



Cal -Tech Testing, Inc.

- Engineering
- Geotechnical
- Environmental

LABORATORIES

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October 10, 2024 (Revised on March 10, 2025)

Mr. Caleb Conlan
DLP Capital
405 Golfway W Drive
St. Augustine, Florida 32095

**RE: Geotechnical Engineering Exploration & Field Soil Permeability Testing Report
Lake City Property Development-Roadways & Stormwater Retention Pond
Lake City, Florida
Cal-Tech Testing Inc. Project No. 24-00463-01**

Dear Mr. Caleb Conlan:

This report presents the results of our geotechnical engineering exploration and field soil permeability testing for the proposed Lake City Property Development by State Road 441 in Lake City, Florida.

SITE AND PROJECT INFORMATION

Based on our observations and information you provided to us, the site is a vacant, wooded, approx. 31-acre land property envisioned for the development of a mobile home community and associated roadways and stormwater retention pond.

SUBSURFACE SOIL EXPLORATION

Per your request and authorization, our subsurface soil exploration was performed on October 2, 2024, and consisted of drilling 13 Standard Penetration Test (SPT) borings to a depth of 5 ft. at locations along the proposed roadways (B1 to B13) and two (2) SPT borings to a depth of 15 ft. at the location of the proposed stormwater retention pond (P1 and P2). In addition, we performed two (2) field soil permeability tests next to borings P1 and P2. The boring locations were laid out by our field crew from GPS coordinates approximately obtained after superimposing the provided Conceptual Site Sketch on a web-available mapping system and using a hand-held device. Refer to the enclosed Boring Location Plan.

We contacted Sunshine State One Call of Florida to mark out existing, known underground utilities prior to the beginning of our field exploration.

The SPT borings were advanced using continuous-flight auger and an automatic 140-lb hammer. The split-spoon sampling was performed continuously in the upper 10 ft. and at 5 ft. intervals thereafter to the termination depth of the borings. The penetration test was

performed by driving a 2-inch O.D. split spoon sampler with the automatic hammer falling 30 inches. The number of hammer blows required to drive the sampler a total of 24 inches (upper 10 ft.) and 18 inches in 6-inch increments were recorded in boring logs. The penetration resistance, N-values, is the summation of the second and third 6-inch increments and is used to derive soil engineering parameter indexes from empirical correlations. The boreholes were backfilled with soil cuttings at completion.

All soil samples were delivered to our geotechnical laboratory for classification by our geotechnical engineer in accordance with the Unified Soil Classification System (USCS).

The field soil permeability tests were performed using a casing driven 0.5 ft. from the bottom of 0.5 ft. deep hand-augered boreholes next to the boring locations P1 and P2. During each test and after soil saturation we recorded the volume required to keep water at the top of the casing at 10 minutes intervals for 30 minutes.

SUBSURFACE SOIL CONDITIONS

GENERALIZED SUBSURFACE SOIL PROFILE

The generalized subsurface soil profile inferred from the results of the field exploration consists of a SAND and slightly SILTY SAND strata to the explored depth of the borings at 15 ft.

The SPT N-values indicate a predominantly Very Loose (i.e. $N < 4$) to Loose (i.e. $5 < N < 10$) relative density of the explored strata upper 4 ft. to 5 ft. (i.e. roadway borings) and Medium Dense (i.e. $11 < N < 30$), thereafter, throughout the remainder explored depth (i.e. retention pond borings).

Details of the subsurface soil strata classification and SPT blows/foot (N-value) are presented in the log of borings enclosed in this report.

Groundwater

The groundwater was measured at a depth of about 3 ft. at most of the boring locations at completion of the borings. The United States Department of Agriculture (USDA) National Resources Conservation Service (NRCS) indicates groundwater 0 inches to 18 inches below natural grades for the soil map units covering the proposed development.

The FEMA Flood Map Service Center map No.12023C0285D, effective on November 2, 2018, (enclosed) indicates the site features a portion located within an area of Special Flood Hazard Area-Zone A.

