FLORIDA BOTANICAL GARDEN FOUNDATION LICENSE AGREEMENT

This Florida Botanical Garden Foundation License Agreement (this "**Agreement**") is entered into as of Aug. 24, 2021 (the "**Effective Date**") between the Florida Botanical Gardens Foundation, Inc., a Florida nonprofit corporation (the "**FBG Foundation**"), and Pinellas County, a political subdivision of the State of Florida ("**County**"), with respect to the Majeed Discovery Garden at the Florida Botanical Gardens (the "**Majeed Discovery Garden**"). The FBG Foundation and the County shall together be referred to herein as the "**Parties**" and individual as a "**Party**."

WHEREAS, the Florida Botanical Gardens are developed and maintained by the Parks and Conservation Resources Department of Pinellas County, Florida;

WHEREAS, the FBG Foundation is a nonprofit corporation that supports the Florida Botanical Gardens financially and through the work of FBG Foundation volunteers;

WHEREAS, the FBG Foundation desires to construct and jointly maintain and operate with the County a children's garden within the Florida Botanical Gardens;

WHEREAS, contemporaneously with the execution of this Agreement, the Majeed Foundation, Inc., a Florida nonprofit corporation (the "**Majeed Foundation**") and the County are entering into an agreement (the **"Majeed/County Agreement"**) pursuant to which the County will provide naming and other rights to the Majeed Foundation in consideration for the Majeed Foundation's donation to the FBG Foundation for the construction, maintenance, and operation of the Majeed Discovery Garden; and

WHEREAS, the FBG Foundation and the County desire to enter into this Agreement to set forth the rights, terms, and conditions of the FBG Foundation's construction and, with the County, maintenance and operation of the completed Majeed Discovery Garden.

NOW, THEREFORE, in consideration of the mutual undertakings of the Parties, and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Term. The term of this Agreement (the "**Agreement Term**") will begin on the Effective Date, and unless earlier terminated pursuant to Section 9 will continue for twenty-five (25) years from the time of the Majeed Discovery Garden opening and installation of the Majeed Discovery Garden signage pursuant to the Majeed/County Agreement. The Parties may extend the term of this Agreement in a signed writing by both Parties for an additional fifteen-year term. The Parties will endeavor to extend this Agreement for the additional fifteen-year term upon the expiration of this Agreement if neither Party has breached this Agreement without cure. This Agreement is subject to, and subordinate to, the Operating Agreement between the Parties, except to the extent the Operating Agreement has a shorter term than this Agreement or to the extent the Operating Agreement conflicts with this Agreement regarding the Majeed Discovery Garden.

2. Garden Boundaries. The boundaries of the Majeed Discovery Garden shall be consistent with the Garden Plans and as approximately set forth in Exhibit "A".

3. Planning/Construction.

a) Garden Plans; Changes. As of the Effective Date, the FBG Foundation has submitted a fully completed set of the Garden Plans to Pinellas County Parks and Conservation ("**PCR**"), and PCR has approved such Garden Plans, which are attached hereto as Exhibit "B" (the "**Garden Plans**"). PCR issued permission for the FBG Foundation to proceed to permits, and as of the Effective Date the Garden Plans are in permitting. Following the Effective Date, the FBG Foundation will submit any material changes to the Garden Plans to PCR for approval prior to implementing such changes. PCR will use all reasonable efforts to promptly review and provide comments, if any, regarding such changes but in no event later than ten (10) business days following receipt. The FBG Foundation will use a licensed engineering/architectural firm to complete all design work for the Majeed Discovery Garden.

b) Construction. The FBG Foundation will construct the Majeed Discovery Garden per the Garden Plans, as amended per the terms provided herein. The FBG Foundation will not be required to obtain County or PCR approval other than as set forth in Section III(a), above. The FBG Foundation will use a licensed contractor for all phases of construction for the Majeed Discovery Garden.

c) Access. The County will provide the FBG Foundation access to the EMS gate for construction equipment and materials delivery.

d) Responsibility. The FBG Foundation is solely responsible for acquiring any and all permits and licenses necessary for the full completion of the design and construction of the Majeed Discovery Garden.

4. Use of Majeed Discovery Garden.

a) Use. The FBG Foundation will have the exclusive right to construct the Majeed Discovery Garden. Without limiting the foregoing:

(i) The FBG Foundation will have the exclusive authority, without the County's prior approval on a per-event basis, for Tuesday, Wednesday, and Thursday of each week, to: (1) program ("book") the Majeed Discovery Garden for education events, birthday parties, and the like; and (2) collaborate with other organizations on programming and events.

(ii) The County will not build or place any structure within the Majeed Discovery Garden boundaries, or store any materials within the Majeed Discovery Garden boundaries, without the prior written consent of the FBG Foundation.

(iii) All revenue generated from Majeed Discovery Garden bookings and events generated by either the FBG Foundation or the County will be split evenly between the County and the FBG Foundation.

(iv) The County will be the operator of the Majeed Discovery Garden, subject to the FBG Foundation's right to schedule programs and other events, without County approval on Tuesdays, Wednesdays, and Thursdays.

(v) The County and the FBG Foundation will pay for the maintenance costs of supporting the Majeed Discovery Garden, as set forth on the attached Exhibit "D".

(vi) The County may prevent the public from utilizing the playground portion of the Majeed Discovery Garden, using its reasonable judgment and only as long as is necessary for health, safety, or maintenance purposes.

Nothing in this Agreement will prohibit the County from entering into license and other agreements with third parties with respect to other areas of the Botanical Gardens, provided that such agreements are compatible with the activities of the Majeed Discovery Garden.

b) Liability Coverage. The FBG Foundation may provide general liability coverage to contractors, vendors, performers, and other programming without obtaining County or PCR approval on a per-event basis, provided that the FBG Foundation complies with any requirements that the County specifies in this Agreement.

c) Restroom Access. The County will allow visitors to use the tropical plaza restroom located within the Florida Botanical Gardens outside of PCR's regular operational hours, as may be adjusted from time to time. The FBG Foundation is required to cover any additional staffing, maintenance, custodial, and costs associated with opening PCR's headquarters outside of PCR's regular business hours, as determined by PCR.

d) Permitted Purposes. The County and the FBG Foundation will ensure that the Majeed Discovery Garden is used for the Permitted Purposes. Consistent with the description of the Majeed Discovery Garden attached hereto as Exhibit "C", the FBG Foundation will support the County's operation of the Majeed Discovery Garden for the following purposes (each a **"Permitted Purpose"**): (1) exposing children to the natural Florida environment, and allowing them to interact with plants, see where food and fibers grow, and experience the role of birds, butterflies, and bees in nature; (2) providing programming opportunities scheduled through the County for children to learn about the care and nurture of plants and animals, as the children interact in creative spaces designed to stimulate all five senses; and (3) scheduling paid events, through the County, that are consistent with the foregoing purposes and do not detract from the goal of making the Majeed Discovery Garden accessible for all children, regardless of ability to pay. The responsibilities and obligations of the FBG Foundation and the County, including how scheduling will function, are set forth in Exhibit "D".

5. **Maintenance.**

a) **FBG Foundation/County Obligations.** The County and the FBG Foundation's maintenance obligations are set forth on the Operations Table attached as Exhibit "D".

(i) Subject to a Fiscal Non-Funding occurrence and/or the County's fiscal year budgeting, the County will maintain the Majeed Discovery Garden consistent with its overall maintenance of the Florida Botanical Gardens.

(ii) Each party will perform its maintenance obligations in a manner that ensures that the Majeed Discovery Garden is maintained, repaired, and replaced in substantially the condition contemplated at opening by the Garden Plans, ordinary wear and tear excepted.

b) **Horticulturalist.** The County may retain a horticulturalist or equivalent professional, as determined by the County, and at the County's sole discretion, to review plans for plant material and planting locations and provide other consulting services for the Majeed Discovery Garden.

6. **Name; Signage.** The parties will comply with the Name/Signage Plan, attached as Exhibit "E". The County shall grant the Majeed Foundation exclusive naming rights to the Majeed Discovery Garden during the Agreement Term in that separate Majeed/County Agreement. The foregoing notwithstanding, the FBG Foundation may provide third-party naming rights within the Majeed Discovery Garden as set forth in this Agreement.

7. **Majeed Foundation**. Each party will comply with its obligations under its agreement with the Majeed Foundation with respect to the Majeed Discovery Garden.

8. **Fiscal Non-Funding**. This Agreement is not a general obligation of the County. It is understood that neither this Agreement nor any representation by any County employee or officer creates any obligation to appropriate or make monies available for the purpose of this Agreement beyond the fiscal year in which this Agreement is executed. No liability shall be incurred by the County, or any department, beyond the monies budgeted and available for this purpose. If funds are not appropriated by the County for any or all of this Agreement, the County shall not be obligated to pay any sums provided pursuant to this Agreement beyond the portion for which funds are appropriated. The County agrees to promptly notify the FBG Foundation in writing of such failure of appropriation, and upon receipt of such notice, this Agreement, and all rights and obligations contained herein, shall terminate without liability or penalty to the County.

Notwithstanding the above, in the event of a Fiscal Non-Funding occurrence, the County will permit the FBG Foundation to provide any funding for the Majeed Discovery Garden that the County is unable to provide due to a Fiscal Non-Funding occurrence. In the event of such occurrence and funding by the FBG Foundation, this Agreement will not be terminated, and the FBG Foundation will have sole discretion in the use of the FBG Foundation's funds consistent with this Agreement.

9. Termination. Either party may terminate this Agreement for Cause. For purposes of this Agreement, "Cause" means the other party's material breach, if the breaching party fails to cure the breach within sixty (60) days after receiving notice thereof (or, if the breach is not reasonably susceptible of cure within sixty (60) days, the breaching party has commenced a cure within sixty (60) days and cures the breach within a reasonable period thereafter, not to exceed one hundred eighty (180) days). In addition, if the County fails to meet its maintenance or other obligations due to an appropriation shortfall, the FBG Foundation may terminate for Cause (but will not have the right to bring an action against the County for breach of contract, or compel the County to comply, and will in all instances be considered a termination without penalty to the County).

10. Indemnification. The FBG Foundation agrees to indemnify, pay the cost of defense, including attorney's fees, and hold harmless the County, its officers, employees and agents from all damages, suits, actions or claims, including reasonable attorney's fees and paralegals' fees incurred by the County, of any character brought on account of any injuries or damages received or sustained by any person, persons, or property, or in any way relating to or arising from this Agreement, including, but not limited to, any persons or entity that the FBG Foundation may contract with in furtherance of this Agreement; or on account of any act or omission, neglect or misconduct of the FBG Foundation; or by, or on account of, any claim or amounts recovered under the Workers' Compensation Law or of any other laws, regulations, ordinance, order or decree; or arising from or by reason of any actual or claimed trademark, patent or copyright infringement or litigation based thereon; except only such injury or damage as shall have been occasioned by the sole negligence of the County. The FBG Foundation's duty to indemnify the County is separate and in addition to any forms of insurance that it may be required to purchase in furtherance of this Agreement.

11. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida (without regard to principles of conflicts of laws). The Parties agree that all actions or proceedings arising in connection with this Agreement must be tried and litigated exclusively in the State of Florida or federal (if permitted by law and either the County or the FBG Foundation elects to file an action in federal court) courts located in, nearest to, or for Pinellas County, Florida. This choice of venue is intended by the Parties to be mandatory and not permissive in nature, and to preclude the possibility of litigation between the Parties with respect to, or arising out of, this Agreement in any jurisdiction other than that specified in this section. Each Party waives any right it may have to assert the doctrine of *forum non conveniens* or similar doctrine or to object to venue with respect to any proceeding brought in accordance with this section.

12. Severability. The terms and conditions of this Agreement shall be deemed to be severable. Consequently, if any clause, term, or condition hereof shall be held to be illegal or void by a court, that determination will not affect the validity or legality of the remaining terms and conditions, and notwithstanding any such determination, this Agreement shall continue in full force and effect, unless the omission of the particular clause, term, or condition held to be illegal or void: (1) renders the balance of this Agreement impossible to perform; or (2) deprives a party of its consideration for entering into this Agreement.

13. Taxes. The FBG Foundation acknowledges that the County is not subject to any state or federal sales, use, transportation, and certain excise taxes. The County acknowledges that, due to its not-for-profit status, the FBG Foundation is a tax-exempt entity. The FBG Foundation will alert the County in writing within thirty (30) days if its tax-exempt status changes.

14. Assignment. This Agreement, and any rights or obligations hereunder, shall not be assigned, transferred, or delegated to any other person or entity. Any purported assignment in violation of this section shall be null and void. Any purported or attempted assignment in violation of this section constitutes grounds for termination of this Agreement, at the election of the non-assigning Party. Notwithstanding the foregoing, the FBG Foundation may assign its rights under this Agreement: (1) to any nonprofit entity controlled by the FBG Foundation, without the consent of the County, but will nonetheless alert the County in writing of any assignment; or (2) to any other nonprofit entity with the County's consent, which will not be unreasonably denied.

15. Compliance With All Laws. The FBG Foundation will comply, at its own expense, with all applicable federal, state, county and Pinellas County Parks and Conservation Resources Department policies, local laws, ordinances, rules, and regulations in the performance of its obligations under this Agreement, including the procurement of licenses, permits and certificates where required, and including, but not limited to, applicable laws and regulations governing construction, taxation, Workers' Compensation, the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Equal Employment Opportunity (EEO), and Occupational Safety and Health Administration (OSHA) (including the Trench Safety Act, Ch. 553.60-553.64, Florida Statutes), health and the environment, work hours, labor and labor conditions, and privacy of medical records or information as applicable to this contract. If the FBG Foundation observes that any attachments or exhibits to this Agreement are at variance with this section, the FBG Foundation will notify the County in writing within thirty (30) days.

16. Public Records. The FBG Foundation acknowledges that information and data it manages as part of the services may be public records in accordance with Chapter 119, Florida Statutes and the County's public records policies. The FBG Foundation agrees that prior to providing services under this Agreement, it will implement policies and procedures to maintain, produce, secure, and retain public records in accordance with applicable laws, regulations, and County policies, including but not limited to the Section 119.0701, Florida Statutes. Notwithstanding any other provision of this Agreement relating to compensation, the FBG Foundation agrees to charge the County, and/or any third parties requesting public records only such fees allowed by Section 119.07, Florida Statutes, and County policy for locating and producing public records during the term of this Agreement. IF THE FBG FOUNDATION HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE FOUNDATION'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE COUNTY'S CUSTODIAN OF PUBLIC RECORDS AT PARKS@PINELLASCOUNTY.ORG, (727) 582-2100, PINELLAS COUNTY PARKS AND CONSERVATION RESOURCES, 12520 ULMERTON RD., LARGO, FL 33774.

17. Liability for Activities on County-Owned, Controlled, or Operated Property. The FBG Foundation will not undertake any acts or activities that foreseeably could cause damage to

any County-owned, controlled, or operated property, without first obtaining the prior written approval of the Bureau Director of the Pinellas County Parks and Conservation Resources Department, or designee.

The County will not assume any responsibility for damage to any equipment or material stored on any County-owned, controlled, or operated property, nor for any damage to any third party's property or person damaged or injured in relation to such equipment or material being stored by the FBG Foundation on any County-owned, controlled, or operated property, for activities taken by the FBG Foundation in furtherance of this Agreement.

18. Insurance: The FBG Foundation will acquire and maintain an appropriate amount of insurance coverage, consistent with the County's Risk Department requirements as set forth in Exhibit F. The Insurance requirements contained in Exhibit F encompass the insurance requirements set forth in the Operating Agreement between Pinellas County, Florida and Florida Botanical Gardens Foundation, Inc., attached hereto as Exhibit G and, the FBG Foundation may satisfy the requirements of both agreements by meeting the insurance requirements set forth in Exhibit F hereto. Said coverage shall be primary and non-contributory.

19. Notice: All notices, forms, and any other written correspondence pertaining to this Agreement shall be in writing and delivered via e-mail, or USPS Certified Mail to the following addresses, with the express understanding that the FBG Foundation must communicate with PCR about the implementation, execution, and resolution of any conflicts associated with this Agreement:

As to the County:
Pinellas County Parks and Conservation Resources Department
Attn: Bureau Director
12520 Ulmerton Road
Largo, FL 33774
pcozzie@pinellascounty.org

As to the FBG Foundation:

Florida Botanical Gardens Foundation, Inc.
Attn: President
12520 Ulmerton Road
Largo, FL 33774-3602
flbgfoundation@gmail.com

20. Entire Agreement. This Agreement constitutes the entire agreement between the Parties with respect to its subject matter and supersedes any oral or written prior agreements or communication between the Parties with respect to its subject matter. This Agreement may not be amended, except by an instrument signed in writing by an authorized representative of each Party hereto. Each Party shall execute such documents and perform such further acts as may be reasonably requested by the other Party to carry out the purposes of this Agreement. No course of dealing between the Parties, nor any omission, failure, or delay by a Party in exercising or

enforcing any right under this Agreement, shall be deemed to: (a) be a waiver of any right; (b) limit or prohibit the future exercise or enforcement of any right; or (c) affect the validity of any provision of this Agreement. No waiver of any breach of any term, condition, or obligation by either Party shall be effective unless it is in writing and executed by the Party against which enforcement is sought. The provisions of Section 20 will survive termination of this Agreement for any reason.

21. Construction. For purposes of this Agreement: (a) unless the context otherwise requires, the masculine, feminine, and neuter genders shall include each of the other genders, the singular shall include the plural, and the plural shall include the singular; (b) the headings are for convenience only, and are not intended to limit the scope or intent of this Agreement; (c) the definition of any defined term shall apply equally to both the singular and plural forms of the term, and to other forms of the word; (d) any reference to a number of days shall be deemed to refer to calendar days; (e) if the final date of any period for the taking of any action falls on a day other than a Business Day, then the end of such period shall be extended to 5:00 p.m. Pinellas County, Florida time on the next day that is a Business Day; and (f) any reference to an Section or Exhibit refers to an Section or Exhibit of this Agreement. The rights, remedies, powers, and privileges provided in this Agreement are cumulative and not exclusive of any rights, remedies, powers, and privileges available at law or equity. **"Business Day"** means any day other than a Saturday, Sunday, or Pinellas County government holiday.

22. Execution; Counterparts. Any photocopy, scan, or other reliable reproduction of a signature page hereof showing the signature of an individual will be conclusive evidence of execution hereof by that individual and may be used in lieu of the original signed signature page for all purposes. This Agreement may be executed in any number of counterparts, and all counterparts will be construed together as one agreement. This Agreement shall be construed without regard to any presumption requiring interpretation against the drafting Party.

IN WITNESS WHEREOF, an authorized officer of each Party has executed this Agreement, effective as of the Effective Date.

Pinellas County, a political subdivision of the State of Florida	**Florida Botanical Garden Foundation, Inc.**
Dave Eggers **Dave Eggers, Chair**	John Thomas Jr. **John Thomas, its President**

ATTEST: KEN BURKE, CLERK
By: Deputy Clerk

APPROVED AS TO FORM
By: *Matthew Tolnay*
Office of the County Attorney

BOARD OF COUNTY COMMISSIONERS
SEAL
PINELLAS COUNTY, FLORIDA

EXHIBIT A

Garden Boundaries

Beginning at the northwest corner of the site at the line of intersection of the stockade fence and the south side of the northern walkway;

Thence running easterly along the south side of the north walkway at the North Bridge approximately 330 feet to the west side of McKay Creek;

Thence turning south along the west side of McKay Creek approximately 485 feet to the South Bridge;

Thence turning west along the north side of the raised boardwalk approximately 235 feet to the concrete walk that borders the parking lot;

Thence running northwesterly along the east side of the walk approximately130 feet to the west side of the existing concrete walk that bisects the Children's Discovery Garden;

Thence turning north along the west side of the existing walk that bisects the garden approximately 45 feet to the north side of the walk that provides access to the butterfly garden;

Thence turning west along the north edge of concrete walk and pads that support percussion instruments approximately 30 feet to a point;

Thence turning north approximately 80 feet on a straight line to the southeast corner of the stockade fence;

Thence running northerly along the fence approximately 80 feet to the point of beginning.

Although not part of the Majeed Discovery Garden construction will require utility connections, compensatory flood storage and excess soil disposal at other locations that are part of the Florida Botanical Gardens property.

EXHIBIT B

Majeed Discovery Garden Plans

[Attached.]

EXHIBIT C

Majeed Discovery Garden Description

The Florida Botanical Gardens Foundation (FBGF), is undertaking the creation of a newgarden within the Botanical Gardens footprint. The Discovery Garden (DG) will be designed specifically to entice, engage and educate children through discovery and play.

The Florida Botanical Gardens is a part of Pinellas County's park system, which includes 15 regional parks, 4 neighborhood parks, the Pinellas Trail, Heritage Village Historical Museum, and 4 nature preserves, including Brooker Creek and Weedon Island. All of these entities are made available to county residents and guests, regardless of socio-economic status, and their impact will only be strengthened with the addition of the DG, as it will enable them to supply to a wider demographic. With no costfor admission, thousands of annual visitors from the Tampa Bay community and beyondare able to enjoy the Botanical Gardens. It is accessible to all those who live, work, and play in Pinellas County, and it provides an oasis for many looking to relax and escape. Our Guest Book boasts reviews by visitors from around the world, who partake in the beauty and serenity of the Gardens. Adding a Children's Garden will broaden the appeal for families with children living in and visiting the community.

The area proposed for the DG is approximately 2.5 acres. Of which, 1.5 acres will be used for the site improvements and 1-acre will receive plantings and natural enhancements. An existing concrete walk running north/south divides the site into a 1/2acre to the west and 2 acres to the east, and features the main entry, which includes ADA-compliant paths, a rain feature, benches and plantings. The west side of the DG has hard surfaces of concrete and pavers, while the east is more natural with surfaces of turf, stabilized soil, wood fiber, pour-in-place play surfaces and mulch. Both sides provide for unstructured play, engaging nature activities, and seating and amenities for parents/supervisors.

The Music Forest contains a plaza of pavers among trees providing a shady space for play with oversized, stationary, musical instruments. A fun and engaging access to thissection will be by rope bridge through a stand of bamboo. Pollinator Landing is a multi-purpose area for climbing, group presentations, puppet shows and theatre skits with seating. The east side of DG features primary educational elements, as well as Florida-Friendly Landscaping™ exhibits. Roots n Shoots is an environment where children can get their hands dirty, and includes a hand water pump, as a source for playand watering plants. A screened classroom building will facilitate nature observation andcreate a location for structured programming. It will provide for both educational presentations and a space for children’s events and parties. Other places for play are provided by a large Beetle Climber and Trunk Jump. A loop path through the southern end of the site will provide for wildlife observation, as well as a location for children todisplay their artwork on an Artline.

EXHIBIT D

Operations Table

Activity	PCR	FBGF	Comments:
Basic Maintenance			
General Landscape Maintenance	Yes	No	
General Irrigation Maintenance	Yes	No	
General Electrical Maintenance	Yes	No	
Equipment Maintenance; Long-term maintenance, repairs, and replacement of equipment and structures	Yes	Yes	FBGF to monitor; repairs/ Costs split 50/50
Landscape Materials/Supplies including mulch, chemicals, related equipment	Yes	No	FBGF will continue to support with Funding as outlined in current FBGF/PC Operating Agreement
Routine Maintenance Staff	Yes	No	FBGF will continue reimbursement procedure as outlined in current FBGF/PC Operating Agreement
Programmatic Activities			
Educational Staff	No	Yes	FBGF may hire an educator to manage programmatic activities in CDG. FBGF may provide educator each weekday Tuesday-Thursday
Daily Cleaning and material setup –education building	No	Yes	FBGF Staff & Volunteers
Educational materials & supplies	No	Yes	FBGF will manage purchase/storage/use
Workshops & Classes including conducting/evaluation	No	Yes	FBGF Staff & Volunteers
Tours & related activities	No	Yes	FBGF Staff & Volunteers to manage to ensure consistency and no scheduling conflicts, but tours are not exclusive to FBGF
Special Events	Yes	Yes	All scheduling through PCR
Volunteer Recruitment, Training, & management	No	Yes	Screening through PCR as is current procedure, but FBGF to facilitate.
Scheduling Facilities for Classes, workshops, private rentals	Yes	No	FBGF may have recurring use of classroom space each weekday Tuesday-Thursday. All other bookings through the County

EXHIBIT E

Name/Signage Plan

[Attached.]

Exhibit F: Minimum Insurance Requirements

(to be added by County Risk Department)

EXHIBIT "F"
Insurance Requirements

The LICENSEE must obtain and maintain, and require any contractors or sub-contractors to obtain and maintain, at all times during the License unless otherwise provided for herein, insurance of the types and in the amounts set forth. All insurance policies must be from responsible companies duly authorized to do business in the State of Florida and have an AM Best rating of A- VIII or better. Within three (3) calendar days prior to the Commencement Date, the LICENSEE shall provide the LICENSOR with properly executed and approved Certificates of Insurance to evidence compliance with the insurance requirements of the License. The Certificate(s) of Insurance must be signed by authorized representatives of the insurance companies shown on the Certificate(s). A copy of the endorsement(s) referenced in paragraph three (3) for Additional Insured must be attached to the certificate(s).

LICENSEE must not use the Premises until the required Certificate(s) of insurance are received and approved by the LICENSOR. Approval by the LICENSOR of any Certificate of Insurance does not constitute verification by the LICENSOR that the insurance requirements have been satisfied or that the insurance policy shown on the Certificate of Insurance is in compliance with the requirements of the License. LICENSOR reserves the right to require a certified copy of the entire insurance policy, including endorsements, at any time.

All policies providing liability coverage(s), other than professional liability and worker's compensation policies obtained by the LICENSEE and any sub-contractors to meet the requirements of the License must be endorsed to include Pinellas County as an Additional Insured.

If any insurance provided pursuant to the License expires prior to the termination of the License, renewal Certificates of Insurance and endorsements must be furnished by the LICENSEE to the LICENSOR at least thirty (30) days prior to the expiration date.

LICENSEE must also notify LICENSOR within twenty-four (24) hours after receipt, of any notices of expiration, cancellation, nonrenewal or adverse material change in coverage received by said LICENSEE from its insurer. Notice must be given by certified mail to: Pinellas County

Risk Department, 400 S. Ft. Harrison Avenue, 3rd Floor, Clearwater, Florida 33756; and nothing contained herein must absolve LICENSEE of this requirement to provide notice.

Should the LICENSEE, at any time, not maintain the insurance coverages required herein, the LICENSOR may terminate the License, or at its sole discretion may purchase such coverages necessary for the protection of the LICENSOR and charge the LICENSEE for such purchase. The LICENSOR is be under no obligation to purchase such insurance, nor is it responsible for the coverages purchased or the insurance company or companies used. The decision of the LICENSOR to purchase such insurance is not a waiver of any of its rights under the License.

Each insurance policy, including those related to the Majeed Family Children's Garden construction, must include the following terms and/or conditions in the policy:

(1) Companies issuing the insurance policy, or policies, must have no recourse against LICENSOR for payment of premiums or assessments for any deductibles which all are at the sole responsibility and risk of LICENSEE.
(2) The term "County" or "Pinellas County" includes all Authorities, Boards, Bureaus, Commissions, Commissioners, Divisions, Departments and Constitutional offices of LICENSOR and individual members, employees thereof in their official capacities, and/or while acting on behalf of Pinellas County.
(3) The policy clause "Other Insurance" does not apply to any insurance coverage currently held by LICENSOR or any such future coverage, or to LICENSOR's Self-Insured Retentions of whatever nature.
(4) All policies must be written on a primary, non-contributory basis.
(5) Insurance policies, other than Professional Liability, must include waivers of subrogation in favor of Pinellas County from both the LICENSEE and sub-contractor(s).

