MAJEED DISCOVERY GARDEN AGREEMENT

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

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

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

WHEREAS, the Majeed Foundation is committed to improving the lives of residents in the Tampa Bay area and beyond, among other things by providing resources for public parks and gardens;

WHEREAS, the Majeed Foundation desires to make a gift of Six Hundred Thousand and 00/100 Dollars (the "Gift") to the FBG Foundation for the construction, maintenance and operation of the Majeed Discovery Garden at the Florida Botanical Gardens (the "Majeed Discovery Garden");

WHEREAS, contemporaneously with the execution of this Agreement, the FBG Foundation and the County are entering into an agreement (the "FBG Foundation/County Agreement") pursuant to which the FBG Foundation will construct the Majeed Discovery Garden and the FBG Foundation and the County will jointly maintain and operate the Majeed Discovery Garden; and

WHEREAS, in consideration of the Majeed Foundation Gift, the County agrees to maintain and operate the Majeed Discovery Garden in accordance with the terms of the FBG Foundation/County Agreement, and to name the Garden the "Majeed Discovery Garden", pursuant to the terms of this Agreement.

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. <u>Term.</u> The term of this Agreement (the "Agreement Term") will begin on the Effective Date, and, unless earlier terminated pursuant to <u>Section 6</u> or <u>7</u>: (a) 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 this Agreement; and (b) thereafter will automatically renew for any renewal period of the FBG Foundation/County Agreement. Thereafter, 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. The County will not have the right to terminate this Agreement during the twenty-five-year term, except as provided under Section 7 below. The County does not object to the Majeed Foundation using the construction of the Majeed Discovery Garden for tax purposes, to the maximum extent allowed by law.

- **2.** <u>Garden Boundaries, Plans.</u> The boundaries of the Majeed Discovery Garden (the "Garden Boundaries") will include the area in the Florida Botanical Gardens in Pinellas County (the "Botanical Gardens") as specified in the Garden Plans. "Garden Plans" means the plans for the Majeed Discovery Garden attached hereto as Exhibit A.
- 3. Maintenance; FBG Agreement Obligations. The County will: (a) perform its maintenance obligations with respect to the Majeed Discovery Garden as required by the FBG Foundation/County Agreement; and (b) will otherwise comply with its obligations under the FBG Foundation/County Agreement. If the FBG Foundation Agreement terminates for any reason, or if the FBG Foundation fails to comply with its obligations under the FBG Foundation/County Agreement, then the County will comply with the FBG Foundation's maintenance obligations under the FBG Foundation/County Agreement. If the County fails to comply with its obligations under this Section II.C, then the Majeed Foundation's sole remedies against the County for such failure shall be: (i) termination of this Agreement pursuant to Section (ii) termination of the Majeed Foundation grant of naming rights pursuant to Section 9; and/or (iii) specific performance.
- **4.** <u>Name</u>; <u>Signage</u>. The County will ensure that the name of the Garden is prominently displayed as the "Majeed Discovery Garden". During the Agreement Term, the County will comply with the Name/Signage Plan attached as <u>Exhibit B</u>. The County hereby grants the Majeed Foundation exclusive naming rights to the Majeed Discovery Garden during the Agreement Term; provided, however, that the FBG Foundation may provide third-party naming rights within the Majeed Discovery Garden as set forth in the FBG Foundation/County Agreement.
- **5.** <u>Gift.</u> The Majeed Foundation will make the Gift in accordance with the timetable set forth at <u>Exhibit C</u>.
- **6.** <u>Termination of Agreement by Majeed Foundation</u>. The Majeed Foundation may terminate this Agreement upon the occurrence of any of the following circumstances (each referred to herein as a "County Default"), if the County fails to cure such circumstance within sixty (60) days after receiving written notice thereof:
 - (a) the County's material breach of this Agreement;
 - (b) the County materially breaches its obligations under the FBG Foundation/County Agreement following the expiration of any applicable notice and cure provision;
 - (c) the FBG Foundation/County Agreement terminates for any reason; or
 - (d) the Majeed Discovery Garden is not substantially maintained and operated in a manner contemplated by the FBG Foundation/County Agreement.

Notwithstanding the foregoing, if a circumstance is reasonably susceptible of cure, but not curable within sixty (60) days, then the cure period shall extend for an additional period reasonably necessary for the County to cure such circumstance, not to exceed one hundred eighty (180) days.

- 7. <u>Termination of Agreement by County</u>. The County may terminate this Agreement, without penalty to the Majeed Foundation, upon the occurrence of any of the following circumstances:
 - (a) the Majeed Foundation fails to make the Gift as required by <u>Section 5</u>, if such failure continues for sixty (60) days after the Majeed Foundation receives written of such failure; or
 - (b) after the Majeed Discovery Garden is named, an officer the Majeed Foundation is found by a court of competent jurisdiction to have violated a local, state, or federal criminal law, and such violation:
 - (i) is a felony;
 - (ii) results in a monetary fine that exceeds five-hundred thousand dollars (\$500,000.00);
 - (iii) causes an ongoing material and adverse effect on the reputation, image, or customer goodwill of the County or the Florida Botanical Gardens; and
 - (iv) brings the Majeed Foundation or the applicable officer into public disrepute, contempt, scandal, or ridicule.
- **8.** 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 8. 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 8.
- 9. <u>Termination of Name Rights</u>. In addition to other remedies the Majeed Foundation may have, the Majeed Foundation may terminate the County's right to use the name "Majeed Discovery Garden" or any other name including "Majeed" (the "Majeed Name") with or without cause at any time, by written notice to the County. If the Majeed Foundation terminates the right to use the Majeed Name, then the County will, within ninety (90) days, remove the Majeed Name from all signage and materials related to the Majeed Discovery Garden. If the Majeed Foundation terminates the right to use the Majeed Name due to a County Default, then the County will bear

all expenses of such removal. If the Majeed Foundation terminates the right to use the Majeed Name for any reason other than a County Default, then the County may condition its removal on the Majeed Foundation's agreement to reimburse the County for the reasonable costs of such removal, provided that the County gives the Majeed Foundation prior notice of the condition and the amount of such costs.

- 10. <u>Severability</u>. 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: (a) renders the balance of this Agreement impossible to perform; or (b) deprives a Party of its consideration for entering into this Agreement.
- 11. <u>Taxes.</u> The Majeed 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 Majeed Foundation is a tax-exempt entity. The Majeed Foundation will alert the County in writing within thirty (30) days if its tax-exempt status changes.
- 12. Assignment. This Agreement, and any rights or obligations thereunder, shall not be assigned, transferred or delegated to any other person or entity without the approval of both Parties. 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 Majeed Foundation may assign its rights under this Agreement: (a) to any nonprofit entity that controls, is controlled by, or is under common control with, the Majeed Foundation or its successor, without the consent of the County, but will nonetheless alert the County in writing of any assignment; or (b) to any other nonprofit entity with the County's consent, which will not be unreasonably denied.
- 13. <u>Public Records.</u> The Majeed 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 Majeed 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 Majeed 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 MAJEED 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 MS. DEANN BAKER, ADMINISTRATIVE SUPPORT SPECIALIST, DBAKER@PINELLASCOUNTY.ORG, (727) 582-2525, PINELLAS

COUNTY PARKS AND CONSERVATION RESOURCES, 12520 ULMERTON RD., LARGO, FL 33774.

- 14. <u>Majeed Foundation Liability Limitation</u>. The Majeed Foundation will not have any rights with respect to the Majeed Discovery Garden or any other County property except for those explicitly granted by this Agreement, the FBG Foundation/County Agreement, or applicable law, and those rights do not include any right to use, manage, oversee, or direct the County or the FBG Foundation as to how to operate any aspect of the Majeed Discovery Garden or other County property. Notwithstanding any provision in any Agreement to the contrary: (a) the Majeed Foundation will not be liable for any personal injury or property damage that occurs at the Majeed Discovery Garden or on other County property; and (b) without limiting the terms of the foregoing subsection (a), the County shall not hold the Majeed Foundation, its directors, officers, employees, agents, or representatives, liable for any claim, cost, or expense (including any attorneys' or experts' fees at trial or on appeal), to the extent that such claim, cost, or expense arises out of the negligence or misconduct of the County or any of its employees or other Persons acting on the County's behalf.
- **15.** <u>Notice</u>. 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:

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 Majeed Foundation:

Majeed Foundation Inc. Attn: Kamal Majeed, Ph. D, its President 2060 Brightwaters Blvd. NE. St. Petersburg, Fl 33704 majeedfoundation@gmail.com

16. 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 14 will survive termination of this Agreement for any reason.

- 17. 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.
- 18. 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

Dave Eggers, Chair

Majeed Foundation Inc.