Observation of soil particles coated with typical yellowish and reddish iron oxide allowed estimation of the Seasonal High Groundwater Table (SHGWT) at a depth of about 1.5 ft. at boring locations P1 and P2.

SOIL PERMEABILITY

Analyses of the data obtained during the field soil permeability tests indicate the following results:

Test No.	Estimated SHGWT (ft.)	Test Depth (ft.)	(K_{vu}) ¹ (ft/day)	(K_h) ² (ft/day)	Fillable Porosity (%)	Hydrologic Soil Group (HSG)
P1	1.5	0.5	0.3	0.7	20	C/D
P2	1.5	0.5	0.8	1.8	20	B/D

Note 1: K_{vu} = Soil Unsaturated Hydraulic Conductivity.

Note 2: K_h = Soil Estimated Horizontal Hydraulic Conductivity.

The confining stratum (SILTY SAND) was encountered at a depth of 2.5 ft. (P1) and 5 ft. (P2).

The USDA NRCS Hydrology National Engineering Handbook criteria was used to assign the Hydrologic Soil Group (HSG) shown in the preceding table.

EVALUATION AND RECOMMENDATIONS

ROADWAYS PAVEMENTS

The encountered subsurface soil conditions are suitable for subgrade of the roadway and parking lot pavements after stabilization of the subgrade upper 12 inches to minimum LBR 40.

The Columbia County Land Development Regulations indicate a typical asphalt pavement consisting of a minimum 6-in-thick Limerock (LBR 100) base course compacted to at least 98% of the material's Maximum Dry Density (ASTM D1557) and a minimum 1.25-in thick asphalt surface course.

The Florida Department of Transportation FDOT recommends a minimum flexible pavement base-groundwater clearance of 3 ft. for proper performance of asphalt pavements. An increased pavement base course thickness of 9 inches is advised for base-groundwater clearance of 2 ft. Edgedrains may be used to lower groundwater 3 ft. below the base, otherwise.

UNDERGROUND UTILITIES

Installation of underground utilities should be performed in accordance with drawings and specifications. Based on the subsurface soils encountered, the sand soils are suitable for reuse as backfilling material. Conversely, the Silty Sand and Clayey Sand soils are not expected to be suitable for backfill material due their high Fines particle content.

When backfilling over utility lines, the fill should be placed in lifts not to exceed 12 inches in loose thickness and compacted to 95% of the material's Maximum Dry Density as per (ASTM D-1557).

Due to the presence of low groundwater, backfilling of underground utilities might require dewatering considerations.

LIMITATIONS

Information on subsurface soil strata and groundwater levels shown on the logs represent conditions encountered only at the locations indicated and at the time of the exploration. If

different conditions are encountered during construction, they should be immediately brought to our attention for evaluation as they may affect our recommendations.

CLOSURE

It has been a pleasure working with you and we look forward to continuing providing our geotechnical engineering and construction materials testing expertise on this and future projects.

We request a copy of the foundation drawings be provided for our review prior to construction.

Sincerely,

Cal-Tech Testing, Inc.

Ivan E. Marcano, P.E.
Sr. Geotechnical Engineer



A handwritten signature in blue ink, appearing to read "Mike Stalvey, Jr.", written over a horizontal line.

Mike Stalvey, Jr.
Vice-President

Enclosures:

- Boring Location Plan (1 sheet)
- FEMA Map (1 sheet)
- Boring Logs (15 sheets)



Boring Location Coordinates provided in Boring Logs

CAL-TECH TESTING, INC.
P.O. BOX 1625
Lake City, Florida 32056-1625
Phone: (386) 755-3633
Fax: (386) 752-5456

BORINGS LOCATION PLAN
Lake City Property Development-Roadways & Stormwater
Retention Pond
Lake City, Florida

