Rizzetta & Company

NatureWalk
Community Development District

Board of Supervisors' Meeting
August 6, 2026

District Office:
120 Richard Jackson Blvd, Suite 220
Panama City Beach, Florida 32407
(850) 334-9055

www.naturewalkcdd.org

NATUREWALK
COMMUNITY DEVELOPMENT DISTRICT AGENDA

Walton Area Chamber of Commerce, 63 South Centre Trail, Santa Rosa Beach, FL 32459

District Board of Supervisors	Jonette Coram	Chairman
	Mike Grubbs	Vice Chairman
	Skylar Lee	Assistant Secretary
	Danell Head	Assistant Secretary
	Mike Duffey	Assistant Secretary
District Manager	Stephanie DeLuna	Rizzetta & Company, Inc.
District Counsel	Joseph Brown	Kutak Rock LLP
District Engineer	Jim Martelli, P.E.	Innerlight Engineering Corporation
Bond Counsel	Cynthia E. Wilhelm	Nabors, Giblin & Nickerson, P.A.

All cellular phones must be placed on mute while in the meeting room.

The Public Comment portion of the agenda is where individuals may make comments on any matters that concern the District. Individuals are limited to a total of three (3) minutes to make comments during this time.

Pursuant to provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting/hearing/workshop is asked to advise the District Office at least forty-eight (48) hours before the meeting/hearing/workshop by contacting the District Manager at (239) 936-0913. If you are hearing or speech impaired, please contact the Florida Relay Service by dialing 7-1-1, or 1-800-955-8771 (TTY)
1-800-955-8770 (Voice), who can aid you in contacting the District Office.

A person who decides to appeal any decision made at the meeting/hearing/workshop with respect to any matter considered at the meeting/hearing/workshop is advised that person will need a record of the proceedings and that accordingly, the person may need to ensure that a verbatim record of the proceedings is made including the testimony and evidence upon which the appeal is to be based.

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT
District Office · Panama City Beach, Florida · (850) 334-9055
Mailing Address · 3434 Colwell Avenue, Suite 200, Tampa, Florida 33614

www.naturewalkcdd.org

Board of Supervisors
NatureWalk Community
Development District

August 3, 2026

REVISED AGENDA

Dear Board Members:

The meeting of the Board of Supervisors of the NatureWalk Community Development District will be held on **Thursday, August 6, 2026, at 12:00 p.m. (CT)** at the **Walton Chamber of Commerce** located at **63 South Centre Trail, Santa Rosa Beach, FL 32459**. The following is the **final** agenda for the meeting:

1. **CALL TO ORDER/ROLL CALL**
2. **AUDIENCE COMMENTS IN AGENDA ITEMS**
3. **BUSINESS ADMINSTRATION**
   - A. Consideration of the Minutes of the Board of Supervisors' Meeting Held on Thursday, July 9, 2026 ..... Tab 1
   - B. Ratification of the Operations and Maintenance Expenditures for the Month(s) of June 2026 ..... Tab 2
4. **STAFF REPORTS**
   - A. District Engineer ..... Tab 3
     1. Lift Station #3 Control Panel Installation
     2. Sitex Stormwater System Pond Clearing and Maintenance
        1. Phase 3 Outflow
        2. Pond 28 Dam Removal
     3. Innerlight Aerial Photography Update
     4. Easement Conditional Approval for 351 FFL
     5. Innerlight NWFWMD Consumptive Use Permit Update
     6. Discussion of Tract L ERP Permit Request
     7. Discussion of Master Agreement between NatureWalk CDD & Innerlight/Pape-Dawson
     8. Chordgrass Stormwater Inlet Repair
   - B. District Landscape Provider ..... Tab 4
     1. Presentation of Completed Monthly Service Reports for July & August 2026
     2. Presentation June, July, and August Irrigation 2026 Audit Reports
     3. Weathermatic Smart Controllers Update
     4. Work Authorizations WA# 26-08 through WA# 26-13 Updates
   - C. District Counsel ..... Tab 5
     1. Parcels Update
     2. HOA Encroachment Notice Update
     3. Wildlife Memorandum
     4. Rules Related to Parking Enforcement
   - D. District Manager ..... Tab 6
     1. Presentation of the PBA Monthly Towing Report
     2. District Encroachment Notice Updates
     3. RadarSign Digital Speed Limit Sign Update
   - E. District Chair

5. BUSINESS ITEMS

A. Ratification of District Items ..... Tab 7
   1. Tightline Bridge 1 Repair Agreement
   2. Innerlight Work Authorization for Photogrammetry & Aerial Orthorectified Photography
   3. Innerlight Agreement for NWFWMD Consumptive Use Permit

B. Discussion & Consideration of the Rizzetta DM Contract ..... Tab 8

C. Discussion & Consideration of the Green Earth Contract ..... Tab 9

D. Public on Fiscal Year 2026/2027 Final Budget ..... Tab 10
   1. Presentation of Proposed Final Budget for Fiscal Year 2026/2027
   2. Consideration of Resolution 2026-06, Adopting FY 26-27 Final Budget

E. Public Hearing on Fiscal Year 2026/2027 Special Assessments ..... Tab 11
   1. Consideration of Resolution 2026-07, Imposing Special Assessments

F. Consideration of Tract L ERP Permit Request

G. Discussion & Consideration of Flock Camera System Renewal

6. SUPERVISOR REQUESTS AND COMMENTS

7. ADJOURNMENT

We look forward to seeing you at the meeting. In the meantime, if you have any questions, please do not hesitate to call us at (407) 472-2471.

Very truly yours,

Stephanie DeLuna

Stephanie DeLuna
District Manager

Tab 1

MINUTES OF MEETING

Each person who decides to appeal any decision made by the Board with respect to any matter considered at the meeting is advised that the person may need to ensure that a verbatim record of the proceedings is made, including the testimony and evidence upon which such appeal is to be based.

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT

The meeting of the Board of Supervisors (BOS) of NatureWalk Community Development District was held on **Thursday, July 9, 2026, at 12:00 p.m.** at the Walton Area Chamber of Commerce, located at 63 South Centre Trail, Santa Rosa Beach, FL 32459.

Present and constituting a quorum:

Jonette Coram	**Board Supervisor, Chairman**
Mike Grubbs	**Board Supervisor, Vice-Chairman**
Mike Duffey	**Board Supervisor, Assistant Secretary**

Also, present were:

Stephanie DeLuna	**District Manager, Rizzetta & Company, Inc.**
Jim Martelli	**District Engineer, Innerlight Engineering** *(via phone)*
Joseph Brown	**District Counsel, Kutak Rock** *(via phone)*
Bert Tony Smith	**Sitex Earth Works** *(via phone)*
Matt Weinrich	**Landscape Provider, GreenEarth** *(via phone)*
Justin Powell	**PBA Towing**
Audience	No audience was present

FIRST ORDER OF BUSINESS **CALL TO ORDER**

Ms. DeLuna confirmed quorum and called the meeting to order at 12:01 PM.

SECOND ORDER OF BUSINESS **AUDIENCE COMMENTS**

There were none as no audience was present.

THIRD ORDER OF BUSINESS **BUSINESS ADMINISTRATION.**

1. **Consideration of the Minutes of the BOS Meeting held on June 4, 2026**

Ms. DeLuna requested feedback on the draft minutes.

Ms. Coram asked that the date listed in line 283 be corrected to read August 9, 2026.

> On a motion by Mr. Duffey, seconded by Mr. Grubbs, with all in favor, the BOS approved the Minutes of the Board of Supervisors Meeting held on June 4, 2026 with correction of line 283, for NatureWalk Community Development District.

2. Ratification of the Operations and Maintenance (O&M) Expenditures for the Month of May 2026

Ms. DeLuna explained that O&M expenditures provided in the agenda were reduced by $2,002.54 due to accounting errors involving payments made to Wahoo Pools and Green Earth. The credits will appear on the June 2026 O&M statement.

> On a motion by Mr. Grubbs, seconded by Mr. Duffey, with all in favor, the BOS ratified corrected Operations and Maintenance Expenditures for the Month of May 2026 in the amount of $88,471.82, for NatureWalk Community Development District.

FOURTH ORDER OF BUSINESS STAFF REPORTS

A. District Engineer

1. Lift Station #3 Control Panel Installation Update

Mr. Martelli stated that materials will be delivered to the vendor on July 7, 2026. Innerlight will help Pump & Process offload the control panel and coordinate its installation by Gulf Coast Electric.

2. Pond # 28 DEP Update

Innerlight produced a drawing for the DEP, who provided written permission to clear an access path to the buffer as long as the wetlands are not impacted and the pond itself is not modified. Innerlight recommends addition of a 6-inch aggregate base material from the roadway at Prairie Pass to the emergency spillway at the rear of Pond #28. Some additional mulch may be needed as well to allow vendor equipment access.

Mr. Smith and Mr. Martelli will connect on Monday, July 13 to discuss scope of work details. A price increase may not be necessary if mulch instead of aggregate material can be used to support the machinery required for the project.

3. Phase 3 Outflow Structure Repair

The depth and condition of the submerged pipe is unknown. A survey team was dispatched to determine topography as a discharge path is required to lower the stormwater pond levels. Installation of a head wall would likely create a deep pit, making a rectangular drainage inlet a safer option. Should this inlet not adequately drop pond levels, an additional lift station would be needed and could be installed within the rectangular structure. Mr. Martelli estimated the cost for a new lift station at between $50,000 to $60,000, with permitting required.

.

4. Tightline Bridge 1 Asphalt Repair

Mr. Martelli had no objections to the Tightline Agreement for Bridge 1 Repair.

> On a motion by Ms. Coram, seconded by Mr. Duffey, with all in favor, the BOS approved the Tightline Construction Bridge 1 Asphalt Repair Agreement for NatureWalk Community Development District.

5. Discussion of Sitex Stormwater Pond Clearing & Green Earth Berm Maintenance

Mr. Smith confirmed Sitex will be onsite during the first week of August and will meet with Green Earth Management and Operations personnel to delineate where the clearing must be maintained per the Innerlight Scopes of Work and new landscaping contract.

6. NWFWMD Consumptive Use Permit Discussion

This permit expires 12/1/2026. Data analysis is required by Northwest Florida Water Management District to justify the daily usage of ground water for irrigation purposes. Permit renewal is a three to four-month process. An approved permit is in effect for ten years. Innerlight will provide updates throughout the process.

> On a motion by Mr. Grubbs, seconded by Mr. Duffey, with all in favor, the BOS authorized the Chair to sign an Agreement with Innerlight Engineering in the amount of $30,100.00 for renewal of the NWFWMD Consumptive Use Permit, for NatureWalk Community Development District.

7. Discussion of High-Resolution Ortho-Rectified Aerial Photography

High-resolution photography functions as a planning and maintenance tool as it provides a better view of ground conditions than is available using Walton County GIS or Property Appraiser maps. A composite aerial photograph of the entire community taken by drone helicopter can then be used by the District to analyze stormwater management ponds, landscaping, encroachments and property lines (which will not be survey grade). Aerials are provided in pdf, jpeg and auto-CAD formats and could be available for September 3, 2026.

The Board asked if aerial photography could be scheduled after Sitex completes clearing vegetation from the remainder of the stormwater system pond berms. Mr. Martelli noted that proposal pricing is based on personnel being mobilized within the next two weeks, but since Sitex won't be onsite until the week of August 3, 2026, additional cost may be required to re-deploy the drone helicopter team.

Discussion ensued regarding whether the Stormwater Berm Maintenance Inspection Report could be used to update the aerial photography exhibit.

Mr. Martelli will attempt to schedule aerial photography of NatureWalk last so that this won't be necessary.

Funds for a portion of the project are available in Miscellaneous Contingency, with the remainder to be taken from Reserves. Ms. DeLuna stated that the FY25-26 Budget will be amended in September to reflect that funds were reallocated between line items due to specific needs during the year. The amendment will then be ratified via Resolution in October/November 2026.

> On a motion by Ms. Coram, seconded by Mr. Duffey, with all in favor, the BOS approved $13,050.00 for Aerial Photography exhibits by Innerlight Engineering / Pape-Dawson, for NatureWalk Community Development District.

B. District Landscape Provider

1. Presentation of Completed Monthly Service Reports for June & July 2026

Mr. Weinrich confirmed that all June services were completed as scheduled. In addition, CDD Bermuda grass outside the pickleball courts was reseeded following a second application of Top Choice to address mole crickets.

Berm maintenance was started on July 6, 2026. Green Earth crews noted some grassy overgrowth, but Mr. Weinrich does not expect it to take more than one week to complete maintenance of the ponds that Sitex has already cleared to date.

Results of the July Irrigation audit are not yet available. Mr. Weinrich will supply the audit to the District on July 13, 2026.

2. Weathermatic Smart Controllers Update

Mr. Weinrich is in receipt of the Weathermatic smart controllers, which are not yet installed.

3. Green Earth Contract Addendum for Berm Maintenance & Smart Controllers

Mr. Weinrich had no objections to the addendum.

> On a motion by Ms. Coram, seconded by Mr. Duffey, with all in favor, the BOS approved the third addendum to the existing Green Earth contract for stormwater pond berm maintenance and the installation of Weathermatic smart irrigation controllers, for NatureWalk Community Development District.

4. Discussion of the Rizzetta LIS RFP

Mr. Weinrich has reviewed the RFP document and has no edits. Green Earth is ready to start the new contract work on August 1, 2026.

5. Work Authorizations WA# 26-08 through WA# 26-13 Updates

WA# 26-11 Cinnamon Fern will be scheduled first.

Ms. Coram asked if the smart controllers will be installed before WA# 26-11 begins to ensure the new plants are watered sufficiently.

Mr. Weinrich stated that an irrigation audit will be done prior to installation and a pictorial report will be provided to the Board to confirm the system is working properly. Once plants are in place, another irrigation audit will be conducted to show that plants are being sufficiently watered. Smart controllers will then be installed.

Mr. Weinrich has obtained additional options for rock associated with WA# 26-12, which will be emailed to the District Manager on July 13, 2026 for dispersal to the Board.

Ms. Coram stated that paperwork for WA# 26-12 and WA# 26-13 are incorrect as the wrong Green Earth proposal was attached and a third that has also an error (the District Chair signature is under Green Earth). Corrected documents were requested from Rizzetta District Management as these projects were approved on June 4 and must be completed prior to September 30.

C. District Counsel

1. Parcels Update

The Quiet Title action for Parcels G and I was dismissed without prejudice today.

There are no new updates for Tracts E, F, J, K, 290, 291 or 292.

Tract H has been notified that the District will accept maintenance of the roadway once completed and is interested in trying to match the existing NatureWalk branded streetlight design.

Counsel has not received any notification that Tract E or Tract H has platted. It is now too late for either of these parcels to have their FY26-27 District Operations and Maintenance assessments recalculated.

2. *Rules Related to Parking Enforcement* Review

Mr. Brown sees no reason to amend the language referring to "no parking on the landscaping."

D. District Manager

The August 6, 2026 will be a public hearing for Adoption of the FY26-27 Budget; notices have gone out. The cover letter and assessments will be received by homeowners within the next two weeks.

Ms. DeLuna explained the District's Public Record Policy: fees apply for any request that requires more than a reasonable request time to do due diligence, i.e. greater than 15 minutes total.

Ms. Bryant placed an extensive records request following her attendance at the June BOS meeting. Available information that was readily available and could be compiled within the reasonable timeframe was provided, along with the fee required to complete her request. Information from years past requires additional Rizzetta and technical personnel, resulting in added cost to the District, hence fees apply. Payment has not been received from Ms. Bryant.

Ms. DeLuna noted that the HOA does not intend to repair the Phase 3 directional sign, but a licensing agreement could be found that allowed its installation on District property. She suggested that District Staff respond to the HOA, advising them to either remove or repair the deteriorated sign that is located on District property on or before August 5, 2026. Per District policy, a Supervisor must be present for sign removal.

On a motion by Mr. Grubbs, seconded by Mr. Duffey, with all in favor, the BOS approved Staff to respond to the HOA, advising them to either remove or repair the deteriorated sign that is located on District property, for NatureWalk Community Development District.

Ms. DeLuna noted that the ducks present in Pond #13 do not belong to the District. However, the CDD is willing to help facilitate the rehoming of the ducks, some of which are now nesting on homeowner property. Walton County Animal Control and Florida Fish and Wildlife have not been willing to remove all of the ducks. The District will continue to request

that the aggressive duck be relocated as it is impacting Stormwater Management Pond Maintenance. Owners will also be encouraged to contact Walton County and Florida Fish and Wildlife to request removal of the duck(s).

Ms. DeLuna confirmed that the past due Florida Power & Light invoice forwarded to the District from Rizzetta Regional CAM Claire Durham and HOAMCO is associated with the Homeowners Association of NatureWalk at Watersound Origins. The associated meter is located at 0 Pathways Drive in Inlet Beach, FL.

1. Presentation of the PBA Towing Report

Mr. Powell asked for clarification regarding vehicles that are parked on top of or within District bushes or plants. Counsel confirmed this is a violation of the *Rules Related to Parking Enforcement,* as pine straw, sod, bushes constitute landscaping.

The Board agreed that the purpose of the "on the landscaping" clause in the policy is to prevent damage to District property, therefore vehicles that are causing damage to plant material, bushes, sod, etc. should be towed.

2. District Encroachment Notice Updates

405 Flatwoods Forest Loop has responded regarding their encroachment and will be provided with the process to resolve it via the Encroachment Improvement Form.

155 Flatwoods Forest Loop requested that the District landscaper address the condition of the curb strip/easement between the sidewalk and street in front of the home. The owners installed a pool in February 2024, damaging CDD plant materials during construction. The owners then removed all plant materials from the curb strip and have stated they received ARC approval to do so. HOAMCO is unable to provide any ARC Request for 155 FFL as Rizzetta & Company was the HOA Management company in 2024. However, HOA ARC approval does not grant owners permission to alter CDD property or easements in any way. The Board requested that the owners restore District property to its original condition at their cost, using Green Earth as the landscaper, so as not to damage existing irrigation. The District Manager will contact the owners to inform them of the Board decision. Before, during and after photos are available which show homeowner damage to District property.

351 Flatwoods Forest Loop requires an approved ARC that shows the District Engineer's recommended fence layout prior to Innerlight staking the homeowners' lot. to the District's knowledge, ARC approval has not yet been granted.

E. District Chair

The Board tabled further discussion of Conservation Area amendment but will review the topic monthly to determine whether any development begins that would impact the area.

Ms. Coram asked for Board input on replacement of the nine (9) deteriorated landscape lights on entrance medians 1 & 2 when the next streetlight retrofit is necessary.

On a motion by Mr. Grubbs, seconded by Mr. Duffey, with all in favor, the BOS approved the Chair to proceed with replacement of the landscape up lights on Medians 1 & 2 in an amount Not-to-Exceed $2,000.00, for NatureWalk Community Development District.

Two (2) Stop signs at the intersection of Flatwoods Forest Loop and Sandgrass Blvd have been vandalized and will be cleaned via volunteer effort.

The HOA July Newsletter was cancelled; the District will request an email blast be sent to homeowners to notify them of upcoming District projects, including stormwater system maintenance requiring vendors and Innerlight Engineering to be present on CDD property along pond fence lines.

Virgin Brothers will complete WA# 24 Bridge 1-2-3 Wear Deck Repairs within the next two weeks, followed by Preserve Trail Board and Guardrail Replacements (WA# 28 and WA# 29).

FIFTH ORDER OF BUSINESS **BUSINESS ITEMS**

A. Discussion & Consideration of the Green Earth Contract

Ms. DeLuna noted that the LIS scope of work and contract is property of the District and can be amended to use for future landscape vendors.

> On a motion by Ms. Coram, seconded by Mr. Grubbs, with all in favor, the BOS approved the Green Earth Landscape contract with a start date of August 1, 2026, for NatureWalk Community Development District.

B. Discussion & Consideration of the Rizzetta DM Contract

The Rizzetta District Management contract will be presented on August 6, 2026.

C. Discussion & Consideration of the RadarSign Digital Speed Sign

Following discussion, the Board chose to refurbish the Digital Speed Sign; a one-year warranty will apply.

> On a motion by Mr. Grubbs, seconded by Mr. Duffey, with all in favor, the BOS approved Refurbishment of the RadarSign in an amount Not-to-Exceed $2,000.00 for NatureWalk Community Development District.

SIXTH ORDER OF BUSINESS **SUPERVISOR REQUESTS**

There were no new Supervisor Requests.

SEVENTH ORDER OF BUSINESS **ADJOURNMENT**

> On a motion by Ms. Coram, seconded by Mr. Grubbs, with all in favor, the Board adjourned the meeting at 2:21 p.m., for NatureWalk Community Development District.

_____ _____

Secretary/Assistant Secretary Chairman/Vice Chairman

Tab 2

NatureWalk Community Development District

DISTRICT OFFICE · PANAMA CITY BEACH, FL 32407
MAILING ADDRESS · 3434 COLWELL AVENUE, SUITE 200 · TAMPA, FLORIDA 33614
WWW.NATUREWALKCDD.ORG

Operations and Maintenance Expenditures
June 2026
For Board Approval

Attached please find the check register listing the Operation and Maintenance expenditures paid from June 1, 2026 through June 30, 2026. This does not include expenditures previously approved by the Board.

The total items being presented: **$60,227.60**

Approval of Expenditures:

_____

_____ Chairperson

_____ Vice Chairperson

_____ Assistant Secretary

NatureWalk Community Development District

Paid Operation & Maintenance Expenditures

June 1, 2026 Through June 30, 2026

Vendor Name	Check Number	Invoice Number	Invoice Description	Invoice Amount
CHELCO	20260625-1	33395901	Monthly Summary 05/26	$ 1,980.62
GreenEarth Southeast, LLC	300272	240509	Landscape Maintenance 06/26	$ 12,907.12
Gulf Coast Electric	300269	93222	Service Call for Replacement of Led Lamp and Photocell 05/26	$ 347.21
Innerlight Engineering Corporation	300275	22300067-000 - 6	Engineering Services 06/26	$ 1,750.00
IPFS Corporation	20260602-1	GAA-D81103 Payment 8	GAA-D81103 Payment 8	$ 4,621.14
Kutak Rock, LLP	300273	3748624	Legal Services 04/26	$ 6,111.00
Rizzetta & Company, Inc.	300270	INV0000109930	Accounting Service 06/26	$ 5,573.51
The Lake Doctors, Inc.	300276	2131824	Pond Maintenance 06/26	$ 768.00
The Lake Doctors, Inc.	300277	2132313	Fountain Cleaning 05/26	$ 184.00
USA TODAY Media Corp	300274	0007733115	Legal Advertising 0526	$ 319.60
VGlobal Tech	300271	8578	ADA Website Maintenance 06/26	$ 300.00
Virgin Brothers LLC	300278	061226 Virgin B	Replace all gardrails 06/26	$ 6,072.28
Virgin Brothers LLC	300278	061226 Virgin Brothers	60 % Deposit for Trail Boardwalk # 29	$ 19,293.12
Report Total				**$ 60,227.60**

Tab 3

NOTICE OF ARCHITECTURAL APPROVAL

July 29, 2026

GLENN A and KAREN R DUFFARD
4637 VININGS CANYON BEND
ATLANTA, GA 30339

RE: **Account # 179600830**
Lot# 136
351 FLATWOODS FOREST LOOP

Dear GLENN A and KAREN R DUFFARD:

Your request for Architectural Change has been **APPROVED AS SUBMITTED on July 13, 2026**. You have approval to proceed with the following:

Specifically- install a white wrought iron fence with 2 gates as per plans submitted July 13, 2026

This approval is based on the aesthetics of your proposed change. The Association board reserves the right to make a final inspection of the change to make sure it matches the request you submitted for approval. Please follow the plan you submitted or submit an additional request form if the original plan is modified.

All modifications shall begin construction within ninety (90) days of approval and must be completed within six (6) months of approval.

Please upload photos of the completed project to your existing ARC application through the portal within two (2) weeks of completion. Should you have any questions, please feel free to contact me by email at **DYMiller@hoamco.com**.

Thank you for your patience throughout this process.

Respectfully,
Dyan Miller
Dyan Miller
Architectural Administrator
On behalf of the Architectural Committee
NATUREWALK HOA (796)

WORK AUTHORIZATION
WITH DISTRICT ENGINEER
FOR CONSUMPTIVE USE PERMIT RENEWAL

THIS WORK AUTHORIZATION ("**Work Authorization**"), dated _____, 2026, authorizes additional work in accordance with the *Agreement Between the NatureWalk Community Development District and Innerlight Engineering Corporation for Professional Engineering Services* dated April 24, 2017 ("**Agreement**"), by and between:

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT, a local unit of special-purpose government established pursuant to Chapter 190, *Florida Statutes*, and located in Walton County, Florida ("**District**"); and

INNERLIGHT ENGINEERING CORPORATION, a Florida Profit Corporation, with an address at 11490 Emerald Coast Parkway, Suite 2W, Miramar Beach, Florida 32550 ("**Engineer**").

SECTION 1. SCOPE OF SERVICES. In addition to the services described in the Agreement, the Engineer shall provide professional engineering and permitting services, as set forth in Engineer's proposal, dated July 2, 2026, and attached hereto as **Exhibit A**, which is incorporated herein by reference, all in accordance with the terms of the Agreement ("**Additional Services**").

SECTION 2. COMPENSATION. It is understood and agreed that the compensation for the Additional Services under this Work Authorization shall be in the total lump sum amount of **$30,100.00** covering Tasks 1-6 as described in Exhibit A**.** Engineer shall invoice the District for completed Additional Service upon completion of each Task for the lump sum amount associated with each Task as reflected in Exhibit A.

It is understood and agreed upon that the compensation for the completion of the Additional Services is based upon all materials, labor, and professional services required to perform such Additional Services. Engineer recognizes and acknowledges that the Additional Services concern the renewal of the District's consumptive use permit, which expires December 1, 2026, and agrees that the Additional Services include all professionally reasonable efforts necessary to ensure the District retains the authority granted by the consumptive use permit, including seeking temporary extensions or authorizations if renewal of the consumptive use permit does not occur before December 1, 2026.

SECTION 3. FINAL AGREEMENT. This Work Authorization, together with the Agreement and any Exhibits, Amendments, or other Work Authorizations for the Agreement, represents the entire understanding between the District and the Engineer with regard to the Additional Services and supersedes any previously executed proposal or agreement related to the provision of such services. To the extent of any conflict between the Agreement or this Work Authorization and Exhibit A hereto, the Agreement and this Work Authorization shall control.

SECTION 4. ACCEPTANCE. Acceptance of this Work Authorization will authorize the Engineer to complete the Additional Services as outlined herein and is indicated by the signature of the authorized representative of the District and the Engineer in the spaces provided below. Engineer shall promptly commence the aforesaid Additional Services as provided herein and shall perform the same in accordance with the terms and conditions of the Agreement, which, except to the extent expressly altered or changed in this Work Authorization, remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused this Work Authorization to be executed the day and year first above written.

ATTEST**:**	**NATUREWALK COMMUNITY DEVELOPMENT DISTRICT**
_____	_____
Secretary/Assistant Secretary	Chairperson, Board of Supervisors
WITNESS:	**INNERLIGHT ENGINEERING CORPORATION**
_____	_____
Witness	By:_____
	Its:_____

Exhibit A: Scope of Additional Services

Exhibit A

INNERLIGHT ENGINEERING
a PAPE–DAWSON company

11490 Emerald Coast Parkway, Suite 2W
Miramar Beach, Florida 32550
Phone: 850.424.5855

July 2, 2026

Ms. Jonette Coram
Naturewalk Community Development District
3434 Colewell Avenue
Suite 200
Tampa, FL 33614

Re: **Proposal for Professional Engineering Services**
Naturewalk CDD – Consumptive Use Permit Renewal
Walton County, Florida

Dear Ms. Coram,

On behalf of Innerlight Engineering, please accept this proposal for the aforementioned property. The Specifics are presented below; the term **Consultant** represents Innerlight Engineering, LLC, the term **Client** refers to the Entity as provided in signature block below:

WHEREAS, the Client wishes to engage Consultant for the performance of Professional Engineering Services; and has determined that Consultant is qualified to serve as Consultant for the Client; and

WHEREAS, Client intends to employ Consultant to perform one or more of the following services as specified and contractually obligated through authorized requests in writing:

- Land Surveying
- Land Planning
- Civil Engineering
- General Transportation and Traffic Engineering
- General Consulting
- Entitlements and / or Permitting
- Technical Studies
- Construction Administration
- Construction Observation
- Miscellaneous Tasks Requested by Client and within the Expertise of Innerlight Engineering Corporation, it's Employees and / or Sub-Consultants

WHEREAS, Consultant shall serve as Client's professional representative in each service or project to which this Agreement applies and will give consultation and advice to Client during the performance of his services. **NOW, THEREFORE,** for and in consideration of the mutual covenants herein contained the acts and deeds to be performed by the parties, and the payments by the Client to the Consultant of the sums of money herein specified, it is mutually covenanted and agreed as follows:

Basis of Scope and Understanding

The Owner requires professional engineering services to prepare, coordinate, and obtain renewal of its existing Consumptive Use Permit (CUP) issued by the Northwest Florida Water Management District (NWFWMD). The renewal will ensure the continued legal withdrawal of groundwater and/or surface water necessary to support the facility while demonstrating continued compliance with applicable District permitting criteria.

Our services will include review of the existing permit, evaluation of historical water use, preparation of supporting technical documentation, coordination with NWFWMD staff, response to requests for additional information (RAIs), and assistance through issuance of the renewed permit.

Scope of Services

Task 1: Project Initiation & Existing Permit Review — $3,600

The scope of work is anticipated to include:

- Review of Existing Consumptive Use Permit
- Review Permit Conditions
- Review Authorized Withdrawal Quantities
- Review Existing Withdrawal Facilities
- Review Compliance History
- Review of Previous Technical Reports

Task 2: Data Collection & Water Use Evaluation — $5,750

The scope of work will include efforts to collect and evaluate available relevant information anticipated to include the following:

- Data Collection
    - Monthly Pumping Records
    - Annual Water Use Summaries
    - Historical Meter Records
    - Production Well Information
    - Pump Capacities
    - Pump Operating Hours
    - Existing Water Conservation Measures
    - Existing Monitoring Wells
    - Groundwater Level Information
    - Irrigation Acreage
- Evaluation
    - Historical Demand Trends
    - Maximum Daily Demand
    - Average Daily Demand
    - Annual Average Withdrawals
    - Peak Month Withdrawals
    - Permit Utilization
    - Water Use Efficiency

Task 3: Technical Engineering Evaluation $7,500

The scope of work is anticipated to include efforts to prepare engineering analyses necessary to support permit renewal such as:

- Water Demand Projections
- Existing Source Capacity Evaluation
- Well Field Evaluation
- Pumping Capacity Review
- Source Redundancy Evaluation
- Water Conservation Evaluation
- Reasonable Beneficial Use Analysis
- Permit Compliance Evaluation

Task 4: Permit Renewal Application Preparation $6,250

The scope of work will include preparation of the NWFWMD Consumptive Use Permit Renewal Application. The specific scope of work is anticipated to include:

- NWFWMD Application Forms
- Technical Narratives
- Water Demand Calculations
- Water Conservation Documentation
- Engineering Exhibits
- Well Inventory
- Location Maps
- Facility Maps
- Withdrawal Point Mapping
- Supporting Figures
- Supporting Tables

Task 5: Agency Coordination $5,000

The scope of work will include necessary Agency coordination anticipated to include the following:

- Coordinate with NWFWMD Staff
- Attend One Pre-Application Meeting
- Respond to Requests for Additional Information (RAIs)
    - Assumes up to two rounds of RAI responses
- Prepare Supplemental Technical Information
- Prepare Revised Application Documents
- Telephone Conferences
- Agency Coordination Meetings

Task 6: Permit Issuance Support **$2,000**

The scope of Work is anticipated to include the following:

- Review Draft Permit
- Review Permit Conditions
- Review Monitoring Requirements
- Review Reporting Requirements
- Coordinate Owner Comments
- Assist with Final Permit Acceptance

ASSUMPTIONS AND LIMITATIONS

- No task other than specifically referenced above is included in this proposal.
- Owner will provide the following information as available:
    - Existing Permit Documents
    - Historical Pumping Records
    - Meter Data
    - Existing Engineering Reports
    - Previous Hydrogeologic Reports
    - Water Quality Data
    - Existing Monitoring Reports
    - Site Access
    - Application Fees
- Existing withdrawal facilities remain unchanged.
- No increase in permitted allocation is requested.
- No new production wells are proposed.
- Existing permit compliance has been maintained.
- Existing hydrogeologic information is sufficient to support renewal.
- Assumes irrigation demand / allowable withdrawal hydrologic modeling is not required or will be provided by the NWFWMD.
- Two rounds of NWFWMD comments or fewer.
- No administrative hearing or permit challenge.
    - No groundwater model updates are required.

Consultant does not control regulatory agency decisions and cannot guarantee approval of any application

If any of the above assumptions materially change, additional services may be required and will be authorized separately.

COMPENSATION

It is understood and agreed that the payment of compensation for services under this contract shall be based upon the Professional Services Agreement and the following:

A. Lump Sum – The Client agrees to compensate Consultant for services rendered in connection with the Scope of Work outlined above on a lump sum basis individually as outlined in the Tasks above. With monthly progress billings based on the Consultant's estimate of the percent complete.

B. ~~Hourly Personnel Rates – The Client agrees to compensate Consultant for services according to the Exhibit B - Hourly Rate Table.~~ Not Applicable

C. A Retainer in the amount of $ 0 will be due upon authorization to proceed and will be applied to the final invoice for services.

REIMBURSABLE EXPENSES

It is understood and agreed that the payment of compensation for Reimbursable Expenses under this contract shall be based upon the executed Professional Services Agreement. Reimbursable expenses consist of actual expenditures made by the Consultant, its employees, or its consultants in the interest of the Client for the incidental expenses such as expenses of reprographics, postage and handling, courier service, and any other such direct expenses. All direct expenses will be calculated to include a twenty percent (10%) multiplier.

The attached Terms and Conditions set out as Exhibit A are incorporated into this Proposal by reference and become part of the agreement between the Client and Consultant by execution of this document. If the terms of this Proposal are acceptable, please acknowledge such by signing below and returning the executed document to us via e-mail or US Mail for our records. Receipt of the executed Proposal serves as authorization for us to proceed with the work.

INNERLIGHT ENGINEERING, LLC
"Consultant"

X_____

Authorized Signature

By: James A. Martelli, PE

Its: Vice President, Land Development

Date: July 2, 2026

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT
"Client"

X_____

Authorized Signature

By: (Print Name): _____

Its: _____

Date: _____

SITE CONSTRUCTION PLANS

NATUREWALK TRACT L

MINOR DEVELOPMENT ORDER, LOCATED IN SECTION 11, TOWNSHIP 3 SOUTH, RANGE 19 WEST, WALTON COUNTY, FLORIDA

UTILITY COMPANIES

CONTRACTOR SHALL HAVE ALL EXISTING BURIED UTILITIES "LINE SPOTTED" BY CALLING 1-800-432-4770 "CALL SUNSHINE" OR BY CONTACTING LOCAL UTILITY COMPANIES.

WATER: FLORIDA COMMUNITY SERVICES INC.
4432 U.S. HIGHWAY 98
SANTA ROSA BEACH, FL 32459
PHONE: 850-231-5114

SEWER: FLORIDA COMMUNITY SERVICES INC.
4432 U.S. HIGHWAY 98
SANTA ROSA BEACH, FL 32459
PHONE: 850-231-5114

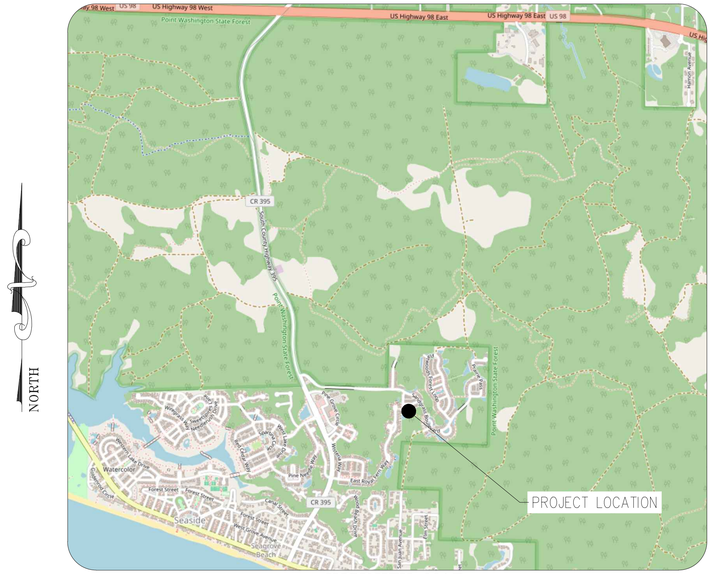
TELEPHONE: CENTURYLINK
SOUTHERN OPERATIONS
650 DENTON BOULEVARD
FT. WALTON BEACH, FL 32547
PHONE: 850-664-3751
800-488-2201

TV CABLE: COX COMMUNICATIONS INC.
34904 EMERALD COAST PARKWAY #136
DESTIN, FL 32541
PHONE: 850-796-1269

ELECTRIC: GULF POWER COMPANY
140 S.W. HOLLYWOOD BOULEVARD
FT. WALTON BEACH, FL 32548
PHONE: 244-4764

PREPARED FOR:

TITAN ACQUISITIONS, L.L.C.
840 S. DAVIS BLVD.
TAMPA, FLORIDA 33606
PHONE: (813) 935-6603



NORTH

VICINITY MAP
NOT TO SCALE

PREPARED BY:

www.eca-fl.com

ECAE, L.L.C.

Land Planning ● Civil Engineering

CERTIFICATE OF AUTHORIZATION NUMBER 36179

2052 West County Highway 30A, R1 - 202
Santa Rosa Beach, Florida 32459
PHONE: (850) 267-0473
FAX: (850) 267-0973
www.eca-fl.com

INDEX OF SHEETS

SHEET#	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS AND DEMO PLAN
3	SITE AND GEOMETRY PLAN
4	GRADING AND DRAINAGE PLAN
5	UTILITY AND LANDSCAPE PLAN
6	CROSS SECTION DETAILS

REGIONAL UTILITIES DETAILS:

S-1	SANITARY SEWER STANDARD DETAILS (1 OF 2)
S-2	SANITARY SEWER STANDARD DETAILS (2 OF 2)
W-1	POTABLE WATER STANDARD DETAILS (1 OF 3)
W-2	POTABLE WATER STANDARD DETAILS (2 OF 3)
W-3	POTABLE WATER STANDARD DETAILS (3 OF 3)

RUDOLPH A. MALL LICENSE No. 94479 STATE OF FLORIDA PROFESSIONAL ENGINEER

RUDOLPH A. MALL, REGISTERED P.E.
FLORIDA CERTIFICATE NO. 94479

NOTE: NOT RELEASED FOR CONSTRUCTION

DATE PREPARED:
JUNE 2026

SHEET 1 of 6

J:\2026\26-007\26-0023-ENG-Engineering Services_Naturewalk_Tract L - Dot13 Drawings\26-007_ENG-2.dwg, 01-COVER SHEET, 8/2/2017 AT 1:34 PM BY: Dylan Franks

THESE PLANS AND THE IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

LEGEND

(F) Field Distance and/or Bearing
(P) Plat Distance and/or Bearing
- ½" Capped Iron Rod Set (LB 7584)
- ½" Capped Iron Rod Set (LB 7584) Witness
- ½" Capped Iron Rod Set (Voelker Control Point)
- ½" Capped Iron Rod Found (LB 3724)
- Permanent Control Point Set (LB 7584)
- Permanent Control Point Found (LB 3724)
- Sanitary Sewer Manhole
- Lift Station
- Grate Inlet
- Pad Mounted Transformer
- 2' Wood Fence
- Asphalt Pavement
- Concrete Pavement
- Gravel/Limestone
- Wood
- Brick
- 25' Wetland Buffer/Easement and Walton County Uplands Preservation Area

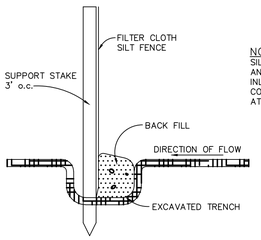
= WETLANDS (0.16 AC.)

= WETLAND BUFFER (0.28 AC.)

= WETLAND BUFFER IMPACT (0.05 AC.)

LEGAL DESCRIPTION:

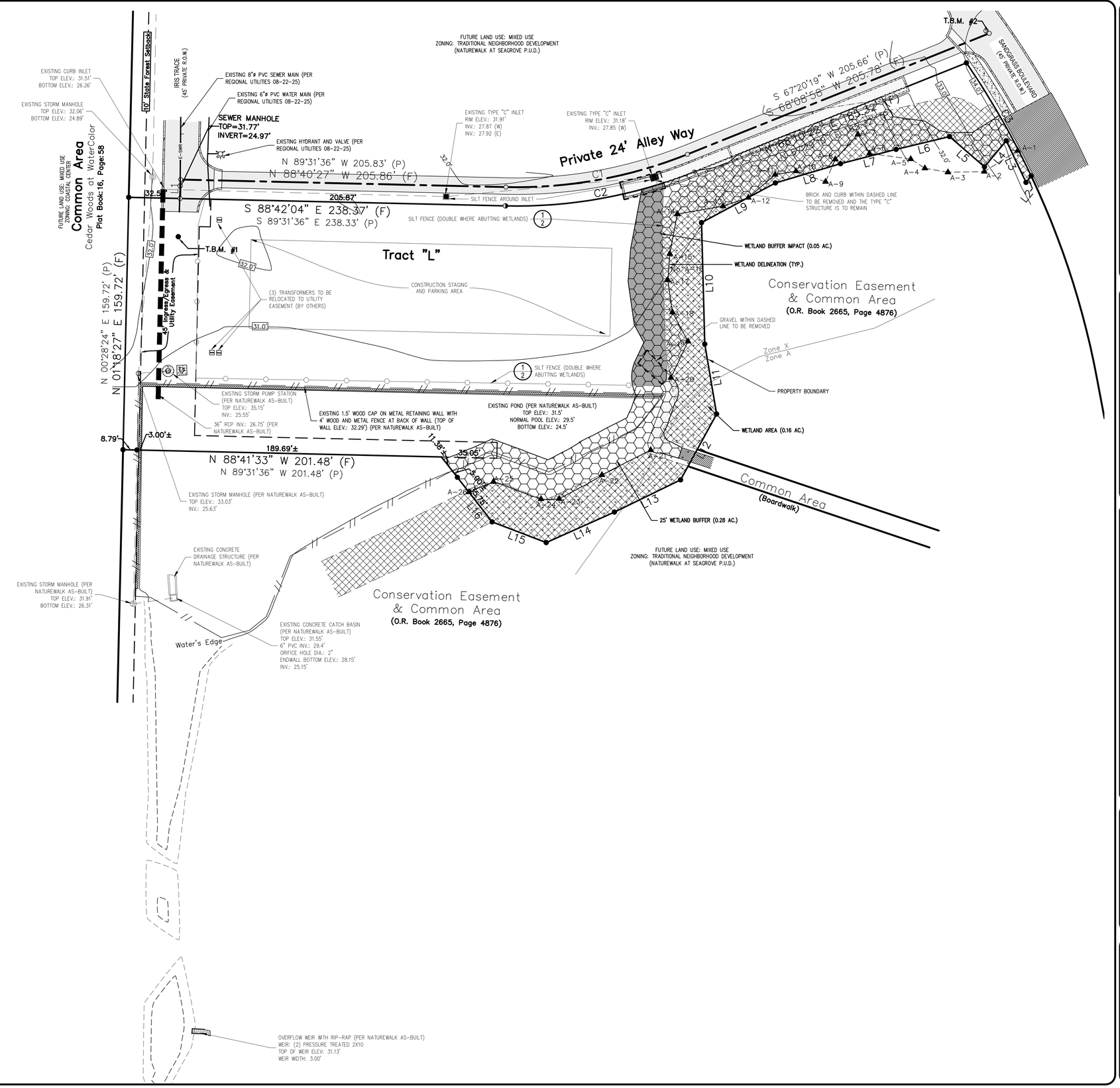
TRACT L, NATUREWALK AT SEAGROVE REPLAT, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 18, PAGES 8, 8A THROUGH 8Q, INCLUSIVE, OF THE PUBLIC RECORDS OF WALTON COUNTY, FLORIDA.



NOTE:
SILT FENCE TO BE CONSTRUCTED AND MAINTAINED AROUND ALL INLETS; ALSO ACROSS DRAINAGE COURSE AT EDGE OF SITE AND AT 150' INTERVALS.

EROSION NOTES:
1. EROSION PROTECTION: SOIL EROSION SEDIMENTATION MUST BE CONTROLLED AND RETAINED ON SITE DURING CONSTRUCTION. THEREFORE, EROSION PROTECTION, SUCH AS STAKED BALED HAY AND SILT FENCE BARRIERS, MUST BE INSTALLED PRIOR TO START OF CONSTRUCTION.
2. SILT FENCE BARRIER SHALL BE INSTALLED AS SHOWN ON PLANS, AND IN ALL AREAS SUBJECT TO SOIL EROSION SEDIMENTATION.

① SILT FENCE
(NOT TO SCALE)



www.eca-fl.com
ECAE, L.L.C.
Land Planning ● Civil Engineering
2052 West County Highway 30A, R1 - 202
Santa Rosa Beach, FLORIDA 32459
PH: (850) 267-0473 , FAX: (850) 267-0973
CERTIFICATE OF AUTHORIZATION NUMBER 35179

REQUESTED BY: TITAN ACQUISITIONS, L.L.C.

NATUREWALK TRACT L

IN SECTION 11, TOWNSHIP 3 SOUTH, RANGE 19 WEST OF WALTON COUNTY, FLORIDA

EXISTING CONDITIONS AND DEMO PLAN

REVISION	DATE	DRAWN BY	CHECK BY

THESE PLANS AND THE IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL ENGINEER

RUDOLPH A. MALL
PROFESSIONAL ENGINEER No. 94479

PROJECT: 26-007

SCALE: 1" = 30'	DRAWN BY: RAM
ORDER: 26-0021	DESIGN BY: RAM
DWG. DATE: 06-05-26	CHECK BY: RAM
FILE: 26-007_ENG-2.dwg	

SHEET
2 of 6

J:\2026\26-0072\6-0023-ENG-Engineering Services_Naturewalk, Tract L - Do\13 Drawings\26-007_ENG-2.dwg, 02-EXISTING CONDITIONS AND DEMO PLAN, Dylan Franks, 1:34 PM

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

PROPOSED LEGEND:

E-WL = EXISTING WATER LINE
E-SWR = EXISTING SEWER LINE
SF = PROPOSED SILT FENCE
BSL = PROPOSED BUILDING SETBACK LINE
LSB = PROPOSED LANDSCAPE BUFFER
P-WL = PROPOSED WATER LINE
P-SWR = PROPOSED SEWER LINE
BP = BEGINNING OF PROJECT
EP = END OF PROJECT
HP = HIGH POINT
LP = LOW POINT
TP = TRANSITION POINT
EX = EXISTING
L.F. = LINEAR FEET
INV. = INVERT
ELEV. = ELEVATION
F.F.E. = FINISHED FLOOR ELEVATION
SQ.FT. = SQUARE FEET
C.M.P. = CORRUGATED METAL PIPE
C.P.P. = CORRUGATED PLASTIC PIPE
R.C.P. = REINFORCED CONCRETE PIPE
PVC = POLYVINYL CHLORIDE
C.P.E.P. = CORRUGATED POLYETHYLENE PIPE
P.C.P.E.P. = PERFORATED CORRUGATED POLYETHYLENE PIPE
30 = PROPOSED CONTOUR ELEVATION AT 1' INTERVALS
W F = PROPOSED FIRE SERVICE
W S = PROPOSED SINGLE WATER SERVICE
S S = PROPOSED SINGLE SEWER SERVICE
△ = PROPOSED REDUCER (SEE PLAN FOR SIZE AND TYPE)
BFP = PROPOSED BACKFLOW PREVENTOR
= GATE VALVE
= WATER METER
= PROPOSED FIRE HYDRANT AND VALVE
(G) = SEWER GRINDER TANK
(S) = SEWER MANHOLE
(D) = STORM DRAINAGE MANHOLE
+10.56 = EXISTING SPOT ELEVATION AT "DOT"
18.69 = PROPOSED SPOT ELEVATION AT "DOT"
YY / XX = DETAIL DESIGNATION
YY = DETAIL NUMBER
XX = PAGE NUMBER

= EXISTING ASPHALT
= EXISTING CONCRETE
= EXISTING GRAVEL/LIMESTONE
= EXISTING WOOD
= EXISTING BRICK
25' WETLAND BUFFER/EASEMENT = AND WALTON COUNTY UPLANDS PRESERVATION AREA PER PLAT
= WETLANDS (0.16 AC.)
= WETLAND BUFFER (0.28 AC.)
= WETLAND BUFFER IMPACT (0.05 AC.)

CURVE TABLE

CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	8.76'	303.00'	1°39'21"	S 89°38'39" E	8.76'
C2	38.21'	303.00'	7°13'28"	N 85°54'56" E	38.18'
C3	53.44'	303.00'	10°06'18"	N 77°15'03" E	53.37'
C4	2.87'	25.00'	6°35'12"	S 1°44'52" W	2.87'

LIGHTING NOTE:

1. NO SITE LIGHTING IS PROPOSED AS PART OF THIS PROJECT.

GENERAL NOTES:

1. F.E.M.A. FLOOD INSURANCE RATE MAP NO. 12131C0703 H, DATED DECEMBER 30, 2020 INDICATES THAT THIS PROPERTY IS LOCATED IN "ZONE X & ZONE A",. FLOOD ZONE(S) SCALED FROM THE AFOREMENTIONED FLOOD INSURANCE RATE MAP. THIS SURVEY WAS PREPARED FOR THE CLIENT'S USE AND PURPOSE AS SHOWN.
2. SECONDARY WETLAND PROTECTION ZONE SHALL REMAIN INTACT, UNCLEARED, AND UNDISTURBED IN ACCORDANCE WITH THE APPROVED DEVELOPMENT ORDER FOR THE DEVELOPMENT.

COUNTY CONSTRUCTION NOTE:

1. CONTRACTORS SHALL MAINTAIN PUBLIC ACCESS AT ALL TIMES ALONG WALTON COUNTY RIGHTS-OF-WAYS.
2. NO PARKING OR UNLOADING OF MATERIALS SHALL OCCUR WITHIN THE PUBLIC RIGHT OF WAY.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STRUCTURES WITHIN THE PUBLIC RIGHT-OF-WAY AND SHALL REPAIR ANY DAMAGE CAUSED BY THE CONSTRUCTION ACTIVITIES TO THE PUBLIC RIGHT-OF-WAY AT THE CONTRACTOR'S EXPENSE.
4. CONTRACTOR SHALL NOT RELOCATE ANY SIDEWALK OR MULTI-USE PATH WITHIN THE COUNTY RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION FROM THE WALTON COUNTY ENGINEER.
5. ALL STOP SIGNS AND STOP BARS SHALL BE PLACED BETWEEN THE PROPERTY BOUNDARY AND THE MULTI-USE PATH AS TO FACILITATE THE TRAFFIC STOPPING BEFORE THE MULTI-USE PATH.
6. CONTRACTOR SHALL MARK ALL CROSSWALKS AND MULTI-USE PATH CROSSINGS TO INDICATE THEM AS A PEDESTRIAN PATHWAY AFTER THE FINAL DRIVEWAY IS IN PLACE.
7. ALL LANDSCAPING WITHIN THE COUNTY RIGHT-OF-WAY SHALL CONSIST OF DROUGHT TOLERANT SPECIES.

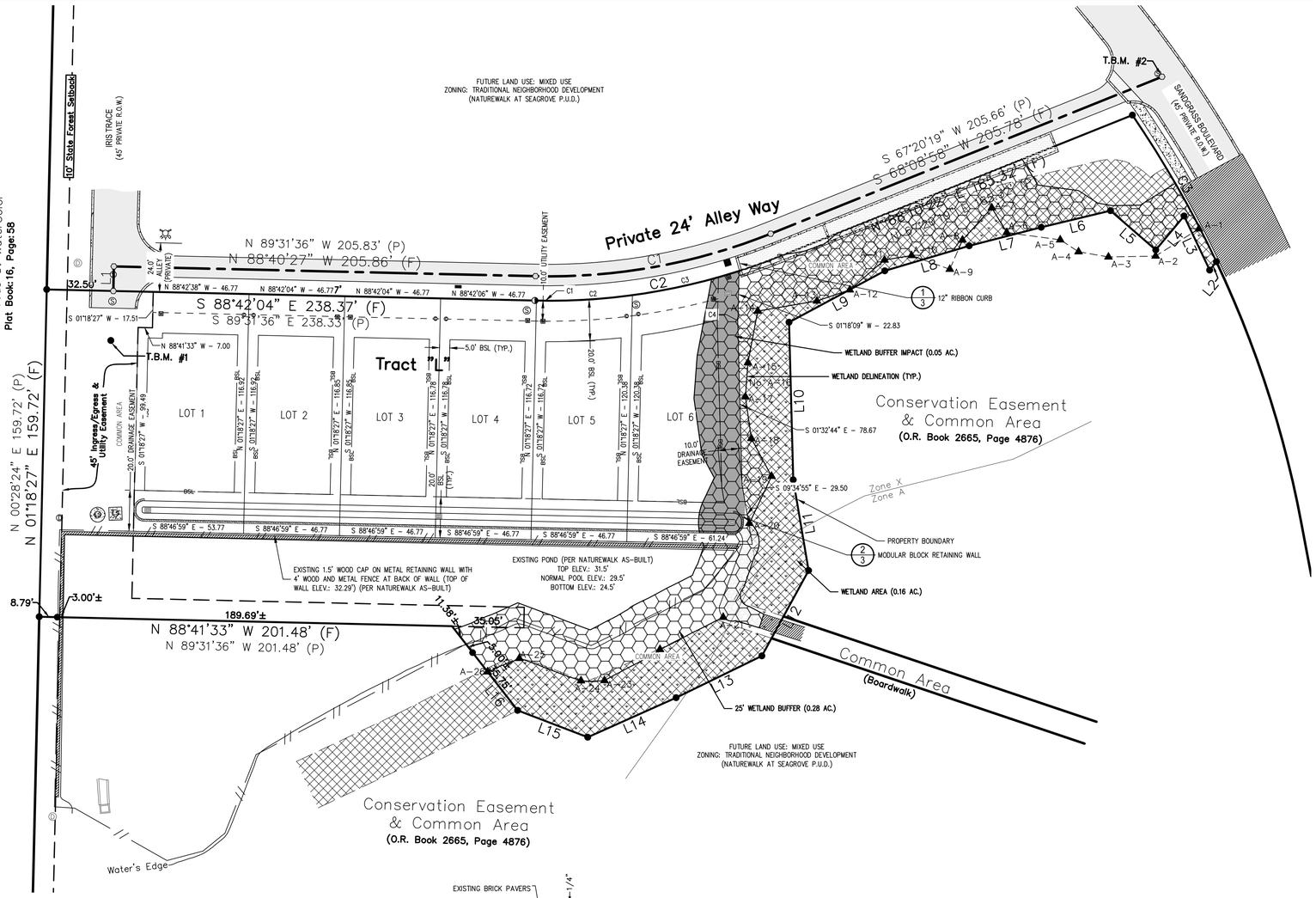
DEVELOPMENT ORDER INSPECTION NOTICE:

A PRE-CONSTRUCTION MEETING AND THE FOLLOWING INSPECTIONS AND MEETINGS WILL BE REQUIRED TO COMPLETE THE DEVELOPMENT ORDER PROCESS.

PLEASE CALL 850-267-1955 TO SCHEDULE. PLEASE ALLOW 48 HOURS FROM THE TIME THE INSPECTION IS REQUESTED TO THE TIME IT'S COMPLETED.

1. A PRE-CONSTRUCTION MEETING WITH ENGINEERING IS MANDATORY PRIOR TO MOBILIZATION ON SITE.
2. PRIOR TO CLEARING AND GRUBBING, THE SEDIMENT, EROSION AND VEGETATIVE PRESERVATION CONTROLS MUST BE INSPECTED.
3. AN INSPECTION IS REQUIRED PRIOR TO THE PLACEMENT OF PAVEMENT BASE. PROCTOR AND DENSITY TESTING RESULTS OF THE SUBGRADE MUST BE PROVIDED TO ENGINEERING PRIOR TO SCHEDULING THIS INSPECTION.
4. AN INSPECTION IS REQUIRED PRIOR TO THE PLACEMENT OF THE PAVING SURFACE COURSE. PROCTOR AND DENSITY TESTING RESULTS OF THE BASE MUST BE PROVIDED TO ENGINEERING PRIOR TO SCHEDULING THIS INSPECTION.
5. PRIOR TO THE COVERING OF ANY STORMWATER EXFILTRATION SYSTEM, AN INSPECTION IS REQUIRED.
6. A FINAL INSPECTION OF ALL INFRASTRUCTURE IMPROVEMENTS IS REQUIRED PRIOR TO THE FINAL ENGINEERING SIGN-OFF. ALL APPLICABLE CERTIFICATIONS FROM THE ENGINEER OF RECORD AND STATE AND LOCAL AGENCIES MUST BE SUBMITTED TO ENGINEERING BEFORE THE SCHEDULING OF THIS INSPECTION.

FAILURE TO SCHEDULE ANY OF THE ABOVE MAY RESULT IN THE PROJECT BEING TURNED TO CODE ENFORCEMENT AND STOP WORK ORDERS ISSUED



SITE DATA TABLE

PARCEL ID NUMBER: 11-3S-19-25010-000-00K1

FUTURE LAND USE: MIXED USE
ZONING: TRADITIONAL NEIGHBORHOOD DEVELOPMENT
LAND USAGE
CURRENT: VACANT
PROPOSED: SINGLE-FAMILY RESIDENTIAL

SITE AREA: 1.64 ACRES (71,506.30 SQ. FT.)
FLOOD ZONE: X / A (SEE NOTE)

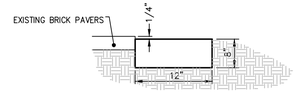
WETLANDS
JURISDICTIONAL WETLAND AREA: 6,849.89 SQ. FT. (0.16 AC.)
25' SECONDARY WETLAND BUFFER: 12,192.77 SQ. FT. (0.28 AC.)
TOTAL AREA: 19,042.66 SQ. FT. (0.44 AC.)
WETLAND BUFFER IMPACT: 2,373.11 SQ. FT. (19.5% OF WETLAND BUFFER)

BUILDING HEIGHT LIMITATION	HEIGHT	# STORIES
ALLOWED:	50'	4 STORY
PROVIDED:	TO BE DETERMINED AT TIME OF BUILDING PERMIT REVIEW	

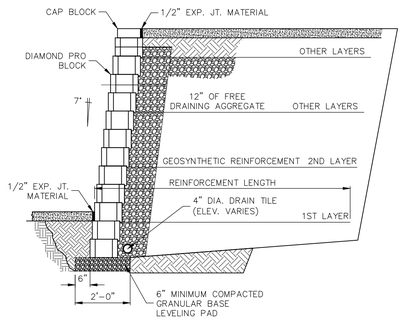
SITE DEVELOPMENT PARAMETERS

	ACRES	SQ. FT.	SITE %
TOTAL SITE AREA:	1.64	71,506.30	100.00
SITE DENSITY:			
ALLOWED:	30 MULTI-FAMILY UNITS (32.61 UNITS PER ACRE) PER PUD		
PROVIDED:	6 SINGLE-FAMILY UNITS (3.66 UNITS PER ACRE)		
SITE INTENSITY:			
DEVELOPMENT AREA:	0.83	36,272.00	50.73
IMPERVIOUS SURFACE AREA (ISR):			
ALLOWED:	N/A	N/A	N/A
PROVIDED:	0.52	22,738.68	31.80
PERVIOUS AREA (OPEN SPACE):			
ALLOWED:	N/A	N/A	N/A
PROVIDED:	1.12	48,767.62	68.20

PARKING
TOTAL REQUIRED: 2 SPACES/UNIT PER PUD (12 SPACES TOTAL)
TOTAL PROVIDED: TO BE DETERMINED AT TIME OF BUILDING PERMIT REVIEW



1 12" RIBBON CURB
(NOT TO SCALE)



2 MODULAR BLOCK RETAINING WALL
(NOT TO SCALE)

www.eca-fl.com
ECAE, L.L.C.
Land Planning ● Civil Engineering
2052 West County Highway 30A, R1 - 202
Santa Rosa Beach, FLORIDA 32459
PH: (850) 267-0473 , FAX: (850) 267-0973
CERTIFICATE OF AUTHORIZATION NUMBER 35179

REQUESTED BY: TITAN ACQUISITIONS, L.L.C.

NATUREWALK TRACT L

IN SECTION 11, TOWNSHIP 3 SOUTH, RANGE 19 WEST OF WALTON COUNTY, FLORIDA

SITE AND GEOMETRY PLAN

REVISION	DATE	DRAWN BY	CHECK BY

THESE PLANS AND THE IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL ENGINEER

RUDOLPH A. MALL
PROFESSIONAL ENGINEER No. 94479

PROJECT: 26-007

SCALE: 1" = 30'	DRAWN BY: RAM
ORDER: 26-0021	DESIGN BY: RAM
DWG. DATE: 06-05-26	CHECK BY: RAM
FILE: 26-007_ENG-2.dwg	

SHEET 3 of 6

J:\2026\26-007\26-0023-ENG-Engineering Services_Naturewalk, Tract L - Do\13 Drawings\26-007_ENG-2.dwg, 03-SITE AND GEOMETRY PLAN, Dylan Franks, 1:34 PM

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

PROPOSED LEGEND:

E-WL = EXISTING WATER LINE
E-SWR = EXISTING SEWER LINE
= PROPOSED SILT FENCE
BSL = PROPOSED BUILDING SETBACK LINE
LSB = PROPOSED LANDSCAPE BUFFER
P-WL = PROPOSED WATER LINE
P-SWR = PROPOSED SEWER LINE

BP = BEGINNING OF PROJECT
EP = END OF PROJECT
HP = HIGH POINT
LP = LOW POINT
TP = TRANSITION POINT
EX = EXISTING
L.F. = LINEAR FEET
INV. = INVERT
ELEV. = ELEVATION
F.F.E. = FINISHED FLOOR ELEVATION
SQ.FT. = SQUARE FEET
C.M.P. = CORRUGATED METAL PIPE
C.P.P. = CORRUGATED PLASTIC PIPE
R.C.P. = REINFORCED CONCRETE PIPE
PVC = POLYVINYL CHLORIDE
C.P.E.P. = CORRUGATED POLYETHYLENE PIPE
P.C.P.E.P. = PERFORATED CORRUGATED POLYETHYLENE PIPE
30 = PROPOSED CONTOUR ELEVATION AT 1' INTERVALS
FS = PROPOSED FIRE SERVICE
W = PROPOSED SINGLE WATER SERVICE
S = PROPOSED SINGLE SEWER SERVICE
= PROPOSED REDUCER (SEE PLAN FOR SIZE AND TYPE)
BFP = PROPOSED BACKFLOW PREVENTOR
= GATE VALVE
= WATER METER
= PROPOSED FIRE HYDRANT AND VALVE
G = SEWER GRINDER TANK
S = SEWER MANHOLE
D = STORM DRAINAGE MANHOLE
10.56 = EXISTING SPOT ELEVATION AT "DOT"
18.69 = PROPOSED SPOT ELEVATION AT "DOT"
YY / XX = DETAIL DESIGNATION (YY = DETAIL NUMBER, XX = PAGE NUMBER)

= EXISTING ASPHALT
= EXISTING CONCRETE
= EXISTING GRAVEL/LIMESTONE
= EXISTING WOOD
= EXISTING BRICK
= 25' WETLAND BUFFER/EASEMENT AND WALTON COUNTY UPLANDS PRESERVATION AREA

EXISTING CURB INLET
TOP ELEV.: 31.51'
BOTTOM ELEV.: 26.26'

EXISTING STORM MANHOLE
TOP ELEV.: 32.06'
BOTTOM ELEV.: 24.89'

FUTURE LAND USE: MIXED USE
ZONING: TRADITIONAL NEIGHBORHOOD DEVELOPMENT
Common Area
Cedar Woods at WaterColor
Plat Book:16, Page:58

10' State Forest Setback

IRIS TRACE
(45' PRIVATE R.O.W.)

FUTURE LAND USE: MIXED USE
ZONING: TRADITIONAL NEIGHBORHOOD DEVELOPMENT
(NATUREWALK AT SEAGROVE P.U.D.)

EXISTING TYPE "C" INLET
RIM ELEV.: 31.91'
INV.: 27.87 (W)
INV.: 27.92 (E)

EXISTING TYPE "C" INLET
RIM ELEV.: 31.18'
INV.: 27.85 (W)

SANDGRASS BOULEVARD
(45' PRIVATE R.O.W.)

T.B.M. #2

Private 24' Alley Way

UTILITY EASEMENT

BP: 0+00.00

0+00

205.87'

T.B.M. #1

Tract "L"

LOT 1 F.F.E.: 33.0
LOT 2 F.F.E.: 33.0'
LOT 3 F.F.E.: 33.0'
LOT 4 F.F.E.: 33.0'
LOT 5 F.F.E.: 33.0'
LOT 6 F.F.E.: 33.0'

1+00

1+37

EP: 1+37.30

45' Ingress/Egress & Utility Easement

20.0' DRAINAGE EASEMENT

COMMON AREA

10.0' DRAINAGE EASEMENT

TYPE "C" INLET
RIM ELEV.: 31.6'
INV.: 28.5' (E, W)
INV.: 27.0' (S)

142 L.F. 18" C.P.E.P.

143 L.F. 18" C.P.E.P.

13 L.F. 18" C.P.E.P.

112 L.F. 18" C.P.E.P.

TYPE "C" INLET
RIM ELEV.: 32.0'
INV.: 28.5'

SILT FENCE (DOUBLE WHERE ABUTTING WETLANDS)

Conservation Easement
& Common Area
(O.R. Book 2665, Page 4876)

Zone X
Zone A

PROPERTY BOUNDARY

EXISTING STORM PUMP STATION
(PER NATUREWALK AS-BUILT)
TOP ELEV.: 35.15'
INV.: 25.55'

36" RCP INV.: 26.75' (PER NATUREWALK AS-BUILT)

EXISTING 1.5' WOOD CAP ON METAL RETAINING WALL WITH 4' WOOD AND METAL FENCE AT BACK OF WALL (TOP OF WALL ELEV.: 32.29') (PER NATUREWALK AS-BUILT)

EXISTING POND (PER NATUREWALK AS-BUILT)
TOP ELEV.: 31.5'
NORMAL POOL ELEV.: 29.5'
BOTTOM ELEV.: 24.5'

8.79'
3.00'±
189.69'±
7.38'±
35.05'
5.00'±
35.75'

EXISTING STORM MANHOLE (PER NATUREWALK AS-BUILT)
TOP ELEV.: 33.03'
INV.: 25.63'

EXISTING CONCRETE
DRAINAGE STRUCTURE (PER
NATUREWALK AS-BUILT)

EXISTING STORM MANHOLE (PER
NATUREWALK AS-BUILT)
TOP ELEV.: 31.91'
BOTTOM ELEV.: 26.31'

Water's Edge

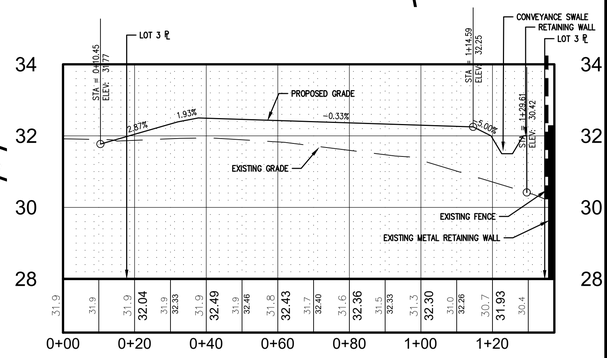
EXISTING CONCRETE CATCH BASIN
(PER NATUREWALK AS-BUILT)
TOP ELEV.: 31.55'
6" PVC INV.: 29.4'
ORIFICE HOLE DIA.: 2"
ENDWALL BOTTOM ELEV.: 28.15'
INV.: 25.15'

OVERFLOW WEIR WITH RIP-RAP (PER NATUREWALK AS-BUILT)
WEIR: (2) PRESSURE TREATED 2X10
TOP OF WEIR ELEV: 31.13'
WEIR WIDTH: 3.00'

Conservation Easement
& Common Area
(O.R. Book 2665, Page 4876)

FUTURE LAND USE: MIXED USE
ZONING: TRADITIONAL NEIGHBORHOOD DEVELOPMENT
(NATUREWALK AT SEAGROVE P.U.D.)

Common Area
(Boardwalk)



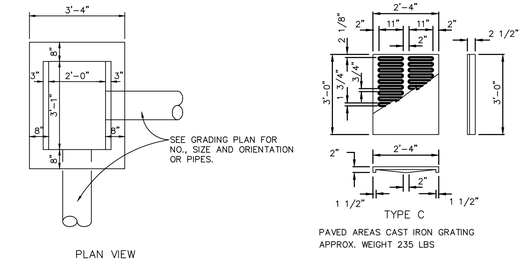
GENERAL CONSTRUCTION NOTES:

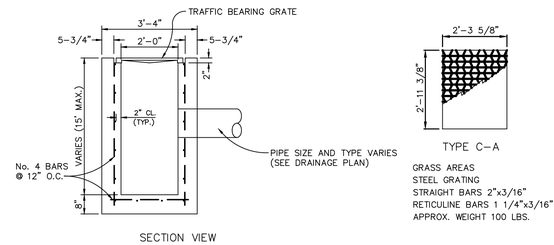
1. CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ALL UTILITY COMPANIES AND CONTRACTORS TO ASSURE ALL UNDERGROUND UTILITIES ARE IN PLACE PRIOR TO FINAL DRESSING OF DRAINAGE SWALES.
3. CONTRACTOR IS RESPONSIBLE FOR SETTING AND ESTABLISHING THE LOCATION, ALIGNMENT, ELEVATION, AND GRADING OF THE SITE FEATURES.
4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO EXISTING STRUCTURES OR UTILITIES AS A RESULT OF PERFORMING THE WORK DESCRIBED HEREIN.
5. UNSUITABLE EXCAVATED MATERIAL DURING DEGRUBBING AND SITE CLEARING SHALL BE DISPOSED OF, OFF SITE.
6. SUITABLE EXCAVATED MATERIAL MAY BE USED ON SITE AS FILL, ONLY FOLLOWING APPROVAL BY THE ENGINEER.
7. ADDITIONAL FILL MATERIAL MUST BE APPROVED BY THE ENGINEER.
8. ALL EXCAVATIONS SHALL COMPLY WITH SECTION 120 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND MEET MINIMUM SLOPE REQUIREMENTS.
9. TEMPORARY EROSION CONTROL SHALL BE ACHIEVED BY SILT FENCING, STRAW OR HAY BALES OR TEMPORARY GRASS.
10. PAVEMENT STRIPING AND MARKINGS SHALL BE THERMOPLASTIC TRAFFIC PAINT IN ACCORDANCE WITH F.D.O.T. SPECIFICATION 710.
11. CLEARING OF NATIVE VEGETATION SHALL BE LIMITED TO 25 PERCENT OF THE TOTAL AREA WITHIN THE SECONDARY WETLAND PROTECTION ZONE FOR THE PURPOSES OF MINIMAL BOARDWALKS, PUBLIC ACCESS FACILITIES &/OR LANDWARD PORTIONS OF DOCKS WHICH ARE OTHERWISE PERMITTED OR EXCEPTED WITHIN THE PRIMARY WETLAND PROTECTION ZONE.
12. PERMANENT EROSION CONTROL SHALL CONSIST OF GRASS SODDING FOR ALL DETENTION AREAS/ SWALES AND GRASS SEEDING FOR ALL OTHER DISTURBED AREAS.
13. COMPACTION OF SUBGRADE BENEATH PARKING AREAS AND BUILDING PADS SHALL BE PERFORMED USING A 10 TON VIBRATORY ROLLER WITH A MINIMUM OF TEN OVERLAPPING PASSES.
14. CONCRETE AND SOILS SHALL BE TESTED BASED ON THE FOLLOWING SCHEDULE:

MATERIAL	TEST	REQUIREMENT	FREQUENCY
CONCRETE	SLUMP	4"±1	EACH 50 CY/DAY
	COMPRESSIVE STRENGTH	3000 P.S.I. AT 28 DAYS	EACH 50 CY/DAY
BASE MATERIAL	DENSITY	98% OF LAB MAX.	1/2,500 SQ. FT.
	LBR	100%	PER MATERIAL CHANGE
SUBGRADE	DENSITY	98% OF LAB MAX.	1/2,500 SQ. FT.
	LBR	40	PER MATERIAL CHANGE

15. STORMWATER IS TO BE DIRECTED FROM DRIVEWAYS AND ROOF DRAINS TO RETENTION BASIN.
16. CONTRACTOR IS TO REMOVE SEDIMENT FROM BASINS UPON COMPLETION OF SITE WORK.
17. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND INSPECTION OF EROSION CONTROL. ADHERENCE TO NPDES PERMIT AND SWPPP DURING CONSTRUCTION IS REQUIRED.
18. BUILDING RUNOFF SHALL BE ROUTED TO CONVEYANCE SWALE VIA ROOF LEADERS AND PIPING.

TYPICAL LOT DRAINAGE





① TYPE "C" INLET
(NOT TO SCALE)

www.eca-fl.com
ECAE, L.L.C.
Land Planning ● Civil Engineering
2052 West County Highway 30A, R1 - 202
Santa Rosa Beach, FLORIDA 32459
PH: (850) 267-0473 , FAX: (850) 267-0973
CERTIFICATE OF AUTHORIZATION NUMBER 35179

REQUESTED BY: TITAN ACQUISITIONS, L.L.C.

