PARKING GARAGE #2 DESIGN-BUILD DESIGN CRITERIA

No. 74308

STATE OF

STATE OF

OY/12/2024

Sean Lanier, PE, CFM City Engineer

DESIGN CRITERIA

1. General Design Requirements

- **a.** All Design Requirements shall be included in the total cost of the work as negotiated by or between the City and the D-B Team. The City will not be responsible for any Design Requirements items that may incur additional costs after establishment of the Guaranteed Maximum Price (GMP).
- **b.** Provide architectural, electrical and infrastructure design and build services for a parking garage that will be a multi-story parking garage with a minimum of 800 parking spaces.
- c. The parking garage shall have two staircases and two elevators to access the upper floors.
- **d.** The parking garage will provide space for four 8-yard garbage dumpsters with screened enclosure and access to the dumpsters from the street for garbage collection trucks to empty the dumpsters.
- **e.** The D-B Team shall evaluate all options for the structural framing system of the parking garage including, but not limited to, precast concrete, cast-in-place concrete, post-tensioned concrete, or steel framing and shall determine the most suitable and cost-effective system for this Project.
- **f.** The D-B Team shall evaluate all options for foundation work to include strip foundations and cast or driven piles. Driven piles during work hours may not be possible due to the proximity of occupied City buildings, however, it may be considered as an option depending on the duration and scheduling of the work.
- **g.** All of exterior facing concrete shall be finished to create a faux finish, or blend with the, and be complementary to the architectural design of the Historic Downtown Square and surrounding areas. Form Based Code shall be adhered to for architectural design.
- **h.** The parking garage shall meet all local, State and Federal codes, regulations, permitting requirements and guidelines for a facility of this type including total ADA compliance and including but not limited to the following codes and standards.
 - a. City of Ocala Code of Ordinances
 - b. City of Ocala Standard Specifications for Construction of Streets, Stormwater, Traffic, Water and Sewer Infrastructure
 - c. Florida Department of Transportation Standard Specifications (FDOT) for Road and Bridge Construction
 - d. FHWA MUTCD
 - e. Florida Building Code
 - f. AISC Steel Construction Manual,
 - g. NFPA 70, National Electric Code (NEC)
 - h. ACI Reinforced Concrete Design Manual, ACI 318
 - i. CFR Title 14 Part 77
 - j. FS Chapter 333
- i. Traffic Circulation Pattern(s): Vehicular entrance and egress access shall be available to include same from East Ft. King Street or Southwest 2nd Avenue and be optimized for existing topography and traffic patterns. Design team will provide a minimum of one vehicular entrance/exit to the parking garage from one of these streets that will be most advantageous to vehicular garage access, while minimizing the impact to the vehicular

- traffic flow and traffic patterns for the surrounding neighborhood. Pedestrian entrances to the garage will be provided at all four corners of the garage.
- **j.** Stall Angle optimize spaces in accordance with existing city of Ocala Code of Ordinances.
- **k.** Aisle Width optimize spaces in accordance with existing city of Ocala Code of Ordinances.
- **l.** Headroom Clearances All interior floor heights shall have a minimum of 7 1/2 feet vertical clearance.
- m. HC van Access Clearance: Per code.
- **n.** Number of Levels: First floor: Slab On-Grade. All elevated Levels, number to be determined to meet 800-vehicle minimum. Top Level: open air parking.
- **o.** Ramp Slopes Parking allowed in all options.
- **p.** Codes, Permits, Inspections and Material Testing: (as stated above and explained herein)
 - 1. Building Code: Prevailing State of Florida Building and NFPA Fire Codes.
 - 2. The D-B Team shall prepare all applications, data, and drawings required by permit agencies to include but not limited to SJRWMD, FDEP, NPDES, FAA etc. and shall be responsible for obtaining all necessary permits, including required fees from such agencies.
 - 3. All permit fees and inspection costs are the responsibility of the D-B Team.
 - **4.** City of Ocala Building Department and the Engineering Department are the responsible building permit and inspection agency.
 - 5. It is the City's expectation that the parking garage will be a threshold building in accordance with Chapters 455 and 481, Florida Statutes. The D-B Team shall be responsible for threshold inspection activities.
 - **6.** The D-B Team will be responsible for all material testing required for acceptable accomplishment of the work. Test results that do not meet design specifications will immediately be brought to the attention of the City Engineer. The City's expectation is that all work shall be accomplished in accordance with the approved design and applicable industry standards such as ACI, ASTM, etc., and
- **q.** Coordinate site development reviews and inspections as necessary.

2. Specific Design Criteria

a. Existing Conditions

- **1.** The D-B Team shall be responsible for all additional subsurface investigations required to perform the design function.
- 2. Prior to commencement of any site work, the D-B Team shall provide all required erosion and sediment control measures to implement the Best Management Practices (BMP's) for control of erosion and sediment as detailed in "The Florida Stormwater Erosion and Sedimentation Control Manual".
- **3.** The City will provide location maps of all known underground utilities. These maps may not be 100% reliable. It is the D-B Team's responsibility to confirm the location of all underground utilities prior to the start of design.

- **4.** The D-B Team is responsible for all underground construction to include new and relocated utility lines. All known underground utilities shall be relocated prior to excavation, if in conflict as determined by City.
- 5. The D-B Team shall provide documentation to the City those inspections by all pertinent parties owning underground lines were performed prior to the start of excavation and may use the services of Sunshine 811 locate to insure this requirement is met.

b. Earthwork

- 1. The parking garage site shall be demolished, cleared, filled and graded to sub-grade elevation as specified. This includes demolition and removal of all required slabs, footers, asphalt paving, curbs, trees and shrubs and disposal of all debris at a regulated landfill. It also includes relocation of existing utility and communication lines as required.
- **2.** The enclosed, fenced site footprint must not be violated by the D-B team without permission from the City.
- **3.** Upon reaching final grade and just prior to the first concrete pour, foundations and under slab areas will be treated for termites.

c. Existing Underground Stormwater System

- 1. All offsite stormwater flowage to the existing underground stormwater conveyance system, that crosses the project site, has been diverted and re-routed into a new system in the adjacent street ROW. The onsite system will be abandoned in place, demolished and removed as appropriate to construct a proper foundation for the new parking garage.
- **2.** The foundations for the parking garage will be designed to accommodate any sections of the underground stormwater conveyance system abandoned in place and minimize the impacts from said system on the parking garage.
- **3.** A new underground stormwater conveyance system shall be designed and constructed to drain stormwater from the site to the underground stormwater conveyance system in the adjacent streets.

d. Exterior Improvements

- 1. Provide sidewalks and cross walks in accordance with the D-B Team's approved site plans. Enhanced sidewalks matching the downtown theming is required along with enhanced crosswalks that are clearly delineated and uses alternate materials to accentuate the crosswalks.
- 2. Provide landscape/streetscape design adhering to Form Based Code requirements and consistent with City theming in downtown. All tree wells shall be sized appropriately and provide the ability to up light and irrigate trees. Coordinate with City departments regarding event power and additional conduits.
- **3.** Provide at least four (4) hose bibs along each façade to ensure maintenance of the facility and landscaping as needed.
- **4.** Entry ways into the parking garage both pedestrian and vehicular shall have exterior illumination to clearly indicate entry ways and provide a safer environment.

e. Masonry

- 1. Utility and Elevator Rooms shall be of concrete block masonry. Joints on the exterior sides of these rooms shall be tooled both vertically and horizontally as concave joints.
- **2.** Masonry walls shall be grout filled to a height of 36" above the parking deck for impact resistance.

f. Metals

- 1. Provide and install any and all miscellaneous metal items including, but not limited to, all loose metals, lintels, bollards, pipe guards, miscellaneous angles and plates and other miscellaneous fasteners, anchors and inserts.
- 2. ADA compliant galvanized steel tube railings and handrails shall be utilized.

g. Thermal and Moisture Protection

1. Caulk and seal joints with the appropriate backer material and caulk to provide a positive barrier against passage of moisture. Caulk color shall match the concrete color, both inside and outside if different, as closely as possible.

h. Openings

- 1. Provide 18-gauge hollow metal doors and hollow metal frames, fire rated as required by code, complete with panic hardware and vision glazing at all stairwell and machine room doors. Frames shall be grout filled and secured to the surrounding structure for maximum durability.
- **2.** At the top deck, provide a rain protected lobby incorporated into the structure. A storefront enclosed lobby would not be a desirable feature.
- **3.** All hardware shall be US32D Dull Stainless, commercial heavy duty and lock sets shall be Schlage with interchangeable cores.

i. Interior Finishes

- 1. Flooring in all areas shall be concrete, broom finished as appropriate to a garage.
- 2. All non-galvanized miscellaneous metal shall be primed with an appropriate primer and painted with a standard color finish coat to match the color scheme of the garage.
- 3. All fire lines will be painted red or the color required by local code.
- **4.** All field applied paint will be single coat epoxy or urethane with a minimum of 3 mils dry film thickness. Provide (2) coats of primer / sealer to all concrete and exposed masonry.
- **5.** Layout and stripe all parking stalls, provide handicap signs, stripe all islands and install concrete wheel stops for all stalls.
- **6.** All Conduits, signage, water lines, etc. shall be installed in a manner that allows for a minimum 7 and ½ feet vertical clearance.

j. Signage

1. Include Wayfinding signage both inside and outside the facility to direct traffic to facility entrance and exit in accordance with, and complementary to, the city's current Wayfinding signage utilized throughout the downtown area.

k. Parking Control Equipment

- 1. Provision shall be made for the installation of parking control equipment sometime in the future. All conduits, equipment chases, electrical connections and ducting necessary for this purpose shall be included in the GMP.
- 2. Provision shall be made for the future installation of Payment kiosks on each floor of the garage in the area of the elevators and stairwells. All conduits, equipment chases, electrical connections and ducting necessary for this purpose shall be included in the GMP.
- **3.** Provision shall be made for the installation of smart parking solutions sometime in the future. All conduits, equipment chases, electrical connections and ducting necessary for this purpose shall be included in the GMP.

l. Elevators

- 1. The elevator system shall be designed and installed per code. A minimum of two elevators shall be provided. Elevators shall be located so as not to be subject to flooding.
- 2. Elevator cabs shall be constructed of vandal resistant material.
- **3.** Elevators shall be 3,500 lb. capacity.
- **4.** All elevator design, permitting and inspection fees shall be included in the GMP.
- **5.** Elevator cost in the GMP shall include a one-year maintenance and service agreement during the warranty period.
- **6.** Provision shall be made for the installation of interior cab surveillance camera equipment sometime in the future. All conduits, equipment chases, electrical connections and ducting necessary for this purpose shall be included in the GMP.

m. Fire Suppression

- 1. The parking garage shall incorporate a complete fire suppression system meeting code requirements for this type of facility. The City's preference would be a non-sprinkled system consisting of a dry standpipe system with an FDC on each floor.
- 2. Provide Fire Department Connections (FDC's) outside the garage as required by
- **3.** Provide wall mounted fire extinguishers in secure cabinets.
- **4.** All design, permitting and inspection fees for the fire suppression system shall be included in the GMP.

n. Plumbing

- 1. The parking garage shall incorporate an internal potable water system/plumbing necessary to provide interior hose bibs on every level for cleaning.
- **2.** Provide at a minimum four (4) internal hose bibs on every level of the garage to provide the ease of periodic cleaning/pressure washing.
- **3.** Provide an interior drainage system sufficient to drain stormwater/rainwater from each floor to the City's stormwater conveyance system in the street Right of Way.
- **4.** All design, permitting and inspection fees for the potable water system and stormwater drainage system shall be included in the GMP.

o. HVAC

1. The facility shall be designed to meet natural ventilation requirements in accordance with the applicable code.

2. If necessary, utility and elevator rooms may be cooled by independent split systems with exterior compressors.

p. Electrical

- 1. Provide a complete electrical system for the garage, including the purchase and installation of a sufficiently sized transformer to provide all of the electrical needs.
- **2.** Provide a complete electrical system to include all transformers, panels, conductors, conduits, wiring devices, surge suppression, transformer and power per code.
- 3. The parking garage shall incorporate lightning protection and grounding systems.
- **4.** All fixtures in the parking garage shall be LED's controlled by day light sensors.
- **5.** Sufficient weatherproofed and secured holiday outlets shall be provided on the top floor to allow for appropriate holiday decoration installation at the parking garage.
- **6.** Exterior lighting shall be consistent with downtown lighting. Coordination with the FAA may be required due to the anticipated height of the structure. Provide lighting options, should additional height from the proposed light poles not be permitted by FAA.
- **7.** Eight (8) level-2 electric vehicle charging stations on the first floor of the garage shall be included as part of the GMP. Providing eight (8) rapid charging electric vehicle charging stations in lieu of the level-2 stations shall be an add alternate to the GMP.

q. Communications

- 1. Provide a communications room/closet for general switch gear and rack space for fiber connectivity of the facility.
- 2. Provide Ring Down Emergency Telephones.

r. Electronic Management Cameras

- 1. All necessary stub-outs shall be made available to allow management, security and surveillance systems. The D-B Team will provide properly sized conduit only, equipment and wiring will be provided by the City.
- **2.** The parking garage shall incorporate complete stand-alone fire detection and alarm systems meeting code requirements for this type of facility.

3. Additional Considerations/Alternatives for the Design-Build Team

a. Finishes

- 1. Thermoplastic striping will be considered as an alternative.
- **2.** Appropriate metal screens for the ventilation openings or to provide security will be considered as an alternative.

b. Parking Control Equipment

- 1. Parking control equipment shall be recommended by the D-B Team for selection by the City. All conduits, wiring, and other equipment needed to make a complete and operable system shall be included in the GMP.
- **2.** Entrance controllers shall be capable of issuing timed parking entrance passes or operating by proximity card reader.