Kamal Majeed, Ph. D, its President

ATTEST: KEN BURKE, CLERK

By:

Deputy Clerk

SEAL

SCOUNTY

ROWN

By: Matthew Tolnay:
Office of the County Attorney

EXHIBIT A

Majeed Discovery Garden Plans

[Attached.]

EXHIBIT B

Name/Signage Plan

[Attached.]

EXHIBIT C

Majeed Gift Timetable

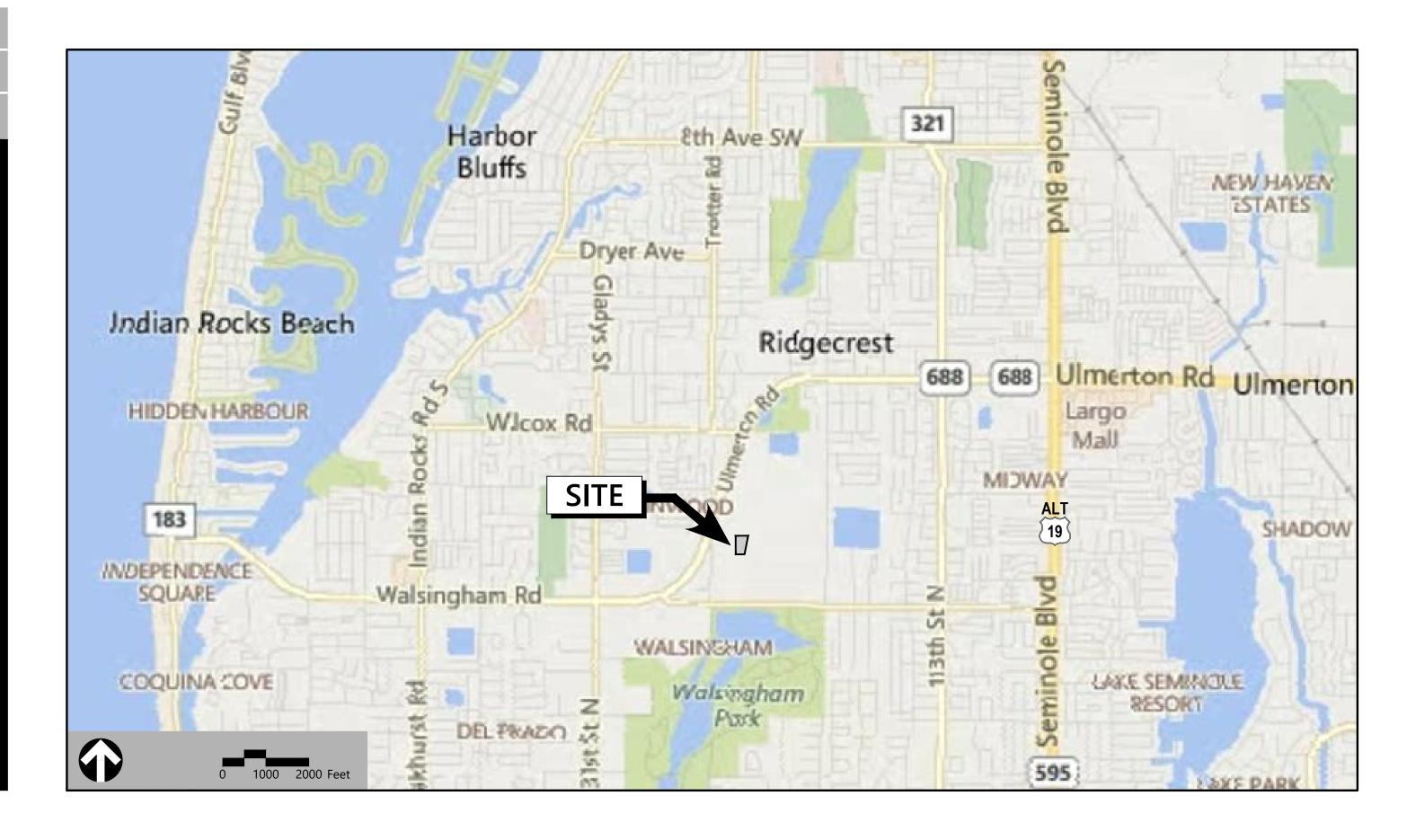
Contribution	Milestone									
\$150,000	Completion of the Garden Plans, receipt of any required									
	County approvals, and execution of the three definitive									
	Agreements									
\$100,000	Start of construction									
\$150,000	75% completion of construction									
\$100,000.00	Completion of construction of Majeed Discovery Garden									
	other than the pond									
\$100,000.00	Later of pond completion or Majeed Discovery Garden									
	opening									

Construction Plans

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

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
Surve	y 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

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
Electri	cal Sheet Index	
No.	Drawing Title	Latest Issue
	Drawing Title Electrical Legend and Specifications	Latest Issue December 14, 2020
E0.01	Electrical Legend and	December 14, 2020
E0.01 E1.00	Electrical Legend and Specifications	December 14, 2020 December 14, 2020
E0.01 E1.00 E1.10	Electrical Legend and Specifications Electrical Site Key	
E0.01 E1.00 E1.10 E1.11	Electrical Legend and Specifications Electrical Site Key West Electrical Plan	December 14, 2020 December 14, 2020 December 14, 2020
No. E0.01 E1.00 E1.10 E1.11 E1.12 E2.00	Electrical Legend and Specifications Electrical Site Key West Electrical Plan South Electrical Plan	December 14, 2020 December 14, 2020 December 14, 2020 December 14, 2020

Landscape & Irrigation Sheet Index



Civil Engineer

501 E. Kennedy Blvd. Suite 1010 Tampa, FL 33602 P 813.327.5450

Architect

Architects, Inc.

St. Petersburg, FL

Owner

813.327.5450

Number FL #3932

Pinellas County

315 Court Street

Clearwater, FL 33756

Certificate of Authorization

F 813.209.2365 Survey VHB

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

Structural Engineer

Master Consulting Engineers, Inc. Tampa, FL

Wannemacher Jensen

Landscape Architect Coyle & Caron, Inc. Orlando, FL

Geotechnical Engineer

Driggers Engineering Services, Inc. Clerawater, FL

KEVIN M. BYNUM, P.E. PE 62392

VHB Project : Issued for :

UTILITY POLE

GUY POLE

HAND HOL

PULL BOX

Abbreviations

Genera	al
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/\//	RIGHT OF WAY

TOP OF BANK

TOE OF SLOPE

Miscellaneous

TOS

- . 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
- 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
- 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 VERIEY 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
- 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

UTILITY CROSSING CALLOUT

Lower Pipe Invert Elev.

- I. 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
- 3. ANY U.S.C. & G.S. MONUMENTS FOUND WITHIN LIMITS OF CONSTRUCTION ARE TO BE PROTECTED

Utilit	ЗУ
BFP	BACKFLOW PREVENTER
СВ	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

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

OWNER IS TO BE FULLY REPLACED WITH A SIMILAR

FENCE/WALL, TO THE SATISFACTION OF THE ADJACENT

INFORMATION (RFI), AND REGARDLESS IF STAKEOUT IS

CONTRACTED THROUGH VHB'S SURVEY DEPARTMENT.

OWNED OR MAINTAINED BY AN ADJACENT PROPERTY

REDUCED PRESSURE

SEWER MANHOLE UNDERDRAIN

UNDERGROUND

UTILITY POLE

- 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
- 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
- 7. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO THE FOR 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
- 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
- 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.

- . 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 LITILITIES 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 RFMOVFD

- 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
- 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.

APPROVED BY THE LOCAL REGULATORY AGENCY.

- 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 SHALI 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 Control

- 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 SHALI MANAGE HIS WORK AND TAKE ALL NECESSARY STEPS TO CONTROL FUGITIVE DUST, CONTROL AND PREVENT FROSION 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, TURBIDIT) 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 SOII 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
- 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,
- 11. EROSION CONTROL DEVICES AND MEASURES DESCRIBED IN THESE GENERAL NOTES ARE GRAPHICALLY SHOWN ON THE PLANS. REFER TO THE FLORIDA STORMWATER FROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL (LATEST EDITION), THI 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) INCLLIDED 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

- . 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
- 2. ANY STRUCTURE NOT SHOWN TO BE REMOVED IS TO REMAIN UNLESS OTHERWISE INSTRUCTED BY THE OWNER OR ARCHITECT, OR REQUIRED BY FIELD
- 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
- 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.

NECESSARY.

9. CONTRACTOR TO FIELD COORDINATE PHASING OF ALL DEMOLITION TO LIMIT INTERRUPTION OF TRAFFIC FLOW AND DAILY OPERATIONS.

8. CONTRACTOR TO COORDINATE THE REMOVAL OR

RELOCATION OF THE EXISTING POWER POLES WITH

LOCAL POWER COMPANY PRIOR TO CONSTRUCTION AS

- 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
- 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.



