STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6187	1	

REFERENCE: U-6187

PROJECT: 48647

SEE SHEET 3 FOR PLAN SHEET LAYOUT AT TIME OF INVESTIGATION

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LINE	STATION	PLAN
-L-	10+30 - 72+81	4-8
-Y1-	10+31 - 35+40	5,9,10
-Y2-	27+98 - 63+90	8,11,12
-Y3-	10+00 - 11+26	9
-Y4-	10+00 - 22+49	4,5
-LPB-	10+00 - 22+69	8
-RPB-	10+00 - 31+48	8
-RPC-	10+00 - 25+89	8
-RPD-	10+00 - 25+32	8,12

APPENDIX A

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

ROADWAY SUBSURFACE INVESTIGATION

COUNTY *DAVIE*

PROJECT DESCRIPTION *REALIGNMENT AND EXTENSION OF SR 1630 (BALTIMORE ROAD) ON NEW LOCATION FROM SOUTH OF US 158 TO A NEW INTERCHANGE AT I-40*

INVENTORY

CAUTION NOTICE

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

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

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

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

PERSONNEL

Q. HILL

CG2 EXPLORATION

J. CRENSHAW

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INVESTIGATED BY *J. CRENSHAW*

DRAWN BY *Q. HILL*

CHECKED BY *J. CRENSHAW*

SUBMITTED BY *SCHNABEL ENG.*

DATE *JULY 2024*

Schnabel ENGINEERING

NORTH CAROLINA LICENSED SEAL 2504 GEOLOGIST JARED K. CRENSHAW

Signed by:

F325B40D4C25483...

SIGNATURE

08/01/2024

DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.	SHEET NO.
U-6187	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	50 MX											GRANULAR SOILS	SILT-CLAY SOILS	MUCK, PEAT
#40	30 MX	50 MX	51 MN											
#200	15 MX	25 MX	10 MX	35 MX	35 MX	35 MX	35 MX	36 MN	36 MN	36 MN	36 MN			
MATERIAL PASSING #40 LL	—		—	40 MX	41 MN	40 MX	41 MN	40 MX	41 MN	40 MX	41 MN	SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER		HIGHLY ORGANIC SOILS
PI	6 MX		NP	10 MX	10 MX	11 MN	11 MN	10 MX	10 MX	11 MN	11 MN			
GROUP INDEX	0		0	0		4 MX		8 MX	12 MX	16 MX	NO MX			
USUAL TYPES OF MAJOR MATERIALS	STONE FRAGS. GRAVEL, AND SAND		FINE SAND	SILTY OR CLAYEY GRAVEL AND SAND				SILTY SOILS		CLAYEY SOILS				
GEN. RATING AS SUBGRADE	EXCELLENT TO GOOD							FAIR TO POOR				FAIR TO POOR	POOR	UNSUITABLE

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

CONSISTENCY OR DENSENESS

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

TEXTURE OR GRAIN SIZE

U.S. STD. SIEVE SIZE	4	10	40	60	200	270
OPENING (MM)	4.76	2.00	0.42	0.25	0.075	0.053

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

GRAIN SIZE MM: 305 | 75 | 2.0 | 0.25 | 0.05 | 0.005
GRAIN SIZE 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) PL — PLASTIC LIMIT	- WET - (W)	SEMISOLID; REQUIRES DRYING TO ATTAIN OPTIMUM MOISTURE
OM — OPTIMUM MOISTURE SL — SHRINKAGE LIMIT	- MOIST - (M)	SOLID; AT OR NEAR OPTIMUM MOISTURE
	- DRY - (D)	REQUIRES ADDITIONAL WATER TO ATTAIN OPTIMUM MOISTURE

PLASTICITY

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

COLOR

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

GRADATION

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

ANGULARITY OF GRAINS

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

MINERALOGICAL COMPOSITION

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

COMPRESSIBILITY

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

PERCENTAGE OF MATERIAL

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

GROUND WATER

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

MISCELLANEOUS SYMBOLS

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

RECOMMENDATION SYMBOLS

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

ABBREVIATIONS

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

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

EQUIPMENT USED ON SUBJECT PROJECT

DRILL UNITS:
- [ ] CME-45C
- [ ] CME-55
- [X] CME-550
- [ ] VANE SHEAR TEST
- [ ] PORTABLE HOIST
- [X] MOBILE B-29
- [ ] _____

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.
- [X] 10cm CONE PENETROMETER
- [X] 95mm FLAT DILATOMETER

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

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

HAND TOOLS:
- [ ] POST HOLE DIGGER
- [X] HAND AUGER
- [ ] SOUNDING ROD
- [ ] VANE SHEAR TEST
- [X] K-100 KESSLER DCP

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: GPS-4, NORTHING: 822656 EASTING: 1567432
-L- STA. 70+99 183' LT
ELEVATION: 786.839 FEET

NOTES:

BRIDGE BORING AND COLLAR ELEVATIONS OBTAINED WITH CONVENTIONAL SURVEY EQUIPMENT - SURVEY DATED 12/20/23

ROADWAY AND CULVERT BORING ELEVATIONS OBTAINED FROM U6187_LS_CON_L509-1.DGN DATED 12/14/2023

FIAD - FILLED IMMEDIATELY AFTER DRILLING

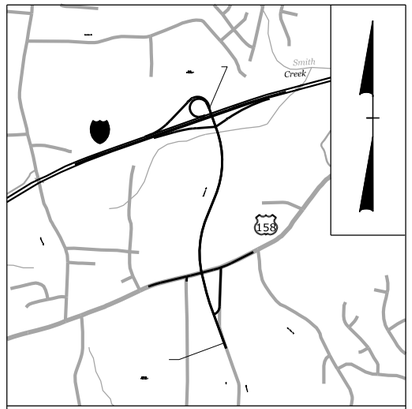
DATE: 8-15-14

09/08/99

TIP PROJECT: U-6187

CONTRACT: TBD

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



VICINITY MAP (NTS)

DESIGN RECOMMENDATION PLANS

(PLANS DEVELOPED USING OPENROADS DESIGNER)

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

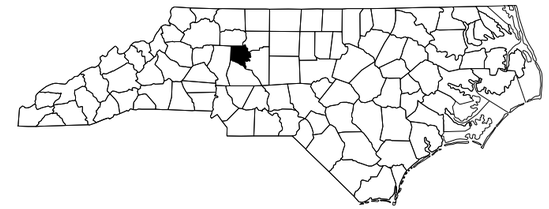
DAVIE COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6187	3	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
48647.1.1		PE

LOCATION: *REALIGNMENT AND EXTENSION OF SR 1630 (BALTIMORE ROAD) FROM SOUTH OF US 158 TO A NEW INTERCHANGE AT I-40*

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



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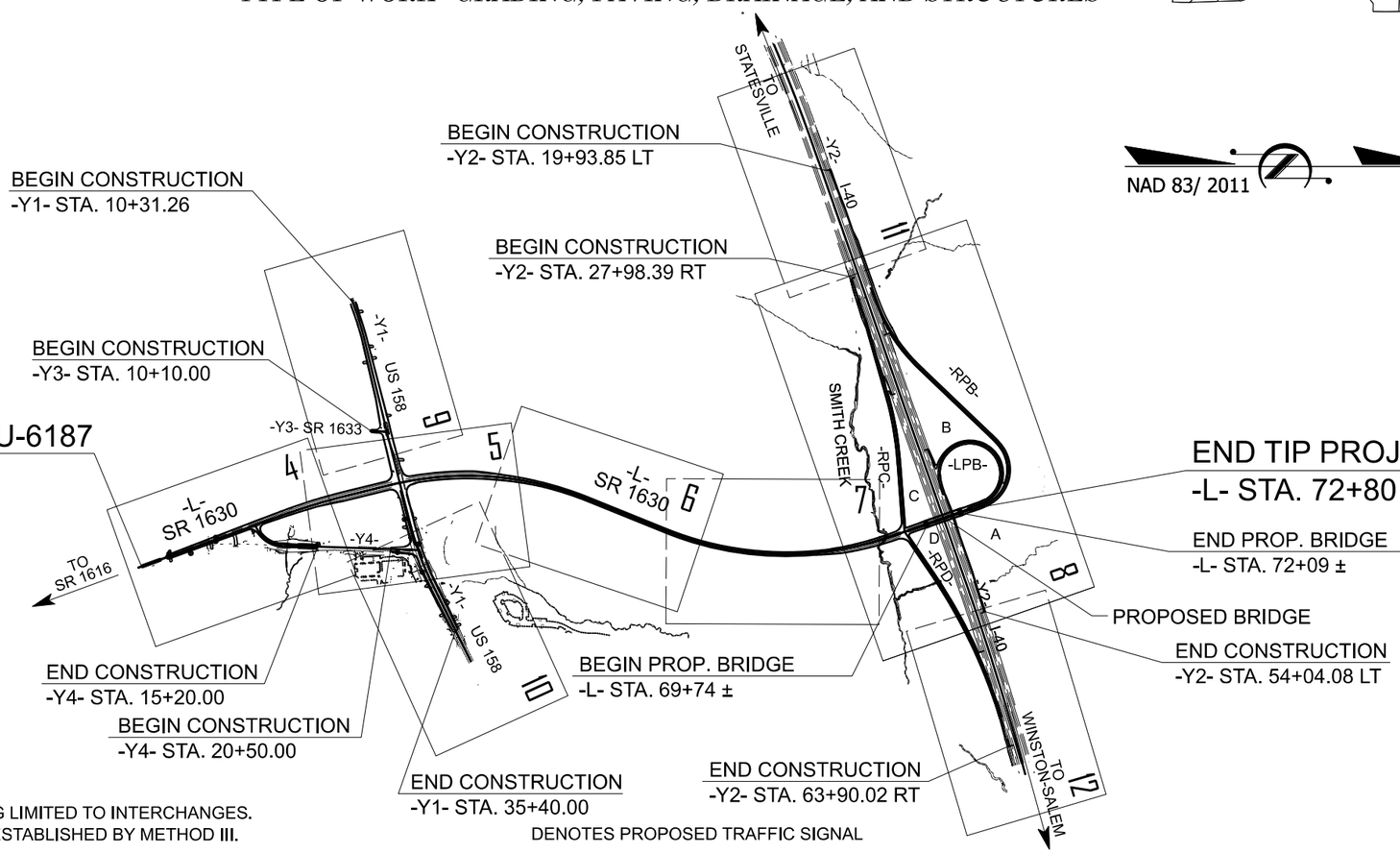


DENOTES PROPOSED TRAFFIC SIGNAL

THIS PROJECT IS NOT WITHIN A MUNICIPAL BOUNDARY.
THIS IS A CONTROL OF ACCESS PROJECT WITH ACCESS TO I-40 BEING LIMITED TO INTERCHANGES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2025 = 8,100
ADT 2045 = 21,200
K = 10 %
D = 55 %
T = 8 % *
V = 60 MPH
* TTST =6% DUAL 2%
FUNC CLASS =
MAJOR COLLECTOR
STATE WIDE TIER

PROJECT LENGTH

PROJECT LENGTHS FOR TIP PROJECT U-6187:

LENGTH ROADWAY TIP PROJECT U-6187 = 1.139 MILES

LENGTH STRUCTURES TIP PROJECT U-6187 = 0.045 MILES

TOTAL LENGTH TIP PROJECT U-6187 = 1.184 MILES

NCDOT Contact: RYAN C. NEWCOMB, PE
Prepared in the Office of: vhb
VHB Engineering NC, P.C. (C-3705)
940 Main Campus Drive, Suite 500
Raleigh, NC 27606

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JUNE 30, 2024

LETTING DATE:
JUNE 17, 2025

JONATHAN P. SOIKA, P.E.
PROJECT ENGINEER

JERRY B. JAVELLANA, P.E.
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: *P.E.*

ROADWAY DESIGN ENGINEER

SIGNATURE: *P.E.*

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

Schnabel ENGINEERING
Schnabel Engineering South, P.C.
1133 Military Cutoff Road, Suite 210 / Wilmington, NC 28405
T 910.769.1621
schnabel-eng.com

July 31, 2024

STATE PROJECT: 48647.1.1

TIP NUMBER: U-6187

COUNTY: DAVIE

DESCRIPTION: Realignment and Extension of SR 1630 (Baltimore Road) on New Location from South of US 158 to a New Interchange at I-40

SUBJECT: Geotechnical Roadway Inventory Report

Project Description

The project consists of constructing a 1.139-mile roadway on new location and adjoining existing state highways, a 2-span bridge over I-40, and 1 culvert, in the city of Advance, North Carolina. The new interchange will provide direct access to I-40 from the communities of Bixby, Redland and the surrounding rural area. The direct access to I-40 will support economic development and address traffic congestion at existing intersections. We also investigated a proposed culvert extension at approximately -Y2- STA. 30+25. It is our understanding that the design team no longer intends to extend this culvert. The provided plans showed anticipated cut excavations as deep as 30± feet and proposed embankment construction with fill heights up to 55± feet. Boring logs associated with this culvert extension are included in this report.

The field investigation was conducted in November 2023 through February of 2024 using both rubber-tire and track-mounted CME 550X drill rigs, with automatic hammers, a truck mounted Mobile B-29, with automatic hammer, and hand tools. Standard Penetration Tests (SPT) were performed at selected locations. Borings were advanced with hollow stem auger equipment and hand tools along the project corridor. Cone Penetration Tests (CPT) and Dilatometer (DMT) tests were completed near the proposed shoulder points of a culvert approximately 30-feet left and 40-feet right of -L- STA. 66+25 as well as at -L- STA. 69+74, near End Bent 1 of the proposed bridge over I-40. Hand augers were performed at locations the drill rig could not access or where concentrated underground utilities warranted, Dynamic Cone Penetration Tests (DCP) were conducted at all hand auger locations. Representative soil samples were collected and forwarded to an approved testing facility for soil quality analysis, moisture content, California Bearing Ratio, specific gravity, organic content, and AASHTO classification.

The Following Alignments were Investigated

Line	Station			Length (ft)
-L-	10+30	to	72+81	6,251
-Y1-	10+31	to	35+40	2,509
-Y2-	27+98	to	63+90	3,592
-Y3-	10+00	to	11+26	126
-Y4-	10+00	to	22+49	1,249
-LPB-	10+00	to	22+69	1,269
-RPB-	10+00	to	31+48	2,148
-RPC-	10+00	to	25+89	1,589
-RPD-	10+00	to	25+32	1,532
			Total=	20,265 feet (~3.8 miles)

Physiography and Geology

Based on a review of the Geologic map of North Carolina (1985) and the Geologic map of the Charlotte 1 degree x 2 degrees quadrangle, North Carolina and South Carolina (1988), the project is located in the Piedmont Physiographic Province. Soils in the area generally consist of residual sands, silts, and clays. Weathered rock and Late Proterozoic crystalline rock of the Metamorphic Mafic Complex (mm) primarily consisted of meta-gabbro underlie. Topography along the project corridor is gently rolling, traversing through a heavily wooded area to the north of US 158 until reaching an open pasture south of I-40. Natural ground surface elevations range from 757.3± feet above sea level in the vicinity of Smith Creek along the -L- alignment to 884.1± feet above sea level at the start of the -Y1- alignment.

Soil Properties

Soil and rock encountered along the project corridor are divided into five categories based on origin: roadway embankment soils, alluvial soils, residual soils, weathered rock, and crystalline rock.

Roadway embankment soils consisting of very loose SAND and GRAVEL (A-1-b), medium stiff silty SAND (A-2-4), medium stiff, clayey SILT (A-5), and medium stiff sandy CLAY, silty CLAY, and sandy and silty CLAY (A-6, A-7-5, A-7-6) were encountered along the -L-, -Y1-, and -Y2- alignments. Soils varied in thickness from less than one foot to 10 feet. Soils moistures were typically moist. Soil quality (classification) testing performed on two samples from this stratum indicate liquid limits of 42 and 59, and plasticity indices (PI) of 13 and 30. Moisture content values were reported as 21% and 32%.

Alluvial soils consisting of stiff sandy CLAY and CLAY (A-6, A-7-6), and sandy SILT (A-4) were encountered along the -L- alignment near Smith Creek. Thickness varied from less than one foot to 6.5 feet thick. Soils moistures were typically moist to wet. Soil quality (classification) testing performed on 2 samples from this stratum indicate liquid limits of 38 and 45, and plasticity indices (PI) of 14 and 17. Moisture content values were reported as 53% and 59%. Organic contents of two samples were reported at 5% and 10.2%.

Residual soils consisting of very loose to very dense SAND, silty SAND and clayey SAND (A-3, A-2-4, A-2-6), medium stiff to hard, SILT, sandy SILT and clayey SILT (A-4, A-5), and very soft to hard, CLAY, sandy CLAY, silty CLAY, and sandy and silty CLAY (A-6, A-7, A-7-5, A-7-6) were encountered throughout the project corridor. Soils varied in thickness from less than one foot to a maximum of 69.1 feet. Soil moistures were typically dry to wet. Soil quality (classification) testing performed on samples from this stratum indicate liquid limits of 31 to 87, and plasticity indices (PI) of 3 to 47. Moisture content values ranged from 9.0% to 70.0%.

Weathered rock consisting of gray, white, black, brown, tan, and pink meta-gabbro was encountered interlaid and underlying residual soils at several locations along the project corridor. Weathered rock elevations in these borings varied from 719.5± feet above sea level to 818.9± feet above sea level. Auger and split spoon refusal were noted beneath some of these layers on crystalline rock (meta-gabbro).

Crystalline rock consisting of black, white, gray, and tan meta-gabbro was encountered underlying residual soils and weathered rock at several locations along the corridor. Top of rock elevations in these borings varied from 686.5± feet above sea level to 738.2± feet above sea level. No rock core samples were collected as part of this investigation.

Groundwater

Borings were left open for a minimum of 24 hours to equilibrate with the surrounding conditions, when conditions permitted. All measured groundwater levels were at least 6 feet below proposed pavement grades in the preliminary roadway plans. Groundwater data was collected in November and December of 2023. Groundwater elevations generally varied with topography and ranged from 764± to 813± feet above sea level.

Areas of Special Geotechnical Interest

A. Highly plastic soils were encountered in the following sections.

Alignment	Begin Station	End Station
-L-	30+75	33+75
-L-	37+75	50+75
-Y1-	10+31	15+25
-Y1-	16+25	23+25
-Y2-	19+93	25+25
-Y2-	45+25	50+75
-Y2-	61+75	62+25
-RPB-	13+75	18+75
-RPD-	10+00	17+75

B. Alluvial Soils were encountered in the following sections.

Alignment	Begin Station	End Station
-L-	65+75	67+25

Alluvial soils should also be expected within the vicinity of creeks and streams in the following areas.

Alignment	Begin Station	End Station
-Y2-	28+75	32+25
-Y2-	50+25	52+75
-Y4-	12+25	13+75
-RPD-	20+25	22+25

These areas may require culvert structures under embankment fills, which were not identified in the preliminary roadway plans.

C. Fill soils were encountered in the following sections.

Alignment	Begin Station	End Station
-Y1-	16+25	16+75
-Y1-	28+25	32+75
-Y2-	34+75	60+25

D. Groundwater wells are shown on the preliminary plans in the following locations.

Alignment	Station	Offset
-Y1-	27+90	100' LT
-Y4-	16+00	37' LT

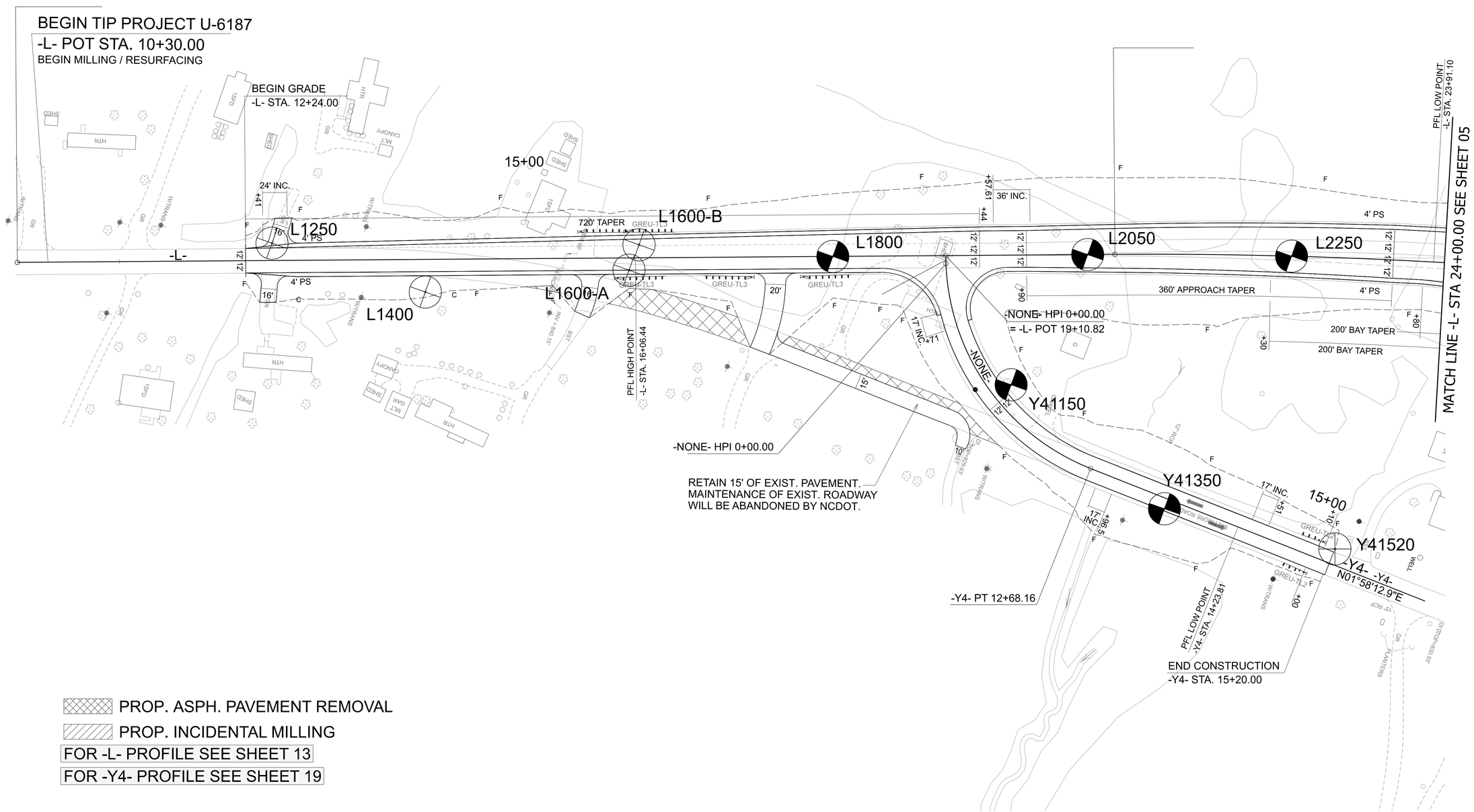
E. No rock outcrops were observed within the project limits.

Jared K. Crenshaw, PG
Senior Geologist

Jason A. Holland, PG
Project Geologist

Schnabel Engineering
1133 Military Cutoff Road, Suite 210
Wilmington, NC 28405

5/26/20



PROP. ASPH. PAVEMENT REMOVAL

PROP. INCIDENTAL MILLING

FOR -L- PROFILE SEE SHEET 13

FOR -Y4- PROFILE SEE SHEET 19

U-6187

2RD1 | 04

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DAVIE COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

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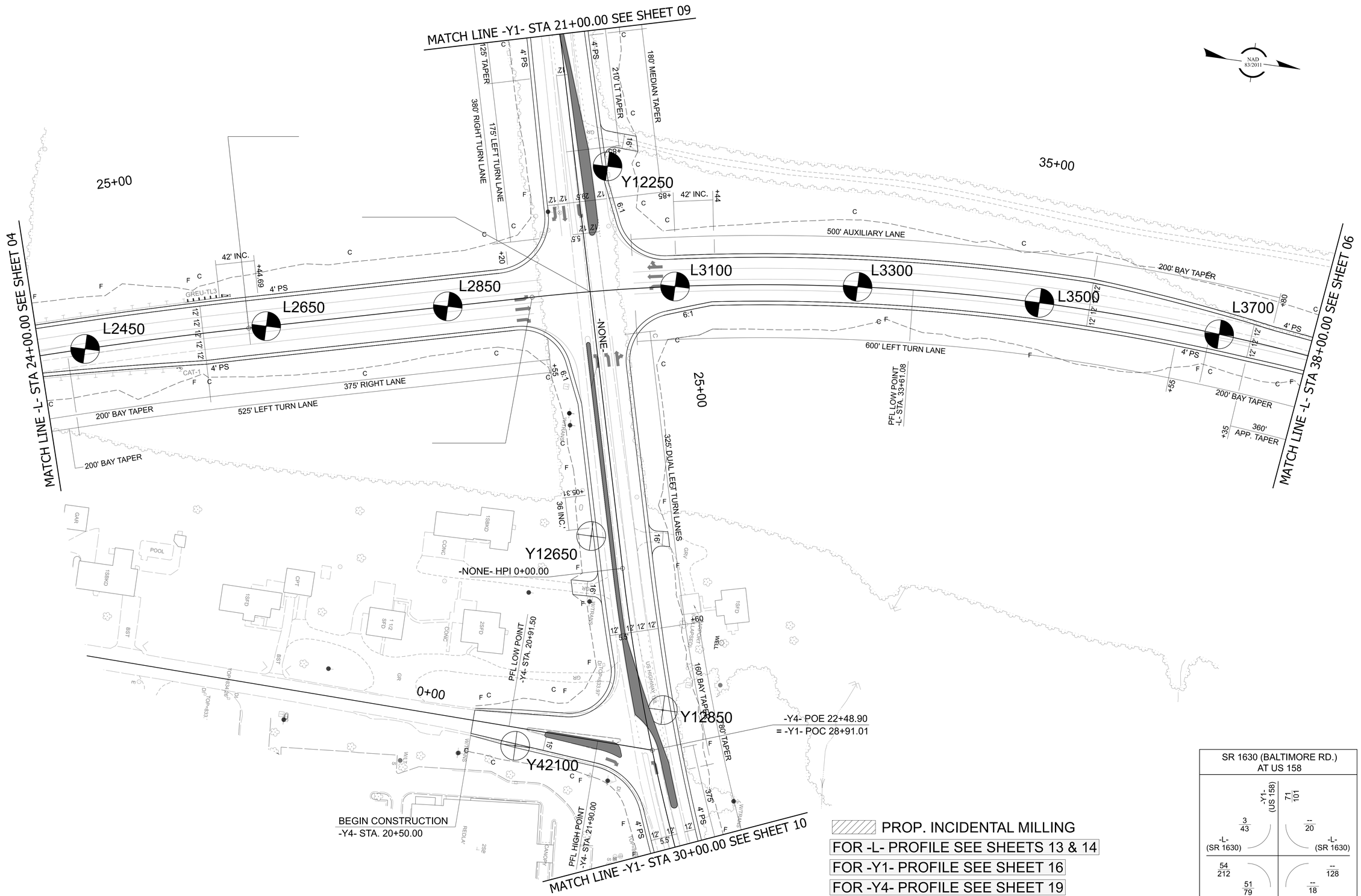
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

5/26/20



PROP. INCIDENTAL MILLING

FOR -L- PROFILE SEE SHEETS 13 & 14

FOR -Y1- PROFILE SEE SHEET 16

FOR -Y4- PROFILE SEE SHEET 19

PROPOSED TRAFFIC SIGNAL

SR 1630 (BALTIMORE RD.) AT US 158

-Y1- (US 158) 71/101	-L- (SR 1630) 3/43
-L- (SR 1630) 1/20	-Y1- (US 158) 119/135
-Y1- (US 158) 54/212	-L- (SR 1630) 51/79
-L- (SR 1630) 1/128	-Y1- (US 158) 1/18