The insurance requirements for this License, which must remain in effect throughout its duration, are as follows:

(A) Workers' Compensation Insurance

Limits Florida Statutory

Employer's Liability Limits

Per Employee	$500,000
Per Employee Disease	$500,000
Policy Limit Disease	$500,000

Community General Liability Insurance including, but not limited to, Independent Contractor, Contractual Liability Premises/Operations, Products/Completed Operations and Personal Injury.

Limits

Each Occurrence	$1,000,000
Products/Completed Operations Aggregate	$2,000,000
Personal Injury and Advertising Injury	$1,000,000
Umbrella	$2,000,000
General Aggregate	$2,000,000

Property Insurance LICENSEE will be responsible for all damage to its own property, equipment and/or materials.

The additional Insurance policies are required during the construction of the Majeed Family Children's Garden for any contractor or subcontractor hired by LICENSEE:

Automobile Liability Insurance shall be provided in accordance with the laws of the State of Florida as to the ownership, maintenance and use of all owned, non-owned, leased or hired vehicles. The bodily injury and property damage limits shall not be less than $1,000,000 combined single limit for each accident.

Exhibit G: Operating Agreement between
Pinellas County, Florida
and
Florida Botanical Gardens Foundation, Inc.

OPERATING AGREEMENT BETWEEN
PINELLAS COUNTY, FLORIDA
AND
FLORIDA BOTANICAL GARDENS FOUNDATION, INC.

THIS AGREEMENT, made and entered into this 13 day of November, 2019 by and between Pinellas County, a political subdivision of the State of Florida, hereinafter referred to as the "COUNTY," and the Florida Botanical Gardens Foundation, Inc., a Florida nonprofit corporation, with its in principal place of business and mailing address located at 12520 Ulmerton Road, Largo, FL 33774-3602, hereinafter referred to as the "FOUNDATION."

WITNESSETH:

WHEREAS, Section 90-18 of the Pinellas County Code (the "Code") requires that Citizen Support Organizations (CSO) such as the FOUNDATION conducting operations on COUNTY parks and preserves enter into written agreements with the COUNTY;

WHEREAS, the COUNTY and the FOUNDATION have a long-standing, mutually beneficial relationship each party seeks to continue;

WHEREAS, the FOUNDATION contributes significant technical expertise, time, and funds to help maintain and enhance the Florida Botanical Gardens (the "Gardens"), which ultimately provide savings for the COUNTY and its taxpayers; and

WHEREAS, the COUNTY and the FOUNDATION share a common elements of a vision to further enhance the Gardens' ecosystem, infrastructure, and visitor experience.

NOW THEREFORE, in consideration of the above and mutual covenants contained herein, the parties agree as follows:

A. **Purpose**: The purpose of this Agreement is to provide a basic legal mechanism for the parties to work together to support the Gardens. Nothing herein prevents the parties from executing separate, more specific, agreements toward that end.

B. **COUNTY Facilities Use by the FOUNDATION**: The COUNTY shall provide certain reasonable and complementary use of the Gardens to the FOUNDATION. The COUNTY shall also provide certain reasonable and complementary use of the COUNTY Parks & Conservation Resources Department's ("Department") headquarters ("Headquarters") located at 12520 Ulmerton Road, Largo, FL 33774 to the FOUNDATION. Such use of the Gardens and Headquarters may include, but is not limited to gift shop operations, and other day-to-day FOUNDATION business. Such use shall be permitted at the COUNTY's discretion, although the COUNTY may not unreasonably withhold such use. Before the COUNTY may revoke any FOUNDATION right to use the Headquarters for gift shop operations and office space, it shall first provide the FOUNDATION with ninety (90) days' written notice. In the event that use of the Gardens and/or Headquarters by the FOUNDATION becomes impossible, impracticable, or otherwise unsafe due to unforeseen health or safety hazards, a natural disaster, local government shutdown, security breach, or other exigent circumstance affecting the Gardens and/or Headquarters, then the COUNTY will not be required to provide ninety (90) days' written notice to the FOUNDATION. The COUNTY will instead provide prompt and reasonable notice under the circumstance(s) to the FOUNDATION regarding the existence of such conditions and will thereafter endeavor to make Headquarters available as soon as practicable. The FOUNDATION shall maintain the Gardens and Headquarters facilities that it occupies in clean, safe, and working order at all times. Unless directed otherwise by the COUNTY, prior to the Gardens closure, the

FOUNDATION shall return all Gardens and Headquarters facilities it uses during the day to the same condition that they were in when FOUNDATION operations commenced on that day. Any complementary use of the COUNTY's facilities shall be consistent with the Department's Mission and the FOUNDATION's Mission.

C. **Budget and Expenditures**: Except as otherwise provided in this section, the FOUNDATION shall have full control over its budget. The COUNTY shall not require any expenditures by the FOUNDATION, outside of incidental charges to which any member of the public would be subject (e.g., permit applications fees). Notwithstanding the above, the FOUNDATION shall expend all funds it generates strictly for the benefit of the Gardens and reasonable administrative and operational costs incurred therewith. The FOUNDATION shall utilize reasonable financial procedures to record its revenues and expenditures and update its gross assets and liabilities accordingly. Notwithstanding its other obligations and financial support of the Gardens, the FOUNDATION will provide sixty-thousand ($60,000) dollars per fiscal year to the COUNTY to supplement the COUNTY's maintenance efforts at the Gardens. These funds may be used to provide funding for a part-time Parks Maintenance Worker, the details of which will be set forth in a separate agreement. These funds will also be used for maintenance related activities at the Gardens, including, but not limited to, purchasing, installing, and maintaining plants, flowers, trees, soil, fertilizer, tools, and any other materials used solely within the Gardens. The FOUNDATION will provide funding to the COUNTY on a **quarterly** basis for all other maintenance related expenditures under **Section C** upon receiving receipts and supporting documentation detailing the costs of the maintenance related expenditures. The COUNTY recognizes that such receipts and documentation allow the FOUNDATION to

comply with its fiduciary responsibilities as outlined in this Agreement and in the FOUNDATION's Fiscal Policies and Procedures. Either party may submit a written request, to be approved by the other party, for an upward or downward adjustment to the sixty-thousand ($60,000) dollar per fiscal year maintenance related allocation provided by the FOUNDATION.

D. **Annual Reporting Requirements**: In accordance with Section 90-18(c) of the Code, the FOUNDATION shall, between September 15 and September 30 of each year, provide the COUNTY with an **Annual Plan of Work** containing, at a minimum, a copy of the following: (1) its budget for the upcoming fiscal year; (2) a statement of its annual goals and objectives; (3) a staff report evaluation of the ending current fiscal year's operations and programs; and (4) a list of its current officers. Furthermore, in accordance with Section 90-18(c) of the Code, the FOUNDATION shall, between September 15 and September 30 of each year, provide the COUNTY with an **Annual Financial Report** containing, at a minimum, a copy of the following: (1) a balance sheet with supporting financial statements for the **previous** fiscal year, and (2) its most recent Form 990 issued to the Internal Revenue Service for Tax-Exempt Organizations for the **previous** fiscal year.

E. **Intent of Annual Reporting Requirements**: The intent of the reporting requirements listed in Section D above is not to burden the FOUNDATION, but rather to ensure transparency with donors and the public. Therefore, reportable items need not be overly comprehensive, but shall be detailed enough to provide donors with (1) complete assurance that donations have not been misappropriated and (2) a firm understanding of the ends (projects, activities, services, etc.) that his or her donation may have supported or will support. To assist in preparing its Annual Plan of Work and any other annual reports, the

FOUNDATION may request that the COUNTY provide a written overview of the Gardens' anticipated needs and completed projects. Such overview shall be provided to the FOUNDATION within thirty (30) days of request and shall include cost estimates of any financial commitments requested of the FOUNDATION. The COUNTY or the FOUNDATION may likewise request a meeting with the other Party to discuss resource allocation between the Parties for planned Gardens' projects. In the spirit of collaboration and in furtherance of this Agreement, all such reasonable requests for meetings relating to annual work should be honored by the non-requesting party in a reasonable amount of time.

F. **Compliance with Applicable Laws**: The FOUNDATION agrees to fully comply with Chapter 90 of the Code titled "Parks and Conservation Resources," Department policies, and all Rules and Regulations issued by the Department, including but not limited to acquiring COUNTY permits, licenses, or other special permissions where required. For example, if the FOUNDATION desires to hold a Special Event (as that term is defined in Section 90-3 of the Code) at the Gardens that is not authorized by a separate legal instrument executed by the COUNTY, the FOUNDATION shall first obtain a Special Event Permit from the Department as required under Section 90-9 of the Code. The FOUNDATION similarly agrees to acquire any additional requisite local, state, or federal permits and shall comply with applicable local, state, and federal law at all times.

G. **Public Records**: The FOUNDATION acknowledges that, like the COUNTY, information and data it manages pursuant to this Agreement may be public records under Section 119 of the Florida Statutes and agrees to retain, maintain, secure, and produce public records in compliance therewith. The FOUNDATION shall not charge any duplication or special service fees authorized under Section 119 of the Florida Statutes to the COUNTY should

the COUNTY request public records from the FOUNDATION pursuant to an audit, reporting requirement, or otherwise.

H. Audit: Notwithstanding, and in addition to the reporting and retention requirements of Sections D and G above, the parties shall retain all records relating to this Agreement, for three (3) years after termination of this Agreement. The COUNTY reserves the right to require the FOUNDATION to provide a certified financial audit conducted by an independent certified public accountant at the expense of the COUNTY at any time.

I. Term: This Agreement shall become effective upon execution by both parties and shall expire five (5) years from the effective date, unless terminated earlier in accordance with the provisions herein. The parties may agree in writing to extend this Agreement for two additional five (5) year terms.

J. Amendment: Except as otherwise provided herein, this Agreement may only be amended by mutual written agreement of the parties. The parties may amend this Agreement at any time.

K. Termination: Either party may terminate this Agreement with cause immediately upon notice to the other party. This Agreement may be terminated with cause if either party fails to fulfill or abide by any term or condition specified herein. Additionally, either party may terminate this Agreement without cause upon ninety (90) days' notice to the other party. The parties may likewise mutually agree in writing to terminate this Agreement for any reason at any time. As required by Section 90-18(b) of the Code, upon expiration or termination of this Agreement, the FOUNDATION will, within fifteen (15) days, cease operations at the Gardens, remove any reference to the Gardens or the Department from its entity name, and cease to hold itself out as such. The COUNTY reserves the right to avail

itself of all available legal remedies, and the expiration or termination of this Agreement will not prevent the FOUNDATION from doing same. The COUNTY will allow the FOUNDATION one-hundred and twenty (120) days following termination or expiration of this Agreement to remove all of the FOUNDATION's property from the COUNTY's premises. The FOUNDATION will bear the risk of loss for the FOUNDATION's property during this one-hundred and twenty (120) day period. Nothing herein prevents the parties from entering into a new operating agreement after expiration or termination of this Agreement.

L. **Indemnity:** The FOUNDATION shall indemnify, pay the reasonable cost of defense, including reasonable attorney's fees, and hold harmless the COUNTY from all suits, actions, or claims of any character brought on account of any negligent act or omission of the FOUNDATION, its officers, members, agents, assignees, or contractors excepting, only such injuries or damages caused by the negligence of the COUNTY.

M. **Damage to FOUNDATION Property:** Notwithstanding the indemnification language set forth in Section L above, the FOUNDATION shall be responsible for any damage to its own equipment, property, and materials.

N. **Insurance:** The FOUNDATION shall at all times during the term of this Agreement comply with the COUNTY's minimum insurance requirements set forth in Exhibit A, which is attached and incorporated hereto. The COUNTY may determine that a particular activity requires additional insurance. In this instance, the FOUNDATION shall be subject to the same COUNTY insurance procedures and requirements that any entity or citizen(s) seeking to conduct such an Activity is subject. For example, issuance of a Special Event Permit by the Department is contingent upon satisfaction of variable insurance

requirements based on the size, scope, and nature of the Special Event. The COUNTY shall consider any input from the FOUNDATION as to appropriate insurance policies and limits for a particular activity. The FOUNDATION agrees that FOUNDATION members, volunteers, and agents, when working on FOUNDATION activities and events on COUNTY property, are not COUNTY volunteers for the purposes of the COUNTY's Worker's Compensation Policy, pursuant to Fla. Stat. § 440.01–440.60 *et seq.*

O. Assignment and Contracting: The FOUNDATION shall not assign any interest in this Agreement or enter into any subcontract for performance of this Agreement. The FOUNDATION also will not contract with any vendor, contractor or subcontractor that provides products or services directly to patrons of the Gardens, or performs services on the Gardens, without prior written COUNTY approval. The FOUNDATION will not contract with any vendor, contractor, or subcontractor that will intentionally interact with patrons of the Gardens on behalf of the FOUNDATION without first obtaining prior written COUNTY approval. Inadvertent and unintentional interactions with the public by any FOUNDATION vendor, contractor, or subcontractor will not be considered a violation of **Section O**. The FOUNDATION also will not contract with any vendor, contractor, or subcontractor that performs services on or relating to any COUNTY property without first obtaining prior written COUNTY approval. In the absence of another established Department guideline for approving requests, the FOUNDATION may include in its written requests seeking approval from the COUNTY a request that such an approval be granted or denied within a specified reasonable timeframe. The COUNTY, through the Department, will thereafter endeavor to provide an approval or denial within the specified timeframe, and if none is provided, a reasonable amount of time under the circumstances,

providing that reasonable and sufficient notice for the written approval was provided to the COUNTY, through the Department, by the FOUNDATION. The FOUNDATION, however, will not have to obtain prior written COUNTY approval if it contracts with any vendor, contractor, or subcontractor that solely interacts with the FOUNDATION's officers, employees, and agents, or that performs services on or relating to FOUNDATION property, or that assists the FOUNDATION in its internal administrative duties. In all instances, the FOUNDATION will provide reasonable notice under the circumstances to the COUNTY when seeking prior written COUNTY approval under **Section O.** Approval may be granted by the Director of the Department, or her or his authorized representative. Approval may also be granted by a Department Operations Manager.

P. Miscellaneous: The COUNTY acknowledges that all items purchased by the FOUNDATION for use and installation at the Gardens become the property of the COUNTY. Ongoing maintenance and disposal of these items at the end of these items' useful life is the responsibility of the COUNTY, which may, from time to time, submit written funding requests to the FOUNDATION to cover deferred maintenance or replacement of previously funded items. The FOUNDATION will first obtain prior written COUNTY approval before the FOUNDATION purchases any items for use and installation at the Gardens.

Q. Notice: All notices, forms, and any other written correspondence pertaining to this Agreement shall be in writing and delivered via e-mail, or USPS Certified Mail to the following addresses:

<u>As to the COUNTY:</u>

Pinellas COUNTY Parks and Conservation Resources Department
Attn: Bureau Director

12520 Ulmerton Road
Largo, FL 33774
pcozzie@pinellasCOUNTY.org

As to the FOUNDATION:

Florida Botanical Gardens Foundation, Inc.
Attn: President
12520 Ulmerton Road
Largo, FL 33774-3602
flbgfoundation@gmail.com

Notice shall be considered delivered or received as reflected by an e-mail read receipt or a certified mail delivery receipt. Either party may change its notice information for this Agreement (name/title, mailing address, e-mail address) at any time by providing written notice of same to the other party.

R. **Severability:** The invalidity or unenforceability of any provisions of the Agreement, including the Exhibits attached and incorporated hereto, shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

S. **Supremacy:** This Agreement supersedes all prior agreements entered into by the Parties.

T. **Fiscal Non-Funding:** In the event that sufficient budgeted funds are not available for a new fiscal period, the COUNTY shall notify the FOUNDATION of such occurrence within a reasonable amount of time and the Agreement shall terminate on the last day of the then current fiscal period without penalty or expense to the COUNTY.

IN WITNESS WHEREOF, the parties herein have executed this Agreement as of the date first above written.

PINELLAS COUNTY, FLORIDA

By:_____
Barry Burton, County Administrator

FLORIDA BOTANICAL GARDENS FOUNDATION, INC.

By:_____
John Thomas, President

Witness:

APPROVED AS TO FORM

By: _____
Office of the County Attorney

By:_____
Communications Coordinator

(Attesting Witness's Name/Title)

Construction Plans

Issued for	Permitting
Date Issued	December 14, 2020
Latest Issue	December 14, 2020

Children's Discovery Garden

12520 Ulmerton Road
Largo, Florida

Civil Sheet Index

No.	Drawing Title	Latest Issue
	Cover	December 14, 2020
C1.0	General Notes & Legend	December 14, 2020
C1.1	General Notes	December 14, 2020
C2.0	Demolition & Erosion Control Plan	December 14, 2020
C2.1	Erosion Control Details	December 14, 2020
C3.0	Site Plan	December 14, 2020
C3.1	Horizontal Geometry Plan	December 14, 2020
C3.2	Horizontal Geometry Plan	December 14, 2020
C3.3	Horizontal Geometry Plan	December 14, 2020
C4.0	Grading & Drainage Plan	December 14, 2020
C4.1	Grading Details	December 14, 2020

Survey Sheet Index

No.	Drawing Title	Latest Issue
Sv-1	Topographic Survey Areas 1 & 2	November 26, 2018
Sv-2	Topographic & Wetland Survey Area 3	May 4, 2019
Sv-3	Topographic & Wetland Survey Area 3	May 5, 2019
Sv-4	Topographic & Wetland Survey Area 4	May 6, 2019
Sv-5	Topographic Survey Discovery Garden	September 22, 2020

Landscape & Irrigation Sheet Index

No.	Drawing Title	Latest Issue
L0.00	General Notes	December 14, 2020
L0.01	Site Key	December 14, 2020
L0.02	Tree Removal and Protection Plan	December 14, 2020
L0.03	Site Plumbing Schematic	December 14, 2020
L1.10	West Materials Plans	December 14, 2020
L1.11	South Materials Plans	December 14, 2020
L1.12	North Materials Plans	December 14, 2020
L3.10	West Fine Grading Plan	December 14, 2020
L3.11	South Fine Grading Plan	December 14, 2020
L3.12	North Fine Grading Plan	December 14, 2020
L4.10	West Planting Plan - Trees	December 14, 2020
L4.11	South Planting Plan - Trees	December 14, 2020
L4.12	North Planting Plan - Trees	December 14, 2020
L4.20	West Planting Plan - Shrubs and G.C.	December 14, 2020
L4.21	South Planting Plan - Shrubs and G.C.	December 14, 2020
L4.21A	South Planting Plan - Pond	December 14, 2020
L4.22	North Planting Plan - Shrubs and G.C.	December 14, 2020
L4.90	Planting Schedule - Site	December 14, 2020
L4.91	Planting Schedule - Site	December 14, 2020
L4.92	Planting Schedule - Site	December 14, 2020
L4.93	Planting Schedule - Pond	December 14, 2020
L4.94	Planting Details	December 14, 2020

Landscape & Irrigation Sheet Index

No.	Drawing Title	Latest Issue
L8.00	Paving Details	December 14, 2020
L8.03	Site Electrical Details	December 14, 2020
L8.12	Metal Details - Entrance Signage	December 14, 2020
R1.10	West Irrigation Plan	December 14, 2020
R1.11	South Irrigation Plan	December 14, 2020
R1.12	North Irrigation Plan	December 14, 2020
R1.90	Irrigation Notes and Schedule	December 14, 2020
R1.91	Irrigation Details	December 14, 2020
R1.92	Drip Irrigation Details	December 14, 2020

Electrical Sheet Index

No.	Drawing Title	Latest Issue
E0.01	Electrical Legend and Specifications	December 14, 2020
E1.00	Electrical Site Key	December 14, 2020
E1.10	West Electrical Plan	December 14, 2020
E1.11	South Electrical Plan	December 14, 2020
E1.12	North Electrical Plan	December 14, 2020
E2.00	Classroom & Shed Bldgs Electrical Plan	December 14, 2020
E3.00	Power One-Line Diagram and Schedules	December 14, 2020

vhb.com

501 E Kennedy Boulevard
Suite 1010
Tampa, FL 33602
813.327.5450
Certificate of Authorization
Number FL #3932

Civil Engineer
VHB
501 E. Kennedy Blvd.
Suite 1010
Tampa, FL 33602
P 813.327.5450
F 813.209.2365

Owner
Pinellas County
315 Court Street
Clearwater, FL 33756

Survey
VHB
225 E. Robinson St.
Suite 300
Orlando, FL 32801
P 407.839.4006

Architect
Wannemacher Jensen
Architects, Inc.
St. Petersburg, FL

Structural Engineer
Master Consulting
Engineers, Inc.
Tampa, FL

Landscape Architect
Coyle & Caron, Inc.
Orlando, FL

Geotechnical Engineer
Driggers Engineering
Services, Inc.
Clerawater, FL

KEVIN M. BYNUM, P.E.
PE 62392

VHB Project : 62897.03
Issued for : Permitting

\\VHB\GBL\PRO\TAMPA\62897.03 COYLE-FBG CHILDRENS GARD\CAD\LD\PLANSET\62897.03-COV 14 December 2020

\\vhb\gbl\proj\Tampa\62897.03 Coyle-FBG Childrens Gard\cad\ld\Planset\62897.03-GN.dwg

Legend

Prop.

PROPERTY LINE
LIMIT OF WORK
RIGHT-OF-WAY
EASEMENT
BUILDING SETBACK
LOT LINE
BASELINE
PHASE LINE BOUNDARY

WETLAND LINE WITH FLAG
FLOODPLAIN
BORDERING LAND SUBJECT TO FLOODING
WETLAND BUFFER ZONE
NO DISTURB ZONE
200' RIVERFRONT AREA

DIRT/GRAVEL ROAD
EDGE OF PAVEMENT
FLUSH CURB
VERT. CURB
CONCRETE CURB & GUTTER
LIMIT OF CURB TYPE
SAWCUT

SOLID WHITE LINE
SOLID YELLOW LINE
BROKEN WHITE LINE
BROKEN YELLOW LINE
SOLID WHITE CHANNELIZING LINE
SOLID YELLOW CHANNELIZING LINE
DOUBLE YELLOW LINE
STOP BAR

STEEL GUARD RAIL
WOOD GUARD RAIL (SQUARE POST)
WOOD GUARD RAIL (SQUARE POST)

PATH
TREE LINE
CHAIN LINK FENCE
STONE WALL
RETAINING WALL
HAY BALES
SILT FENCE
TURBIDITY BARRIER

POND CONTOUR
NORMAL WATER LINE
MINOR CONTOUR
MAJOR CONTOUR
TOP of SLOPE
BOTTOM of SLOPE

BUILDING
BUILDING ENTRANCE
LOADING DOCK
BOLLARD
DUMPSTER PAD
SIGN
DOUBLE SIGN
PARKING METER

PARKING COUNT
COMPACT PARKING STALLS
CROSSWALK

CONC. PAVEMENT
NORMAL PAVEMENT
HEAVY DUTY PAVEMENT
CONCRETE PAD OR SIDEWALK
RIPRAP
CONSTRUCTION ENTRANCE
HANDICAP RAMP
HANDICAP PARKING
VAN-ACCESSIBLE HANDICAP PARKING

Detail no. / Sheet no. — ARCH. DETAIL (SEE ARCH. DRAWINGS)

MANHOLE
UTILITY POLE
GUY POLE
HAND HOLE
PULL BOX

Prop.

TOP & BOTTOM ELEVATION
TOP & BOTTOM ELEVATION
SPOT ELEVATION w/LEADER
SPOT ELEVATION w/LEADER
SPOT ELEVATION
BORING LOCATION
TEST PIT LOCATION
TEST WELL
MONITORING WELL
BENCH MARK

DRAINAGE LINE
OVERFLOW DRAIN
ROOF DRAIN
SEWER LINE
FORCE MAIN
OVERHEAD WIRE
WATER LINE
FIRE PROTECTION LINE
GAS LINE
UNDERGROUND ELECTRIC
TELEPHONE LINE
FIRE ALARM
CABLE TV

DITCH BOTTOM INLET
DRAIN MANHOLE
TRENCH DRAIN
PLUG/STUB
FLARED END SECTION
HEADWALL
GREASE TRAP
CONTROL STRUCTURE
CURB INLET
MES
CATCH BASIN
DOUBLE CATCH BASIN
GUTTER INLET

SEWER MANHOLE

CURB STOP
WATER GATE
TAPPING SLEEVE & VALVE
SIAMESE CONNECTION
FIRE HYDRANT
WATER METER
POST INDICATOR VALVE
WATER WELL

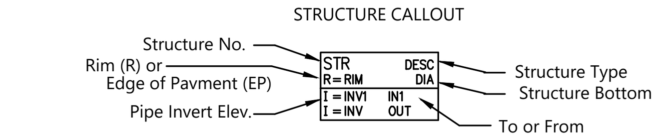
GAS GATE
GAS METER

ELECTRIC MANHOLE
ELECTRIC BOX
ELECTRIC METER
LIGHT POLE
FLOOD LIGHT
SINGLE LUMINAIRE
DOUBLE LUMINAIRE
TRIPLE LUMINAIRE
QUAD LUMINAIRE
WALL PACK

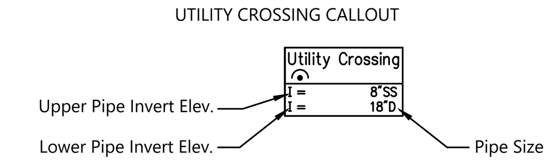
TELEPHONE MANHOLE
TRAFFIC SIGNAL
SIGNAL BOX
FIRE ALARM CONTROL PANEL
FIRE ALARM BOX
TRANSFORMER PAD

For Continuation See Sheet — MATCHLINE TEXT
MATCHLINE

STRUCTURE CALLOUT



UTILITY CROSSING CALLOUT



Abbreviations

General

ABAN	ABANDON
ADJ	ADJUST
APPROX	APPROXIMATE
CONC	CONCRETE
CS	COMPACT SPACE
DWS	DETECTABLE WARNING SURFACE
EL	ELEVATION
ELEV	ELEVATION
EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OAE	OR APPROVED EQUAL
PERF	PERFORATED
P/L	PROPERTY LINE
PROP	PROPOSED
R/W	RIGHT OF WAY
S/W	SIDEWALK
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TYP	TYPICAL

Utility

BFP	BACKFLOW PREVENTER
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CIP	CAST IRON PIPE
COND	CONDUIT
CV	CHECK VALVE
DD	DOUBLE DETECTOR
DIP	DUCTILE IRON PIPE
DS	DOWNSPOUT
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FES	FLARED END SECTION
FH	FIRE HYDRANT
FM	FORCE MAIN
GI	GUTTER INLET
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	MITERED END SECTION
PE	POLYETHYLENE PIPE
PIV	POST INDICATOR VALVE
PVC	POLYVINYLCHLORIDE PIPE
R=	RIM ELEVATION
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAINS
RP	REDUCED PRESSURE
SMH	SEWER MANHOLE
UD	UNDERDRAIN
UG	UNDERGROUND
UP	UTILITY POLE

Miscellaneous

1. THESE DRAWINGS ARE TO BE CONSIDERED PRELIMINARY AND NOT FOR CONSTRUCTION UNTIL ALL PERMIT APPROVALS ARE CONFIRMED RECEIVED BY THE ENGINEER OF RECORD (EOR).
2. THESE DRAWINGS MAY CURRENTLY BE UNDER REVIEW BY THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) AND OTHER REGULATORY AGENCIES. THE FINAL APPROVED PLANS MAY DEVIATE CONSIDERABLY FROM THESE DRAWINGS. THE CONTRACTOR MUST ASSURE CONSTRUCTION IS IN ACCORDANCE WITH THE APPROVED DRAWINGS. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CONTACT THE EOR TO VERIFY APPROPRIATE PLANS ARE BEING UTILIZED.
3. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE LATEST REVISION, UNLESS OTHERWISE NOTED.
4. WHENEVER A CONFLICT OCCURS BETWEEN ANY SPECIFICATION, ANY INFORMATION SHOWN ON THE PLANS AND/OR ANY REGULATORY REQUIREMENT, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
5. THESE DRAWINGS SHALL NOT BE UTILIZED FOR CONSTRUCTION PRIOR TO OBTAINING REQUIRED PERMITS FROM ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK. THE CONTRACTOR SHALL OBTAIN ALL PERMITS FROM WORK WITHIN PUBLIC EASEMENTS AND RIGHTS-OF-WAY AND INSURE THAT ALL OTHER REQUIRED PERMITS ARE APPROVED PRIOR TO COMMENCING THE WORK.
6. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES AND THE EOR'S SPECIFICATIONS. THE CONTRACTOR SHALL REVIEW ALL ACQUIRED PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS.
7. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK, INCLUDING STATE AND LOCAL BUILDING CODES.
8. CONSTRUCTION SHOWN ON THESE PLANS IS PERMITTED ONLY FOR THE WORK LOCATED WITHIN THE PRIVATE PROPERTY. ALL WORK WITHIN THE RIGHT-OF-WAY AND EASEMENTS WILL REQUIRE A SEPARATE PERMIT AND MAY REQUIRE AN ALTERATION TO THE CONSTRUCTION OR MATERIALS SHOWN ON THESE PLANS.
9. ALL RIGHT-OF-WAY INSTALLATIONS WILL BE IN ACCORDANCE WITH PRACTICES REFERENCED IN THE STATE OF FLORIDA UTILITIES ACCOMMODATIONS MANUAL.
10. UNLESS OTHERWISE NOTED, ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
11. SOME OF THE DETAILS SHOWN INCLUDED IN THIS DRAWING SET ARE PROVIDED BY THE REVIEWING REGULATORY AGENCIES AND ARE REQUIRED BY THOSE AGENCIES TO BE SHOWN ON THE DRAWINGS FOR PERMIT APPROVAL. BY SIGNING AND SEALING THESE DRAWINGS, THE EOR IS NOT ASSUMING RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS ON THESE DETAILS. CONTRACTOR SHALL VERIFY THE DETAILS ARE THE LATEST ISSUED BY THE REGULATORY AGENCY, THE DETAILS COMPLY WITH THE LATEST TECHNICAL MANUAL SPECIFICATIONS, AND THE REGULATORY AGENCY INSPECTOR DOES NOT HAVE ANY ALTERNATE REQUIREMENTS NOT SHOWN ON THE DETAILS.
12. ALL PLUMBING SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), THE FLORIDA BUILDING CODE PLUMBING SECTION, AND LOCAL REGULATORY REQUIREMENTS.