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	

KMB Dec. 14, 2020 Permitting

Not Approved for Construction

General Notes & Legend

62897.03

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

- 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
- 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
- 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

- 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 (FOR) ALL REINFORCED CONCRETE PIPE (RCP) USED FOR STORM DRAINAGE TO BE CLASS III (ASTM 6-76-72A), WALL B, UNLESS OTHERWISE NOTED ON ALL POLYVINYL-CHLORIDE (PVC) OR POLYETHYLENE (PE) PIPE USED FOR STORM DRAINAGE TO MEET THE REQUIREMENTS OF FOOT 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
- 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,
- 4. PIPE LENGTHS, ELEVATIONS AND LOCATIONS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED AS REQUIRED LITHIZING 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

- . 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 O 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

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 WILDLIFF 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 T THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTA 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

E OPERATION AND MAINTENANCE ENTITY FOR TH 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

- . TREE AND TOPOGRAPHIC SURVEYS WERE CONDUCTED
- 2. BENCHMARKS SHOWN ON THESE PLANS HAVE BEEN ESTABLISHED BY THE EDOT, EPRN 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.
- 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.

4. ALL BENCHMARKS USED FOR CONSTRUCTION LAYOUT

- 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 SOLIARE FEET FOR ASPHALT OR CONCRETE PARKING/LOADING AREAS AND 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 FFFT 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 SOUARE 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

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

NECESSARY UNTIL THE LEAKAGE IS WITHIN THE SPECIFIED

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 ACCAPTANCE OF THE PROJECT. DO NOT PLACE DISTRIBUTION SYSTEM IN SERVICE UNTIL APPROVAL IS OBTAINED FROM APPLICABLE GOVERNING AUTHORITIES (AS NECESSARY).

OPERATIONS.

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.

THE OWNER.

COMPANY).

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

(OR AS RECOMMENDED BY THE PRIVATE TESTING

RECOMMENDED BY DESIGN ENGINEER AT NO ADDITIONAL

ASPHALT PAVEMENT: MINIMUM ONE (1) TEST FOR EVERY 20,000 SQUARE FEET

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

COMPACTION TEST PER FM 5-511.

COST TO THE OWNER.

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

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.

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 RE TESTED AT 7 DAYS AND THE OTHER AT 28 DAYS. TH 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
- LINE AND GRADE
- 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

- 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

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

2. ALL DESIGN AND CONSTRUCTION MUST CONFORM TO

THE MINIMUM STANDARDS SET DOWN IN PINELLAS

AND THE FLORIDA DEPARTMENT OF

TRANSPORTATION'S "DESIGN STANDARDS" INDEXES

- 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"
- 4. SAFE PEDESTRIAN TRAFFIC IS TO BE MAINTAINED AT

600 THROUGH 670 (LATEST EDITIONS).

ALL TIMES.

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

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.



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

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No.	Revision	Date	Appvd.

KMB Dec. 14, 2020 Permitting

Not Approved for Construction

General Notes

KEVIN M. BYNUM, P.E. PE 62392

62897.03

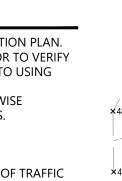
12/14/2020

Demolition Notes

- REFER TO COYLE & CARON PLANS SHEET L0.02 FOR TREE REMOVAL AND PROTECTION PLAN. 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.
- LOCAL CODES APPLY FOR ANY DEMOLITION SHOWN HEREON. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO
- FLOW AND DAILY OPERATIONS. 7. CONTACT ENGINEER OF RECORD (EOR) IMMEDIATELY IF ANY UNDERGROUND STRUCTURES,
- FOUND DURING EXCAVATION, IMPEDE 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. CONTRACTOR TO FIELD VERIFY THE EXTENT OF DRAINAGE WORK TO BE PERFORMED PRIOR TO

AIR CONDITION UNIT WITH 2' X 2' AC 48.48 ×48.7

- 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.



CONSTRUCTION ENTRANCE, REFER TO DETAIL SHEET C2.1 -

BIKE RACK TO BE REMOVAL/RELOCATION TO BE COORDINATED WITH OWNER -

LIGHT POLE TO

BE REMOVED -

143 ×46.8 EXISTING VALVE TO BE RELOCATED; CONTRACTOR TO COORDINATE WITH OWNER -

45.85 45.8EB 45.5 UNKNOWN UTILITIES; ×45.83 ×45.85 ×45.6 REMOVAL/RELOCATION TO BE COORDINATED WITH OWNER ×44.4

×45.8 SIGNS TO BE REM**⊙∀£**D

×45.93

×45.94

46:28 ×46.29

×44.3

129

100 142

REMOVAL/RELOCATION ×47.7 TO BE COORDINATED WITH OWNER -

48.948.96

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.

SIDEWALK TO BE REMOVED -

2136 REMOVED ×45.5

CONCRETE TO BE REMOVED - ×45.6

<u>___2141</u>

×45.2

×44.4 2129

○2117

<u></u>2120

WETLAND LINE AS PLAGGED \$7 0061 FIELD LOCATED BY VANASSE HANGEN BRUSTUM, INC. 04/17/2019

0.06 AC WETLAND IMPACTS -50054

×43.5 ×49.00

- MONITORING WELLS TO BE

ABANDÓNED. REFER TO

NOȚE 11 THIS SHEET

WETLAND LINE AS FLAGGED BY BIO-TECH AND FIELD LOCATED BY VANASSE HANGEN BRUSTLIN, INC. 04/17/2019

×42.8

TURBIDITY BARRIER; REFER TO DETAIL SHEET C2.1

90 SF TEMPORARY WETLAND IMPACTS

2386

WETLAND LINE AS FLAGGED BY AND FIELD LOCATED BY VANASSE HANGEN BRUSTLIN, INC. 04/17/2019

- SILT FENCE, TYP.

REFER TO DETAIL SHEET C2.1

2410

×42.9

×43.8 2406

×43.3

- MONITORING WELLS TO BE ABANDONED. REFER TO

×42.7

NOTE 11 THIS SHEET

2232

2251

⊕²¹⁶⁸

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Legend

—×—×—

SILT FENCE WETLAND LIMITS **INLET PROTECTION**

Survey Legend

- ■■ BENCH **CATCH BASIN**
- E.O. ELECTRICAL OUTLET
- □ LIGHT POLE
- WATER GATE



Florida Botanical Gardens Children's Discovery Garden

12520 Ulmerton Road Largo, Florida

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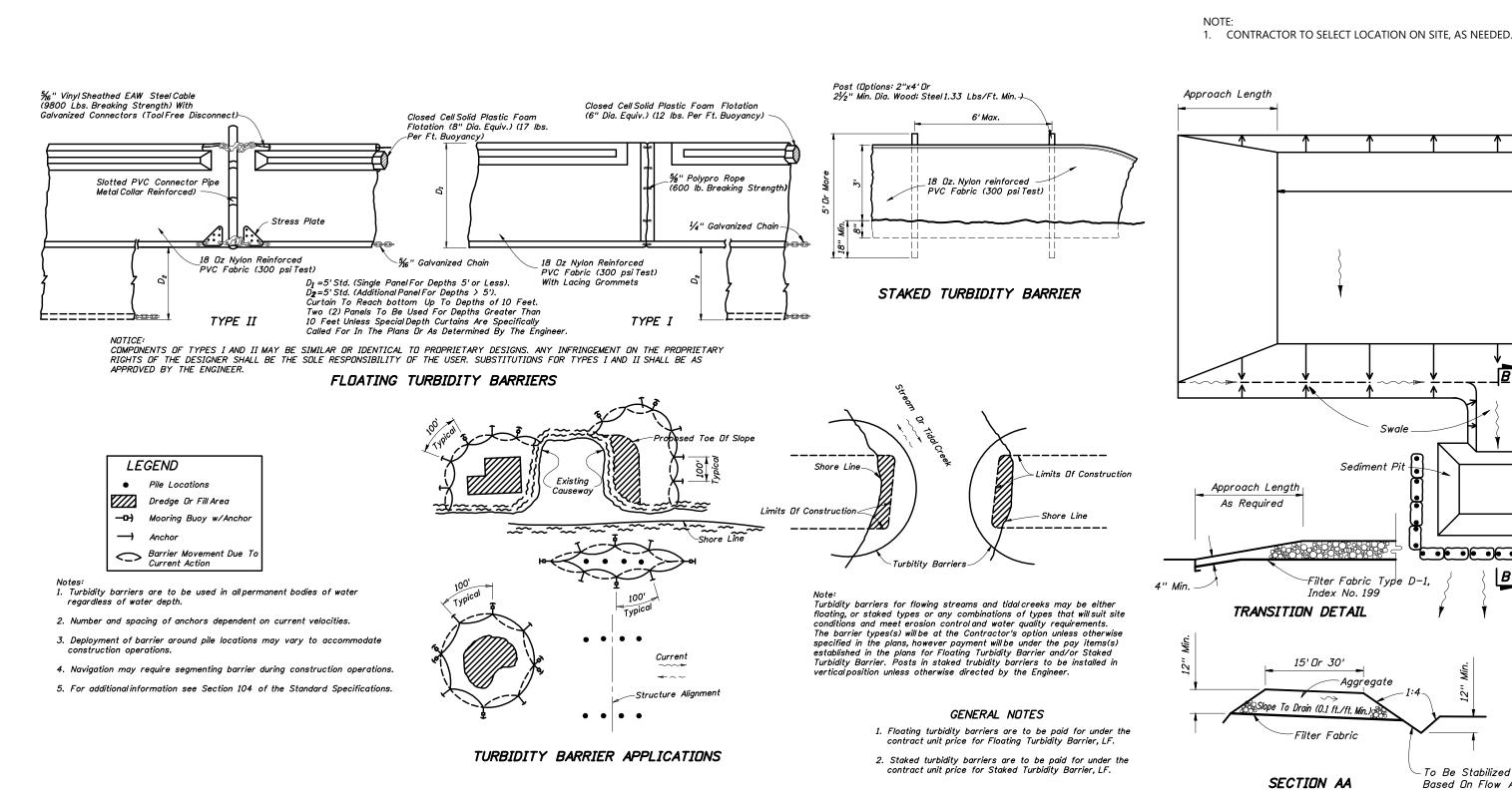
Demolition & Erosion Control Plan