2019/2045 ADT

U-6187

2RD1 | 05

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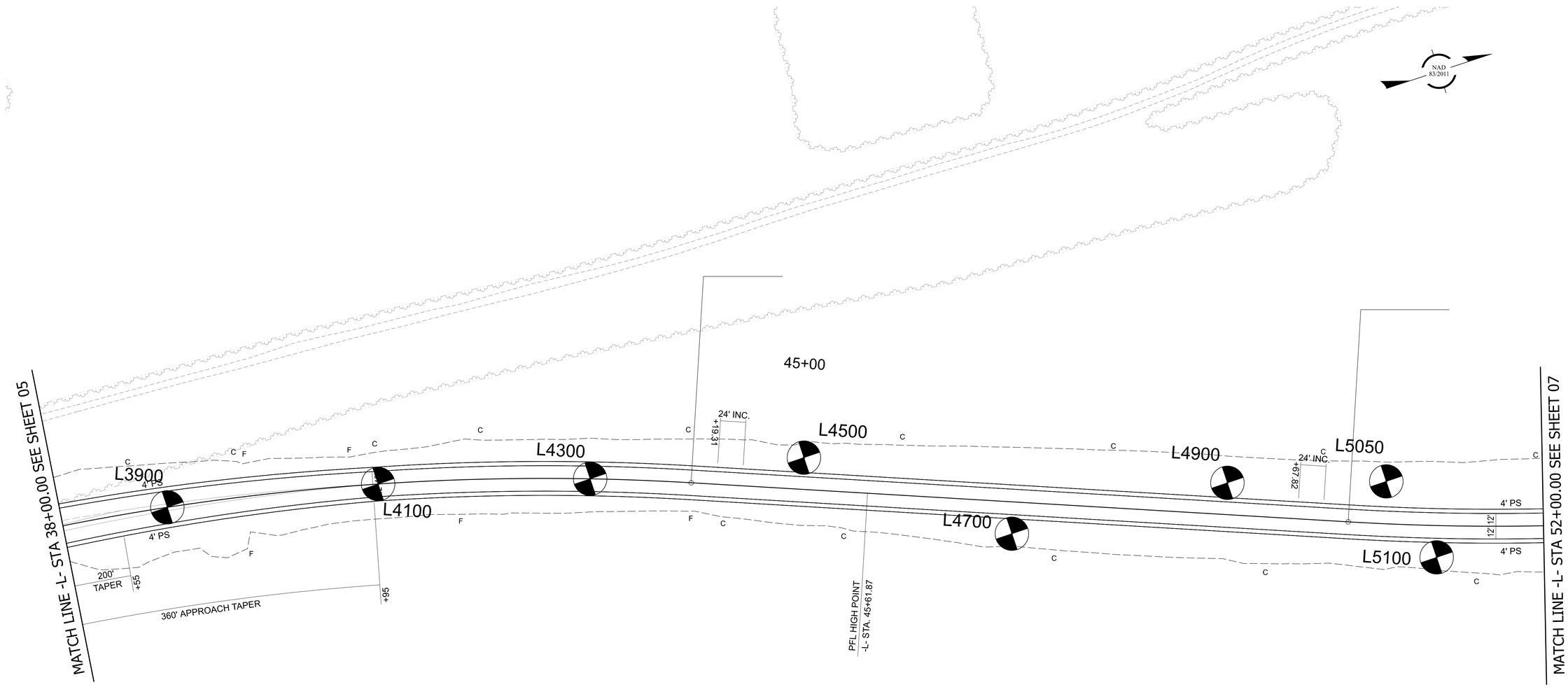

FOR -L- PROFILE SEE SHEET 14

U-6187

2RD1	06

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DEPARTMENT OF TRANSPORTATION
DAVIE COUNTY

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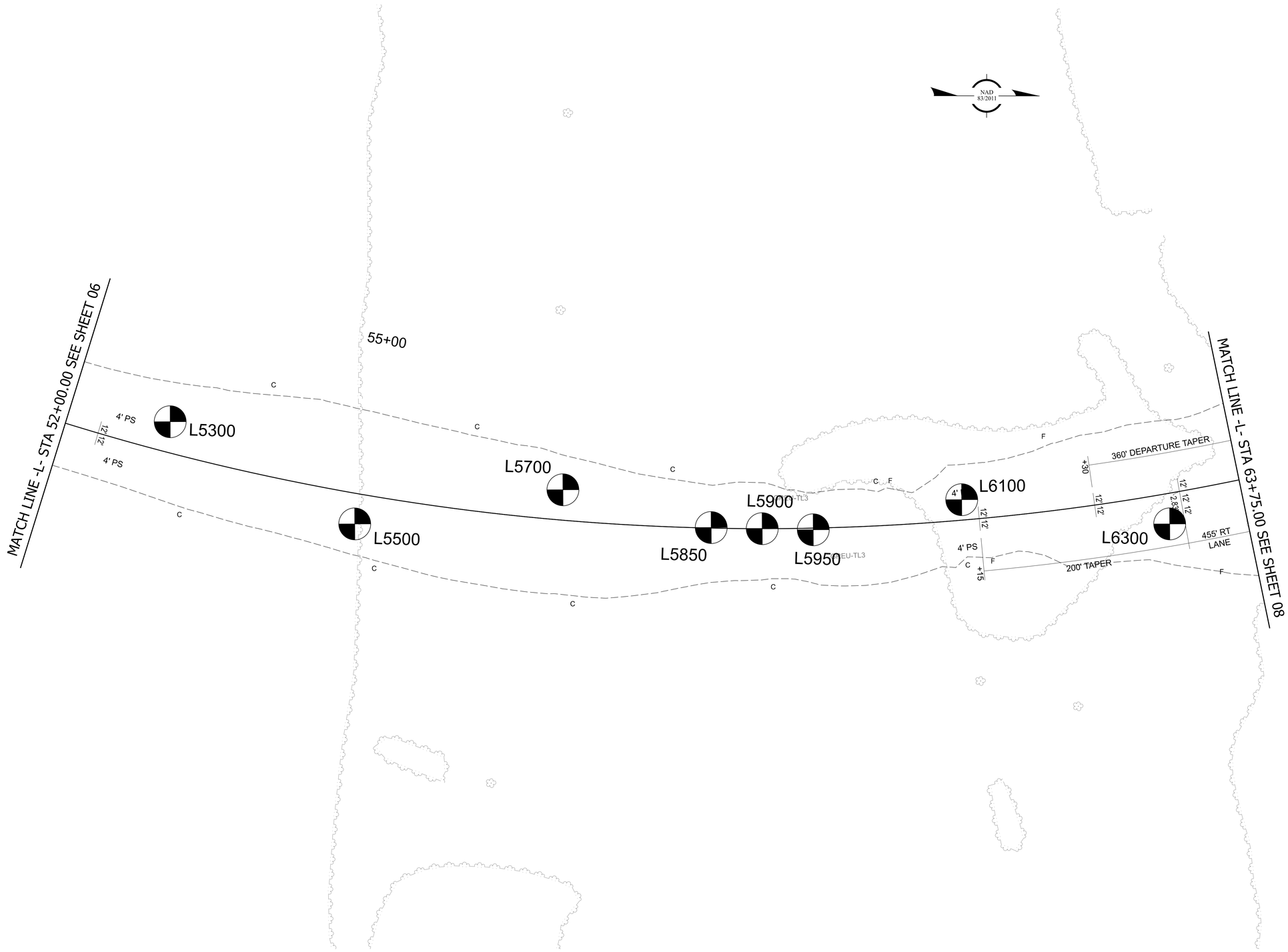

U-6187

2RD1	07

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DAVIE COUNTY

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ROADWAY DESIGN ENGINEER

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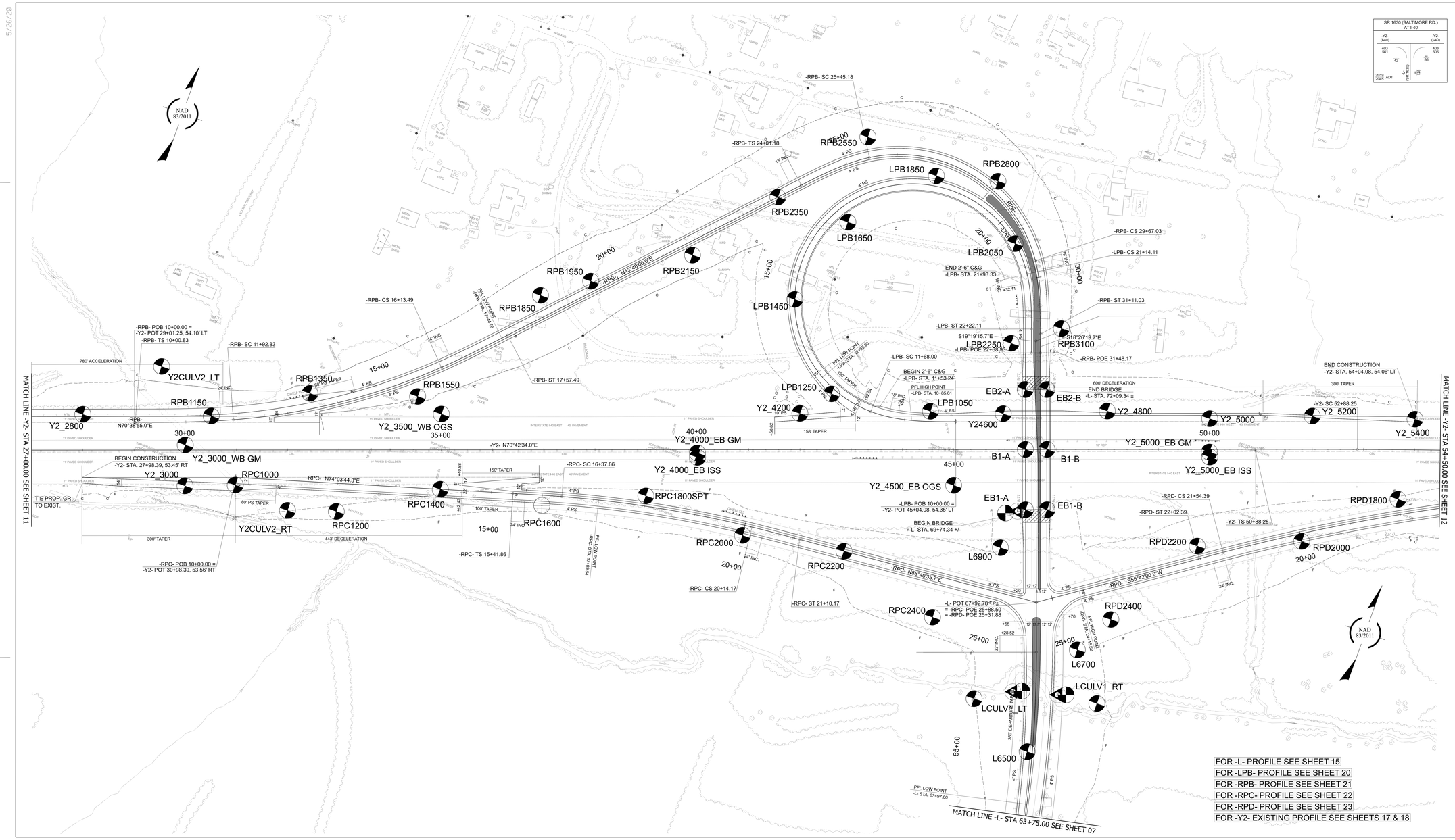

U-6187

2RD1 | 08

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DAVIE COUNTY

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ROADWAY DESIGN ENGINEER

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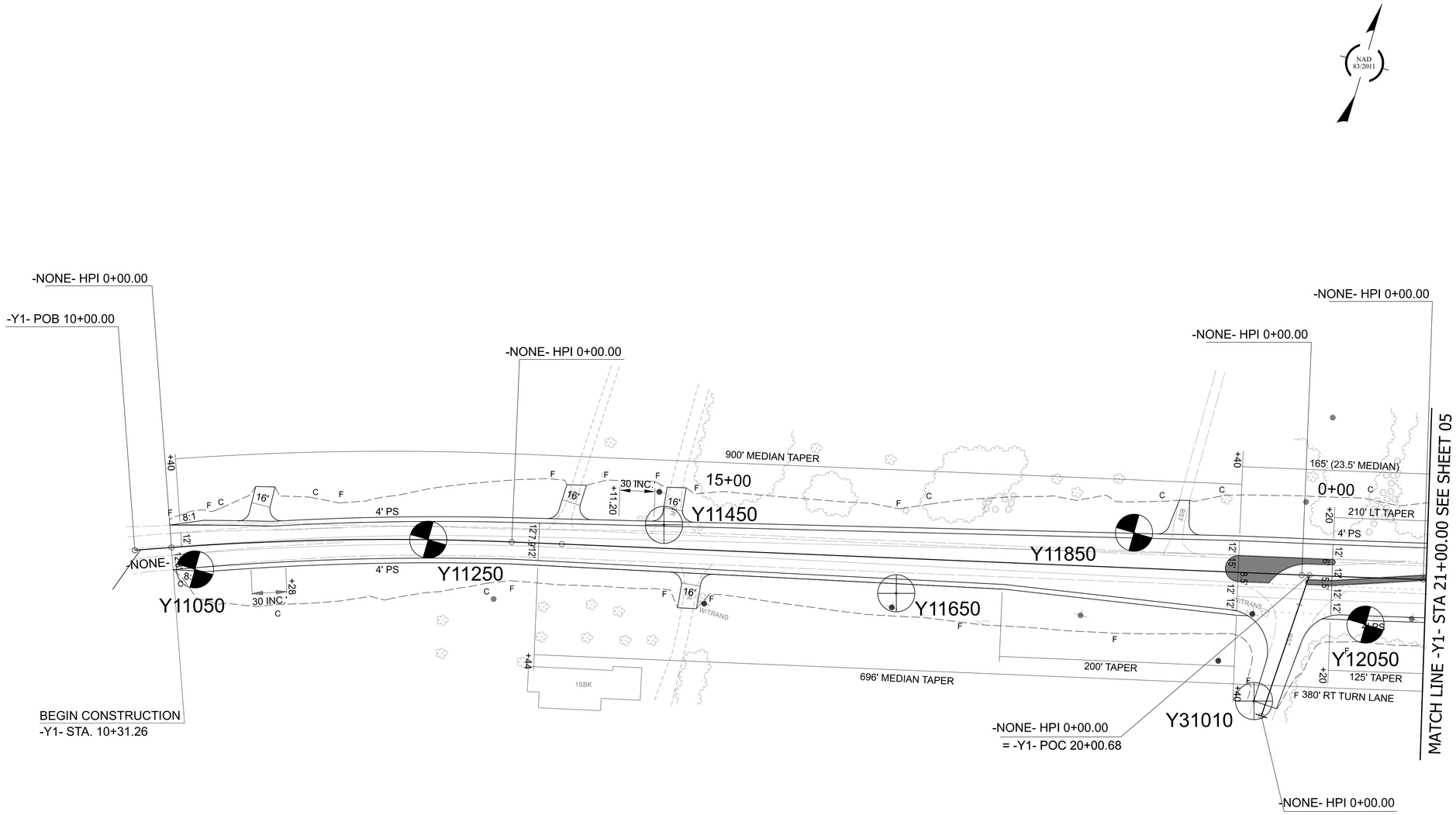

PROP. INCIDENTAL MILLING

FOR -Y1- PROFILE SEE SHEET 16

U-6187

2RD1 | 09

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DAVIE COUNTY

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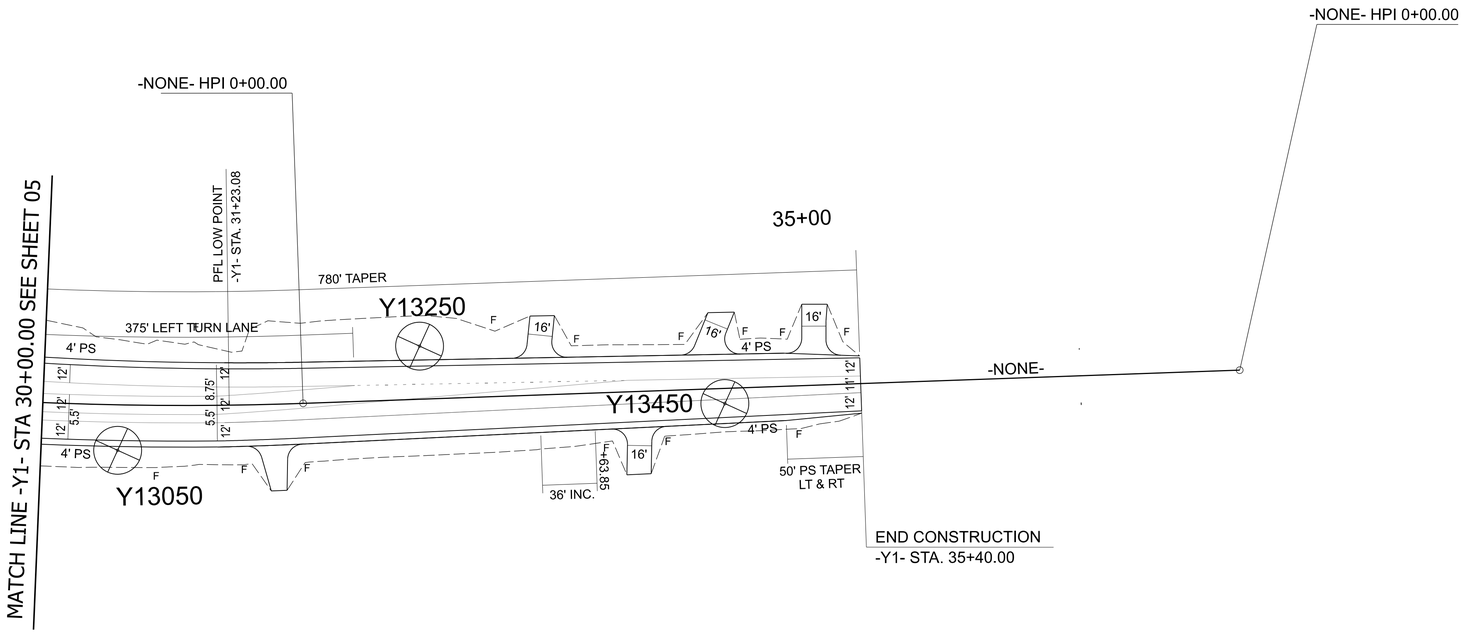

PROP. INCIDENTAL MILLING

FOR -Y1- PROFILE SEE SHEET 16

U-6187

2RD1 | 10

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DAVIE COUNTY

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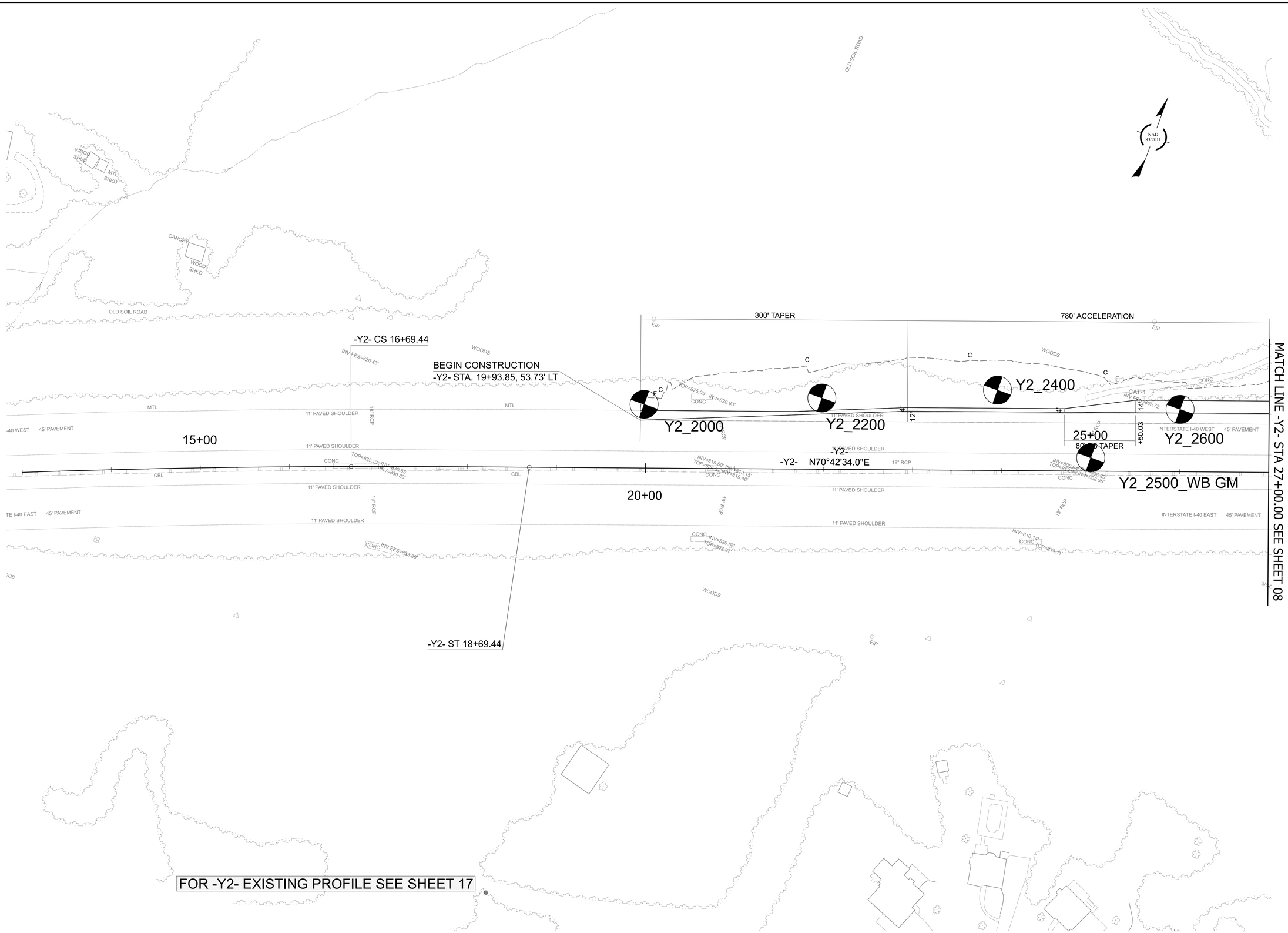

U-6187

2RD1	11

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DAVIE COUNTY

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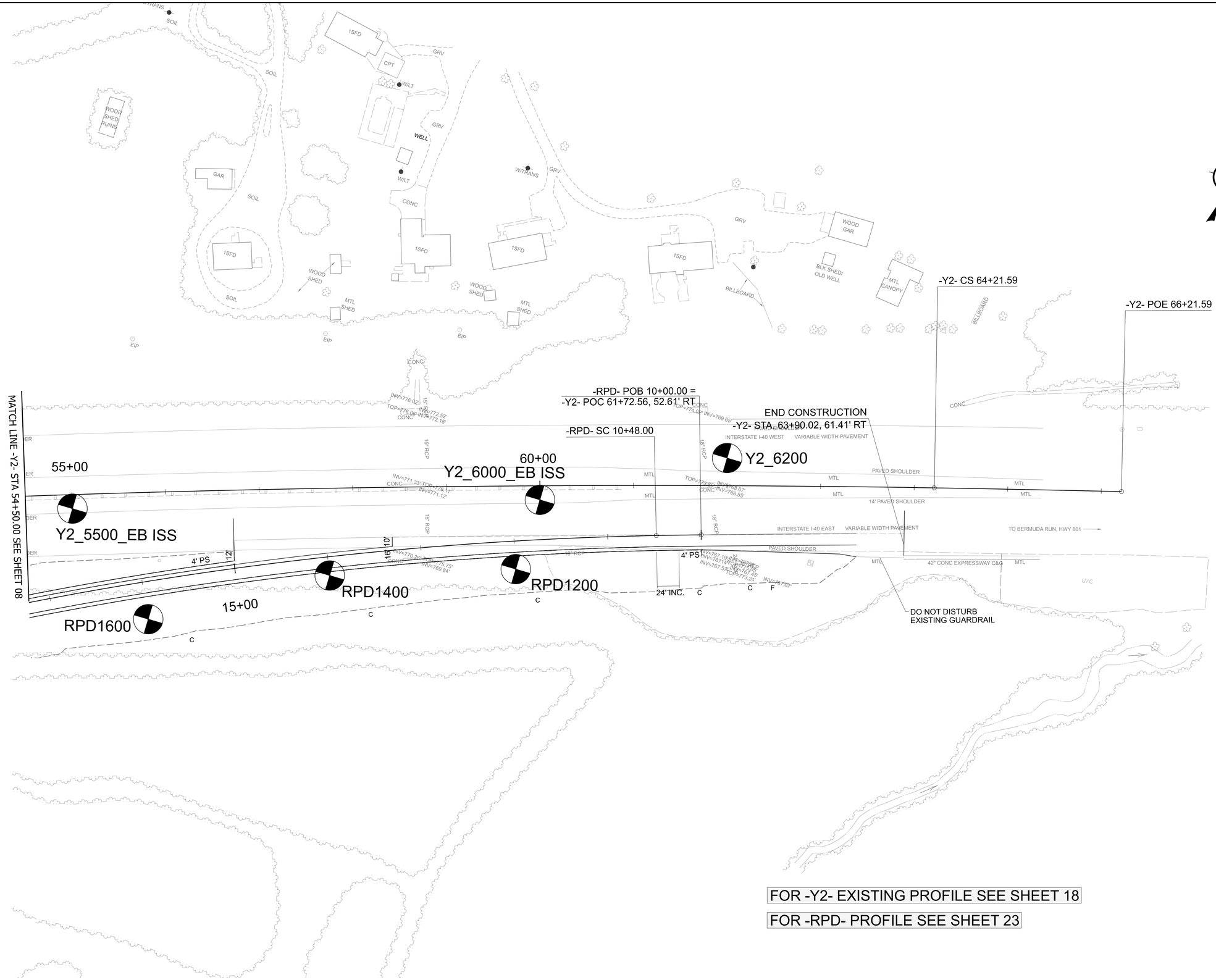
5/26/20



FOR -Y2- EXISTING PROFILE SEE SHEET 18

FOR -RPD- PROFILE SEE SHEET 23

U-6187

2RD1 | 12

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DAVIE COUNTY

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INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L1250	**STATION** 12+50	**OFFSET** 17 ft LT	**ALIGNMENT** -L-
COLLAR ELEV. 842.6 ft	**TOTAL DEPTH** 6.0 ft	**NORTHING** 817,076	**EASTING** 1,567,869
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER Q. Hill	**START DATE** 01/04/24	**COMP. DATE** 01/04/24	**SURFACE WATER DEPTH** N/A

0 HR. Dry
24 HR. FIAD

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)
845											
										842.6 GROUND SURFACE	0.0
840								M		**RESIDUAL** Medium stiff, orange, clayey SILT (A-5), with trace rock and root fragments, micaceous	
										839.6	3.0
								M		Medium stiff, red and brown, silty CLAY (A-6), medium plasticity	
										836.6	6.0

Boring Terminated at Elevation 836.6 ft in CLAY (RESIDUAL)

Kessler DCP Test performed to estimate soil strength

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L1400	**STATION** 14+00	**OFFSET** 32 ft RT	**ALIGNMENT** -L-
COLLAR ELEV. 844.0 ft	**TOTAL DEPTH** 4.4 ft	**NORTHING** 817,234	**EASTING** 1,567,863
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER Q. Hill	**START DATE** 01/04/24	**COMP. DATE** 01/04/24	**SURFACE WATER DEPTH** N/A

HR. Dry
24 HR. FIAD

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
845										
										844.0 GROUND SURFACE 0.0
								M		**RESIDUAL**
										841.8 Medium stiff, brown and red, silty CLAY (A-6), low to medium plasticity 2.2
840								M		839.8 Medium stiff, brown and tan, clayey SILT (A-5), with little sand 4.2
										839.6 4.4
										Medium stiff, brown and orange, silty CLAY (A-6), with trace rock fragments.

Boring Terminated at Elevation 839.6 ft in CLAY (RESIDUAL)

Kessler DCP Test performed to estimate soil strength. Hand auger refusal at 4.4 feet.

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L1600-A	**STATION** 16+00	**OFFSET** 12 ft RT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 843.3 ft	**TOTAL DEPTH** 3.5 ft	**NORTHING** 817,415	**EASTING** 1,567,776	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER Q. Hill	**START DATE** 01/04/24	**COMP. DATE** 01/04/24	**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)
845											
										843.3 GROUND SURFACE	0.0
								M		**ROADWAY EMBANKMENT**	
840										840.9 Medium stiff, orange and brown, clayey SILT (A-5), with some rock fragments, micaceous	2.4
								M		839.8 **RESIDUAL**	3.5
										Medium stiff, brown and orange, sandy SILT (A-4), with trace rock fragments and clay lenses	
										Boring Terminated at Elevation 839.8 ft in SILT (RESIDUAL)	
										Kessler DCP Test performed to estimate soil strength. Hand auger refusal at 3.5 feet.	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L1600-B	**STATION** 16+00	**OFFSET** 60 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 839.0 ft	**TOTAL DEPTH** 2.4 ft	**NORTHING** 817,416	**EASTING** 1,567,749	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER Q. Hill	**START DATE** 01/04/24	**COMP. DATE** 01/04/24	**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
840										
										839.0 GROUND SURFACE 0.0
								M		**ROADWAY EMBANKMENT**
										836.6 Medium dense, brown and orange, sandy SILT (A-4), with trace rock fragments, low to medium plasticity 2.4
										Boring Terminated at Elevation 836.6 ft in SILT (ROADWAY EMBANKMENT)
										Kessler DCP Test performed to estimate soil strength; Hand auger refusal at 2.4 feet.

