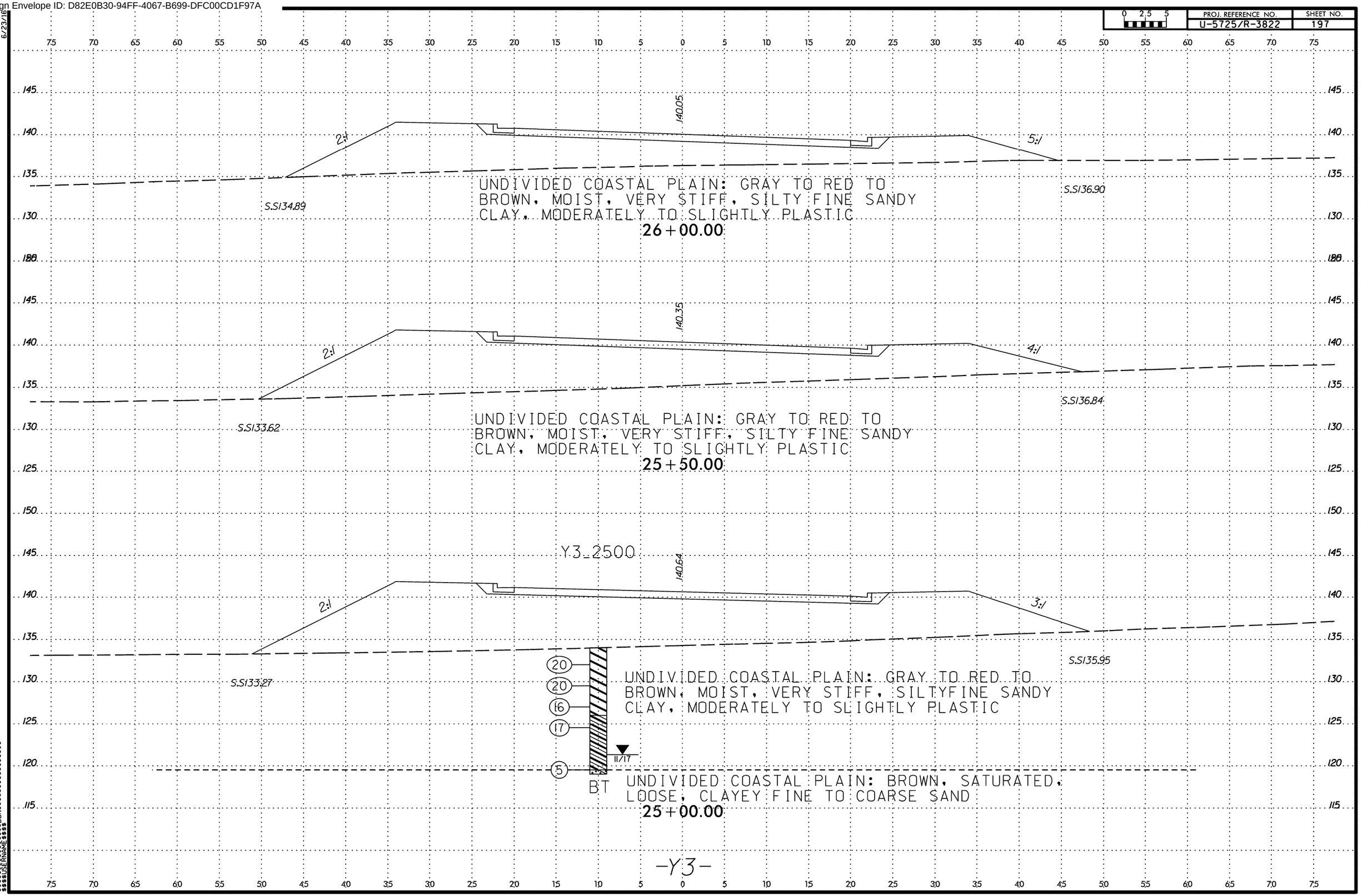
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	195



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



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



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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	198

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

145 140 135 130 125 120 115 110 105

139.17

2:1

2:1

S.SI31.72

S.SI33.09

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY TO RED, MOIST, STIFF TO VERY STIFF, FINE SANDY SILTY CLAY, SLIGHTLY TO MODERATELY PLASTIC

27+50.00

Y3_2700

139.47

2:1

2:1

S.SI32.80

S.SI33.69

UNDIVIDED COASTAL PLAIN: RED, MOIST, STIFF TO VERY SILTY CLAY, SLIGHTLY TO

BROWN TO GRAY TO STIFF, FINE SANDY MODERATELY PLASTIC

(9) (16) (9) (9) (11)

BT
DRY
12/17

27+00.00

139.76

2:1

4:1

S.SI34.70

S.SI35.54

UNDIVIDED COASTAL PLAIN: BROWN TO GRAY TO RED, MOIST, STIFF TO VERY STIFF, FINE SANDY SILTY CLAY, SLIGHTLY TO MODERATELY PLASTIC

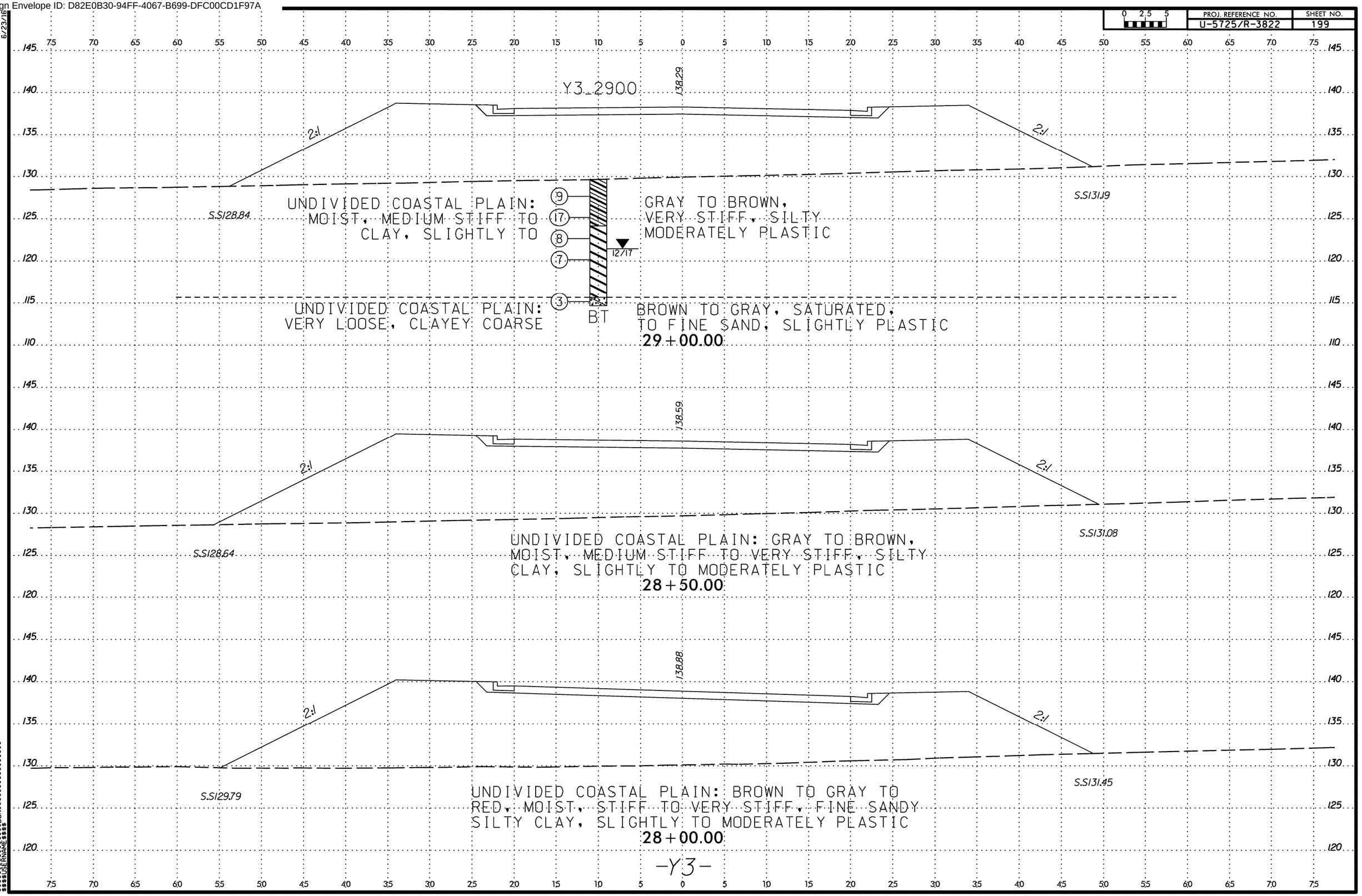
26+50.00

-Y3-

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

6/23/16



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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	200

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

145 140 135 130 125 120

INTERSECTION WITH
-L1- FRONTAGE RD

30+00.00

138.00

2:1

2:1

S.S129.56

S.S131.96

UNDIVIDED COASTAL PLAIN: GRAY TO BROWN, MOIST, MEDIUM STIFF TO VERY STIFF, SILTY CLAY, SLIGHTLY TO MODERATELY PLASTIC

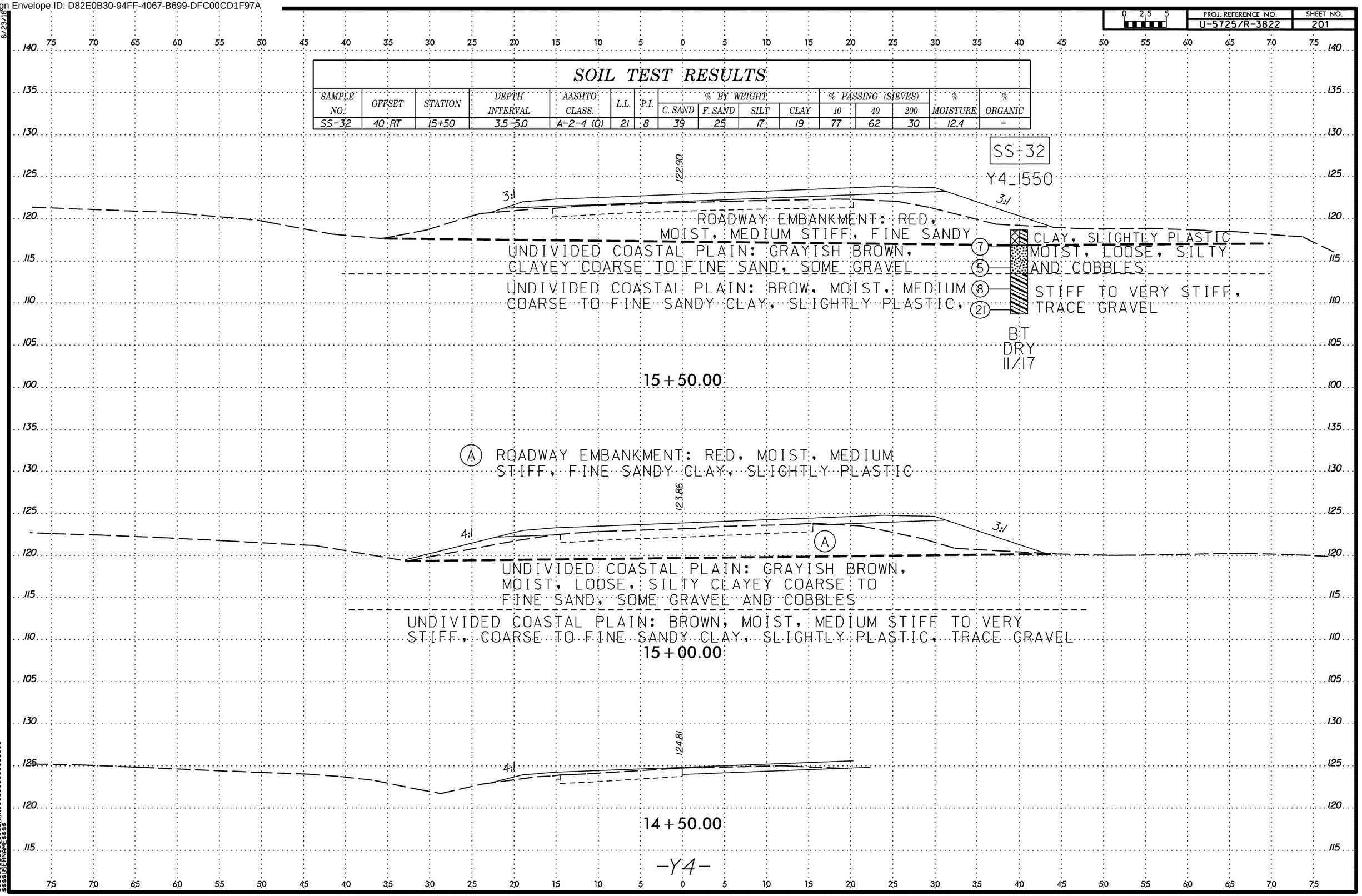
29+50.00

-Y3-

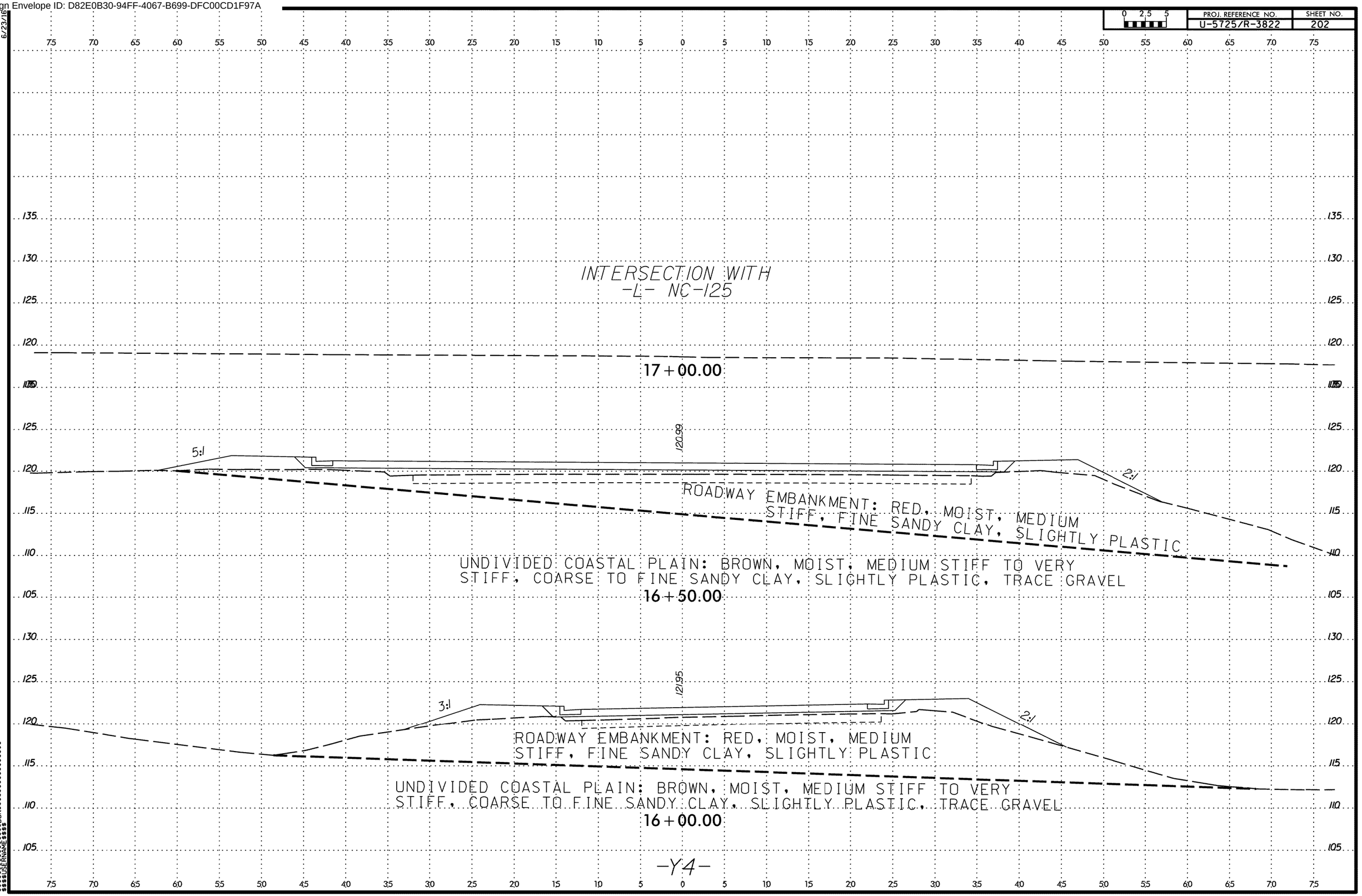
$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

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-32	40 RT	15+50	3.5-5.0	A-2-4 (0)	21	8	39	25	17	19	77	62	30	12.4	-



-Y4-



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

6/23/16

END UNDERCUT
-Y5- STA. 10+75±

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-33	30 LT	10+50	3.5-5.0	A-2-7 (0)	53	19	62	8	5	25	93	55	29	21J	-

SS-33

(M) ROADWAY EMBANKMENT: BROWN TO REDDISH BROWN, MOIST, STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

(B) TOPSOIL

127.6 SQFT

Y5_1050LT

Y5_1059RT
10+59

145.67

5:1

5:1

(B)

(M)

UNDIVIDED COASTAL PLAIN: BROWN, WET TO SATURATED, MEDIUM STIFF, COARSE TO FINE SANDY CLAY, SLIGHTLY PLASTIC

14
9
2
3
5

11/17

UNDIVIDED COASTAL PLAIN: BROWN TO TAN BROWN, MOIST TO SATURATED, MEDIUM DENSE TO VERY LOOSE, CLAYEY FINE TO COARSE SAND, MODERATELY TO SLIGHTLY PLASTIC

13
11
5
4

5/17

BT

BT
FIAD

UNDIVIDED COASTAL PLAIN: TAN BROWN TO RED, WET, MEDIUM STIFF, SILTY CLAY, HIGHLY PLASTIC

10+50.00

BEGIN UNDERCUT
-Y5- STA. 10+00±

INTERSECTION WITH
-L1- FRONTAGE RD

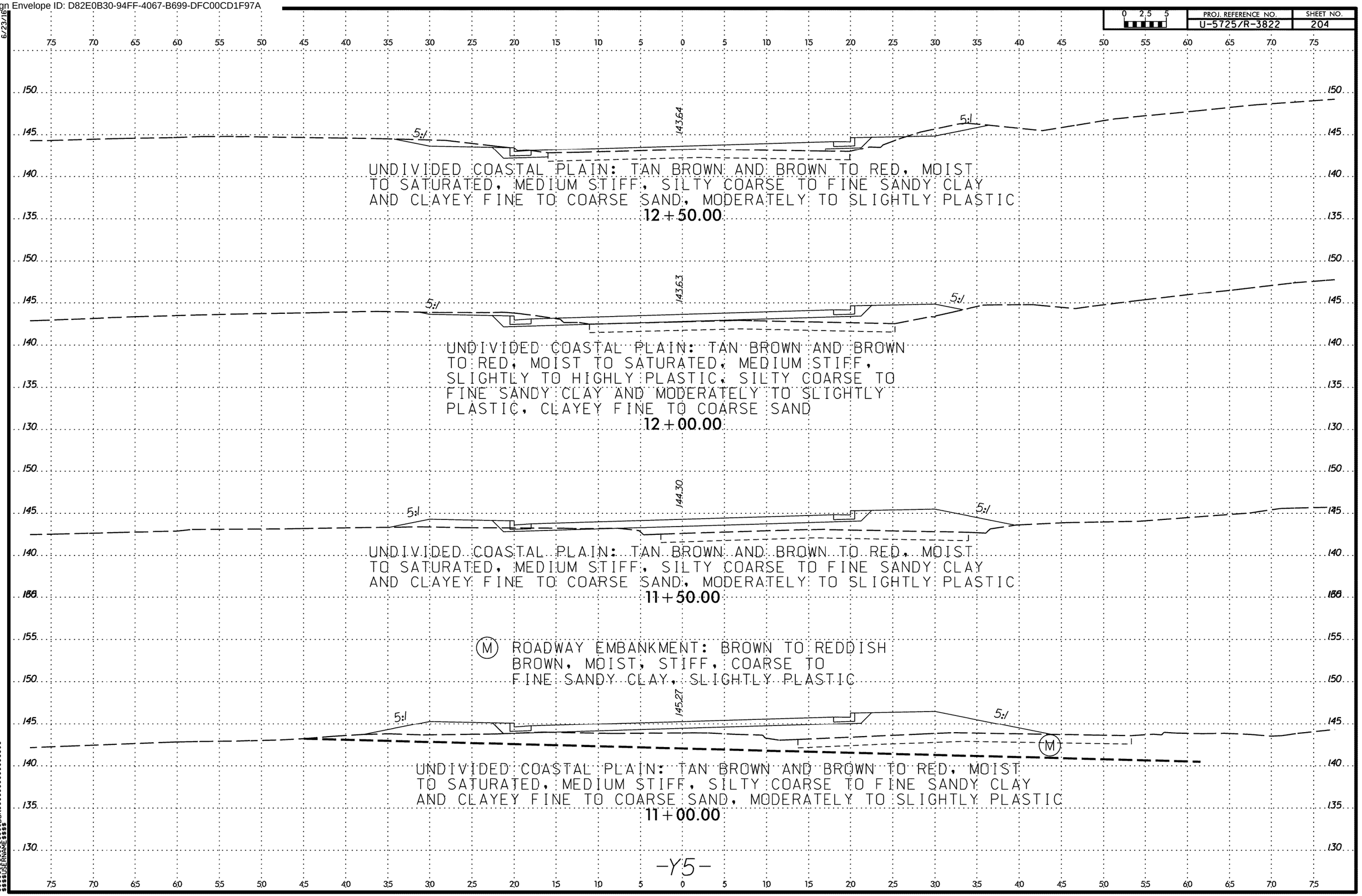
10+00.00

-Y5-

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	204



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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-5725/R-3822	205

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

155
150
145
140
135

14+00.00

13+50.00

13+00.00

5:1

144.29

5:1

UNDIVIDED COASTAL PLAIN: TAN BROWN AND BROWN TO RED, MOIST TO SATURATED, MEDIUM STIFF, SILTY COARSE TO FINE SANDY CLAY AND CLAYEY FINE TO COARSE SAND, MODERATELY TO SLIGHTLY PLASTIC

-Y5-

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

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-5725/R-3822	206

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

135 130 125 120 115 110 105 100 95 90 85 80 75

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-28	CL	*103+00	13.5-15.0	A-7-6 (14)	52	30	28	18	24	30	100	86	56	17.8	-

*Note: Station is on -LI-

(K) ARTIFICIAL FILL: TAN BROWN, MOIST, MEDIUM STIFF, FINE TO COARSE SANDY CLAY, HIGHLY PLASTIC

INTERSECTION WITH -LI- FRONTAGE RD

SS-28

LI 10300
10+16

ARTIFICIAL FILL: GRAY AND BROWN, MOIST, MEDIUM DENSE, CLAYEY COARSE TO FINE SAND AND GRAVEL

UNDIVIDED COASTAL PLAIN: GRAY AND BROWN, SATURATED, VERY LOOSE, CLAYEY FINE TO COARSE SAND, SLIGHTLY PLASTIC

UNDIVIDED COASTAL PLAIN: BROWN, MOIST, SOFT TO VERY STIFF, FINE TO COARSE SANDY CLAY, HIGHLY PLASTIC

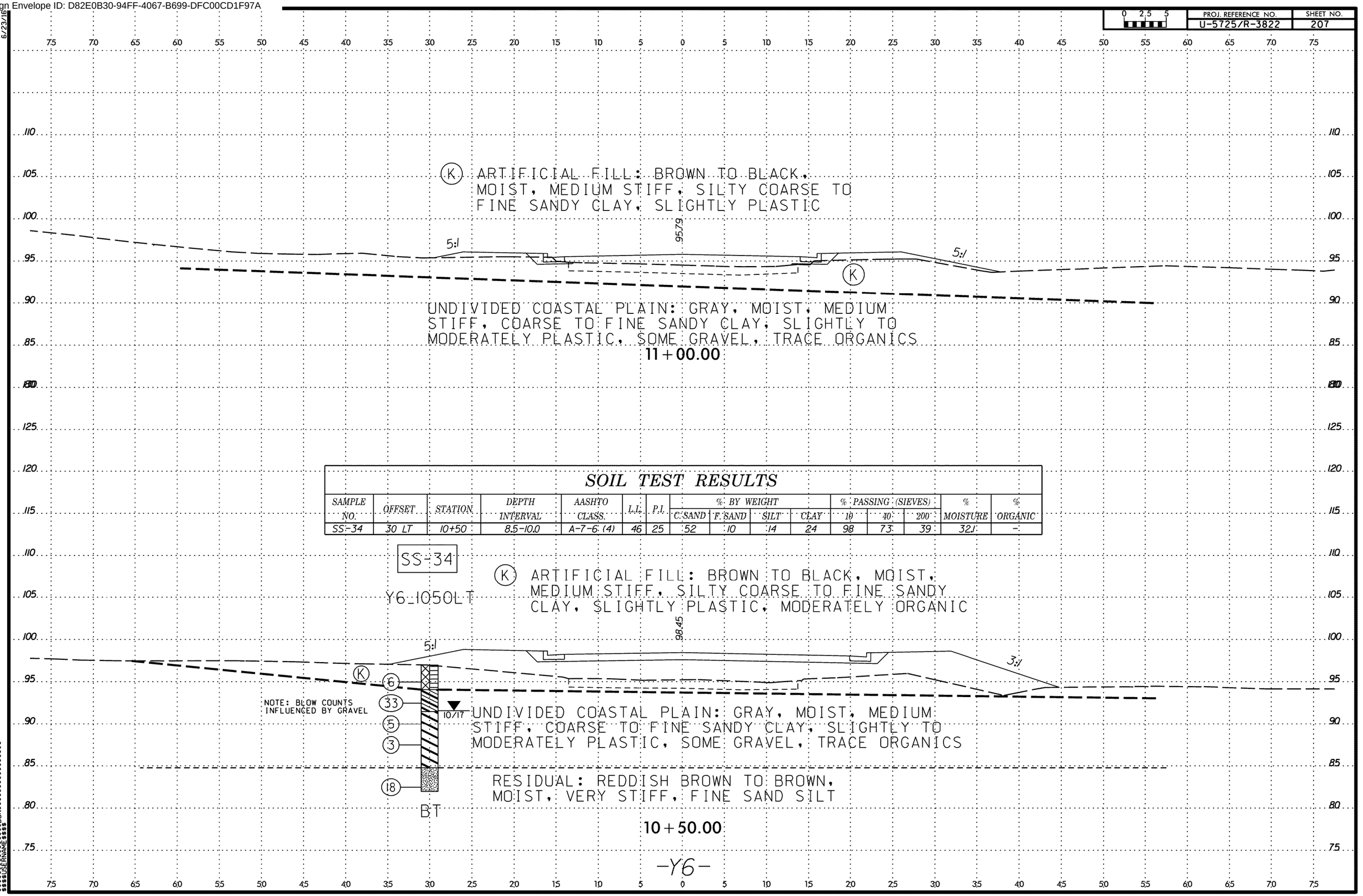
(K) (29) (6) (2) (2) (16) 10/17

BT

10+00.00

-Y6-

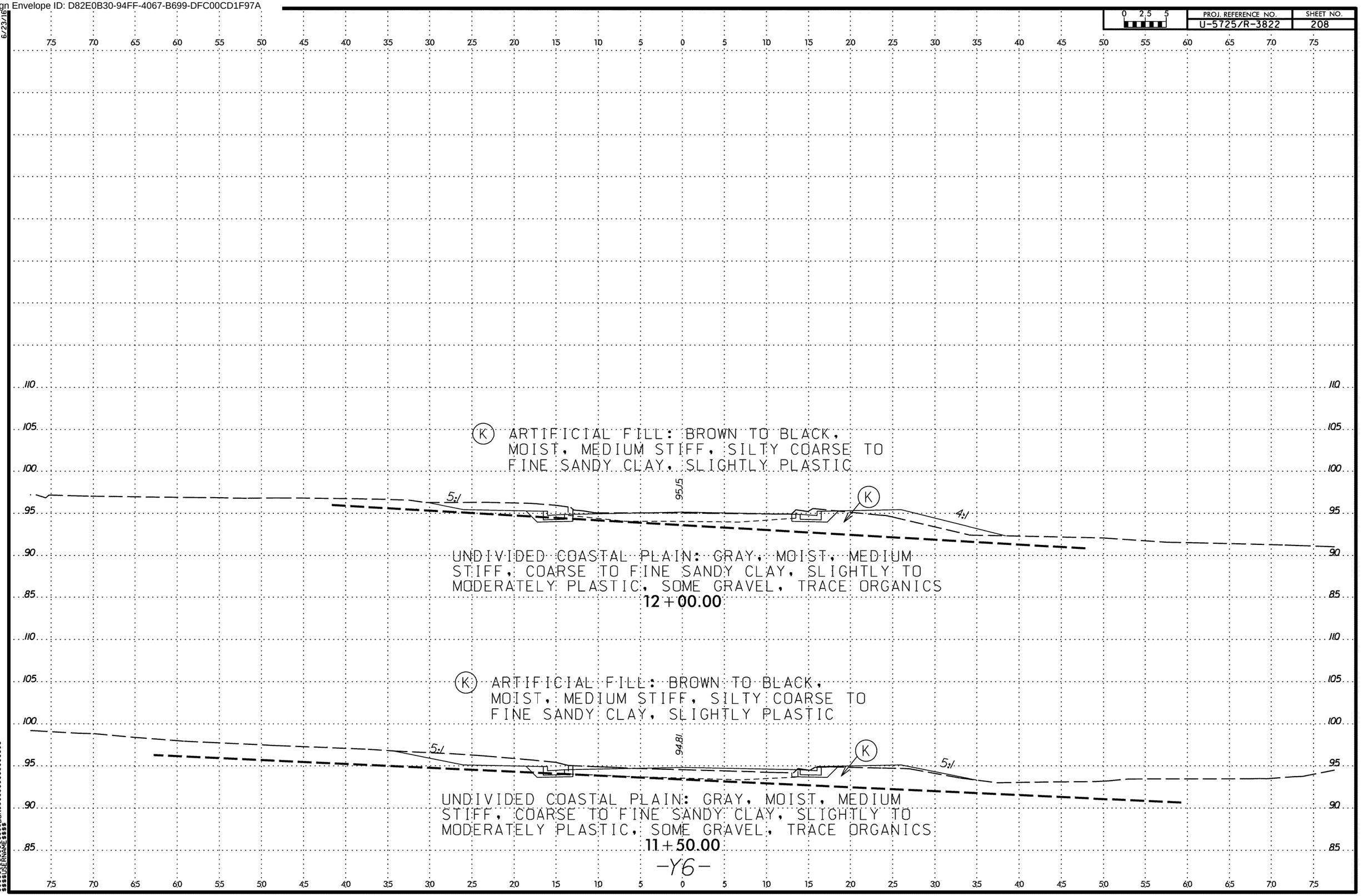
$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$