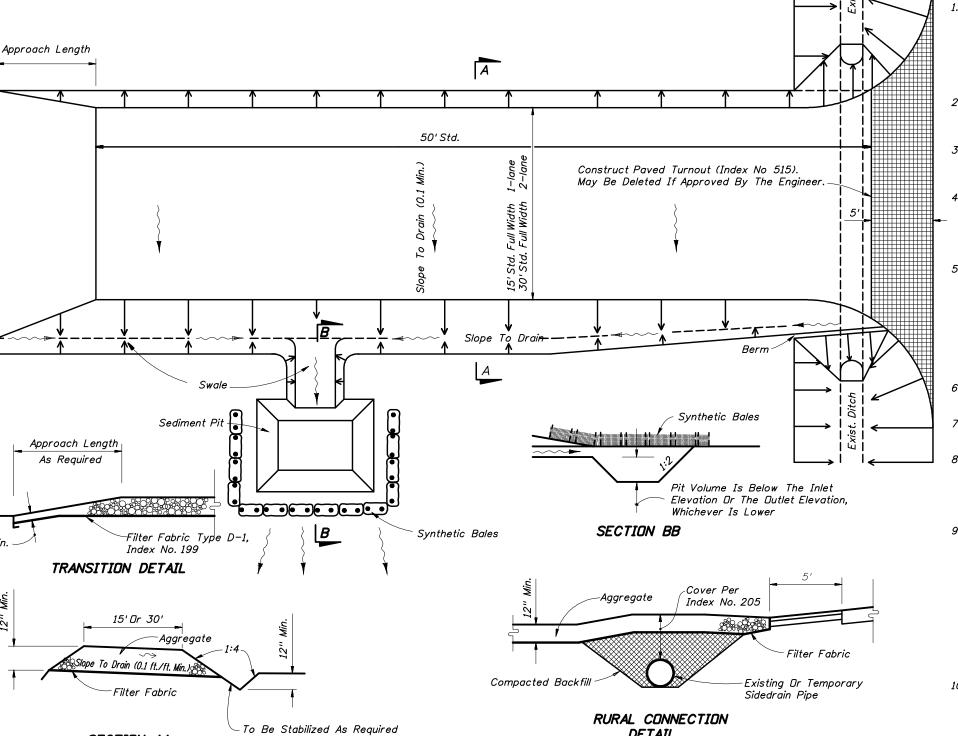
KEVIN M. BYNUM, P.E. 62897.03

PE 62392 12/14/2020

Temporary Erosion and Sediment Control

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





Edge Of Pavement

Source: 2008 FDOT Index No. 103

GENERAL NOTES

- 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.
- 3. The STPD shallbe 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.

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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	App

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

Not Approved for Construction

Erosion Control Details

KEVIN M. BYNUM, P.E. PE 62392

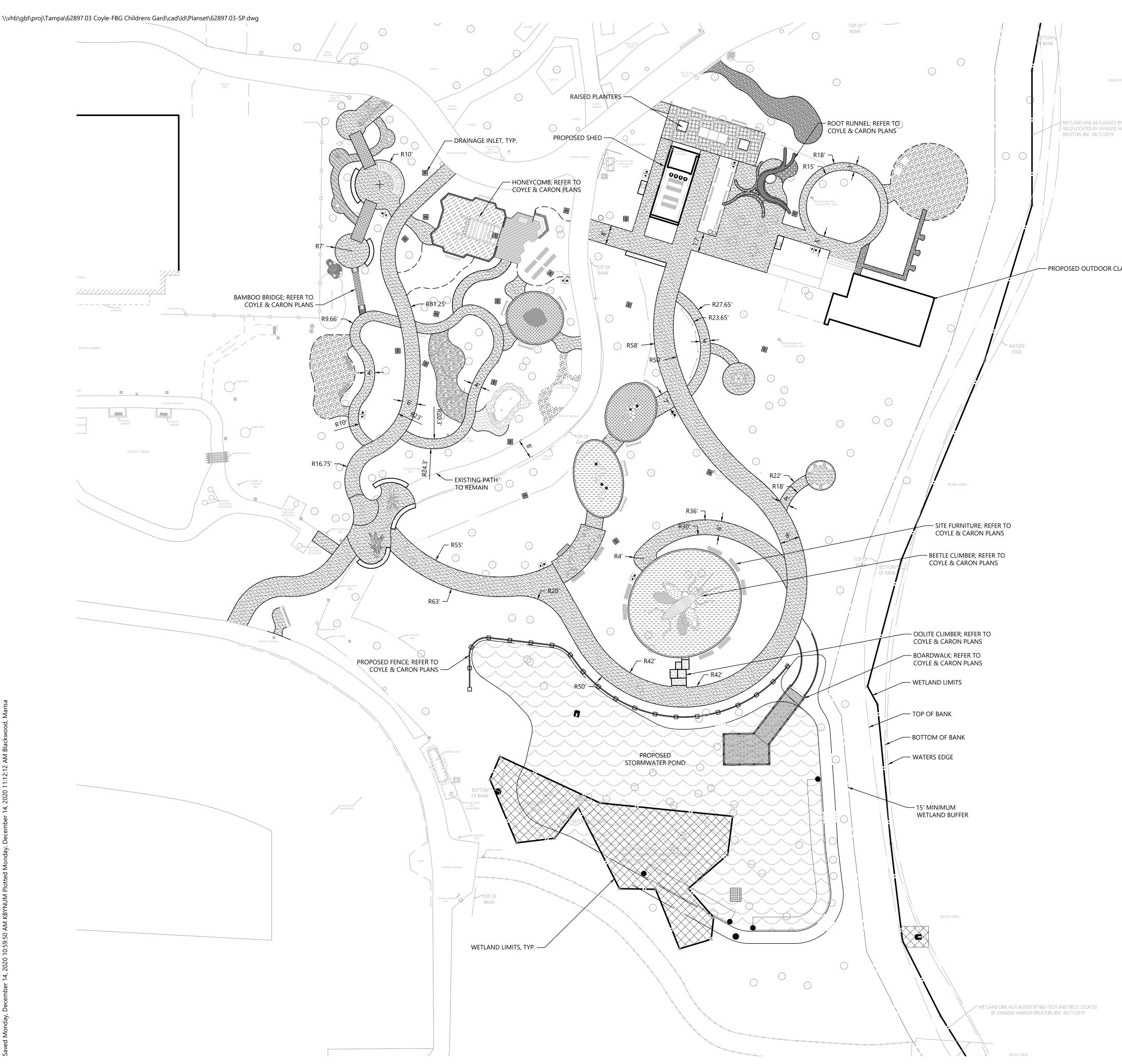
62897.03 12/14/2020

Turbidity Barriers Source: 2008 FDOT Index No. 103 **Soil Tracking Prevention Device Type A**

Based On Flow And Grade

SECTION AA

Source: 2008 FDOT Index No. 106



Site Notes

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

Site Data Table

PROJECT AREA

GENERAL INSTITUTIONAL DISTRICT & ZONING PRESERVATION/CONSERVATION DISTRICT

LAND USE UNDEVELOPED IMPERVIOUS SURFACE RATIO 0.39 0.71 AC OPEN SPACE CLASSROOM AREA 1010 SF SHED AREA 360 SF

CONSTRUCTION DATES JANUARY 2021 TO APRIL 2021

FLOODPLAIN ELEVATION 45.6 PER PINELLAS COUNTY FLOODPLAIN ADMINISTRATOR

- PROPOSED OUTDOOR CLASSROOM

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.
- 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.
- 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.