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L1800	**STATION** 18+00	**OFFSET** CL	**ALIGNMENT** -L-
COLLAR ELEV. 833.2 ft	**TOTAL DEPTH** 14.8 ft	**NORTHING** 817,598	**EASTING** 1,567,696
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft)	
0 HR.	Dry
24 HR.	Dry

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))
835										
	833.2	0.0								833.2 — GROUND SURFACE — 0.0
			5	8	8	16		D		**RESIDUAL** Orange, CLAY (A-7-5 (13)), medium plasticity
830	829.5	3.7								
			9	9	10	19	SS-37	13%		
	826.7	6.5								
			12	16	13	29		M		825.2 — 8.0
825	824.7	8.5								Orange, sandy SILT (A-4), with trace to some rock fragments, micaceous
			10	8	12	20		M		
820	819.7	13.5								
	818.9	14.3	14	86/0.3		100/0.8				818.9 — 14.3
	818.4	14.8	60/0.0			60/0.0				818.4 — 14.8
										WEATHERED ROCK Gray, META-GABBRO
										Boring Terminated with Standard Penetration Test Refusal at Elevation 818.4 ft on CYSTALLINE ROCK

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L2050	**STATION** 20+50	**OFFSET** CL	**ALIGNMENT** -L-
COLLAR ELEV. 818.5 ft	**TOTAL DEPTH** 35.0 ft	**NORTHING** 817,833	**EASTING** 1,567,610
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft)	
0 HR.	31.7
24 HR.	5.5

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))
820										
	818.5	0.0								818.5 — GROUND SURFACE — 0.0
			3	5	5	10		M		**RESIDUAL** Brown, silty and sandy CLAY (A-6), medium plasticity
815	815.0	3.5								
			3	3	4	7				Shelby tube taken from 4.0 - 6.0 ft. Not sampled
	812.0	6.5								
			2	2	4	6		W		
810	810.0	8.5								810.0 — 8.5
			6	10	15	25		W		Brown and tan, clayey SILT (A-5 (0))
805	805.0	13.5								
			13	16	18	34	SS-25	40%		
										801.5 — 17.0
800	800.0	18.5								Gray, tan, and brown, silty SAND (A-2-4), with trace rock fragments and clayey lenses
			10	13	15	28		W		
795	795.0	23.5								
			13	14	20	34		W		
790	790.0	28.5								
			7	10	13	23		W		
785	785.0	33.5								
			17	25	47	72		W		783.5 — 35.0
										Boring Terminated at Elevation 783.5 ft in SAND (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L2250	**STATION** 22+50	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** 13.0
COLLAR ELEV. 821.1 ft	**TOTAL DEPTH** 25.0 ft	**NORTHING** 818,022	**EASTING** 1,567,544	**24 HR.** 5.5
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**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)
825											
	821.1	0.0								821.1 GROUND SURFACE	0.0
820			3	7	8	15		M		**RESIDUAL** Brown, silty CLAY (A-6)	
	817.6	3.5								817.6	3.5
			4	4	5	9	SS-15	29%		Brown and gray, CLAY (A-7 -5 (41)), with little silt, medium plasticity	
815	814.6	6.5									
	812.6	8.5	3	6	7	13					
			4	5	7	12		W			
810										809.1	12.0
	807.6	13.5								Brown, white, and orange, silty CLAY (A-6), with trace sand, saprolitic, medium plasticity	
			1	2	2	4		W			
805											
	802.6	18.5									
			1	2	3	5		W			
800										799.1	22.0
	797.6	23.5								Gray, white, and orange, sandy SILT (A-4), with trace clay	
			7	8	13	21		W		796.1	25.0
										Boring Terminated at Elevation 796.1 ft in SILT (RESIDUAL)	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L2450	**STATION** 24+50	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 827.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 818,213	**EASTING** 1,567,486	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**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
830										
	827.0	0.0								827.0 GROUND SURFACE 0.0
825			5	9	8	17		D		**RESIDUAL** Brown and orange, silty CLAY (A-6), saprolitic, with manganese oxides
	823.5	3.5								
			8	8	7	15		M		
820	820.5	6.5								821.0 6.0
			4	9	12	21		M		Gray and brown, clayey SILT (A-5), micaceous, with manganese oxides
	818.5	8.5								
			7	6	7	13		M		
815										
	813.5	13.5								
			8	10	10	20		M		812.0 15.0
										Boring Terminated at Elevation 812.0 ft in SILT (RESIDUAL)

NCDOT BORE DOUBLE U6187_BORINGS.GPJ NC_DOT.GDT 5/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L2650	**STATION** 26+50	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 839.1 ft	**TOTAL DEPTH** 10.3 ft	**NORTHING** 818,407	**EASTING** 1,567,435	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**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)
840											
	839.1	0.0	4	7	8	15		M		839.1 GROUND SURFACE	0.0
										RESIDUAL Brown and orange, sandy CLAY (A-6), highly plastic	
835	835.7	3.4	7	8	9	17	SS-6	37%		836.1 Orange, silty CLAY (A-7-5 (23)), contains roots, highly plastic	3.0
	832.3	6.8								833.1 Brown and orange, clayey SILT (A-4), medium to high plasticity	6.0
830	830.3	8.8	5	5	8	13		M			
			3	4	3	7		M		828.8 Boring Terminated at Elevation 828.8 ft in SILT (RESIDUAL)	10.3

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L2850	**STATION** 28+50	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 843.7 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 818,601	**EASTING** 1,567,388	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**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
845										
	843.7	0.0	4	7	6	13	SS-1	18%		843.7 GROUND SURFACE 0.0
										RESIDUAL Orange and white, sandy SILT (A-4 (3)), medium plastic
840	840.2	3.5	5	6	6	12		M		840.2 Orange and white, clayey SILT (A-5), medium to high plasticity 3.5
	837.2	6.5	4	3	4	7		M		
835	835.2	8.5	3	2	2	4		M		835.2 8.5
										833.7 Tan, orange, and white, sandy SILT (A-4), saprolitic, highly plastic 10.0
										Boring Terminated at Elevation 833.7 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L3100	**STATION** 31+00	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 847.2 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 818,845	**EASTING** 1,567,334	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**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)
850											
	847.2	0.0								847.2 GROUND SURFACE	0.0
845			4	5	7	12		M		**RESIDUAL** Orange, silty CLAY (A-7), medium plasticity	
	843.7	3.5	7	7	10	17		M			
840	840.7	6.5	3	4	4	8		M			
	838.7	8.5	2	4	5	9		M			
835										835.2 Orange, silty SAND (A-2-4), with trace rock fragments	12.0
	833.7	13.5	5	6	8	14		M		832.2 Boring Terminated at Elevation 832.2 ft in SAND (RESIDUAL)	15.0

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L3300	**STATION** 33+00	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 846.1 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 819,043	**EASTING** 1,567,308	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**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
850										
	846.1	0.0								846.1 GROUND SURFACE 0.0
845			5	7	7	14		M		**RESIDUAL** Orange, silty CLAY (A-7-5 (52)), medium to high plasticity
	842.6	3.5	6	7	9	16		42%		
840	839.6	6.5	5	4	7	11		M		
	837.6	8.5	3	4	8	12		M		
835										834.1 Orange and tan, clayey SILT (A-5), micaceous 12.0
	832.6	13.5	1	3	5	8		M		831.1 Boring Terminated at Elevation 831.1 ft in SILT (RESIDUAL) 15.0

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L3500	**STATION** 35+11	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 840.9 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 819,243	**EASTING** 1,567,299	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**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)
845											
	840.9	0.0								840.9 GROUND SURFACE	0.0
840			5	5	9	14		M		**RESIDUAL** Orange, silty CLAY (A-6), medium plasticity	
	837.4	3.5								837.9	3.0
			7	10	12	22		M		Orange, sandy CLAY (A-7-5 (5)), with little silt, medium plasticity	
835	834.4	6.5									
			4	7	8	15	SS-55	35%			
	832.4	8.5									
			6	9	12	21		M		830.9	10.0
										Boring Terminated at Elevation 830.9 ft in CLAY (RESIDUAL)	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L3700	**STATION** 37+00	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 848.9 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 819,443	**EASTING** 1,567,308	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**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
850										
	848.9	0.0								848.9 GROUND SURFACE 0.0
			3	8	10	18	SS-57	19%		**RESIDUAL** Orange, silty CLAY (A-7-6 (11)), medium to highly plastic
845	845.4	3.5								
			10	7	7	14		M		
	842.4	6.5								842.9 6.0
			8	13	13	26		M		Orange and black, silty SAND (A-2-4)
840	840.4	8.5								840.4 8.5
			5	9	13	22		M		Orange and black, sandy SILT (A-4), medium plasticity
835	835.4	13.5								
			4	2	6	8		M		833.9 15.0
										Boring Terminated at Elevation 833.9 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L3900	**STATION** 39+00	**OFFSET** CL	**ALIGNMENT** -L- / **0 HR.** Dry
COLLAR ELEV. 848.2 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 819,641	**EASTING** 1,567,333 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**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))
850										
	848.2	0.0								848.2 GROUND SURFACE 0.0
			3	3	5	8	SS-62	29%		**RESIDUAL** Orange, silty CLAY (A-7-6 (18)), with trace rock fragments, medium to high plasticity, contains wood fragments
845	844.7	3.5								
			4	4	4	8		M		
	841.7	6.5								842.2 6.0 Orange and brown, SILT (A-4), medium plasticity
			3	5	7	12		M		
840	839.7	8.5								839.7 8.5 Orange and brown, silty CLAY (A-6), with manganese oxides, medium plasticity
			2	2	5	7		M		838.2 10.0 Boring Terminated at Elevation 838.2 ft in CLAY (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L4100	**STATION** 41+00	**OFFSET** CL	**ALIGNMENT** -L- / **0 HR.** Dry
COLLAR ELEV. 849.8 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 819,837	**EASTING** 1,567,376 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**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
850										
	849.8	0.0								849.8 GROUND SURFACE 0.0
			5	8	10	18		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), medium to high plasticity
	846.3	3.5								
845			6	6	10	16		M		
	843.3	6.5								843.8 6.0 Orange and tan, SILT (A-5), micaceous, low to medium plasticity
			3	4	5	9		M		
	841.3	8.5								
840			3	3	5	8		M		839.8 10.0 Boring Terminated at Elevation 839.8 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L4300	**STATION** 43+00	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 854.6 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 820,028	**EASTING** 1,567,435	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/16/23	**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)
855										854.6 GROUND SURFACE	0.0
	854.6	0.0	7	9	6	15		M		**RESIDUAL** Orange, silty CLAY (A-7-6 (25)), medium to high plasticity	
	851.1	3.5									
850			7	8	12	20	SS-71	24%			
	848.1	6.5								848.1 Orange, SILT (A-5), micaceous, medium plasticity	6.5
			5	5	10	15		M			
	846.1	8.5									
845			4	7	7	14		M		844.6 Boring Terminated at Elevation 844.6 ft in SILT (RESIDUAL)	10.0

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L4500	**STATION** 45+00	**OFFSET** 30 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 859.5 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 820,225	**EASTING** 1,567,480	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/16/23	**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	DEPTH (ft)
860										859.5 GROUND SURFACE	0.0
	859.5	0.0	5	7	10	17		M		**RESIDUAL** Orange, SILT (A-4), contains roots, medium plasticity	
	856.0	3.5								856.5 Orange, silty CLAY (A-6), medium to high plasticity	3.0
855			7	8	14	22		M			
	853.0	6.5									
			4	4	6	10		M			
	851.0	8.5									
850			5	4	6	10		M			
										847.5 Tan and orange, SILT (A-4), low plasticity	12.0
	846.0	13.5									
845			2	4	4	8		M		844.5 Boring Terminated at Elevation 844.5 ft in SILT (RESIDUAL)	15.0

NCDOT BORE DOUBLE U6187_BORINGS.GPJ NC_DOT.GDT 5/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L4700	**STATION** 47+00	**OFFSET** 30 ft RT	**ALIGNMENT** -L- / **0 HR.** Dry
COLLAR ELEV. 860.4 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 820,388	**EASTING** 1,567,610 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/16/23	**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)
865											
860	860.4	0.0	4	5	6	11		M		860.4 GROUND SURFACE	0.0
										RESIDUAL Orange, clayey SILT (A-4), medium plasticity, contains root	
	856.9	3.5	8	9	18	27		M		857.4 Orange, silty CLAY (A-6), medium to high plasticity	3.0
855	853.9	6.5	6	7	10	17		M			
	851.9	8.5	3	3	4	7	SS-82	22%		852.4 Orange, SILT (A-5 (6)), micaceous, low to medium plasticity	8.0
850											
	846.9	13.5	3	3	4	7		M			
845											
	841.9	18.5	2	3	3	6		M		840.4 Boring Terminated at Elevation 840.4 ft in SILT (RESIDUAL)	20.0

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L4900	**STATION** 49+00	**OFFSET** 30 ft LT	**ALIGNMENT** -L- / **0 HR.** Dry
COLLAR ELEV. 861.7 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 820,596	**EASTING** 1,567,630 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/16/23	**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
865										
	861.7	0.0								861.7 GROUND SURFACE 0.0
860			4	5	9	14		M		**RESIDUAL** Orange, silty CLAY (A-7-5 (29)), high plasticity
	858.2	3.5	8	8	13	21		27%		
855	855.2	6.5	8	10	8	18		M		853.7 Orange, silty SILT (A-4), low to high plasticity 8.0
	853.2	8.5	5	5	3	8		M		
850										
	848.2	13.5	6	5	6	11		M		
845										
	843.2	18.5	5	4	9	13		M		841.7 Boring Terminated at Elevation 841.7 ft in SILT (RESIDUAL) 20.0

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L5050	**STATION** 50+50	**OFFSET** 40 ft LT	**ALIGNMENT** -L-
COLLAR ELEV. 858.6 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 820,738	**EASTING** 1,567,676
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/16/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft): 0 HR. Dry; 24 HR. Dry

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))
860										
	858.6	0.0	6	9	8	17		M		858.6 GROUND SURFACE 0.0
855	855.1	3.5	6	8	11	19		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), medium to high plasticity
	852.1	6.5	6	8	9	17		M		850.6 8.0
850	850.1	8.5	5	6	7	13		M		Orange, clayey SILT (A-4), low to medium plasticity
845	845.1	13.5	5	4	7	11		M		
840	840.1	18.5	3	3	7	10		M		838.6 20.0
										Boring Terminated at Elevation 838.6 ft in SILT (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L5100	**STATION** 51+00	**OFFSET** 30 ft RT	**ALIGNMENT** -L-
COLLAR ELEV. 852.0 ft	**TOTAL DEPTH** 25.0 ft	**NORTHING** 820,761	**EASTING** 1,567,759
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/16/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft): 0 HR. Dry; 24 HR. Dry

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
855										
	852.0	0.0	5	8	10	18		M		852.0 GROUND SURFACE 0.0
850	848.5	3.5	11	10	13	23		M		**RESIDUAL** Brown and orange, silty CLAY (A-6), medium to high plasticity, contains root fragments
	845.5	6.5	6	8	9	17		M		849.0 3.0
845	843.5	8.5	4	6	6	12	SS-100	30%		Orange, sandy and clayey SILT (A-5 (2)), with trace rock fragments and roots, micaceous, low to medium plasticity
840	838.5	13.5	4	2	4	6		M		
835	833.5	18.5	7	11	10	21		M		
830	828.5	23.5	7	9	14	23		M		827.0 25.0
										Boring Terminated at Elevation 827.0 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L5300	**STATION** 53+00	**OFFSET** 30 ft LT	**ALIGNMENT** -L-
COLLAR ELEV. 852.7 ft	**TOTAL DEPTH** 25.0 ft	**NORTHING** 820,969	**EASTING** 1,567,762
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/16/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft): 0 HR. Dry; 24 HR. Dry

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))
855										
	852.7	0.0								852.7 GROUND SURFACE 0.0
850			2	5	6	11		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), medium to high plasticity
	849.2	3.5	8	10	13	23		M		
	846.2	6.5	3	5	4	9		M		844.7 8.0
845	844.2	8.5	4	5	4	9		M		Orange, SILT (A-5 (3)), micaceous, low to medium plasticity
840	839.2	13.5	12	10	14	24		M		
835	834.2	18.5	3	4	4	8	SS-109	24%		
830	829.2	23.5	4	4	4	8		M		827.7 25.0
										Boring Terminated at Elevation 827.7 ft in SILT (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L5500	**STATION** 55+00	**OFFSET** 30 ft RT	**ALIGNMENT** -L-
COLLAR ELEV. 847.7 ft	**TOTAL DEPTH** 35.0 ft	**NORTHING** 821,151	**EASTING** 1,567,864
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/15/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft): 0 HR. Dry; 24 HR. FIAD

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
850										
	847.7	0.0								847.7 GROUND SURFACE 0.0
845			6	9	7	16		M		**RESIDUAL** Orange and brown, silty CLAY (A-7-5 (10)), low to high plasticity
	844.2	3.5	7	6	7	13	SS-112	22%		
	841.2	6.5	12	12	10	22		M		
840	839.2	8.5	5	8	12	20		M		835.7 12.0
835	834.2	13.5	9	9	5	14		M		Orange and black, sandy and clayey SILT (A-4 (0)), with trace rock fragments, micaceous, low to medium plasticity
830	829.2	18.5	10	7	8	15	SS-116	21%		
825	824.2	23.5	5	5	6	11		M		
820	819.2	28.5	12	6	9	15		M		
815	814.2	33.5	15	5	6	11		M		812.7 35.0
										Boring Terminated at Elevation 812.7 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L5700	**STATION** 57+00	**OFFSET** 30 ft LT	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 838.0 ft	**TOTAL DEPTH** 30.0 ft	**NORTHING** 821,358	**EASTING** 1,567,831	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/15/23	**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)
840											
	838.0	0.0								838.0 GROUND SURFACE	0.0
			4	6	7	13		M		**RESIDUAL** Orange, silty CLAY (A-6), micaceous, with manganese oxides, medium to high plasticity	
835	834.5	3.5									
			6	8	9	17		M			
	831.5	6.5									
830			4	5	7	12		M			
	829.5	8.5								829.5	8.5
			5	10	10	20		M		Orange and black, sandy and clayey SILT (A-4 (0)), with trace rock fragments, micaceous, low to medium plasticity	
825	824.5	13.5									
			20	17	18	35		M			
820	819.5	18.5									
			10	7	8	15	SS-125	29%			
815	814.5	23.5									
			3	8	8	16		M			
810	809.5	28.5									
			3	5	4	9		M		808.0 Boring Terminated at Elevation 808.0 ft in SILT (RESIDUAL)	30.0

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L5850	**STATION** 58+50	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 821.6 ft	**TOTAL DEPTH** 25.0 ft	**NORTHING** 821,504	**EASTING** 1,567,869	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/17/23	**COMP. DATE** 11/17/23	**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
825										
	821.6	0.0								821.6 GROUND SURFACE 0.0
			3	2	2	4		M		**RESIDUAL** Orange, clayey SILT (A-5), micaceous, with manganese oxides, low to medium plasticity
820	818.1	3.5								
			2	2	2	4		M		
815	815.1	6.5								
			2	2	5	7		M		
	813.1	8.5								
			2	2	5	7		M		
810										809.6 12.0
	808.1	13.5								White, gray, and orange, SILT (A-4 (0)), low to medium plasticity, saprolitic
			3	3	8	11	SS-197	M		
805	803.1	18.5								
			2	2	4	6		M		
800	798.1	23.5								
			2	3	5	8		M		796.6 25.0
										Boring Terminated at Elevation 796.6 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L5900	**STATION** 59+00	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 818.5 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 821,555	**EASTING** 1,567,870	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/15/23	**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))
820										
	818.5	0.0								818.5 GROUND SURFACE 0.0
			2	2	1	3		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), contains root fragments, low plasticity
815	815.0	3.5								815.0 3.5
			WOH	1	1	2		M		Orange, silty CLAY (A-7-5 (8)), with manganese oxides, medium to high plasticity
	812.0	6.5								
			1	2	3	5	SS-130	40%		
810	810.0	8.5								
			1	3	4	7		M		
805	805.0	13.5								
			1	1	1	2		M		803.5 15.0
										Boring Terminated at Elevation 803.5 ft in CLAY (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L5950	**STATION** 59+50	**OFFSET** CL	**ALIGNMENT** -L-	**0 HR.** Dry
COLLAR ELEV. 815.7 ft	**TOTAL DEPTH** 25.0 ft	**NORTHING** 821,604	**EASTING** 1,567,870	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/17/23	**COMP. DATE** 11/17/23	**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
820										
	815.7	0.0								815.7 GROUND SURFACE 0.0
815			2	5	5	10		M		**RESIDUAL** Brown and orange, silty CLAY (A-6), medium to high plasticity
	812.2	3.5								
			3	4	5	9		M		
810	809.2	6.5								809.7 6.0
			2	2	6	8		M		Orange, SILT (A-5 (4)), micaceous, low to medium plasticity
	807.2	8.5								
			3	3	3	6	SS-203	26%		
805										
	802.2	13.5								
			1	2	3	5		M		
800										798.7 17.0
	797.2	18.5								White, black, and orange, sandy SILT (A-4 (1)), with manganese oxides, micaceous, saprolitic, low plasticity
			5	2	5	7	SS-205	57%		
795										
	792.2	23.5								
			2	2	3	5		W		790.7 25.0
										Boring Terminated at Elevation 790.7 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L6100	**STATION** 61+00	**OFFSET** 20 ft LT	**ALIGNMENT** -L-
COLLAR ELEV. 801.7 ft	**TOTAL DEPTH** 25.0 ft	**NORTHING** 821,752	**EASTING** 1,567,842
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/15/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft): 0 HR. Dry; 24 HR. FIAD

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))
805										
	801.7	0.0								801.7 GROUND SURFACE 0.0
800			4	5	5	10	SS-133	25%		**RESIDUAL** Brown and orange, silty CLAY (A-7-5 (14)), medium to highly plasticity
	798.2	3.5	4	4	5	9		M		
795	795.2	6.5	2	2	3	5		M		795.7 6.0 Tan, orange, and black, SILT (A-5), with trace rock fragments, micaceous, low to medium plasticity
	793.2	8.5	3	4	5	9		M		
790	788.2	13.5	2	3	2	5		M		
785	783.2	18.5	2	2	4	6		M		
780	778.2	23.5	2	4	6	10		M		779.7 22.0 Gray, black, and orange, sandy SILT (A-4), micaceous, saprolitic; 776.7 25.0 Boring Terminated at Elevation 776.7 ft in SILT (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L6300	**STATION** 63+00	**OFFSET** 30 ft RT	**ALIGNMENT** -L-
COLLAR ELEV. 789.6 ft	**TOTAL DEPTH** 30.0 ft	**NORTHING** 821,958	**EASTING** 1,567,867
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/16/23	**COMP. DATE** 11/16/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft): 0 HR. 27.0; 24 HR. FIAD