NATUREWALK TRACT L

IN SECTION 11, TOWNSHIP 3 SOUTH, RANGE 19 WEST
OF WALTON COUNTY, FLORIDA

GRADING AND DRAINAGE PLAN

DATE	REVISION	DRAWN BY	CHECK BY

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL ENGINEER

RUDOLPH A. MALL
PROFESSIONAL ENGINEER No. 94479

PROJECT: 26-007

SCALE: 1" = 30'	DRAWN BY: RAM
ORDER: 26-0021	DESIGN BY: RAM
DWG. DATE: 06-05-26	CHECK BY: RAM
FILE: 26-007_ENG-2.dwg	

SHEET
4 of 6

THESE PLANS AND THE IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

J:\2026\26-007\26-0023-ENG-Engineering Services_Naturewalk_Tract L - Do\13 Drawings\26-007_ENG-2.dwg, 04-GRADING AND DRAINAGE PLAN, Dylan Franks, 1:34 PM

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

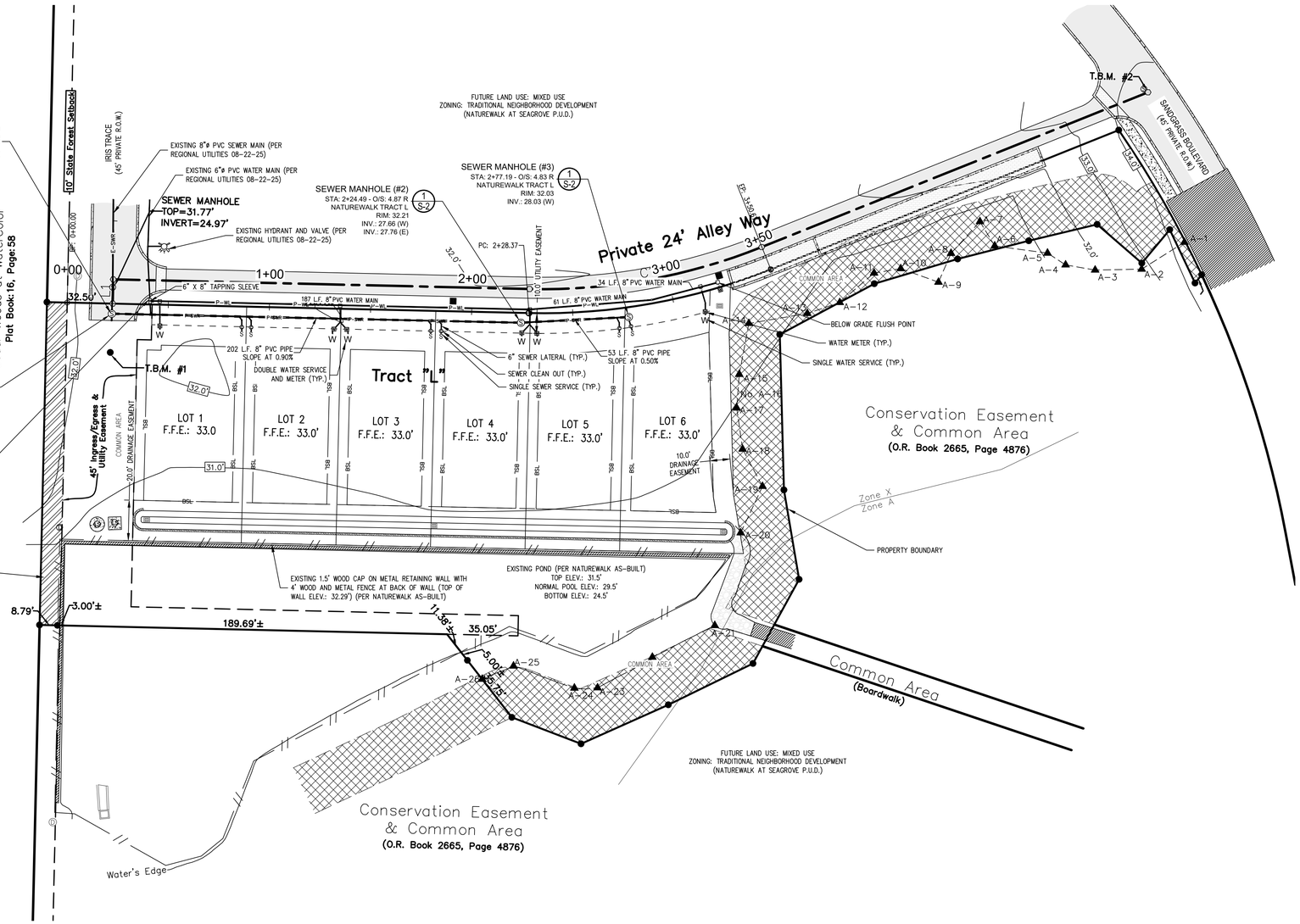
1 inch = 30 ft.

PROPOSED LEGEND:

E-WL = EXISTING WATER LINE
E-SWR = EXISTING SEWER LINE
= PROPOSED SILT FENCE
BSL = PROPOSED BUILDING SETBACK LINE
LSB = PROPOSED LANDSCAPE BUFFER
P-WL = PROPOSED WATER LINE
P-SWR = PROPOSED SEWER LINE

BP = BEGINNING OF PROJECT
EP = END OF PROJECT
HP = HIGH POINT
LP = LOW POINT
TP = TRANSITION POINT
EX = EXISTING
L.F. = LINEAR FEET
INV. = INVERT
ELEV. = ELEVATION
F.F.E. = FINISHED FLOOR ELEVATION
SQ.FT. = SQUARE FEET
C.M.P. = CORRUGATED METAL PIPE
C.P.P. = CORRUGATED PLASTIC PIPE
R.C.P. = REINFORCED CONCRETE PIPE
PVC = POLYVINYL CHLORIDE
C.P.E.P. = CORRUGATED POLYETHYLENE PIPE
P.C.P.E.P. = PERFORATED CORRUGATED POLYETHYLENE PIPE
30 = PROPOSED CONTOUR ELEVATION AT 1' INTERVALS
FS = PROPOSED FIRE SERVICE
WS = PROPOSED SINGLE WATER SERVICE
SS = PROPOSED SINGLE SEWER SERVICE
= PROPOSED REDUCER (SEE PLAN FOR SIZE AND TYPE)
RPZ = PROPOSED BACKFLOW PREVENTOR
= GATE VALVE
= WATER METER
= PROPOSED FIRE HYDRANT AND VALVE
G = SEWER GRINDER TANK
S = SEWER MANHOLE
D = STORM DRAINAGE MANHOLE
10.56 = EXISTING SPOT ELEVATION AT "DOT"
18.69 = PROPOSED SPOT ELEVATION AT "DOT"
YY/XX = DETAIL DESIGNATION
YY = DETAIL NUMBER
XX = PAGE NUMBER

= EXISTING ASPHALT
= EXISTING CONCRETE
= EXISTING GRAVEL/LIMESTONE
= EXISTING WOOD
= EXISTING BRICK
= 25' WETLAND BUFFER/EASEMENT AND WALTON COUNTY UPLANDS PRESERVATION AREA
= NATIVE VEGETATION TO REMAIN (SUPPLEMENT WHERE SPARSE)



NOTE: ALL PROPOSED UTILITIES SHALL BE PLACED UNDERGROUND.

GENERAL NOTES - POTABLE WATER CONSTRUCTION

1. CONTRACTOR SHALL COORDINATE INSTALLATION OF POTABLE WATER MAINS WITH ALL OTHER UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
2. HYDROSTATIC TESTS, LEAKAGE TESTS, DISINFECTION, AND BACTERIOLOGICAL TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE WRITTEN CONSTRUCTION SPECIFICATIONS AND ALL APPLICABLE FDEP AND AWWA REQUIREMENTS.
3. CONTRACTOR SHALL NOTIFY REGIONAL UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION. UTILITY REPRESENTATIVES WILL PERFORM ALL TAPS OF EXISTING LINES AND MUST WITNESS ALL TIES TO EXISTING LINES AND TESTS OF NEW LINES.
4. SERVICES INSTALLED UNDER ASPHALT OR CONCRETE PAVEMENT TO BE INSTALLED IN 2" SCH. 40 PVC CASING EXTENDING 4'-0" BEYOND BACK OF CURB.
5. IT IS REQUIRED THAT ALL NEW AND RELOCATED WATER SERVICES AND PLUMBING SHALL BE IN CONFORMANCE WITH STATE AND FEDERAL REGULATIONS PERTAINING TO THE CONTROL OF LEAD AND COPPER.
6. A 4" WATER BALL MARKER, AS MANUFACTURED BY 3M PART NO. 1403, SHALL BE PLACED AT ALL INLINE VALVES ALONG WATERMAIN AND AT ALL METER BOX LOCATIONS.
7. MINIMUM SEPARATION BETWEEN WATER OR SEWER AND ELECTRICAL CONDUITS OR ELECTRICAL LINES SHALL BE 72" MINIMUM HORIZONTAL AND 18" VERTICAL WITH ELECTRICAL BEING BELOW THE WATER AND SEWER LINES. IN CASES WHERE 18" VERTICAL SEPARATION CANNOT BE MET, 96" OF HORIZONTAL SEPARATION SHALL BE REQUIRED.

GENERAL NOTES - SANITARY SEWER CONSTRUCTION

1. CONTRACTOR SHALL COORDINATE INSTALLATION OF SANITARY SEWERS WITH ALL OTHER UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
2. CONTRACTOR SHALL NOTIFY UTILITY COMPANY 48 HRS PRIOR TO COMMENCEMENT OF CONSTRUCTION. UTILITY COMPANY REPRESENTATIVES MUST WITNESS ALL TIES TO EXISTING LINES AND TESTS OF NEW LINES.
3. SERVICE TRENCHING TO CONFORM TO CITY/COUNTY STANDARDS FOR PIPE INSTALLATION.

UTILITY COMPANIES

CONTRACTOR SHALL HAVE ALL EXISTING BURIED UTILITIES "LINE SPOTTED" BY CALLING 1-800-432-4770 "CALL SUNSHINE" OR BY CONTACTING LOCAL UTILITY COMPANIES.

WATER/SEWER: FLORIDA COMMUNITY SERVICES INC.
70 LOGAN LANE
SANTA ROSA BEACH, FL 32459
PHONE: 850-231-5114

TELEPHONE: SPRINT
SOUTHERN OPERATIONS
650 DENTON BOULEVARD
FT. WALTON BEACH, FL 32547
PHONE: 850-664-3751
800-488-2201

TV CABLE: MEDIACOM
1613 NANTAHALA BEACH ROAD
GULF BREEZE, FL 32563
PHONE: 866-746-7642

ELECTRIC: CHELCO
P.O. BOX 512
DeFUNIAK SPRINGS, FL 32433
PHONE: 800-342-0990

BACKFLOW PREVENTERS

1) ALL WATER SERVICE LINES SHALL BE REQUIRED TO HAVE A BACKFLOW DEVICE.

2) RPZ TYPE BACKFLOW PREVENTERS ARE REQUIRED FOR ALL HIGH HAZARD WATER USES.

3) ALL BACKFLOW PREVENTERS SHALL BE OF THE TYPE REQUIRED BY FDEP, AWWA AND NFPA CODES.

LANDSCAPE NOTES:

1. CANOPY TREES ARE TO BE 3" CALIPER AT THE TIME OF PLANTING.
2. UNDERSTORY TREES MINIMUM OF #15 CONTAINER
3. SHRUBS MINIMUM OF #3 CONTAINER
4. GROUNDCOVER MINIMUM OF #1 CONTAINER
5. SHRUBS SHALL MEASURE 12" IN HEIGHT AT THE TIME OF PLANTING.
6. SILT FENCE AND/OR STRAW/HAY BALES TO BE INSTALLED AND MAINTAINED AROUND ALL INLETS.
7. ANY PART OF THE DEVELOPMENT SITE WHICH HAS BEEN DISTURBED AND IS NOT REQUIRED FOR NATURAL AREAS PRESERVATION, BUILDINGS, STRUCTURES, PRIVATE RESIDENTIAL YARDS, LOADING AND VEHICULAR ACCESS WAYS, STREETS, PARKING AND UTILITY AREAS, PEDESTRIAN WALKS AND HARD-SURFACED ACTIVITY AREAS SHALL BE LANDSCAPED (WC LDC SECTION 5.01.01(E)).
8. ALL LANDSCAPED AREAS SHALL BE FINISHED WITH A NATURAL TOPPING MATERIAL THAT MAY INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING: GROUNDCOVER PLANTING, HYDROSEED, OR MULCH OF AT LEAST TWO INCHES IN DEPTH (WC LDC SECTION 5.01.01 (F)).
9. DRAINAGE FACILITIES SHALL BE COMPLETELY LANDSCAPED WITH PLANTINGS AND GROUND SURFACE MATERIALS. SUCH LANDSCAPING SHALL PROVIDE FOR EROSION PROTECTION WHILE ALLOWING FOR THE EFFICIENT UTILIZATION OF THE SITE (WC LDC SECTION 5.01.03).
10. WHERE THE PLANTING REQUIREMENTS REQUIRE ADDITIONAL TREES OR SHRUBS TO BE INSTALLED IN AN EXISTING NATURAL AREA, IT SHALL BE DONE IN A MANNER WHICH MINIMIZES DISTURBANCES TO NATIVE SPECIES (WC LDC SECTION 5.01.08.D.2.).
11. DIVERSITY OF PLANTINGS SHOULD BE STRIVED FOR IN ALL REQUIRED LANDSCAPE PLANTING, AND IN NO CASE SHOULD ONE SPECIES CONSTITUTE MORE THAN 50 PERCENT OF A LANDSCAPE PLAN.
12. PLANT MATERIALS ARE TO BE IN ACCORDANCE WITH "GRADES AND STANDARDS FOR NURSERY PLANTS", 1963, PARTS I AND II, STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE.

LANDSCAPE BUFFER DATA:

NORTH LANDSCAPE BUFFER
TOTAL LENGTH = 545.99 LF

REQUIRED PLANTING:
NOT SUBJECT TO BUFFER

PROVIDED PLANTING:
N/A

EAST LANDSCAPE BUFFER
TOTAL LENGTH = 686.64 LF

REQUIRED PLANTING:
NOT SUBJECT TO BUFFER

PROVIDED PLANTING:
N/A

SOUTH LANDSCAPE BUFFER
TOTAL LENGTH = 201.48 LF

REQUIRED PLANTING:
NOT SUBJECT TO LANDSCAPE BUFFER

PROVIDED PLANTING:
N/A

WEST 10' LANDSCAPE BUFFER
TOTAL LENGTH = 159.72 LF

REQUIRED PLANTING:
3 CANOPY TREES PER 100 FEET = 5 TREES
2 UNDERSTORY TREES PER 100 FEET = 4 TREES
8 SHRUBS PER 100 FEET = 13 SHRUBS

PROVIDED PLANTING:
PLATTED 10' STATE FOREST SETBACK
NATIVE VEGETATION TO REMAIN
SUPPLEMENT WHERE SPARSE WITH COUNTY APPROVED VEGETATION.

MAINTENANCE SCHEDULE:

1. TURF TO BE MOWED WEEKLY.
2. SHRUBS TO BE PRUNED QUARTERLY AS NEEDED.
3. TREES PRUNED TO ALLOW COMPLIANCE WITH THE VISION TRIANGLE.
4. GROUND COVER TO BE CUT BACK IN LATE FEBRUARY.
5. PINE STRAW TO BE APPLIED IN LATE FALL AND AT SUMMERS END.
6. TURF GRASS TO BE AERATED IN LATE FALL.
7. BEDS SHOULD BE WEEDED WEEKLY.

www.eca-fl.com
ECAE, L.L.C.
Land Planning ● Civil Engineering
2052 West County Highway 30A, R1 - 202
Santa Rosa Beach, FLORIDA 32459
PH: (850) 267-0473 , FAX: (850) 267-0973
CERTIFICATE OF AUTHORIZATION NUMBER 35179

REQUESTED BY: TITAN ACQUISITIONS, L.L.C.

NATUREWALK TRACT L

IN SECTION 11, TOWNSHIP 3 SOUTH, RANGE 19 WEST OF WALTON COUNTY, FLORIDA

UTILITY AND LANDSCAPE PLAN

DATE	REVISION	DRAWN BY	CHECK BY

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL ENGINEER

RUDOLPH A. MALL
PROFESSIONAL ENGINEER No. 94479

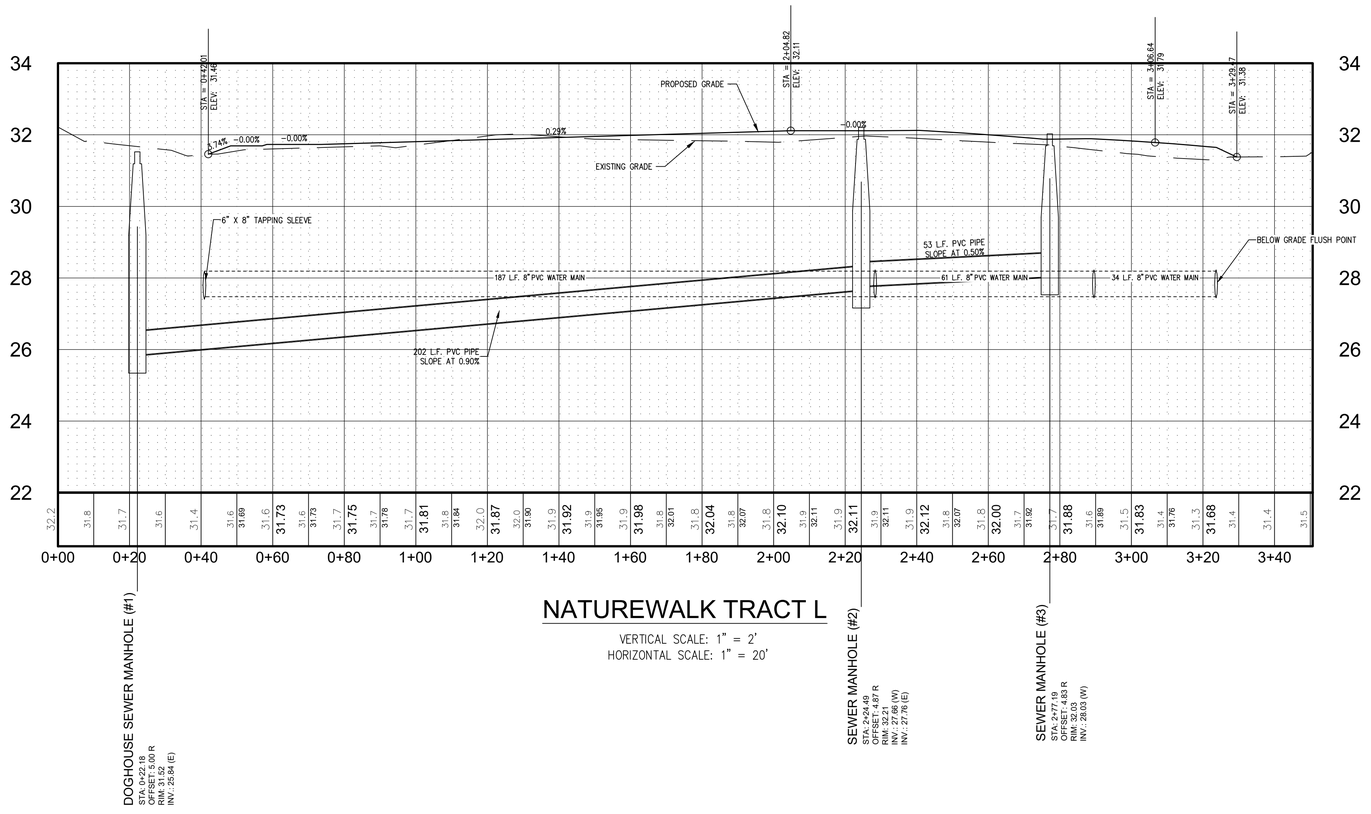
PROJECT: 26-007

SCALE: 1" = 30'	DRAWN BY: RAM
ORDER: 26-0021	DESIGN BY: RAM
DWG. DATE: 06-05-26	CHECK BY: RAM
FILE: 26-007_ENG-2.dwg	

SHEET 5 of 6

THESE PLANS AND THE IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

J:\2026\26-007\26-0023-ENG-Engineering Services_Naturewalk, Tract L - Dc\13 Drawings\26-007_ENG-2.dwg, 05-UTILITY AND LANDSCAPE PLAN, Dylan Franks, 1:34 PM



NATUREWALK TRACT L

VERTICAL SCALE: 1" = 2'
HORIZONTAL SCALE: 1" = 20'

DOGHOUSE SEWER MANHOLE (#1)
STA: 0+22.18
OFFSET: 13.00 R
RIM: 31.56
INV.: 25.84 (E)

SEWER MANHOLE (#2)
STA: 2+04.49
OFFSET: 4.87 R
RIM: 32.21
INV.: 27.66 (W)
INV.: 27.76 (E)

SEWER MANHOLE (#3)
STA: 2+77.19
OFFSET: 4.83 R
RIM: 31.89
INV.: 28.03 (W)

www.eca-fl.com

ECAE, L.L.C.

Land Planning ● Civil Engineering

2052 West County Highway 30A, R1 - 202
Santa Rosa Beach, FLORIDA 32459
PH: (850) 267-0473 , FAX: (850) 267-0973

CERTIFICATE OF AUTHORIZATION NUMBER 35179

REQUESTED BY: TITAN ACQUISITIONS, L.L.C.

NATUREWALK TRACT L

IN SECTION 11, TOWNSHIP 3 SOUTH, RANGE 19 WEST
OF WALTON COUNTY, FLORIDA

CROSS SECTION DETAILS

DATE	REVISION	DRAWN BY	CHECKED BY

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL ENGINEER

RUDOLPH A. MALL
PROFESSIONAL ENGINEER No. 94479

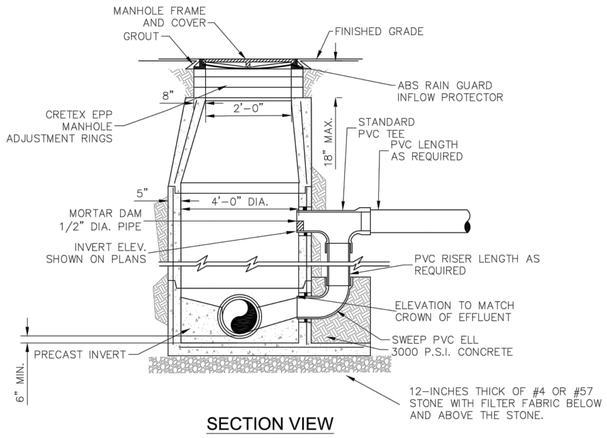
PROJECT: 26-007

SCALE: AS NOTED	DRAWN BY: RAM
ORDER: 26-0021	DESIGN BY: RAM
DWG. DATE: 06-05-26	CHECK BY: RAM
FILE: 26-007_ENG-2.dwg	

SHEET
6 of 6

THESE PLANS AND THE IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

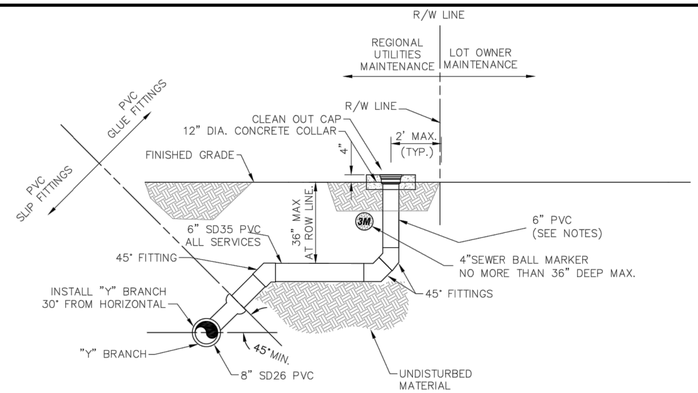
J:\2026\26-007\26-0023-ENG-Engineering Services_Naturewalk, Tract L - Do\13 Drawings\26-007_ENG-2.dwg, 06-CROSS SECTION DETAILS, Dylan Franks, 1:34 PM



SECTION VIEW

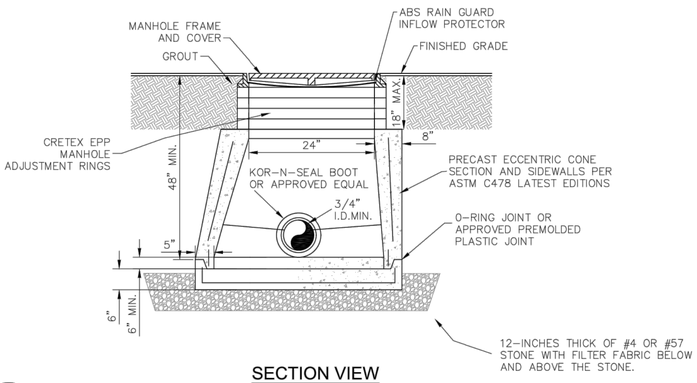
1 **SANITARY SEWER DROP MANHOLE**

N.T.S. (8"–21" SEWERS)



2 **6" SANITARY SEWER SERVICE LATERAL**

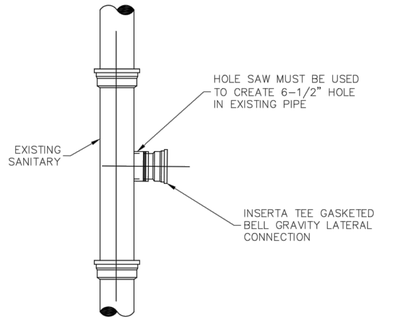
N.T.S.

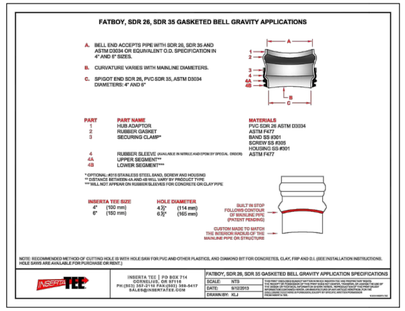


SECTION VIEW

3 **SANITARY SEWER SHALLOW DEPTH MANHOLE**

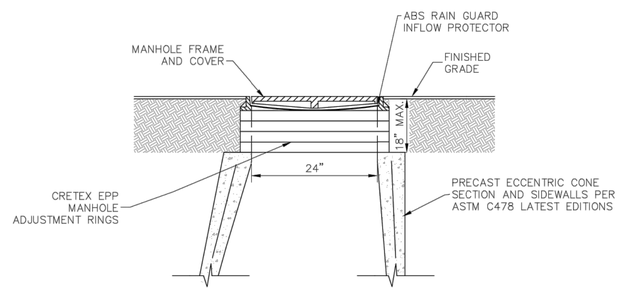
N.T.S. (8"–21" SEWERS)





4 **SANITARY SEWER SERVICE TO EXISTING GRAVITY LINE CONNECTION DETAILS**

N.T.S.



SECTION VIEW

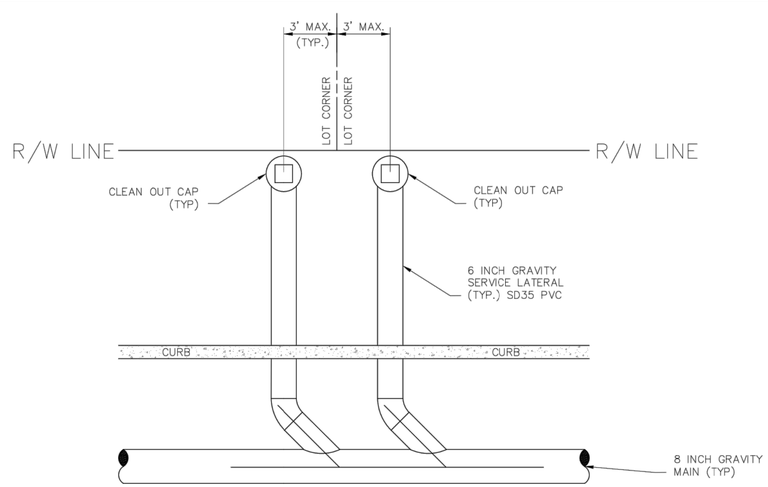
NOTES

1. CRETEX EXPANDED POLY PROPYLENE MANHOLE ADJUSTMENT RINGS, TO BE INSTALLED ON ALL MANHOLES WHERE RISERS ARE NECESSARY. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. AN ABS RAIN GUARD INFLOW PROTECTOR SHALL BE INSTALLED IN ALL MANHOLE RING AND COVERS.

5 **TYPICAL MANHOLE RISER DETAIL**

N.T.S.

APPROVED FOR 2026



6 **TYPICAL GRAVITY SEWER SERVICE LOT PLACEMENT**

N.T.S.

GENERAL NOTES:

1. REFER TO REGIONAL UTILITIES' LATEST WRITTEN SPECIFICATIONS REGARDING NEW TESTING PROCEDURES FOR GRAVITY SEWER SYSTEMS.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND MEETING THE REQUIREMENTS OF REGIONAL UTILITIES STANDARD DETAILS AND SPECIFICATIONS LATEST EDITION.
3. DEVELOPERS OF PRIVATE PROJECTS SHALL PROVIDE ALL WETLANDS PERMITS NECESSARY FOR UTILITY CONSTRUCTION.
4. ALL MANHOLES SHALL HAVE FINAL PAVEMENT AROUND THEM FOR PROTECTION PRIOR TO ACCEPTANCE BY REGIONAL UTILITIES.
5. ALL SEWER MAINS SHALL BE COVERED TO FINISH GRADING FOR PROTECTION PRIOR TO ACCEPTANCE BY REGIONAL UTILITIES.
6. ALL MANHOLES SHALL HAVE NON–STEEL STEPS INSTALLED.
7. 90° FITTINGS SHALL NOT BE USED IN GRAVITY SEWER SYSTEMS.

SANITARY SEWER GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE INSTALLATION OF SANITARY SEWERS WITH ALL OTHER UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
2. VIDEO INSPECTION IS REQUIRED FOR ALL GRAVITY SEWER LINES AND LATERALS PRIOR TO PAVING BUT AFTER ALL OTHER UTILITIES HAVE BEEN INSTALLED. A FULL REPORT SHALL BE GIVEN TO REGIONAL UTILITIES UPON COMPLETION. COST OF VIDEO INSPECTION SHALL BE DONE BY THE CONTRACTOR. REFER TO SECTION 7 OF REGIONAL UTILITIES' DESIGN AND CONSTRUCTION SPECIFICATIONS.
3. NO SANITARY SEWER CONSTRUCTION SHALL COMMENCE UNTIL SHOP DRAWING SUBMITTALS HAVE BEEN APPROVED.
4. A PRE–CONSTRUCTION CONFERENCE IS REQUIRED PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY REGIONAL UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A REGIONAL UTILITIES REPRESENTATIVE MUST WITNESS ALL TIES TO EXISTING LINES AND TESTS OF NEW LINES.
5. ENGINEER SHALL PROVIDE AS–BUILT DRAWINGS IN ACCORDANCE WITH REGIONAL UTILITIES SPECIFICATIONS.
6. LOCATOR BALLS AS MANUFACTURED BY 3M PART NO. 1404 TO BE PLACED ON NORTH SIDE OF ALL MANHOLES NOT WITHIN PAVED AREAS. MANHOLES OUTSIDE OF PAVED AREAS SHALL BE CONSTRUCTED WITH TOP 6" ABOVE GRADE.
7. ALL GRAVITY SEWER SHALL BE VISUALLY INSPECTED BY REGIONAL UTILITIES PRIOR TO FINAL ACCEPTANCE.
8. ALL MECHANICAL JOINT CONNECTIONS SHALL BE RESTRAINED USING MEGA–LUG TYPE RESTRAINTS OR APPROVED EQUAL.
9. MIN. SERVICE SLOPE: 6" = 1/8" PER FOOT.
10. USE 6" SERVICES FOR ALL SINGLE FAMILY HOME CONNECTIONS. USE 6" SERVICES FOR MULTI–FAMILY AND COMMERCIAL CONNECTIONS.
11. A 4" BALL MARKER AS MANUFACTURED BY 3M PART NO. 1404 SHALL BE PLACED AT ALL CLEANOUT LOCATIONS NO DEEPER THAN 36–INCHES.
12. LOCATIONS OF SERVICE STUB TO BE MARKED BY THE LETTER "S" SCRIBED A MINIMUM OF 2" HIGH & 1/4" DEEP IN CURB.
13. IF NO CURBING IS INSTALLED A "3" SQUARE STEEL TAG INSCRIBED WITH A 2" LETTER "S" IS TO BE ATTACHED TO STREET PAVEMENT.
14. SERVICE TRENCHING TO CONFORM TO CITY/COUNTY STANDARDS FOR PIPE INSTALLATION.
15. USE HYDRAULIC CEMENT GROUT TO SEAL INTERIOR AND EXTERIOR OF ALL PRECAST MANHOLE JOINTS.
16. ALL GRAVITY SEWER MAINS AND SEWER SERVICES SHALL BE CONSTRUCTED OF P401 COATED DUCTILE IRON PIPE WHERE COVER IS LESS THAN 30 INCHES UNDER PAVEMENT OR LESS THAN 18 INCHES IN GREEN AREAS.
17. EXTERNAL DROP TYPE MANHOLES ARE REQUIRED WHERE MANHOLE INVERT ELEVATIONS VARY BY OVER 12–INCHES.
18. MANHOLE TOPS IN GREEN AREAS SHALL BE ELEVATED NO LESS THAN 6–INCHES ABOVE FINAL GRADE TO PROHIBIT STORM WATER ENTRY.
19. SEWER SERVICES SHALL BE CONSTRUCTED AT THE LOWER SIDE OF LOTS AS MAY BE APPLICABLE.
20. ALL CONSTRUCTION MUST BE IN ACCORDANCE WITH REGIONAL UTILITIES WRITTEN SPECIFICATIONS, LATEST EDITION.
21. A RAIN GUARD INFLOW PROTECTOR CONSTRUCTED OF ABS MATERIAL SHALL BE INSTALLED ON EVERY MANHOLE TO HELP PREVENT STORM WATER INFLOW.
22. A MANHOLE SHALL BE REQUIRED WHERE ANY 8" SEWER LATERAL CONNECTS TO AN 8" GRAVITY SEWER MAIN.
23. GRAVITY SEWER LATERAL TEE–WYE SHALL ENTER THE GRAVITY SEWER MAIN AT NO LESS THAN A 45° ANGLE.
24. WHERE A SEWER FORCE MAIN ENTERS A WET WELL THAT IS ALSO CONNECTED TO A GRAVITY SEWER SYSTEM, NO LESS THAN TWO MANHOLES UPSTREAM OF THE WET WELL, OR ANY MANHOLE WITHIN 400–FEET OF THE WET WELL SHALL BE LINED WITH THE EPOXY COATING PER REGIONAL SPECIFICATION 9.3.2.13.
25. PRIOR TO A FINAL INSPECTION, ALL LOT CORNERS SHALL BE STAKED BY THE SURVEYOR. INSPECTOR WILL NOT PERFORM FINAL INSPECTION IF STAKING IS INCOMPLETE.

www.eca-fl.com
ECAE, L.L.C.
Land Planning • Civil Engineering
2052 West County Highway 30A, R1 - 202
Santa Rosa Beach, FLORIDA 32459
PH: (850) 267-0473 , FAX: (850) 267-0973
CERTIFICATE OF AUTHORIZATION NUMBER 35179

REQUESTED BY: TITAN ACQUISITIONS, L.L.C.

NATUREWALK TRACT L

IN SECTION 11, TOWNSHIP 3 SOUTH, RANGE 19 WEST OF WALTON COUNTY, FLORIDA

SANITARY SEWER STANDARD DETAIL

DATE	REVISION	DRAWN BY	CHECK BY

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL ENGINEER

RUDOLPH A. MALL
PROFESSIONAL ENGINEER No. 94479

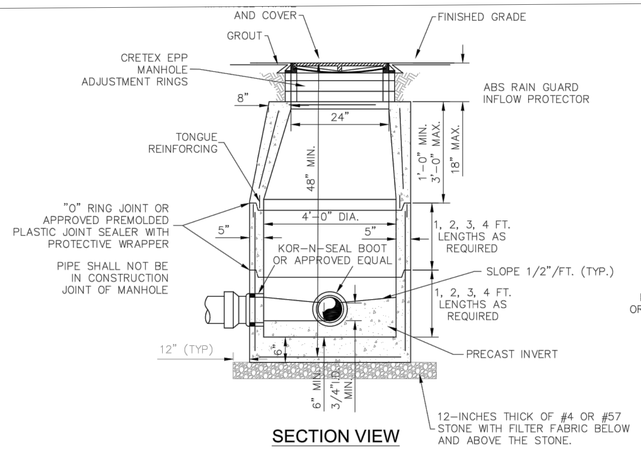
PROJECT: 26-007

SCALE: N.T.S.	DRAWN BY: RAM
ORDER: 26–0021	DESIGN BY: RAM
DWG. DATE: 06–05–26	CHECK BY: RAM
FILE: 26–007_ENG–2.dwg	

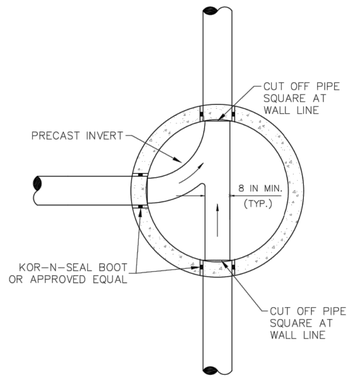
SHEET S-1

THESE PLANS AND THE IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

J:\2026\26-007\26-0023-ENG-Engineering Services_Naturewalk, Tract L - Div13 Drawings\26-007_ENG-2.dwg, 10-SANITARY SEWER STANDARD DETAIL, Dylan Franks, 1:34 PM



SECTION VIEW



PLAN VIEW

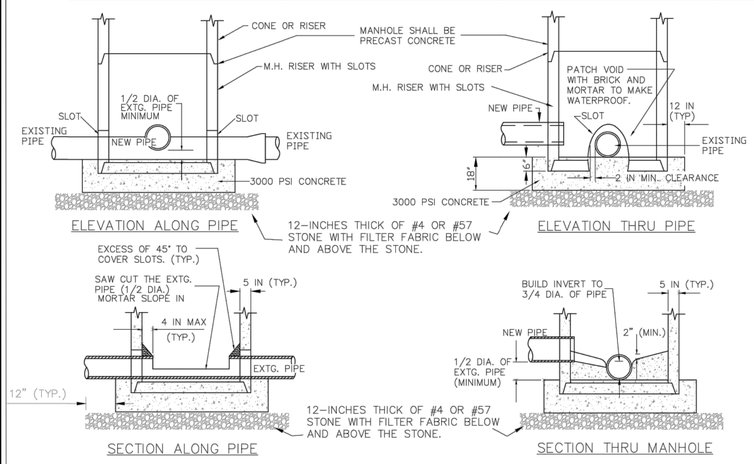
NOTES

1. PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH LATEST EDITION OF ASTM C 478 WITH 4,000 LB. CONCRETE, TYPE II CEMENT.
2. THE INTERIOR AND EXTERIOR OF MANHOLE SHALL BE GIVEN TWO COATS OF FABERTITE BITUMINOUS WATERPROOFING MATERIAL, DO NOT COAT JOINT OF PIPE OPENING SURFACES.
3. STEPS ARE REQUIRED FOR ALL MANHOLES.

NOTE: MANHOLE FRAME AND COVER SHALL BE U.S. FOUNDRY E-170 OR EQUIVALENT.

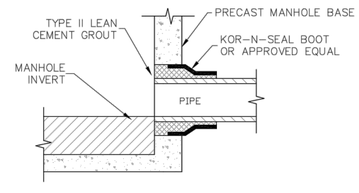
1 SANITARY SEWER STANDARD MANHOLE

N.T.S. (8"-21" SEWERS)



3 DOGHOUSE MANHOLE

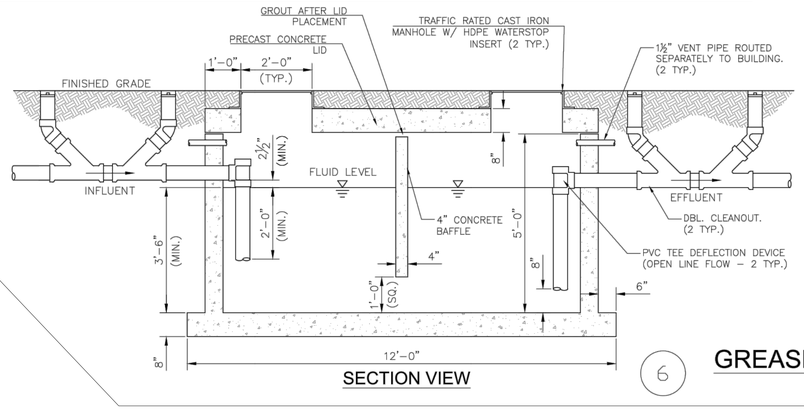
N.T.S. (8"-21" SEWERS)

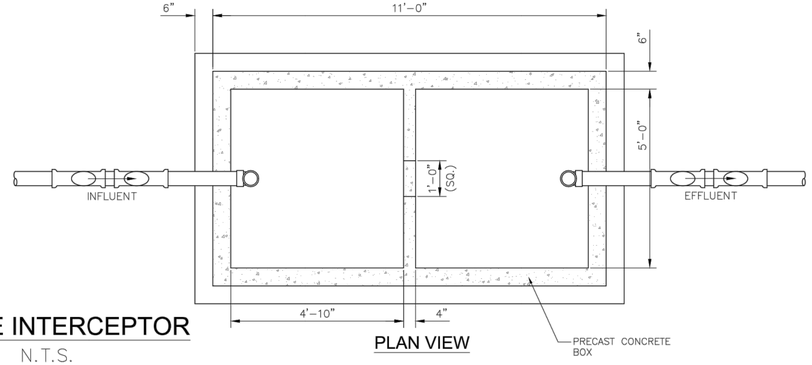


4 PRECAST MANHOLE PIPE CONNECTIONS

N.T.S.

NOTES:
1. PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH LATEST EDITIONS OF ASTM C-478 WITH 4,000 LB. CONCRETE, TYPE II CEMENT.
2. THE INTERIOR AND EXTERIOR OF MANHOLE SHALL BE GIVEN TWO COATS OF FABERTITE BITUMINOUS WATERPROOFING MATERIAL, DO NOT COAT JOINT OR PIPE OPENING SURFACES.
3. MANHOLE FRAME AND COVER SHALL BE U.S. FOUNDRY E-170 OR EQUIVALENT.
4. ALL GREASE INTERCEPTORS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CHAPTER 10 OF THE 2004 FLORIDA BUILDING CODE, PLUMBING SECTION.

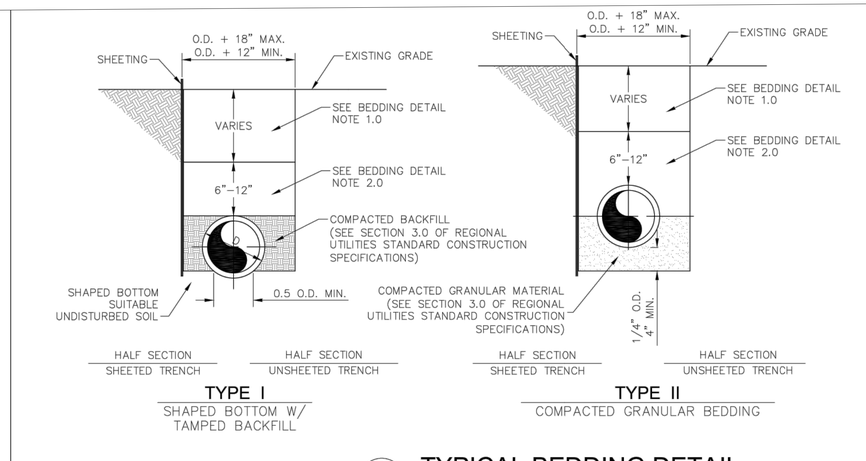




PLAN VIEW

6 GREASE INTERCEPTOR

N.T.S.



2 TYPICAL BEDDING DETAIL

N.T.S.

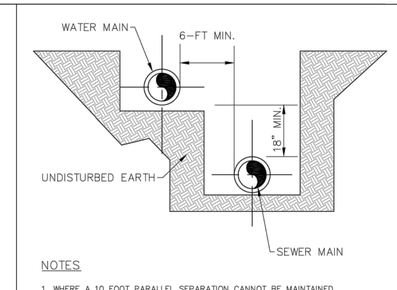
BEDDING DETAIL NOTES:

1.0 THE BACKFILL TO A POINT TWELVE (12) INCHES ABOVE THE PIPE SHALL BE PLACED BY HAND AND SHALL BE CAREFULLY SELECTED MATERIAL FREE FROM ROCKS, BOULDERS, CLODS, ORGANIC MATERIAL, OR OTHER DEBRIS AND LIGHTLY COMPACTED PRIOR TO PLACING REMAINING BACKFILL. THE BALANCE OF THE BACKFILL MAY BE PLACED IN THE DITCH BY HAND OR BY MECHANICAL EQUIPMENT. NO BACKFILL SHALL BE DROPPED DIRECTLY ONTO EXPOSED PIPE.

2.0 CONTRACTOR SHALL EMPLOY AN EXCAVATOR-MOUNTED TRENCH ROLLER OR OTHER MECHANICAL COMPACTION EQUIPMENT TO PROVIDE BACKFILL DENSITIES OF 95% OR GREATER AT ±2% OPTIMUM MOISTURE CONTENT. SURFACE FLOODING AND WATER JETTING OF BACKFILL SHALL NOT BE PERMITTED FOR BACKFILL CONSOLIDATION.

3.0 ALL BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 3.0 OF REGIONAL UTILITIES CONSTRUCTION SPECIFICATIONS

4.0 PIPE COVER SHALL NOT BE LESS THAN 36 INCHES, NOR GREATER THAN 48 INCHES EXCEPT WHERE SPECIFICALLY SHOWN ON THE CONSTRUCTION DRAWINGS AND APPROVED BY REGIONAL UTILITIES.

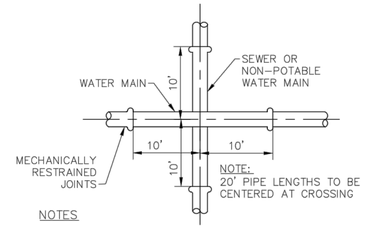


NOTES

1. WHERE A 10 FOOT PARALLEL SEPARATION CANNOT BE MAINTAINED BETWEEN A WATER MAIN AND A SEWER MAIN OR NON-POTABLE WATER MAIN, THEN THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER MAIN OR NON-POTABLE WATER MAIN AND 6 FEET HORIZONTALLY FROM THE EDGE OF THE SEWER MAIN OR NOT-POTABLE WATER MAIN.
2. ANYTHING LESS THAN SHOWN MUST BE APPROVED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

5 WATER/SEWER SEPARATION DETAIL

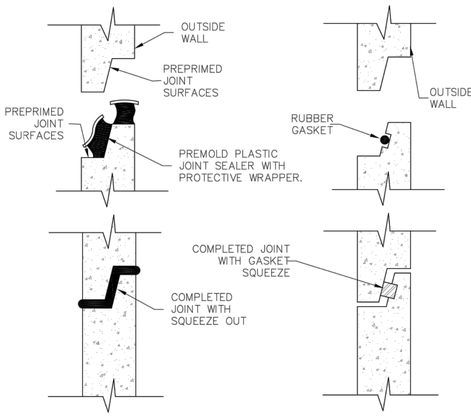
N.T.S.



NOTES

1. WHERE A 18 INCH VERTICAL SEPARATION DISTANCE CANNOT BE MAINTAINED BETWEEN A WATER MAIN AND A SEWER MAIN OR NON-POTABLE WATER MAIN CROSSING THEN THE WATER MAIN SHALL PASS OVER THE SEWER MAIN OR NON-POTABLE WATER MAIN WITH A MINIMUM VERTICAL CLEARANCE OF 12 INCHES. THE SEWER OR NON-POTABLE WATER MAIN SHALL BE 20 FEET OF 6" CONCRETE ENCASEMENT CENTERED ON THE POINT OF CROSSING AND THE WATER MAIN SHALL BE 20 FEET OF 6" CONCRETE ENCASEMENT CENTERED ON THE POINT OF CROSSING. CONCRETE ENCASEMENT SHALL BE POURED SEPARATELY FOR EACH PIPE.
2. ANYTHING LESS THAN SHOWN MUST BE APPROVED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

APPROVED FOR 2026



NOTE:
USE HYDRAULIC CEMENT GROUT INSIDE AND OUT AT JOINTS AND COAT WITH TWO COATS OF FABERTITE BITUMINOUS WATER PROOFING MATERIAL.

7 TYPICAL MANHOLE JOINT DETAIL

N.T.S.

www.eca-fl.com
ECAE, L.L.C.
Land Planning • Civil Engineering
2052 West County Highway 30A, R1 - 202
Santa Rosa Beach, FLORIDA 32459
PH: (850) 267-0473 , FAX: (850) 267-0973
CERTIFICATE OF AUTHORIZATION NUMBER 35179

REQUESTED BY: TITAN ACQUISITIONS, L.L.C.

NATUREWALK TRACT L
IN SECTION 11, TOWNSHIP 3 SOUTH, RANGE 19 WEST OF WALTON COUNTY, FLORIDA

SANITARY SEWER STANDARD DETAILS

DATE	REVISION	DRAW BY	CHECK BY

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL ENGINEER

RUDOLPH A. MALL
PROFESSIONAL ENGINEER No. 94479

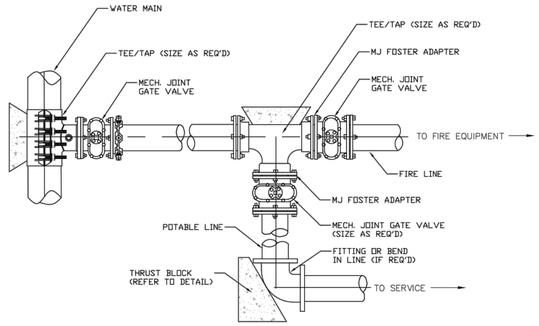
PROJECT: 26-007

SCALE: N.T.S.	DRAWN BY: RAM
ORDER: 26-0021	DESIGN BY: RAM
DWG. DATE: 06-05-26	CHECK BY: RAM
FILE: 26-007_ENG-2.dwg	

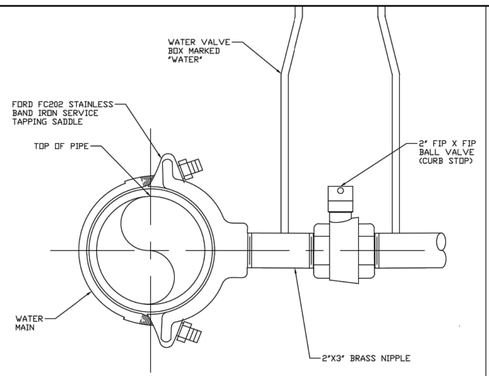
SHEET S-2

THESE PLANS AND THE IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

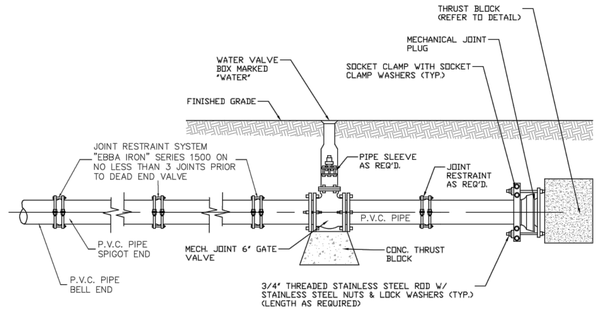
J:\2026\26-007\26-0023-ENG-Engineering Services_Naturewalk, Tract L - Do\13 Drawings\26-007_ENG-2.dwg, 11-SANITARY SEWER STANDARD DETAILS, Dylan Franks, 1:34 PM



1 **CONNECTION FOR FIRE AND WATER SERVICE**
(FOR BORED WATER MAIN SITUATIONS ONLY)
N.T.S.



2 **2" WATER MAIN HOT TAP**
(TAPS MADE BY CONTRACTOR UNDER REGIONAL UTILITIES SUPERVISION)
N.T.S.



NOTE:
ALL PIPE & FITTINGS SHOWN VARY IN SIZE.

3 **DEAD END STUB OUT**
N.T.S.

GENERAL NOTES – POTABLE WATER CONSTRUCTION

1. CONTRACTOR SHALL COORDINATE INSTALLATION OF POTABLE WATER MAINS WITH ALL OTHER UTILITIES PRIOR TO COMMENCING CONSTRUCTION.

2. HYDROSTATIC TESTS, LEAKAGE TESTS, DISINFECTION, AND BACTERIOLOGICAL TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE WRITTEN CONSTRUCTION SPECIFICATION OF REGIONAL UTILITIES AND ALL APPLICABLE F.D.E.P. AND AWWA REQUIREMENTS.

3. NO POTABLE WATER MAIN CONSTRUCTION SHALL COMMENCE UNTIL SHOP DRAWINGS HAVE BEEN APPROVED AND A PRE-CONSTRUCTION CONFERENCE HELD WITH REGIONAL UTILITIES STAFF.

4. PROVIDE LOCKS, IN ACCORDANCE WITH THE WRITTEN CONSTRUCTION SPECIFICATIONS OF REGIONAL UTILITIES, ON ALL CURB STOPS.

5. CONTRACTOR SHALL NOTIFY REGIONAL UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION. UTILITY REPRESENTATIVES WILL PERFORM ALL TAPS OF EXISTING LINES AND MUST WITNESS ALL TIES OF AND TESTS OF NEW LINES.

6. IT IS REQUIRED THAT ALL NEW AND RELOCATED WATER SERVICES AND PLUMBING SHALL BE IN CONFORMANCE WITH STATE AND FEDERAL REGULATIONS PERTAINING TO THE CONTROL OF LEAD AND COPPER.

7. CONTRACTOR SHALL PROVIDE A COMPOSITE METER BOX WITH A COMPOSITE LID AT THE CURB STOP OF ALL WATER SERVICES AS SHOWN IN THE TYPICAL WATER METER INSTALLATION DETAIL. MATERIALS SHALL BE IN ACCORDANCE WITH THE WRITTEN SPECIFICATIONS OF REGIONAL UTILITIES. METER IS TO BE SET BY REGIONAL UTILITIES.

8. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS IN ACCORDANCE WITH REGIONAL UTILITIES SPECIFICATIONS.

9. THE LOCATION OF ALL WATER SERVICE STUBS ARE TO BE MARKED BY THE LETTER "W" SCRIBED A MINIMUM OF 2" HIGH AND 1/4 DEEP IN TOP OF CURB. IF NO CURBING IS INSTALLED A 3" SQUARE STEEL TAG INSCRIBED WITH A 2" LETTER "W" IS TO BE ATTACHED TO THE STREET PAVEMENT.

10. A 4" WATER BALL MARKER, AS MANUFACTURED BY 3M PART NO. 1403, SHALL BE PLACED AT ALL INLINE VALVES ALONG WATER MAIN, AT ALL CORP STOP LOCATIONS, AND IN ALL METER BOXES. MAXIMUM DEPTH OF MARKER BALL IS 36".

11. ALL MECHANICAL JOINTS SHALL USE MEGA-LUG RESTRAINT TYPE RETAINING GLANDS.

12. MINIMUM SEPARATION BETWEEN WATER OR SEWER AND ELECTRICAL CONDUITS OR ELECTRICAL LINES SHALL BE 72" MINIMUM HORIZONTAL & 18" VERTICAL WITH ELECTRICAL BEING BELOW THE WATER AND SEWER LINES. IN CASES WHERE 18" VERTICAL SEPARATION CAN NOT BE MET, 96" OF HORIZONTAL SEPARATION SHALL BE REQUIRED.

13. ALL MECHANICAL JOINT FITTINGS ON PRESSURE PIPE SHALL HAVE BOTH "MEGALUG" TYPE JOINT RESTRAINING GLANDS AND THRUST BLOCKS.

14. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND MEETING THE REQUIREMENTS OF REGIONAL UTILITIES STANDARD DETAILS AND SPECIFICATIONS LATEST EDITION.

15. ANY LOCATION WHERE PRESSURE PIPELINES CURVATURE EXCEEDS MANUFACTURES' SPECIFICATIONS; APPROPRIATE MECHANICAL JOINT FITTINGS SHALL BE USED.

16. ALL 2-INCH VALVES SHALL BE BALL TYPE. 2-INCH GATE VALVES SHALL NOT BE USED.

17. ALL TIE IN TO EXISTING PRESSURIZED PIPELINES SHALL BE BY TAPPING SLEEVE (3 INCH TAP AND LARGER) (OR TAPPING SADDLE, 2 INCH TAP AND SMALLER) AND VALVE.

18. DEVELOPERS OF PRIVATE PROJECTS SHALL PROVIDE ALL WETLANDS PERMITS NECESSARY FOR UTILITY CONSTRUCTION.

19. ALL CONSTRUCTION MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF REGIONAL UTILITIES' STANDARD SPECIFICATIONS.

20. JOINT RESTRAINTS SHALL BE REQUIRED ON ALL WATER MAINS LOCATED IN PAVED AREAS AND WETLANDS.

21. ALL WATER TAPS SHALL BE LOCATED OUT FROM UNDER PROPOSED FUTURE PAVEMENT.

22. WATER SERVICES SHALL BE LOCATED ABOVE STORMWATER EXFILTRATION SYSTEMS.

23. POTABLE WATER MAINS SHALL BE LOCATED ABOVE STORMWATER EXFILTRATION SYSTEMS.

24. PRIOR TO A FINAL INSPECTION, ALL LOT CORNERS SHALL BE STAKED BY THE SURVEYOR. INSPECTOR WILL NOT PERFORM FINAL INSPECTION IF STAKING IS INCOMPLETE.

25. POTABLE WATER SERVICES AND FIRE LINES SHALL BE ON SEPARATE TAPS UNLESS THE TAP IS ACROSS THE ROAD AND A DIRECTIONAL BORE IS REQUIRED. REFER TO DETAIL #1 ON THIS SHEET IF A DIRECTIONAL BORE IS REQUIRED.

BACKFLOW PREVENTORS

1. ALL WATER SERVICE LINES SHALL BE REQUIRED TO HAVE A BACKFLOW DEVICE PURSUANT TO REGIONAL UTILITIES SPECIFICATIONS.

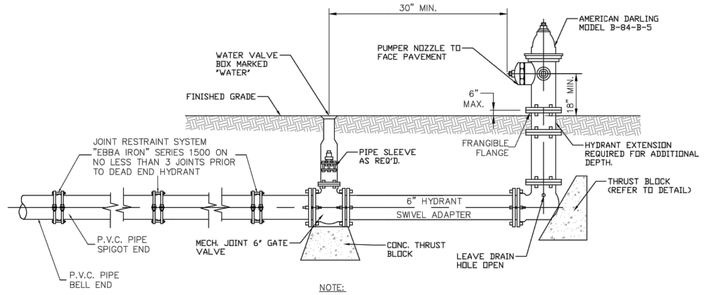
2. ALL FIRE LINES SHALL HAVE A DOUBLE DETECTOR CHECK VALVE ASSEMBLY WITH A 5/8" BYPASS METER. THE METER SHALL BE PURCHASED FROM REGIONAL UTILITIES.

3. REDUCED PRESSURE ZONE BACKFLOW ASSEMBLIES (RPZ) ARE REQUIRED FOR ALL COMMERCIAL, HIGH HAZARD WATER USES, AND FOR HOUSEHOLDS WITH RECLAIM WATER IRRIGATION SERVICES.

4. ALL BACKFLOW PREVENTORS SHALL BE OF THE TYPE REQUIRED BY F.D.E.P. AWWA AND NFPA CODES AND MUST BE PER REGIONAL UTILITIES BACKFLOW PREVENTION MANUAL.

5. ALL SWIMMING POOLS SHALL HAVE RPZ BACKFLOW PREVENTORS.

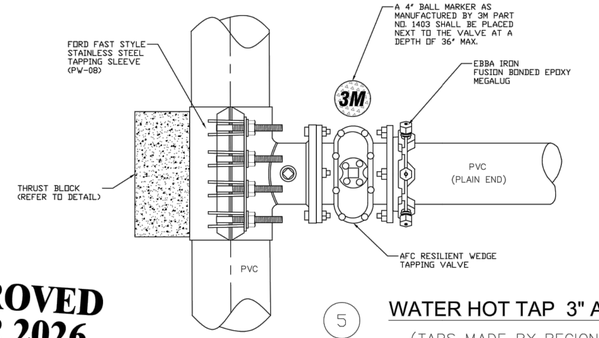
6. ALL WATER SERVICES 1-1/2" AND LARGER ARE REQUIRED TO HAVE AN RPZ BACKFLOW PREVENTOR REGARDLESS IF RESIDENTIAL OR COMMERCIAL.



NOTE:
ALL PIPE & FITTINGS SHOWN VARY IN SIZE.

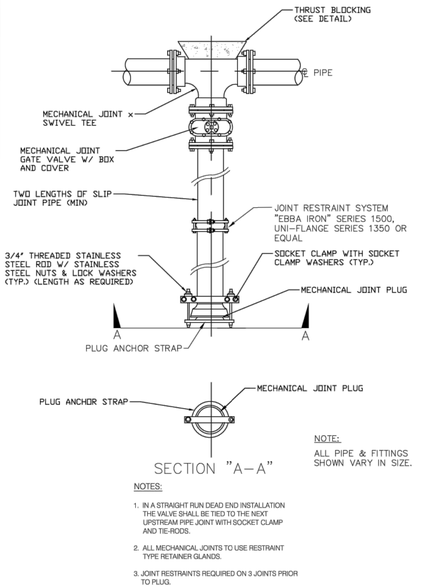
4 **DEAD END FIRE HYDRANT INSTALLATION**
N.T.S.

APPROVED FOR 2026



NOTES:
1. THE EDGE OF THE TAPPING SLEEVE SHALL BE AT LEAST 24" FROM THE BELL END OF THE PIPE
2. TAPPING SLEEVE SHALL BE PRESSURE TESTED AT 150 PSI FOR A MINIMUM OF 15 MINUTES. TEST SHALL BE WITNESSED BY REGIONAL UTILITIES
3. RESTRAINTS REQUIRED ON AT LEAST TWO BELLS OR 40', WHICHEVER IS GREATER, DOWNSTREAM OF TAPPING VALVE.

5 **WATER HOT TAP 3" AND LARGER**
(TAPS MADE BY REGIONAL UTILITIES)
N.T.S.

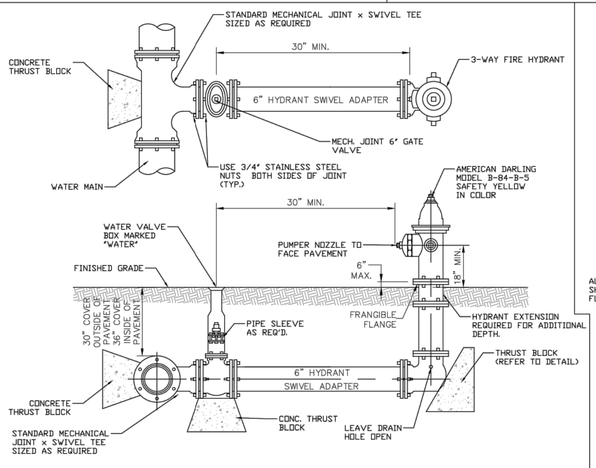


SECTION "A-A"

NOTE:
ALL PIPE & FITTINGS SHOWN VARY IN SIZE.

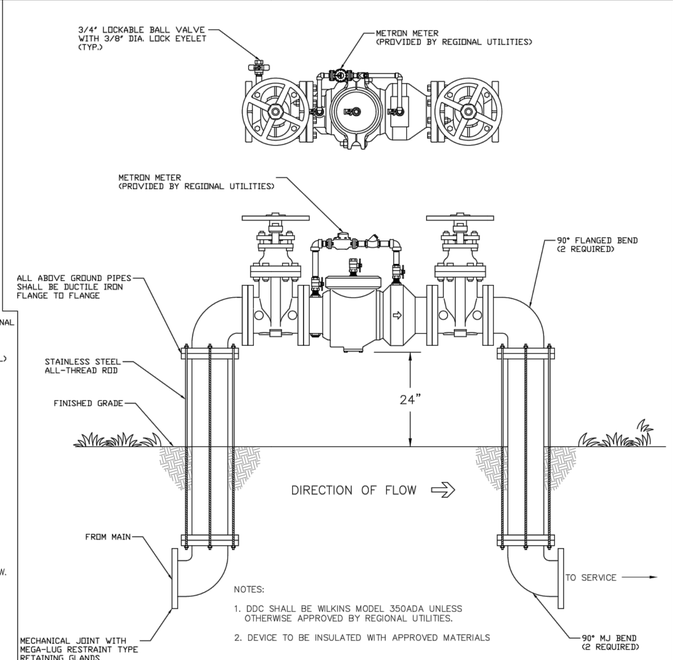
NOTES:
1. IN A STRAIGHT RUN DEAD END INSTALLATION THE VALVE SHALL BE TIED TO THE NEXT UPSTREAM PIPE JOINT WITH SOCKET CLAMP AND TIE-RODS.
2. ALL MECHANICAL JOINTS TO USE RESTRAINT TYPE RETAINER GLANDS.
3. JOINT RESTRAINTS REQUIRED ON 3 JOINTS PRIOR TO PLUG.

6 **DEAD END STUB DETAIL**
N.T.S.



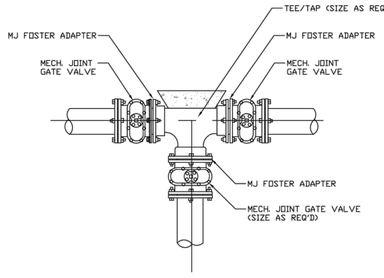
NOTES:
1. FIRE HYDRANTS SHALL BE INSTALLED BETWEEN BACK OF CURB AND FACE OF SIDEWALK WITHIN R/W EXCEPT WHERE CONDITIONS AND OR REGULATION PROHIBIT. FIRE HYDRANTS SHALL BE LOCATED WITHIN RIGHTS OF WAY OR UTILITY EASEMENTS.
2. ALL RODS AND ASSOCIATED HARDWARE SHALL BE STAINLESS STEEL.
3. ALL MECHANICAL JOINTS SHALL USE MEGA-LUG RESTRAINT TYPE RETAINING GLANDS.
4. VALVE BOXES SHALL BE HEIGHT ADJUSTABLE.
5. AMERICAN DARLING MODEL B-84-B-5 HYDRANT SAFETY YELLOW IN COLOR.
6. IF A HYDRANT IS TO BE INSTALLED MORE THAN 10-FEET FROM THE WATER MAIN, A SECOND VALVE SHALL BE USED. REFER TO SECTION 6.3.14.11 OF THE DESIGN AND CONSTRUCTION SPECIFICATIONS.
7. HYDRANTS MUST HAVE A MINIMUM OF 3' CLEARANCE AROUND THEM.
8. HYDRANTS MUST BE PLACED AT LEAST 3' INSIDE OF R.O.W. FROM PROPERTY LINE.
9. HYDRANTS SHALL NOT BE PLACED NEAR POWER TRANSFORMERS.

7 **TYPICAL FIRE HYDRANT INSTALLATION**
N.T.S.



NOTES:
1. DDC SHALL BE WILKINS MODEL 350ADA UNLESS OTHERWISE APPROVED BY REGIONAL UTILITIES.
2. DEVICE TO BE INSULATED WITH APPROVED MATERIALS

8 **FIRE LINE BACK FLOW PREVENTOR**
N.T.S.



9 **3-WAY VALVE ASSEMBLY**
N.T.S.

www.eca-fl.com
ECAE, L.L.C.
Land Planning ● Civil Engineering
2052 West County Highway 30A, R1 - 202
Santa Rosa Beach, FLORIDA 32459
PH: (850) 267-0473 , FAX: (850) 267-0973
CERTIFICATE OF AUTHORIZATION NUMBER 35179

REQUESTED BY: TITAN ACQUISITIONS, L.L.C.

NATUREWALK TRACT L

IN SECTION 11, TOWNSHIP 3 SOUTH, RANGE 19 WEST OF WALTON COUNTY, FLORIDA

POTABLE WATER STANDARD DETAILS

DATE	REVISION	DRAWN BY	CHECKED BY

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL ENGINEER

RUDOLPH A. MALL
PROFESSIONAL ENGINEER No. 94479

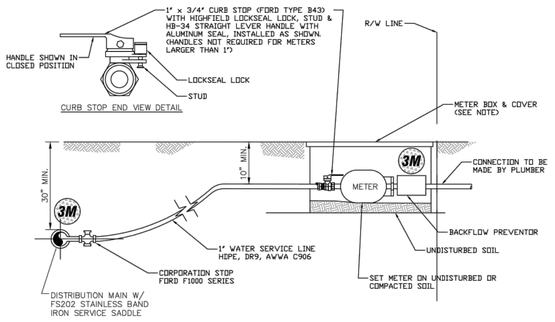
PROJECT: 26-007

SCALE: N.T.S.	DRAWN BY: RAM
ORDER: 26-0021	DESIGN BY: RAM
DWG. DATE: 06-05-26	CHECK BY: RAM
FILE: 26-007_ENG-2.dwg	

SHEET W-1

THESE PLANS AND THE IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

J:\2026\26-007\26-0023-ENG-Engineering Services_Naturewalk, Tract L - Dc\13 Drawings\26-007_ENG-2.dwg, 09-POTABLE WATER STANDARD DETAILS, Dylan Franks, 1:34 PM



A 4" BALL MARKER AS MANUFACTURED BY 3M PART NO.1403 SHALL BE PLACED NEXT TO CORPORATION STOP AND IN THE METER BOX. AT A DEPTH OF 36" MAX.

NOTES:
1. 5/8", 3/4", & 1" METERS SHALL BE INSTALLED IN DFW PLASTICS DFW36C-12 COMPOSITE METER BOX WITH DFW36-1A LID.

2. 1-1/2" & 2" METERS SHALL BE INSTALLED IN DFW PLASTICS DFW1730C-12 COMPOSITE METER BOX WITH DFW1730C-1A LID.

3. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ONE METER BOX PER LOT AND THE WATER SERVICE WITH CURB STOP AND LOCKSEAL LOCK SHALL BE STUBBED IN BOX.

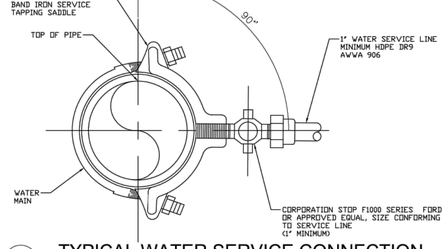
4. CONTRACTOR SHALL COORDINATE INSTALLATION OF POTABLE WATER SERVICES WITH ALL OTHER UTILITIES PRIOR TO COMMENCING CONSTRUCTION.

5. NO METERS WILL BE SET UNTIL REGIONAL UTILITIES HAS RECEIVED CLEARANCE TO PLACE THE SYSTEM INTO SERVICE FROM F.D.E.P.

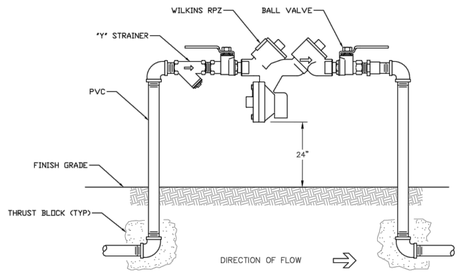
IN ORDER TO RECEIVE CLEARANCE FROM F.D.E.P. THE FOLLOWING PROCEDURE MUST BE COMPLETED:

CONTRACTOR MUST PERFORM PRESSURE TEST, FLUSH AND ARRANGE FOR A FINAL INSPECTION. PRESSURE TEST AND FLUSH MUST BE WITNESSED BY A REGIONAL UTILITIES INSPECTOR. UPON PASSING THE PRESSURE TEST AND FINAL INSPECTION, REGIONAL UTILITIES WILL TAKE BACTERIOLOGICAL TEST. THE ENGINEER FOR THE PROJECT MUST SUBMIT THE BACTERIOLOGICAL TEST RESULTS, AS-BUILT DRAWINGS AND CERTIFICATION OF COMPLETION FORMS TO REGIONAL UTILITIES. REGIONAL UTILITIES WILL THEN SIGN THE COMPLETION FORMS AND FORWARD THEM TO F.D.E.P. WITH COPIES OF THE BACTERIOLOGICAL TEST RESULTS. UPON THEIR REVIEW AND APPROVAL, F.D.E.P. WILL SEND REGIONAL UTILITIES A LETTER GRANTING PERMISSION FOR THE SYSTEM TO BE PLACED INTO OPERATION.

1 TYPICAL WATER METER INSTALLATION
N.T.S.



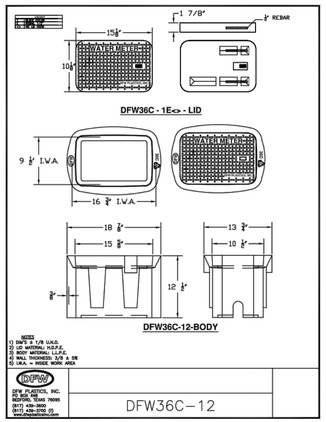
2 TYPICAL WATER SERVICE CONNECTION
N.T.S.



NOTES:
1. RPBA SHALL BE WILKINS UNLESS OTHERWISE APPROVED BY REGIONAL UTILITIES

2. DEVICE TO BE INSULATED WITH APPROVED MATERIALS

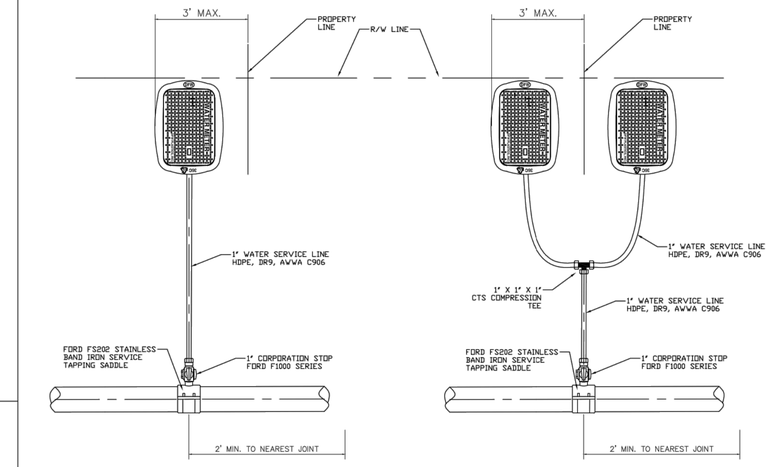
3 REDUCED PRESSURE BACKFLOW ASSEMBLY 3/4"-2"
N.T.S.



NOTES
1) DIM'S ± 1/8 U.N.O.
2) LID MATERIAL: H.D.P.E.
3) BODY MATERIAL: L.L.P.E.
4) WALL THICKNESS: 3/8 ± 5%
5) I.W.A. = INSIDE WORK AREA

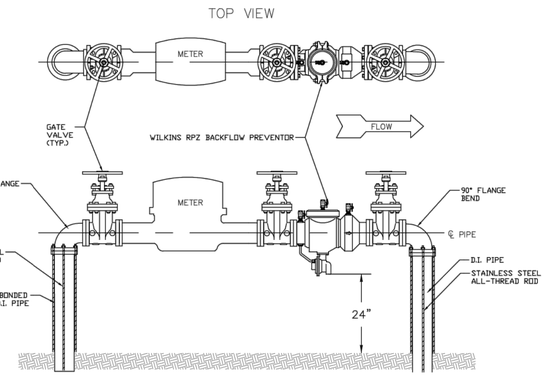
DFW PLASTICS, INC.
PO BOX 648
BEDFORD, TEXAS 76095
(817) 439-3800
(817) 439-3700 (f)
www.dfwplasticsinc.com

COMPOSITE METER BOX WITH TRAFFIC RATED COMPOSITE LID 3/4" - 1" METERS DFW PLASTICS, INC.
4
N.T.S.



5 TYPICAL WATER SERVICE INSTALLATIONS
N.T.S.

APPROVED FOR 2026



NOTES:

1. DUCTILE IRON PIPE SHALL BE COMPATIBLE WITH METER SIZE.

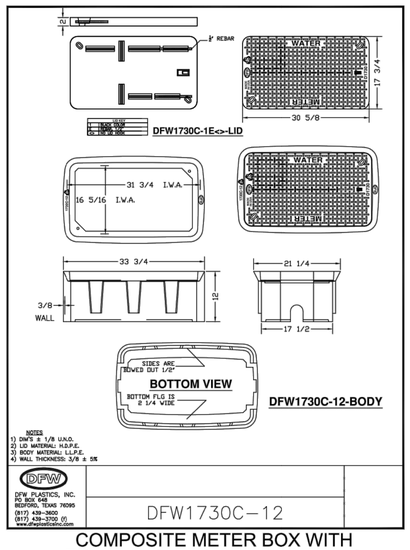
2. DUCTILE IRON PIPE SHALL CONFORM TO REGIONAL UTILITIES STANDARDS AND SPECIFICATION.

