

**February 20, 2019**  
**BOARD OF COUNTY COMMISSIONERS**  
**ORANGE COUNTY, FLORIDA**  
**Addendum No. 2, IFB Y19-724-RC**  
**MOSS PARK RESTROOM**

**Bid Opening Date: March 5, 2019**

This addendum is hereby incorporated into the bid documents of the project referenced above. The following items are clarifications, corrections, additions, deletions and/or revisions to, and shall take precedence over, the original documents. Underlining indicates additions, deletions are indicated by ~~strikethrough~~.

**A. The bid opening date remains March 5, 2019 at 2:00 P.M.**

**B. Additions, Revisions, Deletions, Clarifications, Questions and Answers:**

**1. The following specifications have been revised in their entirety.**

- Specification Section 28 31 11

**2. Revision:** The following drawings have been revised to account for the changed Building location:

- C001: Demolition and Erosion Control Plan dated 2-18-19
- C101: Site Development and Grading Plan dated 2-18-19
- C301: Utility Plan dated 2-18-19

**3. Clarification:** Contractor shall be responsible for identifying trees within the building footprint and flagging said trees prior to demolition so that a field decision can be made as to adjust the building if possible to save said trees.

**4. Question:** Specifications call for lighting protection but there are no lighting protection plans. Should we follow the specification book or the plans?

**Answer:** Contractor to provide a lighting protection system in accordance with the specifications. This is a performance specification to which the contractor is to design and install a system in accordance with the Underwriters Laboratory (UL) and provide a label for the system installed.

**5. Question:** On the finished floor plan all have finished color TBD by the owner for resinous floor, walls and wet wall. Is the owner going to perform the finishing paint for these projects?

**Answer:** No, all finishes to be provided by the bidder.

**6. Question:** On the finished floor plan do not reference where the finishes are per the finish legend. Is there a page missing or is it on another page?

**Answer:** Finishes are as follows:

- Paint: Sherwin Williams 6231 “Repose Gray”
- Wall Tile: 12”x12” Dal-Tile Volume 1.0 VL72 “Reverb Ash”
- Wall Tile Grout: Custom Building Products “Oyster Gray” #09”
- Resinous Flooring and Base: Key Urecon SLT Quartz “Slate”
- 2-Station Lavatory Countertop: Commercial Washroom Innovation “Taupe Organic”
- Toilet Partitions: Scranton Products Solid Plastic HDPE “Paisley”

**7. Question:** Can you confirm what the ceiling material is made of? The legend states gypsum board, the detail on page A301 calls for cement board ceiling.

**Answer:** Interior ceiling is to be moisture resistant Gypsum Board painted and exterior to be Fiber Cement Board painted.

**8. Question:** Regarding the tile, one detail on page A-001, the tile is supposed to go to 6’0 above finished floor. Page, A101, it states tile is to go to 5’, and then on page A301, there is a section cut through showing the shower head at 6’4” with tile going above that.

**Answer:** 6” Resinous base with 6’ of tile capped with a bullnose tile. See sheet A-502 for additional information.

**9. Question:** Drawing P501 shows a detail for the thermostatic mixing valve. Please provide specs for the mixing valve and pipe sizes for manifold

**Answer:** TMV-1 shall be as follows: Tempering/Mixing Valve: Water mixing valve with minimum flow of 5.0 GPH, maximum flow of 21 GPH, dial type thermometer, adjustable high temperature limit stop, integral inlet check stops, strainers, outlet ball valve, locking temperature regulator, bronze body and cap with stainless steel piston & liner. Furnish with wall mounting bracket, 3/4” inlets, 1” outlet. Bradley S59-2045-T or equal.

**10. Question:** Drawing P001 - WC-1/WC-2 shows floor mounted carriers. Please confirm horizontal floor mounted carriers can be used?

**Answer:** The Sanitary Riser Diagram shows floor mounted carriers with individual vertical sanitary drops. The Contractor may use floor mounted carriers with a horizontal sanitary configuration in order to connect more than one water closet above slab and combine them. In addition, horizontal carriers can be used per Project Manual Specification 22 40 00 - 2.7.

**11. Question:** Has there been an asbestos survey conducted for the existing restroom to be demolished?

**Answer:** Yes. See attached PRE-DEMOLITION ASBESTOS SURVEY REPORT dated May 2017.

**12. Question:** The specs call for a glass block with aluminum frames, will acrylic block with vinyl frames be a suitable replacement?

**Answer:** No, provide what is specified.

**13. Question:** Plans are missing the signage plan.

**Answer:** See the attachment titled "Orange County Parks Signage" Dated 2/6/19

**14. Question:** Moss Park has a concrete bench with masonry under it. Please provide the length of the bench so we can complete our CMU take off.

**Answer:** The bench is 23' – 0" in length.

**15. Question:** Reference specification section 28 31 11 – The specification section seems to indicate a combination security / fire alarm system. However, the 3 acceptable manufacturers listed offer only fire alarm specific systems, not combination systems. Please confirm if this project requires a combination security / fire alarm system, and if so, provide the acceptable/ county approved manufacturers. If separate fire alarm and security systems are acceptable, please provide details on the acceptable security system manufacturers.

**Answer:** The combination Security System and Fire Alarm System called for on specification section 28 31 11 is now going to be reduced to only a Fire Alarm System. The owner will be furnishing and installing the Security System after the contractor has completed the project. The contractor shall furnish and install raceways, conduits and door contacts as called for on the plans. See attached revised specification section 28 31 11

**16. Question:** Sheet A-001 includes a wall type legend that is not utilized. Please confirm where these wall types will be installed during construction activities.

**Answer:** Refer to interior elevations for more detail.

**17. Question:** Sheet A-101 includes a finish plan legend that is not utilized. Please confirm where each type of finish will be required in the building.

**Answer:** See response to Question #6 above.

**18. Question:** Detail 1 on sheet S-104 includes a footing step detail, and references the foundation plan for the location of the footing step. The foundation plan on sheet S-102 does not reference this detail. Please indicate where a footing step will be required for the building foundation.

**Answer:** Footing steps for grade changes not anticipated to be needed at this time. However, contractor is responsible for coordination of building foundations with the topographic conditions as shown on C101.

**19. Question:** Specification section 10 21 13 paragraph 2.2 B, C, and D call for the toilet partitions on the project to be floor to ceiling anchored. Detail 3 on page A-501 includes a toilet partition detail showing ceiling-hung partitions with no floor anchoring. Please confirm that the design intent is for ceiling-hung partitions and not floor to ceiling anchored partitions.

**Answer:** Please follow details in drawings for ceiling-hung partitions.

- 20. Question:** Sheet E-201, note 5 says that all telecommunications and data wiring are to be installed by vendor. Does this note reference an Orange County vendor, or will this be the contractor's responsibility?  
**Answer:** Yes, this is an Orange County Vendor. Orange County will provide the data and telecommunications cabling and that the contractor is to provide and install all associated raceways, conduit and power required for the data and telecommunications cabling vendor. Contractor is responsible for coordinating all work and inspections with Orange County's data and telecommunications cabling vendor as it relates to completion of work, inspections and permit finals.
- 21. Question:** Is the contractor expected to provide temporary restroom facilities for the public through the duration of construction?  
**Answer:** No.
- 22. Question:** The Utility Plan on sheet C301 calls to wet tap the new 2" water line to the existing water line on-site. Please indicate the size of the existing water line.  
**Answer:** Assume a 2" wet tap to an existing 8" main. We were not able to obtain info on existing line.
- 23. Question:** Page C0001, site demolition note #10 says "Existing site may contain above and below ground improvements not depicted on this plan. Contractor shall verify site conditions with owner's representative and be responsible for removal or relocation of existing improvements interfering with new development." Contractor cannot be responsible for unknown underground conditions. Is it possible to remove #10 from the drawings, provide more clarification, or revise the bid to include an allowance for the removal of below ground improvements?  
**Answer:** Agreed. Note will be removed. However contractor is still responsible for contacting the utilities and sunshine to mark any known utilities.
- 24. Question:** Detail 4 on page A-501 has a note for 5/8" Gypsum Board pointing at the bond beam in the bulkhead. Does Orange County intend to make the sheath on the bulkhead cement board, like the rest of the ceiling?  
**Answer:** Please make this Cement Board matching the rest of the ceiling.
- 25. Question:** Specification section 09 67 23-2 paragraph 2.1A calls for Key Urecon SLT Quartz or comparable products by HB Fuller, L&M Construction Chemicals, or AI Flooring. Will any alternative resinous quartz products that can otherwise meet specifications be accepted for this project?  
**Answer:** No.
- 26. Question:** Does the Orange County expect the area that has been disturbed during construction/around the new restroom facility to be sodded?  
**Answer:** Yes. All disturbed areas shall be sodded with Bahia.

**27. Question:** There are several trees in the vicinity of the new building footprint. Please provide an additional drawing showing which of these trees are intended to be removed, as their roots may intrude into the working space.

**Answer:** Bidder should account for removal of all trees within vicinity of the new building footprint. Successful bidder shall stake building corners and at that time, Parks/Capital Projects will determine which trees, if any are to be removed or saved.

**28. Question:** No specifications are provided for exterior cementitious boards. Please provide a specification for the cementitious soffit and frieze detailed on sheets A-401 and A-501.

**Answer:** See attached Specification Section 07 46 46

**29. Question:** Specification section 10 21 13 and 19-3 calls for integral hinges, plastic pilaster shoes, and plastic stirrup brackets for the toilet partitions. A specialties subcontractor informed us that the majority of manufacturers, including most of the manufacturers in the recommended suppliers list, do not provide these as options anymore. The recommended alternatives would be 8" wrap-around aluminum hinges, aluminum stirrup brackets, and stainless steel pilaster shoes. Will Orange County consider these alternatives to the integral hinges and plastic equipment?

**Answer:** Provide what is specified, items are still available. The alternatives noted above would be a substitution request, and shall be handled as per No. 7 of Part C – Instruction to Bidders of the Invitation for Bids (below). Requests for substitutions will not be considered prior to contract award in accordance with the provision.

**30. Question:** Can Saniflow Hand Dryer Corp's Machflow hand dryer be substituted in lieu of the nine approved manufacturers?

**Answer:** This is a substitution request and shall be handled as per No. 7 of Part C – Instruction to Bidders of the Invitation for Bids (below). Requests for substitutions will not be considered prior to contract award in accordance with the provision. **NO. 7. PART C – INSTRUCTIONS TO BIDDERS**

#### **SUBSTITUTE MATERIAL AND EQUIPMENT:**

The Contract, if awarded, will be on the basis of material and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. Whenever materials or equipment or patented processes are specified or described in the Contract Documents by naming a trade name, manufacturer, supplier or proprietary item or catalog number, the naming of the item is intended to establish the type, function and quality required and to establish a basis for bidding.

Substitute materials or equipment may be considered after a Contract for the Work is executed if sufficient information is supplied by Contractor to allow Project Manager to evaluate the proposed substitution, unless the naming of the item is followed by words indicating that no substitution is permitted. The procedure for

submittal of any such application by Contractor and consideration by Project Manager is set forth in the General Conditions.

In the event that substitute materials or equipment are used and are less costly than the originally specified material or equipment, then the difference in cost of the item shall benefit the County and Contractor in equal proportions.

Applications for substitute materials and equipment shall only be evaluated after the Contract is executed. The Base Bid and Alternates shall reflect the costs for the materials and equipment named or specified only.

C. ACKNOWLEDGEMENT OF ADDENDA

- a. The Bidder/Proposer shall acknowledge receipt of this addendum by completing the applicable section in the solicitation or by completion of the acknowledgement information on the addendum. Either form of acknowledgement must be completed and returned not later than the date and time for receipt of the bid or proposal.
- b. All other terms and conditions of the IFB remain the same.
- c. **Receipt acknowledged by:**

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Date Signed

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of Firm

**SECTION 28 31 11 - FIRE ALARM SYSTEM**

**PART I GENERAL**

**1.01 RELATED DOCUMENTS**

- A. The General Conditions (Division 1) applies to the work specified in this section.

**1.02 RESPONSIBILITIES**

- A. This section of the specifications includes the provision and installation of the Fire Alarm System hereinafter referred to as the Fire Alarm System, which will be provided by the Electrical Contractor.
- B. All labor and materials unless specifically indicated otherwise shall be provided by the electrical contractor.
- C. All conduit, boxes, fittings, couplings, connectors, straps, supports, pull lines, bushings, etc. shall be provided and installed by the electrical contractor as per the electrical drawings.

**1.03 GENERAL**

- A. The electrical contractor shall provide, install and program a functionally complete, integrated, microprocessor based Fire Alarm System.
- B. Any reference to “device”, “component”, “unit”, “module”, or “system”, shall be understood to mean the Fire Alarm System, or any associated manufactured part thereof.

**1.04 SYSTEM DESCRIPTION**

- A. The alarm system shall provide the following features:
  - 1. The Fire Alarm System shall be approved for connection, notification, and signal transmission of Automatic Fire Detection as defined in NFPA 72 and NFPA 101 Life Safety Code.
  - 2. System keypads/annunciators shall be provided as shown on the plans to perform all functions as described herein.
  - 3. Provide fire alarm horn units as shown on the plans
  - 4. Provide fire alarm strobe units as shown on the plans.
  - 5. Provide photoelectric duct smoke detectors with shutdown relays, sampling tubes and remote test/indicator units as shown on the plans.
  - 6. Provide addressable smoke detectors as shown on the plans.
  - 7. Provide addressable manual pull stations as shown on the plans.
  - 8. Provide key lock box for fire department access (where required by local authority having jurisdiction).