Construction

1. SURVEY INFORMATION AND LEGAL DESCRIPTIONS SHOWN HEREON WERE OBTAINED BY OTHERS. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS, BUT MAY HAVE BEEN ALTERED WITHOUT THE EOR'S KNOWLEDGE. THE CONTRACTOR SHALL VERIFY THIS INFORMATION AND BE FAMILIAR WITH ALL SITE CONDITIONS (INCLUDING SUB-SURFACE CONDITIONS AND UTILITIES) PRIOR TO COMMENCING THE WORK. DAMAGES TO ANY EXISTING FACILITIES (ABOVE-GROUND AND UNDERGROUND) SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR, WHETHER OR NOT SHOWN HEREON.
2. CONTRACTOR SHALL LOCATE PROPERTY LINES AS REQUIRED TO AVOID ENCROACHMENT ONTO ADJACENT PROPERTY.
3. ANY U.S.C. & G.S. MONUMENTS FOUND WITHIN LIMITS OF CONSTRUCTION ARE TO BE PROTECTED.
4. PROPERTY FENCING AND/OR WALLS ON THE PERIMETER OF THE SITE ARE TO BE FIELD VERIFIED WITH ADJACENT PROPERTY OWNERS AS TO WHO OWNS OR MAINTAINS THE FENCE/WALL, REGARDLESS OF WHETHER OR NOT SHOWN HEREON TO BE REMOVED OR IF CONSIDERED AN ENCROACHMENT ON THE WORK TO BE PERFORMED. ANY DAMAGE TO OR REMOVAL OF FENCING/WALLS OWNED OR MAINTAINED BY AN ADJACENT PROPERTY OWNER IS TO BE FULLY REPLACED WITH A SIMILAR FENCE/WALL, TO THE SATISFACTION OF THE ADJACENT PROPERTY OWNER, AT THE EXPENSE OF THE CONTRACTOR.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THE STAKEOUT SURVEYOR HAS THE MOST CURRENT SET OF PLANS, INCLUDING ALL RECENT REVISIONS MADE BY ADDENDUM OR REQUEST FOR INFORMATION (RFI), AND REGARDLESS IF STAKEOUT IS CONTRACTED THROUGH VHB'S SURVEY DEPARTMENT.
6. UPON REQUEST, ELECTRONIC DATA (IN AUTOCAD FORMAT) ASSOCIATED WITH THESE SITE PLANS WILL BE PROVIDED FOR CONSTRUCTION LAYOUT PURPOSES. HOWEVER, THE ENGINEER OF RECORD (EOR) WILL IN NO WAY BE RESPONSIBLE FOR ANY ADVERSE RESULTS IF THE ELECTRONIC DATA IS USED BY OTHERS FOR CONSTRUCTION PURPOSES (REGARDLESS OF WHETHER OR NOT THE ELECTRONIC DATA CONTAINS ERRORS). [AS AN OPTION, COORDINATE GEOMETRY INFORMATION ASSOCIATED WITH THESE SITE PLANS WILL BE PROVIDED BY THE EOR, AT THE CONTRACTOR'S EXPENSE.]
7. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO THE EOR FOR APPROVAL A MINIMUM OF SEVEN (7) WORKING DAYS IN ADVANCE OF THE CONTRACTOR'S NEED FOR THE SAME. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES AND VERIFY ALL FIELD CONDITIONS BEFORE ORDERING ANY MATERIALS AND CASTING ANY STRUCTURES AS SHOWN.
9. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES, INCLUDING BUT NOT LIMITED TO THE ONES SHOWN ON THE COVER SHEET.
10. IT WILL BE NECESSARY TO EXAMINE, COORDINATE AND ADJUST ACCORDINGLY THE PROPOSED LOCATIONS OF THE VARIOUS COMPONENTS OF THE SITE UTILITIES. THE LAYOUTS INDICATED IN THE PLANS ARE NOT EXACT AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT COORDINATION DRAWINGS SHOWING PIPE SIZES, STRUCTURES, AND ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SCHEDULING AND COORDINATION OF ALL THE UNDERGROUND WORK ASSOCIATED WITH THIS PROJECT.
11. CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TEMPORARY CONSTRUCTION TRAFFIC RELATED ACCESS POINTS TO THE PROJECT SITE AND/OR SPECIFIC AREAS OF WORK ON THE PROJECT SITE AS NECESSARY.
12. CONTRACTOR TO FIELD COORDINATE PHASING OF ALL CONSTRUCTION TO LIMIT INTERRUPTION OF TRAFFIC FLOW AND DAILY OPERATIONS.
13. ALL STORMWATER, WATER AND SANITARY SEWER LINES SHALL BE INSPECTED PRIOR TO BACKFILL. CONTRACTOR SHALL COORDINATE SCHEDULING OF ALL INSPECTIONS.
14. THE CONTRACTOR SHALL PROVIDE THE EOR WITH AS-BUILT SURVEYS PREPARED BY A LICENSED PROFESSIONAL LAND SURVEYOR OF ALL WATER, SANITARY SEWER AND STORMWATER MANAGEMENT SYSTEMS AS REQUIRED BY THE FDEP AND THE SWFWMD. SANITARY SEWER AS-BUILTS SHALL BE REVIEWED AND APPROVED BY THE EOR PRIOR TO CONSTRUCTING PAVEMENT.
15. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF OFF-SITE, IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS, AT THE CONTRACTORS EXPENSE.
16. ANY DAMAGE TO STATE, COUNTY, OR LOCAL ROADS CAUSED BY THE CONTRACTOR'S HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR, TO THE SATISFACTION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
17. RESTORE ALL AREAS DISTURBED BY CONSTRUCTION TO CONDITIONS PRIOR TO CONSTRUCTION. SPECIAL CARE SHOULD BE TAKEN TO RESTORE OFF-SITE AREAS DISTURBED BY CONSTRUCTION. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, CURBS, DRIVEWAYS, SIDEWALKS, ETC. WITH MATERIALS OF THE SAME TYPE OR BETTER THAN THAT REMOVED DURING CONSTRUCTION, AT THE CONTRACTOR'S EXPENSE.
18. CONTRACTOR SHALL PROVIDE REDLINED DESIGN PLANS TO DOCUMENT CHANGES IN WORK DURING CONSTRUCTION INCLUDING DIRECTIVES AND ADDENDA NO LATER THAN THIRTY (30) DAYS PRIOR TO THE CERTIFICATE OF OCCUPANCY DATE.

Safety

1. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
2. SIGNS AND BARRICADES TO BE ACCORDING TO FDOT MANUAL OF SAFE PRACTICES; REFERENCE FDOT INDEXES 600 THRU 650.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MAINTENANCE OF TRAFFIC AND PEDESTRIAN CONTROL, AT THE CONTRACTOR'S EXPENSE, PER APPROPRIATE FDOT SPECIFICATIONS. SEE FDOT INDEX NUMBERS 600 THROUGH 660.
4. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
5. CONTRACTOR SHALL PROVIDE AND MAINTAIN HIS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH HIS HEALTH AND SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING HIS EMPLOYEES AND SUBCONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUBCONTRACTORS AND SUBCONTRACTORS' EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT PERCEIVED AS THE ENTIRE SAFETY PROGRAM, BUT JUST BASIC REQUIREMENTS.
6. ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P.
7. [FDOE ONLY:] WHERE TRENCH EXCAVATION EXCEEDS FIVE (5) FEET IN DEPTH, LAWS OF FLORIDA, CHAPTER 90-96, SHALL BE FOLLOWED FOR TRENCH SAFETY. THE CONTRACTOR SHALL PROVIDE WRITTEN ASSURANCE OF COMPLIANCE WITH THIS LAW WITH A SEPARATE COST ITEM IDENTIFYING THE COST OF COMPLIANCE AND A TRENCH SAFETY SYSTEM DESIGN.]
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.
9. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN PROJECT LIMITS.
10. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL AND TRAFFIC DESIGN STANDARD INDEX PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
11. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.
12. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES. CALL SUNSHINE ONE (1-800-432-4770) TO ARRANGE FIELD LOCATIONS.
13. ANY SIDEWALK WHICH BECOMES UNDERMINED OR DAMAGED DURING CONSTRUCTION MUST BE REMOVED AND REPLACED. PERMITS WILL BE OBTAINED BY THE CONTRACTOR FOR THE CLOSING OF SIDEWALKS IN THE RIGHT-OF-WAY. SIDEWALKS ARE TO BE RECONSTRUCTED WITHIN THREE (3) DAYS AFTER REMOVAL. WHEN EXISTING SIDEWALK IS REMOVED, IT IS TO BE REMOVED TO THE NEAREST JOINT.
14. WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE SIDEWALK FOR A PERIOD OF MORE THAN ONE HOUR, CONTRACTOR SHALL PROVIDE PEDESTRIAN CONTROL FOR CLOSURE OF SIDEWALKS PER FDOT INDEX 660, UNLESS OTHERWISE NOTED.
15. CONTRACTOR SHALL SECURE ALL OPENINGS UNDER CONSTRUCTION AT THE END OF EACH WORKING DAY.

Tree/Wetland Protection & Landscaping

1. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN AS INDICATED ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. PROTECTIVE BARRICADES SHALL REMAIN IN PLACE UNTIL LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE COMPLETED. NO TREE SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM LOCAL REGULATORY AGENCY AND THE OWNER.
2. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AS NECESSARY FOR CONSTRUCTION. DISTURBED AREAS, NOT OTHERWISE STABILIZED, WILL BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.
3. ALL MECHANICAL EQUIPMENT SHALL BE SCREENED BY VEGETATION OR OTHERWISE, WHETHOR OR NOT SHOWN HEREON. CONTRACTOR TO COORDINATE WITH THE LANDSCAPE ARCHITECT, ARCHITECT, OWNER OR ENGINEER OF RECORD (EOR), AS APPLICABLE.
4. EXISTING TREES & LANDSCAPING SHOWN ON THESE PLANS. SEE PROPOSED LANDSCAPING PLAN FOR TREE RELOCATION OR REMOVAL AND NEW LANDSCAPING. CONTRACTOR SHALL CONTACT THE EOR AND/OR OWNER PRIOR TO ANY CONSTRUCTION THAT MAY DAMAGE TREES WHICH ARE NOT MARKED TO BE REMOVED.
5. DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, IT SHALL BE UNLAWFUL TO REMOVE VEGETATION (EXCEPT BY HAND) BY GRUBBING OR TO PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIPLINE OF A TREE TO REMAIN ON THE SITE UNLESS OTHERWISE APPROVED BY THE LOCAL REGULATORY AGENCY.
6. TREE LIMBS SHALL BE PRUNED AS REQUIRED FOR NEW CONSTRUCTION. WHEN TREE LIMBS OVERHANG EXISTING OR NEW VEHICULAR USE AREAS, THE CONTRACTOR SHALL PRUNE SUCH TREES TO PROVIDE CLEARANCE MEETING THE STANDARDS SET FORTH BY THE FLORIDA DEPARTMENT OF TRANSPORTATION. PRUNING SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 PRUNING STANDARDS.
7. ALL TRIMMING UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LOCAL CODES SHALL BE PRUNED IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 PRUNING STANDARDS.
8. GRASS SOD AND SEED SHALL BE BAHIA, UNLESS OTHERWISE SHOWN ON THE LANDSCAPE PLANS. SEED AND MULCH ALL AREAS LEFT BARREN FROM CONSTRUCTION, UNLESS OTHERWISE SHOWN. SOD ALL SLOPES GREATER THAN 5:1, WHETHER OR NOT SHOWN HEREON. ALL RETENTION POND BANKS SHALL BE SODDED, REGARDLESS OF SLOPE, TO THE POND BOTTOM FOR DESIGNED DRY PONDS OR THE WATER LINE AT THE TIME OF INSTALLATION FOR DESIGNED WET PONDS. STEEP SLOPES TO BE SODDED AS SOON AS POSSIBLE AFTER FINE GRADING TO PREVENT EROSION.

Erosion Control

1. THE CONTRACTOR IS RESPONSIBLE FOR SITE CONDITIONS FROM THE DATE OF NOTICE TO PROCEED, UNTIL THE PROJECT IS ACCEPTED BY THE OWNER, ENGINEER OF RECORD (EOR) AND THE LOCAL REGULATORY AGENCIES. ACCORDINGLY, THE CONTRACTOR IS SOLELY RESPONSIBLE AND SHALL MANAGE HIS WORK AND TAKE ALL NECESSARY STEPS TO CONTROL FUGITIVE DUST, CONTROL AND PREVENT EROSION, AND TRANSPORT OF SEDIMENT INTO EXISTING WETLANDS, DRAINAGE WAYS, CONSERVATION AREAS, NATURAL AREAS AND OFFSITE AREAS, AS WELL AS NEWLY CONSTRUCTED ROADWAYS, STORMWATER FACILITIES AND MITIGATION AREAS. THIS MAY REQUIRE ADDITIONAL MEASURES FROM THOSE SHOWN ON THE CONSTRUCTION PLANS, SUCH AS WINDROWS, DIVERSION SWALES, SEED & MULCH, STAKED HAY BALES, OR OTHER EROSION CONTROL MEASURES NECESSARY TO REACT TO VARYING SITE CONDITIONS OR INCLEMENT WEATHER. IF EROSION OCCURS, THE CONTRACTOR SHALL IMMEDIATELY REMEDY THE DAMAGE CAUSED BY SUCH EROSION BY CONTROLLED REMOVAL OF SEDIMENTS, REPLANTING IF NECESSARY AND RE-ESTABLISHMENT OF EROSION PROTECTION DEVICES, AT THE CONTRACTOR'S SOLE EXPENSE.
2. THE CONTRACTOR SHALL INSTALL WATER QUALITY AND EROSION CONTROL DEVICES ALONG THE PROJECT PERIMETER, AS DESIGNATED ON THESE PLANS. THE CONTRACTOR SHALL RECEIVE THE ENGINEER'S APPROVAL OF THE INSTALLATION PRIOR TO ANY OTHER SITE CONSTRUCTION.
3. DAILY INSPECTION OF THE EROSION CONTROL WILL BE REQUIRED BY THE CONTRACTOR. ANY DISTURBANCE OF THESE DEVICES SHALL BE REPAIRED IMMEDIATELY.
4. CONTRACTOR IS TO PROVIDE EROSION CONTROL AND SEDIMENTATION BARRIER (HAY BALES, TURBIDITY BARRIERS OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE. IF, IN THE OPINION OF THE EOR AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE EOR AND/OR AUTHORITIES.
5. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.
6. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS AND UNTIL THE DISTURBED AREAS ARE COMPLETELY STABILIZED AND/OR VEGETATED. ALL SURFACES DISTURBED FOR 30 OR MORE DAYS SHALL BE VEGETATED WITH A TEMPORARY OR PERMANENT COVER. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER.
7. TO MINIMIZE SOIL EROSION, PROPOSED LAND ALTERATION ACTIVITIES SHALL NOT UNNECESSARILY REMOVE EXISTING VEGETATION AND ALTER EXISTING TOPOGRAPHY. ADEQUATE PROTECTION MEASURES (IE HAY BALES, BAFFLES, SODDING AND SANDBAGGING) SHALL BE PROVIDED, AS NECESSARY TO MINIMIZE EROSION AND DOWNSTREAM SEDIMENTATION CAUSED BY SURFACE WATER RUN-OFF ON EXPOSED LAND SURFACES.
8. ANY AREAS SUBJECT TO EROSION MUST BE ADEQUATELY STABILIZED WITH VEGETATIVE MATERIAL THAT WILL, IN A REASONABLE TIME FRAME, DETER SOIL DISTURBANCE. SODDING, PLUGGING, SPRIGGING OR SEEDING IS ACCEPTABLE FOR STABILIZATION, HOWEVER, SODDING MAY BE REQUIRED IN AREAS OF EROSION-PRONE SOILS OR WHERE SLOPES ARE GREATER THAN 5:1. VEGETATION OTHER THAN GRASS IS ACCEPTABLE UNLESS OTHERWISE SPECIFIED. SILT FENCES, HAY BALES, AND/OR TURBIDITY BARRIERS SHALL BE INSTALLED AT ALL OFF-SITE DISCHARGE POINTS.
9. THE CONTRACTOR MUST SELECT, IMPLEMENT, AND OPERATE ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE AND TO PREVENT VIOLATIONS OF WATER QUALITY STANDARD AS SPECIFIED IN THE FLORIDA ADMINISTRATIVE CODE AND FLORIDA STATUTES.
10. THE CONTRACTOR IS ENCOURAGED TO USE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS AS DESCRIBED IN THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (DER, 1988).
11. EROSION CONTROL DEVICES AND MEASURES DESCRIBED IN THESE GENERAL NOTES ARE GRAPHICALLY SHOWN ON THE PLANS. REFER TO THE FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL (LATEST EDITION), THE FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL (LATEST EDITION), THE BEST MANAGEMENT PRACTICES (BMP) PLAN INCLUDED HEREIN, THE CONSTRUCTION SURFACE WATER MANAGEMENT PLAN (CSWMP) INCLUDED HEREIN, AND/OR THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR ADDITIONAL DETAILS, INSTRUCTIONS AND SCHEDULING AS APPLICABLE.
12. THE CONTRACTOR WILL BE REQUIRED TO ADHERE TO THE SPECIFIC EROSION CONTROL MEASURES DESCRIBED ABOVE AND SHOWN ON THE PLANS ALONG WITH A SPECIFIC CONSTRUCTION SCHEDULE FOR IMPLEMENTATION. THE CONTRACTOR WILL ALSO BE REQUIRED TO MODIFY THE PLAN OR MATERIALS TO ADAPT TO SEASONAL VARIATIONS.
13. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IF ADDITIONAL CONTROLS ARE NEEDED AND DEPLOYMENT SCHEDULES FOR THE IMPLEMENTATION OF ALL EROSION CONTROL DEVICES THROUGHOUT CONSTRUCTION.
14. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS.

Demolition

1. DEMOLITION WORK SHALL NOT BE LIMITED TO THESE DOCUMENTS. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND EXTENT OF REMOVAL OF ITEMS SHOWN PRIOR TO USING THIS INFORMATION FOR BID PURPOSES.
2. ANY STRUCTURE NOT SHOWN TO BE REMOVED IS TO REMAIN UNLESS OTHERWISE INSTRUCTED BY THE OWNER OR ARCHITECT, OR REQUIRED BY FIELD CONDITIONS.
3. CONTRACTOR TO COMPLETELY REMOVE EXISTING ITEMS ON SITE INCLUDING BUILDINGS, CURBS, ASPHALT, BASE COURSE, CONCRETE AND EXISTING UTILITIES (AS APPLICABLE) AS SHOWN AND NECESSARY TO ALLOW FOR NEW CONSTRUCTION.
4. LOCAL CODES APPLY FOR ANY DEMOLITION SHOWN HEREON.
5. A SEPARATE PERMIT FOR THE DEMOLITION OF THE EXISTING BUILDINGS SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO STARTING WORK AS APPLICABLE.
6. CONTRACTOR TO COORDINATE WITH LOCAL UTILITY COMPANIES, FOR ANY UTILITIES SHOWN TO BE REMOVED OR RELOCATED HEREON, EARLY IN CONSTRUCTION PROCESS, AS TO AVOID ANY DELAYS.
7. ALL EXISTING WELLS FOUND ON SITE ARE TO BE PROPERLY ABANDONED BY A FLORIDA LICENSED WATER WELL CONTRACTOR IN ACCORDANCE WITH RULE 40D-3.531(2), F.A.C., UNLESS OTHERWISE SHOWN.
8. CONTRACTOR TO COORDINATE THE REMOVAL OR RELOCATION OF THE EXISTING POWER POLES WITH LOCAL POWER COMPANY PRIOR TO CONSTRUCTION AS NECESSARY.
9. CONTRACTOR TO FIELD COORDINATE PHASING OF ALL DEMOLITION TO LIMIT INTERRUPTION OF TRAFFIC FLOW AND DAILY OPERATIONS.
10. CONTACT ENGINEER OF RECORD (EOR) IMMEDIATELY IF ANY UNDERGROUND STRUCTURES, FOUND DURING EXCAVATION, IMPEDE THE COMPLETION OF CONSTRUCTION AS SHOWN.
11. SOME ITEMS SHOWN TO BE REMOVED MAY NEED TO BE RELOCATED TO OTHER AREAS ON SITE AT THE REQUEST OF THE OWNER. CONTRACTOR TO FIELD COORDINATE.
12. THERE MAY BE EXISTING IRRIGATION LINES IN THE AREA OF WORK THAT NEED TO BE REMOVED AND/OR RELOCATED, THAT ARE NOT SHOWN HEREON. CONTRACTOR TO FIELD VERIFY THE EXTENT OF IRRIGATION WORK TO BE PERFORMED PRIOR TO BID. CONTRACTOR TO COORDINATE RELOCATION WITH OWNER OR LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION, AS APPLICABLE.
13. CONTRACTOR SHALL ASSUME UTILIZATION OF THE EXISTING BASE COURSE UNDER NEW ASPHALT WHERE GRADE ALLOWS FOR BID PURPOSES.
14. IN AREAS WHERE ASPHALT IS SHOWN TO BE REMOVED, BASE MAY REMAIN IF AREA IS PROPOSED TO BE COVERED WITH CONCRETE (WALKS, PAVEMENT, ETC.)
15. ADDITIONAL ASPHALT AREAS, NOT SHOWN HEREON, MAY REQUIRE REMOVAL IF REGRADING NEEDS TO OCCUR FOR PROPER DRAINAGE. SEE PROPOSED GRADING PLAN FOR DETAILS.
16. THE SITE CONTRACTOR IS RESPONSIBLE FOR HAVING THEIR DEWATERING PLAN AND TURBIDITY CONTROL PLAN APPROVED BY THE APPLICABLE REGULATORY AGENCIES, PRIOR TO CONSTRUCTION, AS NECESSARY. REFER TO THE SITE PERMIT CONDITIONS FOR AGENCIES REQUIRING SUCH REVIEW, APPROVAL AND/OR SEPARATE PERMITS. WHERE PUMPS ARE TO BE USED TO REMOVE WATER FROM CONSTRUCTION AREAS, THE WATER SHALL BE TREATED PRIOR TO DISCHARGE TO WETLANDS. TREATMENT METHODS INCLUDE, FOR EXAMPLE, TURBID WATER BEING PUMPED INTO GRASSED SWALES OR APPROPRIATE UPLAND VEGETATED AREAS (OTHER THAN UPLAND PRESERVATION AREAS AND WETLAND BUFFERS), SEDIMENT BASINS, OR CONFINED BY AN APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS OR LOW BERMS, AND KEPT CONFINED UNTIL TURBIDITY LEVELS MEET STATE WATER QUALITY STANDARDS.

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Certificate of Authorization
Number FL #3932

Florida Botanical Gardens Children's Discovery Garden
12520 Ulmerton Road
Largo, Florida

No.	Revision	Date	Appvd.

Designed by: MAB — Checked by: KMB
Issued for: Permitting — Date: Dec. 14, 2020

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Earthworks

1. ALL FILL SHALL CONSIST OF SATISFACTORY SOIL MATERIALS, DEFINED AS THOSE COMPLYING WITH ASTM D2487 SOIL CLASSIFICATION GROUPS [GW, GP, GM, SW, SM AND SP] FREE OF RUBBLE, ORGANICS, CLAY, DEBRIS AND OTHER SIMILAR UNSUITABLE MATERIALS. UNSATISFACTORY SOIL MATERIALS ARE DEFINED AS THOSE COMPLYING WITH ASTM D2487 SOIL CLASSIFICATION GROUPS [GC, SC, ML, MH, CL, CH, OL, OH, AND PT]. UNLESS OTHERWISE NOTED, ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% AASHTO T-180, METHOD D.

2. REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE IF REQUIRED, PROVIDED THAT THE MATERIAL IS DEEMED SUITABLE FOR CONSTRUCTION BY THE MATERIALS TESTING COMPANY. EXCESS MATERIAL IS TO BE EITHER STOCKPILED ON THE SITE AS DIRECTED BY THE OWNER OR ENGINEER OF RECORD (EOR), OR REMOVED FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS EARTHWORK FROM THE SITE.

3. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE EOR, OR MATERIALS TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.