3. ENTIRE ASSEMBLY MUST BE INSULATED.

4. THE BACKFLOW PREVENTOR SHALL BE LOCATED DOWN STREAM FROM THE METER.

5. ALL ABOVE GROUND PIPE AND FITTINGS SHALL BE FLANGED.

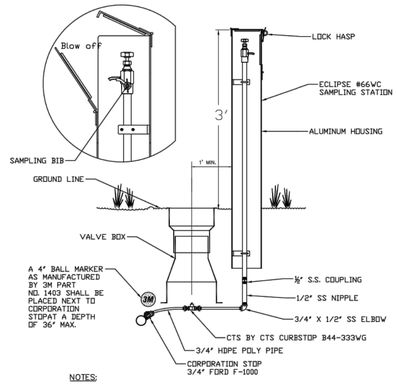
6 3" OR LARGER ABOVE GROUND METER & RPZ BACKFLOW INSTALLATION
N.T.S.



NOTES
1) DIM'S ± 1/8 U.N.O.
2) LID MATERIAL: H.D.P.E.
3) BODY MATERIAL: L.L.P.E.
4) WALL THICKNESS: 3/8 ± 5%

DFW PLASTICS, INC.
PO BOX 648
BEDFORD, TEXAS 76095
(817) 439-3800
(817) 439-3700 (f)
www.dfwplasticsinc.com

COMPOSITE METER BOX WITH TRAFFIC RATED COMPOSITE LID 1-1/2" - 2" METERS DFW PLASTICS, INC.
7
N.T.S.



NOTES:

1. SAMPLING STATIONS SHALL BE 1' BURY, WITH A ½" MIP INLET, AND A 7/64" UNTHREADED BLOW OFF.

2. ALL STATIONS SHALL BE ENCLOSED IN A LOCKABLE, NON-REMOVABLE 6" SQUARE ALUMINUM HOUSING. ALL OPENINGS SHALL BE HINGED.

3. WHEN OPEN, THE STATION SHALL REQUIRE NO KEY FOR OPERATION, AND WATER WILL FLOW IN AN ALL STAINLESS STEEL WATERWAY.

4. ALL WORKING PARTS SHALL BE OF STAINLESS STEEL AND SERVICEABLE FROM ABOVE GROUND WITH NO DIGGING OR REPLACEMENT NEEDED.

5. A SLOW TURNING VALVE WITH 6 TURNS TO OPEN WILL CONTROL THE WATER FLOW, AND BE LOCATED AFTER THE SAMPLING BIB.

6. AS MANUFACTURED BY KUPFERLE FOUNDRY, ST. LOUIS MO. 63102. MODEL # 66WC, OR APPROVED EQUAL.

8 TYPICAL WATER SAMPLING STATION
N.T.S.

www.eca-fl.com
ECAE, L.L.C.
Land Planning • Civil Engineering
2052 West County Highway 30A, R1 - 202
Santa Rosa Beach, FLORIDA 32459
PH: (850) 267-0473 , FAX: (850) 267-0973
CERTIFICATE OF AUTHORIZATION NUMBER 35179

REQUESTED BY: TITAN ACQUISITIONS, L.L.C.

NATUREWALK TRACT L

IN SECTION 11, TOWNSHIP 3 SOUTH, RANGE 19 WEST OF WALTON COUNTY, FLORIDA

POTABLE WATER STANDARD DETAILS

REVISION	DATE	DRAWN BY	CHECK BY

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL ENGINEER

RUDOLPH A. MALL
PROFESSIONAL ENGINEER No. 94479

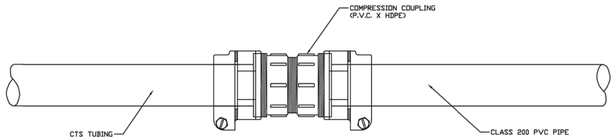
PROJECT: 26-007

SCALE: N.T.S.	DRAWN BY: RAM
ORDER: 26-0021	DESIGN BY: RAM
DWG. DATE: 06-05-26	CHECK BY: RAM
FILE: 26-007_ENG-2.dwg	

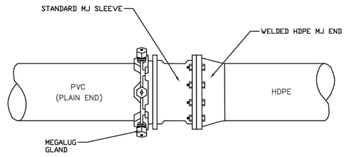
SHEET W-2

THESE PLANS AND THE IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

J:\2026\26-007\26-0023-ENG-Engineering Services_Naturewalk, Tract L - Dot13 Drawings\26-007_ENG-2.dwg, 10-POTABLE WATER STANDARD DETAILS, Dylan Franks, 1:35 PM

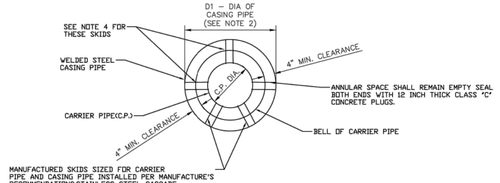


1 HDPE TO PVC TRANSITION
(UP TO 2" DIAMETER)
N.T.S.



NOTE:
JOINT RESTRAINT REQUIRED ON 3 PVC JOINTS BEFORE TRANSITION CONNECTION

2 HDPE-TO-PVC CONNECTION
(3" PIPE AND LARGER)
N.T.S.



6 TYPICAL CASING DETAIL
N.T.S.

	CASING PIPE SIZES (MIN.)											
CARRIER PIPE NOM. DIA. (D2)	4"	6"	8"	10"	12"	14"	16"	18"	22"	24"	30"	36"
CASING PIPE NOM. DIA. (D1)	8"	12"	16"	22"	24"	30"	30"	30"	36"	36"	48"	60"
HWY X-ING WALL THK.-INCHES	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.250	0.375	0.500

NOTES:
1. MIN. COVER TO TOP OF CASING SHALL BE 36".

2. THE INSIDE DIAMETER OF THE CASING PIPE SHALL BE 4" GREATER THAN THAN THE OUTSIDE DIAMETER OF THE CARRIER PIPE BELL OR COUPLING.

3. ALL JACK AND BORE CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION UTILITY ACCOMMODATION MANUAL, LATEST EDITION.

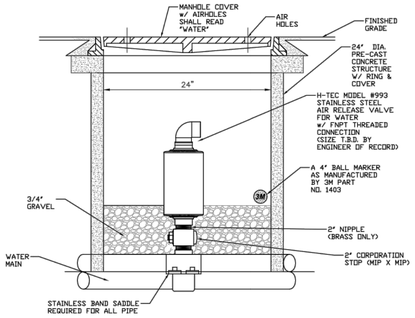
4. SKIDS SHALL BE SECURED TO THE CARRIER PIPE AS PER MANUFACTURERS RECOMMENDATIONS. (MINIMUM OF 3 SKIDS PER PIPE JOINT.)

5. ROTATION OF CARRIER PIPE INSIDE THE CASING PIPE WILL NOT BE PERMITTED. ALL JOINTS WITHIN THE CASING SHALL HAVE JOINT RESTRAINTS INSTALLED.

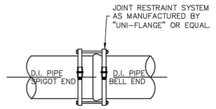
6. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING OF CASING AND CARRIER PIPE INSTALLATION FOR APPROVAL PRIOR TO PURCHASING MATERIALS.

7. CASING SHALL EXTEND A MINIMUM OF 8 FEET PAST EDGE OF PAVEMENT.

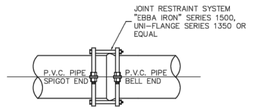
WATER MAIN CROSSING FOR ROADWAYS



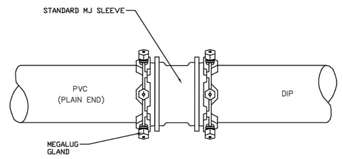
7 H-TEC 2-INCH
AUTOMATIC AIR
RELEASE VALVE
MODEL #993
STAINLESS STEEL
N.T.S.



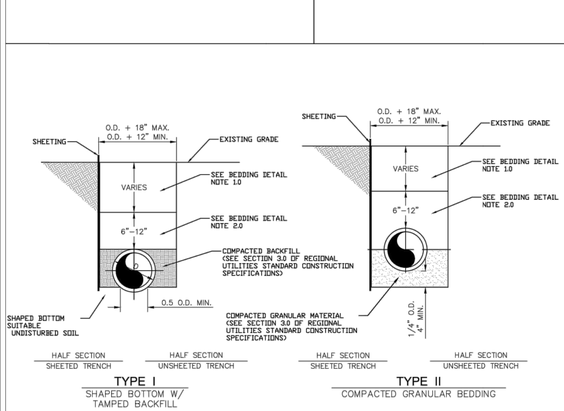
TYPICAL RESTRAINED
D.I. TO D.I. JOINT
3 N.T.S.



TYPICAL RESTRAINED
P.V.C. JOINT
4 N.T.S.



TYPICAL RESTRAINED
CAST IRON/DUCTILE IRON TO P.V.C. JOINT
5 N.T.S.



TYPE I
SHAPED BOTTOM W/
TAMPED BACKFILL

TYPE II
COMPACTED GRANULAR BEDDING

BEDDING DETAIL NOTES:

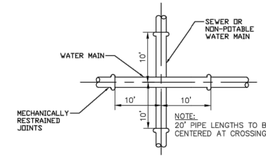
1.0 THE BACKFILL TO A POINT TWELVE (12) INCHES ABOVE THE PIPE SHALL BE PLACED BY HAND AND SHALL BE CAREFULLY SELECTED MATERIAL FREE FROM ROCKS, BOULDERS, CLODS, ORGANIC MATERIAL, OR OTHER DEBRIS AND LIGHTLY COMPACTED PRIOR TO PLACING REMAINING BACKFILL. THE BALANCE OF THE BACKFILL MAY BE PLACED IN THE DITCH BY HAND OR BY MECHANICAL EQUIPMENT. NO BACKFILL SHALL BE DROPPED DIRECTLY ONTO EXPOSED PIPE.

2.0 CONTRACTOR SHALL EMPLOY AN EXCAVATOR-MOUNTED TRENCH ROLLER OR OTHER MECHANICAL COMPACTION EQUIPMENT TO PROVIDE BACKFILL DENSITIES OF 95% OR GREATER AT ±2% OPTIMUM MOISTURE CONTENT. SURFACE FLOODING AND WATER JETTING OF BACKFILL SHALL NOT BE PERMITTED FOR BACKFILL CONSOLIDATION.

3.0 ALL BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 3.0 OF REGIONAL UTILITIES CONSTRUCTION SPECIFICATIONS

4.0 PIPE COVER SHALL NOT BE LESS THAN 36 INCHES, NOR GREATER THAN 48 INCHES EXCEPT WHERE SPECIFICALLY SHOWN ON THE CONSTRUCTION DRAWINGS AND APPROVED BY REGIONAL UTILITIES.

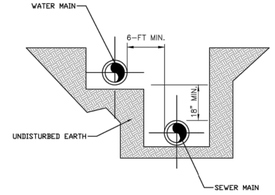
8 TYPICAL BEDDING DETAIL
N.T.S.



NOTES

1. WHERE A 18 INCH VERTICAL SEPARATION DISTANCE CANNOT BE MAINTAINED BETWEEN A WATER MAIN AND A SEWER MAIN OR NON-POTABLE WATER MAIN CROSSING THEN THE WATER MAIN SHALL PASS OVER THE SEWER MAIN OR NON-POTABLE WATER MAIN WITH A MINIMUM VERTICAL CLEARANCE OF 12 INCHES. THE SEWER OR NON-POTABLE WATER MAIN SHALL BE 20 FEET OF 6" CONCRETE ENCASEMENT CENTERED ON THE POINT OF CROSSING AND THE WATER MAIN SHALL BE 20 FEET OF 6" CONCRETE ENCASEMENT CENTERED ON THE POINT OF CROSSING. CONCRETE ENCASEMENT SHALL BE POURED SEPARATELY FOR EACH PIPE.

2. ANYTHING LESS THAN SHOWN MUST BE APPROVED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.



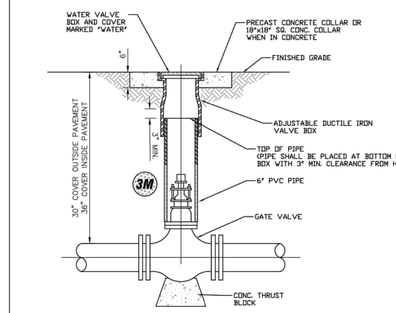
NOTES

1. WHERE A 10 FOOT PARALLEL SEPARATION CANNOT BE MAINTAINED BETWEEN A WATER MAIN AND A SEWER MAIN OR NON-POTABLE WATER MAIN, THEN THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER MAIN OR NON-POTABLE WATER MAIN AND 6 FEET HORIZONTALLY FROM THE EDGE OF THE SEWER MAIN OR NOT-POTABLE WATER MAIN.

2. ANYTHING LESS THAN SHOWN MUST BE APPROVED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

9 WATER/SEWER CROSSING AND SEPARATION DETAIL
N.T.S.

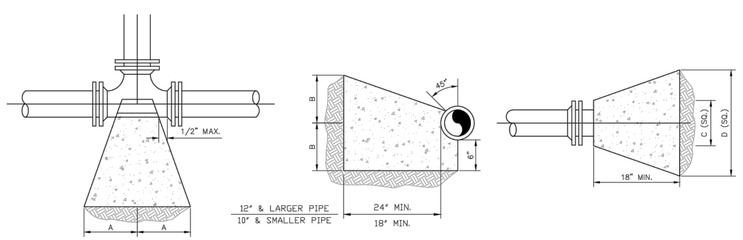
APPROVED FOR 2026



A 4" BALL MARKER AS MANUFACTURED BY 3M PART NO.1403 SHALL BE PLACED NEXT TO ALL VALVES AT A DEPTH OF 36" MAX.

NOTE:
ALL BELOW GROUND VALVES REQUIRE VALVE BOX.

10 VALVE AND BOX DETAIL
N.T.S.

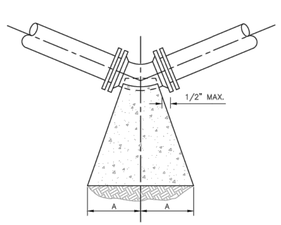


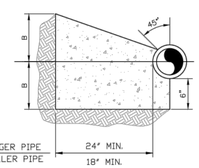
SIZE	TEE		CU. FT.
	A	B	CONC.
6"	10"	12"	3.5
8"	13"	16"	5.4
10"	16"	20"	9.4
12"	18"	24"	16.6
14"	22"	27"	23.2
16"	24"	30"	28.6
18"	26"	32"	36.2

SIZE	PLUG		CU. FT.
	C	D	CONC.
6"	10"	21"	2.6
8"	12"	29"	4.5
10"	14"	36"	6.9
12"	16"	41"	9.0
14"	18"	48"	12.3
16"	20"	54"	15.2
18"	22"	60"	19.2

NOTES:
1. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.
2. THESE TABLES SHOW MINIMUM SIZE THRUST BLOCKS FOR GOOD SOIL. (A-1 THROUGH A-3, CLEAN SAND AND GRAVEL)
3. POOR SOIL (A-4 THROUGH A-8, SILTY SOILS, CLAYS, MUCK AND PEAT) WILL REQUIRE LARGER THRUST BLOCKS.

11 THRUST BLOCK DETAIL
N.T.S.

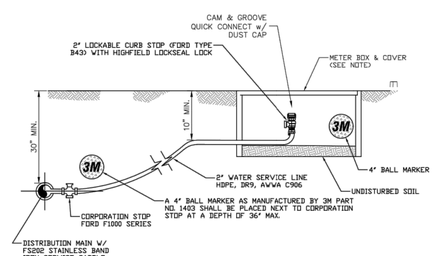




NOTES:
1. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.
2. THESE TABLES SHOW MINIMUM SIZE THRUST BLOCKS FOR GOOD SOIL. (A-1 THROUGH A-3, CLEAN SAND AND GRAVEL)
3. POOR SOIL (A-4 THROUGH A-8, SILKY SOILS, CLAYS, MUCK AND PEAT) WILL REQUIRE LARGER THRUST BLOCKS.

SIZE	1/4 BENDS		CU. FT.	1/8 BENDS		CU. FT.	1/16 BENDS		CU. FT.
	A	B	CONC.	A	B	CONC.	A	B	CONC.
6"	16"	10"	3.2	9"	10"	3.0	6"	8"	1.3
8"	22"	13"	7.2	12"	13"	3.7	8"	10"	2.1
10"	26"	17"	11.5	14"	17"	5.9	10"	13"	3.6
12"	29"	21"	21.1	16"	21"	8.6	11"	16"	6.6
14"	35"	24"	29.8	19"	24"	14.9	12"	20"	8.9
16"	38"	27"	37.8	21"	27"	19.1	12"	24"	11.2
18"	42"	29"	47.8	22"	29"	24.2	13"	26"	14.2

12 THRUST BLOCK DETAIL
N.T.S.



13 BELOW GRADE FLUSH POINT
N.T.S.

NOTES:

1. FLUSH POINTS SHALL BE INSTALLED BETWEEN BACK OF CURB AND FACE OF SIDEWALK WITHIN R/W EXCEPT WHERE CONDITIONS AND OR REGULATION PROHIBIT. FLUSH POINTS SHALL BE LOCATED WITHIN RIGHTS OF WAY OR UTILITY EASEMENTS.

2. METER BOX AND COVER SHALL BE TRAFFIC RATED. SEE DETAIL #7 ON SHEET W-2.

www.eca-fl.com
ECAE, L.L.C.
Land Planning ● Civil Engineering
2052 West County Highway 30A, R1 - 202
Santa Rosa Beach, FLORIDA 32459
PH: (850) 267-0473 . FAX: (850) 267-0973
CERTIFICATE OF AUTHORIZATION NUMBER 35179

REQUESTED BY: TITAN ACQUISITIONS, L.L.C.

NATUREWALK TRACT L
IN SECTION 11, TOWNSHIP 3 SOUTH, RANGE 19 WEST
OF WALTON COUNTY, FLORIDA

POTABLE WATER
STANDARD DETAILS

DATE	REVISION	DRAWN CHECK BY	BY

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL ENGINEER

RUDOLPH A. MALL
PROFESSIONAL ENGINEER No. 94479

PROJECT: 26-007

SCALE: N.T.S.	DRAWN BY: RAM
ORDER: 26-0021	DESIGN BY: RAM
DWG. DATE: 06-05-26	CHECK BY: RAM
FILE: 26-007_ENG-2.dwg	

SHEET
W-3

THESE PLANS AND THE IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

J:\2026\26-007\26-0023-ENG-Engineering Services_Naturewalk, Tract L - Dx\13 Drawings\26-007_ENG-2.dwg, 11-POTABLE WATER STANDARD DETAILS, Dylan Franks, 1:35 PM

Emerald Coast Associates Engineering, LLC.

Land Planning ● Civil Engineering

STORMWATER MANAGEMENT REPORT

Naturewalk at Seagrove Tract L (ECA# 26-007)

Walton County, Florida.

Prepared for:
Titan Acquisitions, LLC
840 S. Davis Blvd.
Tampa, FL 33606

Prepared by:
Emerald Coast Associates Engineering, LLC
2052 West County Highway 30-A Suite R1-202
Santa Rosa Beach, FL 32459
ECA Job No. 26-007

TABLE OF CONTENTS

INTRODUCTION……***3***
SITE INFORMATION…… ***3***
DESIGN CRITERIA …… ***3***
STORMWATER MANAGEMENT PLAN …… ***4***

LIST OF APPENDICIES

APPENDIX A LOCATION MAP
APPENDIX B HISTORICAL DRAINAGE DOCUMENTS
APPENDIX C GEOTCH REPORT
APPENDIX D AS-BUILT SURVEY
APPENDIX E TREATMENT CALCS
APPENDIX F ICPR REPORT

1.0 INTRODUCTION

ECAE, LLC. (ECA) is pleased to provide the following Stormwater Management Plan for the referenced facility. The property is in Section 11 Township 3 South, Range 19 West, in Walton County, Florida. The site is located within Naturewalk at Seagrove Subdivision, at the end of Iris Trace, approximately 150 feet south of the intersection of Iris Trace and Cinnamon Fern Lane. A project location map is included in **Appendix A – Location Map**. The existing site is vacant and open with light underbrush. The proposed development includes (6) single-family residences with associated infrastructure. Stormwater will be managed using a wet detention system. The system is designed in accordance with the Walton County Land Development Code. The following sections detail relevant site information, design criteria and calculations, and the stormwater management plan.

2.0 SITE INFORMATION

The subject parcel (11-3S-19-25010-000-00K1) measures approximately 1.64 acres. The project tract is within an existing PUD (Naturewalk at Seagrove) currently designated as Tract L. Stormwater management for the existing PUD, was permitted through FDEP in 2005 under permit 66-0233997. The project tract is partially located within an existing stormwater management basin labeled as Basin 6, which treats and facilitates stormwater runoff via wet detention pond located south adjacent to the project, which is labeled as Pond 7. The information used to size and design the existing wet detention pond is provided in **Appendix B – Historical Drainage Documents.** The property is also bordered by a 25-ft conservation easement / secondary wetland buffer. Proposed stormwater management for this project will consist of utilizing the existing wet detention facility (Pond 7) for both stormwater treatment and attenuation.

ECA received a geotechnical report from Southern Earth Sciences (**Appendix C – Geotech Report**). Groundwater was encountered at a depth between 1.7 and 2.0 feet below existing grade. The seasonal high groundwater is estimated to be 0.5 feet below existing grade. Based on the existing as-built survey obtained from ECA Surveying from 2011 (**Appendix D – As-Built Pond 7**), the Normal Water Level (NWL) for Pond 7 is established by a 2" orifice set at elevation 29.40'.

3.0 DESIGN CRITERIA

Per the Walton County Land Development Code, detention areas are required to provide storage of the runoff resulting from 1-inch of rainfall and attenuate the 25-year storm. The code also requires detention ponds not overtop during the 100-year storm of critical duration.

Per the original permit FDEP stormwater guidelines, the required treatment volume for the existing pond was based on the runoff generated from 1.5-inch of rainfall, since the project is

located within an identified Outstanding Florida Water (OFW). Additionally, the basins were designed to attenuate the 25-yr critical storm event.

The original size of Basin 6 is shown as 8.348 acres. The area of improvements associated with the Tract L project is approximately 0.84 acres. The total proposed drainage area for Pond 7 is 9.17 acres. The design parameters for the existing pond are shown in Figure 1 and Figure 2. As shown, the current required treatment volume for Pond 7 is 45,454 cubic feet based on the 1.5" of runoff. Based on the treatment calculations provided in **Appendix E – Treatment Calcs**, the proposed required treatment volume for the total wet pond drainage area is 49,931 cubic feet. The total treatment volume that is provided in Pond 7 is 50,370 cubic feet.

Using the information provided in the original drainage reports and as-built surveys, the existing wet pond was modeled with ICPR4 to demonstrate the capacity and performance of the pond while accounting for the post-development conditions associated with Tract L. As shown in **Appendix F – ICPR Report**, the 25-year critical maximum stage height for the detention basin occurred at elevation 31.80 feet during the 24-hour, 25-year storm event. During the 24-hour, 25-year storm, the post-development runoff discharge rate is equal to 40.03 cubic feet per second. The pre-development runoff discharge rate for the same storm event was equal to 50.32 cubic feet per second. Since the post-development discharge rate is less than the pre-development rate, the existing treatment facility has been sized sufficiently to attenuate the 25-year critical storm. The maximum stage height during the 100-year storm occurred at elevation 31.93 during the 24-hour storm. Since the maximum stage height during the 100-year storm is less than the top of the detention basin, the existing pond does not overtop during the 100-year storm event.

The bleed down orifice is currently sized 2" diameter, as shown in the as-built survey. **Appendix D** includes the orifice sizing calculations for the proposed Tract L Basin in addition to the existing Basin 6 drainage area. The proposed calculations demonstrate that the existing control structure / orifice (2") is sized sufficiently to bleed down half of the required storage volume in between 48 and 60 hours. Permanent pool volume (PPV) requirements are also included in Appendix E – Treatment Calcs, which shows the current PPV=95,760 cubic feet exceeding the minimum required amount per the original orifice sizing criteria.

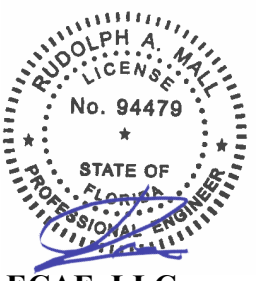
4.0 STORMWATER MANAGEMENT PLAN

The attached Grading and Drainage Plan illustrates the location, and grading of the site and drainage conveyance for stormwater management. Stormwater is directed to the existing detention area via sheet flow, downspouts, and inlets with piping. Minor site grading will be required to achieve required site grades and assure positive drainage.

No degradation of water quality is expected. Silt fencing and hay bales will be installed prior to and during construction as indicated on the Grading and Drainage Plan. Silt fencing will remain in place until construction is complete and the project is stabilized.

Please contact us with any questions or comments regarding this project.

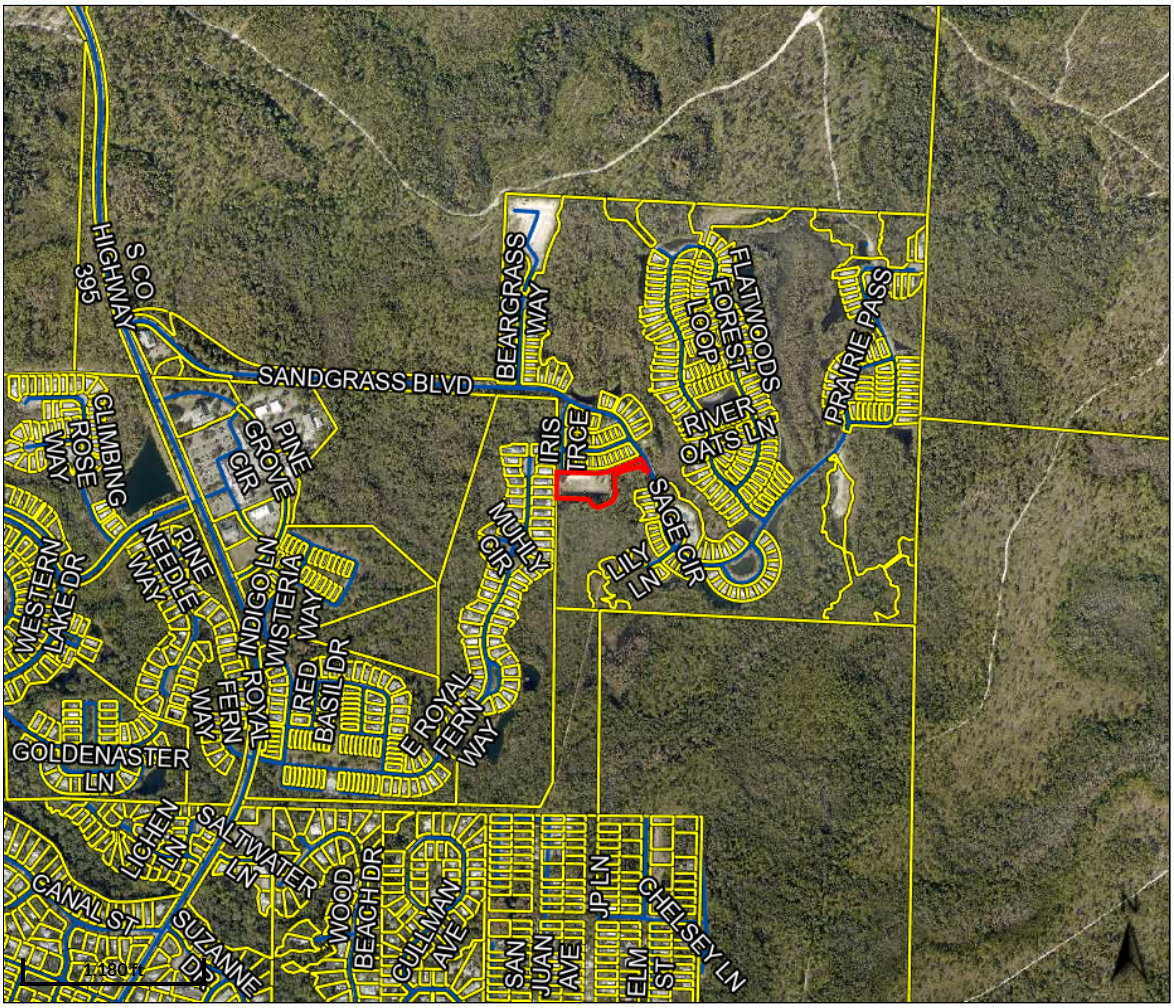
Sincerely,



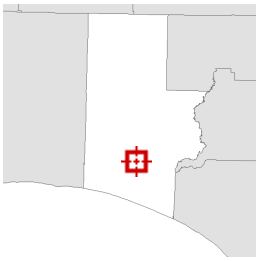
ECAE, LLC.
Rudy Mall, P.E.
VP of Engineering

APPENDIX A
Location Map

qPublic.net™ Walton County Property Appraiser



Overview



Legend

- Landmarks
- Parcels
- Roads

Parcel Number	11-3S-19-25010-000-00K1	**Physical Address**		**Building Value**	$0	**Just Value**	$127,651	**Last 2 Sales Date**	**Price**	**Vacant**	**Qual**
Acreage	1.57	**Mailing Address**	TITAN ACQUISITIONS LLC 840 S DAVIS BLVD TAMPA, FL 33606	**Misc Value**	$1,000	**Assessed Value**	$127,651	2/2/2026	$100	Y	U
Property Usage	VACANT			**Land Value**	$126,651	**Exempt Value**	$0	8/26/2025	$166200	Y	U
				Ag Land Value	$0	**Taxable Value**	$127,651	**MLS**			
				Ag Market Value	$0						

This map has been compiled from the most authentic information available and is to be used for assessment purposes only. Walton County Property Appraiser's Office assumes no responsibility for errors and/or omissions contained herein. THIS MAP IS NOT A SURVEY.

Date created: 6/1/2026
Last Data Uploaded: 5/30/2026 9:32:42 AM

Developed by SCHNEIDER GEOSPATIAL

APPENDIX B
Historical Drainage Documents

Florida Department of
ENVIRONMENTAL PROTECTION

Memorandum

TO: File

FROM: Michelle Dusseau Diller, P.E. 4/28/05

THROUGH: Cliff Street, P.E. 4/28

DATE: April 28, 2005

SUBJECT: NatureWalk at Seagrove
Walton County, 66-0233997-003-RG

The stormwater notice and plans for this approximate 153-acre residential subdivision have been reviewed and found to qualify for a stormwater Category D general permit pursuant to Rule 62-25, Florida Administrative Code. The –001 application addresses the proposed wetland impacts and is in process. The –002 stormwater application was denied for numerous technical deficiencies which have been resolved in this application.

The developer proposes to construct a 290-lot single-family residential subdivision. There are 62.5 acres of the site that are wetlands that will remain undisturbed except for the impacts proposed in the –001 application (primarily road crossings). Of the remaining 90.5 acres of uplands, nine acres will be developed at a future point in time and are not included in this application and 17 acres comprise required buffers and setbacks, resulting in 64.3 acres of development requiring the stormwater treatment shown in this proposal.

The final site design consists of 13 drainage areas. The grading plan routes stormwater via sheet flow and drop inlets into one or more wet detention ponds in each drainage area. Vegetated natural buffers (VNBs) will be utilized to treat rear lot drainage for some of the lots; compensatory treatment will be provided in the wet detention ponds. Stormwater from the site will discharge into Point Washington State Forest; therefore the system was designed to OFW standards. Details of the ponds are contained on the attached table.

Littoral zones in all ponds consist of Zone 2 and 3 plants. A specific planting scheme is included on the plan drawings. Fences are required for all of the ponds and have been provided. Borings confirm the NPL for each pond.

The requirements for the maintenance entity are satisfied by the establishment of a Homeowners' Association. The Association documents also address restrictions on the VNB areas to prevent the disturbance of these areas.

Erosion control appears adequate and is noted on the drawings.

Numerous technical issues were addressed at my request (see faxes and emails in the file). The final approved drawings and calculations were received by the Department on April 22, 2005.

NatureWalk at Seagrove
Summary of final design

Basin	Ponds	Basin area (ac)	Imp area (ac)	Perv area (ac)	Cw	Orig Grade	Boring #	EL GW	EL NPL	EL floor	PP depth	Overflow EL	TV depth	Req PPV	Prov PPV	Req TV	Prov TV
1	1	2.457	1.2	0.954	0.72	34	E1	30.5	30.5	25.5	5.0	32.0	1.5	27,818	39,473	13,381	21,705
5	4,5	4.125	4.11	0.014	0.68	33	E5,A4	31.5	31.5	26.5	5.0	33.0	1.5	44,801	46,753	22,458	26,691
6	7	8.348	6.4	1.95	0.49	31	E6	29.5	29.5	24.5	5.0	31.0	1.5	74,981	95,760	45,454	50,370
9	10,11,12	5.81	5.29	0.52	0.67	30.5-32	X9,E8,E9	29.5-30.75	29.5	24.5	5.0	31.0	1.5	62,066	89,909	31,637	45,520
10	13,14,15	9.081	7.275	0.944	0.68	31.5-33	A6,E10,E11	30-32	31	24	7.0	32.3	1.3	98,453	157,823	49,445	52,009
11	16	1	0.694	0.112	0.6	33	A7	32	31.5	27.5	4.0	32.4	0.9	9,981	22,103	5,447	8,061
12	17	2.83	2.222	0.328	0.58	34	A10	32	31.5	26.5	5.0	32.7	1.2	28,140	37,882	15,409	15,793
12a	18,18a	3.139	2.319	0.443	0.68	33-34.5	E13,A11	30-33	32	27	5.0	33.1	1.1	34,028	50,743	17,089	19,386
13	19,20	5.491	3.837	1.054	0.66	33.5	E14,A12	31-32.5	31	26	5.0	32.5	1.5	57,783	86,059	29,899	42,381
13a	21	1.583	1.077	0.212	0.85	35	E12	33.25-33.75	33	28	5.0	33.7	0.7	21,453	38,304	8,619	9,361
14	22,23,24,25	6.588	5.603	0.407	0.61	32-33	A17,E2,A8,A16	30.5-32	31.5	25.5-27.5	4-6	32.8	1.3	68,422	74,190	35,872	36,519
16	26	1.393	1.112	0.178	0.66	34	A3	31-31.5	31.5	25.5	6.0	33.0	1.5	14,660	15,173	7,585	7,623
17	27,28,29	4.055	2.793	0.515	0.67	33-34	A15,A13,A14	30.75-32	31.5	26.5	5.0	32.3	0.8	43,314	102,727	22,078	27,301

Basin	Ponds	Orifice diameter	Drawdown (hr)	Littoral %	Short circuit?	Fence?	Plant ok?	Connect pipes?	Invert <NPL?
1	1	1.375	59.3	38	no	n/a	yes	no	n/a
5	4,5	1.500	59.2	35/46	no	yes	yes	yes	yes
6	7	2.000	62.8	36	no	yes	yes	no	n/a
9	10,11,12	2.000	56.8	47/45/37	no	yes	yes	yes	yes
10	13,14,15	2.125	62.2	35/42/47	no	yes	yes	yes	yes
11	16	1.000	52.7	38	no	yes	yes	no	n/a
12	17	1.250	56.9	36	no	yes	yes	no	n/a
12a	18,18a	1.375	60.0	33/41	no	yes	yes	yes	yes
13	19,20	1.875	60.1	33/32	no	yes	yes	yes	yes
13a	21	1.125	54.8	38	possible	yes	yes	no	n/a
14	22,23,24,25	1.875	56.0	38/40/37	no	yes	yes	yes	yes
16	26	0.750	67.6	46	no	yes	yes	no	n/a
17	27,28,29	1.750	61.8	47/38/36	no	yes	yes	yes	yes

NatureWalk at Seagrove
Summary of final design

Project: Pond 1
28-Apr-05

INPUT:		*OUTPUT:*						
EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
32	15,899	7,706	61,178	1.40	0	0	0.00	32.0 overflow
31.5	14,924	13,999	53,472	1.23	7,706	7,706	0.18	
30.5	13,074	11,782	39,473	0.91	13,999	21,705	0.50	NPL/top littoral (SHGW)
29.5	10,490	9,316	27,691	0.64	11,782	33,487	0.77	
28.5	8,141	7,435	18,376	0.42	9,316	42,802	0.98	bottom littoral
27.5	6,728	6,084	10,941	0.25	7,435	50,237	1.15	
26.5	5,440	4,857	4,857	0.11	6,084	56,321	1.29	
25.5	4,274	0	0	0.00	4,857	61,178	1.40	Floor

PPV req'd	27,818	ft3
PPV prov	39,473	ft3
TV req'd	13,381	ft3
TV prov	21,705	ft3
TV depth	1.5	ft
Littoral	38%	

NatureWalk at Seagrove
Summary of final design

Project: Pond 1
Date: 28-Apr-05

INPUT

2.457	= Aac, Basin Area (ac)
1.5	= Ai, Impervious Area (ac)
0.65	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
0.343	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff: (OFW discharge)

0.31	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
13,378	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

0.29	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
12,627	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

0.32	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
13,786	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

0.39	= Vpp (ac-ft) = C * Rws * A * Tr / 153
16,975	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

0.39	= Vpp (ac-ft)
16,975	= Vpp (cf)
25,463	=Vpp (cf) OFW discharge (50% additional required)

$.65 \times \frac{32}{12} \times 2.457 \times \frac{14}{153} = .39\ ac$

Michelle Diller 4/28/05

NatureWalk at Seagrove
Summary of final design

Project: Pond 1
Date: 28-Apr-05

SIZING THE ORIFICE

INPUT

21,705	= V, Provided Treatment volume (cf)
0.6	= C, Orifice coefficient (usually assume C=0.6)
32	= Ew, Elevation of the overflow weir
30.5	= Ec, orifice inv elev (ft)
1.375	= D, Diameter (in)
30.5	=Normal permanent pool level (ft)

OUTPUT

31.25	= E(1/2) = 0.5 (Ew + Egw) , Elevation where 1/2 the treat vol is released.
1.44	= h1, = Ew - Egw - D/2 (ft)
0.69	= h2 = E(1/2) - Ec - D/2 (ft)
1.125	= hav, average of h1 and h2 (ft)
0.0103	= Orifice area = 3.14*D^2 / 2 (sf)
0.053	= Qav = Ao x C x (2 g hav) ^0.5 (cfs)
189.5	= Qav x (3600 s/hr) (cf/hr)
57.3	= t(1/2), drawdown time for half the treatment volume (hrs)

PLANTING ZONES

OUTPUT

ZONE 1 is between	32.00	and	31.00
ZONE 2 is between	31.00	and	29.50
ZONE 3 is between	29.50	and	27.50
ZONE 4 is between	27.50	and	25.50

NatureWalk at Seagrove
Summary of final design

Project: Ponds 4&5
28-Apr-05

Pond 4

INPUT:		*OUTPUT:*						
EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
34	13,412	12,709	60,471	1.39	0	0	0.00	
33	12,006	11,333	47,762	1.10	12,709	12,709	0.29	overflow weir 33.0
32	10,659	5,167	36,429	0.84	11,333	24,042	0.55	
31.5	10,010	9,086	31,262	0.72	5,167	29,209	0.67	NPL/top littoral
30.5	8,162	7,314	22,176	0.51	9,086	38,295	0.88	
29.5	6,465	5,942	14,863	0.34	7,314	45,608	1.05	bottom littoral
28.5	5,419	4,931	8,921	0.20	5,942	51,550	1.18	
27.5	4,443	3,990	3,990	0.09	4,931	56,481	1.30	
26.5	3,536	0	0	0.00	3,990	60,471	1.39	Floor

Pond 5

INPUT:		*OUTPUT:*						
EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
34	9,089	8,426	34,108	0.78	0	0	0.00	top elevation
33	7,763	7,115	25,682	0.59	8,426	8,426	0.19	overflow 33.0
32	6,467	3,076	18,567	0.43	7,115	15,541	0.36	
31.5	5,838	5,069	15,491	0.36	3,076	18,617	0.43	NPL/top littoral
30.5	4,300	3,738	10,422	0.24	5,069	23,686	0.54	
29.5	3,175	2,841	6,684	0.15	3,738	27,424	0.63	bottom littoral
28.5	2,506	2,205	3,844	0.09	2,841	30,264	0.69	
27.5	1,903	1,639	1,639	0.04	2,205	32,469	0.75	
26.5	1,375	0	0	0.00	1,639	34,108	0.78	Floor

Total PPV reqd	44,801 ft3
Total PPV prov	46,753 ft3
Total TV reqd	22,458 ft3
Total TV prov	26,691 ft3

NatureWalk at Seagrove
Summary of final design

Project: Ponds 4&5
Date: 28-Apr-05

INPUT

4.125	= Aac, Basin Area (ac)
4.11	= Ai, Impervious Area (ac)
0.68	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
0.364	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff:

0.52	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
22,461	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

0.69	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
29,866	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

0.56	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
24,214	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

0.68	= Vpp (ac-ft) = C * Rws * A * Tr / 153
29,815	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

0.69	= Vpp (ac-ft)
29,866	= Vpp (cf)
44,799	=Vpp (cf) (OFW discharge, 50% additional req'd)

NatureWalk at Seagrove
Summary of final design

Project: Ponds 4&5
Date: 28-Apr-05

SIZING THE ORIFICE

INPUT

26,691	= V, Provided Treatment volume (cf)
0.6	= C, Orifice coefficient (usually assume C=0.6)
33	= Ew, Elevation of the overflow weir
31.5	= Ec, orifice inv elev (ft)
1.5	= D, Diameter (in)
31.5	=Normal permanent pool level (ft)

OUTPUT

32.25	= E(1/2) = 0.5 (Ew + Egw) , Elevation where 1/2 the treat vol is released.
1.44	= h1, = Ew - Egw - D/2 (ft)
0.69	= h2 = E(1/2) - Ec - D/2 (ft)
1.125	= hav, average of h1 and h2 (ft)
0.0123	= Orifice area = 3.14*D^2 / 2 (sf)
0.063	= Qav = Ao x C x (2 g hav) ^0.5 (cfs)
225.5	= Qav x (3600 s/hr) (cf/hr)
59.2	= t(1/2), drawdown time for half the treatment volume (hrs)

PLANTING ZONES

OUTPUT

ZONE 1 is between	33.00	and	32.00
ZONE 2 is between	32.00	and	30.50
ZONE 3 is between	30.50	and	28.50
ZONE 4 is between	28.50	and	26.50

NatureWalk at Seagrove
Summary of final design

Project: Pond 7 final design
28-Apr-05

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
32	40,462	38,481	184,611	4.24	0	0	0.00	
31	36,499	34,550	146,130	3.35	38,481	38,481	0.88	overflow 31.0
30	32,601	15,820	111,580	2.56	34,550	73,031	1.68	
29.5	30,679	27,845	95,760	2.20	15,820	88,851	2.04	NPL/top littoral zone
28.5	25,011	22,318	67,915	1.56	27,845	116,696	2.68	
27.5	19,624	18,006	45,598	1.05	22,318	139,013	3.19	bottom littoral zone
26.5	16,387	15,048	27,592	0.63	18,006	157,019	3.60	
25.5	13,708	12,545	12,545	0.29	15,048	172,066	3.95	
24.5	11,381	0	0	0.00	12,545	184,611	4.24	Floor

PPV reqd	74,981	ft3
PPV prov	95,760	ft3
TV reqd	45,454	ft3
TV prov	50,370	ft3

Michelle Diller 4/28/05

NatureWalk at Seagrove
Summary of final design

Project: Pond 7
Date: 28-Apr-05

INPUT

8.348	= Aac, Basin Area (ac)
6.4	= Ai, Impervious Area (ac)
0.49	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
2.32	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff:

1.04	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
45,455	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

1.15	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
50,000	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

0.81	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
35,311	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

1.00	= Vpp (ac-ft) = C * Rws * A * Tr / 153
43,478	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

1.15	= Vpp (ac-ft)
50,000	= Vpp (cf)
75,000	=Vpp (cf) (OFW discharge, 50% additional req'd)

NatureWalk at Seagrove
Summary of final design

Project: Pond 7
Date: 28-Apr-05

SIZING THE ORIFICE

INPUT

50,370	= V, Provided Treatment volume (cf)
0.6	= C, Orifice coefficient (usually assume C=0.6)
31	= Ew, Elevation of the overflow weir
29.5	= Ec, orifice inv elev (ft)
2	= D, Diameter (in)
29.5	=Normal permanent pool level (ft)

OUTPUT

30.25	= E(1/2) = 0.5 (Ew + Egw) , Elevation where 1/2 the treat vol is released.
1.42	= h1, = Ew - Egw - D/2 (ft)
0.67	= h2 = E(1/2) - Ec - D/2 (ft)
1.125	= hav, average of h1 and h2 (ft)
0.0218	= Orifice area = 3.14*D^2 / 2 (sf)
0.111	= Qav = Ao x C x (2 g hav) ^0.5 (cfs)
400.9	= Qav x (3600 s/hr) (cf/hr)
62.8	= t(1/2), drawdown time for half the treatment volume (hrs)

PLANTING ZONES

OUTPUT

ZONE 1 is between	31.00	and	30.00
ZONE 2 is between	30.00	and	28.50
ZONE 3 is between	28.50	and	26.50
ZONE 4 is between	26.50	and	24.50

NatureWalk at Seagrove
Summary of final design

Project: Pond 13

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
32.3	16,277	20,047	85,845	1.97	0	0	0.00	popoff 32.3
31	14,565	13,641	65,798	1.51	20,047	20,047	0.46	NPL/top littoral zone
30	12,716	11,857	52,158	1.20	13,641	33,688	0.77	
29	10,997	10,201	40,301	0.93	11,857	45,544	1.05	
28	9,405	8,911	30,100	0.69	10,201	55,745	1.28	bottom littoral zone
27	8,416	7,950	21,190	0.49	8,911	64,656	1.48	
26	7,483	7,044	13,240	0.30	7,950	72,605	1.67	
25	6,604	6,197	6,197	0.14	7,044	79,649	1.83	
24	5,789	0	0	0.00	6,197	85,845	1.97	floor

Project: Pond 14

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
32.3	13,605	16,599	64,912	1.49	0	0	0.00	popoff 32.3
31	11,932	11,025	48,313	1.11	16,599	16,599	0.38	NPL/top littoral zone
30	10,118	9,280	37,288	0.86	11,025	27,624	0.63	
29	8,441	7,668	28,008	0.64	9,280	36,904	0.85	
28	6,895	6,417	20,340	0.47	7,668	44,572	1.02	bottom littoral zone
27	5,939	5,490	13,923	0.32	6,417	50,989	1.17	
26	5,041	4,622	8,433	0.19	5,490	56,479	1.30	
25	4,202	3,812	3,812	0.09	4,622	61,100	1.40	
24	3,421	0	0	0.00	3,812	64,912	1.49	floor

Project: Pond 15

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
32.3	12,579	15,363	59,075	1.36	0	0	0.00	popoff 32.3 (in this pond)
31	11,056	10,219	43,713	1.00	15,363	15,363	0.35	NPL/top littoral zone
30	9,381	8,580	33,494	0.77	10,219	25,581	0.59	
29	7,778	7,022	24,915	0.57	8,580	34,161	0.78	
28	6,266	5,792	17,893	0.41	7,022	41,183	0.95	bottom littoral zone
27	5,317	4,872	12,101	0.28	5,792	46,974	1.08	
26	4,426	4,012	7,230	0.17	4,872	51,846	1.19	
25	3,598	3,218	3,218	0.07	4,012	55,858	1.28	
24	2,837	0	0	0.00	3,218	59,075	1.36	floor

PPV reqd	98,453 ft3
PPV prov	157,823 ft3
TV reqd	49,445 ft3
TV prov	52,009 ft3
TV depth	1.3 ft

NatureWalk at Seagrove
Summary of final design

Project: Ponds 13,14,15
Date: 28-Apr-05

INPUT

9.081	= Aac, Basin Area (ac)
7.275	= Ai, Impervious Area (ac)
0.68	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
0.862	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff: (OFW discharge)

1.14	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
49,446	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

1.29	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
56,095	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

1.22	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
53,306	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

1.51	= Vpp (ac-ft) = C * Rws * A * Tr / 153
65,635	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

1.51	= Vpp (ac-ft)
65,635	= Vpp (cf)
98,453	=Vpp (cf) OFW discharge (additional 50% req'd)

NatureWalk at Seagrove
Summary of final design

Project: Pond 16
28-Apr-05

INPUT:		*OUTPUT:*						
EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
32.4	9,496	3,701	30,163	0.69	0	0	0.00	Overflow weir 32.4
32	9,009	4,360	26,462	0.61	3,701	3,701	0.08	
31.5	8,430	7,598	22,103	0.51	4,360	8,061	0.19	NPL/top littoral zone
30.5	6,765	5,988	14,505	0.33	7,598	15,658	0.36	
29.5	5,210	4,708	8,518	0.20	5,988	21,646	0.50	bottom littoral zone
28.5	4,206	3,810	3,810	0.09	4,708	26,354	0.60	
27.5	3,413	0	0	0.00	3,810	30,163	0.69	Floor

PPV reqd	9,566	ft3
PPV prov	22,103	ft3
TV reqd	5,447	ft3
TV prov	8,061	ft3
TV depth	0.9	ft

NatureWalk at Seagrove
Summary of final design

Project: Pond 16
Date: 28-Apr-05

INPUT

1	= Aac, Basin Area (ac)
0.694	= Ai, Impervious Area (ac)
0.6	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
0.194	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff: (OFW discharge)

0.12	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
5,445	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

0.13	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
5,594	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

0.12	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
5,179	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

0.15	= Vpp (ac-ft) = C * Rws * A * Tr / 153
6,377	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

0.15	= Vpp (ac-ft)
6,377	= Vpp (cf)
9,566	=Vpp (cf) OFW discharge (additional 50% req'd)

NatureWalk at Seagrove
Summary of final design

Project: Pond 16
Date: 28-Apr-05

SIZING THE ORIFICE

INPUT

8,189	= V, Provided Treatment volume (cf)
0.6	= C, Orifice coefficient (usually assume C=0.6)
32.4	= Ew, Elevation of the overflow weir
31.5	= Ec, orifice inv elev (ft)
1	= D, Diameter (in)
31.5	=Normal permanent pool level (ft)

OUTPUT

31.95	= E(1/2) = 0.5 (Ew + Egw) , Elevation where 1/2 the treat vol is released.
0.86	= h1, = Ew - Egw - D/2 (ft)
0.41	= h2 = E(1/2) - Ec - D/2 (ft)
0.675	= hav, average of h1 and h2 (ft)
0.0055	= Orifice area = 3.14*D^2 / 2 (sf)
0.022	= Qav = Ao x C x (2 g hav) ^0.5 (cfs)
77.6	= Qav x (3600 s/hr) (cf/hr)
52.7	= t(1/2), drawdown time for half the treatment volume (hrs)

PLANTING ZONES

OUTPUT

ZONE 1 is between	32.40	and	32.00
ZONE 2 is between	32.00	and	30.50
ZONE 3 is between	30.50	and	28.50
ZONE 4 is between	28.50	and	26.50

NatureWalk at Seagrove
Summary of final design

Project: Pond 17
28-Apr-05

INPUT:		*OUTPUT:*						
EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
32.7	14,157	2,795	53,675	1.23	0	0	0.00	popoff 32.7
32.5	13,792	12,999	50,880	1.17	2,795	2,795	0.06	
31.5	12,205	11,083	37,882	0.87	12,999	15,793	0.36	NPL/top littoral zone
30.5	9,961	8,916	26,799	0.62	11,083	26,876	0.62	
29.5	7,871	7,216	17,883	0.41	8,916	35,792	0.82	bottom littoral zone
28.5	6,561	5,938	10,667	0.24	7,216	43,008	0.99	
27.5	5,314	4,729	4,729	0.11	5,938	48,946	1.12	
26.5	4,144	0	0	0.00	4,729	53,675	1.23	Floor

PPV reqd	23,043	ft3
PPV prov	37,882	ft3
TV reqd	15,407	ft3
TV prov	15,793	ft3
TV depth	1.2	ft

NatureWalk at Seagrove
Summary of final design

Project: Pond 17
Date: 28-Apr-05

INPUT

2.83	= Aac, Basin Area (ac)
2.222	= Ai, Impervious Area (ac)
0.58	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
0.28	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff: (OFW discharge)

0.35	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
15,409	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

0.40	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
17,235	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

0.33	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
14,169	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

0.40	= Vpp (ac-ft) = C * Rws * A * Tr / 153
17,447	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

0.40	= Vpp (ac-ft)
17,447	= Vpp (cf)
26,170	=Vpp (cf) OFW discharge (additional 50% req'd)

NatureWalk at Seagrove
Summary of final design

Project: Pond 17
Date: 28-Apr-05

SIZING THE ORIFICE

INPUT

15,943	= V, Provided Treatment volume (cf)
0.6	= C, Orifice coefficient (usually assume C=0.6)
32.7	= Ew, Elevation of the overflow weir
31.5	= Ec, orifice inv elev (ft)
1.25	= D, Diameter (in)
31.5	=Normal permanent pool level (ft)

OUTPUT

32.1	= E(1/2) = 0.5 (Ew + Egw) , Elevation where 1/2 the treat vol is released.
1.15	= h1, = Ew - Egw - D/2 (ft)
0.55	= h2 = E(1/2) - Ec - D/2 (ft)
0.900	= hav, average of h1 and h2 (ft)
0.0085	= Orifice area = 3.14*D^2 / 2 (sf)
0.039	= Qav = Ao x C x (2 g hav) ^0.5 (cfs)
140.1	= Qav x (3600 s/hr) (cf/hr)
56.9	= t(1/2), drawdown time for half the treatment volume (hrs)

PLANTING ZONES

OUTPUT

ZONE 1 is between	32.70	and	32.00
ZONE 2 is between	32.00	and	30.50
ZONE 3 is between	30.50	and	28.50
ZONE 4 is between	28.50	and	26.50

NatureWalk at Seagrove
Summary of final design

Project: Ponds 18 and 18A
28-Apr-05

Pond 18

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33.1	11,048	1,099	43,058	0.99	0	0	0.00	popoff 33.1
33	10,933	10,371	41,959	0.96	1,099	1,099	0.03	
32	9,808	8,988	31,589	0.73	10,371	11,470	0.26	NPL/top littoral
31	8,167	7,373	22,601	0.52	8,988	20,457	0.47	
30	6,578	6,063	15,229	0.35	7,373	27,830	0.64	bottom littoral
29	5,547	5,048	9,166	0.21	6,063	33,892	0.78	
28	4,548	4,119	4,119	0.09	5,048	38,940	0.89	
27	3,689	0	0	0.00	4,119	43,058	0.99	Floor

Pond 18A

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33.1	7,804	775	27,071	0.62	0	0	0.00	popoff 33.1
33	7,688	7,142	26,296	0.60	775	775	0.02	
32	6,595	5,870	19,155	0.44	7,142	7,916	0.18	NPL/top littoral
31	5,144	4,528	13,285	0.30	5,870	13,786	0.32	
30	3,911	3,558	8,758	0.20	4,528	18,313	0.42	bottom littoral
29	3,204	2,894	5,200	0.12	3,558	21,871	0.50	
28	2,583	2,307	2,307	0.05	2,894	24,764	0.57	
27	2,030	0	0	0.00	2,307	27,071	0.62	Floor

Total PPV reqd	34,028 ft3
Total PPV prov	50,743 ft3
Total TV reqd	17,089 ft3
Total TV prov	19,386 ft3
depth TV	1.1 ft

NatureWalk at Seagrove
Summary of final design

Project: Ponds 18 & 18a
Date: 28-Apr-05

INPUT

3.139	= Aac, Basin Area (ac)
2.319	= Ai, Impervious Area (ac)
0.68	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
0.377	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff:

0.39	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
17,092	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

0.42	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
18,324	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

0.42	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
18,426	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

0.52	= Vpp (ac-ft) = C * Rws * A * Tr / 153
22,688	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

0.52	= Vpp (ac-ft)
22,688	= Vpp (cf)
34,032	=Vpp (cf) (OFW discharge, 50% additional req'd)

Michelle Diller 4/28/05

NatureWalk at Seagrove
Summary of final design

Project: Ponds 18/18a
Date: 28-Apr-05

SIZING THE ORIFICE

INPUT

19,471	= V, Provided Treatment volume (cf)
0.6	= C, Orifice coefficient (usually assume C=0.6)
33.1	= Ew, Elevation of the overflow weir
32	= Ec, orifice inv elev (ft)
1.375	= D, Diameter (in)
32	=Normal permanent pool level (ft)

OUTPUT

32.55	= E(1/2) = 0.5 (Ew + Egw) , Elevation where 1/2 the treat vol is released.
1.04	= h1, = Ew - Egw - D/2 (ft)
0.49	= h2 = E(1/2) - Ec - D/2 (ft)
0.825	= hav, average of h1 and h2 (ft)
0.0103	= Orifice area = 3.14*D^2 / 2 (sf)
0.045	= Qav = Ao x C x (2 g hav) ^0.5 (cfs)
162.3	= Qav x (3600 s/hr) (cf/hr)
60.0	= t(1/2), drawdown time for half the treatment volume (hrs)

PLANTING ZONES

OUTPUT

ZONE 1 is between	33.10	and	32.50
ZONE 2 is between	32.50	and	31.00
ZONE 3 is between	31.00	and	29.00
ZONE 4 is between	29.00	and	27.00

NatureWalk at Seagrove
Summary of final design

Project: Ponds 19 & 20
28-Apr-05

Pond 19

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33.5	16,664	15,875	78,202	1.80	0	0	0.00	
32.5	15,086	14,322	62,327	1.43	15,875	15,875	0.36	popoff 32.5
31.5	13,558	6,591	48,005	1.10	14,322	30,197	0.69	
31	12,805	11,710	41,414	0.95	6,591	36,788	0.84	NPL/top littoral
30	10,615	9,579	29,704	0.68	11,710	48,498	1.11	
29	8,543	7,889	20,125	0.46	9,579	58,077	1.33	bottom littoral
28	7,235	6,662	12,236	0.28	7,889	65,966	1.51	
27	6,088	5,575	5,575	0.13	6,662	72,627	1.67	
26	5,061	0	0	0.00	5,575	78,202	1.80	Floor

Pond 20

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33.5	16,639	15,971	82,084	1.88	0	0	0.00	
32.5	15,303	14,642	66,113	1.52	15,971	15,971	0.37	popoff 32.5
31.5	13,981	6,827	51,471	1.18	14,642	30,613	0.70	
31	13,325	12,213	44,645	1.02	6,827	37,440	0.86	NPL/top littoral
30	11,100	10,069	32,432	0.74	12,213	49,652	1.14	
29	9,038	8,485	22,363	0.51	10,069	59,721	1.37	bottom littoral
28	7,932	7,422	13,878	0.32	8,485	68,206	1.57	
27	6,911	6,457	6,457	0.15	7,422	75,628	1.74	
26	6,002	0	0	0.00	6,457	82,084	1.88	Floor

Total PPV reqd	57,783 ft3
Total PPV prov	86,059 ft3
Total TV reqd	29,899 ft3
Total TV prov	42,381 ft3
depth TV	1.5 ft

NatureWalk at Seagrove
Summary of final design

Project: Ponds 19 & 20
Date: 28-Apr-05

INPUT

5.491	= Aac, Basin Area (ac)
3.837	= Ai, Impervious Area (ac)
0.66	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
0.6	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff:

0.69	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
29,898	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

0.71	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
30,859	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

0.72	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
31,285	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

0.88	= Vpp (ac-ft) = C * Rws * A * Tr / 153
38,520	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

0.88	= Vpp (ac-ft)
38,520	= Vpp (cf)
57,781	=Vpp (cf) (OFW discharge, 50% additional req'd)

NatureWalk at Seagrove
Summary of final design

Project: Ponds 19&20
Date: 28-Apr-05

SIZING THE ORIFICE

INPUT	
42,384	= V, Provided Treatment volume (cf)
0.6	= C, Orifice coefficient (usually assume C=0.6)
32.5	= Ew, Elevation of the overflow weir
31	= Ec, orifice inv elev (ft)
1.875	= D, Diameter (in)
31	=Normal permanent pool level (ft)

OUTPUT	
31.75	= E(1/2) = 0.5 (Ew + Egw) , Elevation where 1/2 the treat vol is released.
1.42	= h1, = Ew - Egw - D/2 (ft)
0.67	= h2 = E(1/2) - Ec - D/2 (ft)
1.125	= hav, average of h1 and h2 (ft)
0.0192	= Orifice area = 3.14*D^2 / 2 (sf)
0.098	= Qav = Ao x C x (2 g hav) ^0.5 (cfs)
352.4	= Qav x (3600 s/hr) (cf/hr)
60.1	= t(1/2), drawdown time for half the treatment volume (hrs)

PLANTING ZONES

OUTPUT			
ZONE 1 is between	32.50	and	31.50
ZONE 2 is between	31.50	and	30.00
ZONE 3 is between	30.00	and	28.00
ZONE 4 is between	28.00	and	26.00

NatureWalk at Seagrove
Summary of final design

Project: Pond 21
28-Apr-05

INPUT:		*OUTPUT:*						
EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33.7	13,893	2,753	47,665	1.09	0	0	0.00	overflow 33.7
33.5	13,636	6,608	44,912	1.03	2,753	2,753	0.06	
33	12,797	11,570	38,304	0.88	6,608	9,361	0.21	NPL/top littoral zone
32	10,342	9,165	26,735	0.61	11,570	20,931	0.48	
31	7,987	7,244	17,570	0.40	9,165	30,095	0.69	bottom littoral zone
30	6,501	5,824	10,326	0.24	7,244	37,339	0.86	
29	5,147	4,502	4,502	0.10	5,824	43,163	0.99	
28	3,857	0	0	0.00	4,502	47,665	1.09	Floor

PPV reqd	21,453 ft3
PPV prov	38,304 ft3
TV reqd	8,619 ft3
TV prov	9,361 ft3
TV depth	0.7 ft

Michelle Diller 4/28/05

NatureWalk at Seagrove
Summary of final design

Project: Pond 21
Date: 28-Apr-05

INPUT

1.583	= Aac, Basin Area (ac)
1.077	= Ai, Impervious Area (ac)
0.85	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
0.294	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff: (OFW discharge)

0.20	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
8,619	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

0.20	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
8,737	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

0.27	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
11,615	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

0.33	= Vpp (ac-ft) = C * Rws * A * Tr / 153
14,302	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

0.33	= Vpp (ac-ft)
14,302	= Vpp (cf)
21,453	=Vpp (cf) OFW discharge (additional 50% req'd)

NatureWalk at Seagrove
Summary of final design

Project: Pond 21
Date: 28-Apr-05

SIZING THE ORIFICE

INPUT

9,496	= V, Provided Treatment volume (cf)
0.6	= C, Orifice coefficient (usually assume C=0.6)
33.7	= Ew, Elevation of the overflow weir
33	= Ec, orifice inv elev (ft)
1.125	= D, Diameter (in)
33	=Normal permanent pool level (ft)

OUTPUT

33.35	= E(1/2) = 0.5 (Ew + Egw) , Elevation where 1/2 the treat vol is released.
0.65	= h1, = Ew - Egw - D/2 (ft)
0.30	= h2 = E(1/2) - Ec - D/2 (ft)
0.525	= hav, average of h1 and h2 (ft)
0.0069	= Orifice area = 3.14*D^2 / 2 (sf)
0.024	= Qav = Ao x C x (2 g hav) ^0.5 (cfs)
86.7	= Qav x (3600 s/hr) (cf/hr)
54.8	= t(1/2), drawdown time for half the treatment volume (hrs)

PLANTING ZONES

OUTPUT

ZONE 1 is between	33.70	and	33.50
ZONE 2 is between	33.50	and	32.00
ZONE 3 is between	32.00	and	30.00
ZONE 4 is between	30.00	and	28.00

NatureWalk at Seagrove
Summary of final design

DA #14 Ponds 22, 23, 24, 25

Project: Pond 22

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33	8,145	1,609	31,147	0.72	0	0	0.00	
32.8	7,948	6,044	29,538	0.68	1,609	1,609	0.04	popoff 32.8
32	7,162	3,463	23,494	0.54	6,044	7,653	0.18	
31.5	6,690	6,021	20,031	0.46	3,463	11,116	0.26	NPL/top littoral zone
30.5	5,351	4,745	14,011	0.32	6,021	17,137	0.39	
29.5	4,138	3,771	9,266	0.21	4,745	21,881	0.50	bottom littoral zone
28.5	3,404	3,068	5,495	0.13	3,771	25,652	0.59	
27.5	2,731	2,428	2,428	0.06	3,068	28,720	0.66	
26.5	2,124	0	0	0.00	2,428	31,147	0.72	floor

Project: Pond 23

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33	3,862	783	10,319	0.24	0	0	0.00	
32.8	3,965	2,796	9,536	0.22	783	783	0.02	popoff 32.8
32	3,026	1,416	6,740	0.15	2,796	3,579	0.08	
31.5	2,636	2,275	5,325	0.12	1,416	4,995	0.11	NPL/top littoral zone
30.5	1,913	1,589	3,050	0.07	2,275	7,269	0.17	
29.5	1,265	983	1,461	0.03	1,589	8,858	0.20	bottom littoral zone
28.5	701	478	478	0.01	983	9,841	0.23	
27.5	255	0	0	0.00	478	10,319	0.24	floor

Project: Pond 24

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33	6,081	1,195	17,837	0.41	0	0	0.00	popoff 32.8
32.8	5,864	4,345	16,643	0.38	1,195	1,195	0.03	
32	4,999	2,371	12,298	0.28	4,345	5,540	0.13	
31.5	4,485	3,859	9,927	0.23	2,371	7,911	0.18	NPL/top littoral zone
30.5	3,233	2,672	6,068	0.14	3,859	11,770	0.27	
29.5	2,110	1,730	3,396	0.08	2,672	14,441	0.33	bottom littoral zone
28.5	1,349	1,052	1,667	0.04	1,730	16,171	0.37	
27.5	754	615	615	0.01	1,052	17,222	0.40	
26.5	476	0	0	0.00	615	17,837	0.41	floor

Project: Pond 25

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
32.8	13,320	10,188	54,992	1.26	0	0	0.00	overflow 32.8
32	12,151	5,896	44,804	1.03	10,188	10,188	0.23	
31.5	11,431	10,370	38,908	0.89	5,896	16,084	0.37	NPL/top littoral zone
30.5	9,309	8,283	28,538	0.66	10,370	26,454	0.61	
29.5	7,257	6,766	20,255	0.46	8,283	34,737	0.80	bottom littoral zone
28.5	6,275	5,652	13,489	0.31	6,766	41,503	0.95	
27.5	5,029	4,437	7,837	0.18	5,652	47,155	1.08	
26.5	3,845	3,400	3,400	0.08	4,437	51,592	1.18	
25.5	2,955	0	0	0.00	3,400	54,992	1.26	Floor

PPV reqd	68,422 ft3
PPV prov	74,190 ft3
TV reqd	35,873 ft3
TV prov	36,519 ft3
TV depth	1.3 ft

Michelle Diller 4/28/05

NatureWalk at Seagrove
Summary of final design

Project: Ponds 22,23,24,25
Date: 28-Apr-05

INPUT:

6.588	= Aac, Basin Area (ac)
5.603	= Ai, Impervious Area (ac)
0.61	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
0.578	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff: (OFW discharge)

0.82	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
35,872	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

0.97	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
42,466	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

0.80	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
34,691	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

0.98	= Vpp (ac-ft) = C * Rws * A * Tr / 153
42,715	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

0.98	= Vpp (ac-ft)
42,715	= Vpp (cf)
64,072	=Vpp (cf) OFW discharge (additional 50% req'd)

Michelle Diller 4/28/05

NatureWalk at Seagrove
Summary of final design

Project: DA #14
Date: 28-Apr-05

SIZING THE ORIFICE

INPUT

36,721	= V, Provided Treatment volume (cf)
0.6	= C, Orifice coefficient (usually assume C=0.6)
32.8	= Ew, Elevation of the overflow weir
31.5	= Ec, orifice inv elev (ft)
1.875	= D, Diameter (in)
31.5	=Normal permanent pool level (ft)

OUTPUT

32.15	= E(1/2) = 0.5 (Ew + Egw) , Elevation where 1/2 the treat vol is released.
1.22	= h1, = Ew - Egw - D/2 (ft)
0.57	= h2 = E(1/2) - Ec - D/2 (ft)
0.975	= hav, average of h1 and h2 (ft)
0.0192	= Orifice area = 3.14*D^2 / 2 (sf)
0.091	= Qav = Ao x C x (2 g hav) ^0.5 (cfs)
328.0	= Qav x (3600 s/hr) (cf/hr)
56.0	= t(1/2), drawdown time for half the treatment volume (hrs)

PLANTING ZONES

OUTPUT

ZONE 1 is between	32.80	and	32.00
ZONE 2 is between	32.00	and	30.50
ZONE 3 is between	30.50	and	28.50
ZONE 4 is between	28.50	and	26.50

NatureWalk at Seagrove
Summary of final design

Project: Pond 26
28-Apr-05

INPUT:		*OUTPUT:*						
EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33	5,680	5,274	20,995	0.48	0	0	0.00	overflow 33
32	4,868	2,337	15,721	0.36	5,274	5,274	0.12	
31.5	4,478	3,928	13,384	0.31	2,337	7,611	0.17	NPL/top littoral zone
30.5	3,378	2,890	9,456	0.22	3,928	11,539	0.26	
29.5	2,402	2,190	6,566	0.15	2,890	14,429	0.33	bottom littoral zone
28.5	1,977	1,791	4,377	0.10	2,190	16,618	0.38	
27.5	1,605	1,444	2,586	0.06	1,791	18,409	0.42	
26.5	1,283	1,142	1,142	0.03	1,444	19,853	0.46	
25.5	1,000	0	0	0.00	1,142	20,995	0.48	Floor

PPV reqd	14,658	ft3
PPV prov	13,384	ft3
TV reqd	7,585	ft3
TV prov	7,611	ft3
TV depth	1.5	ft

NatureWalk at Seagrove
Summary of final design

Project: Pond 26
Date: 28-Apr-05

INPUT

1.393	= Aac, Basin Area (ac)
1.112	= Ai, Impervious Area (ac)
0.66	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
0.103	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff: (OFW discharge)

0.17	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
7,585	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

0.20	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
8,583	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

0.18	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
7,937	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

0.22	= Vpp (ac-ft) = C * Rws * A * Tr / 153
9,772	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

0.22	= Vpp (ac-ft)
9,772	= Vpp (cf)
14,658	=Vpp (cf) OFW discharge (additional 50% req'd)

NatureWalk at Seagrove
Summary of final design

Project: Pond 26
Date: 28-Apr-05

SIZING THE ORIFICE

INPUT

7,623	= V, Provided Treatment volume (cf)
0.6	= C, Orifice coefficient (usually assume C=0.6)
33	= Ew, Elevation of the overflow weir
31.5	= Ec, orifice inv elev (ft)
0.75	= D, Diameter (in)
31.5	=Normal permanent pool level (ft)

OUTPUT

32.25	= E(1/2) = 0.5 (Ew + Egw) , Elevation where 1/2 the treat vol is released.
1.47	= h1, = Ew - Egw - D/2 (ft)
0.72	= h2 = E(1/2) - Ec - D/2 (ft)
1.125	= hav, average of h1 and h2 (ft)
0.0031	= Orifice area = 3.14*D^2 / 2 (sf)
0.016	= Qav = Ao x C x (2 g hav) ^0.5 (cfs)
56.4	= Qav x (3600 s/hr) (cf/hr)
67.6	= t(1/2), drawdown time for half the treatment volume (hrs)

PLANTING ZONES

OUTPUT

ZONE 1 is between	33.00	and	32.00
ZONE 2 is between	32.00	and	30.50
ZONE 3 is between	30.50	and	28.50
ZONE 4 is between	28.50	and	26.50

NatureWalk at Seagrove
Summary of final design

Project: Pond 27

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33	4,080	2,713	13,756	0.32	0	0	0.00	
32.3	3,671	1,075	11,043	0.25	2,713	2,713	0.06	popoff 32.3
32	3,496	1,678	9,968	0.23	1,075	3,788	0.09	
31.5	3,215	2,822	8,290	0.19	1,678	5,466	0.13	NPL/top littoral zone
30.5	2,428	2,066	5,469	0.13	2,822	8,287	0.19	
29.5	1,703	1,474	3,403	0.08	2,066	10,353	0.24	bottom littoral zone
28.5	1,244	1,093	1,930	0.04	1,474	11,826	0.27	
27.5	941	837	837	0.02	1,093	12,919	0.30	
26.5	733	0	0	0.00	837	13,756	0.32	floor

Project: Pond 28

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33	22,123	14,869	85,602	1.97	0	0	0.00	popoff 32.3
32.3	20,361	5,995	70,732	1.62	14,869	14,869	0.34	
32	19,606	9,496	64,737	1.49	5,995	20,864	0.48	
31.5	18,379	16,596	55,241	1.27	9,496	30,361	0.70	NPL/top littoral zone
30.5	14,813	13,120	38,645	0.89	16,596	46,957	1.08	
29.5	11,427	10,392	25,525	0.59	13,120	60,077	1.38	bottom littoral zone
28.5	9,357	8,424	15,133	0.35	10,392	70,469	1.62	
27.5	7,490	6,710	6,710	0.15	8,424	78,892	1.81	
26.5	5,929	0	0	0.00	6,710	85,602	1.97	floor

Project: Pond 29

INPUT: *OUTPUT:*

EL	Area [sf]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Incremental Volume [cf]	Cumulative Volume [cf]	Cumulative Volume [ac-ft]	Comments:
33	12,409	8,443	56,696	1.30	0	0	0.00	
32.3	11,714	3,470	48,253	1.11	8,443	8,443	0.19	popoff 32.3
32	11,417	5,588	44,783	1.03	3,470	11,913	0.27	
31.5	10,933	10,234	39,196	0.90	5,588	17,500	0.40	NPL/top littoral zone
30.5	9,534	8,878	28,962	0.66	10,234	27,734	0.64	
29.5	8,221	7,609	20,085	0.46	8,878	36,611	0.84	
28.5	6,996	6,612	12,476	0.29	7,609	44,220	1.02	bottom littoral zone
27.5	6,228	5,864	5,864	0.13	6,612	50,832	1.17	
26.5	5,500	0	0	0.00	5,864	56,696	1.30	floor

PPV reqd	43,314 ft3
PPV prov	102,727 ft3
TV reqd	22,078 ft3
TV prov	27,301 ft3
TV depth	0.8 ft

NatureWalk at Seagrove
Summary of final design

Project: Ponds 27,28,29
Date: 28-Apr-05

INPUT

4.055	= Aac, Basin Area (ac)
2.793	= Ai, Impervious Area (ac)
0.67	= C, Runoff Coefficient
32	= Rws, Wet Season Rainfall (in); may use about 31" for NW Fla
14	= Tr, Residence Time (days); use 14 days if littoral zone is present
62	= Ra, Annual Rainfall (in); may use about 62" for NW Fla
0.747	= Pond area (ac)

OUTPUT

Treatment Volume

1.5" Runoff: (OFW discharge)

0.51	= Vrt, Reqrd Treatment Volume (1" of runoff) [ac-ft]
22,079	= Vrt, Reqrd Treatment Volume (1" of runoff) [cf]

Permanent Pool Volume

Empirical Design Method:

0.52	= Vpp (ac-ft) = Ap * (0.5 / 12) + Ai * (2.0 / 12)
22,568	= Vpp (cf) = Ap * (0.5 / 12) + Ai * (2.0 / 12)

Annual Runoff Design Method

0.54	= Vpp (ac-ft) = Ran * A * Cw * Tr / 365
23,453	= Vpp (cf) = Ran * A * Cw * Tr / 365

Wet Season Design Method (153 days from June - October):

0.66	= Vpp (ac-ft) = C * Rws * A * Tr / 153
28,878	= Vpp (cf) = C * Rws * A * Tr / 153

Maximum Value from the Three Methods

0.66	= Vpp (ac-ft)
28,878	= Vpp (cf)
43,316	=Vpp (cf) OFW discharge (additional 50% req'd)

NatureWalk at Seagrove
Summary of final design

Project: ~~Pond 1~~ Ponds 27, 28, 29
Date: 28-Apr-05

SIZING THE ORIFICE

INPUT	
19,500	= V, Provided Treatment volume (cf)
0.6	= C, Orifice coefficient (usually assume C=0.6)
32.7	= Ew, Elevation of the overflow weir
31.5	= Ec, orifice inv elev (ft)
1.375	= D, Diameter (in)
31.5	=Normal permanent pool level (ft)

OUTPUT	
32.1	= E(1/2) = 0.5 (Ew + Egw) , Elevation where 1/2 the treat vol is released.
1.14	= h1, = Ew - Egw - D/2 (ft)
0.54	= h2 = E(1/2) - Ec - D/2 (ft)
0.900	= hav, average of h1 and h2 (ft)
0.0103	= Orifice area = 3.14*D^2 / 2 (sf)
0.047	= Qav = Ao x C x (2 g hav) ^0.5 (cfs)
169.5	= Qav x (3600 s/hr) (cf/hr)
57.5	= t(1/2), drawdown time for half the treatment volume (hrs)

PLANTING ZONES

OUTPUT

ZONE 1 is between	32.70	and	32.00
ZONE 2 is between	32.00	and	30.50
ZONE 3 is between	30.50	and	28.50
ZONE 4 is between	28.50	and	26.50

Naturewalk | Seagrove | RAI items

① need agent authorization letter allowing Shannon Howell to sign for Richard Olson

② HOA docs must be signed + notarized

③ Cover page (at least) of stormwater management plan must be signed + sealed

④ Future development area in NW corner
what treatment is being provided for the roadway N of the wetland crossing?
⇒ road should stub out just past wetland crossing as it does for other "future development areas"

⑤ VNBs
→ need to be specifically addressed in HOA docs
→ need to be shown on the preliminary plat] using the Walton County 25' buffer

⑥ Erosion controls (around ponds to protect the ponds during lot construction)

Pond 4: add to west and east sides
Pond 5: add to south side
Pond 6: NW side
Pond 8: south side
Pond 9: N, E, S sides
Pond 10: east side (curve)
Pond 12: NE side (vertical wall side)
Pond 13: SE side (curve)
Pond 14: SW side
Pond 15: S side
Pond 21: around pond
Pond 16: along vertical wall
Pond 18: W, E, S sides
Pond 18a: W, S sides
Pond 19: W side (vertical wall)
Pond 20: SW side
Pond 29: eastern portion of pond, south side

* double row silt fence adjacent to wetlands
* good

STAEDTLER® No. 937 811E Engineer's Computation Pad

STAEDTLER® No. 937 811E Engineer's Computation Pad

⑦ stub out road at north end of Flatwoods Forest Loop should be extended ~~to north end of Rd~~ northward to reach Pond #18A to provide maintenance access

⑧ SWPPP is incorrect: states there will be 5 wet detention ponds

⑨ Littoral zone general comment

* Nuphar lutea (spatterdock) is a Zone 3-4 plant, should be planted in the deeper part of Zone 3, not all of it
  → FDM recommends it be planted in groups 25' apart (not 18" centers staggered rows)

→ enhance littoral zones around orifice discharge structures also overflow structures where possible

⑩ Ponds

→ required volume calcs are all for ½" and 1" of rainfall volume
  → Need to be revised to show proper volumes for 1.5" runoff to wet d's
  1.0" runoff to dry retention

→ backside of side slopes should also be stabilized w/ sod

→ orifice diameter should be rounded to nearest 1/8", not 1/4"
  stay as close to 60 hrs as possible

* diameters on STD-6 do not match "round-up" diameters in calcs

→ provide the pond area info in stage-storage table for the weir elevation + orifice elevation

→ need to maximize inlets + outlets to minimize dead zones/non-mixing areas

→ ~~need sod specified for all side slopes above~~ littoral zone
  - shown on plan views of ponds

→ PPV ~~of~~ 50% greater due to OFW discharge
  show on calc book

⑪ Discharge structures DS1-DS10 - shouldn't the top elevation shown on QD-11 match the top elevations shown on SD6?