**1.05 QUALITY ASSURANCE**

- A. Equipment
  - 1. The equipment described in this section represents the function and type of some of the material required and herein specified. The equipment indicated in this section does not intend to be a complete list of all components required for a operational and approved system, but only as a guideline from which the system should be designed. Additional equipment not herein specifically indicated but necessary for an operational system shall be provided.
  
- B. Submittals
  - 1. The electrical contractor shall submit complete documentation of the system equipment showing model numbers, types, ratings, sizes, styles, manufacturer's name, and data sheets for all components.
  - 2. Submittals must reach the engineer not more than thirty- (30) calendar days after the bid has been awarded.
  
- C. Installation and Equipment Standards
  - 1. All equipment, systems, and materials furnished and installed under this section shall be installed in accordance with all applicable standards of the National Electric Code (NEC), National Fire Protection Association (NFPA), Underwriters Laboratories (UL) and the Americans with Disabilities Act (ADA).
  
- D. Acceptable Manufacturers
  - 1. Silent Knight
  - 2. Gamewell
  - 3. Notifier
  
- E. Warranty
  - 1. All components, parts, and assemblies supplied and installed by the Contractor shall be warranted against defects in material and workmanship for a period of at least 12 months (parts & labor), commencing upon date of acceptance by the owner.
  
- F. Service/Maintenance
  - 1. System maintenance and repair of system or workmanship defects during the warranty period shall be provided by the Contractor free of charge (parts & labor).
  - 2. Contractor shall provide testing and monitoring for the duration of the one year warranty period, with the Owner providing monitoring after warranty period expires.
  - 3. The installer shall respond to any request for service from the Owner within 24 hours of receipt of call from the owner.
  - 4. Extended service/maintenance contract shall be offered by the installer to the Owner to become effective after the expiration of the warranty.

**PART 2 - PRODUCTS**



**2.01 MATERIALS**

**A. System Components**

1. The Fire Alarm System specified herein shall include a Control Unit with digital alarm communicator, built-in telephone line monitor, 512 event history log, real time clock, help screens, test timer, battery charging/voltage supervision circuitry, battery lead supervision, diagnostic displays, time/event based scheduling system, lightning/EMI protection circuits, contact ID reporting, printer support, point ID bypass, keypad programmable and downloadable. In addition the system shall be capable of segregating the points (i.e. a device or group of devices zoned together).
2. Manual Pull Stations shall be addressable and UL Listed, dual action, single stage w/key reset.
3. Fire Alarm signals shall be combination horn/light units or individual strobe light units, UL Listed and of the required intensity to comply with NFPA.
4. Ceiling Mounted Smoke Detectors shall be surface mounted photoelectric type, addressable and UL Listed as located as noted on the drawings.

- B. Upon a general fire alarm signal from the alarm control panel, all air-handling units, as scheduled, shall be shutdown via relays provided by the alarm contractor. Connection between these relays and the air handling equipment shall be the responsibility of the mechanical contractor.

**2.02 SYSTEM INTERFACE REQUIREMENTS**

- A. Grounding: The electrical contractor shall properly earth ground the Fire Alarm System to prevent electrostatic charges and other transient electrical surges for damaging the alarm system panel.
- B. All signal cables provided for the Fire Alarm System shall be Class II plenum rated cable where required. Where subject to mechanical damage wiring shall be enclosed in metallic conduit.
1. Data Wires shall not be enclosed in conduit or raceways containing AC power wiring.
  2. Where EMI may interfere with proper operation of the Fire Alarm System circuits, twisted/shielded cable shall be used.
  3. All conduit shall be concealed in ceiling space, partition walls or load bearing walls (where approved by structural engineer) or under slab.
  4. All Alarm Fire System junction boxes shall be labeled "Alarm System" with decal or other approved markings.
- C. Telephone Interface: The system shall be equipped with a phone line monitor and shall interface with the Owners phone lines via RJ-31X jacks for supervision of the telephone line connection to the Fire Alarm System Control panel. The RJ-31X telephone jacks shall be the responsibility of the Owner.
- D. The system shall have wireless connection capability.

**PART 3 - INSTALLATION**

3.01 EXECUTION

A. General

1. Installation of the Fire Alarm System shall be in strict compliance with the manufacturer's recommendations.
2. Fastening and supports of all equipment shall be adequate to support the required load and provide a safety factor of five.

3.02 FINAL SYSTEM ACCEPTANCE

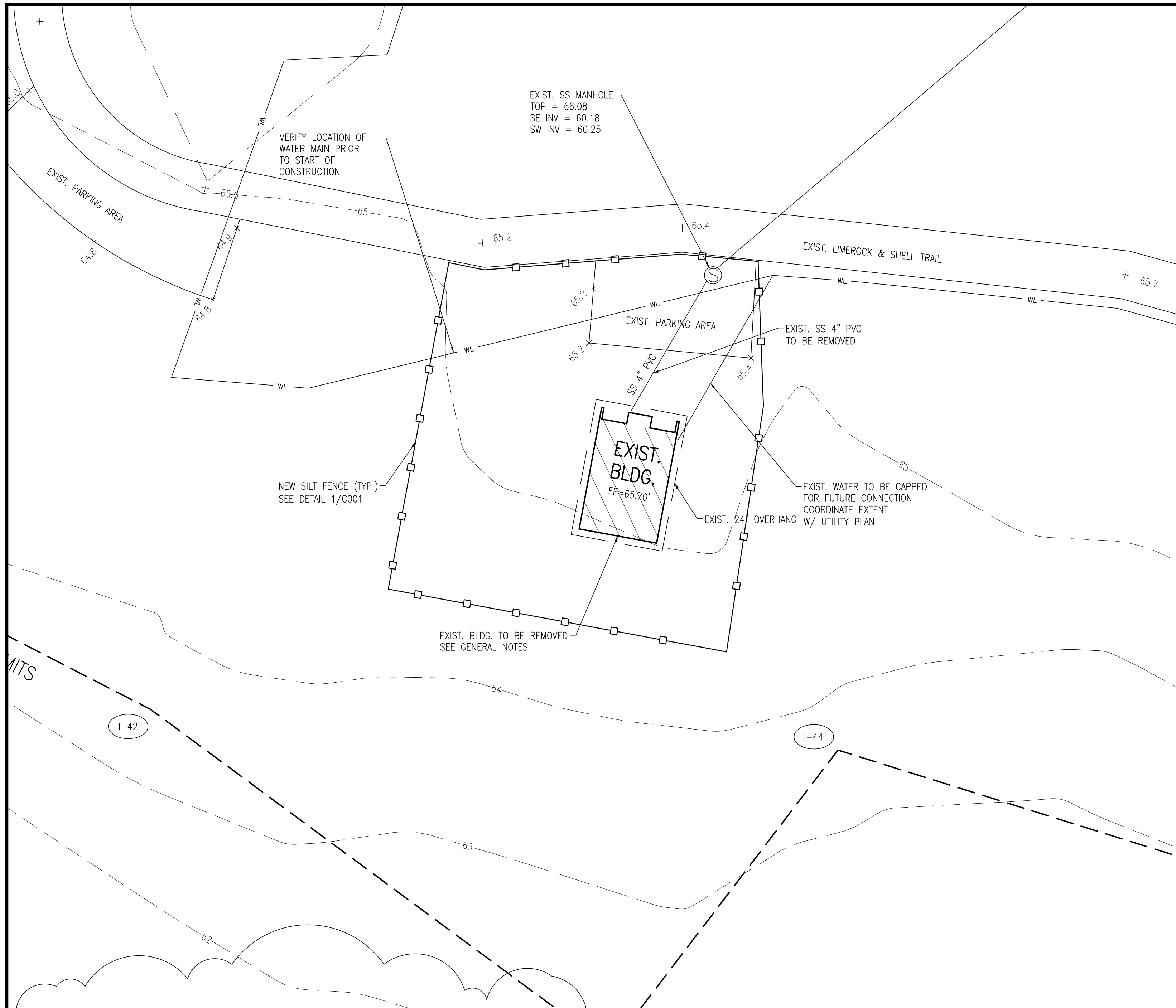
- A. The Fire Alarm System will be accepted only after a satisfactory test of the entire system has been completed by the Authority Having Jurisdiction, a factory trained technician in the presence of the Owner or Owners representative.
- B. Upon completion of the installation, the Fire Alarm System contractor will provide the Owner "As-Built" drawings of the system, a minimum of two (2) hours of training and one (1) set of operating manuals explaining operation of the system.
- C. The Fire Alarm System Contractor shall provide to the Owner a contract for periodic system testing, maintenance as well as monitoring services. A contract for monitoring services shall be executed with the Owner prior to completion of the alarm system.

3.03 ON-SITE SERVICES

- A. The Fire Alarm System Contractor shall provide the on-site services of an authorized, factory trained technical representative to supervise all connections and fully test all devices and components of the Alarm System during installation.
- B. The Fire Alarm System Contractor shall provide training on the operation, proper use and testing of the installed Fire Alarm System to the Owners Representative.