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

WETLAND LIMITS WETLAND BUFFER PROPOSED STORMWATER POND **PAVEMENT**



Florida Botanical Gardens Children's Discovery Garden

12520 Ulmerton Road Largo, Florida

No.	Revision	Date	Appvd.

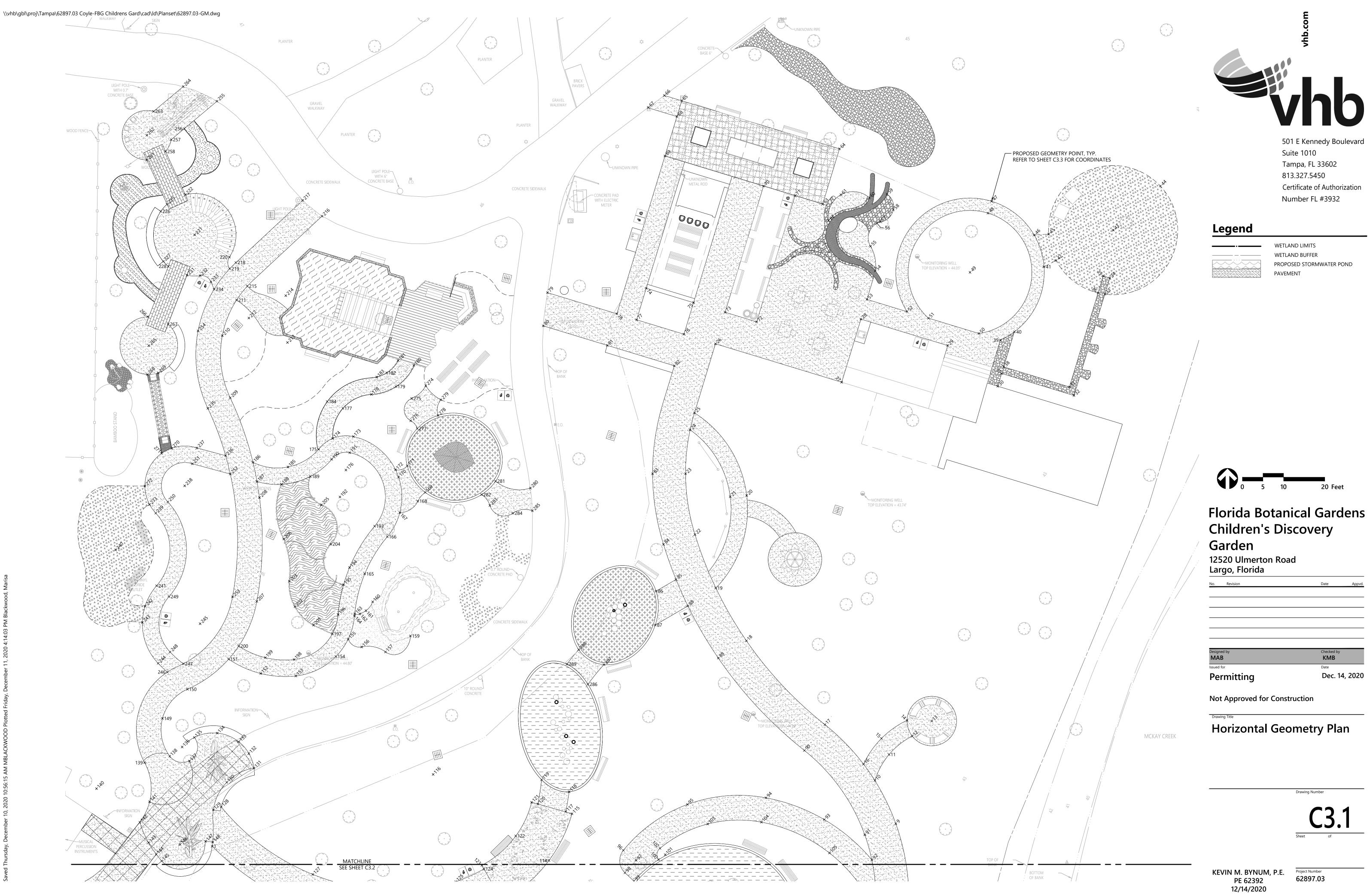
Designed by MAB Checked by KMB Dec. 14, 2020 Permitting

Not Approved for Construction

Site Plan

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

62897.03



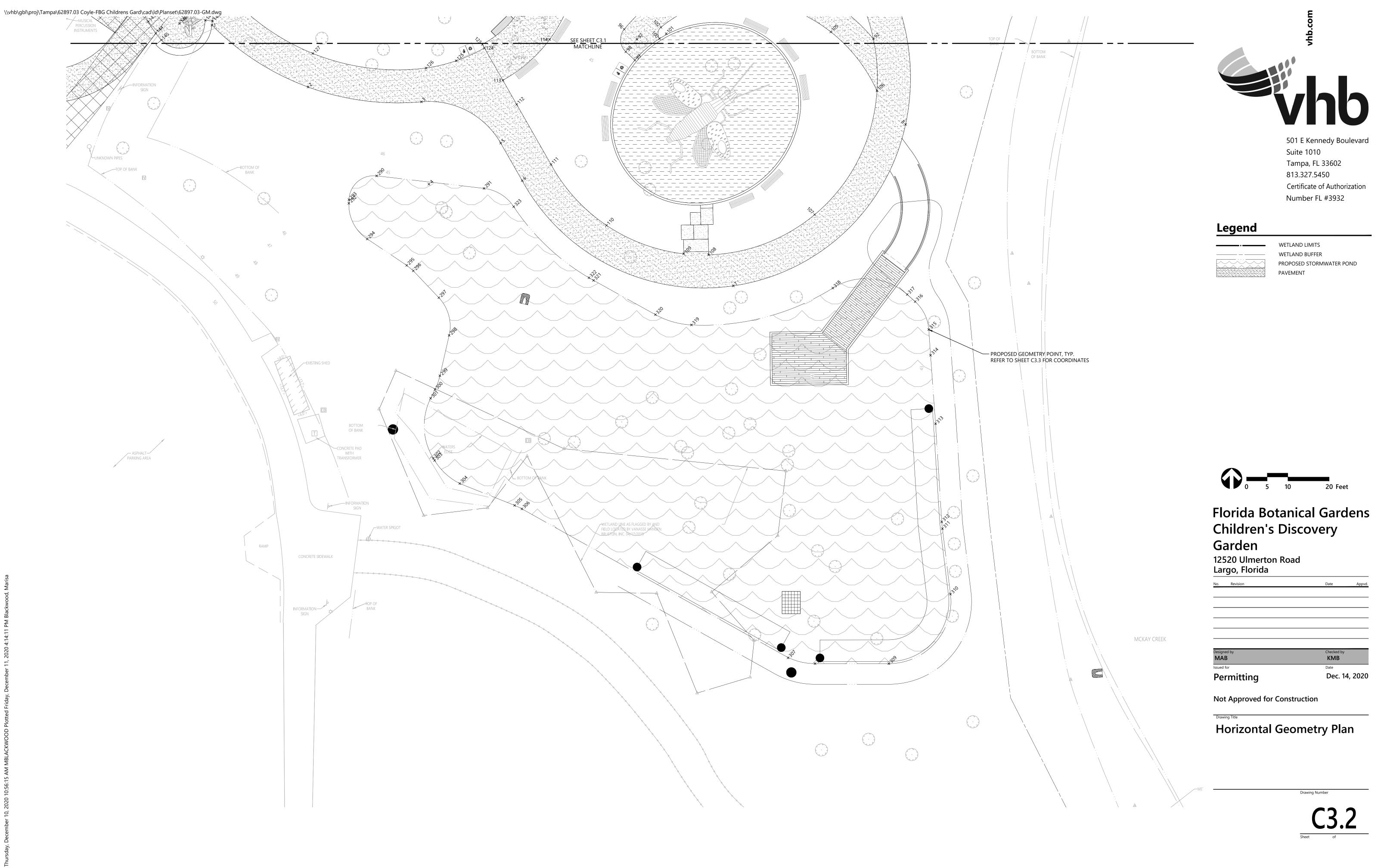
501 E Kennedy Boulevard Tampa, FL 33602 Certificate of Authorization