RAI Items

Drainage Area #1

* Pond 1

→ NPL is set one foot above SHGW. – why?
seems to be no reason for it
justify, or lower orifice elevation to 30.5
+ TV overflow accordingly

→ orifice diameter: calcs say 1.5" ϕ (too big)
drawings say 1.25" (should be 1.375" (1 3/8"))

→ no skimmer apparent around the discharge boxes

→ DS1 not shown on stormwater structure schedule (GD11)

Drainage Area #3

↳ show recovery calculations

↳ recovery calcs based on limiting permeability (where k = 10 in/hr from?)
→ show native soils perm
→ put a lower limit on fill sand perm

Drainage Area #5

→ Pond 5, no maintenance access

↳ areas shown for Pond 5 appear much too small
per my measurements / check

↳ TV currently 21.6" deep, maximum design is supposed to be 18" see P. 6-86

↳ elevations shown on GD11 for DS2 do not match
elevations shown on STD-601 SW-1

↳ orifice drawdown details on STD-6
DS2 – drawing sheet number should be SW-1, not 2

↳ concentrate more littoral zone @ outfall of Pond 4

Drainage Area #6

↳ current design of Pond 7 is unacceptable
due to dead storage area in most of pond
see P. 6-84, 6-85 FDM

TV too deep 1.8'

move outlet east to more center of bank

→ move outfall to south end of pond w/ current design or redesign pond

↳ Boardwalk needs to be shown on SW-3

↳ need to see a cross-section of the boardwalk
(side walls/fence) cannot be able to access the pond

→ enhance littoral zone @ outfall

↳ how does boardwalk cross fence?

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD

Drainage Area #7

↳ current design of Pond 6 is unacceptable

TV is too deep (2.35')
PPV not enough (need 10,557 ft³ for OFW discharge)

↳ concentrate more littoral zone @ orifice

Drainage Area #8

↳ calcs show pond bottoms @ 32.5, drawings state 33 ~~clarify~~ clarify

↳ show time for recovery

k = 10 in/hr - where obtained
as w/ DA #3

→ calculate based on limiting soils permeability
→ add lower limit to fill sands perm

Drainage Area #9

↳ TV is too deep (2.3') ; -1.5' max (no further than elevation 31)
way oversized

↳ Pond 12: ineffective design, large dead zone where no mixing / settling / nutrient uptake expected

=> inlet + outlet need to be on opposite ends of pond

↳ enhance littoral zone in Pond 12, particularly around orifice

Drainage Area #10

↳ TV is too deep (2.5')

↳ NPL is set below expected gw table (gw table ~ 31, NPL @ 29.5)
NPL should be set @ 31

↳ ~~Boring for Pond 15 shows~~

↳ enhance littoral zone around orifice discharge structure in Pond #14

↳ Pond 15 boardwalk - show how it intersects the fence
need railheight specified to prevent access

Drainage Area #11

↳ move inlet farther south to increase mixing zone in pond

↳ concentrate additional littoral plantings around orifice (shallow out pond bottom to 6:1, add deeper Zone 3, some Zone 4 plants)

Drainage Area #12

↳ DA shown as 1.915 ac on "post-development DA calcs" shown as 2.24 ac on PPV calcs

↳ orifice on STD-6 1.25"ϕ → ok, but calcs shown it rounded up to 1.5" no

↳ add additional littoral zone around orifice structure
↳ shallow bottom to 6:1
add deeper Zone 3, some Zone 4

Drainage Area #12A

↳ provide invert elevation for connection pipe P128
↳ needs to be below NPL (nothing shown on stormwater pipe schedule)

↳ current orifice discharge location is an issue
① short circuiting
② dead zone - lack of mixing
] move structure to west end of the pond

↳ orifice diameter should be 1.375" (1 3/8"), not 1.5"

↳ Pond #18 section: retaining wall top elevation needs to have a minimum elevation above 33.10, and probably above the 25yr elevation of 33.42

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD

Drainage Area #13

RAI items

↳ maintenance access to ponds - appears to be an easement between the lots between the ponds
↳ needs to clearly be called out as a maintenance easement on the plat
↳ TV too deep (1.7')
↳ Pond 19 move discharge orifice farther NE to maximize mixing zone
enhance littoral zone around discharge structures (NE corner of pond)
↳ Pond 20
move overflow farther away from inlet to ↑ mixing
↳ littoral zone is < 30%, add more (have +0.5' in Zone 2, all of Zone 1 to overflow)
* enhance around discharge structure
(w/ current TV, orifice is a little small, may be ok when TV decreased)

Drainage Area #13A

↳ inadequate TV (sized for 1" runoff, not 1.5" runoff)
↳ inlet pipe P211 invert shows as 29.5, pond bottom is at 28
* add riprap pad or bubble-up structure
↳ DS list on GD11 doesn't include any structures past DS10
↳ enhance littoral zone @ discharge

Drainage Area 14

↳ Inadequate PPV and TV
↳ Pond 24: most of pond is dead storage
bring inlet more towards NE corner perhaps off S150 rather than S149
↳ Pond 24: too much littoral zone (58%) ⇒ reduce overall, but enhance littoral plantings around overflow weir
↳ Pond 22: enhance littoral plantings around discharge structure
↳ Pond 22: retaining wall needs to spec a minimum top elevation

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD

Drainage Area #15

RAI items

→ Inadequate TV in Pond 25, doesn't meet OFW discharge

→ enhance littoral plantings in SE corner of pond by orifice + around OFS11

→ calcs round up ϕ says 1.25"; 1" used on STD-6 (not evaluated as TV is inadequate)

Drainage Area #16

Pumping station discharges
- DPS1 ~~where does it discharge~~
- DPS2
- DPS3

→ Inadequate TV + PPV
TV too deep 1.7'

→ enhance littoral plantings around DS14, if need to remove excess pull from very eastern end

→ orifice ϕ on STD-6 doesn't match value in calcs

DA #17

TV inadequate
Pond 28 dead zone / move orifice
enhance littoral zone

VNBs

5.642c - complete lots w/o treatment
→ show spot elevations
should only be rear of lots given el
→ put front into one of the DAs

Table of VNB areas
pond where compensatory is provided

Pond analyses

5445 ft³/acre

Drainage Area #1

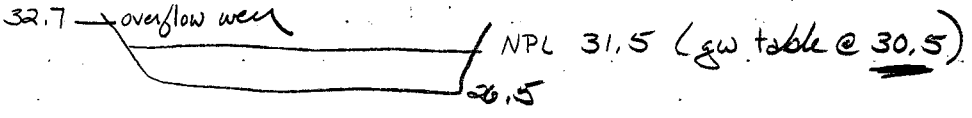
↳ Pond 1

drainage area: 90,365 + (400×30) = 102,365 ft²
2.35 ac

EOR 2.457 ac ✓ ok

wet detention pond OFW standards

$V_{DEP.}$ = 13,378 ft³



Littoral zone 28.5 to 31.5

↑ building will overhang part of the area

Check pond areas

	me	EOR
26.5	3317	3306
27.5		4359
28.5		5537
29.5	8389	8269
30.5		11333
31.5	15084	14942
32.5		16890
33.5		18951

* NPL set 1' above expected gw table

PPV large enough per current design

Littoral zone

3934 + 3745 = 7679 ft²

↑ EOR 6673 ft²

↑ did account for building

$\frac{7679\ ft^2}{14,942\ ft^2} = 51\%$

STAEDTLER® No. 937 811E Engineer's Computation Pad

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area #3

Ponds 2+3 – dry ponds
one on north side, one on south side of the road

	SHGW	NG	GW	✓ ok
Pond 2 : boring E4	1.5′	32.5	31.0	]
Pond 3 : boring E3	1.5′	32.5	31.0	]

V_{DEP} = 7844 ft³ – 1" ?

0.75" not 1" ?

bottom area per EOR 14,238 ft²] permeability of native soils?

* must do recovery calculations based on limiting permeability → show the native soils permeability
  * show recovery #'s
  * k = 10 in/hr → put a lower limit on fill sand permeability

Drainage Area #5

→ Ponds 4+5

→ interconnected via pipe network @ elevations below NPL

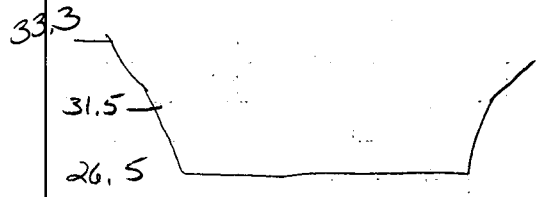
↳ bleeddown weir in Pond 4 (DS2) orifice @ 30.6 ? on GD11
top elev @ 31.31

↳ overflow weir in Pond 5 (OFS1)
on STD-6
SHGW @ 31.5
spillway (weir) @ 33.3

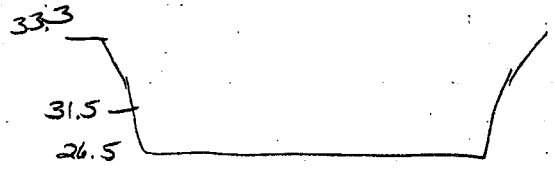
per STD-6
orifice @ 31.5
overflow @ 33.3
doesn't match elevations on GD11

Geotech		SHGW BG	NG	GW	NPL	
Pond 4	E5	2	33	31	31.5	] should be ok on average
Pond 5	A4	1	33	32	31.5	]

area per EOR 3.176 ac V_{DEP} = 17,293 ft³



4



5

PP - 5'
TV - 1.8' → 21.6" too deep*

* Pond 4: concentrate more littoral zone plantings around orifice

Littoral zone 40% → combined

Check pond areas

	Pond 4 ✓ ok		Pond 5	
	me	EOR	me	EOR
26.5	3683	3536		
27.5				
28.5			2579	727
29.5				
30.5	8342	8162		
31.5			6085	2692
32				
33				
34				

EOR's area numbers are WAY off

* Pond 5 no maintenance access

* once areas verified: recheck littoral zone
check TV vol + depth
check PPV
check orifice Ø

STAEDTLER® No. 937 811E Engineer's Computation Pad

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area 6

↳ Pond 7

- Poor design - dead storage area in majority of pond
  ↑ see P. 6-85 of FDM

per page 6-84, in dead storage areas where inflow is bypassed w/o mixing, that area of the pond is ineffective in providing pollutant removal

* This is not unavoidable, there are adequate uplands to the north of the pond that could be utilized in a better pond design or more discharge structures to the south end of the pond

- Boardwalk cannot go over pond unless 4' fence/walls on both sides
  - how over fence?

⇒ no evaluation done on the pond parameters due to inadequacy of current design

TV depth 1.8', 1.5' max

gw boring A2 @ elevation ≈ 31.5 SHGW 1.5'

~~elevation~~ 30
orifice @ 29.5 } within fluctuation of water table

---

cl-
evaluate pond from line on drawing

24.5	4543	
25.5	5475	
26.5	6358	
27.5	7477	
28.5	9098	
29.5	10952	→ 0.25 ac
30	11718	
31	13162	
32	14090	

3.465
3.716
.885
4.601

TV not adequate

Drainage A. a #7

Pond 6

0.96 acres $V_{DEP} = 5227 ft^3$

geotech: boring E6	NG	SHGW	NPL should be	NPL @ 31
ok	≈32	1'	31	31

TV: way overdeep 2.35' deep max 18"

* littoral zone should be concentrated around orifice
  add some deeper plantings around orifice

→ baffle ok, makes travel path long enough

⇒ no evaluation done on the pond parameters due to inadequacy of current design

→ PPV not adequate (need an extra 50% due to OFD discharge)

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area 8

Ponds 8+9

Area: 37,433 ft² → 0.86 ac EOR 0.818 ac

V_{DEP} = ~~2469 ft³~~ 2227 ft³ 0.75"

Geotech: Boring E7

NG	SHGW	expected wt	Pond bottom
32	1.25	30.75	33

sand backfill to 32.5?

* dry ponds → interconnected; no overflow structures
  → bottom 33, top 34

* calcs show bottom @ 32.5, drawings SW-4 and STD-6 show bottom @ 33

Pond areas

✓ ok, drawings appear to match calcs

* k : 10 in/hr used where obtained? show # hours for recovery

→ volume adequate @ bottom @ 33

→

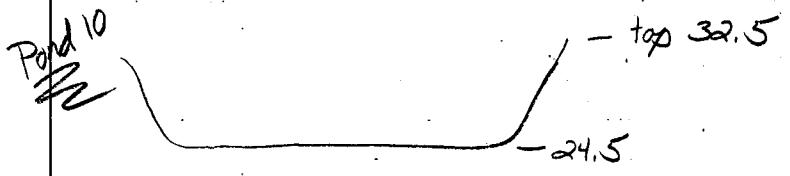
STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area #9

NPL 29.5

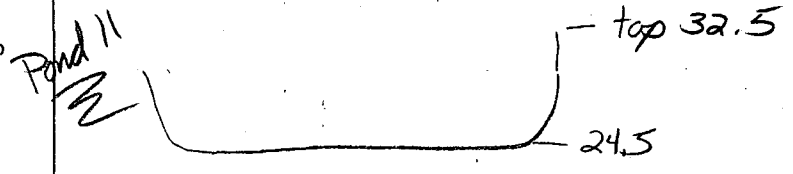
Ponds 10, 11, 12

lok Invert elevation of pipes connecting the ponds 29.45
→ these three ponds are interconnected
orifice + overflow weir in Pond 12

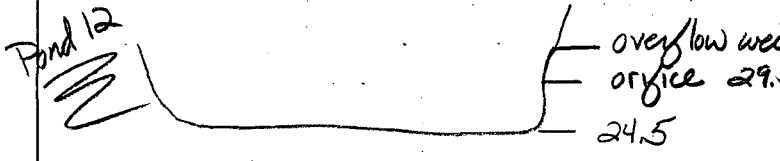


Littoral zone 1451

$$\frac{3112 - 1661}{3112} = 47\%$$



$$\frac{4356 - 2406}{4356}^{1450} = 45\%$$



2.3' TV
no!! too deep

PP → 5' deep

$$\frac{20235 - 14485787}{20235} = 28.5\%$$

Geotech

Pond	Boring	NG	SHGW	expected wt	NPL	
10	X9	32	1.25	30.75	29.5	will equalize between the three ponds
11	E8	30.5	1	29.5	29.5	
12	E9	30.5	0.5	30	29.5	

→ ineffective design in Pond 12
→ large dead zone
* orifice + ~~weir~~ overflow weir need to be moved to SE corner of pond

↳ TV too deep (2.3') ← TV is way oversized
→ check pond areas ✓ pond areas ok
→ check volumes
→ check littoral ↑ see above

→ more littoral zone in Pond 12

→ enhance littoral zone in Pond 12
shallow up side slopes

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area #10

Ponds 13, 14, 15

Drainage area 10.272 ac
VDEP = 55931 ft³

* TV is 2.5' deep → too deep

w/ NPL @ 29.5, no higher than 31
NPL @ 31, no higher than 32.5
is set @ 32

Geotech

Pond	Boring	NG	SHGW	expected wt	NPL
13	A6	31.5	1.5	30	29.5
14	E10	33	1	32	29.5
15	E1 (E11?)	32	1	31	29.5

boring E1 is also the label for Pond 1; can't be both

* NPL is set below expected gw table → NPL should be set at 31 not 29.5

current design, PP is adequate, barely

* enhance littoral zone around discharge structure in Pond #14

check areas of ponds → ✓ ok

→ littoral zones ✓ ok, but enhance around #14

* Pond 15: Boardwalk
  → how over the fence?
  → height of side rails?

NPL is 29.5

✓ ok Invert elevation of pipes connecting the ponds: 28.0

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area #11

Pond 16

1.0 acre V_{DEP} = 5445 ft³

PPV: 9981 ft³

Geotech

Boring	NG	GW@1.5 SHGW	31.5 expected wt	APL
A7	33	1	32	31.5

ok

Littoral zone: 38% → concentrate more around orifice

→ move inlet farther south to ↑ mixing zone

→ pond areas ok

PPV: 4' deep

TV: 0.9' deep

→ orifice diameter of 1.0" adequate w/ current design (53 hours)

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area #12

Pond 17

Drainage area ok — 1.915 ac ← ? per EOR's PPV calcs DA = 2.24 ac — V_{DEP} = 10,427 ft³

Geotech

Boring	NG	wt	SHGW	wt expected	NPL	
A10	34	2.5	2	31.5-32	31.5	✓ ok

PP: depth 5'
vol req'd

TV depth 1.4' ✓ ok

Littoral zone: 36% ✓ add additional around orifice structure

Pond areas: ok

Orifice → STD-6 shows as 1.25" ϕ ——— 62.3 hours
calcs say round up to 1.5" ϕ — no!

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area 2A

Ponds 18 + 18A

* connection pipe is P128 → no pipe information on stormwater pipe schedule
need elevation

Geotech

Pond	Boring	NG	gw	SHGW	expected wt	NPL
18	EB3	≈34.5	1.5	1	33-33.5	32
18a	A11	≈33	3	2.5	30-30.5	kept @ 32 by other pond

DA: 3.139 ac V_{DEP} = 17,092 ft³ PPV depth : 5'
TV depth : 1.1'
PPV req'd = 33,027 ft³

→ is inlet from 18a a short-circuiting problem?

* Littoral zone: ok, but add additional plantings around discharge orifice

Pond areas - ok

* orifice diameter should be 1.375" (1 3/8") not 1.5"

* dead zone - entire west end of the pond

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage f 2 13

Ponds 19+20

* Maintenance access to ponds:
  there is an apparent access between the lots between the ponds 20' wide @ road, 10' wide @ back of lots
  ↳ needs to be clearly called out as a maintenance easement on plat

Drainage Area 5.774 ac ✓ V_{DEP} = 31,439 ft³

Pond 19
↳ move orifice structure farther NE to corner to maximize mixing zone
↳ Pond 20 more overflow weir farther away from inlet
Invert elevation of pipes connecting the ponds 28.24 NPL 31 ✓ok

Geotech

Pond	Boring	wt	SHGW	NG	expected wt	NPL
19	E14	1.5	1	≈33.5	32 - 32.5 ←	31
20	A12	2.5	2	≈33.5	31 - 31.5	31

✓ ok?

PPV: 5' depth
TV: 1.7' depth - too deep!

Littoral zone: < 30% in Pond 20, add → have +0.5' more in Zone 2, room in Zone 1

enhance littoral zone in NE section of pond

→ pond areas ok

STAEDTLER® No. 937 811E Engineer's Computation Pad

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area #13A

Pond 21

Drainage area ✓ ok 2.159 ac V_{DEP} = 11,756 ft^3

DS list on GD11 doesn't include DS1, doesn't go past DS10

PPV: 5' deep volume adequate
TV: 0.7' deep → volume not adequate (sized for 1", not 1.5")

Littoral zone ✓ adequate

* inlet pipe P211 invert shows as 29.5, pond bottom 28
  * add riprap pad on bubble-up structure

→ enhance littoral zone @ discharge

→ size TV for 1.5" Runoff, is too small @EL28: 1032 + 1550 = 2582

Geotech

Boring	NG	wt	SHGW	expected wt	NPL
EI2	35	1.75	1.25	33.25 - 33.75	33

✓ ok

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area 14

DA 3.56 ac $V_{DEP} = 19,384 ft^3$

→ better design from a waterflow standpoint would be to combine Ponds 23+24; use some of the 25' buffer

↳ Inlet pipe into Pond 22 would be better to bring it in along road ROW from S140 than from S145

→ better to trim it out into the pond instead at retaining wall

→ Pond 22: retaining wall top elevation min of overflow elevation ? min 254 elevation?

↳ Inadequate PPV

↳ Inadequate TV

→ Pond 24: too most of pond is dead storage bring inlet in more towards NE corner, perhaps off S150 rather than S149

↳ Pond 24: too much littoral zone 58% → reduce

↳ Ponds 22+24, enhance littoral plantings around discharge structures

Geotech

Pond	Boring	est. NG	wt	SHGW	expected wt	NPL	
22	A17	32	1.5	1	30.5-31	31.5	← has orifice
23	E2	33	1.5	1	31.5-32	31.5	✓ ok
24	A8	33	1.5	1	31.5-32	31.5	

↳ orifice ϕ not evaluated

Drainage Area #15

Pond 25 DA 2.604 ac V_{DEP} = 14,179 ft³
↑ TV provided is inadequate

Geotech Boring	est. NG	wt	SHGW	expected wt	NPL	
A16	33	2	1.5	31-31.5	31.5	ok

PPV volume adequate depth 6'
TV volume inadequate depth 0.8'

→ enhance lit and plantings in SE corner of pond by orifice + around OFS11

→ pond areas + orifice ø not evaluated

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area #16

Pond 26 1.682 ac V_{DEP} = 9158 ft^3

TV provided - inadequate depth 1.7' too deep
PPV provided - inadequate depth 5'

Geotech

Boring	est NG	wt	SHGW	expected wt	NPL	
A3	34	3	2.5	31 - 31.5	31.5	✓ ok

enhance littoral plantings around DS14, remove some @ east end if necessary

orifice ϕ on STD-6 doesn't match value from calcs

STAEDTLER® No. 937 811E Engineer's Computation Pad

Drainage Area #17

DA: 3.729 ac V_{DEP} = 20,304 ft^3

TV inadequate for OFW depth 0.6'

PPV: depth 5', volume adequate for DA

Geotech

Pond	Boring	NG	wt	SHGW	expected wt	NPL	
27	A15	34	2.5	2	31.5-32	31.5	
28	A13	33.5	2.5	2	31-31.5	31.5	✓
29	A14	33	2.25	2	30.75-31	31.5	

Pond 28:

Dead zone

enhance littoral & plantings around discharge

STAEDTLER® No. 937 811E Engineer's Computation Pad

VNBs

Whole lots

250 × 100	whole lots off Seagrass Way	25,000
450 × 90		40,500
1200 × 100	whole lots W and E of pool area	120,000
600 × 100		60,000
		245,500

total 5.64 acres

1.5%

compensatory treatment req'd

in here, PPV must also be ↑ → wet detention: 30,710 ft³
dry retention: 15,355 ft³

also partial lots

1200 × 50 → 60,000 ft² 1.38 ac

wet det: 7514 ft³ →
dry ret: 3757 ft³

→ Adjust whole lots w/o treatment

→ Table of VNB areas
+ which ponds compensatory treatment is being provided in

STAEDTLER® No. 937 811E Engineer's Computation Pad

Florida Department of State, Division of Corporations

www.sunbiz.org

Public Inquiry

Florida Limited Liability

NATUREWALK DEVELOPMENT COMPANY, LLC

PRINCIPAL ADDRESS
1234 AIRPORT RD., STE. 215
DESTIN FL 32541

MAILING ADDRESS
1234 AIRPORT RD., STE. 215
DESTIN FL 32541

Document Number	FEI Number	Date Filed
L03000043304	593755013	11/07/2003
State	**Status**	**Effective Date**
FL	ACTIVE	NONE
Last Event	**Event Date Filed**	**Event Effective Date**
NAME CHANGE AMENDMENT	08/10/2004	NONE
Total Contribution		
0.00		

Registered Agent

Name & Address
OLSON, RICHARD 1234 AIRPORT RD., STE. 215 DESTIN FL 32541

Manager/Member Detail

Name & Address	Title
OLSON & ASSOCIATES OF NW FLORIDA, INC. 1234 AIRPORT RD., STE. 215 DESTIN FL 32541	MGRM

Annual Reports

STORMWATER MANAGEMENT PLAN

RECEIVED
APR 15 2005
NORTHWEST FLORIDA
DEP

PROJECT:
NatureWalk at Seagrove
Walton County, Florida

PROJECT DATE:
October 2004
Revised: February 2005; April 2005

PROJECT NUMBER:
214145AA01

PREPARED FOR:
NatureWalk Development Company, LLC
1234 Airport Road, Suite 215
Destin, Florida 32541

Hatch Mott MacDonald

120 Beckrich Road, Suite 180
Panama City Beach, Florida 32407
Phone: (850) 236-5831
Fax: (850) 234-1952

Brian D. Justice, P.E.
Florida License #: 59378

-003 application

New

TABLE OF CONTENTS:

1. **Vicinity Map**

2. **Stormwater report narrative**
   - Project Overview
   - Existing Site Conditions
   - Design Approach
   - Environmental Impacts
   - Conclusion

3. **Exhibit 1:** Pre-Development Site Information

4. **Exhibit 2:** Pre-Development Time of Concentration (T_c)

5. **Exhibit 3:** Post-Development Site Information

6. **Exhibit 4:** Post Development 'C' Factor Calculation for R.O.W. and Roads

7. **Exhibit 5:** Post Development 'C' Factor Calculations for Lots

8. ~~**Exhibit 6:** Post-Development Discharge information for (Wetlands, Future Development, Lots Bordering Wetlands)~~ **OMIT**

9. **Exhibit 7:** SUPRA –3 Drainage Area Calculations and figures

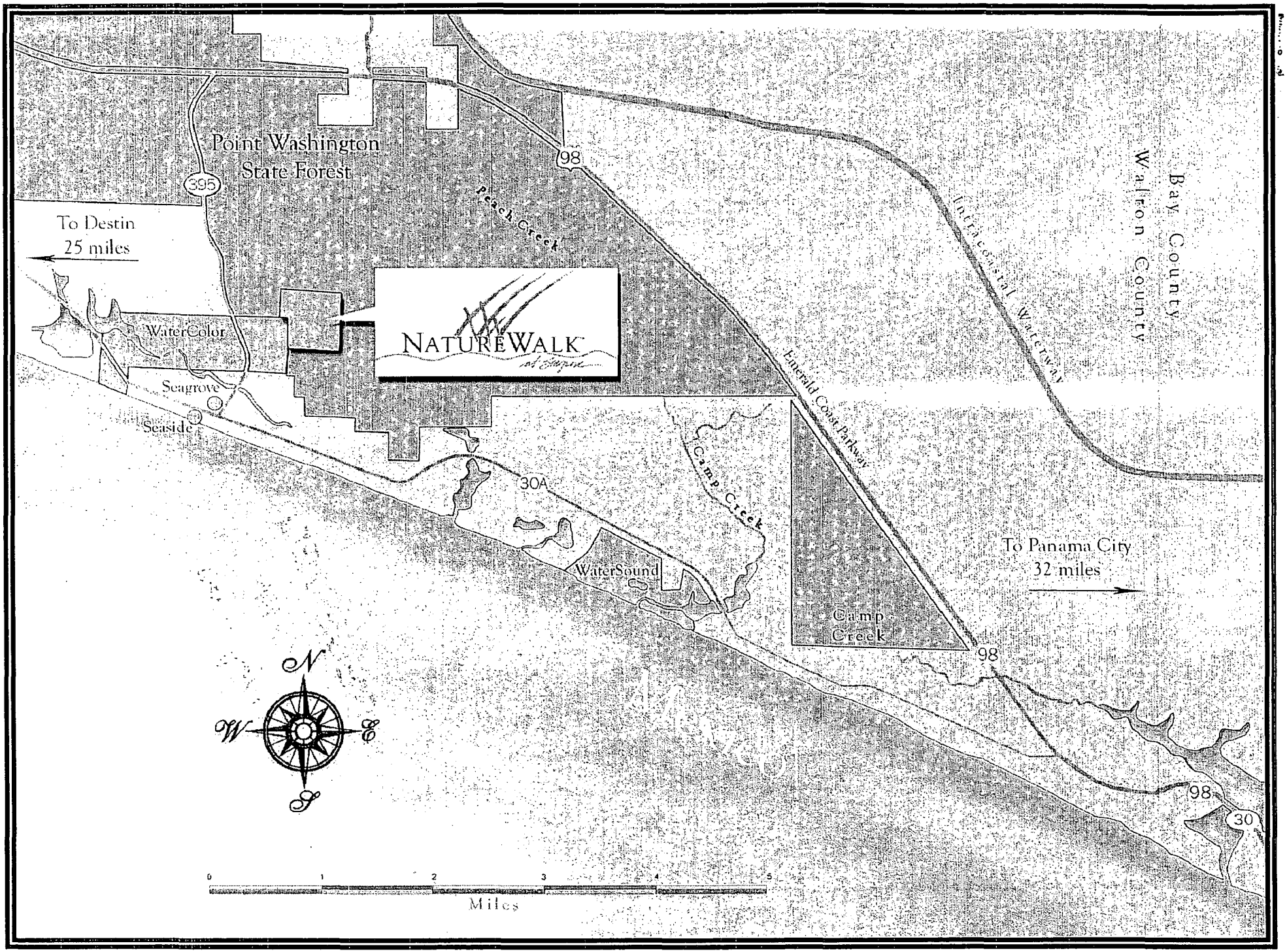
10. ~~**Exhibit 8:** Post-Development Discharge Summaries~~ **OMIT**

11. **Exhibit 9:** Vegetative Natural Buffer Calculations

12. **Exhibit 10:** Geotechnical Report

13. **Certifications**

BEST AVAILABLE COPY



VICINITY MAP

DOCUMENT TITLE:	STORMWATER MANAGEMENT PLAN
PROJECT:	NatureWalk at Seagrove
LOCATION:	Walton County, Florida
PREPARED BY:	Hatch Mott MacDonald
PROJECT NUMBER:	214145AA01
DATE:	October 2004; Revised February 2005; Revised April 2005

PROJECT OVERVIEW:

The project is located on the east side of County Road 395 approximately 1 mile north of County Road 30-A in Walton County, Florida. The project consists of a 290 single-family lot residential subdivision on an approximate 153-acre (project area) parcel. The project will consist of pervious concrete, concrete paver and asphalt roadways, stormwater drainage facilities, water and sewer infrastructure, entrance sales center and a community amenity area.

EXISTING CONDITIONS:

The existing site is in the natural state and has not been disturbed. There are several historic logging roads running throughout the property with culvert crossings at the wetland areas. The project is surrounded on the west, north and east sides by the Point Washington State Forest. On the southwest side of the property is the WaterColors residential development.

The proposed development areas rest on the upland areas of the project. There are two main wetland areas that drain from north to south through the property. Soil investigations were performed to find the water table elevations (see attached PSI report) and found desirable materials down to substantial depths. The soil report states that the water table depth varied throughout the site with a maximum of 3' below existing grade. The approximated seasonal high groundwater levels were estimated 6" above the found levels. All of the stormwater facilities will be wet basins so no percolation information was obtained.

DESIGN APPROACH:

As a result of the geotechnical report, slopes and layout of the improvements, the project will utilize wet ~~retention~~/detention basins. The wetland areas will have timber bridges at the road crossings. These bridges will have a construction that has gaps between the deck members and therefore stormwater will not be collected from these areas. The bridge areas will be accounted for in the calculations.

A pre-development runoff coefficient of 0.39 has been used for all pre-development calculations. This is based on the wetland and upland areas (see Exhibit 1). The post-development runoff coefficients are established based on the type of building lot and on the type of right-of-way (see Exhibits 4 and 5).

The project site has been treated as an entire unit with regards to calculating the time of concentration (T_c). The fetch route map and calculations are attached. The calculated T_c for the west fetch route is 124 minutes with the east fetch route being 116 minutes. Due to several low areas (holes) along both fetch routes, the actual T_c will be longer due to the time required for these areas to fill up and then continue along the route.

For the purpose of calculating the pre-development runoff rate, the calculated 124 minutes will be used (see Exhibit 2). We will use the 8-hour storm event as the critical duration event.

The wetland areas and future development areas have been accounted for in the overall post-development discharge totals (see Exhibit 6). There are several areas that are not accounted for in the drainage areas and stormwater basins. These areas typically border and slope into the wetlands. A discharge rate was calculated for each of the 25-year storm events and was included in the overall post-development discharge totals (see Exhibit 6). compensatory shown in the ponds for these VNB areas

The roadways will utilize a mountable type curb with storm inlets to catch and convey runoff from the roadways to the retention/detention basins. These basins will be designed to treat and attenuate the 25-year critical duration storm event. The basins will have discharge flumes to the wetlands for the runoff greater than the treatment volume. OFW

Due to the stormwater volume being released into the adjacent wetland areas, which in turn release into the surrounding State Forrest, an extra 50% treatment volume is required by the FDEP. A treatment volume of 364,456 cf has been provided, which is 21,491 cf more than the required 342,964 cf (see Exhibit 3). Drainage Area attenuation calculations for the 1, 2, 4, 8 and 24 hour duration storm events are included in Exhibit 7. The total post-development runoff rate is less that the pre-development runoff rate of the site as shown in the attenuation summary (see Exhibit 8). 63 acres ?? was 75 acres in last calc

Several Drainage Areas have basins that are interconnected thru the collection system and will act as one basin. These drainage areas will have only one drawdown flow discharge location and all but DA #14 will have only one overflow discharge location. DA #14 will have three overflow discharge flumes (basins 22, 24 and 25) and together will act as one flume. The drawdown discharge and overflow discharge details are outlined on sheet STD-6 of the construction plans. The drainage areas and pond numbers are listed below for reference:

Drainage Area #1:	Pond 1
Drainage Area #5:	Ponds 4 & 5
Drainage Area #6:	Pond 7
Drainage Area #9:	Ponds 10, 11 & 12
Drainage Area #10:	Ponds 13, 14 & 15
Drainage Area #11:	Pond 16
Drainage Area #12:	Pond 17
Drainage Area #12A:	Ponds 18 & 18A
Drainage Area #13:	Ponds 19 & 20
Drainage Area #13A:	Pond 21
Drainage Area #14:	Ponds 22, 23, 24 & 25
Drainage Area #16:	Pond 26
Drainage Area #17:	Ponds 27, 28 & 29

Treatment volume
1.5" 5445 cf/acre

DA3 (dry ponds) eliminated
DA7 removed (combined, pond 6 removed)
DA8 (dry ponds) eliminated
DA15 removed (combined w/DA14)

The treatment volume (orifice drawdown flow) will be collected and piped to a discharge point for the northeast and the entrance areas of the project. The remainder of the project will be collected and routed to three discharge-pumping stations, which will pump the water up to a surrounding grade for release into the wetland areas. The pump stations will use a dual pump setup, similar to a sewage system pumping station, which will allow one pump to serve as a backup. A discharge manifold system will be installed to disperse the flow over a large area. The orifice discharge rates for each drainage area have been included into the post-development

discharge totals (see Exhibit 8). The Homeowners Association will be responsible for the maintenance of this pumping system.

The required wetland buffer calculations are shown in Exhibit 9. Walton County requires a 25' setback from the FDEP wetland line. This area will be used as the buffer for areas discharging directly into the wetlands. The 300-second travel time requirement was used as a guideline for determining the minimum width of the buffer based on a given slope.

ENVIRONMENTAL IMPACTS:

The proposed development will be protected from soil erosion and sedimentation movement utilizing standard erosion and sedimentation control practices as indicated in the Stormwater Pollution Prevention Plan (SWPPP). This will include staked hay bales and silt fencing around the downstream perimeter and retention areas. All disturbed unpaved areas will be seeded, sodded or otherwise landscaped.

The contractor will be required to obtain coverage under the Generic Permit for Stormwater Discharge from Large and Small Construction Activities and to revise the SWPPP as appropriate to accommodate the individual work plan. Additionally the contractor will be required to have qualified inspectors make periodic inspections as required by Rule 62-621 of the Florida Administrative Code and document those inspections in a standard format.

CONCLUSIONS:

For the proposed development, the "SUPRA-3" stormwater model was utilized to generate stage storage volumes for a range of storm events. The Florida Development Manual was used as a guide to design the wet detention systems to meet the water quality requirements. As such, the stormwater management system for this project meets or exceeds the requirements specified in Chapter 5.06.00 of the County's Land Development Code.

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: October, 2004

PRE-DEVELOPMENT SITE INFORMATION

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL SITE AREA	6666228.00	153.036	
TOTAL WETLAND AREA	2722369.00	62.497	0.50
TOTAL UPLAND AREA	3943859.00	90.539	0.31

PRE "C" FACTOR:				***0.39***

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... October, 2004

PRE-DEVELOPMENT TIME of CONCENTRATION (Tc)

WEST FETCH

FETCH NUMBER	LENGTH (ft)*	ELEVATION CHANGE (ft)*	SLOPE (%)	OVERLAND FLOW VELOCITY (ft/min)**	TIME OF CONCENTRATION (min)
L1	46.0	1.0	2.174	38.0	1.2
L2	28.0	1.0	3.571	41.5	0.7
L3	29.0	1.0	3.448	41.2	0.7
L4	1336.0	1.0	0.075	24.5	54.5
L5	770.0	1.0	0.130	24.9	30.9
L6	157.0	1.0	0.637	28.0	5.6
L7	476.0	1.0	0.210	25.3	18.8
L8	307.0	1.0	0.326	26.0	11.8

* Travel Length and Elevation change is based on TC-1 figure (See Attached)
** Overland Flow Velocity is based on "Wooded Low Storage Curve" in Table 6-575 (See Attached)

TOTAL Tc =	**124.3**

EAST FETCH

FETCH NUMBER	LENGTH (ft)	ELEVATION CHANGE (ft)	SLOPE (%)	OVERLAND FLOW VELOCITY (ft/min)**	TIME OF CONCENTRATION (min)
L9	184.0	0.5	0.272	25.8	7.1
L10	123.0	2.0	1.626	33.7	3.6
L11	1729.0	1.0	0.058	24.4	70.9
L12	856.0	1.0	0.117	24.9	34.4

* Travel Length and Elevation change is based on TC-1 figure (See Attached)
** Overland Flow Velocity is based on "Wooded Low Storage Curve" in Table 6-575 (See Attached)

TOTAL Tc =	**116.0**

CONCLUSION:

The West Fetch seems to provide the longest Time of Concentration (**Tc**). The calculated 124 minutes will used in the Pre-Development discharge rate calculations for the entire site.

NOTE: Due to several low and flat areas along both the East and West Fetch paths, the actual **Tc** would be longer.

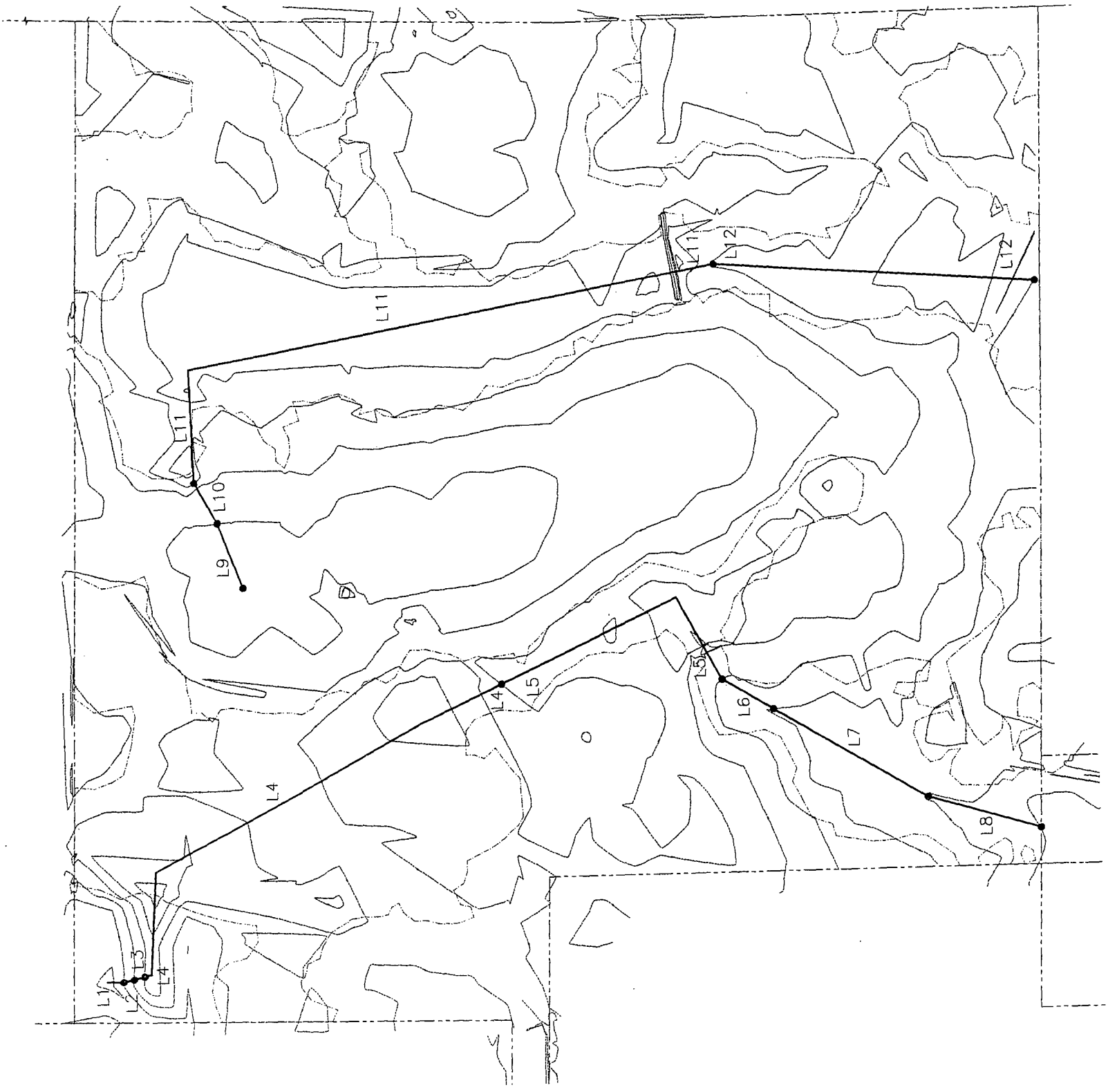


EXHIBIT 2A

Figure 3
Average Velocities for Estimating Time of
Travel for Overland Flow

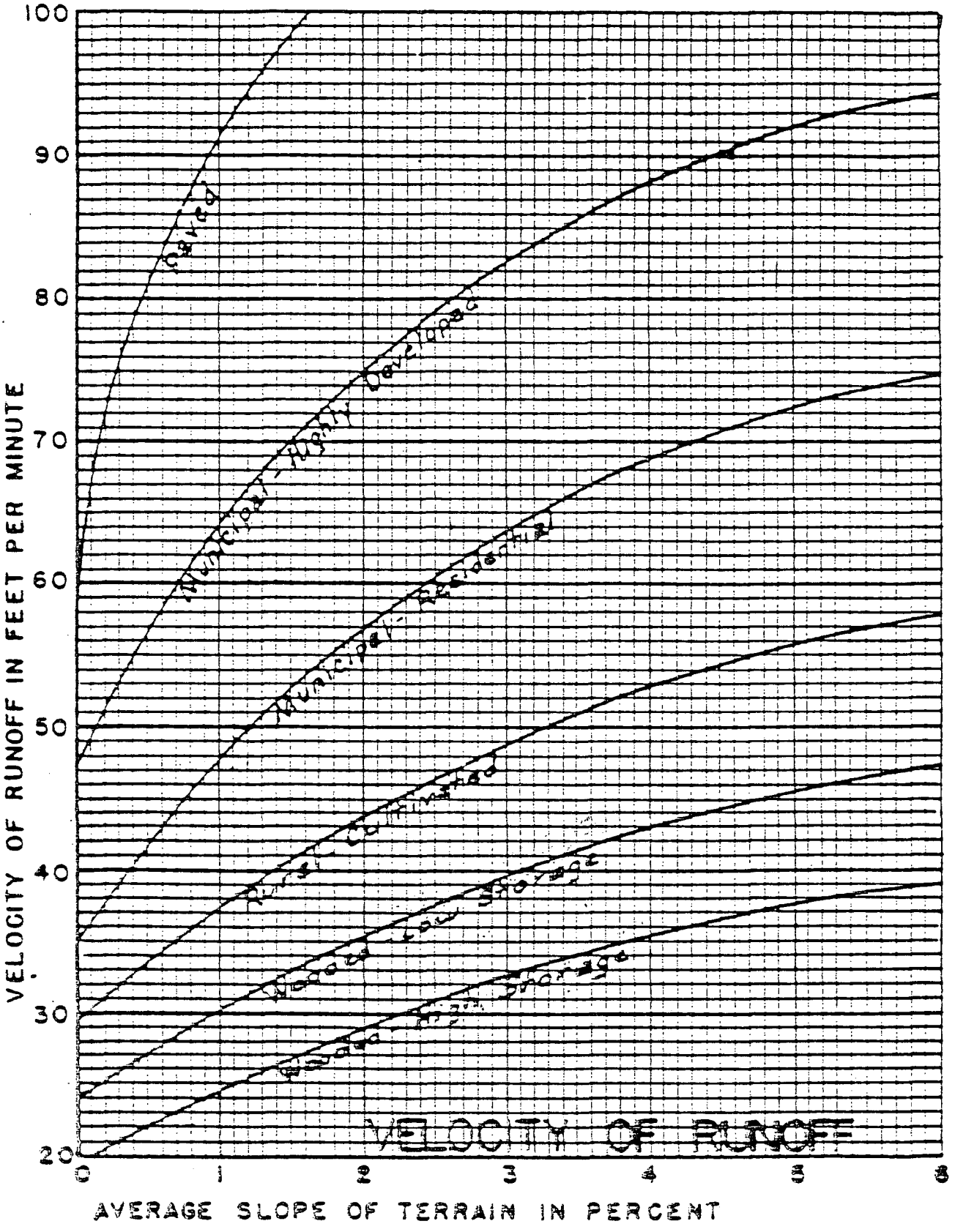


EXHIBIT 28

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... October 2004; Revised 4/11/05

POST-DEVELOPMENT SITE INFORMATION

took out buffers 00 themselves

	AREA (sf)	AREA (ac)	
TOTAL SITE AREA	6666228.00	153.036	
TOTAL DEVELOPMENT AREA	2799556.00	64.269	> 10 ac smaller
TOTAL FUTURE DEVELOPMENT AREA	398385.00	9.146	← ≈ 6 acres smaller
TOTAL BUFFER AND SETBACK AREAS *	745918.00	17.124	
TOTAL WETLAND AREA	2722369.00	62.497	

Note: *Development area does not include: 25' wetland setback area (to remain in natural state)
25' Forestry setback area (to remain in natural state)

1.5" RAINFALL VOLUMES REQUIRED AND PROVIDED:

DRAINAGE AREA VOLUMES:

	acres	VOLUME REQUIRED (cf)	VOLUME REQUIRED (ac-ft)	VOLUME PROVIDED (cf)	VOLUME PROVIDED (ac-ft)
Drainage Area #1	2.46	13381.00 ✓	0.30719	21945.00 +	0.50379
Drainage Area #2 (OMIT)					
Drainage Area #3 (OMIT)					
Drainage Area #4 (OMIT)					
Drainage Area #5	4.12	22458.00	0.51556	26702.00 +	0.61299
Drainage Area #6	8.35	45454.00	1.04348	50355.00 +	1.15599
Drainage Area #7 (OMIT)					
Drainage Area #8 (OMIT)					
Drainage Area #9	5.8	31637.00	0.72629	45520.00 −	1.04500
Drainage Area #10	9.08	49445.00	1.13510	52403.00 −	1.20301
Drainage Area #11	1.0	5447.00	0.12505	8189.00 =	0.18799
Drainage Area #12	2.83	15407.00	0.35370	15943.00 −	0.36600
Drainage Area #12A	3.14	17090.00	0.39233	19471.00 =	0.44699
Drainage Area #13	5.49	29899.00	0.68639	42384.00 −	0.97300
Drainage Area #13A	1.58	8620.00	0.19789	9496.00 +	0.21800
Drainage Area #14	6.59	35873.00	0.82353	36721.00 +	0.84300
Drainage Area #15 (OMIT)					
Drainage Area #16	1.39	7586.00	0.17415	7623.00 −	0.17500
Drainage Area #17	4.05	22078.00	0.50684	27704.00 +	0.63600
Areas direct discharge into Wetlands	7.09	38589.38	0.88589	27269.00	0.62601
	Totals: 62.97	342964.38	7.87338	364456.00	8.36676

	(cf)	(ac-ft)
Excess Volume Provided	21491.63	0.49338

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... October 2004; Revised March 2005

POST-DEVELOPMENT 'C' FACTOR CALCULATIONS for R.O.W. and ROADS

Roadways with 45' R.O.W. per 45' Lot Length (See attached figure)

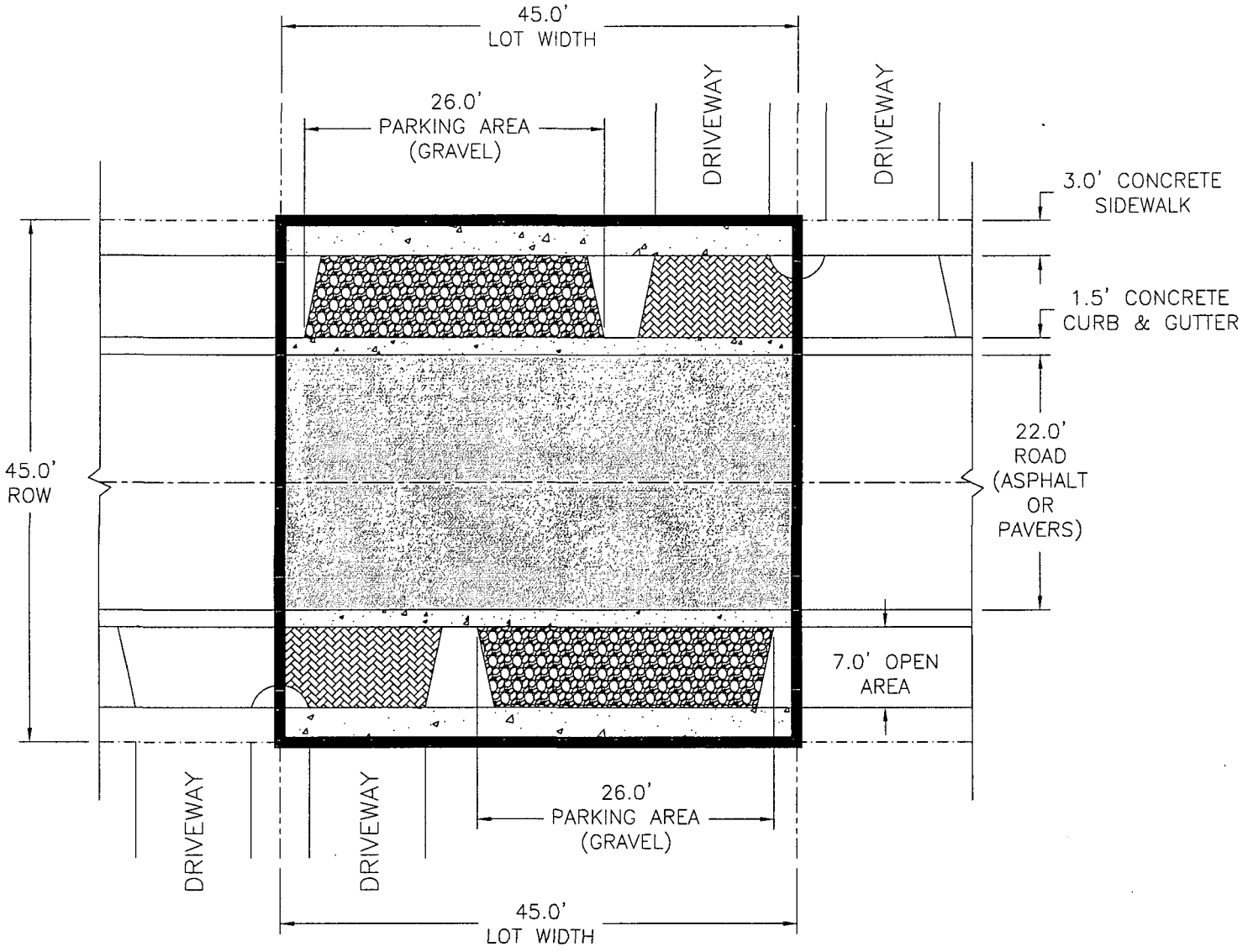
	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL AREA	2025.00	0.046	
SIDEWALK AREA (CONCRETE)	270.00	0.006	0.95
ROAD CURB AREA (CONCRETE)	135.00	0.003	0.95
ROADWAY AREA (ASPHALT OR PAVERS)	990.00	0.023	0.95
DRIVEWAY AREA (PAVERS)	178.00	0.004	0.85
ROAD PARKING AREA (GRAVEL)	343.00	0.008	0.70
PERVIOUS AREA	109.00	0.003	0.31
POST "C" FACTOR:			***0.86***

Roadways with 45' R.O.W. (without parking)

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL AREA	2025.00	0.046	
SIDEWALK AREA (CONCRETE)	270.00	0.006	0.95
ROAD CURB AREA (CONCRETE)	135.00	0.003	0.95
ROADWAY AREA (ASPHALT OR PAVERS)	990.00	0.023	0.95
DRIVEWAY AREA (PAVERS)	0.00	0.000	0.85
ROAD PARKING AREA (GRAVEL)	0.00	0.000	0.70
PERVIOUS AREA	630.00	0.014	0.31
POST "C" FACTOR:			***0.75***

Roadways with 24' R.O.W. per 35' Lot Length (See attached figure)

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL AREA	840.00	0.019	
SIDEWALK AREA (CONCRETE)	0.00	0.000	0.95
ROAD CURB AREA (CONCRETE)	53.00	0.001	0.95
ROADWAY AREA (PERVIOUS CONCRETE)	455.00	0.010	0.80
DRIVEWAY AREA (PAVERS)	193.00	0.004	0.85
PERVIOUS AREA	139.00	0.003	0.31
POST "C" FACTOR:			***0.74***



TOTAL R.O.W. AREA:	2025 S.F.
SIDEWALK AREA (CONCRETE):	270 S.F.
CURB AREA (CONCRETE):	135 S.F.
ROADWAY AREA (ASPHALT OR PAVERS):	990 S.F.
DRIVEWAY AREA (PAVERS):	178 S.F.
STREET PARKING AREA (GRAVEL):	343 S.F.
PERVIOUS AREA:	109 S.F.

TYPICAL 45' R.O.W. AND ROAD

NOT TO SCALE

POST DEVELOPMENT 'C' FACTOR AREAS for R.O.W and ROADS

NatureWalk at Seagrove
WALTON COUNTY, FLORIDA

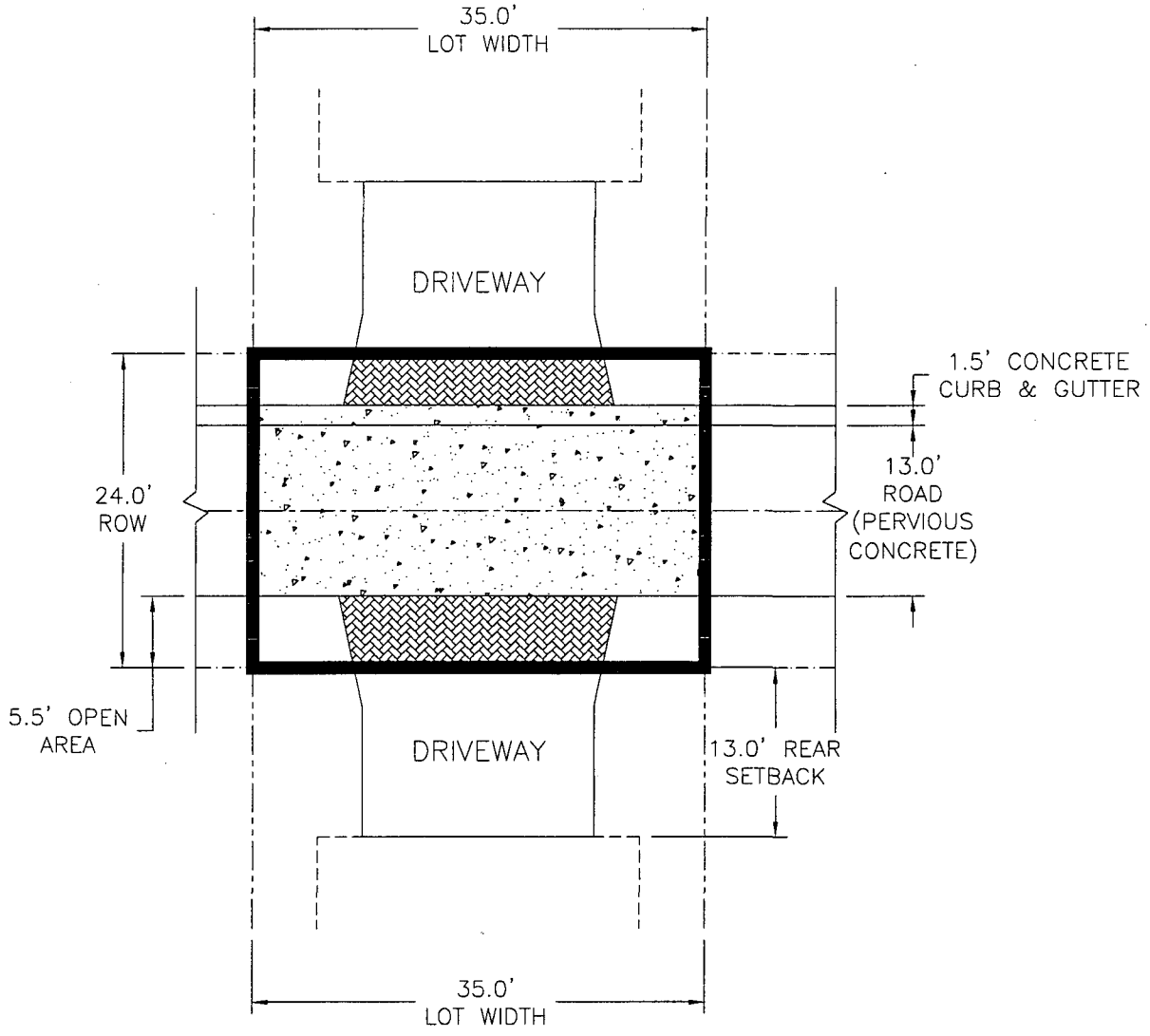
Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC

DATE:	JULY 2004	DESIGNED BY:	B. JUSTICE
LAST REVISED:	MARCH 2005	DRAWN BY:	B. JUSTICE
H.M.M. PROJECT NUMBER:	214145AA01		
SHEET:		PROJECT ENGINEER:	B. JUSTICE
1 OF 4		PROJECT MANAGER:	B. PERRY

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ¤ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC. and may not be reproduced without written permission.

EXHIBIT 4A



TOTAL R.O.W. AREA:	840 S.F.
CURB AREA (CONCRETE):	53 S.F.
ROADWAY AREA (PERVIOUS CONCRETE):	455 S.F.
DRIVEWAY AREA (PAVERS):	193 S.F.
PERVIOUS AREA:	139 S.F.

TYPICAL 24' R.O.W. AND ROAD

NOT TO SCALE

POST DEVELOPMENT 'C' FACTOR AREAS for R.O.W and ROADS

NatureWalk at Seagrove
WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC

DATE:	JULY 2004	DESIGNED BY:	B. JUSTICE
LAST REVISED:	MARCH 2005	DRAWN BY:	B. JUSTICE
H.M.M. PROJECT NUMBER:	214145AA01		
SHEET:	2 OF 4	PROJECT ENGINEER:	B. JUSTICE
		PROJECT MANAGER:	B. PERRY

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ¤ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

EXHIBIT 4B

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... October, 2004

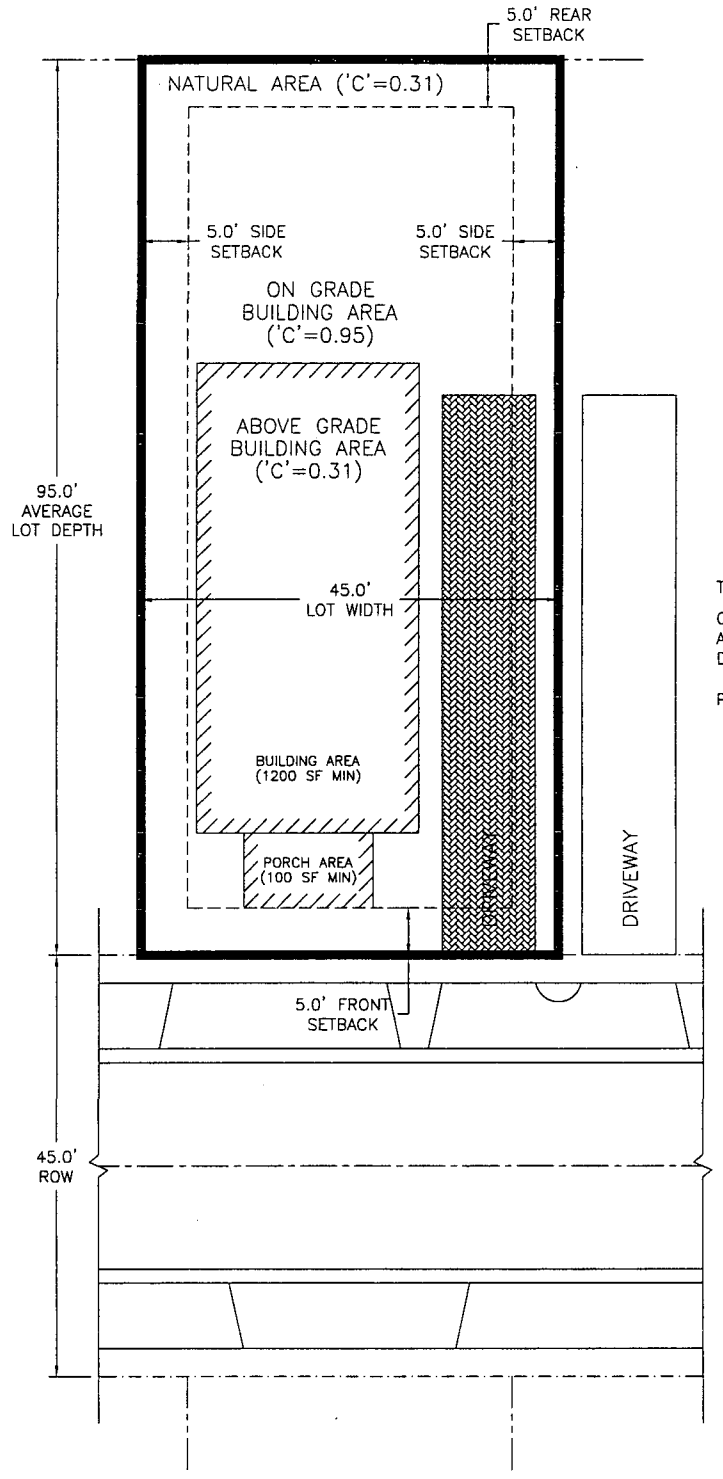
POST-DEVELOPMENT 'C' FACTOR CALCULATIONS for LOTS

Typical 45' Lot w/Average depth of 95' (See attached figure)

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL AREA	4275.00	0.098	
ON GRADE BUILDABLE AREA	1675.00	0.038	0.95
ABOVE GRADE BUILDABLE AREA	1200.00	0.028	0.31
DRIVEWAY AREA	187.00	0.004	0.80
PERVIOUS AREA	1213.00	0.028	0.31
POST "C" FACTOR:			***0.58***

Typical 35' Lot w/depth of 90' (See attached figure)

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL AREA	3150.00	0.072	
ON GRADE BUILDABLE AREA	500.00	0.011	0.95
ABOVE GRADE BUILDABLE AREA	1300.00	0.030	0.31
DRIVEWAY AREA	236.00	0.005	0.80
PERVIOUS AREA	1114.00	0.026	0.31
POST "C" FACTOR:			***0.45***



TOTAL LOT AREA:	4275 S.F.
ON GRADE BUILDABLE AREA:	1675 S.F.
ABOVE GRADE BUILDABLE AREA:	1300 S.F.
DRIVEWAY AREA:	187 S.F.
PERVIOUS AREA:	1113 S.F.

TYPICAL 45' WIDE LOT

NOT TO SCALE

POST DEVELOPMENT 'C' FACTOR CALCULATIONS FOR 24' ROW ROADS

NatureWalk at Seagrove
WALTON COUNTY, FLORIDA

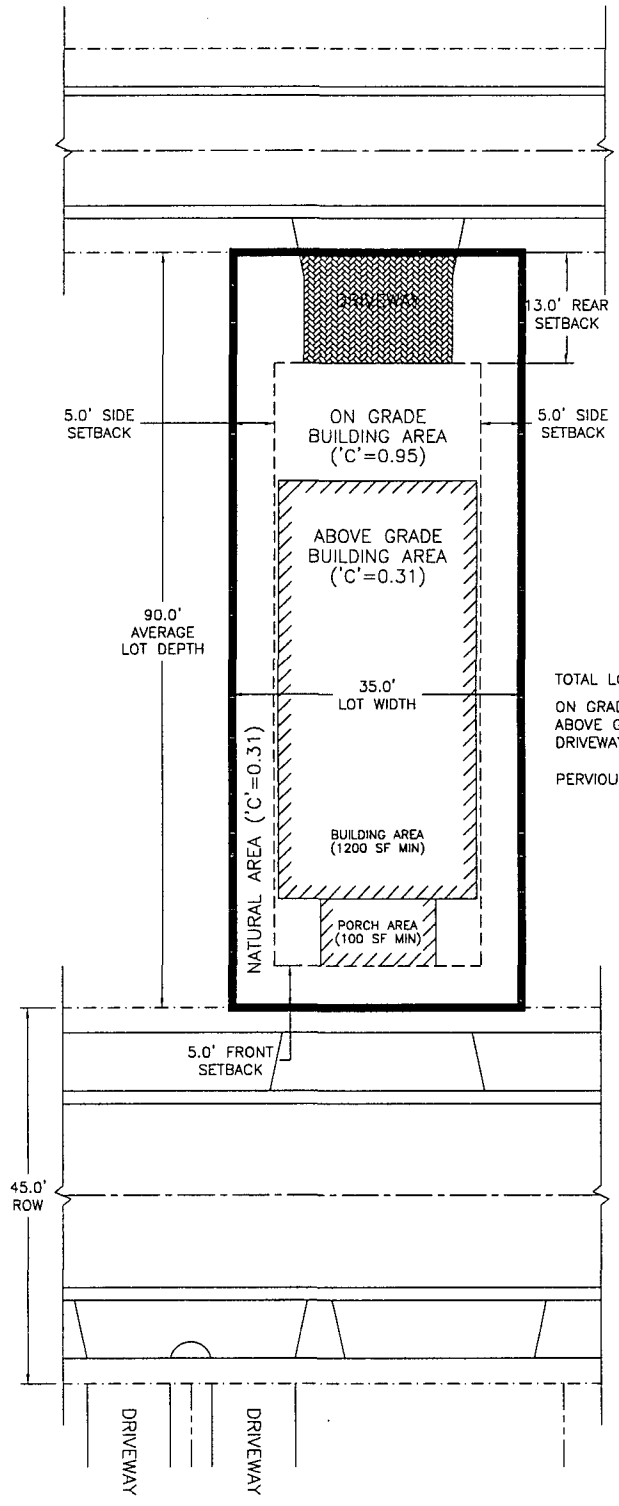
Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC

DATE:	JULY 2004	DESIGNED BY:	B. JUSTICE
LAST REVISED:		DRAWN BY:	B. JUSTICE
H.M.M. PROJECT NUMBER:	214145AA01		
SHEET:	3 OF 4	PROJECT ENGINEER:	B. JUSTICE
		PROJECT MANAGER:	B. PERRY

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ¤ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

EXHIBIT 5A



TOTAL LOT AREA:	3150 S.F.
ON GRADE BUILDABLE AREA:	500 S.F.
ABOVE GRADE BUILDABLE AREA:	1300 S.F.
DRIVEWAY AREA:	236 S.F.
PERVIOUS AREA:	1114 S.F.

TYPICAL 35' WIDE LOT

NOT TO SCALE

POST DEVELOPMENT 'C' FACTOR CALCULATIONS FOR 24' ROW ROADS

NatureWalk at Seagrove
WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC

DATE:	JULY 2004
LAST REVISED:	
H.M.M. PROJECT NUMBER:	214145AA01
SHEET:	4 OF 4

DESIGNED BY:	B. JUSTICE
DRAWN BY:	B. JUSTICE
PROJECT ENGINEER:	B. JUSTICE
PROJECT MANAGER:	B. PERRY

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ¤ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

EXHIBIT 5B

DRAINAGE AREA #1

SCALE: 1"=100'

POND #1

R/W

R/W

R/W

COULD NOT FIND OTHER END OF PIPE

15" C.P.P. INVERT= 30.29"

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC

Architects Engineers Surveyors
AA - C0000635 EB - 0000155 LB - 0006783
120 Beckton Rd., Suite 160
Panama City Beach, Florida 32407
Telephone: (850) 235-5831 • Fax: (850) 234-1452

NATUREWALK
at Seagrove
WALTON COUNTY, FLORIDA

OLSON
REAL ESTATE DEVELOPMENT
ASSOCIATES OF N.W. FL. INC.