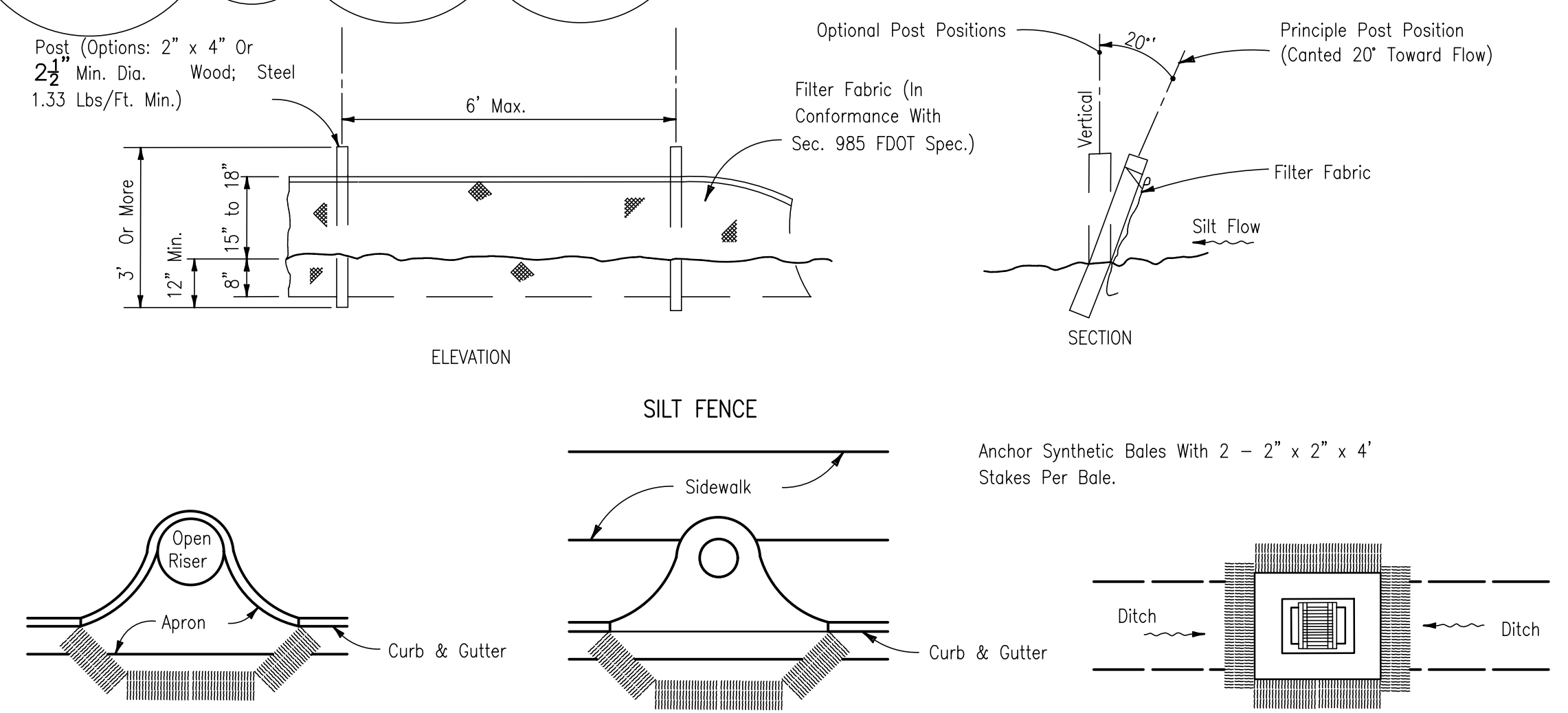
END OF SECTION





**DEMOLITION AND EROSION CONTROL PLAN**

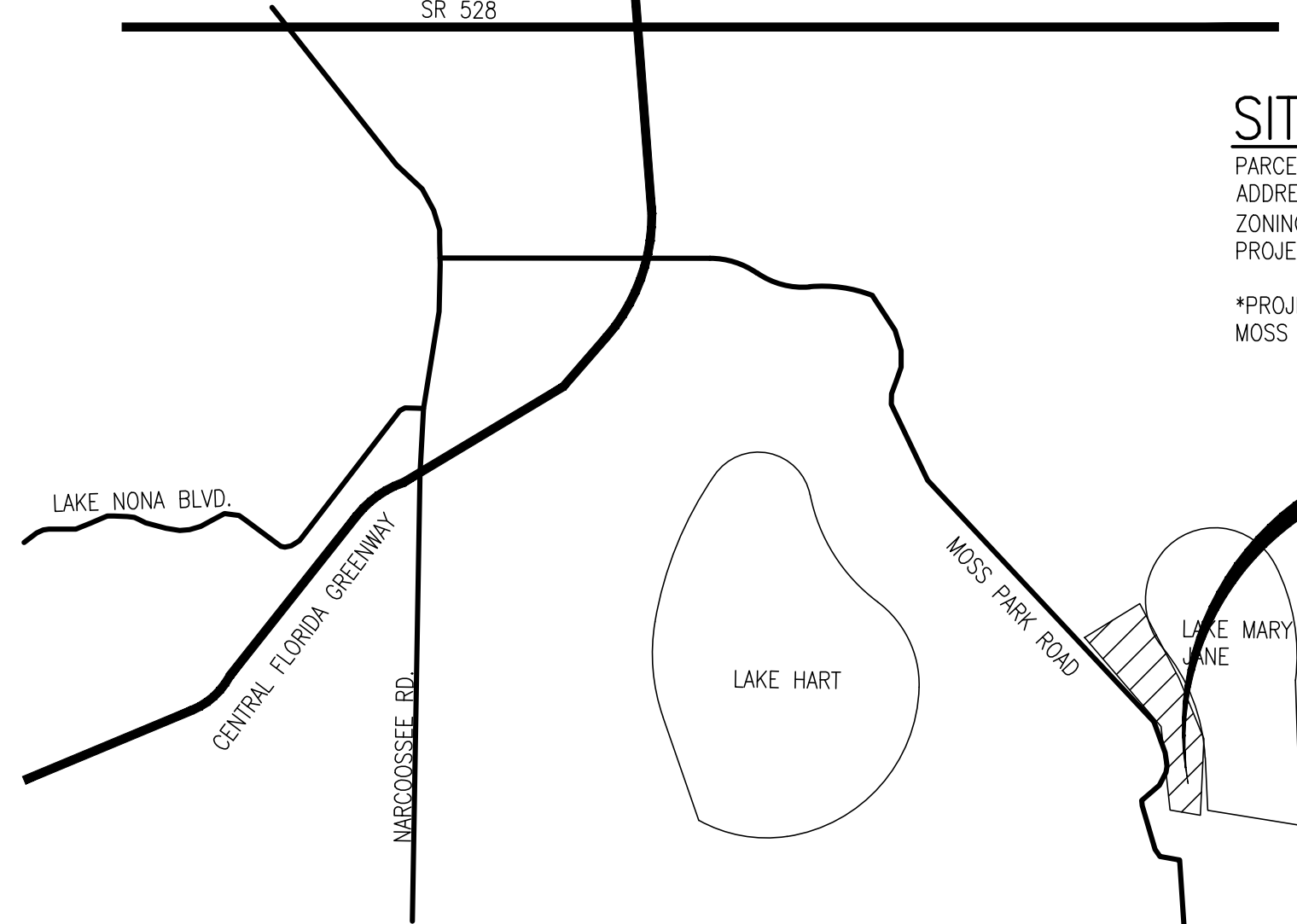
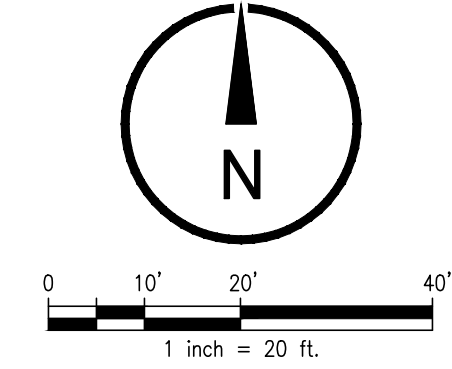
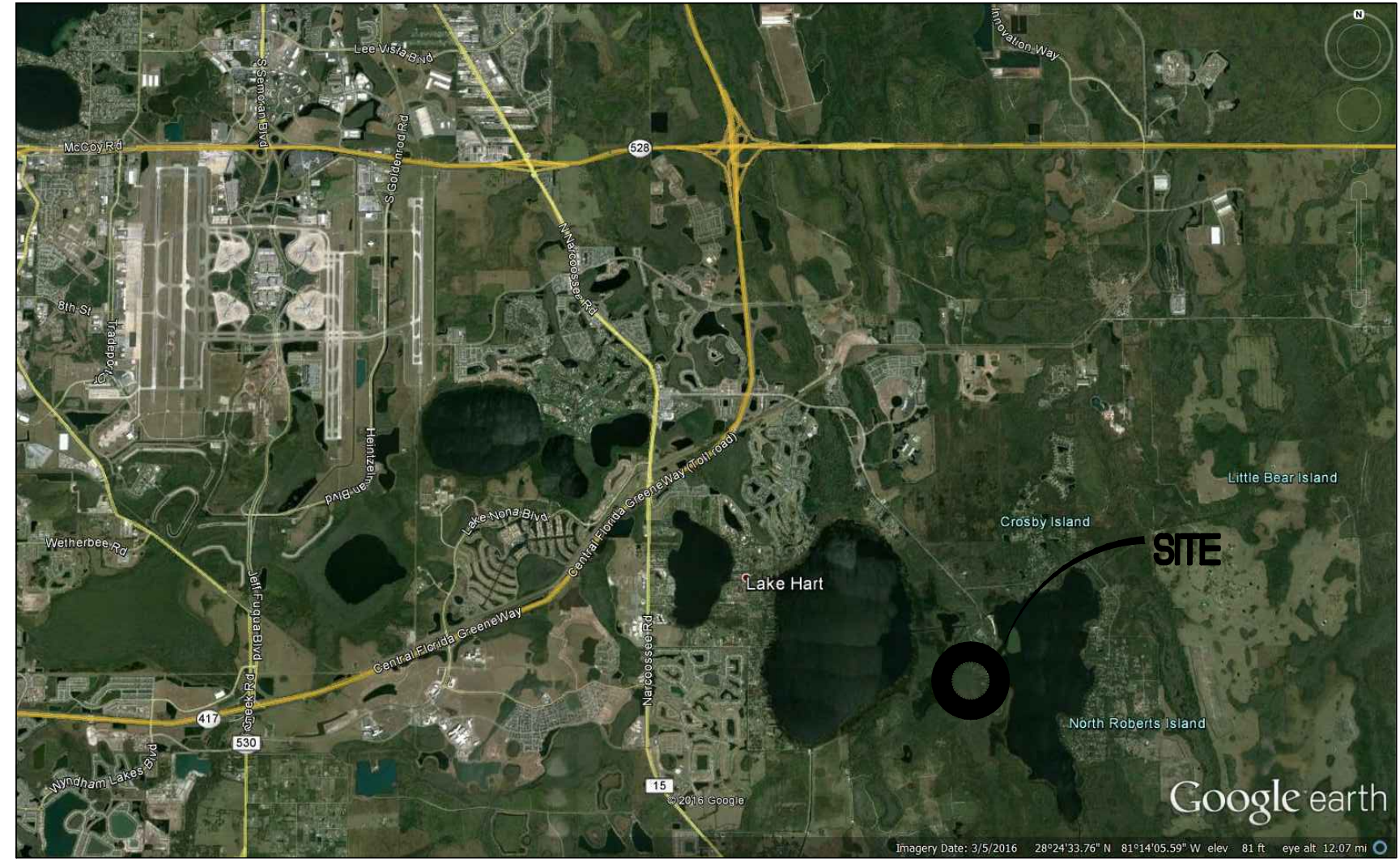
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PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

**1 EROSION CONTROL DETAILS**

C001 NTS



**LOCATION MAP**

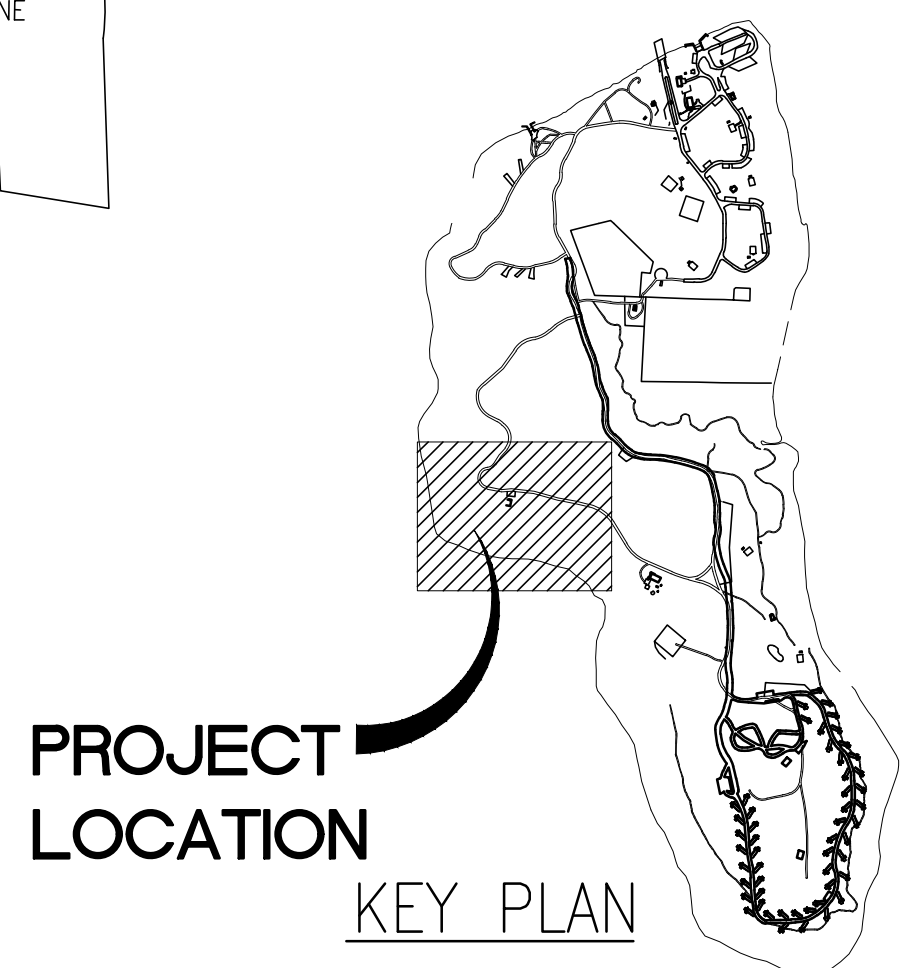
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**SITE DATA:**

PARCEL ID: 23-24-31-0000-00-005  
 ADDRESS: 12901 MOSS PARK RD., ORLANDO, FLORIDA 32808  
 ZONING: NA (OC PARK)  
 PROJECT AREA\* 0.1 AC.

\*PROJECT SCOPE CONSISTS OF CONSTRUCTING 1622 SF RESTROOM BUILDING AT MOSS PARK

**PROJECT LOCATION**



**LEGEND**

	EXIST.	TO BE REMOVED
ASPHALT PAVEMENT		
CONCRETE PAVEMENT		
CONCRETE CURB		
SIGN		
CHAIN LINK FENCE		
WATER LINE		
SANITARY SEWER LINE		
STORM DRAIN LINE		
LIGHT POLE		
FIRE HYDRANT		
SANITARY SEWER CLEANOUT		
STORM DRAIN INLET		
STORM YARD DRAIN		
TREE		

**SOIL EROSION & SEDIMENTATION CONTROL NOTES:**

- ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO ORANGE COUNTY AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD).
- EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN, CONSTRUCTION.
- SOIL MATERIALS SHALL BE CONTAINED, AND NOT ALLOWED TO COLLECT ON ANY OFF-PERIMETER AREAS OR IN WATERWAYS. THESE INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND POND.
- DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE THE EFFECTIVENESS OF THESE EFFORTS. ANY NECESSARY REMEDIES SHALL BE PERFORMED WITHOUT DELAY.
- ALL MUD, DIRT OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING STATE-COUNTY-CITY OR PRIVATE ROADS AND FACILITIES FROM THIS SITE, DUE TO CONSTRUCTION SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR/BUILDER.
- PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES OR ANY DISTURBED LAND AREAS SHALL BE COMPLETED WITHIN (15) FIFTEEN CALENDAR DAYS AFTER FINAL GRADING. WHEN IT IS NOT POSSIBLE TO PERMANENTLY PROTECT A DISTURBED AREA IMMEDIATELY AFTER GRADING OPERATIONS, TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED. ALL TEMPORARY PROTECTION SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE IN PLACE AND ESTABLISHED. A CERTIFICATE OF COMPLIANCE WILL NOT BE ISSUED UNTIL THE ABOVE REQUIREMENTS HAVE BEEN MET.

**SITE DEMOLITION NOTES:**

- CONTRACTOR SHALL OBTAIN COPIES OF RECORD DRAWINGS, AND BE RESPONSIBLE FOR LOCATING EXISTING UTILITIES WITHIN THE PROJECT AREA.
- DISPOSAL OF ALL MATERIAL LEAVING THE SITE WILL BE ON HAUL ROUTES, AND BY METHODS AS APPROVED BY OWNER.
- COORDINATE LOCATION OF CONTRACTOR STAGING AREA WITH OWNER CONSTRUCTION REPRESENTATIVE.
- ALL PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTED UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. THE COST FOR SUCH RESTORATION SHALL BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.
- ALL SURVEY DATA USED AND CONDITIONS ASSUMED TO BE PRESENT IN PREPARATION OF THESE PLANS WAS PROVIDED BY OC AND RECORD/AS-BUILT DOCUMENTS FOR THE EXISTING PARK PROVIDED BY OCCP. SKC IS NOT RESPONSIBLE FOR INACCURACY OF INFORMATION PERTAINING TO EXISTING CONDITIONS.
- CONTRACTOR SHALL CLEAN THE CONSTRUCTION AREA OF ALL DEBRIS, AGGREGATES, ETC. ALL WASTE MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
- CONTRACTOR SHALL PROTECT THE EDGE OF ALL REMAINING PAVEMENT AND HARDSCAPE. DO NOT HAUL OVER UNPROTECTED PAVEMENT OR SAWCUT EDGES.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES AND IMPROVEMENTS PRIOR TO START OF CONSTRUCTION.
- ALL DISTURBED AREAS WITHIN PROJECT AREA SHALL BE SODDED.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF PROJECT AREA AND MAINTENANCE OF PEDESTRIAN AND VEHICULAR TRAFFIC. CONTRACTOR SHALL PROVIDE TEMPORARY SIDEWALK FOR PEDESTRIAN TRAFFIC FROM EXISTING PARKING AREA.
- REMOVAL OF EXISTING BUILDING INCLUDES FOUNDATION, AND PROPER CAPPING OF EXISTING UTILITIES SERVING THE BUILDING.