- **3.** Payment kiosks shall be on each floor of the garage in the area of the elevators and stairwells. Payment kiosks shall be capable of accepting cash, credit/debit cards, tap payments, and integrate with all current City parking payment apps. Payment kiosks shall be networked to allow for real time accounting.
- **4.** Exit controllers shall be capable of operating by payment or by proximity card reader.
- 5. Payment kiosks shall integrate with all current parking technologies.
- **6.** The D-B Team would only be responsible for the required conduit to make this connection. Cabling and network connections will be by the City.

c. Other Equipment

- 1. Elevators may be of the type not requiring a machine room.
- 2. Elevators may have variable speed control.
- **3.** Stub up connections where possible to the existing water, wastewater and HVAC lines to allow future connections.

d. Interior Improvements

1. As an alternative provide a guard house/office with publicly accessible bathrooms adjacent to the office.

e. Exterior Improvements

1. Include brick paver sidewalks with planters to match the existing crosswalks and City Hall/Citizens Circle areas, as well as being complementary to the Historic Downtown Square, in accordance with the approved D-B Team site plans. This shall be included in the GMP.

4. Parking Garage - Project information

The City shall designate a City Representative who shall be fully acquainted with the Project. The City Representative shall render decisions promptly, if within the representative's authority, and furnish requested information expeditiously.

Additionally, the following information shall be made available to the D-B Team:

Attachment #01 – Parking Garage Site Geotechnical Report

Attachment #02 – Proposed Parking Garage #2 Site Utilities

Attachment #03 – Proposed Parking Garage #2 Site Survey

Attachment #04 – Proposed Parking Garage #2 Conceptual Floor Plan

Attachment #05 – Proposed Parking Garage #2 Site & Laydown Area Location

Survey and Location Information

The property that has been assembled together to comprise the site that will accommodate the proposed parking garage that is the subject of this Request for Proposal is more particularly identified and described as follows:

Parcel 2853-026-001:

South 36 feet of East 112 feet of Lot 1, Block 26, Old Survey of Ocala, according to the plat thereof recorded in Plat Book E, page(s) 1 and 2, of the public records of Marion County, Florida;

And

Parcel 2853-026-002:

Lot 2, Block 26, Old Survey of Ocala, according to the plat thereof, recorded in Plat Book E, page 2, Marion County, Florida, EXCEPT commencing at the Northeast corner of said Lot 2, thence South 76 feet, thence West 2 feet, thence North 76 feet, thence East 2 feet to the Point of Beginning;

And

Parcel 2853-026-003:

Lots 3 and 4 of Block 26, Old Survey of Ocala, according to the plat thereof recorded in Plat Book E, page(s) 1 and 2, of the public records of Marion County, Florida;

And

Parcel 2853-026-004:

Commencing at the Northeast corner of Lot 1, Block 26 (and being the Northeast corner of said block) of the Old Survey of Ocala, according to the plat thereof recorded in Plat Book E, page(s) 1 and 2, of the public records of Marion County, Florida, and running West 114 feet, thence South 76 feet thence East 114 feet, thence North 76 feet to the Point of Beginning, being the North 76 feet of Lot 1, and 2 feet East and West by 76 feet North and South in the Northeast corner of Lot 2 of said block.

And

The portion of Lot 1, Block 26, Old Survey of Ocala, according to the plat thereof as recorded in Plat Book E, at page 1, of the public records of Marion County, Florida, bounded as follows:

On the North: By the South line of the North 76 feet thereof as more particularly

described in the Warranty Deed recorded in Official Records Book 988,

at page 1270, of said public records;

On the East: By the East line thereof;

On the South: By the North line of the South 36 feet thereof as more particularly

described in the Warranty Deeds recorded in Official Records Book

599, at pages 418 through 423, inclusive, of said public records;

On the West: By the West line thereof.

A Boundary Survey of the subject property (in addition to other lands) was recently prepared by the Survey Division of the City of Ocala Engineering Department pursuant to Work Order 22-005782, File No. 22-005782.01, dated June 30, 2022.



ENGINEERING CONSULTANTS IN GEOTECHNICAL • ENVIRONMENTAL • CONSTRUCTION MATERIALS TESTING

October 24, 2023 Project No. 23-3006.205.1

Paul Constable City of Ocala Engineering Department 1805 NE 30th Avenue, Building 300 Ocala, Florida 34470

Reference: Proposed Parking Garage, Parcel No. 2853-026-001, 2853-026-002

2853-026-003 and 2853-026-004, SW Broadway Street, Ocala, Florida

Geotechnical Site Evaluation

Dear Mr. Constable:

Geo-Technologies, Inc. (Geo-Tech) completed a geotechnical site evaluation of the project site as requested by you. Services were conducted in accordance with Proposal No. 13132 dated January 19, 2023 and Proposal No. 13592 dated June 8, 2023.

Our findings, evaluations and recommendations are presented in the following report. Generally accepted soils and foundation engineering practices were employed in the preparation of this report.

Loading conditions and the finish floor elevation of the proposed parking garage had not been established at the time of this report., Geo-Tech recommends a reevaluation of the recommendations in this report after loading conditions and finished floor elevations have been determined. Design of parking garage foundation system was not included in Geo-Tech's scope of services for this project.

Geo-Tech appreciates the opportunity to provide our services for this project. Should you have any questions regarding the contents of this report or if we may be of further assistance, please do not hesitate to contact the undersigned.

Sincerely,

Gerald W. Green, Jr. Soil & Water Scientist

GWG/CAH

1016 S.E. 3RD AVENUE, OCALA, FLORIDA 34471 • PHONE: (352) 694-7711 • FAX: (352) 694-7733

Proposed Parking Garage, Parcel No. 2853-026-001, 2853-026-002 2853-026-003 and 2853-026-004, SW Broadway Street, Ocala, Florida

October 24, 2023 Project No. 23-3006.205.1

Purposes

Purposes of this evaluation were to characterize subsurface soils conditions in the proposed parking garage building areas and to provide geotechnical engineering site preparation recommendations to guide design and construction of the parking garage foundation system.

Site Description

The site is located at Parcel No. 2853-026-001, 2853-026-002, 2853-026-003 and 2853-026-004 on the south side of SW Broadway Street in Ocala, Florida. The site consisted of two (2) existing buildings with associated parking areas at the time of drilling.

Exploration Program

Field exploration services for this geotechnical site evaluation consisted of the following:

- A Ground Penetrating Radar (GPR) survey in accessible areas of the proposed parking garage building area. Our GPR survey was performed on July 26, 2023.
- Twenty (20) Standard Penetration Test (SPT) borings (B-1, B-3 thru B-15 and B-17 thru B-22) to depths ranging from approximately forty (40) to sixty-five (65) feet below existing site grade in the proposed parking garage building area (ASTM D-1586). SPT borings were performed on September 1, 5 and 6, 2023.
- Two (2) auger borings (B-2 and B-16) to depths of approximately one (1) foot below existing site grade in the proposed parking garage building area (ASTM D-4700). SPT borings were performed on September 5, 2023.

Boring locations were determined in the field based on accessibility and the site plan provided by you dated January 1, 2022.

Sampling & Testing Descriptions

Auger Sampling

Auger borings were performed using the methodology outlined in ASTM D-4700. Auger boring sampling method consists of rotating an auger to advance the barrel into the ground. The operator may have to apply downward pressure to keep the auger advancing. When the barrel is filled, the unit is withdrawn from the cavity and a sample may be collected from the barrel.

Samples recovered during performance of our auger borings were visually classified in the field and representative portions of the samples were placed in containers and transported to our laboratory for further analysis.

GPR

GPR is an electromagnetic geophysical method that detects interfaces between subsurface materials with differing dielectric constants. The GPR system consists of an antenna which houses the transmitter and receiver; a profiling recorder which processes the received signal and produces a graphic display of the data; and a video display unit which processes and transmits



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the output signal to a color video display unit that records the data in a file base in a portable computer.

The transmitter radiates repetitive short-duration electromagnetic waves into the earth from an antenna moving across the ground surface. These radar waves are reflected back to the receiver by interfaces between materials with different dielectric constants. Travel times of the signal are used to estimate the depth of signal penetration. Intensity of the reflected signal is a function of the contrast in the dielectric constant between the materials, the conductivity of the material through which the wave is traveling, and the frequency of the signal. Subsurface features which commonly cause such reflections are: 1) natural geology such as changes in sediment composition, bedding and cementation horizons, voids, and water content; or 2) unnatural changes to the subsurface such as disturbed soils, soil backfill, buried debris, tanks, pipelines and utilities. Moisture contents of underlying soils will limit the depth of the transmitted signal. The profiling recorder processes the signal from the receiver and produces a continuous cross-section of the subsurface interface reflections, referred to as reflectors.

GPR data output from the recorder is transferred color printed charts, which present the data as a continuous profile. A GPR survey is conducted along transects which are measured paths along which the GPR antenna is moved. Calibrated survey wheel measurements are used to determine the position of the antenna during the field survey.

Normal geologic conditions in the subsurface, as viewed on a GPR profile, are frequently characterized by the occurrence of relatively continuous and horizontal GPR reflectors, representing soil horizons. Anomalous subsurface features, such as sinkholes, exhibit GPR reflectors, which, in the area of the sinkhole, dip down toward the center of the sinkhole. In the center of the sinkhole, the GPR reflectors associated with the suspected soil horizons either dip sharply downward or are discontinuous. Subsurface features such as water or air-filled voids are typically characterized by: 1) a relatively high-amplitude reflection of the GPR signals, and 2) a hyperbolic shape of the GPR signals. Fractures are typically characterized by an abrupt increase in the depth of penetration of the GPR signal and the occurrence of relatively high-angle reflectors near the boundaries of the suspected fracture.

Depth of investigation of the GPR signal is highly site-specific and is limited by signal attenuation (absorption) in the subsurface materials. Signal attenuation is dependent upon the electrical conductivity and moisture content of the subsurface materials. Signal attenuation is greatest in materials with relatively high electrical conductivities such as clays and brackish groundwater, and lowest in relatively low-conductivity materials such as dry sand or rock. Depth of investigation is also dependent on the antenna's transmitting frequency. Depth of investigation generally increases as transmitting frequency decreases; however, the ability to resolve smaller subsurface features is diminished as frequency is decreased.

GPR antennas used on the project are internally shielded from above ground interference sources. Accordingly, the GPR response is affected on minimally by overhead power lines, metallic buildings, or nearby objects.



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Gradation (-200) Testing

A specimen of soil is washed over a seventy-five (75) μ m (No. 200) sieve. Clay and other particles that are dispersed by the wash water, as well as water-soluble materials, are removed from the soil during the test. The loss in mass resulting from the wash treatment is calculated as mass percent of the original sample and is reported as the percentage of material finer than a seventy-five (75) μ m (No. 200) sieve by washing.

Loss on Ignition Testing

Representative soil samples were returned to our laboratory for organic content testing. The "Loss on Ignition" method for the determination of organic content is most applicable to those materials identified as peat, organic muck and soils containing relatively undecayed or undecomposed vegetative matter or fresh plant materials such wood, roots, grass, or carbonaceous materials. This method determines the quantitative oxidation of organic matter in these materials and gives a valid estimate of organic content (reference Florida Method FM 1-T267).

Standard Penetration Testing

A Standard Penetration Test (SPT) boring (ASTM D-1586) is defined as a standard split-barrel sampler driven into the soil by a one hundred and forty (140) pound hammer falling thirty (30) inches. The number of blows required to drive the sampler one (1) foot, after seating six (6) inches, is designated resistance, or "N"-Value is an index to soil strength and consistency.

Samples recovered during performance of our SPT borings were visually classified in the field and representative portions of the samples were placed in containers and transported to our laboratory for further analysis.

Findings

GPR Survey

The GPR survey was performed utilizing a shielded one hundred sixty (160) MHz antenna and the GX HDR monitor manufactured by Mala Geoscience of Mala, Vasterbotten Municipality, Sweden.

Data from the GPR survey was transferred from the GX HDR monitor to a desktop computer where processing was performed utilizing MALA Object Mapper Version 2.0.1804.102 software produced by Mala Geoscience of Mala, Vasterbotten Municipality, Sweden.

Preliminary GPR transects were performed on random areas of the project site to calibrate the GPR equipment and to characterize overall site conditions. Preliminary GPR survey data indicated that a shielded one hundred sixty (160) MHz antenna provided optimum penetration and resolution of the GPR data to identify potential subsurface karst features at the project site.

GPR transects were constructed by Geo-Tech throughout accessible areas of the proposed parking garage building areas. We refer the reader to the GPR Survey and Boring Location Map presented in Appendix I.



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The GPR investigation was performed by towing the antenna along each transect line. The location of the antenna along a transect line is electronically marked on the GPR data to allow correlation of the data to actual ground locations.

Our GPR survey data indicated a maximum signal penetration depth of approximately thirty-eight (38) feet below existing site grade. The depth of investigation was based upon two-way travel times of the GPR signal traveling through unsaturated and saturated soils underlying the site. The depth was limited by attenuation of the GPR signal due to existing soil conditions at the site. Subsurface features located below the maximum depth of penetration would not have been detected by the GPR.

Review of the GPR survey data presented indications of downwarping, discontinuous strata and/or localized areas of deeper signal penetration in ten (10) locations throughout the site. SPT borings B-4, B-13, B-14, B-15, B-16 and B-18 thru B-21 were later performed in these areas.

SPT Borings

General subsurface conditions found in borings are graphically presented on the soil profiles in Appendix I. Horizontal lines designating the interface between differing materials found represent approximate boundaries. Transition between soil layers is typically gradual.

Soils found in borings B-1, B-3, B-4, B-7, B-8, B-11 and B-15 generally consisted of a surficial layer of loose fine sand ranging from approximately four (4) to eight (8) feet thick underlain by loose to dense clayey sand, medium stiff to very stiff slightly sandy clay and limestone to the depths drilled.

Soils found in borings B-2 and B-16 generally consisted of a surficial layer of fine sand to the depths drilled.

Soils found in borings B-5 and B-12 generally consisted of a surficial layer of fine sand ranging from approximately four (4) to six (6) feet thick underlain by very loose to dense clayey sand and very soft to very stiff slightly sandy clay to the depths drilled.

Soils found in boring B-6 generally consisted of a surficial layer of limerock approximately four (4) feet thick underlain by loose to medium dense clayey sand, stiff to very stiff slightly sandy clay and limestone to the depth drilled.