4. GEOTECHNICAL ENGINEERING CONSULTATION, OBSERVATION, AND MATERIALS TESTING SHOULD BE EXERCISED DURING ALL PHASES OF SITE PREPARATION AND EARTHWORK. REFER TO SUBSURFACE SOILS EXPLORATION REPORT PREPARED BY OTHERS FOR RECOMMENDATIONS.

5. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE MATERIALS TESTING COMPANY OR THE EOR AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS OR THE ABOVE REFERENCED SOILS REPORT.

6. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE MATERIALS TESTING FIRM. TESTS WILL BE REQUIRED PURSUANT TO THE LOCAL REGULATORY AGENCY OR THE EOR SPECIFICATIONS. UPON COMPLETION OF PROPOSED CONSTRUCTION, THE CONTRACTOR'S MATERIALS TESTING FIRM SHALL PROVIDE A CERTIFICATION SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA, CERTIFYING THAT THE TESTING PROGRAM HAS BEEN COMPLETED IN ACCORDANCE WITH THE PROJECT PLANS, SPECIFICATIONS, AND LOCAL REGULATORY REQUIREMENTS, AND THAT THE COMPLETED PROJECT COMPLIES WITH THE TESTING CRITERIA CONTAINED THEREIN.

7. A QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN PLACE MATERIALS AS REQUIRED BY THESE PLANS AND THE VARIOUS AGENCIES. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING. THE EOR WILL REVIEW THE TESTING REPORTS FOR COMPLIANCE WITH THE REQUIRED SPECIFICATIONS, BUT MAKES NO CLAIM AS TO THE CONTRACTOR'S PROPER MEANS AND METHODS OF EARTHWORK OPERATIONS THAT TOOK PLACE DURING CONSTRUCTION BY DOING SO.

8. COMPACTION FOR PIPE BACKFILL SHALL COMPLY WITH AASHTO T-99 (100%).

Storm Drainage

1. REFERENCED STANDARD INDEX NUMBERS REFER TO DETAILS DEPICTED IN THE FDOT "DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM", LATEST EDITION, UNLESS OTHERWISE SHOWN.

2. CONTRACTOR TO SUBMIT PROPOSED STORM PIPE MATERIALS FOR APPROVAL BY THE ENGINEER OF RECORD (EOR). ALL REINFORCED CONCRETE PIPE (RCP) USED FOR STORM DRAINAGE TO BE CLASS III (ASTM 6-76-72A), WALL B, UNLESS OTHERWISE NOTED ON PLANS. ALL POLYVINYL-CHLORIDE (PVC) OR POLYETHYLENE (PE) PIPE USED FOR STORM DRAINAGE TO MEET THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 948 - MISCELLANEOUS TYPES OF PIPE. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH LOCAL REGULATORY REQUIREMENTS AND/OR FDOT DESIGN STANDARDS, UNLESS OTHERWISE NOTED ON PLANS.

3. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURE WITH THE EXCEPTION OF MITERED END SECTIONS WHICH ARE NOT INCLUDED IN LENGTHS.

4. ALL DRAINAGE STRUCTURE TOPS AND COVERS SHALL BE HEAVY DUTY TRAFFIC RATED FOR H-20 LOADINGS. ALL FDOT INLET GRATES TO BE CAST IRON OR STEEL CHAINED TO INLETS PER FDOT INDEX #201.

5. ALL ROOF RUNOFF IS TO BE COLLECTED AND ROUTED TO THE STORMWATER POND VIA UNDERGROUND PIPE SYSTEM.

6. AREA ADJACENT TO THE PROPOSED STRUCTURE SHALL BE GRADED AS REQUIRED TO INSURE ALL ROOF RUNOFF IS ROUTED TO THE STORMWATER POND.

7. RE-ROUTE OR ADJUST SIDESLOPES OF DRAINAGE SWALES AS REQUIRED TO AVOID TREES AND TREE ROOTS. COORDINATE WITH THE EOR AS NECESSARY.

8. ALL STORM DRAINAGE PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE ENGINEER OF RECORD (EOR) PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE EOR 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.

9. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS FOR THESE PURPOSES, AT THE EXPENSE OF THE CONTRACTOR.

10. CONSTRUCT STORMWATER POND(S) AT THE BEGINNING OF PROJECT CONSTRUCTION. POND(S) TO BE GRADED AND MAINTAINED TO REMAIN FUNCTIONALLY EFFECTIVE DURING ALL PHASES OF CONSTRUCTION.

11. DOWNSPOUT COLLECTOR PIPE LENGTHS ARE SHOWN FOR MAIN PIPE RUNS ONLY (FOR CLARITY PURPOSES), BUT ADDITIONAL ROOFDRAIN PIPE MAY HAVE TO BE INSTALLED TO COLLECT ALL DOWNSPOUTS AND CANOPY COLUMN DRAINAGE AS SHOWN ON THE ARCHITECTURAL OR PLUMBING PLANS.

12. SEE SITE UTILITY PLANS FOR FLOOR DRAIN AND CONDENSATE CONNECTIONS TO STORM SYSTEM. FLOOR DRAINS AND CONDENSATE LINES SHALL NOT BE CONNECTED TO ROOFDRAIN COLLECTION SYSTEM UNLESS BACKWATER VALVE IS PROVIDED.

Utilities

1. CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION OF POTABLE WATER AND/OR SANITARY SEWER COLLECTION SYSTEMS PRIOR TO ASSURING THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) PERMITS HAVE BEEN ACQUIRED. CONTRACTOR SHALL REVIEW SPECIFIC CONDITIONS DEPICTED ON FDEP PERMITS, WHICH MAY NOT BE SHOWN HEREON.

2. CONTRACTOR IS TO COORDINATE ALL WORK WITH UTILITY COMPANIES IN ORDER TO PREVENT DAMAGE TO UTILITY LINES AND THE MAKING OF ADJUSTMENTS TO SAME, IF REQUIRED. THE CONTRACTOR SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY OWNERS PRIOR TO CONSTRUCTION.

3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY THE FEASIBILITY OF CONSTRUCTING GRAVITY SEWER SYSTEMS (IE. VERIFY EXISTING INVERTS AT POINTS OF CONNECTION, EXIT INVERTS OF BUILDING PLUMBING, GREASE TRAP CONFIGURATION, MINIMUM SLOPES, ETC.).

4. PIPE LENGTHS, ELEVATIONS AND LOCATIONS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED AS REQUIRED, UTILIZING DEFLECTION OR FITTINGS AS NECESSARY. CONTRACTOR TO PROVIDE REDLINE MARKUPS AND CERTIFIED AS-BUILT SURVEYS OF ALL FIELD CHANGES MADE. PRIOR TO BACKFILL, IT MAY BE NECESSARY TO PROVIDE OPEN PIPING ABOVE GRADE TO EACH DEFLECTION OR FITTING LOCATION SO ACCURATE AS-BUILT INFORMATION MAY BE OBTAINED. CONTRACTOR TO ASSURE THIS IS DONE AT EACH CHANGE OF DIRECTION OR ELEVATION, OR RE-EXCAVATION FOR SURVEYING WILL BE NECESSARY.

5. PORTIONS OF WORK AND/OR MATERIALS FOR THE UTILITY CONNECTIONS MAY BE PROVIDED BY THE GOVERNING MUNICIPALITY. CONTRACTOR TO VERIFY AND COORDINATE.

6. THE FIRE LINE SHOWN HEREON IS FOR GENERAL INFORMATION ONLY. THE FIRE LINE IS PART OF THE FIRE PROTECTION SYSTEM FOR THE BUILDING AND WILL BE DESIGNED BY A FIRE PROTECTION SYSTEM ENGINEER IN ACCORDANCE WITH CHAPTER 61G15-32 FLORIDA ADMINISTRATIVE CODE (F.A.C.). THE FIRE PROTECTION SYSTEM ENGINEER WILL PREPARE THE FIRE PROTECTION SYSTEM ENGINEERING DOCUMENTS IN ACCORDANCE WITH CHAPTER 61G15-32.003 F.A.C. AND SUBMIT THEM TO THE LOCAL REGULATORY AGENCY FOR REVIEW AND APPROVAL AS PART OF THE BUILDING PLAN REVIEW AND PERMITTING. CONTRACTOR SHALL COORDINATE THIS EFFORT AS NECESSARY.

7. IF CHEMICAL ADDITIVES OR AN AUXILIARY WATER SOURCE ARE USED IN THE FIRE PROTECTION SYSTEM, THEN THE DOUBLE DETECTOR CHECK VALVE (DDCV) BACKFLOW ASSEMBLY ON THE MAIN FIRE SERVICE, AS SHOWN HEREON, WILL NEED TO BE CHANGED OUT TO A REDUCED PRESSURE ZONE (RPZ) BACKFLOW ASSEMBLY. CONTRACTOR TO VERIFY WITH THE FIRE PROTECTION SYSTEM ENGINEER PRIOR TO INSTALLATION. THE RPZ CAN NOT BE INSTALLED IN AN AREA THAT MAY BECOME FLOODED (SUCH AS AN UNDERGROUND VAULT), SO ACCOMMODATIONS WILL NEED TO BE MADE TO AVOID THAT. CONTRACTOR TO COORDINATE ALL THIS WITH THE EOR PRIOR TO ORDERING OF MATERIALS AS NECESSARY.

8. WATER AND SANITARY SEWER SYSTEMS SHALL NOT BE PLACED INTO SERVICE UNTIL INSPECTED AND APPROVED BY THE FDEP AND OTHER PERTINENT REGULATORY AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND OBTAINING THE FOLLOWING ITEMS:

   A) INSPECTOR APPROVALS
   B) LIFT STATION START-UP TEST
   C) CURRENT BACTERIOLOGICAL TEST RESULTS
   D) PRESSURE, EXFILTRATION AND OTHER APPROPRIATE TEST RESULTS
   E) LOCATING WIRE CONTINUITY TESTS
   F) AS-BUILT SURVEYS

   ALL APPLICABLE ITEMS ABOVE SHALL BE PROVIDED TO THE ENGINEER OF RECORD (EOR) A MINIMUM OF 60 DAYS PRIOR TO FINAL ACCEPTANCE AND PLACEMENT INTO OPERATION.

9. PROVIDE CLEARANCES OF 7'-6" IN THE FRONT AND TO THE SIDES OF ALL FIRE HYDRANTS.

Paving & Grading

1. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED SIDEWALK, PAVEMENT, SLAB, STRUCTURE TOP, OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.

2. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.

3. CURBING WILL BE PLACED IN LOCATIONS SHOWN ON THE PLANS TO THE DIMENSIONS AND SPECIFICATIONS SHOWN ON THE DETAILS PROVIDED, LOCAL REGULATORY REQUIRMENTS, OR PER FDOT DESIGN STANDARDS. CONTRACTOR TO VERIFY LOCATIONS AND DIMENSIONS WITH THE ENGINEER OF RECORD (EOR) PRIOR TO POURING CONCRETE.

4. CONTRACTOR TO PROVIDE A 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIALS (BUILDINGS, OTHER POURED CONCRETE, ETC.), UNLESS OTHERWISE NOTED ON DRAWINGS.

5. ALL PAVEMENT MARKINGS SHALL BE MADE WITH PERMANENT, LEAD FREE MATERIAL. THERMOPLASTIC PER FDOT SPECIFICATIONS AT DRIVEWAY INTERSECTIONS AND IN RIGHTS-OF-WAY. FAST DRY TRAFFIC PAINT (WATER BORNE) PER FDOT SPECIFICATIONS FOR PARKING LOT STRIPING AND ON-SITE TRAFFIC MARKINGS. PROVIDE PAVEMENT MARKINGS AS SHOWN PER FDOT INDEX NO. 17346.

6. ALL DIMENSIONS ARE TO OUTSIDE WALL OF BUILDING, ASSUMED CENTER POINT OF EXISTING TREE TRUNK (PER SURVEY SYMBOL), FRONT FACE OF CURB/SIDEWALK, EDGE OF PAVEMENT (IF NO CURB) PAVEMENT STRIPING CENTERLINE, OR PROPOSED TOP OF BANK/TOE OF SLOPE, UNLESS OTHERWISE NOTED.

7. PRIOR TO BASE OR PAVING CONSTRUCTION, THE CONTRACTOR SHALL ENSURE ALL NEW OR FUTURE UNDERGROUND UTILITIES, I.E. ELECTRIC, IRRIGATION, PVC SLEEVES OR CONDUITS, ETC., HAVE BEEN INSTALLED, INSPECTED AND AS-BUILT. IF PAVING IS TO OCCUR BEFORE THE INSTALLATION OF ANY UNDERGROUND UTILITIES, THE CONTRACTOR SHALL ENSURE THE NECESSARY SLEEVES/CONDUITS ARE PROVIDED AND SHALL COORDINATE THE LOCATIONS WITH THE CONSTRUCTION PLANS.

8. ALL PEDESTRIAN ROUTES, SIDEWALKS AND RAMPS, AS WELL AS ALL HANDICAPPED SIGNS, SYMBOLS, PARKING SPACES, ETC. SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH LOCAL, STATE AND FEDERAL ADA REQUIREMENTS WHETHER OR NOT SHOWN HEREON. CONTRACTOR SHALL VERIFY REQUIREMENTS WITH LOCAL INSPECTORS PRIOR TO POURING SIDEWALKS AND RAMPS.

Signage

1. PROVIDE TRAFFIC SIGNAGE SHOWN PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, UNLESS OTHERWISE SHOWN. INSTALL TRAFFIC SIGNAGE PER FDOT INDEX #17302. SEE ARCHITECTURAL PLANS FOR ADDITIONAL SIGNAGE REQUIREMENTS, AS APPLICABLE.

2. INSTALL SIGNAGE SO THAT THE BOTTOM EDGE OF THE BOTTOM SIGN IS AT LEAST 7'-0" ABOVE FINISHED GRADE AT THE SIGN POST, THE ADJACENT EDGE OF PAVEMENT (E.O.P.) OR THE ADJACENT TOP OF CURB, WHICHEVER IS GREATER. SIGN POSTS TO BE 11' LONG.

3. INSTALL SIGNAGE SO THAT THE VERTICAL EDGE OF THE SIGN CLOSEST TO THE ROAD IS AT LEAST 2' HORIZONTALLY FROM THE ADJACENT E.O.P.

Historical Preservation Note

IF DURING CONSTRUCTION ACTIVITIES, ANY EVIDENCE OF HISTORIC RESOURCES, INCLUDING BUT NOT LIMITED TO ABORIGINAL OR HISTORIC POTTERY, PREHISTORIC STONE TOOLS, BONE OR SHELL TOOLS, HISTORIC TRASH PITS, OR HISTORIC POTTERY, FOUNDATION, ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORIC RESOURCES (STATE HISTORIC PRESERVATION OFFICER) AND THE LOCAL REGULATORY AGENCY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE RESOURCES BEING FOUND ON THE SITE.

Protected Plant/Animal Note

IF DURING CONSTRUCTION ACTIVITIES, ANY EVIDENCE OF THE PRESENCE OF STATE AND/OR FEDERALLY PROTECTED PLANT AND/OR ANIMAL SPECIES ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) AND THE LOCAL REGULATORY AGENCY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE PLANT AND/OR ANIMAL SPECIES BEING FOUND ON THE SITE.

National Pollutant Discharge Elimination System (NPDES)

THE CONTRACTOR ACKNOWLEDGES THE REQUIREMENT OF THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), WHICH HAS PUBLISHED RULES FOR OBTAINING COVERAGE UNDER THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GENERIC PERMIT FOR STORMWATER DISCHARGES FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES.

IN OCTOBER 2000, EPA AUTHORIZED THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) TO IMPLEMENT THE NPDES STORMWATER PERMITTING PROGRAM IN THE STATE OF FLORIDA (IN ALL AREAS EXCEPT INDIAN COUNTRY LANDS). DEP'S AUTHORITY TO ADMINISTER THE NPDES PROGRAM IS SET FORTH IN SECTION 403.0885, FLORIDA STATUTES (F.S.). THE NPDES STORMWATER PROGRAM REGULATES POINT SOURCE DISCHARGES OF STORMWATER INTO SURFACE WATERS OF THE STATE OF FLORIDA FROM CERTAIN MUNICIPAL, INDUSTRIAL AND CONSTRUCTION ACTIVITIES. AS THE NPDES STORMWATER PERMITTING AUTHORITY, DEP IS RESPONSIBLE FOR PROMULGATING RULES AND ISSUING PERMITS, MANAGING AND REVIEWING PERMIT APPLICATIONS, AND PERFORMING COMPLIANCE AND ENFORCEMENT ACTIVITIES.

THE CONTRACTOR AGREES TO ASSIST THE OWNER IN THE PREPARATION, AND IMPLEMENTATION, OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE EPA HAS PUBLISHED SUMMARY GUIDANCE FOR: "DEVELOPING POLLUTION PREVENTION PLANS AND BEST MANAGEMENT PRACTICES" (EPA 832-R-92-005, SEPTEMBER 1992).

Record Drawing Requirements

THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF RECORD DRAWINGS TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

A. DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.

B. DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, WATER AND WASTEWATER PIPING AND RELATED APPURTENANCES. ALL CHANGES TO PIPING LOCATION INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.

C. DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER. DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON THE ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.

D. LOCATION OF ALL INLETS, MANHOLES, HYDRANTS, VALVES AND VALVE BOXES SHALL BE SHOWN. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO AND PREFERABLY THREE PERMANENT POINTS.

E. DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE FIELD VERIFIED AND SHOWN. THE INVERTS AND GRADE ELEVATIONS OF ALL INLETS AND MANHOLES SHALL BE SHOWN.

F. EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY A REGISTERED SURVEYOR WITH A NOTE READING "THESE AS-BUILTS DRAWINGS ACCURATELY DEPICT THE ACTUAL IMPROVEMENTS AS CONSTRUCTED".

Stormwater System Operation & Maintenance

THE OPERATION AND MAINTENANCE ENTITY FOR THE DEVELOPMENT SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE PONDS, SURFACE AND SUBSURFACE DRAINAGE SYSTEMS. THIS WILL REQUIRE INSPECTION, ON AT LEAST AN ANNUAL BASIS, OF THE ON-SITE DRAINAGE SYSTEM, INCLUDING BUT NOT LIMITED TO INLETS, STORM MANHOLES, STORM PIPES, DITCHES, SWALES, DETENTION AREAS, AND CONTROL STRUCTURES, MAKING SURE THAT THE SYSTEM IS FREE FROM EXCESS SILT, DEBRIS AND SEDIMENTATION BUILD-UP. THIS MAY REQUIRE PERIODIC MAINTENANCE AS DESCRIBED BELOW AND AS NEEDED TO MAINTAIN THE VIABILITY OF THE ORIGINAL DESIGN INTENT. THE WORK SPECIFIED CONSISTS OF THE OPERATION AND MAINTENANCE ACTIVITIES REQUIRED TO INSURE CONTINUED AND PROPER PERFORMANCE OF THE STORMWATER MANAGEMENT SYSTEM. THE OPERATION AND MAINTENANCE ENTITY SHOULD PERFORM THE FOLLOWING OPERATION AND MAINTENANCE PROCEDURES:

1. PONDS & SWALES SHALL BE PERIODICALLY MOWED AND CLEANED. DURING THE MOWING OPERATION, PONDS & SWALES SHALL BE INSPECTED FOR BARE SPOTS, DAMAGE, AND EROSION. ANY BARE SPOTS GREATER THAN ONE SQUARE FOOT IN AREA SHALL BE SODDED TO REPLACE THE GRASS COVER. IN CASE OF EROSION OR DAMAGE WHERE UNDERLYING SOIL IS MISSING, THE MISSING SOIL SHALL BE REPLACED AND THE AREA BROUGHT TO GRADE, THEN SODDED AS REQUIRED.

2. INLET GRATES WILL BE CHECKED MONTHLY FOR DAMAGE OR BLOCKAGE. ANY DAMAGED GRATES WILL BE REPLACED OR REPAIRED. ANY DEBRIS BLOCKING FULL FLOW THROUGH THE GRATE WILL BE REMOVED.

3. PIPES & INLETS WILL BE INSPECTED YEARLY FOR DAMAGE OR BLOCKAGE. ANY DAMAGED PIPES OR INLETS WILL BE REPAIRED OR REPLACED. ANY TRASH, DEBRIS, OR SAND DEPOSITS WILL BE REMOVED.

4. DISCHARGE STRUCTURES AND CONTROL DEVICES SHOULD BE MAINTAINED OPERATIONAL BY ELIMINATING CLOGGING OF THE BAFFLES, GRATES, ETC., CAUSED BY TRASH, DEBRIS AND SEDIMENT. THE INSPECTION FOR PROPER OPERATION AND MAINTENANCE OF THESE DEVICES SHOULD BE CONDUCTED QUARTERLY. ADDITIONAL MONITORING AND MAINTENANCE SHOULD BE CONDUCTED AFTER SEVERE RAINFALL EVENTS.

5. DRY DETENTION AND RETENTION AREAS SHOULD BE MAINTAINED OPERATIONAL BY REMOVING SEDIMENTS, TRASH AND INVADER VEGETATION WHICH CAN HINDER PROPER FUNCTIONING. THE INSPECTION SHOULD BE CONDUCTED QUARTERLY. ADDITIONAL MONITORING AND MAINTENANCE SHOULD BE CONDUCTED AFTER SEVERE RAINFALL EVENTS.

6. ALL GRASS IN THE DRY POND AREA SHOULD BE MOWED PERIODICALLY AND ALL CLIPPINGS RECOVERED AND DISPOSED OF OFF-SITE. IF PERCOLATION BECOMES RESTRICTED DUE TO A BUILD UP OF FINES THE BOTTOM MUST BE CLEANED AND REGRADED TO DESIGN ELEVATIONS.

7. IN WET DETENTION AND RETENTION PONDS, THE LITTORAL SHELF AREA MAY BE ALLOWED TO VEGETATE NATURALLY FOR A PERIOD OF TWO YEARS. MOWING OR REMOVAL OF NATIVE VEGETATION, INCLUDING CATTAILS, IS PROHIBITED. REMOVAL INCLUDES DREDGING, THE APPLICATION OF HERBICIDE, INTRODUCTION OF GRASS CARP AND CUTTING. IF NOT ADEQUATELY VEGETATED AFTER THE TWO YEAR PERIOD, PLANTING AND MAINTENANCE OF WETLAND SPECIES MAY BE REQUIRED. MAINTENANCE ENTITY SHOULD CONTACT THE SWFWMD FOR A DETERMINATION.

Land Surveying

1. TREE AND TOPOGRAPHIC SURVEYS WERE CONDUCTED BY VHB.

2. BENCHMARKS SHOWN ON THESE PLANS HAVE BEEN ESTABLISHED BY THE F.D.O.T., F.P.R.N. REFERENCE SHALL BE MADE TO SURVEYS ENTITLED "TOPOGRAPHIC SURVEY", WITH DATE SURVEYED 11/08/2018.

3. ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988, U.S. SURVEY FEET.

4. ALL BENCHMARKS USED FOR CONSTRUCTION LAYOUT SHALL BE VERIFIED BY A PROFESSIONAL SURVEYOR AND MAPPER, PRIOR TO USE, TO VERIFY THEIR ACCURACY. ANY DISCREPANCIES DISCOVERED MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD (EOR) IN WRITING.

5. ALL FIELD SURVEY LAYOUT FOR THE FACILITIES SHOWN ON THE CONSTRUCTION DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

6. MONUMENTS AND OTHER SURVEY CONTROL POINTS SHALL BE PROTECTED FROM DAMAGE AND DISTURBANCE. IF ANY CONTROL POINTS ARE DAMAGED OR DISTURBED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE THE CONTROL POINTS TO THEIR ORIGINAL CONDITION AT THEIR OWN EXPENSE.

Testing

EARTHWORK/COMPACTION:
QUALITY CONTROL TESTING DURING CONSTRUCTION: ALLOW TESTING SERVICE TO INSPECT AND APPROVE EACH SUBGRADE AND FILL LAYER BEFORE FURTHER BACKFILL OR CONSTRUCTION WORK IS PERFORMED. RECOMMENDED TESTING IS AS FOLLOWS:

ONE (1) FIELD DENSITY TEST, IN ACCORDANCE WITH ASTM D-1556, WILL BE PERFORMED PER 5,000 SQUARE FEET FOR ASPHALT OR CONCRETE PARKING/LOADING AREAS AND DRIVES.

- ONE (1) FIELD DENSITY TEST, IN ACCORDANCE WITH ASTM D-1556, WILL BE PERFORMED AROUND EACH MANHOLE OR INLET.
- ONE (1) FIELD DENSITY TEST, IN ACCORDANCE WITH ASTM D-1556, WILL BE PERFORMED PER 100 FEET OF TRENCHED UTILITIES FOR EACH LIFT. THERE SHALL BE A MINIMUM OF ONE TEST BETWEEN STRUCTURES.
- FILL MATERIAL: MAKE AT LEAST ONE (1) FIELD DENSITY TEST FOR EACH 2,000 SQUARE FEET OF FILL MATERIAL, BUT IN NO CASE LESS THAN FOUR TESTS. TESTS SHALL BE PERFORMED FOR EACH LIFT OF FILL.
- IF IN OPINION OF ENGINEER, BASED ON TESTING SERVICE REPORTS AND INSPECTION, SUBGRADE OF FILLS WHICH HAVE BEEN PLACED ARE BELOW SPECIFIED DENSITY, PROVIDE ADDITIONAL COMPACTION AND TESTING AT NO ADDITIONAL CHARGE TO THE OWNER.

WATER/FORCE MAIN SYSTEMS:

WATER DISTRIBUTION SYSTEM AND WASTEWATER FORCE MAIN PIPE INSTALLED BELOW GRADE AND OUTSIDE BUILDING SHALL BE TESTED IN ACCORDANCE WITH FOLLOWING PROCEDURES:

PERFORM THE TESTING OF PIPE MATERIALS, JOINTS, AND/OR OTHER MATERIALS INCORPORATED INTO THE CONSTRUCTION OF WATER MAINS AND FORCE MAINS TO DETERMINE LEAKAGE AND WATERTIGHTNESS. ALL PRESSURE PIPELINE SHALL BE TESTED IN ACCORDANCE WITH SECTION 4 OF AWWA C600 LATEST EDITION. IN THE EVENT ANY STATE OR LOCAL CODE REQUIRES A MORE STRINGENT TEST, THE MORE STRINGENT SHALL APPLY.

PRESSURE TEST: AFTER THE PIPE HAS BEEN LAID, ALL NEWLY LAID PIPE OR ANY VALVED SECTION THEREOF SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE OF AT LEAST 1.5 TIMES THE WORKING PRESSURE AT THE POINT OF TESTING AND NOT LESS THAN 1.25 TIMES THE WORKING PRESSURE AT THE HIGHEST POINT ALONG THE TEST SECTION.

LEAKAGE TEST: THE LEAKAGE TEST SHALL BE CONDUCTED CONCURRENTLY WITH THE PRESSURE TEST. LEAKAGE IS DEFINED AS THE QUANTITY OF WATER THAT MUST BE SUPPLIED INTO THE NEWLY LAID PIPELINE, OR ANY VALVED SECTION THEREOF, TO MAINTAIN PRESSURE WITHIN 5 PSI OF THE SPECIFIED TEST PRESSURE AFTER THE AIR IN THE PIPELINE HAS BEEN EXPELLED AND THE PIPELINE HAS BEEN FILLED WITH WATER. LEAKAGE SHALL NOT BE MEASURED BY A DROP IN PRESSURE IN A TEST SECTION OVER A PERIOD OF TIME. NO PIPELINE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE IS GREATER THAN THAT DETERMINED BY THE FOLLOWING FORMULA:

L = ALLOWABLE LEAKAGE, (GALLONS PER HOUR)

S = LENGTH OF PIPE TESTED, (FEET)

D = NOMINAL DIAMETER OF PIPE, (INCHES)

P = AVERAGE TEST PRESSURE DURING TEST, (PSIG)

VISIBLE LEAKAGE: ALL VISIBLE LEAKS SHALL BE REPAIRED REGARDLESS OF THE AMOUNT OF LEAKAGE.