**LEGAL DESCRIPTION:**

PART OF SECTIONS 22, 23, 26 AND 27, TOWNSHIP 24 SOUTH, RANGE 31 EAST, ORANGE COUNTY, FLORIDA.

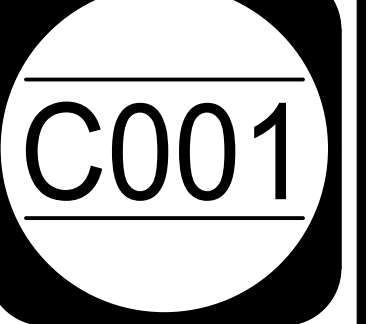
**SURVEYOR'S REPORT:**

- VERTICAL INFORMATION SHOWN HEREON REFERS TO ORANGE COUNTY BENCHMARK C-802-008, A 2-1/4" ORANGE COUNTY BRASS DISK ON TOP OF CONCRETE BRIDGE SUPPORT BEAM 22.5'± WEST OF THE CENTERLINE OF MOSS PARK ROAD 1.5'± NORTH OF CONCRETE RUB RAIL, 268'± NORTH OF MOSS PARK ENTRANCE.

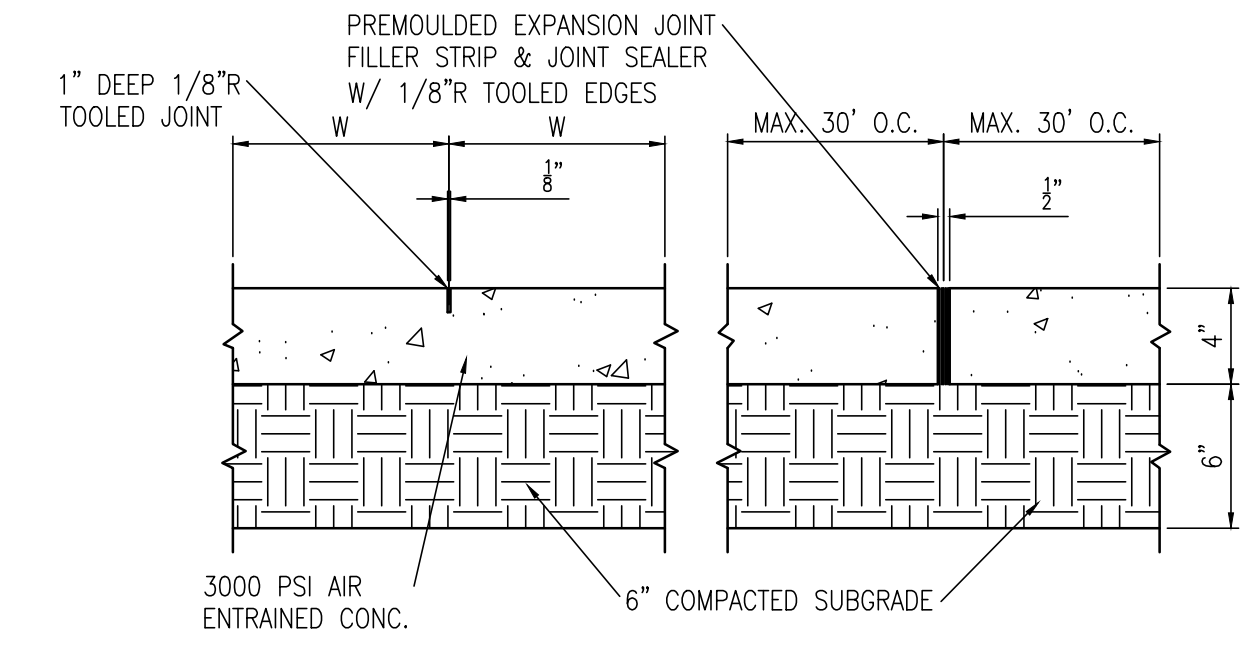
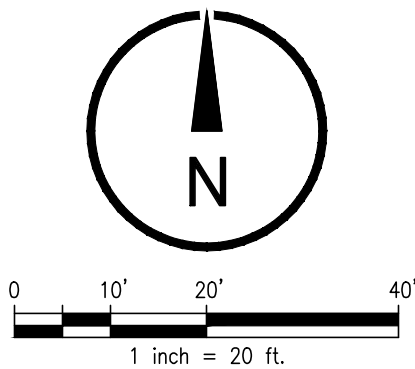
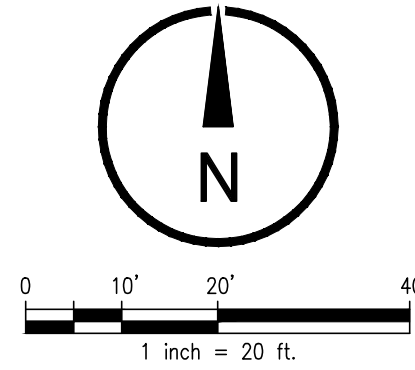
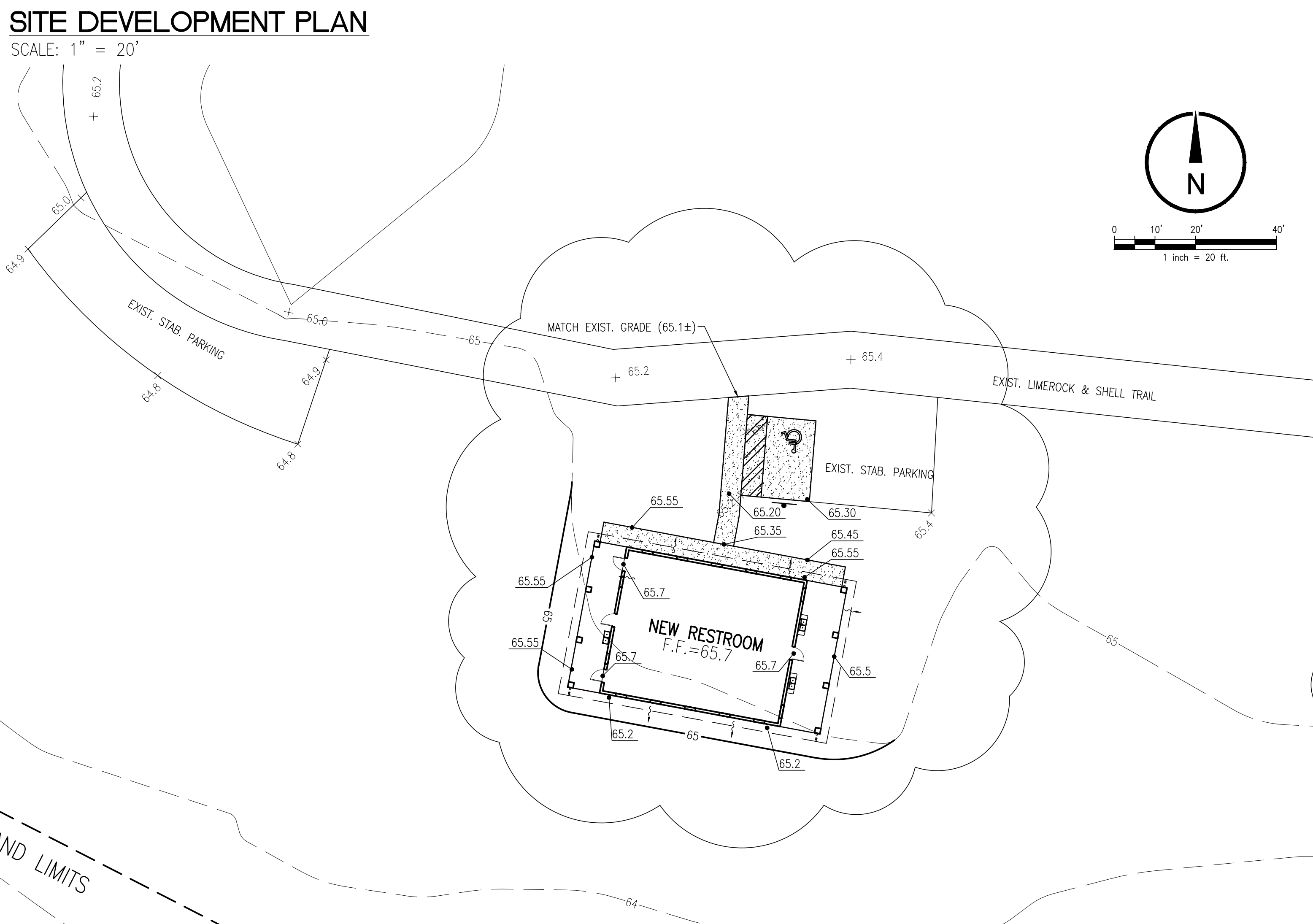
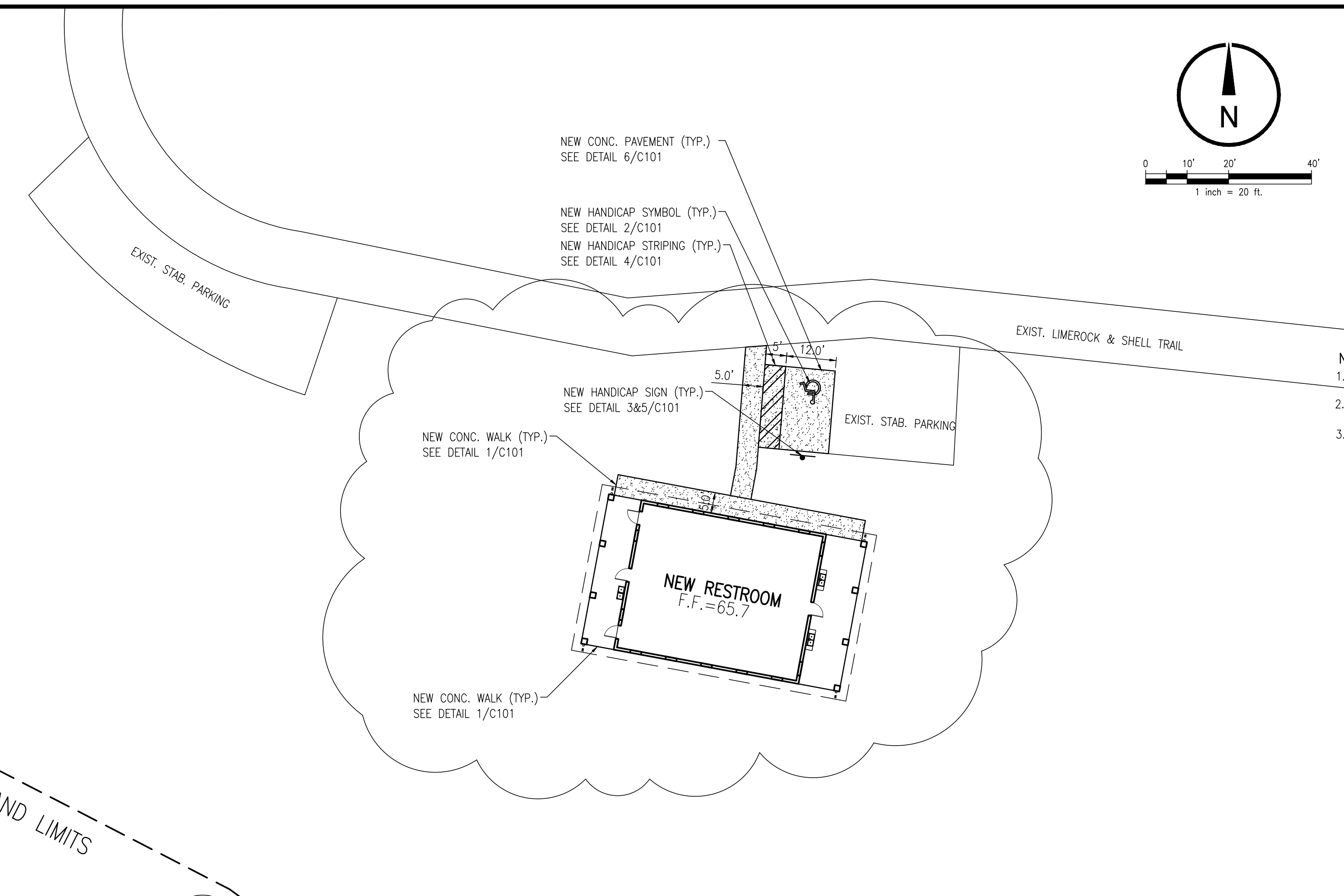
URBAN DESIGN PLANNING ENGINEERING  
**SK Consortium, Inc.**  
 1053 N. ORLANDO AVE. SUITE 3 • MAITLAND • FLORIDA 32751  
 TELEPHONE 407-629-4288 • FACSIMILE 407-629-1656