Soils found in borings B-9, B-18 and B-20 generally consisted of a surficial layer of clayey sand approximately two (2) feet thick underlain by fine sand, loose to medium dense clayey sand, soft to very stiff slightly sandy clay and limestone to the depths drilled.

Soils found in borings B-10 and B-17 generally consisted of a surficial layer of loose fine sand ranging from approximately eight (8) to thirteen and one-half (13 ½) feet thick underlain by loose to medium dense clayey sand and limestone to the depths drilled.

Soils found in boring B-13 generally consisted of a surficial layer of fine sand approximately two (2) feet thick underlain by slightly clayey sand, loose to medium dense clayey sand, very stiff slightly sandy clay and limestone to the depth drilled.



Exhibit A - Attachment #1 Proposed Parking Garage, Parcel No. 2853-026-001, 2853-026-002 2853-026-003 and 2853-026-004, SW Broadway Street, Ocala, Florida

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Soils found in boring B-14 generally consisted of a surficial layer of fine sand approximately six (6) feet thick underlain by loose to medium dense clayey sand, medium dense fine sand, soft to medium stiff slightly sandy clay and limestone to the depth drilled.

Soils found in boring B-19 generally consisted of a surficial layer of very loose clayey sand approximately eight (8) feet thick underlain by medium stiff to very stiff slightly sandy clay and limestone to the depth drilled.

Soils found in boring B-21 generally consisted of a surficial layer of clayey sand approximately two (2) feet thick underlain by fine sand, organic sand, loose to medium dense clayey sand, soft to very stiff slightly sandy clay and limestone to the depth drilled.

The pavement section found in boring B-22 consisted of approximately one and one-quarter (1 1/4) inches of asphalt and approximately seven (7) inches of limerock. Soils found beneath the pavement section generally consisted of loose fine sand, loose to medium dense clayey sand, medium stiff to stiff slightly sandy clay and limestone to the depth drilled.

Groundwater was not found within ten (10) feet below existing site grade in our SPT borings at the time of drilling.

Auger Borings

General subsurface conditions found in borings are graphically presented on the soil profiles in Appendix I. Horizontal lines designating the interface between differing materials found represent approximate boundaries. Transition between soil layers is typically gradual.

Soils found in borings B-2 and B-16 generally consisted of a surficial layer of fine sand to the depths drilled. Borings B-2 and B-16 were terminated at approximately one (1) foot below existing site grade due to underground utilities.

Groundwater was not found in borings B-3 and B-16 within the depths drilled.

Laboratory Testing Results

Gradation (-200)

Slightly clayey sand, clayey sand and organic sand soils found in our borings yielded passing fines ranging from eleven (11) to thirty-four (34) percent on the samples tested. We refer the reader to the attached soil profiles for the various soils found.

Loss On Ignition

Organic sand soils found in boring B-21 appeared to be slightly organic. Organic content of the sample tested was seventeen (17) percent. The test result is noted on the B-21 soil profile at the appropriate depth.

Evaluations

Surficial fine sand, clayey sand and shallow slightly clayey sand soils found in our borings appear to be suitable material for conventional foundation systems.



Exhibit A - Attachment #1 Proposed Parking Garage, Parcel No. 2853-026-001, 2853-026-002 2853-026-003 and 2853-026-004, SW Broadway Street, Ocala, Florida

October 24, 2023 Project No. 23-3006.205.1

However, decreasing N-values were observed in our soil borings. The low N-values of the in-situ soils may cause excessive settlements for the structures placed above them. Geo-Tech recommends a reevaluation of the recommendations in this report after loading conditions and finished floor elevations have been determined.

Shallow clayey sand soils found in our borings typically exhibit moderate shrink/swell behavior with moisture content changes. Generally, these clay soils will swell upon wetting and shrink upon drying thus causing movement of structures placed on them.

In addition, organic sand soils found in borings B-21 are unsuitable for conventional foundation systems. Organic sand will typically decompose over time causing movement of structures placed above them.

Groundwater may become perched above clayey soils after periods of prolonged rainfall and may influence near surface construction.

Recommendations

Geo-Tech recommends utilizing a monolithic thickened edge slab or perimeter footing foundation system with the bottom of the foundation and floor slabs at least two (2) feet above the underlying unsuitable clayey soils. We refer the reader to the Recommended Separation detail presented in Appendix II.

Suitable options to attain the aforementioned separation are as follows:

Excavate the clayey soils to create the minimum buffer between the foundation Option 1: and floor slabs and the top of the clayey soils. If excavating for the foundation system to provide the recommended separation, excavation should extend a minimum of two (2) feet beyond each side of the footing. Care should be taken to ensure the foundation system bears in the backfilled area(s).

> The depth of excavation should be controlled so that a "bathtub effect" that will trap water is not created. The bottom of the undercut should be graded to drain to a positive gravity outfall. If it is not feasible to have a positive gravity outfall, an underdrain should be placed in the bottom of the excavation to drain stormwater that may accumulate in the excavation.

> Structural fill should be placed in accordance with the Structural Fill Material and Compaction of Fill Soils sections of this report.

> We wish to emphasize that the excavation and replacement of the underlying clay soils from beneath the building is not a guarantee that the deeper clays will not cause foundation movements. However, the risk is reduced significantly.

Raise the existing site grade to provide the recommended separation. However, Option 2: prior to importing and placing fill soils to raise the existing site grade the building area should be proof-rolled to increase the density of the near surface soils. Proof-rolling should occur after stripping and grubbing.



Proposed Parking Garage, Parcel No. 2853-026-001, 2853-026-002 2853-026-003 and 2853-026-004, SW Broadway Street, Ocala, Florida

October 24, 2023 Project No. 23-3006.205.1

Structural fill should be placed in accordance with the Structural Fill Material and Compaction of Fill Soils sections of this report.

Option 3: Combine Options 1 and 2 in order to attain the desired finish floor elevation.

Geo-Tech also recommends removing the surficial limestone found in boring B-6 as well as the shallow organic sand soils found in boring B-21 and backfilling the excavations in accordance with the Structural Fill Soils and Compaction of Fill Soils sections of this report.

General Building Site Preparation Recommendations

Stripping and Grubbing

The "footprint" of the proposed parking garage, plus an additional horizontal margin of ten (10) feet, should be stripped of the existing vegetation, stumps, surface debris, or other deleterious materials as found. Expect clearing and grubbing to depths of about eight (8) to twelve (12) inches. Deeper clearing and grubbing depths may be encountered in heavily vegetated areas where major root systems are found. Actual depth(s) of stripping and grubbing must be determined by visual observation and judgment during the earthwork operation.

Proof-Rolling

Proof-rolling of the cleared surface is recommended to: 1) verify unsuitable soils [soils with greater than twenty-five (25) percent passing a No. 200 sieve] in the base of excavations/cleared surfaces are firm and unyielding; 2) increase the density of the upper two (2) feet of the in-situ sand soils [soils with less than twenty-five (25) percent passing a No. 200 sieve] to at least ninety-five (95) percent of the maximum density as determined by the modified proctor test method (ASTM D- 1557) maximum dry density value; and 3) prepare the existing surface for the addition of fill soils (if required). Proof-rolling of the building area should consist of at least ten (10) passes of a self-propelled static compactor. Each pass of the compactor should overlap the preceding pass by thirty (30) percent to insure complete coverage. If deemed necessary, in areas that continue to "yield," remove all deleterious material and replace with a clean, compacted sand backfill. Proof-rolling should occur after cutting and before filling. Vibratory compaction equipment should not be used within one-hundred (100) feet of neighboring structures.

Structural Fill Material

Structural fill material should be free of organic material such as roots and/or vegetation. Geo-Tech recommends using sand fill with between three (3) to twelve (12) percent by dry weight of material passing the U.S. Standard No. 200 sieve size. All structural fill should be pre-qualified prior to importing and placing.

Upper fine sands found on site should meet these requirements and can be used if kept separate from the clayey soils during the earthwork phase of construction. Clayey soils are typically not used for structural fill due to inherent nature to retain moisture and the natural weight of the material makes compaction requirements difficult to achieve. However, the clayey soils can be utilized for other non-structural grading as desired.



Proposed Parking Garage, Parcel No. 2853-026-001, 2853-026-002 2853-026-003 and 2853-026-004, SW Broadway Street, Ocala, Florida

October 24, 2023 Project No. 23-3006.205.1

Compaction of Fill Soils

Structural fill should be placed in level lifts not thicker than twelve (12) inches (uncompacted). Lift thicknesses should be reduced to six (6) inches if hand-held compaction equipment is used. Each lift in the proposed building area should be compacted to at least ninety-eight (98) percent of the maximum density as determined by the Modified Proctor Test Method (ASTM D-1557) maximum dry density value. Filling and compaction operation should continue in lifts until the desired elevation is attained.

Foundation Support

Foundations for the proposed structure may consist of shallow foundations placed on compacted engineered fill material. Such footings may be designed for maximum allowable soils contact pressures of two thousand five hundred (2,500) pounds per square foot. For purposes of confinement, exterior footings should be embedded at least twenty-four (24) inches below the lowest adjacent grade as measured to the base of the footing. Interior footings should be embedded a minimum of eighteen (18) inches below the lowest adjacent grade as measured to the base of the footing.

Moisture entry from the underlying subgrade soils should be minimized. An impervious membrane placed between the subgrade soils and floor slab will help to accomplish this. A polyethylene film (six [6] mil) is commonly used for this purpose. Care should be used so that the membrane is not punctured when placing reinforcing steel (or mesh) and concrete.

Quality Control

Geo-Tech recommends establishing a comprehensive quality control program to ensure that site preparation and foundation construction is conducted according to the plans and specifications. Materials testing and inspection services should be provided by Geo-Technologies, Inc. An engineering technician should be on-site to monitor all stripping and grubbing, to verify that all deleterious materials have been removed.

Density testing should be performed during backfill and below all footings and floor slabs to check the required compaction. Field density values should be compared to laboratory proctor moisture-density results for each different natural and fill soil encountered.

Geo-Tech recommends notifying us to confirm the excavation depth, installation of the daylight gravity drain (if required), compaction of backfill soils and that the foundation is properly located within the excavation boundaries.

Geotechnical engineering design does not end with the advertisement of construction documents. The design is an ongoing process throughout construction. Because of Geo-Tech's familiarity with the site conditions and the intent of the engineering design, we are most qualified to address problems that might arise during construction in a timely and cost-effective manner.

Closure/General Qualifications

This report was prepared to assist various professionals in the parking garage foundation system design for this project. The scope of this report is limited to this specific project. Geo-Tech should be informed of any project changes so our evaluations and recommendations can be



Proposed Parking Garage, Parcel No. 2853-026-001, 2853-026-002 2853-026-003 and 2853-026-004, SW Broadway Street, Ocala, Florida

October 24, 2023 Project No. 23-3006.205.1

reviewed. Earthwork and foundation construction operations should be reviewed by our engineer to assess fulfillment of the design requirements.

Evaluations and recommendations submitted in this report are based on our findings from the soil borings performed. Soil, limestone and groundwater conditions may vary between boring locations. These variations were not taken into consideration for this report. However, variations may become evident during the construction. Geo-Tech should be informed if variations are encountered during construction so our evaluations and recommendations can be reviewed.



APPENDIX I SOIL PROFILES

Log of Shibit of Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA

Boring Location: (SEE BORING LOCATION MAP)

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Project No: 23-3006.205.1

Engineer: NJH/CAH

Enclosure: BORING MAP



1016 SE 3rd Avenue Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
0-		Ground Surface		0.0				
1 2 3 4		FINE SAND BROWN FINE SAND (SP)	HAND AUGERED (0.0'-6.0')	0.0				
6		CLAYEY SAND		6.0		-	-	21
8		YELLOWISH BROWN AND GREY	MEDIUM DENSE		1		21	29
10 11 12	/ / / / /	CLAYEY SAND (SC)	MEDIUM DENSE		2	11	29	
14 15 16 17-) ,,		DENSE		3	Ш	33	33
18- 19- 20- 21-	//		MEDIUM DENSE		4	П	10	10
23 24 25 26			MEDIUM DENSE		5	П	11	11
28 29 30 31	/ / / /		LOOSE		6	П	6	6
33- 34- 35- 36-	, , , , , ,		LOOSE		7	П	6	6
0123456789011234567890112345678901123456789011234567890123345678901234567890100000000000000000000000000000000000		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)	MEDIUM STIFF	38.5	8	П	7	7
43 44 45 46 47		LIMESTONE LIGHT BROWN LIMESTONE	3 BLOWS - 12"	43.5	9	П	3	3
48 49			28 BLOWS - 12"	3	10	П	28	28
51 52 53 54 55 56 57			50 BLOWS - 3"	55.0	11	П	50	50
56 57		End of Borehole						

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 5, 2023

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Drilled By: AM

Drill Method: ASTM D-1586

Soil Profile: 1 OF 22

Log oFxhibit Ae: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA

Project No: 23-3006.205.1

Enclosure: BORING MAP

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

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Depth/Elev. Description Remarks Depth (ft) Symbol Number 0.0 **Ground Surface** 012345678901123456789012345678901233456789012334567890123345678901233456789012334567890124567890123456789012345678**FINE SAND** BORING TERMINATED AT APPROX. 1.0 FOOT BROWN FINE SAND (SP) BELOW EXISTING SITE GRADE DUE TO **UNDERGROUND OBSTRUCTION** End of Borehole

Ground Water Depth: NOT FOUND

Drill Date: SEPTEMBER 5, 2023 Drill Method: ASTM D-4700

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 2 OF 22

Log oFxhibit A: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

1016 SE 3rd Avenue Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM **Enclosure: BORING MAP**

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
0-		Ground Surface		0.0				
01234567890111345671119111111111111111111111111111111111		FINE SAND BROWN FINE SAND (SP)	HAND AUGERED (0.0'-6.0')					
7			LOOSE	8.0	1	Ш	8	8
10 11	~	CLAYEY SAND YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	LOOSE		2		4	4
13				13.5				10
14 15 16 17		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)	STIFF		3		10	
19 19 20 21			STIFF		4	П	10	10
23 24 25 26			STIFF	2	5	П	10	10
27 28 29 30		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN	STIFF	28.5	6	П	15	15
32 33 34 35		SLIGHTLY SANDY CLAY (CH) WITH LIMESTONE LIMESTONE	14 BLOWS - 12"	33.5	7		14	14
36-		LIGHT BROWN LIMESTONE						
38 39 40 41			14 BLOWS - 12"	5	8	П	11	11
42 43 44 45 46			13 BLOWS - 12"	,	9	П	13	13
47 48 49 50			14 BLOWS - 12"	50.0	10	П	14	14
50 51 52 53 54 55 56		End of Borehole						
55 56 57								