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))
790										
	789.6	0.0								789.6 GROUND SURFACE 0.0
			5	6	6	12	SS-145	24%		**RESIDUAL** Orange, sandy CLAY (A-7-6 (16)), with little silt, highly plastic
785	786.1	3.5	4	7	10	17		M		
	783.1	6.5	3	5	6	11		M		783.1 6.5 White and orange, sandy SILT (A-4) with some clay and rock fragments, low to medium plasticity
780	781.1	8.5	3	3	5	8		M		
775	776.1	13.5	1	1	3	4	SS-149	40%		777.6 12.0 Tan, white, and orange, silty and sandy CLAY (A-7-5 (22)), low to medium plasticity
770	771.1	18.5	4	1	2	3		M		
765	766.1	23.5	2	9	11	20	SS-151	37%		767.6 22.0 White and tan, sandy SILT (A-4 (0))
760	761.1	28.5	4	4	6	10		M		759.6 30.0 Boring Terminated at Elevation 759.6 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L6500	**STATION** 65+00	**OFFSET** 10 ft LT	**ALIGNMENT** -L- **0 HR.** 11.6
COLLAR ELEV. 766.0 ft	**TOTAL DEPTH** 54.2 ft	**NORTHING** 822,146	**EASTING** 1,567,786 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/16/23	**COMP. DATE** 11/16/23	**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)
770											
	766.0	0.0								766.0 GROUND SURFACE	0.0
765			4	5	4	9		M		**RESIDUAL** White, brown, orange, and gray, silty CLAY (A-6), with trace fine sand, low to high plasticity	
	762.5	3.5									
			3	3	3	6		M			
760	759.5	6.5									
			4	3	3	6		M			
	757.5	8.5									
			1	2	3	5		M			
755											
	752.5	13.5									
			1	2	5	7		M			
750										749.0	17.0
	747.5	18.5								Gray and black, sandy SILT (A-4), with little clay, saprolitic, low to medium plasticity	
			2	3	5	8		M			
745											
	742.5	23.5									
			3	5	10	15		M			
740											
	737.5	28.5									
			3	6	9	15		M			
735										734.0	32.0
	732.5	33.5								Gray and black, silty SAND (A-2-4), saprolitic	
			5	9	14	23		M			
730											
	727.5	38.5									
			9	10	13	23		M			
725										724.0	42.0
	722.5	43.5								Gray, brown, and orange sandy SILT (A-4 (0)), low to medium plasticity	
			15	17	26	43	SS-163	23%			
720											
	717.5	48.5									
			19	28	32	60		M			
715											
	712.1	53.9								712.1	53.9
	711.8	54.2	60/0.1			60/0.1				711.8 **CRYSTALLINE ROCK** Tan, META-GABBRO	54.2
			60/0.0			60/0.0				Boring Terminated with Standard Penetration Test Refusal at Elevation 711.8 ft in CRYSTALLINE ROCK (META-GABBRO)	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L6700	**STATION** 67+00	**OFFSET** 80 ft RT	**ALIGNMENT** -L- **0 HR.** 12.6
COLLAR ELEV. 768.4 ft	**TOTAL DEPTH** 54.2 ft	**NORTHING** 822,366	**EASTING** 1,567,813 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/17/23	**COMP. DATE** 11/20/23	**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
770										
	768.4	0.0								768.4 GROUND SURFACE 0.0
			4	5	5	10	SS-207	M		**ALLUVIAL** Brown, sandy SILT (A-4), with little organic matter
765	764.9	3.5								765.4 3.0
			1	1	2	3	SS-208	56%		**RESIDUAL** Orange, clayey SILT (A-5 (9)), micaceous, low to medium plasticity
	761.9	6.5								
			WOH	WOH	1	1		W		Shelby tube taken from 5.0 - 7.0 ft in an offset hole. Not sampled
760	759.9	8.5								760.4 8.0
			1	1	1	2		W		Gray, orange, and white, silty SAND (A-2-4), saprolitic
755	754.9	13.5								
			WOH	23	21	44	SS-211	55%		
750	749.9	18.5								
			2	3	6	9		W		
745	744.9	23.5								
			4	6	7	13		W		
740	739.9	28.5								
			7	10	13	23		W		
735	734.9	33.5								734.4 34.0
			33	67/0.1		100/0.6		W		**WEATHERED ROCK** White and gray, META-GABBRO
730	729.9	38.5								731.4 37.0
			8	10	25	35		W		**RESIDUAL** White, orange, and brown, sandy SILT (A-5), micaceous, low to medium plasticity
725	724.9	43.5								726.4 42.0
			22	21	19	40		W		Black, tan, and gray, silty SAND (A-2-4),
720	719.9	48.5								
			11	10	15	25		W		
715										
	714.2	54.2	60/0.0			60/0.0		W		714.2 54.2
										Boring Terminated with Standard Penetration Test Refusal at Elevation 714.2 ft on CRYSTALLINE ROCK (META-GABBRO)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. L6900	**STATION** 69+00	**OFFSET** 70 ft LT	**ALIGNMENT** -L- / **0 HR.** 20.0
COLLAR ELEV. 783.0 ft	**TOTAL DEPTH** 50.0 ft	**NORTHING** 822,505	**EASTING** 1,567,605 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/20/23	**COMP. DATE** 11/20/23	**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))
785										
	783.0	0.0								783.0 GROUND SURFACE 0.0
			7	7	6	13		M		**RESIDUAL** Red, brown, white, black, gray, and orange, sandy and silty CLAY (A-7-6 (4)), with some rock fragments and manganese oxides, micaceous, low to high plasticity
780	779.5	3.5	9	14	18	32		M		
	776.5	6.5	6	7	11	18		M		
775	774.5	8.5	7	5	10	15	SS-232	22%		
770	769.5	13.5	1	1	1	2		M		
765	764.5	18.5	WOH	1	1	2		▽		
760	759.5	23.5	WOH	WOH	1	1		M		
755	754.5	28.5	WOH	1	2	3		M		
										751.0 32.0 Orange, black, tan, and brown, sandy and clayey SILT (A-4), with manganese oxides and trace rock fragments, micaceous, saprolitic, low to medium plasticity
750	749.5	33.5	1	1	3	4		M		
745	744.5	38.5	1	2	4	6		M		
740	739.5	43.5	3	5	7	12		M		
735	734.5	48.5	3	4	7	11		M		733.0 50.0 Boring Terminated at Elevation 733.0 ft in SILT (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION Bridge on -L- (Baltimore Road) over I-40			**GROUND WTR (ft)**
BORING NO. EB1-A	**STATION** 69+74	**OFFSET** 21 ft LT	**ALIGNMENT** -L- / **0 HR.** 20.8
COLLAR ELEV. 783.2 ft	**TOTAL DEPTH** 71.3 ft	**NORTHING** 822,591	**EASTING** 1,567,627 / **24 HR.** 18.9
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/05/23	**COMP. DATE** 12/06/23	**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))
785										
	783.2	0.0								783.2 GROUND SURFACE 0.0
			3	7	12	19		M		**RESIDUAL** Orange, tan, and brown, clayey SILT (A-4), micaceous, medium to high plasticity
780	779.0	4.2	5	8	7	15		M		
	776.2	7.0	3	3	5	8		M		
775	773.5	9.7	3	3	3	6		M		774.2 9.0 Orange and black, SILT (A-5), with manganese oxides, micaceous, medium plasticity
770	768.3	14.9	2	2	3	5		M		770.2 13.0 Tan, orange, and black, clayey SILT (A-4), with manganese oxides, micaceous, low to medium plasticity
765	763.3	19.9	2	3	3	6		M		
760	758.3	24.9	3	2	5	7		M		
755	753.4	29.8	5	17	34	51		M		755.2 28.0 White and gray, silty SAND (A-2-4), with quartz fragments, micaceous
750	748.6	34.6	18	36	64	100		M		747.6 35.6 **WEATHERED ROCK** White, pink, and tan, META-GABBRO
745	743.6	39.6	40	60/0.4		100/0.9				
740	738.6	44.6	WOH	WOH	1	1		M		740.2 43.0 **RESIDUAL** Gray, brown, pink, orange, and black, sandy SILT (A-4), micaceous, saprolitic, low to medium plasticity
735	733.3	49.9	4	7	11	18		M		
730	728.4	54.8	8	9	13	22		M		
725	723.4	59.8	10	17	23	40		M		
720	718.4	64.8	12	23	46	69		M		
715	713.4	69.8	9	16	28	44		M		711.9 71.3 Boring Terminated at Elevation 711.9 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill	
SITE DESCRIPTION Bridge on -L- (Baltimore Road) over I-40				**GROUND WTR (ft)**
BORING NO. EB1-B	**STATION** 69+74	**OFFSET** 21 ft RT	**ALIGNMENT** -L-	**0 HR.** 20.0
COLLAR ELEV. 784.0 ft	**TOTAL DEPTH** 69.6 ft	**NORTHING** 822,605	**EASTING** 1,567,667	**24 HR.** 19.1
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER D. Demby	**START DATE** 12/06/23	**COMP. DATE** 12/08/23	**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))
785										
	784.0	0.0								784.0 GROUND SURFACE 0.0
			5	5	7	12		M		**RESIDUAL** Orange, brown, and tan, sandy and silty CLAY (A-6), medium to highly plastic
780	779.9	4.1								
	778.0	6.0	5	8	13	21		M		
			9	12	10	22		M		
775	774.8	9.2								775.0 9.0
			5	6	7	13		M		Orange, tan, brown, and black, clayey SILT (A-4), with manganese oxides, micaceous, medium to low plasticity
770	769.5	14.5								
			2	2	3	5		M		
765	764.1	19.9								
			2	2	3	5		M		
760	759.1	24.9								
			2	3	3	6		M		
755	754.1	29.9								756.0 28.0
			WOH	2	4	6		M		Orange, tan, and black, SILT (A-5), micaceous, low to medium plasticity
750	749.5	34.5								751.0 33.0
			3	6	5	11		M		Orange, white, black, and tan, sandy CLAY (A-6), micaceous, saprolitic, low to medium plasticity
745	744.3	39.7								
			3	3	7	10		M		
740	739.5	44.5								
			4	4	6	10		M		
735	734.5	49.5								736.0 48.0
			7	13	15	28		M		Black, tan, and orange, silty SAND (A-2-4), saprolitic
730	729.5	54.5								
			13	24	26	50		M		
725	724.5	59.5								
			23	13	38	51		M		
720	719.5	64.5	100/0.4			100/0.4				719.5 64.5 **WEATHERED ROCK** White and gray, META-GABBRO
715	714.5	69.5	60/0.1			60/0.1				714.5 69.5 714.4 69.6 **CRYSTALLINE ROCK** White and gray, META-GABBRO Boring Terminated with Standard Penetration Test Refusal at Elevation 714.4 ft in CRYSTALLINE ROCK (META-GABBRO)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill	
SITE DESCRIPTION Bridge on -L- (Baltimore Road) over I-40				**GROUND WTR (ft)**
BORING NO. B1-A	**STATION** 70+92	**OFFSET** 21 ft LT	**ALIGNMENT** -L-	**0 HR.** 14.8
COLLAR ELEV. 783.2 ft	**TOTAL DEPTH** 64.5 ft	**NORTHING** 822,702	**EASTING** 1,567,588	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER D. Demby	**START DATE** 12/14/23	**COMP. DATE** 12/14/23	**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
785										
	783.2	0.0								783.2 GROUND SURFACE 0.0
			4	4	5	9		M		**RESIDUAL** Orange, clayey SILT (A-5), with trace rock fragments and manganese oxides, micaceous, low to medium plasticity
780	779.7	3.5								
			2	3	3	6		M		
	776.3	6.9								
775			2	2	3	5		M		
	774.1	9.1								
			2	3	4	7		M		
770										
	768.7	14.5								
			2	1	2	3				
765										
	763.5	19.7								
			2	2	3	5		M		
760										
	758.7	24.5								
			2	2	2	4		M		
755										
	753.8	29.4								
			2	3	4	7		M		
750										
	748.9	34.3								
			2	2	4	6		M		
745										
	744.2	39.0								
			3	2	5	7		M		
740										741.2 42.0
	739.2	44.0								Black, white, and tan, sandy SILT (A-4), micaceous, saprolitic, low to medium plasticity
			4	8	14	22		M		
735										
	734.2	49.0								
			16	13	17	30		M		
730										731.2 52.0
	729.2	54.0								**WEATHERED ROCK** Gray and brown, META-GABBRO
			42	58/0.4		100/0.9				
725										
	724.2	59.0								
			47	53/0.1		100/0.6				
720										
	719.2	64.0	100/0.5			100/0.5				718.7 64.5 Boring Terminated at Elevation 718.7 ft in WEATHERED ROCK (META-GABBRO)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION Bridge on -L- (Baltimore Road) over I-40			**GROUND WTR (ft)**
BORING NO. B1-B	**STATION** 70+92	**OFFSET** 21 ft RT	**ALIGNMENT** -L- / **0 HR.** 19.0
COLLAR ELEV. 783.2 ft	**TOTAL DEPTH** 62.9 ft	**NORTHING** 822,716	**EASTING** 1,567,628 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/14/23	**COMP. DATE** 12/15/23	**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))
785										
	783.2	0.0								783.2 GROUND SURFACE 0.0
			3	2	3	5		M		**RESIDUAL** Orange, SILT (A-5), micaceous, medium plasticity
780	779.9	3.3								780.2 3.0
			3	4	4	8		M		White, silty SAND (A-2-4), with some quartz fragments, micaceous
	776.2	7.0								776.2 7.0
775			2	2	3	5		M		Orange and black, SILT (A-5), with manganese oxides, micaceous, low to medium plasticity
	774.2	9.0								
			2	2	3	5		M		
770										
										*NOTE: Undisturbed sample collected at 14.0'. Not submitted for laboratory testing.
										766.2 17.0
765	764.3	18.9								White, silty SAND (A-2-4)
			2	2	2	4				763.5 19.7
										Orange, tan, and black, SILT (A-5), micaceous, with manganese oxides and trace sand, medium plasticity
760										
	759.1	24.1								
			2	2	3	5		M		
755										
	753.9	29.3								
			2	3	5	8		M		
750										
	749.2	34.0								751.2 32.0
			3	3	5	8		M		Tan, orange, white, and gray, sandy SILT (A-4), micaceous, low to medium plasticity
745										
	743.8	39.4								
			3	6	7	13		M		
740										
	739.2	44.0								
			3	7	10	17		M		
735										736.2 47.0
	734.1	49.1								Tan and gray, silty SAND (A-2-4), micaceous
			9	16	26	42		M		
730										
	729.1	54.1								
			5	21	36	57		M		727.2 56.0
725	725.1	58.1								**WEATHERED ROCK** Black and gray, META GABBRO
			100/0.2			100/0.2				
	720.3	62.9								720.3 62.9
			60/0.0			60/0.0				Boring Terminated with Standard Penetration Test Refusal at Elevation 720.3 ft on CRYSTALLINE ROCK (META-GABBRO)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION Bridge on -L- (Baltimore Road) over I-40			**GROUND WTR (ft)**
BORING NO. EB2-A	**STATION** 72+09	**OFFSET** 21 ft LT	**ALIGNMENT** -L- / **0 HR.** 40.4
COLLAR ELEV. 806.3 ft	**TOTAL DEPTH** 69.6 ft	**NORTHING** 822,813	**EASTING** 1,567,549 / **24 HR.** 31.0
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/07/23	**COMP. DATE** 12/11/23	**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
810										
	806.3	0.0								806.3 GROUND SURFACE 0.0
			3	4	5	9		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), medium to high plasticity
805										804.3 2.0
	802.7	3.6								Orange, SILT (A-4), medium plasticity
			4	7	7	14		M		
800	800.3	6.0								
			4	5	6	11		M		
	797.2	9.1								
			2	3	3	6		M		
795										794.3 12.0
										White, SAND (A-2-4), with some quartz fragments
	792.4	13.9								
			16	15	16	31		M		
790										
	787.2	19.1								
			8	7	5	12		M		
785										783.3 23.0
										Orange and black, SILT (A-5 (1)), with little clay and manganese oxides, low to medium plasticity
	781.5	24.8								
			2	2	3	5		M		
780										
	776.4	29.9								
			2	2	3	5				
775										
	771.9	34.4								
			2	2	4	6		66%		
770										
	766.6	39.7								
			2	4	6	10		M		
765										
	761.7	44.6								
			3	3	7	10		M		
760										758.3 48.0
										Black, tan, and orange, silty SAND (A-2-4), micaceous
	756.8	49.5								
			4	6	8	14		M		
755										
	751.8	54.5								
			4	7	8	15		M		
750										
	747.0	59.3								
			7	10	16	26		M		
745										
	742.0	64.3								
			10	10	14	24		M		
740										
	737.2	69.1								737.2 69.1
	736.7	69.6	60/0.1			60/0.1				736.7 69.6 **CRYSTALLINE ROCK** Black and gray, META-GABBRO
			60/0.0			60/0.0				Boring Terminated with Standard Penetration Test Refusal at Elevation 736.7 ft on CRYSTALLINE ROCK (META-GABBRO)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill	
SITE DESCRIPTION Bridge on -L- (Baltimore Road) over I-40				**GROUND WTR (ft)**
BORING NO. EB2-B	**STATION** 72+09	**OFFSET** 21 ft RT	**ALIGNMENT** -L-	**0 HR.** 31.5
COLLAR ELEV. 806.7 ft	**TOTAL DEPTH** 68.6 ft	**NORTHING** 822,827	**EASTING** 1,567,589	**24 HR.** 30.0
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER D. Demby	**START DATE** 12/07/23	**COMP. DATE** 12/07/23	**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)
810											
	806.7	0.0								806.7 GROUND SURFACE	0.0
805			3	4	8	12		M		**RESIDUAL** Orange and brown, sandy CLAY (A-6), medium plasticity	
	803.6	3.1	4	6	7	13		M		803.7	3.0
800	800.7	6.0	3	3	4	7		M		Orange, SILT (A-5), with mangense oxides, micaceous, medium to high plasticity	
	798.2	8.5	4	4	5	9		M		798.2	8.5
795										Orange, brown, and black, sandy SILT (A-4), with some rock fragments, micas, and manganese oxides, low to medium plasticity	
	793.2	13.5	4	4	4	8		M			
790											
	788.3	18.4	3	3	4	7		M			
785											
	783.3	23.4	2	3	4	7		M			
780											
	777.9	28.8	2	5	6	11					
775											
	773.1	33.6	3	3	7	10		M		774.7 Orange, brown, and black, sandy SILT (A-5), micaceous, low to medium plasticity	32.0
770											
	768.1	38.6	3	4	7	11		M			
765										764.7 Tan, brown, and black, sandy SILT (A-4), micaceous, low to medium plasticity	42.0
	763.1	43.6	3	5	7	12		M			
760										759.7 Black, tan, white, and gray, silty SAND (A-2-4), with trace rock fragments, micaceous	47.0
	758.2	48.5	4	10	9	19		M			
755											
	753.0	53.7	8	18	27	45		M			
750											
	748.1	58.6	11	18	37	55		M			
745										745.7 **WEATHERED ROCK** Gray and black, META-GABBRO	61.0
	743.3	63.4	100/0.5			100/0.5					
740											
	738.2	68.5	60/0.1			60/0.1				738.2 **CRYSTALLINE ROCK** Gray and black, META-GABBRO	68.5
										738.1 Boring Terminated with Standard Penetration Test Refusal at Elevation 738.1 ft on CRYSTALLINE ROCK (META-GABBRO)	68.6

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill	
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40				**GROUND WTR (ft)**
BORING NO. LCULV1_LT	**STATION** 66+00	**OFFSET** 120 ft LT	**ALIGNMENT** -L-	**0 HR.** 4.5
COLLAR ELEV. 761.4 ft	**TOTAL DEPTH** 40.0 ft	**NORTHING** 822,209	**EASTING** 1,567,654	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER J. Kiker	**START DATE** 11/16/23	**COMP. DATE** 11/16/23	**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
765										
	761.4	0.0								761.4 GROUND SURFACE 0.0
760			4	2	3	5	SS-165	59%		**ALLUVIAL** Orange and brown, CLAY (A-7-6 (9)), medium plasticity
	757.9	3.5								757.9 3.5
755			1	0	1	1				**RESIDUAL** Brown, orange, gray, and black, SILT (A-5 (0), A-5 (2)), micaceous, saprolitic, low plasticity
	754.9	6.5	WOH	1	3	4	SS-167	49%		
	752.9	8.5	1	0	2	2		W		Shelby tube taken from 10.0 - 12.0 ft. Not sampled
750										
	747.9	13.5	1	2	3	5		W		
745										
	742.9	18.5	2	3	5	8		W		
740										
	737.9	23.5	1	1	5	6		W		
735										
	732.9	28.5	WOH	2	5	7	SS-172	41%		
730										
	727.9	33.5	WOH	3	5	8		W		
725										
	722.9	38.5	WOH	2	6	8		W		721.4 40.0
										Boring Terminated at Elevation 721.4 ft in SAND (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. LCULV1_RT	**STATION** 66+00	**OFFSET** 120 ft RT	**ALIGNMENT** -L- / **0 HR.** 5.0
COLLAR ELEV. 759.8 ft	**TOTAL DEPTH** 35.5 ft	**NORTHING** 822,280	**EASTING** 1,567,884 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/20/23	**COMP. DATE** 11/20/23	**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))
760										
	759.8	0.0	3	5	4	9	SS-241	53%		759.8 GROUND SURFACE 0.0
										ALLUVIAL Brown and orange, sandy CLAY (A-6 (6)), with some silt, low to medium plasticity
	756.3	3.5	1	1	1	2				
755										
	753.3	6.5	1	1	2	3		M		753.3 6.5 **RESIDUAL** Black, white, and orange, silty SAND (A-2-4), micaceous, saprolitic
	751.3	8.5	2	2	3	5		M		
750										
	746.3	13.5	4	2	2	4		M		
745										
										742.8 17.0 Black, white, and orange, sandy SILT (A-4 (0)), low to medium plasticity, saprolitic
	741.3	18.5	1	1	3	4	SS-246	31%		
740										
	736.3	23.5	2	2	30	32		M		
735										
										732.8 27.0 Black, white, and tan, silty SAND and SAND (A-2-4 (0), A-3)
	731.3	28.5	20	23	22	45		M		
730										
	726.3	33.5	100/0.4			60/0.4	SS-249	12%		726.3 33.5 **WEATHERED ROCK** Black, white, and tan, META-GABBRO 35.5
725	724.3	35.5	60/0.0			60/0.0				

Boring Terminated with Standard Penetration Test Refusal at Elevation 724.3 ft on CRYSTALLINE ROCK (META-GABBRO)

Running sands encountered at 28.5 feet.

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. LPB1050	**STATION** 10+50	**OFFSET** 20 ft RT	**ALIGNMENT** -LPB- / **0 HR.** 17.5
COLLAR ELEV. 786.4 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 822,712	**EASTING** 1,567,388 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/30/23	**COMP. DATE** 11/30/23	**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
790										
	786.4	0.0	3	2	1	3		M		786.4 GROUND SURFACE 0.0
785										785.7 **RESIDUAL** Brown, silty SAND (A-2-4) 0.7
	782.9	3.5	1	1	1	2		M		Brown, orange, and tan, clayey SILT (A-5 (6)), with trace sand and manganese oxides, micaceous, low to medium plasticity
780	780.4	6.0	WOH	1	1	2		M		
	777.9	8.5	1	1	2	3		M		
775										
	772.9	13.5	1	1	2	3		M		
770										
	767.9	18.5	1	2	4	6	SS-1067	58%		766.4 20.0

Boring Terminated at Elevation 766.4 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. LPB1250	**STATION** 12+50	**OFFSET** 10 ft LT	**ALIGNMENT** -LPB- / **0 HR.** 16.7
COLLAR ELEV. 793.0 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 822,680	**EASTING** 1,567,195 / **24 HR.** 12.3
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/07/23	**COMP. DATE** 12/11/23	**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)
795											
	793.0	0.0	2	3	4	7		M		793.0 GROUND SURFACE	0.0
790	789.5	3.5	2	3	3	6		M		**RESIDUAL** Orange and black, SILT (A-5), with manganese oxides, micaceous, low to medium plasticity	
	787.0	6.0	2	2	4	6		M			
785	784.5	8.5	2	3	3	6		M			
780	779.5	13.5	1	1	3	4		W			
775	774.5	18.5	2	3	3	6		W		774.0 White, sandy SILT (A-4), with little clay, saprolitic, micaceous, low to medium plasticity	19.0
										773.0 Boring Terminated at Elevation 773.0 ft in SILT (RESIDUAL)	20.0

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** J. Crenshaw
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. LPB1450	**STATION** 14+50	**OFFSET** CL	**ALIGNMENT** -LPB- / **0 HR.** 31.7
COLLAR ELEV. 809.6 ft	**TOTAL DEPTH** 35.0 ft	**NORTHING** 822,831	**EASTING** 1,567,066 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/08/23	**COMP. DATE** 12/08/23	**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
810										
	809.6	0.0	4	4	5	9		M		809.6 GROUND SURFACE 0.0
805	806.1	3.5	4	4	7	11		M		**RESIDUAL** Orange, sandy SILT (A-4), micaceous
	803.6	6.0	2	4	5	9		M		806.6 3.0
800	801.1	8.5	2	4	4	8		M		Orange, white, and black, SILT (A-5), micaceous, low to medium plasticity
795	796.1	13.5	3	3	5	8		M		
790	791.1	18.5	2	2	3	5		M		
785	786.1	23.5	3	3	4	7		W		
780	781.1	28.5	1	1	3	4		W		
775	776.1	33.5	2	4	6	10		W		774.6 35.0
										Boring Terminated at Elevation 774.6 ft in SILT (RESIDUAL)

NCDOT BORE DOUBLE U6187_BORINGS.GPJ NC_DOT.GDT 5/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. LPB1650	**STATION** 16+50	**OFFSET** 30 ft RT	**ALIGNMENT** -LPB- / **0 HR.** Dry
COLLAR ELEV. 818.2 ft	**TOTAL DEPTH** 35.0 ft	**NORTHING** 823,008	**EASTING** 1,567,114 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/11/23	**COMP. DATE** 12/11/23	**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))
820										
	818.2	0.0								818.2 GROUND SURFACE 0.0
			2	3	4	7		M		**RESIDUAL** Red and brown, silty CLAY (A-6), with trace rock fragments, medium plasticity
815	814.7	3.5	5	4	7	11		M		
	812.2	6.0	3	5	5	10		M		812.2 6.0 Orange, brown, red, tan, and white, clayey SILT (A-5), with trace sand and manganese oxides, low to medium plasticity
810	810.2	8.0	2	3	4	7		M		
805	804.7	13.5	4	4	6	10		M		
800	799.7	18.5	2	2	5	7		M		796.2 22.0 Orange, brown, and tan, silty CLAY (A-6), with trace rock fragments and manganese oxides, medium plasticity
795	794.7	23.5	3	3	7	10		M		
790	789.7	28.5	3	4	5	9		M		
785	784.7	33.5	1	3	3	6		M		783.2 35.0 Boring Terminated at Elevation 783.2 ft in CLAY (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. LPB1850	**STATION** 18+50	**OFFSET** 20 ft LT	**ALIGNMENT** -LPB- / **0 HR.** Dry
COLLAR ELEV. 826.8 ft	**TOTAL DEPTH** 40.0 ft	**NORTHING** 823,150	**EASTING** 1,567,248 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/11/23	**COMP. DATE** 12/11/23	**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
830										
	826.8	0.0								826.8 GROUND SURFACE 0.0
			4	4	7	11		M		826.0 10 inches of Topsoil 0.8
825	823.3	3.5	3	6	8	14		M		**RESIDUAL** Orange and brown, CLAY (A-7), with little sand, medium to high plasticity
820	820.8	6.0	3	4	6	10		M		820.8 6.0 Orange, white, black, and brown, sandy SILT (A-5), micaceous, low to medium plasticity
815	818.3	8.5	3	4	4	8		M		
810	813.3	13.5	6	7	6	13		M		
805	808.3	18.5	3	4	6	10		M		809.8 17.0 Orange, black, red, and white, SILT (A-4), with trace sand, micaceous, saprolitic, low to medium plasticity
800	803.3	23.5	3	3	5	8		M		
795	798.3	28.5	6	6	9	15		M		799.8 27.0 Brown and orange, clayey SILT (A-5), micaceous, low to medium plasticity, saprolitic 797.3 29.5
790	793.3	33.5	3	3	4	7		M		Orange, red, tan, and black, and white, sandy SILT (A-4), with trace rock fragments, micaceous, low to medium plasticity
	788.3	38.5	6	5	9	14		M		786.8 40.0 Boring Terminated at Elevation 786.8 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. LPB2050	**STATION** 20+50	**OFFSET** CL	**ALIGNMENT** -LPB- / **0 HR.** Dry
COLLAR ELEV. 819.6 ft	**TOTAL DEPTH** 30.0 ft	**NORTHING** 823,076	**EASTING** 1,567,436 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/12/23	**COMP. DATE** 12/12/23	**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))
820										
	819.6	0.0	9	10	10	20		M		819.6 GROUND SURFACE 0.0
										RESIDUAL Orange and brown, CLAY (A-7), medium to high plasticity
815	816.1	3.5	4	6	10	16		M		
	813.6	6.0	3	5	7	12		M		813.6 6.0
										Orange, black, and red, SILT (A-5), micaceous, low to medium plasticity
810	811.1	8.5	3	4	6	10		M		
805	806.1	13.5	2	3	3	6		M		
800	801.1	18.5	3	4	4	8		M		
795	796.1	23.5	3	3	5	8		M		
790	791.1	28.5	3	5	4	9		M		789.6 30.0
										Boring Terminated at Elevation 789.6 ft in SILT (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** J. Crenshaw
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. LPB2250	**STATION** 22+50	**OFFSET** 40 ft RT	**ALIGNMENT** -LPB- / **0 HR.** Dry
COLLAR ELEV. 810.7 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 822,889	**EASTING** 1,567,493 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/08/23	**COMP. DATE** 12/11/23	**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
815										
810	810.7	0.0	3	4	6	10		M		810.7 GROUND SURFACE 0.0
										RESIDUAL Orange, clayey SILT (A-5), medium plasticity
	807.2	3.5	4	5	7	12		M		807.7 3.0
805	804.7	6.0	6	8	13	21		M		Orange and white, silty SAND (A-2-4), with trace rock fragments, micaceous
	802.2	8.5	4	6	5	11		M		
800	797.2	13.5	3	3	5	8		M		798.7 12.0
										Orange, sandy SILT (A-4), micaceous, low plasticity
										795.7 15.0
										Boring Terminated at Elevation 795.7 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPB1150	**STATION** 11+50	**OFFSET** 10 ft LT	**ALIGNMENT** -RPB- / **0 HR.** Dry
COLLAR ELEV. 797.3 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,240	**EASTING** 1,566,066 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/30/23	**COMP. DATE** 11/30/23	**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)
800											
										797.3 GROUND SURFACE	0.0
										795.9 **ROADWAY EMBANKMENT** 17 inches of Pavement	1.4
795	795.8	1.5	3	2	5	7, 10, 8, 13		M		793.8 **RESIDUAL** Orange, clayey SILT (A-4), with manganese oxides, micaceous, medium plasticity	3.5
	793.8	3.5	9	5	5			M		Orange, silty CLAY (A-6), with trace to little rock fragments, sand, and manganese oxides, micaceous, medium to high plasticity	
	791.3	6.0	2	3	5			M			
790	788.8	8.5	3	5	8			M		787.3	10.0
										Boring Terminated at Elevation 787.3 ft in CLAY (RESIDUAL)	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPB1350	**STATION** 13+50	**OFFSET** 30 ft LT	**ALIGNMENT** -RPB- / **0 HR.** Dry
COLLAR ELEV. 791.0 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,345	**EASTING** 1,566,233 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/07/23	**COMP. DATE** 12/11/23	**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	
795											
	791.0	0.0								791.0 GROUND SURFACE	0.0
790			2	4	6	10	SS-360	40%		**RESIDUAL** Orange and brown, silty CLAY (A-7-6 (11)), contains root fragments, medium plasticity	
	787.5	3.5								787.5 Orange and brown, sandy SILT (A-4), with little clay, medium plasticity	3.5
			7	26	47	73		M			
785	785.0	6.0								785.0 Black, white, and orange, silty SAND (A-2-4), with trace to some rock fragments	6.0
			13	28	41	69		M			
	782.5	8.5									
			12	21	28	49		M		781.0	10.0
										Boring Terminated at Elevation 781.0 ft in SAND (RESIDUAL)	