PROPOSED STORMWATER POND



Children's Discovery

Checked by **KMB** Dec. 14, 2020



KEVIN M. BYNUM, P.E.
PE 62392
12/14/2020
Project Number
62897.03

Poin	t Table		Point	t Table		Poin	t Table		Point	t Table		Poin	t Table		Point	t Table		Poin	t Table	
Point #	Northing	Easting	Point #	Northing	Easting	Point #	Northing	Easting	Point #	Northing	Easting	Point #	Northing	Easting	Point #	Northing	Easting	Point #	Northing	Easting
1	1291410.7423	394508.7918	51	1291538.7938	394682.5102	101	1291408.6791	394618.6724	151	1291456.0985	394512.7892	202	1291468.8142	394528.8721	256	1291584.7460	394502.0298	308	1291256.2730	394654.6769
2	1291395.7696	394532.0346	52	1291540.3745	394677.3174	102	1291410.2208	394617.3984	152	1291452.6119	394520.5715	203	1291474.9993	394527.4966	257	1291582.0822	394498.8506	309	1291256.2730	394672.5387
3	1291392.1904	394559.4498	53	1291543.3352	394667.5915	103	1291416.1235	394628.9779	153	1291452.0244	394529.0788	204	1291483.9899	394537.5664	258	1291579.2280	394497.4867	310	1291273.0969	394687.4274
4	1291372.2738	394561.2753	54	1291550.2499	394669.6059	104	1291416.5699	394641.9929	154	1291456.7400	394538.8006	205	1291493.5055	394535.2629	261	1291577.1505	394492.9388	311	1291288.9121	394685.4900
5	1291382.1964	394578.6403	55	1291556.2190	394668.4678	105	1291409.1012	394658.4909	155	1291460.9709	394541.7731	206	1291485.2568	394526.1596	262	1291583.1505	394492.9465	312	1291290.5693	394685.3248
6	1291373.1158	394583.8290	56	1291561.7785	394670.0296	106	1291394.8445	394669.6585	156	1291459.0522	394545.0554	207	1291470.1137	394519.6191	263	1291588.9281	394494.5647	313	1291314.2999	394683.8301
7	1291347.6672	394634.8969	57	1291562.1667	394670.8416	107	1291364.8940	394654.5845	157	1291457.8484	394550.8156	208	1291495.3004	394520.2646	264	1291594.9622	394501.7661	314	1291330.8860	394682.6144
8	1291386.7269	394676.5804	58	1291565.0621	394673.9893	108	1291355.1618	394628.9263	159	1291461.7234	394556.8688	209	1291519.4739	394513.1634	265	1291532.1317	394493.4202	315	1291337.0970	394682.1877
9	1291416.1944	394674.5994	59	1291568.8661	394672.4821	109	1291355.4143	394622.9130	160	1291469.9936	394547.7165	210	1291534.5646	394511.2555	266	1291539.1422	394493.1432	316	1291343.8504	394678.8943
10	1291426.6497	394669.5238	60	1291567.9786	394668.1717	110	1291362.3002	394604.2261	161	1291467.8600	394546.0876	211	1291543.1831	394514.7025	267	1291537.3322	394498.1059	317	1291345.5795	394676.9697
11	1291432.9589	394672.9542	61	1291568.7182	394661.2874	111	1291377.0202	394590.8120	162	1291467.0760	394544.6446	212	1291538.8167	394517.6852	268	1291525.1198	394493.0364	318	1291347.1351	394658.9854
12	1291437.4249	394678.5782	62	1291562.4768	394658.2899	112	1291391.5530	394582.5078	163	1291467.0533	394543.3541	213	1291532.8826	394527.0554	269	1291525.5068	394495.7305	319	1291338.2144	394624.7800
13	1291441.0872	394683.3307	63	1291566.4624	394656.8615	113	1291397.4033	394579.1648	164	1291466.5601	394543.3081	214	1291544.2513	394526.6390	270	1291507.2502	394499.0005	320	1291340.7009	394616.0606
14	1291441.2691	394677.3335	64	1291579.8556	394660.9385	114	1291407.2663	394590.4764	165	1291476.7825	394545.8006	215	1291546.5663	394517.3199	271	1291506.0169	394496.4823	321	1291348.9945	394601.0936
15	1291436.8764	394671.1198	65	1291591.5044	394622.6723	115	1291418.6161	394596.0645	166	1291485.7762	394551.2620	216	1291563.5217	394535.4317	272	1291498.0844	394492.4690	322	1291349.6209	394599.9894
16	1291430.6296	394666.7742	66	1291592.7909	394618.4459	116	1291428.1466	394562.3871	167	1291491.6175	394554.2877	217	1291567.3527	394530.7412	273	1291493.5851	394493.6055	323	1291366.8214	394581.7908
17	1291440.2205	394657.4022	67	1291589.8854	394614.5571	117	1291419.1285	394594.5579	168	1291494.3994	394558.6758	218	1291552.2646	394514.5334	274	1291522.4144	394560.6005			
18	1291460.5472	394638.3664	68	1291587.6777	394621.5074	118	1291423.9427	394595.3684	169	1291496.5448	394560.4618	219	1291550.7828	394513.0476	275	1291519.3275	394557.1790			
19	1291473.3259	394630.9597	69	1291578.1112	394618.5952	119	1291426.8519	394588.6885	170	1291500.2469	394553.9846	220	1291553.5989	394512.9710	276	1291513.9093	394556.9437			
20	1291495.7974	394638.4247	70	1291570.8307	394642.5116	120	1291420.9600	394587.7819	171	1291502.9813	394556.1068	221	1291559.0062	394504.5590	277	1291512.0236				
21	1291495.4813		71	1291568.5010		121	1291421.3906		172	1291502.0248		222	1291568.7422		278	1291515.1903				
22	1291486.3154		72	1291537.8879		122	1291413.2282		173	1291510.0741		225	1291566.4150		279	1291519.0030				
23	1291501.0602		73	1291540.2177		123	1291406.0858		174	1291509.6325		226	1291564.6879		280	1291497.5875				
24	1291511.7009		74	1291546.0421		124	1291405.2175		175	1291506.9837		227	1291552.5635		281	1291499.2579				
25	1291515.8056		75 	1291542.5475		125	1291402.1245		176	1291501.9594		228	1291551.3322		282	1291496.0071				
26	1291532.5644		76 	1291534.8942		126	1291400.3600		177	1291516.9147		231	1291549.1847		283	1291493.3625				
27	1291523.2454		77	1291538.3888		127	1291403.8900		178	1291520.2998		232	1291549.0922		284	1291491.4897				
28	1291538.5519		78	1291539.8449		128	1291420.2820		179	1291522.2034		233	1291547.5888		285	1291492.0692				
29	1291532.1451		79	1291544.9723		129	1291419.5425		180	1291527.3727		234	1291545.7924		286	1291449.9958 1291454.7659				
30 31	1291522.2822 1291525.3714		80 81	1291536.9215 1291532.1918		130 131	1291426.2312 1291429.7043		181 182	1291528.5273 1291525.5249		235 236	1291516.9107 1291505.4358		287 288	1291454.7659				
32	1291520.0323		82	1291527.2411		132	1291433.2163		183	1291523.5249		237	1291507.3142		289	1291454.8828				
33	1291544.6014		83	1291501.0389		133	1291436.0347		184	1291518.5640		238	1291498.1301		290	1291374.2772				
34	1291548.5240		84	1291483.9449		134	1291438.1588		185	1291502.7014		239	1291491.5027		291	1291371.2407				
35	1291549.0094		85	1291475.4149		135	1291437.1054		186	1291503.8268		240	1291482.5816		292	1291367.6452				
36		394723.6452	86	1291472.5923		136	1291434.8005		187	1291499.1610		241	1291473.8915		293	1291368.5072				
37	1291522.1121		87	1291464.3745		137	1291431.3830		188	1291498.4755		242	1291468.9595		294	1291359.0166				
38	1291526.9658		88	1291468.9920	394624.1703		1291432.5667		189	1291500.4020			1291465.0013		295	1291352.6217				
39	1291533.4823		89	1291456.3547	394631.5407	139	1291431.0032	394492.3951	190	1291504.5655		244	1291455.0942		296	1291351.3046				
40	1291535.4784	394703.3535	90	1291433.9552	394652.4276	140	1291424.7009	394480.7399	191	1291506.1685	394542.1552	245	1291464.6910	394505.8613	297	1291344.8070	394563.6691			
41	1291551.2370	394710.5385	91	1291413.4955	394667.0684	141	1291421.5093	394493.5998	192	1291495.4280	394539.7797	246	1291452.9547	394497.9098	298	1291335.6926	394566.1647			
42	1291552.7940	394713.4731	92	1291407.4312	394668.7831	142	1291416.5440	394491.2458	193	1291488.3500	394548.2000	247	1291454.9754	394501.7798	299	1291325.9066	394563.9264			
43	1291560.1358	394727.3106	93	1291417.1880	394657.2486	143	1291411.5886	394493.3631	194	1291478.3123	394542.1047	248	1291457.8362	394498.5804	300	1291322.5736	394562.7358			
44	1291570.8348	394738.7522	94	1291422.4681	394643.0936	144	1291408.7790	394495.1998	195	1291474.1373	394540.6516	249	1291471.2628	394498.3240	301	1291320.4726	394561.6913			
45	1291559.1649	394711.6762	95	1291420.8636	394624.0552	145	1291407.1557	394496.5347	196	1291466.9132	394539.3237	250	1291494.2296	394498.0293	302	1291305.9684	394562.3268			
46	1291558.9461	394708.1520	96	1291409.7434	394608.5191	146	1291411.1571	394501.0057	197	1291462.2328	394537.9270	251	1291503.4820	394503.9505	303	1291305.4265	394562.6583			
47	1291567.1239	394697.8298	97	1291407.3216	394611.6115	147	1291411.9256	394507.1803	198	1291456.0014	394528.6509	252	1291500.9885	394513.1808	304	1291299.8418	394568.7361			
48	1291564.2540	394696.9562	98	1291404.2940	394608.9050	148	1291411.7341	394508.9198	199	1291456.4639	394521.6569	253	1291471.1955	394513.7174	305	1291294.5518	394582.0101			
49	1291549.9041	394692.5879	99	1291402.2644	394611.0906	149	1291441.7207	394496.7369	200	1291459.2738	394515.2355	254	1291535.6971	394505.3634	306	1291293.7118	394583.7743			