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-34	30 LT	10+50	8.5-10.0	A-7-6 (4)	46	25	52	10	14	24	98	73	39	32.1	-

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



PROJECT REFERENCE NO.	SHEET NO.
U–5725/R–3822	209

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

APPENDIX A
BORE LOGS

REFERENCE: U–5725/R–3822

PROJECT: 50162 /37765

ESP
ESP ASSOCIATES, PA
7011 ALBERT PICK RD
SUITE E
GREENSBORO, NC 27409
FIRM # C-0587
WWW.ESPASSOCIATES.COM

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_1700	**STATION** 17+00	**OFFSET** 46 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 150.2 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 968,640	**EASTING** 2,398,323	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/08/17	**COMP. DATE** 11/08/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
155										
150	149.2	1.0	1	2	3	5		M		150.2 GROUND SURFACE 0.0 148.5 **ROADWAY EMBANKMENT** Brown, Medium Dense, Silty Fine SAND 1.7
	146.7	3.5	2	3	2	5	SS-1	16%		**UNDIVIDED COASTAL PLAIN** Brown to Gray, Loose, Clayey Fine to Coarse SAND, Moderately Plastic
145	144.2	6.0	4	4	4	8		M		142.6 Brown to Red to Gray, Stiff, Silty CLAY, Moderately Plastic, Trace Sand 7.6
	141.7	8.5	4	5	7	12		M		140.2 Boring Terminated at Elevation 140.2 ft in Undivided Coastal Plain Material: Silty CLAY 10.0 Cave-In at 8.1'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_1905	**STATION** 19+05	**OFFSET** 57 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 152.9 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 968,820	**EASTING** 2,398,224	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/07/17	**COMP. DATE** 11/07/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
155										
										152.9 GROUND SURFACE 0.0
150	151.9	1.0	5	4	3	7	SS-2	8%		**UNDIVIDED COASTAL PLAIN** Brown, Loose, Clayey Coarse to Fine SAND
	149.4	3.5	3	3	4	7		M		147.4 5.5
145	146.9	6.0	5	6	6	12		M		Gray to Red, Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
	144.4	8.5	5	6	7	13		M		142.9 10.0 Boring Terminated at Elevation 142.9 ft in Undivided Coastal Plain Material: Sandy CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_2123	**STATION** 21+23	**OFFSET** 45 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 156.1 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 968,950	**EASTING** 2,398,022	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/09/17	**COMP. DATE** 11/09/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
160										
										156.1 GROUND SURFACE 0.0
155	155.1	1.0	2	2	3	5		M		155.4 0.7' Topsoil 0.7
	152.6	3.5	2	3	4	7	SS-3	18%		**UNDIVIDED COASTAL PLAIN** Brown, Medium Stiff, Fine Sandy Clay, Slightly Plastic
150	150.1	6.0	4	6	6	12		M		150.6 5.5 Gray to Red, Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
	147.6	8.5	4	6	6	12		M		146.1 10.0 Boring Terminated at Elevation 146.1 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.8'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_2300	**STATION** 23+00	**OFFSET** 20 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 157.0 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 969,118	**EASTING** 2,397,952	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/09/17	**COMP. DATE** 11/09/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
160										
										157.0 GROUND SURFACE 0.0
155	156.0	1.0	4	7	8	15		M		156.7 0.3' Topsoil 0.3
	153.5	3.5	4	6	8	14		M		**UNDIVIDED COASTAL PLAIN** Brown to Tan Brown to Red, Very Stiff to Medium Stiff, Coarse to Fine Sandy CLAY, Highly Plastic
150	151.0	6.0	3	4	5	9		M		
	148.5	8.5	2	3	4	7		M		147.0 10.0 Boring Terminated at Elevation 147.0 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 8.0'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_2500	**STATION** 25+00	**OFFSET** 30 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 158.5 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 969,297	**EASTING** 2,397,858	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/09/17	**COMP. DATE** 11/09/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
160											
	157.5	1.0								158.5 GROUND SURFACE	0.0
										157.8 0.7' Topsoil	0.7
			5	5	6	11		M		**UNDIVIDED COASTAL PLAIN** Brown to Tan Brown, Stiff to Very Stiff, Coarse to Fine Sandy CLAY, Highly Plastic	
155	155.0	3.5	4	5	7	12		M			
	152.5	6.0	5	7	10	17		M			
150	150.0	8.5	5	6	7	13		M		148.5	10.0
										Boring Terminated at Elevation 148.5 ft in Undivided Coastal Plain Material: Sandy CLAY	
										Cave-In at 6.9'	

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_2700	**STATION** 27+00	**OFFSET** 20 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 157.9 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 969,491	**EASTING** 2,397,801	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/09/17	**COMP. DATE** 11/09/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
160										
	156.9	1.0								157.9 GROUND SURFACE 0.0
			3	7	8	15		M		156.7 1.2' Topsoil 1.2
155	154.4	3.5								**UNDIVIDED COASTAL PLAIN** Brown, Stiff to Very Stiff, Coarse to Fine Sandy CLAY, Highly Plastic
			5	7	9	16	SS-4	22%		
	151.9	6.0								
			4	5	7	12		M		
150	149.4	8.5								
			3	4	5	9		M		147.9 10.0
										Boring Terminated at Elevation 147.9 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.5'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_2900LT	**STATION** 29+00	**OFFSET** 50 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 157.3 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 969,682	**EASTING** 2,397,724	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/09/17	**COMP. DATE** 11/09/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
160										
										157.3 GROUND SURFACE 0.0
	156.3	1.0								**UNDIVIDED COASTAL PLAIN**
155			6	9	12	21		M		Brown to Red, Very Stiff to Medium Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
	153.8	3.5								
			4	6	6	12		M		
	151.3	6.0								
150			3	5	4	9		M		
	148.8	8.5								
			3	3	3	6		M		
										147.3 10.0
										Boring Terminated at Elevation 147.3 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 8.1'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_2900RT	**STATION** 29+00	**OFFSET** 50 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 154.8 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 969,701	**EASTING** 2,397,823	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/09/17	**COMP. DATE** 11/09/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
155										
	153.8	1.0								154.8 GROUND SURFACE 0.0
			3	6	6	12		M		154.0 0.8' Topsoil 0.8
	151.3	3.5								**UNDIVIDED COASTAL PLAIN**
150			4	5	6	11		M		Brown to Red, Stiff to Medium Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
	148.8	6.0								
			3	3	4	7		M		
	146.3	8.5								
145			3	4	3	7		M		144.8 10.0
										Boring Terminated at Elevation 144.8 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 8.2'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_3100	**STATION** 31+00	**OFFSET** 40 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 156.3 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 969,886	**EASTING** 2,397,707	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/09/17	**COMP. DATE** 11/09/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
160										ELEV. (ft) DEPTH (ft)
										156.3 GROUND SURFACE 0.0
										155.2 1.1' Topsoil 1.1
155	155.3	1.0	4	4	6	10		D		**UNDIVIDED COASTAL PLAIN** Red to Brown, Medium Stiff to Very Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
	152.8	3.5	5	7	13	20	SS-5	26%		
150	150.3	6.0	3	3	4	7		M		
	147.8	8.5	3	3	3	6		M		146.3 10.0
										Boring Terminated at Elevation 146.3 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.7'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_3282	**STATION** 32+82	**OFFSET** 53 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 156.4 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 970,071	**EASTING** 2,397,792	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/09/17	**COMP. DATE** 11/09/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
160										
										156.4 GROUND SURFACE 0.0
										155.8 0.2' Asphalt over 0.4' ABC 0.6
155	155.4	1.0	3	5	7	12		M		**UNDIVIDED COASTAL PLAIN** Greenish Brown to Gray to Red to Reddish Brown, Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
	152.9	3.5	7	7	7	14		M		
150	150.4	6.0	3	4	5	9		M		
	147.9	8.5	3	4	5	9		M		146.4 10.0
										Boring Terminated at Elevation 146.4 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.9'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_3500	**STATION** 35+00	**OFFSET** 40 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 158.9 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 970,293	**EASTING** 2,397,713	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/09/17	**COMP. DATE** 11/09/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
160										158.9 GROUND SURFACE 0.0
	157.9	1.0	7	8	9	17		D		**UNDIVIDED COASTAL PLAIN** Brown and Gray to Red, Very Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic
155	155.4	3.5	6	10	13	23		D		
	152.9	6.0	5	8	11	19	SS-5	23%		153.3 5.6 Gray to Red, Stiff to Very Stiff, Fine Sandy CLAY, Highly Plastic
150	150.4	8.5	4	7	8	15		M		148.9 10.0 Boring Terminated at Elevation 148.9 ft in Undivided Coastal Plain Material: Sandy CLAY

Cave-In at 7.9'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_3699	**STATION** 36+99	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 163.4 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 970,485	**EASTING** 2,397,783	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/10/17	**COMP. DATE** 11/10/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
165										163.4 GROUND SURFACE 0.0
	162.4	1.0	5	6	7	13		D		**UNDIVIDED COASTAL PLAIN** Brown, Stiff to Very Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
160	159.9	3.5	8	8	9	17		D		
	157.4	6.0	6	7	8	15		M		157.6 5.8 Brown to Red to Gray, Stiff to Very Stiff, Fine Sandy CLAY, Moderately Plastic
155	154.9	8.5	5	7	9	16		M		153.4 10.0 Boring Terminated at Elevation 153.4 ft in Undivided Coastal Plain Material: Sandy CLAY

Cave-In at 7.5'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_3900	**STATION** 39+00	**OFFSET** 20 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 164.5 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 970,687	**EASTING** 2,397,798	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/10/17	**COMP. DATE** 11/10/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
165										ELEV. (ft) DEPTH (ft)
										164.5 GROUND SURFACE 0.0
	163.5	1.0	6	9	9	18	SS-7	12%		**UNDIVIDED COASTAL PLAIN** Brown, Very Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
160	161.0	3.5	8	8	9	17		D		159.3 5.2
	158.5	6.0	7	9	13	22		D		Brown to Red to Gray, Very Stiff, Fine Sandy CLAY, Moderately Plastic
155	156.0	8.5	7	10	14	24		M		154.5 10.0
										Boring Terminated at Elevation 154.5 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.6'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_4100	**STATION** 41+00	**OFFSET** 34 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 164.6 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 970,875	**EASTING** 2,397,885	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE F&R2175 CME-55 88% 02/11/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Davis, S.	**START DATE** 11/16/17	**COMP. DATE** 11/16/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
165										
										164.6 GROUND SURFACE 0.0
										164.1 0.5' Asphalt 0.5
										ROADWAY EMBANKMENT
										161.1 Brown Coarse to Fine SAND 3.5
160	161.1	3.5	2	4	6	10		M		**UNDIVIDED COASTAL PLAIN** Red to Brown, Stiff to Very Stiff, Fine Sandy CLAY, Moderately Plastic
155	156.1	8.5	5	8	11	19		M		
	151.1	13.5	2	3	4	7		M		152.0 12.6
										Brown, Loose, Clayey Coarse to Fine SAND, Trace Silt, Slightly Plastic 149.6 15.0
										Boring Terminated at Elevation 149.6 ft in Undivided Coastal Plain Material: Clayey SAND
										Cave-In at 11.2'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_4300	**STATION** 43+00	**OFFSET** 20 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 166.2 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 971,081	**EASTING** 2,397,866	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/10/17	**COMP. DATE** 11/10/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
170										
										166.2 GROUND SURFACE 0.0
165	165.2	1.0	6	11	13	24		D		**UNDIVIDED COASTAL PLAIN** Brown to Red, Very Stiff to Hard, Coarse to Fine Sandy CLAY, Moderately Plastic
	162.7	3.5	10	13	14	27		D		
160	160.2	6.0	8	21	22	43		D		
	157.7	8.5	7	19	20	39		M		
155										155.0 11.2 Brown and Red, Loose, Clayey Coarse to Fine SAND, Slightly Plastic
	152.7	13.5	3	3	4	7	SS-8	22%		151.2 15.0 Boring Terminated at Elevation 151.2 ft in Undivided Coastal Plain Material: Clayey SAND
										Cave-In at 11.5'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_4500	**STATION** 45+00	**OFFSET** 29 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 162.4 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 971,269	**EASTING** 2,397,949	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE F&R2175 CME-55 88% 02/11/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Davis, S.	**START DATE** 11/16/17	**COMP. DATE** 11/16/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
165										
										162.4 GROUND SURFACE 0.0
										162.0 0.4' Asphalt
160	161.4	1.0	4	3	1	4		M		159.9 **ROADWAY EMBANKMENT** 2.5 Brown, Loose, Coarse to Fine SAND, Trace Clay
	158.9	3.5	4	5	8	13		M		**UNDIVIDED COASTAL PLAIN** Red to Brown, Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
155										
	153.9	8.5	4	4	5	9		M		152.4 10.0 Boring Terminated at Elevation 152.4 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 6.3'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_4676	**STATION** 46+76	**OFFSET** 30 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 160.7 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 971,453	**EASTING** 2,397,921	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/20/17	**COMP. DATE** 12/20/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
165											
										160.7	0.0
160	159.7	1.0	4	8	10	18 33		D		GROUND SURFACE **UNDIVIDED COASTAL PLAIN** Red to Gray, Very Stiff to Hard, Coarse to Fine Sandy Silty CLAY, Moderately Plastic	
	157.2	3.5	8	14	19			D			
155	154.7	6.0	6	11	14	25		D			
	152.2	8.5	5	6	6	12		D			
										152.8	7.9
										Tan Brown to Red, Medium Dense, Silty Clayey Coarse to Fine SAND, Slightly Plastic	
										150.7	10.0
										Boring Terminated at Elevation 150.7 ft in Undivided Coastal Plain Material: Clayey SAND Cave-In at 6.0'	

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_4900	**STATION** 49+00	**OFFSET** 40 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 153.9 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 971,676	**EASTING** 2,397,950	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/13/17	**COMP. DATE** 11/13/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
155											
										153.9	0.0
	152.9	1.0	5	6	10	16		D		GROUND SURFACE **UNDIVIDED COASTAL PLAIN** Reddish Brown, Very Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic	
150	150.4	3.5	7	9	11	20	SS-9	19%			
	147.9	6.0	5	6	6	12		M			
145	145.4	8.5	4	5	5	10	SS-10	13%			
										146.0	7.9
										Reddish Brown to Tan Brown, Loose to Medium Dense, Clayey Fine to Coarse SAND, Slightly Plastic	
140	140.4	13.5	2	2	2	4		M			
										137.7	16.2
										Gray to Tan Brown, Very Loose, Clayey Coarse to Fine SAND, Slightly Plastic	
135	135.4	18.5	WOH	WOH	WOH	0		Sat.			
										133.9	20.0
										Boring Terminated at Elevation 133.9 ft in Undivided Coastal Plain Material: Clayey SAND Cave-In at 16.5'	

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_5100	**STATION** 51+00	**OFFSET** 30 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 158.2 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 971,871	**EASTING** 2,397,998	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/13/17	**COMP. DATE** 11/13/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
160										
	157.2	1.0	7	8	9	17		M		158.2 / 0.0 GROUND SURFACE
	157.6	0.4								0.4' Topsoil
155	154.7	3.5	7	8	10	18		M		**UNDIVIDED COASTAL PLAIN** Reddish Brown to Red and Brown, Stiff to Very Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
	152.2	6.0	8	10	14	24		M		
150	149.7	8.5	7	8	10	18		M		148.2 / 10.0 Boring Terminated at Elevation 148.2 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 7.1'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_5350	**STATION** 53+50	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 158.6 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 972,109	**EASTING** 2,398,082	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE F&R2175 CME-55 88% 02/11/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Davis, S.	**START DATE** 11/16/17	**COMP. DATE** 11/16/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
160										
										158.6 / 0.0 GROUND SURFACE
										157.9 / 0.7 0.7' Asphalt
										156.1 / 2.5 **ROADWAY EMBANKMENT** Brown, Coarse to Fine SAND
155	155.1	3.5	5	7	10	17		M		**UNDIVIDED COASTAL PLAIN** Red to Brown, Very Stiff, Coarse to Fine Sandy CLAY, Slightly to Moderately Plastic
150	150.1	8.5	5	6	10	16		M		148.6 / 10.0 Boring Terminated at Elevation 148.6 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 6.2'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_5500	**STATION** 55+00	**OFFSET** 40 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 153.2 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 972,264	**EASTING** 2,398,075	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/13/17	**COMP. DATE** 11/13/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
155										
	152.2	1.0	3	4	5	9		M		153.2 / 0.0 GROUND SURFACE
	152.8	0.4								0.4' Topsoil
150	149.7	3.5	5	7	9	16	SS-11	21%		**UNDIVIDED COASTAL PLAIN** Red to Brown, Stiff to Very Stiff, Coarse to Fine Sandy CLAY, Highly Plastic
	147.2	6.0	5	7	9	16		M		
145	144.7	8.5	4	5	9	14		M		143.2 / 10.0 Boring Terminated at Elevation 143.2 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.2'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_5700	**STATION** 57+00	**OFFSET** 40 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 148.3 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 972,459	**EASTING** 2,398,119	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/13/17	**COMP. DATE** 11/13/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
150										
	147.3	1.0	3	4	6	10		M		148.3 / 0.0 GROUND SURFACE
145	144.8	3.5	3	4	5	9		M		**UNDIVIDED COASTAL PLAIN** Red to Brown, Stiff to Very Stiff, Coarse to Fine Sandy CLAY, Highly Plastic
	142.3	6.0	5	7	8	15		M		140.4 / 7.9
140	139.8	8.5	4	5	5	10		M		138.3 / 10.0 Red to Brown, Loose to Medium Dense, Clayey Fine SAND, Slightly Plastic
										Boring Terminated at Elevation 138.3 ft in Undivided Coastal Plain Material: Clayey SAND
										Cave-In at 7.9'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_5900	**STATION** 59+00	**OFFSET** 25 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 147.8 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 972,567	**EASTING** 2,398,210	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/13/17	**COMP. DATE** 11/13/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
150										ELEV. (ft) DEPTH (ft)
										147.8 GROUND SURFACE 0.0
	146.8	1.0								**UNDIVIDED COASTAL PLAIN**
145			5	8	12	20		D		Red to Brown to Gray, Very Stiff to Stiff, Coarse to Fine Sandy CLAY, Moderately to Highly Plastic
	144.3	3.5	6	13	16	29		D		
	141.8	6.0				19				
140			6	8	11			D		
	139.3	8.5	5	7	9	16		D		137.8 10.0
										Boring Terminated at Elevation 137.8 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.1'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_6003	**STATION** 60+03	**OFFSET** 20 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 144.7 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 972,741	**EASTING** 2,398,245	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/19/17	**COMP. DATE** 12/19/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
145										
	143.7	1.0								144.7 GROUND SURFACE 0.0
			5	6	8	14		D		**UNDIVIDED COASTAL PLAIN**
140	141.2	3.5	10	9	10	19		D		Brown, Stiff, Silty Coarse to Fine Sandy CLAY, Slightly Plastic 141.8 2.9
	138.7	6.0								Brown to Red to Gray, Very Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
			7	9	11	20		D		
	136.2	8.5								
135			5	6	12	18		D		134.7 10.0
										Boring Terminated at Elevation 134.7 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 5.2'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_6300	**STATION** 63+00	**OFFSET** 4 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 137.4 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 973,035	**EASTING** 2,398,295	**24 HR.** 7.1
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/14/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft) DEPTH (ft)
140										
										137.4 GROUND SURFACE 0.0
	136.4	1.0								**UNDIVIDED COASTAL PLAIN** Brown to Gray, Very Soft to Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
135			WOH	WOH	WOH	0		M		
	133.9	3.5	2	3	3	6		M		
	131.4	6.0	2	3	5	8		▼		
130	128.9	8.5	4	4	4	8		M		128.9 8.5 127.9 Brown, Medium Stiff to Stiff, Fine to Course Sandy CLAY, Slightly Plastic 9.5 127.4 10.0 Brown to Red to Gray, Medium Stiff to Stiff, Silty CLAY, Moderately Plastic Boring Terminated at Elevation 127.4 ft in Undivided Coastal Plain Material: Silty CLAY

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_6500	**STATION** 65+00	**OFFSET** 3 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 133.8 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 973,231	**EASTING** 2,398,332	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/14/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
135										
	132.8	1.0								133.8 GROUND SURFACE 0.0 133.1 0.7' Topsoil 0.7
			3	5	7	12		M		**UNDIVIDED COASTAL PLAIN** Red to Brown with Gray, Stiff to Very Stiff, Fine Sandy CLAY, Slightly Plastic
130	130.3	3.5	6	10	13	23		M		
	127.8	6.0	4	7	9	16	SS-12	22%		128.2 5.6 Gray to Brown, Very Stiff to Stiff, Fine Sandy Silty CLAY, Highly Plastic
125	125.3	8.5	4	6	7	13		M		123.8 10.0 Boring Terminated at Elevation 123.8 ft in Undivided Coastal Plain Material: Silty CLAY Cave-In at 7.4'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_6700	**STATION** 67+00	**OFFSET** 62 ft LT	**ALIGNMENT** -L-	**0 HR.** 12.3
COLLAR ELEV. 132.2 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 973,439	**EASTING** 2,398,316	**24 HR.** 8.7
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/14/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
135											
										132.2 GROUND SURFACE	0.0
	131.2	1.0	6	7	8	15		M		131.5 0.7' Topsoil	0.7
130	128.7	3.5	3	5	6	11		M		**UNDIVIDED COASTAL PLAIN** 129.1 Brown to Red, Stiff to Very Stiff, Silty CLAY, Moderately Plastic, Trace Sand	3.1
	126.2	6.0	3	3	3	6		M		126.7 Brown to Red, Stiff, Fine Sandy CLAY, Slightly Plastic	5.5
125	123.7	8.5	2	1	1	2		M		Brown to Red to Gray, Soft to Medium Stiff, Silty CLAY, Moderately to Highly Plastic, Thin (1" to 2" thick) Coarse Sand Lenses	
120	118.7	13.5	2	2	2	4		W		117.2	15.0
										Boring Terminated at Elevation 117.2 ft in Undivided Coastal Plain Material: Silty CLAY	

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_6900	**STATION** 69+00	**OFFSET** 26 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 130.0 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 973,616	**EASTING** 2,398,444	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/14/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
130										
	129.0	1.0	2	5	7	12		M		130.0 GROUND SURFACE 0.0
	126.5	3.5	3	6	6	12		M		129.6 0.4' Topsoil 0.4
125	124.0	6.0	3	3	3	6		M		**UNDIVIDED COASTAL PLAIN** 126.8 Brown to Red, Stiff, Fine Sandy CLAY, Slightly Plastic 3.2
	121.5	8.5	2	2	2	4		W		Gray to Red to Brown, Stiff to Medium Stiff, Silty CLAY, Highly to Moderately Plastic, Thin (1" to 2" Thick) Clayey Sand Lenses
120										121.9 Brown to Tan Brown, Soft to Medum Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic 8.1
										120.0 10.0
										Boring Terminated at Elevation 120.0 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.6'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_7100	**STATION** 71+00	**OFFSET** 11 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 126.1 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 973,815	**EASTING** 2,398,470	**24 HR.** 7.8
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/15/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
130										
										126.1 GROUND SURFACE 0.0
										125.6 0.5' Topsoil 0.5
125	125.1	1.0	5	6	7	13		M		**UNDIVIDED COASTAL PLAIN** Tan Brown to Reddish Brown to Gray, Stiff to Medium Stiff, Fine Sandy CLAY, Slightly Plastic
	122.6	3.5	5	6	7	13		M		
120	120.1	6.0	3	3	5	8				118.3 7.8
	117.6	8.5	3	5	5	10		M		Red to Gray, Stiff, Silty CLAY, Highly Plastic, Thin (1" to 2" Thick) Sand Lenses 116.1 10.0
										Boring Terminated at Elevation 116.1 ft in Undivided Coastal Plain Material: Silty CLAY

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_7300	**STATION** 73+00	**OFFSET** 30 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 123.9 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 974,007	**EASTING** 2,398,530	**24 HR.** 7.6
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/14/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
125										
	122.9	1.0	2	2	2	4	SS-13	24%		123.9 GROUND SURFACE 0.0
120	120.4	3.5	2	1	2	3		W		123.8 0.3' Topsoil 0.1
	117.9	6.0	2	2	3	5				**UNDIVIDED COASTAL PLAIN** Grayish Brown to Black, Soft to Medium Stiff, Clayey SILT, Slightly Plastic, Trace Organics 119.1 4.8
115	115.4	8.5	2	3	4	7		M		Gray, Medium Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic, Trace Gravel
										113.9 10.0
										Boring Terminated at Elevation 113.9 ft in Undivided Coastal Plain Material: Sandy CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_7300A	**STATION** 73+00	**OFFSET** 20 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 123.7 ft	**TOTAL DEPTH** 5.0 ft	**NORTHING** 974,009	**EASTING** 2,398,521	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/22/17	**COMP. DATE** 12/22/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
125										123.7 GROUND SURFACE 0.0
	122.7	1.0						M		**UNDIVIDED COASTAL PLAIN** Brown to Gray, Soft to Medium Stiff, Clayey SILT, Slightly Plastic
120	120.2	3.5	2	2	2	4		W		118.7 5.0
			1	2	1	3				Boring Terminated at Elevation 118.7 ft in Undivided Coastal Plain Material: Clayey SILT

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_7507	**STATION** 75+07	**OFFSET** 38 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 123.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 974,208	**EASTING** 2,398,581	**24 HR.** 10.0
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/19/17	**COMP. DATE** 12/19/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
125										123.0 GROUND SURFACE 0.0
	122.0	1.0	4	5	9	14		M		**UNDIVIDED COASTAL PLAIN** Red to Brown to Gray, Stiff to Medium Stiff, Coarse to Fine Sandy CLAY, Moderately to Highly Plastic
120	119.5	3.5	4	5	7	12		M		
	117.0	6.0	5	4	3	7		M		
115	114.5	8.5	3	3	3	6		M		
										110.8 12.2
110	109.5	13.5	1	1	1	2		Sat.		Brown, Soft, Coarse to Fine Sandy CLAY, Slightly Plastic 108.0 15.0
										Boring Terminated at Elevation 108.0 ft in Undivided Coastal Plain Material: Sandy CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_7705	**STATION** 77+05	**OFFSET** 34 ft RT	**ALIGNMENT** -L-	**0 HR.** 10.2
COLLAR ELEV. 119.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 974,403	**EASTING** 2,398,618	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/19/17	**COMP. DATE** 12/19/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
120										ELEV. (ft) 119.0 GROUND SURFACE DEPTH (ft) 0.0
	118.0	1.0	WOH	WOH	1	1		Sat.		**UNDIVIDED COASTAL PLAIN** Brown, Very Soft to Medium Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic
115	115.5	3.5	1	3	3	6		M		
	113.0	6.0	6	9	11	20		M		113.3 5.7 Brown to Red to Gray, Very Stiff to Soft, Coarse to Fine Sandy CLAY, Highly Plastic, Little Gravel
110	110.5	8.5	5	7	10	17		M		
105	105.5	13.5	2	2	2	4		Sat.		104.0 15.0 Boring Terminated at Elevation 104.0 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 9.0'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_7900	**STATION** 79+00	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** 5.6
COLLAR ELEV. 113.5 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 974,600	**EASTING** 2,398,625	**24 HR.** 5.2
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/14/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
115										113.5 0.0 GROUND SURFACE
	112.5	1.0	WOH	4	5	9		M		113.2 0.3 0.3' Topsoil
110	110.0	3.5	5	6	6	12		Sat.		112.0 1.5 **ROADWAY EMBANKMENT** Brown, Medium Stiff, Fine to Coarse Sandy CLAY, Slightly Plastic
	107.5	6.0	3	4	4	8		Sat.		**UNDIVIDED COASTAL PLAIN** Brown to Gray, Stiff to Medium Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic, Little Gravel and Cobbles
105	105.0	8.5	2	3	3	6		Sat.		
100	100.0	13.5	5	3	4	7		Sat.		99.2 14.3 98.5 15.0 Gray, Medium Stiff, Silty CLAY, Highly Plastic Boring Terminated at Elevation 98.5 ft in Undivided Coastal Plain Material: Silty CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_8100	**STATION** 81+00	**OFFSET** 52 ft LT	**ALIGNMENT** -L-	**0 HR.** 3.4
COLLAR ELEV. 109.6 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 974,807	**EASTING** 2,398,615	**24 HR.** 1.5
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/14/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
110										109.6 GROUND SURFACE	0.0
	108.6	1.0	1	1	1	2				109.4 0.2' Topsoil	0.2
							SS-14	18%		**ALLUVIAL**	
	106.1	3.5	3	4	5	9		W		106.4 Gray to Black, Very Loose, Silty Clayey Fine to Coarse SAND, Slightly Plastic, Trace Organics, Trace Gravel	3.2
105										Gray, Medium Stiff, Fine to Coarse Sandy CLAY, Slightly Plastic, Little Gravel, Trace Organics	
	103.6	6.0	3	2	2	4		Sat.		102.6 Note: Blow count influenced by gravel	7.0
	101.1	8.5	3	3	4	7		Sat.		99.6 **UNDIVIDED COASTAL PLAIN**	10.0
100										Brown, Medium Stiff, Fine to Coarse Sandy CLAY, Slightly Plastic	
										Boring Terminated at Elevation 99.6 ft in Undivided Coastal Plain Material: Sandy CLAY	