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPB1550	**STATION** 15+50	**OFFSET** 35 ft RT	**ALIGNMENT** -RPB- **0 HR.** 15.5
COLLAR ELEV. 791.8 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 822,409	**EASTING** 1,566,434 **24 HR.** 14.0
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/07/23	**COMP. DATE** 12/11/22	**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)
795											
	791.8	0.0								791.8 GROUND SURFACE	0.0
790			4	5	7	12		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), medium plasticity	
	788.3	3.5								788.3	3.5
			5	4	6	10		M		Orange, SILT (A-4), low to medium plasticity	
785	785.8	6.0								785.8	6.0
			2	3	4	7		M		Orange, black, and white, silty and sandy CLAY (A-7-5 (19)), low to medium plasticity	
	783.3	8.5									
			6	8	4	12		M			
780											
	778.3	13.5									
			2	1	2	3	SS-358	62%			
775										774.8	17.0
	773.3	18.5								Orange and black, sandy SILT (A-4), with little clay, low to medium plasticity	
			6	7	9	16		W		771.8	20.0
										Boring Terminated at Elevation 771.8 ft in SILT (RESIDUAL)	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** J. Crenshaw
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPB1850	**STATION** 18+50	**OFFSET** 40 ft LT	**ALIGNMENT** -RPB- **0 HR.** 25.0
COLLAR ELEV. 808.1 ft	**TOTAL DEPTH** 30.0 ft	**NORTHING** 822,675	**EASTING** 1,566,595 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/08/23	**COMP. DATE** 12/08/23	**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
810										
	808.1	0.0								808.1 GROUND SURFACE 0.0
			2	4	6	10		M		**RESIDUAL** Red and brown, clayey SILT (A-5), with some sand
805	804.6	3.5								
			5	10	12	22		M		
	802.1	6.0								802.1 6.0
			4	5	8	13		M		Red and brown, SILT (A-4), with trace sand and clay and manganese oxides, low plasticity
800	799.6	8.5								
			3	5	7	12		M		
795	794.6	13.5								
			6	7	6	13		M		
790	789.6	18.5								791.1 17.0
			2	4	4	8		M		Red and brown, clayey SILT (A-5), with trace rock fragments, micaceous
785	784.6	23.5								786.1 22.0
			3	2	3	5				Orange, brown, and black, sandy SILT (A-4), with manganese oxides, micaceous
780	779.6	28.5								
			2	4	7	11		W		778.1 30.0
										Boring Terminated at Elevation 778.1 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** J. Crenshaw
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPB1950	**STATION** 19+50	**OFFSET** 20 ft LT	**ALIGNMENT** -RPB- **0 HR.** 28.2
COLLAR ELEV. 807.5 ft	**TOTAL DEPTH** 35.0 ft	**NORTHING** 822,733	**EASTING** 1,566,679 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/08/23	**COMP. DATE** 12/08/23	**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)
810											
	807.5	0.0								807.5 GROUND SURFACE	0.0
			2	2	5	7		M		**RESIDUAL** Red and brown, sandy SILT (A-4), with trace rock fragments, low plasticity	
805											
	804.0	3.5									
			13	21	18	39		M			
	801.5	6.0									
800			3	10	24	34		M			
	799.0	8.5									
			10	14	20	34		M			
795										795.5	12.0
	794.0	13.5								Orange, black, and white, silty SAND (A-2-4), with trace rock fragments, saprolitic	
			9	11	6	17		M			
790											
	789.0	18.5									
			11	7	11	18		M			
785											
	784.0	23.5									
			3	2	4	6		Sat.			
780											
	779.0	28.5									
			5	3	7	10		Sat.			
775											
	774.0	33.5									
			3	6	7	13		Sat.		772.5	35.0
										Boring Terminated at Elevation 772.5 ft in SAND (RESIDUAL)	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPB2150	**STATION** 21+50	**OFFSET** 25 ft RT	**ALIGNMENT** -RPB- **0 HR.** 22.3
COLLAR ELEV. 804.1 ft	**TOTAL DEPTH** 35.0 ft	**NORTHING** 822,847	**EASTING** 1,566,849 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/11/23	**COMP. DATE** 12/11/23	**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
805										
	804.1	0.0								804.1 GROUND SURFACE 0.0
			3	3	4	7		M		**RESIDUAL** Brown and orange, clayey SILT (A-4), medium plasticity
800										801.1 3.0
	800.6	3.5								Orange and tan, CLAY (A-7-5 (21)), with manganese oxides, medium plasticity
			2	9	10	19		M		
	798.1	6.0								
			5	7	8	15		M		
795	795.6	8.5								
			2	4	4	8	SS-405	50%		
										792.1 12.0
790	790.6	13.5								White and orange, silty SAND (A-2-4)
			5	7	7	14		W		
785	785.6	18.5								
			7	4	4	8		W		
										782.1 22.0
780	780.6	23.5								Orange, tan, and black, CLAY (A-7), medium plasticity
			3	3	3	6		W		
775	775.6	28.5								
			1	2	2	4		W		
770	770.6	33.5								
			3	4	6	10		W		769.1 35.0
										Boring Terminated at Elevation 769.1 ft in CLAY (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPB2350	**STATION** 23+50	**OFFSET** CL	**ALIGNMENT** -RPB- / **0 HR.** 25.0
COLLAR ELEV. 813.2 ft	**TOTAL DEPTH** 30.0 ft	**NORTHING** 823,009	**EASTING** 1,566,969 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/11/23	**COMP. DATE** 12/11/23	**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))
815										
	813.2	0.0								813.2 — GROUND SURFACE — 0.0
			2	5	5	10		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), with some roots, medium plasticity
810	809.7	3.5								809.7 — 3.5
			3	6	7	13		M		Orange, SILT (A-4), with little clay, micaceous, low to medium plasticity
	807.2	6.0								
			4	5	7	12		M		
805	804.7	8.5								
			3	5	7	12		M		
800	799.7	13.5								801.2 — 12.0
			2	3	4	7		M		Orange and black, SILT (A-5), micaceous, low to medium plasticity
795	794.7	18.5								796.2 — 17.0
			4	3	3	6		M		Orange and black, sandy SILT (A-4), with trace rock fragments and little clay, low to medium plasticity
790	789.7	23.5								789.4 — 23.8
			4	5	10	15				Orange and black, silty SAND (A-2-4), with trace rock fragments
785	784.7	28.5								
			4	5	6	11		M		783.2 — 30.0
										Boring Terminated at Elevation 783.2 ft in SAND (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPB2550	**STATION** 25+50	**OFFSET** 40 ft LT	**ALIGNMENT** -RPB- / **0 HR.** Dry
COLLAR ELEV. 822.5 ft	**TOTAL DEPTH** 35.0 ft	**NORTHING** 823,178	**EASTING** 1,567,096 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/11/23	**COMP. DATE** 12/11/23	**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
825										
	822.5	0.0								822.5 — GROUND SURFACE — 0.0
			2	2	2	4		M		**RESIDUAL** Brown, orange, and black, silty CLAY (A-6), with little sand, low to medium plasticity
820	819.0	3.5								
			2	3	6	9		M		
	816.5	6.0								
815			3	3	4	7		M		
	814.0	8.5								813.5 — 9.0
			3	4	4	8				White, silty SAND (A-2-4), with trace quartz rock fragments
810										810.5 — Bulk Sample from 10 - 20 ft. — 12.0
	809.0	13.5								Orange, red, white, tan, and black, clayey SILT (A-4), with trace sand, micaceous, low to medium plasticity
			5	5	6	11		M		
805	804.0	18.5								
			4	2	3	5		M		
800	799.0	23.5								
			3	3	5	8		M		
795	794.0	28.5								
			2	3	3	6		M		
790	789.0	33.5								790.5 — 32.0
			3	4	6	10		M		Orange, tan, white, and pink, CLAY (A-6), saprolitic, low to medium plasticity
										787.5 — 35.0
										Boring Terminated at Elevation 787.5 ft in CLAY (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPB2800	**STATION** 28+00	**OFFSET** 20 ft LT	**ALIGNMENT** -RPB- / **0 HR.** Dry
COLLAR ELEV. 825.5 ft	**TOTAL DEPTH** 40.0 ft	**NORTHING** 823,180	**EASTING** 1,567,365 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/12/23	**COMP. DATE** 12/12/23	**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))
830										
825	825.5	0.0								825.5 GROUND SURFACE 0.0
			4	5	6	11		M		**RESIDUAL** Orange and brown, clayey SILT (A-4), medium to high plasticity
	822.0	3.5								822.0 — 3.5
			4	9	12	21		M		Orange, silty CLAY (A-6), medium to high plasticity
820	819.5	6.0								819.5 — 6.0
			4	5	7	12		M		Tan, orange, and black, clayey SILT (A-4), with little clay, some rock fragments, micaceous, and manganese oxides, low to medium plasticity
	817.0	8.5								
			3	4	4	8		M		
815										
	812.0	13.5								
			2	4	4	8		M		
810										
	807.0	18.5								
			3	3	5	8		M		
805										
	802.0	23.5								
			3	3	4	7		M		
800										
	797.0	28.5								
			3	3	4	7		M		
795										
	792.0	33.5								
			1	2	3	5		M		
790										
										788.5 — 37.0
	787.0	38.5								Brown, black, and orange, SILT (A-5), micaceous, low to medium plasticity
			2	3	5	8		M		785.5 — 40.0
										Boring Terminated at Elevation 785.5 ft in SILT (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** J. Crenshaw
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPB3100	**STATION** 31+00	**OFFSET** 40 ft LT	**ALIGNMENT** -RPB- / **0 HR.** Dry
COLLAR ELEV. 811.2 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 822,949	**EASTING** 1,567,576 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/08/23	**COMP. DATE** 12/08/23	**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))
815										
	811.2	0.0								811.2 GROUND SURFACE 0.0
810			3	7	8	15		M		**RESIDUAL** Red and brown, CLAY (A-6), with manganese oxides and root fragments, low plasticity
	807.7	3.5								807.7 — 3.5
			5	5	6	11		M		Red, brown, and orange, SILT (A-5), micaceous
805	805.2	6.0								
			2	3	5	8		M		803.2 — 8.0
	802.7	8.5								Red, white, and orange, silty SAND (A-2-4), micaceous
			3	3	3	6		M		799.2 — 12.0
800										
	797.7	13.5								Orange, SILT (A-5), with manganese oxides, micaceous, low plasticity
			2	4	4	8		M		
795										
	792.7	18.5								
			2	3	4	7		M		791.2 — 20.0
										Boring Terminated at Elevation 791.2 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPC1000	**STATION** 10+00	**OFFSET** 15 ft RT	**ALIGNMENT** -RPC- **0 HR.** Dry
COLLAR ELEV. 799.2 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,128	**EASTING** 1,566,155 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/28/23	**COMP. DATE** 11/28/23	**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)
800										799.2 GROUND SURFACE	0.0
	797.7	1.5								797.7 **ROADWAY EMBANKMENT** PAVEMENT	1.5
795	795.7	3.5	6	2	5	7		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), with trace sand and rock fragments, contains manganese oxides, micaceous, medium plasticity	
			4	4	5	9		M			
	793.2	6.0	3	5	5	10		M			
790	790.7	8.5	2	3	6	9		M		789.2 Boring Terminated at Elevation 789.2 ft in CLAY (RESIDUAL)	10.0

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPC1200	**STATION** 12+00	**OFFSET** 55 ft RT	**ALIGNMENT** -RPC- **0 HR.** 2.5
COLLAR ELEV. 775.0 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 822,144	**EASTING** 1,566,358 **24 HR.** 2.5
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/05/23	**COMP. DATE** 12/06/23	**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
780										
775	775.0	0.0								775.0 GROUND SURFACE 0.0
			2	5	5	10				**RESIDUAL** Brown and gray, sandy SILT (A-4), low to medium plasticity
	771.5	3.5						M		
770			2	2	1	3				
	769.0	6.0						M		769.0 Brown, orange, tan, and black, silty SAND (A-2-4) 6.0
			3	3	5	8				
	766.5	8.5						M		
765			4	2	4	6				
										763.0 Orange and brown, sandy SILT (A-4), micaceous, low to medium plasticity 12.0
	761.5	13.5								
760			2	2	4	6		M		
	756.5	18.5								
			2	3	5	8		M		755.0 Boring Terminated at Elevation 755.0 ft in SILT (RESIDUAL) 20.0

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPC1400	**STATION** 14+00	**OFFSET** CL	**ALIGNMENT** -RPC- **0 HR.** 11.0
COLLAR ELEV. 792.8 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 822,252	**EASTING** 1,566,535 **24 HR.** 11.0
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/05/23	**COMP. DATE** 12/06/23	**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)
795											
	792.8	0.0	3	7	11	18		M		792.8 GROUND SURFACE	0.0
790	789.3	3.5	5	11	25	36		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), with trace rock fragments, medium plasticity 789.3	3.5
	786.8	6.0	26	18	12	30		M		Orange and brown, silty SAND (A-2-4), with trace to little rock fragments, micaceous	
785	784.3	8.5	8	18	16	34					
780	779.3	13.5	5	7	4	11		Sat.		777.8	15.0
										Boring Terminated at Elevation 777.8 ft in SAND (RESIDUAL)	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPC1600	**STATION** 16+00	**OFFSET** 20 ft RT	**ALIGNMENT** -RPC- **0 HR.** Dry
COLLAR ELEV. 789.2 ft	**TOTAL DEPTH** 2.6 ft	**NORTHING** 822,288	**EASTING** 1,566,733 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER J. Crenshaw	**START DATE** 12/20/23	**COMP. DATE** 12/20/23	**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
790										789.2 GROUND SURFACE 0.0
								M		786.7 0.5 **RESIDUAL** Medium stiff, brown, sandy SILT (A-4), with root fragments, moist
								M		786.6 2.6 Loose, brown and orange, clayey SAND (A-2-6), moist
										Boring Terminated at Elevation 786.6 ft on a suspected boulder.

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPC1800	**STATION** 18+00	**OFFSET** 30 ft LT	**ALIGNMENT** -RPC- / **0 HR.** Dry
COLLAR ELEV. 787.1 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 822,372	**EASTING** 1,566,918 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/04/23	**COMP. DATE** 12/06/23	**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))
790										
	787.1	0.0								787.1 GROUND SURFACE 0.0
785			2	3	5	8		M		**RESIDUAL** Orange, red, brown, and tan, silty CLAY (A-6), with little sand and root fragments, micaceous, medium plasticity
	783.6	3.5	5	4	5	9		M		
780	781.1	6.0	3	2	2	4		M		
	778.6	8.5	2	3	4	7		M		
775	773.6	13.5	1	1	2	3		M		772.1 15.0
										Boring Terminated at Elevation 772.1 ft in CLAY (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPC2000	**STATION** 20+00	**OFFSET** 20 ft RT	**ALIGNMENT** -RPC- / **0 HR.** Dry
COLLAR ELEV. 787.3 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 822,362	**EASTING** 1,567,122 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/05/23	**COMP. DATE** 12/06/23	**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))
790										
	787.3	0.0								787.3 GROUND SURFACE 0.0
785			4	7	12	19		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), with some roots, medium to high plasticity
	783.8	3.5	6	12	16	28		M		
780	781.3	6.0	6	9	11	20		M		
	778.8	8.5	7	9	12	21		M		
775										775.3 12.0
	773.8	13.5	3	3	3	6		M		Orange and tan, clayey SILT (A-5), micaceous, medium plasticity
										772.3 15.0
										Boring Terminated at Elevation 772.3 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPC2200	**STATION** 22+00	**OFFSET** CL	**ALIGNMENT** -RPC- **0 HR.** 17.7
COLLAR ELEV. 783.9 ft	**TOTAL DEPTH** 45.0 ft	**NORTHING** 822,398	**EASTING** 1,567,319 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/16/23	**COMP. DATE** 11/16/23	**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))
785										
	783.9	0.0								783.9 GROUND SURFACE 0.0
			4	8	13	21		M		**RESIDUAL** Orange and gray, silty CLAY (A-7-6), with some sand, medium to high plasticity
780	780.4	3.5	8	9	15	24		M		
	777.4	6.5	4	6	9	15		M		
775	775.4	8.5	5	8	10	18		M		
770	770.4	13.5	1	1	1	2		M		
										766.9 17.0
765	765.4	18.5	WOH	1	0	1		W		Black, white, brown, tan, and orange, sandy SILT (A-5), with manganese oxides, micaceous, saprolitic, low to medium plasticity
760	760.4	23.5	WOH	1	1	2		W		
755	755.4	28.5	1	1	1	2		W		
750	750.4	33.5	3	3	3	6		W		
										746.9 37.0
745	745.4	38.5	10	19	21	40		Sat.		White and tan, silty SAND (A-2-4), with trace rock fragments
740	740.4	43.5	9	15	24	39		Sat.		
										738.9 45.0
										Boring Terminated at Elevation 738.9 ft in SAND (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPC2400	**STATION** 24+00	**OFFSET** 80 ft RT	**ALIGNMENT** -RPC- **0 HR.** 7.3
COLLAR ELEV. 765.5 ft	**TOTAL DEPTH** 39.6 ft	**NORTHING** 822,333	**EASTING** 1,567,525 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/16/23	**COMP. DATE** 11/16/23	**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
770										
765	765.5	0.0								765.5 GROUND SURFACE 0.0
			2	3	4	7		M		**RESIDUAL** Brown, sandy SILT (A-4), medium plasticity
	762.0	3.5								762.5 3.0
760			WOH	1	1	2		M		Brown, white, gray, and orange silty SAND (A-2-5), saprolitic
	759.0	6.5								759.0 6.5
			WOH	1	2	3				Brown and orange, sandy SILT (A-4), micaceous, saprolitic, low plasticity
755	757.0	8.5	3	4	4	8		W		
	752.0	13.5								
750			5	6	8	14		W		
	747.0	18.5								748.5 17.0
745			3	4	6	10		Sat.		Black, white, and orange, silty SAND (A-2-5), saprolitic
	742.0	23.5								
740			4	5	6	11		Sat.		
	737.0	28.5								738.5 27.0
735			10	9	13	22		Sat.		Black, white, and orange, SAND (A-3), saprolitic
	732.0	33.5								
730			14	34	31	65		Sat.		
	727.0	38.5								726.5 39.0
			36	62	38/0.1	100/0.6				725.9 39.6
										WEATHERED ROCK Black and white, META-GABBRO
										Boring Terminated at Elevation 725.9 ft in WEATHERED ROCK (META-GABBRO)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPD1200	**STATION** 12+00	**OFFSET** 30 ft LT	**ALIGNMENT** -RPD- / **0 HR.** Dry
COLLAR ELEV. 776.7 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 823,042	**EASTING** 1,568,878 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/05/23	**COMP. DATE** 12/06/23	**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)
780											
	776.7	0.0								776.7 GROUND SURFACE	0.0
775			4	5	8	13		M		**RESIDUAL** Orange, tan, and black, clayey SILT (A-5), with manganese oxides, micaceous, low to medium plasticity	
	773.2	3.5	2	3	4	7		M			
770	770.7	6.0	3	3	4	7		M			
	768.2	8.5	2	2	7	9		M			
765										764.7	12.0
	763.2	13.5	2	3	4	7		M		761.7 Orange, black, and tan, SILT (A-4), with manganese oxides, micaceous, low to medium plasticity	15.0
										Boring Terminated at Elevation 761.7 ft in SILT (RESIDUAL)	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPD1400	**STATION** 14+00	**OFFSET** 20 ft LT	**ALIGNMENT** -RPD- / **0 HR.** Dry
COLLAR ELEV. 780.7 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 822,979	**EASTING** 1,568,689 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/05/23	**COMP. DATE** 12/06/23	**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
785										
	780.7	0.0								780.7 GROUND SURFACE 0.0
780			4	6	9	15		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), contains root fragments, medium plasticity
	777.2	3.5	5	6	9	15		M		777.2 3.5 Orange, clayey SILT (A-4), micaceous, medium plasticity
775	774.7	6.0	3	4	4	8		M		774.7 6.0 Orange, tan, and black, clayey SILT (A-5), with manganese oxides, micaceous, medium plasticity
	772.2	8.5	3	2	4	6		M		
770	767.2	13.5	2	2	3	5		M		
765	762.2	18.5	2	2	2	4		M		763.7 17.0 Tan, orange, and black, sandy SILT (A-4), with manganese oxides, low to medium plasticity 760.7 20.0
										Boring Terminated at Elevation 760.7 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPD1600	**STATION** 16+00	**OFFSET** 40 ft LT	**ALIGNMENT** -RPD- / **0 HR.** Dry
COLLAR ELEV. 785.5 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 822,879	**EASTING** 1,568,516 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/05/23	**COMP. DATE** 12/06/23	**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)
790											
785	785.5	0.0								785.5 GROUND SURFACE	0.0
			4	4	5	9		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), medium to high plasticity	
	782.0	3.5									
			6	8	13	21		M			
780	779.5	6.0									
			5	7	8	15		M			
	777.0	8.5								777.0	8.5
			4	3	5	8		M		Orange, SILT (A-5), with manganese oxides, micaceous, low to medium plasticity	
775											
	772.0	13.5									
			2	3	3	6		M			
770											
	767.0	18.5									
			2	2	4	6		M		765.5	20.0
										Boring Terminated at Elevation 765.5 ft in SILT (RESIDUAL)	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPD1800	**STATION** 18+00	**OFFSET** 30 ft RT	**ALIGNMENT** -RPD- / **0 HR.** Dry
COLLAR ELEV. 779.1 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 822,850	**EASTING** 1,568,307 / **24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/05/23	**COMP. DATE** 12/06/23	**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
780										
	779.1	0.0								779.1 GROUND SURFACE 0.0
			4	5	9	14		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), medium plasticity
775	775.6	3.5								775.6 3.5
			5	9	10	19		M		Orange, tan, and black, clayey SILT (A-4), with manganese oxides, low to medium plasticity
	773.1	6.0								
			3	5	5	10		M		
770	770.6	8.5								
			3	4	4	8		M		
765	765.6	13.5								
			1	2	2	4		M		764.1 15.0
										Boring Terminated at Elevation 764.1 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPD2000	**STATION** 20+00	**OFFSET** 15 ft LT	**ALIGNMENT** -RPD- **0 HR.** 13.7
COLLAR ELEV. 770.5 ft	**TOTAL DEPTH** 43.6 ft	**NORTHING** 822,711	**EASTING** 1,568,156 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/04/23	**COMP. DATE** 12/04/23	**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))
770.5		0.0	3	6	7	13, 15		M		GROUND SURFACE 0.0
	767.0	3.5	5	6	9			M		**RESIDUAL** Orange and brown, CLAY (A-7), medium to high plasticity 3.5
	764.5	6.0	2	1	3	14		M		Tan and orange, sandy CLAY (A-6), medium plasticity 5.5
	762.0	8.5	WOH	1	2	3	SS-265	70%		Orange and gray, silty CLAY (A-7-5 (36)), medium plasticity
	757.0	13.5	2	1	4	5		W		12.0 Orange, gray, and brown, sandy SILT (A-4), with little clay, micaceous, low to medium plasticity
	752.0	18.5	2	4	5	9		W		
	747.0	23.5	3	6	8	14		Sat.		22.0 White, gray, and orange, silty SAND (A-2-4), micaceous, saprolitic
	742.0	28.5	5	7	9	16		Sat.		
	737.0	33.5	6	11	14	25		Sat.		37.0 Gray, tan, and white, sandy SILT (A-4), medium plasticity
	732.0	38.5	14	28	45	73		W		42.0 **CRYSTALLINE ROCK** Black and gray, META-GABBRO 43.6
	727.0	43.5	60/0.1			60/0.1				Boring Terminated with Standard Penetration Test Refusal at Elevation 726.9 ft in CRYSTALLINE ROCK (META-GABBRO)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPD2200	**STATION** 22+00	**OFFSET** 25 ft RT	**ALIGNMENT** -RPD- **0 HR.** Dry
COLLAR ELEV. 769.7 ft	**TOTAL DEPTH** 48.6 ft	**NORTHING** 822,635	**EASTING** 1,567,967 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/04/23	**COMP. DATE** 12/04/23	**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))
769.7		0.0	2	2	5	7		M		GROUND SURFACE 0.0
	766.2	3.5	2	2	3	5		M		**RESIDUAL** Brown and orange, silty CLAY (A-7), contains wood fragments, micaceous, medium to high plasticity
	763.7	6.0	WOH	WOH	WOH	0		M		
	761.2	8.5	WOH	1	2	3		M		8.0 Orange, brown, and white, sandy and clayey SILT (A-4), low to medium plasticity
	756.2	13.5	WOH	3	3	6		M		
	751.2	18.5	4	5	7	12		M		
	746.2	23.5	11	12	11	23		M		22.0 Gray and tan, silty SAND (A-2-4)
	741.2	28.5	6	17	23	40		M		27.0 Black and white, clayey SAND (A-2-6), with trace silt, saprolitic
	736.2	33.5	32	68/0.4		100/0.9				34.0 **WEATHERED ROCK** Black and white, META-GABBRO
	730.8	38.9	100/0.3			100/0.3				
	726.2	43.5	60/0.1			60/0.1				43.5 **CRYSTALLINE ROCK** Black and white, META-GABBRO
	721.2	48.5	60/0.1			60/0.1				48.6 Boring Terminated with Standard Penetration Test Refusal at Elevation 721.1 ft in CRYSTALLINE ROCK (META-GABBRO)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. RPD2400	**STATION** 24+00	**OFFSET** 70 ft LT	**ALIGNMENT** -RPD- / **0 HR.** 22.1
COLLAR ELEV. 748.4 ft	**TOTAL DEPTH** 42.4 ft	**NORTHING** 822,444	**EASTING** 1,567,855 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 11/20/23	**COMP. DATE** 11/20/23	**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)
750											
	748.4	0.0								748.4 GROUND SURFACE	0.0
			5	6	8	14		D		**RESIDUAL** Brown, tan, gray, and orange, silty CLAY (A-6), low to medium plasticity	
745	744.9	3.5	6	6	9	15		M			
	741.9	6.5	3	2	3	5		M			
740	739.9	8.5	WOH	1	2	3		M		739.9 Tan and orange, SILT (A-5), micaceous, low to medium plasticity	8.5
735	734.9	13.5	WOH	1	2	3		M		736.4 Black and orange, sandy SILT (A-4), with some clay, low to medium plasticity	12.0
730	729.9	18.5	1	WOH	1	1		M		731.4 White and black, sandy CLAY (A-7-5), low to medium plasticity	17.0
725	724.9	23.5	2	5	7	12		M		726.4 Black, white, and tan, silty SAND (A-2-4)	22.0
720	719.9	28.5	2	3	6	9		Sat.		721.4 Orange, white, and black, sandy SILT (A-4), low to medium plasticity	27.0
715	714.9	33.5	5	8	11	19		W		716.4 Black, white, and orange, silty SAND (A-2-4)	32.0
710	709.9	38.5	9	13	12	25		Sat.			
	706.1	42.3	60/0.1			60/0.1				706.1 / 706.0 **CRYSTALLINE ROCK** Black, META-GABBRO	42.3 / 42.4

Boring Terminated with Standard Penetration Test Refusal at Elevation 706.0 ft in CRYSTALLINE ROCK (META-GABBRO)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y11050	**STATION** 10+50	**OFFSET** 20 ft RT	**ALIGNMENT** -Y1- / **0 HR.** Dry
COLLAR ELEV. 883.0 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 818,402	**EASTING** 1,566,067 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 12/01/23	**COMP. DATE** 12/01/23	**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	
885											
										883.0 GROUND SURFACE	0.0
	881.5	1.5								881.8 **ROADWAY EMBANKMENT** PAVEMENT	1.3
880	879.5	3.5	5	3	4	7		M		**RESIDUAL** Orange, tan, and brown, sandy SILT (A-4), with trace manganese oxides, low to high plasticity	
	877.0	6.0	3	5	5	10		M			
875	874.5	8.5	1	2	2	4		M			
870	869.5	13.5	2	4	4	8		M		871.0 Orange, silty SAND (A-2-4), with some rock fragments	12.0
			4	10	10	20		M		868.0	15.0

Boring Terminated at Elevation 868.0 ft in SAND (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y11250	**STATION** 12+50	**OFFSET** 35 ft LT	**ALIGNMENT** -Y1-
COLLAR ELEV. 879.3 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 818,481	**EASTING** 1,566,250
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 12/01/23	**COMP. DATE** 12/01/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft)	
0 HR.	Dry
24 HR.	FIAD

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)
880										879.3 GROUND SURFACE	0.0
	878.2	1.1								878.2 **ROADWAY EMBANKMENT**	1.1
			4	5	4	9		M		877.6 PAVEMENT	1.7
875	875.8	3.5								AGGREGATE BASE COURSE	
			7	7	12	19	SS-106	31%		**RESIDUAL** Brown and orange, silty CLAY (A-7-5 (35)), medium to high plasticity	
	873.3	6.0									
			5	9	10	19		M			
870	870.8	8.5								870.8	8.5
			4	6	8	14		M		Orange and tan, clayey SILT (A-4), medium plasticity	
865	865.8	13.5									
			3	4	6	10		M		864.3	15.0

Boring Terminated at Elevation 864.3 ft in SILT (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y11450	**STATION** 14+50	**OFFSET** 20 ft LT	**ALIGNMENT** -Y1-
COLLAR ELEV. 869.5 ft	**TOTAL DEPTH** 6.0 ft	**NORTHING** 818,549	**EASTING** 1,566,440
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER Q. Hill	**START DATE** 02/01/24	**COMP. DATE** 02/01/24	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft)	
0 HR.	Dry
24 HR.	FIAD

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
870										869.5 GROUND SURFACE 0.0
								M		**RESIDUAL** Medium stiff, red and brown, silty CLAY (A-7-5) with trace to little sand and rock fragments, low to medium plasticity
865										863.5 6.0

Boring Terminated at Elevation 863.5 ft in CLAY (RESIDUAL)

Kessler DCP Test performed to estimate soil strength

NCDOT BORE DOUBLE U6187_BORINGS.GPJ NC_DOT.GDT 5/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y11650	**STATION** 16+50	**OFFSET** 30 ft RT	**ALIGNMENT** -Y1-
COLLAR ELEV. 861.9 ft	**TOTAL DEPTH** 6.0 ft	**NORTHING** 818,548	**EASTING** 1,566,646
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER Q. Hill	**START DATE** 01/04/24	**COMP. DATE** 01/04/24	**SURFACE WATER DEPTH** N/A