ACCEPTANCE OF INSTALLATION: IF ANY TEST OF PIPE LAID IN PLACE DISCLOSES LEAKAGE GREATER THAN THAT SPECIFIED, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE THE LEAK AND MAKE REPAIRS AS NECESSARY UNTIL THE LEAKAGE IS WITHIN THE SPECIFIED ALLOWANCE. CONTRACTOR SHALL SUPPLY ALL WATER FOR TESTING AT NO ADDITIONAL COST TO THE OWNER.

PROVIDE ONE COPY OF RESULTS OF HYDROSTATIC PRESSURE TEST TO ENGINEER (AND UTILITY COMPANY AS NECESSARY) UPON COMPLETION OF WATER DISTRIBUTION/WASTEWATER FORCE MAIN BACKFILLING OPERATIONS.

ADJUSTING AND CLEANING (WATER DISTRIBUTION ONLY): DISINFECT DISTRIBUTION SYSTEM WITH CHLORINE BEFORE ACCEPTANCE FOR DOMESTIC OPERATION. AMOUNT OF CHLORINE SHALL BE SUCH AS TO PROVIDE DOSAGE OF NOT LESS THAN 50 PARTS/MILLION. THOROUGHLY FLUSH LINES BEFORE INTRODUCTION OF CHLORINATING MATERIALS AND AFTER CONTACT PERIOD OF NOT LESS THAN 24 HOURS, SYSTEM SHALL BE FLUSHED WITH CLEAN WATER UNTIL RESIDUAL CHLORINE CONTENT IS NOT GREATER THAN 1.0 PART/MILLION. OPEN AND CLOSE VALVES IN LINES BEING DISINFECTED SEVERAL TIMES DURING CONTACT PERIOD. AFTER DISINFECTION, TAKE TWO CONSECUTIVE DAYS OF WATER SAMPLES AND BACTERIOLOGICAL TESTS IN ACCORDANCE WITH AWWA SPECIFICATIONS. PROVIDE ONE COPY OF RESULTS OF BACTERIOLOGICAL TESTS (W/RESIDUAL CHLORINE LEVELS) TO ENGINEER (AND UTILITY COMPANY AS NECESSARY) UPON COMPLETION. RESAMPLING IS REQUIRED IF THERE IS MORE THAN SIXTY (60) CALENDAR DAYS BETWEEN THE TIME THE SAMPLE WAS TAKEN AND THE FORMAL ACCEPTANCE OF THE PROJECT. DO NOT PLACE DISTRIBUTION SYSTEM IN SERVICE UNTIL APPROVAL IS OBTAINED FROM APPLICABLE GOVERNING AUTHORITIES (AS NECESSARY).

GRAVITY SANITARY SEWER:
TESTING: PERFORM TESTING OF COMPLETED PIPING IN ACCORDANCE WITH LOCAL AUTHORITIES HAVING JURISDICTION. ALL PIPES SHALL BE CLEANED BY FLUSHING WITH WATER PRIOR TO TESTING. A HIGH VELOCITY JET OR OTHER METHODS MAY BE NECESSARY.

VISUAL TESTING OF GRAVITY LINES SHALL BE PERFORMED BY LAMPING TO VERIFY ACCURACY OF ALIGNMENT, PIPE DEFLECTION AND FREEDOM FROM DEBRIS AND OBSTRUCTION. THE FULL DIAMETER OF THE PIPE SHOULD BE VISIBLE WHEN VIEWED BETWEEN CONSECUTIVE MANHOLES. ANY FAILED PIPE SECTION LOCATIONS SHALL BE REPORTED TO THE ENGINEER. FAILED PIPE SECTIONS SHALL BE REPAIRED OR REPLACED AND RETESTED UNTIL WITHIN SPECIFIED ALLOWANCES AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.

EXFILTRATION OR LEAKAGE TESTING OF GRAVITY LINES SHALL BE PERFORMED BY BULKHEADING THE SEWER UNDER TEST AT THE MANHOLE AT THE LOWEST END AND FILLING THE SEWER WITH CLEAR WATER UNTIL THE WATER IS UP A MINIMUM OF TWO FEET ABOVE THE CLEANOUT AT THE HIGHEST POINT IN THE SYSTEM, OR TO THE CROWN OF THE MANHOLE AT THE HIGHEST POINT IN THE SYSTEM. LEAKAGE WILL BE THE MEASURED AMOUNT OF WATER ADDED TO MAINTAIN THE LEVEL IN THE HIGHEST END STRUCTURE. TESTS SHALL BE CARRIED ON A MINIMUM OF FOUR HOURS WITH READINGS AT 30-MINUTE INTERVALS. THE QUANTITY OF LEAKAGE FOR ANY SECTION OF THE SEWER SHALL NOT EXCEED 50 GALLONS/MILE OF PIPE/DAY/INCH PIPE DIAMETER.

INFILTRATION TESTING OF GRAVITY LINES SHALL BE PERFORMED WHEN THE GROUNDWATER LEVEL IS A MINIMUM OF TWO FEET ABOVE THE CROWN OF THE SEWER AT THE HIGHEST POINT IN THE TEST SECTION. INFILTRATION TESTS WILL BE MADE BY MEASURING THE INFILTRATED AMOUNT OF WATER AT A TEMPORARY BULKHEAD SET UP IN THE LAST INVERT OF THE SEWER SYSTEM. THE BULKHEAD SHALL BE PULLED AND THE INFILTRATED WATER COLLECTED AND MEASURED. TESTS SHALL BE CARRIED ON A MINIMUM OF FOUR HOURS. THE QUANTITY OF INFILTRATED WATER FOR ANY SECTION OF THE SEWER SHALL NOT EXCEED 50 GALLONS/MILE OF PIPE/DAY/INCH PIPE DIAMETER.

STORMWATER SYSTEMS:
TESTING: PERFORM VISUAL TESTING OF COMPLETED PIPING ONLY. ALL PIPES SHALL BE CLEANED BY FLUSHING WITH WATER PRIOR TO TESTING. A HIGH VELOCITY JET OR OTHER METHODS MAY BE NECESSARY. VISUAL TESTING BY LAMPING SHALL BE PERFORMED TO VERIFY ACCURACY OF ALIGNMENT, PIPE DEFLECTION AND FREEDOM FROM DEBRIS AND OBSTRUCTION. THE FULL DIAMETER OF THE PIPE SHOULD BE VISIBLE WHEN VIEWED BETWEEN CONSECUTIVE STRUCTURES. ANY FAILED PIPE SECTION LOCATIONS SHALL BE REPORTED TO THE ENGINEER. FAILED PIPE SECTIONS SHALL BE REPAIRED OR REPLACED AND RETESTED UNTIL WITHIN SPECIFIED ALLOWANCES AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.

ASPHALT PAVEMENT:
MINIMUM ONE (1) TEST FOR EVERY 20,000 SQUARE FEET (OR AS RECOMMENDED BY THE PRIVATE TESTING COMPANY).

TEST IN-PLACE ASPHALT CONCRETE COURSES FOR COMPLIANCE WITH REQUIREMENTS FOR THICKNESS, COMPACTION AND SURFACE SMOOTHNESS. TEST EACH SOURCE OF ASPHALT CONCRETE MATERIAL FOR COMPLIANCE WITH FDOT SPECIFICATIONS. REPAIR OR REMOVE AND REPLACE UNACCEPTABLE PAVING AS RECOMMENDED BY DESIGN ENGINEER AT NO ADDITIONAL COST TO THE OWNER.

COMPACTION TEST PER FM 5-511.

THICKNESS TEST PER ASTM D-3549. IN-PLACE COMPACTED THICKNESS WILL NOT BE ACCEPTABLE IF EXCEEDING FOLLOWING ALLOWABLE VARIATION FROM REQUIRED THICKNESS:

BASE COURSE: 1/2", PLUS OR MINUS.

SURFACE COURSE: 1/4", PLUS OR MINUS.

SURFACE SMOOTHNESS: TEST FINISHED SURFACE OF EACH ASPHALT CONCRETE COURSE FOR SMOOTHNESS, USING 10' STRAIGHT EDGE APPLIED PARALLEL WITH, AND AT RIGHT ANGLES TO CENTERLINE OF PAVED AREA. SURFACES WILL NOT BE ACCEPTABLE IF EXCEEDING THE FOLLOWING TOLERANCES FOR SMOOTHNESS.

BASE COURSE SURFACE: 1/4".

WEARING COURSE SURFACE: 3/16".

PAVING BASE COURSE: PERFORM TESTING OF IN-PLACE BASE COURSES FOR COMPLIANCE WITH REQUIREMENTS FOR MOISTURE, THICKNESS AND DENSITY. TEST EACH SOURCE OF BASE MATERIAL FOR COMPLIANCE WITH FDOT SPECIFICATIONS. REPAIR OR REMOVE AND REPLACE UNACCEPTABLE PAVING AS RECOMMENDED BY DESIGN ENGINEER AT NO ADDITIONAL COST TO THE OWNER.

MOISTURE CONTENT TEST PER ASTM D-698.

MECHANICAL ANALYSIS TEST PER AASHTO T-88.

PLASTICITY INDEX TEST PER ASTM D-4318.

BASE MATERIAL THICKNESS TEST PER FDOT SPECIFICATIONS.

FIELD DENSITY TEST PER ASTM D-1557.

CONCRETE PAVEMENT:
TEST CONCRETE IN ACCORDANCE WITH ACI 318 TO VERIFY COMPLIANCE WITH MINIMUM DESIGN STRENGTHS. TAKE ONE SLUMP TEST, AIR TEST AND STRENGTH TEST FOR EACH DAYS POUR.

TEST SHALL CONSIST OF 3 CYLINDERS, OF WHICH ONE WILL BE TESTED AT 7 DAYS AND THE OTHER AT 28 DAYS. THE THIRD CYLINDER SHALL BE TESTED SHALL BE TESTED IN THE EVENT ANY OF THE OTHER TWO FAIL TO MEET THE SPECIFICATIONS.

Television Inspection (Public Only)

PUBLIC STORM DRAINS AND SANITARY SEWER PIPING REQUIRE A CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION BE CONDUCTED PRIOR TO PIPELINE ACCEPTANCE AND PRIOR TO AND AFTER COMPLETION OF PIPELINE REHABILITATION. THE CCTV INSPECTION SHALL DOCUMENT AND VERIFY THE FOLLOWING:

1. THE OVERALL CONDITION OF THE HOST PIPELINE
2. LINE AND GRADE
3. CLEANLINESS
4. THAT POST-INSTALLATION PER THE CONTRACT HAS TAKEN PLACE.

THE CCTV INSPECTION SHALL BE DOCUMENTED IN AN ELECTRONIC REPORT (INSPECTION REPORT) AND DIGITAL VIDEO RECORDING, PER THE LOCAL REGULATORY AGENCY REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE INDEXING, REPORT AND VIDEO DOCUMENTATION FORMAT IS IN THE LATEST, MOST UP-TO-DATE FORMAT REQUIRED BY THE AGENCY. CCTV INSPECTION OF NEW CONSTRUCTION SHALL BE PERFORMED AFTER ALL REQUIRED TESTING IS SATISFACTORILY COMPLETED. CLEANING STORM DRAINS SHALL BE PERFORMED PRIOR TO THE TELEVISION INSPECTION IN A SEPARATE OPERATION. UNLESS OTHERWISE SHOWN, THE CONTRACTOR SHALL PERFORM A TELEVISION INSPECTION ON ALL STORM DRAINS AND SANITARY SEWER PIPING BETWEEN MANHOLES, STORM DRAIN INLETS, AND LATERALS.

Pinellas County General Construction Notes

1. ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE MINIMUM STANDARDS SET DOWN IN PINELLAS COUNTY LAND DEVELOPMENT, ZONING AND/OR RELATED ORDINANCES AND MINIMUM TESTING FREQUENCY REQUIREMENTS.

2. AS-BUILT SURVEYS AND/OR RECORD DRAWINGS MUST BE SUBMITTED TO THE COUNTY FIVE (5) BUSINESS DAYS PRIOR TO THE SITE INSPECTION FOR CERTIFICATE OF OCCUPANCY. NO CO WILL BE ISSUED WITHOUT REVIEW AND ACCEPTANCE OF RECORD DRAWINGS.

3. ALL ELEVATIONS MUST BE PER NAVD88.

4. ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY WILL BE COMPACTED TO 100% OF MAXIMUM DENSITY AND SODDED.

5. ALL PUBLIC SIDEWALK THAT IS DAMAGED OR DOES NOT MEET ADA CRITERIA SHALL BE REPLACED.

6. DETENTION AREAS SHALL BE ROUGHED OUT PRIOR TO OTHER SITE GRADING AS A MEANS OF EROSION CONTROL.

7. CONSTRUCTION OF STORMWATER FILTERDRAINS (UNDERDRAINS) SHALL BE INSPECTED BY THE ENGINEER OF RECORD WITH AN INSPECTION REPORT AND PHOTO DOCUMENTATION PROVIDED TO THE COUNTY.

8. SILT FENCE SHALL BE INSTALLED AT ALL INFLOW POINTS TO STORMWATER MANAGEMENT SYSTEMS AND SHALL BE MAINTAINED FOR THE DURATION OF THE CONSTRUCTION PROJECT. RETAINED SEDIMENT SHALL BE REMOVED AT REGULAR INTERVALS OR AS DIRECTED BY THE COUNTY.

Pinellas County Notes

1. AS-BUILT SURVEYS AND/OR RECORD DRAWINGS MUST BE SUBMITTED TO THE COUNTY FIVE (5) BUSINESS DAYS PRIOR TO THE SITE INSPECTION FOR CERTIFICATE OF OCCUPANCY. NO CO WILL BE ISSUED WITHOUT REVIEW AND ACCEPTANCE OF RECORD DRAWINGS

2. UPON COMPLETION OF THE PROJECT, THE ENGINEER OF RECORD SHALL COMPLETE THE ORIGINAL CERTIFICATION OF PROJECT COMPLETION FORM (ENCLOSED) AND SUBMIT 2 ORIGINAL COPIES OF AS-BUILT PLANS, ELECTRONIC FILES (BOTH PDF AND DWG) AND INDEPENDENT TESTING REPORTS FOR WORK PERFORMED WITHIN PINELLAS COUNTY RIGHTS-OF-WAY.

3. A CERTIFICATE OF OCCUPANCY INSPECTION CANNOT BE REQUESTED OR SCHEDULED UNTIL ALL PROJECT COMPLETION DOCUMENTS HAVE BEEN SUBMITTED TO OUR OFFICE. AS-BUILT DOCUMENTS MUST BE SUBMITTED AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO THE REQUESTING OR SCHEDULING OF A CO. CO INSPECTIONS MUST BE SCHEDULED TWO DAYS IN ADVANCE AND ARE ONLY AVAILABLE ON MONDAYS, WEDNESDAYS OR FRIDAYS.

Pinellas County Public Works Notes

ALL PROPOSED WORK MUST COMPLY WITH F.D.O.T. INDEX NO. 700.

1. ALL RIGHT-OF-WAY INSTALLATIONS WILL BE IN ACCORDANCE WITH PRACTICES REFERENCED IN THE STATE OF FLORIDA UTILITIES ACCOMMODATIONS MANUAL.

2. ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE MINIMUM STANDARDS SET DOWN IN PINELLAS COUNTY LAND DEVELOPMENT, ZONING AND/OR RELATED ORDINANCES, AND MINIMUM TESTING FREQUENCY REQUIREMENTS.

3. SIGNS AND BARRICADES SHALL BE IN ACCORDANCE WITH THE US DEPARTMENT OF TRANSPORTATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE FLORIDA DEPARTMENT OF TRANSPORTATION'S "DESIGN STANDARDS" INDEXES 600 THROUGH 670 (LATEST EDITIONS).

4. SAFE PEDESTRIAN TRAFFIC IS TO BE MAINTAINED AT ALL TIMES.

5. PLACE EXPANSION JOINTS WHERE 4" AND 6" CONCRETE ABUT.

6. SAW CUT EXISTING EDGE-OF-PAVEMENT PRIOR TO CONSTRUCTING DRIVEWAY CONNECTION.

7. DISTURBED AREA WITHIN THE RIGHT OF WAY WILL BE COMPACTED TO 100% OF MAXIMUM DENSITY AND SODDED.

8. DO NOT DISTURB EXISTING UNDERDRAIN OR STORM SYSTEMS. IF FILTRATION BED IS DISTURBED, CONTACT THE AREA INSPECTOR WITH THE PINELLAS COUNTY HIGHWAY DEPARTMENT AT 464-8900 FOR ASSISTANCE.

vhb.com
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501 E Kennedy Boulevard
Suite 1010
Tampa, FL 33602
813.327.5450
Certificate of Authorization Number FL #3932

Florida Botanical Gardens Children's Discovery Garden
12520 Ulmerton Road
Largo, Florida

No.	Revision	Date	Appvd.

Designed by: MAB
Checked by: KMB
Issued for: Permitting
Date: Dec. 14, 2020

Not Approved for Construction

Drawing Title
General Notes

Drawing Number
C1.1
Sheet of

KEVIN M. BYNUM, P.E.
PE 62392
12/14/2020

Project Number
62897.03

Saved Tuesday, December 1, 2020 3:04:44 PM MBLACKWOOD Plotted Friday, December 11, 2020 4:11:39 PM Blackwood, Marisa

Demolition Notes

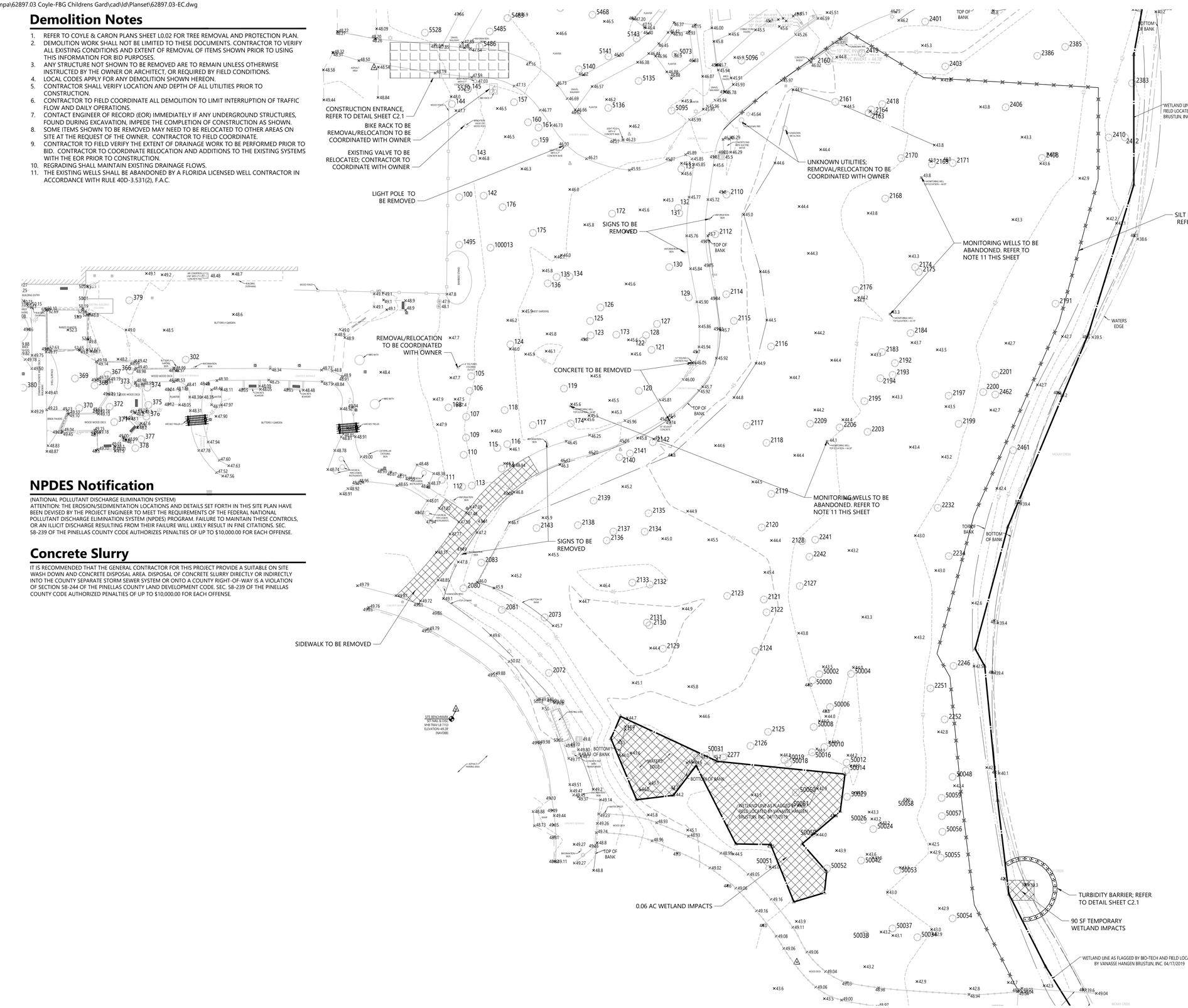
1. REFER TO COYLE & CARON PLANS SHEET L0.02 FOR TREE REMOVAL AND PROTECTION PLAN.
2. DEMOLITION WORK SHALL NOT BE LIMITED TO THESE DOCUMENTS. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND EXTENT OF REMOVAL OF ITEMS SHOWN PRIOR TO USING THIS INFORMATION FOR BID PURPOSES.
3. ANY STRUCTURE NOT SHOWN TO BE REMOVED ARE TO REMAIN UNLESS OTHERWISE INSTRUCTED BY THE OWNER OR ARCHITECT, OR REQUIRED BY FIELD CONDITIONS.
4. LOCAL CODES APPLY FOR ANY DEMOLITION SHOWN HEREON.
5. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO FIELD COORDINATE ALL DEMOLITION TO LIMIT INTERRUPTION OF TRAFFIC FLOW AND DAILY OPERATIONS.
7. CONTACT ENGINEER OF RECORD (EOR) IMMEDIATELY IF ANY UNDERGROUND STRUCTURES, FOUND DURING EXCAVATION, MAPPED THE COMPLETION OF CONSTRUCTION AS SHOWN.
8. SOME ITEMS SHOWN TO BE REMOVED MAY NEED TO BE RELOCATED TO OTHER AREAS ON SITE AT THE REQUEST OF THE OWNER. CONTRACTOR TO FIELD COORDINATE.
9. CONTRACTOR TO FIELD VERIFY THE EXTENT OF DRAINAGE WORK TO BE PERFORMED PRIOR TO BID. CONTRACTOR TO COORDINATE RELOCATION AND ADDITIONS TO THE EXISTING SYSTEMS WITH THE EOR PRIOR TO CONSTRUCTION.
10. REGRADING SHALL MAINTAIN EXISTING DRAINAGE FLOWS.
11. THE EXISTING WELLS SHALL BE ABANDONED BY A FLORIDA LICENSED WELL CONTRACTOR IN ACCORDANCE WITH RULE 40D-3.531(2), F.A.C.

NPDES Notification

(NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM)
ATTENTION: THE EROSION/SEDIMENTATION LOCATIONS AND DETAILS SET FORTH IN THIS SITE PLAN HAVE BEEN DEVISED BY THE PROJECT ENGINEER TO MEET THE REQUIREMENTS OF THE FEDERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM. FAILURE TO MAINTAIN THESE CONTROLS, OR AN ILLICIT DISCHARGE RESULTING FROM THEIR FAILURE WILL LIKELY RESULT IN FINE CITATIONS. SEC. 58-239 OF THE PINELLAS COUNTY CODE AUTHORIZES PENALTIES OF UP TO $10,000.00 FOR EACH OFFENSE.

Concrete Slurry

IT IS RECOMMENDED THAT THE GENERAL CONTRACTOR FOR THIS PROJECT PROVIDE A SUITABLE ON SITE WASH DOWN AND CONCRETE DISPOSAL AREA. DISPOSAL OF CONCRETE SLURRY DIRECTLY OR INDIRECTLY INTO THE COUNTY SEPARATE STORM SEWER SYSTEM OR ONTO A COUNTY RIGHT-OF-WAY IS A VIOLATION OF SECTION 58-244 OF THE PINELLAS COUNTY LAND DEVELOPMENT CODE. SEC. 58-239 OF THE PINELLAS COUNTY CODE AUTHORIZED PENALTIES OF UP TO $10,000.00 FOR EACH OFFENSE.



POINT #	TREE ID	SIZE	C
2072	C-70	10"8.7"	re
2073	C-71	12"	la
2080	C-68	20"	la
2081	C-69	7"	fi
2083	C-67	7"&10"	la
2110	C-54	18"	si
2112	C-55	14"	si
2114	C-56	12"	si
2115	C-57	18"	si
2116	C-87	17"	si
2117	C-59	16"	si
2118	C-60	15"	si
2119	C-86	15"	si
2120	C-85	15"	si
2121	C-80	8"	la
2122	C-79	9"	re
2123	C-78	8"	re
2124	C-124	16"	si
2125	C-125	12"	la
2126	C-126	10"	re
2127	C-127	10"	re
2128	C-84	12"	si
2129	C-128	3---10"	re
2130	C-129	14"	si
2131	C-130	10"	la
2132	C-75	16"	si
2133	C-74	15"	si
2134	C-76	14"	si
2135	C-77	14"	si
2136	C-72	6"	la
2137	C-73	6"	la
2138	C-64	9"	la
2139	C-63	6"	la
2140	C-62	12"	si
2141	C-61	8"	si
2142	C-60	9"	re
2143	C-59	10"	re
2160	C-53	10"	si
2161	C-105	11"8.7"	la
2163	C-104	6"	la
2164	C-103	10"8.10"	re
2168	C-99	8"	la
2169	C-101	6"	la
2170	C-102	6"	la
2171	C-100	6"	la
2174	C-98	9"	la
2175	C-98	TWO C-98 LOCAT	
2176	C-97	20"	la
2183	C-95	7"	la
2184	C-96	9"	la
2191	C-112	8"	la
2192	C-94	6"	la
2193	C-93	6"	la
2194	C-92	9"	re
2195	C-91	8"&8"	la
2197	C-118	6"	si
2199	C-117	9"	la
2200	C-115	16"	la
2201	C-114	9"	re
2203	C-90	6"	la
2206	C-89	14"	si
2209	C-88	9"&7"	si
2232	C-120	7"	la
2234	C-119	20"	la
2241	C-83	6"	cc
2242	C-82	14"	si
2246	C-121	18"	si
2251	C-122	10"	la
2252	C-123	8"	la
2377	C-107	10"	si
2383	C-48	8"	re
2385	C-49	5"&7"	re
2386	C-50	18"&10"	la
2401	C-51	10"	re
2403	C-107	9"	la
2406	C-108	18"	si
2408	C-109	24"	la
2410	C-110	8"	la
2412	C-111	8"	la
2418	C-106	8"	la
2419	C-52	16"	si
2461	C-118	8"	la
2462	C-113	7"	re

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Certificate of Authorization
Number FL #3932

Legend

- SILT FENCE
- WETLAND LIMITS
- INLET PROTECTION

Survey Legend

- BENCH
- CATCH BASIN
- E.O. ELECTRICAL OUTLET
- IRRIGATION VALVE
- LIGHT POLE
- SPRINKLER HEAD
- WATER GATE
- YARD DRAIN

0 10 20 40 Feet

Florida Botanical Gardens Children's Discovery Garden

12520 Ulmerton Road
Largo, Florida

No.	Revision	Date	Appvd.