Other Samples:
O-2.3% (1.0 - 2.5)

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_8220	**STATION** 82+20	**OFFSET** 18 ft RT	**ALIGNMENT** -L-	**0 HR.** 2.3
COLLAR ELEV. 109.3 ft	**TOTAL DEPTH** 8.5 ft	**NORTHING** 974,909	**EASTING** 2,398,708	**24 HR.** 1.2
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/14/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
110										109.3 GROUND SURFACE	0.0
	108.3	1.0				1				108.7 0.6' Topsoil	0.6
			2	3	3	6		W		**ALLUVIAL**	
	105.8	3.5								Gray, Medium Stiff, Fine Sandy CLAY, Slightly Plastic	
105			1	1	1	2		W		104.9 **RESIDUAL**	4.4
	103.3	6.0	100/0.3			100/0.3				103.5 Brown to Gray, Soft, Silty CLAY, Moderately Plastic, Trace SAND	5.8
	100.8	8.5	60/0.0			60/0.0				100.8 **WEATHERED ROCK**	8.5
										METAMORPHOSED QUARTZ DIORITE	
										Boring Terminated with Standard Penetration Test Refusal at Elevation 100.8 ft on Crystalline Rock: METAMORPHOSED QUARTZ DIORITE	

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. CULV1_A	**STATION** 84+46	**OFFSET** 74 ft LT	**ALIGNMENT** -L-	**0 HR.** 8.6
COLLAR ELEV. 111.5 ft	**TOTAL DEPTH** 16.5 ft	**NORTHING** 975,154	**EASTING** 2,398,666	**24 HR.** 7.4
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/23/17	**COMP. DATE** 10/23/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
115										
										111.5 GROUND SURFACE 0.0
										ARTIFICIAL FILL Brown, Medium Dense, Clayey Silty Coarse to Fine SAND
110	108.0	3.5	5	6	7	13		D		
										105.0 6.5
105	103.0	8.5								**ALLUVIAL** Gray, Stiff to Very Stiff, Fine to Coarse Sandy CLAY, Moderately Plastic, Some Gravel, Trace Organics Note: Blow count influenced by gravel
			6	9	6	15		W		
100										99.1 12.4
	98.0	13.5								**RESIDUAL** Green to Brown, Very Stiff, Coarse to Fine Sandy Clayey SILT
			18	13	12	25		W		
95	95.0	16.5								95.0 16.5
			60/0.0			60/0.0				Boring Terminated with Standard Penetration Test Refusal at Elevation 95.0 ft on Crystalline Rock: METAMORPHOSED QUARZ DIORITE

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. CULV1_B	**STATION** 84+50	**OFFSET** 50 ft RT	**ALIGNMENT** -L-	**0 HR.** 1.6
COLLAR ELEV. 104.6 ft	**TOTAL DEPTH** 14.9 ft	**NORTHING** 975,128	**EASTING** 2,398,787	**24 HR.** 1.4
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Rod Sounding	**HAMMER TYPE** N/A	
DRILLER N/A	**START DATE** 10/20/17	**COMP. DATE** 10/20/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
105										104.6 GROUND SURFACE 0.0
			WOH	1		1		M		103.7 **ALLUVIAL** 0.9
			WOH	WOH		0		M		Brown to Black, Loose, Clayey Fine SAND, Highly Organic, Trace Gravel
			1	WOH		1				100.0 Gray to Black, Very Soft to Soft, Fine Sandy CLAY, Highly Organic, Slightly Plastic 4.6
100			1	2		3		Sat.		
			2	3		5				97.3 Gray, Medium Dense, Clayey Fine SAND, Little Organics 7.3
			6	4		10		Sat.		
			8	5		13				**RESIDUAL** Green to Brown, Very Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic
95			9	11		20		Sat.		
			10	13		23				
			10	11		21		Sat.		
			7	10		17				
			16	17		33				
90			15	36		51				
			36	29		65				
			36	42/0.4		100/0.9				89.7 14.9
			60/0.0			60/0.0				Boring Terminated at Elevation 89.7 ft on Crystalline Rock: METAMORPHOSED QUARZ DIORITE
										Note: Rod sounding blow counts are not equivalent to SPT blow counts

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_8700LT	**STATION** 87+00	**OFFSET** 103 ft LT	**ALIGNMENT** -L-	**0 HR.** 11.3
COLLAR ELEV. 116.3 ft	**TOTAL DEPTH** 25.0 ft	**NORTHING** 975,409	**EASTING** 2,398,698	**24 HR.** 11.5
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/14/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
120										
115	115.3	1.0	WOH	2	2	4		M		116.3 GROUND SURFACE 0.0 **ARTIFICIAL FILL** Red to Black, Soft to Medium Stiff, Fine Sandy CLAY, Slightly Plastic, Trace Organics` (Odor and Wood Fragments)
	112.8	3.5	2	2	2	4		M		
110	110.3	6.0	2	2	2	4		M		
	107.8	8.5	3	1	1	2	SS-15	14%		108.1 8.2 **ALLUVIAL** Gray to Black, Very Loose, Silty Fine to Coarse SAND, Trace Organics
105	102.8	13.5	9	10	13	23		Sat.		103.6 12.7 Gray, Medium Dense, Clayey Fine to Coarse SAND, Some Gravel and Cobbles Note: Blow count influenced by gravel and cobbles
100	97.8	18.5	1	2	2	4	SS-16	19%		99.0 17.3 Brown, White, and Black, Loose, Fine to Coarse SAND, Trace Clay and Silt
95	92.8	23.5	4	5	9	14		W		94.2 22.1 **UNDIVIDED COASTAL PLAIN** Brown, Medium Dense, Clayey Fine to Coarse SAND, Slightly Plastic, Trace Gravel 91.3 25.0 Boring Terminated at Elevation 91.3 ft in Undivided Coastal Plain: Clayey SAND

Other Samples:
O-1.5% (8.5 - 10.0)

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. L_8700RT	**STATION** 87+00	**OFFSET** 78 ft RT	**ALIGNMENT** -L-	**0 HR.** 2.3
COLLAR ELEV. 106.3 ft	**TOTAL DEPTH** 17.5 ft	**NORTHING** 975,360	**EASTING** 2,398,872	**24 HR.** 1.9
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/14/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
110										
105	105.3	1.0	4	4	6	10				106.3 GROUND SURFACE 0.0 106.0 0.4' Topsoil
	102.8	3.5	5	6	5	11		Sat.		**ALLUVIAL** Brown to Tan Brown, Stiff to Very Soft, Fine to Coarse Sandy CLAY, Slightly Plastic, Little Gravel and Cobbles Note: Blow counts influenced by gravel and cobbles
100	100.3	6.0	1	1	0	1		Sat.		
	97.8	8.5	4	5	6	11		Sat.		97.1 9.2 **UNDIVIDED COASTAL PLAIN** Tan Brown, Medium Dense, Clayey Fine to Coarse SAND, Slightly Plastic
95	92.8	13.5	1	1	1	2		Sat.		93.4 12.9 **RESIDUAL** Brown to Green to White, Soft, Fine Sandy Silty CLAY, Moderately Plastic
90	88.8	17.5	60/0.0			60/0.0				89.8 16.5 88.8 17.5 **WEATHERED ROCK** METAMORPHOSED QUARTZ DIORITE Boring Terminated with Standard Penetration Test Refusal at Elevation 88.8 ft on Crystalline Rock: METAMORPHOSED QUARTZ DIORITE

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_1600	**STATION** 16+00	**OFFSET** 36 ft RT	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 158.5 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 968,057	**EASTING** 2,397,349	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/19/17	**COMP. DATE** 12/19/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
160										158.5 GROUND SURFACE 0.0
	157.5	1.0						M		**UNDIVIDED COASTAL PLAIN** Brown to Red to Gray, Medium Stiff to Very Stiff, Silty Fine Sandy CLAY, Slightly to Moderately Plastic
155	155.0	3.5	3	3	5	8		M		
	152.5	6.0	3	5	5	10		M		
			8	9	14	23		M		
150	150.0	8.5	6	9	12	21		M		148.5 10.0
										Boring Terminated at Elevation 148.5 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 5.9'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_1823	**STATION** 18+23	**OFFSET** 31 ft LT	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 159.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 968,178	**EASTING** 2,397,548	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/19/17	**COMP. DATE** 12/19/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
160										159.0 GROUND SURFACE 0.0
	158.0	1.0						W		**UNDIVIDED COASTAL PLAIN** Brown, Very Loose, Silty Coarse to Fine SAND, Trace Clay 156.0 3.0
155	155.5	3.5	WOH	1	2	3		M		Brown to Red to Gray, Medium Stiff to Very Stiff, Fine Sandy Silty CLAY, Moderately to Highly Plastic
	153.0	6.0	3	4	6	10		M		
			5	6	9	15		M		
150	150.5	8.5	3	4	5	9		M		
										144.7 14.3
145	145.5	13.5	4	3	3	6		M		144.0 15.0 Brown, Medium Stiff, Fine Sandy Clayey SILT
										Boring Terminated at Elevation 144.0 ft in Undivided Coastal Plain Material: Clayey SILT
										Cave-In at 10.5'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_2000	**STATION** 20+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 155.9 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 968,235	**EASTING** 2,397,715	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/19/17	**COMP. DATE** 12/19/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
160										
										ELEV. (ft) 155.9 GROUND SURFACE — DEPTH (ft) 0.0
155	154.9	1.0	2	2	2	4		W		**UNDIVIDED COASTAL PLAIN** Brown, Loose, Silty Coarse to Fine SAND, Trace Clay
	152.4	3.5	4	4	4	8		M		152.8 — 3.1 Brown, Loose, Clayey Fine SAND, Slightly Plastic
150	149.9	6.0	4	5	7	12		M		150.3 — 5.6 Gray, Stiff, Coarse to Fine Sandy CLAY, Highly Plastic
	147.4	8.5	4	5	6	11		M		145.9 — 10.0 Boring Terminated at Elevation 145.9 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 6.2'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_2270	**STATION** 22+70	**OFFSET** 3 ft LT	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 154.1 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 968,426	**EASTING** 2,397,904	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/09/17	**COMP. DATE** 11/09/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
155										
	153.1	1.0	3	5	6	11		M		154.1 — 0.0 GROUND SURFACE 153.2 — 0.9 0.9' Topsoil
150	150.6	3.5	4	5	5	10		M		**UNDIVIDED COASTAL PLAIN** Gray to Red, Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
	148.1	6.0	4	6	6	12		M		148.8 — 5.3 Gray to Red, Stiff, Fine Sandy CLAY, Slightly Plastic
145	145.6	8.5	3	4	6	10		M		144.1 — 10.0 Boring Terminated at Elevation 144.1 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 7.5'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_2400	**STATION** 24+00	**OFFSET** 32 ft RT	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 157.3 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 968,502	**EASTING** 2,398,014	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/09/17	**COMP. DATE** 11/09/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
160										ELEV. (ft) DEPTH (ft)
										157.3 GROUND SURFACE 0.0
	156.3	1.0								**UNDIVIDED COASTAL PLAIN**
155			2	1	2	3		M		Brown to Tan Brown, Very Loose to Loose, Coarse to Fine SAND
	153.8	3.5	2	2	3	5	SS-17	6%		
	151.3	6.0	4	5	4	9		M		150.8 6.5
150	148.8	8.5								Brown, Stiff, Fine Sandy CLAY, Slightly Plastic
			4	4	7	11		M		147.3 10.0
										Boring Terminated at Elevation 147.3 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.6'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_2619	**STATION** 26+19	**OFFSET** 50 ft LT	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 158.4 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 968,713	**EASTING** 2,398,117	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/08/17	**COMP. DATE** 11/08/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
160										
										158.4 GROUND SURFACE 0.0
	157.4	1.0								**UNDIVIDED COASTAL PLAIN**
155			7	7	6	13	SS-18	10%		Brown to Tan Brown, Medium Dense to Dense, Clayey Coarse to Fine SAND
	154.9	3.5	5	6	10	16		M		
	152.4	6.0	10	14	16	30		M		150.6 7.8
150	149.9	8.5								Gray, Stiff, Fine Sandy CLAY, Slightly Plastic
			8	6	6	12		M		148.4 10.0
										Boring Terminated at Elevation 148.4 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.8'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_2800	**STATION** 28+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 150.8 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 968,783	**EASTING** 2,398,292	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/08/17	**COMP. DATE** 11/08/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft) DEPTH (ft)
155										
150	149.8	1.0	2	2	1	3		M		150.8 GROUND SURFACE 0.0 150.2 0.6' Topsoil 0.6
	147.3	3.5	3	3	2	5		M		**ARTIFICIAL FILL** Brown, Very Loose, Silty Coarse to Fine SAND 146.5 4.3
145	144.8	6.0	4	5	6	11		M		**UNDIVIDED COASTAL PLAIN** Gray to Brown, Medium Stiff to Stiff, Fine Sandy CLAY, Slightly Plastic
	142.3	8.5	4	4	4	8		M		140.8 10.0 Boring Terminated at Elevation 140.8 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 7.6'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_3016	**STATION** 30+16	**OFFSET** 10 ft LT	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 146.3 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 968,927	**EASTING** 2,398,453	**24 HR.** 6.7
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/07/17	**COMP. DATE** 11/07/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
150										
145	145.3	1.0	4	6	5	11		M		146.3 GROUND SURFACE 0.0 **ARTIFICIAL FILL** 144.3 Reddish Brown, Stiff, Silty Fine Sandy CLAY, Trace Gravel, Slightly Plastic 2.0
	142.8	3.5	4	6	8	14		M		141.7 Gray, Medium Stiff, Fine Sandy CLAY, Trace Organics 4.6
140	140.3	6.0	3	3	3	6				140.6 5.7 Gray to Dark Brown, Medium Dense, Clayey Fine SAND, Trace Organics 138.2 8.1
	137.8	8.5	3	3	3	6		M		Dark Brown to Gray, Moist, Medium Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic 136.3 10.0 **UNDIVIDED COASTAL PLAIN** Tan Brown to Red with Gray, Medium Stiff, Fine Sandy CLAY, Moderately Plastic Boring Terminated at Elevation 136.3 ft in Undivided Coastal Plain Material: Sandy CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_3200	**STATION** 32+00	**OFFSET** 30 ft RT	**ALIGNMENT** -L1-	**0 HR.** 8.0
COLLAR ELEV. 141.2 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 969,042	**EASTING** 2,398,603	**24 HR.** 7.5
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/07/17	**COMP. DATE** 11/07/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
										141.2	0.0
										GROUND SURFACE	
										140.5	0.7
										0.7' Topsoil	
										UNDIVIDED COASTAL PLAIN	
										138.0	3.2
										Brown to Tan Brown, Medium Dense, Clayey Fine SAND	
										Tan Brown and Brown, Stiff to Soft, Coarse to Fine Sandy CLAY, Slightly Plastic	
140	140.2	1.0	5	9	7	16		D			
	137.7	3.5	4	6	7	13		M			
135	135.2	6.0	2	2	3	5					
	132.7	8.5	2	1	1	2		M			
130										129.1	12.1
	127.7	13.5	WOH	1	3	4	SS-19	38%		Red with Gray, Soft to Medium Stiff, Silty Coarse to Fine Sandy CLAY, Moderately Plastic	
										126.2	15.0
										Boring Terminated at Elevation 126.2 ft in Undivided Coastal Plain Material: Sandy CLAY	

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_3400	**STATION** 34+00	**OFFSET** 34 ft RT	**ALIGNMENT** -L1-	**0 HR.** 2.6
COLLAR ELEV. 134.7 ft	**TOTAL DEPTH** 25.0 ft	**NORTHING** 969,220	**EASTING** 2,398,708	**24 HR.** 1.8
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/07/17	**COMP. DATE** 11/07/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										134.7 GROUND SURFACE 0.0
										ALLUVIAL
										Black to Gray, Very Soft, Clayey Fine to Coarse Sandy SILT, Trace Organics
135	133.7	1.0	WOH	WOH	WOH	0	SS-20	24% W		
	131.2	3.5	WOH	WOH	WOH	0		Sat.		
130	128.7	6.0	1	1	0	1				128.1 6.6
	126.2	8.5	1	1	1	2	SS-21	31%		**UNDIVIDED COASTAL PLAIN**
125										Tan Brown, Very Loose to Loose, Clayey Fine to Coarse SAND
	121.2	13.5	1	1	0	1		Sat.		
120										
	116.2	18.5	WOH	1	0	1		Sat.		
115										
	111.2	23.5	1	2	2	4		W		109.7 25.0
110										Boring Terminated at Elevation 109.7 ft in Undivided Coastal Plain Material: Clayey SAND

Other Samples:
O-1.4% (1.0 - 2.5)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_3600	**STATION** 36+00	**OFFSET** 20 ft RT	**ALIGNMENT** -L1-	**0 HR.** 5.8
COLLAR ELEV. 138.4 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 969,413	**EASTING** 2,398,768	**24 HR.** 5.8
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/07/17	**COMP. DATE** 11/07/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft) / DEPTH (ft)
140										
	137.4	1.0								138.4 GROUND SURFACE 0.0 137.7 0.7' Topsoil 0.7
135	134.9	3.5	2	6	8	14	SS-22	19%		**UNDIVIDED COASTAL PLAIN** Brown with Gray, Very Stiff to Soft, Coarse Sandy CLAY, Highly Plastic, Trace Roots Near Top
	132.4	6.0	4	7	8	15		Sat.		
130	129.9	8.5	2	2	2	4		Sat.		
			2	2	3	5				128.4 10.0 Boring Terminated at Elevation 128.4 ft in Undivided Coastal Plain Material: Sandy CLAY

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_3800	**STATION** 38+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 137.1 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 969,607	**EASTING** 2,398,820	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/07/17	**COMP. DATE** 11/07/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
140										
										137.1 GROUND SURFACE 0.0
	136.1	1.0								136.1 1.0' Topsoil 1.0
135	133.6	3.5	5	9	12	21		D		**UNDIVIDED COASTAL PLAIN** Brown to Gray, Very Stiff, Silty Fine Sandy CLAY, Slightly Plastic
	131.1	6.0	5	8	8	16		D		131.5 5.6
130	128.6	8.5	3	6	9	15		M		Brown to Gray, Very Stiff to Stiff, Fine Sandy Silty CLAY, Moderately Plastic
			3	5	7	12		M		127.1 10.0 Boring Terminated at Elevation 127.1 ft in Undivided Coastal Plain Material: Silty CLAY Cave-In at 7.8'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_3900	**STATION** 39+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** 6.7
COLLAR ELEV. 134.3 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 969,700	**EASTING** 2,398,856	**24 HR.** 4.6
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/07/17	**COMP. DATE** 11/07/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
135										ELEV. (ft) 134.3 GROUND SURFACE — DEPTH (ft) 0.0
								M		**UNDIVIDED COASTAL PLAIN** Brown to Gray, Stiff to Very Stiff, Silty Fine Sandy CLAY, Slightly to Moderately Plastic
130										
								W		
125										122.3 — 12.0
										Brown, Very Loose to Loose, Clayey Fine SAND
120								Sat.		
115										114.3 — 20.0
										Boring Terminated at Elevation 114.3 ft in Undivided Coastal Plain Material: Clayey SAND

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_4000	**STATION** 40+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** 3.5
COLLAR ELEV. 131.0 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 969,794	**EASTING** 2,398,892	**24 HR.** 2.4
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/06/17	**COMP. DATE** 11/06/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
135										131.0 GROUND SURFACE 0.0
	130.0	1.0	1	3	3	6				129.3 **ALLUVIAL** MUCK 1.7
130	127.5	3.5	2	3	5	8	SS-23	21%		**UNDIVIDED COASTAL PLAIN** Greenish Brown to Red to Gray, Medium Stiff to Stiff, Silty Fine Sandy CLAY, Moderately Plastic
	125.0	6.0	WOH	WOH	WOH	0		W		125.7 5.3
125	122.5	8.5	WOH	WOH	WOH	0		W		Gray, Very Soft, Clayey Coarse to Fine Sandy SILT
	117.5	13.5	WOH	WOH	WOH	0		Sat.		117.1 13.9
120	112.5	18.5	2	2	3	5		Sat.		Gray, Very Loose to Loose, Clayey Coarse to Fine SAND, Slightly Plastic
115										111.0 20.0
										Boring Terminated at Elevation 111.0 ft in Undivided Coastal Plain Material: Clayey SAND

Other Samples:
ST-1 (8.3 - 10.1)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_4097	**STATION** 40+97	**OFFSET** 15 ft RT	**ALIGNMENT** -L1-	**0 HR.** 10.7
COLLAR ELEV. 137.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 969,879	**EASTING** 2,398,940	**24 HR.** 7.6
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/06/17	**COMP. DATE** 11/06/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
140										
										137.0 GROUND SURFACE 0.0
135										135.5 **UNDIVIDED COASTAL PLAIN** Brown to Black, Dry, Loose to Medium Dense, Silty Fine SAND, Trace Clay 1.5
										Brown to Tan Brown, Dry to Moist, Medium Dense, Fine SAND, Trace Clay
130										130.5 Brown to Gray, Moist, Medium Stiff, Silty CLAY, Highly Plastic 6.5
125										126.0 Brown and Gray, Wet, Very Soft, Fine Sandy CLAY, Slightly Plastic 11.0
										122.0 Boring Terminated at Elevation 122.0 ft in Undivided Coastal Plain Material: Sandy CLAY 15.0

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_4200	**STATION** 42+00	**OFFSET** 30 ft RT	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 136.1 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 969,970	**EASTING** 2,398,991	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/06/17	**COMP. DATE** 11/06/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
140										
135	135.1	1.0	9	6	6	12		D		136.1 GROUND SURFACE 0.0
	132.6	3.5	5	4	7	11		D		134.8 1.3' Topsoil 1.3
130	130.1	6.0	3	4	6	10		M		132.8 **UNDIVIDED COASTAL PLAIN** Greenish Brown to Gray, Medium Dense, Clayey Fine SAND 3.3
	127.6	8.5	3	4	7	11		M		Gray to Brown, Stiff, Fine Sandy CLAY, Highly Plastic
										127.1 9.0
										126.1 Brown to Reddish Brown, Stiff, Fine Sandy CLAY, Slightly Plastic 10.0
										Boring Terminated at Elevation 126.1 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.3'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_4400	**STATION** 44+00	**OFFSET** 20 ft RT	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 138.5 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 970,161	**EASTING** 2,399,053	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/07/17	**COMP. DATE** 11/07/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
140											
	137.5	1.0								138.5 GROUND SURFACE	0.0
										137.8 0.7' Topsoil	0.7
			3	4	8	12		D		**UNDIVIDED COASTAL PLAIN** Greenish Brown with Red, Stiff to Very Stiff, Fine Sandy CLAY, Slightly Plastic	
135	135.0	3.5	5	11	13	24		D			
	132.5	6.0								133.0	5.5
			2	4	6	10	SS-24	35%		Greenish Brown to Red to Gray, Stiff, Silty CLAY, Highly Plastic, Trace SAND	
130	130.0	8.5	3	4	6	10		M		128.5	10.0
										Boring Terminated at Elevation 128.5 ft in Undivided Coastal Plain Material: Silty CLAY	
										Cave-In at 6.5'	

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_4600	**STATION** 46+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 140.5 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 970,355	**EASTING** 2,399,105	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/06/17	**COMP. DATE** 11/06/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
145											
										140.5 GROUND SURFACE	0.0
140	139.5	1.0								139.4 1.1' Topsoil	1.1
			6	14	15	29		D		**UNDIVIDED COASTAL PLAIN** Brown to Reddish Brown with Gray, Very Stiff, Fine Sandy CLAY, Slightly Plastic	
	137.0	3.5	8	10	14	24		D			
135	134.5	6.0								134.9	5.6
			4	6	9	15		M		Greenish Brown to Gray, Very Stiff to Stiff, Silty CLAY, Highly Plastic	
	132.0	8.5	4	5	7	12		M		130.5	10.0
										Boring Terminated at Elevation 130.5 ft in Undivided Coastal Plain Material: Silty CLAY	
										Cave-In at 7.1'	

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_4800	**STATION** 48+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 143.2 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 970,542	**EASTING** 2,399,176	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
145										
	142.2	1.0	1	4	4	8		M		143.2 GROUND SURFACE 0.0 **UNDIVIDED COASTAL PLAIN** Tan Brown to Red, Medium Stiff to Stiff, Fine Sandy CLAY, Slightly Plastic
140	139.7	3.5	4	6	8	14		M		
	137.2	6.0	4	5	8	13		M		137.5 5.7 Gray to Red to Brown, Stiff, Silty Coarse to Fine Sandy CLAY, Moderatelty Plastic
135	134.7	8.5	7	7	6	13		M		
130	129.7	13.5	4	5	7	12		M		128.2 15.0 Boring Terminated at Elevation 128.2 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 10.1'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_5000	**STATION** 50+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 141.7 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 970,728	**EASTING** 2,399,248	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
145										
	140.7	1.0	2	3	4	7		M		141.7 GROUND SURFACE 0.0 **UNDIVIDED COASTAL PLAIN** Tan Brown, Medium Stiff to Stiff, Fine Sandy CLAY, Slightly Plastic
140	138.2	3.5	4	5	8	13		M		
	135.7	6.0	4	5	7	12		M		136.3 5.4 Gray to Red to Brown, Stiff to Very Stiff, Silty Coarse to Fine Sandy CLAY, Moderately Plastic
135	133.2	8.5	5	6	13	19		M		
130	128.2	13.5	5	6	7	13		M		126.7 15.0 Boring Terminated at Elevation 126.7 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 10.9'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_5200	**STATION** 52+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 139.3 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 970,913	**EASTING** 2,399,325	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
140										139.3 GROUND SURFACE 0.0
	138.3	1.0	3	5	6	11		M		**UNDIVIDED COASTAL PLAIN** Tan Brown to Brown to Red, Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic
135	135.8	3.5	4	6	8	14		M		
	133.3	6.0	4	6	7	13		M		131.5 7.8
130	130.8	8.5	4	6	8	14		M		129.3 Tan Brown to Gray to Red, Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic 10.0
										Boring Terminated at Elevation 129.3 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 6.8'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_5400	**STATION** 54+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 135.1 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 971,094	**EASTING** 2,399,409	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
140										
135	134.1	1.0	3	4	5	9		M		135.1 GROUND SURFACE 0.0 **UNDIVIDED COASTAL PLAIN** Tan Brown, Stiff. Fine Sandy CLAY, Slightly Plastic
	131.6	3.5	4	5	7	12		M		
130	129.1	6.0	4	6	6	12		M		129.6 5.5 Tan Brown to Brown to Red to Gray, Medium Dense, Silty Clayey Fine SAND, Slightly Plastic
	126.6	8.5	4	7	6	13		M		125.1 10.0 Boring Terminated at Elevation 125.1 ft in Undivided Coastal Plain Material: Clayey SAND
										Cave-In at 5.6'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_5600	**STATION** 56+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** 9.0
COLLAR ELEV. 131.6 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 971,273	**EASTING** 2,399,499	**24 HR.** 8.1
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
135										
										131.6 GROUND SURFACE 0.0
130	130.6	1.0	2	2	2	4		M		**UNDIVIDED COASTAL PLAIN** Tan Brown to Gray, Soft to Stiff, Fine Sandy CLAY, Slightly Plastic
	128.1	3.5	2	3	2	5		W		
125	125.6	6.0	3	3	5	8				123.6 8.0
	123.1	8.5	4	5	7	12		M		Gray to Light Gray to Tan Brown, Medium Dense to Very Loose, Clayey Coarse to Fine SAND, Slightly Plastic
120										
	118.1	13.5	1	1	1	2		Sat.		116.6 15.0
										Boring Terminated at Elevation 116.6 ft in Undivided Coastal Plain Material: Clayey SAND