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 5, 2023 Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 3 OF 22

Log oFxhibit A -: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No

Boring Location: (SEE BORING LOCATION MAP)

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Project No: 23-3006.205.1

Engineer: NJH/CAH

Enclosure: BORING MAP



Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
0 1 2 3 4 5 6 7 8 9 10 1 12 13 14 15 6 17 8 19 20 12 22 32 22 5 26 27 28 9 30 1 32 33 34 4 12 4 3 3 4 4 2 4 3 3 4 4 2 4 3 3 4 4 2 4 3 3 4 4 4 3 3 4 4 4 3 4 4 3 4 4 3 4 4 3 4 4 4 3 4 4 4 3 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 4 3 4 4 4 4 3 4 4 4 4 3 4		FINE SAND BROWN FINE SAND (SP)	HAND AUGERED (0.0'-6.0')					
5 6				6.0				_
Į Ž		CLAYEY SAND	LOOSE		1	Ш	7	7
8 9		YELLOWISH BROWN AND GREY	MEDIUM DENSE		2	T	21	21
10 11 12		CLAYEY SAND (SC)	William Serior					
14			MEDIUM DENSE		3	П	12	12
15			WILDIOW DENGE		3	ш	12	- 1
1 17								\
18			MEDIUM DENIGE				10	19
20			MEDIUM DENSE		4	ш	19	1 /· I
21								/
23] /
24			LOOSE		5	Ш	5	5
26								
27				28.5				\
29		SLIGHTLY SANDY CLAY	STIFF		6	П	13	13
30		GREY AND YELLOWISH BROWN						
32		SLIGHTLY SANDY CLAY (CH)						
33			SITFF		7	П	9	9
35			5,,,,				3	
37				00 -				
38		OLIOUTIV OANDV CLAY) (EDV 07:55	38.5			- 00	28
40		SLIGHTLY SANDY CLAY	VERY STIFF		8	ш	28	<u> </u>
41		GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH) WITH						
43		LIMESTONE]	43.5				28
44 45 46	群莊	LIMESTONE	28 BLOWS - 12"		9	Ш	28	
46	母母	LIGHT BROWN LIMESTONE						
47 48	基語							
48 49 50	起棋		14 BLOWS - 12"		10	П	14	14
51 52	華華] \
52	華華							
54	出班		29 BLOWS - 12"	55.0	11	П	29	29
53 54 55 56 57	1	End of Borehole	1					1 I
57	=	End of poletions						

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 1, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 4 OF 22

Log of shibit Ae. Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Enclosure: BORING MAP



1016 SE 3rd Avenue Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
0-		Ground Surface		0.0				
3 4		FINE SAND BROWN FINE SAND (SP)	HAND AUGERED (0.0'-6.0')	4.0				
01234567890123456789001234567890123456789012334567890123345678901233456789012334567890123345678901233456789012334567890123345678901200000000000000000000000000000000000	* ·	CLAYEY SAND YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	LOOSE MEDIUM DENSE		1 2	H	6 16	6
13 14 15 16 17			LOOSE		3	П	9	9
18 19 20 21			LOOSE		4	П	7	7
23 24 25 26	/		LOOSE		5	П	4	4
27 28 29 30 31			LOOSE		6	П	7	7
32 33 34 35 36		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)	MEDIUM STIFF	33.5	7	П	5	5
37 38 39 40 41		SEIGHTET SANDT CEAT (CIT)	MEDIUM STIFF		8	П	6	6
43 44 45 46			STIFF		9	П	10	10
48			STIFF	50.0	10	П	14	14
4454474490111111111111111111111111111111111	/ 2	End of Borehole	311(1	30.0	10	11	14	
54 55 56 57								

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 1, 2023 Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 5 OF 22

Log oFxbibit Ae. Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Enclosure: BORING MAP



1016 SE 3rd Avenue Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
0		Ground Surface		0.0				
1 1 3		LIMEROCK LIGHT BROWN LIMEROCK	HAND AUGERED (0.0'-6.0')	4.0				
2345678901112341511111111111111111111111111111111		CLAYEY SAND YELLOWISH BROWN AND GREY CLAYEY SAND (SC) % PASS -200 AT APPROX. 5.0 FEET = 31	LOOSE MEDIUM DENSE		1 2		9	9
13 14 15 16	مر		MEDIUM DENSE		3	П	10	10
17 18 19 20 21 21 22	/		LOOSE	00.5	4	ш	8	8
23 24 25 26 27		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)	STIFF	23.5	5	П	10	10
28 29 30 31 32			VERY STIFF	22.5	6	П	16	16
35 36 36 37		LIMESTONE LIGHT BROWN LIMESTONE	10 BLOWS - 12"	33.5	7	П	10	10
38 39 40			50 BLOWS - 1"	40.0	8	П	50	50
401 412 434 445 445 455 555 555 557		End of Borehole						

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 1, 2023 Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 6 OF 22

Log oFxbibit Ae: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Enclosure: BORING MAP

1016 SE 3rd Avenue Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
0-		Ground Surface		0.0				
012345678901113456789012324567890012334567890111111111111111111111111111111111111		FINE SAND BROWN FINE SAND (SP) WITH LIMEROCK	HAND AUGERED (0.0'-6.0')	4.0				
5-		FINE SAND		6.0				10
7-8-		LIGHT BROWN FINE SAND (SP) CLAYEY SAND	LOOSE		1		10	10
10-		YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	MEDIUM DENSE		2	Ш	7	1
12-		02.112.1 67.112 (00)						1
14-			LOOSE		3	Ш	17	17
17 18 19			MEDIUM DENSE		4	-	6	6
20			WEDIOW DENOE		-			
23 24 25			LOOSE		5	П	11	111
26 27 28				28.5				
29 30 31		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN	MEDIUM DENSE		6		7	7
33 33 34		SLIGHTLY SANDY CLAY (CH)	MEDIUM STIFF		7	-	9	9.
35-			WEDIOW STILL				9	
38-			STIFF		8		28	28
40-			31111		0			1
42 43 44	11111	LIMECTONE	24 BLOWS - 12"	43.5		- 11-11	0.4	24
45 46		LIMESTONE LIGHT BROWN LIMESTONE	24 DLO443 - 12		9	П	24	
47 48 49	難		27 BLOWS - 12"	50.0	10	П	27	27
50		End of Borehole	21 DLUVVS - 12"	50.0	10		27	•
52								
50 51 52 53 54 55 56 57								
57-								

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 1, 2023 Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 7 OF 22

Log oFxbibit A .: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA

Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Enclosure: BORING MAP

1016 SE 3rd Avenue Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
0=		Ground Surface		0.0				
3		FINE SAND BROWN FINE SAND (SP)	HAND AUGERED (0.0'-6.0')	4.0				
5 6 7 8	~	CLAYEY SAND YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	MEDIUM DENSE		1	П	15	15 14
10 11 12		% PASS -200 AT APPROX. 5.0 FEET = 30	MEDIUM DENSE	13.5	2	Ш	14	1
13- 14- 15- 16- 17-		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)	MEDIUM STIFF	13.0	3	П	8	8
18 19 20 21			STIFF		4	П	13	13
23 24 25 26			STIFF		5	П	12	12
012345678901123456789012345678901234567890 11123456789012222222222333333333333333333333333333			MEDIUM STIFF		6	П	8	8
33 34 35 36			STIFF		7	П	11	11
37 38 39 40 41		LIMESTONE LIGHT BROWN LIMESTONE	24 BLOWS - 12"	38.5	8	Ш	24	24
41 42 43 44 45 46			33 BLOWS - 12"		9		33	33
47		Ford of Develope	22 BLOWS - 12"	50.0	10	П	22	/22
50 51 52 53 54 55 56 57		End of Borehole			11			

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 1, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile : 8 OF 22

Log of shibit her Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project

Boring Location: (SEE BORING LOCATION MAP)

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Project No: 23-3006.205.1

Engineer: NJH/CAH

Enclosure: BORING MAP



1016 SE 3rd Avenue Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
		Ground Surface CLAYEY SAND YELLOWISH BROWN AND GREY CLAYEY SAND (SC) FINE SAND BROWN FINE SAND (SP) SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)	HAND AUGERED (0.0'-6.0') SOFT STIFF	6.0	1 2	H	3 9	3 9
14 15 11 18 11 18 19 11 18 19 11 18 19 11 19 11 11 11 11 11 11 11 11 11 11		CLAYEY SAND YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	LOOSE	18.5	4 5	П	8 9	8
2890mmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmm			LOOSE LOOSE MEDIUM DENSE		7	П	5	5.
44344444444444444444444444444444444444		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH) LIMESTONE LIGHT BROWN LIMESTONE End of Borehole	VERY STIFF 43 BLOWS - 12"	43.5 48.5 50.0	9	П	19	19

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 9 OF 22

Log oFxhibit he. Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project N

Boring Location: (SEE BORING LOCATION MAP)

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Project No: 23-3006.205.1

Engineer: NJH/CAH

Enclosure: BORING MAP



Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
		Ground Surface		0.0				
1 1		FINE SAND	HAND AUGERED	2.0				
3		BROWN FINE SAND (SP)	(0.0'-6.0')					
012345678901123456789011123456789022222222222222333334567890112345678902222222222222222333333333333333333333		FINE SAND BROWN FINE SAND (SP) WTH LIMESTONE CLAYEY SAND	LOOSE LOOSE	8.0	1	П	5	5
10 11 12 13		YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	LOUSE		2		6	1
14 15 16 17	مر		MEDIUM DENSE		3	11	11	11
18 19 19 20 21 22 22 22 22 22 22 22 22 22 22 22 22			MEDIUM DENSE		4	П	10	10
23 24 25 26 26		LIMESTONE LIGHT BROWN LIMESTONE	5 BLOWS - 12"	23.5	5	П	5	5
28 29 30 31			7 BLOWS - 12"		6	П	7	7
32 33 34 35 36			11 BLOWS - 12"		7	П	11	11
41=			16 BLOWS - 12"		8	П	16	16
42 43 44 45 46			29 BLOWS - 12"		9	П	29	29
47 48 49 50 51 52 53 554 556 557 557 557 557 557 557 557 557 557		End of Deschale	37 BLOWS - 12"	50.0	10	П	37	37
52		End of Borehole						
54								
55								
57-								

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile : 10 OF 22

Log oFxbibit Ae: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Enclosure: BORING MAP

1016 SE 3rd Avenue Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
0-		Ground Surface		0.0				
012345678901234567890112345678901234567890142344244444444444444444444444444444444		FINE SAND BROWN FINE SAND (SP)	HAND AUGERED (0.0'-6.0')					
7			LOOSE	8.0	1		5	5
10 11 12		CLAYEY SAND YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	MEDIUM DENSE		2		11	11
13 14 15 16 17			MEDIUM DENSE		3	П	11	11
19 20 21 21	سر		LOOSE	23.5	4	П	6	6
23 24 25 26 27		SLIGHTLY SANDY CLAY LIGHT GREENISH GREY AND YELLOWISH BROWN SLIGHTLY	VERY STIFF	20.0	5	П	16	16
28 29 30 31 32		SANDY CLAY (CH)	STIFF		6	П	13	13
33- 34- 35- 36- 37-			VERY STIFF		7	П	18	18
38 39 40 41 42			VERY STIFF		8	П	18	18
43 44 45 46 47			STIFF		9	П	14	14
48 49 50 51 52 53 54		LIMESTONE LIGHT BROWN LIMESTONE End of Borehole	17 BLOWS - 12"	48.5	10	П	17	17
56 57								

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023 Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 11 OF 22

Log oFxhibit Ae: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No: 23-3006.205.1

Enclosure: BORING MAP

Boring Location: (SEE BORING LOCATION MAP)

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Engineer: NJH/CAH

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Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
		Ground Surface		0.0				
1 2 3 4 5		FINE SAND BROWN FINE SAND (SP)	HAND AUGERED (0.0'-6.0')	6.0				
6		CLAYEY SAND	10005	0.0	_	П		9
8		YELLOWISH BROWN AND GREY	LOOSE		1		9	27
10		CLAYEY SAND (SC)	MEDIUM DENSE		2		27	*
11- 12- 13-			MEDIUM DENGE					26
15			MEDIUM DENSE		3	ш	26	<u> </u>
16- 17- 18- 19- 20-			MEDIUM DENSE		4		11	11
21								
23 23 24 25			DENSE		5	П	31	31
26 27 28 29			MEDIUM DENSE		6	П	13	- 13
30 31 32			MESION SERIOL				10	
34 35 36			VERY LOOSE		7	П	3	3
37				38.5				
39		SLIGHTLY SANDY CLAY	VERY SOFT		8	П	2	2.
41 42 43		LIGHT GREENISH GREY AND YELLOWISH BROWN SLIGHTLY						
44 45 46		SANDY CLAY (CH)	STIFF		9	П	10	10
47 48								
49 50			VERY STIFF	50.0	10	Ш	16	16
0.12345678901234566789012345667890122345667890123345667890123345667890123345667890123345667890123456789012345678000000000000000000000000000000000000		End of Borehole						

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 12 OF 22

Log oFxhibit Ae: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Pro

Project No: 23-3006.205.1

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Boring Location: (SEE BORING LOCATION MAP)

..........