REVISION DESCRIPTION	REV.	DATE

DATE:	OCTOBER 2004
DESIGNED BY:	B. JUSTICE
DRAWN BY:	B. JUSTICE
PROJECT ENGINEER	B. JUSTICE
PROJECT MANAGER:	J. GOIN
H.M.M. PROJECT NUMBER:	214145A01

THIS DRAWING IS NOT FOR CONSTRUCTION

SHEET TITLE:
STORMWATER DRAINAGE AREA #1

SHEET NUMBER:
1 of 14

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 3/25/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 1

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	107045.00	✓ 2.457	
TOTAL BUILDING & SIDEWALK AREAS	13516.00	0.310	0.95 ✓
TOTAL ROADWAY & PARKING AREAS	38861.00	0.892	0.95 ✓
TOTAL RETENTION AREA	13113.00	0.301	1.00

same

TOTAL PERVIOUS AREA	41555.00	0.954	0.31

POST "C" FACTOR:			*0.71*

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	4460.21	0.10239
1.5" RAINFALL VOLUME:	13380.63	0.30718

$V_{DEP} = 13,881$

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 3/25/05

RETENTION BASIN VOLUMES

DRAINAGE AREA # 1

Pond #1

Elev.	Area (sf)	Area (ac.)
25.5	4274	0.098
26.5	5440	0.125
27.5	6728	0.154
28.5	8141	0.187
29.5	10490	0.241
30.5	**13074**	**0.300**
31.5	14924	0.343
32.5	16875	0.387
33.5	18927	0.435

	Elevation:	Area (sf):
Treatment Volume Orifice:	**30.50**	**13,074**
Attenuation Discharge Weir:	**32.00**	**15,899**

1.5'

41331 cf..... Vol @ 30.5 (Permanent Pool) SHGW

Littoral Zone Calculations:

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 30.5 to Elev.: 28.5 as shown on the drawings

Total pond area: 13074 sf —
Area of littoral Zone: 4933 sf ✓ **38%** ✓ Between 30% and 50%...OK

28.5 - 30.5

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 3/25/05

PERMANENT POOL VOLUME CALCULATION

DRAINAGE AREA # 1

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	107045.00
Weighted Coefficient factor '***Cw***':	0.71

$$PP_v = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 15937.04 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	107045.00
Weighted Coefficient factor '***Cw***':	0.71
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_v = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 18545.14 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	65490.00
Pervious Area (sf)	41555.00

2" * Impervious Area (cf)	10915.00
1/2" * Pervious Area (cf)	1731.46

PPv = 12646.46 cf

CONCLUSION:

Method #2 governs, use 18,545 cf as permanent Pool Volume

PPV Volume Required for OFW: 27818 cf ✓

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 3

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 1

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	13380.00
Treatment Volume Provided below discharge weir '**Vp**' (cf):	21954.00
Time '**T**' (hr):	60.00
Extra Treatment Volume Provided (cf):	8574.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.051 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate '**Q**' (cfs):	0.051
c	0.60
Gravity '**g**':	32.20
PPv Elevation/Orifice Elevation (ft):	30.50
Discharge Weir Elevation (ft):	32.00
Average head '**h**' on the orifice 3/4 * (Discharge El-PPv El) (ft):	1.13

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0100 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

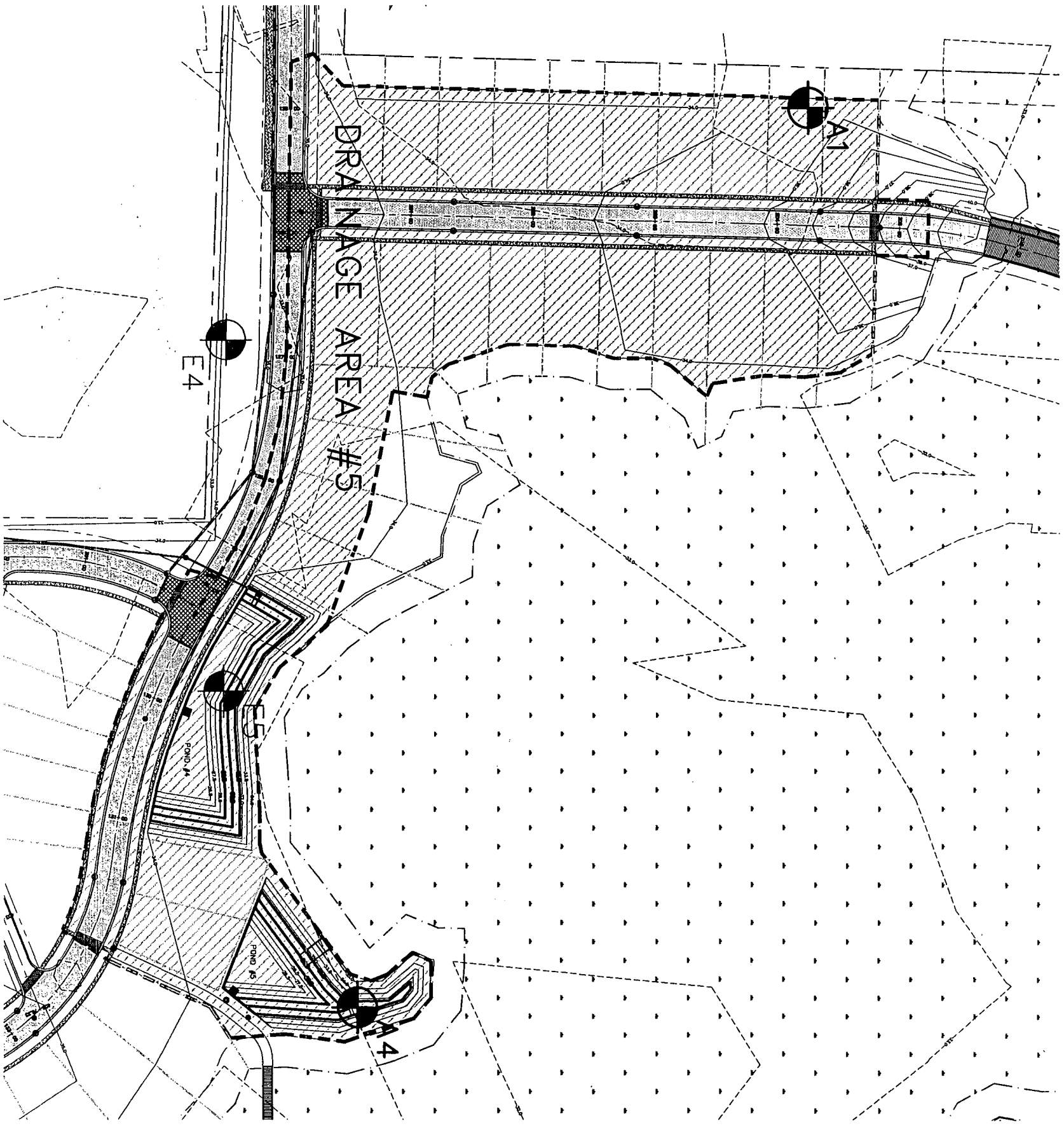
Diameter = 0.1126 ft
Diameter = 1.3507 in

Round Up to 1.375 in. Diameter Orifice ✓

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.053 cfs

Actual Discharge Time (T)= 57.9 Hrs ✓



SCALE: 1"=100'

SHEET NUMBER: 2 of 14	SHEET TITLE: STORMWATER DRAINAGE AREA #5	THIS DRAWING IS NOT FOR CONSTRUCTION	DATE: OCTOBER 2004 DESIGNED BY: B. JUSTICE DRAWN BY: B. JUSTICE PROJECT ENGINEER: B. JUSTICE PROJECT MANAGER: J. GOIN H.M.M. PROJECT NUMBER: 214145AA01	DATE	REV.	REVISION DESCRIPTION	OLSON ASSOCIATES OF N.W. FL, INC. REAL ESTATE - DEVELOPMENT NATUREWALK at Seagrove WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC
Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 160
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ▫ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 3/25/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 5

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	179667.00	4.125	
TOTAL BUILDING AREA (45' LOTS)	120277.00	2.761	0.58
TOTAL BUILDING AREA (35' LOTS)	0.00	0.000	0.45
TOTAL RIGHT OF WAY (45' WIDE ROW)	46064.00	1.057	0.86
TOTAL RIGHT OF WAY (24' WIDE ROW)	0.00	0.000	0.74
TOTAL RETENTION AREA	12702.00	0.292	1.00
TOTAL PERVIOUS AREA	624.00	0.014	0.31
POST "C" FACTOR:			***0.68***

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	7486.13	0.17186
1.5" RAINFALL VOLUME:	22458.38 ✓	0.51557

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 3/25/05

RETENTION BASIN VOLUMES

DRAINAGE AREA # 5

Pond #4

Elev.	Area (sf)	Area (ac)
26.5	3536	0.081
27.5	4443	0.102
28.5	5419	0.124
29.5	6465	0.148
30.5	8162	0.187
31.5	**10010**	**0.230**
32	10659	0.245
33	12006	0.276
34	13412	0.308

32460 cf..... Vol @ 31.5 (Permanent Pool)

Ponds combined

Elev.	Area (sf)	Area (ac.)
26.5	4911	0.113
27.5	6346	0.146
28.5	7925	0.182
29.5	9640	0.221
30.5	12462	0.286
31.5	**15848**	**0.364**
32	17126	0.393
33	19769	0.454
34	22501	0.517

Pond #5

Elev.	Area (sf)	Area (ac)
26.5	1375	0.032
27.5	1903	0.044
28.5	2506	0.058
29.5	3175	0.073
30.5	4300	0.099
31.5	**5838**	**0.134**
32	6467	0.148
33	7763	0.178
34	9089	0.209

	Elevation:	Area (sf):
Treatment Volume Orifice:	**31.50** ✓	**15,848**
Attenuation Discharge Weir:	**33.00** ✓	**19,769**

16727 cf..... Vol @ 31.5 (Permanent Pool)

✓ revised

49187 cf..... Total Vol @ 31.5 (Permanent Pool)

Littoral Zone Calculations (Pond #4):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.5 to Elev.: 29.5 as shown on the drawings
Total pond area: 10010 sf ✓
Area of littoral Zone: 3545 sf ✓ **35%** ✓ Between 30% and 50%...OK

Littoral Zone Calculations (Pond #5):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.5 to Elev.: 29.5 as shown on the drawings
Total pond area: 5838 sf ✓
Area of littoral Zone: 2663 sf ✓ **46%** ✓ Between 30% and 50%...OK

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 3/25/05

PERMANENT POOL VOLUME CALCULATION

DRAINAGE AREA # 5

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	179667.00
Weighted Coefficient factor '***Cw***':	0.68

$$PP_V = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 25618.88 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	179667.00
Weighted Coefficient factor '***Cw***':	0.68
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_V = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 29811.41 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	179043.00
Pervious Area (sf)	624.00

2" * Impervious Area (cf)	29840.50
1/2" * Pervious Area (cf)	26.00

PPv = 29866.50 cf

CONCLUSION:

Method #3 governs, use 29,867 cf as permanent Pool Volume

PPV Volume Required for OFW: 44,801 cf √

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July, 2004; Revised 2/1/05, Revised 3/25/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 5

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	22458.00
Treatment Volume Provided below discharge weir '**Vp**' (cf):	26702.00
Time '**T**' (hr):	60.00
Extra Treatment Volume Provided (cf):	4244.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.062 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate '**Q**' (cfs):	0.062
c	0.60
Gravity '**g**':	32.20
PPv Elevation/Orifice Elevation (ft):	31.50
Discharge Weir Elevation (ft):	33.00
Average head '**h**' on the orifice 3/4 * (Discharge El-PPv El) (ft):	1.13

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0121 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

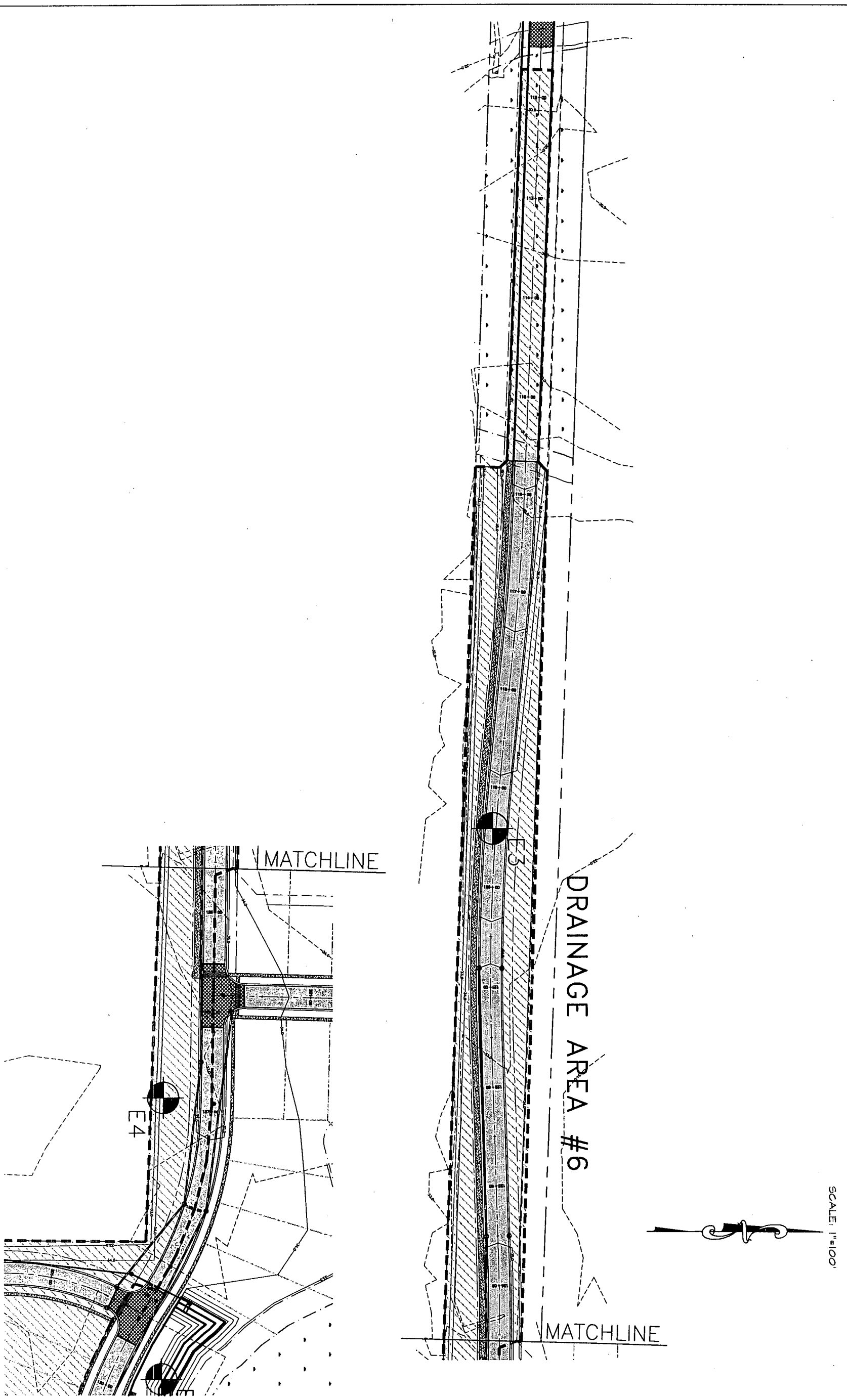
Diameter = 0.1241 ft
Diameter = 1.4896 in.

Round Up to 1.50 in. Diameter Orifice ✓

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.063 cfs

Actual Discharge Time (T)= 59.2 Hrs ✓



SHEET NUMBER: 3 of 14

SHEET TITLE: STORMWATER DRAINAGE AREA #6

THIS DRAWING IS NOT FOR CONSTRUCTION

DATE:	OCTOBER 2004
DESIGNED BY:	B. JUSTICE
DRAWN BY:	B. JUSTICE
PROJECT ENGINEER	B. JUSTICE
PROJECT MANAGER:	J. GOIN
H.M.M. PROJECT NUMBER:	214145AA01

DATE	REV.	REVISION DESCRIPTION

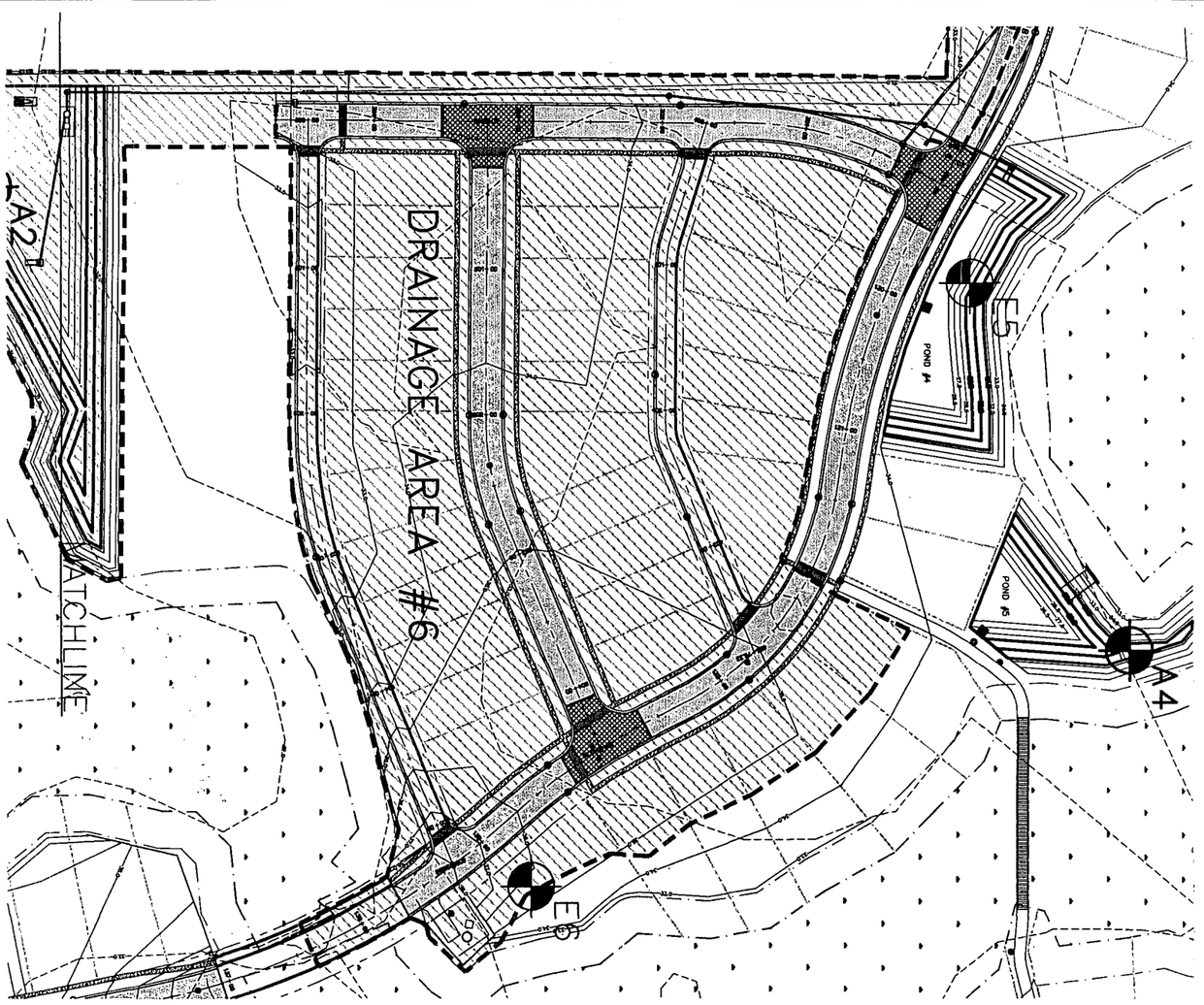
OLSON ASSOCIATES OF N.W. FL, INC. REAL ESTATE - DEVELOPMENT

NATUREWALK at Seagrove

WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC
Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ¤ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.



SCALE: 1"=100'

SHEET NUMBER: 4 of 14

SHEET TITLE: STORMWATER DRAINAGE AREA #6

THIS DRAWING IS NOT FOR CONSTRUCTION

DATE:	OCTOBER 2004
DESIGNED BY:	B. JUSTICE
DRAWN BY:	B. JUSTICE
PROJECT ENGINEER	B. JUSTICE
PROJECT MANAGER:	J. GOIN
H.M.M. PROJECT NUMBER:	214145AA01

DATE	REV.	REVISION DESCRIPTION

OLSON ASSOCIATES OF N.W. FL, INC. REAL ESTATE - DEVELOPMENT

NATUREWALK at Seagrove

WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 • Fax: (850) 234-1052

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove

Project Job Number: 214145AA01

Date: July 2004; Revised 4/6/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 6

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	363632.00	8.348	
TOTAL BUILDING AREA (45' LOTS)	14812.00	0.340	0.58
TOTAL BUILDING AREA (35' LOTS)	93790.00	2.153	0.45
TOTAL RIGHT OF WAY (45' WIDE ROW)	66949.00	1.537	0.86
TOTAL RIGHT OF WAY (24' WIDE ROW)	19558.00	0.449	0.74
TOTAL RIGHT OF WAY (45' R.O.W. w/o PARKING)	52901.00	1.214	0.75
TOTAL RETENTION AREA	30679.00	0.704	1.00
TOTAL PERVIOUS AREA	84943.00	1.950	0.31
POST "C" FACTOR:			***0.49***

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	15151.33	0.34783
1.5" RAINFALL VOLUME:	45454.00	1.04348

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/6/05

RETENTION BASIN VOLUMES

DRAINAGE AREA # 6

enlarged

Pond #7

Elev.	Area (sf)	Area (ac)
24.5	11381	0.261
25.5	13708	0.315
26.5	16387	0.376
27.5	19624	0.451
28.5	25011	0.574
29.5	**30679**	**0.704**
30.0	32601	0.748
31.0	36499	0.838
32.0	40462	0.929

	Elevation:	Area (sf):
Treatment Volume Orifice:	**29.50** ✓	**30,679**
Attenuation Discharge Weir:	**31.00** ✓	**36,499**

101142 cf..... Vol @ 29.5 (Permanent Pool)

Littoral Zone Calculations:

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 29.5 to Elev.: 27.5 as shown on the drawings

Total pond area: 30679 sf ✓
Area of littoral Zone: 11055 sf ✓ **36%** ✓ Between 30% and 50%...OK

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 4/6/05

PERMANENT POOL VOLUME CALCULATION

DRAINAGE AREA # 6

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	363632.00
Weighted Coefficient factor '***Cw***':	0.49

$$PP_V = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 37362.94 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	363632.00
Weighted Coefficient factor '***Cw***':	0.49
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_V = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 43477.39 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	278689.00
Pervious Area (sf)	84934.00

2" * Impervious Area (cf)	46448.17
1/2" * Pervious Area (cf)	3538.92

PPv = 49987.08 cf

CONCLUSION:

Method #3 governs, use 49,987 cf as permanent Pool Volume

PPV Volume Required for OFW: 74,981 cf ✓

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove

Project Job Number: 214145AA01

Date: ..... July 2004; Revised 2/1/05; Revised 4/6/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 6

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	45454.00
Treatment Volume Provided below discharge weir '**Vp**' (cf):	50355.00
Time '**T**' (hr):	60.00
Extra Treatment Volume Provided (cf):	4901.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.117 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate '**Q**' (cfs):	0.117
c	0.60
Gravity '**g**':	32.20
PPv Elevation/Orifice Elevation (ft):	29.50
Discharge Weir Elevation (ft):	31.00
Average head '**h**' on the orifice 3/4 * (Discharge El-PPv El) (ft):	1.13

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0228 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

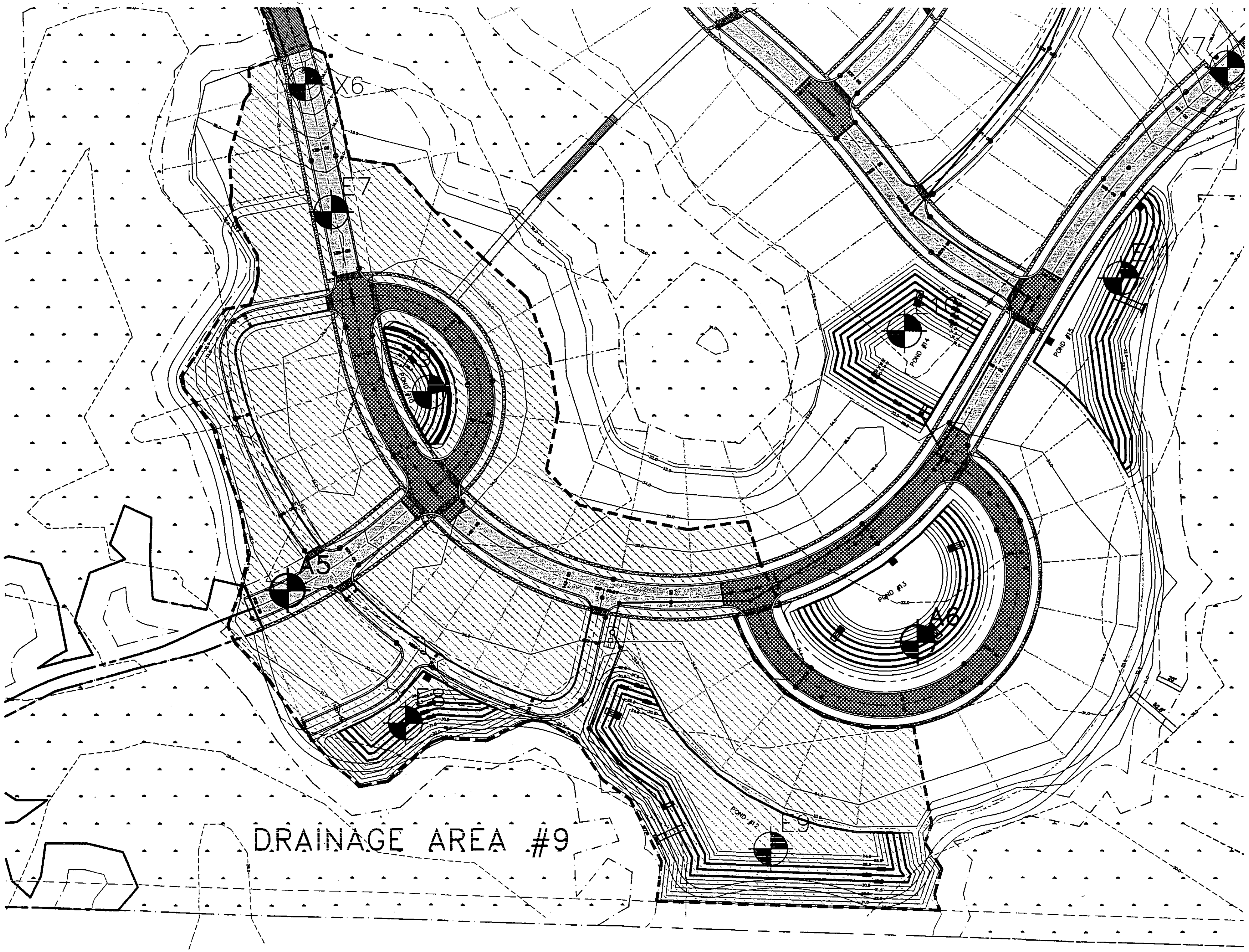
Diameter = 0.1705 ft
Diameter = 2.046 In.

Round Down to 2.000 in. Diameter Orifice ✓

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.111 cfs

Actual Discharge Time (T)= 62.8 Hrs ✓



Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC
Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 238-5831 • Fax: (850) 234-1952

OLSON ASSOCIATES OF N.W. FL. INC.
REAL ESTATE • DEVELOPMENT

NATUREWALK at Seagrove
WALTON COUNTY, FLORIDA

DATE	REV.	REVISION DESCRIPTION

DATE:	OCTOBER 2004
DESIGNED BY:	B. JUSTICE
DRAWN BY:	B. JUSTICE
PROJECT ENGINEER	B. JUSTICE
PROJECT MANAGER:	J. GOIN
H.M.M. PROJECT NUMBER:	214145AA01

THIS DRAWING IS NOT FOR CONSTRUCTION

SHEET TITLE:
STORMWATER DRAINAGE AREA #9

SHEET NUMBER:
5 of 14

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 9

slightly larger

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	253095.00	5.810	
TOTAL BUILDING AREA (45' LOTS)	68797.00	1.579	0.58
TOTAL BUILDING AREA (35' LOTS)	44188.00	1.014	0.45
TOTAL RIGHT OF WAY (45' WIDE ROW)	70961.00	1.629	0.86
TOTAL RIGHT OF WAY (24' WIDE ROW)	18779.00	0.431	0.74
TOTAL RETENTION AREA	27703.00	0.636	1.00
TOTAL PERVIOUS AREA	22667.00	0.520	0.31
POST "C" FACTOR:			***0.67***

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	10545.63	0.24209
1.5" RAINFALL VOLUME:	31636.88 ✓	0.72628

(incorporated former pond 9 area + all of lots adjacent to #12)

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

RETENTION BASIN VOLUMES

DRAINAGE AREA # 9

Pond #10

Elev.	Area (sf)	Area (ac)
24.5	633	0.015
25.5	928	0.021
26.5	1270	0.029
27.5	1661	0.038
28.5	2334	0.054
29.5	**3112**	**0.071**
30.5	3683	0.085
31.5	4264	0.098
32.5	4851	0.111

8572 cf..... Vol @ 29.5 (Permanent Pool)

Pond #11

Elev.	Area (sf)	Area (ac)
24.5	886	0.020
25.5	1336	0.031
26.5	1842	0.042
27.5	2406	0.055
28.5	3334	0.077
29.5	**4356**	**0.100**
30.5	5088	0.117
31.5	5862	0.135
32.5	6677	0.153

11999 cf..... Vol @ 29.5 (Permanent Pool)

Ponds combined

Elev.	Area (sf)	Area (ac)
24.5	11004	0.253
25.5	13313	0.306
26.5	15815	0.363
27.5	18515	0.425
28.5	22912	0.526
29.5	**27703**	**0.636**
30.5	31096	0.714
31.5	34618	0.795
32.5	38264	0.878

Pond #12

Elev.	Area (sf)	Area (ac)
24.5	9485	0.218
25.5	11049	0.254
26.5	12703	0.292
27.5	14448	0.332
28.5	17244	0.396
29.5	**20235**	**0.465**
30.5	22325	0.513
31.5	24492	0.562
32.5	26736	0.614

72550 cf..... Vol @ 29.5 (Permanent Pool)

	Elevation:	Area (sf):
Treatment Volume Orifice:	**29.50** ✓	**27,703**
Attenuation Discharge Weir:	**31.00** ✓	**33,367**

.636

93122 cf..... Total Vol @ 29.5 (Permanent Pool)

Littoral Zone Calculations (Pond #10):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 29.5 to Elev.: 27.5 as shown on the drawings

Total pond area:	3112 sf		
Area of littoral Zone:	1451 sf	**47%**	Between 30% and 50%...OK

Littoral Zone Calculations (Pond #11):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 29.5 to Elev.: 27.5 as shown on the drawings

Total pond area:	4356 sf		
Area of littoral Zone:	1950 sf	**45%**	Between 30% and 50%...OK

Littoral Zone Calculations (Pond #12):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 29.5 to Elev.: 26.5 as shown on the drawings

Total pond area:	20235 sf		
Area of littoral Zone:	7532 sf	**37%**	Between 30% and 50%...OK

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

PERMANENT POOL VOLUME CALCULATION

DRAINAGE AREA # 9

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	253095.00
Weighted Coefficient factor '***Cw***':	0.67

$$PP_v = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 35558.32 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	253095.00
Weighted Coefficient factor '***Cw***':	0.67
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_v = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 41377.45 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	230428.00
Pervious Area (sf)	22667.00

5.29
0.52

2" * Impervious Area (cf)	38404.67
1/2" * Pervious Area (cf)	944.46

PPv = 39349.13 cf

CONCLUSION:

Method #2 governs, use 41,377 cf as permanent Pool Volume

PPV Volume Required for OFW: 62,066 cf

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 4/4/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 9

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	31637.00
Treatment Volume Provided below discharge weir '**Vp**' (cf):	45520.00 ✓
Time '**T**' (hr):	60.00
Extra Treatment Volume Provided (cf):	13883.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.105 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate '**Q**' (cfs):	0.105
c	0.60
Gravity '**g**':	32.20
PPv Elevation/Orifice Elevation (ft):	29.50
Discharge Weir Elevation (ft):	31.00
Average head '**h**' on the orifice 3/4 * (Discharge El-PPv El) (ft):	1.13

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0206 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

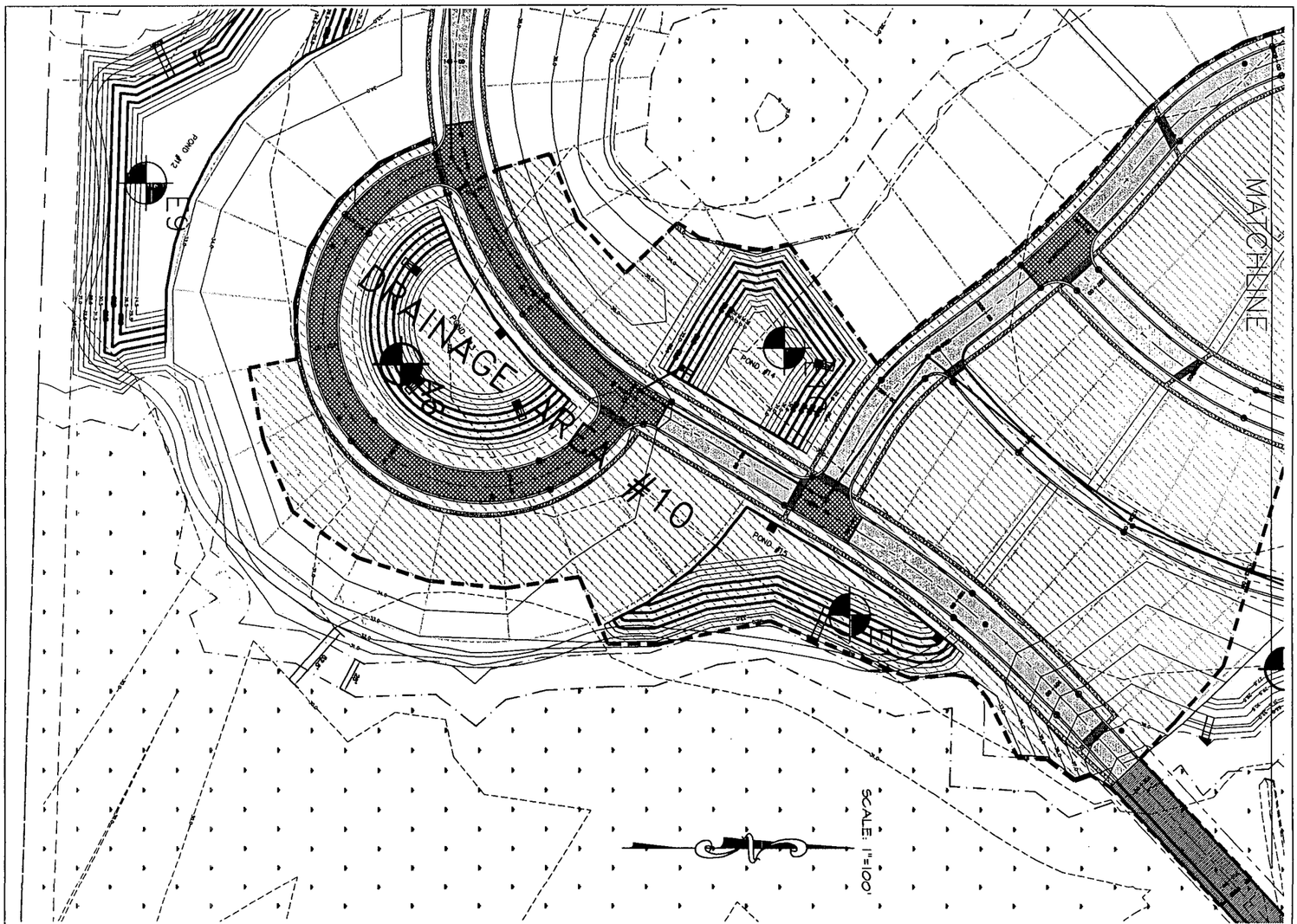
Diameter = 0.1621 ft
Diameter = 1.9450 In.

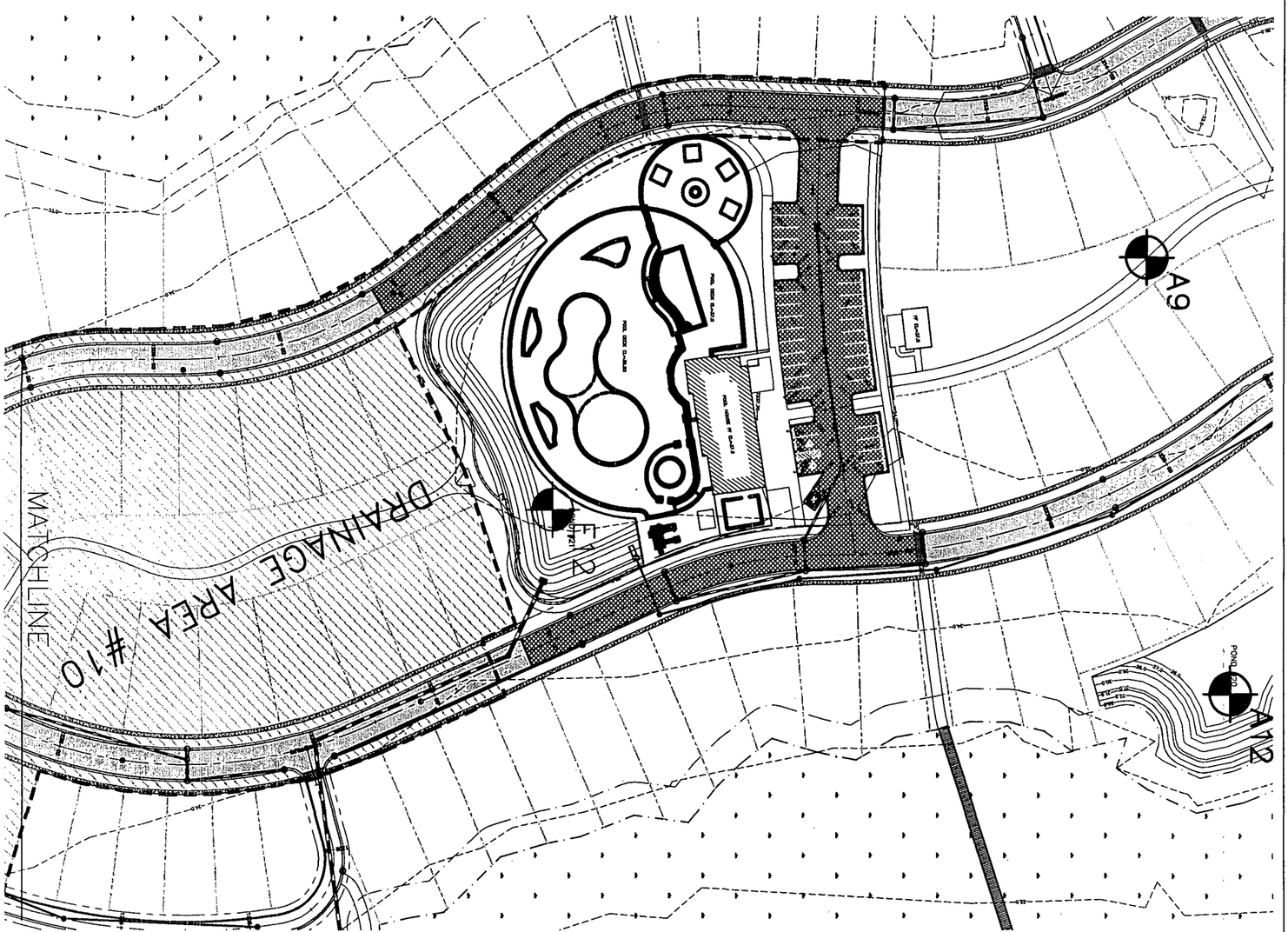
Round Up to 2.00 in. Diameter Orifice ✓

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.111 cfs

Actual Discharge Time (T)= 56.8 Hrs ✓





SHEET NUMBER: 6 of 14	SHEET TITLE: STORMWATER DRAINAGE AREA #10	THIS DRAWING IS NOT FOR CONSTRUCTION	DATE: OCTOBER 2004 DESIGNED BY: B. JUSTICE DRAWN BY: B. JUSTICE PROJECT ENGINEER: B. JUSTICE PROJECT MANAGER: J. GOIN H.M.M. PROJECT NUMBER: 214145AA01	DATE	REV.	REVISION DESCRIPTION

OLSON ASSOCIATES OF N.W. FL, INC. REAL ESTATE - DEVELOPMENT

NATUREWALK at Seagrove

WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC
Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 160
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ▪ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 10

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	395563.00	✓ 9.081	
TOTAL BUILDING AREA (45' LOTS)	116466.00	2.674	0.58
TOTAL BUILDING AREA (35' LOTS)	50409.00	1.157	0.45
TOTAL RIGHT OF WAY (45' WIDE ROW)	139722.00	3.208	0.86
TOTAL RIGHT OF WAY (24' WIDE ROW)	10303.00	0.237	0.74
TOTAL AMENITIES AREA (POOL)	0.00	0.000	0.95
TOTAL RETENTION AREA	37553.00	0.862	1.00
TOTAL PERVIOUS AREA	41110.00	0.944	0.31
POST "C" FACTOR:			***0.68***

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	16481.79	✓ 0.37837
1.5" RAINFALL VOLUME:	49445.38 ✓	1.13511

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

RETENTION BASIN VOLUMES

DRAINAGE AREA # 10

Pond #13

Elev.	Area (sf)	Area (ac)
24.0	5789	0.133
25.0	6604	0.152
26.0	7483	0.172
27.0	8416	0.193
28.0	9405	0.216
29.0	10997	0.252
30.0	12716	0.292
31.0	**14565**	**0.334**
32.0	15869	0.364
33.0	17230	0.396

68849 cf..... Vol @ 31.0 (Permanent Pool)

Ponds combined

Elev.	Area (sf)	Area (ac)
24.0	12047	0.277
25.0	14404	0.331
26.0	16950	0.389
27.0	19672	0.452
28.0	22566	0.518
29.0	27216	0.625
30.0	32215	0.740
31.0	**37553**	**0.862**
32.0	41287	0.948
33.0	45204	1.038

Pond #14

Elev.	Area (sf)	Area (ac)
24.0	3421	0.079
25.0	4202	0.096
26.0	5041	0.116
27.0	5939	0.136
28.0	6895	0.158
29.0	8441	0.194
30.0	10118	0.232
31.0	**11932**	**0.274**
32.0	13204	0.303
33.0	14543	0.334

50681 cf..... Vol @ 31.0 (Permanent Pool)

	Elevation:	Area (sf):
Treatment Volume Orifice:	**31.00**	**37,533**
Attenuation Discharge Weir:	**32.30**	**42,471**

Pond #15

Elev.	Area (sf)	Area (ac)
24.0	2837	0.065
25.0	3598	0.083
26.0	4426	0.102
27.0	5317	0.122
28.0	6266	0.144
29.0	7778	0.179
30.0	9381	0.215
31.0	**11056**	**0.254**
32.0	12214	0.280
33.0	13431	0.308

45439 cf..... Vol @ 31.0 (Permanent Pool)

164969 cf..... Total Vol @ 31.0 (Permanent Pool)

Littoral Zone Calculations (Pond #13):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.0 to Elev.: 28.0 as shown on the drawings

Total pond area:	14565 sf ✓		
Area of littoral Zone:	5160 sf ✓	**35%** ✓	Between 30% and 50%...OK

Littoral Zone Calculations (Pond #14):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.0 to Elev.: 28.0 as shown on the drawings

Total pond area:	11932 sf		
Area of littoral Zone:	5037 sf	**42%**	Between 30% and 50%...OK

Littoral Zone Calculations (Pond #15):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.0 to Elev.: 28.0 as shown on the drawings

Total pond area:	11056 sf		
Area of littoral Zone:	4790 sf	**43%**	Between 30% and 50%...OK

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

PERMANENT POOL VOLUME CALCULATION

DRAINAGE AREA # 10

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	395563.00
Weighted Coefficient factor '***Cw***':	0.68

$$PP_v = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 56403.68 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	395563.00
Weighted Coefficient factor '***Cw***':	0.68
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_v = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 65634.16 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	354453.00
Pervious Area (sf)	41110.00

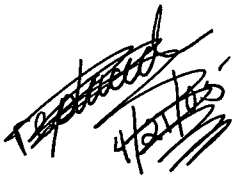
2" * Impervious Area (cf)	59075.50
1/2" * Pervious Area (cf)	1712.92

PPv = 60788.42 cf

CONCLUSION:

Method #2 governs, use 65,634 cf as permanent Pool Volume

PPV Volume Required for OFW: 98,451 cf



Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 4/4/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 10

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	49445.00
Treatment Volume Provided below discharge weir **'Vp'** (cf):	52403.00
Time **'T'** (hr):	60.00
Extra Treatment Volume Provided (cf):	2958.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.121 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate **'Q'** (cfs):	0.121
c	0.60
Gravity **'g'**:	32.20
PPv Elevation/Orifice Elevation (ft):	31.00
Discharge Weir Elevation (ft):	32.30
Average head **'h'** on the orifice 3/4 * (Discharge El-PPv El) (ft):	0.97

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0255 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

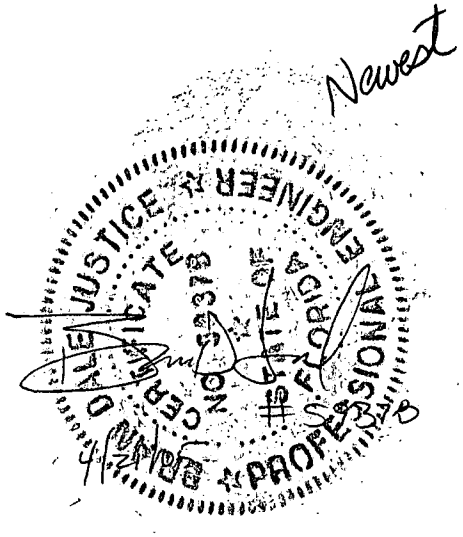
Diameter = 0.1802 ft
Diameter = 2.1628 in

Round Down to 2.125 in. Diameter Orifice

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.117 cfs

Actual Discharge Time (T)= 62.2 Hrs



Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 4/4/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 10

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	49445.00
Treatment Volume Provided below discharge weir **'Vp'** (cf):	52403.00
Time **'T'** (hr):	60.00
Extra Treatment Volume Provided (cf):	2958.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.121 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate **'Q'** (cfs):	0.121
c	0.60
Gravity **'g'**:	32.20
PPv Elevation/Orifice Elevation (ft):	29.50
Discharge Weir Elevation (ft):	31.00
Average head **'h'** on the orifice 3/4 * (Discharge El-PPv El) (ft):	1.13

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0238 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

Diameter = 0.1739 ft
Diameter = 2.0868 in

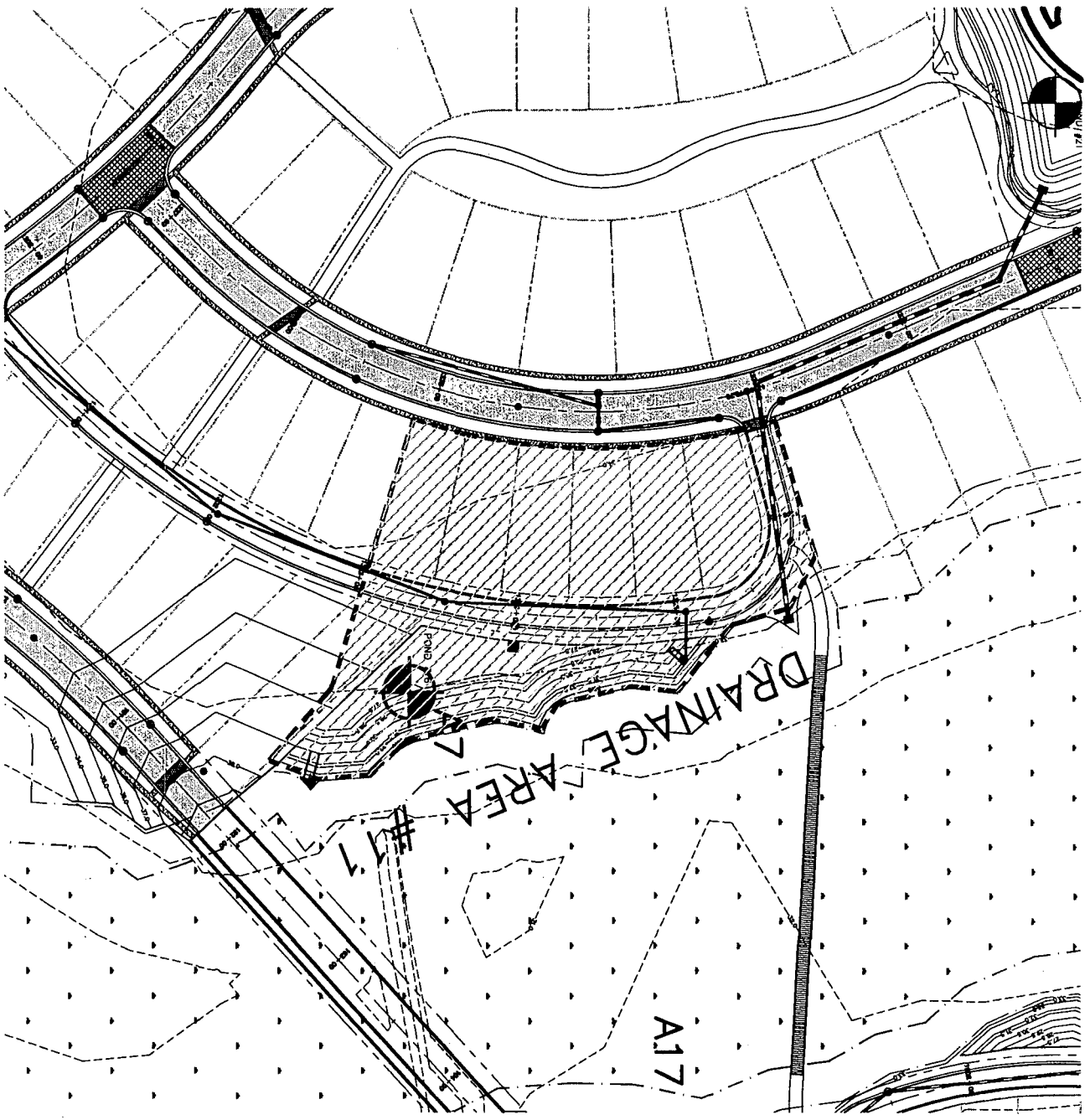
replaced 4/21/05

Round Up to 2.125 in. Diameter Orifice

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.126 cfs

Actual Discharge Time (T)= 57.9 Hrs



SHEET NUMBER: 7 of 14

SHEET TITLE: STORMWATER DRAINAGE AREA #11

THIS DRAWING IS NOT FOR CONSTRUCTION

DATE:	OCTOBER 2004
DESIGNED BY:	B. JUSTICE
DRAWN BY:	B. JUSTICE
PROJECT ENGINEER	B. JUSTICE
PROJECT MANAGER:	J. GOIN
H.M.M. PROJECT NUMBER:	214145AA01

DATE	REV.	REVISION DESCRIPTION

OLSON ASSOCIATES OF N.W. FL, INC. REAL ESTATE - DEVELOPMENT

NATUREWALK at Seagrove

WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ▫ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove

Project Job Number: 214145AA01

Date: July 2004; Revised 4/4/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 11

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	43576.00	1.000	
TOTAL BUILDING AREA (45' LOTS)	0.00	0.000	0.58
TOTAL BUILDING AREA (35' LOTS)	21791.00	0.500	0.45
TOTAL RIGHT OF WAY (45' WIDE ROW)	0.00	0.000	0.86
TOTAL RIGHT OF WAY (24' WIDE ROW)	8484.00	0.195	0.74
TOTAL RETENTION AREA	8429.00	0.194	1.00
TOTAL PERVIOUS AREA	4872.00	0.112	0.31
POST "C" FACTOR:			***0.60***

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	1815.67	0.04168
1.5" RAINFALL VOLUME:	5447.00	0.12505

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

RETENTION BASIN VOLUMES

DRAINAGE AREA # 11

Pond #16

Elev.	Area (sf)	Area (ac)
27.5	3413	0.078
28.5	4206	0.097
29.5	5210	0.120
30.5	6765	0.155
31.5	**8430**	**0.194**
32.0	9009	0.207
33.0	10207	0.234

	Elevation:	Area (sf):
Treatment Volume Orifice:	**31.50**	**8,430**
Attenuation Discharge Weir:	**32.40**	**9,496**

22920 cf..... Vol @ 31.5 (Permanent Pool)

Littoral Zone Calculations:

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.5 to Elev.: 29.5 as shown on the drawings

Total pond area: 8430 sf ✓
Area of littoral Zone: 3220 sf ✓ **38%** ✓ Between 30% and 50%...OK

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 4/4/05

PERMANENT POOL VOLUME CALCULATION
DRAINAGE AREA # 11

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	43576.00
Weighted Coefficient factor '***Cw***':	0.60

$$PP_V = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 5482.54 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	43576.00
Weighted Coefficient factor '***Cw***':	0.60
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_V = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 6379.75 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	38704.00
Pervious Area (sf)	4872.00

2" * Impervious Area (cf)	6450.67
1/2" * Pervious Area (cf)	203.00

PPv = 6653.67 cf

CONCLUSION:

Method #3 governs, use 6,654 cf as permanent Pool Volume

PPV Volume Required for OFW: 9,981 cf ✓

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 4/4/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 11

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	5447.00
Treatment Volume Provided below discharge weir **'Vp'** (cf):	8189.00
Time **'T'** (hr):	60.00
Extra Treatment Volume Provided (cf):	2742.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.019 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate **'Q'** (cfs):	0.019
c	0.60
Gravity **'g'**:	32.20
PPv Elevation/Orifice Elevation (ft):	31.50
Discharge Weir Elevation (ft):	32.40
Average head **'h'** on the orifice 3/4 * (Discharge El-PPv El) (ft):	0.67

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0048 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

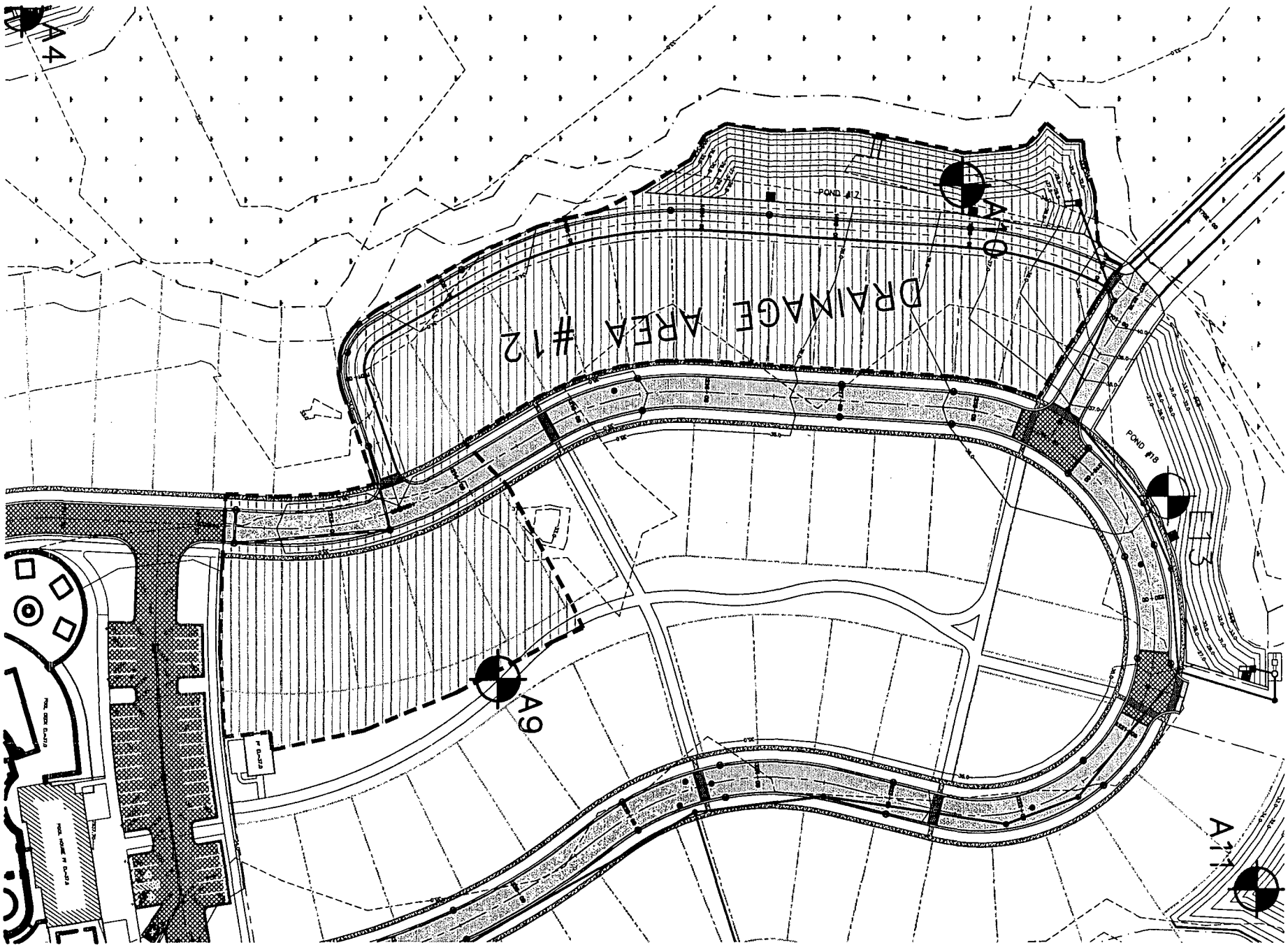
Diameter = 0.0781 ft
Diameter = 0.9373 in

Round Up to (1.00) **in. Diameter Orifice**

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.022 cfs

Actual Discharge Time (T)= 52.7 Hrs



SCALE: 1"=100'

SHEET NUMBER:	SHEET TITLE:		DATE:	OCTOBER 2004	DATE	REV.	REVISION DESCRIPTION
8 of 14	STORMWATER DRAINAGE AREA #12	THIS DRAWING IS NOT FOR CONSTRUCTION	DESIGNED BY:	B. JUSTICE			
			DRAWN BY:	B. JUSTICE			
			PROJECT ENGINEER	B. JUSTICE			
			PROJECT MANAGER:	J. GOIN			
			H.M.M. PROJECT NUMBER:	214145AA01			

OLSON ASSOCIATES OF N.W. FL, INC.
REAL ESTATE - DEVELOPMENT

NATUREWALK at Seagrove
WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC
Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ¤ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 12

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	123258.00	2.830	
TOTAL BUILDING AREA (45' LOTS)	23184.00	0.532	0.58
TOTAL BUILDING AREA (35' LOTS)	47921.00	1.100	0.45
TOTAL RIGHT OF WAY (45' WIDE ROW)	9224.00	0.212	0.86
TOTAL RIGHT OF WAY (24' WIDE ROW)	16456.00	0.378	0.74
TOTAL RETENTION AREA	12205.00	0.280	1.00
TOTAL PERVIOUS AREA	14268.00	0.328	0.31
POST "C" FACTOR:			***0.58***

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	5135.75	0.11790
1.5" RAINFALL VOLUME:	15407.25 ✓	0.35370

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July, 2004

RETENTION BASIN VOLUMES

DRAINAGE AREA # 12

Pond #17

Elev.	Area (sf)	Area (ac)
26.5	4144	0.095
27.5	5314	0.122
28.5	6561	0.151
29.5	7871	0.181
30.5	9961	0.229
31.5	**12205**	**0.280**
32.5	13792	0.317
33.5	15451	0.355

	Elevation:	Area (sf):
Treatment Volume Orifice:	**31.50**	**12,205**
Attenuation Discharge Weir:	**32.70**	**14,157**

39062 cf..... Vol @ 31.5 (Permanent Pool)

Littoral Zone Calculations:

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.5 to Elev.: 29.5 as shown on the drawings ✓

Total pond area: 12205 sf ✓
Area of littoral Zone: 4334 sf **36%** ✓ Between 30% and 50%...OK

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 4/4/05

PERMANENT POOL VOLUME CALCULATION

DRAINAGE AREA # 12

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	123258.00
Weighted Coefficient factor '***Cw***':	0.58

$$PP_v = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 14990.84 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	123258.00
Weighted Coefficient factor '***Cw***':	0.58
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_v = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 17444.10 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	108990.00
Pervious Area (sf)	14268.00

2" * Impervious Area (cf)	18165.00
1/2" * Pervious Area (cf)	594.50

PPv = 18759.50 cf

CONCLUSION:

Method #3 governs, use 18,760 cf as permanent Pool Volume

PPV Volume Required for OFW: 28,140 cf

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 4/4/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 12

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	15407.00
Treatment Volume Provided below discharge weir '**Vp**' (cf):	15943.00
Time '**T**' (hr):	60.00
Extra Treatment Volume Provided (cf):	536.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.037 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate '**Q**' (cfs):	0.037
c	0.60
Gravity '**g**':	32.20
PPv Elevation/Orifice Elevation (ft):	31.50
Discharge Weir Elevation (ft):	32.70
Average head '**h**' on the orifice 3/4 * (Discharge El-PPv El) (ft):	0.90

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0081 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

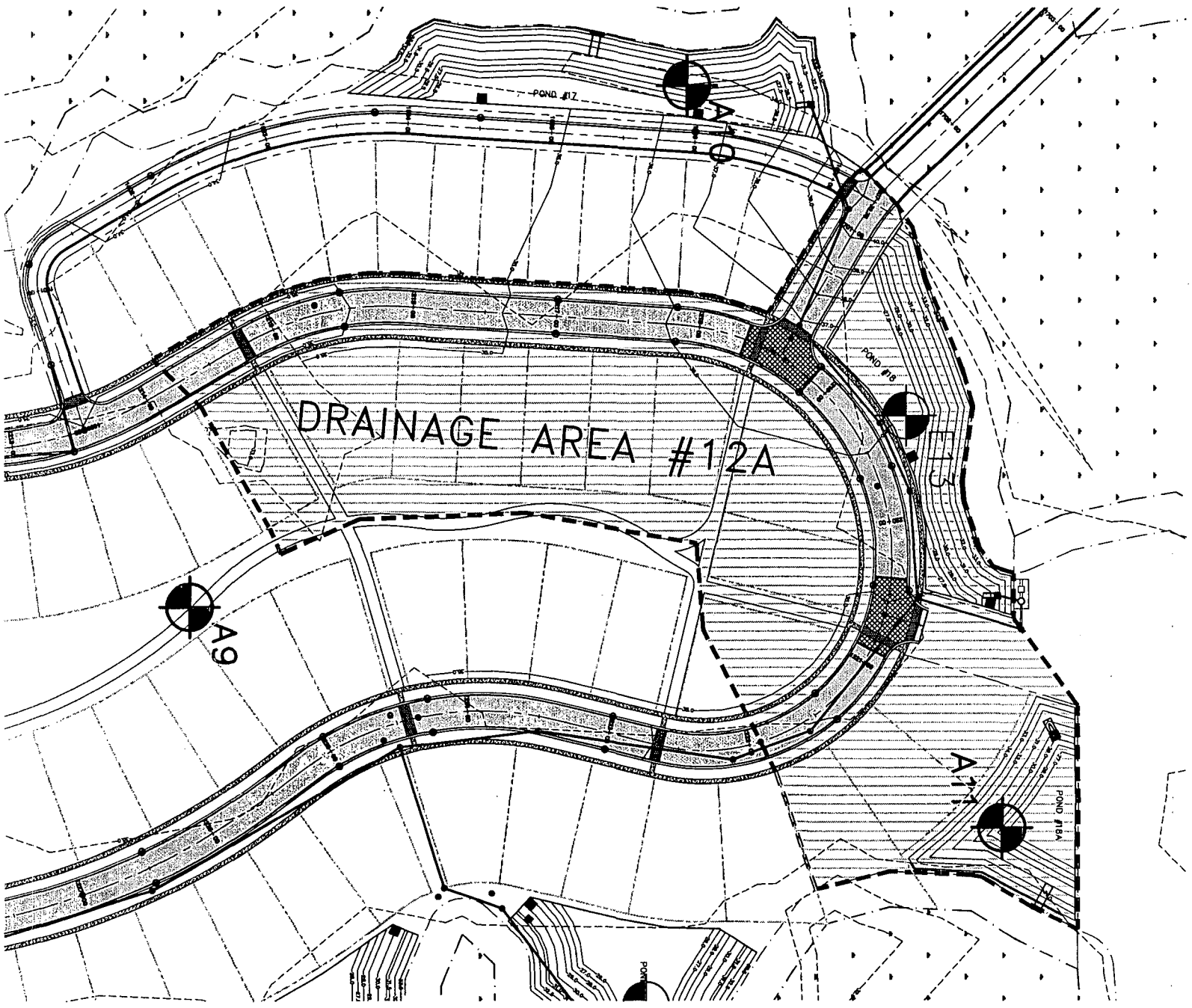
Diameter = 0.1014 ft
Diameter = 1.2171 in

Round Up to 1.250 in. Diameter Orifice ✓

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.039 cfs

Actual Discharge Time (T)= 56.9 Hrs ✓



SCALE: 1"=100'

SHEET NUMBER: 9 of 14

SHEET TITLE: STORMWATER DRAINAGE AREA #12A

THIS DRAWING IS NOT FOR CONSTRUCTION

DATE:	OCTOBER 2004
DESIGNED BY:	B. JUSTICE
DRAWN BY:	B. JUSTICE
PROJECT ENGINEER	B. JUSTICE
PROJECT MANAGER:	J. GOIN
H.M.M. PROJECT NUMBER:	214145AA01

DATE	REV.	REVISION DESCRIPTION

OLSON ASSOCIATES OF W.F.L., INC. REAL ESTATE · DEVELOPMENT

NATUREWALK at Seagrove

WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ▪ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 12A

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	136717.00	3.139	
TOTAL BUILDING AREA (45' LOTS)	57258.00	1.314	0.58
TOTAL BUILDING AREA (35' LOTS)	0.00	0.000	0.45
TOTAL RIGHT OF WAY (45' WIDE ROW)	43757.00	1.005	0.86
TOTAL RIGHT OF WAY (24' WIDE ROW)	0.00	0.000	0.74
TOTAL RETENTION AREA	16403.00	0.377	1.00
TOTAL PERVIOUS AREA	19299.00	0.443	0.31
POST "C" FACTOR:			***0.68***

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	5696.54	0.13077
1.5" RAINFALL VOLUME:	17089.63	0.39232

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

RETENTION BASIN VOLUMES

DRAINAGE AREA # 12A

Pond #18

Elev.	Area (sf)	Area (ac)
27.0	3689	0.085
28.0	4548	0.104
29.0	5547	0.127
30.0	6578	0.151
31.0	8167	0.187
32.0	**9808**	**0.225**
33.0	10933	0.251
34.0	12082	0.277

32488 cf..... Vol @ 32.0 (Permanent Pool)

Elev.	Area (sf)	Area (ac)
27.0	5719	0.131
28.0	7131	0.164
29.0	8751	0.201
30.0	10489	0.241
31.0	13311	0.306
32.0	**16403**	**0.377**
33.0	18621	0.427
34.0	20934	0.481

Pond #18A

Elev.	Area (sf)	Area (ac)
27.0	2030	0.047
28.0	2583	0.059
29.0	3204	0.074
30.0	3911	0.090
31.0	5144	0.118
32.0	**6595**	**0.151**
33.0	7688	0.176
34.0	8852	0.203

	Elevation:	Area (sf):
Treatment Volume Orifice:	**32.00**	**16,403**
Attenuation Discharge Weir:	**33.10**	**18,818**

20453 cf..... Vol @ 32.0 (Permanent Pool)

52940 cf..... Total Vol @ 32.0 (Permanent Pool)

Littoral Zone Calculations (Pond #18):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 32.0 to Elev.: 30.0 as shown on the drawings

Total pond area:	9808 sf		
Area of littoral Zone:	3230 sf	**33%**	Between 30% and 50%...OK ✓

Littoral Zone Calculations (Pond #18A):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 32.0 to Elev.: 30.0 as shown on the drawings

Total pond area:	6595 sf		
Area of littoral Zone:	2684 sf	**41%**	Between 30% and 50%...OK ✓

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

PERMANENT POOL VOLUME CALCULATION

DRAINAGE AREA # 12A

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	136717.00
Weighted Coefficient factor '***Cw***':	0.68

$$PP_v = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 19494.60 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	136717.00
Weighted Coefficient factor '***Cw***':	0.68
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_v = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 22684.89 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	117418.00
Pervious Area (sf)	19299.00

2" * Impervious Area (cf)	19569.67
1/2" * Pervious Area (cf)	804.13

PPv = 20373.79 cf

CONCLUSION:

Method #2 governs, use 22,685 cf as permanent Pool Volume

PPV Volume Required for OFW: 34,028 cf ✓

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 4/4/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 12A

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	17090.00
Treatment Volume Provided below discharge weir '**Vp**' (cf):	19471.00
Time '**T**' (hr):	60.00
Extra Treatment Volume Provided (cf):	2381.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.045 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate '**Q**' (cfs):	0.045
c	0.60
Gravity '**g**':	32.20
PPv Elevation/Orifice Elevation (ft):	32.00
Discharge Weir Elevation (ft):	33.10
Average head '**h**' on the orifice 3/4 * (Discharge El-PPv El) (ft):	0.83

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0103 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

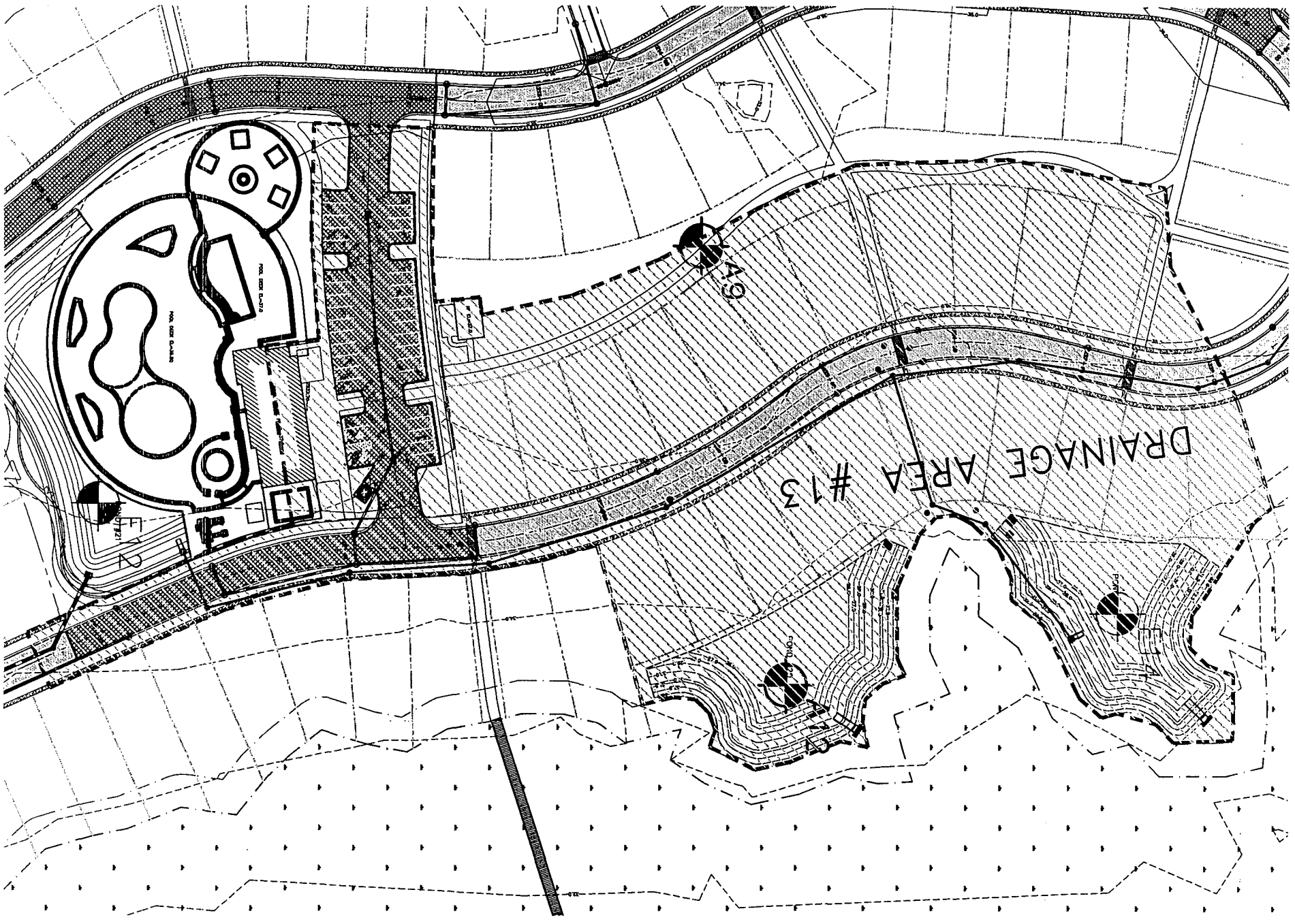
Diameter = 0.1146 ft
Diameter = 1.3746 in

Round Up to 1.375 in. Diameter Orifice

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.045 cfs

Actual Discharge Time (T)= 60.0 Hrs



SHEET NUMBER: 10 of 14

SHEET TITLE: STORMWATER DRAINAGE AREA #13

THIS DRAWING IS NOT FOR CONSTRUCTION

DATE:	OCTOBER 2004
DESIGNED BY:	B. JUSTICE
DRAWN BY:	B. JUSTICE
PROJECT ENGINEER	B. JUSTICE
PROJECT MANAGER:	J. GOIN
H.M.M. PROJECT NUMBER:	214145AA01

DATE	REV.	REVISION DESCRIPTION

OLSON ASSOCIATES, INC., FL, N.Y.C.
REAL ESTATE - DEVELOPMENT

NATUREWALK at Seagrove

WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ¤ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 4/4/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 13

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	239197.00	5.491	
TOTAL BUILDING AREA (45' LOTS)	101922.00	2.340	0.58
TOTAL BUILDING AREA (35' LOTS)	0.00	0.000	0.45
TOTAL RIGHT OF WAY (45' WIDE ROW)	43182.00	0.991	0.86
TOTAL RIGHT OF WAY (24' WIDE ROW)	0.00	0.000	0.74
TOTAL POOL AMENITY BUILDING	3289.00	0.076	0.95
TOTAL POOL PARKING AREA & SIDEWALK	16537.00	0.380	0.95
TOTAL TRAIL PATH AREA	2213.00	0.051	0.70
TOTAL RETENTION AREA	26130.00	0.600	1.00
TOTAL PERVIOUS AREA	45924.00	1.054	0.31
POST "C" FACTOR:			***0.66***

3.857

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	9966.54	0.22880
1.5" RAINFALL VOLUME:	29899.63 ✓	0.68640

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/4/05

RETENTION BASIN VOLUMES

DRAINAGE AREA # 13

Pond #19

Elev.	Area (sf)	Area (ac)
26.0	5061	0.116
27.0	6088	0.140
28.0	7235	0.166
29.0	8543	0.196
30.0	10615	0.244
31.0	**12805**	**0.294**
31.5	13558	0.311
32.5	15086	0.346
33.5	16644	0.382

43151 cf..... Vol @ 31.0 (Permanent Pool)

Ponds combined

Elev.	Area (sf)	Area (ac)
26.0	11063	0.254
27.0	12999	0.298
28.0	15167	0.348
29.0	17581	0.404
30.0	21715	0.499
31.0	**26130**	**0.600**
31.5	27539	0.632
32.5	30389	0.698
33.5	33283	0.764

Pond #20

Elev.	Area (sf)	Area (ac)
26.0	6002	0.138
27.0	6911	0.159
28.0	7932	0.182
29.0	9038	0.207
30.0	11100	0.255
31.0	**13325**	**0.306**
31.5	13981	0.321
32.5	15303	0.351
33.5	16639	0.382

47069 cf..... Vol @ 31.0 (Permanent Pool)

	Elevation:	Area (sf):
Treatment Volume Orifice:	**31.00**	**26,130**
Attenuation Discharge Weir:	**32.50**	**30,389**

90220 cf..... Total Vol @ 31.0 (Permanent Pool)

Littoral Zone Calculations (Pond #19):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area ✓
Littoral Zone slope is 6:1 from Elev.: 31.0 to Elev.: 29.0 as shown on the drawings

Total pond area: 12805 sf
Area of littoral Zone: 4262 sf **33%** ✓ Between 30% and 50%...OK

Littoral Zone Calculations (Pond #20):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area ✓
Littoral Zone slope is 6:1 from Elev.: 31.0 to Elev.: 29.0 as shown on the drawings