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_5800	**STATION** 58+00	**OFFSET** 20 ft RT	**ALIGNMENT** -L1-	**0 HR.** 9.5
COLLAR ELEV. 133.7 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 971,438	**EASTING** 2,399,613	**24 HR.** 10.0
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
135										
										133.7 GROUND SURFACE 0.0
	132.7	1.0	4	5	9	14		M		**UNDIVIDED COASTAL PLAIN** Tan Brown to Gray to Red, Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic
130	130.2	3.5	7	8	6	14		M		
	127.7	6.0	4	5	6	11		M		
125	125.2	8.5	3	4	5	9				123.3 10.4
										Tan Brown to Gray, Loose, Clayey Fine to Coarse SAND, Slightly Plastic
120	120.2	13.5	3	3	3	6		Sat.		118.7 15.0
										Boring Terminated at Elevation 118.7 ft in Undivided Coastal Plain Material: Clayey SAND

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_6000	**STATION** 60+00	**OFFSET** 20 ft LT	**ALIGNMENT** -L1-	**0 HR.** 11.0
COLLAR ELEV. 134.8 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 971,630	**EASTING** 2,399,682	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
135										ELEV. (ft) 134.8 GROUND SURFACE DEPTH (ft) 0.0
	133.8	1.0	4	5	6	11		M		**UNDIVIDED COASTAL PLAIN** Brown to Red to Gray, Stiff to Medium Stiff, Fine Sandy CLAY, Moderately Plastic
130	131.3	3.5	3	6	7	13		M		
	128.8	6.0	4	5	7	12		M		
125	126.3	8.5	3	5	7	12				
	121.3	13.5	1	2	3	5		Sat.		119.8 15.0
120										Boring Terminated at Elevation 119.8 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 11.3'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_6200	**STATION** 62+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 130.2 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 971,787	**EASTING** 2,399,808	**24 HR.** 10.1
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
135										
130	129.2	1.0	5	6	7	13		M		130.2 GROUND SURFACE 0.0 **UNDIVIDED COASTAL PLAIN** Brown, Stiff to Very Stiff, Fine Sandy CLAY, Slightly Plastic
	126.7	3.5	5	7	8	15		M		
125	124.2	6.0	4	6	8	14		M		124.7 5.5 Red to Gray to Brown, Stiff, Coarse to Fine Sandy Silty CLAY, Moderately Plastic
	121.7	8.5	3	4	5	9				
120	116.7	13.5	3	5	8	13		M		115.2 15.0 Boring Terminated at Elevation 115.2 ft in Undivided Coastal Plain Material: Silty CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_6400	**STATION** 64+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** 11.2
COLLAR ELEV. 126.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 971,952	**EASTING** 2,399,921	**24 HR.** 7.5
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft) DEPTH (ft)
130										
125	125.0	1.0	3	4	6	10		M		126.0 GROUND SURFACE 0.0 **UNDIVIDED COASTAL PLAIN** Brown to Red, Stiff, Fine Sandy CLAY, Slightly Plastic
	122.5	3.5	3	4	7	11		M		
120	120.0	6.0	3	4	8	12				120.3 5.7 Brown to Red, Medium Dense, Clayey Fine to Coarse SAND
	117.5	8.5	3	5	20	25		W		116.5 9.5 Brown to Red, Medium Dense, Silty Fine to Coarse SAND and GRAVEL 115.0 11.0 *Blow Count Influenced by Gravel
115	112.5	13.5	3	9	13	22		W		Brown, Very Stiff, CLAY, Highly Plastic, Some Gravel 111.0 15.0 *Blow Count Influenced by Gravel Boring Terminated at Elevation 111.0 ft in Undivided Coastal Plain Material: CLAY

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_6600	**STATION** 66+00	**OFFSET** 20 ft RT	**ALIGNMENT** -L1-	**0 HR.** 7.3
COLLAR ELEV. 120.4 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 972,105	**EASTING** 2,400,051	**24 HR.** 6.4
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
125										
120	119.4	1.0	2	4	4	8		M		120.4 GROUND SURFACE 0.0 **UNDIVIDED COASTAL PLAIN** Brown, Loose, Silty Coarse to Fine SAND
	116.9	3.5	4	4	3	7		M		116.4 4.0 Brown to Gray, Medium Stiff to Soft, Fine Sandy CLAY, Slightly Plastic
115	114.4	6.0	2	2	1	3				112.3 8.1 Black to Brown, Loose, Clayey Fine to Coarse SAND, Slightly Plastic, Some Gravel
	111.9	8.5	4	3	2	5		Sat.		
110	106.9	13.5	2	2	3	5		Sat.		105.4 15.0 Boring Terminated at Elevation 105.4 ft in Undivided Coastal Plain Material: Clayey SAND

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_6800	**STATION** 68+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 124.5 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 972,281	**EASTING** 2,400,148	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft) / DEPTH (ft)
125										124.5 GROUND SURFACE 0.0
	123.5	1.0	2	4	6	10		M		**UNDIVIDED COASTAL PLAIN** Brown to Red, Stiff, Fine Sandy Silty CLAY, Moderately Plastic
120	121.0	3.5	5	6	8	14		M		119.2 5.3 Brown, Medium Stiff to Stiff, Fine to Coarse Sandy CLAY, Slightly Plastic
	118.5	6.0	4	4	4	8		M		
115	116.0	8.5	3	4	6	10		M		114.5 10.0 Boring Terminated at Elevation 114.5 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 6.2'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_7000	**STATION** 70+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 122.1 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 972,443	**EASTING** 2,400,266	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
125										122.1 GROUND SURFACE 0.0
	121.1	1.0	2	3	5	8		M		**UNDIVIDED COASTAL PLAIN** Brown, Medium Stiff, Fine to Coarse Sandy CLAY, Slightly Plastic
120	118.6	3.5	3	4	7	11		M		118.9 3.2 Brown, Medium Dense, Clayey Silty Fine to Coarse SAND, Some Gravel
	116.1	6.0	10	11	9	20		M		
115	113.6	8.5	5	11	9	20		M		114.0 8.1 Brown, Medium Dense, Clayey Fine to Coarse SAND, Slightly Plastic 112.1 10.0 Boring Terminated at Elevation 112.1 ft in Undivided Coastal Plain Material: Clayey SAND Cace-In at 7.0'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_7200	**STATION** 72+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** 7.3
COLLAR ELEV. 120.2 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 972,594	**EASTING** 2,400,397	**24 HR.** 7.8
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
125											
120										120.2 GROUND SURFACE	0.0
	119.2	1.0	2	2	2	4		M		**UNDIVIDED COASTAL PLAIN** Brown, Soft to Stiff, Fine to Coarse Sandy CLAY, Slightly Plastic	
	116.7	3.5	3	6	8	14		M			
115	114.2	6.0	3	3	4	7				114.7 Brown, Loose to Very Loose, Silty Clayey Fine to Coarse SAND, Slightly Plastic, Little Gravel	5.5
	111.7	8.5	5	4	3	7		Sat.			
110											
	106.7	13.5	3	2	1	3		Sat.		105.2 Boring Terminated at Elevation 105.2 ft in Undivided Coastal Plain Material: Clayey SAND	15.0

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_7400	**STATION** 74+00	**OFFSET** 10 ft RT	**ALIGNMENT** -L1-	**0 HR.** 6.8
COLLAR ELEV. 117.3 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 972,724	**EASTING** 2,400,548	**24 HR.** 5.2
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
120										
										117.3 GROUND SURFACE 0.0
115	116.3	1.0	3	3	3	6		M		**UNDIVIDED COASTAL PLAIN** Brown, Medium Stiff, Fine to Coarse Sandy CLAY, Slightly Plastic
	113.8	3.5	3	3	4	7				
110	111.3	6.0	1	1	1	2		Sat.		111.7 White to Brown, Clayey Fine to Coarse SAND, Slightly Plastic 5.6
	108.8	8.5	1	2	2	4		Sat.		
105	103.8	13.5	1	3	3	6		W		104.7 Brown, Medium Stiff, CLAY, Some Gravel, Highly Plastic *Blow Count Influenced by Gravel 12.6
100	98.8	18.5	3	4	3	7		Sat.		97.3 Boring Terminated at Elevation 97.3 ft in Undivided Coastal Plain Material: CLAY 20.0

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_7600	**STATION** 76+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** 10.4
COLLAR ELEV. 112.4 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 972,861	**EASTING** 2,400,694	**24 HR.** 8.2
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
115										
	111.4	1.0	4	4	4	8		M		112.4 GROUND SURFACE 0.0 **UNDIVIDED COASTAL PLAIN** Red to Brown, Medium Stiff to Stiff, Silty Fine Sandy CLAY, Slightly Plastic
110	108.9	3.5	4	5	6	11		M		
	106.4	6.0	3	5	5	10				106.9 5.5 Red to Brown, Stiff to Soft, Fine to Coarse Sandy CLAY, Moderately to Highly Plastic
105	103.9	8.5	3	2	3	5		W		
100	98.9	13.5	1	2	2	4		W		
95	93.9	18.5	1	2	2	4		Sat.		92.4 20.0 Boring Terminated at Elevation 92.4 ft in Undivided Coastal Plain Material: Sandy CLAY

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_7800	**STATION** 78+00	**OFFSET** CL	**ALIGNMENT** -L1	**0 HR.** 7.0
COLLAR ELEV. 106.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 972,992	**EASTING** 2,400,845	**24 HR.** 6.8
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
110										
	105.0	1.0	5	7	7	14		M		106.0 GROUND SURFACE 0.0 **UNDIVIDED COASTAL PLAIN** Brown to Red, Stiff, Coarse to Fine Sandy Clay, Slightly Plastic
105	102.5	3.5	4	5	5	10		M		
	100.0	6.0	2	3	3	6				100.2 5.8 Brown to Red, Loose, Clayey Fine to Coarse SAND, Slightly Plastic
100	97.5	8.5	2	1	2	3		Sat.		97.0 9.0 Red to Brown, Soft to Medium Stiff, Clay, Highly Plastic, with 2 to 3 Inch Sand Lenses
95	92.5	13.5	2	2	3	5		Sat.		91.0 15.0 Boring Terminated at Elevation 91.0 ft in Undivided Coastal Plain Material: CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_8000	**STATION** 80+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 101.3 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 973,135	**EASTING** 2,400,985	**24 HR.** 3.7
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft) DEPTH (ft)
105										
										101.3 GROUND SURFACE 0.0
										100.1 **ARTIFICIAL FILL** 1.2 Brown, Fine Sandy CLAY (Cultivated Field)
100	100.3	1.0	3	2	2	4		M		**ALLUVIAL** Black, Medium Stiff, Fine Sandy Clayey SILT, Highly Organic
	97.8	3.5	2	3	3	6		W		95.8 5.5
95	95.3	6.0	1	1	1	2		W		**UNDIVIDED COASTAL PLAIN** Brown to Gray, Soft, Fine Sandy CLAY, Trace Organics, Slightly Plastic
	92.8	8.5	WOH	1	1	2		Sat.		91.3 10.0
										Boring Terminated at Elevation 91.3 ft in Undivided Coastal Plain Material: Sandy CLAY

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_8216	**STATION** 82+16	**OFFSET** 46 ft RT	**ALIGNMENT** -L1-	**0 HR.** 4.0
COLLAR ELEV. 97.6 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 973,277	**EASTING** 2,401,157	**24 HR.** 1.2
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
100										
										97.6 GROUND SURFACE 0.0
	96.6	1.0						W		96.5 Topsoil 1.1
95			2	2	2	4		W		**UNDIVIDED COASTAL PLAIN** Brown to Gray, Soft to Medium Stiff, Fine to Coarse Sandy CLAY, Slightly Plastic
	94.1	3.5	1	2	3	5		Sat.		90.0 7.6
90	91.6	6.0	1	2	1	3		Sat.		Brown to Gray, Very Soft to Medium Stiff, Coarse to Fine Sandy CLAY, Little Gravel, Highly Plastic
	89.1	8.5	1	0	1	1				
85	84.1	13.5	1	2	3	5		Sat.		82.6 15.0
										Boring Terminated at Elevation 82.6 ft in Undivided Coastal Plain Material: Sandy CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_8400	**STATION** 84+00	**OFFSET** 10 ft RT	**ALIGNMENT** -L1-	**0 HR.** 4.1
COLLAR ELEV. 97.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 973,454	**EASTING** 2,401,227	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/22/17	**COMP. DATE** 12/22/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
										97.0	0.0
										GROUND SURFACE	
	96.0	1.0								**UNDIVIDED COASTAL PLAIN**	
			2	1	2	3		M		Brown, Very Loose, Silty Coarse to Fine SAND, Trace Clay	2.0
	93.5	3.5								95.0	
			4	7	3	10		M		Tan Brown, Soft to Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic, Little Gravel	5.6
	91.0	6.0								91.4	
			WOH	1	1	2		W		Gray, Soft, Clay, Highly Plastic, Trace Sand	
	88.5	8.5								88.0	9.0
			2	8	12	20		Sat.		Brown to Gray, Medium Dense, Clayey Fine to Coarse SAND, Slightly Plastic, Little Gravel	
	83.5	13.5								82.0	15.0
			4	5	6	11		Sat.		Boring Terminated at Elevation 82.0 ft in Undivided Coastal Plain Material: Clayey SAND	

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_8600	**STATION** 86+00	**OFFSET** 30 ft LT	**ALIGNMENT** -L1-	**0 HR.** 4.6
COLLAR ELEV. 96.7 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 973,649	**EASTING** 2,401,283	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/22/17	**COMP. DATE** 12/22/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										96.7 GROUND SURFACE 0.0
	95.7	1.0								**UNDIVIDED COASTAL PLAIN**
			5	5	8	13		M		Brown, Medium Dense, Silty Coarse to Fine SAND, Little Gravel 2.0
	93.2	3.5								94.7
			9	11	10	21		M		Brown, Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic, Little Gravel 3.2
	90.7	6.0								93.5
			1	2	1	3		Sat.		Brown, Medium Dense, Clayey Coarse to Fine SAND and GRAVEL 5.3
	88.2	8.5								91.4
			1	2	1	3		Sat.		Brown to White, Very Loose, Clayey Fine to Coarse SAND, Slightly Plastic, Some Gravel
	83.2	13.5								
			WOH	1	0	1		Sat.		
	78.2	18.5								79.2 17.5
			5	7	8	15				**RESIDUAL**
								W		Green to Black to White, Stiff to Very Stiff, Fine Sandy Clayey SILT 20.0
										76.7
										Boring Terminated at Elevation 76.7 ft in Residual: Clayey SILT

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Long, B.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_8800	**STATION** 88+00	**OFFSET** 30 ft RT	**ALIGNMENT** -L1-	**0 HR.** 7.8
COLLAR ELEV. 94.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 973,813	**EASTING** 2,401,411	**24 HR.** 6.1
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/25/17	**COMP. DATE** 10/25/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
95										94.0 GROUND SURFACE	0.0
	93.0	1.0	2	2	2	4		M		**UNDIVIDED COASTAL PLAIN** Gray, Loose, Clayey Coarse to Fine SAND, Slightly Plastic 91.6	2.4
90	90.5	3.5	3	4	19	23		M		Gray to Brown, Very Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic, Little Gravel Note: Blow count influenced by gravel 88.0	6.0
	88.0	6.0	3	4	4	8		M		Gray, Loose, Clayey Coarse to Fine SAND, Slightly Plastic 85.6	8.4
85	85.5	8.5	3	1	1	2	SS-25	50%		Tan to Gray, Soft to Stiff, Silty CLAY, Highly Plastic, Trace Sand	
80	80.5	13.5	2	4	5	9		M		79.0 Boring Terminated at Elevation 79.0 ft in Undivided Coastal Plain Material: Silty CLAY	15.0

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Long, B.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_9000	**STATION** 90+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** 8.7
COLLAR ELEV. 96.5 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 974,015	**EASTING** 2,401,437	**24 HR.** 8.8
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/25/17	**COMP. DATE** 10/25/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
100										96.5 GROUND SURFACE 0.0
	95.5	1.0	41	17	23	40	SS-26	7%		**UNDIVIDED COASTAL PLAIN** Tan to Brown, Dense, Clayey Fine to Coarse SAND, Some Gravel
95	93.0	3.5	20	21	16	37		D		91.0 5.5
	90.5	6.0	3	3	3	6		M		Gray to Tan, Medium Stiff, Coarse to Fine Sandy CLAY, Slighlty Plastic, Trace Gravel 88.3 8.2
90	88.0	8.5	3	2	2	4		Sat.		Tan, Loose, Silty Coarse to Fine SAND
	83.0	13.5	2	1	2	3		W		83.0 13.5 Gray, Soft to Very Stiff, Fine Sandy CLAY, Slightly Plastic, Little Gravel Note: Blow count influenced by gravel
85	78.0	18.5	5	15	2	17		W		76.5 20.0 Boring Terminated at Elevation 76.5 ft in Undivided Coastal Plain Material: Sandy CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Long, B.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_9200	**STATION** 92+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 96.0 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 974,212	**EASTING** 2,401,472	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/25/17	**COMP. DATE** 10/25/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
100										
										96.0 GROUND SURFACE 0.0
95	95.0	1.0	3	4	5	9 15		M		**UNDIVIDED COASTAL PLAIN** Tan to Brown to Orange, Loose to Medium Dense, Clayey Fine to Coarse SAND, Slightly Plastic
	92.5	3.5	8	8	7			M		
90	90.0	6.0	7	7	5	12		M		
	87.5	8.5	5	6	5	11		M		86.0 10.0
										Boring Terminated at Elevation 86.0 ft in Undivided Coastal Plain Material: Clayey SAND
										Cave-In at 6.3'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Long, B.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_9400	**STATION** 94+00	**OFFSET** 10 ft RT	**ALIGNMENT** -L1-	**0 HR.** 8.3
COLLAR ELEV. 90.3 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 974,411	**EASTING** 2,401,497	**24 HR.** 5.7
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/25/17	**COMP. DATE** 10/25/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
95										
										90.3 GROUND SURFACE 0.0
90	89.3	1.0	3	2	1	3		D		**UNDIVIDED COASTAL PLAIN** Black to Brown, Soft, Coarse to Fine Sandy Silt,
	86.8	3.5	2	4	5	9				86.9 3.4
85	84.3	6.0	2	3	3	6	SS-27	11%		Gray to Orange to Tan, Loose, Clayey Fine to Coarse SAND, Slightly Plastic, Some Gravel
	81.8	8.5	3	2	2	4		W		80.3 10.0
80										**RESIDUAL** Brown, Hard, Fine Sandy SILT
	76.8	13.5	11	15	29	44		D		75.3 15.0
										Boring Terminated at Elevation 75.3 ft in Residual: Sandy SILT
										Other Samples: O-1.2% (3.5 - 5.0)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Long, B.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_9600	**STATION** 96+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 88.7 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 974,611	**EASTING** 2,401,497	**24 HR.** 9.4
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers		**HAMMER TYPE** Automatic
DRILLER Meatyard, C.	**START DATE** 10/25/17	**COMP. DATE** 10/25/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
90										ELEV. (ft) DEPTH (ft)
										88.7 GROUND SURFACE 0.0
	87.7	1.0	6	8	8	16		D		**UNDIVIDED COASTAL PLAIN** Tan to Gray to Orange, Stiff to Very Stiff, Fine Sandy CLAY, Slightly Plastic
85	85.2	3.5	8	9	7	16		D		
	82.7	6.0	3	4	6	10		M		
80	80.2	8.5	5	7	10	17				
75	75.2	13.5	8	8	12	20		M		73.7 15.0
										Boring Terminated at Elevation 73.7 ft in Undivided Coastal Plain Material: Sandy CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Bridge on Premier Boulevard Extension Over Chockoyotte Creek				**GROUND WTR (ft)**
BORING NO. EB1-A	**STATION** 97+13	**OFFSET** 32 ft LT	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 85.2 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 974,726	**EASTING** 2,401,470	**24 HR.** 7.4
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/25/17	**COMP. DATE** 10/25/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
90										
85										85.2 GROUND SURFACE 0.0
	81.7	3.5	7	6	6	12		D		**ALLUVIAL** Tan to Gray, Stiff, Coarse to Fine Sandy CLAY, Little Gravel, Slightly Plastic
80										77.6 7.6
	76.7	8.5	1	2	3	5		M		**RESIDUAL** Gray to Tan with Reddish Orange Mottling, Medium Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic
	75.2	10.0	60/0.0			60/0.0				75.2 10.0
										Boring Terminated with Standard Penetration Test Refusal at Elevation 75.2 ft on Crystalline Rock: METAMORPHOSED QUARTZ DIORITE

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Bridge on Premier Boulevard Extension Over Chockoyotte Creek				**GROUND WTR (ft)**
BORING NO. EB1-A1	**STATION** 97+13	**OFFSET** 37 ft LT	**ALIGNMENT** -L1-	**0 HR.** 5.4
COLLAR ELEV. 86.0 ft	**TOTAL DEPTH** 11.9 ft	**NORTHING** 974,726	**EASTING** 2,401,465	**24 HR.** 6.5
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/27/17	**COMP. DATE** 10/27/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
90										
85										86.0 GROUND SURFACE 0.0
										ALLUVIAL Tan to Gray, Stiff, Coarse to Fine Sandy CLAY, Little Gravel, Slightly Plastic
80										78.4 7.6
										RESIDUAL Gray to Tan with Reddish Orange Mottling, Medium Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic
75	74.1	11.9	60/0.0			60/0.0				76.5 9.5 74.1 11.9 **WEATHERED ROCK** METAMORPHOSED QUARTZ DIORITE
										Boring Terminated with Standard Penetration Test Refusal at Elevation 74.1 ft on Crystalline Rock: METAMORPHOSED QUARTZ DIORITE

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Bridge on Premier Boulevard Extension Over Chockoyotte Creek				**GROUND WTR (ft)**
BORING NO. EB1-B	**STATION** 97+13	**OFFSET** 32 ft RT	**ALIGNMENT** -L1-	**0 HR.** 19.6
COLLAR ELEV. 84.9 ft	**TOTAL DEPTH** 26.3 ft	**NORTHING** 974,723	**EASTING** 2,401,534	**24 HR.** 7.6
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/25/17	**COMP. DATE** 10/25/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
85										84.9 GROUND SURFACE	0.0
	81.4	3.5	14	25	29	54		W		**ALLUVIAL** Tan, Medium Dense to Very Dense, Silty Coarse to Fine SAND with Gravel and Cobbles Note: Blow count influenced by gravel and cobbles	
80										78.4	6.5
	76.4	8.5	9	13	13	26		M		Gravel and Cobbles	
75										76.9	8.0
	71.4	13.5	10	13	13	26		M		**RESIDUAL** Orange to Brown, Very Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic	
70										67.8	17.1
	66.4	18.5	15	36	37	73		M		White and Brown, Hard, Coarse to Fine Sandy SILT	
65										62.1	22.8
	61.4	23.5	66	44/0.3		100/0.8				**WEATHERED ROCK** METAMORPHOSED QUARTZ DIORITE	
60	58.7	26.2	60/0.1			60/0.1				58.7 58.6	26.2 26.3
										CRYSTALLINE ROCK METAMORPHOSED QUARTZ DIORITE Boring Terminated with Standard Penetration Test Refusal at Elevation 58.6 ft in Crystalline Rock: METAMORPHOSED QUARTZ DIORITE	

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Long, B.	
SITE DESCRIPTION Bridge on Premier Boulevard Extension Over Chockoyotte Creek				**GROUND WTR (ft)**
BORING NO. EB1-C	**STATION** 97+17	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 86.2 ft	**TOTAL DEPTH** 22.4 ft	**NORTHING** 974,728	**EASTING** 2,401,502	**24 HR.** 8.2
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/25/17	**COMP. DATE** 10/25/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
90											
										86.2 GROUND SURFACE	0.0
85										**ALLUVIAL** Tan to Gray, Moist, Coarse to Fine Sandy CLAY, Little Gravel, Slightly Plastic	
										81.2	5.0
80										Tan, Wet, Medium Dense to Very Dense, Silty, Coarse to Fine SAND with Gravel and Cobbles	
										78.1	8.1
75										77.2 Gravel and Cobbles	9.0
										RESIDUAL Gray to Tan to Orange Brown with Reddish Orange Mottling, Moist, Medium Stiff to Very Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic	
70										71.4	14.8
										White and Brown, Moist, Hard, Coarse to Fine Sandy SILT	
65										68.3	17.9
	63.8	22.4	60/0.0			60/0.0				**WEATHERED ROCK** METAMORPHOSED QUARTZ DIORITE	
										63.8	22.4
										Boring Terminated with Standard Penetration Test Refusal at Elevation 63.8 ft on Crystalline Rock: METAMORPHOSED QUARTZ DIORITE	

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Bridge on Premier Boulevard Extension Over Chockoyotte Creek				**GROUND WTR (ft)**
BORING NO. EB2-A	**STATION** 101+23	**OFFSET** 32 ft LT	**ALIGNMENT** -L1-	**0 HR.** 4.8
COLLAR ELEV. 86.2 ft	**TOTAL DEPTH** 19.8 ft	**NORTHING** 975,135	**EASTING** 2,401,489	**24 HR.** 1.6
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/17/17	**COMP. DATE** 10/17/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
										86.2	0.0
										GROUND SURFACE	
										ALLUVIAL Black and Gray, Soft to Medium Stiff, Silty CLAY with Gravel, Highly Organic, Slightly Plastic, Trace Sand	
	82.7	3.5	2	5	6	11		M		83.2	3.0
										RESIDUAL Orange Brown to Gray, Stiff to Very Stiff, Coarse to Fine Sandy Silty CLAY, Slightly Plastic	
	77.7	8.5	7	11	13	24		W		75.9	10.3
										Brown and White, Medium Dense, Silty Coarse to Fine SAND	
	72.7	13.5	10	15	85/0.2	100/0.7				72.2	14.0
										WEATHERED ROCK Brown and White Metamorphosed Quartz Diorite	
	67.7	18.5	46	54/0.4						66.4	19.8
	66.4	19.8	60/0.0			100/0.9 60/0.0				Boring Terminated with Standard Penetration Test Refusal at Elevation 66.4 ft on Crystalline Rock: METAMORPHOSED QUARTZ DIORITE	

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Bridge on Premier Boulevard Extension Over Chockoyotte Creek				**GROUND WTR (ft)**
BORING NO. EB2-B	**STATION** 101+23	**OFFSET** 32 ft RT	**ALIGNMENT** -L1-	**0 HR.** 4.0
COLLAR ELEV. 87.1 ft	**TOTAL DEPTH** 38.7 ft	**NORTHING** 975,132	**EASTING** 2,401,553	**24 HR.** 1.1
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/16/17	**COMP. DATE** 10/16/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
										87.1	0.0
										GROUND SURFACE	
										1.5' Topsoil	
										85.6	1.5
										RESIDUAL Orange Brown to Light Brown, Medium Dense to Dense, Silty Coarse to Fine SAND, Little Rock Fragments	
	83.6	3.5	3	7	10	17		M			
	78.6	8.5	10	16	14	30		W			
	73.6	13.5	10	13	19	32		M			
	68.6	18.5	13	27	50	77		D			
	63.6	23.5	26	50	50/0.4	100/0.9					
	58.6	28.5	100/0.3			100/0.3					
	53.6	33.5	100/0.2			100/0.2					
	48.6	38.5	100/0.2			100/0.2					
										74.6	12.5
										Red to Greenish Brown, Hard, Fine Sandy Clayey SILT	
										64.2	22.9
										WEATHERED ROCK Greenish Brown METAMORPHOSED QUARTZ DIORITE	
										48.4	38.7
										Boring Terminated at Elevation 48.4 ft in Weathered Rock: METAMORPHOSED QUARTZ DIORITE	

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Bridge on Premier Boulevard Extension Over Chockoyotte Creek				**GROUND WTR (ft)**
BORING NO. EB2-C	**STATION** 101+23	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** 11.4
COLLAR ELEV. 87.3 ft	**TOTAL DEPTH** 31.2 ft	**NORTHING** 975,134	**EASTING** 2,401,521	**24 HR.** 2.2
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/17/17	**COMP. DATE** 10/17/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
90										87.3 GROUND SURFACE	0.0
85								▼		**ALLUVIAL** Black to Gray, Soft to Medium Stiff, Coarse to Fine Sandy Silty CLAY, Highly Organic, Slightly Plastic	
										84.3	3.0
80										**RESIDUAL** Orange Brown, Medium Stiff, Silty CLAY, Slightly Plastic	
										79.3	8.0
75										Orange Brown, Medium Dense, Clayey Silty Coarse to Fine SAND	
70											
65											
60										62.3	25.0
										Rock Fragments and Fine to Coarse SAND	
										60.3	27.0
	58.8	28.5	56	44/0.2		100/0.7				**WEATHERED ROCK** METAMORPHOSED QUARTZ DIORITE	
	56.1	31.2	60/0.0			60/0.0				56.1	31.2
										Boring Terminated with Standard Penetration Test Refusal at Elevation 56.1 ft on Crystalline Rock: METAMORPHOSED QUARTZ DIORITE	

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_10300	**STATION** 103+00	**OFFSET** CL	**ALIGNMENT** -L1-	**0 HR.** 2.3
COLLAR ELEV. 95.3 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 975,310	**EASTING** 2,401,530	**24 HR.** 1.6
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/23/17	**COMP. DATE** 10/23/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
100											
95										95.3 GROUND SURFACE	0.0
	94.3	1.0	20	18	11	29		M		**ARTIFICIAL FILL** Gray and Brown, Medium Dense, Clayey Fine to Coarse SAND and GRAVEL	
	91.8	3.5	4	4	2	6				92.2 Tan Brown, Medium Stiff, Fine to Coarse Sandy CLAY, Highly Plastic	3.1
90	89.3	6.0	2	1	1	2		Sat.		89.7 **UNDIVIDED COASTAL PLAIN** Gray and Brown, Very Loose, Clayey Fine to Coarse SAND, Slightly Plastic	5.6
	86.8	8.5	1	1	1	2		M		86.5 **RESIDUAL** Brown, Soft to Very Stiff, Silty Fine to Course Sandy CLAY, Highly Plastic	8.8
85	81.8	13.5	3	6	10	16	SS-28	18%		80.3 Boring Terminated at Elevation 80.3 ft in Residual: Sandy CLAY	15.0