Enclosure: BORING MAP



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Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
0-	*********	Ground Surface		0.0				
2		FINE SAND BROWN FINE SAND (SP)	HAND AUGERED (0.0'-6.0')	2.0				
4		SLIGHTLY CLAYEY SAND	(0.0-0.0)	4.0				
6- 7-		YELLOWISH BROWN SLIGHTLY CLAYEY SAND (SP-SC)	LOOSE		1	П	6	6
8-		% PASS -200 AT APPROX. 3.0 FEET = 11	MEDIUM DENSE		2		28	28
10- 11- 12- 13- 14- 15-		CLAYEY SAND YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	MEDIUM DENSE		3		19	19
01234567890112341567890112345678901333335678	/		MEDIUM DENSE		4	П	17	17
22 23 24 25 26	<i>></i>		LOOSE		5	П	7	7
28- 29- 30- 31- 32-		SLIGHTLY SANDY CLAY LIGHT GREENISH GREY AND YELLOWISH BROWN SLIGHTLY	VERY STIFF	28.5	6	П	27	27
33- 34- 35- 36-		SANDY CLAY (CH)	VERY STIFF		7	П	28	28
37 38 39 40 41		LIMESTONE LIGHT BROWN LIMESTONE	6 BLOWS - 12"	38.5	8	Ш	6	6
43- 44- 45- 46-			6 BLOWS - 12"		9	П	6	6
47- 48- 49- 50- 51- 52- 53- 54-			21 BLOWS - 12"		10	П	21	21
53- 54- 55- 56- 57-			12 BLOWS - 12"		11	II	12	12

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023 Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 13 OF 22

Log oF&bibit Ae: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

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Client: CITY OF OCALA ENGINEERING DEPARTMENT

Enclosure: BORING MAP

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
58 59			50 BLOWS - 6"	60.0	12	П	50	50
589 661 663 666 667 772 775 777 778 8123 8845 889 991 995 998 990 1102 1102 1102 1102 1102 1102 1102		End of Borehole					30	

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023 Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 13 OF 22

Log of shibit Ae: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No: 23-3006.205.1

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Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Boring Location: (SEE BORING LOCATION MAP)

Enclosure: BORING MAP

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Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
0-		Ground Surface		0.0				
012345678901123456789000123456789000123456789000123456789000123456789000123456789000123456789000000000000000000000000000000000000		FINE SAND BROWN FINE SAND (SP)	HAND AUGERED (0.0'-6.0')	6.0				
6		CLAYEY SAND	MEDILIM DENCE	6.0	4		40	10
8]		YELLOWISH BROWN AND GREY	MEDIUM DENSE		1		10	21
9 10 11 12 13	~	CLAYEY SAND (SC)	MEDIUM DENSE		2	Ш	21	
14- 15- 16-	~		MEDIUM DENSE		3	П	25	25
17 				18.5				
19 20 21	4	FINE SAND BROWN FINE SAND (SP)	MEDIUM DENSE		4		27	27
22 23 				23.5				
24 25 26 27	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	CLAYEY SAND YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	LOOSE		5	Ш	6	6
28 29 30 31 31			LOOSE		6	П	4	4
33 34 35 36			LOOSE		7	П	5	5
37- 38- 39- 40-		SLIGHTLY SANDY CLAY	SOFT	38.5	8	П	4	4
41 42 43		LIGHT GREENISH GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)						
44 45 46			MEDIUM STIFF		9	Ш	6	6
445011111111111111111111111111111111111			MEDIUM STIFF		10	П	5	5
53 54 55 56 57		1:	MEDIUM STIFF		11	П	8	8

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023 Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 14 OF 22

Log of shibit A: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA

Boring Location: (SEE BORING LOCATION MAP)

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Project No: 23-3006.205.1

Engineer: NJH/CAH

Enclosure: BORING MAP



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								J
Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
58 59 60 61 62 63 64		LIMESTONE LIGHT BROWN LIMESTONE	21 BLOWS - 12" 50 BLOWS - 3"	58.5 65.0	12		21	21
59012345678901723456777777777777788888888889992345678999999999999999999999999999999999999		End of Borehole						

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 14 OF 22

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Enclosure: BORING MAP



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Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
		Ground Surface		0.0				
012345678901234567890012345678901233456789012334567890123344443		FINE SAND BROWN FINE SAND (SP)	HAND AUGERED (0.0'-6.0')					
6		OLAVEY CAND		6.0				17
7 8		CLAYEY SAND YELLOWISH BROWN AND GREY	MEDIUM DENSE		1	Ш	17	24
9 10 11 11		CLAYEY SAND (SC)	MEDIUM DENSE		2	Ш	24	- 1
13]								38
15			DENSE		3	11	38	
16 17								
18-			DENCE		4		25	35
201			DENSE		4	ш	35	· /
22								
24			LOOSE		5	П	8	8
26								
28								8
29 d			LOOSE		6	ш	8	-
31=								
33	1		MEDILIM DENCE		-	-	40	10
35			MEDIUM DENSE		7		10	- f
37	-			20.5				
38 = 39 =		SLIGHTLY SANDY CLAY	MEDIUM STIFF	38.5	8	п	5	5
40 3		GREY AND YELLOWISH BROWN	MEDIOM OTH		-		J	- T
42		SLIGHTLY SANDY CLAY (CH)						
44			STIFF		9	П	11	11
45								
47								
49			VERY STIFF		10	Π	30	30
51								/
53								/
74456744901123345567 44567490552345567 5557			MEDIUM STIFF		11	ш	7	(
56								
	أكسي		<u></u>					

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 15 OF 22

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA

Project No: 23-3006.205.1

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Boring Location: (SEE BORING LOCATION MAP)

Enclosure: BORING MAP



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Depth (ft) Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
559061223456667777237475677890112348888889999234566789990110234566788990112334 889999999999999999999999999999999999	LIMESTONE LIGHT BROWN LIMESTONE End of Borehole	50 BLOWS - 4"	58.5	12		50	50

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023 Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 15 OF 22

Drilled By: AM

Log of Shibit A -: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA

Boring Location: (SEE BORING LOCATION MAP)

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Project No: 23-3006.205.1

Engineer: NJH/CAH

Enclosure: BORING MAP



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Depth (ft)	Symbol	Description	Depth/Elev.	Number	Remarks
0		Ground Surface FINE SAND	0.0	1	BORING TERMINATED AT APPROX. 1.0 FOOT
0123456789011134567890123456789001233456789012345678901233456789012334565555555555555555555555555555555555		End of Borehole			BELOW EXISTING SITE GRADE DUE TO UNDERGROUND OBSTRUCTION

Ground Water Depth: NOT FOUND

Drill Date: SEPTEMBER 5, 2023

Drilled By: AM

Drill Method: ASTM D-4700

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 16 OF 22

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA

Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Engineer: NJH/CAH

Enclosure: BORING MAP

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Description
FINE SAND BROWN FINE SAND (SP) FINE SAND BROWN FINE SAND (SP) LOOSE
FINE SAND BROWN FINE SAND (SP) HAND AUGERED (0.0°-6.0°) LOOSE LOOSE LOOSE LOOSE 1
36 STATE LIGHT BROWN LIMESTONE 37 STATE ST
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 STATE LIGHT BROWN LIMESTONE 37 STATE ST
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 38 38 38 38 38 38 38 38 38 38 38 38
36 37 37 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38
37 38 38 38 38 38 38 38 38 38 38 38 38 38
10 = 12 9 1 21
43 44 43 44 41 42 41 41 41 41 41 41 41 41 41 41 41 41 41
45 10 10 11 21
48 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
50 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
37 BLOWS - 12" 12 37 37
28 BLOWS - 12" 11

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 17 OF 22

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA

Project No: 23-3006.205.1

Engineer: NJH/CAH

1016 SE 3rd Avenue Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Boring Location: (SEE BORING LOCATION MAP)

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Enclosure: BORING MAP

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standa	rd Penetrat N-Values 40 60	ion Test 80 100
58 59			50 BLOWS - 4"	60.0	13	П	50		50	
589601 663 664 666 6771 773 774 776 881 823 885 888 899 992 399 990 1004 1067 1078 1078 1078 1078 1078 1078 1078 107		End of Borehole								

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile 17 OF 22

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA

Boring Location: (SEE BORING LOCATION MAP)

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Project No: 23-3006.205.1

Engineer: NJH/CAH

Enclosure: BORING MAP



ENGINEERING CONSULTANTS 1016 SE 3rd Avenue

Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
01123456		Ground Surface CLAYEY SAND BROWN CLAYEY SAND (SC) % PASS -200 AT APPROX. 1.0 FOOT = 15	HAND AUGERED (0.0'-6.0')	0.0 2.0 4.0				
99111111111111111111111111111111111111		FINE SAND BROWN FINE SAND (SP) CLAYEY SAND YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	LOOSE STIFF	8.0	1 2		8 13	13
14 15 16 17 18 19 19		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)	MEDIUM STIFF SOFT		3	11	8	4
21 22 23 24 25 26 27			VERY STIFF	20.5	5	11	30	30
28 29 30 31 32 33 33 34		LIMESTONE LIGHT BROWN LIMESTONE End of Borehole	50 BLOWS - 6"	28.5	6	П	50	50
36 37 38 39 40 41								
43 44 45 46 47 48								
0.1234567890112345167890112345167890112322222345678901123451678902222222222222333333441244444444445555555555								

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023 Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 18 OF 22

Drilled By: AM

Log of whilbit Ae: Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Engineer: NJH/CAH

Enclosure: BORING MAP



Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0-		Ground Surface		0.0				
0123456789011234567890112345678901 11234567890122222222223331	<i>/</i>	CLAYEY SAND BROWN TO YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	HAND AUGERED (0.0'-6.0')					
7			VERY LOOSE	8.0	1	Ш	3	3
10 11 12		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)	MEDIUM STIFF		2	Ш	7	7
14- 15- 16- 17-			VERY STIFF		3		16	16
19 20 21 22			VERY STIFF		4	Ш	18	18
24- 25- 26- 27- 28-			VERY STIFF	28.5	5	Ш	17	17
29 30 31 32 33		LIMESTONE LIGHT BROWN LIMESTONE	11 BLOWS - 12"		6	П	11	11
32- 33- 34- 35- 36- 37- 38-			19 BLOWS - 12"		7		19	19
38- 39- 40- 41- 42- 43-			14 BLOWS - 12"		8		14	
44 45 46 47			23 BLOWS - 12"		9		23	23
48- 49- 50- 51- 52- 53-			31 BLOWS - 12"		10	П	31	31
54	基盘		50 BLOWS - 5"	55.0	11	II	50	50
54 55 56 57		End of Borehole						

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 19 OF 22

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA

Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Enclosure: BORING MAP

ENGINEERING CONSULTANT 1016 SE 3rd Avenue Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
012345678901123141123144	/	Ground Surface CLAYEY SAND BROWN CLAYEY SAND (SC) % PASS -200 AT APPROX. 1.0 FOOT = 16 FINE SAND BROWN FINE SAND (SP) CLAYEY SAND GREY CLAYEY SAND (SC) SLIGHTLY SANDY CLAY	HAND AUGERED (0.0'-6.0') LOOSE LOOSE	6.0	1 2		5 7	5 7 15
012345678901123451678902222222222223333333333333333333333333		GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH) CLAYEY SAND YELLOWISH BROWN AND GREY CLAYEY SAND (SC)	STIFF MEDIUM DENSE MEDIUM DENSE	23.5	5		15	15 16 18
38 39 40 41 42		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH) LIMESTONE LIGHT BROWN LIMESTONE	MEDIUM STIFF 7 BLOWS - 12"	33.5	7 8	11	8	7
43 444 445 447 448 449 551 553 556 57 557		End of Borehole	43 BLOWS - 12" 50 BLOWS - 2"	50.0	10	Ш	50	50

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 20 OF 22

Log of Khiloit Ac. Attachment #1

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Enclosure: BORING MAP



Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Туре	Blows/ft	Standard Penetration Test N-Values 20 40 60 80 100
0		Ground Surface CLAYEY SAND	LIAND ALIGHBE	0.0 2.0				
3		BROWN CLAYEY SAND (SC)	(0.0'-6.0')	4.0				
5		% PASS -200 AT APPROX. 1.0 FOOT = 14		6.0				_
7 8		FINE SAND BROWN FINE SAND (SP)	LOOSE		1	Ш	7	7 27
9 10 11 12		ORGANIC SAND BLACK ORGANIC SAND (OL)	MEDIUM DENSE		2	Ш	27	- 1
13 14 15		% ORGANIC AT APPROX. 5.0 FEET = 17 % PASS -200 AT APPROX. 5.0 FEET = 34	MEDIUM DENSE		3	П	15	/15
16 17 18		CLAYEY SAND GREY CLAYEY SAND (SC)		18.5				/4
20 21 22 22		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)	SOFT		4		4	
24 25 26			VERY STIFF		5	П	16	16
01234567890112341567890012345678900123345678900123456789000123456789000123456789000000000000000000000000000000000000			MEDIUM STIFF		6	П	7	7
33 34 35 36 37			MEDIUM STIFF		7	П	8	8
38 39 40 41			VERY STIFF		8	П	17	17
43 43 44 45 46			VERY STIFF		9	П	18	18
44 45 46 47 48 49 50 51	++++	LIMESTONE LIGHT BROWN LIMESTONE	17 BLOWS - 12"	48.5	10	П	17	17
52 53 54 55 56 57			50 BLOWS - 2"	55.0	11	П	50	50
56 57		End of Borehole						

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: SEPTEMBER 6, 2023

Drilled By: AM

Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile: 21 OF 22

Project: PROPOSED PARKING GARAGE, SW BROADWAY ST, OCALA

Project No: 23-3006.205.1

Boring Location: (SEE BORING LOCATION MAP)