Total pond area: 13325 sf
Area of littoral Zone: 4287 sf **32%** ✓ Between 30% and 50%...OK

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 4/4/05

PERMANENT POOL VOLUME CALCULATION

DRAINAGE AREA # 13

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	239197.00
Weighted Coefficient factor '***Cw***':	0.66

$$PP_v = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 33104.16 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	239197.00
Weighted Coefficient factor '***Cw***':	0.66
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_v = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 38521.66 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	193273.00
Pervious Area (sf)	45924.00

2" * Impervious Area (cf)	32212.17
1/2" * Pervious Area (cf)	1913.50

PPv = 34125.67 cf

CONCLUSION:

Method #2 governs, use 38,522 cf as permanent Pool Volume

PPV Volume Required for OFW: 57,783 cf ✓

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 4/4/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 13

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	29899.00
Treatment Volume Provided below discharge weir '**Vp**' (cf):	42384.00
Time '**T**' (hr):	60.00
Extra Treatment Volume Provided (cf):	12485.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.098 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate '**Q**' (cfs):	0.098
c	0.60
Gravity '**g**':	32.20
PPv Elevation/Orifice Elevation (ft):	31.00
Discharge Weir Elevation (ft):	32.50
Average head '**h**' on the orifice 3/4 * (Discharge El-PPv El) (ft):	1.13

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0192 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

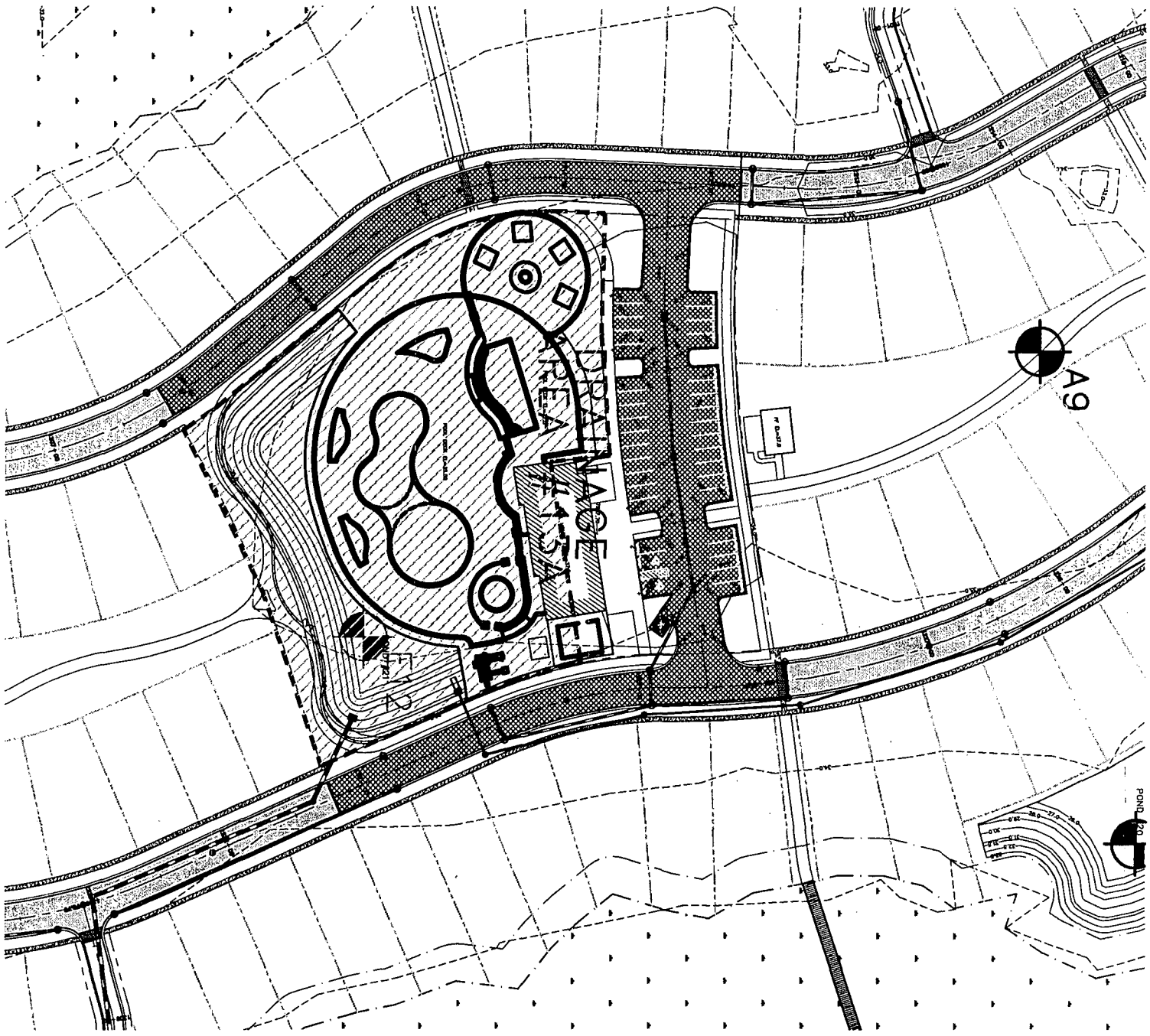
Diameter = 0.156 ft
Diameter = 1.877 in

Round Down to 1.875 in. Diameter Orifice

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.098 cfs

Actual Discharge Time (T)= 60.1 Hrs



SCALE: 1"=100'

SHEET NUMBER: 11 of 14	SHEET TITLE: STORMWATER DRAINAGE AREA #13A	THIS DRAWING IS NOT FOR CONSTRUCTION	DATE: OCTOBER 2004 DESIGNED BY: B. JUSTICE DRAWN BY: B. JUSTICE PROJECT ENGINEER: B. JUSTICE PROJECT MANAGER: J. GOIN H.M.M. PROJECT NUMBER: 214145AA01	DATE / REV. / REVISION DESCRIPTION	OLSON ASSOCIATES OF N.W. FL, INC. REAL ESTATE - DEVELOPMENT	NATUREWALK at Seagrove WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC
Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 • Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/5/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 13A

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	68956.00	1.583 ✓	
TOTAL BUILDING AREA	2264.00	0.052	0.95
TOTAL POOL AND DECK AREA	39240.00	0.901	0.95
TOTAL TRAIL PATH AREA	5406.00	0.124	0.70
TOTAL PARKING AREA	0.00	0.000	0.95
TOTAL RETENTION AREA	12797.00	0.294	1.00
TOTAL PERVIOUS AREA	9249.00	0.212	0.31
POST "C" FACTOR:			***0.85***

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	2873.17	0.06596
1.5" RAINFALL VOLUME:	8619.50 ✓	0.19788

1,077

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 4/5/05

RETENTION BASIN VOLUMES

DRAINAGE AREA # 13A

Pond #21

Elev.	Area (sf)	Area (ac)
28.0	3857	0.089
29.0	5147	0.118
30.0	6501	0.149
31.0	7987	0.183
32.0	10342	0.237
33.0	**12797**	**0.294**
33.5	13636	0.313
34.5	15347	0.352

	Elevation:	Area (sf):
Treatment Volume Orifice:	**33.00**	**12,797**
Attenuation Discharge Weir:	**33.70**	**13,893**

39426 cf..... Vol @ 33.0 (Permanent Pool)

Littoral Zone Calculations:

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 33.0 to Elev.: 31.0 as shown on the drawings

Total pond area: 12797 sf
Area of littoral Zone: 4810 sf **38%** ✓ Between 30% and 50%...OK

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/5/05

PERMANENT POOL VOLUME CALCULATION
DRAINAGE AREA # 13A

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	68956.00
Weighted Coefficient factor '***Cw***':	0.85

$$PP_v = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 12290.62 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	68956.00
Weighted Coefficient factor '***Cw***':	0.85
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_v = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 14301.99 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	59707.00
Pervious Area (sf)	9249.00

2" * Impervious Area (cf)	9951.17
1/2" * Pervious Area (cf)	385.38

PPv = 10336.54 cf

CONCLUSION:

Method #2 governs, use 14,302 cf as permanent Pool Volume

PPV Volume Required for OFW: 21,453 cf √

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 4/5/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 13A

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	8620.00
Treatment Volume Provided below discharge weir '**Vp**' (cf):	9496.00
Time '**T**' (hr):	60.00
Extra Treatment Volume Provided (cf):	876.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.022 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate '**Q**' (cfs):	0.022
c	0.60
Gravity '**g**':	32.20
PPv Elevation/Orifice Elevation (ft):	33.00
Discharge Weir Elevation (ft):	33.70
Average head '**h**' on the orifice 3/4 * (Discharge El-PPv El) (ft):	0.53

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0063 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

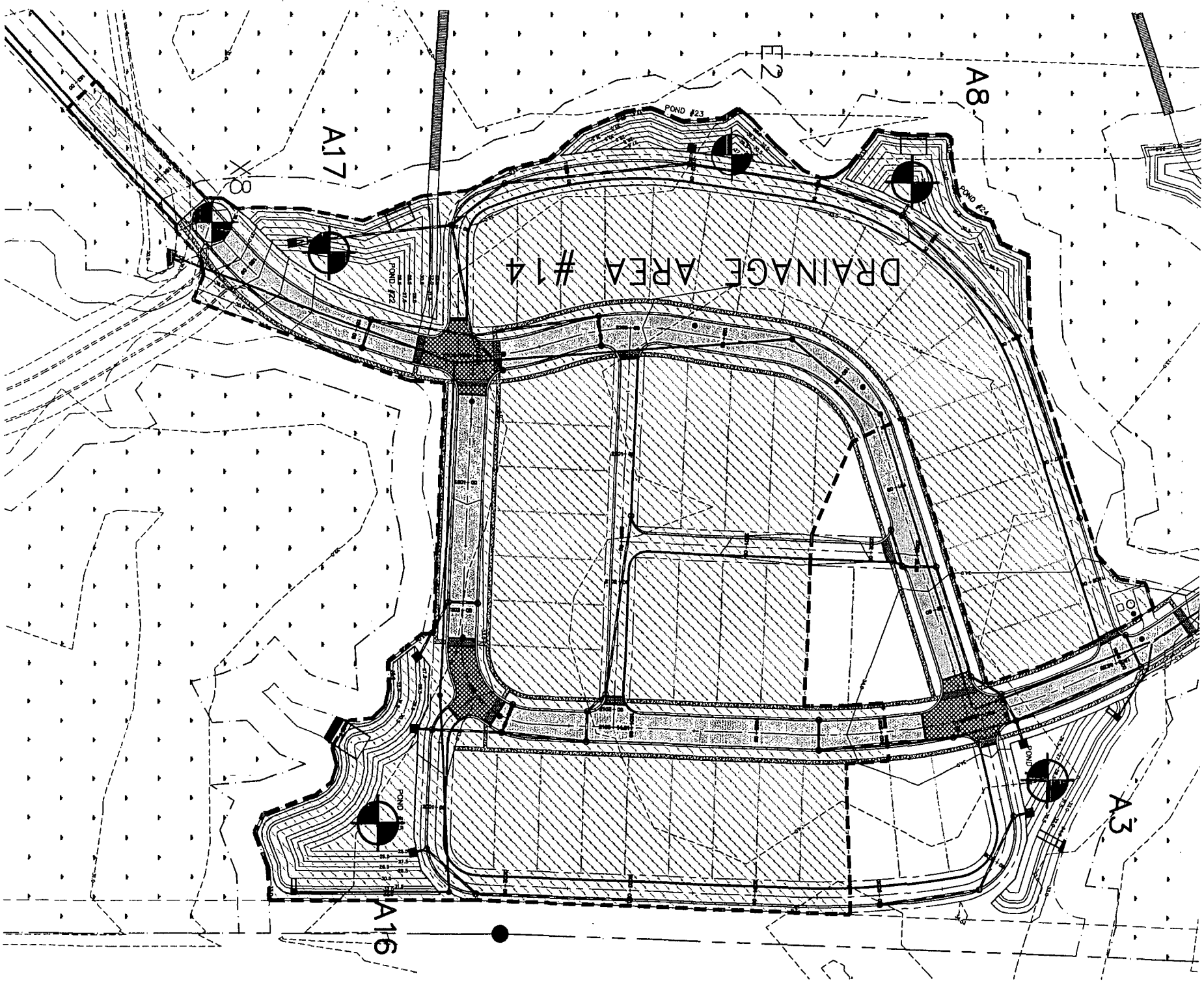
Diameter = 0.0896 ft
Diameter = 1.0748 in

Round Up to 1.125 in. Diameter Orifice ✓

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.024 cfs

Actual Discharge Time (T)= 54.8 Hrs ✓



SCALE: 1" = 100'

SHEET NUMBER: 12 of 14

SHEET TITLE: STORMWATER DRAINAGE AREA #14

THIS DRAWING IS NOT FOR CONSTRUCTION

DATE:	OCTOBER 2004
DESIGNED BY:	B. JUSTICE
DRAWN BY:	B. JUSTICE
PROJECT ENGINEER	B. JUSTICE
PROJECT MANAGER:	J. GOIN
H.M.M. PROJECT NUMBER:	214145AA01

DATE	REV.	REVISION DESCRIPTION

OLSON ASSOCIATES OF W. FL, INC. REAL ESTATE · DEVELOPMENT

NATUREWALK at Seagrove

WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC
Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 • Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove

Project Job Number: 214145AA01

Date: July 2004; Revised 4/5/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 14

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	286983.00	6.588	
TOTAL BUILDING AREA (45' LOTS)	0.00	0.000	0.58
TOTAL BUILDING AREA (35' LOTS)	145030.00	3.329	0.45
TOTAL RIGHT OF WAY (45' WIDE ROW)	59129.00	1.357	0.86
TOTAL RIGHT OF WAY (24' WIDE ROW)	39902.00	0.916	0.74
TOTAL RETENTION AREA	25196.00	0.578	1.00
TOTAL PERVIOUS AREA	17726.00	0.407	0.31
POST "C" FACTOR:			***0.61***

5.603

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	11957.63	0.27451
1.5" RAINFALL VOLUME:	35872.88 √	0.82353

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/5/05

RETENTION BASIN VOLUMES
DRAINAGE AREA # 14

Pond #22

Elev.	Area (sf)	Area (ac)
26.5	2124	0.049
27.5	2731	0.063
28.5	3404	0.078
29.5	4138	0.095
30.5	5351	0.123
31.5	**6690**	**0.154**
32.0	7162	0.164
33.0	8145	0.187

20952 cf..... Vol @ 31.5 (Permanent Pool)

Pond #23

Elev.	Area (sf)	Area (ac)
27.5	255	0.006
28.5	701	0.016
29.5	1265	0.029
30.5	1913	0.044
31.5	**2636**	**0.061**
32.0	3026	0.069
33.0	3862	0.089

4943 cf..... Vol @ 31.5 (Permanent Pool)

Pond #24

Elev.	Area (sf)	Area (ac)
26.5	476	0.011
27.5	754	0.017
28.5	1349	0.031
29.5	2110	0.048
30.5	3233	0.074
31.5	**4485**	**0.103**
32.0	4999	0.115
33.0	6081	0.140

10693 cf..... Vol @ 31.5 (Permanent Pool)

	Elevation:	Area (sf):
Treatment Volume Orifice:	**31.50**	**25,235**
Attenuation Discharge Weir:	**32.80**	**30,840**

Pond #25

Elev.	Area (sf)	Area (ac)
25.5	2955	0.068
26.5	3845	0.088
27.5	5029	0.115
28.5	6275	0.144
29.5	7257	0.167
30.5	9309	0.214
31.5	**11431**	**0.262**
32.0	12151	0.279
33.0	13613	0.313

40355 cf..... Vol @ 31.5 (Permanent Pool)

Ponds combined

Elev.	Area (sf)	Area (ac)
25.5	2955	0.068
26.5	5555	0.128
27.5	8769	0.201
28.5	11729	0.269
29.5	14770	0.339
30.5	19806	0.455
31.5	**25242**	**0.579**
32.0	27338	0.628
33.0	31701	0.728

76943 cf..... Total Vol @ 31.5 (Permanent Pool)

Littoral Zone Calculations (Pond #22):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.5 to Elev.: 29.5 as shown on the drawings

Total pond area:	6690 sf		
Area of littoral Zone:	2552 sf	**38%**	Between 30% and 50%...OK

Littoral Zone Calculations (Pond #24):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.5 to Elev.: 29.5 as shown on the drawings

Total pond area:	4485 sf		
Area of littoral Zone:	1787 sf	**40%**	Between 30% and 50%...OK

Littoral Zone Calculations (Pond #25):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.5 to Elev.: 29.5 as shown on the drawings

Total pond area:	11431 sf		
Area of littoral Zone:	4174 sf	**37%**	Between 30% and 50%...OK

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 4/5/05

PERMANENT POOL VOLUME CALCULATION

DRAINAGE AREA # 14

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	286983.00
Weighted Coefficient factor '***Cw***':	0.61

$$PP_v = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 36708.69 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	286983.00
Weighted Coefficient factor '***Cw***':	0.61
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_v = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 42716.08 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	269257.00
Pervious Area (sf)	17726.00

2" * Impervious Area (cf)	44876.17
1/2" * Pervious Area (cf)	738.58

PPv = 45614.75 cf

CONCLUSION:

Method #3 governs, use 45,615 cf as permanent Pool Volume

PPV Volume Required for OFW: 68,422 cf

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 4/5/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 14

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	35872.00
Treatment Volume Provided below discharge weir '**Vp**' (cf):	36721.00
Time '**T**' (hr):	60.00
Extra Treatment Volume Provided (cf):	849.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.085 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate '**Q**' (cfs):	0.085
c	0.60
Gravity '**g**':	32.20
PPv Elevation/Orifice Elevation (ft):	31.50
Discharge Weir Elevation (ft):	32.80
Average head '**h**' on the orifice 3/4 * (Discharge El-PPv El) (ft):	0.97

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0179 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

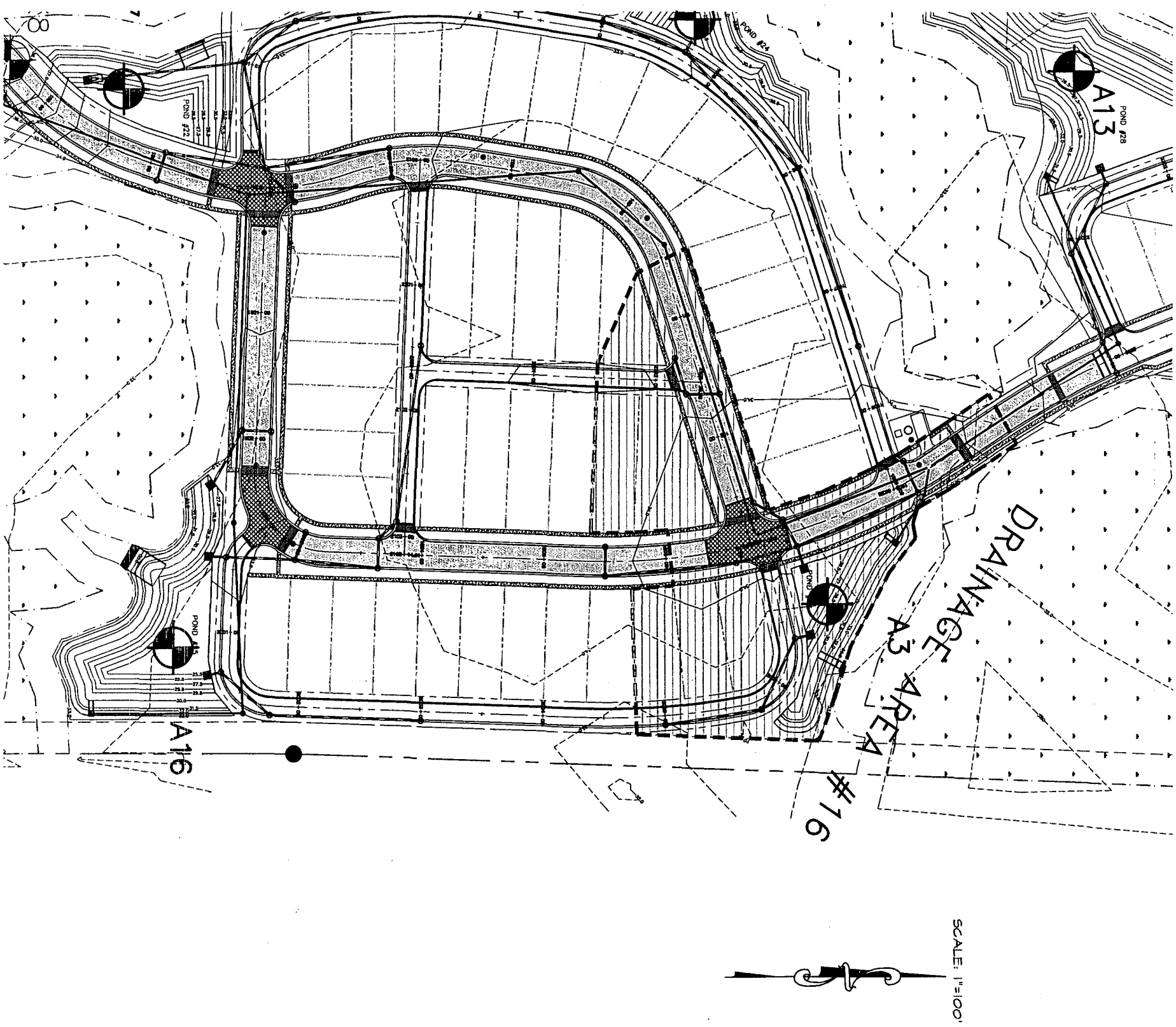
Diameter = 0.1509 ft
Diameter = 1.8105 in

Round Up to 1.875 in. Diameter Orifice

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.091 cfs

Actual Discharge Time (T)= 56.0 Hrs



SHEET NUMBER: 13 of 14

SHEET TITLE: STORMWATER DRAINAGE AREA #16

THIS DRAWING IS NOT FOR CONSTRUCTION

DATE:	OCTOBER 2004
DESIGNED BY:	B. JUSTICE
DRAWN BY:	B. JUSTICE
PROJECT ENGINEER	B. JUSTICE
PROJECT MANAGER:	J. GOIN
H.M.M. PROJECT NUMBER:	214145AA01

DATE	REV.	REVISION DESCRIPTION

OLSON ASSOCIATES OF N.W. FL, INC. REAL ESTATE · DEVELOPMENT

NATUREWALK at Seagrove

WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC
Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ▫ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove

Project Job Number: 214145AA01

Date: July 2004; Revised 4/8/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 16

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	60684.00	1.393	
TOTAL BUILDING AREA (45' LOTS)	0.00	0.000	0.58
TOTAL BUILDING AREA (35' LOTS)	18808.00	0.432	0.45
TOTAL RIGHT OF WAY (45' WIDE ROW)	22966.00	0.527	0.86
TOTAL RIGHT OF WAY (24' WIDE ROW)	6693.00	0.154	0.74
TOTAL RETENTION AREA	4478.00	0.103	1.00
TOTAL PERVIOUS AREA	7739.00	0.178	0.31
POST "C" FACTOR:			***0.66***

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	2528.50	0.05805
1.5" RAINFALL VOLUME:	7585.50 ✓	0.17414

1.112

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/8/05

RETENTION BASIN VOLUMES

DRAINAGE AREA # 16

Pond #26

Elev.	Area (sf)	Area (ac)
25.5	1000	0.023
26.5	1283	0.029
27.5	1605	0.037
28.5	1977	0.045
29.5	2402	0.055
30.5	3378	0.078
31.5	**4478**	**0.103**
32.0	4868	0.112
33.0	5680	0.130
34.0	6537	0.150

	Elevation:	Area (sf):
Treatment Volume Orifice:	**31.50**	**4,478**
Attenuation Discharge Weir:	**33.00**	**5,680**

15173 cf..... Vol @ 31.5 (Permanent Pool)

me 13,384 all my numbers are slightly smaller than EOR's OK

Littoral Zone Calculations:

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.5 to Elev.: 29.5 as shown on the drawings

Total pond area:	4478 sf		
Area of littoral Zone:	2076 sf	**46%**	Between 30% and 50%...OK

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 4/8/05

PERMANENT POOL VOLUME CALCULATION
DRAINAGE AREA # 16

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	60686.00
Weighted Coefficient factor '***Cw***':	0.66

$$PP_v = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 8398.76 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	60686.00
Weighted Coefficient factor '***Cw***':	0.66
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_v = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 9773.22 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	52947.00
Pervious Area (sf)	7739.00

2" * Impervious Area (cf)	8824.50
1/2" * Pervious Area (cf)	322.46

PPv = 9146.96 cf

CONCLUSION:

Method #2 governs, use 9,773 cf as permanent Pool Volume

PPV Volume Required for OFW: 14,660 cf ✓

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 4/8/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 16

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	7586.00
Treatment Volume Provided below discharge weir '**Vp**' (cf):	7623.00
Time '**T**' (hr):	60.00
Extra Treatment Volume Provided (cf):	37.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.018 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate '**Q**' (cfs):	0.018
c	0.60
Gravity '**g**':	32.20
PPv Elevation/Orifice Elevation (ft):	31.50
Discharge Weir Elevation (ft):	33.00
Average head '**h**' on the orifice 3/4 * (Discharge El-PPv El) (ft):	1.13

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0035 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

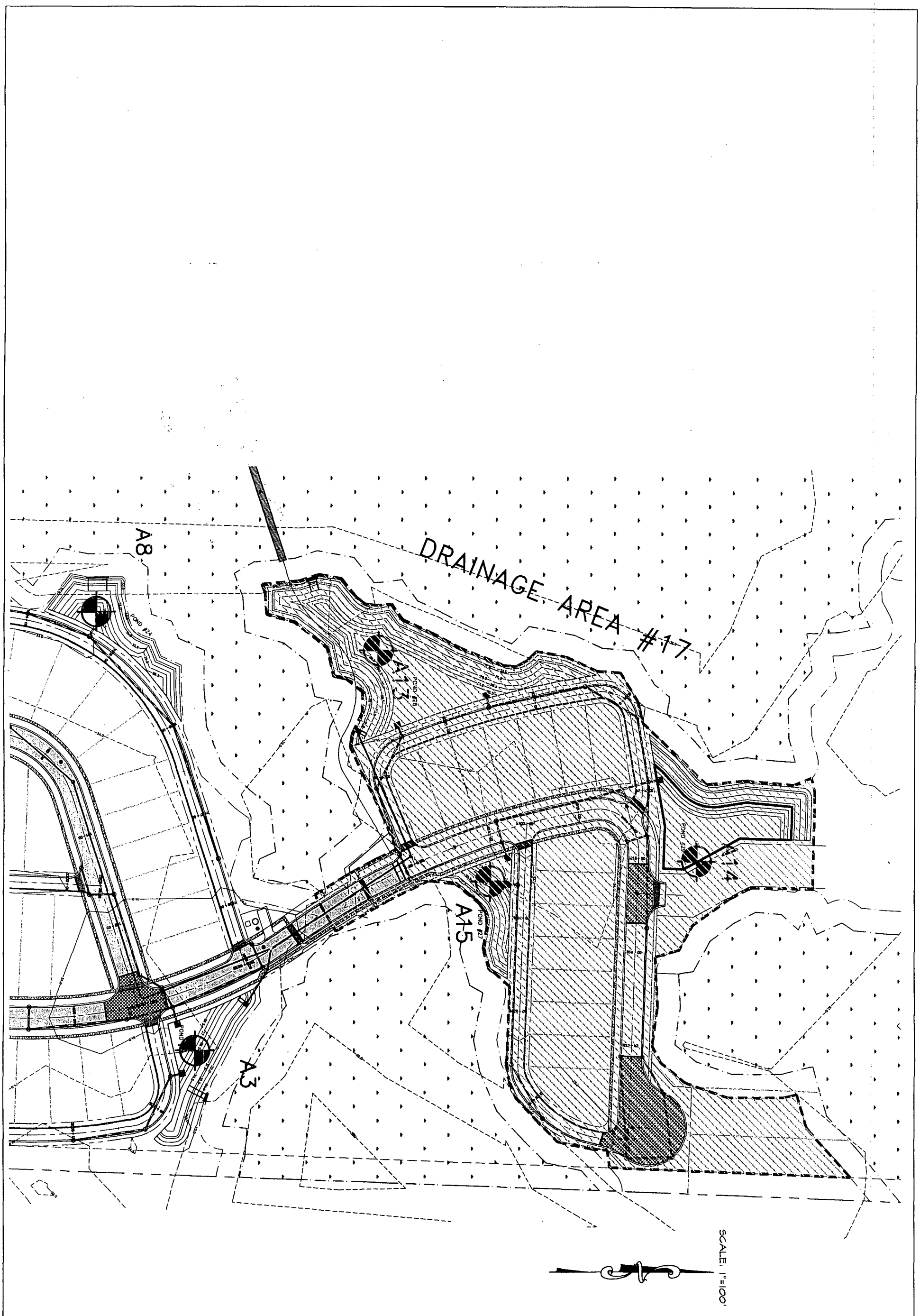
Diameter = 0.0663 ft
Diameter = 0.7959 in

Round Down to 0.750 in. Diameter Orifice ✓

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.016 cfs ⌋

Actual Discharge Time (T)= 67.6 Hrs



SHEET NUMBER: 14 of 14

SHEET TITLE: STORMWATER DRAINAGE AREA #17

THIS DRAWING IS NOT FOR CONSTRUCTION

DATE:	OCTOBER 2004
DESIGNED BY:	B. JUSTICE
DRAWN BY:	B. JUSTICE
PROJECT ENGINEER	B. JUSTICE
PROJECT MANAGER:	J. GOIN
H.M.M. PROJECT NUMBER:	214145AA01

DATE	REV.	REVISION DESCRIPTION

OLSON ASSOCIATES OF N.W. FL, INC. REAL ESTATE - DEVELOPMENT

NATUREWALK at Seagrove

WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 • Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove

Project Job Number: 214145AA01

Date: July 2004; Revised 4/5/05

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

DRAINAGE AREA # 17

	AREA (sf)	AREA (ac)	"C" FACTOR
TOTAL DRAINAGE BASIN	176625.00	4.055	
TOTAL BUILDING AREA (45' LOTS)	11677.00	0.268	0.58
TOTAL BUILDING AREA (35' LOTS)	49152.00	1.128	0.45
TOTAL RIGHT OF WAY (45' WIDE ROW)	40675.00	0.934	0.86
TOTAL RIGHT OF WAY (24' WIDE ROW)	20139.00	0.462	0.74
TOTAL RETENTION AREA	32527.00	0.747	1.00
TOTAL PERVIOUS AREA	22455.00	0.515	0.31
POST "C" FACTOR:			***0.67***

2.793

	VOLUME (cf)	VOLUME (ac-ft)
1/2" RAINFALL VOLUME:	7359.38	0.16895
1.5" RAINFALL VOLUME:	22078.13 ✓	0.50684

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 4/5/05

RETENTION BASIN VOLUMES

DRAINAGE AREA # 17

Pond #27

Elev.	Area (sf)	Area (ac)
26.5	733	0.017
27.5	941	0.022
28.5	1244	0.029
29.5	1703	0.039
30.5	2428	0.056
31.5	**3215**	**0.074**
32.0	3496	0.080
33.0	4080	0.094

9129 cf..... Vol @ 31.5 (Permanent Pool)

Ponds combined

Elev.	Area (sf)	Area (ac)
26.5	12162	0.279
27.5	14659	0.337
28.5	17597	0.404
29.5	21351	0.490
30.5	26775	0.615
31.5	**32527**	**0.747**
32.0	34519	0.792
33.0	38612	0.886

Pond #28

Elev.	Area (sf)	Area (ac)
26.5	5929	0.136
27.5	7490	0.172
28.5	9357	0.215
29.5	11427	0.262
30.5	14813	0.340
31.5	**18379**	**0.422**
32.0	19606	0.450
33.0	22123	0.508

57853 cf..... Vol @ 31.5 (Permanent Pool)

	Elevation:	Area (sf):
Treatment Volume Orifice:	**31.50**	**32,527**
Attenuation Discharge Weir:	**32.30**	**35,719**

Pond #29

Elev.	Area (sf)	Area (ac)
26.5	5500	0.126
27.5	6228	0.143
28.5	6996	0.161
29.5	8221	0.189
30.5	9534	0.219
31.5	**10933**	**0.251**
32.0	11417	0.262
33.0	12409	0.285

40272 cf..... Vol @ 31.5 (Permanent Pool)

107255 cf..... Total Vol @ 31.5 (Permanent Pool)

Littoral Zone Calculations (Pond #27):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.5 to Elev.: 29.5 as shown on the drawings

Total pond area:	3215 sf		
Area of littoral Zone:	1512 sf	**47%**	Between 30% and 50%...OK

Littoral Zone Calculations (Pond #28):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.5 to Elev.: 29.5 as shown on the drawings

Total pond area:	18379 sf		
Area of littoral Zone:	6952 sf	**38%**	Between 30% and 50%...OK

Littoral Zone Calculations (Pond #29):

Littoral shelf required to be 6:1 slope (min) and 30% to 50% of permanent pool area
Littoral Zone slope is 6:1 from Elev.: 31.5 to Elev.: 28.5 as shown on the drawings

Total pond area:	10933 sf		
Area of littoral Zone:	3937 sf	**36%**	Between 30% and 50%...OK

Hatch Mott MacDonald

Project Name: NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: July 2004; Revised 4/5/05

PERMANENT POOL VOLUME CALCULATION

DRAINAGE AREA # 17

Method #1: 3.83% of Average Annual Rainfall	
Average Yearly Rainfall Amount for Walton County '***TRa***' (in):	65.70
Drainage Area '***Da***' (sf):	176625.00
Weighted Coefficient factor '***Cw***':	0.67

$$PP_v = 0.383 \times TR_a \times D_a \times C_w$$

PPv = 24814.75 cf

Method #2: Wet Season Rainfall	
Wet Season Rainfall Amount for Walton County '***Ra***' (in):	32.00
Drainage Area '***Da***' (sf):	176625.00
Weighted Coefficient factor '***Cw***':	0.67
Detention time for 5 month wet season '***Dt***' (days):	14.00
5 month wet season '***Wp***' (days):	153.00

$$PP_v = R_a \times D_a \times C_w \times \left(\frac{Dt}{Wp}\right)$$

PPv = 28875.69 cf

Method #3: 2" over Impervious Area plus 1/2" over Pervious Area	
Impervious Area (sf)	154170.00
Pervious Area (sf)	22455.00

2" * Impervious Area (cf)	25695.00
1/2" * Pervious Area (cf)	935.63

PPv = 26630.63 cf

CONCLUSION:

Method #2 governs, use 28,876 cf as permanent Pool Volume

PPV Volume Required for OFW: 43,314 cf

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... July 2004; Revised 2/1/05; Revised 4/5/05

DRAWDOWN ORIFICE CALCULATIONS

DRAINAGE AREA # 17

Discharge rate for no more than 50% of treatment volume in 60 hours	
Required Treatment Volume for first 1.5" of runoff from Drainage Area (cf):	22078.00
Treatment Volume Provided below discharge weir '**Vp**' (cf):	27704.00
Time '**T**' (hr):	60.00
Extra Treatment Volume Provided (cf):	5626.00

Solve for Discharge Rate (Q):

$$Q = \frac{V_p}{T}$$

Discharge Rate (Q) = 0.064 cfs

The Treatment Volume is provided for in depth above PPv, and below the discharge weir	
Discharge Rate '**Q**' (cfs):	0.064
c	0.60
Gravity '**g**':	32.20
PPv Elevation/Orifice Elevation (ft):	31.50
Discharge Weir Elevation (ft):	32.30
Average head '**h**' on the orifice 3/4 * (Discharge El-PPv El) (ft):	0.60

Solve for Area of Orifice (A):

$$A = \frac{Q}{c\sqrt{2gh}}$$

Area = 0.0172 sf

Solve for Diameter of Orifice (D):

$$D = \sqrt{\left(\frac{4A}{\Pi}\right)}$$

Diameter = 0.1480 ft
Diameter = 1.7755 in

Round Down to 1.75 in. Diameter Orifice

Solve for Actual Discharge Rate (Q):

Actual Discharge Rate (Q)= 0.062 cfs

Actual Discharge Time (T)= 61.8 Hrs

Hatch Mott MacDonald

Project Name: ..... NatureWalk at Seagrove
Project Job Number: 214145AA01
Date: ..... October, 2004

VEGETATIVE NATURAL BUFFER CALCULATIONS

PURPOSE: To determine the travel time and buffer width for water quality as required by the Florida Administrative Rule for runoff discharge.

ASSUMPTIONS AND CONSIDERATIONS:

1. The following conditions reflect the worst case senario for the project site
2. Buffer width provided is 25'
3. Flow is even across the lot due to topography
4. Light underbrush will be predicted in the buffer area

VARIABLES:	VALUE:	DESCRIPTION:
Tt	Calculated	Overland travel time (hr)
n	0.4	Roughness coefficient, (0.4 for light underbrush)
W	25	Buffer width (ft)
P2	6	2 Year precipitation (in)
L	52	Horizontal length (ft)
h	1	Vertical height change (ft)
s	0.019	slope (ft/ft)

CALCULATION:

Determine the travel time using the St. Johns manual with Manning's Kinematic Solution (SCS 1986) to compute the time (**Tt**) through the buffer.

FORMULA:

$$Tt = \frac{0.007 * (n * W)^{0.8}}{(P2)^{0.5} * (s)^{0.4}}$$

Tt = 0.088 hours or 315.30 seconds

CONCLUSION:

This time is greater than the minimum 300 seconds as recommended by the *St. Johns River Water Management District Applicants Handbook, April 11, 1994, section 21.*

CALCULATION:

Determine the minimum width (**W**) allowed by the St. Johns Manual is given by the empirical formula, for the (**Tt**) minimum 300 seconds (0.083 hr), to assure water quality:

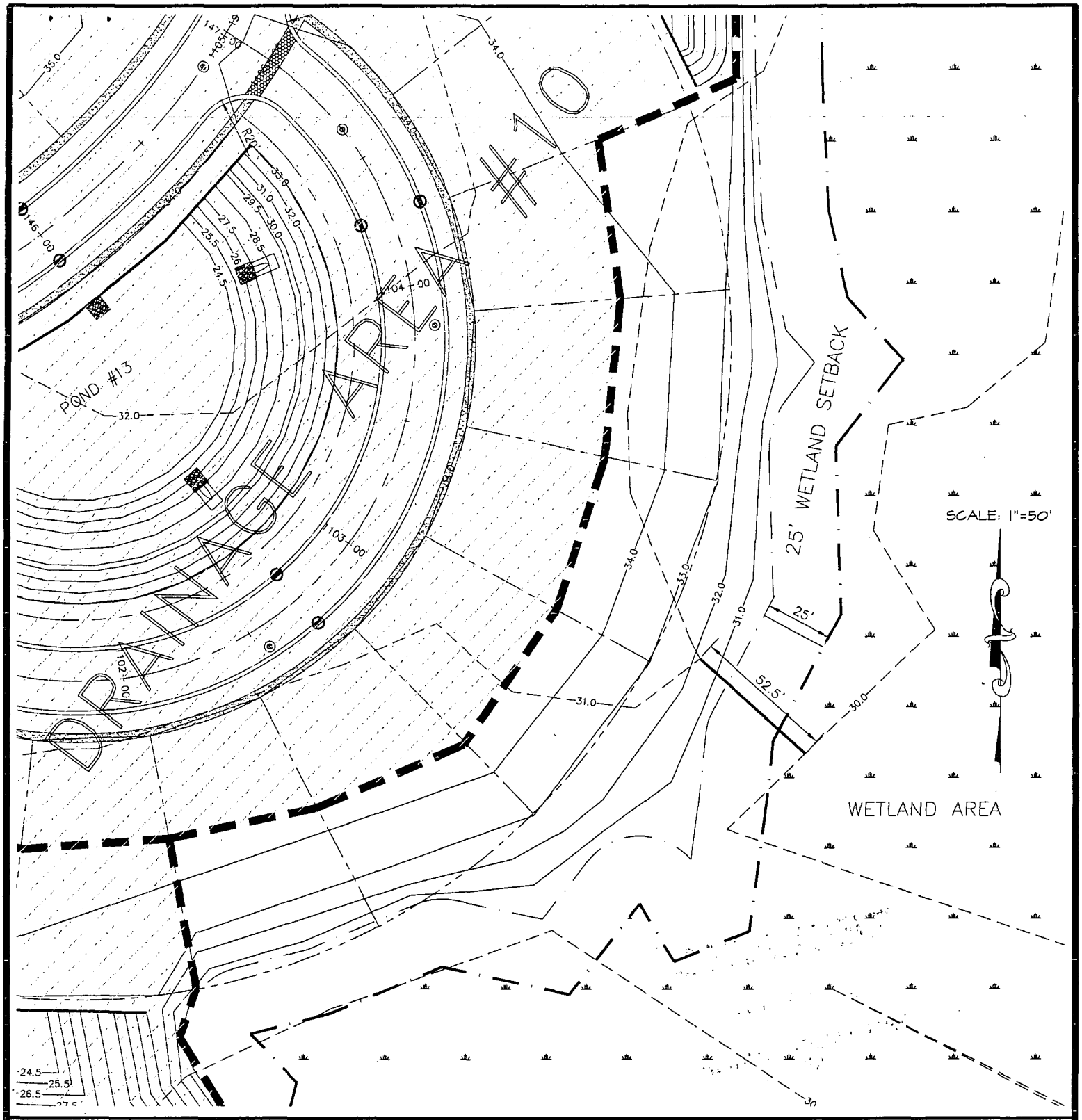
FORMULA:

$$W = \frac{(Tt)^{1.25} * (P2)^{0.625} * (s)^{0.5}}{0.002 * n}$$

W = 23.7 feet

CONCLUSION:

The buffer width provided of 25 feet is greater than the calculated buffer width



NatureWalk at Seagrove
Walton County, Florida

Vegetated Natural Buffer

Hatch Mott MacDonald

Hatch Mott MacDonald Florida, LLC

DATE:	OCTOBER 2004	DESIGNED BY:	B. JUSTICE
LAST REVISED:		DRAWN BY:	B. JUSTICE
H.M.M. PROJECT NUMBER:	214145AA01		
SHEET:	1	PROJECT ENGINEER:	B. JUSTICE
	OF 1	PROJECT MANAGER:	J. GOIN

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 180
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ¤ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

EXHIBIT 9.A

PSI Information To Build On
Engineering • Consulting • Testing

Hatch Mott MacDonald
Panama City

FEB – 3 2005

To	A	I	C	Sign	Date
BRP					

File No. 21145
Return To

November 18, 2004

Mr. David Campbell, P.E.
Olson Associates of N.W. Florida
1234 Airport Road, Suite 215
Destin, Florida 32541

SUBJECT: Addendum to Nature Walk – Preliminary Geotechnical Exploration
Walton County, Florida
PSI Project No. 687-45159

Dear Mr. Campbell:

This letter forwards the results of the auger borings performed on July 6, and August 17 and 18, 2004 for the proposed Nature Walk Subdivision in Walton County, Florida and the additional auger borings performed on November 6, 2004. The purpose of this exploration was to determine the depth to groundwater at thirty-three locations specified by you. The following Table #1 presents the results of our field testing. The test borings were located in the field using a hand held GPS unit, and Lat/Long coordinates provided by you. Therefore, the boring locations should be considered approximate.

Table #1

Location	Groundwater Level (feet)	Estimated Seasonal High Groundwater Level (feet)
A-1	2	1 ½
A-2	2	1 ½
A-3	3	2 ½
A-4	1 ½	1
A-5	1 ½	1
A-6	2	1 ½
A-7	1 ½	1
A-8	1 ½	1
A-9	3	2 ½
A-10	2 ½	2
A-11	3	2 ½
A-12	2 ½	2

Table #1 Continued

Location	Groundwater Level (feet)	Estimated Seasonal High Groundwater Level (feet)
A-13	2 ½	2
A-14	2 ¼	2
A-15	2 ½	2
A-16	2	1 ½
A-17	1 ½	1
A-18	1 ¾	1 ¼
X-9	1 ¾	1 ¼
E-1	3 ½	3
E-2	1 ½	1
E-3	2	1 ½
E-4	2	1 ½
E-5	2 ½	2
E-6	1 ½	1
E-7	1 ¾	1 ¼
E-8	1 ½	1
E-9	1	½
E-10	1 ½	1
E-11	1 ½	1
E-12	1 ¾	1 ¼
E-13	1 ½	1
E-14	1 ½	1

The test borings generally encountered brown, grey, and light grey fine sand from the surface to the bottom of the 3 foot to 4 foot deep auger borings where the borehole collapsed due to the groundwater.

We hope this letter provides sufficient information for the present. If you have any questions or comments, please feel free to call.

Sincerely,
PROFESSIONAL SERVICE INDUSTRIES, INC.

11/16/04

JAMES T. VICKERS, P.E.
Branch Manager/Sr. Geotechnical Engineer
Florida Reg. #56813

PHILIP J. RAMSEY
Staff Engineer

call about
dental Xrays

- **CERTIFICATION** – ***HATCH MOTT MACDONALD (HMM)*** certifies that the engineering plans comply with Section 14-86.003, Florida Administrative Code, as applicable.

- **LOCATION/VICINITY MAP** - A project vicinity map is included with this document and identifies the location of the site.

- **GRADING PLAN** - Stormwater drainage and grading is shown on the attached site engineering drawing. A professional engineer registered in Florida has sealed this drawing.

- **EROSION CONTROL** - Erosion control measures will be utilized throughout the construction phase of this project to restrict any turbid runoff from leaving the construction site. Erosion control measures include hay bales, silt fences and sequencing of construction activities.

APPENDIX C
Geotechnical Report

SOUTHERN EARTH SCIENCES
Geotechnical | Environmental | Materials Testing

DESTIN AREA OFFICE
625 Valparaiso Parkway, Unit 706
Valparaiso, FL 32580

Tel: (850) 837-9966
Fax: (850) 837-9967
www.soearth.com

FL Certificate of Authorization #3737

Anchor Title and Associates
1510 S Clark Avenue
Tampa, Florida 33629
Attn: Mr. Chris Hemmings

March 24, 2026
SESI Project No: P26-201

Subject: Stormwater Field Testing Report for the Nature Walk Tract L Townhome Project, Santa Rosa Beach, Walton County, Florida
Walton County Parcel ID: 11-3S-19-25010-000-00K1

Dear Mr. Hemmings:

Southern Earth Sciences, Inc., has completed the geotechnical services for the residential property at the above-mentioned property in Walton County, Florida. This report presents the results of our testing and includes soil boring logs, field infiltration rate and estimated seasonal high groundwater level.

FIELD INVESTIGATIVE PROCEDURES:

On March 21st, 2026, our firm's personnel traveled to the project site and completed the field testing for the above referenced project. For stormwater management, two (2) hand auger borings were performed to a depth of approximately 2.8 – 3.2 feet below existing ground surface. The location is shown on the attached plan. Additionally, one (1) double ring infiltrometer test was completed at the location shown on the attached plan.

The double ring infiltrometer test was performed at a depth of approximately 0.25 feet below top of existing grade after surficial grasses were removed. A hand auger boring was performed near the double ring infiltrometer test to sample and classify the underlying soils, and to determine the depth to groundwater. A description of the soil conditions and the depths to the groundwater (if encountered) are presented below.

The double-ring infiltrometer test was performed in accordance with ASTM D 3385 "Infiltration Rate of Soils in Field Using Double-Ring Infiltrometers." Soils were presaturated for thirty (30) minutes prior to performing the test.

The test data is graphically presented as elapsed time versus accumulated intake on the attached tables. The average infiltration rate was approximately 1.7 inches per hour for DRI-1. We should note that these infiltration rates are unfactored and should be used with an appropriate factor of safety. The double-ring infiltrometer tests do not include the effects of long-term saturation and groundwater mounding. It should also be noted that testing does not take into account surface water runoff that may take place if there is no containment used.

The infiltrometer rate stated above should not be considered the drawdown rate of the pond. The drawdown rate is a complex 3-dimensional phenomenon dependent upon numerous factors including pond/system geometry, vertical and horizontal infiltration rates, groundwater mounding, etc. The prediction of the drawdown rate is made more difficult by varying soil/groundwater conditions. The Northwest Florida Water Management District recommends a correlation factor between unsaturated vertical infiltration rates and horizontal hydraulic conductivity of 1.5.

FIELD/LABORATORY TESTING FOR STORMWATER DESIGN:

It is our understanding that 6-unit single-family lots will be constructed on the property. You have indicated that the stormwater basin may be constructed on the west side of the project. Currently, pond dimensions and/or pond bottom elevations are in design. Based upon our in-field observations, the site is fairly level with not more than one to two feet of relief over of the site.

On the date of our field-testing, March 21st, 2026, the groundwater levels were measured at a depth between 1.7 and 2.0 feet below existing ground surface at our hand auger boring location. Fluctuations in the water table will occur due to the seasonal precipitation/evapotranspiration differences and tidal influences, therefore groundwater levels should be verified prior to construction. Based upon observations made during performance of our hand auger borings, the estimated depth to the seasonal high groundwater is 0.5 feet (±0.5 feet) below existing ground surface. During periods of above average rainfall, groundwater levels may rise above the seasonal high depths indicated above. To further determine groundwater levels and seasonal high groundwater depths, we highly recommend performing direct push borings to gain a continuous soil sample.

SOIL BORING LOGS

Table I

Soil Classification at HA-1 / DRI-1

Depth Interval (feet)	Soil Classification
Ground Surface – 0.5	Brown slightly silty fine SAND
0.5 – 1.25	Gray slightly silty fine SAND
1.25 – 3.2	Tan slightly silty fine SAND

Groundwater was measured at a depth of 2.0 feet below existing ground surface.

Table II

Soil Classification at HA-2

Depth Interval (feet)	Soil Classification
Ground Surface – 1.0	Brown slightly silty fine SAND
1.0 – 2.8	Tan slightly silty fine SAND

Groundwater was measured at a depth of 1.7 feet below existing ground surface.

GENERAL COMMENTS:

Professional judgments on design criteria are presented in this letter. These are based partly on our evaluations of technical information provided, partly on our understanding of the characteristics of the project being planned, and partly on our general experience with subsurface conditions in the area. We do not guarantee performance of the project in any respect, only that our judgments meet the standard of care of our profession.

This information is exclusively for the use and benefit of the addressee(s) identified on the first page of this report and is not for the use or benefit of, nor may it be relied upon by any other person or entity. The contents of this letter may not be quoted in whole or in part or distributed to any person or entity other than the addressee(s) hereof without, in each case, the advance written consent of the undersigned.

This report has been prepared in order to aid in the evaluation of this property and to assist the architects and engineers in the stormwater management design. It is intended for use with regard to the specific project discussed herein, and any changes in the loads, locations, or assumed (or reported) grades shall be brought to our attention immediately so that we may determine how such changes may affect our conclusions and recommendations. Our report does not address environmental issues which may be associated with the subject property.

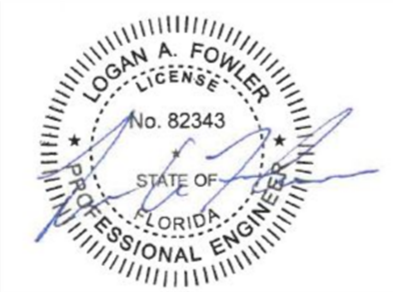
While hand auger borings performed for this project are representative of subsurface soil conditions at their respective locations and for their respective vertical reaches, local variations of the subsurface materials are anticipated and may be encountered. The boring logs and related information are based on the driller's logs and visual examination of selected samples in the laboratory. Delineation between soil types shown on the boring logs is approximate, and soil descriptions represent our interpretation of subsurface conditions at the designated boring location on the particular date drilled.

We appreciate the opportunity to assist you. If you have any questions or if we may be of further assistance, please call at your convenience.

Yours Very Truly,

SOUTHERN EARTH SCIENCES, INC.

Shane George
Branch Manager



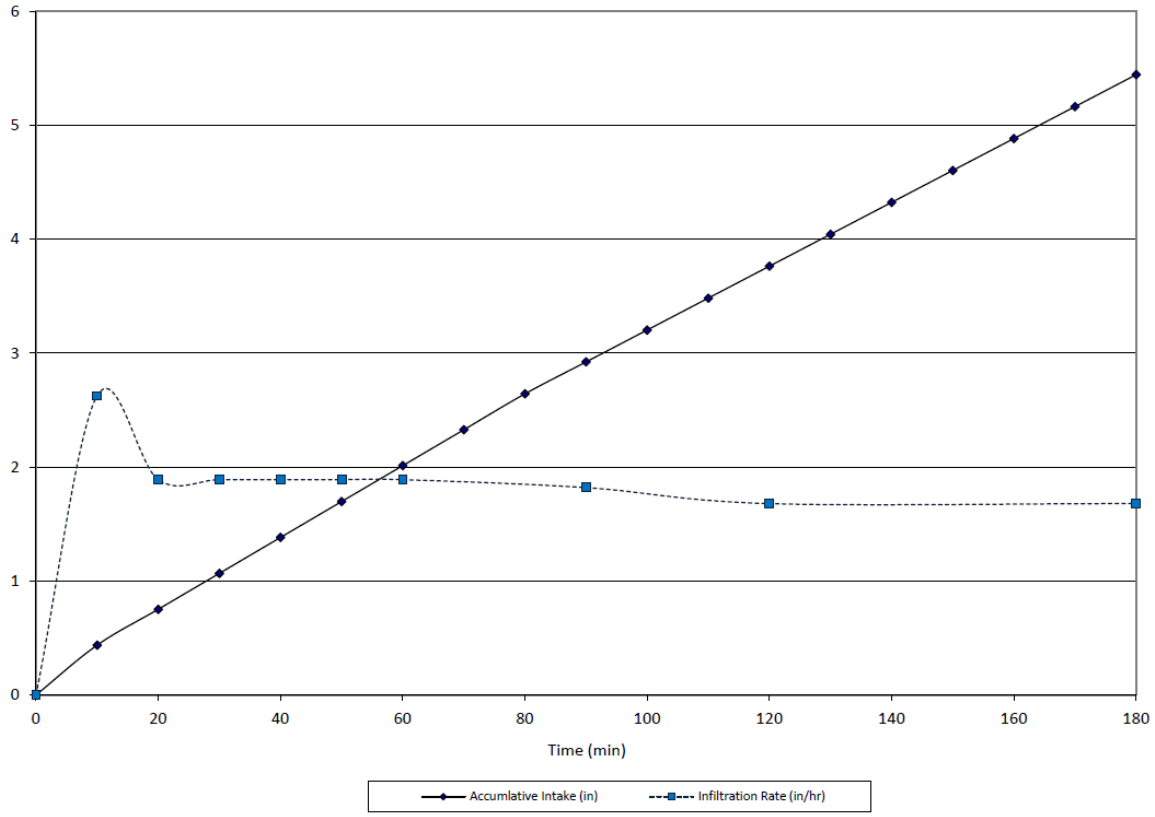
Logan A. Fowler, P.E.
Eng. Reg. No. 82343
State of Florida

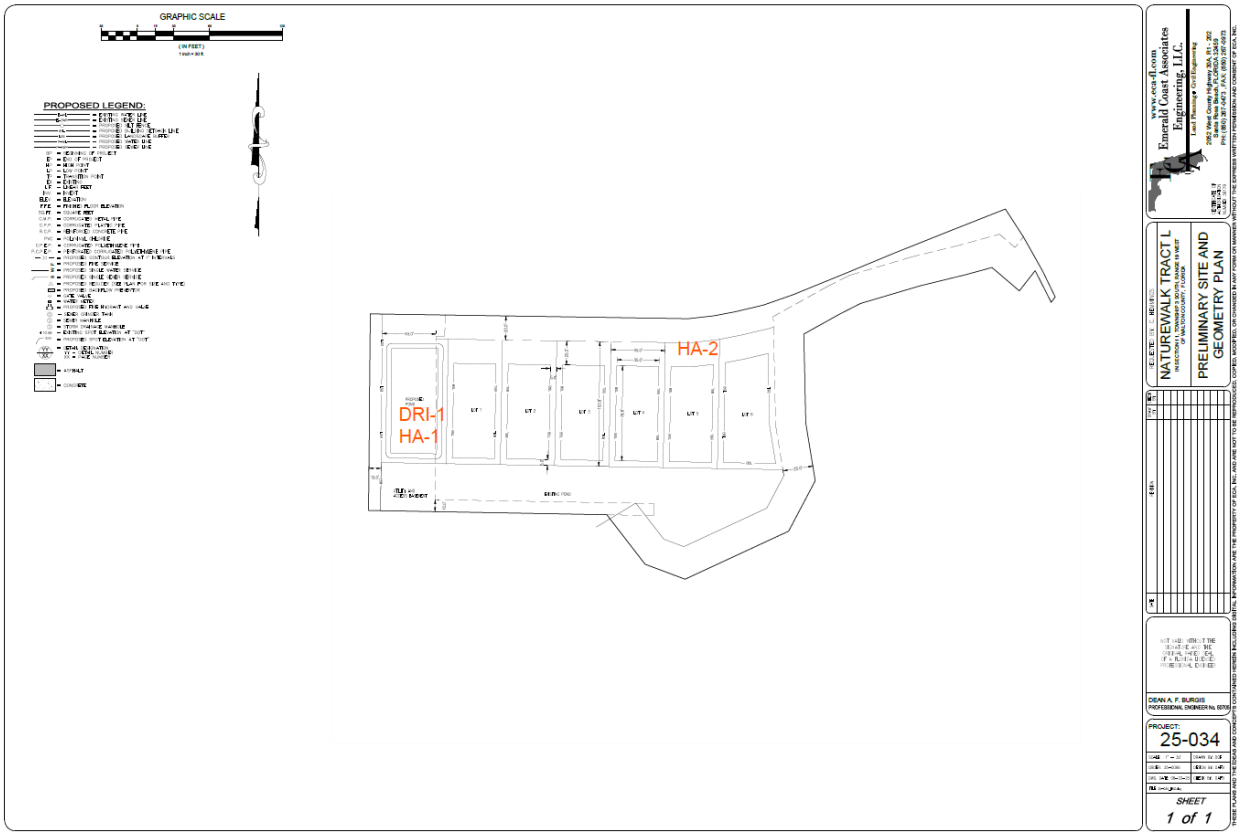
This item has been digitally signed and sealed by Logan A. Fowler, P.E. (FL Eng. License No.: 82343) using a Digital Signature. Printed copies of this document are not considered signed and sealed and the authentication code must be verified on any electronic copies.

WSG/lf

GRAPH 1

Double Ring Infiltrometer Test at DRI-1





Boring Location Plan

(not to scale)

Important Information About Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you —* should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

Rely, on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.

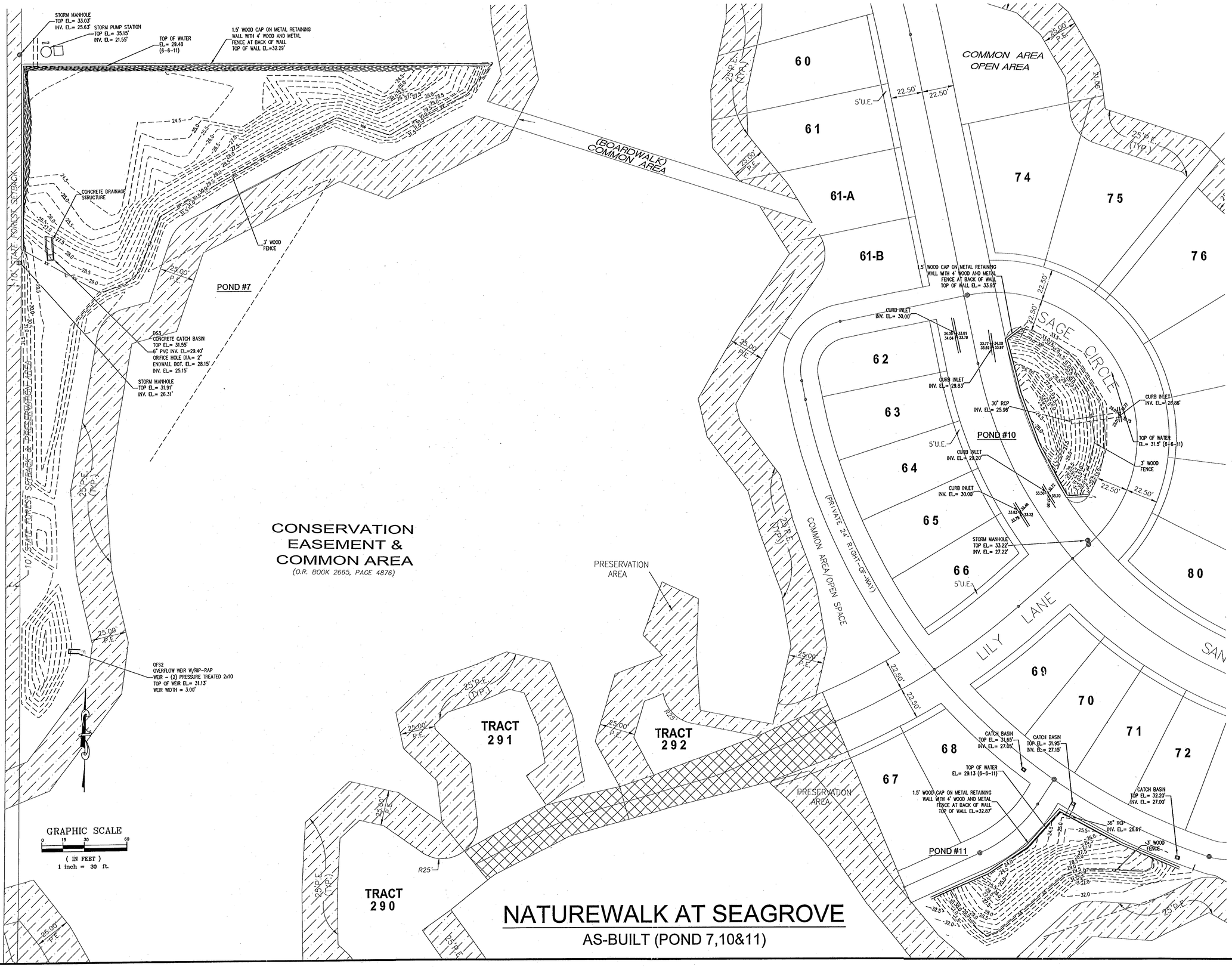
ASFE
The Best People on Earth

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@asfe.org www.asfe.org

Copyright 2004 by ASFE, Inc. Duplication, reproduction, or copying of this document, in whole or in part, by any means whatsoever, is strictly prohibited, except with ASFE's specific written permission. Excerpting, quoting, or otherwise extracting wording from this document is permitted only with the express written permission of ASFE, and only for purposes of scholarly research or book review. Only members of ASFE may use this document as a complement to or as an element of a geotechnical engineering report. Any other firm, individual, or other entity that so uses this document without being an ASFE member could be commiting negligent or intentional (fraudulent) misrepresentation.

IIGER06045.0M

APPENDIX D
AS-BUILT SURVEY



NATUREWALK AT SEAGROVE

AS-BUILT (POND 7,10&11)

Emerald Coast Associates Inc.
Land Planning • Engineering • Surveying
Since 1979
179 COUNTY HIGHWAY 393 SOUTH
SANTA ROSA BEACH, FLORIDA 32459
PH: (850) 267-0473, FAX: (850) 267-0979
www.eca-fl.com

AS-BUILT SURVEY

AS-BUILT SURVEY OF NATURE WALK AT SEAGROVE
LOCATED IN SECTIONS 11 AND 14, TOWNSHIP 3 SOUTH, RANGE 19 WEST, WALTON COUNTY FLORIDA

DATE	REVISION
5-4-12	CHANGE ORIFICE DIAMETER POND 7 - WAL

CHECK BY: DSV

SEE SHEET 1 OF 5 FOR SURVEY REPORT, LEGEND AND CERTIFICATIONS

PROJECT: 11-061 AB

DRAWN BY: W.J.L.	SCALE: 1" = 30'
DWG. DATE: 5-19-11	ORDER: 11-0252
FIELD DATE: 5/13/11	PROJECT: 11-061
FIELD BOOK(S): 1893, PAGES 1-17 (RL) 1890, PAGES 35-41 (RH)	

SHEET 4 OF 5

THESE PLANS, AND IDEAS AND CONCEPTS CONTAINED HEREIN INCLUDING DIGITAL INFORMATION ARE THE PROPERTY OF ECA, INC. AND ARE NOT TO BE REPRODUCED, COPIED, MODIFIED, OR CHANGED IN ANY FORM OR MANNER WITHOUT THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ECA, INC.

J:\2011\11-061\11-0252-SUR-As-built Survey of 10 Stormwater_Naturewalk\Drawing\11-061AB.dwg, SHEET 4, Bill, Jun 06, 2012 - 2:00:34pm

APPENDIX E
Treatment Calcs

NATUREWALK TRACT L - TREATMENT CALCS

Post Development Basin Data:

			Runoff Coefficient	Curve Number
Proposed Impervious Area =	*0.52*	*Acres*	0.75	98
Existing Impervious Area (to remain) =	*6.39*	*Acres*	0.75	98
Open Space, Good Condition	*2.26*	*Acres*	0.31	57
Open Space, Poor Condition	*0.00*	*Acres*	0.31	80
Pond Area=	*0.70*	*Acres*	1	100
Offsite Area =	*0.00*	*Acres*	0.9	90
Total Contributing Drainage Area=	***9.17***	*Acres*	0.72	96

STORMWATER POND DATA

elevation (FT.)	TOTAL (SF.)	area (ac.)	avg. area (SF.)	delta H (FT.)	volume (CF)	sum vol. (CF)	sum vol. CY	NOTATIONS
24.5	11381	0.2613						-
25.5	13708	0.3147	12545	1.00	12545	12545	465	-
26.5	16387	0.3762	15048	1.00	15048	27592	1022	-
27.5	19624	0.4505	18006	1.00	18006	45598	1689	-
28.5	25011	0.5742	22318	1.00	22318	67915	2515	-
29.5	30679	0.7043	27845	1.00	27845	95760	3547	Permanent Pool
30.0	32601	0.7484	31640	0.50	15820	111580	4133	
31.0	36499	0.8379	34550	1.00	34550	146130	5412	Treatment EL
31.5	40462	0.9289	38481	0.50	19240	165370	6125	Pond Top
			Treatment Volume Required (ERP 1.5" depth)=			*49931*	*cf*	
			Treatment Volume Provided (ERP)=			*50370*	*cf*	

PERMANENT POOL VOLUME

Empirical Design Method

Impervious Area (acres) (includes pond area):	7.61	Pervious Area (acres):	2.26
2" over impervious area (cf):	55,278	1/2" Over Pervious Area (cf):	4,102
Volume = 2" over impervious + 1/2" over pervious area:			

Permanent Pool Required =	*59,380*	*cu.ft.*
1.5 x Permanent Pool Required =	***89,069***	***cf***
Permanent Pool Provided =	***95,760***	***cf***
Mean Permanent Pool Depth =	***3.12***	***ft***

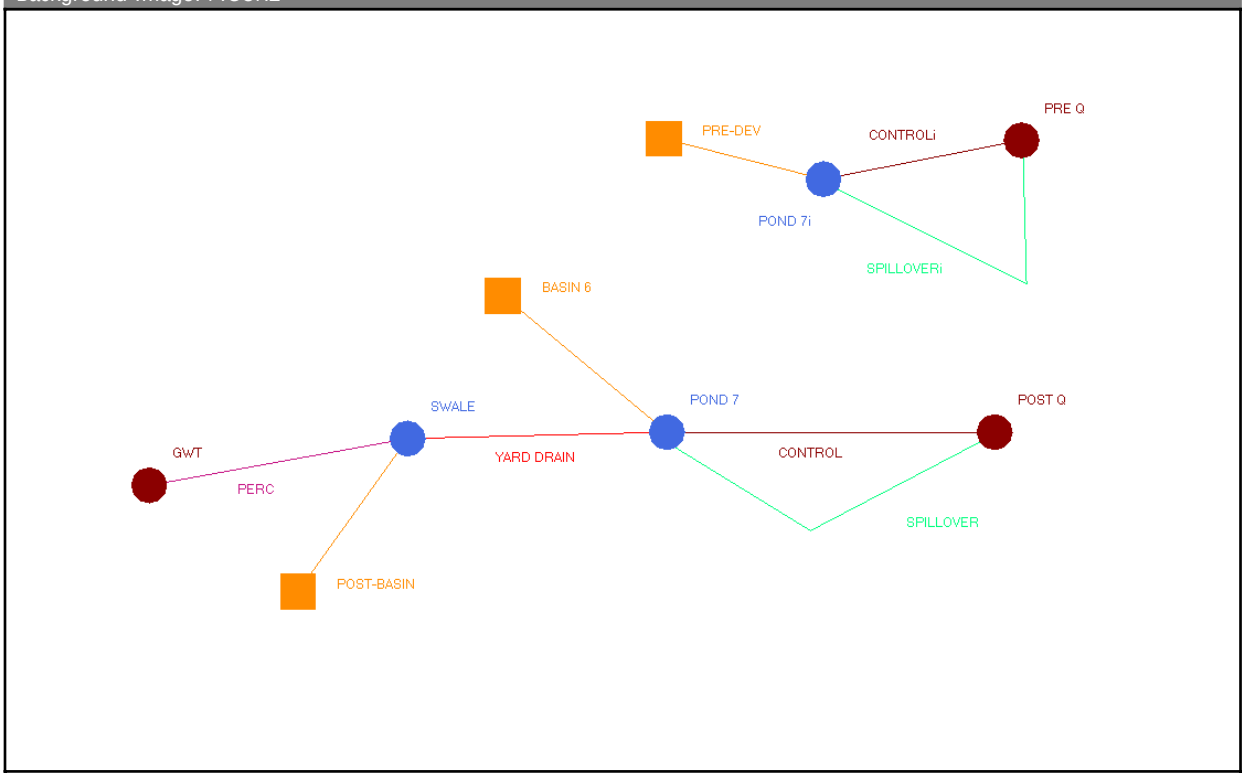
BLEED DOWN ORIFICE

No more than 1/2 the treatment volume can discharge within the first 48-60 hours.