Designed by: MAB
Checked by: KMB
Issued for: Permitting
Date: Dec. 14, 2020

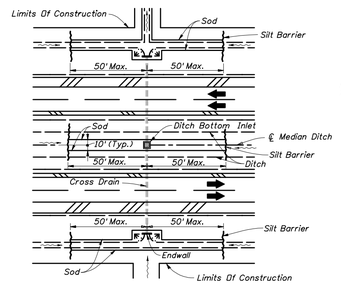
Not Approved for Construction

Drawing Title
Demolition & Erosion Control Plan

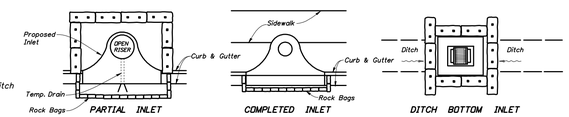
Drawing Number
C2.0
Sheet of

KEVIN M. BYNUM, P.E.
PE 62392
12/14/2020

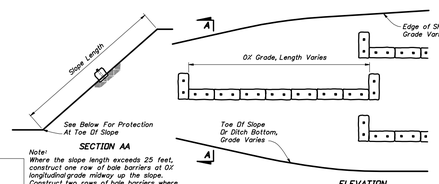
Project Number
62897.03



DITCH INSTALLATIONS AT DRAINAGE STRUCTURES



PROTECTION AROUND INLETS OR SIMILAR STRUCTURES



Note:
Where the slope length exceeds 25 feet, construct one row of bale barriers at 0.X longitudinal grade midway up the slope. Construct two rows of bale barriers where the slope length exceeds 50 feet.

ALONG FILL SLOPE

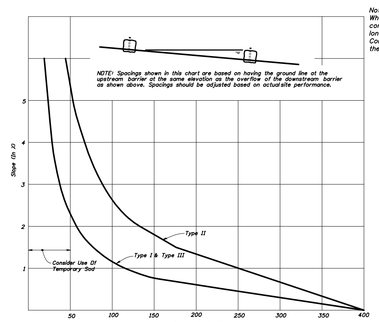
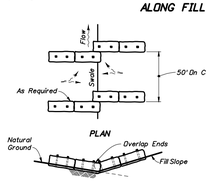
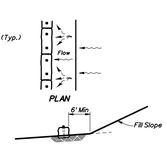


CHART I

COMMENDED SPACING FOR SYNTHETIC BALES OR BALE TYPE BARRIERS AND TYPE III SILT FENCE



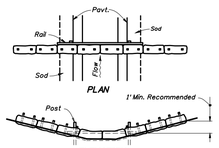
TO BE USED WHERE THE NATURAL GROUND SLOPES TOWARD THE TOE OF SLOPE



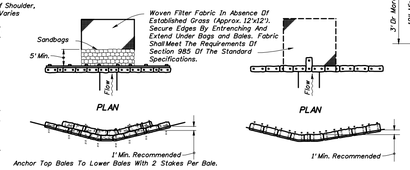
TO BE USED WHERE THE NATURAL GROUND SLOPES AWAY FROM THE TOE OF SLOPE

AT TOE OF SLOPE

BARRIERS FOR FILL SLOPES



SYNTHETIC BALES OR BALE TYPE BARRIERS FOR PAVED DITCHES



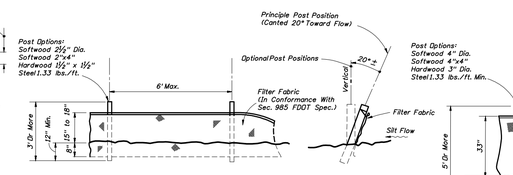
SYNTHETIC BALES OR BALE TYPE BARRIERS FOR UNPAVED DITCHES

NOTES FOR SYNTHETIC BALES OR BALE TYPE BARRIERS

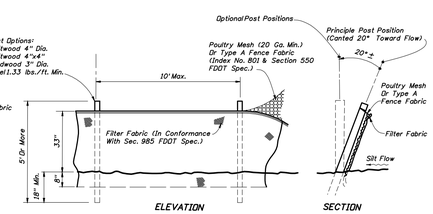
1. Type I and II Synthetic Barrier should be spaced in accordance with Chart 1, Sheet 1.
2. Bales shall be trenched 3" to 4" and anchored with 2-1" x 2" (or 1" dia.) x 4' wood stakes. Stakes of other material or shape providing equivalent strength may be used if approved by the Engineer. Stakes other than wood shall be removed upon completion of the project.
3. Rails and posts shall be 2" x 4" wood. Other materials providing equivalent strength may be used if approved by the Engineer.
4. Adjacent bales shall be butted firmly together.
5. Where used in conjunction with silt fence, bales shall be placed on the upstream side of the fence.
6. Bales to be paid for under the contract unit price for Synthetic Bales, LF. The unit price shall include the cost of filter fabric for Type I and II Barriers. Sandbags shall be paid for under the unit price for Sandbagging, CY. Rock bags to be paid for under the contract unit price for Rock Bags, EA.

Temporary Erosion and Sediment Control

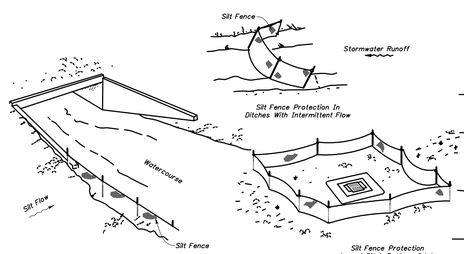
N.T.S. Source: 2008 FDOT Index No. 102



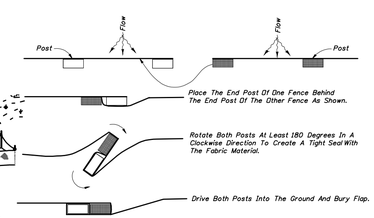
TYPE III SILT FENCE



TYPE IV SILT FENCE



SILT FENCE APPLICATIONS



PLAN VIEW

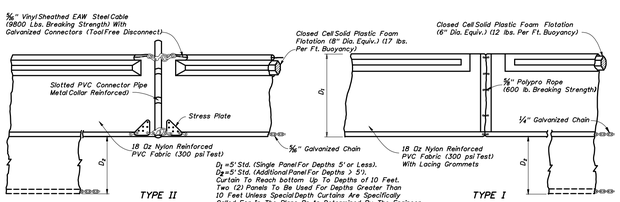
JOINING TWO SILT FENCES

NOTES FOR SILT FENCES

1. Type III Silt Fence to be used at most locations. Where used in ditches, the spacing for Type III Silt fence shall be in accordance with Chart 1, Sheet 1.
2. Type IV Silt Fence to be used where large sediment loads are anticipated. Suggested use is where fill slope is 1:2 or steeper and length of slope exceeds 25 feet. Avoid use where the detained water may back into travellanes or off the right of way.
3. Do not construct silt fences across permanent flowing watercourses. Silt fences are to be at upland locations and turbidity barriers used at permanent bodies of water.
4. Where used as slope protection, Silt Fence is to be constructed on 0.X longitudinal grade to avoid channelizing runoff along the length of the fence.
5. Silt Fence to be paid for under the contract unit price for Staked Silt Fence, (LF).

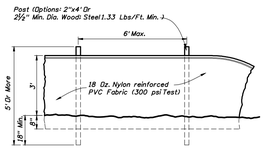
Silt Fence

N.T.S. Source: 2008 FDOT Index No. 103

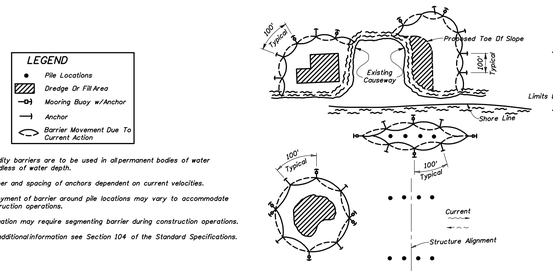


NOTICE:
COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

FLOATING TURBIDITY BARRIERS

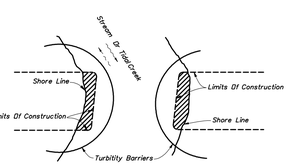


STAKED TURBIDITY BARRIER



Notes:
1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the Standard Specifications.

TURBIDITY BARRIER APPLICATIONS



Note:
Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractor's option unless otherwise specified in the plans, however payment will be under the pay item(s) established in the plans for Floating Turbidity Barrier and/or Staked Turbidity Barrier. Posts in staked trubidity barriers to be installed in vertical position unless otherwise directed by the Engineer.

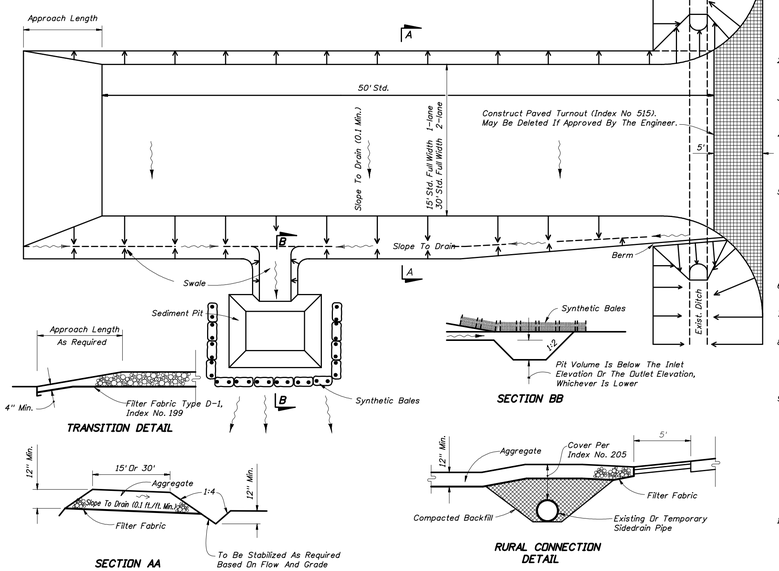
GENERAL NOTES

1. Floating turbidity barriers are to be paid for under the contract unit price for Floating Turbidity Barrier, LF.
2. Staked turbidity barriers are to be paid for under the contract unit price for Staked Turbidity Barrier, LF.

Turbidity Barriers

N.T.S. Source: 2008 FDOT Index No. 103

NOTE:
1. CONTRACTOR TO SELECT LOCATION ON SITE, AS NEEDED.



GENERAL NOTES

1. A Soil Tracking Prevention Device (STPD) shall be constructed at locations designated by the engineer for points of egress from unstabilized areas of the project to public roads where off-site tracking of mud could occur. Traffic from unstabilized areas of the construction project shall be directed thru a STPD. Barriers, flagging, or other positive means shall be used as required to limit and direct vehicular egress across the STPD.
2. The Contractor may propose an alternative technique to minimize off-site tracking of sediment. The alternative must be reviewed and approved by the Engineer prior to its use.
3. All materials spilled, dropped, or tracked onto public roads (including the STPD aggregate and construction mud) shall be removed daily, or more frequently if so directed by the Engineer.
4. Aggregates shall be as described in Section 901 excluding 901-2.3. Aggregates shall be FDOT size #1. If this size is not available, the next available smaller size aggregate may be substituted with the approval of the Engineer. Sizes containing excessive small aggregate will track off the project and are unsuitable.
5. The sediment pit should provide a retention volume of 3600 cubic feet/acre of surface area draining to the pit. When the STPD is isolated from other drainage areas, the following pit volumes will satisfy this requirement:
   15' x 50'=100 ft.³ 30' x 50'=200 ft.³
   As an option to the sediment pit, the width of the swale bottom can be increased to obtain the volume. When the sediment pit or swale volume has been reduced to one half, it shall be cleaned. When a swale is used, synthetic bales or silt fence shall be placed along the entire length.
6. The swale ditch draining the STPD shall have a 0.02' minimum and a 1.0' maximum grade along the STPD and to the sediment pit.
7. Mitered end sections are not required when the sidedrain pipe satisfies the clear zone requirements.
8. The STPD shall be maintained in a condition that will allow it to perform its function. To prevent off-site tracking, the STPD shall be rinsed (daily when in use) to move accumulated mud downward thru the stone. Additional stabilization of the vehicular route leading to the STPD may be required to limit the mud tracked.
9. A STPD shall be paid for under the contract unit price for Soil Tracking Prevention Device, EA. The unit price shall constitute full compensation for construction, maintenance, replacement of materials, removal, and restoration of the area utilized for the STPD; including but not limited to excavation, grading, temporary pipe (including MES when required), filter fabric, aggregate, paved turnout (including asphalt and base construction), ditch stabilization, approach route stabilization, sediment removal and disposal, water, rinsing and cleaning of the STPD and cleaning of public roads, grassing and sod. Synthetic Bale or Bale Type Barrier shall be paid for under the contract unit price for Synthetic Bales, LF. Silt fence shall be paid for under the contract unit price for Staked Silt Fence, LF.
10. The nominal size of a standard STPD is 15' x 50' unless otherwise shown in the plans. If the volume of entering and existing vehicles warrant, a 30' width STPD may be used if approved by the Engineer. When a double width (30') STPD is used, the pay quantity shall be 2 for each location.

Soil Tracking Prevention Device Type A

N.T.S. Source: 2008 FDOT Index No. 106

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Florida Botanical Gardens Children's Discovery Garden

12520 Ulmerton Road
Largo, Florida

No.	Revision	Date	Appvd.

Designed by: MAB
Checked by: KMB
Issued for: Permitting
Date: Dec. 14, 2020

Not Approved for Construction

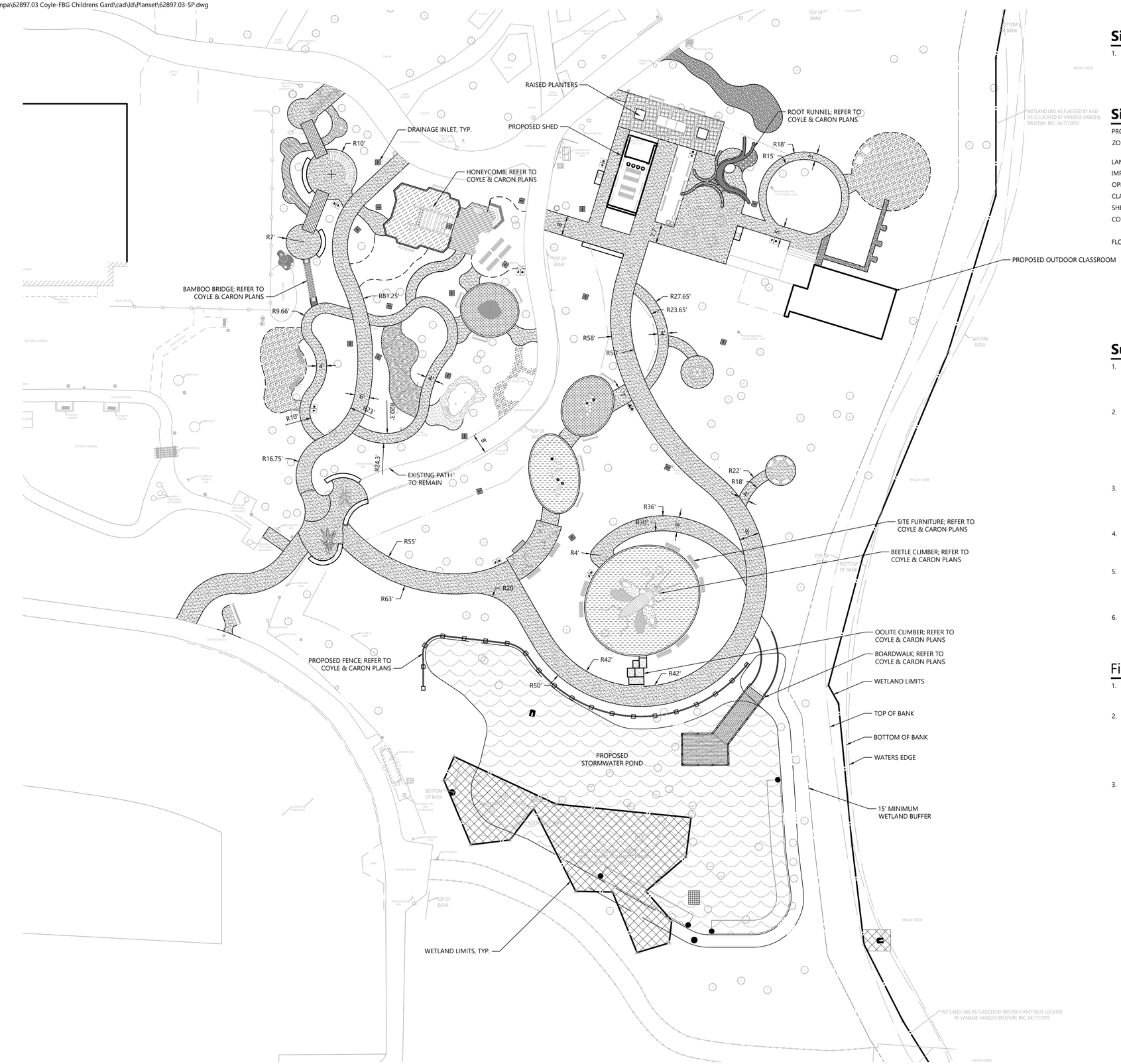
Drawing Title: Erosion Control Details

Drawing Number: C2.1
Sheet of

KEVIN M. BYNUM, P.E.
PE 62392
12/14/2020

Project Number: 62897.03

Saved Tuesday, November 17, 2020 2:57:23 PM MBLACKWOOD Plotted Friday, December 11, 2020 4:12:38 PM Blackwood, Marisa



Site Notes

1. REFER TO COYLE & CARON PLANS FOR PAVING MATERIALS & DETAILS.

Site Data Table

PROJECT AREA	1.17 AC
ZONING	GENERAL INSTITUTIONAL DISTRICT & PRESERVATION/CONSERVATION DISTRICT
LAND USE	UNDEVELOPED
IMPERVIOUS SURFACE RATIO	0.39
OPEN SPACE	0.71 AC
CLASSROOM AREA	1010 SF
SHED AREA	360 SF
CONSTRUCTION DATES	JANUARY 2021 TO APRIL 2021

FLOODPLAIN ELEVATION 45.6 PER PINELLAS COUNTY FLOODPLAIN ADMINISTRATOR

Subgrade Preparation

1. SLAB-ON-GRADE CONSTRUCTION: SUBGRADE PREPARATION FOR THE SHED SLAB-ON-GRADE AND CONCRETE WALK AND PAVEMENT AREAS WILL NECESSITATE UNDERCUTTING AND REMOVAL OF ALL OF THE HIGHLY ORGANIC SOILS FOLLOWED BY BACKFILL AND COMPACTING SUITABLE STRUCTURAL FILL TO REESTABLISH THE PROPOSED FINISH SUBGRADE ELEVATION.

2. THE ENTIRE BUILDING AND SLAB ON GRADE AREAS AND FOR A DISTANCE OF AT LEAST 3 FEET BEYOND THE OUTSIDE FOOTING PERIMETER SHOULD BE STRIPPED OF ALL SURFACE VEGETATION AND SOILS WITH AN EXCESSIVE ORGANIC CONTENT AND OTHER OBJECTIONABLE MATERIAL. EXACT DEPTH OF STRIPPING SHOULD BE DETERMINED BY A REPRESENTATIVE OF THE SOIL ENGINEER IN THE FIELD. FOUNDATION AREAS SHALL BE CAREFULLY INSPECTED PROBED AS DISCUSSED IN THE REPORT TEXT. UNSUITABLE MATERIALS SHALL BE REMOVED THROUGHOUT THE FOOTINGS ISOLATED COLUMN THROUGHOUT THE FOOTING AREA PLUS A MARGIN OF NOT LESS THAN 2 FEET. BACKFILL SOILS SHALL BE PLACED AND COMPACTED AS SUBSEQUENTLY SPECIFIED.

3. THE EXPOSED SUBGRADE SHOULD BE UNIFORMLY COMPACTED USING A HAND-OPERATED, VIBRATORY ROLLER HAVING A MINIMUM DRUM WIDTH OF 36 INCHES. A QUALIFIED ENGINEER OR TECHNICIAN SHOULD BE PRESENT DURING INITIAL COMPACTION OPERATIONS TO CHECK PROPER COMPACTOR PERFORMANCE AND COMPACTION PROCEDURES. THE COMPACTION SHOULD BE PERFORMED AT A SPEED EQUIVALENT TO A SLOW WALKING PACE.

4. SUBGRADE COMPACTION SHOULD CONSIST OF NO LESS THAN TEN (10) COMPLETE COVERAGES IN A CRISS-CROSSED PATTERN. IN ADDITION, COMPACTION SHOULD ACHIEVE A MINIMUM DENSITY OF NO LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY ESTABLISHED IN ASTM D-1557.

5. THE BOTTOM OF FOOTING EXCAVATIONS SHALL BE COMPACTED USING A HAND-GUIDED VIBRATORY OR IMPACT COMPACTOR WITH A MINIMUM WIDTH OF 16 INCHES OR THE LEAST FOOTING DIMENSION. COMPACTION SHOULD CONSIST OF NO LESS THAN TEN (10) COMPLETE COVERAGES TO EFFECT A DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY.

6. DENSITY TESTS SHOULD BE USED TO CONTROL COMPACTION. AT LEAST ONE (1) DENSITY TEST SHOULD BE PERFORMED FOR EVERY 2,000 SQ FT AT A DEPTH OF 6 INCHES BELOW THE STRIPPED, COMPACTED GRADE ELEVATIONS. NO FEWER THAN TWO (2) TESTS SHOULD BE PLANNED. DENSITY TESTS SHOULD ALSO BE PERFORMED IN THE BOTTOM OF SELECTED REPRESENTATIVE FOOTINGS.

Fill or Backfill Placement and Compaction

1. FILL REQUIRED TO DEVELOP PROPOSED GRADE SHOULD BE INORGANIC, CLEAN TO SLIGHTLY SILTY FINE SANDS, FREE OF UNSUITABLE DEBRIS. FOR EXAMPLE, SOILS WITH A UNIFIED SOIL CLASSIFICATION OF SP TO SP-SM WOULD CERTAINLY BE CONSIDERED SUITABLE.

2. THE FILL SHOULD BE PLACED IN LIFT THICKNESSES NOT EXCEEDING 9 INCHES WITH EACH LIFT COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. THINNER LIFTS MAY BE REQUIRED DEPENDING UPON COMPACTOR SIZE AND PERFORMANCE. MOISTURE CONTENT WITHIN THE FILL SOIL SHOULD BE CONTROLLED TO WITHIN ±2% OF OPTIMUM AS ESTABLISHED IN ASTM D-1557 TO HELP ENSURE DEVELOPMENT OF BOTH DENSITY AND STABILITY DURING COMPACTION OPERATIONS. NO FEWER THAN SIX (6) TO EIGHT (8) COVERAGES SHOULD BE MADE ON EACH LIFT USING THE ABOVE SPECIFIED SMALL, VIBRATORY ROLLER.

3. DENSITY TESTS SHOULD ALSO BE USED TO CONTROL FILL PLACEMENT. AT LEAST ONE (1) DENSITY TEST SHOULD BE PERFORMED FOR EACH 2,500 SQ FT PER FILL LIFT. NO FEWER THAN TWO (2) TESTS SHOULD BE PLANNED PER FILL LIFT.

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Legend

- WETLAND LIMITS
- WETLAND BUFFER
- PROPOSED STORMWATER POND
- PAVEMENT

0 10 20 40 Feet

Florida Botanical Gardens Children's Discovery Garden

12520 Ulmerton Road
Largo, Florida

No.	Revision	Date	Appvd.

Designed by MAB
Checked by KMB
Issued for Permitting
Date Dec. 14, 2020

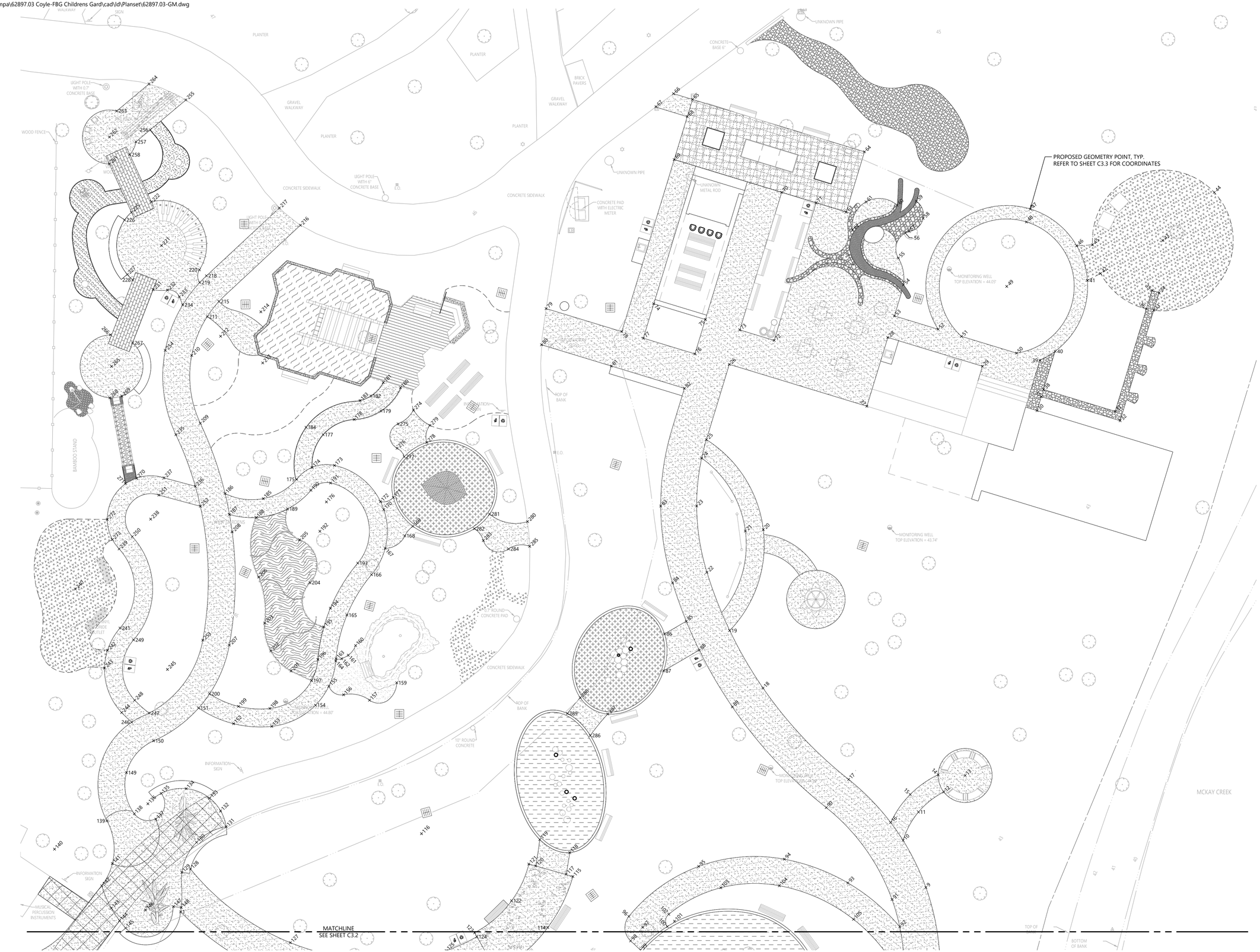
Not Approved for Construction

Drawing Title
Site Plan

Drawing Number
C3.0
Sheet of

KEVIN M. BYNUM, P.E.
PE 62392
12/14/2020

Project Number
62897.03



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Legend

- WETLAND LIMITS
- WETLAND BUFFER
- PROPOSED STORMWATER POND
- PAVEMENT

0 5 10 20 Feet

Florida Botanical Gardens Children's Discovery Garden

12520 Ulmerton Road
Largo, Florida

No.	Revision	Date	Appvd.