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_10502	**STATION** 105+02	**OFFSET** 31 ft RT	**ALIGNMENT** -L1-	**0 HR.** Dry
COLLAR ELEV. 99.8 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 975,504	**EASTING** 2,401,580	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/23/17	**COMP. DATE** 10/23/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
100											
	98.8	1.0								99.8 GROUND SURFACE	0.0
			6	12	15	27		M		**ARTIFICIAL FILL** Reddish Brown, Medium Stiff to Stiff, Fine Sandy Clayey SILT, Slightly Plastic,Trace Gravel	
	96.3	3.5	7	4	6	10				97.8 / 96.7	2.0 / 3.1
95	93.8	6.0	7	5	4	9		M		94.3 Black to Brown, Medium Dense, Silty Fine to Coarse SAND	5.5
	91.3	8.5	3	4	4	8				91.6 **UNDIVIDED COASTAL PLAIN** Gray to Brown, Stiff, CLAY with Layers of Sand, Moderately Plastic, Trace Organics	8.2
90								M		89.8 Grayish Brown, Loose, Clayey Coarse to Fine SAND, Slightly Plastic	10.0
										Tan Brown to Gray, Medium Stiff to Stiff, Fine to Coarse Sandy CLAY, Slightly Plastic	
										Boring Terminated at Elevation 89.8 ft in Undivided Coastal Plain Material: Sandy CLAY	
										Cave-In at 7.3'	

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. L1_10700	**STATION** 107+00	**OFFSET** 34 ft RT	**ALIGNMENT** -L1-	**0 HR.** 5.4
COLLAR ELEV. 100.5 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 975,688	**EASTING** 2,401,638	**24 HR.** 5.4
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 10/23/17	**COMP. DATE** 10/23/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft) DEPTH (ft)
105										
100	99.5	1.0	5	5	8	13 15		M		100.5 0.0 GROUND SURFACE **ARTIFICIAL FILL** 0.3' Stone
	97.0	3.5	5	7	8					97.2 3.3 Reddish Brown, Medium Dense, Clayey Coarse to Fine SAND, Slightly Plastic **UNDIVIDED COASTAL PLAIN**
95	94.5	6.0	1	1	3	4		Sat.		Gray to Brown, Very Stiff to Soft, Coarse to Fine Sandy Silty CLAY with Sand Layers, Slightly to Moderately Plastic
	92.0	8.5	2	2	2	4		Sat.		91.0 9.5 Gray to Brown, Soft to Medium Stiff, Coarse to Fine Sandy Silty CLAY with Sand Layers, Moderately to Highly Plastic
90	87.0	13.5	2	3	3	6		M		86.5 14.0 85.5 15.0 Black, Medium Stiff, Fine Sandy CLAY, Moderately Plastic, Trace Organics Boring Terminated at Elevation 85.5 ft in Undivided Coastal Plain Material: Sandy CLAY

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Premier Boulevard Extension from NC 125 to South of US 158				**GROUND WTR (ft)**
BORING NO. Y1_1089	**STATION** 10+89	**OFFSET** 15 ft LT	**ALIGNMENT** -Y1-	**0 HR.** Dry
COLLAR ELEV. 157.2 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 968,258	**EASTING** 2,397,867	**24 HR.** 11.1
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/19/17	**COMP. DATE** 12/19/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
160										
155	156.2	1.0	3	3	3	6		M		157.2 0.0 GROUND SURFACE **UNDIVIDED COASTAL PLAIN**
	153.7	3.5	4	5	10	15		M		154.8 2.4 Brown, Loose, Silty Coarse to Fine SAND, Trace Clay White, Loose to Medium Dense, Fine SAND, Trace Silt
150	151.2	6.0	4	4	5	9		M		150.6 6.6 Gray to Brown, Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic
	148.7	8.5	5	5	6	11		M		
145	143.7	13.5	2	3	2	5		M		145.0 12.2 Gray, Medium Stiff, Clay, Highly Plastic, with 1 to 2 Inch Sand Lenses 142.2 15.0 Boring Terminated at Elevation 142.2 ft in Undivided Coastal Plain Material: CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y3_1300	**STATION** 13+00	**OFFSET** CL	**ALIGNMENT** -Y3-	**0 HR.** Dry
COLLAR ELEV. 153.2 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 972,330	**EASTING** 2,398,182	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/15/17	**COMP. DATE** 11/15/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
155										
	152.2	1.0	8	11	17	28		D		153.2 GROUND SURFACE 0.0
150	149.7	3.5	6	11	12	23		D		152.9 0.3' Topsoil 0.3
	147.2	6.0	6	8	10	18	SS-29	16%		**UNDIVIDED COASTAL PLAIN** Brown to Red, Very Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
145	144.7	8.5	5	7	9	16		M		143.2 10.0
										Boring Terminated at Elevation 143.2 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.8'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y3_1500	**STATION** 15+00	**OFFSET** 20 ft LT	**ALIGNMENT** -Y3-	**0 HR.** Dry
COLLAR ELEV. 150.5 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 972,296	**EASTING** 2,398,381	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/15/17	**COMP. DATE** 11/15/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION (ELEV. (ft) / DEPTH (ft))
155										
	149.5	1.0	4	7	9	16		M		150.5 GROUND SURFACE 0.0
150	147.0	3.5	6	12	13	25		M		**UNDIVIDED COASTAL PLAIN** Red to Brown, Very Stiff to Medium Stiff, Coarse to Fine Sandy CLAY, Moderately Plastic
	144.5	6.0	3	5	6	11		M		
145	142.0	8.5	3	4	4	8		M		140.5 10.0
										Boring Terminated at Elevation 140.5 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.9'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y3_1700	**STATION** 17+00	**OFFSET** CL	**ALIGNMENT** -Y3-	**0 HR.** Dry
COLLAR ELEV. 146.7 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 972,223	**EASTING** 2,398,568	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/15/17	**COMP. DATE** 11/15/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
150										
	145.7	1.0	4	5	6	11 17		M		146.7 GROUND SURFACE 0.0
145	143.2	3.5	6	7	10	7		M		**UNDIVIDED COASTAL PLAIN** Red to Brown to Gray, Very Stiff to Medium Stiff, Silty Coarse to Fine Sandy CLAY, Highly Plastic
	140.7	6.0	2	3	4	6		M		
140	138.2	8.5	2	3	3			M		136.7 10.0
										Boring Terminated at Elevation 136.7 ft in Undivided Coastal Plain Material: Sandy CLAY
										Cave-In at 7.0'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y3_1900	**STATION** 19+00	**OFFSET** CL	**ALIGNMENT** -Y3-	**0 HR.** Dry
COLLAR ELEV. 142.2 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 972,169	**EASTING** 2,398,761	**24 HR.** 11.6
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/15/17	**COMP. DATE** 11/15/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
145										142.2 GROUND SURFACE 0.0
	141.2	1.0	4	5	7	12		M		**UNDIVIDED COASTAL PLAIN** Brown to Red, Stiff to Very Stiff, Silty Coarse to Fine Sandy CLAY, Highly Plastic
140	138.7	3.5	4	6	9	15		M		
	136.2	6.0	4	7	10	17	SS-30	27%		
135	133.7	8.5	4	6	7	13		M		
	128.7	13.5	4	4	5	9		M		127.2 15.0
130										Boring Terminated at Elevation 127.2 ft in Undivided Coastal Plain Material: Sandy CLAY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y3_2100	**STATION** 21+00	**OFFSET** 10 ft RT	**ALIGNMENT** -Y3-	**0 HR.** Dry
COLLAR ELEV. 136.4 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 972,106	**EASTING** 2,398,951	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/15/17	**COMP. DATE** 11/15/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
140										
										136.4 GROUND SURFACE 0.0
										135.9 0.5' Topsoil 0.5
135	135.4	1.0	3	5	6	11		M		**UNDIVIDED COASTAL PLAIN** Gray to Red with Brown, Siff to Very Stiff, Silty CLAY, Highly Plastic
	132.9	3.5	4	7	8	15		M		
130	130.4	6.0	4	6	8	14		M		
	127.9	8.5	5	7	8	15	SS-31	31%		
125	122.9	13.5	4	4	5	9		M		121.4 15.0 Boring Terminated at Elevation 121.4 ft in Undivided Coastal Plain Material: Silty CLAY Cave-In at 12.3'

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y3_2300	**STATION** 23+00	**OFFSET** 10 ft LT	**ALIGNMENT** -Y3-	**0 HR.** Dry
COLLAR ELEV. 134.4 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 972,072	**EASTING** 2,399,149	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/15/17	**COMP. DATE** 11/15/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
135										134.4 GROUND SURFACE 0.0
	133.4	1.0	3	2	1	3		M		**UNDIVIDED COASTAL PLAIN** Brown to Gray, Soft to Stiff, Fine Sandy CLAY, Moderately Plastic, Trace Organics in Upper 3'
	130.9	3.5	2	3	3	6		M		
130	128.4	6.0	4	5	7	12		M		
	125.9	8.5	3	4	5	9		M		124.4 10.0 Boring Terminated at Elevation 124.4 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 8.2'
125										

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y3_2500	**STATION** 25+00	**OFFSET** 10 ft LT	**ALIGNMENT** -Y3-	**0 HR.** Dry
COLLAR ELEV. 134.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 972,018	**EASTING** 2,399,341	**24 HR.** 12.7
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/15/17	**COMP. DATE** 11/15/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
										ELEV. (ft) DEPTH (ft)
135										
										134.0 GROUND SURFACE 0.0
	133.0	1.0	5	8	12	20		M		**UNDIVIDED COASTAL PLAIN** Gray to Red to Brown, Very Stiff, Fine Sandy Silty CLAY, Moderately Plastic
130	130.5	3.5	5	9	11	20		M		
	128.0	6.0	4	6	10	16		M		
125	125.5	8.5	5	8	9	17		M		126.0 8.0 Gray to Red to Brown, Very Stiff, Fine Sandy CLAY, Slightly Plastic
120	120.5	13.5	2	2	3	5		Sat.		119.5 14.5 119.0 Brown, Loose, Clayey Fine to Coarse SAND 15.0 Boring Terminated at Elevation 119.0 ft in Undivided Coastal Plain Material: Clayey SAND

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y3_2700	**STATION** 27+00	**OFFSET** CL	**ALIGNMENT** -Y3-	**0 HR.** Dry
COLLAR ELEV. 133.1 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 971,936	**EASTING** 2,399,525	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
135										
										133.1 GROUND SURFACE 0.0
	132.1	1.0	3	4	5	9		M		**UNDIVIDED COASTAL PLAIN** Brown to Red, Stiff to Very Stiff, Fine Sandy CLAY, Slightly Plastic
130	129.6	3.5	5	7	9	16		M		
	127.1	6.0	3	4	5	9		M		127.5 5.6 Gray to Red, Stiff, Fine Sandy Silty CLAY, Moderately Plastic
125	124.6	8.5	3	4	5	9		M		
120	119.6	13.5	3	4	7	11		M		118.1 15.0 Boring Terminated at Elevation 118.1 ft in Undivided Coastal Plain Material: Silty CLAY Cave-In at 11.2'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y3_2900	**STATION** 29+00	**OFFSET** 10 ft LT	**ALIGNMENT** -Y3-	**0 HR.** Dry
COLLAR ELEV. 129.7 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 971,838	**EASTING** 2,399,700	**24 HR.** 8.2
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 12/21/17	**COMP. DATE** 12/21/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft) / DEPTH (ft)
130										129.7 GROUND SURFACE 0.0
	128.7	1.0	3	4	5	9		M		**UNDIVIDED COASTAL PLAIN** Brown to Gray, Stiff to Very Stiff, Fine Sandy CLAY, Slightly Plastic
	126.2	3.5	3	7	10	17		M		
125	123.7	6.0	3	3	5	8				124.2 5.5 Gray to Brown, Medium Stiff to Stiff, Silty Fine Sandy CLAY, Moderately Plastic, with 2 to 3 Inch Fine to Coarse Sand Lenses
	121.2	8.5	4	3	4	7		M		
120										
	116.2	13.5	1	2	1	3		Sat.		115.7 14.0 114.7 Brown to Gray, Very Loose, Clayey Coarse to Fine SAND, Slightly Plastic 15.0 Boring Terminated at Elevation 114.7 ft in Undivided Coastal Plain Material: Clayey SAND
115										

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y4_1550	**STATION** 15+50	**OFFSET** 40 ft RT	**ALIGNMENT** -Y4-	**0 HR.** Dry
COLLAR ELEV. 118.7 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 975,558	**EASTING** 2,398,673	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/14/17	**COMP. DATE** 11/14/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
120										118.7 GROUND SURFACE 0.0
	117.7	1.0	2	3	4	7		M		**ROADWAY EMBANKMENT** 116.9 Red, Medium Stiff, Fine Sandy CLAY, Slightly Plastic 1.8
115	115.2	3.5	3	2	3	5	SS-32	12%		**ALLUVIAL** 113.5 Grayish Brown, Loose, Silty Clayey Coarse to Fine SAND, Some Gravel and Cobbles 5.2
	112.7	6.0	2	3	5	8		M		**UNDIVIDED COASTAL PLAIN** Brown, Medium Stiff to Very Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic, Trace Gravel
110	110.2	8.5	6	8	13	21		M		108.7 10.0 Boring Terminated at Elevation 108.7 ft in Undivided Coastal Plain Material: Sandy CLAY Cave-In at 7.7'

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y5_1050LT	**STATION** 10+50	**OFFSET** 30 ft LT	**ALIGNMENT** -Y5-	**0 HR.** 6.6
COLLAR ELEV. 144.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 968,938	**EASTING** 2,398,546	**24 HR.** 5.2
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/07/17	**COMP. DATE** 11/07/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
145											
										144.0	0.0
	143.0	1.0								143.6	0.4
			4	6	8	14		M		GROUND SURFACE	
140	140.5	3.5						21%		0.4' Topsoil	
			5	4	5	9	SS-33			**UNDIVIDED COASTAL PLAIN**	
	138.0	6.0								Brown to Tan Brown, Medium Dense to Very Loose, Clayey Fine to Coarse SAND, Moderately Plastic	
			1	1	1	2		W			
135	135.5	8.5									
			WOH	1	2	3		W			
										131.0	13.0
130	130.5	13.5								Tan Brown to Red, Medium Stiff, Silty CLAY, Highly Plastic	
			2	3	2	5		W		129.0	15.0
										Boring Terminated at Elevation 129.0 ft in Undivided Coastal Plain Material: Silty CLAY	

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y5_1059RT	**STATION** 10+59	**OFFSET** 40 ft RT	**ALIGNMENT** -Y5-	**0 HR.** 6.4
COLLAR ELEV. 144.5 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 968,880	**EASTING** 2,398,506	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER Meatyard, C.	**START DATE** 11/07/17	**COMP. DATE** 11/07/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
145										
										144.5 GROUND SURFACE 0.0
	143.5	1.0								143.6 0.4' Asphalt Over 0.5' ABC 0.9
			4	6	7	13		M		**ROADWAY EMBANKMENT**
140	141.0	3.5						M		Brown to Reddish Brown, Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic
			4	5	6	11				139.2 5.3
	138.5	6.0								**UNDIVIDED COASTAL PLAIN**
			2	3	2	5		Sat.		Tan Brown, Medium Stiff, Coarse to Fine Sandy CLAY, Slightly Plastic
	136.0	8.5								136.3 8.2
135			2	2	2	4		Sat.		Tan Brown, Loose, Clayey Fine SAND, Slightly Plastic
										134.5 10.0
										Boring Terminated at Elevation 134.5 ft in Undivided Coastal Plain Material: Clayey SAND

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50162.1.1 / 37765.1.5	**TIP** U-5725 / R-3822	**COUNTY** HALIFAX	**GEOLOGIST** Pastrana, C.R.	
SITE DESCRIPTION Widening of NC 125 from I-95 to Old Farm Road				**GROUND WTR (ft)**
BORING NO. Y6_1050LT	**STATION** 10+50	**OFFSET** 30 ft LT	**ALIGNMENT** -Y6-	**0 HR.** 5.8
COLLAR ELEV. 97.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 975,369	**EASTING** 2,401,589	**24 HR.** 5.4
DRILL RIG/HAMMER EFF./DATE AME9533 CME-550X 80% 12/15/2017		**DRILL METHOD** H.S. Augers		**HAMMER TYPE** Automatic
DRILLER Meatyard, C.	**START DATE** 10/23/17	**COMP. DATE** 10/23/17	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft) / DEPTH (ft)
100										97.0 / 0.0 GROUND SURFACE
	96.0	1.0	2	3	3	6		M		**ARTIFICIAL FILL** Brown to Black, Medium Stiff, Silty Coarse to Fine Sandy CLAY, Slightly Plastic, Moderately Organic
95	93.5	3.5	10	13	20	33				94.1 / 2.9
	91.0	6.0	1	3	2	5		M		**UNDIVIDED COASTAL PLAIN** Gray, Coarse to Fine Sandy CLAY, Slightly Plastic, Some Gravel, Trace Organics Note: Blow count influenced by gravel
90	88.5	8.5	WOH	1	2	3	SS-34	32%		91.5 / 5.5
										Gray, Medium Stiff, Silty Fine to Coarse Sandy CLAY, Moderately Plastic, Thin (1" to 2" Thick) Sand Lenses
85	83.5	13.5	7	9	9	18		M		84.8 / 12.2 **RESIDUAL** Reddish Brown to Brown, Very Stiff, Fine Sandy SILT, Saprolitic
										82.0 / 15.0 Boring Terminated at Elevation 82.0 ft in Residual: Sandy SILT

PROJECT REFERENCE NO.	SHEET NO.
U–5725/R–3822	265

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

APPENDIX B
SOIL TEST RESULTS

REFERENCE: U–5725/R–3822

PROJECT: 50162 /37765

ESP
ESP ASSOCIATES, PA
7011 ALBERT PICK RD
SUITE E
GREENSBORO, NC 27409
FIRM # C-0587
WWW.ESPASSOCIATES.COM

SOILS LABORATORY TESTS RESULTS

WBS NO.: 50162.1.1 / 37765.1.6

TIP NO.: U-5725 / R3822

COUNTY: HALIFAX

SITE DESCRIPTION: NC 125 (-L-) FROM I-95 TO OLD FARM ROAD AND PREMIER BOULEVARD EXTENSION (-L1-) FROM NC 125 TO SOUTH OF US 158

SAMPLE NO.	ALIGNMENT	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS	N	L.L	P.I.	% BY WEIGHT				% PASSING SIEVES			% MOISTURE	% ORGANIC
									CSE. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1	-L-	17+00	46' RT	3.5-5.0	A-2-6 (0)	5	32	16	46	25	7	22	100	83	30	15.5	-
SS-2	-L-	19+05	57' RT	1.0-2.5	A-2-4 (0)	7	NP	NP	41	42	4	13	100	91	19	7.5	-
SS-3	-L-	21+23	45' LT	3.5-5.0	A-6 (1)	7	33	15	28	37	6	29	99	93	37	16.0	-
SS-4	-L-	27+00	20' LT	3.5-5.0	A-7-6 (10)	16	49	29	17	35	7	41	98	90	49	21.8	-
SS-5	-L-	31+00	40' LT	3.5-5.0	A-7-6 (8)	20	46	24	18	32	10	40	94	90	49	25.7	-
SS-6	-L-	35+00	40' LT	6.0-7.5	A-7-6 (29)	19	67	43	8	28	10	54	100	99	69	23.3	-
SS-7	-L-	39+00	20' LT	1.0-2.5	A-6 (4)	18	39	19	30	30	8	32	100	83	44	11.9	-
SS-8	-L-	43+00	20' LT	13.5-15.0	A-2-6 (1)	7	38	14	13	53	7	27	100	99	35	21.8	-
SS-9	-L-	49+00	40' LT	3.5-5.0	A-6 (2)	20	38	12	12	47	7	34	100	98	43	18.7	-
SS-10	-L-	49+00	40' LT	8.5-10.0	A-2-5 (0)	10	42	10	66	10	8	16	99	53	25	13.2	-
SS-11	-L-	55+00	40' LT	3.5-5.0	A-7-6 (10)	16	48	26	23	28	9	40	100	91	51	21.0	-
SS-12	-L-	65+00	3' LT	6.0-7.5	A-7-6 (27)	16	55	34	6	21	26	47	100	98	79	21.8	-
SS-13	-L-	73+00	30' RT	1.0-2.5	A-4 (2)	4	21	5	3	20	53	24	100	98	84	23.8	-
SS-14	-L-	81+00	52' LT	1.0-2.5	A-2-6 (0)	2	26	11	42	27	13	18	79	57	27	18.1	2.3
SS-15	-L-	87+00	103' LT	8.5-10.0	A-2-4 (0)	2	NP	NP	50	27	15	8	86	62	24	13.8	1.5
SS-16	-L-	87+00	103' LT	18.5-20.0	A-2-4 (0)	4	NP	NP	69	20	6	5	89	52	11	19.4	-
SS-17	-L1-	24+00	32' RT	3.5-5.0	A-3 (1)	5	NP	NP	23	73	1	3	100	89	8	6.3	-
SS-18	-L1-	26+19	50' LT	1.0-2.5	A-2-4 (0)	13	23	9	29	41	6	24	100	93	33	9.9	-
SS-19	-L1-	32+00	30' RT	13.5-15.0	A-7-6 (15)	4	46	24	12	22	23	43	100	97	69	37.9	-
SS-20	-L1-	34+00	34' RT	1.0-2.5	A-4 (0)	0	26	10	44	21	13	22	99	76	37	23.8	1.4
SS-21	-L1-	34+00	34' RT	8.5-10.0	A-2-4 (0)	2	25	3	68	13	6	13	100	89	20	30.7	-
SS-22	-L1-	36+00	20' RT	1.0-2.5	A-7-5 (9)	14	76	39	52	8	5	35	99	61	40	18.6	-
SS-23	-L1-	40+00	CL	3.5-5.0	A-7-6 (16)	8	49	22	6	29	23	42	100	99	71	21.4	-
ST-1	-L1-	40+00	CL	8.3-10.1	A-4 (0)	N/A	22	4	31	35	13	21	100	90	38	27.8	-
SS-24	-L1-	44+00	20' RT	6.0-7.5	A-7-5 (44)	10	70	39	1	6	31	62	100	99	95	34.5	-
SS-25	-L1-	88+00	30' RT	8.5-10.0	A-7-6 (42)	2	63	42	6	3	34	57	100	97	91	50.1	-
SS-26	-L1-	90+00	CL	1.0-2.5	A-2-4 (0)	40	25	7	45	33	5	17	64	46	16	7.3	-
SS-27	-L1-	94+00	10' RT	3.5-5.0	A-2-6 (0)	9	32	13	67	13	7	13	71	32	16	11.1	1.2
SS-28	-L1-	103+00	CL	13.5-15.0	A-7-6 (14)	16	52	30	28	18	24	30	100	86	56	17.8	-
SS-29	-Y3-	13+00	CL	6.0-7.5	A-7-6 (4)	18	42	16	17	40	8	35	100	93	44	15.8	-
SS-30	-Y3-	19+00	CL	6.0-7.5	A-7-6 (25)	17	57	32	11	18	25	46	100	95	76	26.7	-
SS-31	-Y3-	21+00	10' RT	8.5-10.0	A-7-5 (52)	15	77	45	0	5	32	63	100	100	97	30.9	-
SS-32	-Y4-	15+50	40' RT	3.5-5.0	A-2-4 (0)	5	21	8	39	25	17	19	77	62	30	12.4	-
SS-33	-Y5-	10+50	30' LT	3.5-5.0	A-2-7 (0)	9	53	19	62	8	5	25	93	55	29	21.1	-
SS-34	-Y6-	10+50	30' LT	8.5-10.0	A-7-6 (4)	3	46	25	52	10	14	24	98	73	39	32.1	-

Signed:

NCDOT Certification No. 129-04-0411

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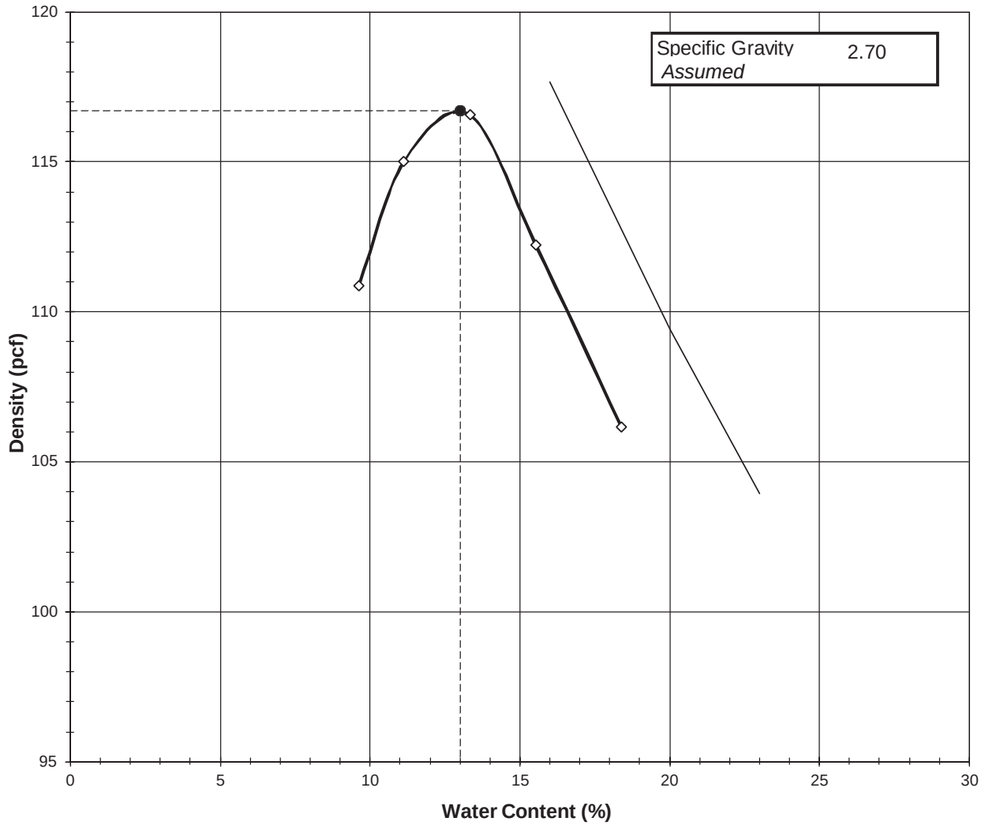
MOISTURE DENSITY RELATIONSHIP

AASHTO T99-10

Client:	ESP Associates	Boring No.:	36+00 25 LT
Client Reference:	R-3822 FQ32.300. Task 1	Depth (ft):	NA
Project No.:	R-2017-878-002	Sample No.:	CBR-1
Lab ID:	R-2017-878-002-001	Test Method	**STANDARD**

Visual Description: BROWN SILTY SANDY CLAY

Optimum Water Content **13.0**
Maximum Dry Density **116.7**



Tested By APG *Date* 12/20/17 *Checked By* GEM *Date* 1/2/18

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MOISTURE - DENSITY RELATIONSHIP

AASHTO T99-10

Client:	ESP Associates	Boring No.:	36+00 25 LT
Client Reference:	R-3822 FQ32.300. Task 1	Depth (ft):	NA
Project No.:	R-2017-878-002	Sample No.:	CBR-1
Lab ID:	R-2017-878-002-001		

Visual Description: BROWN SILTY SANDY CLAY

Total Weight of the Sample (g)	NA
As Received Water Content (%)	NA
Assumed Specific Gravity	2.70
Percent Retained on 3/4"	NA
Percent Retained on 3/8"	NA
Percent Retained on #4	0
Oversize Material	Not included
Procedure Used	B

Test Type		**STANDARD**
Rammer Weight (lb)		5.5
Rammer Drop (in)		12
Rammer Type		MECHANICAL
Machine ID	R	174
Mold ID	R	552
Mold diameter		4"
Weight of the Mold (g)		4243
Volume of the Mold (cm^3)		943

Mold / Specimen

Point No.	**1**	**2**	**3**	**4**	**5**
Wt. of Mold & Wet Sample (g)	6080	6175	6239	6202	6142
Wt.of Mold (g)	4243	4243	4243	4243	4243
Wt. of Wet Sample (g)	1837	1932	1997	1960	1900
Mold Volume (cm^3)	943	943	943	943	943

Moisture Content / Density

Tare Number	905	913	SS-3	904	SS-1
Wt. of Tare & Wet Sample (g)	523.10	506.90	505.60	539.10	633.10
Wt. of Tare & Dry Sample (g)	486.11	466.32	457.96	479.96	550.30
Wt. of Tare (g)	101.70	101.80	100.50	99.40	100.00
Wt. of Water (g)	36.99	40.58	47.64	59.14	82.80
Wt. of Dry Sample (g)	384.41	364.52	357.46	380.56	450.30
Wet Density (g/cm^3)	1.95	2.05	2.12	2.08	2.01
Wet Density (pcf)	121.5	127.8	132.1	129.7	125.7
Moisture Content (%)	**9.6**	**11.1**	**13.3**	**15.5**	**18.4**
Dry Density (pcf)	**110.9**	**115.0**	**116.6**	**112.2**	**106.2**