1/2 Treatment Volume:		24,965 cf		
Discharge rate:		0.1156 cfs (@ T=60hrs)		0.1445 cfs (@ T=48hrs)
Orifice equation :	Q=C x A x (sqrt. of 2 x g x h)			
C=		0.72		
Q=		0.12 cfs (T=60hrs)		0.14 cfs (T=48hrs)
g=		32.2 ft/s		
average h=		1.13 ft		
Solving for Area =		0.0188 sf		0.0235 sf
diameter=		1.86 inches (T=60hrs)		2.08 inches (T=48hrs)

APPENDIX F
ICPR Report

Background Image: FIGURE



Curve Number: 1 [Set]

Land Cover Zone	Soil Zone	Curve Number [dec]
IMPERVIOUS	D	98.0
PERVIOUS	A	57.0
PRE-DEVELOPED	A/D	57.0

Manual Basin: BASIN 6

Scenario:	Scenario1
Node:	POND 7
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	22.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	8.3400 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
6.3900	IMPERVIOUS	D	
1.9500	PERVIOUS	A	

Comment:

Manual Basin: POST-BASIN

Scenario: Scenario1
Node: SWALE
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 15.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH323
Peaking Factor: 323.0
Area: 0.7100 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.1900	PERVIOUS	A	
0.5200	IMPERVIOUS	D	

Comment:

Manual Basin: PRE-DEV

Scenario: Scenario1
Node: POND 7i
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH323
Peaking Factor: 323.0
Area: 9.1700 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
6.3900	IMPERVIOUS	D	
1.9500	PERVIOUS	A	
0.8300	PRE-DEVELOPED	A/D	

Comment:

Node: GWT

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 29.00 ft
Warning Stage: 32.00 ft
Alert Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	29.50
0	0	0	24.0000	30.00
0	0	0	48.0000	30.50
0	0	0	36.0000	30.00
0	0	0	72.0000	29.50

Comment:

Node: POST Q

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 27.00 ft
Warning Stage: 31.00 ft
Alert Stage: 31.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	28.00
0	0	0	72.0000	29.00

Comment:

Node: PRE Q

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 30.00 ft
Alert Stage: 30.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	28.00
0	0	0	72.0000	29.00

Comment:

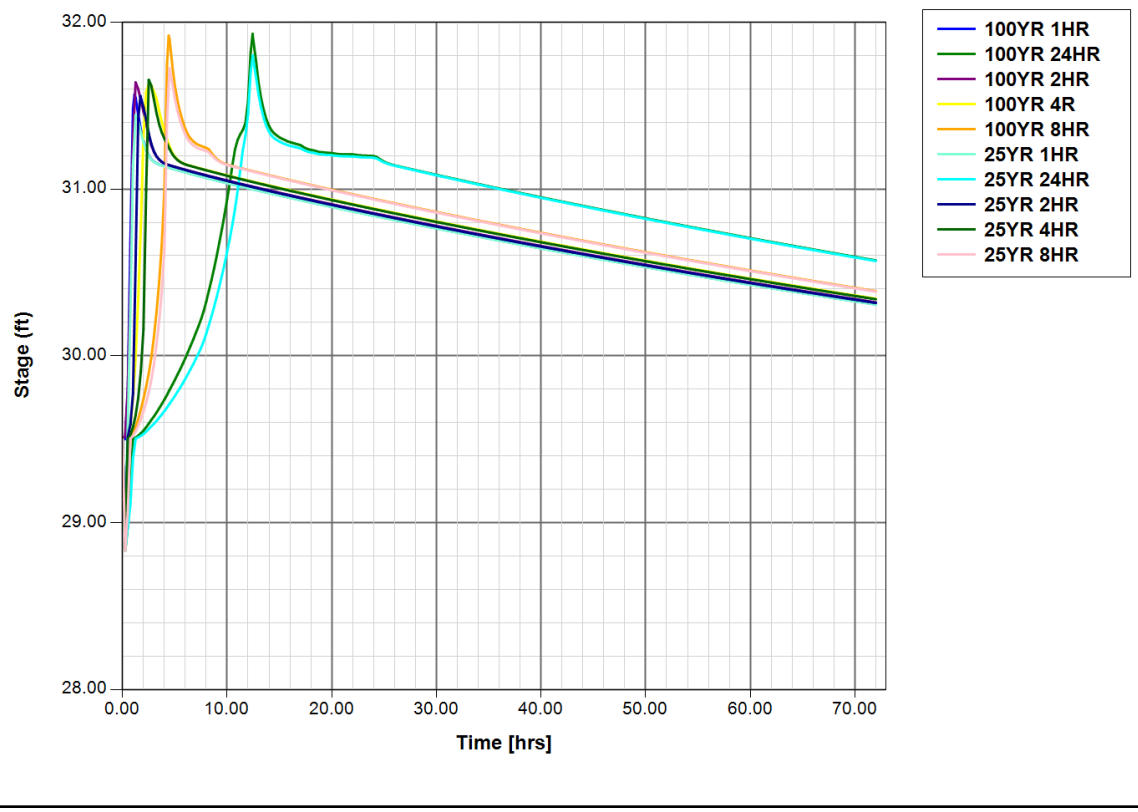
Node: POND 7

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 29.50 ft
Warning Stage: 32.00 ft
Alert Stage: 32.00 ft

Stage [ft]	Area [ac]	Area [ft2]
29.50	0.7040	30666
30.00	0.7480	32583
31.00	0.8380	36503
32.00	0.9290	40467

Comment:

Stage [Node: POND 7]



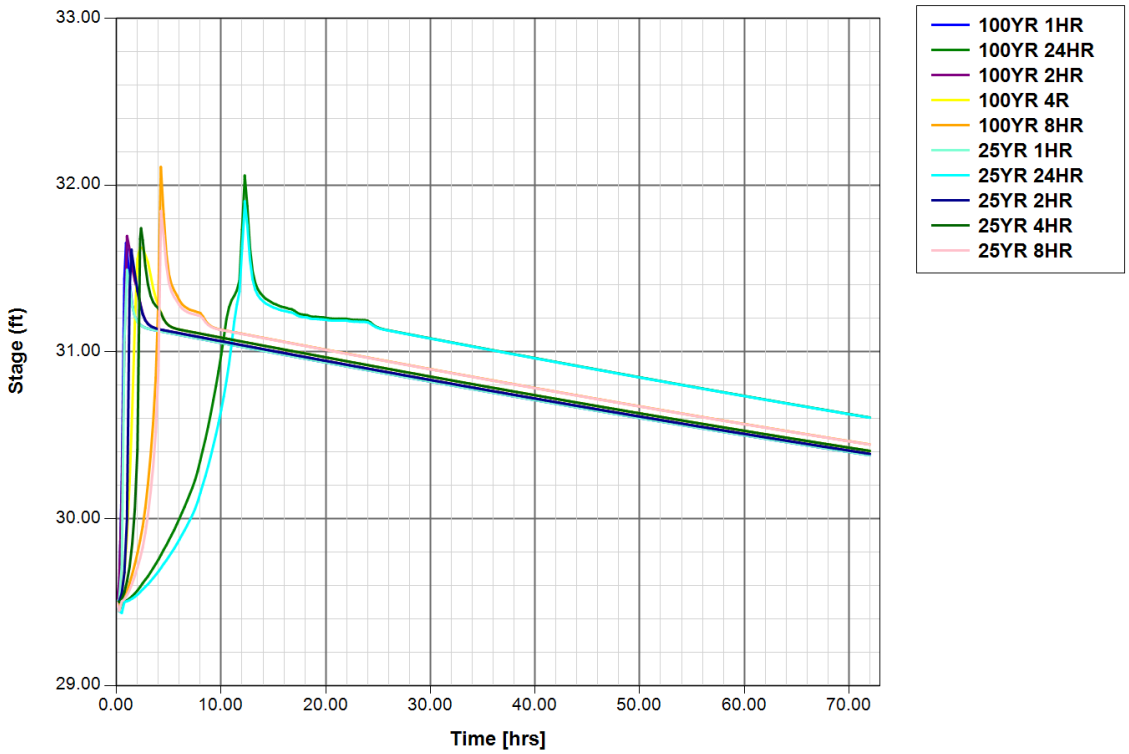
Node: POND 7i

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 29.50 ft
Warning Stage: 32.50 ft
Alert Stage: 32.50 ft

Stage [ft]	Area [ac]	Area [ft2]
29.50	0.7040	30666
30.00	0.7480	32583
31.00	0.8380	36503
32.00	0.9290	40467

Comment:

Stage [Node: POND 7i]



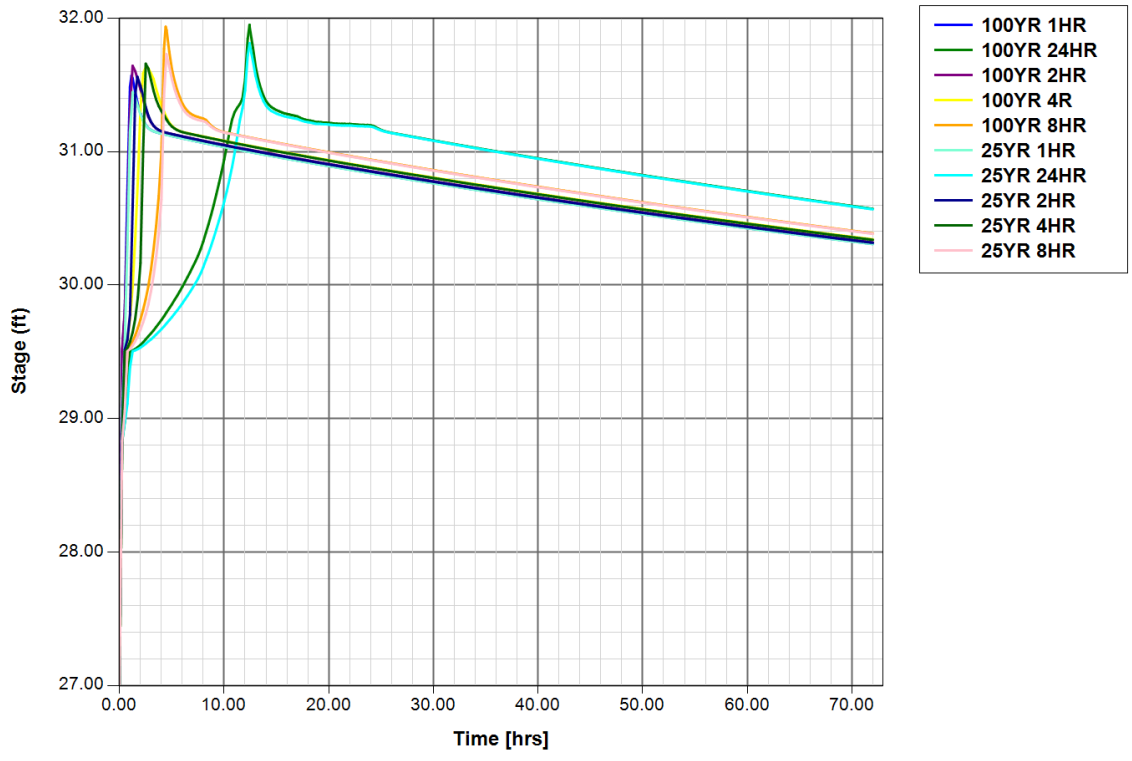
Node: SWALE

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 27.00 ft
Warning Stage: 32.25 ft
Alert Stage: 32.25 ft

Stage [ft]	Area [ac]	Area [ft2]
27.00	0.0001	4
28.00	0.0001	4
29.00	0.0001	4
30.00	0.0001	4
31.00	0.0200	871
31.50	0.0200	871
32.00	0.0700	3049

Comment: YARD DRAIN INLET SUMPS INCLUDED

Stage [Node: SWALE]



Node Max Conditions w/ Times : Multi Item | (name, sim) [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]	Time to Max Stage [hr]	Time to Min/Max Delta Stage [hr]	Time to Max Total Inflow [hr]	Time to Max Total Outflow [hr]
POST Q	100YR 1HR	31.00	31.00	29.00	0.0001	20.54	0.00	0	72.0048	4.0107	1.1453	0.0000
POST Q	100YR 24HR	31.00	31.00	29.00	0.0001	52.00	0.00	0	72.0069	21.0706	12.4394	0.0000
POST Q	100YR 2HR	31.00	31.00	29.00	0.0001	26.52	0.00	0	72.0072	3.1435	1.2844	0.0000
POST Q	100YR 4R	31.00	31.00	29.00	0.0001	25.75	0.00	0	72.0078	4.8155	2.6072	0.0000
POST Q	100YR 8HR	31.00	31.00	29.00	0.0001	51.00	0.00	0	72.0046	8.4046	4.4117	0.0000
POST Q	25YR 1HR	31.00	31.00	29.00	0.0001	12.33	0.00	0	72.0027	4.9521	1.3040	0.0000
POST Q	25YR 24HR	31.00	31.00	29.00	0.0001	40.03	0.00	0	72.0015	18.5378	12.4452	0.0000
POST Q	25YR 2HR	31.00	31.00	29.00	0.0001	19.78	0.00	0	72.0027	4.2952	1.7137	0.0000
POST Q	25YR 4HR	31.00	31.00	29.00	0.0001	27.74	0.00	0	72.0044	4.6166	2.5795	0.0000
POST Q	25YR 8HR	31.00	31.00	29.00	0.0001	33.40	0.00	0	72.0058	8.0632	4.4823	0.0000
PRE Q	100YR 1HR	30.00	30.00	29.00	0.0001	28.39	0.00	0	72.0048	4.0107	0.9073	0.0000
PRE Q	100YR 24HR	30.00	30.00	29.00	0.0001	65.85	0.00	0	72.0069	21.0706	12.3144	0.0000
PRE Q	100YR 2HR	30.00	30.00	29.00	0.0001	31.77	0.00	0	72.0072	3.1435	1.0463	0.0000
PRE Q	100YR 4R	30.00	30.00	29.00	0.0001	26.25	0.00	0	72.0078	4.8155	2.2539	0.0000
PRE Q	100YR 8HR	30.00	30.00	29.00	0.0001	71.39	0.00	0	72.0046	8.4046	4.2333	0.0000
PRE Q	25YR 1HR	30.00	30.00	29.00	0.0001	15.95	0.00	0	72.0027	4.9521	1.0183	0.0000
PRE Q	25YR 24HR	30.00	30.00	29.00	0.0001	50.32	0.00	0	72.0015	18.5378	12.3187	0.0000
PRE Q	25YR 2HR	30.00	30.00	29.00	0.0001	25.02	0.00	0	72.0027	4.2952	1.4339	0.0000
PRE Q	25YR 4HR	30.00	30.00	29.00	0.0001	35.65	0.00	0	72.0044	4.6166	2.3429	0.0000
PRE Q	25YR 8HR	30.00	30.00	29.00	0.0001	44.88	0.00	0	72.0058	8.0632	4.2789	0.0000

Node Max Conditions w/ Times : Multi Item | (name, sim) [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]	Time to Max Stage [hr]	Time to Min/Max Delta Stage [hr]	Time to Max Total Inflow [hr]	Time to Max Total Outflow [hr]
GWT	100YR 1HR	32.00	0.00	30.50	0.0003	0.24	0.29	0	47.9965	36.0132	1.0554	0.0001
GWT	100YR 24HR	32.00	0.00	30.50	0.0003	0.16	0.29	0	47.9986	36.0236	12.3813	0.0001
GWT	100YR 2HR	32.00	0.00	30.50	0.0003	0.24	0.29	0	47.9989	36.0239	1.1638	0.0001
GWT	100YR 4R	32.00	0.00	30.50	0.0003	0.22	0.29	0	47.9994	36.0244	2.2098	0.0001
GWT	100YR 8HR	32.00	0.00	30.50	0.0003	0.25	0.29	0	47.9963	36.0213	4.3523	0.0001
GWT	25YR 1HR	32.00	0.00	30.50	0.0003	0.22	0.29	0	48.0027	36.0194	1.1776	0.0001
GWT	25YR 24HR	32.00	0.00	30.50	0.0003	0.16	0.29	0	48.0015	36.0181	12.3762	0.0001
GWT	25YR 2HR	32.00	0.00	30.50	0.0003	0.24	0.29	0	48.0027	36.0194	1.5875	0.0001
GWT	25YR 4HR	32.00	0.00	30.50	0.0003	0.25	0.29	0	47.9961	36.0294	2.4815	0.0001
GWT	25YR 8HR	32.00	0.00	30.50	0.0003	0.23	0.29	0	47.9975	36.0225	4.4066	0.0001
POND 7	100YR 1HR	32.00	32.00	31.57	-0.0040	40.47	20.54	38758	1.1442	0.0001	0.7501	1.1453
POND 7	100YR 24HR	32.00	32.00	31.93	-0.0040	55.85	52.00	40196	12.4387	0.0001	12.3490	12.4394
POND 7	100YR 2HR	32.00	32.00	31.64	-0.0040	37.73	26.52	39043	1.2825	0.0001	0.9355	1.2844
POND 7	100YR 4R	32.00	32.00	31.63	-0.0040	26.50	25.75	39006	2.6013	0.0001	2.1668	2.6072
POND 7	100YR 8HR	32.00	32.00	31.92	-0.0040	62.17	51.00	40155	4.4117	0.0001	4.2500	4.4117
POND 7	25YR 1HR	32.00	32.00	31.44	-0.0040	40.77	12.33	38269	1.3022	0.0001	0.7501	1.3040
POND 7	25YR 24HR	32.00	32.00	31.80	-0.0040	43.43	40.03	39686	12.4452	0.0001	12.3430	12.4452
POND 7	25YR 2HR	32.00	32.00	31.56	-0.0040	43.99	19.78	38719	1.7119	0.0001	1.2500	1.7137
POND 7	25YR 4HR	32.00	32.00	31.65	-0.0040	47.09	27.74	39105	2.5795	0.0001	2.2499	2.5795
POND 7	25YR 8HR	32.00	32.00	31.72	-0.0040	46.95	33.40	39381	4.4823	0.0001	4.2502	4.4823
POND 7i	100YR 1HR	32.50	32.50	31.65	-0.0010	53.03	28.39	39091	0.9073	1.3275	0.6332	0.9073
POND	100YR	32.50	32.50	32.06	0.0010	70.44	65.85	40467	12.313	11.913	12.250	12.314

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]	Time to Max Stage [hr]	Time to Min/Max Delta Stage [hr]	Time to Max Total Inflow [hr]	Time to Max Total Outflow [hr]
7i	24HR								4	0	1	4
POND 7i	100YR 2HR	32.50	32.50	31.69	0.0010	47.32	31.77	39257	1.0459	0.6975	0.8169	1.0463
POND 7i	100YR 4R	32.50	32.50	31.63	0.0010	28.92	26.25	38987	2.2503	1.5434	2.0332	2.2539
POND 7i	100YR 8HR	32.50	32.50	32.11	0.0010	97.23	71.39	40467	4.2333	3.9633	4.1333	4.2333
POND 7i	25YR 1HR	32.50	32.50	31.49	0.0010	68.42	15.95	38451	1.0179	0.5871	0.6166	1.0183
POND 7i	25YR 24HR	32.50	32.50	31.90	-0.0010	54.44	50.32	40081	12.3187	12.4651	12.2497	12.3187
POND 7i	25YR 2HR	32.50	32.50	31.61	0.0010	72.75	25.02	38931	1.4339	1.1252	1.1166	1.4339
POND 7i	25YR 4HR	32.50	32.50	31.74	0.0010	77.19	35.65	39441	2.3429	2.0920	2.1167	2.3429
POND 7i	25YR 8HR	32.50	32.50	31.84	0.0010	72.49	44.88	39852	4.2786	4.0122	4.1333	4.2789
SWALE	100YR 1HR	32.25	32.25	31.57	0.0085	8.46	3.37	1183	1.1442	0.0001	0.0001	0.6337
SWALE	100YR 24HR	32.25	32.25	31.95	0.0085	8.46	4.40	2840	12.4273	0.0001	0.0001	12.3208
SWALE	100YR 2HR	32.25	32.25	31.64	0.0085	8.46	2.71	1501	1.2806	0.0001	0.0001	0.8183
SWALE	100YR 4R	32.25	32.25	31.63	0.0085	8.46	2.02	1464	2.6013	0.0001	0.0001	2.5036
SWALE	100YR 8HR	32.25	32.25	31.94	0.0085	8.46	5.12	2778	4.4091	0.0001	0.0001	4.1651
SWALE	25YR 1HR	32.25	32.25	31.45	0.0085	8.46	4.01	878	1.3022	0.0001	0.0001	0.6672
SWALE	25YR 24HR	32.25	32.25	31.81	0.0085	8.46	3.47	2241	12.4362	0.0001	0.0001	12.3081
SWALE	25YR 2HR	32.25	32.25	31.56	0.0085	8.46	4.20	1141	1.7102	0.0001	0.0001	1.1531
SWALE	25YR 4HR	32.25	32.25	31.66	0.0085	8.46	4.11	1570	2.5766	0.0001	0.0001	2.1532
SWALE	25YR 8HR	32.25	32.25	31.73	0.0085	8.46	3.63	1883	4.4785	0.0001	0.0001	4.1838

Drop Structure Link: CONTROL		Upstream Pipe		Downstream Pipe	
Scenario:	Scenario1	Invert:	25.15 ft	Invert:	21.55 ft
From Node:	POND 7	Manning's N:	0.0130	Manning's N:	0.0130

To Node:	POST Q
Link Count:	1
Pipe Flow Direction:	Both
Solution:	Combine
Increments:	0
Pipe Count:	1
Damping:	0.0000 ft
Length:	150.00 ft
FHWA Code:	0
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Geometry: Circular		Geometry: Circular	
Max Depth:	0.50 ft	Max Depth:	0.50 ft
Bottom Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000
Top Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000

Pipe Comment:

Weir Component

Weir:	1
Weir Count:	1
Weir Flow Direction:	Positive
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	Circular
Invert:	29.40 ft
Control Elevation:	29.40 ft
Max Depth:	0.16 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	2
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	31.55 ft
Control Elevation:	31.55 ft
Max Depth:	3.00 ft
Max Width:	2.00 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Drop Structure Comment:

Drop Structure Link: CONTROLi		Upstream Pipe		Downstream Pipe	
Scenario:	Scenario1	Invert:	25.15 ft	Invert:	21.55 ft
From Node:	POND 7i	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	PRE Q	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	0.50 ft	Max Depth:	0.50 ft
Pipe Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	150.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	31.55 ft	Ref Node:	
Control Elevation:	31.55 ft	Discharge Coefficients	
Max Depth:	3.00 ft	Weir Default:	3.200
Max Width:	2.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component		Bottom Clip	
Weir:	2	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Sharp Crested Vertical	Default:	0.00 ft
Geometry Type:	Circular	Op Table:	
Invert:	29.40 ft	Ref Node:	
Control Elevation:	29.40 ft	Discharge Coefficients	
Max Depth:	0.16 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Percolation Link: PERC

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	SWALE		
To Node:	GWT	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	540.00 ft
Flow Direction:	Both	Perimeter 2:	854.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	3681.00 ft
Water Table Elevation:	29.50 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	1.700 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	1.700 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.400		
Layer Thickness:	0.00 ft		

Comment:

Weir Link: SPILLOVER

Scenario:	Scenario1	**Bottom Clip**	
From Node:	POND 7	Default:	0.00 ft
To Node:	POST Q	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Horizontal	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	31.14 ft	**Discharge Coefficients**	
Control Elevation:	31.14 ft	Weir Default:	2.800
Max Depth:	10.00 ft	Weir Table:	
Max Width:	3.00 ft	Orifice Default:	0.600
Fillet:	0.00 ft	Orifice Table:	

Comment:

Weir Link: SPILLOVERi

Scenario:	Scenario1	**Bottom Clip**	
From Node:	POND 7i	Default:	0.00 ft
To Node:	PRE Q	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Horizontal	Op Table:	

Geometry Type:	Rectangular
Invert:	31.13 ft
Control Elevation:	31.13 ft
Max Depth:	10.00 ft
Max Width:	3.00 ft
Fillet:	0.00 ft

Ref Node:	
Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Pipe Link: YARD DRAIN		Upstream		Downstream	
Scenario:	Scenario1	Invert:	28.50 ft	Invert:	27.00 ft
From Node:	SWALE	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	POND 7	Geometry: Circular		Geometry: Circular	
Link Count:	3	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	145.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Simulation: 100YR 1HR

Scenario:	Scenario1
Run Date/Time:	6/8/2026 12:14:32 PM
Program Version:	StormWise 4.08.09

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr
Ia/S: 0.20 dec
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 4.48 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 100YR 24HR

Scenario: Scenario1
Run Date/Time: 6/8/2026 12:14:41 PM

Program Version: StormWise 4.08.09

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr
Ia/S: 0.20 dec
Smp/Man Basin Rain Opt: Global

Rainfall Name:	~SCSIII-24
Rainfall Amount:	13.44 in
Storm Duration:	24.0000 hr
Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (1D):	100 ft2
Energy Switch (1D):	Energy

Comment:

Simulation: 100YR 2HR

Scenario: Scenario1
Run Date/Time: 6/8/2026 12:14:49 PM
Program Version: StormWise 4.08.09

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:

Unit Hydrograph Folder:		Curve Number Set:	1
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	1

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~FDOT-2
		Rainfall Amount:	6.00 in
		Storm Duration:	2.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100YR 4R

Scenario:	Scenario1
Run Date/Time:	6/8/2026 12:14:56 PM
Program Version:	StormWise 4.08.09

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr
Ia/S: 0.20 dec
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-4
Rainfall Amount: 7.52 in
Storm Duration: 4.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 100YR 8HR

Scenario: Scenario1
Run Date/Time: 6/8/2026 12:15:05 PM
Program Version: StormWise 4.08.09

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set: 1

Green-Ampt Set:

Vertical Layers Set:

Impervious Set: 1

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr

Ia/S: 0.20 dec

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~SCSIII-24

Rainfall Amount: 9.52 in

Storm Duration:	8.0000 hr
Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (1D):	100 ft2
Energy Switch (1D):	Energy

Comment:

Simulation: 25YR 1HR

Scenario: Scenario1
Run Date/Time: 6/8/2026 12:15:12 PM
Program Version: StormWise 4.08.09

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1

Green-Ampt Set:	
Vertical Layers Set:	
Impervious Set:	1

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SCSIII-24
		Rainfall Amount:	3.78 in
		Storm Duration:	1.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 25YR 24HR

Scenario:	Scenario1
Run Date/Time:	6/8/2026 12:15:19 PM
Program Version:	StormWise 4.08.09

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr
Ia/S: 0.20 dec
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~SCSIII-24
Rainfall Amount: 10.70 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 25YR 2HR

Scenario: Scenario1
Run Date/Time: 6/8/2026 12:15:28 PM
Program Version: StormWise 4.08.09

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr
Ia/S: 0.20 dec
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~SCSIII-24
Rainfall Amount: 4.76 in
Storm Duration: 2.0000 hr
Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D):	100 ft2
Energy Switch (1D):	Energy

Comment:

Simulation: 25YR 4HR

Scenario: Scenario1
Run Date/Time: 6/8/2026 12:15:37 PM
Program Version: StormWise 4.08.09

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1

Green-Ampt Set:
Vertical Layers Set:

Impervious Set:	1

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SCSIII-24
		Rainfall Amount:	6.10 in
		Storm Duration:	4.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 25YR 8HR

Scenario:	Scenario1
Run Date/Time:	6/8/2026 12:15:45 PM
Program Version:	StormWise 4.08.09

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

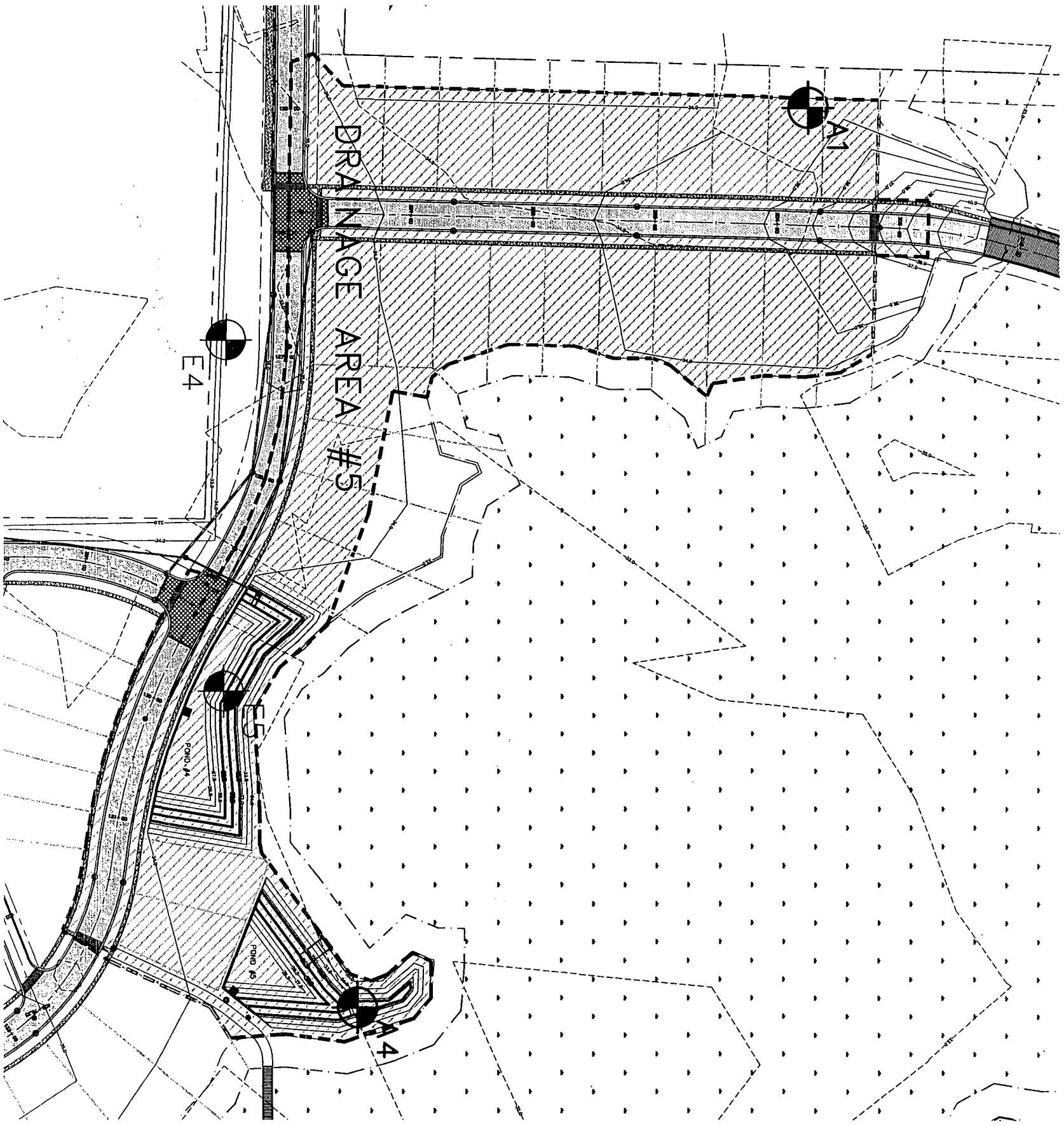
Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr
Ia/S: 0.20 dec
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~SCSIII-24
Rainfall Amount: 7.40 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:



SCALE: 1"=100'

SHEET NUMBER: 2 of 14	SHEET TITLE: STORMWATER DRAINAGE AREA #5	THIS DRAWING IS NOT FOR CONSTRUCTION	DATE: OCTOBER 2004 DESIGNED BY: B. JUSTICE DRAWN BY: B. JUSTICE PROJECT ENGINEER: B. JUSTICE PROJECT MANAGER: J. GOIN H.M.M. PROJECT NUMBER: 214145AA01	DATE	REV.	REVISION DESCRIPTION	OLSON ASSOCIATES OF N.W. FL, INC. REAL ESTATE - DEVELOPMENT NATUREWALK at Seagrove WALTON COUNTY, FLORIDA

Hatch Mott MacDonald
Hatch Mott MacDonald Florida, LLC
Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783
120 Beckrich Rd., Suite 160
Panama City Beach, Florida 32407
Telephone: (850) 236-5831 ▫ Fax: (850) 234-1952

This drawing is the property of Hatch Mott MacDonald Florida, LLC, and may not be reproduced without written permission.

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT

INFORMATION FOR DEVELOPERS AND BUILDERS AND GENERAL CONSTRUCTION LICENSE AGREEMENT

Who is this for?

Developers and builders within NatureWalk at Seagrove.

Who's who in NatureWalk?

The **NatureWalk Community Development District** is a local unit of special-purpose government established under Chapter 190, Florida Statutes. The District owns and maintains various improvements and property within NatureWalk. This includes the master stormwater system and ponds, landscape tracts and greenspaces, streetlights, roadways, alleyways, bridges, and boardwalks. Separate **local utility providers** offer electric, potable water, sewer, and other utility services within NatureWalk. **Walton County** has zoning and development permitting authority in NatureWalk. The **NatureWalk Homeowners Association**, which is separate from the District, owns and operates amenities within NatureWalk including pools and pickleball courts and may have various deed restrictions it enforces under its recorded covenants, conditions, and restrictions for NatureWalk.

What is the purpose of this document?

To provide information regarding the District's role within NatureWalk and an opportunity for the District and developers and builders within NatureWalk to cooperate and coordinate with regard to use of District facilities.

What does the District expect of developers and builders within NatureWalk?

The District expects developers and builders to coordinate with the District as to use of the District's roads for construction access, to use alternate access where available to minimize impact to District roads and bridges, and to otherwise manage construction traffic in coordination with the District to minimize impact to the District Property. The District also expects developers and builders to coordinate with the District regarding any temporary use of District Property for material storage, laydown, etc., during construction. The attached form of **General Construction License Agreement** is intended to provide a formal means to address these matters.

If a developer or builders plans to install or construct permanent improvements on District owned property, that matter should be addressed separately by contacting the District. If a developer or builder desires to dedicate any new improvements or property to the District for long-term ownership and maintenance (for example, road extensions, stormwater facilities, streetlights, or common area landscaping or greenspaces), that should also be addressed separately by contacting the District. The District may, but is not obligated, to accept such improvements.

Who do you contact for more information?

For more information see the District's website, www.naturewalkcdd.org, or contact the District Manager (850) 334-9055; sdeluna@rizzetta.com.

GENERAL CONSTRUCTION LICENSE AGREEMENT

THIS LICENSE AGREEMENT ("**License Agreement**") is made and entered into this ___ day of _____, 20___, by and between:

NatureWalk Community Development District, a local unit of special- purpose government established pursuant to Chapter 190, Florida Statutes, located in Clay County, Florida (the "**District**"), and

[Developer/Builder] a Florida corporation or limited liability company, with an address of _____ _____(the "**Licensee**").

RECITALS

WHEREAS, the District is a local unit of special-purpose government established pursuant to and governed by Chapter 190, Florida Statutes; and

WHEREAS, the District owns, operates, and maintains certain facilities and real property within the NatureWalk at Seagrove development, including a master stormwater system and ponds, landscape tracts and greenspaces, streetlights, roadways, alleyways, bridges, and boardwalks ("**District Property**"), which facilities and real property are within the boundaries of the District; and

WHEREAS, the Licensee is developing or constructing improvements upon certain property within the District identified as **[insert tract or parcel identification by plat and parcel ID number]** ("**Licensee Property**") and desires to utilize certain District Property as part of its development and construction activities as described and identified in **Exhibit A**; and

WHEREAS, the District is willing to allow the Licensee to utilize or connect to the District Property as described and identified in Exhibit A pursuant to the terms of this License Agreement; and

WHEREAS, the District and the Licensee warrant and agree that they have all right, power, and authority to enter into and be bound by this License Agreement.

NOW, THEREFORE, based upon good and valuable consideration and the mutual covenants of the parties, the receipt of which and sufficiency of which is hereby acknowledged, the District and the Licensee agree as follows:

1. INCORPORATION OF RECITALS. The Recitals stated above are true and correct and are incorporated herein as a material part of this License Agreement.

DRAFT

2. GRANT OF LICENSE. The District hereby grants to the Licensee a non-exclusive license to utilize the District Property as described and identified in Exhibit A and in accordance with the other terms of this License Agreement ("**License**") .

If the License provides for use of District Property for egress and ingress and general construction access, Licensee shall provide the District with a $5,000 deposit, which deposit may be used for maintenance and repair or District Property damaged or impacted by Licensee's use of District Property for egress, ingress and general construction access. Upon termination of this License, if the District determines in good faith that no such maintenance or repair is necessary, the deposit shall be returned.

If this License provides for use of District Property for storage of materials or laydown **[District and Licensee shall identify such areas in Exhibit A and the District shall require an appropriate deposit for maintenance and repair of such area in the event Licensee does not return the area to its pre-use condition upon termination of this License]**. Upon termination of this License, Licensee shall return any District Property used for storage or laydown to its pre-use condition.

3. MAINTENANCE. License shall maintain any areas used for material storage or laydown in a clean, safe, and sightly condition.

4. CONDITIONS ON THE LICENSE. The License granted herein is subject to the following terms and conditions:

A. District makes no representation or warranty regarding the condition of the areas within the License or whether the use contemplated by this License Agreement is allowed under applicable law, restrictions, or zoning requirements. Licensee accepts the areas within the License in their present "AS IS" condition. Licensee shall make no alterations or changes to the areas within the License without the District's written consent.

B. Licensee shall abide by all reasonable directions and requirements of District and any insurance company insuring the License Area.

6. EFFECTIVE DATE; TERM. This License Agreement shall become effective on the date first written above and shall continue in full force and effect until revoked or terminated earlier in accordance with Section 7, herein.

7. TERMINATION. The District and the Licensee acknowledge and agree that the License granted herein is a mere privilege and may be terminated, with or without cause, at the sole discretion of the District upon thirty (30) days' written notice. This License Agreement shall otherwise terminate upon receipt of the last certificate of occupancy associated with development of the Licensee Property. The provisions of Sections 8 and 9, below, shall survive termination of this License Agreement.

8. CARE OF PROPERTY. Licensee agrees to use all due care to protect the property of the District, its patrons and guests from damage. Licensee shall assume responsibility for any and all damage to any real or personal property of the District or any third parties as a result of the Licensee's activities under this License Agreement, including any damage caused by its authorized representatives or contractor. Licensee shall repair any damage resulting from its operations under this License Agreement within a reasonable time and shall use its best efforts to make such repairs within twenty-four (24) hours. Any such repairs shall be at Licensee's sole expense, unless otherwise agreed, in writing, by the District. The provisions of this Section 9 shall survive termination of this License Agreement.

9. INDEMNIFICATION. Licensee agrees to indemnify, defend and hold harmless the District and its officers, supervisors, staff, agents, and representatives, and successors and assigns, of the foregoing, against all liability for damages and expenses resulting from, arising out of, or in any way connected with, this License Agreement and any negligent act or omission of Licensee or its agents, representatives, or subcontractors.

10. INSURANCE. Licensee shall provide the District with certificates of insurance and will name the District as an additional insured if requested. No policy may be canceled during the term of this License Agreement without at least thirty (30) days' written notice to the District.

11. LIMITATIONS ON GOVERNMENTAL LIABILITY. Nothing in this License Agreement shall be deemed as a waiver of the District's sovereign immunity or the District's limits of liability as set forth in Section 768.28, *Florida Statutes*, or other statute, and nothing in this Agreement shall inure to the benefit of any third party for the purpose of allowing any claim which would otherwise be barred under such limitations of liability or by operation of law.

12. RECOVERY OF COSTS AND FEES. In the event the District is required to enforce this License Agreement by court proceedings or otherwise, then if successful, the District shall be entitled to recover from the Licensee all fees and costs incurred, including reasonable attorneys' fees and costs.

13. AMENDMENT. Amendments to and waivers of the provisions contained in this License Agreement may be made only by an instrument in writing which is executed by both of the parties hereto.

14. ASSIGNMENT. Neither the District nor the Licensee may assign its rights, duties or obligations under this License Agreement without the prior written approval of the other. Any purported assignment without said written authorization shall be void.

15. ARM'S LENGTH NEGOTIATION. This License Agreement has been negotiated fully among the parties as an arm's length transaction. The parties participated fully in the preparation of this License Agreement and received, or had the opportunity to receive, the advice of counsel. In the case of a dispute concerning the interpretation of any provision of this License Agreement, the parties are deemed to have drafted, chosen and selected the language and any doubtful language will not be interpreted or construed against any party.

16. THIRD PARTY BENEFICIARIES. This License Agreement is solely for the benefit of the parties hereto and no right or cause of action shall accrue upon or by reason of, to or for the benefit of, any third party not a formal party to this License Agreement.

17. SEVERABILITY. The invalidity or unenforceability of any one or more provisions of this License Agreement shall not affect the validity or enforceability of the remaining portions of this License Agreement, or any part of this License Agreement not held to be invalid or unenforceable.

18. COUNTERPARTS. This License Agreement may be executed in any number of counterparts, each of which when executed and delivered shall be an original; however, all such counterparts together shall constitute but one and the same instrument.

IN WITNESS WHEREOF, the parties execute this License Agreement the day and year first written above.

Attest:	**NATUREWALK COMMUNITY DEVELOPMENT DISTRICT**
_____	_____
Assistant Secretary	Chairperson, Board of Supervisors
Witness	**LICENSEE**
_____	_____
Signature	
_____	_____
Print Name of Witness	By: _____ Its: _____

Exhibit A – [To be Attached: Description of License and License Areas]

Tab 4

August Anticipated Services 2026

Nature Walk CDD

General Maintenance: Spring/Summer

- 07/07/2026
- 07/14/2026
- 07/21//2026
- 07//28/2026

Flex Crew

- 6th, 8th,9th, 13th,15th,16th,20th,22nd,23rd,27th, 29th,

Trail Trimming

- 07/22/2026
- 07/23/2026

Pond Maintenance/Berms

- 07//08/2026
- 07/09/2026
- 07/15/2026

Irrigation Audits-Repair

- 07/06/2026
- 07/07/2026

Turf/Plant Applications

- 07/22//2026


Green Earth

August Anticipated Services 2026

Nature Walk CDD

General Maintenance: Spring/Summer

- 08/04/2026
- 08/11/2026
- 08/18//2026
- 08/25/2026

Flex Crew

- 3rd,5th,6th,10th,12th, 13th, 17th,19th,20th,24th,26th,27

Trail Trimming

- 08/19/2026
- 08/20/2026

Pond Maintenance/Berms

- 08/12/2026
- 08/13/2026
- 08/14/2026

Irrigation Audits-Repair

- 08/04/2026
- 08/05/2026

Turf/Plant Applications

- 08/12/2026


Green Earth

Carlos Alladyce
Green-earth SE

MAINTENANCE

Tuesday, July 28, 2026

Prepared For NW CDD

88 Issues Identified



ANNUALS

Assigned To Kirk

Annuals blooming lovely



WEEDS

Assigned To Ocean/Flex Crew

Please spray crack weeds



WEEDS

Please sprayed crack weeds



LEAVES

Please remove leaves from flower bed



MOWING

Turf looks healthy

Turf cut at correct height 3.5 inches



TREE RINGS

Tree rings neatly edged

Please spray weeds inside tree rings



EDGING

Assigned To Flex Crew

Edging looks good



MOWING

Middle islands pushed mowed at 3.5 inches

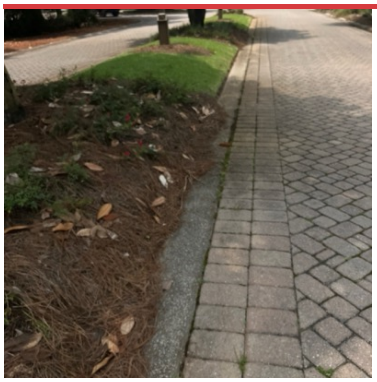


MAINTENANCE

Edging looks neat

Pavers need to be sprayed for weeds

Leaves need to be removed from pine straw



MAINTENANCE

Remove leaves from pine straw



MAINTENANCE

Turf mowed with push mower at 3.5 inches

Tree rings edged

Edging done neatly

Tree limbs lifted



MAINTENANCE

No low hanging limbs on crepe Myrtle

No suckers

Good job



EDGING

Allow turf to grow out a little before edging again

Edging too wide



WEEDS

Hand pull weeds from flower bed



MAINTENANCE

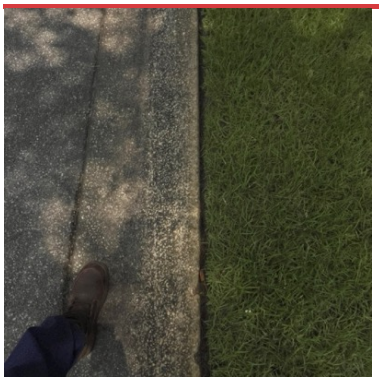
Turf looks healthy

Edging nicely done



WEEDS

Pull weeds



EDGING

Neatly edged



MOWING

Good job



EDGING

Good job



TREE CARE

No sucklings present



MOWING

Good job



PRUNING

Please cut back palmetto from growing over the turf



MAINTENANCE

Edging done correctly

Cut back palmetto

Turf cut at correct height



PRUNING

Cont to cut back palmetto



MAINTENANCE

Please edge soft edges

Please spray weeds

Please cut back palmetto



SCALPING

Pay closer attention to your surroundings and make sure you're not using the wrong size machine at the wrong location.



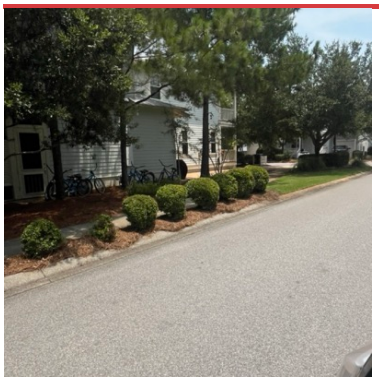
MAINTENANCE

Soft edges need to be done



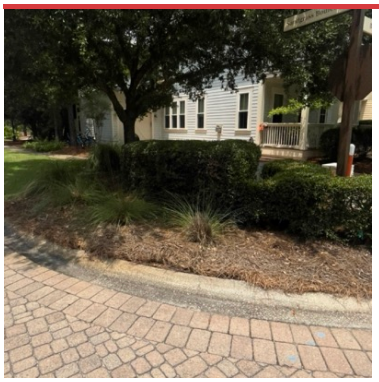
PRUNING

Good job



PRUNING

Good job



PRUNING

Good job



PRUNING

Good job



PRUNING

Assigned To Flex Crew

Good job



PRUNING

Good job



TURF

Phase 3 turf not looking good



TURF

Cont



EDGING

Good job



TURF

Bare spot in turf phase 3



MOWING

Good job



MAINTENANCE

Edging looks good

Turf no looking good

Phase 3



BLOWING

Rock path from phase 3 to flat-woods forest need blowing off



WEEDS

Rock pathway from phase3 to fwf needs spraying



WEEDS

Please spray



MAINTENANCE

Assigned To Flex Crew

Berm has been weed whacked



WEEDS

Spray weeds along rock pathway



WEEDS

Please spray asap



DRAINS

Assigned To Ocean

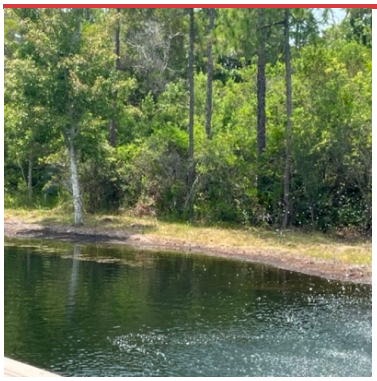
Please clear drains of debris

Pictures were taken before maintenance was completed



DRAINS

Cont



MAINTENANCE

Berm weed whacked



MAINTENANCE

Berm needs to be weed whacked



DEAD PLANTS

Please remove dead plant materials throughout property



MAINTENANCE

Assigned To Flex Crew

Please weed whack



PRUNING

Palmetto needs to be cut back from hanging over roadways and sidewalks



PRUNING

Continue with the pruning



PRUNING

Shrubs need to be pruned



PRUNING

Need to continue with pruning from salamander circle through to phase 3



WEEDS

Please spray



VOLUNTEER

Remove volunteers from muhley grass



PRUNING

Continue with pruning



MAINTENANCE

Retention pond in FWF needs weed whacking and spraying



WEEDS

Weed whack and spray weeds around pond in Flatwood forest loop



WEEDS

Cont



PRUNING

Thin out tall palmettos and cut back overhanging palmetto from sidewalk and roadways



PRUNING

Cont



WEEDS

Please spray weeds



MOWING

Retention basin/dog park

Good job



WEEDS

Please check ALL rock beds and spray weeds, hand pull ALL weeds taller than 2inches



ROCK PATHWAY

Please spray weeds



BERM

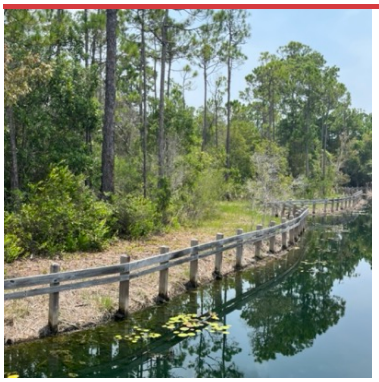
Assigned To Flex Crew

Please weed whack



PRUNING

Remove dead from palmetto



BERM

Cont to weed whack berms



BERM

Cont to weed whack



PRUNING

Cont pruning throughout property



BERM

Cont weed whack



BERM

Cont



PRUNING

Cont pruning



PRUNING

Cont to prune



BERM

Good job



BERM

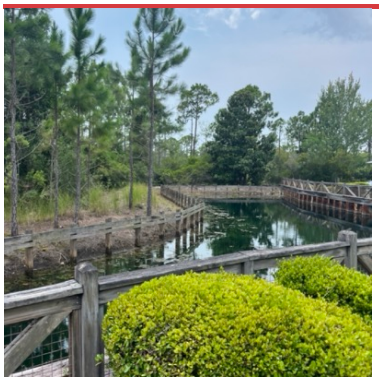
Assigned To Flex Crew

Good job keeping berm weed whacked



MAINTENANCE

Good job



BERM

Good job



BERM

Good job



MAINTENANCE

Good job weed whacking berm

Shrubs need pruning



MAINTENANCE

Assigned To Ocean

Dog park need to be mow

Spoke with team to get it done

Pic was taken before maintenance was done



WEEDS

Weed whack and spray weeds in pinestraw



WEEDS

Weed whack and spray



PRUNING

Assigned To Flex Crew

Good job

Shrubs has been pruned from entrance to salamander circle.



WEEDS

Please weed whack and spray



PRUNING

Awesome job!

Prepared for: Nature Walk CDD

Location:

Prepared by: Eric Parks

Irrigation Audit Report

07/07/2026

Site Audit

Nature Walk CDD

Audited By: Eric Parks on 07/07/26

Clock Location: Controller #1

Category	Score
Irrigation Time Audit	**0**

- Audit current date and time
- Audit Programs set on Timer
- Audit Start Times
- Audit the days the system is running
- Open the time face and audit connection and zone count
- System operational unless otherwise specified

Zone 5	**0**

- broken nozzle
- (2) nozzles

Zone 6	**0**

- broken nozzle
- (1) nozzle

Zone 7	**0**

- poly break
- (2) poly leaks

Prepared for: Nature Walk CDD

Location:

Prepared by: Eric Parks

Irrigation Audit Report

07/07/2026

Site Audit

Nature Walk CDD

Audited By: Eric Parks on 07/07/26

Clock Location: Controller #2

Category	Score
Irrigation Time Audit	**0**

- Audit current date and time
- Audit Programs set on Timer
- Audit Start Times
- Audit the days the system is running
- Open the time face and audit connection and zone count
- System operational unless otherwise specified

Zone 2	**0**

- broken MP
- (3) mp nozzles

Zone 5	**0**

- broken nozzle
- (3) nozzles

Zone 10	**0**

- (1) damaged micro spray

Prepared for: Nature Walk CDD

Location:

Prepared by: Eric Parks

Irrigation Audit Report

07/07/2026

Site Audit

Nature Walk CDD

Audited By: Eric Parks on 07/07/26

Clock Location: Controller #3

Category	Score
Irrigation Time Audit	**0**

- Audit current date and time
- Audit Programs set on Timer
- Audit Start Times
- Audit the days the system is running
- Open the time face and audit connection and zone count
- System operational unless otherwise specified

Zone 3	**0**

- broken nozzle
- (2) nozzles

Zone 6	**0**

- broken MP
- (1) mp nozzle

Zone 7	**0**

- poly break
- (3) poly leaks

Zone 11	**0**

- poly break
- (1) poly leak

Zone 15	**0**

- broken lateral
- (1) damaged lateral

Zone 24	**0**

- poly break
- (3) poly leaks

Prepared for: Nature Walk CDD

Location:

Prepared by: Eric Parks

Irrigation Audit Report

07/07/2026

Site Audit

Nature Walk CDD

Audited By: Eric Parks on 07/07/26

Clock Location: Controller #4

Category	Score
Irrigation Time Audit	**0**

- Audit current date and time
- Audit Programs set on Timer
- Audit Start Times
- Audit the days the system is running
- Open the time face and audit connection and zone count
- System operational unless otherwise specified

Zone 6	**0**

- zone not coming on from the timer
- Troubleshooting needed

Zone 7	**0**

- poly break
- (1) poly leak

Prepared for: Nature Walk CDD

Location:

Prepared by: Eric Parks

Irrigation Audit Report

07/07/2026

Site Audit

Nature Walk CDD

Audited By: Eric Parks on 07/07/26

Clock Location: Irrigation Audit Zones (1-100)

Category	Score
Irrigation Time Audit	**0**

- Audit current date and time
- Audit Programs set on Timer
- Audit Start Times
- Audit the days the system is running
- Open the time face and audit connection and zone count

Zone 1	**0**

- zone functioning properly

Zone 2	**0**

- zone functioning properly

Zone 3	**0**

- zone functioning properly

Zone 4	**0**

- zone functioning properly

Zone 5	**0**

- zone functioning properly

Zone 6	**0**

- zone functioning properly

Zone 7	**0**

- zone functioning properly

Zone 8	**0**

- zone functioning properly

Zone 9	**0**

- zone functioning properly

Tab 5

KUTAKROCK

Kutak Rock LLP
107 West College Avenue, Tallahassee, FL 32301
office 850.692.7300

Joseph A. Brown
850.692.7300
joseph.brown@kutakrock.com

MEMORANDUM

TO: NATURE WALK COMMUNITY DEVELOPMENT DISTRICT
BOARD OF SUPERVISORS

FROM: JOSEPH A. BROWN

DATE: JULY 28, 2026

RE: COMMUNITY DEVELOPMENT DISTRICT'S DUTY TO WARN OF WILDLIFE

The purpose of this memorandum is to outline Nature Walk Community Development District's ("**District**") responsibilities under Florida law to warn residents or other individuals about wildlife, including ducks, waterfowl, alligators, and other wild animals that may be present on District property.[1] As explained further below, the general rule is that there is no duty to warn individuals about wild animals that are natural to the area.[2] A court, however, may find that the District has a duty to warn or take other reasonable precautions when the District has additional information about a danger that an individual would not be expected to realize under its duty to exercise ordinary care in management of District property, including use of reasonable care to discover dangerous conditions on its land and to protect permitted entrants from those conditions.[3] That situation would most likely arise when the District has notice that wildlife is regularly present in a particular location, has been removed from a particular location, is being attracted to a particular location by feeding or food waste, or has displayed aggressive, nesting, territorial, or otherwise unusual behavior. But where the District is not aware of any specific wildlife issue beyond the ordinary presence of wildlife natural to the area, the general rule applies, and it is within the Board of Supervisors' ("**Board**") discretion to provide warning notice of the same.

Florida law is well settled that the owner or possessor of land is not required to anticipate the presence of, or guard an invitee (i.e., residents and guests) or trespasser (i.e., unknown individuals) against, harm from wild animals unless one of two conditions exists: (1) the animal has been reduced to possession, harbored, or otherwise brought under the landowner's control; or (2) the animal is not

[1] This memo is intended to address wildlife generally. Based on the District's current concern, ducks and waterfowl are the primary practical focus; however, the same general analysis may apply to other wildlife depending on the species, location, District knowledge, and circumstances.
[2] *Palumbo v. State Game & Fresh Water Fish Com.*, 487 So. 2d 352, 353 (Fla. 1st DCA 1986).
[3] Cases addressing this issue base their conclusion on the duty of a landowner to warn individuals of a dangerous condition on the property that the landowner is aware of but is a dangerous condition that an individual would not know or have reason to know exists on the property. *See Post v. Lunney*, 261 So. 2d 146, 149-150 (Fla. 1972).

indigenous to the locality but has been introduced onto the premises by the landowner.[4] This general rule would mean that wildlife warning signs throughout the community are generally not required as a matter of Florida law; however, it remains within the Board's discretion to place signs or distribute notices in areas where doing so is reasonable as a risk-management, resident-education, or public-relations measure.

However, if the District has actual or constructive knowledge of a specific wildlife-related condition on District property that presents an unreasonable risk of harm and is not one that residents or guests would reasonably be expected to appreciate, reasonable precautions should be considered. Florida courts have recognized that a landowner may be held liable where the landowner knew or should have known of an unreasonable risk of harm from wild animals and could not expect patrons to realize or guard against that danger.

For the District, the reported primary wildlife concern is ducks.[5] The District may therefore consider reasonable, species-neutral precautions in areas where ducks or other wildlife are regularly present or where recreational activities occur, especially near ponds, amenity areas, sidewalks, trails, playgrounds, pools, dog parks, outdoor fitness equipment, seating areas, and other high-traffic locations. Reasonable precautions may include, among other things, posting signs warning of the possible presence of wildlife, instructing residents not to feed or approach wildlife, reminding residents to secure food waste or other attractants, sending community-wide educational messages, documenting reports of aggressive, sick, injured, nesting, or nuisance wildlife, and coordinating with the appropriate governmental or licensed wildlife resources when removal or specialized response is needed. In light of the District's reported duck issue, preventative actions may be prudent even if not legally mandated, because feeding, food waste, and repeated human interaction can attract or condition wildlife and increase resident complaints, nuisance conditions, and avoidable risk.

No current Florida statute, code, or ordinance appears to impose some generally applicable requirement for a community development district to post wildlife-warning signs for ducks, waterfowl, or ordinary wildlife hazards on District property. Florida law does, however, recognize penalties for violating Fish and Wildlife Conservation Commission rules or orders that prohibit or restrict feeding wildlife or freshwater fish, attracting or enticing wildlife or freshwater fish with food or garbage, or allowing food or garbage to be placed in a manner that attracts or entices wildlife or freshwater fish. The District also has statutory authority, subject to applicable governmental regulatory and permitting authority, to exercise special powers relating to public improvements and community facilities, and the Board or an aggrieved person may seek legal or equitable remedies to enforce District bylaws, resolutions, regulations, rules, codes, or orders adopted under Chapter 190. Accordingly, if the Board elects to act, the most supportable approach is to combine reasonable signage with community education and adopted amenity or common-area rules, such as "do not feed wildlife," "do not approach or harass wildlife," "keep pets leashed where required," "dispose of food and trash properly," and "report aggressive, sick, injured, or nuisance wildlife to District management."

[4] *Wamser v. City of St. Petersburg*, 339 So. 2d 244, 246 (Fla. 2d DCA 1976); *see also Palumbo,* 487 So. 2d at 353.
[5] *See Hanrahan v. Hometown America, LLC*, 90 So. 3d 915, 918-19 (Fla. 4th DCA 2012) (recognizing potential landowner duty where the landowner knows or should know of an unreasonable risk of harm posed by wild animals on the premises and cannot expect patrons to realize or guard against it).

In sum, the District should provide notice or take other reasonable precautions where the Board has knowledge of a specific wildlife concern on District property, including locations where ducks or other wildlife are repeatedly present, are being fed or attracted by food waste, have created sanitation or nuisance concerns, or have displayed aggressive, nesting, territorial, or otherwise unusual behavior. Such notice may be provided through an annual or seasonal mailing to District residents, periodic electronic communications, amenity and pond-area rules, targeted signage in higher-traffic or higher-activity locations, or any other reasonable precautionary method or combination of methods as determined by the Board. Where the District uses signage, the District should act reasonably, which means the signs should adequately communicate the nature of the hazard and the expected resident conduct. Due to the lack of a generally applicable legal requirement for wildlife-warning signs, there are no set rules on how many signs should be placed or what exact language must be used. If placing signage, we advise that such signage be written broadly enough to cover wildlife generally, but specific enough to address the District's current wildlife issues. For example, signs may state: "Wildlife Present: Do Not Feed or Approach Wildlife. Keep Food and Trash Secured. Report Aggressive, Sick, Injured, or Nuisance Wildlife to District Management." Where appropriate, written warnings may be paired with pictorial warnings so residents and guests understand both the type of wildlife concern and the conduct expected of them.

Tab 6

PBA Towing LLC

NatureWalk Tow Activity Report

Reporting Period: July 2–28, 2026

Tow Event #1

Call Number	593
Date / Time	7/2/2026 2:07 AM
Reason	Landscape Parking



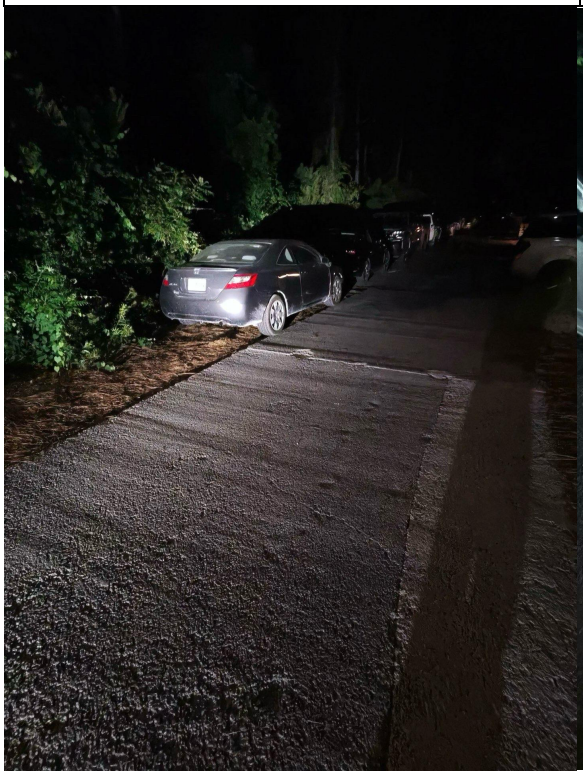
Tow Event #2

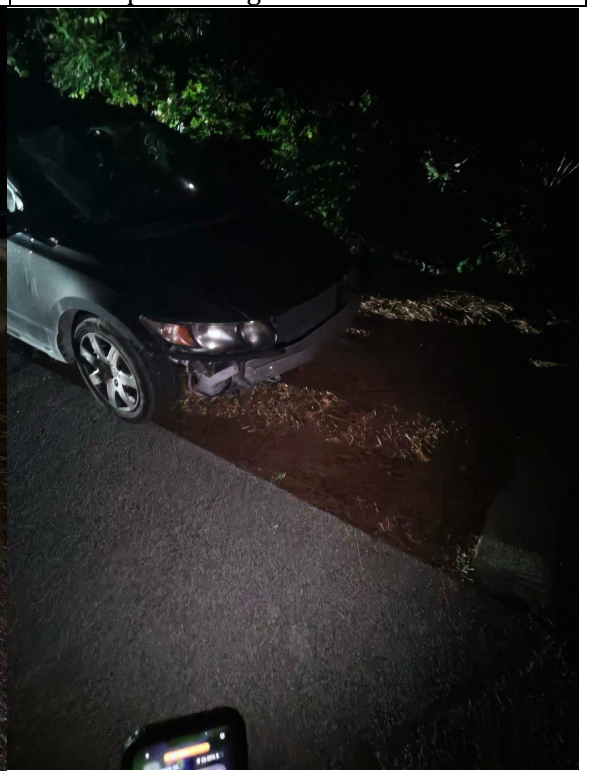
Call Number	606
Date / Time	7/3/2026 2:56 AM
Reason	Landscape Parking



Tow Event #3

Call Number	621
Date / Time	7/4/2026 1:58 AM
Reason	Landscape Parking





Tow Event #4

Call Number	647
Date / Time	7/8/2026 1:35 AM
Reason	Commercial Vehicle in Community Space
Photo	Insert photo below



Tow Event #5

Call Number	650
Date / Time	7/9/2026 1:46 AM
Reason	Commercial Vehicle in Community Space



Tow Event #6

Call Number	654
Date / Time	7/10/2026 2:49 AM
Reason	Landscape Parking

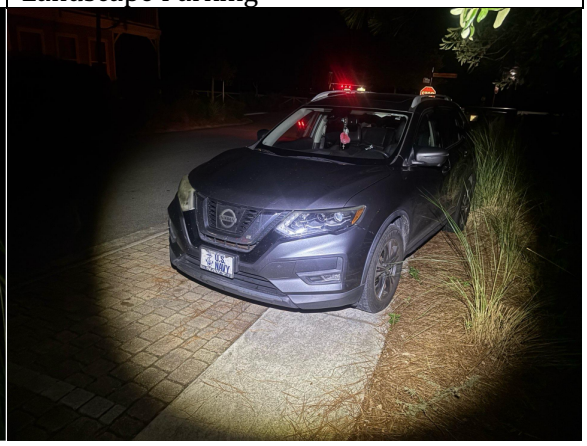




Tow Event #7

Call Number	659
Date / Time	7/11/2026 1:39 AM
Reason	Landscape Parking





Tow Event #8

Call Number	676
Date / Time	7/13/2026 2:00 AM
Reason	Landscape Parking



Tow Event #9

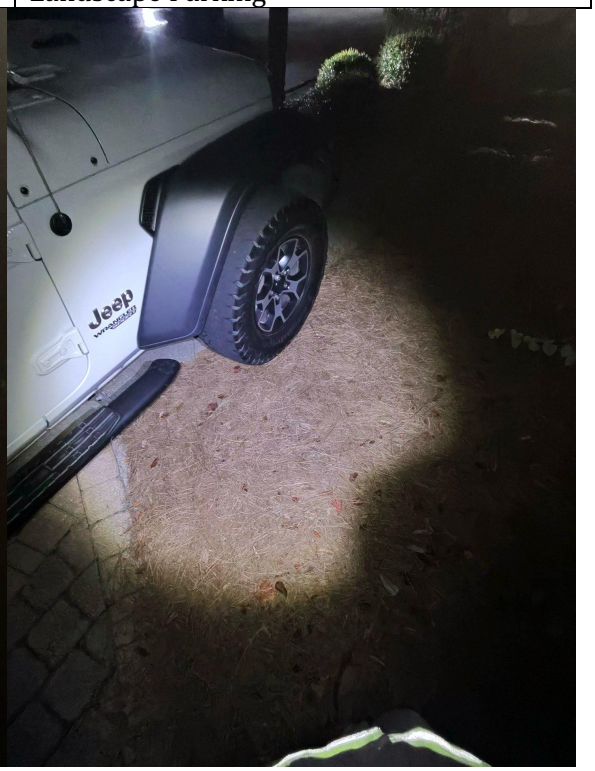
Call Number	677
Date / Time	7/13/2026 12:29 AM
Reason	Commercial Vehicle in Community Space



Tow Event #10

Call Number	695
Date / Time	7/17/2026 3:28 AM
Reason	Landscape Parking





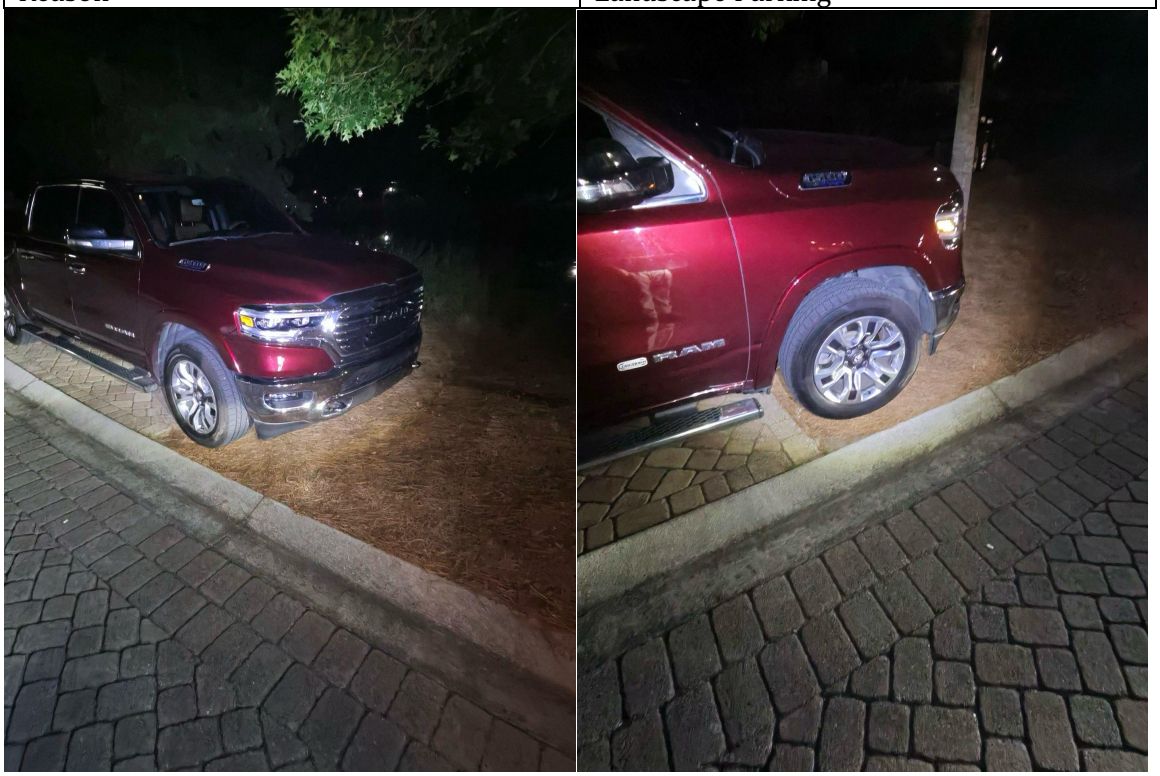
Tow Event #11

Call Number	696
Date / Time	7/17/2026 3:47 AM
Reason	Street Parking



Tow Event #12

Call Number	697
Date / Time	7/17/2026 4:41 AM
Reason	Landscape Parking



Tow Event #13

Call Number	710
Date / Time	7/18/2026 3:50 AM
Reason	Street Parking



Tow Event #14

Call Number	711
Date / Time	7/19/2026 12:41 AM
Reason	Street Parking



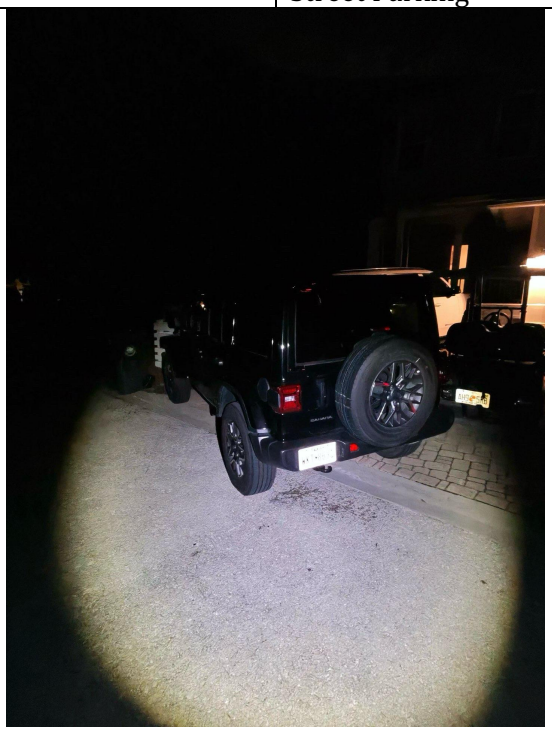
Tow Event #15

Call Number	718
Date / Time	7/20/2026 2:28 AM
Reason	Commercial Vehicle in Community Space



Tow Event #16

Call Number	719
Date / Time	7/20/2026 2:47 AM
Reason	Street Parking



Tow Event #17

Call Number	729
Date / Time	7/21/2026 2:07 AM
Reason	Landscape Parking



Tow Event #18

Call Number	737
Date / Time	7/22/2026 4:40 AM
Reason	Street Parking



Tow Event #19

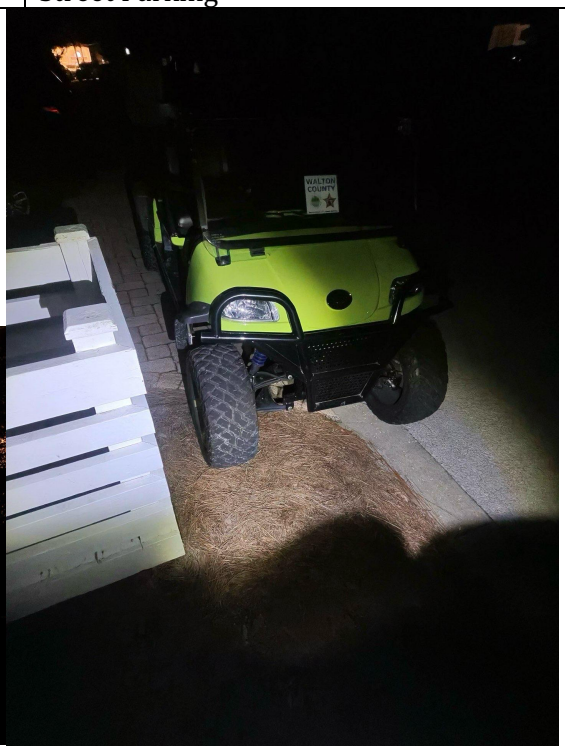
Call Number	738
Date / Time	7/22/2026 4:51 AM
Reason	Landscape Parking



Tow Event #20

Call Number	745
Date / Time	7/23/2026 2:04 AM
Reason	Street Parking





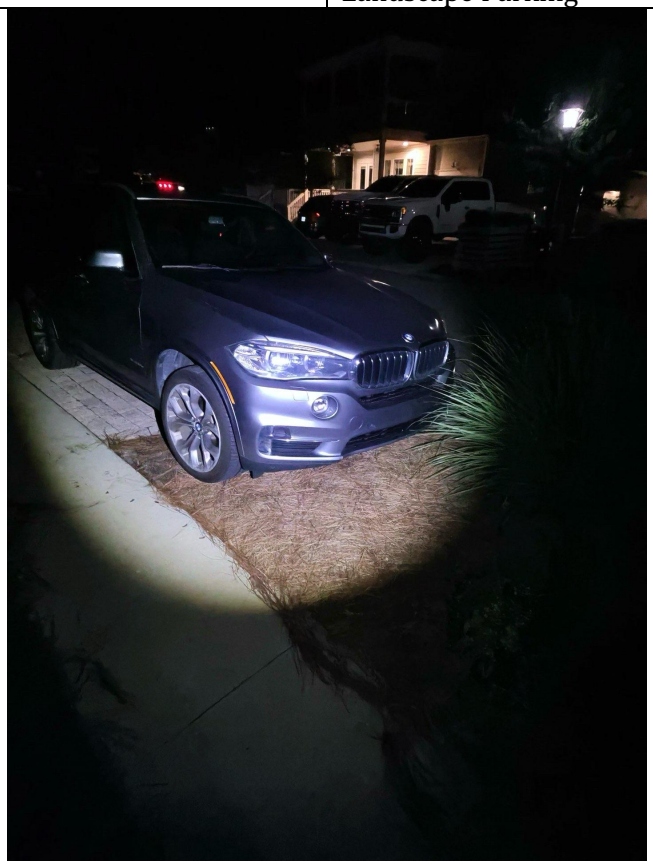
Tow Event #21

Call Number	746
Date / Time	7/23/2026 2:13 AM
Reason	Landscape Parking



Tow Event #22

Call Number	748
Date / Time	7/24/2026 1:56 AM
Reason	Landscape Parking



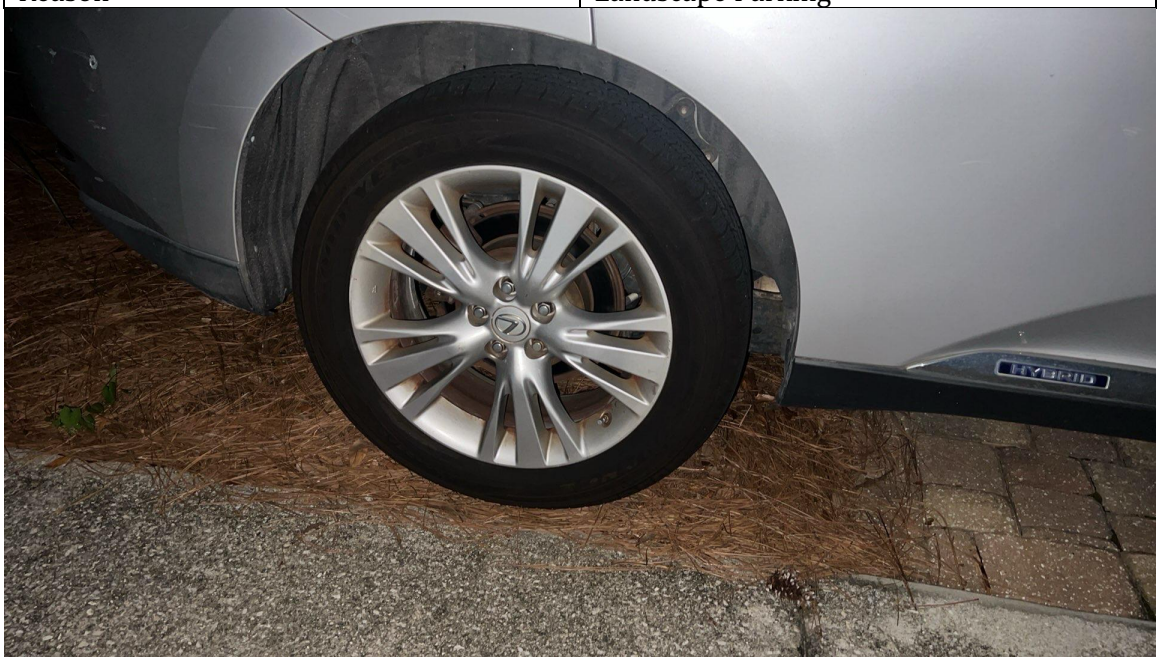
Tow Event #23

Call Number	749
Date / Time	7/24/2026 1:57 AM
Reason	Commercial Vehicle in Community Space



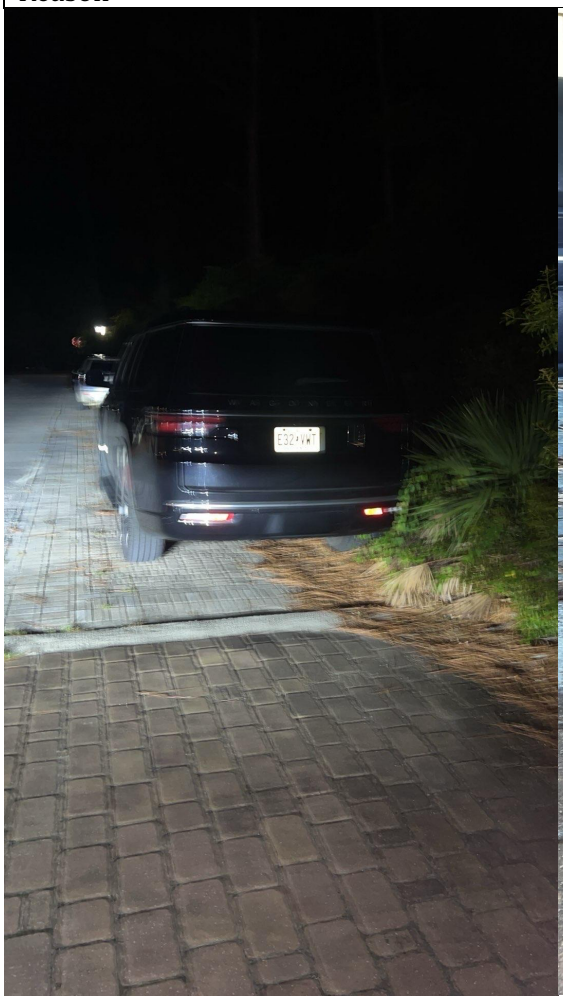
Tow Event #24

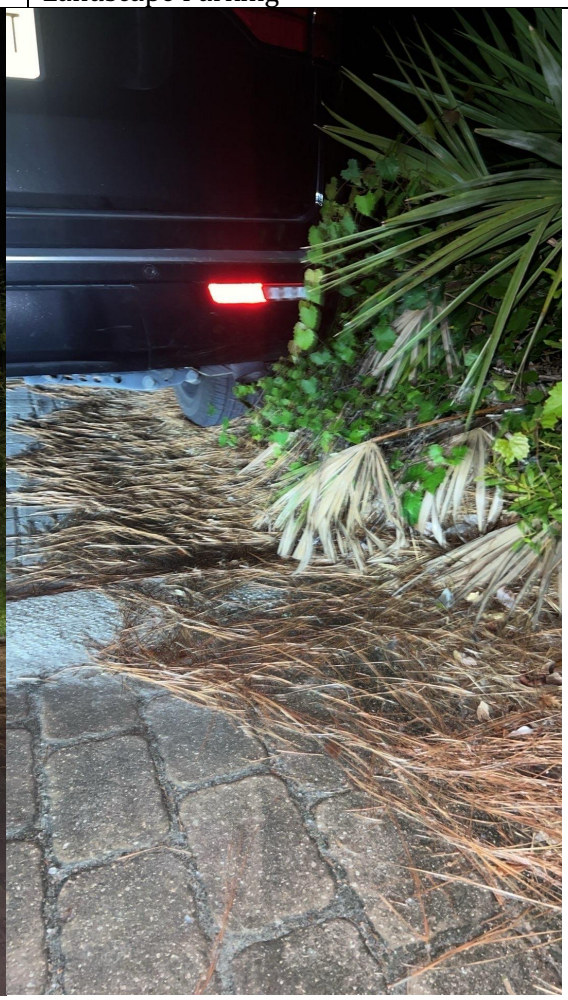
Call Number	759
Date / Time	7/26/2026 2:02 AM
Reason	Landscape Parking



Tow Event #25

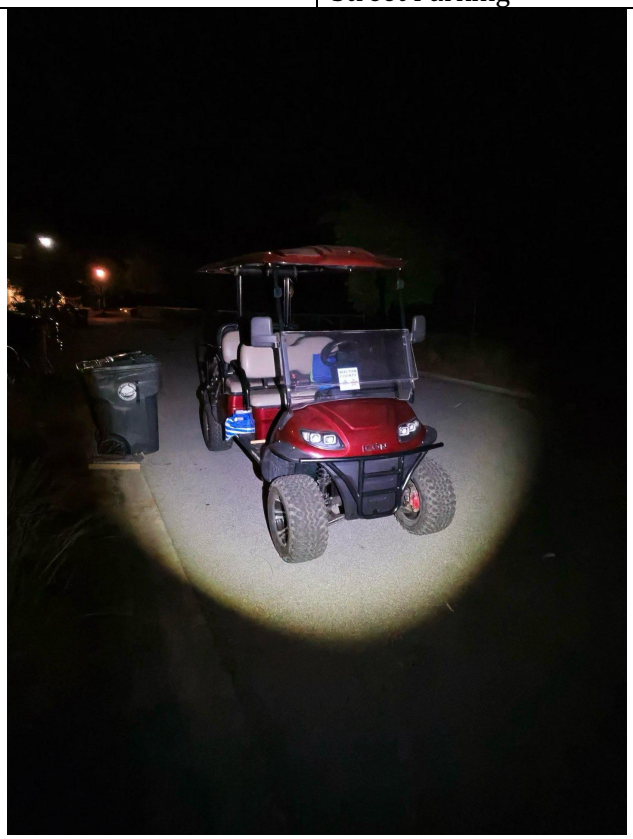
Call Number	761
Date / Time	7/26/2026 3:47 AM
Reason	Landscape Parking





Tow Event #26

Call Number	766
Date / Time	7/27/2026 1:10 AM
Reason	Street Parking



Tow Event #27

Call Number	767
Date / Time	7/27/2026 1:40 AM
Reason	Landscape Parking



Tow Event #28

Call Number	771
Date / Time	7/28/2026 1:13 AM
Reason	Landscape Parking



Tab 7

AGREEMENT BETWEEN THE NATUREWALK COMMUNITY DEVELOPMENT DISTRICT AND TIGHTLINE CONSTRUCTION, INC., FOR ALLEYWAY REPAIR SERVICES

THIS AGREEMENT ("Agreement") is made and entered into this ___ day of _____, 2026, by and between:

NatureWalk Community Development District, a local unit of special-purpose government established pursuant to Chapter 190, *Florida Statutes,* being situated in Walton County, Florida, and whose mailing address is 3434 Colwell Avenue, Suite 200, Tampa, Florida 33614 ("**District**"); and

Tightline Construction, Inc., a Florida corporation, with a mailing and principal address at 3601 E. 11th Street, Panama City, Florida 32401 ("**Contractor**", together with District, "**Parties**").