**ORANGE COUNTY PARKS: MOSS PARK RESTROOM BUILDING (Y15-902C)**

PROJECT NO. 17-109	PERMIT SET	DATE	12-01-17	PROJECT ADDRESS	12901 MOSS PARK RD., ORLANDO, FL 32808
	SCALE	GENERAL REV.	2-18-17	OWNER NAME AND ADDRESS	ORANGE COUNTY PARKS 409 E. SOUTH STREET 5TH FLOOR ORLANDO, FLORIDA 32801
FILE NAME	DRAWN BY	CHECKED BY	DATE		
	D. FORDYTH	M. KALALICHI	05-05-2018		
CONSULTANTS		SIGNATURE AND DATED SEAL			
DRAWING TITLE		DEMOLITION AND EROSION CONTROL PLAN			
CONSULTANTS		BORRELLI + PARTNERS ARCHITECTURE PLANNING LANDSCAPE INTERIOR ORLANDO 700 VILASSAR STREET ORLANDO, FLORIDA 32808 ORLANDO 700 VILASSAR STREET ORLANDO, FLORIDA 32808 CONSULTANT: THE DRAWING IS THE PROPERTY OF BORRELLI + PARTNERS. ALL RIGHTS ARE RESERVED. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF BORRELLI + PARTNERS.			
		MALIBU KALALICHI 41046			



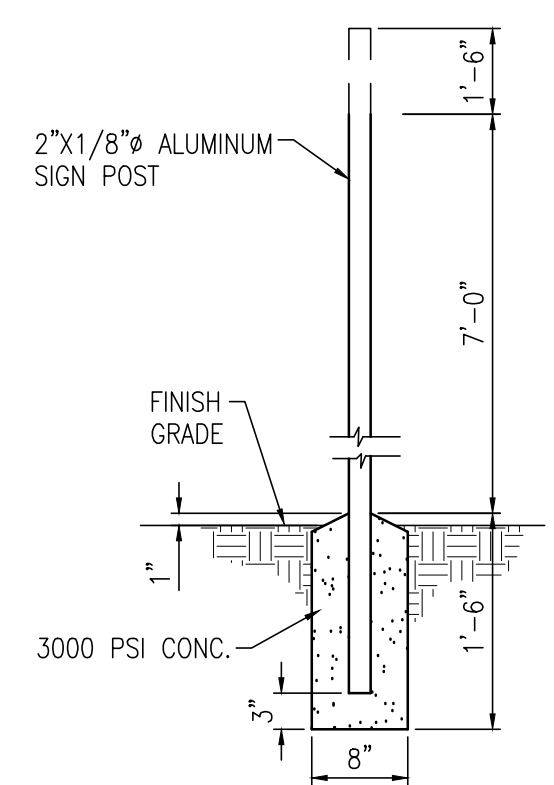




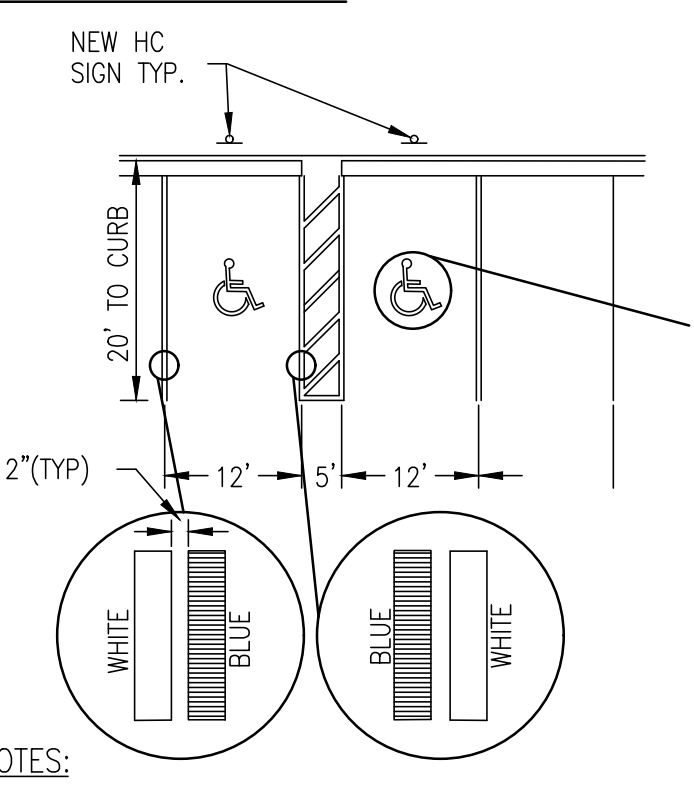
**NOTES:**

- A THICKENED EDGE SHALL BE PROVIDED BETWEEN SIDEWALK AND DRIVEWAYS OR PARKING LOT.
- SLOPE CONC. SIDEWALKS AWAY FROM BUILDINGS TO PROVIDE POSITIVE DRAINAGE.
- THE CROSS SLOPE OF THE SIDEWALK SHALL NOT EXCEED 2%.
- PROVIDE CONTROL JOINTS @ INTERVALS EQUAL TO SIDEWALK WIDTH (W).
- PROVIDE PREMOULDED EXPANSION JOINT WHERE CONC. WALK ABUTS BLDG., POLES, AND OTHER CONC. WALKS.

**1 CONC. SIDEWALK DETAIL**  
C101 1-1/2"=1'-0"



**NOTE:**  
1. STOP SIGNS ARE REQUIRED TO BE HIGH INTENSITY GRADE SIGNS.

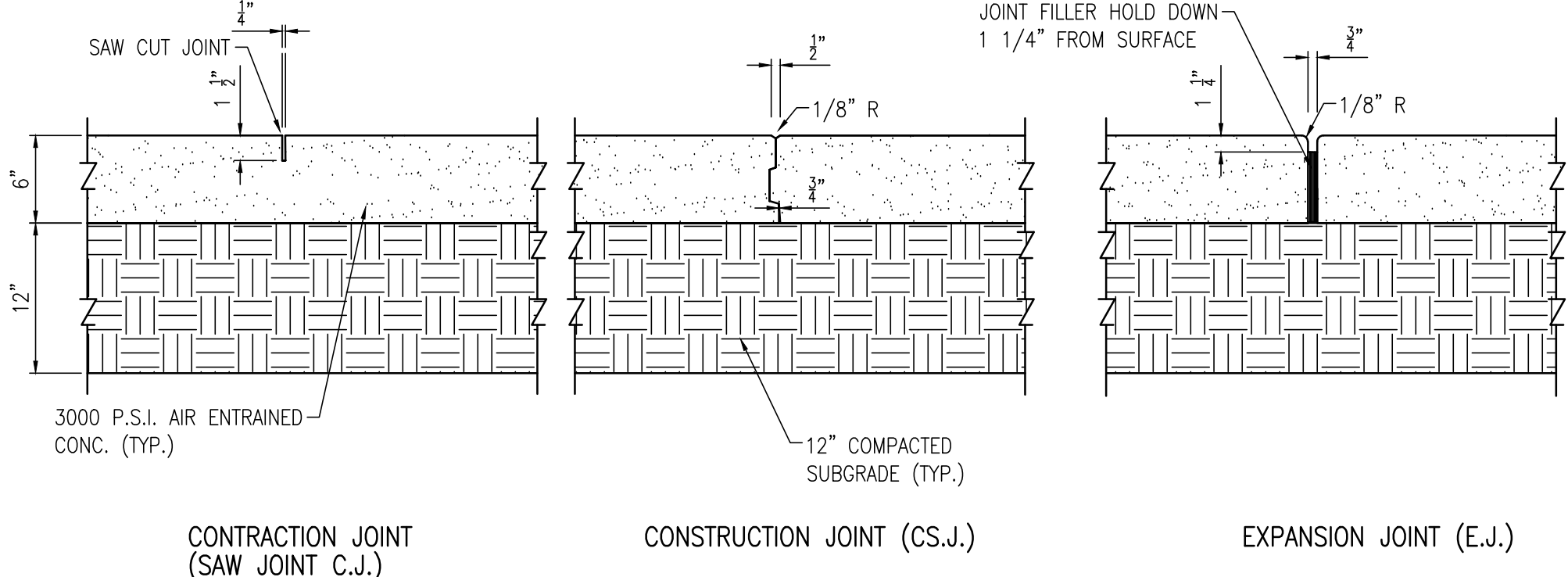


**NOTES:**

- EACH SUCH PARKING SPACE SHALL BE CONSPICUOUSLY OUTLINED IN BLUE PAINT, AND SHALL BE POSTED AND MAINTAINED WITH A PERMANENT, ABOVE GRADE SIGN BEARING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY, OR THE CAPTION "PARKING BY DISABLED PERMIT ONLY," OR BEARING BOTH SUCH SYMBOL AND CAPTION. SUCH SIGNS SHALL NOT BE OBTURED BY A VEHICLE PARKED IN THE SPACE. ALL HANDICAPPED PARKING SPACES MUST BE SIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE DEPARTMENT OF TRANSPORTATION.
- FL DOT RECOMMENDS MEASURING PARKING SPACE WIDTH FROM CENTER TO CENTER BETWEEN BLUE AND WHITE STRIPES.

**3 TYP. SIGN POST**  
C101 3/4" = 1'-0"

**4 HANDICAP STRIPING DETAIL**  
C101

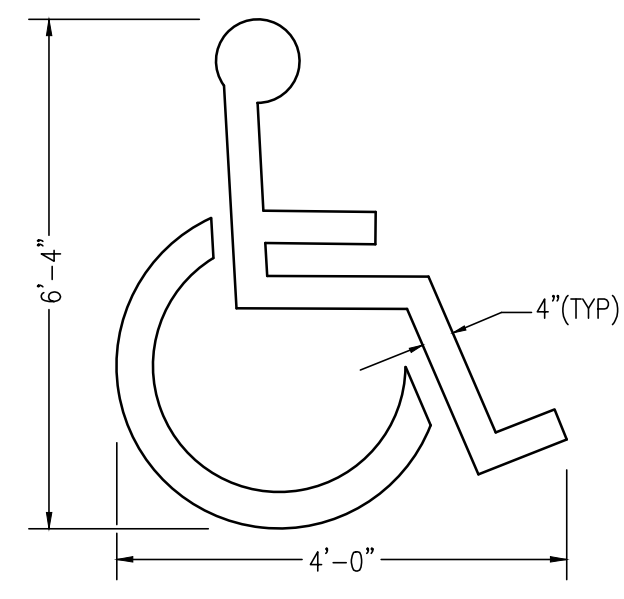


**GEOMETRY NOTES:**

- ALL SURVEY DATA USED AND CONDITIONS ASSUMED TO BE PRESENT IN PREPARATION OF THESE PLANS WAS PROVIDED BY SOUTHEASTERN SURVEYING AND MAPPING.
- THE CONTRACTOR SHALL VERIFY AND LOCATE ALL VERTICAL AND HORIZONTAL CONTROL POINTS PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES SHOULD BE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SURVEYOR OF THE CONDITION IN WRITING PRIOR TO COMMENCING HIS CONSTRUCTION ACTIVITIES.
- ALL PAVEMENT OFFSETS, RADII AND DIMENSIONS SHOWN ARE TO PROPOSED EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL STAKE ALL IMPROVEMENTS USING THE GEOMETRIC DATA PROVIDED. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND VERTICAL, PRIOR TO THE INSTALLATION OF ANY IMPROVEMENTS. ONCE STAKED, CONTRACTOR SHALL VERIFY THE BLDG. LOCATION WITH OC REPRESENTATIVE.

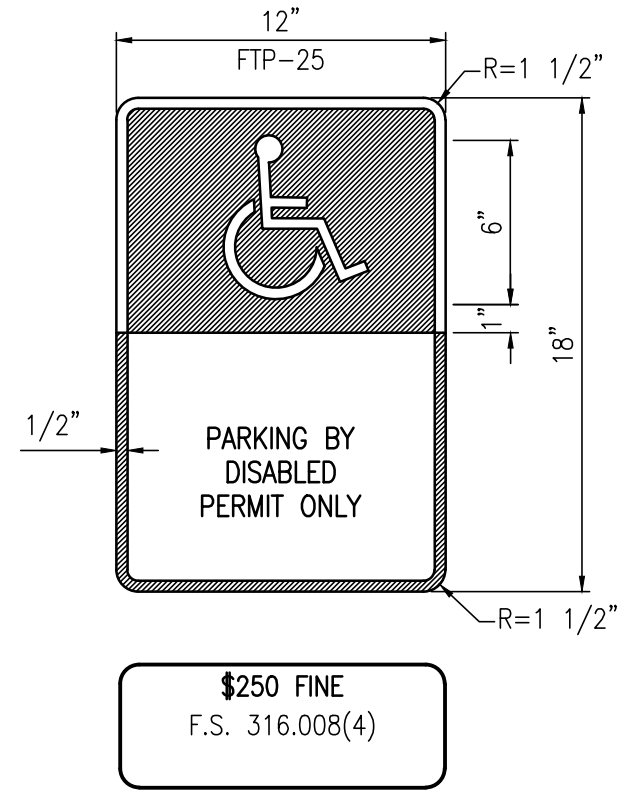
**GENERAL NOTES:**

- CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL PEDESTRIAN AND VEHICULAR TRAFFIC AS REQUIRED BY OCPR.
- THE EXTENT OF EROSION PROTECTION MEASURES SHOWN ARE THE MINIMUM REQUIRED. CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES AS REQUIRED DURING CONSTRUCTION AS DEEMED NECESSARY.
- REFER TO SHEET C001 FOR EROSION & SEDIMENTATION CONTROL DURING CONSTRUCTION.
- ALL DISTURBED AREAS SHALL BE SODDED WITH BAHIA SOD.