National Flood Hazard Layer FIRMMette



82°38'48"W 30°14'10"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, A99	With BFE or Depth Zone AE, AO, AH, VE, AR
	Without Base Flood Elevation (BFE) Zone A, V, A99	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway	

OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee. See Notes. Zone X
	Area with Flood Risk due to Levee Zone D

OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard Zone X
	Effective LOMRs
	Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer
	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall

OTHER FEATURES	Cross Sections with 1% Annual Chance Water Surface Elevation
	20.2
	17.5
	Coastal Transect
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature

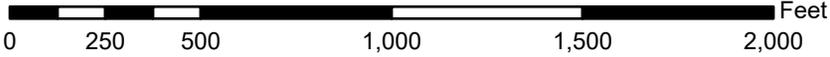
MAP PANELS	Digital Data Available
	Digital Data Available
	No Digital Data Available
	Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/10/2024 at 1:23 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



1:6,000

82°38'11"W 30°13'39"N

Basemap Imagery Source: USGS National Map 2023

Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring P1 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 15 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'58.80" W83°38'30.10"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Dark gray SAND with silt (SP-SM)		0					Sample Type: 2-in Spilt Spoon SHGWT estimated at 1.5 ft.
Reddish brown SILTY SAND (SM)		1	1	X	1-1-1-1	2	
Reddish gray SILTY SAND (SM)		2	2	X	1-1-1-2	2	
Reddish gray SILTY SAND (SM)		5	3	X	5-7-8-15	15	
Gray CLAYEY SAND (SC)		4	4	X	14-12-15-18	27	
		5	5	X	15-17-14-14	31	
Bottom of Boring at 15 ft.		15	6	X	7-9-10	19	
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring P2 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 15 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'54.03" W83°38'30.08"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Gray SAND (SP)		0					Sample Type: 2-in Spilt Spoon SHGWT estimated at 1.5 ft.
Dark grayish brown SAND (Sp)		1	1	X	1-1-2-2	3	
		2	2	X	3-4-7-9	11	
Light brownish gray SILTY SAND (SM)		5	3	X	3-3-4-8	7	
		4	4	X	8-12-13-13	25	
Pinkish gray SILTY SAND (SM)		5	5	X	4-4-7-8	11	
		10					
		15	6	X	7-13-18	31	
Bottom of Boring at 15 ft.		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B1 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'59.10" W83°38'26.31"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Dark gray SAND (SP)		0					
		1	1	X	1-2-3-1	5	Sample Type: 2-in Spilt Spoon
Gray & yellowish red CLAYEYSAND (SC)		2	2	X	1-1-1-6	2	
Bottom of Boring at 5 ft.		5	3	X	7-13	NA	
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B2 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°14'01.44" W83°38'26.81"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Dark gray SAND (SP)		0					
Light gray SAND (SP)		1	1	X	2-2-3-5	5	Sample Type: 2-in Spilt Spoon
Gray SAND (SP)		2	2	X	4-5-9-15	14	
Bottom of Boring at 5 ft.		5	3	X	10-15	NA	
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B3 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°14'01.75" W83°38'20.87"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Dark gray SAND (SP)		0					
		1	1	X	5-7-6-7	13	Sample Type: 2-in Spilt Spoon
Gray SILTY SAND (SM)		2	2	X	3-3-3-2	6	
Bottom of Boring at 5 ft.		5	3	X	1-1	NA	
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B4 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'59.33" W83°38'22.24"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Dark gray SAND (SP)		0					
		1	1	X	1-1-2-2	3	Sample Type: 2-in Spilt Spoon
Gray and yellowish red CLAYEY SAND (SC)		2	2	X	3-6-6-3	12	
Bottom of Boring at 5 ft.		5	3	X	3-5	NA	
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B5 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 1 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'56.86" W83°38'27.27"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Dark gray SILTY SAND (SM)		0	1	X	1-1-1-1	2	Sample Type: 2-in Spilt Spoon
Gray and yellowish red CLAYEY SAND (SC)		2	2	X	1-1-2-2	3	
Bottom of Boring at 5 ft.		5	3	X	7-7	NA	
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B6 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 1.5 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'56.86" W83°38'27.27"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Gray SILTY SAND (SM)		0					
		1	1	X	1-1-3-3	4	Sample Type: 2-in Spilt Spoon
Light brownish gray SILTY SAND (SM)		2	2	X	4-6-3-3	9	
Bottom of Boring at 5 ft.	5	3	X	1-1	NA		
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B7 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'51.58" W83°38'27.24"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Grayish brown SAND (SP)		0					
		1	1	X	2-2-2-3	4	Sample Type: 2-in Spilt Spoon
Light brownish gray SAND (SP)		2	2	X	3-5-3-5	8	
Bottom of Boring at 5 ft.		5	3	X	1-1	NA	
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B8 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'51.58" W83°38'27.24"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Gray SAND (SP)		0					
		1	1	X	2-2-3-3	5	Sample Type: 2-in Spilt Spoon
Gray SAND with silt (SP-SM)		2	2	X	1-4-4-4	8	
Bottom of Boring at 5 ft.		5	3	X	3-2	NA	
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B9 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'51.58" W83°38'27.24"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Dark gray SAND (SP)		0					
		1	1	X	1-2-2-3	4	Sample Type: 2-in Spilt Spoon
Gray and yellowish red SILTY SAND (SM)		2	2	X	4-5-4-4	9	
Bottom of Boring at 5 ft.		5	3	X	3-2	NA	
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B10 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'51.58" W83°38'27.24"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Dark gray SAND (SP)		0					
		1	1	X	1-1-1-2	2	Sample Type: 2-in Spilt Spoon
Light gray SAND (SP)		2	2	X	3-5-4-5	9	
Bottom of Boring at 5 ft.		5	3	X	4-5	NA	
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B11 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'48.35" W83°38'28.23"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Gray SAND (SP)		0					
		1	1	X	1-1-2-2	3	Sample Type: 2-in Spilt Spoon
Light gray SAND (SP)		2	2	X	5-9-13-5	22	
Bottom of Boring at 5 ft.		5	3	X	4-3	NA	
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B12 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'45.92" W83°38'32.85"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Grayish brown SAND (SP)		0					
		1	1	X	1-1-2-2	3	Sample Type: 2-in Spilt Spoon
		2	2	X	3-6-7-9	13	
Gray and yellowish red SILTY SAND (SM)		5	3	X	3-3	NA	
Bottom of Boring at 5 ft.							
		10					
		15					
		20					
		25					