Designed by	Checked by
MAB	KMB

Issued for: Permitting

Date: Dec. 14, 2020

Not Approved for Construction

Drawing Title: Horizontal Geometry Plan

Drawing Number: C3.1

Sheet of

KEVIN M. BYNUM, P.E.
PE 62392
12/14/2020

Project Number: 62897.03

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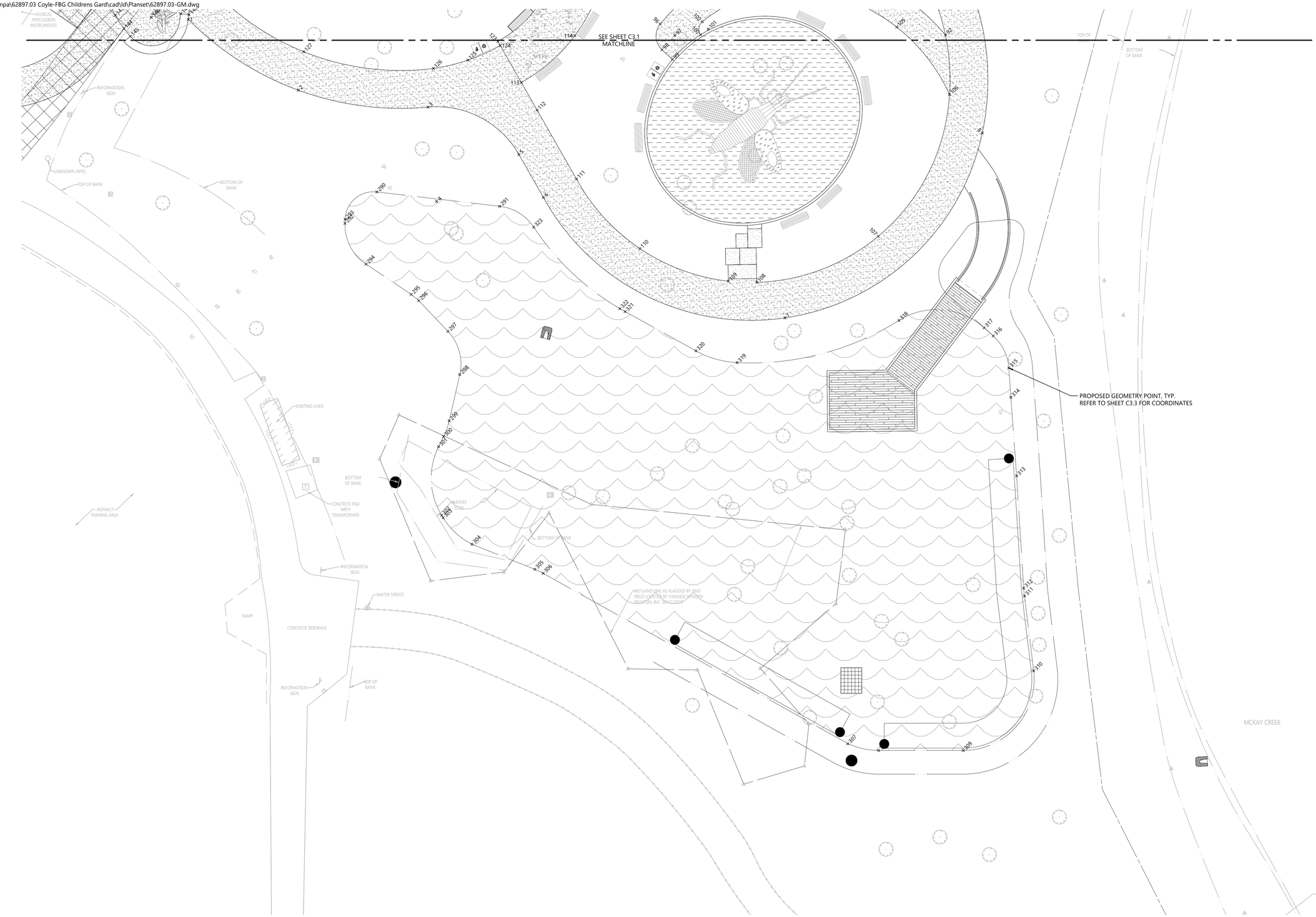

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Number FL #3932

Legend

- WETLAND LIMITS
- WETLAND BUFFER
- PROPOSED STORMWATER POND
- PAVEMENT

0 5 10 20 Feet

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No.	Revision	Date	Apprvd.

Designed by: MAB
Checked by: KMB
Issued for: Permitting
Date: Dec. 14, 2020

Not Approved for Construction

Drawing Title
Horizontal Geometry Plan

Drawing Number
C3.2
Sheet of

KEVIN M. BYNUM, P.E.
PE 62392
12/14/2020

Project Number
62897.03

Saved Thursday, December 10, 2020 10:56:15 AM MBLACKWOOD Plotted Friday, December 11, 2020 4:14:11 PM Blackwood, Marisa

Point Table

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5	1291382.1964	394578.6403
6	1291373.1158	394583.8290
7	1291347.6672	394634.8969
8	1291386.7269	394676.5804
9	1291416.1944	394674.5994
10	1291426.6497	394669.5238
11	1291432.9589	394672.9542
12	1291437.4249	394678.5782
13	1291441.0872	394683.3307
14	1291441.2691	394677.3335
15	1291436.8764	394671.1198
16	1291430.6296	394666.7742
17	1291440.2205	394657.4022
18	1291460.5472	394638.3664
19	1291473.3259	394630.9597
20	1291495.7974	394638.4247
21	1291495.4813	394634.4329
22	1291486.3154	394625.8856
23	1291501.0602	394623.5998
24	1291511.7009	394624.7012
25	1291515.8056	394625.7613
26	1291532.5644	394630.8629
27	1291523.2454	394661.4759
28	1291538.5519	394666.1354
29	1291532.1451	394687.1818
30	1291522.2822	394699.3364
31	1291525.3714	394700.2767
32	1291520.0323	394717.8154
33	1291544.6014	394725.2946
34	1291548.5240	394726.4887
35	1291549.0094	394724.8943
36	1291544.9061	394723.6452
37	1291522.1121	394716.7064
38	1291526.9658	394700.7621
39	1291533.4823	394699.9583
40	1291535.4784	394703.3535
41	1291551.2370	394710.5385
42	1291552.7940	394713.4731
43	1291560.1358	394727.3106
44	1291570.8348	394738.7522
45	1291559.1649	394711.6762
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47	1291567.1239	394697.8298
48	1291564.2540	394696.9562
49	1291549.9041	394692.5879
50	1291535.0631	394694.7656

Point Table

Point #	Northing	Easting
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52	1291540.3745	394677.3174
53	1291543.3352	394667.5915
54	1291550.2499	394669.6059
55	1291556.2190	394668.4678
56	1291561.7785	394670.0296
57	1291562.1667	394670.8416
58	1291565.0621	394673.9893
59	1291568.8661	394672.4821
60	1291567.9786	394668.1717
61	1291568.7182	394661.2874
62	1291562.4768	394658.2899
63	1291566.4624	394656.8615
64	1291579.8556	394660.9385
65	1291591.5044	394622.6723
66	1291592.7909	394618.4459
67	1291589.8854	394614.5571
68	1291587.6777	394621.5074
69	1291578.1112	394618.5952
70	1291570.8307	394642.5116
71	1291568.5010	394650.1649
72	1291537.8879	394640.8459
73	1291540.2177	394633.1926
74	1291546.0421	394614.0595
75	1291542.5475	394625.5394
76	1291534.8942	394623.2096
77	1291538.3888	394611.7297
78	1291539.8449	394606.9465
79	1291544.9723	394590.1024
80	1291536.9215	394589.0786
81	1291532.1918	394604.6167
82	1291527.2411	394620.8799
83	1291501.0389	394615.5998
84	1291483.9449	394618.2449
85	1291475.4149	394621.2889
86	1291472.5923	394616.4480
87	1291464.3745	394616.2514
88	1291468.9920	394624.1703
89	1291456.3547	394631.5407
90	1291433.9552	394652.4276
91	1291413.4955	394667.0684
92	1291407.4312	394668.7831
93	1291417.1880	394657.2486
94	1291422.4681	394643.0936
95	1291420.8636	394624.0552
96	1291409.7434	394608.5191
97	1291407.3216	394611.6115
98	1291404.2940	394608.9050
99	1291402.2644	394611.0906
100	1291407.4701	394617.0486

Point Table

Point #	Northing	Easting
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103	1291416.1235	394628.9779
104	1291416.5699	394641.9929
105	1291409.1012	394658.4909
106	1291394.8445	394669.6585
107	1291364.8940	394654.5845
108	1291355.1618	394628.9263
109	1291355.4143	394622.9130
110	1291362.3002	394604.2261
111	1291377.0202	394590.8120
112	1291391.5530	394582.5078
113	1291397.4033	394579.1648
114	1291407.2663	394590.4764
115	1291418.6161	394596.0645
116	1291428.1466	394562.3871
117	1291419.1285	394594.5579
118	1291423.9427	394595.3684
119	1291426.8519	394588.6885
120	1291420.9600	394587.7819
121	1291421.3906	394586.2603
122	1291413.2282	394582.4283
123	1291406.0858	394574.2035
124	1291405.2175	394574.6997
125	1291402.1245	394567.8707
126	1291400.3600	394560.5845
127	1291403.8900	394533.2007
128	1291420.2820	394510.9828
129	1291419.5425	394509.0628
130	1291426.2312	394512.3323
131	1291429.7043	394518.9176
132	1291433.2163	394517.6837
133	1291436.0347	394515.2525
134	1291438.1588	394510.0161
135	1291437.1054	394504.4644
136	1291434.8005	394501.5065
137	1291431.3830	394503.2693
138	1291432.5667	394498.4943
139	1291431.0032	394492.3951
140	1291424.7009	394480.7399
141	1291421.5093	394493.5998
142	1291416.5440	394491.2458
143	1291411.5886	394493.3631
144	1291408.7790	394495.1998
145	1291407.1557	394496.5347
146	1291411.1571	394501.0057
147	1291411.9256	394507.1803
148	1291411.7341	394508.9198
149	1291441.7207	394496.7369
150	1291448.8067	394502.7926

Point Table

Point #	Northing	Easting
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152	1291452.6119	394520.5715
153	1291452.0244	394529.0788
154	1291456.7400	394538.8006
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156	1291459.0522	394545.0554
157	1291457.8484	394550.8156
159	1291461.7234	394556.8688
160	1291469.9936	394547.7165
161	1291467.8600	394546.0876
162	1291467.0760	394544.6446
163	1291467.0533	394543.3541
164	1291466.5601	394543.3081
165	1291476.7825	394545.8006
166	1291485.7762	394551.2620
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191	1291506.1685	394542.1552
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194	1291478.3123	394542.1047
195	1291474.1373	394540.6516
196	1291466.9132	394539.3237
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198	1291456.0014	394528.6509
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200	1291459.2738	394515.2355
201	1291464.3520	394533.3704

Point Table

Point #	Northing	Easting
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204	1291483.9899	394537.5664
205	1291493.5055	394535.2629
206	1291485.2568	394526.1596
207	1291470.1137	394519.6191
208	1291495.3004	394520.2646
209	1291519.4739	394513.1634
210	1291534.5646	394511.2555
211	1291543.1831	394514.7025
212	1291538.8167	394517.6852
213	1291532.8826	394527.0554
214	1291544.2513	394526.6390
215	1291546.5663	394517.3199
216	1291563.5217	394535.4317
217	1291567.3527	394530.7412
218	1291552.2646	394514.5334
219	1291550.7828	394513.0476
220	1291553.5989	394512.9710
221	1291559.0062	394504.5590
222	1291568.7422	394502.2766
225	1291566.4150	394497.8427
226	1291564.6879	394496.3299
227	1291552.5635	394496.9110
228	1291551.3322	394498.1473
231	1291549.1847	394502.6781
232	1291549.0922	394505.8681
233	1291547.5888	394508.4973
234	1291545.7924	394509.2582
235	1291516.9107	394507.7385
236	1291505.4358	394512.0556
237	1291507.3142	394505.1026
238	1291498.1301	394502.1239
239	1291491.5027	394495.1028
240	1291482.5816	394485.3422
241	1291473.8915	394495.3090
242	1291468.9595	394492.5279
243	1291465.0013	394491.8647
244	1291455.0942	394495.6681
245	1291464.6910	394505.8613
246	1291452.9547	394497.9098
247	1291454.9754	394501.7798
248	1291457.8362	394498.5804
249	1291471.2628	394498.3240
250	1291494.2296	394498.0293
251	1291503.4820	394503.9505
252	1291500.9885	394513.1808
253	1291471.1955	394513.7174
254	1291535.6971	394505.3634
255	1291591.3978	394509.9684

Point Table

Point #	Northing	Easting
256	1291584.7460	394502.0298
257	1291582.0822	394498.8506
258	1291579.2280	394497.4867
261	1291577.1505	394492.9388
262	1291583.1505	394492.9465
263	1291588.9281	394494.5647
264	1291594.9622	394501.7661
265	1291532.1317	394493.4202
266	1291539.1422	394493.1432
267	1291537.3322	394498.1059
268	1291525.1198	394493.0364
269	1291525.5068	394495.7305
270	1291507.2502	394499.0005
271	1291506.0169	394496.4823
272	1291498.0844	394492.4690
273	1291493.5851	394493.6055
274	1291522.4144	394560.6005
275	1291519.3275	394557.1790
276	1291513.9093	394556.9437
277	1291512.0236	394558.5300
278	1291515.1903	394563.5695
279	1291519.0030	394564.2648
280	1291497.5875	394585.9760
281	1291499.2579	394577.5283
282	1291496.0071	394574.1390
283	1291493.3625	394576.1423
284	1291491.4897	394581.7542
285	1291492.0692	394586.4601
286	1291449.9958	394599.9362
287	1291454.7659	394603.8278
288	1291458.4052	394597.6822
289	1291454.8828	394594.8355
290	1291374.2772	394548.6271
291	1291371.2407	394574.6086
292	1291367.6452	394541.9063
293	1291368.5072	394541.9336
294	1291359.0166	394546.3430
295	1291352.6217	394555.9070
296	1291351.3046	394557.5010
297	1291344.8070	394563.6691
298	1291335.6926	394566.1647
299	1291325.9066	394563.9264
300	1291322.5736	394562.7358
301	1291320.4726	394561.6913
302	1291305.9684	394562.3268
303	1291305.4265	394562.6583
304	1291299.8418	394568.7361
305	1291294.5518	394582.0101
306	1291293.7118	394583.7743
307	1291257.6817	394648.1479

Point Table

Point #	Northing	Easting
308	1291256.2730	394654.6769
309	1291256.2730	394672.5387
310	1291273.0969	394687.4274
311	1291288.9121	394685.4900
312	1291290.5693	394685.3248
313	1291314.2999	394683.8301
314	1291330.8860	394682.6144
315	1291337.0970	394682.1877
316	1291343.8504	394678.8943
317	1291345.5795	394676.9697
318	1291347.1351	394658.9854
319	1291338.2144	394624.7800
320	1291340.7009	394616.0606
321	1291348.9945	394601.0936
322	1291349.6209	394599.9894
323	1291366.8214	394581.7908

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Florida Botanical Gardens Children's Discovery Garden

12520 Ulmerton Road
Largo, Florida

No.	Revision	Date	Appvd

Designed by: MAB
Checked by: KMB
Issued for: Permitting
Date: Dec. 14, 2020

Not Approved for Construction

Drawing Title
Horizontal Geometry Plan

Drawing Number
C3.3
Sheet of

KEVIN M. BYNUM, P.E.
PE 62392
12/14/2020

Project Number
62897.03

Grading Notes

1. REFER TO COYLE & CARON PLANS FOR HARDSCAPE GRADING.
2. EXISTING TOPOGRAPHY BASED ON SURVEY PROVIDED BY VHB.
3. ELEVATIONS SHOWN HEREON ARE IN FEET AND DECIMALS REFERENCED TO NAVD 88.
4. ALL EXTERIOR SLOPES, NEW CONSTRUCTION, SHALL BE VERIFIED TO BE IN COMPLIANCE WITH LOCALLY ADOPTED REGULATIONS AND SHALL BE MEASURED WITH A 24 INCH SMART LEVEL. CROSS SLOPES IN ALL CONDITIONS SHALL BE 2% MAXIMUM.
5. CONTRACTOR TO INSTALL SILT FENCE AND TEMPORARY INLET PROTECTION (ON ALL PROPOSED AND EXISTING INLETS IN OR NEAR THE PROJECT AREA). EROSION CONTROL TO REMAIN THROUGHOUT CONSTRUCTION.

Pinellas County Notes - Wet Ponds

DETENTION POND CONSTRUCTION

1. THE LOCATION AND DIMENSIONS OF THE DETENTION POND SHALL BE VERIFIED ONSITE PRIOR TO ITS CONSTRUCTION. ALL DESIGN REQUIREMENTS INCLUDING DETENTION POND DIMENSIONS AND DISTANCES TO FOUNDATIONS, SEPTIC SYSTEMS, AND WELLS NEED TO BE VERIFIED.
2. ONCE EXCAVATION OF THE WET DETENTION POND BEGINS, THE SOIL TYPES NEED TO BE VERIFIED TO ENSURE THAT THEY ARE SUITABLE FOR THE POND.
3. IF THE WET DETENTION POND IS BEING CREATED BY CONSTRUCTION OF AN EMBANKMENT, RATHER THAN SOLELY THROUGH EXCAVATION, SPECIAL ATTENTION DURING CONSTRUCTION MUST BE FOCUSED ON THE EMBANKMENT'S CONSTRUCTION, ESPECIALLY OF ANY PIPES THAT ARE PART OF THE DISCHARGE STRUCTURE THAT ARE BUILT THROUGH THE EMBANKMENT.
4. TO MINIMIZE THE POTENTIAL THAT AN EMBANKMENT WILL FAIL, INSPECTION OF THE STRUCTURE THROUGHOUT ITS CONSTRUCTION ARE NEEDED TO ASSURE THAT COMPONENTS SUCH AS ANTI-SEEP COLLARS OR DIAPHRAGMS AND SOIL COMPACTION ARE DONE PROPERLY.
5. ALL ELEVATIONS NEED TO BE VERIFIED IN THE FIELD AS CONSTRUCTION OCCURS TO ASSURE THAT THEY ARE CONSISTENT WITH PERMITTED PLAN SPECIFICATIONS.
6. ALL INLETS AND OUTLETS SHALL BE STABILIZED AS SET FORTH IN THE PERMITTED PLANS TO PREVENT EROSION, SCOUR, AND SEDIMENTATION.

INSPECTIONS, OPERATION AND MAINTENANCE

MAINTENANCE ISSUES ASSOCIATED WITH WET DETENTION PONDS INCLUDE ASSURING THAT SEDIMENTS ARE NOT ACCUMULATING TO SUCH A DEGREE THAT THEY ARE DECREASING THE REQUIRED STORAGE VOLUME AND ASSURING THAT ALL INLETS, OUTLETS, AND DISCHARGE STRUCTURES ARE NOT CLOGGED OR DAMAGED STRUCTURALLY.

1. INSPECTION ITEMS:

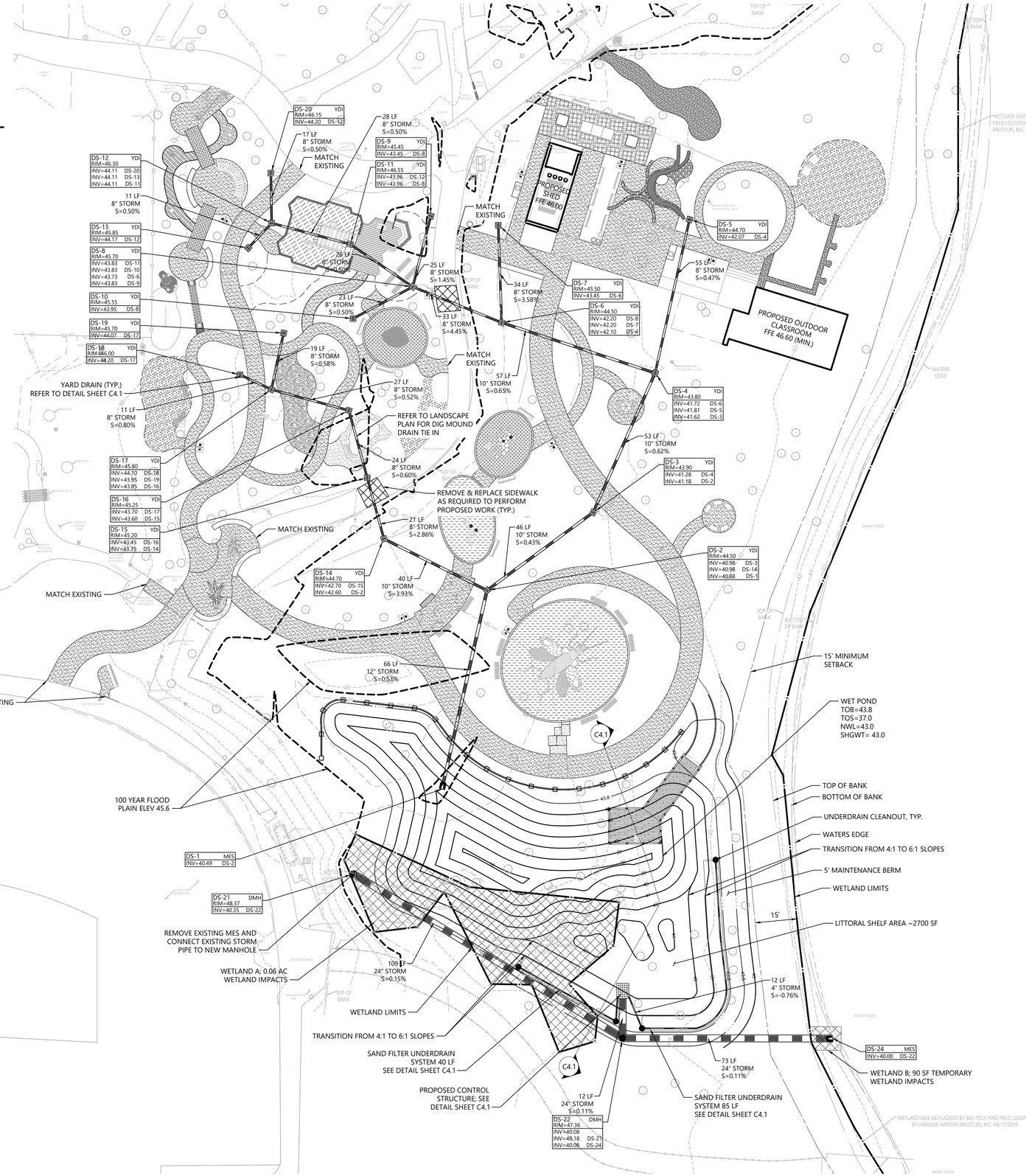
1.1. INSPECT BASIN FOR EXCESSIVE SEDIMENT ACCUMULATIONS THAT DECREASE THE WET DETENTION POND'S PERMITTED STORAGE VOLUME.
1.2. INSPECT INFLOW AND OUTFLOW STRUCTURES, TRASH RACKS, SKIMMERS, AND OTHER SYSTEM COMPONENTS FOR ACCUMULATION OF DEBRIS AND TRASH THAT WOULD CAUSE CLOGGING AND ADVERSELY IMPACT OPERATION OF THE WET DETENTION POND.
1.3. IF AN EMBANKMENT IS USED, INSPECT TO ENSURE THAT NO PIPING OF WATER IS OCCURRING THROUGH THE EMBANKMENT AND THAT THERE IS NO DAMAGE OR STRUCTURAL INTEGRITY ISSUES.
1.4. INSPECT VEGETATION ON SIDE SLOPES TO ASSURE IT IS HEALTHY, MAINTAINING COVERAGE, AND THAT NO EROSION IS OCCURRING.
1.5. INSPECT THE WET DETENTION POND FOR POTENTIAL MOSQUITO BREEDING PROBLEMS
1.6. INSPECT WET DETENTION POND AND, IF APPLICABLE, LITTORAL ZONE TO ASSURE THAT CATTAILS OR OTHER INVASIVE VEGETATION ARE NOT BECOMING ESTABLISHED.

2. MAINTENANCE ACTIVITIES AS-NEEDED TO PROLONG SERVICE:

2.1. IF NEEDED, REMOVE ACCUMULATED SEDIMENTS TO RESTORE PERMITTED STORAGE VOLUME AND DISPOSE OF PROPERLY PLEASE NOTE THAT STORMWATER SEDIMENT DISPOSAL MAY BE REGULATED UNDER CHAPTER 62-701, F.A.C.
2.2. REMOVE TRASH AND DEBRIS FROM INFLOW AND OUTFLOW STRUCTURES, TRASH RACKS, AND OTHER SYSTEM COMPONENTS TO PREVENT CLOGGING OR IMPEDING FLOW.
2.3. MAINTAIN HEALTHY VEGETATIVE COVER TO PREVENT EROSION OF SIDE SLOPES OR AROUND INFLOW AND OUTFLOW STRUCTURES. REMOVE ANY TREES OR SHRUBS THAT MAY HAVE BECOME ESTABLISHED ON THE DISCHARGE STRUCTURE EMBANKMENT, IF APPLICABLE.
2.4. ELIMINATE MOSQUITO BREEDING HABITATS SUCH AS THICK GROWTHS OF CATTAILS AND ENSURE THAT MOSQUITO FISH ARE PRESENT IN THE WET DETENTION POND.
2.5. REMOVE CATTAILS AND OTHER EXOTIC VEGETATION FROM THE LITTORAL ZONE, IF APPLICABLE, AND REPLANT APPROPRIATE VEGETATION IF NEEDED TO MEET LITTORAL ZONE REQUIREMENTS.