Zero Air Voids

Moisture Content (%)	16.0	20.0	23.0	
Dry Unit Weight (pcf)	117.7	109.4	103.9	

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SINGLE POINT CBR TEST
AASHTO T-193

Client	ESP Associates	Boring No.	36+00 25 LT
Client Reference	R-3822 FQ32.300, Task 1	Depth(ft.)	NA
Project No.	R-2017-878-002	Sample No.	CBR-1
Lab ID	R-2017-878-002-001	Visual Description	BROWN SILTY SANDY CLAY

Test Type	**STANDARD**
Molding Method	C
Mold ID	R354
Wt. of Mold (gm.)	4208.3
Mold Volume (cc)	2123
Surcharge (lbs.)	**15**
Piston Area (in^2)	3
Sample Height	4.58
Sample Conditions	Soaked
Blows per Layer	**56**

Density Measurement	**Before Soaking**	**After Soaking**
Wt. Mold & WS (gm.)	8734.1	8780.4
Wt. WS (gm.)	4525.8	4572
Sample Volume (cc)	2123	2120
Wet Density (gm./cc)	2.13	2.16
Wet Density (pcf)	133.0	134.6
Dry Density (pcf)	**118.0**	**119.1**
Dry Density (gm./cc)	**1.89**	**1.91**

Water Contents	**As Rec'd**	**Begining Compaction**	**After Compaction**	**Before Soaking**	**After Soaking**	**Top 1" After Soak**
Tare No.	906	812	SS-4		AF-05	BE-01
Wt. of T+WS (gm.)	361	387.72	393.61		983.22	649.33
Wt. of T+DS (gm.)	341.19	355.49	360.8		896.19	591.82
Wt of Tare (gm.)	102.37	106.65	99.22		228.16	228.15
Moisture Content(%)	8.3	13.0	12.5	12.7	13.0	15.8

Piston Displacement (in.)	**Load (lbs.)**	**Penetration Stress (psi.)**	**Swell Measurement**		
			Elapsed Time (hrs)	Dial Gauge (Div)	Percent Swell
0	2	0.7			
0.025	57	19.0			
0.050	124	41.3			
0.075	183	61.0			
0.100	229	76.3	0.00	396	0.00%
0.125	270	90.0	28.50	391	-0.11%
0.150	310	103.3	44.08	390	-0.13%
0.175	341	113.7			
0.200	375	125.0			
0.250	441	147.0			
0.300	506	168.7			
0.350	568	189.3			
0.400	625	208.3			
0.450	681	227.0			
0.500	732	244.0			
0.550	784	261.3			
0.600	829	276.3	**1Division =**	**0.001**	**in.**

Tested By *129-04-0411* *Date* *1/3/18* *Checked By* *GEM* *Date* 1/9/18

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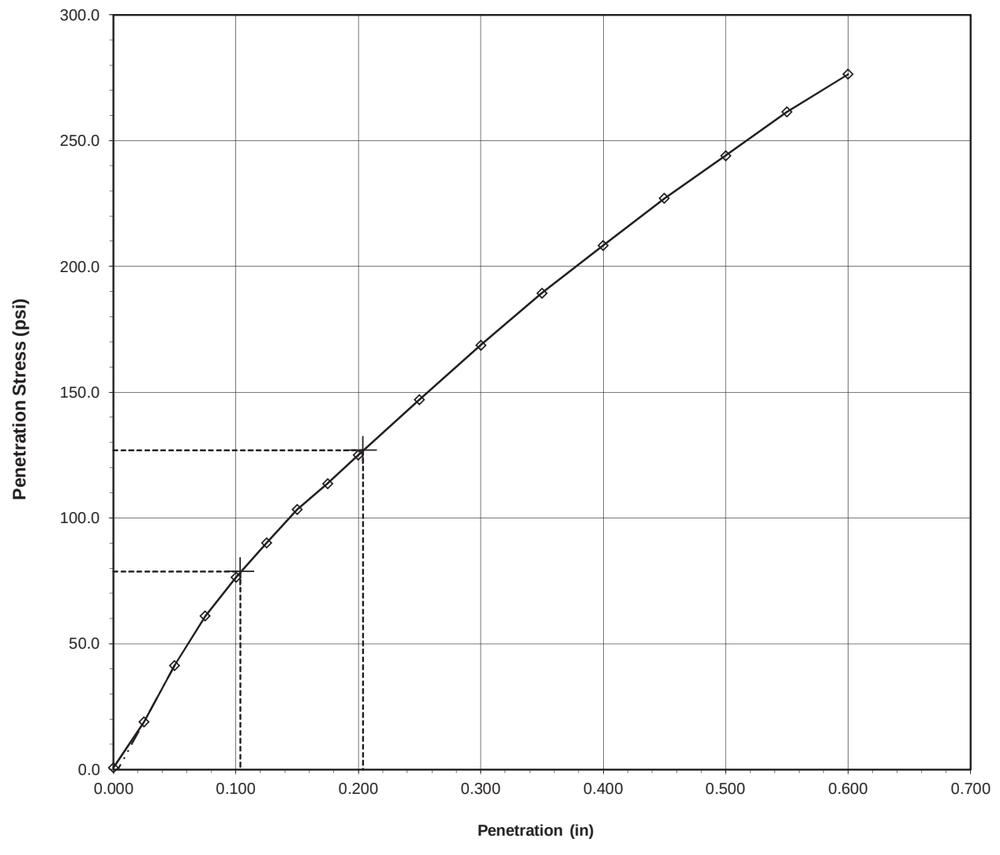
SINGLE POINT CBR TEST
AASHTO T-193

Client	ESP Associates	Boring No.	36+00 25 LT
Client Reference	R-3822 FQ32.300, Task 1	Depth(ft.)	NA
Project No.	R-2017-878-002	Sample No.	CBR-1
Lab ID	R-2017-878-002-001	Visual Description	BROWN SILTY SANDY CLAY

CBR VALUE (0.1")	**7.6 %**
CBR VALUE (0.2")	**8.3 %**
CORRECTED CBR VALUE (0.1")	**7.9 %**
CORRECTED CBR VALUE (0.2")	**8.5 %**

Penetration Stress vs. Penetration



Tested By *129-04-0411* *Date* *1/3/18* *Approved By* *MPS* *Date* 1/9/18

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January 11, 2018

Project No. R-2017-878-002

Mr. Paul Weaver, P.G.
ESP Associates, P.A.
7011 Albert Pick Rd., Suite E
Greensboro, NC 27409

pweaver@espassociates.com

Transmittal
Laboratory Test Results
R-3822 FQ32.300. Task 1

Please find attached the laboratory test results for the above referenced project. The tests were outlined on the Project Verification Form that was transmitted to your firm prior to the testing. The testing was performed in general accordance with the methods listed on the enclosed data sheets. The test results are believed to be representative of the samples that were submitted for testing and are indicative only of the specimens which were evaluated. We have no direct knowledge of the origin of the samples and imply no position with regard to the nature of the test results, i.e. pass/fail and no claims as to the suitability of the material for its intended use.

The test data and all associated project information provided shall be held in strict confidence and disclosed to other parties only with authorization by our Client. The test data submitted herein is considered integral with this report and is not to be reproduced except in whole and only with the authorization of the Client and Geotechnics. The remaining sample materials for this project will be retained for a minimum of 90 days as directed by the Geotechnics' Quality Program.

We are pleased to provide these testing services. Should you have any questions or if we may be of further assistance, please contact our office.

Respectively submitted,
Geotechnics, Inc.

Michael P. Smith
Regional Manager

We understand that you have a choice in your laboratory services and we thank you for choosing Geotechnics.

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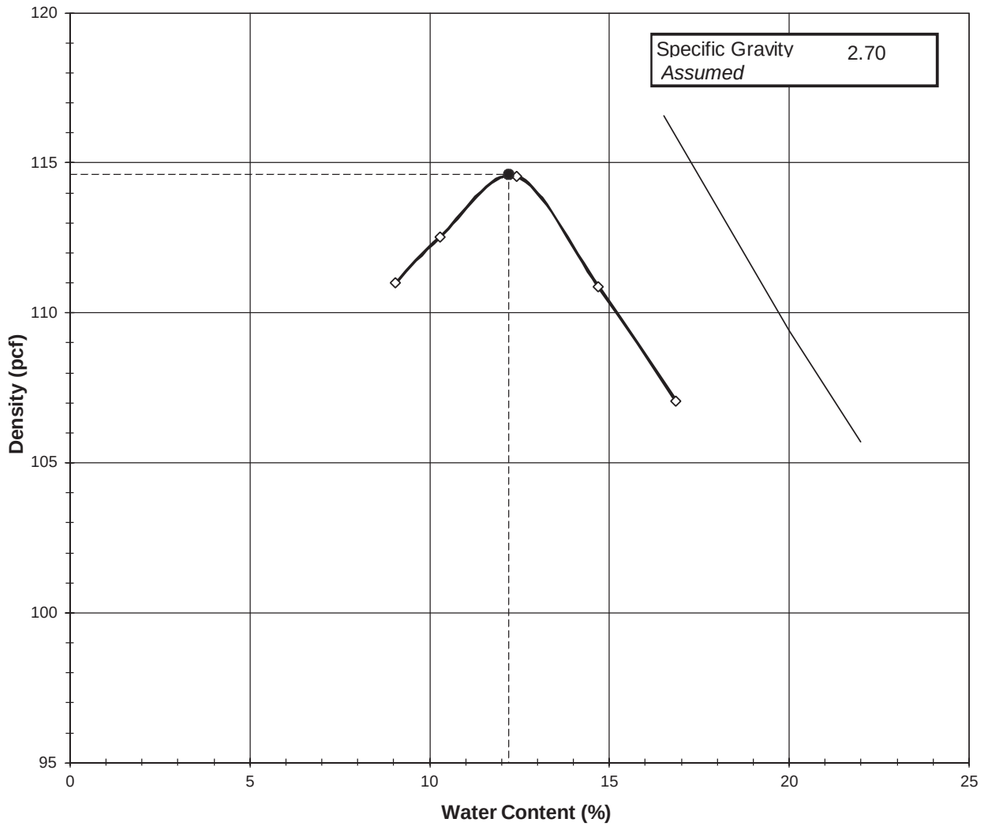
MOISTURE DENSITY RELATIONSHIP

AASHTO T99-10

Client:	ESP Associates	Boring No.:	73+00 25 RT
Client Reference:	R-3822 FQ32.300. Task 1	Depth (ft):	NA
Project No.:	R-2017-878-002	Sample No.:	CBR-4
Lab ID:	R-2017-878-002-002	Test Method	**STANDARD**
Visual Description:	BROWN SANDY SILT		

Optimum Water Content **12.2**
Maximum Dry Density **114.6**



Tested By *APG* *Date* *12/20/17* *Checked By* *GEM* *Date* *1/2/18*

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MOISTURE - DENSITY RELATIONSHIP

AASHTO T99-10

Client:	ESP Associates	Boring No.:	73+00 25 RT
Client Reference:	R-3822 FQ32.300. Task 1	Depth (ft):	NA
Project No.:	R-2017-878-002	Sample No.:	CBR-4
Lab ID:	R-2017-878-002-002		

Visual Description: BROWN SANDY SILT

Total Weight of the Sample (g)	NA
As Received Water Content (%)	NA
Assumed Specific Gravity	2.70
Percent Retained on 3/4"	NA
Percent Retained on 3/8"	0
Percent Retained on #4	0
Oversize Material	Not included
Procedure Used	B

Test Type		**STANDARD**
Rammer Weight (lb)		5.5
Rammer Drop (in)		12
Rammer Type		MECHANICAL
Machine ID	R	174
Mold ID	R	552
Mold diameter		4"
Weight of the Mold (g)		4243
Volume of the Mold (cm^3)		943

Mold / Specimen

Point No.	**1**	**2**	**3**	**4**	**5**
Wt. of Mold & Wet Sample (g)	6072	6119	6189	6165	6134
Wt.of Mold (g)	4243	4243	4243	4243	4243
Wt. of Wet Sample (g)	1830	1876	1947	1922	1891
Mold Volume (cm^3)	943	943	943	943	943

Moisture Content / Density

Tare Number	914	911	908	912	906
Wt. of Tare & Wet Sample (g)	512.80	580.00	511.20	600.60	690.30
Wt. of Tare & Dry Sample (g)	478.72	535.36	466.03	536.63	605.53
Wt. of Tare (g)	102.10	101.90	102.00	101.20	102.30
Wt. of Water (g)	34.08	44.64	45.17	63.97	84.77
Wt. of Dry Sample (g)	376.62	433.46	364.03	435.43	503.23
Wet Density (g/cm^3)	1.94	1.99	2.06	2.04	2.01
Wet Density (pcf)	121.0	124.1	128.8	127.2	125.1
Moisture Content (%)	**9.0**	**10.3**	**12.4**	**14.7**	**16.8**
Dry Density (pcf)	**111.0**	**112.5**	**114.6**	**110.9**	**107.1**

Zero Air Voids

Moisture Content (%)	16.5	20.0	22.0
Dry Unit Weight (pcf)	116.6	109.4	105.7

Tested By APG *Date* 12/20/17 *Checked By* GEM *Date* 1/2/18

DCN:CT-S12 DATE:5/1/13 REVISION: 14 *PROCTOR.xls*

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SINGLE POINT CBR TEST

AASHTO T-193

Client	ESP Associates	Boring No.	73+00 25 RT
Client Reference	R-3822 FQ32.300, Task 1	Depth(ft.)	NA
Project No.	R-2017-878-002	Sample No.	CBR-4
Lab ID	R-2017-878-002-002	Visual Description	BROWN SANDY SILT

Test Type	**STANDARD**			
Molding Method	C	**Density Measurement**	**Before Soaking**	**After Soaking**
Mold ID	R359			
Wt. of Mold (gm.)	4175.8	Wt. Mold & WS (gm.)	8623.8	8657.2
Mold Volume (cc)	2118	Wt. WS (gm.)	4448	4481
Surcharge (lbs.)	**15**	Sample Volume (cc)	2118	2117
Piston Area (in^2)	3	Wet Density (gm./cc)	2.10	2.12
Sample Height	4.58	Wet Density (pcf)	131.0	132.1
Sample Conditions	Soaked			
Blows per Layer	**56**	**Dry Density (pcf)**	**116.4**	**117.0**
		Dry Density (gm./cc)	**1.87**	**1.88**

Water Contents	**As Rec'd**	**Begining Compaction**	**After Compaction**	**Before Soaking**	**After Soaking**	**Top 1" After Soak**
Tare No.	AF-10	921	924		919	917
Wt. of T+WS (gm.)	583.51	645.31	1176.47		1118	761.32
Wt. of T+DS (gm.)	543.5	598.2	1069.92		1015.76	694.16
Wt of Tare (gm.)	227.05	223.22	222.11		220.22	223.54
Moisture Content(%)	12.6	12.6	12.6	12.6	12.9	14.3

Piston Displacement (in.)	**Load (lbs.)**	**Penetration Stress (psi.)**	**Swell Measurement**		
			Elapsed Time (hrs)	Dial Gauge (Div)	Percent Swell
0	8.28	2.8			
0.025	32.95	11.0			
0.050	63.06	21.0			
0.075	96.61	32.2			
0.100	135.15	45.0	0.00	416	0.00%
0.125	175.03	58.3	19.00	414	-0.04%
0.150	216.48	72.2	44.67	414	-0.04%
0.175	258.48	86.2			
0.200	300.05	100.0			
0.250	385.13	128.4			
0.300	474.96	158.3			
0.350	566.49	188.8			
0.400	662.76	220.9			
0.450	762.99	254.3			
0.500	868.96	289.7			
0.550	974.42	324.8			
0.600	1083.41	361.1	**1Division =**	**0.001**	**in.**

Tested By APG *Date* 1/8/18 *Checked By* GEM *Date* 1/11/18

DCN: CT-S27 REVSI0N: 5 DATE: 11/15/05 *Z:\2017 PROJECTS\ESP\2017-878 ESP - R-3882 FQ32.300, TASK 1\[2017-878-002-002 1CBR TESTNET REV1.xls]SHEET1*

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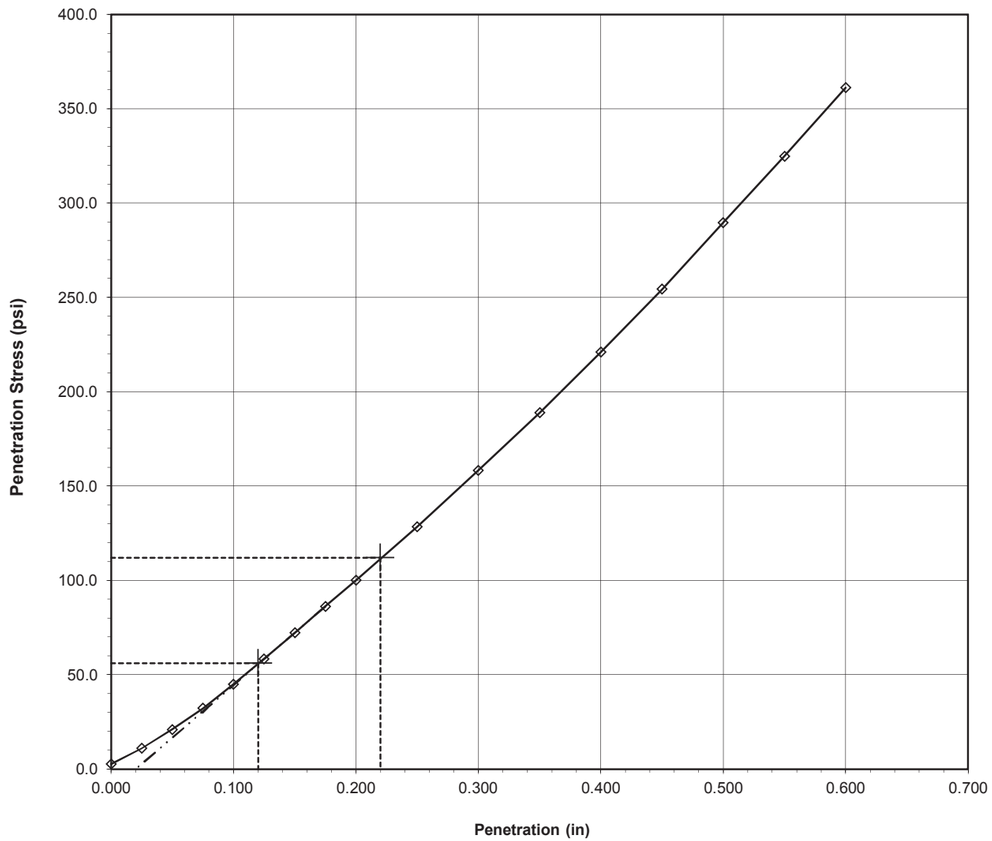
SINGLE POINT CBR TEST
AASHTO T-193

Client	ESP Associates	Boring No.	73+00 25 RT
Client Reference	R-3822 FQ32.300, Task 1	Depth(ft.)	NA
Project No.	R-2017-878-002	Sample No.	CBR-4
Lab ID	R-2017-878-002-002	Visual Description	BROWN SANDY SILT

CBR VALUE (0.1")	**4.5 %**
CBR VALUE (0.2")	**6.7 %**
CORRECTED CBR VALUE (0.1")	**5.6 %**
CORRECTED CBR VALUE (0.2")	**7.5 %**

Penetration Stress vs. Penetration



Tested By APG *Date* 1/8/18 *Approved By* MPS *Date* 1/11/18

 DCN: CT-S27 REVSI0N: 5 DATE: 11/15/05 *Z:\2017 PROJECTS\ESP\2017-878 ESP - R-3882 FQ32.300, TASK 1\[2017-878-002-002 1CBR TESTNET REV1.xls]SHEET1*

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PROJECT REFERENCE NO.	SHEET NO.
U–5725/R–3822	272

REFERENCE: U–5725/R–3822

PROJECT: 50162 /37765

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

APPENDIX C
L1_4000_ST1 CONSOLIDATION TEST RESULTS

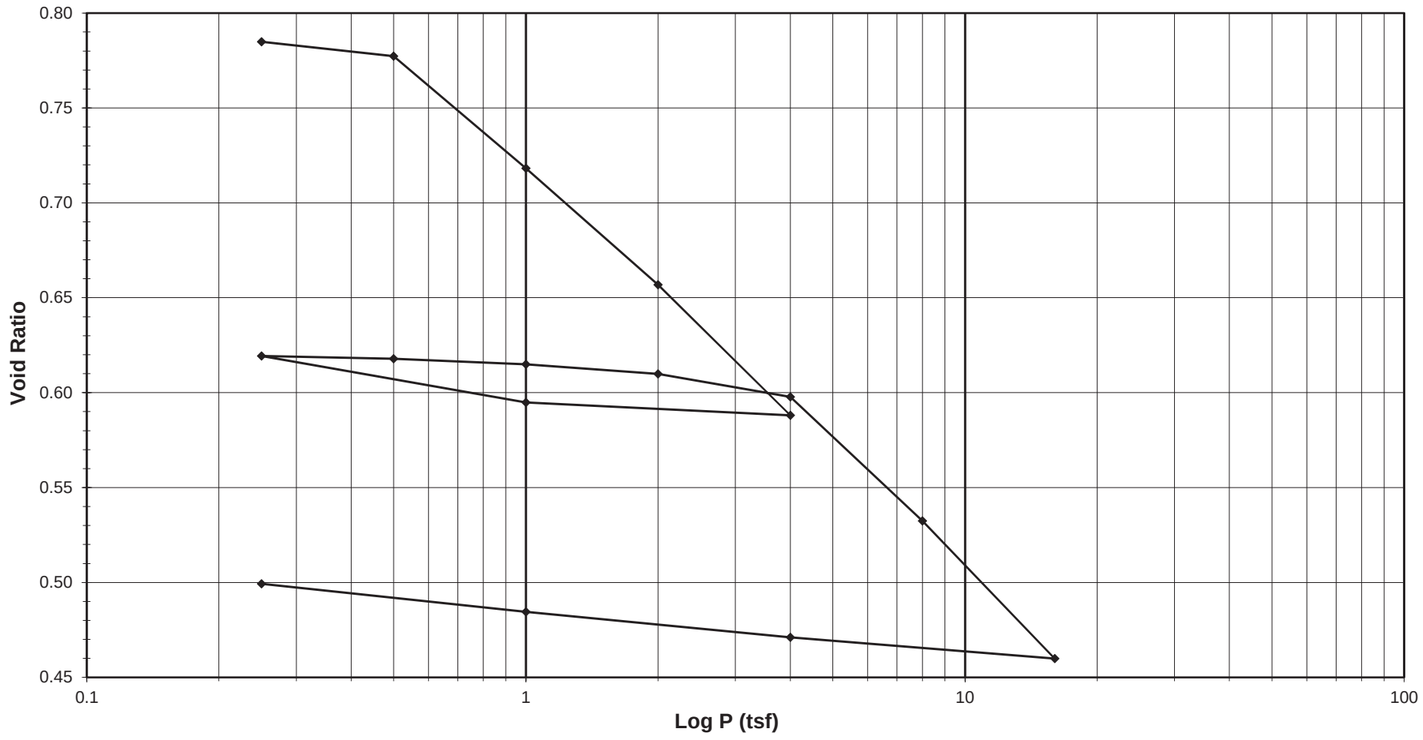
ESP
ESP ASSOCIATES, PA
7011 ALBERT PICK RD
SUITE E
GREENSBORO, NC 27409
FIRM # C-0587
WWW.ESPASSOCIATES.COM

ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Reference	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By *29-04-041* *Date* *12/1/17* *Approved By* *MPS* *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 6

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ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Reference	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED
Consolidometer No. R470
1 Division = 0.0001 (in.)

Sample Properties	**Initial**	**Final**
Water Content		
Tare Number	810	904
Wt. Tare & WS (g)	432.63	239.86
Wt. Tare & DS (g)	362.98	217.18
Wt. Water (g)	69.65	22.68
Wt. Tare (g)	112.41	99.45
Wt. DS (g)	250.57	117.73
Water Content (%)	27.80	19.26
Sample Parameters		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.8260
Sample Volume (cc)	80.44	66.44
Wt. Wet Sample + Ring (g)	365.95	355.85
Wt. of Ring (g)	214.74	214.74
Wt. of Wet Sample (g)	151.21	141.11
Wet Density (pcf)	117.30	132.53
Wet Density (g/cc)	1.88	2.12
Water Content (%)	27.80	19.26
Wt. of Dry Sample (g)	118.32	118.32
Dry Density (pcf)	91.79	111.12
Dry Density (g/cc)	1.47	1.78
Void Ratio	0.8152	0.4993
Saturation (%)	91.04	103.01
Specific Gravity	2.67	*Measured*

Test Data Summary

Applied Pressure (tsf)	**Final Dial Reading** (div)	**Machine Deflection** (div)	**Corrected Reading** (div)	**Height of Sample** (mm)	**Volume (cc)**	**Dry Density** (g/cc)	**Void Ratio**
Seating	0	0	0	25.400	80.440	1.47092	**0.81519**
0.25	190.0	22.9	167.1	24.976	79.096	1.49591	**0.78486**
0.5	244.8	36.1	208.7	24.870	78.761	1.50228	**0.77730**
1	582.9	48.4	534.5	24.042	76.141	1.55398	**0.71817**
2	941.4	68.9	872.4	23.184	73.422	1.61152	**0.65682**
4	1349.3	97.7	1251.6	22.221	70.372	1.68136	**0.58800**
1	1276.5	62.6	1213.9	22.317	70.675	1.67415	**0.59483**
0.25	1117.8	38.5	1079.3	22.658	71.758	1.64890	**0.61927**
0.5	1128.9	42.2	1086.8	22.640	71.698	1.65027	**0.61792**
1	1157.5	54.2	1103.3	22.598	71.565	1.65334	**0.61491**
2	1203.5	72.6	1130.9	22.527	71.343	1.65849	**0.60990**
4	1296.0	98.0	1198.1	22.357	70.802	1.67114	**0.59771**
8	1688.6	130.8	1557.8	21.443	67.909	1.74234	**0.53242**
16	2134.4	177.2	1957.3	20.429	64.696	1.82888	**0.45991**
4	2025.1	129.1	1896.0	20.584	65.189	1.81506	**0.47103**
1	1910.3	88.3	1822.0	20.772	65.784	1.79863	**0.48446**
0.25	1800.6	60.6	1740.0	20.980	66.443	1.78078	**0.49934**

Tested By *129-04-0411* *Date* *12/1/17* *Input Checked By* *GEM* *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 6

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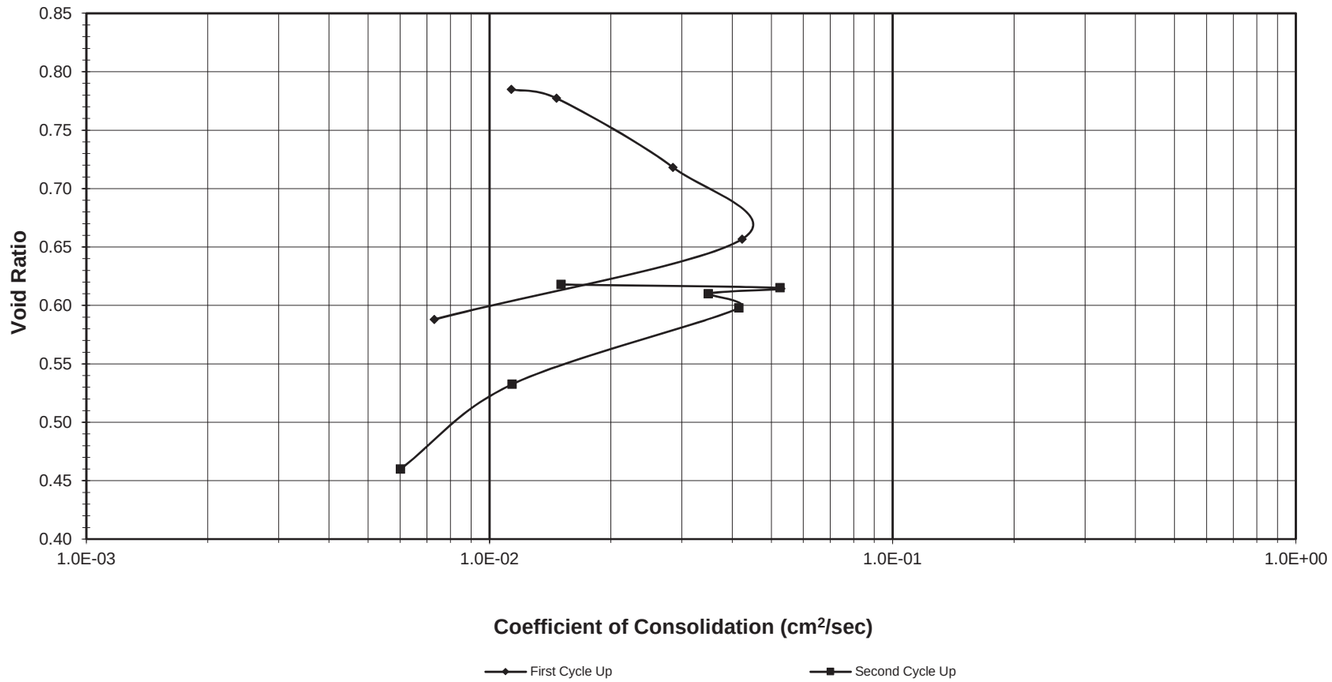
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Reference	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By *129-04-0411* *Date* *12/1/17* *Input Checked By* *GEM* *Date* *12/18/17*

DCN: CT-24E Date: 5/3/12 Revision: 6

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ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Reference	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED
Consolidometer No. R470
**1 Division = ** 0.0001 (in.)