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Project: Lake City Property Development-Roadways & Ret. Pond	Cal-Tech Testing, Inc. 3309 SR 247 Lake City, Florida 32024	Log of Boring B13 Page 1 of 1
Project Location: Lake City, Florida		
Project Number: 24-00463-01		

Date(s) Drilled: 10/2/24	Logged By: KS	Checked By: IM
Drilling Method: SPT	Drill Bit Size/Type: 2" OD Split Spoon	Total Depth of Borehole: 5 feet bgs
Drill Rig Type: Mud Bug	Drilling Contractor: Cal-Tech Testing, Inc.	Approximate Surface Elevation: Referred to ground surface
Groundwater Level and Date Measured: 3 ft.	Sampling Method(s): Split Spoon	Hammer Data: Automatic Hammer
Borehole Backfill: Soil cuttings	Location: N30°13'46.36" W83°38'27.48"	

MATERIAL DESCRIPTION	Symbol Log	Depth (ft)	Sample No.	Sample Type	Blow Counts/0.5 ft	N Value (blows/ft)	REMARKS (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, Etc.)
Reddish brown SAND (SP)		0					
		1	1	X	1-1-3-3	4	Sample Type: 2-in Spilt Spoon
Gray SILTY SAND (SM)		2	2	X	4-4-3-3	7	
Bottom of Boring at 5 ft.		5	3	X	2-2	NA	
		10					
		15					
		20					
		25					

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