**NOTE:**  
THIS SYMBOL TO BE WHITE D.O.T. PAINT

**2 HANDICAP PARKING SYMBOL DETAIL**  
C101 NOT TO SCALE



**NOTES:**

- ALL LETTER ARE 1" SERIES "C", PER MUTCD.
- TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
- BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
- FINE NOTIFICATION SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
- ONE(1) SIGN REQUIRED FOR EACH PARKING SPACE.
- INSTALLATION HEIGHT OF SIGN SHALL BE ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

**5 HANDICAP SIGN DETAIL**  
C101 NOT TO SCALE

**LEGEND:**

	EXIST.	NEW
ASPHALT PAVEMENT	[Symbol]	[Symbol]
CONCRETE WALK	[Symbol]	[Symbol]
CONCRETE CURB	[Symbol]	[Symbol]
LIGHT POLE	[Symbol]	[Symbol]
SIGN	[Symbol]	[Symbol]

**URBAN DESIGN PLANNING ENGINEERING**  
**SKConsortium, Inc.**  
1053 N. ORLANDO AVE. SUITE 3 MAILLAND FLORIDA 32751  
TELEPHONE 407-629-4288 FACSIMILE 407-629-1656

**ORANGE COUNTY PARKS: MOSS PARK RESTROOM BUILDING (Y15-902C)**

**BORRELLI + PARTNERS**  
ARCHITECTURE PLANNING LANDSCAPE INTERIOR  
20 VASSAR STREET  
ORLANDO, FL 32813  
COMMERCIAL DESIGN DIVISION  
PROJECT NO. 15-001  
DATE 05-05-2018

**CONSULTANTS**  
SIGNATURE AND DATED SEAL  
MAJID KALAGIRCHI 41046

**DRAWING TITLE**  
SITE DEVELOPMENT AND GRADING PLAN

PROJECT NO.	DATE	DESCRIPTION
17-109	17-109	PERMIT SET
1	2-15-19	GENERAL REV.

**OWNER NAME AND ADDRESS**  
ORANGE COUNTY PARKS  
400 E. SOUTH STREET  
5TH FLOOR  
ORLANDO, FLORIDA 32801

**FILE NAME**  
D. FORSYTH  
M.KALAGIRCHI

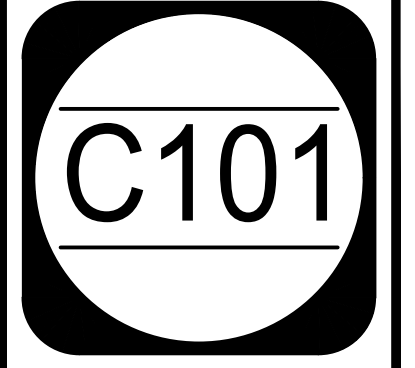
**CHECKED BY**  
DATE

**SCALE**  
1" = 20'

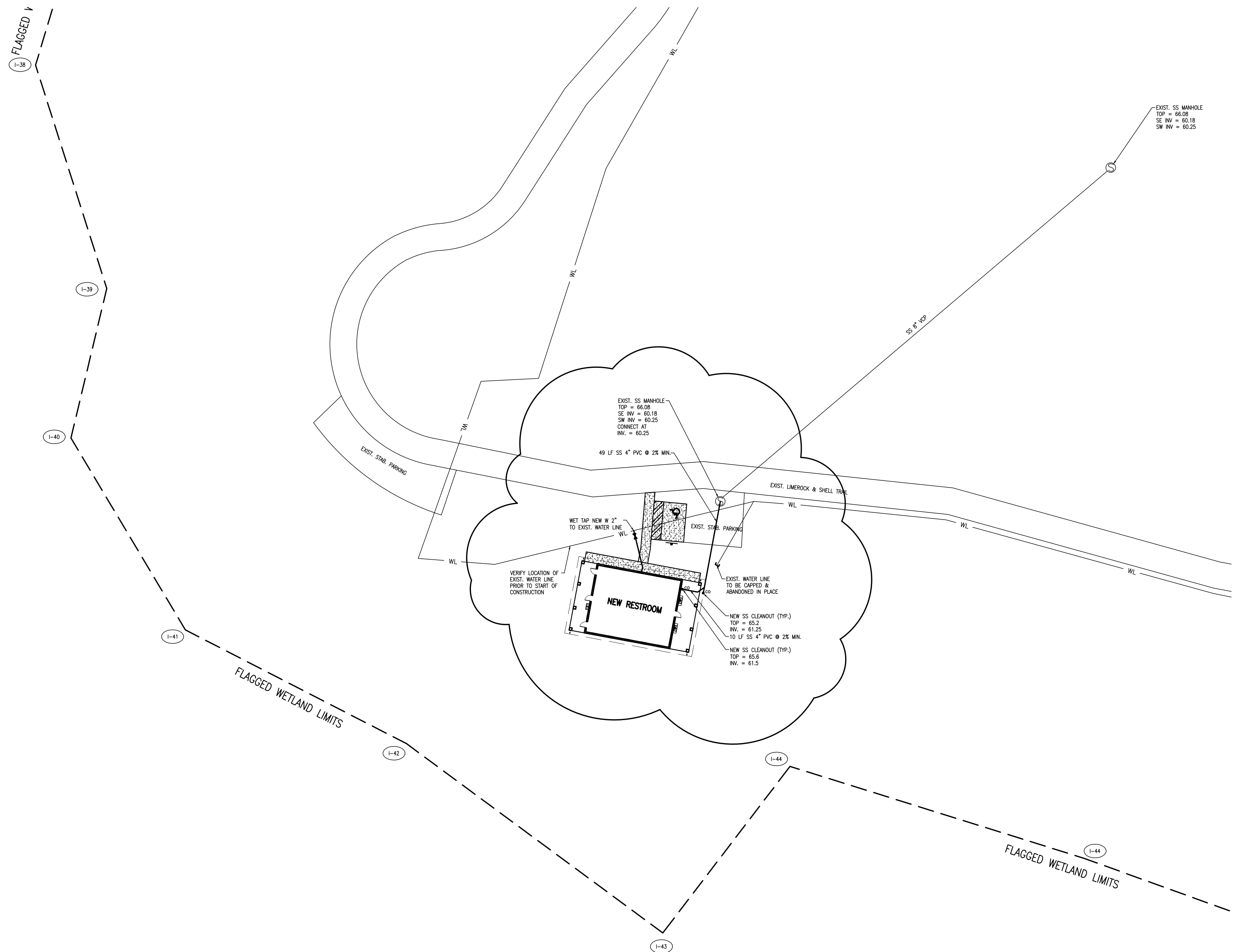
**PROJECT ADDRESS**  
1901 MOSS PARK RD.  
ORLANDO, FL 32813

**DATE**  
05-05-2018

**PROJECT NO.**  
17-109



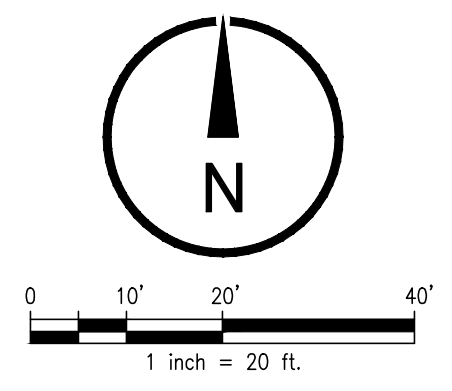




### GENERAL NOTES

- ALL EXISTING UTILITIES ARE TO BE FIELD VERIFIED. IF ANY DISCREPANCIES SHOULD BE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SURVEYOR OF THE CONDITION IN WRITING PRIOR TO COMMENCING HIS CONSTRUCTION ACTIVITIES.
- ALL DISTURBED AREAS MUST BE SODDED W/ BAHIA.
- MAINTENANCE OF TRAFFIC SHALL CONFORM WITH LATEST EDITION OF FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS. CONTRACTOR IS RESPONSIBLE FOR PLACEMENT OF ALL NECESSARY TRAFFIC CONTROL DEVICES INCLUDING BARRICADES, FLASHING LIGHTS, TEMPORARY SIGNAGE, MARKINGS, ETC.
- A 48-HOUR NOTICE WILL BE GIVEN TO THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION & TESTING OF ANY UTILITY SHOWN ON THESE PLANS.
- WHEN TRENCH EXCAVATION EXCEEDS (5) FEET IN DEPTH:
  - CONTRACTOR SHALL CONFORM TO OSHA STD. 29CFR. SECTION 1926.650.
  - THE CONTRACTOR SHALL PROVIDE WRITTEN ASSURANCE OF COMPLIANCE WITH
  - TRENCH SAFETY SYSTEM SHALL BE BY THE CONTRACTOR.
- ALL UTILITIES CONSTRUCTION CONNECTING TO THE OC UTILITY SYSTEM SHALL CONFORM TO ORANGE COUNTY STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL DATED FEB. 2011.
- THE CONTRACTOR SHALL PERFORM HYDROSTATIC TESTING OF ALL NEWLY-INSTALLED WATER DISTRIBUTION SYSTEM IN ACCORDANCE WITH AWWA STANDARD C600 FOR DUCTILE-IRON PIPE. TESTING SHALL BE IN ACCORDANCE WITH AWWA MANUAL M23 FOR PVC.
- THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION THEREOF FROM THE LOCAL WATER UTILITY, ENGINEER OF RECORD, AND FDEP, PRIOR TO PLACING IN SERVICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF THE FDEP WATER AND SEWER PERMITS FROM THE OWNER AND MAINTAIN THEM ON THE JOB SITE AT ALL TIMES. DISINFECTION OF THE WATER DISTRIBUTION SYSTEM SHALL BE IN ACCORDANCE WITH THE FDEP WATER PERMIT, AND RECEIVE APPROVAL PERFORMED IN ACCORDANCE WITH AWWA 651 "DISINFECTING WATER MAINS.
- ALL POTABLE WATER MAIN MUST BEAR THE "NSF" LOGO. WATER MAIN SHALL BE PER AWWA C-900, DR-18.
- VARIANCES FROM THE SEPARATION DISTANCES LISTED BETWEEN WATER AND SANITARY/STORM SEWERS/RECLAIM WATER LISTED IN OCU STANDARDS MUST COMPLY WITH 62-555-.314(S), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH
  - A MINIMUM OF 3' OF COVER SHALL BE MAINTAINED OVER ALL WATER AND SEWER MAINS.
  - MAGNETIC TAPE AND LOCATING WIRE SHALL BE INSTALLED WITH ALL NON METALLIC
  - ON SITE WATER & WASTE WATER COLLECTION SYSTEM IS PRIVATELY OWNED AND MAINTAINED.
  - PVC GRAVITY SEWER (4) INCH THROUGH (15) INCH SHALL BE SDR 35. JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET IN ACCORDANCE WITH ASTM D3212 AND ASTM F477. ALL PVC SEWER SHALL BEAR THE "NSF-DW SEAL." FORCEMAIN SHALL BE PVC C900 DR-18 AND PVC CERTAINTED CERTA-LOK PIPE AT DIRECTIONAL BORE.
  - CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION ACTIVITY FOR DIG PERMITS, ELECTRICAL PERMITS OR OTHER PERMITS AS APPLICABLE. CONTRACTOR IS TO COORDINATE FULLY WITH UTILITY COMPANIES ON EXACT LOCATION OF UNDERGROUND UTILITIES PRIOR TO EXCAVATION. THE FOLLOWING COMPANIES SHALL BE CONTACTED BY THE CONTRACTOR:
 

DUKE ENERGY	CALL SUNSHINE	ORANGE COUNTY UTILITIES
3300 EXCHANGE PLACE	PH. 1-800-432-4770	9150 CURRY FORD RD.
LAKE MARY FL. 32746		ORLANDO, FL 32825
PH. 407-942-9291		PH. 407-254-9900
- NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET AND PREFERABLY 10 FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE TYPE SANITARY SEWER, STORM SEWER, WASTEWATER FORCEMAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, FAC. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND THE GRAVITY TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM TYPE SANITARY SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES AND PREFERABLY 12 INCHES ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCEMAIN OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE. AT THE UTILITY CROSSINGS DESCRIBED ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE. SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPE LINE. ALTERNATIVELY AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM TYPE SANITARY SEWERS OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, FAC, AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, FAC.
- ALL PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTED UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. THE COST FOR SUCH RESTORATION SHALL BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.



### UTILITY PLAN

SCALE: 1" = 20'

LEGEND		EXIST.	NEW
WATER LINE	— W —	— W —	— W —
SANITARY SEWER LINE	— SS —	— SS —	— SS —
FORCE MAIN	— FM —	— FM —	— FM —
POWER POLE	⊙		
LIGHT POLE	⊙		
WATER VALVE	⊗		
CLEAN-OUT	⊙		⊙
SANITARY SEWER MANHOLE	⊙		●
FIRE HYDRANT	⊗		
OVERHEAD POWER LINE	— OHL —		

ORANGE COUNTY PARKS: MOSS PARK RESTROOM BUILDING (Y15-902C)  
 CONSULTANTS  
 DRAWING TITLE  
 UTILITY PLAN  
 PROJECT ADDRESS  
 12901 MOSS PARK RD.  
 ORLANDO, FL 32832  
 OWNER NAME AND ADDRESS  
 ORANGE COUNTY PARKS  
 401 E. SOUTH STREET  
 5TH FLOOR  
 ORLANDO, FLORIDA 32801

**BORRELLI PARTNERS**  
 ARCHITECTURE PLANNING LANDSCAPE INTERIOR  
 770 VASSAR STREET  
 ORLANDO, FL 32804 (407) 418-1338  
CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL AFFECTED AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL AFFECTED AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL AFFECTED AGENCIES.