Sample Properties	**Initial**	**Final**
Water Content		
Tare Number	810	904
Wt. Tare & WS (g)	432.63	239.86
Wt. Tare & DS (g)	362.98	217.18
Wt. Water (g)	69.65	22.68
Wt. Tare (g)	112.41	99.45
Wt. DS (g)	250.57	117.73
Water Content (%)	27.80	19.26
Sample Parameters		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.000	0.826
Sample Volume (cc)	80.44	66.44
Wt. Wet Sample + Ring (g)	365.95	355.85
Wt. of Ring (g)	214.74	214.74
Wt. of Wet Sample (g)	151.21	141.11
Wet Density (pcf)	117.30	132.53
Wet Density (g/cc)	1.88	2.12
Water Content (%)	27.80	19.26
Wt. of Dry Sample (g)	118.32	118.32
Dry Density (pcf)	91.79	111.12
Dry Density (g/cc)	1.47	1.78
Void Ratio	0.8152	0.4993
Saturation (%)	91.04	103.01
Specific Gravity	*2.67*	*Measured*

C_v Test Data Summary

Load Increment	**Dial Reading @ t_{50}**	**Machine Deflection**	**Corrected Dial Reading @ t_{50}**	**Sample Height @ t_{50}**	**Time t_{50}**	**C_v**
(tsf)	(div)	(div)	(div)	(cm)	(min.)	**(cm²/sec)**
0 - 0.25	106.1	22.9	83.2	2.519	**0.46**	**0.01132**
0.25 - 0.5	192.1	36.1	156.0	2.500	**0.35**	**0.01466**
0.5 - 1.0	480.7	48.4	432.3	2.430	**0.17**	**0.02852**
1.0 - 2.0	692.7	68.9	623.8	2.382	**0.11**	**0.04232**
2.0 - 4.0	1159.8	97.7	1062.1	2.270	**0.58**	**0.00729**
4.0 - 1.0	NA	62.6	NA	NA	**NA**	**NA**
1.0 - 0.25	NA	38.5	NA	NA	**NA**	**NA**
0.25 - 0.5	1123.4	42.2	1081.2	2.265	**0.28**	**0.01504**
0.5 - 1.0	1142.8	54.2	1088.5	2.264	**0.08**	**0.05257**
1.0 - 2.0	1184.2	72.6	1111.6	2.258	**0.12**	**0.03486**
2.0 - 4.0	1243.9	98.0	1145.9	2.249	**0.10**	**0.04152**
4.0 - 8.0	1463.3	130.8	1332.4	2.202	**0.35**	**0.01137**
8.0 - 16.0	1924.1	177.2	1746.9	2.096	**0.60**	**0.00601**
16.0 - 4.0	NA	129.1	NA	NA	**NA**	**NA**
4.0 - 1.0	NA	88.3	NA	NA	**NA**	**NA**
1.0 - 0.25	NA	60.6	NA	NA	**NA**	**NA**

Tested By *129-04-0411* *Date* *12/1/17* *Input Checked By* *GEM* *Date* *12/18/17*

DCN: CT-24E Date: 5/3/12 Revision: 6

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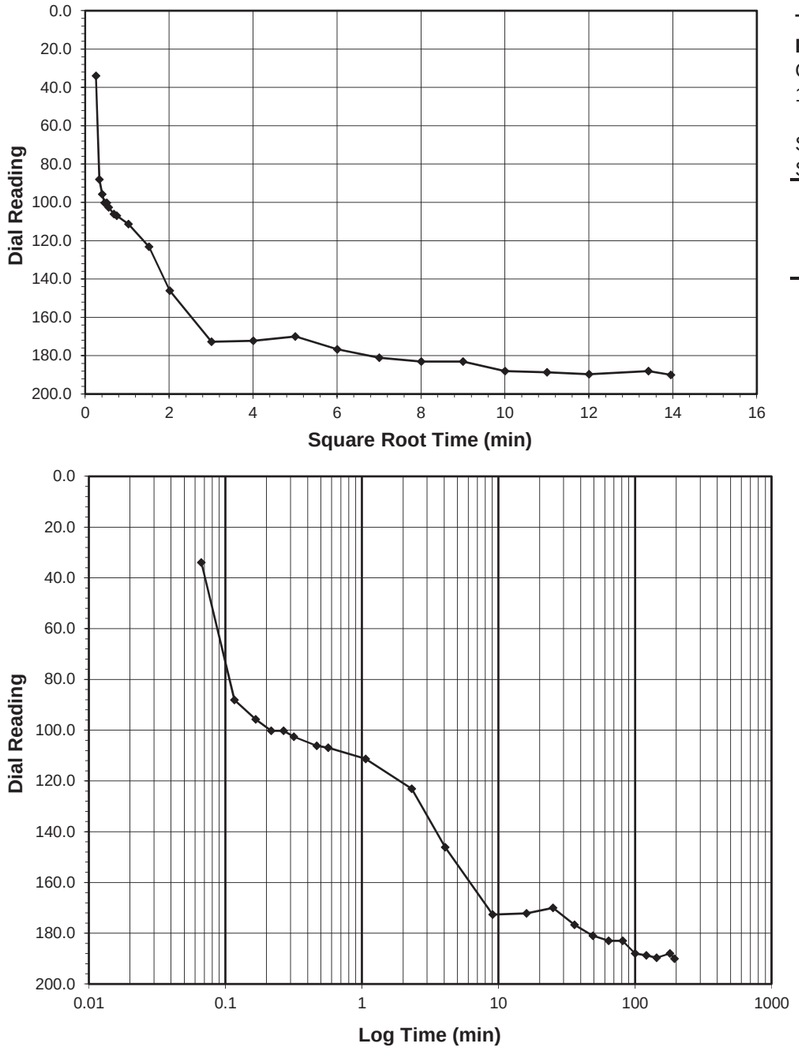
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**0.0-0.25**
Final Reading	**(div)**	**190.0**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/1/17
Start Time		13:22:23

Elapsed Time (min)	Dial Reading (div)
Initial	**0.0**
0.07	34.0
0.12	88.1
0.17	95.8
0.22	100.2
0.27	100.2
0.32	102.6
0.47	106.2
0.57	106.9
1.07	111.4
2.32	123.1
4.07	146.1
9.07	172.7
16.07	172.2
25.07	170.0
36.07	176.6
49.07	181.0
64.08	183.0
81.08	183.0
100.08	188.0
121.08	188.7
144.08	189.7
180.08	188.0
194.67	190.0

Tested By *129-04-0411* *Date* *12/1/17* *Checked By* *GEM* *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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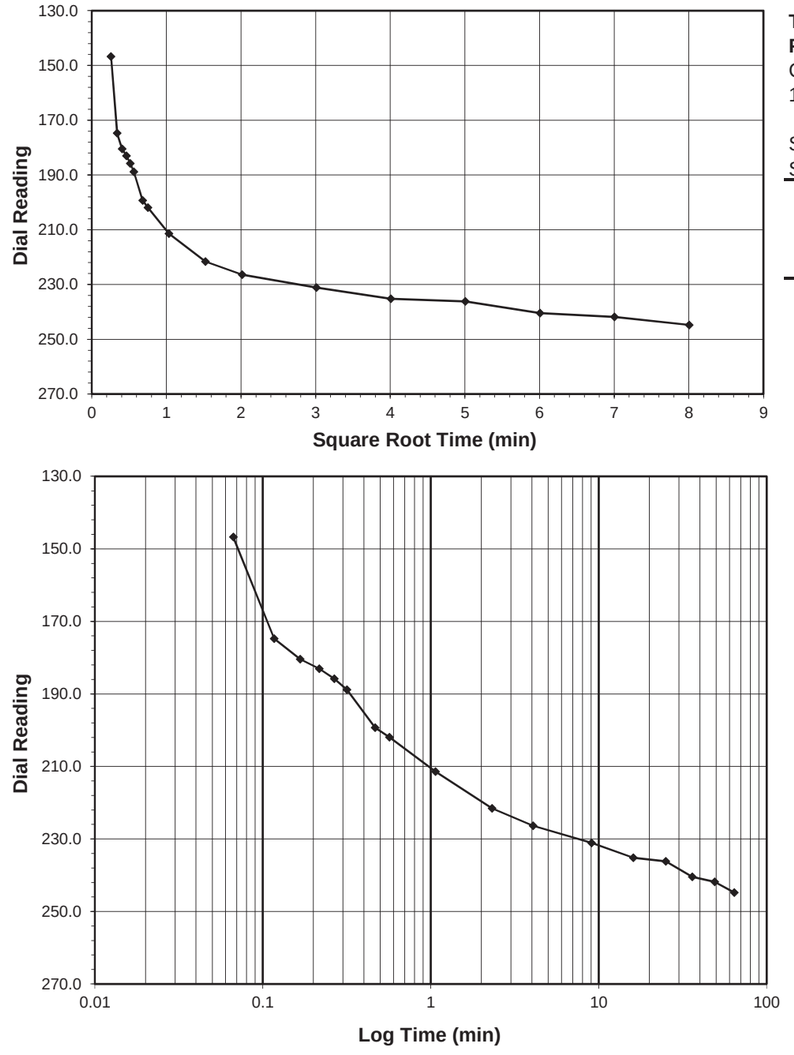
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**0.25-0.5**
Final Reading	**(div)**	**244.8**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/1/17
Start Time		16:37:03

Elapsed Time (min)	Dial Reading (div)
Initial	**190.0**
0.07	146.8
0.12	174.7
0.17	180.4
0.22	183.0
0.27	185.8
0.32	188.8
0.47	199.3
0.57	202.0
1.07	211.4
2.32	221.6
4.07	226.4
9.07	231.1
16.07	235.2
25.07	236.2
36.07	240.4
49.07	241.9
64.08	244.8

Tested By *129-04-0411* *Date* *12/1/17* *Checked By* *GEM* *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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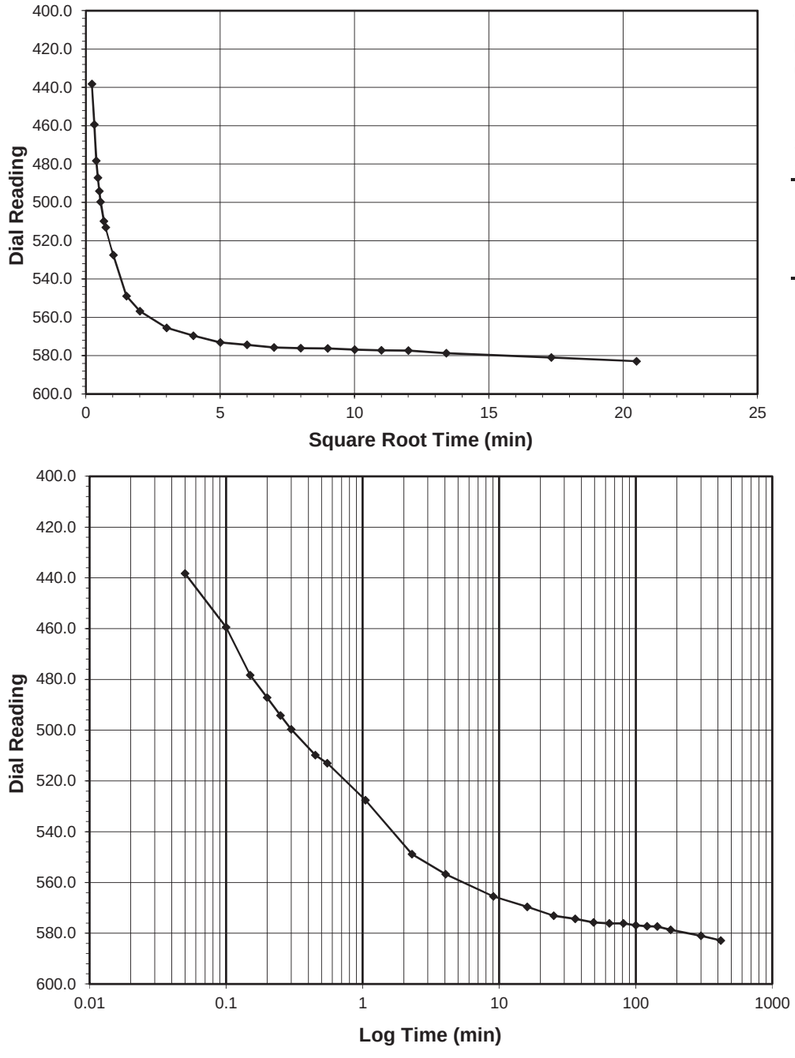
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**0.5-1.0**
Final Reading	**(div)**	**582.9**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/4/17
Start Time		17:29:53

Elapsed Time (min)	Dial Reading (div)
Initial	**244.8**
0.05	438.3
0.10	459.4
0.15	478.3
0.20	487.2
0.25	494.2
0.30	499.7
0.45	509.9
0.55	513.1
1.05	527.6
2.30	548.9
4.05	556.7
9.05	565.5
16.05	569.6
25.05	573.1
36.05	574.3
49.05	575.8
64.05	576.1
81.07	576.2
100.07	576.9
121.07	577.2
144.07	577.4
180.07	578.7
300.07	581.0
420.10	582.9

Tested By 129-04-0411 *Date* 12/4/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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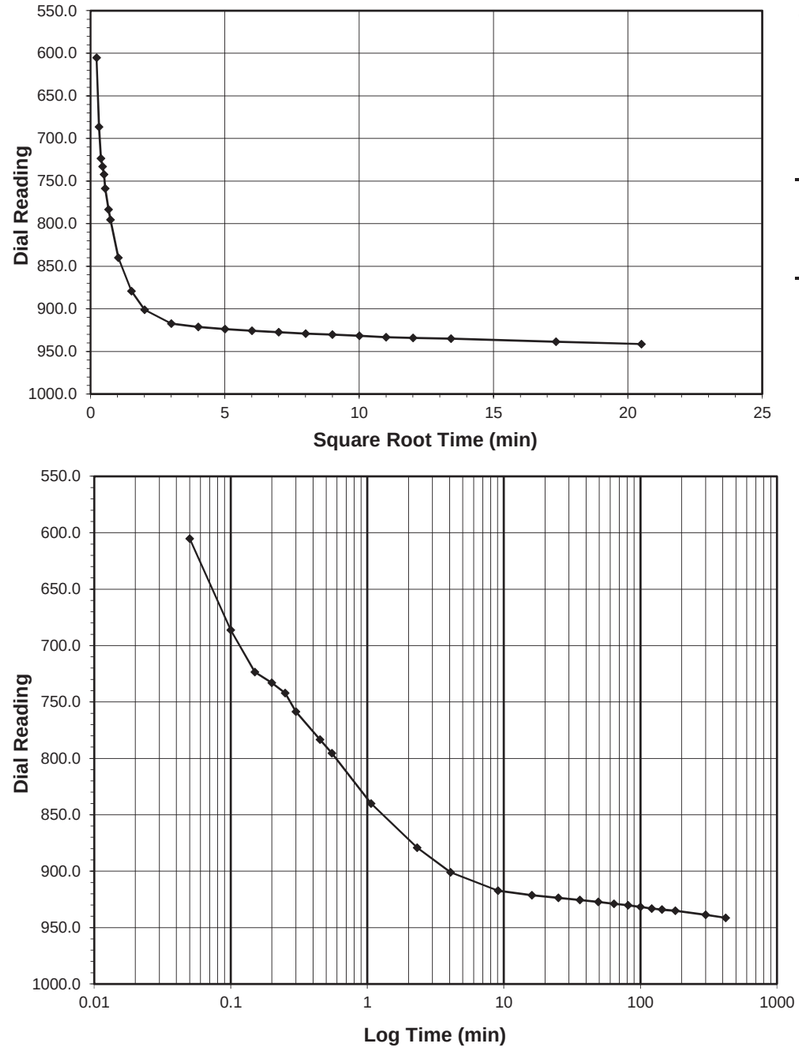
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**1.0-2.0**
Final Reading	**(div)**	**941.4**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/5/17
Start Time		0:29:59

Elapsed Time (min)	Dial Reading (div)
Initial	**582.9**
0.05	605.2
0.10	686.3
0.15	723.5
0.20	733.0
0.25	742.1
0.30	758.7
0.45	783.3
0.55	795.4
1.07	840.0
2.32	879.2
4.07	901.0
9.07	917.4
16.07	921.4
25.07	923.7
36.07	925.6
49.07	927.3
64.07	929.0
81.07	930.3
100.07	931.7
121.07	933.2
144.08	934.0
180.08	935.0
300.08	938.7
420.47	941.4

Tested By 129-04-0411 *Date* 12/5/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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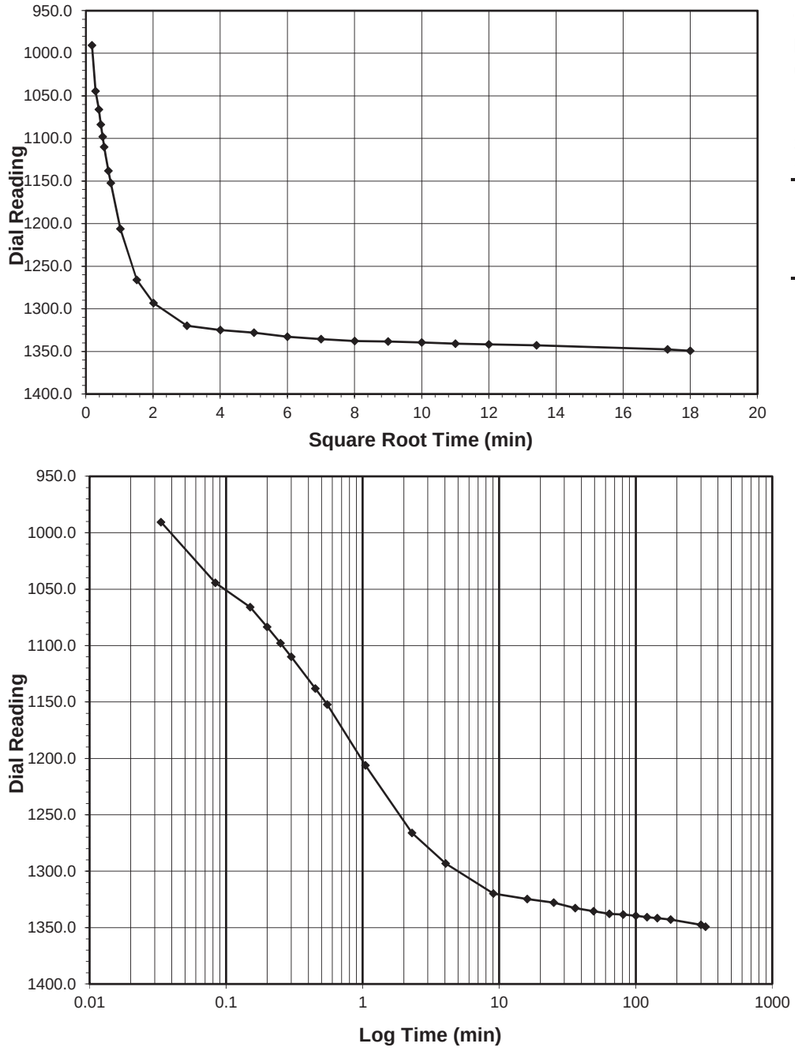
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**2.0-4.0**
Final Reading	**(div)**	**1349.3**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/5/17
Start Time		7:30:27

Elapsed Time (min)	Dial Reading (div)
Initial	**941.4**
0.03	990.5
0.08	1044.4
0.15	1066.0
0.20	1083.6
0.25	1097.9
0.30	1109.9
0.45	1138.0
0.55	1152.4
1.05	1206.2
2.30	1266.1
4.05	1293.2
9.05	1319.8
16.05	1324.8
25.05	1328.0
36.05	1332.8
49.05	1335.4
64.05	1337.8
81.05	1338.4
100.05	1339.5
121.05	1340.8
144.05	1341.6
180.05	1342.8
300.07	1347.5
323.95	1349.3

Tested By *129-04-0411* *Date* *12/5/17* *Checked By* *GEM* *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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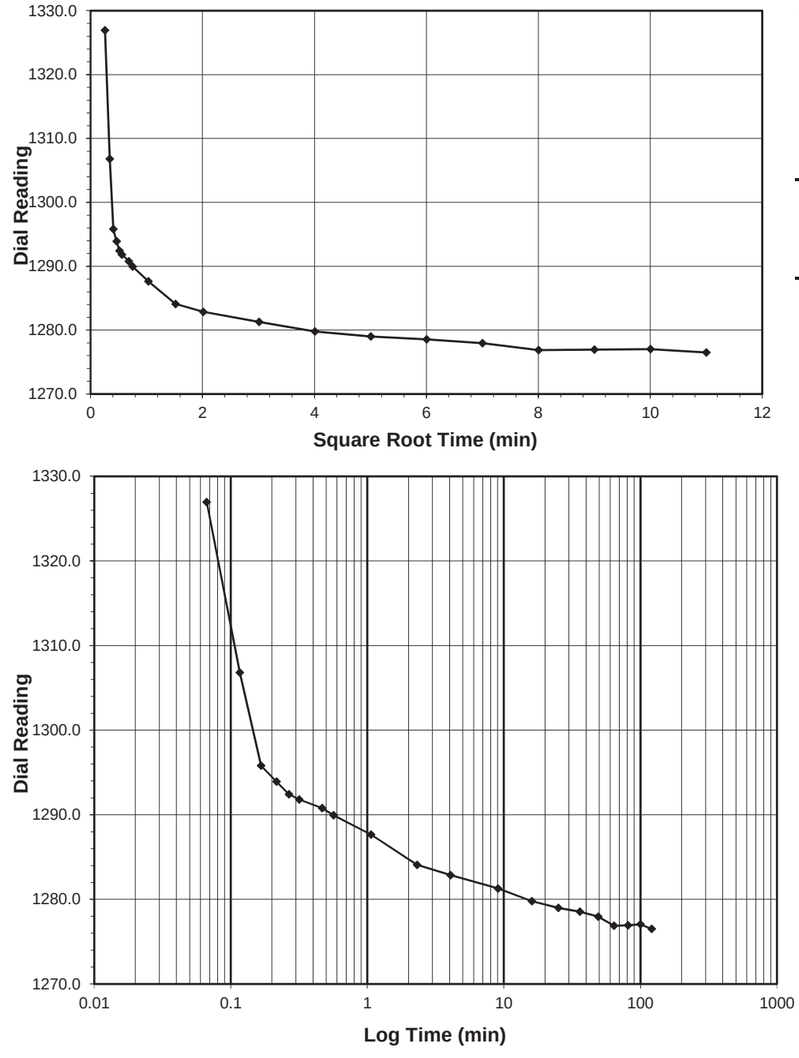
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**4.0-1.0**
Final Reading	**(div)**	**1276.5**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/5/17
Start Time		12:54:26

Elapsed Time (min)	Dial Reading (div)
Initial	**1349.3**
0.07	1326.9
0.12	1306.8
0.17	1295.8
0.22	1293.9
0.27	1292.4
0.32	1291.8
0.47	1290.8
0.57	1290.0
1.07	1287.6
2.32	1284.1
4.07	1282.9
9.07	1281.3
16.07	1279.8
25.07	1279.0
36.07	1278.6
49.07	1277.9
64.07	1276.9
81.07	1276.9
100.07	1277.0
121.07	1276.5

Tested By *129-04-0411* *Date* *12/5/17* *Checked By* *GEM* *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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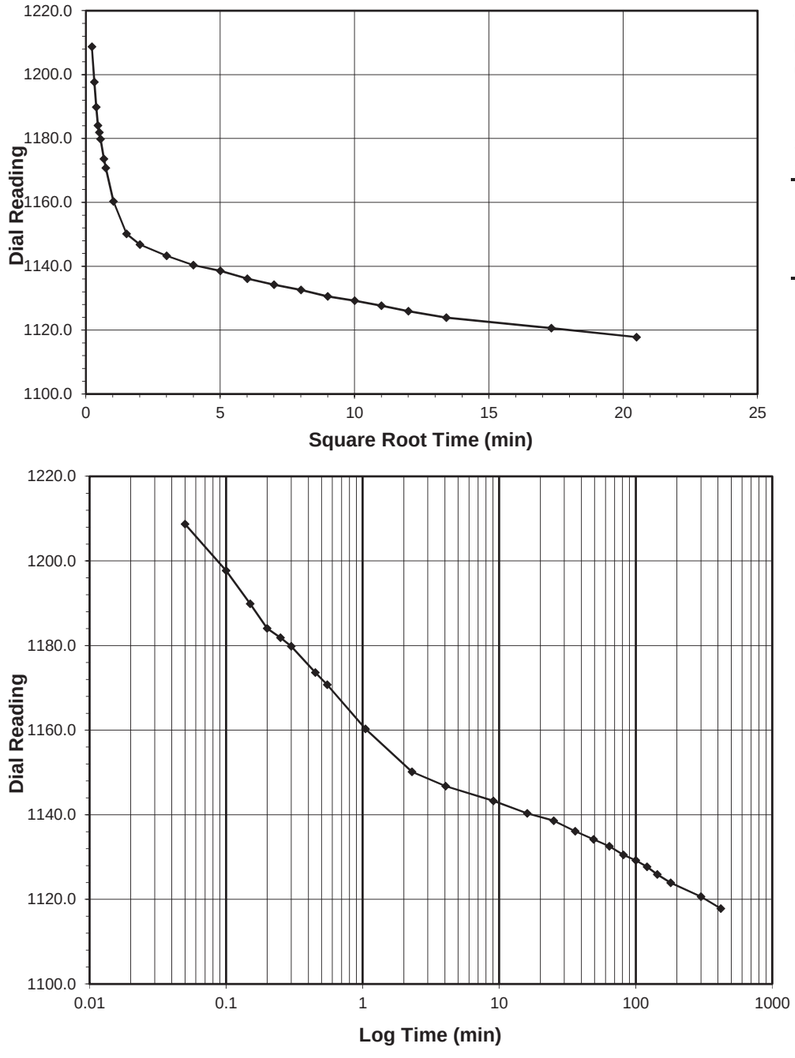
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**1.0-0.25**
Final Reading	**(div)**	**1117.8**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/5/17
Start Time		19:54:31

Elapsed Time (min)	Dial Reading (div)
Initial	**1276.5**
0.05	1208.7
0.10	1197.7
0.15	1189.8
0.20	1184.1
0.25	1181.9
0.30	1179.8
0.45	1173.6
0.55	1170.7
1.05	1160.3
2.30	1150.2
4.05	1146.8
9.05	1143.3
16.05	1140.3
25.07	1138.6
36.07	1136.1
49.07	1134.2
64.07	1132.6
81.07	1130.5
100.07	1129.2
121.07	1127.7
144.07	1125.9
180.07	1123.9
300.07	1120.6
420.05	1117.8

Tested By 129-04-0411 *Date* 12/5/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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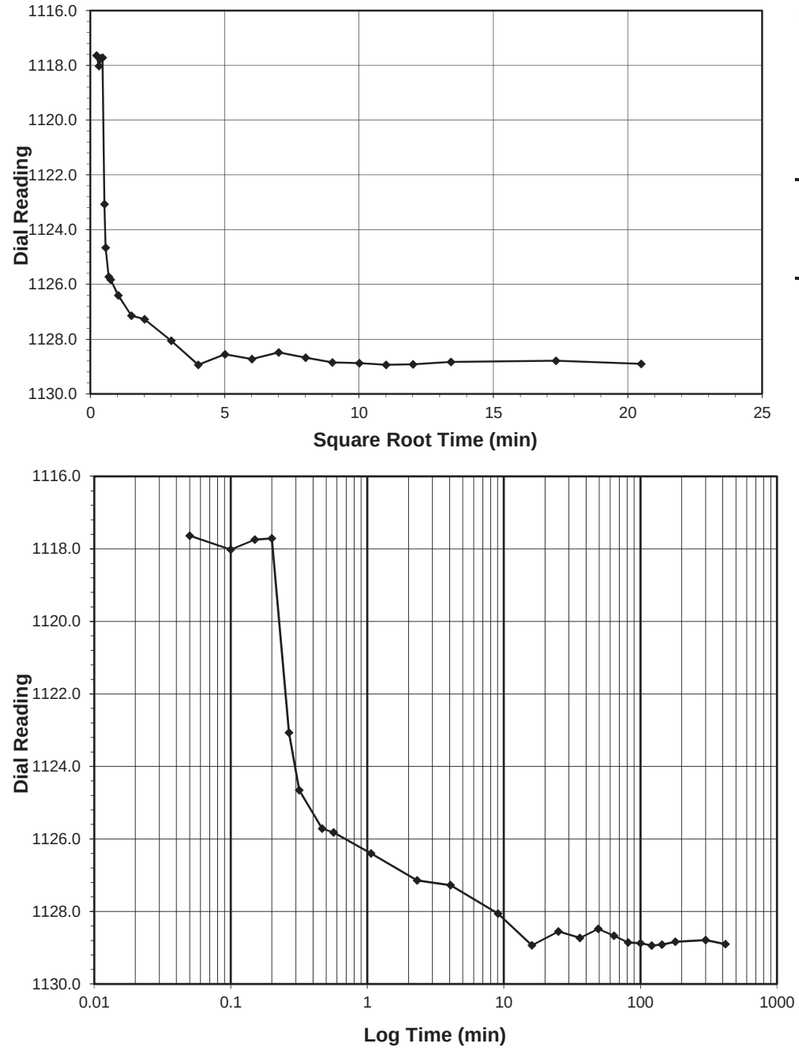
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**0.25-0.5**
Final Reading	**(div)**	**1128.9**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/6/17
Start Time		2:54:34