50 1291535.0631 394694.7656 100 1291407.4701 394617.0486 150 1291448.8067 394502.7926 201 1291464.3520 394533.3704

255 1291591.3978 394509.9684

307 1291257.6817 394648.1479



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

Vo.	Revision	Date	Appvo

Designed by KMB

Issued for Date

Permitting Dec. 14, 2020

Not Approved for Construction

Drawing T

Horizontal Geometry Plan

Drawing Nu

C3.3

KEVIN M. BYNUM, P.E. PE 62392 6212/14/2020

Project Number 62897.03

Grading Notes

- REFER TO COYLE & CARON PLANS FOR HARDSCAPE GRADING.
- EXISTING TOPOGRAPHY BASED ON SURVEY PROVIDED BY VHB.
- 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. 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.
- 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. ALL INLETS AND OUTLETS SHALL BE STABILIZED AS SET FORTH IN THE PERMITTED PLANS TO PREVENT EROSION, SCOUR, AND

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:

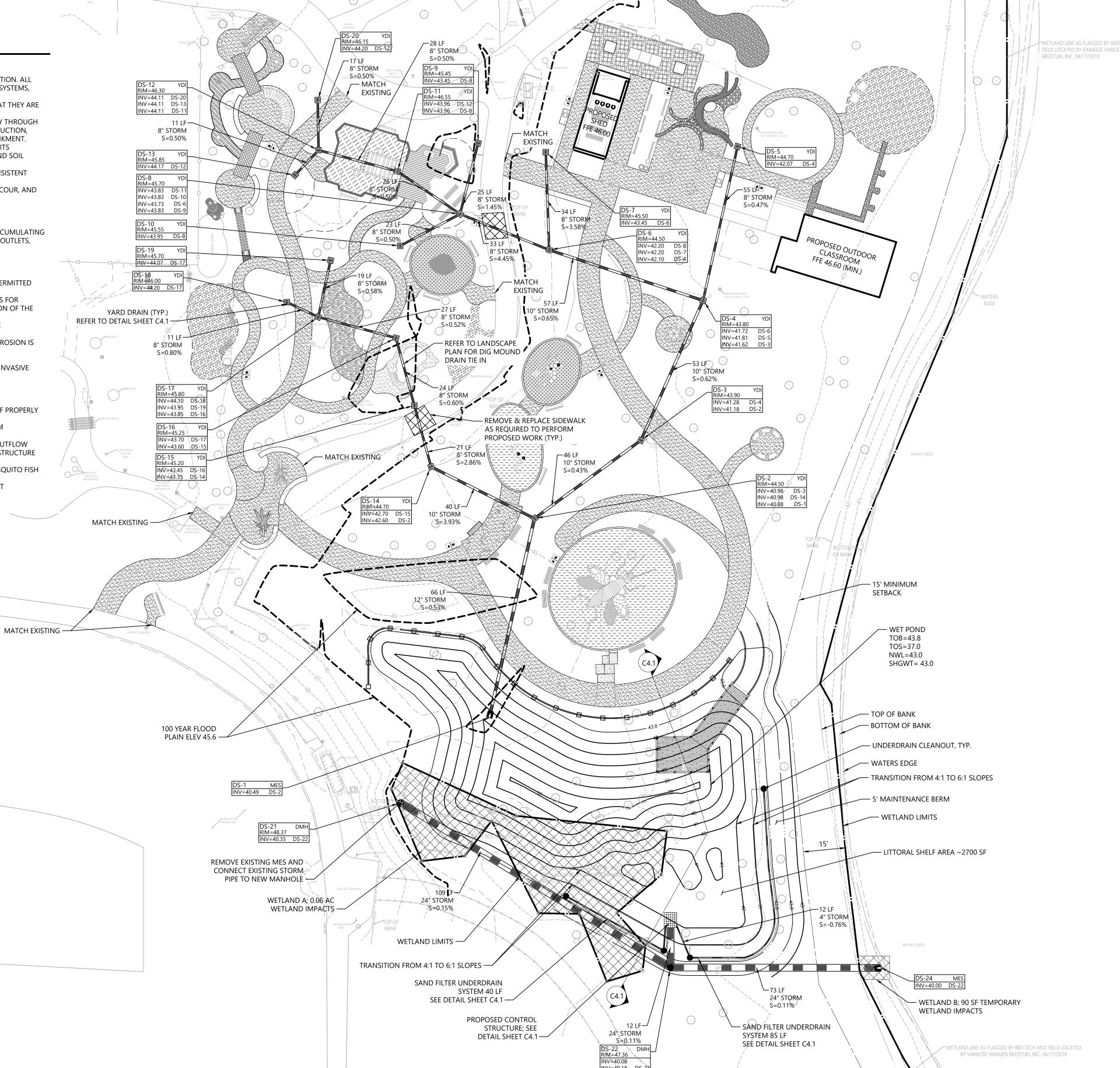
- 1.1. INSPECT BASIN FOR EXCESSIVE SEDIMENT ACCUMULATIONS THAT DECREASE THE WET DETENTION POND'S PERMITTED
- 1.2. INSPECT INFLOW AND OUTFLOW STRUCTURES, TRASH RACKS, SKIMMERS, AND OTHER SYSTEM COMPONENTS FOR ACCUMULATION OF DEBRIS AND TRASH THAT WOULD CAUSE CLOGGING AND ADVERSELY IMPACT OPERATION OF 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.
- INSPECT VEGETATION ON SIDE SLOPES TO ASSURE IT IS HEALTHY, MAINTAINING COVERAGE, AND THAT NO EROSION IS
- OCCURRING. INSPECT THE WET DETENTION POND FOR POTENTIAL MOSQUITO BREEDING PROBLEMS
- 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. 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. 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	Туре	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



INV=40.18 DS-2 INV=40.08 DS-24



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

Legend

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



Florida Botanical Gardens Children's Discovery Garden

12520 Ulmerton Road Largo, Florida

Designed by MAB	Checked by
MAB	KMB

KMB Dec. 14, 2020 Permitting

Not Approved for Construction

WETLAND LINE AS FLAGGED BY BIO-TECH AND FIELD LOCATED BY VANASSE HANGEN BRUSTLIN, INC. 04/17/2019

Grading & Drainage Plan

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

62897.03

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:

- 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

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

BECOME SEALED. USUALLY INDICATIONS OF DEPOSITS MAY BE OBSERVED AT THE OUTLETS, JUNCTION BOXES AND CLEANOUTS.

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.