SIGNATURE AND DATED SEAL  
 MAJID KALAGHCHI 4/10/16

PROJECT NO. 17-109  
 PHASE PERMIT SET  
 SCALE 1" = 20'  
 FILE NAME  
 DRAWN BY D. FORSYTH  
 CHECKED BY M. KALAGHCHI  
 DATE 05-05-2018

PROJECT ADDRESS  
 12901 MOSS PARK RD.  
 ORLANDO, FL 32832  
 OWNER NAME AND ADDRESS  
 ORANGE COUNTY PARKS  
 401 E. SOUTH STREET  
 5TH FLOOR  
 ORLANDO, FLORIDA 32801

DRAWING TITLE  
 UTILITY PLAN

PROJECT ADDRESS  
 12901 MOSS PARK RD.  
 ORLANDO, FL 32832  
 OWNER NAME AND ADDRESS  
 ORANGE COUNTY PARKS  
 401 E. SOUTH STREET  
 5TH FLOOR  
 ORLANDO, FLORIDA 32801

PROJECT NO. 17-109  
 PHASE PERMIT SET  
 SCALE 1" = 20'  
 FILE NAME  
 DRAWN BY D. FORSYTH  
 CHECKED BY M. KALAGHCHI  
 DATE 05-05-2018

**SK Consortium, Inc.**  
 URBAN DESIGN PLANNING ENGINEERING  
 1053 N. ORLANDO AVE. SUITE 3 MAITLAND FLORIDA 32751  
 TELEPHONE 407-629-4288 FACSIMILE 407-629-1656

**SECTION 07 46 46 - FIBER-CEMENT SIDING, SOFFITS, AND CEILINGS**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Section includes exterior fiber-cement siding, soffits and ceilings.
- B. Related Requirements:
  - 1. Section 06 10 00 "Rough Carpentry" for wood furring, grounds, nailers, and blocking.
  - 2. Section 07 11 13 "Bituminous Dampproofing" for weather-resistive barriers.

**1.3 COORDINATION**

- A. Coordinate siding installation with flashings and other adjoining construction to ensure proper sequencing.
- B. Coordinate installation and fastening requirements to meet local wind zone requirements and codes.

**1.4 ACTION SUBMITTALS**

- A. Product Data: For each type of product. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Samples for Initial Selection: For fiber-cement siding, soffit and ceiling including related accessories.
- C. Samples for Verification: For each type, color, texture, and pattern required.
  - 1. 12-inch- (300-mm-) long-by-actual-width Sample of siding.

**1.5 INFORMATIONAL SUBMITTALS**

- A. Product Certificates: For each type of fiber-cement siding, soffit and ceiling.
- B. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for fiber-cement siding.

- C. Research/Evaluation Reports: For each type of fiber-cement siding required, from ICC-ES.
- D. Sample Warranty: For special warranty.

#### 1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For each type of product, including related accessories, to include in maintenance manuals.

#### 1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Furnish full lengths of fiber-cement siding and soffit including related accessories, in a quantity equal to 2 percent of amount installed.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with labels intact until time of use.
- B. Store materials on elevated platforms, under cover, and in a dry location.

#### 1.9 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace products that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Structural failures including cracking and deforming.
    - b. Deterioration of materials beyond normal weathering.
  - 2. Warranty Period: 25 years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Source Limitations: Obtain products, including related accessories, from single source from single manufacturer.

2.2 FIBER-CEMENT SIDING

- A. General: ASTM C 1186, Type A, Grade II, fiber-cement board, noncombustible when tested according to ASTM E 136; with a flame-spread index of 25 or less when tested according to ASTM E 84.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- a. CertainTeed Corporation.
  - b. GAF Materials Corporation.
  - c. James Hardie Building Products, Inc.
  - d. James Hardie Siding Products.
  - e. MaxiTile, Inc.
  - f. Nichiha Fiber Cement.
  - g. Norandex; Building Materials Distribution, Inc.
- B. Labeling: Provide fiber-cement siding that is tested and labeled according to ASTM C 1186 by a qualified testing agency acceptable to authorities having jurisdiction.
- C. Nominal Thickness: Not less than 5/16 inch (8 mm).
- D. Horizontal Pattern: Boards 8-1/4 to 8-1/2 inches (210 to 216 mm wide in plain style which provided a minimum of a 7" exposure when installed.
1. Texture: Wood grain texture.
- E. Factory Priming: Manufacturer's standard acrylic primer.

2.3 FIBER-CEMENT SOFFIT AND EXTERIOR CEILINGS

- A. General: ASTM C 1186, Type A, Grade II, fiber-cement board, noncombustible when tested according to ASTM E 136; with a flame-spread index of 25 or less when tested according to ASTM E 84.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- a. CertainTeed Corporation.
  - b. James Hardie Building Products, Inc.
  - c. James Hardie Siding Products.
  - d. MaxiTile, Inc.
  - e. Nichiha Fiber Cement.
  - f. Norandex; Building Materials Distribution, Inc.
- B. Nominal Thickness: Not less than 5/16 inch (8 mm).
- C. Pattern: 24-inch- wide sheets wood-grain texture.



- D. Ventilation: Provide unperforated soffit unless otherwise indicated.
- E. Factory Priming: Manufacturer's standard acrylic primer.

## 2.4 ACCESSORIES

- A. Siding Accessories, General: Provide starter strips, edge trim, outside and inside corner caps, and other items as recommended by siding manufacturer for building configuration.
  - 1. Provide accessories matching color and texture of adjacent siding unless otherwise indicated.
- B. Decorative Accessories: Provide the following fiber-cement decorative accessories as indicated:
  - 1. Corner posts.
  - 2. Door and window casings.
  - 3. Fasciae.
  - 4. Moldings and trim.
- C. Fasteners:
  - 1. For fastening to wood, use siding nails of sufficient length to penetrate a minimum of 1 inch (25 mm) into substrate.
  - 2. For fastening to metal, use ribbed bugle-head screws of sufficient length to penetrate a minimum of 1/4 inch (6 mm), or three screw-threads, into substrate.
  - 3. For fastening fiber cement, use hot-dip galvanized fasteners.
- D. Insect Screening for Soffit Vents: Aluminum, 18-by-16 (1.4-by-1.6-mm) mesh.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of fiber-cement siding and soffit and related accessories.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.

### 3.3 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply.

1. Do not install damaged components.
  2. Install fasteners no more 24 inches o.c. or as per manufacturer's recommendations.
- B. Install joint sealants as specified in Section 079200 "Joint Sealants" and to produce a weathertight installation and per manufacturer's recommendations.

3.4 ADJUSTING AND CLEANING

- A. Remove damaged, improperly installed, or otherwise defective materials and replace with new materials complying with specified requirements.
- B. Clean finished surfaces according to manufacturer's written instructions and maintain in a clean condition during construction.

**END OF SECTION 07 46 46**

Refer to the Technical Specification of the Project

Provide SIGNAGE that conforms to the requirements of all regulatory agencies holding jurisdiction.

**Comply with all applicable provisions of the Florida Building Code Accessibility. Requirements include, but are not limited to the following:**

General Information (FBC Accessibility Section 703 Signs):

1. Signs shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile character, or two separate signs, one with visual, and one with tactile character, shall be provided.
2. Tactile characters must be all upper case and raised at least 1/32". Tactile characters must be sans serif, not italic, not oblique, script or highly decorative.
3. The stroke width of the upper case "I" has to be 15% of the letter height or less. The character width of the uppercase "O" must be between 55% and 110% of the height of the corresponding uppercase "I".
4. The copy height for tactile information must be between 5/8" and 2". If separate visual characters are provided, raised characters can be 1/2" and need not contrast with the background.
5. The distance between characters on tactile copy must be a minimum of 1/8" and a maximum of 4 times the character stroke width. These distances are measured between the closest points of adjacent characters. Characters shall be separated from raised borders and decorative elements 3/8 inch (9.5 mm) minimum.
6. Spacing between lines of the characters needs to be a minimum of 135% and a maximum of 170% of the corresponding uppercase "I" height (measured from baseline to baseline).
7. Braille shall be Grade II and positioned directly below the corresponding raised characters. If text is multi-lined, Braille is placed below the entire body of text and separated 3/8" from any other tactile characters and 3/8" minimum from raised borders and decorative elements.
8. Visual characters and symbols, and their background, are to have a non-glare finish. The color of raised characters must contrast as much as possible with their background to make sure signs are more legible for persons with low vision.
9. Pictograms, selected from International Standards, are to be located within a 6" vertical void and accompanying text descriptions are to be located directly below the pictogram.

Mounting height for the SIGNAGE (FBC Accessibility Section 703.4.1)

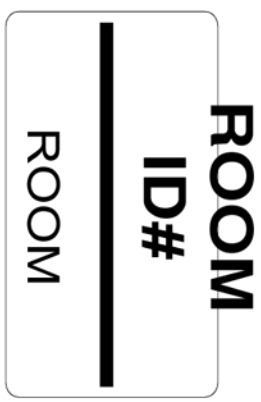
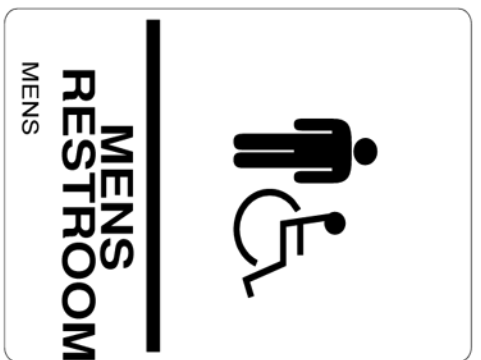
Signs are to be mounted at a height to allow the baselines of raised characters to be located between 48" and 60" above the ground.

Minimum Height: Baseline of lowest character mounted no lower than 48" above floor  
Maximum Height: Baseline of highest character mounted no higher than 60" above floor

Location of the SIGNAGE (FBC Accessibility Section 703.4.2)

1. Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side.
2. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf.
3. Where a tactile sign is provided at double doors with two active leaves, the sign shall be located to the right of the right hand door.
4. Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall.
5. Signs containing tactile characters shall be located so that a clear floor space of 18 inches (455 mm) minimum by 18 inches (455 mm) minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position.

For how Mounting Heights & Horizontal Viewing Distance impact characters size refer to table (703.5.5 Visual Character Height) of the Florida Accessibility Code.



**NOTE :**  
 PICTOGRAMS SHALL HAVE A FIELD HEIGHT OF 6 INCHES  
 MINIMUM. CHARACTERS AND BRAILLE SHALL NOT BE LOCATED  
 IN THE PICTOGRAM FIELD

**SIGNAGE GENERAL NOTES AND REQUIREMENTS:**

- Refer to the Technical Specification of the Project
- Provide SIGNAGE that conforms to the requirements of all regulatory agencies holding jurisdiction.
- Comply with all applicable provisions of the Florida Building Code Accessibility. Requirements include, but are not limited to the following:

# **PRE-DEMOLITION ASBESTOS SURVEY REPORT**

**Group Camping Restroom  
12901 Moss Park Road  
Orlando, Florida**

**GLE Project No.: 17270-00149**

**Prepared for:**

**Orange County Risk Management  
109 E. Church Street, Suite 200  
Orlando, Florida 32802**

**May 2017**

**Prepared by:**



**1155 S. Semoran Boulevard, Suite 3-1111  
Winter Park, Florida 32792  
407-658-4151 • Fax 407-658-4410**



May 5, 2017

Ms. Tisha Pence  
Orange County Risk Management  
109 E. Church Street, Suite 200  
Orlando, Florida 32802

**RE: Pre-Demolition Asbestos Survey Report  
Group Camping Restroom  
12901 Moss Park Road  
Orlando, Florida**

GLE Project No.: 17270-00149

Dear Ms. Pence:

GLE Associates, Inc. (GLE) performed a pre-demolition survey for asbestos-containing materials on April 28, 2017, at the Moss Park Group Camping Restrooms, located in Orlando, Florida. The survey was performed by Mr. Joel Howard with GLE. This report outlines the sampling and testing procedures, and presents the results along with our conclusions and recommendations.

GLE appreciates the opportunity to serve as your consultant on this project. If you should have any questions, or if we can be of further service, please do not hesitate to call.

Sincerely,  
**GLE Associates, Inc.**

Joel Howard CIE, LEP  
Orlando Operations Manager

Robert B. Greene, PE, PG, CIH, LEED AP  
President  
Florida LAC #EA 0000009

JH/MBC/RBG/lr

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GLE Associates, Inc.

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# 1.0 INTRODUCTION

## 1.1 INTRODUCTION

The purpose of this demolition survey was to identify accessible asbestos-containing materials (ACMs) and their general locations within the Moss Park Group Camping Restrooms, in Orlando, Florida. The survey was conducted pursuant to National Emission Standards for Hazardous Air Pollutants [NESHAP, 40 Code of Federal Regulations (CFR) 61] requirements, associated with the scheduled demolition plans. The survey was performed on April 28, 2017, by Mr. Joel Howard, an Environmental Protection Agency/Asbestos Hazard Emergency Response Act (EPA/AHERA) accredited inspector. The scope of this survey did not include demolition of any building components, evaluation of architectural plans, or the quantification of materials for abatement purposes, or removal cost estimating.

## 1.2 FACILITY DESCRIPTION

A summary of the facility investigated is outlined in the table below.