Elapsed Time (min)	Dial Reading (div)
Initial	**1117.8**
0.05	1117.6
0.10	1118.0
0.15	1117.7
0.20	1117.7
0.27	1123.1
0.32	1124.7
0.47	1125.7
0.57	1125.8
1.07	1126.4
2.32	1127.1
4.07	1127.3
9.07	1128.1
16.07	1128.9
25.07	1128.6
36.07	1128.7
49.07	1128.5
64.07	1128.7
81.07	1128.9
100.07	1128.9
121.07	1128.9
144.07	1128.9
180.07	1128.8
300.08	1128.8
420.02	1128.9

Tested By 129-04-0411 *Date* 12/6/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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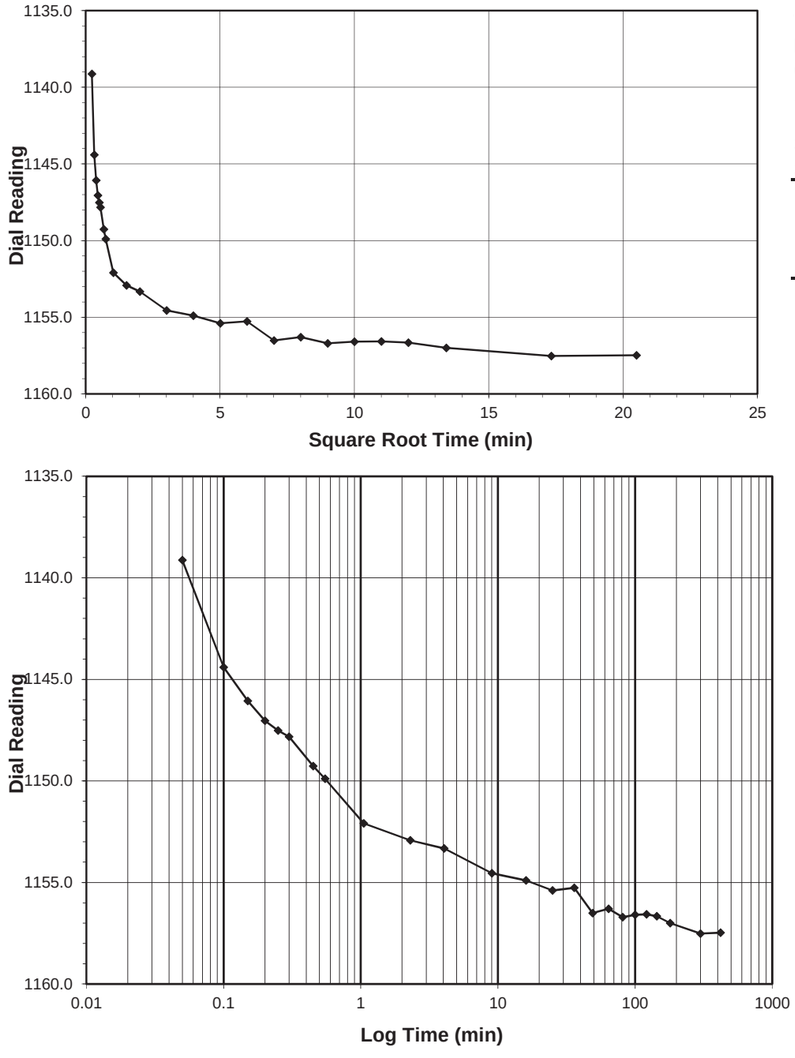
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**0.5-1.0**
Final Reading	**(div)**	**1157.5**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/6/17
Start Time		9:54:35

Elapsed Time (min)	Dial Reading (div)
Initial	**1128.9**
0.05	1139.1
0.10	1144.4
0.15	1146.1
0.20	1147.0
0.25	1147.5
0.30	1147.8
0.45	1149.3
0.55	1149.9
1.05	1152.1
2.30	1152.9
4.05	1153.3
9.05	1154.5
16.05	1154.9
25.05	1155.4
36.05	1155.3
49.05	1156.5
64.05	1156.3
81.05	1156.7
100.05	1156.6
121.05	1156.6
144.05	1156.7
180.07	1157.0
300.07	1157.5
420.02	1157.5

Tested By 129-04-0411 *Date* 12/6/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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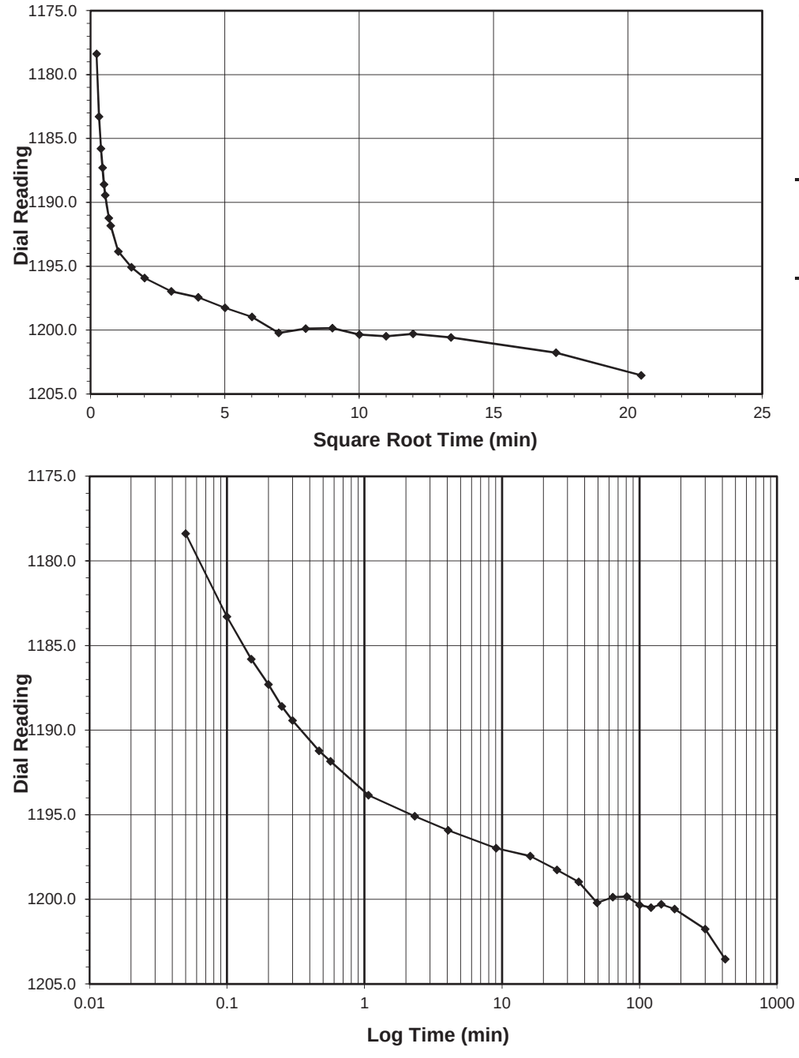
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**1.0-2.0**
Final Reading	**(div)**	**1203.5**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/6/17
Start Time		16:54:36

Elapsed Time (min)	Dial Reading (div)
Initial	**1157.5**
0.05	1178.4
0.10	1183.3
0.15	1185.8
0.20	1187.3
0.25	1188.6
0.30	1189.4
0.47	1191.2
0.57	1191.8
1.07	1193.8
2.32	1195.1
4.07	1195.9
9.07	1197.0
16.07	1197.4
25.07	1198.3
36.07	1199.0
49.07	1200.2
64.07	1199.9
81.07	1199.8
100.07	1200.3
121.07	1200.5
144.07	1200.3
180.07	1200.6
300.08	1201.8
420.10	1203.5

Tested By 129-04-0411 *Date* 12/6/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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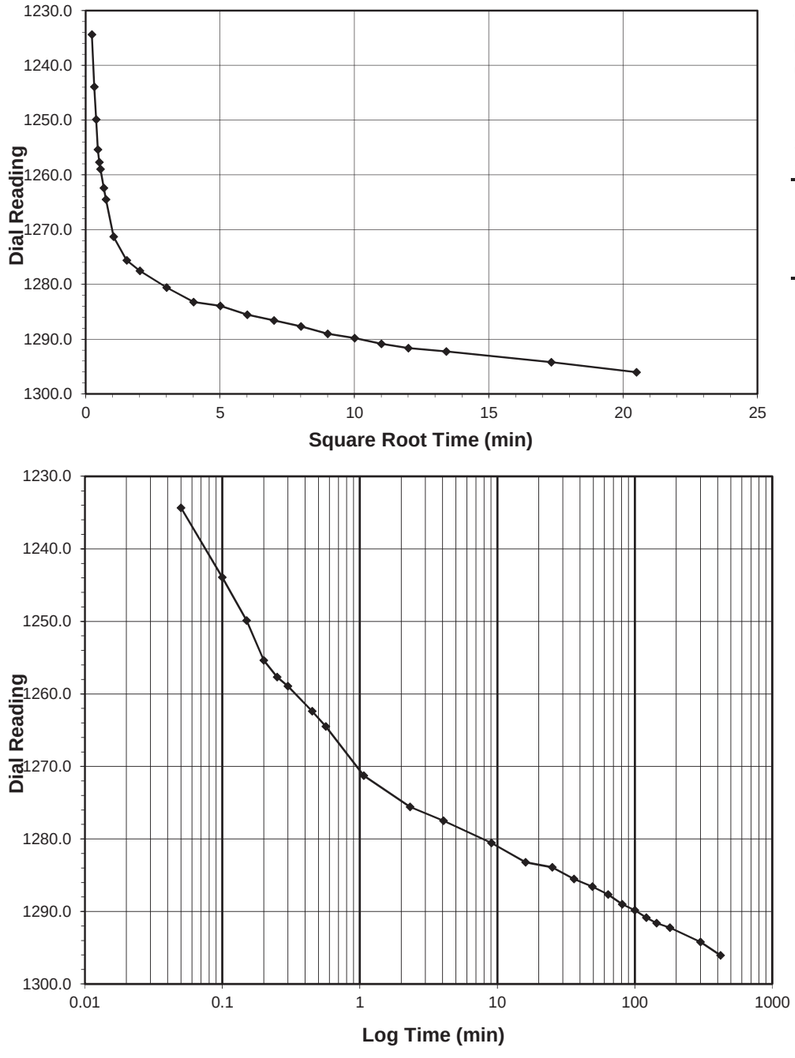
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**2.0-4.0**
Final Reading	**(div)**	**1296.0**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/6/17
Start Time		23:54:42

Elapsed Time (min)	Dial Reading (div)
Initial	**1203.5**
0.05	1234.3
0.10	1243.9
0.15	1249.9
0.20	1255.4
0.25	1257.7
0.30	1258.9
0.45	1262.4
0.57	1264.5
1.07	1271.3
2.32	1275.6
4.07	1277.5
9.07	1280.6
16.07	1283.2
25.07	1283.9
36.07	1285.5
49.07	1286.6
64.07	1287.7
81.07	1289.0
100.08	1289.8
121.08	1290.9
144.08	1291.6
180.08	1292.2
300.08	1294.2
420.13	1296.0

Tested By 129-04-0411 *Date* 12/6/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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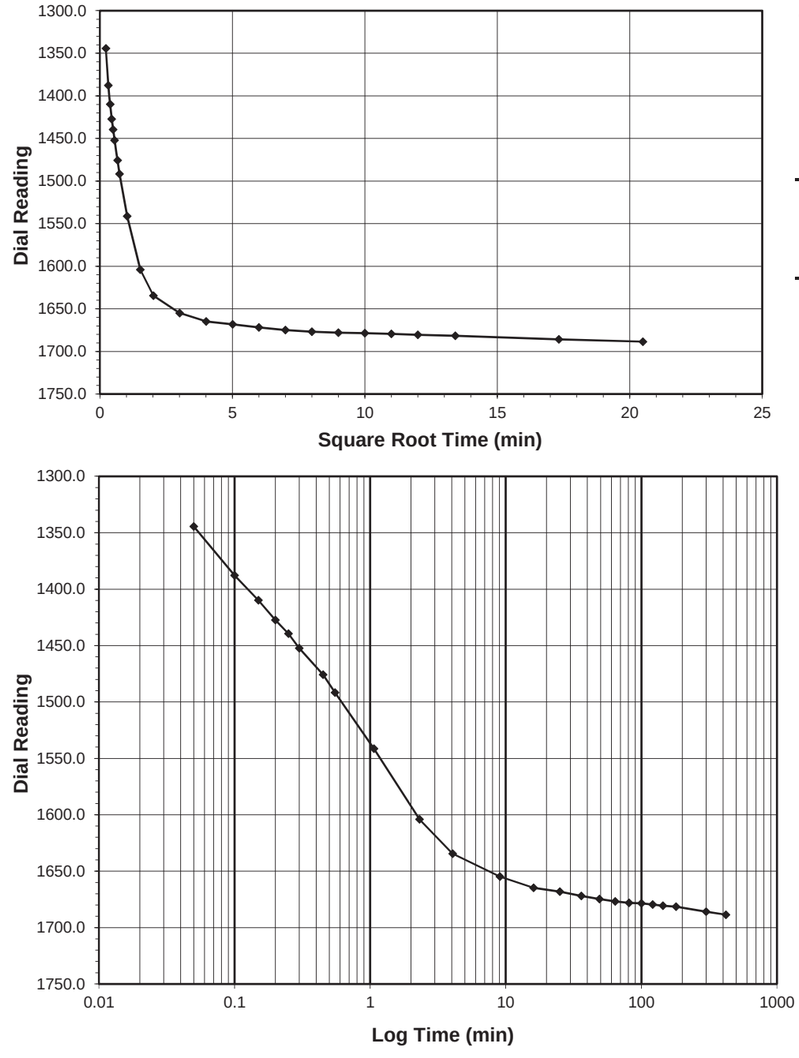
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**4.0-8.0**
Final Reading	**(div)**	**1688.6**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/7/17
Start Time		6:54:50

Elapsed Time (min)	Dial Reading (div)
Initial	**1296.0**
0.05	1344.4
0.10	1387.8
0.15	1409.7
0.20	1427.3
0.25	1439.5
0.30	1452.2
0.45	1475.7
0.55	1491.8
1.07	1541.3
2.32	1604.0
4.07	1634.5
9.07	1654.9
16.07	1664.7
25.07	1668.1
36.07	1671.9
49.07	1674.8
64.07	1676.8
81.07	1678.0
100.07	1678.5
121.07	1679.5
144.07	1680.5
180.07	1681.5
300.08	1685.9
420.13	1688.6

Tested By 129-04-0411 *Date* 12/7/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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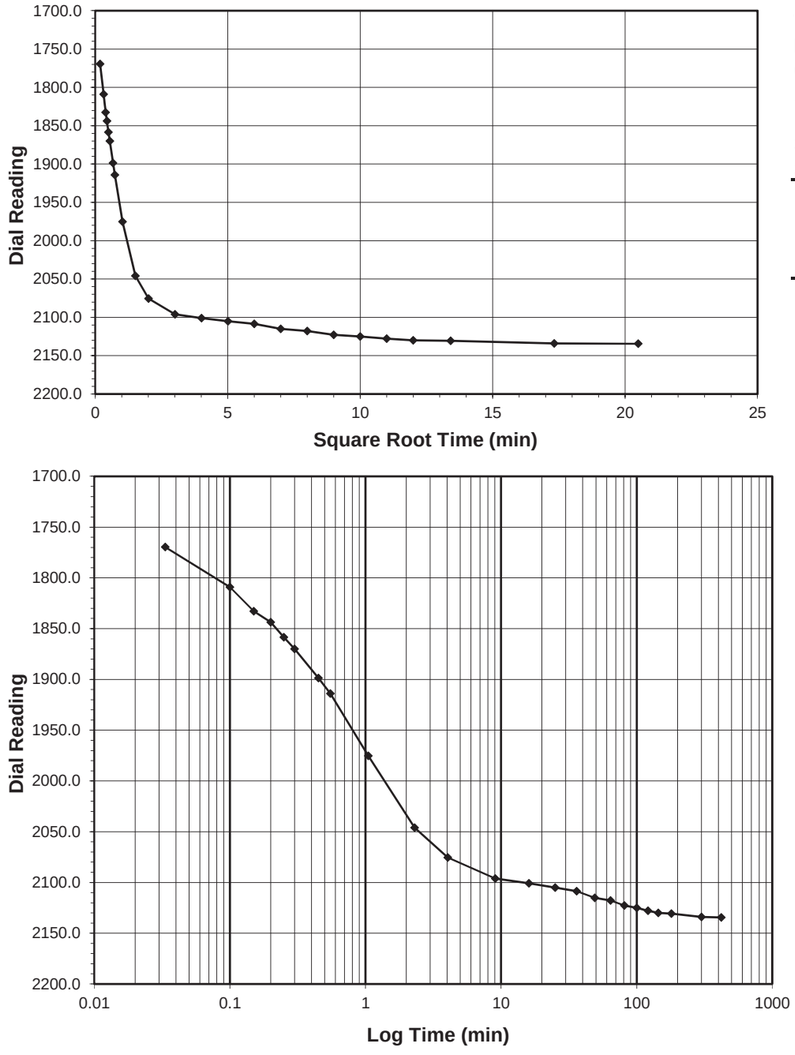
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**8.0-16.0**
Final Reading	**(div)**	**2134.4**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/7/17
Start Time		13:54:58

Elapsed Time (min)	Dial Reading (div)
Initial	**1688.6**
0.03	1769.5
0.10	1809.1
0.15	1832.8
0.20	1843.7
0.25	1858.5
0.30	1870.0
0.45	1898.7
0.55	1914.0
1.05	1975.4
2.30	2046.0
4.05	2075.4
9.05	2096.0
16.07	2100.9
25.07	2105.0
36.07	2108.6
49.07	2115.1
64.07	2117.7
81.07	2122.7
100.07	2125.0
121.07	2127.9
144.07	2129.9
180.07	2130.7
300.07	2134.0
420.17	2134.4

Tested By 129-04-0411 *Date* 12/7/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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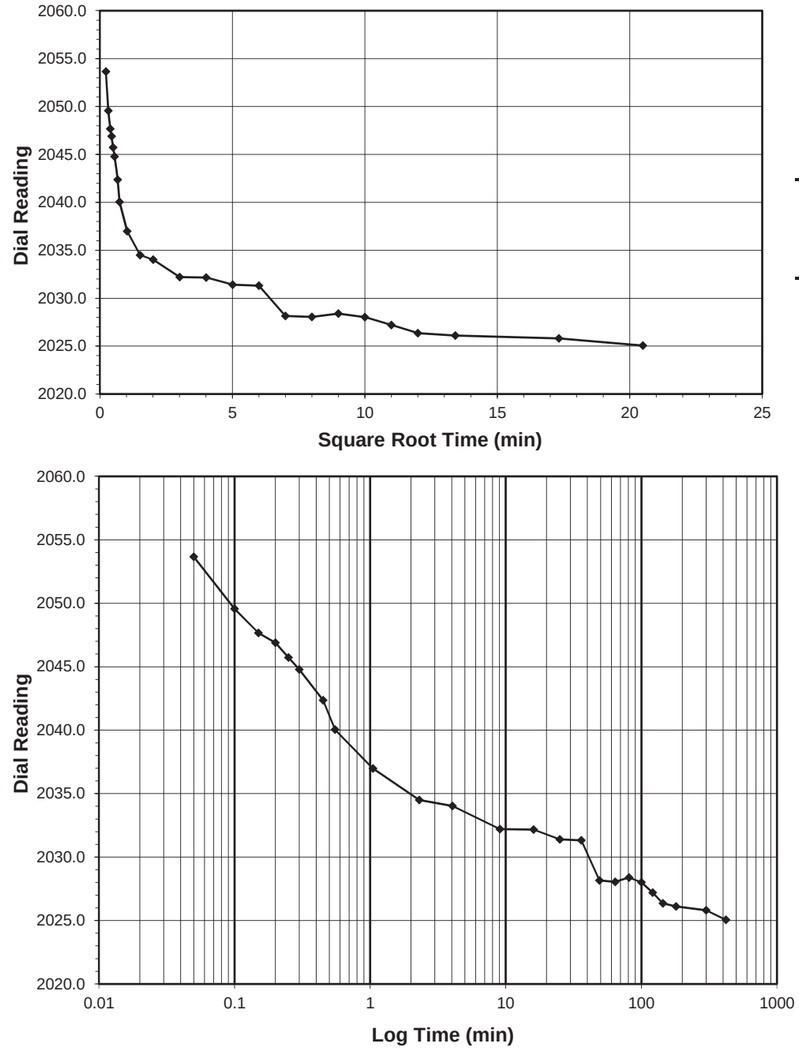
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**16.0-4.0**
Final Reading	**(div)**	**2025.1**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/7/17
Start Time		20:55:09

Elapsed Time (min)	Dial Reading (div)
Initial	**2134.4**
0.05	2053.7
0.10	2049.6
0.15	2047.7
0.20	2046.9
0.25	2045.7
0.30	2044.8
0.45	2042.4
0.55	2040.0
1.05	2037.0
2.30	2034.5
4.05	2034.0
9.07	2032.2
16.07	2032.2
25.07	2031.4
36.07	2031.3
49.07	2028.2
64.07	2028.1
81.07	2028.4
100.07	2028.0
121.07	2027.2
144.07	2026.4
180.07	2026.1
300.07	2025.8
420.02	2025.1

Tested By 129-04-0411 *Date* 12/7/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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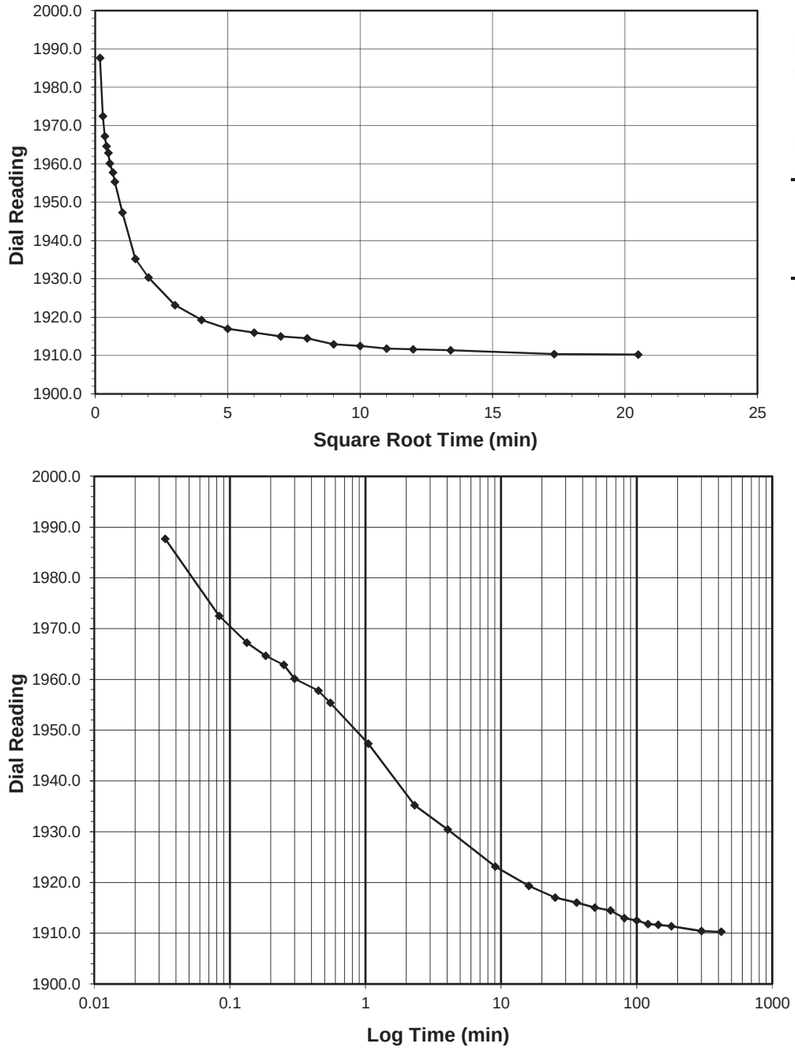
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**4.0-1.0**
Final Reading	**(div)**	**1910.3**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/8/17
Start Time		3:55:10

Elapsed Time (min)	Dial Reading (div)
Initial	**2025.1**
0.03	1987.7
0.08	1972.5
0.13	1967.2
0.18	1964.7
0.25	1962.9
0.30	1960.1
0.45	1957.8
0.55	1955.4
1.05	1947.3
2.30	1935.2
4.05	1930.4
9.05	1923.1
16.05	1919.3
25.05	1917.0
36.05	1916.0
49.07	1915.0
64.07	1914.5
81.07	1913.0
100.07	1912.5
121.07	1911.8
144.07	1911.6
180.07	1911.4
300.07	1910.4
420.03	1910.3

Tested By 129-04-0411 *Date* 12/8/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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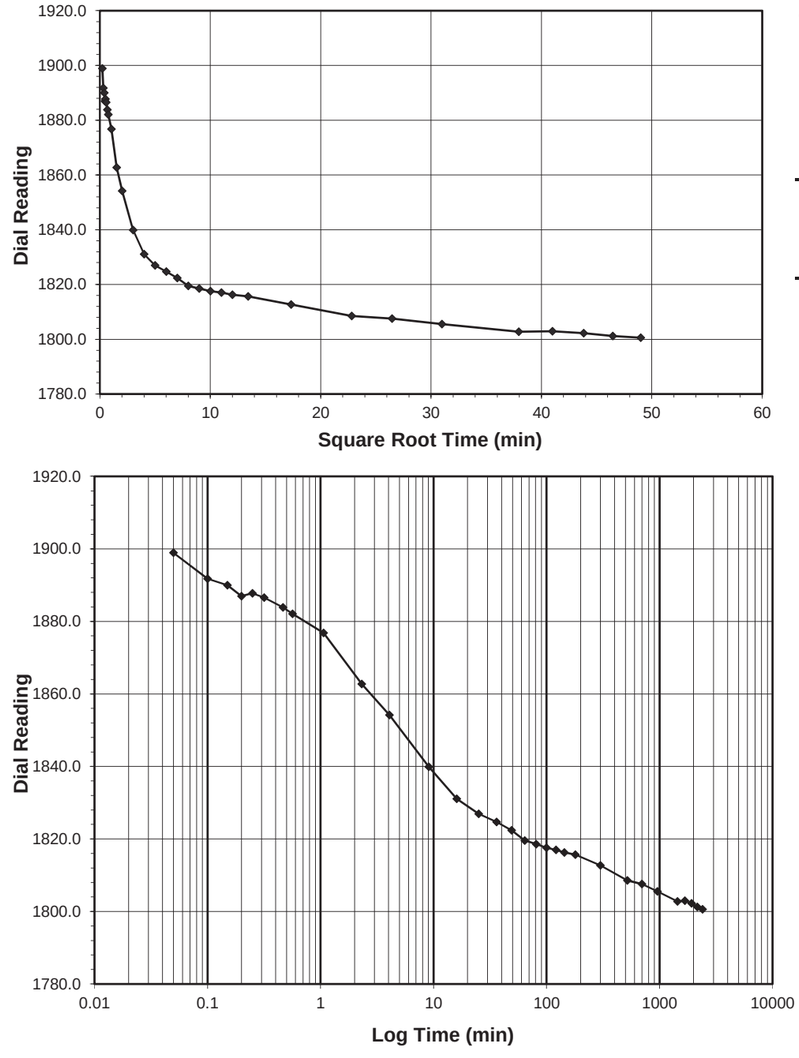
ONE DIMENSIONAL CONSOLIDATION

AASHTO T-216

Client	ESP Associates	Boring No.	L1_4000
Client Project	R-3822 FQ32.300, Task 1	Depth (ft)	8.3-10.1
Project No.	R-2017-878-001	Sample No.	ST-1
Lab ID	R-2017-878-001-008	Visual Description	WHITE CLAYEY SAND

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load	**(tsf)**	**1.0-0.25**
Final Reading	**(div)**	**1800.6**
Consolidometer No.		**R470**
1 Division	(in)	0.0001
Start Date		12/8/17
Start Time		10:55:13

Elapsed Time (min)	Dial Reading (div)
Initial	**1910.3**
0.05	1898.9
0.10	1891.7
0.15	1890.0
0.20	1886.9
0.25	1887.7
0.32	1886.5
0.47	1883.8
0.57	1882.1
1.07	1876.8
2.32	1862.7
4.07	1854.1
9.07	1839.9
16.07	1831.0
25.08	1827.0
36.08	1824.7
49.08	1822.4
64.08	1819.5
81.08	1818.6
100.08	1817.6
121.08	1817.0
144.08	1816.3
180.08	1815.7
300.08	1812.7
520.08	1808.5
700.08	1807.6
960.08	1805.5
1440.10	1802.8
1680.10	1802.9
1920.10	1802.3
2160.10	1801.2
2400.10	1800.6

Tested By 129-04-0411 *Date* 12/8/17 *Checked By* GEM *Date* 12/18/17

DCN: CT-24E Date: 5/3/12 Revision: 3

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