0 HR. Dry
24 HR. FIAD

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)
865											
										861.9 GROUND SURFACE	0.0
860								M		**ROADWAY EMBANKMENT** Medium stiff, red and brown, silty CLAY (A-7-6), with trace sand and gravel	
										855.9	6.0
										Boring Terminated at Elevation 855.9 ft in CLAY (ROADWAY EMBANKMENT) Kessler DCP Test performed to estimate soil strength	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y11850	**STATION** 18+50	**OFFSET** 30 ft LT	**ALIGNMENT** -Y1-
COLLAR ELEV. 860.9 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 818,654	**EASTING** 1,566,826
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/13/23	**COMP. DATE** 12/13/23	**SURFACE WATER DEPTH** N/A

0 HR. Dry
24 HR. FIAD

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
865										
										860.9 GROUND SURFACE 0.0
860	860.9	0.0	4	4	6	10		M		**RESIDUAL** Orange, brown, and black, clayey SILT (A-5), contains root fragments, medium to high plasticity
	857.4	3.5	3	6	10	16		M		
855	854.9	6.0	3	4	6	10		M		
	852.4	8.5	3	6	8	14		M		
850										848.9 12.0
	847.4	13.5	9	13	11	24		M		Orange and brown, silty SAND (A-2-4), with trace rock fragments 845.9 15.0
										Boring Terminated at Elevation 845.9 ft in SAND (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y12050	**STATION** 20+50	**OFFSET** 48 ft RT	**ALIGNMENT** -Y1- / **0 HR.** Dry
COLLAR ELEV. 854.1 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 818,633	**EASTING** 1,567,037 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/13/23	**COMP. DATE** 12/13/23	**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)
855											
	854.1	0.0	4	4	6	10		M		854.1 GROUND SURFACE	0.0
850	850.6	3.5	4	7	8	15		M		**RESIDUAL** Orange and brown, sandy and clayey SILT (A-4, A-5), with some rock fragments, low to medium plasticity	
	848.1	6.0	4	9	12	21		M			
845	845.6	8.5	11	14	11	25		M			
840	840.6	13.5	4	7	11	18		M		839.1 Boring Terminated at Elevation 839.1 ft in SILT (RESIDUAL)	15.0

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill	
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40				**GROUND WTR (ft)**
BORING NO. Y12250	**STATION** 22+50	**OFFSET** 55 ft LT	**ALIGNMENT** -Y1-	**0 HR.** Dry
COLLAR ELEV. 851.8 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 818,755	**EASTING** 1,567,213	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers		**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/15/23	**COMP. DATE** 11/16/23		**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	
855											
	851.8	0.0	4	8	9	17		M		851.8 GROUND SURFACE	0.0
850	848.3	3.5	11	8	9	17		M		**RESIDUAL** Brown, sandy SILT (A-4), contains root fragments	848.3 3.5
								M		Orange, silty CLAY (A-7-6), highly plastic	845.8 6.0
845	845.3	6.5	7	9	9	18		M		Orange and black, sandy SILT (A-4), with trace rock fragments and little clay, medium plasticity	
	843.3	8.5	4	6	10	16		M			839.8 12.0
840	838.3	13.5	5	6	9	15		M		Orange, silty SAND (A-2-4), with some rock fragments	836.8 15.0
										Boring Terminated at Elevation 836.8 ft in SAND (RESIDUAL)	

NCDOT BORE DOUBLE U6187_BORINGS.GPJ NC_DOT.GDT 5/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill	
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40				**GROUND WTR (ft)**
BORING NO. Y12650	**STATION** 26+50	**OFFSET** 30 ft RT	**ALIGNMENT** -Y1-	**0 HR.** Dry
COLLAR ELEV. 836.6 ft	**TOTAL DEPTH** 6.0 ft	**NORTHING** 818,790	**EASTING** 1,567,616	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A	
DRILLER Q. Hill	**START DATE** 01/04/24	**COMP. DATE** 01/04/24	**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)
840											
										836.6 GROUND SURFACE	0.0
835								M		**RESIDUAL** Medium stiff, red and brown, silty CLAY (A-7-6), with trace sand, contains root fragments	
										830.6	6.0
										Boring Terminated at Elevation 830.6 ft in CLAY (RESIDUAL) Kessler DCP Test performed to estimate soil strength	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill	
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40				**GROUND WTR (ft)**
BORING NO. Y12850	**STATION** 28+50	**OFFSET** 20 ft LT	**ALIGNMENT** -Y1-	**0 HR.** Dry
COLLAR ELEV. 831.2 ft	**TOTAL DEPTH** 6.0 ft	**NORTHING** 818,893	**EASTING** 1,567,795	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A	
DRILLER Q. Hill	**START DATE** 01/04/24	**COMP. DATE** 01/04/24	**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
835										
										831.2 GROUND SURFACE 0.0
830								M		**ROADWAY EMBANKMENT** Medium stiff, orange and brown, silty CLAY (A-7-6), with little sand and gravel
										825.2 6.0
										Boring Terminated at Elevation 825.2 ft in CLAY (ROADWAY EMBANKMENT) Kessler DCP Test performed to estimate soil strength

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y13050	**STATION** 30+50	**OFFSET** 30 ft RT	**ALIGNMENT** -Y1-
COLLAR ELEV. 832.3 ft	**TOTAL DEPTH** 6.0 ft	**NORTHING** 818,917	**EASTING** 1,568,000
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER J. Crenshaw	**START DATE** 12/20/23	**COMP. DATE** 12/20/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft): 0 HR. Dry; 24 HR. FIAD

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)
835											
										832.3 GROUND SURFACE	0.0
830								M		**RESIDUAL** Medium stiff, brown and red, silty CLAY (A-7-6), contains root fragments and trace rock fragments, low to medium plasticity	
										826.3	6.0
										Boring Terminated at Elevation 826.3 ft in CLAY (RESIDUAL) Kessler DCP Test performed to estimate soil strength	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y13250	**STATION** 32+50	**OFFSET** 35 ft LT	**ALIGNMENT** -Y1-
COLLAR ELEV. 827.9 ft	**TOTAL DEPTH** 6.0 ft	**NORTHING** 819,062	**EASTING** 1,568,153
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER J. Crenshaw	**START DATE** 12/20/23	**COMP. DATE** 12/20/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft): 0 HR. Dry; 24 HR. FIAD

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
830										
										827.9 GROUND SURFACE 0.0
825								M		**ROADWAY EMBANKMENT** Medium stiff, orange and brown, sandy CLAY (A-6), with some silt and trace gravel, medium plasticity
										821.9 6.0
										Boring Terminated at Elevation 821.9 ft in CLAY (ROADWAY EMBANKMENT) Kessler DCP Test performed to estimate soil strength

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y13450	**STATION** 34+50	**OFFSET** 10 ft RT	**ALIGNMENT** -Y1- **0 HR.** Dry
COLLAR ELEV. 834.1 ft	**TOTAL DEPTH** 2.8 ft	**NORTHING** 819,112	**EASTING** 1,568,352 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER J. Crenshaw	**START DATE** 12/20/23	**COMP. DATE** 12/20/23	**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)
835										834.1 GROUND SURFACE	0.0
								M		**RESIDUAL** Medium stiff, brown, sandy CLAY (A-6), with trace rock fragments, medium plasticity	
										831.3 Boring Terminated BY AUGER REFUSAL at Elevation 831.3 ft on suspected boulder	2.8

Kessler DCP Test performed to estimate soil strength; Hand auger refusal at 2.8 feet.

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y22000	**STATION** 20+00	**OFFSET** 75 ft LT	**ALIGNMENT** -Y2- **0 HR.** Dry
COLLAR ELEV. 824.6 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 821,901	**EASTING** 1,565,071 **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/30/23	**COMP. DATE** 11/30/23	**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)
825										824.6 GROUND SURFACE	0.0
	824.6	0.0	5	7	3	10		M		824.0 7 inches of Topsoil	0.6
	821.1	3.5	3	4	4	8		M		821.1 Orange, silty CLAY (A-6), with some rock fragments, medium plasticity	3.5
820	818.6	6.0	2	2	3	5		M		Orange and brown, clayey SILT (A-4), with trace sand, micaceous, low to medium plasticity	
	816.1	8.5	1	1	2	3		M			
815										812.6 Orange, silty CLAY (A-6), with trace sand, contains manganese oxides, medium plasticity	12.0
	811.1	13.5	WOH	1	1	2		M		809.6 Boring Terminated at Elevation 809.6 ft in CLAY (RESIDUAL)	15.0
810											

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y22200	**STATION** 22+00	**OFFSET** 80 ft LT	**ALIGNMENT** -Y2-
COLLAR ELEV. 815.4 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 821,972	**EASTING** 1,565,259
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/30/23	**COMP. DATE** 11/30/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft): 0 HR. Dry; 24 HR. FIAD

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))
820										
815	815.4	0.0	4	7	7	14		M		815.4 GROUND SURFACE 0.0
										814.6 9 inches of Topsoil 0.8
	811.9	3.5	10	8	10	18		M		**RESIDUAL** 811.9 Brown, silty Sand (A-2-4), with some rock fragments 3.5
810	809.4	6.0	3	6	6	12		M		Orange and black, sandy and clayey SILT (A-4), with trace to little rock fragments, low to medium plasticity
	806.9	8.5	2	2	3	5		M		
805	801.9	13.5	2	3	5	8		M		800.4 15.0
										Boring Terminated at Elevation 800.4 ft in SILT (RESDIUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y22400	**STATION** 24+00	**OFFSET** 90 ft LT	**ALIGNMENT** -Y2-
COLLAR ELEV. 811.6 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 822,047	**EASTING** 1,565,444
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/30/23	**COMP. DATE** 11/30/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft): 0 HR. Dry; 24 HR. FIAD

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
815										
	811.6	0.0								811.6 GROUND SURFACE 0.0
810			5	5	7	12		M		810.8 TOPSOIL 0.8
	808.1	3.5	9	9	13	22		M		**RESIDUAL** 808.1 Brown, silty SAND (A-2-4) 3.5
805	805.6	6.0	9	11	14	25		M		Orange and brown sandy SILT and SILT (A-4), trace to little rock fragments, low to medium plasticity
	803.1	8.5	10	12	27	39		M		
800	798.1	13.5	8	13	12	25		M		796.6 15.0
										Boring Terminated at Elevation 796.6 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y22500_WB_IGM	**STATION** 25+00	**OFFSET** 15 ft LT	**ALIGNMENT** -Y2-	**0 HR.** Dry
COLLAR ELEV. 814.7 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,009	**EASTING** 1,565,563	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/28/23	**COMP. DATE** 11/28/23	**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)
815											
	814.7	0.0	2	3	4	7		M		814.7 GROUND SURFACE	0.0
										RESIDUAL Brown and orange, SILT (A-4), micaceous	
	811.2	3.5	5	6	7	13		M			
810											
	808.7	6.0	2	3	4	7		M		808.7	6.0
										Brown, tan, and orange, clayey SILT (A-5), with manganese oxides	
	806.2	8.5	2	2	4	6		M		804.7	10.0
805										Boring Terminated at Elevation 804.7 ft in SILT (RESIDUAL)	
										Boring offset 14' FY	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y22600	**STATION** 26+00	**OFFSET** 70 ft LT	**ALIGNMENT** -Y2-	**0 HR.** Dry
COLLAR ELEV. 810.1 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,094	**EASTING** 1,565,639	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/30/23	**COMP. DATE** 11/30/23	**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
815										
810										810.1 GROUND SURFACE 0.0
	808.6	1.5	5	4	6	10		M		808.7 **ROADWAY EMBANKMENT** 17 inches of Pavement 1.4
	806.6	3.5	3	4	5	9		M		**RESIDUAL** Brown and orange silty CLAY (A-6), micaceous, low to high plasticity
805	804.1	6.0	2	5	5	10		M		
	801.6	8.5	1	2	2	4		M		800.1 10.0
										Boring Terminated at Elevation 800.1 ft in CLAY (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y22800	**STATION** 28+00	**OFFSET** 70 ft LT	**ALIGNMENT** -Y2- / **0 HR.** Dry
COLLAR ELEV. 799.8 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 822,161	**EASTING** 1,565,828 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/30/23	**COMP. DATE** 11/30/23	**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)
800										799.8 GROUND SURFACE	0.0
	798.3	1.5								798.3 **ROADWAY EMBANKMENT** 18 inches of Pavement	1.5
	796.3	3.5	3	6	7	13		M		**RESIDUAL** Orange, sandy CLAY (A-6), with trace rock fragments, micaceous, medium plasticity	
795			3	3	6	9		M			
	793.8	6.0								793.8	6.0
			3	5	6	11		M		Orange and brown, clayey SILT (A-4), with trace sand and rock fragments, micaceous, medium plasticity	
	791.3	8.5									
790			3	5	7	12		M			
	786.3	13.5									
785			4	4	7	11		M		784.8	15.0

Boring Terminated at Elevation 784.8 ft in SILT (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y23000_WB GM	**STATION** 30+00	**OFFSET** 10 ft LT	**ALIGNMENT** -Y2- / **0 HR.** Dry
COLLAR ELEV. 801.4 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,170	**EASTING** 1,566,037 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/28/23	**COMP. DATE** 11/28/23	**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
805										
	801.4	0.0								801.4 GROUND SURFACE 0.0
800			2	2	5	7		M		**RESIDUAL** Brown and orange, silty CLAY (A-7-5 (15)), micaceous
	797.9	3.5	3	6	6	12	SS-9006	33%		
795	795.4	6.0	3	4	7	11		M		
	792.9	8.5	3	5	9	14		M		791.4 10.0

Boring Terminated at Elevation 791.4 ft in CLAY (RESIDUAL)

Boring offset 13.5' FY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y23000	**STATION** 30+00	**OFFSET** 70 ft RT	**ALIGNMENT** -Y2-	**0 HR.** Dry
COLLAR ELEV. 795.2 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 822,094	**EASTING** 1,566,063	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/28/23	**COMP. DATE** 11/28/23	**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)
800											
795										795.2 GROUND SURFACE	0.0
	793.7	1.5								793.7 **ROADWAY EMBANKMENT** 18 inches of Pavement	1.5
	791.7	3.5	5	3	4	7		M		**RESIDUAL** Orange and brown, silty CLAY (A-6), micaceous, medium to high plasticity	
790			1	2	4	6		M			
	789.2	6.0	4	5	6	11		M			
	786.7	8.5	3	4	9	13		M		786.7 Orange and brown, clayey SILT (A-4), with trace rock fragments, low to medium plasticity	8.5
785											
	781.7	13.5	3	6	9	15		M		780.2 Boring Terminated at Elevation 780.2 ft in SILT (RESIDUAL)	15.0

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y23500_WB OGS	**STATION** 35+00	**OFFSET** 71 ft LT	**ALIGNMENT** -Y2-	**0 HR.** Dry
COLLAR ELEV. 801.4 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,392	**EASTING** 1,566,489	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/27/23	**COMP. DATE** 11/27/23	**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
805										
	801.4	0.0								801.4 GROUND SURFACE 0.0
800			4	11	9	20		M		**ROADWAY EMBANKMENT** Brown and orange, sandy CLAY (A-7-5 (4)), medium plasticity
	797.9	3.5	3	5	7	12	S-01	M		
795	795.4	6.0	5	6	7	13		M		795.9 Brown, orange, and red, silty SAND (A-2-4), with clay lenses, trace gravel, and mangenese oxides 5.5
	792.9	8.5	3	7	9	16		M		791.4 Boring Terminated at Elevation 791.4 ft in SAND (ROADWAY EMBANKMENT) 10.0

Boring offset 12.0' FW

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y24000_EB GM	**STATION** 40+00	**OFFSET** 7 ft RT	**ALIGNMENT** -Y2- / **0 HR.** Dry
COLLAR ELEV. 794.4 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,485	**EASTING** 1,566,986 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/29/23	**COMP. DATE** 11/29/23	**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)
795											
	794.4	0.0	2	3	5	8		M		794.4 GROUND SURFACE	0.0
										RESIDUAL Orange and brown, silty CLAY (A-7-5 (25)), with trace rock fragments, low to medium plasticity	
790	790.9	3.5	5	7	10	17	SS-1015	26%			
	788.4	6.0	3	4	6	10		M		786.4	8.0
785	785.9	8.5	1	2	2	4		M		784.4 Orange, SILT (A-5), micaceous, low to medium plasticity	10.0
										Boring Terminated at Elevation 784.4 ft in SILT (RESIDUAL)	
										Boring offset 13.0' FY	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y24000_EB ISS	**STATION** 40+00	**OFFSET** 15 ft RT	**ALIGNMENT** -Y2- / **0 HR.** Dry
COLLAR ELEV. 791.5 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,477	**EASTING** 1,566,989 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/15/23	**COMP. DATE** 12/15/23	**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
795										
										791.5 GROUND SURFACE 0.0
										790.3 **ROADWAY EMBANKMENT** 1.3
790	790.1	1.4								790.1 PAVEMENT 1.4
			9	7	6	13				AGGREGATE BASE COURSE
	788.0	3.5					SS-523	16%		**RESIDUAL**
			6	6	6	12		M		Red and brown, silty CLAY (A-7-6 (16)), micaceous, medium plasticity
785	785.5	6.0								785.5 6.0
			4	5	6	11		M		Orange, red, and brown, clayey SILT (A-5), with manganese oxides, low to medium plasticity
	783.0	8.5								781.5 10.0
			3	3	4	7		M		Boring Terminated at Elevation 781.5 ft in SILT (RESIDUAL)
										Boring offset 6.5' FY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y24200	**STATION** 42+00	**OFFSET** 70 ft LT	**ALIGNMENT** -Y2- / **0 HR.** Dry
COLLAR ELEV. 786.3 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,623	**EASTING** 1,567,150 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/30/23	**COMP. DATE** 11/30/23	**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)
790											
	786.3	0.0								786.3 GROUND SURFACE	0.0
785			3	6	2	10		M		785.6 TOPSOIL	0.7
	782.8	3.5								**RESIDUAL** Orange and brown, sandy SILT (A-4), low plasticity 782.8	3.5
			2	5	5			M		Orange and white, silty SAND (A-2-4) 780.3	6.0
780	780.3	6.0									
			1	2	2	4		M		Orange and brown, SILT (A-5), contains manganese oxides, micaceous, low to medium plasticity 777.8	8.5
	777.8	8.5									
			2	2	2	4		M		White and tan, silty SAND (A-2-4) 776.3	10.0

Boring Terminated at Elevation 776.3 ft in SAND (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y24500_EB OGS	**STATION** 45+00	**OFFSET** 70 ft RT	**ALIGNMENT** -Y2- / **0 HR.** Dry
COLLAR ELEV. 787.4 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,590	**EASTING** 1,567,479 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/28/23	**COMP. DATE** 11/29/23	**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
790										
	787.4	0.0								787.4 GROUND SURFACE 0.0
			10	2	2	4	SS-1010	32%		**ROADWAY EMBANKMENT** Orange, sandy and silty CLAY (A-7-6 (20), A-7-6 (4)), micaceous, low to high plasticity
785	783.9	3.5								
			5	5	6	11	SS-1011	21%		
	781.4	6.0								
			3	3	5	8		M		
780	778.9	8.5								
			1	2	2	4		M		777.4 10.0

Boring Terminated at Elevation 777.4 ft in CLAY (ROADWAY EMBANKMENT)

Boring offset 14.0' FW

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y24600	**STATION** 46+00	**OFFSET** 70 ft LT	**ALIGNMENT** -Y2- / **0 HR.** 21.5
COLLAR ELEV. 778.4 ft	**TOTAL DEPTH** 25.0 ft	**NORTHING** 822,755	**EASTING** 1,567,527 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/30/23	**COMP. DATE** 11/30/23	**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))
780										
	778.4	0.0	3	8	5	13		M		778.4 / 0.0 GROUND SURFACE
										777.6 / 0.8 TOPSOIL
775	774.9	3.5	1	2	2	4		M		**RESIDUAL** Orange, brown, tan, and white, silty SAND (A-2-4), micaceous
	772.4	6.0	1	1	2	3		M		
770	769.9	8.5	1	1	2	3		M		
765	764.9	13.5	3	2	3	5		M		
										761.4 / 17.0 Orange, SILT (A-4), micaceous, low to medium plasticity
760	759.9	18.5	WOH	1	2	3		M		
755	754.9	23.5	WOH	1	2	3		W		753.4 / 25.0 Boring Terminated at Elevation 753.4 ft in SILT (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y24800	**STATION** 48+00	**OFFSET** 75 ft LT	**ALIGNMENT** -Y2- / **0 HR.** 20.0
COLLAR ELEV. 773.7 ft	**TOTAL DEPTH** 25.0 ft	**NORTHING** 822,826	**EASTING** 1,567,714 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/29/23	**COMP. DATE** 11/29/23	**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
775										
	773.7	0.0	5	5	3	8		M		773.7 / 0.0 GROUND SURFACE
										773.0 / 0.7 8 inches of Topsoil
770	770.2	3.5	2	2	3	5		M		**RESIDUAL** Orange, white, and tan, sandy and clayey SILT (A-4), contains manganese oxides, micaceous, low to medium plasticity
	767.7	6.0	1	1	1	2		M		
765	765.2	8.5	1	1	1	2		M		
760	760.2	13.5	1	1	2	3		M		
755	755.2	18.5	2	2	4	6				
										751.7 / 22.0 Orange and tan silty SAND (A-2-4), contains manganese oxides
750	750.2	23.5	3	3	8	11		W		748.7 / 25.0 Boring Terminated at Elevation 748.7 ft in SAND (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill	
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40				**GROUND WTR (ft)**
BORING NO. Y25000_EB GM	**STATION** 50+00	**OFFSET** 5 ft RT	**ALIGNMENT** -Y2-	**0 HR.** Dry
COLLAR ELEV. 783.2 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,816	**EASTING** 1,567,929	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER M. Brewer	**START DATE** 11/29/23	**COMP. DATE** 11/29/23	**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)
785											
	783.2	0.0	3	2	4	6		M		783.2 GROUND SURFACE	0.0
780	779.7	3.5	5	7	9	16		M		**RESIDUAL** Orange and brown clayey SILT (A-5), contains trace sand, micaceous 780.2	3.0
	777.2	6.0	2	4	7	11		M		Red and brown, silty CLAY (A-7), medium to high plasticity	
775	774.7	8.5	3	5	5	10		M		773.2	10.0

Boring Terminated at Elevation 773.2 ft in CLAY (RESIDUAL)

Boring offset 12.0' FY

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill	
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40				**GROUND WTR (ft)**
BORING NO. Y25000_EB ISS	**STATION** 50+00	**OFFSET** 35 ft RT	**ALIGNMENT** -Y2-	**0 HR.** Dry
COLLAR ELEV. 784.5 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,807	**EASTING** 1,567,933	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER D. Demby	**START DATE** 12/15/23	**COMP. DATE** 12/15/23	**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
785										784.5 GROUND SURFACE 0.0
	782.5	2.0								783.0 **ROADWAY EMBANKMENT** 1.5
	781.0	3.5	4	5	7	12				782.5 PAVEMENT 2.0
780			4	4	5	9	SS-519	21% M		AGGREGATE BASE COURSE
	778.5	6.0								**RESIDUAL** Orange and brown, silty CLAY (A-7-5 (13)), with trace sand, micaceous, medium to high plasticity
			3	6	8	14		M		
	776.0	8.5								
775			3	5	7	12		M		774.5 10.0

Boring Terminated at Elevation 774.5 ft in CLAY (RESIDUAL)

Boring offset 6.5' FY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y25000	**STATION** 50+00	**OFFSET** 60 ft LT	**ALIGNMENT** -Y2- / **0 HR.** 18.2
COLLAR ELEV. 776.4 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 822,878	**EASTING** 1,567,908 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/29/23	**COMP. DATE** 11/29/23	**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)
780											
										776.4 GROUND SURFACE	0.0
775	774.9	1.5								774.9 **ROADWAY EMBANKMENT** 18 inches of Pavement	1.5
	772.9	3.5	4	5	9	14 16		M		773.2 **RESIDUAL** Orange and tan, silty CLAY (A-7), with trace sand, high plasticity	3.2
770	770.4	6.0	4	7	9			M		769.9 Orange and tan, clayey SILT (A-5), micaceous, medium plasticity	6.5
	767.9	8.5	1	1	3	4		M		Orange, gray, and white SILT and sandy SILT (A-4), contains manganese oxides, micaceous, low to medium plasticity	
765			1	1	2	3		M			
	762.9	13.5	WOH	1	1	2		M			
760	757.9	18.5	1	3	4	7		W		756.4 Boring Terminated at Elevation 756.4 ft in SILT (RESIDUAL)	20.0

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y25200	**STATION** 52+00	**OFFSET** 65 ft LT	**ALIGNMENT** -Y2- / **0 HR.** 17.5
COLLAR ELEV. 777.0 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 822,949	**EASTING** 1,568,095 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/29/23	**COMP. DATE** 11/29/23	**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
780										
	777.0	0.0								777.0 GROUND SURFACE 0.0
			4	6	3	9		M		776.1 TOPSOIL 0.9
775	773.5	3.5								**RESIDUAL**
			2	2	5	7		M		773.5 Brown and orange, sandy SILT (A-4), micaceous, low to medium plasticity 3.5
770	771.0	6.0	4	5	5	10		M		Orange and brown, CLAY and silty CLAY (A-7), micaceous, medium plasticity
	768.5	8.5	1	1	3	4		M		
765										
	763.5	13.5	WOH	WOH	2	2		M		763.0 Gray and orange, sandy CLAY (A-6), low to medium plasticity 14.0
760	758.5	18.5	1	1	1	2		W		757.0 Boring Terminated at Elevation 757.0 ft in CLAY (RESIDUAL) 20.0

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y25400	**STATION** 54+00	**OFFSET** 60 ft LT	**ALIGNMENT** -Y2-	**0 HR.** Dry
COLLAR ELEV. 776.1 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 823,009	**EASTING** 1,568,287	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/29/23	**COMP. DATE** 11/29/23	**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)
780											
										776.1 GROUND SURFACE	0.0
775	774.6	1.5								774.6 **ROADWAY EMBANKMENT** PAVEMENT	1.5
	772.6	3.5	3	4	5			M		**RESIDUAL** Brown and orange, CLAY (A-7), micaceous, medium plasticity	
770	770.1	6.0	3	3	5			M		770.1 Orange, SILT (A-4), low to medium plasticity	6.0
	767.6	8.5	1	1	2			M			
765			WOH	1	1			M			
	762.6	13.5	WOH	WOH	1			M		761.1	15.0

Boring Terminated at Elevation 761.1 ft in SILT (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y25500_EB ISS	**STATION** 55+00	**OFFSET** 15 ft RT	**ALIGNMENT** -Y2-	**0 HR.** Dry
COLLAR ELEV. 780.8 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 822,970	**EASTING** 1,568,405	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/29/23	**COMP. DATE** 11/29/23	**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
785										
										780.8 GROUND SURFACE 0.0
780	779.3	1.5								779.3 **ROADWAY EMBANKMENT** PAVEMENT 1.5
	777.3	3.5	3	3	6			37%		**RESIDUAL** Orange and tan, CLAY (A-7-5 (25, 13)), with manganese oxides, micaceous, low to medium plasticity
775	774.8	6.0	3	4	4			M		
	772.3	8.5	2	3	4			M		
			1	2	3			M		770.8 10.0

Boring Terminated at Elevation 770.8 ft in CLAY (RESIDUAL)

Boring Offset 6.0 FY

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y26000_EB ISS	**STATION** 60+00	**OFFSET** 15 ft RT	**ALIGNMENT** -Y2-
COLLAR ELEV. 777.5 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 823,121	**EASTING** 1,568,881
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/29/23	**COMP. DATE** 11/29/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft)	
0 HR.	Dry
24 HR.	FIAD

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)
780											
										777.5 GROUND SURFACE	0.0
	776.0	1.5								776.0 **ROADWAY EMBANKMENT** PAVEMENT	1.5
775			5	3	3	6		M		**RESIDUAL** Orange, tan, and black, clayey SILT (A-5), with manganese oxides, micacous, low to medium plasticity	
	774.0	3.5	2	2	3	5		M			
	771.5	6.0	2	2	3	5		M			
770	769.0	8.5	1	1	3	4		M		767.5	10.0

Boring Terminated at Elevation 767.5 ft in SILT (RESIDUAL)

Boring offset 5.5' FY

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y26200	**STATION** 62+00	**OFFSET** 30 ft RT	**ALIGNMENT** -Y2-
COLLAR ELEV. 770.5 ft	**TOTAL DEPTH** 15.0 ft	**NORTHING** 823,135	**EASTING** 1,569,086
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/29/23	**COMP. DATE** 11/29/23	**SURFACE WATER DEPTH** N/A

GROUND WTR (ft)	
0 HR.	Dry
24 HR.	FIAD

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
775										
770	770.5	0.0								770.5 GROUND SURFACE 0.0
			8	2	3	5		M		**ROADWAY EMBANKMENT** Brown, silty SAND (A-2-4), with trace gravel
	767.0	3.5								767.5 3.0
765			3	4	4	8		M		**RESIDUAL** Orange SILT (A-4), contains manganese oxides, low to medium plasticity
	764.5	6.0								764.5 6.0
			3	3	3	6		M		Orange, clayey SILT (A-5), micaceous, medium plasticity
	762.0	8.5								762.0 8.5
760			1	1	3	4		M		Orange and black, sandy SILT and clayey SILT (A-4), contains manganese oxides, micaceous, low to medium plasticity
	757.0	13.5								
			2	5	13	18		M		755.5 15.0

Boring Terminated at Elevation 755.5 ft in SILT (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y2CULV2_LT	**STATION** 29+55	**OFFSET** 165 ft LT	**ALIGNMENT** -Y2- / **0 HR.** 5.0
COLLAR ELEV. 778.6 ft	**TOTAL DEPTH** 33.9 ft	**NORTHING** 822,300	**EASTING** 1,565,943 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/13/23	**COMP. DATE** 12/13/23	**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))
780										
	778.6	0.0								778.6 GROUND SURFACE 0.0
			4	4	5	9		M		777.5 TOPSOIL 1.1
775	775.1	3.5								**RESIDUAL** Brown, gray, and tan, silty CLAY (A-7-6), medium plasticity
			3	2	2	4				
	772.6	6.0								772.6 6.0
			3	5	6	11	SS-480	42%		Gray, white, and orange, sandy SILT (A-4 (0)), saprolitic
770	770.1	8.5								
			4	6	7	13		W		
765	765.1	13.5								
			5	6	10	16		W		
760	760.1	18.5								761.6 17.0
										Gray, white, and orange, silty SAND (A-2-4)
			6	6	10	16		Sat.		
755	755.1	23.5								
			6	10	10	20		Sat.		754.4 24.2
										White and gray, SAND (A-1-b), with little sand and trace rock fragments, micaceous
										751.6 27.0
										White, silty SAND (A-2-4)
750	750.1	28.5								
			8	22	78	100		Sat.		749.1 29.5
										WEATHERED ROCK Black and gray, META-GABBRO
745	745.1	33.5								
			100/0.4			100/0.4				744.7 33.9
										Boring Terminated at Elevation 744.7 ft in WEATHERED ROCK (META-GABBRO)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y2CULV2_RT	**STATION** 32+05	**OFFSET** 120 ft RT	**ALIGNMENT** -Y2- / **0 HR.** 3.9
COLLAR ELEV. 775.7 ft	**TOTAL DEPTH** 40.0 ft	**NORTHING** 822,115	**EASTING** 1,566,267 / **24 HR.** 3.0
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER D. Demby	**START DATE** 12/05/23	**COMP. DATE** 12/15/23	**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
780										
775	775.7	0.0								775.7 GROUND SURFACE 0.0
			4	2	3	5		M		**RESIDUAL** Orange and brown, silty CLAY (A-7-6), contains root fragments, micaceous, medium plasticity
	772.2	3.5								
			1	2	2	4		W		
770	769.7	6.0								769.7 6.0
			2	2	3	5		W		Orange and brown, sandy SILT (A-4), with some rock fragments, micaceous, low to medium plasticity
	767.2	8.5								
765			2	2	2	4		W		
	762.2	13.5								763.7 12.0
										White and tan, silty SAND (A-2-4), saprolitic
			12	18	18	36		Sat.		
760	757.2	18.5								758.7 17.0
										Running sands in auger. Boring paused and resumed at an offset location
			3	4	7	11	SS-487	41%		White, SILT (A-4 (4)), micaceous, low to medium plasticity
755	752.2	23.5								753.7 22.0
			5	10	12	22		W		Orange, SILT (A-5), micaceous, low to medium plasticity
750	747.2	28.5								748.7 27.0
			10	9	13	22		W		Gray, white, black, and orange, sandy SILT (A-4), with little clay, micaceous, low to medium plasticity
745	742.2	33.5								
			11	12	17	29		W		
740	737.2	38.5								
			9	21	13	34		W		735.7 40.0
										Boring Terminated at Elevation 735.7 ft in SILT (RESIDUAL)
										Boring was initially paused at 15.0 feet due to running sands in the augers. The boring was resumed at an offset location (10' left of initital boring) on a later date. The drill crew augered to the initial termination depth of 15.0 feet and collected the next SPT sample at 18.5 feet.