Engineer: NJH/CAH

Client: CITY OF OCALA ENGINEERING DEPARTMENT

Enclosure: BORING MAP

ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, Florida 352.694.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft		enetration Test alues 4 60 80 100
0-		Ground Surface		0.0					
1 2 3 4		PAVEMENT SECTION ASPHALT = 1 1/4" LIMEROCK = 7"	HAND AUGERED (0.0'-6.0')						
5 6 7		FINE SAND BROWN FINE SAND (SP)	LOOSE	8.0	1	П	1	.1	
9 10-	~	CLAYEY SAND GREY CLAYEY SAND (SC)	LOOSE		2	11	4	4	
12				13.5					
012345678901123456789011234567890112345678901222222222222333335667		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)	MEDIUM STIFF		3	Ш	6	6	
18 19 20			STIFF		4	JI	10	10	
22				23.5				17	
24 25 26		CLAYEY SAND YELLOWISH BROWN AND GREY	MEDIUM DENSE		5		17	17	
28		CLAYEY SAND (SC)	CTIFF	28.5	0		_	9	
30 31 32		SLIGHTLY SANDY CLAY GREY AND YELLOWISH BROWN SLIGHTLY SANDY CLAY (CH)	STIFF		6	-11	9		
34 35 36		LOSS OF DRILLING FLUID CIRCULATION AT APPROX. 31.0 FEET	STIFF		7	П	15	15	
37 38				38.5				17	
39 40 41		LIMESTONE LIGHT BROWN LIMESTONE	17 BLOWS - 12"		8		17	1	
43 44 44			23 BLOWS - 12"		9	П	23	23	
46 46 47									
48 49 50			21 BLOWS - 12"	50.0	10	П	21	21	
51 52		End of Borehole							
51 52 53 54 55 56 57									
56 57									

Ground Water Depth: GREATER THAN 10.0 FEET

Drill Date: OCTOBER 13, 2023

Drilled By: WH/CM/ZC
Drill Method: ASTM D-1586

Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW

Soil Profile 22 OF 22

APPENDIX II

BORING LOCATION MAP

Exhibit A - Attachment #1



PROPOSED PARKING GARAGE PID NO. 2853-026-001, 2853-026-002, 2853-026-003 AND 28553-026-004 SW BROADWAY STREET, OCALA, FLORIDA

BORING LOCATION MAP

■GEOTECHNICAL ■ENVIRONMENTAL
■CONSTRUCTION MATERIALS TESTING ■GEOPHYSICAL EXPLORATION 1016 SE 3rd AVENUE, OCALA, FLORIDA 34471 ~ (352) 694-7711

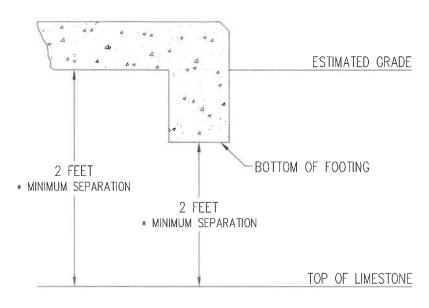
SCALE: N.T.S. DATE: 10-20-23

FIGURE:

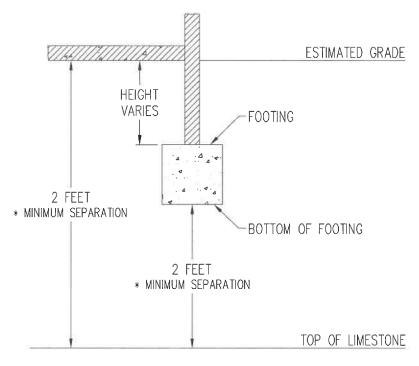
Exhibit A - Attachment #1

APPENDIX III

RECOMMENDED SEPARATION DETAIL



MONOLITHIC FOOTING DETAIL NOT TO SCALE



STEM WALL FOOTING DETAIL

NOT TO SCALE

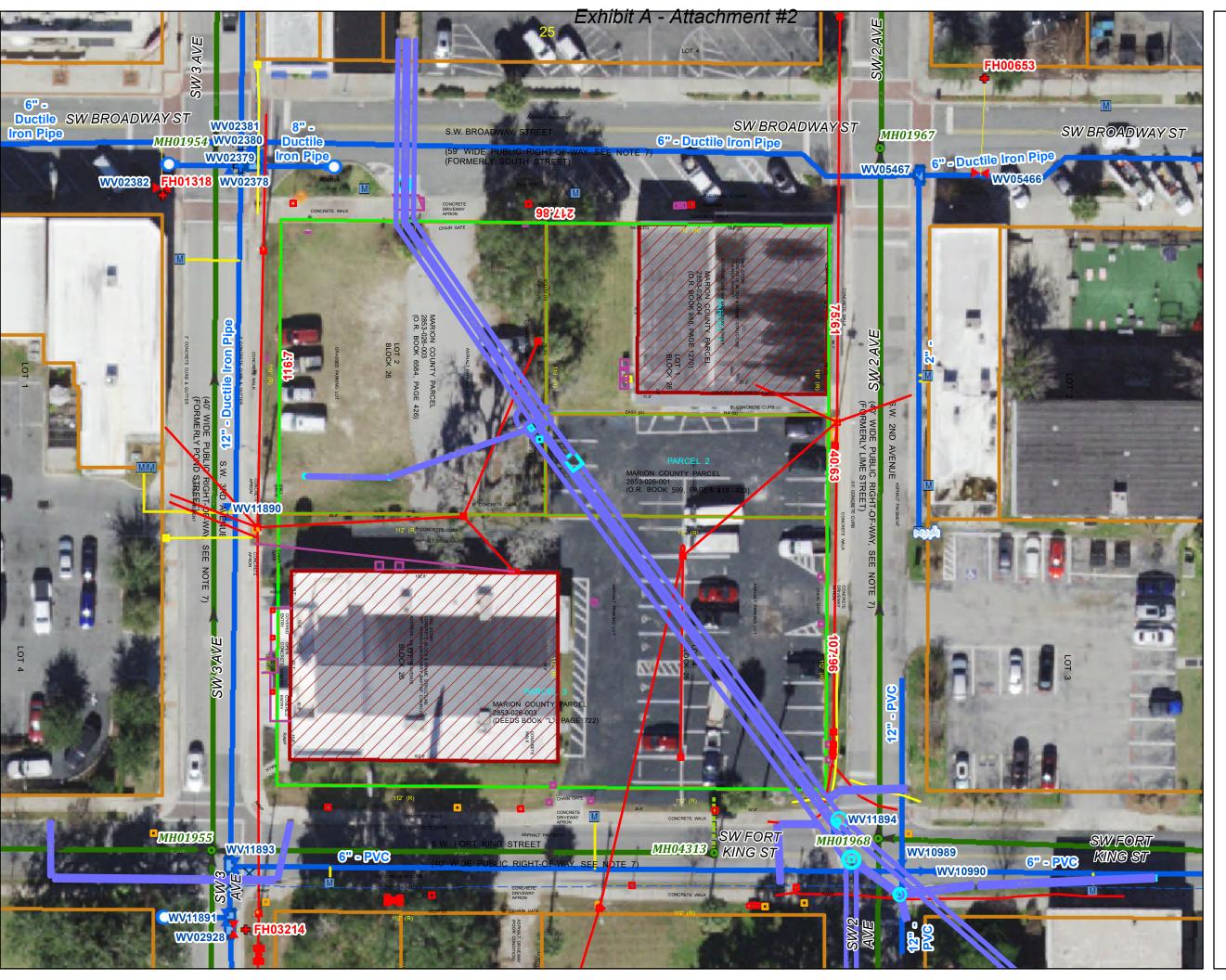
*MAY VARY DEPENDING UPON CONSTRUCTION TECHNIQUE

RECOMMENDED SEPARATION

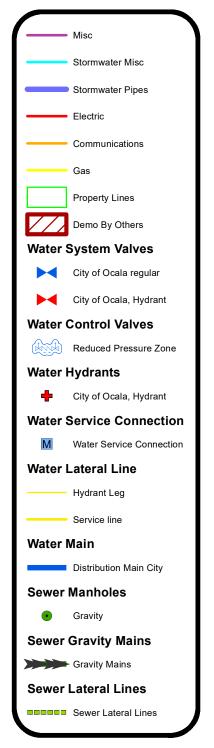


■GEOTECHNICAL ■ENVIRONMENTAL
■CONSTRUCTION MATERIALS TESTING ■GEOPHYSICAL EXPLORATION
1016 SE 3rd AVENUE, OCALA, FLORIDA 34471 ~ (352) 694-7711

Figure



New Parking
Garage
SW Broadway Blvd
SW Ft King
SW 2nd Ave
SW 3rd Ave







DESCRIPTION (SEE NOTE 4):

PARCEL 1:

COMMENCING AT THE NORTHEAST CORNER OF LOT 1, BLOCK 26 (AND BEING THE NORTHEAST CORNER OF SAID BLOCK) OF THE OLD SURVEY OF OCALA, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK E, PAGE(S) 1 AND 2, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA, AND RUNNING WEST 114 FEET, THENCE SOUTH 76 FEET THENCE EAST 114 FEET, THENCE NORTH 76 FEET TO THE POINT OF BEGINNING, BEING THE NORTH 76 FEET OF LOT 1, AND 2 FEET EAST AND WEST BY 76 FEET NORTH AND SOUTH IN THE NORTHEAST CORNER OF LOT 2 OF SAID BLOCK.

PARCEL 2:

SOUTH 36 FEET OF EAST 112 FEET OF LOT 1, BLOCK 26, OLD SURVEY OF OCALA, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK E, PAGE(S) 1 AND 2, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA.

PARCEL 3:

LOTS 3 AND 4 OF BLOCK 26, OLD SURVEY OF OCALA, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK E, PAGE(S) 1 AND 2, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA.

NOTES:

- 1. THIS BOUNDARY SURVEY WAS PREPARED FOR THE PURPOSE OF RENDERING A PROFESSIONAL OPINION AS TO THE LOCATION OF THE RECORD TITLE BOUNDARY LINES OF THE SUBJECT PROPERTY DESCRIBED HEREON; DETERMINING THE HORIZONTAL LOCATION OF VISIBLE FIXED IMPROVEMENTS LYING WITHIN, IN NEAR PROXIMITY TO AND / OR CROSSING THE BOUNDARY LINES OF THE SUBJECT PROPERTY; AND TO FACILITATE THE CLOSING OF THE REAL ESTATE TRANSACTION TO ACHIEVE THE SUBSEQUENT CONVEYANCE AND VESTING OF THE SUBJECT PROPERTY'S TITLE INTO THE CITY OF OCALA, A MUNICIPAL CORPORATION OF THE STATE OF FLORIDA.
- 2. ALL RECORDING DATA DEPICTED AND / OR NOTED HEREON REFERENCES THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA, UNLESS SPECIFIED TO THE CONTRARY.
- 3. THIS SURVEY HAS BEEN PREPARED WITH THE BENEFIT OF THE TITLE COMMITMENT ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, FILE NUMBER 2076-5993955, ISSUING AGENT: GOODING & BATSEL, PLLC, ISSUING OFFICE FILE NUMBER: TITLEWORK CITY 2022 CITY PF MT MORIAH, COMMITMENT DATE: MAY 07, 2002, @ 8:00 AM; FOLLOWING ARE EXCEPTIONS TO TITLE AS REFERENCED IN SCHEDULE BII THEREOF WHICH ARE ALSO CONSIDERED AS MATTERS OF SURVEY AFFECTING THE SUBJECT PROPERTY DESCRIBED HEREON:
 - A. MATTERS APPEARING ON THE PLAT RECORDED IN PLAT BOOK E, PAGE(S) 1, AFFECT THE SUBJECT PROPERTY AS MORE PARTICULARLY SHOWN ON SHEET 2 (SCHEDULE BII, ITEM 9).
 - B. THE EASEMENT GRANTED TO THE CITY OF OCALA RECORDED IN DEED BOOK 322, PAGE 128, ENCUMBERS THE PORTION OF PARCEL 3 LYING WITHIN LOT 4, BLOCK 26, AS MORE PARTICULARLY SHOWN ON SHEET 2 (SUBJECT TO THE POTENTIAL ALTERNATE LOCATION AS INFLUENCED BY THE FACTORS DESCRIBED IN NOTE 8) (SCHEDULE BII, ITEM 10).
 - C. THE EASEMENT GRANTED TO AMERICAN TELEPHONE AND TELEGRAPH COMPANY RECORDED IN BOOK 1479, PAGE 1485, ENCUMBERS THE PORTION OF PARCEL 3 THAT LIES WITHIN LOT 4, BLOCK 26, AS MORE PARTICULARLY SHOWN ON SHEET 2 (SCHEDULE BII, ITEM 11).
 - D. THE EASEMENT GRANTED TO THE CITY OF OCALA RECORDED IN BOOK 5646, PAGE 1579, ENCUMBERS THE PORTION OF PARCEL 3 LYING WITHIN LOT 4, BLOCK 26, AS MORE PARTICULARLY AND APPROXIMATELY SHOWN ON SHEET 2 (SCHEDULE BII, ITEM 12).
- 4. THE LEGAL DESCRIPTION OF THE PROPERTY DESCRIBED HEREON WAS TRANSCRIBED FROM SCHEDULE A OF THE TITLE COMMITMENT REFERENCED IN NOTE 3 (AS TO PARCELS 1 THROUGH 6, INCLUSIVE) AND ALSO FROM THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 6584, AT PAGE 426, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA (AS TO PARCEL "A") TO DEFINE AND DESCRIBE THE PARCELS OF LAND PROPOSED FOR ACQUISITION FROM MT. MORIAH MISSIONARY BAPTIST CHURCH OF OCALA, INC. (AS TO PARCELS 1 THROUGH 6, INCLUSIVE), AND FROM IOM, A FLORIDA LIMITED LIABILITY COMPANY (AS TO PARCEL "A").
- 5. BEARINGS AND DISTANCES SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE), NORTH AMERICAN DATUM (NAD) OF 1983 (2011 ADJUSTMENT), AS DETERMINED FROM REAL TIME KINEMATIC (RTK) OBSERVATIONS UTILIZING BOTH GLOBAL POSITIONING SYSTEM (GPS) AND GLOBAL NAVIGATION SATELLITE SYSTEM (GLONASS) SATELLITE CONSTELLATIONS, THE CORRECTIONS TO WHICH WERE RECEIVED FROM THE FLORIDA PERMANENT REFERENCE NETWORK (FPRN) AS OPERATED AND MAINTAINED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) WITH ACCEPTABLE INDEPENDENT CHECKS MADE TO OFFSITE HORIZONTAL CONTROL STATIONS PREVIOUSLY ESTABLISHED BY THE SURVEY DIVISION OF THE OCALA CITY ENGINEER'S OFFICE, FROM WHICH THE SOUTH LINE OF BLOCK 26 OF THE OLD SURVEY OF OCALA, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK E, AT PAGE 1, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA, AS SHOWN AND MONUMENTED HEREON, BEARS N89°27'46"W.
- 6. THE HORIZONTAL LOCATION OF FEATURES INCLUDED IN THIS SURVEY WAS ACHIEVED VIA CONVENTIONAL SURVEY METHODOLOGIES TO INDEPENDENTLY VERIFY THE HORIZONTAL DISTANCE BETWEEN CONTROL POINTS ESTABLISHED FOR THE EXECUTION OF THIS SURVEY IN THE FORM OF A CLOSED TRAVERSE (ACHIEVING AN ERROR OF CLOSURE OF 1:73,076) UTILIZING AN ELECTRONIC TOTAL STATION TO SUBSEQUENTLY CONDUCT RADIAL TOPOGRAPHIC SURVEY MEASUREMENTS RESULTING IN AN EXPECTED HORIZONTAL ACCURACY OF +/- 0.05 FEET TO THE LOCATED FEATURES SHOWN HEREON.
- 7. THE ORIGINAL WIDTH OF ALL STREETS (WITH THE EXCEPTION OF S.W. BROADWAY STREET) LYING IMMEDIATELY ADJACENT TO THE SUBJECT LANDS WERE 1 CHAIN (66 FEET) AS ESTABLISHED BY AND SHOWN ON THE PLAT OF OLD SURVEY OF OCALA ("COUNTY SITE OF MARION COUNTY" SEE NOTE 12.V); THE ORIGINAL WIDTH OF S.W. BROADWAY STREET (FORMERLY SOUTH STREET) WAS 1-1/2 CHAINS (99 FEET); THE WIDTH OF SUCH STREETS WERE SUBSEQUENTLY REDUCED (FROM 66 FEET TO 40 FEET AND FROM 99 FEET TO 59 FEET) BY OFFICIAL ACTION OF THE MARION COUNTY BOARD OF COUNTY COMMISSIONERS ON APRIL 6, 1847, THE RECORD OF WHICH IS DOCUMENTED IN MINUTES VOLUME 1, AT PAGE 28, PUBLIC RECORDS OF MARION COUNTY, FLORIDA, PRIOR TO THE INCORPORATION OF THE CITY OF OCALA IN 1868.
- 8. THE INTERIOR LINES DIVIDING LOTS 1 THROUGH 4, INCLUSIVE, OF BLOCK 26, ARE SHOWN IN THE LOCATION SUPPORTED BY A PREPONDERANCE OF THE EVIDENCE RECOVERED DURING THE PREPARATION OF THIS SURVEY WHICH INCLUDES EXISTING MONUMENTATION, PHYSICAL SITE IMPROVEMENTS, OCCUPATION AND MAINTENANCE WHICH APPEAR TO BE IN SUBSTANTIAL AGREEMENT WITH THE DIMENSIONAL INFORMATION SHOWN ON THE MAP OF BLOCK 26 OF THE "OLD SURVEY" AS FOUND IN THE "ASSESSOR'S BLOCK BOOK" (SEE NOTE 12.X) WHICH ESSENTIALLY CREATES FOUR EQUAL-SIZED LOTS THROUGH ESTABLISHING INTERSECTING LINES THAT CONNECT THE MID-POINT ALONG EACH SIDE OF BLOCK 26 TO THE OPPOSITE MID-POINT BASED ON THE AMENDED BLOCK LENGTH THAT RESULTS FOLLOWING THE RIGHTS-OF-WAY REDUCTION REFERENCED IN NOTE 7 ("AMENDED BLOCK 26"); HOWEVER, THERE IS OTHER INFORMATION TO SUGGEST THAT AN ALTERNATE INTERPRETATION MAY EXIST AS TO THE LOCATION OF THE LOTS ("ALTERNATE LOCATION") BASED ON AN EQUAL-SIZED DIVISION OF BLOCK 26 AS DETERMINED FROM THE ORIGINAL BLOCK LENGTH PRIOR TO THE REDUCTION OF RIGHTS-OF-WAY REFERENCED IN NOTE 7 ("ORIGINAL BLOCK 26"); SUCH "ALTERNATE LOCATION" IS GRAPHICALLY SHOWN HEREON TO ILLUSTRATE THE POTENTIAL IMPACT TO THE BOUNDARIES OF THE SUBJECT PARCELS (AND EXISTING IMPROVEMENTS LYING THEREIN) SHOULD THE "ALTERNATE LOCATION" BE SUBSEQUENTLY DETERMINED TO BE THE INTERPRETATION AS TO THE PROPER LOCATION OF THE INTENDED LINES OF SUCH LOTS; TOWARDS RENDERING THE FINAL OPINION OF SURVEY AND DETERMINING WHICH INTERPRETATION REFLECTS THE PROPER INTENT, EFFORT WAS MADE TO DISCOVER THE OFFICIAL ACTION OR THE MANNER BY WHICH THE REFERENCED LOTS WERE CREATED OF RECORD AND ACCORDING TO INFORMATION PROVIDED BY GREG SAULS OF FIRST AMERICAN TITLE INSURANCE COMPANY, DEEDS OF RECORD AND MAPS IN THE "ASSESSOR'S BLOCK BOOK" HAVE BEEN PRIMARILY RELIED UPON TO DETERMINE THE INTENT WITH RESPECT TO THE SIZE AND LOCATION OF INDIVIDUAL LOTS WITHIN THE PLAT.

BOUNDARY SURVEY

CITY OF OCALA - REAL ESTATE DIVISION PROPOSED PROPERTY ACQUISITION - LANDS OF: MT. MORIAH MISSIONARY BAPTIST CHURCH OF OCALA, INC. & IOM, LLC

PARCEL 4:

LOT 1, BLOCK 27, OLD SURVEY OF OCALA, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK E, PAGE(S) 1 AND 2, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA.

PARCEL 5:

COMMENCING AT THE NW CORNER OF LOT 1, BLOCK 27, OLD SURVEY OF OCALA, AS PER PLAT THEREOF RECORDED IN PLAT BOOK E, PAGE(S) 1 AND 2, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA, RUNNING THENCE WEST 56 FEET, THENCE SOUTH 72 FEET, THENCE EAST 56 FEET, THENCE NORTH 72 FEET TO THE POINT OF BEGINNING; AND BEING ALSO DESCRIBED AS THE NORTH 72 FEET OF THE EAST 56 FEET OF LOT 2, BLOCK 27, OLD SURVEY OF OCALA, FLORIDA.

PARCEL 6:

THE WEST 1/2 OF LOT 3, BLOCK 27, EXCEPT THE NORTH 10 FEET THEREOF, OLD SURVEY OF OCALA, AS PER PLAT THEREOF RECORDED IN PLAT BOOK E, PAGE 2, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA, AND COMMENCE AT THE SOUTHWEST CORNER OF LOT 2, BLOCK 27, OLD SURVEY OF OCALA FOR THE POINT OF BEGINNING; THENCE SOUTH 10 FEET, THENCE EAST 112 FEET, THENCE NORTH 50 FEET, THENCE WEST 112 FEET, THENCE SOUTH 40 FEET TO THE POINT OF BEGINNING, SAID PLAT BEING RECORDED IN PLAT BOOK E, PAGE 2, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA. AND THE NORTH 72 FEET OF THE WEST 56 FEET OF LOT 2, BLOCK 27, OLD SURVEY OF OCALA, AS PER PLAT THEREOF RECORDED IN PLAT BOOK E, PAGE 2, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA.

AND

PARCEL "A":

LOT 2, BLOCK 26, OLD SURVEY OF OCALA, ACCORDING TO THE PLAT THEREOF, RECORDED IN PLAT BOOK E, PAGE 2, MARION COUNTY, FLORIDA, EXCEPT COMMENCING AT THE NORTHEAST CORNER OF SAID LOT 2, THENCE SOUTH 76 FEET, THENCE WEST 2 FEET, THENCE NORTH 76 FEET, THENCE EAST 2 FEET TO THE POINT OF BEGINNING.

- 9. A TITLE GAP EXISTS BETWEEN PARCEL 1 AND PARCEL 2 AS MORE PARTICULARLY SHOWN ON SHEET 2; SAID TITLE GAP AS IT MAY BE INFLUENCED BY THE "ALTERNATE LOCATION" OF LOT LINES DESCRIBED IN NOTE 8 IS ALSO MORE PARTICULARLY SHOWN ON SHEET 2; THE COMBINED DIMENSION (NORTH TO SOUTH) OF SAID PARCELS YIELDS A LENGTH OF 112 FEET WHICH COINCIDENTALLY IS THE SAME DIMENSION OF A LOT THAT LIES WITHIN A BLOCK IN THE OLD SURVEY OF OCALA WHICH WAS SURROUNDED BY STANDARD-WIDTH ROADS (1 CHAIN; 66 FEET) FOLLOWING THE RIGHTS-OF-WAY WIDTH REDUCTION DESCRIBED IN NOTE 7.
- 10. ACCORDING TO FLOOD INSURANCE RATE MAP (FIRM) NO. 12083C0517E (VERSION 2.3.3.2), AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), COMMUNITY 120330, PANEL 00517, SUFFIX E, EFFECTIVE DATE: APRIL 19, 2017, THE PROPERTY DESCRIBED HEREON APPEARS TO LIE IN ZONE "X" (AREAS OF MINIMAL FLOOD HAZARD).
- 11. OWNERSHIP AND PARCEL ACCOUNT INFORMATION DEPICTED AND / OR NOTED HEREON WAS OBTAINED FROM THE PUBLIC RECORD PROPERTY DATABASE OPERATED AND MAINTAINED BY THE OFFICE OF THE MARION COUNTY PROPERTY APPRAISER.
- 12. DURING THE COURSE OF PREPARING THIS SURVEY, THE FOLLOWING DATA AND RECORD SOURCES WERE USED IN RENDERING AN OPINION AS TO THE LOCATION OF THE BOUNDARIES OF RECORD TITLE FOR THE SUBJECT PARCEL:
- A. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 988, AT PAGE 1270 (AS TO PARCEL 1;
- B. THE COUNTY DEED RECORDED IN OFFICIAL RECORDS BOOK 599, AT PAGE 244 (AS TO PARCEL 2);
- C. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 599, AT PAGE 418 (AS TO PARCEL 2);
- D. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 599, AT PAGE 419 (AS TO PARCEL 2);
- E. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 599, AT PAGE 420 (AS TO PARCEL 2);
- F. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 599, AT PAGE 421 (AS TO PARCEL 2):
- G. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 599, AT PAGE 422 (AS TO PARCEL 2);
 H. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 599, AT PAGE 423 (AS TO PARCEL 2);
- I. THE TRANSCRIPTION OF THE WARRANTY DEED RECORDED IN DEEDS BOOK "L", AT PAGE 722 (AS TO PARCEL 3 AND PROVIDED WITH THE TITLE COMMITMENT REFERENCED IN NOTE 3);
- J. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 2154, AT PAGE 523 (AS TO PARCEL 4);
- K. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1106, AT PAGE 504 (AS TO PARCEL 4;
- L. THE CORRECTIVE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 2284, AT PAGE 513 (AS TO PARCEL 5);
- M. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1240, AT PAGE 24 (AS TO PARCEL 5);
 N. THE QUITCLAIM DEED RECORDED IN OFFICIAL RECORDS BOOK 3205, AT PAGE 1847 (AS TO PARCEL 6);
- O. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 3121, AT PAGE 94 (AS TO PARCEL 6;
- P. THE QUIT-CLAIM DEED RECORDED IN OFFICIAL RECORDS BOOK 947, AT PAGE 414 (AS TO PARCEL 6):
- Q. THE QUIT-CLAIM DEED RECORDED IN OFFICIAL RECORDS BOOK 947, AT PAGE 413 (AS TO PARCEL 6);
 R. THE QUIT-CLAIM DEED RECORDED IN OFFICIAL RECORDS BOOK 947, AT PAGE 412 (AS TO PARCEL 6):
- S. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 6584, AT PAGE 426 (AS TO PARCEL "A");
- T. THE WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1346, AT PAGE 1886 (AS TO PARCEL "A");
- U. THE TITLE COMMITMENT REFERENCED IN NOTE 3;
- V. THE PLAT OF THE OLD SURVEY OF OCALA ("COUNTY SITE OF MARION COUNTY") AS RECORDED IN PLAT BOOK E, PAGE 1;
- W. THE PLAT OF THE "OLD SURVEY" AND "NEW SURVEY" OF OCALA AS RECORDED IN PLAT BOOK E, PAGE 2;
- X. THE MAP OF BLOCKS 26 AND 27 (AND ADJOINING BLOCKS) OF THE "OLD SURVEY" AS FOUND IN THE "ASSESSOR'S BLOCK BOOK" (PAGE UNNUMBERED) IN THE FILES OF THE OFFICE OF THE CITY OF OCALA REAL ESTATE DIVISION.
- Y. THE PROPERTY RECORD CARD OF PARCEL ACCOUNTS 2853-026-001, 2853-026-002, 2853-026-003, 2853-026-004, 2853-0274-001, 2853-027-002 AND 2853-027-003 AS OBTAINED FROM THE OFFICE OF THE MARION COUNTY PROPERTY APPRAISER (NOTE: THE PARCEL ACCOUNT AND PROPERTY RECORD CARD CONTAINING OWNERSHIP AND PROPERTY TRANSFER HISTORY ASSOCIATED WITH THE REMAINING LANDS IN BLOCK 27 IS BLOCKED FROM ACCESS VIA THE PROPERTY OWNERSHIP MAPPING DATABASE (BETA MAPIT+) AS OPERATED AND MAINTAINED BY THE OFFICE OF THE MARION COUNTY PROPERTY APPRAISER AND, AS SUCH, UNAVAILABLE FOR REVIEW);
- Z. THE BOUNDARY SURVEY PREPARED FOR ADRIAN OWEN & WANDA HAMPTON AS PREPARED BY R.M. BARRINEAU & ASSOCIATES, INC., JOB NO. 12106, DRAWING NO. 12106, DATED JUNE 22, 2012, AS RECOVERED FROM THE RECORD ARCHIVES OF THE SURVEY DIVISION OF THE OCALA CITY ENGINEER'S OFFICE:
- AA. THE BOUNDARY SURVEY PREPARED FOR OCALA BROADWAY, LLC, AS PREPARED BY ABSOLUTE LAND SURVEYING, INC., JOB NO. 05-751, DATED APRIL 22, 2005, AS RECOVERED FROM THE RECORD ARCHIVES OF THE SURVEY DIVISION OF THE OCALA CITY ENGINEER'S OFFICE.
- 13. THIS SURVEY IS OF ONLY THE VISIBLE FIXED IMPROVEMENTS AND VISIBLE EVIDENCE OF UNDERGROUND UTILITIES AS OBSERVED AT THE TIME OF FIELD SURVEY LYING WITHIN, IN NEAR PROXIMITY TO AND / OR CROSSING THE BOUNDARY LINES OF THE SUBJECT PROPERTY; IMPROVEMENTS, UTILITIES, AND / OR ENCROACHMENTS, IF ANY, THAT LINE UNDERGROUND AND ARE CONCEALED FROM VIEW WERE NOT LOCATED EXCEPT AS MAY BE SHOWN HEREON.
- 14. DIGITAL COPIES OF THIS SURVEY ARE INVALID WITHOUT THE ELECTRONIC SIGNATURE OF THE FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER LISTED HEREON THAT IS DIGITALLY AUTHENTICATED; PRINTED COPIES OF THIS SURVEY ARE INVALID UNLESS THEY BEAR THE ORIGINAL SIGNATURE AND RAISED SEAL OF THE FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER LISTED HEREON.
- 15. ADDITIONS OR DELETIONS TO THIS SURVEY MAP BY ANY ENTITY OTHER THAN THE SIGNING PARTY ARE PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING PARTY.