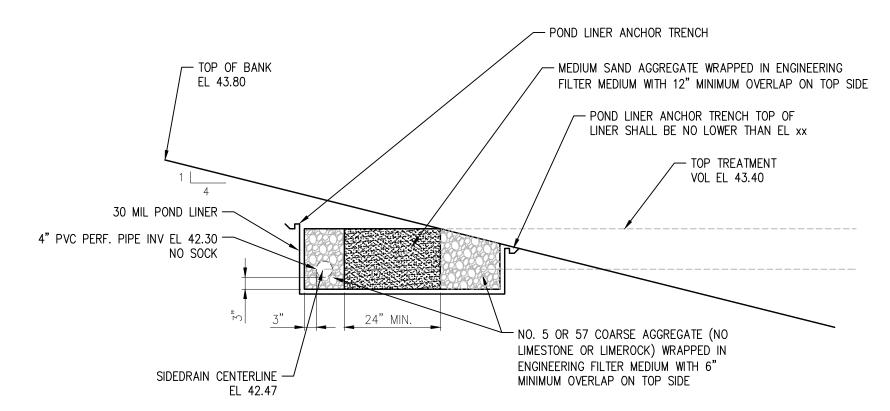
AUXILIARY STRUCTURES - THE LIFE AND VALUE OF A SIDEDRAIN OR UNDERDRAIN SYSTEM MANY TIMES DEPENDS ON THE REPAIR OF AUXILIARY STRUCTURES. THESE STRUCTURES ARE TO PROTECT THE SIDEDRAIN OR UNDERDRAIN SYSTEM AS WELL AS TO AID IN DETERMINING WHEN MAINTENANCE IS NEEDED. IF THEY ARE NOT MAINTAINED, THE VALUE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

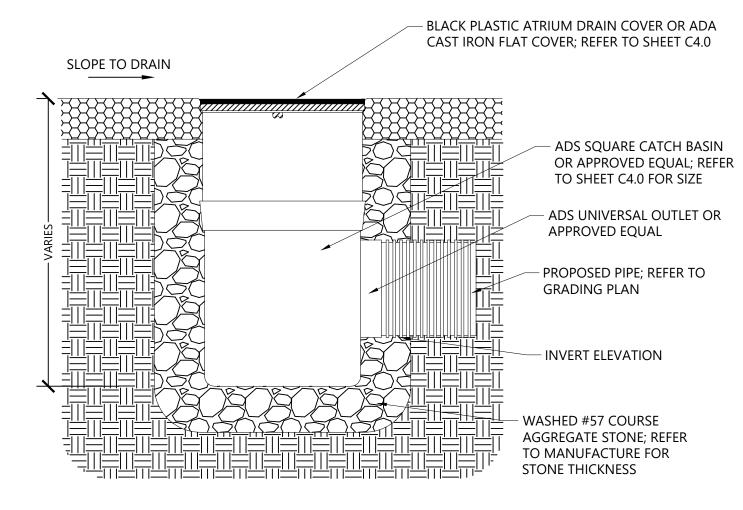
(REF: DEPARTMENT OF ENVIRONMENTAL REGULATION, STATE OF FLORIDA, "THE FLORIDA DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT", JUNE, 1988.)

IRON OXIDE.

- 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
- 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).



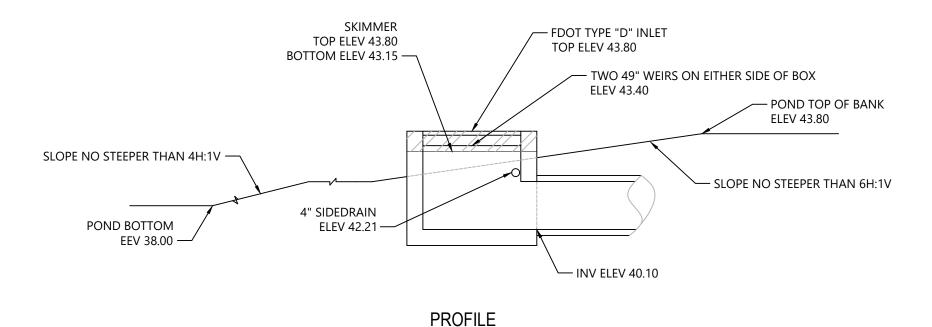
Sand Filter Sidedrain Detail

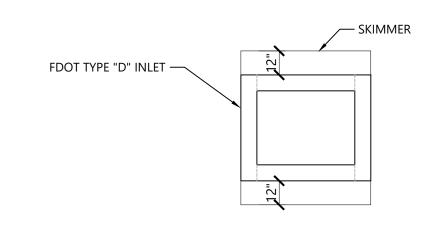


Yard Drain Detail

N.T.S.

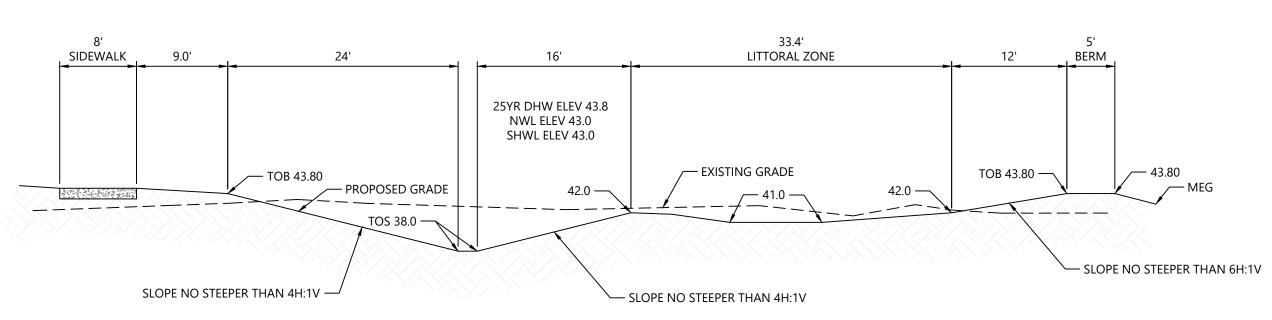
Source: ADS Manufacturer





<u>PLAN</u>

Control Strucutre



Pond Section



501 E Kennedy Boulevard

Certificate of Authorization

Suite 1010

Tampa, FL 33602

Number FL #3932

813.327.5450

12520 Ulmerton Road Largo, Florida

Checked by KMB Dec. 14, 2020 Permitting

Not Approved for Construction

Grading Details

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

62897.03





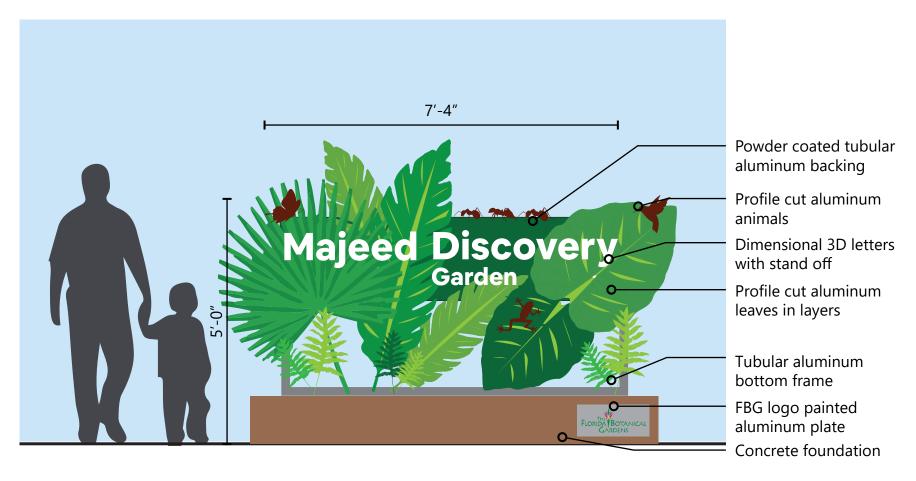




Florida Botanical Garden

Majeed Garden Signage

Date:	4/05/2021
Scale:	NTS
scale:	1/1/2



Main Entrance Sign

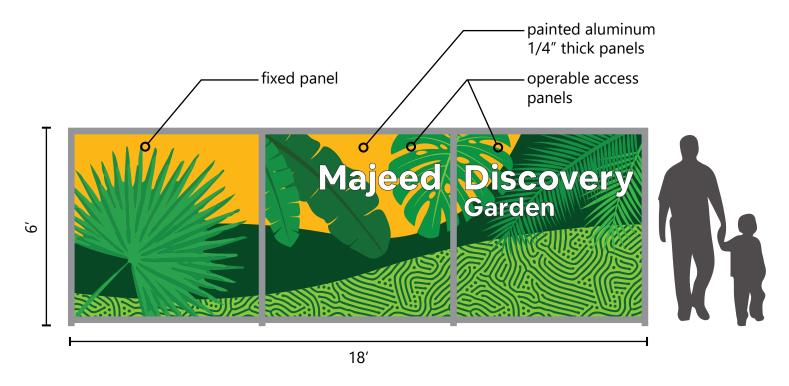


Florida Botanical Garden

Majeed Garden Signage

Date: 4/05/2021

Scale: NTS



North Entrance Sign



Date:	4/05/2021
CI	NITC
Scale:	NTS