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y31010	**STATION** 10+10	**OFFSET** 10 ft LT	**ALIGNMENT** -Y3- / **0 HR.** Dry
COLLAR ELEV. 854.3 ft	**TOTAL DEPTH** 6.0 ft	**NORTHING** 818,544	**EASTING** 1,566,964 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER J. Crenshaw	**START DATE** 12/20/23	**COMP. DATE** 12/20/23	**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))
855										854.3 GROUND SURFACE 0.0
								M		**RESIDUAL** Medium stiff, orange and brown, CLAY (A-7), with trace sand and root fragments, medium to high plasticity
850										850.3 4.0
								M		Medium stiff, orange and brown, clayey SILT (A-5), medium plasticity
										848.3 6.0
										Boring Terminated at Elevation 848.3 ft in SILT (RESIDUAL)
										Kessler DCP Test performed to estimate soil strength

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y41150	**STATION** 11+50	**OFFSET** 20 ft LT	**ALIGNMENT** -Y4- / **0 HR.** Dry
COLLAR ELEV. 825.3 ft	**TOTAL DEPTH** 20.0 ft	**NORTHING** 817,806	**EASTING** 1,567,755 / **24 HR.** 15.9
DRILL RIG/HAMMER EFF./DATE CG23639 CME 550X 90% 03/15/2023		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER J. Kiker	**START DATE** 11/14/23	**COMP. DATE** 11/15/23	**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))
830										
										825.3 GROUND SURFACE 0.0
825	825.3	0.0	5	9	7	16 45	SS-30	22%		**RESIDUAL** Orange, silty CLAY (A-7-6 (19)), with little sand and rock fragments
	821.8	3.5	10	22	23			M		
820										819.3 6.0
	818.8	6.5	4	8	14	22		M		Orange and tan, sandy SILT (A-4), with trace rock fragments, micaceous
	816.8	8.5	9	11	15	26		M		
815										813.3 12.0
	811.8	13.5	4	11	20	31				Gray, brown, black, and tan, silty SAND (A-2-4), with some clay and little rock fragments, micaceous
810										
	806.8	18.5	23	34	12	46		Sat.		805.3 20.0
										Boring Terminated at Elevation 805.3 ft in SAND (RESIDUAL)

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill	
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40				**GROUND WTR (ft)**
BORING NO. Y41350	**STATION** 13+50	**OFFSET** 10 ft RT	**ALIGNMENT** -Y4-	**0 HR.** Dry
COLLAR ELEV. 823.0 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 817,988	**EASTING** 1,567,819	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic	
DRILLER M. Brewer	**START DATE** 12/01/23	**COMP. DATE** 12/01/23	**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)
825											
										823.0 GROUND SURFACE	0.0
	822.5	0.5								822.4	0.6
			9	1	2	3		M		821.3 **ROADWAY EMBANKMENT** PAVEMENT	1.7
820										AGGREGATE BASE COURSE	
	819.5	3.5	3	3	5	8		M		**RESIDUAL** Brown and orange, silty CLAY (A-7), with some sand, micaceous	
	817.0	6.0	1	1	4	5		M			
815	814.5	8.5	3	6	5	11		M		813.0	10.0

Boring Terminated at Elevation 813.0 ft in CLAY (RESIDUAL)

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill	
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40				**GROUND WTR (ft)**
BORING NO. Y41520	**STATION** 15+20	**OFFSET** 15 ft LT	**ALIGNMENT** -Y4-	**0 HR.** Dry
COLLAR ELEV. 826.3 ft	**TOTAL DEPTH** 6.0 ft	**NORTHING** 818,159	**EASTING** 1,567,800	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A	
DRILLER Q. Hill	**START DATE** 01/04/24	**COMP. DATE** 01/04/24	**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
830										
										826.3 GROUND SURFACE 0.0
825								M		**ROADWAY EMBANKMENT** Medium stiff, brown and orange, silty CLAY (A-7-6), with roots and trace rock fragments, micaceous, moist
										823.1 3.2
								M		**RESIDUAL** Medium stiff, brown, red, and orange, silty CLAY (A-7-6), with trace rock fragments, micaceous, moist
										820.3 6.0

Boring Terminated at Elevation 820.3 ft in CLAY (RESIDUAL)

Kessler DCP Test performed to estimate soil strength

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y42100	**STATION** 21+00	**OFFSET** 25 ft RT	**ALIGNMENT** -Y4- / **0 HR.** Dry
COLLAR ELEV. 827.7 ft	**TOTAL DEPTH** 8.5 ft	**NORTHING** 818,737	**EASTING** 1,567,855 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger	**HAMMER TYPE** N/A
DRILLER J. Crenshaw	**START DATE** 12/20/23	**COMP. DATE** 12/20/23	**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)
830											
										827.7 GROUND SURFACE	0.0
825								M		**RESIDUAL** Medium stiff, orange and brown, silty CLAY (A-7-6), trace root fragments, low to medium plasticity, moist	
820										819.2	8.5
										Boring Terminated at Elevation 819.2 ft in CLAY (RESIDUAL)	

WBS 48647.1.1	**TIP** U-6187	**COUNTY** DAVIE	**GEOLOGIST** Q. Hill
SITE DESCRIPTION 2- Lane Extension of SR 1630 (Baltimore Road) From South of US 158 to I-40			**GROUND WTR (ft)**
BORING NO. Y42600	**STATION** 46+00	**OFFSET** 70 ft LT	**ALIGNMENT** -Y4- / **0 HR.** 21.5
COLLAR ELEV. 786.6 ft	**TOTAL DEPTH** 25.0 ft	**NORTHING** 822,755	**EASTING** 1,567,527 / **24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE CG29022 Mobile B-29 86% 04/11/2022		**DRILL METHOD** H.S. Augers	**HAMMER TYPE** Automatic
DRILLER M. Brewer	**START DATE** 11/29/23	**COMP. DATE** 11/30/23	**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
790										
	786.6	0.0								786.6 GROUND SURFACE 0.0
785			3	8	5	13	S-09	M		785.7 10" TOPSOIL 0.9
	783.1	3.5						M		**RESIDUAL** Orange, brown, white, and tan, silty SAND (A-2-4), micaceous
780	780.6	6.0	1	2	2	4		M		
	778.1	8.5	1	1	2	3		M		
775			1	1	2	3		M		
	773.1	13.5	3	2	3	5		M		
770										769.6 17.0
	768.1	18.5	WOH	1	2	3		M		Orange, SILT (A-4), micaceous, low to medium plasticity
765										
	763.1	23.5	WOH	1	2	3		M		761.6 25.0
										Boring Terminated at Elevation 761.6 ft in SILT (RESIDUAL)

LABORATORY TESTING RESULTS
-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-37	0' CL	18+00	3.7-5.2	A-7-5(13)	54	20	15.5	23.3	18.9	42.3	99.5	92	66	13	-
SS-25	0' CL	20+50	13.5-15	A-5(0)	43	4	22.6	49	16.6	11.8	99.7	91	36	40	-
SS-15	0' CL	22+50	3.5-5.0	A-7-5(41)	73	43	5	12.9	16.1	65.9	100	98	85	29	-
SS-6	0' CL	26+50	3.4-4.9	A-7-5(23)	71	21	4.4	22.1	23.5	50	99.9	98	78	37	-
SS-1	0' CL	28+50	0.0-1.5	A-4(3)	36	10	17.2	35.4	25.1	22.3	94.8	84	50	18	-
SS-49	0' CL	33+00	3.5-5.0	A-7-5(52)	87	47	1.9	9.5	17.1	71.5	99.9	99	91	42	-
SS-55	0' CL	35+00	6.5-8.0	A-7-5(5)	50	11	20.9	32.5	18.2	28.4	100	89	53	35	-
SS-57	0' CL	37+00	0.0-1.5	A-7-6(11)	43	19	12.5	25.7	18.6	43.2	98.8	92	65	19	-
SS-62	0' CL	39+00	0.0-1.5	A-7-6(18)	52	23	12.7	15.9	19.7	51.7	98.6	92	73	29	8.6
SS-71	0' CL	43+00	3.5-5.0	A-7-5(25)	66	22	7	10.5	10.7	71.8	99.9	96	85	24	-
SS-82	30' RT	47+00	8.5-10.0	A-5(6)	50	8	10.9	37.3	20.3	31.5	100	96	61	22	-
SS-86	30' LT	49+00	3.5-5.0	A-7-5(29)	68	29	4.9	16.6	23.2	55.3	100	98	83	27	-
SS-100	30' RT	51+00	8.5-10.0	A-5(2)	42	6	19.6	39.6	22.1	18.7	100	90	48	30	-
SS-109	30' LT	53+00	18.5-20.0	A-5(3)	51	4	12.1	42.4	28.3	17.2	100	94	56	24	-
SS-112	30' RT	55+00	3.5-5.0	A-7-5(10)	50	13	13.4	26.2	26.4	34	99.8	94	67	22	-
SS-116	30' RT	55+00	18.5-20.0	A-4(0)	36	3	27.7	34.4	27	10.9	100	83	45	21	-
SS-125	30' LT	57+00	18.5-20.0	A-4(0)	NP	NP	29.1	39.6	22.5	8.8	98.1	84	38	29	-
SS-197	0' CL	58+50	13.5-15.0	A-4(0)	32	3	46.5	20.9	19	13.6	90.6	57	34	-	-
SS-130	0' CL	59+00	6.5-8.0	A-7-5(8)	56	11	6.4	44.1	30.6	19	100	98	60	40	-
SS-203	0' CL	59+50	8.5-10.0	A-5(4)	55	9	22.4	37.1	24.2	16.3	95.4	82	47	26	-
SS-205	0' CL	59+50	18.5-20.0	A-4(1)	38	4	35.1	20.3	30.8	13.8	95	69	48	57	-
SS-133	40' LT	61+00	0.0-1.5	A-7-5(14)	49	19	14.9	17.5	23.5	44.2	97.6	88	69	25	-
SS-145	30' RT	63+00	0.0-1.5	A-7-6(16)	53	26	19.1	18.1	19.9	42.9	90.3	78	60	24	-
SS-149	30' RT	63+00	13.5-15.0	A-7-5(22)	56	18	2.3	9.3	48.1	40.3	99.9	99	91	40	-
SS-151	30' RT	63+00	23.5-25.0	A-4(0)	NP	NP	23.8	30.4	31.5	14.4	94.9	80	50	37	-
SS-163	10' LT	65+00	43.5-45.0	A-4(0)	31	3	29.7	38.6	22.7	9.1	99	87	39	23	-
SS-165	120' LT	66+00	0.0-1.5	A-7-6(9)	45	17	18.1	25.4	23.9	32.6	97.6	87	59	59	5
SS-167	120' LT	66+00	6.5-8.0	A-5(0)	49	4	32	37.2	21.8	8.9	99.6	82	38	49	-
SS-172	120' LT	66+00	28.5-30.0	A-5(2)	44	9	14.5	49.1	23	13.4	100	98	44	41	-
SS-241	120' RT	66+00	0.0-1.5	A-6(6)	38	14	18.5	29.3	21.8	30.4	97.2	87	56	53	-
SS-246	120' RT	66+00	18.5-20.0	A-4(0)	33	5	20.7	40.9	29.4	9	100	92	48	31	-
SS-249	120' RT	66+00	33.5-33.9	A-2-4(0)	NP	NP	56.6	31.7	9.4	2.4	84.1	56	13	12	-
SS-207	80' RT	67+00	0.0-1.5	( )	NEM	-	25.9	22.9	24.1	27.1	86.3	72	47	-	10.2
SS-208	80' RT	67+00	3.5-5.0	A-5(9)	58	9	4.9	37.6	32.5	25	100	99	67	56	-
SS-211	80' RT	67+00	13.5-15.0	A-2-4(0)	NP	NP	37.9	41.4	12.4	8.3	97.7	79	26	55	-
SS-232	70' LT	69+00	8.5-10.0	A-7-6(4)	49	23	44	18.6	13	24.4	84.2	56	34	22	-
SS-394	21' LT	72+09	34.4-35.9	A-5(1)	54	5	16.2	46.2	26.1	11.5	100	96	46	66	-

PROJECT REFERENCE NO.	SHEET NO.
U-6187	72

– L P B –

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- 1067	20′ RT	10+50	18.5- 20.0	A-5(6)	53	8	12.8	34	42.9	10.3	100	96	61	58	-

– R P B –

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- 360	30′ LT	13+50	0.0- 1.5	A-7-6(11)	47	20	21.2	21.7	29.4	27.7	89.5	77	54	40	-
SS- 358	35′ RT	15+50	13.5- 15.0	A-7-5(19)	66	26	15.1	22.3	35.7	26.8	98.5	88	66	62	-
SS- 405	25′ RT	21+50	8.5- 10.0	A-7-5(21)	63	16	2.5	16.8	43.5	37.2	100	99	87	50	-

– R P D –

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- 265	15′ LT	20+00	8.5- 10.0	A-7-5(36)	72	33	2.8	10.6	48.9	37.8	100	99	89	70	-

– Y 1 –

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- 106	25′ RT	12+50	3.5- 5.0	A-7-5(35)	73	35	5.9	22.3	12.6	59.2	99.8	97	84	31	-

– Y 2 –

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- 480	55′ RT	29+55	6.0- 7.5	A-4(0)	33	3	10	48	27.9	14	97	93	52	42	-
SS- 9006	14′ RT	30+00	3.5- 5.0	A-7-5(15)	50	16	10.1	15.5	37.7	36.7	99.4	94	77	33	-
SS- 487	120′ RT	32+05	18.5- 20.0	A-4(4)	39	7	16.7	26.8	40.9	15.6	93.4	84	59	41	-
SS- 1015	13′ RT	40+00	3.5- 5.0	A-7-5(25)	67	28	12.7	12.8	14.5	59.9	95.8	87	74	26	-
SS- 523	7′ RT	40+00	1.3- 1.8	A-7-6(16)	52	24	17.3	19.1	28.9	34.8	93.8	83	64	16	-
SS- 1010	14′ RT	45+00	0.0- 1.5	A-7-6(20)	59	30	20.4	15.4	22.7	41.5	89.9	78	60	32	-
SS- 1011	14′ RT	45+00	3.5- 5.0	A-7-6(4)	42	13	38.1	17.7	25.6	18.7	86.8	61	42	21	-
SS- 519	7′ RT	50+00	2.0- 3.5	A-7-5(13)	51	18	13.5	21.7	32.3	32.5	90.7	83	64	21	-
SS- 1022	6′ RT	55+00	1.5- 3.0	A-7-5(25)	62	22	2.6	15.9	41.5	40	99.8	99	87	37	-

– Y 4 –

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	20′ LT	11+50	0.0- 1.5	A-7-6(19)	55	31	19.8	18.9	37.9	23.5	86.9	76	56	22	-

CONE PENETROMETER RESULTS

PROJECT NO.	U-6187
PROJECT NAME	2-Lane Extension of SR 1630
ROUTE	I 40, US 158, and SR 1630
COUNTY	Davie

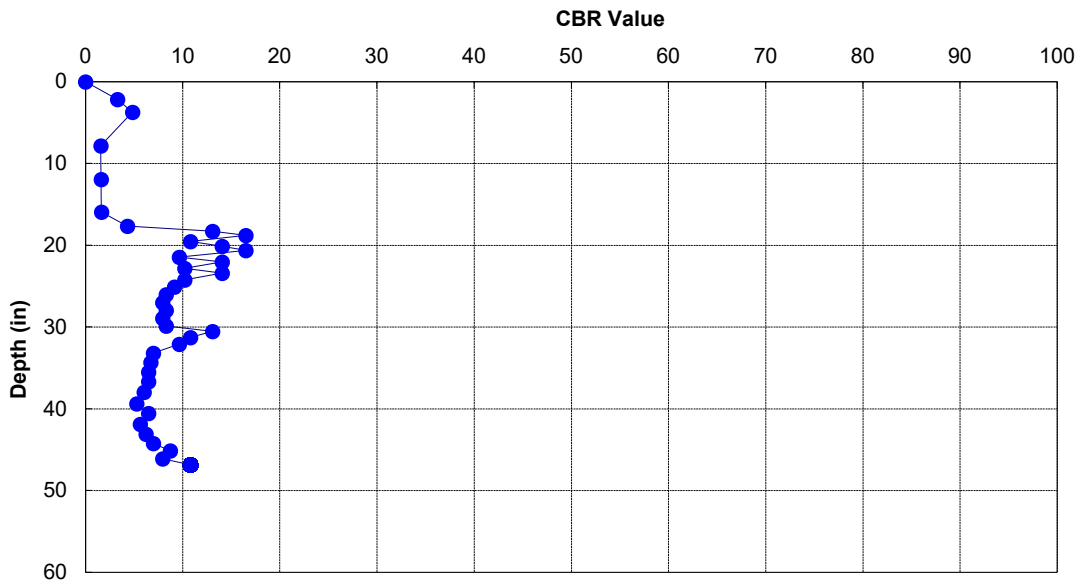
GEOLOGIST	Quinton Hill
GEOTECH(S)	J. Rose
	J. Crenshaw
	M. Brewer

L1250 1

Datum = Exstg Grd Lvl 01/04/2024

Interval 0.0 to 17.0	
# of Values	6
Avg CBR	2.9
Wghtd Avg.	-
Max CBR	4.8
Min CBR	1.6

Interval 17.0 to 46.9	
# of Values	32
Avg CBR	9.5
Wghtd Avg.	-
Max CBR	16.5
Min CBR	5.3

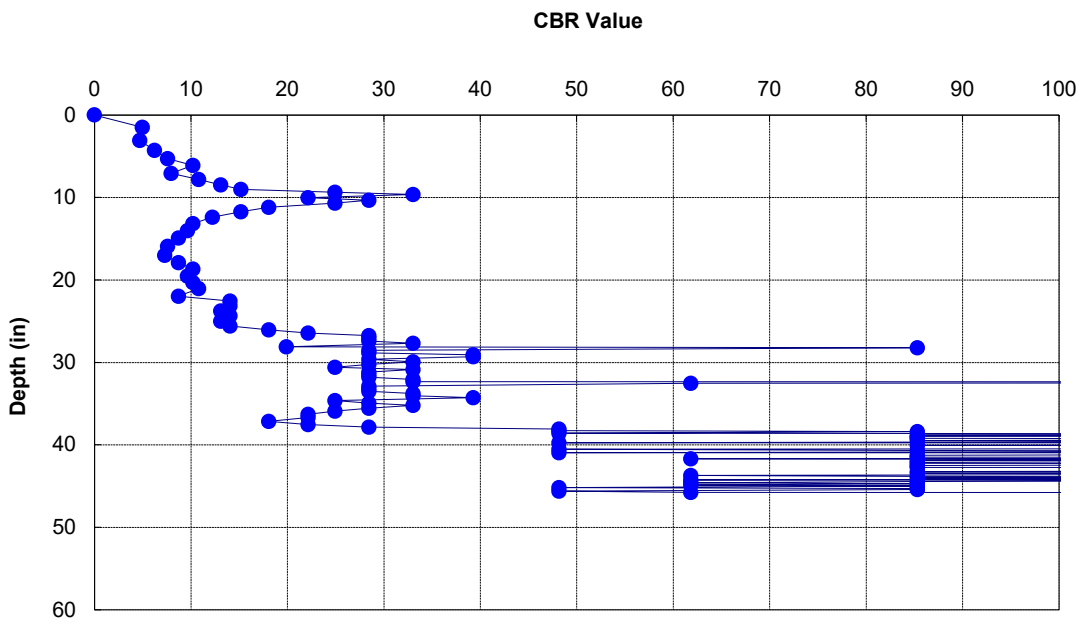


L1400 2

Datum = Exstg Grd Lvl 01/04/2024

Interval 0.0 to 10.0	
# of Values	12
Avg CBR	13.4
Wghtd Avg.	-
Max CBR	33.0
Min CBR	4.7

Interval 10.0 to 45.8	
# of Values	138
Avg CBR	83.2
Wghtd Avg.	-
Max CBR	100+
Min CBR	7.3



CONE PENETROMETER RESULTS

PROJECT NO.	U-6187
PROJECT NAME	2-Lane Extension of SR 1630
ROUTE	I 40, US 158, and SR 1630
COUNTY	Davie

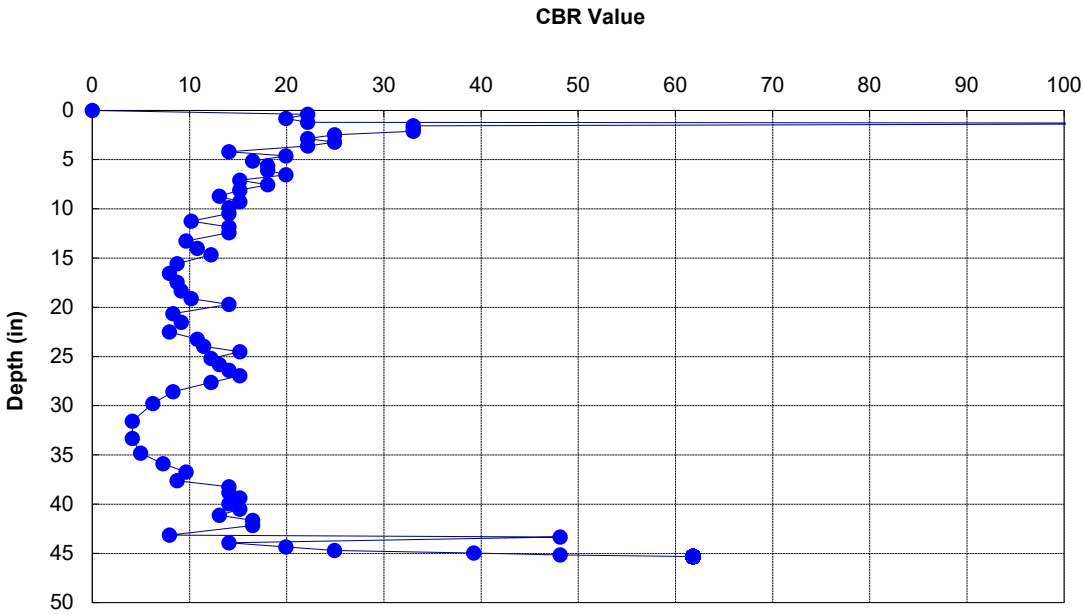
GEOLOGIST	Quinton Hill
GEOTECH(S)	J. Rose
	J. Crenshaw
	M. Brewer

L1600-A 3

Datum = Exstg Grd Lvl 01/04/2024

Interval 0.0 to 26.0	
# of Values	45
Avg CBR	18.6
Wghtd Avg.	-
Max CBR	100+
Min CBR	7.9

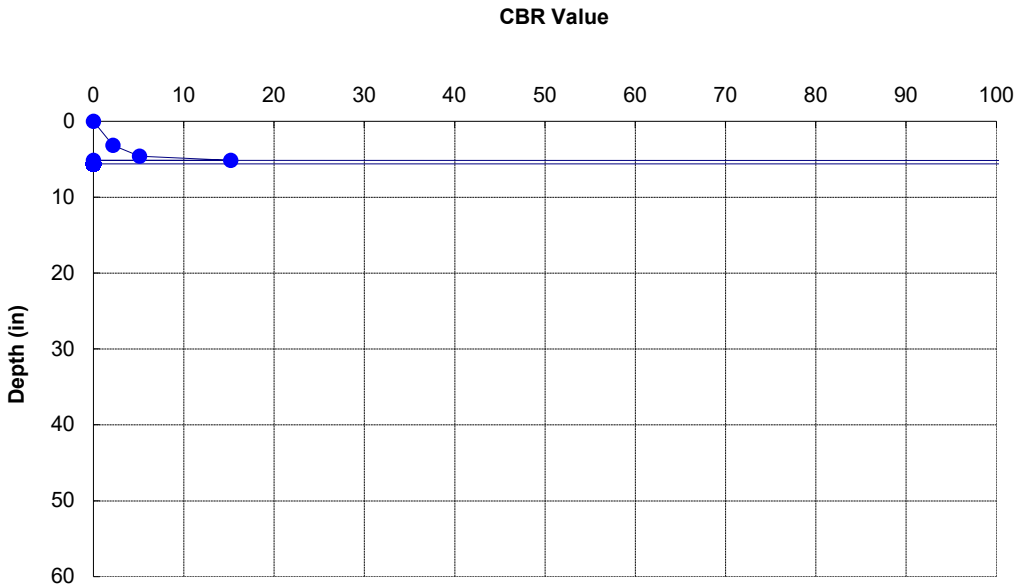
Interval 26.0 to 45.3	
# of Values	26
Avg CBR	17.8
Wghtd Avg.	-
Max CBR	61.8
Min CBR	4.1