Facility Type:	Commercial
Construction Date:	1977
Number of Floors:	One
<b>Exterior</b>	
Floor Support:	Concrete Slab on Grade
Wall Support:	Concrete Block
Exterior Finish:	Paint
Roof System Type:	Asphalt Shingle
<b>Interior</b>	
Wall Substrate:	Concrete Block
Wall Finishes:	Paint
Floor Finishes:	Ceramic Tile
Ceiling System:	Plywood
Ceiling Finishes:	Paint

# 2.0 RESULTS

## 2.1 ASBESTOS SURVEY PROCEDURES

The survey was performed by visually observing accessible areas of the building. EPA/AHERA accredited inspector performed the visual observations (refer to Appendix B for personnel qualifications).



After the overall visual survey was completed, representative sampling areas were determined. The surveyor delineated homogeneous areas of suspect materials and samples of each material were obtained, in general accordance with regulations as established by the Occupational Safety and Health Administration and NESHAP. The field surveyor determined sample locations based on previous experience. Both friable and non-friable materials were sampled. A friable material is one that can be crushed when dry by normal hand pressure. This survey did not include the demolition of building components to access suspect material.

After completion of the fieldwork, the samples were delivered to GLE's National Voluntary Laboratory Accreditation Program accredited laboratory for analysis. The samples were analyzed by Polarized Light Microscopy (PLM) coupled with dispersion staining, in general accordance with EPA-600/R-93/116. Utilizing this procedure, the various asbestos minerals (chrysotile, amosite, crocidolite, actinolite, tremolite, and anthophyllite) can be determined. The percentages of asbestos minerals in the samples were visually determined by the microscopist. Please note that the EPA designates all materials containing greater than one percent asbestos as an "asbestos-containing material."

Regulated ACM is defined as (a) Friable asbestos materials, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

Category I and Category II non-friable ACM, as defined by the EPA:

- Category I non-friable ACM means asbestos-containing packings, gaskets, resilient floor covering, asphalt roofing products, and pliable sealants and mastics that are in good condition and not friable, containing more than 1% asbestos, as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, PLM.
- Category II non-friable ACM means any material, excluding Category I non-friable ACM, containing more than 1% asbestos as determined using the methods specified in Appendix E, Subpart E, 40 CFR Part 763 Section 1, PLM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

## **2.2 IDENTIFIED SUSPECT ASBESTOS-CONTAINING MATERIALS**

A total of 12 samples of suspect building materials were collected from the facility during the survey, representing four different identified homogeneous areas. The results of the laboratory analyses are included in Appendix A.

**TABLE 2.2-1: SUMMARY OF HOMOGENEOUS SAMPLING AREAS  
GROUP CAMPING RESTROOM - ORLANDO, FLORIDA**

<b>HA #</b>	<b>HOMOGENEOUS MATERIAL DESCRIPTION</b>	<b>HOMOGENEOUS MATERIAL LOCATION</b>	<b>FRIABILITY (F/NF)</b>	<b>% ASBESTOS*</b>	<b># OF SAMPLES COLLECTED</b>	<b>APPROXIMATE QUANTITY</b>	<b>ACM CATEGORY</b>
RS-1	Brown Roof Shingles	Roof	NF	ND	3	NIS	NA
M-1	Concrete	Slab	NF	ND	3	NIS	NA
M-2	Grout	Floor	NF	ND	3	NIS	NA
M-3	Roofing Felt	Roof	NF	ND	3	NIS	NA

<b>ASBESTOS CONTENT</b> Expressed as percent	* = The facility owner has the option of point-counting by polarized light microscopy (PLM) those RACM whose asbestos content is less than 10% in order to more accurately determine the asbestos content therein.					
	PC = Results based on Point-Count analysis					
<b>FRIABILITY</b>	F = Friable Material				NF = Non-Friable Material	
<b>ACM CATEGORY</b>	RACM = Regulated ACM	CAT I = Category I non-friable ACM	CAT II = Category II non-friable ACM			
<b>ABBREVIATIONS:</b>	NA = Not Applicable	ND = None Detected	NIS = Not in Scope	C = Chrysotile	A = Amosite	
	HA = Homogeneous Area	SF = Square Feet	LF = Linear Feet	CF = Cubic Feet	AHU = Air Handler Unit	

## **3.0 CONCLUSIONS AND RECOMMENDATIONS**

### **3.1 GENERAL**

**No asbestos-containing materials were identified in the scope of this survey.**

## **4.0 LIMITATIONS AND CONDITIONS**

As a result of previous renovations, there may be hidden materials, such as floor tile, sheet vinyl flooring, insulation, etc. These materials may be found in various areas hidden under existing flooring materials or in wall cavities. Any materials found during construction activities, either not addressed in this survey report, or similar to the ACM identified in this survey report should be assumed to be ACM until sampling and analysis documents otherwise.

Because of the hidden nature of many building components (i.e. within mechanical chases), it may be impossible to determine if all of the suspect building materials have been located and subsequently tested. Destructive testing in some instances is not a viable option. We cannot, therefore, guarantee that all potential ACM has been located. For the same reasons, estimates of quantities and/or conditions are subject to readily apparent situations, and our findings reflect this condition. We do warrant, however, that the investigations and methodology reflect our best efforts based upon the prevailing standard of care in the environmental industry.

The information contained in this report was prepared based upon specific parameters and regulations in force at the time of this report. The information herein is only for the specific use of the client and GLE. GLE accepts no responsibility for the use, interpretation, or reliance by other parties on the information contained herein, unless prior written authorization has been obtained from GLE.

**APPENDIX A**  
**Analytical Results and Chain of Custody**

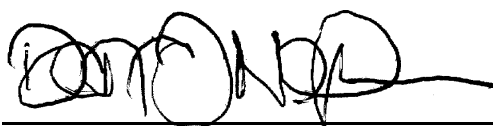
# SUMMARY OF BULK SAMPLE ANALYSIS

## OCRM; Moss Park Group RR

17270-00149

Sample	Sample Type		Fiber Type
RS-01A	Brown Roof Shingles	20%	Glass Fibers
		80%	Bitumen, Quartz, Calcite, Mica
RS-01B	Brown Roof Shingles	20%	Glass Fibers
		80%	Bitumen, Quartz, Calcite, Mica
RS-01C-QC	Brown Roof Shingles	20%	Glass Fibers
		80%	Bitumen, Quartz, Calcite, Mica
M-01A	Concrete	100%	Quartz, Calcite, Clay, Mica
M-01B	Concrete	100%	Quartz, Calcite, Clay, Mica
M-01C	Concrete	100%	Quartz, Calcite, Clay, Mica
M-02A	Grout	100%	Quartz, Calcite, Clay, Mica
M-02B	Grout	100%	Quartz, Calcite, Clay, Mica
M-02C	Grout	100%	Quartz, Calcite, Clay, Mica
M-03A	Roofing Felt	100%	Cellulose/paper
M-03B	Roofing Felt	100%	Cellulose/paper
M-03C	Roofing Felt	100%	Cellulose/paper

Analyst / Approved  
Signatory:



Darryl Neldner

\* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

\*\* The percentage of each component is visually estimated. The result of this analysis relate only to the material tested. The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

\*\*\* This report shall not be reproduced except in full, without the written approval of the laboratory. GLE Report # 21108

Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 5/1/2017

Page 1 of 1

**CHAIN OF CUSTODY/SAMPLE TRANSMITTAL FORM**



GLE Associates, Inc.  
 1155 S. Semoran Blvd., Suite 3-1111  
 Winter Park, FL 32792  
 PHONE: (407) 658-4151 FAX: (407) 658-4410

CLIENT:	DLRM	LAB: 2108
PROJECT #:	17270-00149	
PROJECT:	Moss Park Group RR	
LABORATORY SENT TO:	GLE	
DATE:	4/28/17	

**SAMPLE INFORMATION**

SAMPLE #	DESCRIPTION	SAMPLE #	DESCRIPTION
RS-1-A-C	Brown roof shingles		
M-1-A-C	Concrete		
M-2-A-C	Grout		
M-3-A-C	Roofing felt		

<b>IMPORTANT: TOTAL NUMBER OF SAMPLES SUBMITTED</b>	12
<b>IMPORTANT: POSITIVE STOP ANALYSIS</b>	NO
<b>IMPORTANT: E-MAIL RESULTS TO</b>	showard@gleassociates.com jelliott@bruno

**NOTE:**

Turnaround time starts at receipt by lab and does not include weekend or holidays.

**Select Turnaround Time**

3 hour   
  6 Hour   
  24 Hour   
  48 Hour   
  3 Day   
  4 Day

**REPORT RESULTS TO THE ADDRESS ABOVE**

CHAIN OF CUSTODY: GLE ASSOCIATES, INC.		CHAIN OF CUSTODY: LABORATORY	
PACKAGED BY: Joel Howard	DATE PACKAGED: 4-28-17	SAMPLES RECEIVED BY:	DATE:
METHOD OF TRANSMITTAL: FedEx	TRANSMITTED BY: [Signature]	TIME:	CONDITION OF PACKAGED SAMPLES:
CHAIN OF CUSTODY: RETURNED TO GLE ASSOCIATES, INC.			
RECEIVED BY:	INVENTORIED BY:	REPACKAGED AND SEALED BY:	DATE:

F:\HR Forms\Asbestos Forms Chain Of Custody - ORL.doc

**APPENDIX B**  
**Personnel and Laboratory Certifications**



STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT  
1940 NORTH MONROE STREET  
TALLAHASSEE FL 32399-0783

(850) 487-1395

GLE ASSOCIATES INC  
5405 CYPRESS CENTER DRIVE  
SUITE 110  
TAMPA FL 33609

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto [www.myfloridalicense.com](http://www.myfloridalicense.com). There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!



DETACH HERE

RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY

STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
ASBESTOS LICENSING UNIT

LICENSE NUMBER

ZA0000034

The ASBESTOS BUSINESS ORGANIZATION  
Named below IS LICENSED  
Under the provisions of Chapter 469 FS.  
Expiration date: NOV 30, 2017



GLE ASSOCIATES INC  
5405 CYPRESS CENTER DRIVE  
SUITE 110  
TAMPA FL 33609



ISSUED: 12/01/2015

DISPLAY AS REQUIRED BY LAW

SEQ # L1512010002475





**STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**

**ASBESTOS LICENSING UNIT  
2601 BLAIR STONE ROAD  
TALLAHASSEE FL 32399-0783**

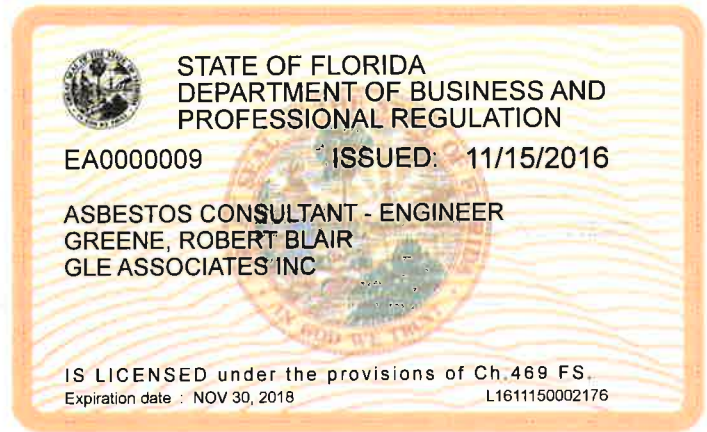
**(850) 487-1395**

**GREENE, ROBERT BLAIR  
GLE ASSOCIATES INC  
5405 CYPRESS CENTER DR  
SUITE 110  
TAMPA FL 33609**

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbecue restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto [www.myfloridalicense.com](http://www.myfloridalicense.com). There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!



DETACH HERE

RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY

**STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
ASBESTOS LICENSING UNIT**

**LICENSE NUMBER**

EA0000009

The ASBESTOS CONSULTANT - ENGINEER  
Named below IS LICENSED  
Under the provisions of Chapter 469 FS.  
Expiration date: NOV 30, 2018



**GREENE, ROBERT BLAIR  
GLE ASSOCIATES INC  
5405 CYPRESS CENTER DR  
SUITE 110  
TAMPA FL 33609**

ISSUED: 11/15/2016

DISPLAY AS REQUIRED BY LAW

SEQ# L1611150002176

Center for Training, Research and Education for Environmental Occupations

certifies

**Joel Howard**

Risk Management Division, 109 E Church Street , Orlando, FL 32804

Having passed a 25-question exam with a score of 70% or higher has successfully met training requirements for

***Asbestos Refresher: Inspector***

FDBPR Asbestos Licensing Unit: Provider #0000995; Course #FL49-0004731 (1/2 Day; 3.40 Contact Hours)

**(Reaccreditation for Inspector under TSCA Title II/AHERA)**

*Conducted*

**07/26/2016**

**Certificate #: 170428-5661**

**Exam Date: 07/26/2016**

**EPA accreditation expires: 07/26/2017**

**Principal Instructor: Brian Duchene, PE, LAC**

**CEUs: .4**

**FBPR LAC: #0000995; Course #0004731**

**FBPE PDHs: #0004021; Course #0009083/Educational Institutions: 4 PDHs**

*Carol Hinton*

Carol Hinton, Associate Director



United States Department of Commerce  
National Institute of Standards and Technology



**Certificate of Accreditation to ISO/IEC 17025:2005**

**NVLAP LAB CODE: 102003-0**

**GLE Associates, Inc.**  
Tampa, FL

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

**Asbestos Fiber Analysis**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2017-04-01 through 2018-03-31

*Effective Dates*



*[Signature]*  
For the National Voluntary Laboratory Accreditation Program