	OF OCALA, A FLORIDA MUNICIPAL CORPORATION, AND TO
	GOODING & BATSEL, PLLC, THAT THIS SURVEY MEETS THE
	REQUIREMENTS OF THE STANDARDS OF PRACTICE SET
	FORTH IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE,
	PURSUANT TO CHAPTER 472.027, FLORIDA STATUTES.
	Degight great by Reby Botton Can a Manicipal Degistration of the Canal American American Canal C
0	0 R. KELLY ROBERTS, P.S.M.

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#WI: RKR CHECKED: RKR

E: 01.01.2022 SCALE: 1" = 20'

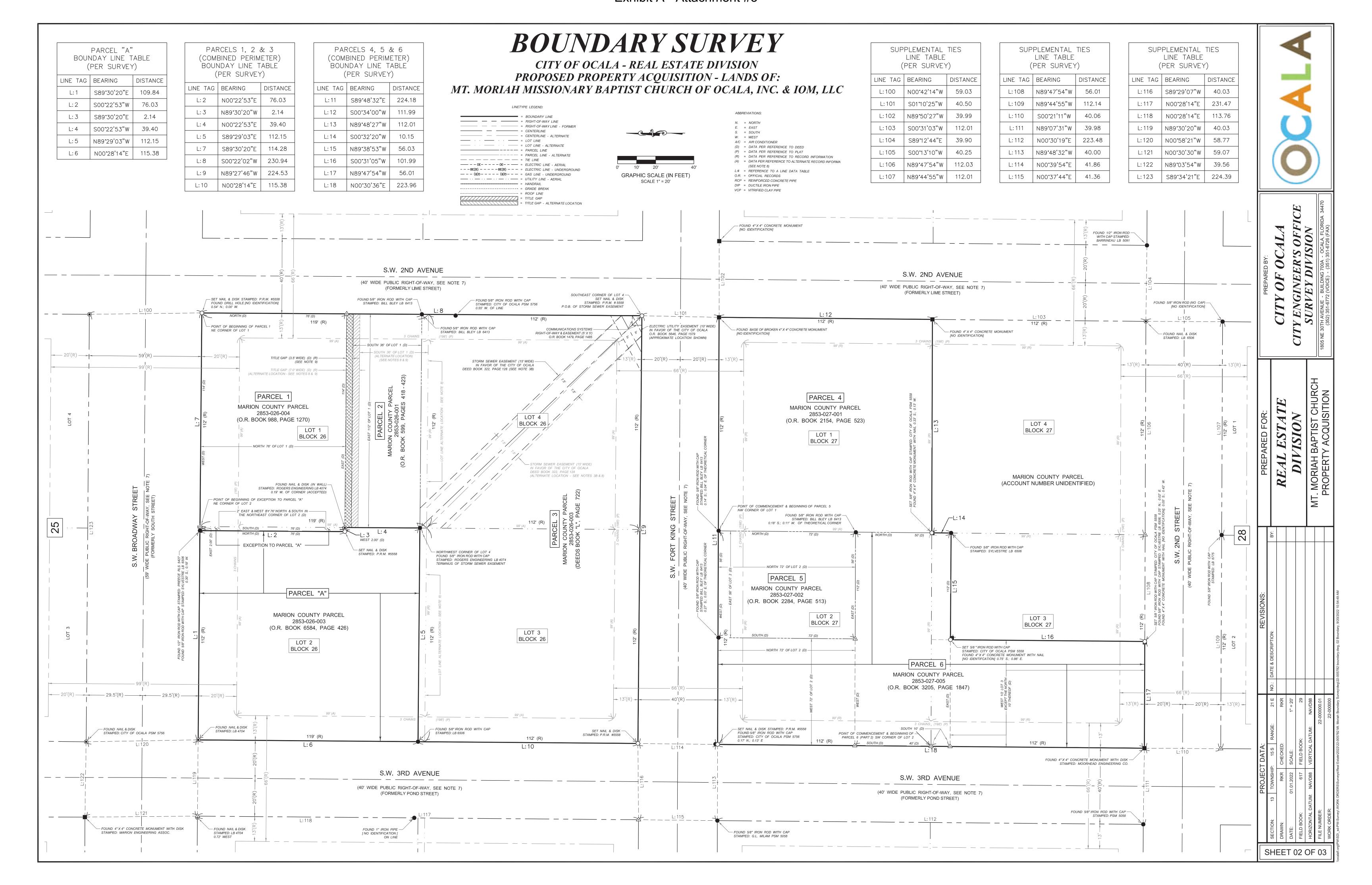
D BOOK: 617 FIELD BOOK: 29

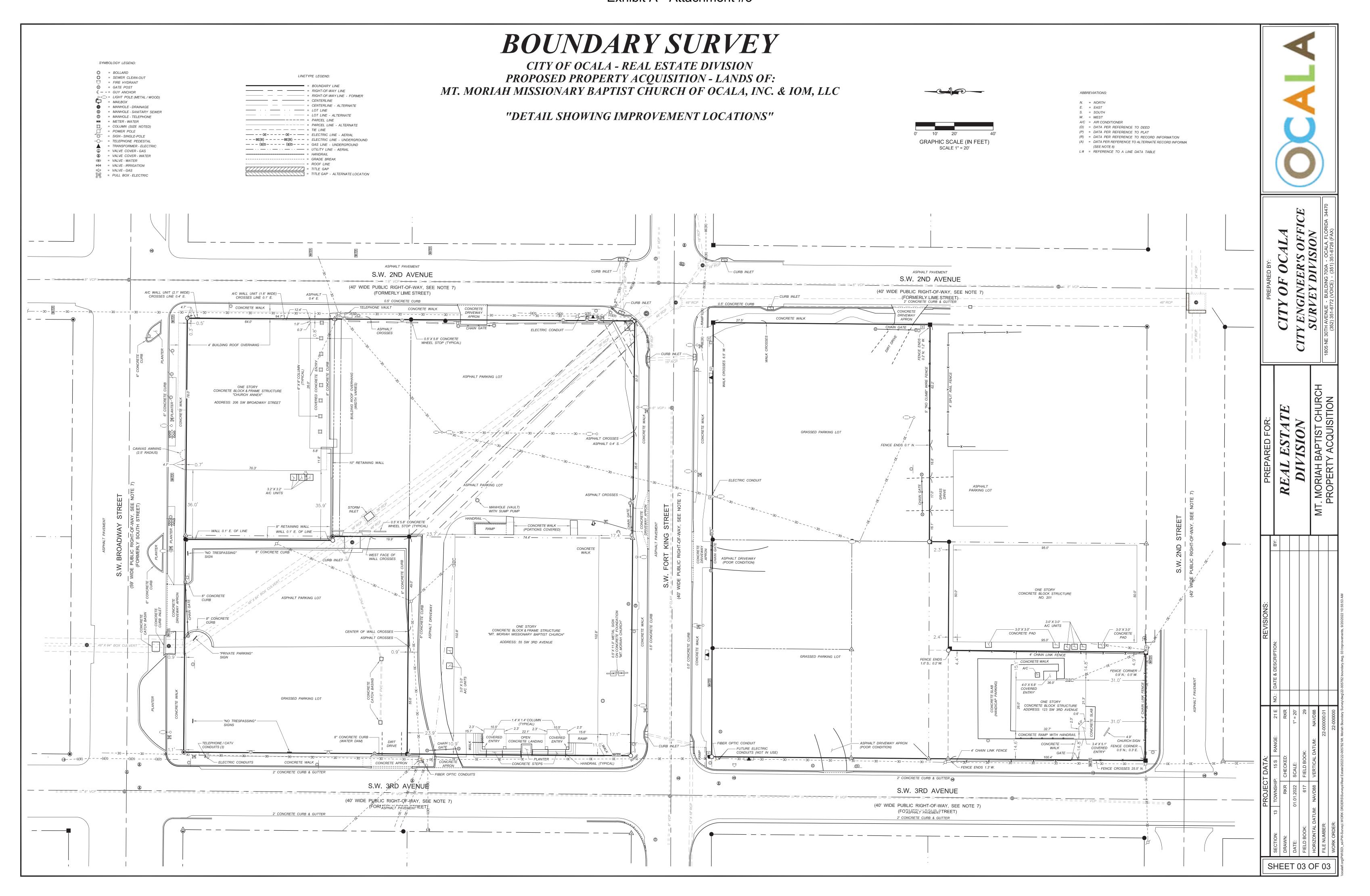
IZONTAL DATUM: NAVD88 VERTICAL DATUM: NAVD88

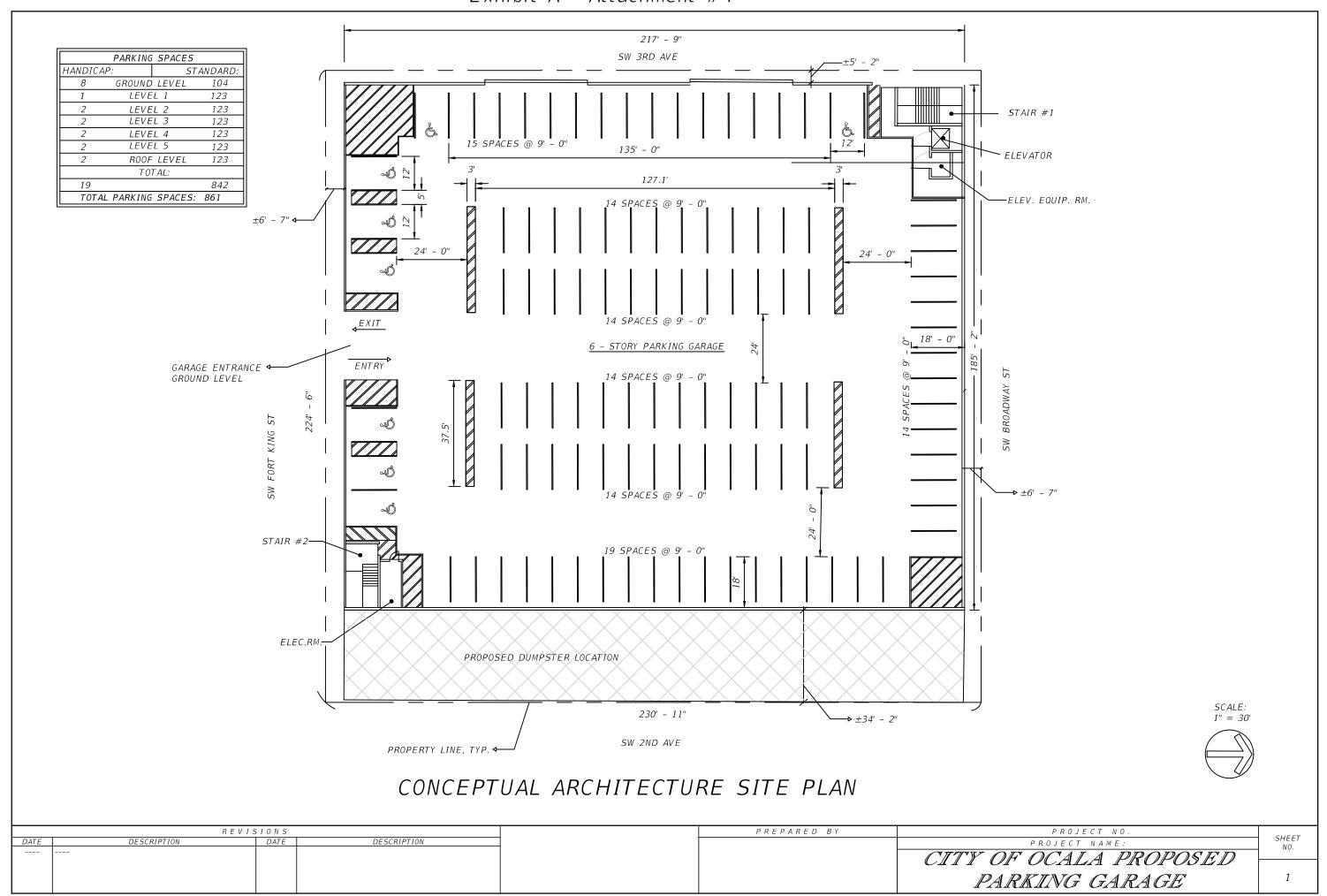
NUMBER: 22-000000.01

RK ORDER: 22-000000

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Parking Garage and Lay Down Area