L1600-B 4

Datum = Exstg Grd Lvl 01/04/2024

Interval 0.0 to 5.2	
# of Values	3
Avg CBR	7.5
Wghtd Avg	-
Max CBR	15.2
Min CBR	2.2



CONE PENETROMETER RESULTS

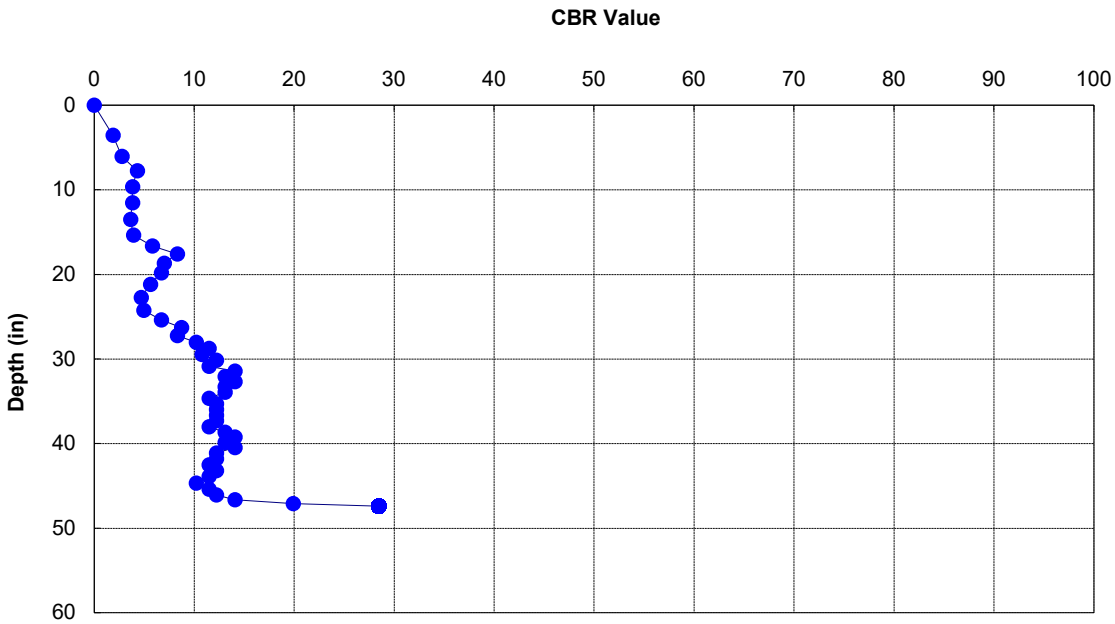
PROJECT NO.	U-6187
PROJECT NAME	2-Lane Extension of SR 1630
ROUTE	I 40, US 158, and SR 1630
COUNTY	Davie

GEOLOGIST	Quinton Hill
GEOTECH(S)	J. Rose
	J. Crenshaw
	M. Brewer

Y11450 5

Datum = Top of subgrade 02/01/2024

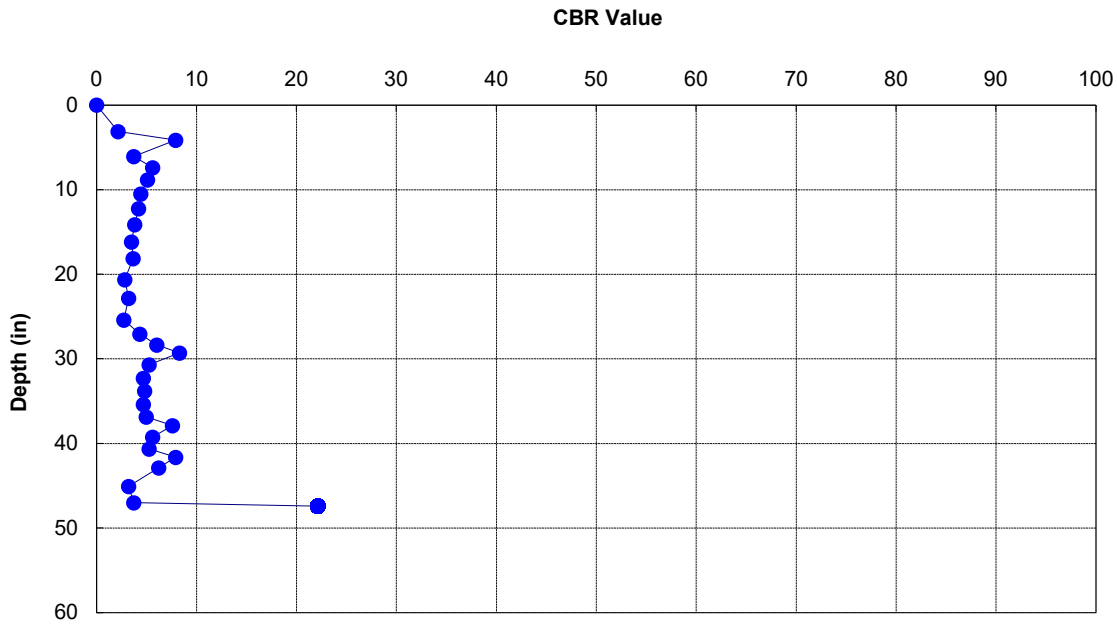
Interval 0.0 to 47.4	
# of Values	48
Avg CBR	10.3
Wghtd Avg.	-
Max CBR	28.4
Min CBR	1.9



Y11650 6

Datum = Exstg Grd Lvl 01/04/2024

Interval 0.0 to 47.4	
# of Values	29
Avg CBR	5.4
Wghtd Avg.	-
Max CBR	22.2
Min CBR	2.2



CONE PENETROMETER RESULTS

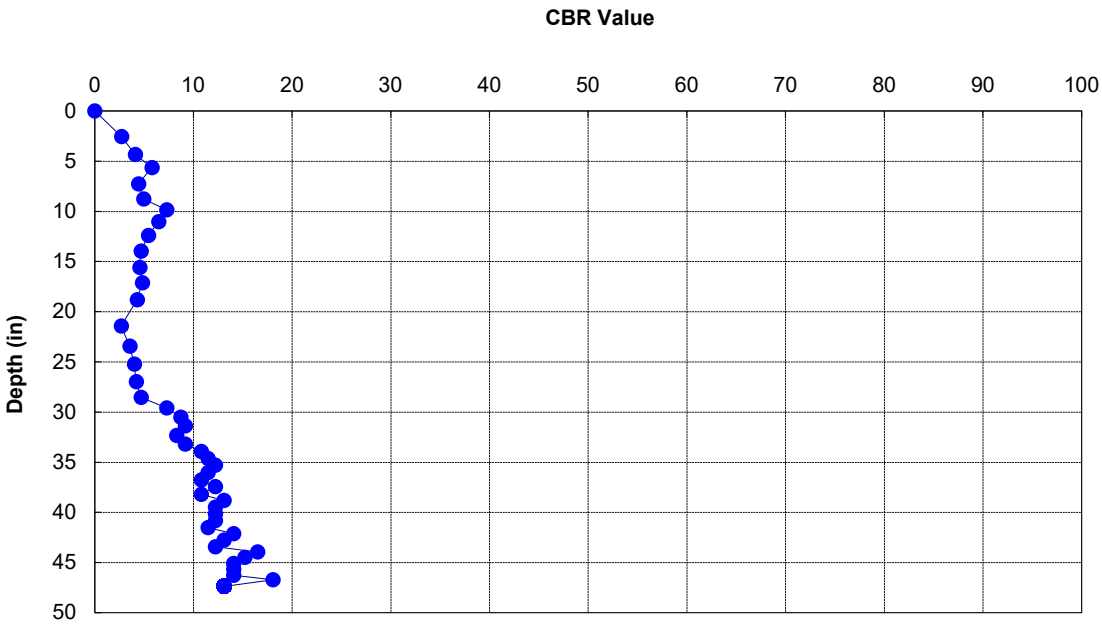
PROJECT NO.	U-6187
PROJECT NAME	2-Lane Extension of SR 1630
ROUTE	I 40, US 158, and SR 1630
COUNTY	Davie

GEOLOGIST	Quinton Hill
GEOTECH(S)	J. Rose
	J. Crenshaw
	M. Brewer

Y12650 7

Datum = Exstg Grd Lvl 01/04/2024

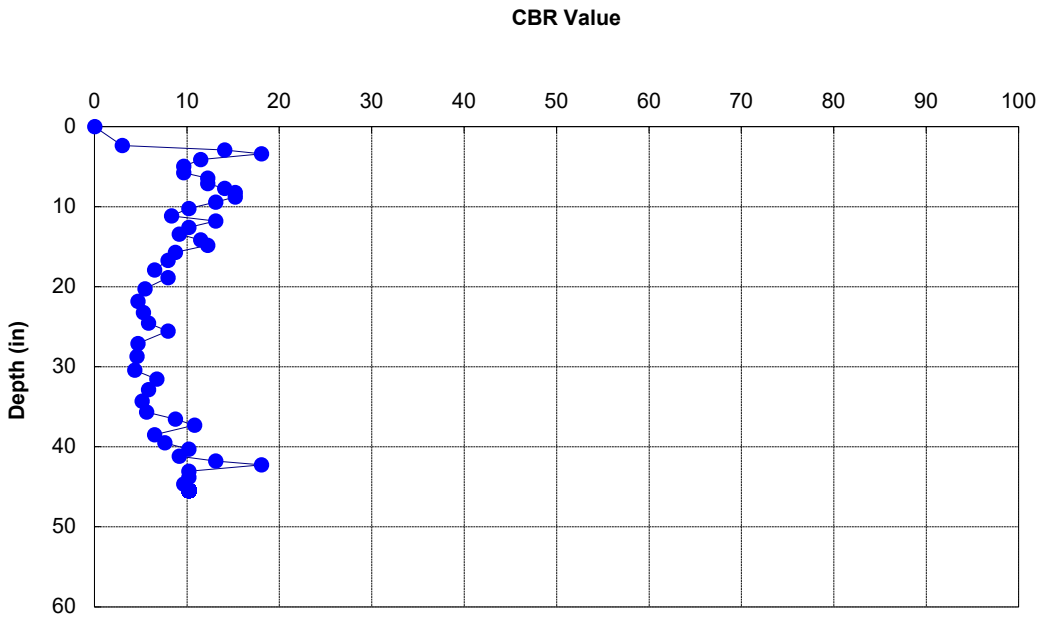
Interval	
0.0 to	47.4
# of Values	44
Avg CBR	9.2
Wghtd Avg.	-
Max CBR	18.1
Min CBR	2.7



Y12850 8

Datum = Exstg Grd Lvl 01/04/2024

Interval	
0.0 to	45.5
# of Values	47
Avg CBR	9.4
Wghtd Avg.	-
Max CBR	18.1
Min CBR	3.0



CONE PENETROMETER RESULTS

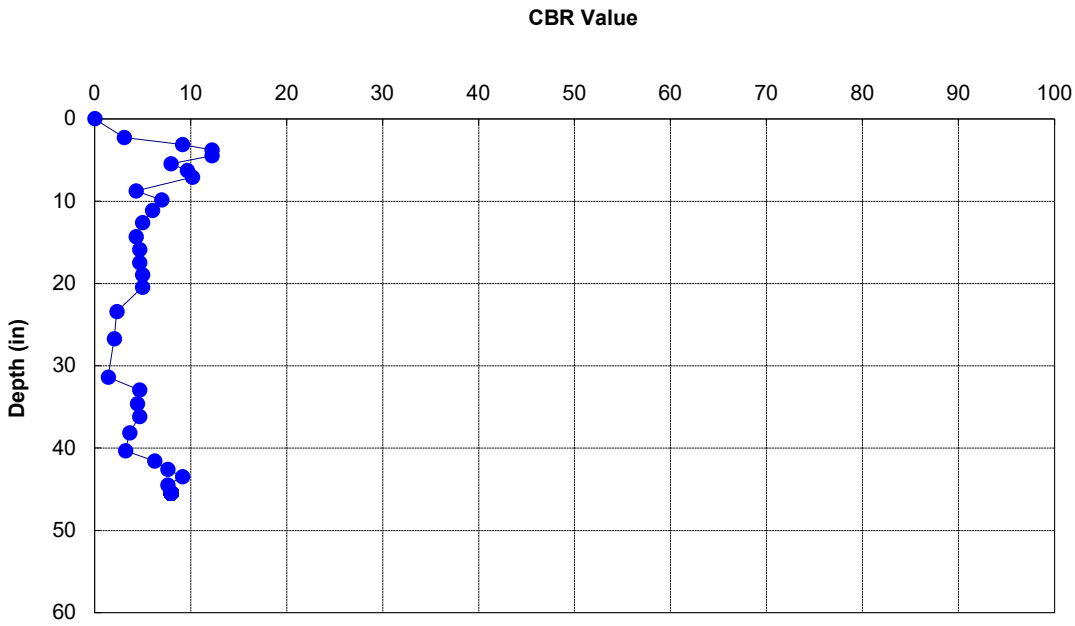
PROJECT NO.	U-6187
PROJECT NAME	2-Lane Extension of SR 1630
ROUTE	I 40, US 158, and SR 1630
COUNTY	Davie

GEOLOGIST	Quinton Hill
GEOTECH(S)	J. Rose
	J. Crenshaw
	M. Brewer

Y13050 9

Datum = Exstg Grd Lvl 12/20/2023

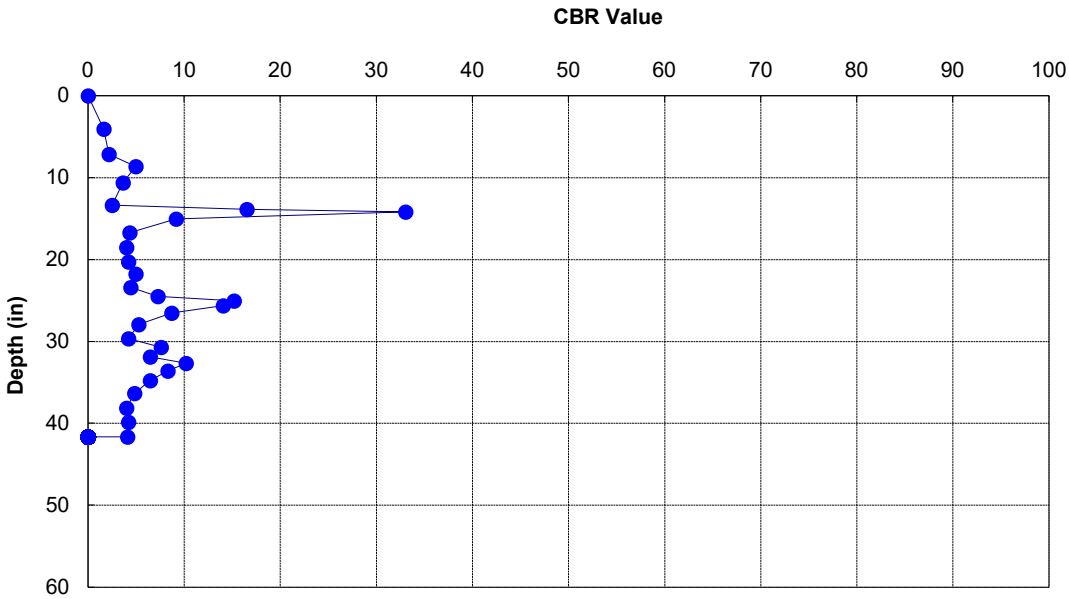
Interval	
0.0 to	45.5
# of Values	29
Avg CBR	6.0
Wghtd Avg.	-
Max CBR	12.2
Min CBR	1.4



Y13250 10

Datum = Exstg Grd Lvl 12/20/2023

Interval	
0.0 to	41.7
# of Values	28
Avg CBR	7.4
Wghtd Avg.	-
Max CBR	33.0
Min CBR	1.6



CONE PENETROMETER RESULTS

PROJECT NO.	U-6187
PROJECT NAME	2-Lane Extension of SR 1630
ROUTE	I 40, US 158, and SR 1630
COUNTY	Davie

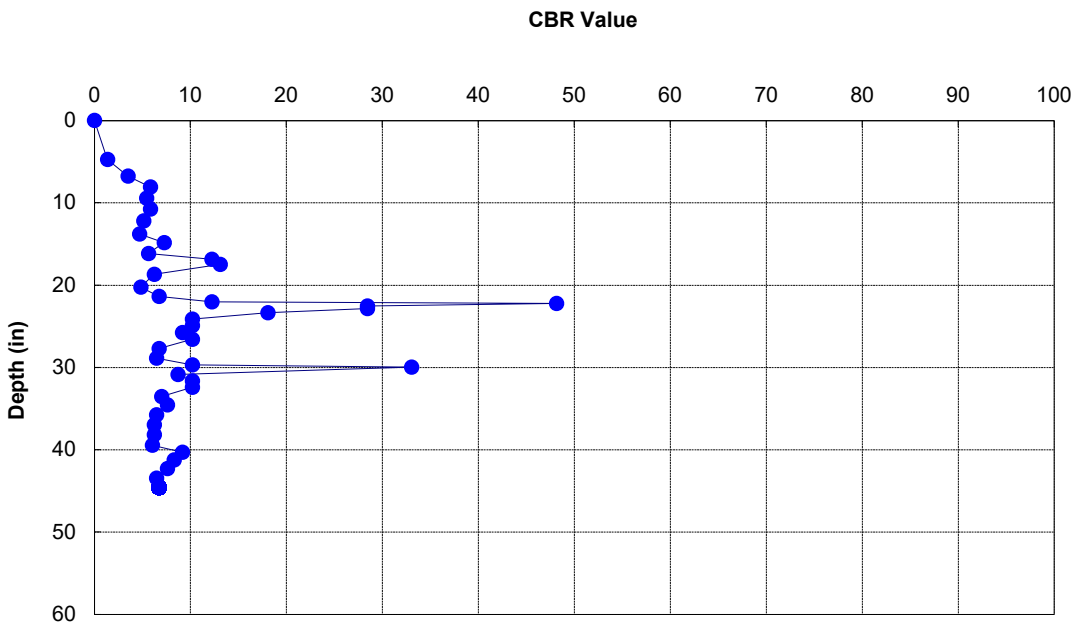
GEOLOGIST	Quinton Hill
GEOTECH(S)	J. Rose
	J. Crenshaw
	M. Brewer

Y13450 11

Datum = Exstg Grd Lvl 12/20/2023

Interval 0.0 to 22.9	
# of Values	19
Avg CBR	11.7
Wghtd Avg.	-
Max CBR	48.1
Min CBR	1.4

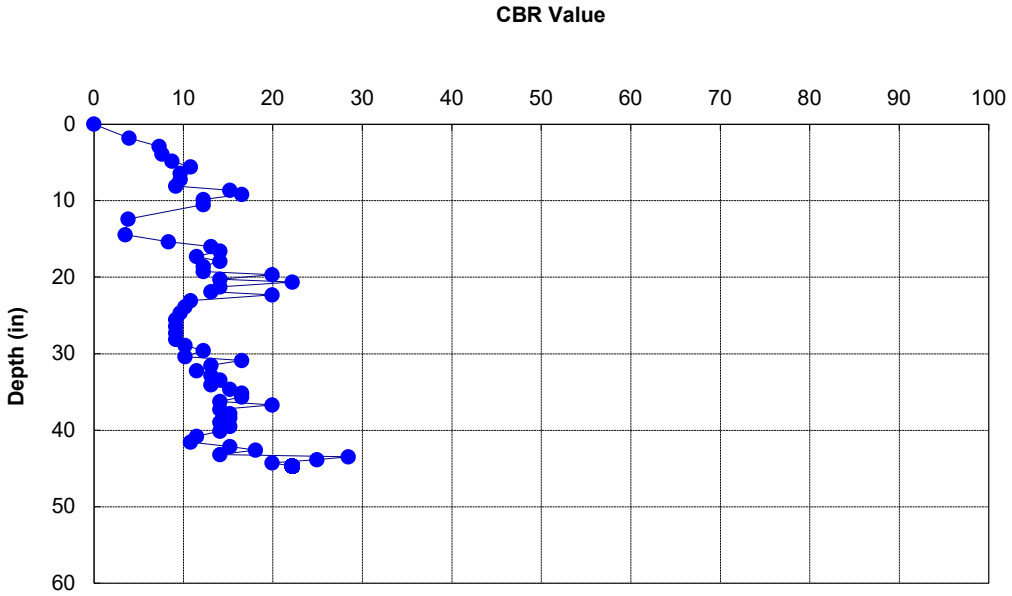
Interval 22.9 to 44.6	
# of Values	22
Avg CBR	9.2
Wghtd Avg.	-
Max CBR	33.0
Min CBR	6.0



Y31010 12

Datum = Exstg Grd Lvl 12/20/2023

Interval 0.0 to 44.7	
# of Values	63
Avg CBR	13.3
Wghtd Avg.	-
Max CBR	28.4
Min CBR	3.5



CONE PENETROMETER RESULTS

PROJECT NO.	U-6187
PROJECT NAME	2-Lane Extension of SR 1630
ROUTE	I 40, US 158, and SR 1630
COUNTY	Davie

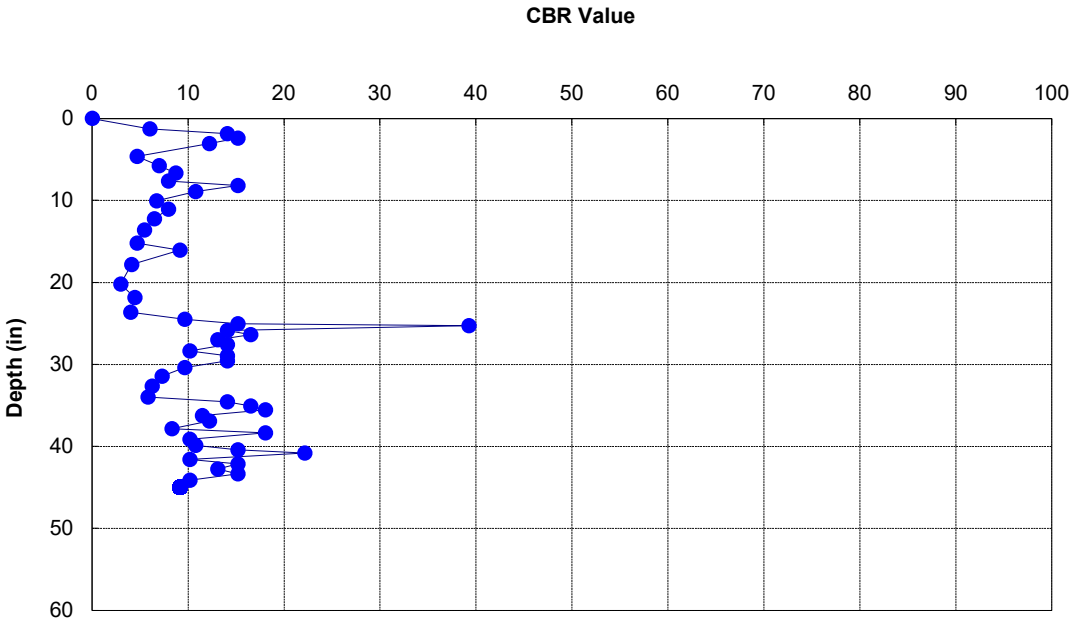
GEOLOGIST	Quinton Hill
GEOTECH(S)	J. Rose
	J. Crenshaw
	M. Brewer

Y41520 13

Datum = Exstg Grd Lvl 01/04/2024

Interval 0.0 to 17.4	
# of Values	17
Avg CBR	8.6
Wghtd Avg.	-
Max CBR	15.2
Min CBR	4.1

Interval 17.4 to 45.0	
# of Values	34
Avg CBR	-
Wghtd Avg.	2.6
Max CBR	39.3
Min CBR	3.0

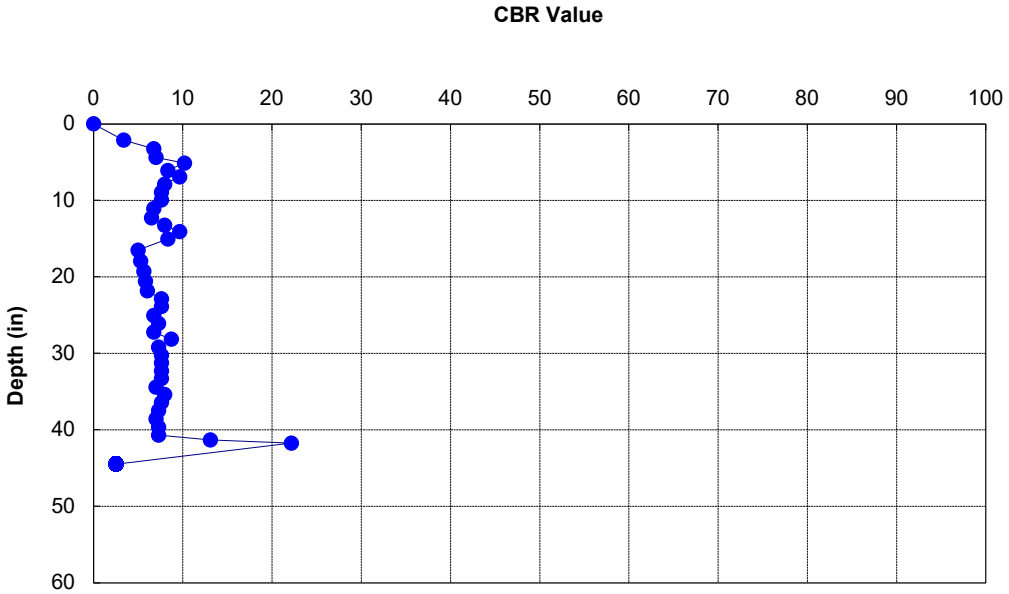


Y42100 14

Datum = Exstg Grd Lvl 12/20/2023

Interval 0.0 to 30.6	
# of Values	28
Avg CBR	7.2
Wghtd Avg.	-
Max CBR	10.2
Min CBR	3.4

Interval 30.6 to 44.5	
# of Values	12
Avg CBR	8.7
Wghtd Avg.	-
Max CBR	22.2
Min CBR	2.5

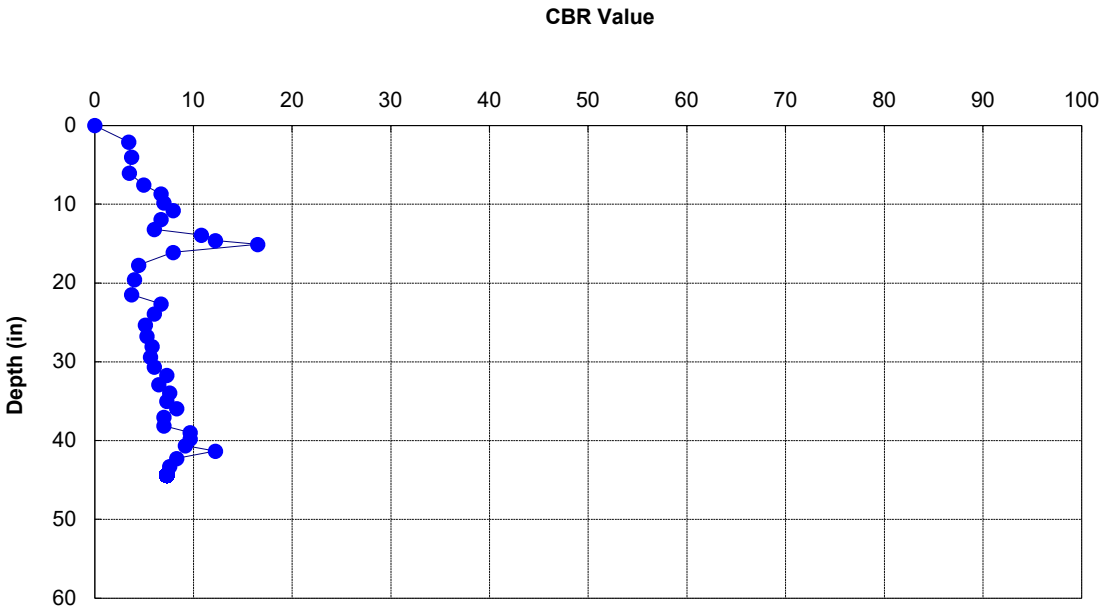


CONE PENETROMETER RESULTS

PROJECT NO.	U-6187
PROJECT NAME	2-Lane Extension of SR 1630
ROUTE	I 40, US 158, and SR 1630
COUNTY	Davie

GEOLOGIST	Quinton Hill
GEOTECH(S)	J. Rose
	J. Crenshaw
	M. Brewer

RPC1600 15

Datum = Exstg Grd Lvl 12/20/2023

Interval	
0.0 to	45.5
# of Values	29
Avg CBR	6.0
Wghtd Avg.	-
Max CBR	12.2
Min CBR	1.4