Storm Sewer Structure Schedule

Number	Type	Northing	Easting
DS-1	MES	1291343.30	394584.21
DS-2	12" ATRIUM YD	1291414.43	394600.32
DS-3	12" ATRIUM YD	1291442.33	394638.35
DS-4	12" ATRIUM YD	1291492.23	394660.55
DS-5	12" ATRIUM YD	1291547.21	394672.87
DS-6	12" ATRIUM YD	1291510.29	394605.60
DS-7	6" ATRIUM YD	1291545.18	394604.38
DS-8	12" ATRIUM YD	1291523.11	394573.76
DS-9	12" ATRIUM YD	1291548.44	394580.24
DS-10	6" ATRIUM YD	1291511.74	394552.37
DS-11	6" CAST IRON YD	1291538.34	394551.39
DS-12	6" ATRIUM YD	1291545.90	394523.22
DS-13	6" ATRIUM YD	1291536.99	394514.81
DS-14	12" ATRIUM YD	1291432.88	394563.43
DS-15	6" ATRIUM YD	1291454.77	394557.45
DS-16	12" ATRIUM YD	1291478.85	394550.86
DS-17	6" ATRIUM YD	1291486.35	394523.14
DS-18	6" ATRIUM YD	1291491.63	394511.89
DS-19	6" ATRIUM YD	1291506.57	394527.52
DS-20	12" ATRIUM YD	1291563.80	394522.93
DS-21	MANHOLE	1291312.93	394552.58
DS-22	MANHOLE	1291254.14	394648.94
DS-23	CLEANOUT	1291317.97	394682.20
DS-24	MES	1291254.01	394724.16



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Legend

- WETLAND LIMITS
- WETLAND BUFFER
- PROPOSED STORMWATER PIPE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- 100 YEAR FLOOD PLAIN
- DRAINAGE INLET

0 10 20 40 Feet

Florida Botanical Gardens Children's Discovery Garden

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SIDEDRAIN MAINTENANCE:
A SIDEDRAIN FILTER SYSTEM OF ADEQUATE DESIGN AND PROPER INSTALLATION, USING GOOD MATERIAL, STILL REQUIRES MAINTENANCE TO KEEP IT OPERATING. INSPECTION OF THE DRAINS, ESPECIALLY AFTER HEAVY RAINS, SHOULD BE MADE TO SEE IF THEY ARE WORKING AND IF MAINTENANCE IS REQUIRED. PORE SPACES IN STORMWATER FILTERS CAN BE EXPECTED TO SEAL WITH TIME FOLLOWING THE BEGINNING OF OPERATION. THE DURATION OF A FILTER'S EFFECTIVENESS BEFORE THE HYDRAULIC CAPACITY IS REDUCED TO THE POINT THAT DRAWDOWN REQUIREMENTS CAN NO LONGER BE MET WILL DEPEND ON A NUMBER OF FACTORS INCLUDING THE INITIAL PERMEABILITY OF FILTER MATERIAL USED, THE DEGREE OF PRETREATMENT (SEDIMENTATION) PRIOR TO ENTERING THE FILTRATION FACILITY, AND THE NATURE OF THE POLLUTANTS BEING REMOVED.

PRELIMINARY INDICATION SHOW THAT THESE SYSTEMS CAN FUNCTION FOR UP TO ONE YEAR WITH ONLY MINOR MAINTENANCE. HOWEVER, PERIODIC DISCING OR SCRAPING THE SURFACE LAYERS OF THE SOIL MAY BE REQUIRED FOLLOWING HEAVY EVENTS THAT CARRY HEAVY SEDIMENT LOADS.

COARSE GRAINED SYSTEMS MAY REQUIRE COMPLETE REPLACEMENT OF THE FILTER MEDIA TO RESTORE THEIR FUNCTION FOLLOWING CLOGGING SINCE POLLUTANTS WOULD BE EXPECTED TO FURTHER PENETRATE THESE SYSTEMS THAN THEIR MORE CLOSE-GRAINED COUNTERPARTS. MOST OF THE PARTICULATES WILL BE TRAPPED IN THE FIRST 2 OR 3 INCHES OF THE LATTER WHILE SUSPENDED SUBSTANCES CAN BE EXPECTED TO PENETRATE UP TO A FOOT OR MORE INTO THE COARSE-GRAINED FILTER. SEMI-ANNUAL RESTORATION EFFORTS ARE LIKELY TO INVOLVE COMPLETE REMOVAL AND CLEANING AND OR REPLACEMENT OF THE TOP 12 INCHES OR MORE OF THE FILTER MATERIAL. WHILE MAJOR MAINTENANCE OF THIS TYPE MAY NOT HAVE TO BE DONE AS OFTEN, WHEN IT IS REQUIRED, THE OPERATION WILL INVOLVE A SIGNIFICANT AMOUNT OF LABOR AND MATERIAL. HEAVY MACHINERY MAY BE NEEDED IF THE FACILITY IS LARGE AND CARE WILL BE NEEDED TO PREVENT DAMAGE TO THE SIDEDRAIN OR UNDERDRAIN PIPES. THERE MAY BE SOME PROBLEMS ASSOCIATED WITH THE ABILITY OF THESE MORE COARSE-GRAINED, EVENLY GRADED MATERIALS TO SUPPORT MACHINERY NEEDED TO PERFORM MAINTENANCE ACTIVITIES, SUCH AS SCRAPPING WITHOUT GETTING EQUIPMENT STUCK AND/OR DAMAGING THE FILTER BED.

COMMON CAUSES OF SUBSURFACE DRAINAGE SYSTEM FAILURES INCLUDE THE FOLLOWING:
1. DRAINS INSTALLED WITH INSUFFICIENT CAPACITY.
2. DRAINS PLACED TOO SHALLOW AND LACK OF AUXILIARY STRUCTURES NECESSARY FOR THE INSTALLATION.
3. DRAINS OF INSUFFICIENT STRENGTH OR LACKING IN OTHER QUALITIES NECESSARY FOR THE INSTALLATION.
4. LACK OF MAINTENANCE STRUCTURES, SUCH AS CLEANOUTS, INSTALLED AT PROPER LOCATIONS.
5. POOR CONSTRUCTION RESULTING IN SUCH INADEQUACIES AS TOO WIDE OR TOO SMALL A JOINT SPACING, IMPROPER BEDDING, POOR GRADE AND ALIGNMENT AND IMPROPER BACKFILLING.
6. FAILURE DUE TO MINERAL DEPOSITS SUCH AS IRON OXIDE. THESE DEPOSITS DO NOT SERIOUSLY AFFECT THE OPERATION OF THE DRAIN UNLESS THE PERFORATIONS OR JOINTS BECOME SEALED. USUALLY INDICATIONS OF DEPOSITS MAY BE OBSERVED AT THE OUTLETS, JUNCTION BOXES AND CLEANOUTS.

HYDRAULIC CLEANING - HIGH PRESSURE HYDRAULIC NOZZLES HAVE BEEN USED WITH SUCCESS TO CLEAN SIDEDRAIN OR UNDERDRAIN SYSTEMS IN FLORIDA THAT HAVE EVIDENCE OF IRON OXIDE.

SILT AND VEGETATION - ONE OF THE MOST COMMON MAINTENANCE PROBLEMS THAT WE HAVE WITH SIDEDRAIN OR UNDERDRAIN SYSTEMS IN FLORIDA IS TO GET LANDOWNERS TO KEEP THE OUTLETS FREE OF SILT AND VEGETATION WHERE THEY EMPTY INTO OPEN DITCHES OR CONTROL STRUCTURES. THE OUTLET END OF THE SYSTEM MUST BE KEPT CLEAN IF THE MAXIMUM BENEFITS FROM THE SIDEDRAIN OR UNDERDRAIN SYSTEM ARE TO BE OBTAINED. SEDIMENT AND FAST GROWING AQUATIC VEGETATION MIGHT CAUSE THE OUTLETS TO BECOME ENTIRELY PLUGGED WITHIN ONE YEAR AFTER INSTALLATION, CONSEQUENTLY FREQUENT INSPECTIONS MUST BE MADE.

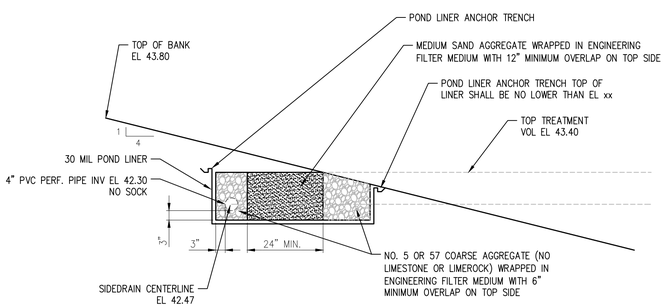
TREES - IF TREES NEAR THE DRAIN ARE NOT REMOVED AT THE TIME OF CONSTRUCTION, THE SIDEDRAIN OR UNDERDRAIN MAY BECOME PLUGGED BY ROOTS. IF IT IS FOUND THAT THE SIDEDRAIN OR UNDERDRAIN LINE IS NOT FUNCTIONING AND THE OUTLET IS OPEN, THE LINES SHOULD BE CHECKED NEAR TREES.

AUXILIARY STRUCTURES - THE LIFE AND VALUE OF A SIDEDRAIN OR UNDERDRAIN SYSTEM MANY TIMES DEPENDS ON THE REPAIR OF AUXILIARY STRUCTURES. THESE STRUCTURES ARE TO PROTECT THE SIDEDRAIN OR UNDERDRAIN SYSTEM AS WELL AS TO AID IN DETERMINING WHEN MAINTENANCE IS NEEDED. IF THEY ARE NOT MAINTAINED, THE VALUE OF THE INSTALLATION WILL DECREASE. REGULAR INSPECTION IS REQUIRED.

AS-BUILT PLANS - UPON COMPLETING A SUBSURFACE DRAINAGE INSTALLATION AND AFTER ALL CHECKS AND INSPECTIONS HAVE BEEN MADE, A SET OF "AS-BUILT" PLANS, SHOWING LOCATION, DEPTHS AND SIZES OF ALL DRAINS SHOULD BE PRESERVED AND MADE AVAILABLE TO THOSE THAT WILL BE MAINTAINING THE SYSTEM.

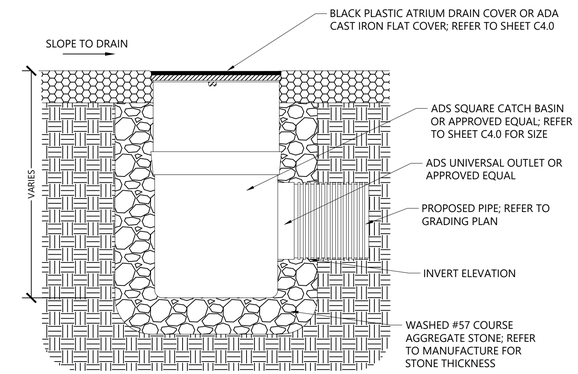
(REF: DEPARTMENT OF ENVIRONMENTAL REGULATION, STATE OF FLORIDA, "THE FLORIDA DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT", JUNE, 1988.)

NOTES:
1. 3/4" WASHED ROCK SHALL BE #5 COURSE AGGREGATE PER FDOT SECTION 901.
2. NON-WOVEN ENGINEERING FABRIC SHALL BE AMACO STYLE #4545 OR APPROVED EQUIVALENT.
3. SIDEDRAIN OR UNDERDRAIN PIPING SHALL BE LAID AT GRADES AND SLOPES SHOWN AND COVERED WITH APPROVED FILTER MATERIAL. A MINIMUM THREE (3) INCH THICK GRAVEL ENVELOPE WRAPPED IN FILTER CLOTH IS SUGGESTED TO IMPROVE FLOW INTO THE DRAIN PIPE.
4. SIDEDRAIN OR UNDERDRAIN PIPING MATERIAL SHALL BE FOUR (4) INCH PERFORATED PVC PIPE WITH NO SOCK MATERIAL OR AN APPROVED EQUAL. INSTALLATION SHALL BE ACCORDING THE MANUFACTURER'S RECOMMENDATIONS.
5. GRAVEL ENVELOPE MATERIAL SHALL BE A COARSE MATERIAL, ALL OF WHICH SHALL PASS A 1-1/2 INCH SIEVE. FDOT NO. 57 STONE OR EQUIVALENT IS RECOMMENDED. THE MATERIAL SHOULD BE WASHED AND CONTAIN NO MORE THAN ONE (1) PERCENT SILT, CLAY AND ORGANIC MATTER. THE MATERIAL SHALL BE HARD, DURABLE AND COMPLY WITH THE REQUIREMENTS FOR SOUNDNESS SPECIFIED IN ASTM D-694-62. THE MATERIAL SHALL NOT CONTAIN ANY LIMESTONE, LIMEROCK OR PHOSPHATE.
6. THE SAND FILTER MATERIAL SHALL BE A WASHED MATERIAL MEETING FDOT ROAD AND BRIDGE SPECIFICATIONS FOR SILICA SAND (CONTAINING LESS THAN ONE (1) PERCENT SILT, CLAY AND ORGANIC MATTER), UNLESS FILTER CLOTH IS USED AROUND THE GRAVEL WHICH IS SUITABLE TO RETAIN THE SILT, CLAY AND ORGANIC MATTER WITHIN THE SAND FILTER. CALCIUM CARBONATE (LIMEROCK) AGGREGATE IS NOT AN ACCEPTABLE SUBSTITUTE.
7. THE SAND FILTER MATERIAL SHALL HAVE A UNIFORMITY COEFFICIENT 1.5 OR GREATER AND AN EFFECTIVE GRAIN SIZE OF 0.20 TO 0.55 MILLIMETERS IN DIAMETER.
8. THE SIDEDRAIN OR UNDERDRAIN SYSTEM SHALL BE CONSTRUCTED SUCH THAT DISPLACEMENT OF THE FILTER MEDIA AND DRAIN PIPE WILL NOT OCCUR DURING BACKFILLING.
9. THE UPPER END OF EACH DRAIN PIPE AND ANY BENDS SHALL BE CONNECTED TO A CLEANOUT STRUCTURE WHETHER OR NOT SHOWN HEREON. THE CLEANOUT SCREW CAP SHALL BE WATERTIGHT.
10. PRIOR TO INSTALLATION OF THE FILTER MEDIA (SAND), THE CONTRACTOR SHALL SUBMIT TEST RESULTS, FROM A CERTIFIED INDEPENDENT LABORATORY, OF THE MEDIA MATERIAL THAT WILL BE USED IN CONSTRUCTION OF THE UNDERDRAIN/SIDEDRAIN SYSTEM, TO THE ENGINEER OF RECORD FOR SUBMITTAL TO THE REGULATORY AGENCY. THE TESTS SHALL ADDRESS THE FOLLOWING FILTER MEDIA PARAMETERS: UNIFORMITY COEFFICIENT, EFFECTIVE GRAIN SIZE, SIEVE ANALYSIS, PERCENT SILTS, CLAYS AND ORGANIC MATTER, AND A PERMEABILITY TEST (CONSTANT HEAD).



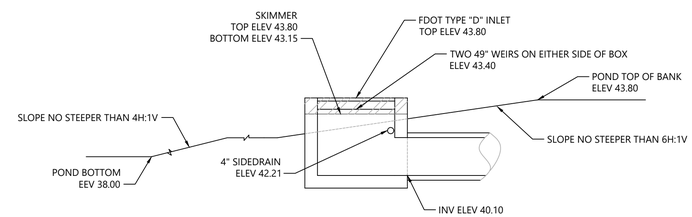
Sand Filter Sidedrain Detail

N.T.S.



Yard Drain Detail

N.T.S. Source: ADS Manufacturer



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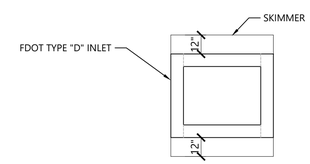

PLAN

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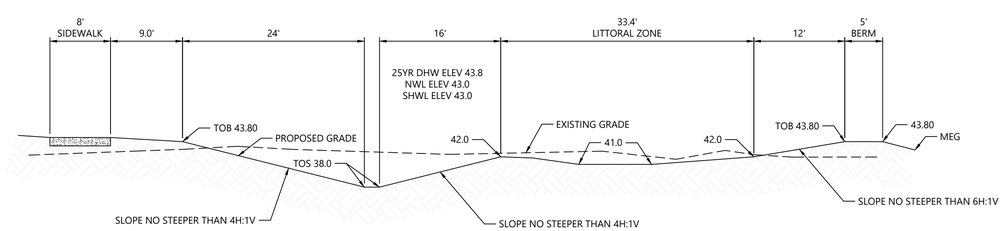

Pond Section

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Saved Friday, December 11, 2020 3:22:39 PM MBLACKWOOD Plotted Friday, December 11, 2020 4:15:26 PM Blackwood, Marisa

Coyle & Caron
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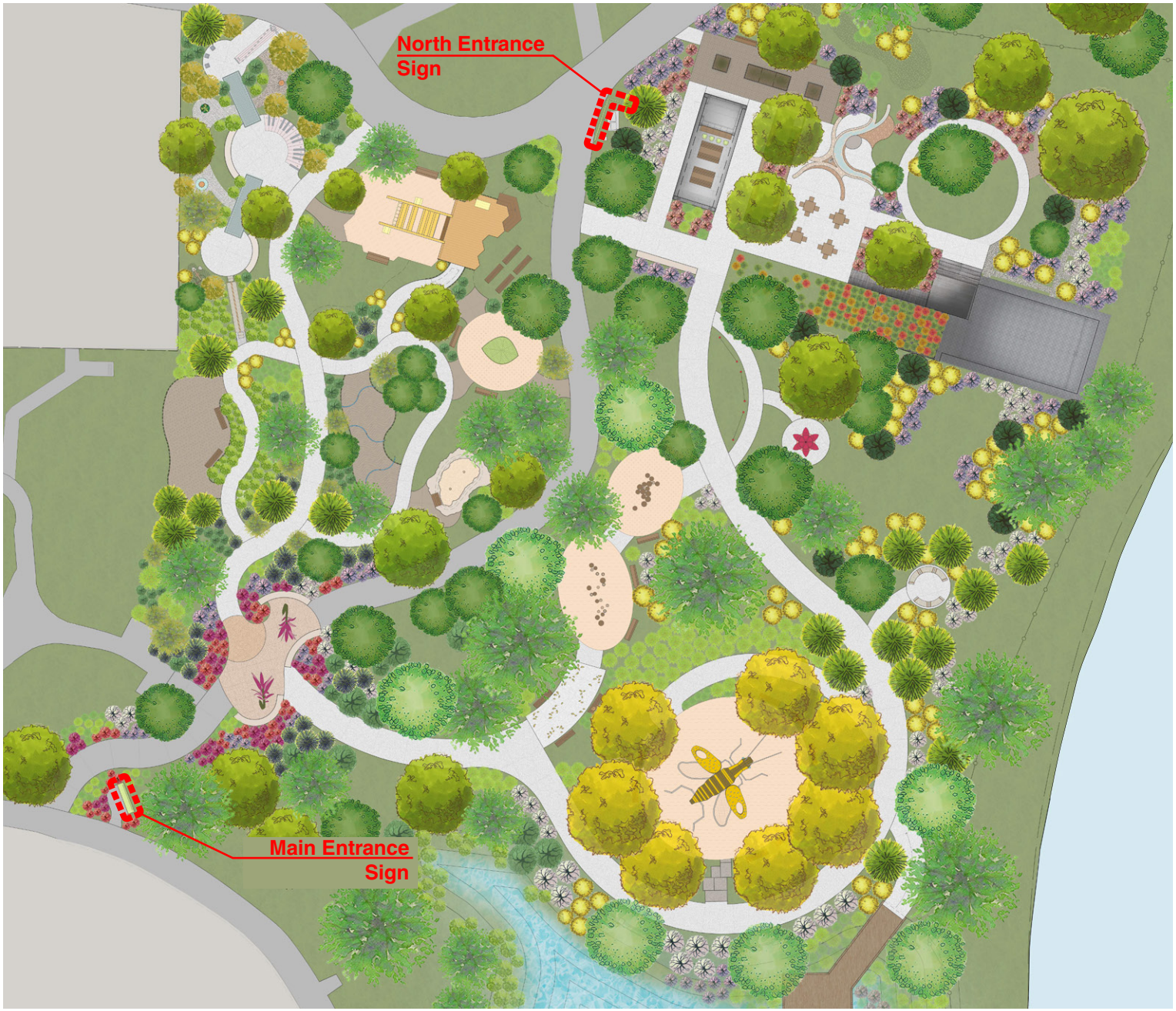
236 Pasadena Place
Orlando, FL 32803 407-866-0650
www.coylecaron.com

Florida Botanical Garden

Majeed Garden Signage

Date: 4/05/2021



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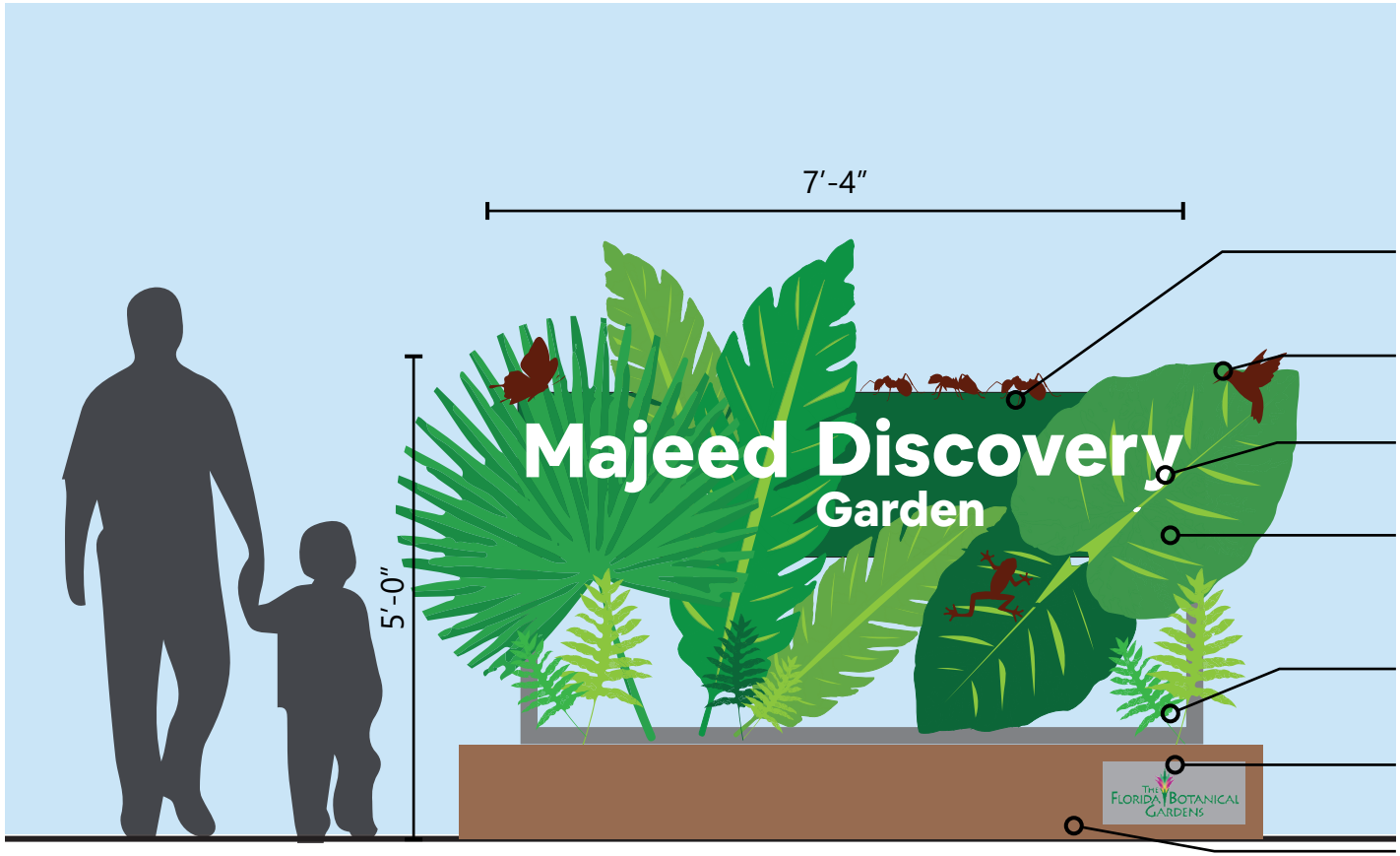
landscape architecture
236 Pasadena Place
Orlando, FL 32803 407-866-0650
www.coylecaron.com

Florida Botanical Garden

Majeed Garden Signage

Date: 4/05/2021

Scale: NTS



Powder coated tubular aluminum backing

Profile cut aluminum animals

Dimensional 3D letters with stand off

Profile cut aluminum leaves in layers

Tubular aluminum bottom frame

FBG logo painted aluminum plate

Concrete foundation

Main Entrance Sign

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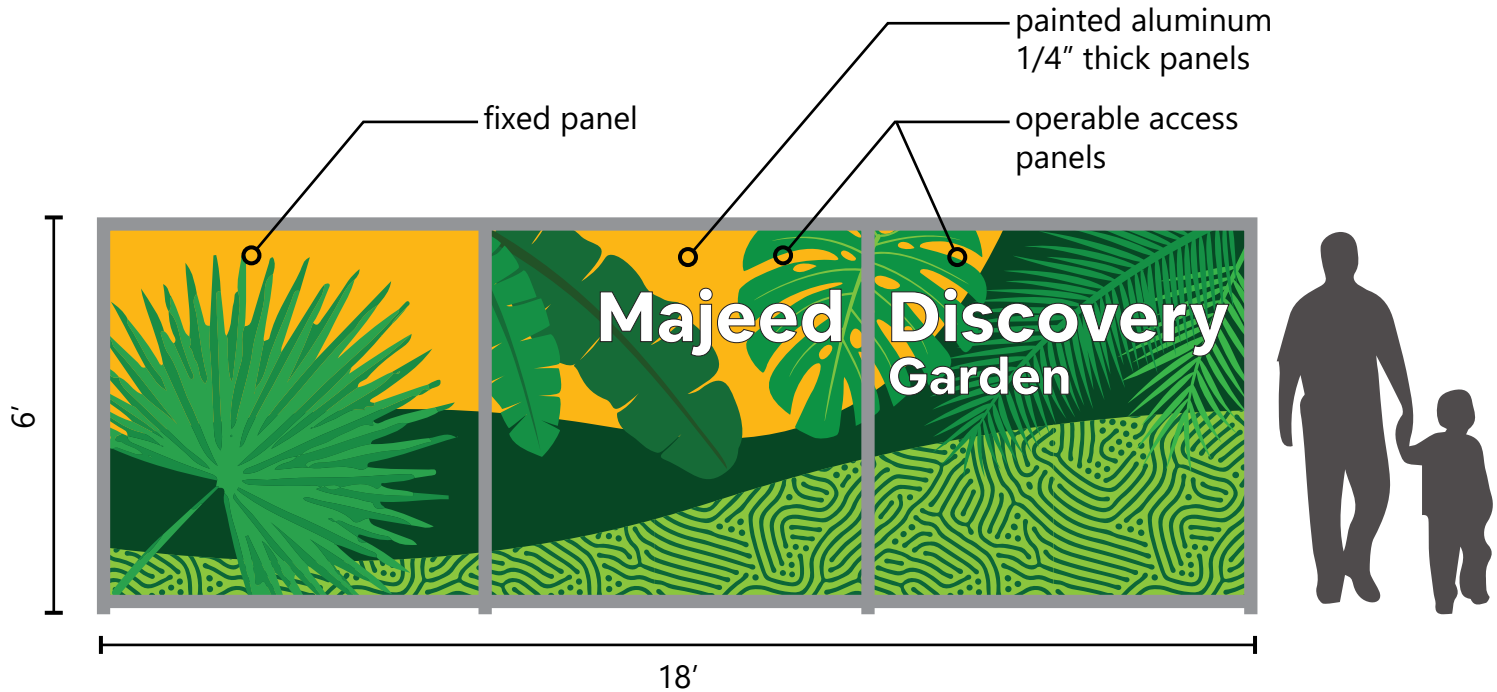

North Entrance Sign

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