RECITALS

WHEREAS, the District is a local unit of special-purpose government established pursuant to the Uniform Community Development District Act of 1980, as codified in Chapter 190, *Florida Statutes* (the "Act"), by ordinance adopted by Walton County, Florida; and

WHEREAS, the District was established for the purpose of planning, financing, constructing, operating and/or maintaining certain infrastructure; and

WHEREAS, the District has a need to retain an independent contractor to provide repair and replacement services; and

WHEREAS, Contractor submitted a proposal and represents that it is qualified to provide repair and replacement services for the demolition and replacement of existing asphalt of approximately 13.1 square yards at the east approach of Bridge 1 within the District and has agreed to provide such services to the District as further described in **Composite Exhibit A**, attached hereto and incorporated by reference herein ("**Services**"); and

WHEREAS, the District and Contractor warrant and agree that they have all right, power and authority to enter into and be bound by this Agreement.

NOW, THEREFORE, in consideration of the recitals, agreements, and mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the Parties, the Parties agree as follows:

SECTION 1. INCORPORATION OF RECITALS. The recitals stated above are true and correct and by this reference are incorporated by reference as a material part of this Agreement.

SECTION 2. DUTIES. The District agrees to use Contractor to provide the Services in accordance with the terms of this Agreement. The duties, obligations, and responsibilities of the Contractor are described in **Composite Exhibit A** hereto.

A. Contractor shall provide demolition and replacement services, as described in **Composite Exhibit A**. Such Services include Contractor's confirmation that they can meet strength and density requirements described in **Composite Exhibit A.**

This Agreement includes an additional allowance of not-to-exceed $2,000.00 for appropriate geotechnical testing by a third-party geotechnical testing company to confirm specifications are met. Such third-party geotechnical testing company is subject to approval of the District's Engineer. Contractor shall coordinate the testing timeline with that third-party vendor. The Services shall include any effort specifically required by this Agreement and **Composite Exhibit A** reasonably necessary to allow the District to receive the maximum benefit of all of the Services and items described herein and demonstrated in **Composite Exhibit A**, including but not limited to, the repair, construction, installation, and all materials reasonably necessary. To the extent any of the provisions of this Agreement are in conflict with the provisions of **Composite Exhibit A,** this Agreement controls.

B. Services shall commence on a date as reasonably directed by the District's Engineer, Jim Martelli, and shall be completed as expeditiously as possible recognizing that time is of the essence upon commencement of the Services.

C. This Agreement grants to Contractor the right to enter the lands that are subject to this Agreement, for those purposes described in this Agreement, and Contractor hereby agrees to comply with all applicable laws, rules, and regulations.

D. Contractor shall perform all Services in a neat and workmanlike manner. In the event the District in its sole determination, finds that the work of Contractor is not satisfactory to District, District shall have the right to immediately terminate this Agreement and will only be responsible for payment of work satisfactorily completed and for materials actually incorporated into the Services.

E. Contractor shall be solely responsible for the means, manner and methods by which its duties, obligations and responsibilities are met to the satisfaction of the District. While providing the Services, the Contractor shall assign such staff as may be required, and such staff shall be responsible for coordinating, expediting, and controlling all aspects to assure completion of the Services.

F. Contractor shall report directly to the District Engineer. Contractor shall use all due care to protect the property of the District, its residents and landowners from damage. Contractor agrees to repair any damage resulting from Contractor's activities and work within twenty-four (24) hours.

G. Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Agreement. At completion of the Services, the Contractor shall remove from the site waste materials, rubbish, tools, construction equipment, machinery and surplus materials. If the Contractor fails to clean up as provided herein, the District may do so and the cost thereof shall be charged to the Contractor.

SECTION 3. COMPENSATION, PAYMENT, AND RETAINAGE.

A. The District shall pay Contractor **$8,253.00** for the Services as identified in **Composite Exhibit A** attached hereto and incorporated herein by reference. Contractor shall invoice the District for the Services as they are completed. Such amounts include all materials and labor provided for in **Composite Exhibit A** and all items, labor, materials, or otherwise, to provide the District the maximum

benefits of the Services. The District shall provide payment within forty-five (45) days of receipt of invoices, which shall only include materials and labor satisfactorily provided through the date of such invoice. This Agreement also includes an additional allowance of not-to-exceed **$2,000.00** for appropriate geotechnical testing by a third-party geotechnical testing company to confirm specifications are met. Contractor shall coordinate the testing timeline with that third-party vendor. Payment shall be made to such third-party geotechnical testing company directly by the District within forty-five (45) days of receipt of invoices for completed geotechnical testing.

B. If the District should desire additional work or services, the Contractor agrees to negotiate in good faith to undertake such additional work or services. Upon successful negotiations, the Parties shall agree in writing to an addendum, addenda, or change order(s) to this Agreement. The Contractor shall be compensated for such agreed additional work or services based upon a payment amount acceptable to the parties and agreed to in writing.

C. The District may require, as a condition precedent to making any payment to the Contractor, that all subcontractors, material men, suppliers or laborers be paid and require evidence, in the form of lien releases or partial waivers of lien, to be submitted to the District by those subcontractors, material men, suppliers or laborers, and further require that the Contractor provide an Affidavit relating to the payment of said indebtedness. Further, the District shall have the right to require, as a condition precedent to making any payment, evidence from the Contractor, in a form satisfactory to the District, that any indebtedness of the Contractor, as to services to the District, has been paid and that the Contractor has met all of the obligations with regard to the withholding and payment of taxes, Social Security payments, Workmen's Compensation, Unemployment Compensation contributions, and similar payroll deductions from the wages of employees.

SECTION 4. WARRANTY. The Contractor warrants to the District that all workmanship and installation services provided will be consistent with industry standards for the type of Services provided. Final acceptance of the Services, nor final payment therefore, nor any provision of the Agreement shall relieve Contractor of responsibility for deficient workmanship or installation services that are not consistent with industry standards for the type of Services provided.

SECTION 5. INSURANCE.

A. The Contractor shall maintain throughout the term of this Agreement the following insurance:

(1) Worker's Compensation Insurance in accordance with the laws of the State of Florida.

(2) Commercial General Liability Insurance covering the Contractor's legal liability for bodily injuries, with limits of not less than $1,000,000 combined single limit bodily injury and property damage liability, and covering at least the following hazards:

(i) Independent Contractors Coverage for bodily injury and property damage in connection with any subcontractors'

operation.

(3) Employer's Liability Coverage with limits of at least $1,000,000 (one million dollars) per accident or disease.

(4) Automobile Liability Insurance for bodily injuries in limits of not less than $1,000,000 combined single limit bodily injury and for property damage, providing coverage for any accident arising out of or resulting from the operation, maintenance, or use by the Contractor of any owned, non-owned, or hired automobiles, trailers, or other equipment required to be licensed.

B. The District, its staff, consultants and supervisors shall be named as additional insured. The Contractor shall furnish the District with the Certificate of Insurance evidencing compliance with this requirement. No certificate shall be acceptable to the District unless it provides that any change or termination within the policy periods of the insurance coverage, as certified, shall not be effective within thirty (30) days of prior written notice to the District. Insurance coverage shall be from a reputable insurance carrier, licensed to conduct business in the State of Florida.

C. If the Contractor fails to have secured and maintained the required insurance, the District has the right but not the obligation to secure such required insurance in which event the Contractor shall pay the cost for that required insurance and shall furnish, upon demand, all information that may be required in connection with the District's obtaining the required insurance.

SECTION 6. INDEMNIFICATION.

A. Contractor agrees to defend, indemnify, and hold harmless the District and its officers, agents, employees, successors, assigns, members, affiliates, or representatives from any and all liability, claims, actions, suits, liens, demands, costs, interest, expenses, damages, penalties, fines, judgments against the District, or loss or damage, whether monetary or otherwise, arising out of, wholly or in part by, or in connection with the Services to be performed by Contractor, its subcontractors, its employees and agents in connection with this Agreement, including litigation, mediation, arbitration, appellate, or settlement proceedings with respect thereto. Additionally, nothing in this Agreement requires Contractor to indemnify the District for the District's percentage of fault if the District is adjudged to be more than 50% at fault for any claims against the District and Contractor as jointly liable parties; however, Contractor shall indemnify the District for any and all percentage of fault attributable to Contractor for claims against the District, regardless whether the District is adjudged to be more or less than 50% at fault.

B. Obligations under this section shall include the payment of all settlements, judgments, damages, liquidated damages, penalties, forfeitures, back pay awards, court costs, arbitration and/or mediation costs, litigation expenses, attorneys' fees, paralegal fees, expert witness fees (incurred in court, out of court, on appeal, or in bankruptcy proceedings), any interest, expenses, damages, penalties, fines, or judgments against the District, but shall in no event include consequential damages.

SECTION 7. LIMITATIONS ON GOVERNMENTAL LIABILITY. Nothing in this Agreement shall be deemed as a waiver of the District's sovereign immunity or the District's limits of liability as set forth in Section 768.28, *Florida Statutes*, or other statute, and nothing in this Agreement shall inure to the benefit of any third party for the purpose of allowing any claim which would otherwise be barred under such limitations of liability or by operation of law.

SECTION 8. COMPLIANCE WITH GOVERNMENTAL REGULATION. The Contractor shall keep, observe, and perform all requirements of applicable local, State, and Federal laws, rules, regulations, or ordinances. If the Contractor fails to notify the District in writing within five (5) days of the receipt of any notice, order, required to comply notice, or a report of a violation or an alleged violation, made by any local, State, or Federal governmental body or agency or subdivision thereof with respect to the services being rendered under this Agreement or any action of the Contractor or any of its agents, servants, employees, or materialmen, or with respect to terms, wages, hours, conditions of employment, safety appliances, or any other requirements applicable to provision of services, or fails to comply with any requirement of such agency within five (5) days after receipt of any such notice, order, request to comply notice, or report of a violation or an alleged violation, the District may terminate this Agreement, such termination to be effective upon the giving of notice of termination.

SECTION 9. LIENS AND CLAIMS. The Contractor shall promptly and properly pay for all labor employed, materials purchased, and equipment hired by it to perform under this Agreement. The Contractor shall keep the District's property free from any materialmen's or mechanic's liens and claims or notices in respect to such liens and claims, which arise by reason of the Contractor's performance under this Agreement, and the Contractor shall in due course promptly discharge any such claim or lien. In the event that the Contractor does not in due course promptly pay or satisfy such claim or lien, the District, in addition to any and all other remedies available under this Agreement, may terminate this Agreement to be effective immediately upon the giving of notice of termination.

SECTION 10. DEFAULT AND PROTECTION AGAINST THIRD PARTY INTERFERENCE. A default by either party under this Agreement shall entitle the other to all remedies available at law or in equity, which may include, but not be limited to, the right of damages, injunctive relief, and/or specific performance. The District shall be solely responsible for enforcing its rights under this Agreement against any interfering third party. Nothing contained in this Agreement shall limit or impair the District's right to protect its rights from interference by a third party to this Agreement.

SECTION 11. CUSTOM AND USAGE. It is hereby agreed, any law, custom, or usage to the contrary notwithstanding, that the District shall have the right at all times to enforce the conditions and agreements contained in this Agreement in strict accordance with the terms of this Agreement, notwithstanding any conduct or custom on the part of the District in refraining from so doing; and further, that the failure of the District at any time or times to strictly enforce its rights under this Agreement shall not be construed as having created a custom in any way or manner contrary to the specific conditions and agreements of this Agreement, or as having in any way modified or waived the same.

SECTION 12. SUCCESSORS. This Agreement shall inure to the benefit of and be binding upon the heirs, executors, administrators, successors, and assigns of the Parties to this Agreement, except as expressly limited in this Agreement.

SECTION 13. TERMINATION. The District agrees that the Contractor may terminate this Agreement with cause by providing thirty (30) days' written notice of termination to the District

stating a failure of the District to perform according to the terms of this Agreement; provided, however, that the District shall be provided a reasonable opportunity to cure any failure under this Agreement. The Contractor agrees that the District may terminate this Agreement immediately for cause by providing written notice of termination to the Contractor. The District shall provide thirty (30) days' written notice of termination without cause. Upon any termination of this Agreement, the Contractor shall be entitled to payment for all work and/or services rendered up until the effective termination of this Agreement, subject to whatever claims or off-sets the District may have against the Contractor.

SECTION 14. PERMITS AND LICENSES. All permits and licenses required by any governmental agency directly for the District or specifically for provision of the Services shall be obtained and paid for by the District. All other permits or licenses necessary for the Contractor to perform under this Agreement shall be obtained and paid for by the Contractor.

SECTION 15. ASSIGNMENT. Neither the District nor the Contractor may assign this Agreement without the prior written approval of the other. Any purported assignment without such approval shall be void.

SECTION 16. INDEPENDENT CONTRACTOR STATUS. In all matters relating to this Agreement, the Contractor shall be acting as an independent contractor. Neither the Contractor nor employees of the Contractor, if there are any, are employees of the District under the meaning or application of any Federal or State Unemployment or Insurance Laws or Old Age Laws or otherwise. The Contractor agrees to assume all liabilities or obligations imposed by any one or more of such laws with respect to employees of the Contractor, if there are any, in the performance of this Agreement. The Contractor shall not have any authority to assume or create any obligation, express or implied, on behalf of the District and the Contractor shall have no authority to represent the District as an agent, employee, or in any other capacity, unless otherwise set forth in this Agreement.

SECTION 17. HEADINGS FOR CONVENIENCE ONLY. The descriptive headings in this Agreement are for convenience only and shall neither control nor affect the meaning or construction of any of the provisions of this Agreement.

SECTION 18. ENFORCEMENT OF AGREEMENT. In the event that either the District or the Contractor is required to enforce this Agreement by court proceedings or otherwise, then the prevailing party shall be entitled to recover all fees and costs incurred, including reasonable attorneys' fees and costs for trial, alternative dispute resolution, or appellate proceedings.

SECTION 19. AGREEMENT. This instrument shall constitute the final and complete expression of this Agreement between the Parties relating to the subject matter of this Agreement. None of the provisions of **Composite Exhibit A** shall apply to this Agreement and **Composite Exhibit A** shall not be incorporated herein, except that **Composite Exhibit A** is applicable to the extent that it states the scope of services for the labor and materials to be provided under this Agreement.

SECTION 20. AMENDMENTS. Amendments to and waivers of the provisions contained in this Agreement may be made only by an instrument in writing which is executed by both Parties.

SECTION 21. AUTHORIZATION. The execution of this Agreement has been duly authorized by the appropriate body or official of the Parties, the Parties have complied with all the requirements of law, and the Parties have full power and authority to comply with the terms and

provisions of this Agreement.

SECTION 22. NOTICES. All notices, requests, consents and other communications under this Agreement ("Notice" or "Notices") shall be in writing and shall be hand delivered, mailed by First Class Mail, postage prepaid, or sent by overnight delivery service, to the Parties, as follows:

A.	**If to District:**	NatureWalk Community Development District 3434 Colwell Avenue, Suite 200 Tampa, Florida 33614 Attn: District Manager
	With a copy to:	Kutak Rock LLP 107 West College Avenue Tallahassee, Florida 32301 Attn: District Counsel
B.	**If to the Contractor:**	Tightline Construction, Inc. 3601 E. 11th Street Panama City, Florida 32401 Attn: _____

Except as otherwise provided in this Agreement, any Notice shall be deemed received only upon actual delivery at the address set forth above. Notices delivered after 5:00 p.m. (at the place of delivery) or on a non-business day, shall be deemed received on the next business day. If any time for giving Notice contained in this Agreement would otherwise expire on a non-business day, the Notice period shall be extended to the next succeeding business day. Saturdays, Sundays, and legal holidays recognized by the United States government shall not be regarded as business days. Counsel for the District and counsel for the Contractor may deliver Notices on behalf of the District and the Contractor. Any party or other person to whom Notices are to be sent or copied may notify the Parties and addressees of any change in name or address to which Notices shall be sent by providing the same on five (5) days written notice to the Parties and addressees set forth in this Agreement.

SECTION 23. THIRD PARTY BENEFICIARIES. This Agreement is solely for the benefit of the Parties hereto and no right or cause of action shall accrue upon or by reason, to or for the benefit of any third party not a formal party to this Agreement. Nothing in this Agreement expressed or implied is intended or shall be construed to confer upon any person or corporation other than the Parties hereto any right, remedy, or claim under or by reason of this Agreement or any of the provisions or conditions of this Agreement; and all of the provisions, representations, covenants, and conditions contained in this Agreement shall inure to the sole benefit of and shall be binding upon the Parties hereto and their respective representatives, successors, and assigns.

SECTION 24. CONTROLLING LAW AND VENUE. This Agreement and the provisions contained in this Agreement shall be construed, interpreted, and controlled according to the laws of the State of Florida. All actions and disputes shall be brought in the proper court and venue, which shall be Walton County, Florida.

SECTION 25. COMPLIANCE WITH PUBLIC RECORDS LAWS. Contractor understands and agrees that all documents of any kind provided to the District in connection with this Agreement may be public records, and, accordingly, Contractor agrees to comply with all applicable

provisions of Florida law in handling such records, including but not limited to Section 119.0701, *Florida Statutes*. Contractor acknowledges that the designated public records custodian for the District is Stephanie DeLunca ("Public Records Custodian"). Among other requirements and to the extent applicable by law, the Contractor shall 1) keep and maintain public records required by the District to perform the service; 2) upon request by the Public Records Custodian, provide the District with the requested public records or allow the records to be inspected or copied within a reasonable time period at a cost that does not exceed the cost provided in Chapter 119, *Florida Statutes*; 3) ensure that public records which are exempt or confidential, and exempt from public records disclosure requirements, are not disclosed except as authorized by law for the duration of the contract term and following the contract term if the Contractor does not transfer the records to the Public Records Custodian of the District; and 4) upon completion of the contract, transfer to the District, at no cost, all public records in Contractor's possession or, alternatively, keep, maintain and meet all applicable requirements for retaining public records pursuant to Florida laws. When such public records are transferred by the Contractor, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the District in a format that is compatible with Microsoft Word or Adobe PDF formats.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, *FLORIDA STATUTES*, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 850-334-9055, SDELUNA@RIZZETTA.COM, 120 RICHARD JACKSON BLVD., SUITE 220, PANAMA CITY, FLORIDA 32407.

SECTION 26. SEVERABILITY. The invalidity or unenforceability of any one or more provisions of this Agreement shall not affect the validity or enforceability of the remaining portions of this Agreement, or any part of this Agreement not held to be invalid or unenforceable.

SECTION 27. ARM'S LENGTH TRANSACTION. This Agreement has been negotiated fully between the Parties as an arm's length transaction. The Parties participated fully in the preparation of this Agreement with the assistance of their respective counsel. In the case of a dispute concerning the interpretation of any provision of this Agreement, the Parties are each deemed to have drafted, chosen, and selected the language, and any doubtful language will not be interpreted or construed against any party.

SECTION 28. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which when executed and delivered shall be an original; however, all such counterparts together shall constitute, but one and the same instrument. Additionally, the Parties acknowledge and agree that the Agreement may be executed by electronic signature, which shall be considered as an original signature for all purposes and shall have the same force and effect as an original signature. Without limitation, "electronic signature" shall include faxed versions of an original signature, electronically scanned and transmitted versions (e.g. via PDF) of an original signature, or signatures created in a digital format.

SECTION 29. E-VERIFY. The Contractor shall comply with and perform all applicable provisions of Section 448.095, *Florida Statutes*. Accordingly, to the extent required by Florida Statute, Contractor shall register with and use the United States Department of Homeland

Security's E-Verify system to verify the work authorization status of all newly hired employees. The District may terminate this Agreement immediately for cause if there is a good faith belief that the Contractor has knowingly violated Section 448.091, *Florida Statutes*. By entering into this Agreement, the Contractor represents that no public employer has terminated a contract with the Contractor under Section 448.095(2)(c), *Florida Statutes*, within the year immediately preceding the date of this Agreement.

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT

_____ _____

Secretary By:_____

Its:_____

TIGHTLINE CONSTRUCTION, INC.

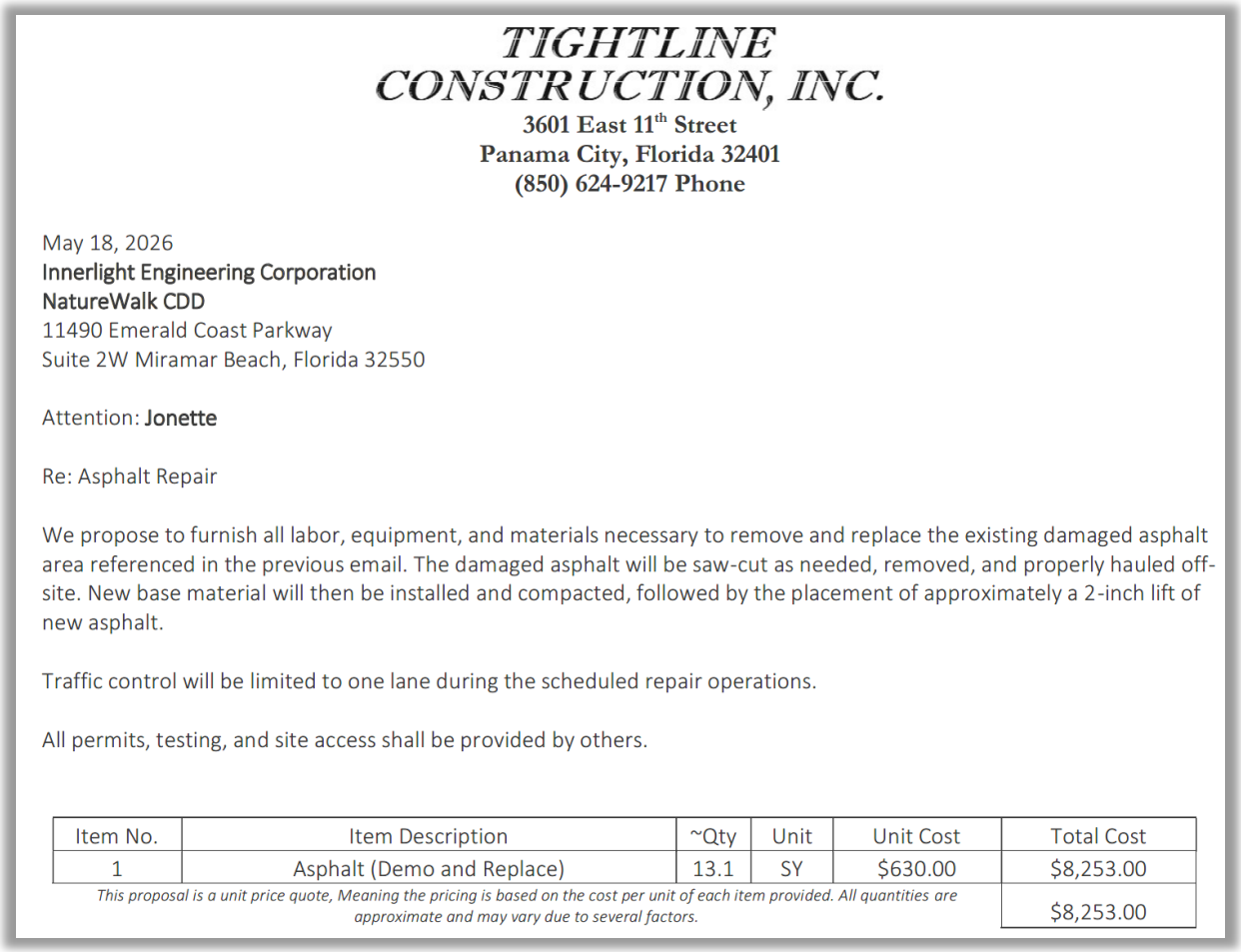
_____ _____

Witness By:_____

Its:_____

Composite Exhibit A: Scope of Services

COMPOSITE EXHIBIT A



TIGHTLINE
CONSTRUCTION, INC.
3601 East 11th Street
Panama City, Florida 32401
(850) 624-9217 Phone

May 18, 2026
Innerlight Engineering Corporation
NatureWalk CDD
11490 Emerald Coast Parkway
Suite 2W Miramar Beach, Florida 32550

Attention: Jonette

Re: Asphalt Repair

We propose to furnish all labor, equipment, and materials necessary to remove and replace the existing damaged asphalt area referenced in the previous email. The damaged asphalt will be saw-cut as needed, removed, and properly hauled off-site. New base material will then be installed and compacted, followed by the placement of approximately a 2-inch lift of new asphalt.

Traffic control will be limited to one lane during the scheduled repair operations.

All permits, testing, and site access shall be provided by others.

Item No.	Item Description	~Qty	Unit	Unit Cost	Total Cost
1	Asphalt (Demo and Replace)	13.1	SY	$630.00	$8,253.00
This proposal is a unit price quote, Meaning the pricing is based on the cost per unit of each item provided. All quantities are approximate and may vary due to several factors.					$8,253.00

Services include Contractor's confirmation that they can meet strength and density requirements listed below. This Agreement includes an additional allowance of not-to-exceed $2,000.00 for appropriate geotechnical testing by a third-party geotechnical testing company to confirm specifications are met. Contractor shall coordinate the testing timeline with that third-party vendor.

- Stabilized Subgrade with a LBR = / > 40 and Compacted to a minimum of 98% per AASHTO T-180.
- Graded Aggregate Base with a LBR =/> 100, Compacted to a minimum of 98% per AASHTO T-180.
- Bituminous Prime Coat between Base and Asphaltic Concrete Paving.

WORK AUTHORIZATION
WITH DISTRICT ENGINEER
FOR PHOTOGRAMMETRY & AERIAL
ORTHORECTIFIED PHOTOGRAPHY

THIS WORK AUTHORIZATION ("**Work Authorization**"), dated _____, 2026, authorizes additional work in accordance with the *Agreement Between the NatureWalk Community Development District and Innerlight Engineering Corporation for Professional Engineering Services* dated April 24, 2017 ("**Agreement**"), by and between:

> **NATUREWALK COMMUNITY DEVELOPMENT DISTRICT**, a local unit of special-purpose government established pursuant to Chapter 190, *Florida Statutes*, and located in Walton County, Florida ("**District**"); and
>
> **INNERLIGHT ENGINEERING CORPORATION,** a Florida Profit Corporation, with an address at 11490 Emerald Coast Parkway, Suite 2W, Miramar Beach, Florida 32550 ("**Engineer**").

SECTION 1. SCOPE OF SERVICES. In addition to the services described in the Agreement, the Engineer shall provide professional engineering and permitting services, as set forth in Engineer's proposal, dated July 8, 2026, and attached hereto as **Exhibit A**, which is incorporated herein by reference, all in accordance with the terms of the Agreement ("**Additional Services**").

SECTION 2. COMPENSATION. It is understood and agreed that the compensation for the Additional Services under this Work Authorization shall be in the total lump sum amount of **$13,050.00** covering Tasks 1-2 as described in **Exhibit A.** Engineer shall invoice the District for completed Additional Service upon completion of each Task for the lump sum amount associated with each Task as reflected in **Exhibit A**.

It is understood and agreed upon that the compensation for the completion of the Additional Services is based upon all materials, labor, and professional services required to perform such Additional Services. Engineer recognizes and acknowledges that the Additional Services concern the renewal of the District's consumptive use permit, which expires December 1, 2026, and agrees that the Additional Services include all professionally reasonable efforts necessary to ensure the District retains the authority granted by the consumptive use permit, including seeking temporary extensions or authorizations if renewal of the consumptive use permit does not occur before December 1, 2026.

SECTION 3. FINAL AGREEMENT. This Work Authorization, together with the Agreement and any Exhibits, Amendments, or other Work Authorizations for the Agreement, represents the entire understanding between the District and the Engineer with regard to the Additional Services and supersedes any previously executed proposal or agreement related to the provision of such services. To the extent of any conflict between the Agreement or this Work Authorization and **Exhibit A** hereto, the Agreement and this Work Authorization shall control.

SECTION 4. ACCEPTANCE. Acceptance of this Work Authorization will authorize the Engineer to complete the Additional Services as outlined herein and is indicated by the signature of the authorized representative of the District and the Engineer in the spaces provided below. Engineer shall promptly commence the aforesaid Additional Services as provided herein and shall perform the same in accordance with the terms and conditions of the Agreement, which, except to the extent expressly altered or changed in this Work Authorization, remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused this Work Authorization to be executed the day and year first above written.

ATTEST**:**	**NATUREWALK COMMUNITY DEVELOPMENT DISTRICT**
_____	_____
Secretary/Assistant Secretary	Chairperson, Board of Supervisors
WITNESS:	**INNERLIGHT ENGINEERING CORPORATION**
_____	_____
Witness	By:_____
	Its:_____

Exhibit A: Scope of Additional Services

Exhibit A

INNERLIGHT ENGINEERING
a PAPE-DAWSON company

11490 Emerald Coast Parkway, Suite 2W
Miramar Beach, Florida 32550
Phone: 850.424.5855

July 8, 2026

Ms. Jonette Coram
Chair
Naturewalk Community Development District
3434 Colwell Ave, Suite 200
Tampa, Florida 33614

Re: **Proposal for Professional Engineering Services**
Naturewalk – Photogrammetry & Aerial Orthorectified Photography
Walton County, Florida

Dear Ms. Coram

On behalf of Innerlight Engineering, please accept this proposal for the aforementioned property. The Specifics are presented below; the term **Consultant** represents Innerlight Engineering, LLC, the term **Client** refers to the Entity as provided in signature block below:

WHEREAS, the Client wishes to engage Consultant for the performance of Professional Engineering Services; and has determined that Consultant is qualified to serve as Consultant for the Client; and

WHEREAS, Client intends to employ Consultant to perform one or more of the following services as specified and contractually obligated through authorized requests in writing:

- Land Surveying
- Land Planning
- Civil Engineering
- General Transportation and Traffic Engineering
- General Consulting
- Entitlements and / or Permitting
- Technical Studies
- Construction Administration
- Construction Observation
- Miscellaneous Tasks Requested by Client and within the Expertise of Innerlight Engineering Corporation, it's Employees and / or Sub-Consultants

WHEREAS, Consultant shall serve as Client's professional representative in each service or project to which this Agreement applies and will give consultation and advice to Client during the performance of his services. **NOW, THEREFORE,** for and in consideration of the mutual covenants herein contained the acts and deeds to be performed by the parties, and the payments by the Client to the Consultant of the sums of money herein specified, it is mutually covenanted and agreed as follows:

Basis of Scope and Understanding

It is the Consultant's understanding that the scope of work will consist of the preparation of an orthorectified aerial photograph as described below for the Naturewalk property. It is our understanding that this photogrammetry will be for the Client's general use and to support the Client's Planning and historical record keeping efforts.

Scope of Services

Task 1: Project Control and Ground Truthing (Task 125) $3,950

The scope of work is anticipated to include the following:

- Pape-Dawson's Geospatial team will establish photo-identifiable control targets within and adjacent to the project site, as needed to support aerial triangulation and orthomosaic production. Control targets may consist of chevrons placed on hard surfaces, bare ground, or other photo-identifiable features.
- Survey crews will mobilize to set and survey the necessary control targets and check points after receipt of written Notice to Proceed, site access, and approval of the control target layout by the Client.

Task 2: Photogrammetry – Aerial Acquisition & Processing (Task 123) $9,100

The scope of work is anticipated to include the following:

- Aerial imagery will be acquired with sufficient overlap and at an appropriate altitude to produce a 2-inch (0.167-foot) ground sample distance orthomosaic over the project limits shown in Exhibit B.
- Upon completion of the project control survey, the Pape-Dawson Geospatial team will mobilize to the project site to acquire aerial imagery covering the project limits. The acquired data will be reviewed for completeness prior to demobilization.
- The imagery will be processed using photogrammetric methods, including aerial triangulation and orthorectification, to generate a seamless orthomosaic of the project area and stormwater facilities included in the area of the scope.

DELIVERABLES

The Orthorectified Aerial Photogrammetry will be delivered in the following formats:

- JPG
- ECW
- TIF
- DWG

ASSUMPTIONS AND LIMITATIONS

- The project units will be US Survey Feet.
- Horizontal and vertical datum will be defined by the Licensed Surveyor responsible for project control (Innerlight Engineering).
- Orthometric elevations will be calculated using Geoid defined by the Licensed Surveyor responsible for project control.
- The orthomosaic will be generated from aerial imagery acquired at 2-inch GSD or better.
- Ground control and independent check points will be set and surveyed as needed to support photogrammetric processing and orthomosaic accuracy.
- Visibility of ground features and planimetric detail is subject to vegetation cover, shadows, standing water, weather, and existing surface conditions.
- This scope includes orthomosaic production only. No planimetric mapping, topographic mapping, contours, surface model generation, or LiDAR products are included unless specifically authorized.
- All areas to be surveyed are assumed to be owned by or accessible through the Client. Access coordination for privately owned lands will be the responsibility of the Client prior to mobilization.
- Pape-Dawson reserves the right to revise project fees if, at any time during the project, there is a change in the project limits, schedule, access conditions, or scope of work.

Notes:

i. If any of the assumptions above prove to be incorrect, additional scope and fee may be required.

ii. At the written request of the Client and after approval of a subsequent written Additional Service Request for the supplemental scope of work, Pape-Dawson can, if authorized, provide the Client with services additional to those scoped herein.

These services can include, but are not limited to the following:

- *Planimetric mapping / feature extraction*
- *Additional orthophotography*
- *Supplemental control or check point surveying*
- *Expanded aerial acquisition outside the limits shown in Exhibit A*
- *Additional processing or deliverables not specifically identified above*

COMPENSATION

It is understood and agreed that the payment of compensation for services under this contract shall be based upon the Professional Services Agreement and the following:

A. **Lump Sum** – The Client agrees to compensate Consultant for services rendered in connection with the Scope of Work outlined above on a lump sum basis individually as outlined in the Tasks above. With monthly progress billings based on the Consultant's estimate of the percent complete.
B. **Hourly Personnel Rates** – The Client agrees to compensate Consultant for services according to the **Exhibit B - Hourly Rate Table. (When Applicable)**
C. **A Retainer in the amount of $ 0** will be due upon authorization to proceed and will be applied to the final invoice for services.

REIMBURSABLE EXPENSES

It is understood and agreed that the payment of compensation for Reimbursable Expenses under this contract shall be based upon the executed Professional Services Agreement. Reimbursable expenses consist of actual expenditures made by the Consultant, its employees, or its consultants in the interest of the Client for the incidental expenses such as expenses of reprographics, postage and handling, courier service, and any other such direct expenses. All direct expenses will be calculated to include a twenty percent (20%) multiplier.

The attached Terms and Conditions set out as Exhibit A are incorporated into this Proposal by reference and become part of the agreement between the Client and Consultant by execution of this document. If the terms of this Proposal are acceptable, please acknowledge such by signing below and returning the executed document to us via e-mail or US Mail for our records. Receipt of the executed Proposal serves as authorization for us to proceed with the work.

INNERLIGHT ENGINEERING, LLC
"Consultant"

X_____
Authorized Signature
By: Josh Smith, P.S.M.
Its: Survey Department Manager
Date: July 8, 2026

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT
"Client"

X_____
Authorized Signature
By: (Print Name): _____
Its: _____
Date: _____

EXHIBIT 'A'

Pape-Dawson Consulting Engineers, LLC

RE: Naturewalk – Photogrammetry & Aerial Orthorectified Photography (the "Project")

TERMS AND CONDITIONS

Pape-Dawson Consulting Engineers, LLC, hereinafter referred to as "Consultant", has agreed to provide Professional Services to **Naturewalk community development district**, hereinafter referred to as "Client," pursuant to the terms set out in a "Proposal Letter Agreement - Scope of Services and Compensation" (the "Proposal") executed by Client and these Terms and Conditions.

ARTICLE 1: SERVICES

Consultant agrees to perform Professional Services (the "Services") in conformance with the descriptions, definitions, terms and conditions as set forth herein and on the Proposal and any Exhibits, rate sheets, and Additional Services Requests subsequently attached hereto or incorporated hereto by reference. This description of Services is intended to be general in nature and is neither a complete description of Consultant's Services nor a limitation on the Services that Consultant is to provide under this Agreement.

ARTICLE 2: PROPOSAL AND ADDITIONAL SERVICES REQUESTS

2.1 These Terms and Conditions, the Proposal and any Exhibits, rate sheets, and Additional Services Requests for this Project are hereby incorporated by reference and are collectively referred to herein as the "Agreement."

2.2 The Proposal, as amended or modified by any Additional Services Requests, shall identify the specific Scope of Services to be performed and the amount and type of compensation for the specific services.

2.3 Client shall authorize and Consultant shall commence work set out in the Proposal and any Additional Services Requests upon Client's execution of the Proposal.

ARTICLE 3: CHANGES

3.1 The Client may at any time, by written Additional Service Request, make changes within the general scope of the Proposal relating to services to be performed for this Project. If such changes cause an increase or decrease in the Consultant's cost of, or time required for, performance of any services, an equitable adjustment shall be made and reflected in a properly executed Amendment.

3.2 The Consultant is not obligated to begin work on a change of scope or deliver that work product until a properly executed Additional Services Request is signed by the Client.

3.3 This Agreement is based on laws and regulations in effect as of the date of execution of this Agreement by Client. Changes after this date to these laws and regulations may be the basis for modifications to Consultant's scope of Services, times of performance, or compensation. In the event that there are modifications and/or additions to legal or regulatory requirements relating to the Services to be performed under this Agreement after the date of execution of this Proposal, the scope of Services, times of performance, and compensation provided for in these Terms and Conditions, the Proposal, and any subsequent Additional Services Requests shall be reflected in an appropriate Additional Services Request.

3.4 Should commencement of the individual tasks or services set out in the Proposal not be initiated within three (3) months of the date of execution of the Proposal by Client, Consultant reserves the right to revise the costs, fees, and scope of work for the tasks or services not yet initiated.

3.5 If after the commencement of work, Consultant's performance of the individual tasks or services is suspended at the instruction of client for a period of three (3) cumulative months, Consultant may at its sole discretion submit to client an invoice for all tasks and services performed prior to suspension, and Client shall pay that invoice within thirty (30) days after receipt. If Client fails to pay the invoice in full within thirty (30) days, Consultant may terminate this Agreement in accordance with the provisions of Article 7.1 herein.

ARTICLE 4: THE TERM

4.1 **Term.** Consultant shall be retained by Client as of the date Client executes the Proposal, Consultant shall complete its Services within a reasonable time, and this Agreement shall remain in effect until the Services have been fully performed or until the Consultant's Services are terminated under provisions of the Agreement.

ARTICLE 5: DUTIES

5.1 **Access.** Client will provide Consultant with access to the Property or to any other site as required by Consultant for performance of the Services.

5.2 **Client furnished Data.** Client shall provide all criteria and full information as to Client's requirements for the Project; designate a person to act with authority on Client's behalf in respect to all aspects of the Project, examine and respond promptly to Consultant's submissions, and give prompt written notice to Consultant whenever he observes or otherwise becomes aware of any defect in the work; and provide any recordings, transcripts, notes, and/or minutes taken during any meetings between Client and Consultant upon request, inclusive of any artificial intelligence-generated documents. If either Client or Consultant intend to record a meeting, the recording party must first notify the other party that the meeting will be recorded, so that the other party may request any such recording or other work product created from the recording.

Client shall also do the following and pay all costs incident thereto: Furnish to Consultant core borings, probings and subsurface exploration, hydrographic surveys, laboratory tests and inspections of samples, materials and equipment and similar data; appropriate professional interpretations of all of the foregoing; environmental assessment and impact statements, and any other information previously made available to the Client, which may be required by Consultant, all of which Consultant may rely upon in performing its services.

Provide such legal, accounting, independent cost estimating and insurance counseling services as may be required for the Project, any auditing service required in respect of constructor(s)' applications for payment, and any inspection services to determine if constructor(s) are performing the work legally.

5.3 **Other Information.** Consultant will rely upon commonly used sources of data, including database searches and agency contacts. Consultant does not warrant the accuracy of the information obtained from those sources and has not been requested to independently verify such information.

5.4 **Indemnity.** The Consultant agrees, to the fullest extent permitted by law, to indemnify and hold the Client harmless for damages and losses arising from the negligent acts, errors or omissions of the Consultant in the performance of the professional services under this Agreement, to the extent that the Consultant is responsible for such damages and losses on a comparative basis of fault and responsibility between the Consultant and the Client. The Consultant is not obligated to indemnify the Client for the Client's own negligence.

Notwithstanding the foregoing, to the fullest extent permitted by law, Consultant shall indemnify and hold the client harmless from and against all claims arising out of or resulting from bodily injury to, or sickness, disease or death of, any employee, agent or representative of Consultant or any of its subcontractors. To the fullest extent permitted by law, Client and Consultant waive against each other, and the other's employees, officers, directors, members, agents, insurers, partners, and consultants or subconsultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to the Project.

5.5 **Ownership of Documents.** All designs, drawings, specifications, documents, and other work products of the Consultant, whether in hard copy or in electronic form, are instruments of service for the Services, whether Services are completed or not. Reuse, change or alteration by the Client or by others acting through or on behalf of the Client of any such instruments or service without the written permission of the Consultant will be at the Client's sole risk. Client agrees to indemnify the Consultant, its officers, partners, employees, and subcontractors from all claims, damages, losses, and costs, including, but not limited to, litigation expenses and attorney's fees, arising out of or related to such unauthorized reuse, change or alteration.

5.6 **Reporting Obligations.** Client has responsibility for complying with all legal reporting obligations. Nothing in the Agreement precludes Consultant from providing any notices or reports that it may be required by law to give to governmental entities.

5.7 **Laboratory Services.** In performing environmental services, Consultant may make use of an independent testing laboratory. Consultant will not, and Client shall not rely upon Consultant to, check the quality or accuracy of the testing laboratory's services.

5.8 **Changed Conditions.** The Client shall rely on the Consultant's judgment as to the continued adequacy of the Agreement in light of occurrences or discoveries that were not originally contemplated by or known to the Consultant, including but not limited to suspension of Consultant's work as set out in Article 3.5 herein. Should Consultant call for contract renegotiation due to such changed conditions, the Consultant shall identify the changed conditions necessitating renegotiation and the Consultant and the Client shall promptly and in good faith enter into renegotiation of this Agreement. If terms cannot be agreed to, the parties agree that either party has the right to terminate the Agreement.

5.9 **Opinions of Cost.** Should Consultant provide any cost opinions, it is understood that those opinions are based on the experience and judgment of Consultant and are merely opinions. Consultant does not warrant that actual costs will not vary from those opinions because, among other things, Consultant has no control over market conditions.

5.10 **Construction Observation.** If construction phase services are included in the basic services, the Consultant shall visit the project at appropriate intervals during construction to become generally familiar with the progress and quality of the contractors' work and to determine if the work is proceeding in general accordance with the Contract Documents. The Client has not retained the Consultant to make detailed inspections or to provide exhaustive or continuous project review and observation services. The Consultant does not guarantee the performance of, and shall have no responsibility for, the acts or omissions of any contractor, subcontractor, supplier or any other entity furnishing materials or performing any work on the project. Consultant shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by Contractor(s) or the safety precautions and programs incident to the work of Contractor(s).

5.11 **Subconsultants.** Consultant may employ such Subconsultants as Consultant deems necessary to assist in the performance or furnishing of the Services, subject to reasonable, timely, and substantive objections by Client.t.

ARTICLE 6: COMPENSATION OF SERVICES

6.1 **Compensation of Services.** Consultant's compensation for services shall be set forth in the Proposal and any subsequent Additional Services Requests.

Compensation. Client agrees to pay Consultant for Professional Services in accordance with the descriptions, definitions, terms and conditions as set forth herein and in the Proposal and any Additional Services Requests, or Amendments subsequently attached hereto or incorporated herein by reference. Expenses directly related to these services, including reproduction, travel, long distance telephone bill, express mail, special deliveries and subcontractor expenses shall include a 10% markup on cost.

Consultant reserves the right to adjust the hourly billing rates set out in the Proposal, Additional Service Requests, and/or Amendments thereto on an annual basis. Consultant shall notify Client of any hourly billing rate adjustments when they go into effect.

Payments. Consultant will invoice Client monthly in accordance with the terms and conditions of this Agreement, the Proposal, and any subsequent Additional Services Requests for Services and reimbursables. Client agrees to promptly pay Consultant at the address or ACH noted in the monthly invoice, the full amount of each such invoice upon receipt. In no event shall Consultant's failure to bill monthly constitute default under the terms and conditions of this Agreement.

6.2 **Sales and Use Tax.** Any State, City and MTA Sales Tax must be collected on Surveying Fees for the establishment of Real Property Boundaries and determining the location of structures or improvements in relation to the boundaries. Charges for prints and reproductions are also subject to a Sales Tax. Client agrees to pay Consultant the applicable Sales Tax on services and said tax is not considered a part of Consultant's compensation for services. In the event subsequent taxes are levied by Federal, State or Local authorities, relating to the services in writing and such modifications as are required shall be made a part of this Agreement.

6.3 **Right to Stop Performance.** If Client does not pay any amount due to Consultant within thirty (30) days after the invoice date, Consultant may, upon three (3) additional days' verbal or written notice to Client, stop performance of the Services until payment of the amount owed has been received.

6.4 **Interest.** Payments due and unpaid to Consultant under the Agreement shall bear interest at the rate of twelve percent (12%) per annum, or lesser if required by law, calculated from the date of the invoice, if the payment is not made within thirty (30) days of the date of the invoice.

6.5 **Attorney's Fees:** In the event Consultants' invoices for services are given to an attorney for collection, or if suit is brought for collection, or if they are collected through probate, bankruptcy, or other judicial proceeding, then Client shall pay Consultant all costs of collection, including the maximum attorney's fees allowed by Law and court costs, in addition to other amounts due..

ARTICLE 7: TERMINATION OF SERVICES

7.1 **Termination.** This Agreement may be terminated without cause at any time prior to completion of Consultant's services, either by Client or by Consultant, upon written notice to the other at the address of record. Upon receipt of written notice from Client to discontinue work, the Consultant shall discontinue work under this Agreement immediately. In the event Client terminates the Agreement based on Client's reasonable opinion the Consultant has failed or refused to prosecute the work efficiently, promptly or with diligence, the Consultant shall have ten (10) days, from the receipt of written notification by Client, to cure such failure to perform in accordance with the terms of this Agreement.

7.2 **Compensation in Event of Termination.** On termination, by either Client or Consultant, Client shall pay Consultant with respect to all contracted services rendered and expenses incurred before termination an amount fixed by applying the Consultant's Standard Hourly Rates, in force at the

time of termination, to all services performed to date, in addition to termination settlement costs the Consultant reasonably incurs relating to commitments which had become firm before the termination.

.

ARTICLE 8: RELATIONSHIP OF PARTIES

8.1 **Independent Contractor**. It is understood that the relationship of Consultant to Client shall be that of an independent contractor. Neither Consultant nor employees of Consultant shall be deemed to be employees of Client.

ARTICLE 9. LIMITATION OF LIABILITY

9.1 **Limitation of Liability**. To the fullest extent permitted by law, the total liability of Consultant and its subconsultants and subcontractors to Client for any and all injuries, claims, losses, expenses, or damages whatsoever from any cause or causes, including, but not limited to, strict liability, breach of contract, breach of warranty, negligence, or errors or omissions (collectively "Claims") shall not exceed the Consultant's total fee. In no event will Consultant, its subconsultants or subcontractors be liable for punitive, special, incidental, or consequential damages.

9.2 **No Certification**. Consultant shall not be required to sign any documents, no matter by whom requested, that would result in Consultant having to certify, guarantee, or warrant the existence of conditions whose existence Consultant cannot ascertain. The Client also agrees not to make resolution of any dispute with Consultant or payments of any amount due to Consultant in any way contingent upon Consultant's signing any such certification.

9.3 **Execution of Documents**. The Consultant shall not be required to execute any documents subsequent to the signing of this Agreement that in any way might, in the sole judgment of the Consultant, increase the Consultant's risk or the availability or cost of its professional or general liability insurance.

9.4 **No Supervision of Contractors.** Consultant shall not at any time supervise, direct, control, or have authority over any contractor work, nor shall Consultant have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety at the Project site, nor for any failure of a contractor to comply with laws and regulations applicable to such contractor's furnishing and performing of its work.

9.5 Consultant shall not be responsible for the acts or omissions of any contractor, subcontractor, or supplier, or of any of their agents or employees or of any other persons (except Consultant's own agents, employees, and Subconsultants) at the Project site or otherwise furnishing or performing any work for the Project.

9.5 PURSUANT TO FLA.STAT.ANN. § 558.0035, AN INDIVIDUAL EMPLOYEE, CONSULTANT OR DESIGN PROFESSIONAL PERFORMING PROFESSIONAL SERVICES OR AGENT MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE.

ARTICLE 10: MISCELLANEOUS

10.1 **Entire Agreement**. The Agreement (including any exhibits) contains the entire agreement between Consultant and Client, and no oral statements or prior written matter shall be of any force or effect. The Agreement may be modified only by a written document executed by both parties.

10.2 **Governing Law**. The Agreement shall be governed by and construed in accordance with the laws of the State of Florida.

10.3 **Venue**. Venue of any action under the Agreement shall be exclusively in the Florida County court where the Services are performed.

10.4 **Severability.** If any provision of the Agreement is held to be illegal, invalid or unenforceable under present or future laws, such provision shall be fully severable and the Agreement shall be construed and enforced as if such illegal, invalid or unenforceable provision is not a part hereof, and the remaining provisions shall remain in full force and effect. In lieu of any illegal, invalid or unenforceable provision, there shall be added automatically as a part of the Agreement, a provision as similar in its terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

10.5 **Construction of Agreement.** The parties acknowledge that each party and, if it so chooses, its counsel have reviewed and revised the Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Agreement or any amendments or exhibits.

10.6 **Successor and Assigns; Third Party Beneficiary.** The Agreement

shall be binding upon Consultant, Client and their respective legal representatives, successors and permitted assigns. Neither Consultant nor Client may assign the Agreement nor any right or obligation under it without the prior written consent of the other party. Nothing in the Agreement restricts Consultant's ability to hire subcontractors in connection with the Services. The Services and any report prepared under this Agreement are for the sole benefit and sole use of Client and are not for the use of any other person. Only Client may rely upon the Agreement and the Services, unless Consultant gives Client prior and specific written approval.

10.7 **Dispute Resolution.** Any claim, dispute or other matter in question arising out of or related to the Agreement of the Services provided thereunder shall be subject to arbitration. Prior to arbitration, the parties shall endeavor to resolve disputes by mediation. Claims, disputes and other matters in question between the parties that are not resolved by mediation shall be decided by arbitration which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect. The demand for arbitration shall be filed in writing with the other Party to this Agreement and with the American Arbitration Association. No arbitration arising out of or relating to the Agreement shall include, by consolidation or joinder or in any other manner, an additional person or entity not a party to this Agreement. The foregoing agreement to arbitration shall be specifically enforceable in accordance with applicable law in any court having jurisdiction. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction.

10.8 **Mediation**: Any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to non-binding mediation as a condition precedent to the institution of legal proceedings by either party. If such matter relates to or is the subject of a lien arising out of the Consultant's services, the Consultant may proceed in accordance with applicable law to comply with the lien notice or filing deadlines prior to resolution of the matter by mediation or other legal proceedings.

Each party agrees to include a similar mediation provision in all agreements with independent contractors and consultants retained for the Project and to require all independent contractors and consultants also to include a similar mediation provision in all agreements with their respective subcontractors, suppliers, and subconsultants, thereby providing for mediation as the initial method for dispute resolution between the parties to all those agreements.

The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the county where the project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

10.9 **No Warranty**. Consultant makes no warranty, either expressed or implied, as to Consultant's findings, recommendations, plans, specifications, or professional advice. Consultant has endeavored to perform its services in accordance with generally accepted standards of practice by recognized professional firms in performing services of a similar nature in

the same locality, under similar circumstances. Client recognizes that neither Consultant nor any of Consultant's subconsultants or subcontractors owes any fiduciary responsibility to Client.

10.10 **Survival of Provisions.** Termination of the Services for any reason whatsoever shall not affect (a) any right or obligation of any party that is accrued or vested prior to such termination, and any provision of the Agreement relating to any such right or obligation shall be deemed to survive the termination of the Services or (b) any continuing obligation, liability or responsibility of Consultant and of Client which would otherwise Survive termination of the Services.

10.11 **NON-SOLICITATION**. During the term of this Agreement and for a period of two (2) years thereafter, neither Client, nor its affiliates, nor any of their respective employees, agents, owners, officers, members, shareholders, or directors ("Client Entities") shall directly, or indirectly through another person or entity: (i) induce or attempt to induce any employee, agent, owner, officer, member, shareholder, director, client, customer, vendor or supplier, or other business relation of Consultant ("Business Relation") to leave the employ of, or terminate its contract, affiliation, or other business relationship with Consultant, (ii) hire or recruit away any Business Relation of Consultant, within two (2) years after such person ceased to be affiliated with Consultant, (iii) induce or attempt to induce any Business Relation of Company to cease doing business with Consultant or its other Business Relations, or (iv) otherwise interfere with, sabotage, or otherwise undermine any of the foregoing relationships.

EXHIBIT 'B'



WORK AUTHORIZATION
WITH DISTRICT ENGINEER
FOR CONSUMPTIVE USE PERMIT RENEWAL

THIS WORK AUTHORIZATION ("**Work Authorization**"), dated _____, 2026, authorizes additional work in accordance with the *Agreement Between the NatureWalk Community Development District and Innerlight Engineering Corporation for Professional Engineering Services* dated April 24, 2017 ("**Agreement**"), by and between:

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT, a local unit of special-purpose government established pursuant to Chapter 190, *Florida Statutes*, and located in Walton County, Florida ("**District**"); and

INNERLIGHT ENGINEERING CORPORATION, a Florida Profit Corporation, with an address at 11490 Emerald Coast Parkway, Suite 2W, Miramar Beach, Florida 32550 ("**Engineer**").

SECTION 1. SCOPE OF SERVICES. In addition to the services described in the Agreement, the Engineer shall provide professional engineering and permitting services, as set forth in Engineer's proposal, dated July 2, 2026, and attached hereto as **Exhibit A**, which is incorporated herein by reference, all in accordance with the terms of the Agreement ("**Additional Services**").

SECTION 2. COMPENSATION. It is understood and agreed that the compensation for the Additional Services under this Work Authorization shall be in the total lump sum amount of **$30,100.00** covering Tasks 1-6 as described in Exhibit A**.** Engineer shall invoice the District for completed Additional Service upon completion of each Task for the lump sum amount associated with each Task as reflected in Exhibit A.

It is understood and agreed upon that the compensation for the completion of the Additional Services is based upon all materials, labor, and professional services required to perform such Additional Services. Engineer recognizes and acknowledges that the Additional Services concern the renewal of the District's consumptive use permit, which expires December 1, 2026, and agrees that the Additional Services include all professionally reasonable efforts necessary to ensure the District retains the authority granted by the consumptive use permit, including seeking temporary extensions or authorizations if renewal of the consumptive use permit does not occur before December 1, 2026.

SECTION 3. FINAL AGREEMENT. This Work Authorization, together with the Agreement and any Exhibits, Amendments, or other Work Authorizations for the Agreement, represents the entire understanding between the District and the Engineer with regard to the Additional Services and supersedes any previously executed proposal or agreement related to the provision of such services. To the extent of any conflict between the Agreement or this Work Authorization and Exhibit A hereto, the Agreement and this Work Authorization shall control.

SECTION 4. ACCEPTANCE. Acceptance of this Work Authorization will authorize the Engineer to complete the Additional Services as outlined herein and is indicated by the signature of the authorized representative of the District and the Engineer in the spaces provided below. Engineer shall promptly commence the aforesaid Additional Services as provided herein and shall perform the same in accordance with the terms and conditions of the Agreement, which, except to the extent expressly altered or changed in this Work Authorization, remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused this Work Authorization to be executed the day and year first above written.

ATTEST**:**	**NATUREWALK COMMUNITY DEVELOPMENT DISTRICT**
_____	_____
Secretary/Assistant Secretary	Chairperson, Board of Supervisors
WITNESS:	**INNERLIGHT ENGINEERING CORPORATION**
_____	_____
Witness	By:_____
	Its:_____

Exhibit A: Scope of Additional Services

Exhibit A

INNERLIGHT ENGINEERING
a PAPE–DAWSON company

11490 Emerald Coast Parkway, Suite 2W
Miramar Beach, Florida 32550
Phone: 850.424.5855

July 2, 2026

Ms. Jonette Coram
Naturewalk Community Development District
3434 Colewell Avenue
Suite 200
Tampa, FL 33614

Re: **Proposal for Professional Engineering Services**
Naturewalk CDD – Consumptive Use Permit Renewal
Walton County, Florida

Dear Ms. Coram,

On behalf of Innerlight Engineering, please accept this proposal for the aforementioned property. The Specifics are presented below; the term **Consultant** represents Innerlight Engineering, LLC, the term **Client** refers to the Entity as provided in signature block below:

WHEREAS, the Client wishes to engage Consultant for the performance of Professional Engineering Services; and has determined that Consultant is qualified to serve as Consultant for the Client; and

WHEREAS, Client intends to employ Consultant to perform one or more of the following services as specified and contractually obligated through authorized requests in writing:

- Land Surveying
- Land Planning
- Civil Engineering
- General Transportation and Traffic Engineering
- General Consulting
- Entitlements and / or Permitting
- Technical Studies
- Construction Administration
- Construction Observation
- Miscellaneous Tasks Requested by Client and within the Expertise of Innerlight Engineering Corporation, it's Employees and / or Sub-Consultants

WHEREAS, Consultant shall serve as Client's professional representative in each service or project to which this Agreement applies and will give consultation and advice to Client during the performance of his services. **NOW, THEREFORE,** for and in consideration of the mutual covenants herein contained the acts and deeds to be performed by the parties, and the payments by the Client to the Consultant of the sums of money herein specified, it is mutually covenanted and agreed as follows:

Basis of Scope and Understanding

The Owner requires professional engineering services to prepare, coordinate, and obtain renewal of its existing Consumptive Use Permit (CUP) issued by the Northwest Florida Water Management District (NWFWMD). The renewal will ensure the continued legal withdrawal of groundwater and/or surface water necessary to support the facility while demonstrating continued compliance with applicable District permitting criteria.

Our services will include review of the existing permit, evaluation of historical water use, preparation of supporting technical documentation, coordination with NWFWMD staff, response to requests for additional information (RAIs), and assistance through issuance of the renewed permit.

Scope of Services

Task 1: Project Initiation & Existing Permit Review — $3,600

The scope of work is anticipated to include:

- Review of Existing Consumptive Use Permit
- Review Permit Conditions
- Review Authorized Withdrawal Quantities
- Review Existing Withdrawal Facilities
- Review Compliance History
- Review of Previous Technical Reports

Task 2: Data Collection & Water Use Evaluation — $5,750

The scope of work will include efforts to collect and evaluate available relevant information anticipated to include the following:

- Data Collection
    - Monthly Pumping Records
    - Annual Water Use Summaries
    - Historical Meter Records
    - Production Well Information
    - Pump Capacities
    - Pump Operating Hours
    - Existing Water Conservation Measures
    - Existing Monitoring Wells
    - Groundwater Level Information
    - Irrigation Acreage
- Evaluation
    - Historical Demand Trends
    - Maximum Daily Demand
    - Average Daily Demand
    - Annual Average Withdrawals
    - Peak Month Withdrawals
    - Permit Utilization
    - Water Use Efficiency

Task 3: Technical Engineering Evaluation $7,500

The scope of work is anticipated to include efforts to prepare engineering analyses necessary to support permit renewal such as:

- Water Demand Projections
- Existing Source Capacity Evaluation
- Well Field Evaluation
- Pumping Capacity Review
- Source Redundancy Evaluation
- Water Conservation Evaluation
- Reasonable Beneficial Use Analysis
- Permit Compliance Evaluation

Task 4: Permit Renewal Application Preparation $6,250

The scope of work will include preparation of the NWFWMD Consumptive Use Permit Renewal Application. The specific scope of work is anticipated to include:

- NWFWMD Application Forms
- Technical Narratives
- Water Demand Calculations
- Water Conservation Documentation
- Engineering Exhibits
- Well Inventory
- Location Maps
- Facility Maps
- Withdrawal Point Mapping
- Supporting Figures
- Supporting Tables

Task 5: Agency Coordination $5,000

The scope of work will include necessary Agency coordination anticipated to include the following:

- Coordinate with NWFWMD Staff
- Attend One Pre-Application Meeting
- Respond to Requests for Additional Information (RAIs)
    - Assumes up to two rounds of RAI responses
- Prepare Supplemental Technical Information
- Prepare Revised Application Documents
- Telephone Conferences
- Agency Coordination Meetings

Task 6: Permit Issuance Support **$2,000**

The scope of Work is anticipated to include the following:

- Review Draft Permit
- Review Permit Conditions
- Review Monitoring Requirements
- Review Reporting Requirements
- Coordinate Owner Comments
- Assist with Final Permit Acceptance

ASSUMPTIONS AND LIMITATIONS

- No task other than specifically referenced above is included in this proposal.
- Owner will provide the following information as available:
    - Existing Permit Documents
    - Historical Pumping Records
    - Meter Data
    - Existing Engineering Reports
    - Previous Hydrogeologic Reports
    - Water Quality Data
    - Existing Monitoring Reports
    - Site Access
    - Application Fees
- Existing withdrawal facilities remain unchanged.
- No increase in permitted allocation is requested.
- No new production wells are proposed.
- Existing permit compliance has been maintained.
- Existing hydrogeologic information is sufficient to support renewal.
- Assumes irrigation demand / allowable withdrawal hydrologic modeling is not required or will be provided by the NWFWMD.
- Two rounds of NWFWMD comments or fewer.
- No administrative hearing or permit challenge.
    - No groundwater model updates are required.

Consultant does not control regulatory agency decisions and cannot guarantee approval of any application

If any of the above assumptions materially change, additional services may be required and will be authorized separately.

COMPENSATION

It is understood and agreed that the payment of compensation for services under this contract shall be based upon the Professional Services Agreement and the following:

A. Lump Sum – The Client agrees to compensate Consultant for services rendered in connection with the Scope of Work outlined above on a lump sum basis individually as outlined in the Tasks above. With monthly progress billings based on the Consultant's estimate of the percent complete.

B. ~~Hourly Personnel Rates – The Client agrees to compensate Consultant for services according to the Exhibit B - Hourly Rate Table.~~ Not Applicable

C. A Retainer in the amount of $ 0 will be due upon authorization to proceed and will be applied to the final invoice for services.

REIMBURSABLE EXPENSES

It is understood and agreed that the payment of compensation for Reimbursable Expenses under this contract shall be based upon the executed Professional Services Agreement. Reimbursable expenses consist of actual expenditures made by the Consultant, its employees, or its consultants in the interest of the Client for the incidental expenses such as expenses of reprographics, postage and handling, courier service, and any other such direct expenses. All direct expenses will be calculated to include a twenty percent (10%) multiplier.

The attached Terms and Conditions set out as Exhibit A are incorporated into this Proposal by reference and become part of the agreement between the Client and Consultant by execution of this document. If the terms of this Proposal are acceptable, please acknowledge such by signing below and returning the executed document to us via e-mail or US Mail for our records. Receipt of the executed Proposal serves as authorization for us to proceed with the work.

INNERLIGHT ENGINEERING, LLC
"Consultant"

X_____

Authorized Signature

By: James A. Martelli, PE

Its: Vice President, Land Development

Date: July 2, 2026

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT
"Client"

X_____

Authorized Signature

By: (Print Name): _____

Its: _____

Date: _____

INNERLIGHT ENGINEERING
a PAPE–DAWSON company

11490 Emerald Coast Parkway, Suite 2W
Miramar Beach, Florida 32550
Phone: 850.424.5855

July 2, 2026

Ms. Jonette Coram
Naturewalk Community Development District
3434 Colewell Avenue
Suite 200
Tampa, FL 33614

Re: **Proposal for Professional Engineering Services**
Naturewalk CDD – Consumptive Use Permit Renewal
Walton County, Florida

Dear Ms. Coram,

On behalf of Innerlight Engineering, please accept this proposal for the aforementioned property. The Specifics are presented below; the term **Consultant** represents Innerlight Engineering, LLC, the term **Client** refers to the Entity as provided in signature block below:

WHEREAS, the Client wishes to engage Consultant for the performance of Professional Engineering Services; and has determined that Consultant is qualified to serve as Consultant for the Client; and

WHEREAS, Client intends to employ Consultant to perform one or more of the following services as specified and contractually obligated through authorized requests in writing:

- Land Surveying
- Land Planning
- Civil Engineering
- General Transportation and Traffic Engineering
- General Consulting
- Entitlements and / or Permitting
- Technical Studies
- Construction Administration
- Construction Observation
- Miscellaneous Tasks Requested by Client and within the Expertise of Innerlight Engineering Corporation, it's Employees and / or Sub-Consultants

WHEREAS, Consultant shall serve as Client's professional representative in each service or project to which this Agreement applies and will give consultation and advice to Client during the performance of his services. **Now, THEREFORE,** for and in consideration of the mutual covenants herein contained the acts and deeds to be performed by the parties, and the payments by the Client to the Consultant of the sums of money herein specified, it is mutually covenanted and agreed as follows:

Basis of Scope and Understanding

The Owner requires professional engineering services to prepare, coordinate, and obtain renewal of its existing Consumptive Use Permit (CUP) issued by the Northwest Florida Water Management District (NWFWMD). The renewal will ensure the continued legal withdrawal of groundwater and/or surface water necessary to support the facility while demonstrating continued compliance with applicable District permitting criteria.

Our services will include review of the existing permit, evaluation of historical water use, preparation of supporting technical documentation, coordination with NWFWMD staff, response to requests for additional information (RAIs), and assistance through issuance of the renewed permit.

Scope of Services

Task 1: Project Initiation & Existing Permit Review $3,600

The scope of work is anticipated to include:

- Review of Existing Consumptive Use Permit
- Review Permit Conditions
- Review Authorized Withdrawal Quantities
- Review Existing Withdrawal Facilities
- Review Compliance History
- Review of Previous Technical Reports

Task 2: Data Collection & Water Use Evaluation $5,750

The scope of work will include efforts to collect and evaluate available relevant information anticipated to include the following:

- Data Collection
    - Monthly Pumping Records
    - Annual Water Use Summaries
    - Historical Meter Records
    - Production Well Information
    - Pump Capacities
    - Pump Operating Hours
    - Existing Water Conservation Measures
    - Existing Monitoring Wells
    - Groundwater Level Information
    - Irrigation Acreage
- Evaluation
    - Historical Demand Trends
    - Maximum Daily Demand
    - Average Daily Demand
    - Annual Average Withdrawals
    - Peak Month Withdrawals
    - Permit Utilization
    - Water Use Efficiency

Task 3: Technical Engineering Evaluation $7,500

The scope of work is anticipated to include efforts to prepare engineering analyses necessary to support permit renewal such as:

- Water Demand Projections
- Existing Source Capacity Evaluation
- Well Field Evaluation
- Pumping Capacity Review
- Source Redundancy Evaluation
- Water Conservation Evaluation
- Reasonable Beneficial Use Analysis
- Permit Compliance Evaluation

Task 4: Permit Renewal Application Preparation $6,250

The scope of work will include preparation of the NWFWMD Consumptive Use Permit Renewal Application. The specific scope of work is anticipated to include:

- NWFWMD Application Forms
- Technical Narratives
- Water Demand Calculations
- Water Conservation Documentation
- Engineering Exhibits
- Well Inventory
- Location Maps
- Facility Maps
- Withdrawal Point Mapping
- Supporting Figures
- Supporting Tables

Task 5: Agency Coordination $5,000

The scope of work will include necessary Agency coordination anticipated to include the following:

- Coordinate with NWFWMD Staff
- Attend One Pre-Application Meeting
- Respond to Requests for Additional Information (RAIs)
    - Assumes up to two rounds of RAI responses
- Prepare Supplemental Technical Information
- Prepare Revised Application Documents
- Telephone Conferences
- Agency Coordination Meetings

Task 6: Permit Issuance Support $2,000

The scope of Work is anticipated to include the following:

- Review Draft Permit
- Review Permit Conditions
- Review Monitoring Requirements
- Review Reporting Requirements
- Coordinate Owner Comments
- Assist with Final Permit Acceptance

ASSUMPTIONS AND LIMITATIONS

- No task other than specifically referenced above is included in this proposal.
- Owner will provide the following information as available:
    - Existing Permit Documents
    - Historical Pumping Records
    - Meter Data
    - Existing Engineering Reports
    - Previous Hydrogeologic Reports
    - Water Quality Data
    - Existing Monitoring Reports
    - Site Access
    - Application Fees
- Existing withdrawal facilities remain unchanged.
- No increase in permitted allocation is requested.
- No new production wells are proposed.
- Existing permit compliance has been maintained.
- Existing hydrogeologic information is sufficient to support renewal.
- Assumes irrigation demand / allowable withdrawal hydrologic modeling is not required or will be provided by the NWFWMD.
- Two rounds of NWFWMD comments or fewer.
- No administrative hearing or permit challenge.
    - No groundwater model updates are required.

Consultant does not control regulatory agency decisions and cannot guarantee approval of any application

If any of the above assumptions materially change, additional services may be required and will be authorized separately.

COMPENSATION

It is understood and agreed that the payment of compensation for services under this contract shall be based upon the Professional Services Agreement and the following:

A. Lump Sum – The Client agrees to compensate Consultant for services rendered in connection with the Scope of Work outlined above on a lump sum basis individually as outlined in the Tasks above. With monthly progress billings based on the Consultant's estimate of the percent complete.

B. ~~Hourly Personnel Rates – The Client agrees to compensate Consultant for services according to the Exhibit B - Hourly Rate Table.~~ Not Applicable

C. A Retainer in the amount of $ 0 will be due upon authorization to proceed and will be applied to the final invoice for services.

REIMBURSABLE EXPENSES

It is understood and agreed that the payment of compensation for Reimbursable Expenses under this contract shall be based upon the executed Professional Services Agreement. Reimbursable expenses consist of actual expenditures made by the Consultant, its employees, or its consultants in the interest of the Client for the incidental expenses such as expenses of reprographics, postage and handling, courier service, and any other such direct expenses. All direct expenses will be calculated to include a twenty percent (10%) multiplier.

The attached Terms and Conditions set out as Exhibit A are incorporated into this Proposal by reference and become part of the agreement between the Client and Consultant by execution of this document. If the terms of this Proposal are acceptable, please acknowledge such by signing below and returning the executed document to us via e-mail or US Mail for our records. Receipt of the executed Proposal serves as authorization for us to proceed with the work.

INNERLIGHT ENGINEERING, LLC
"Consultant"

X_____

Authorized Signature

By: James A. Martelli, PE

Its: Vice President, Land Development

Date: July 2, 2026

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT
"Client"

X_____

Authorized Signature

By: (Print Name): _____

Its: _____

Date: _____

EXHIBIT 'A'

Pape-Dawson Consulting Engineers, LLC

RE: Naturewalk CDD – Consumptive Use Permit Renewal (the "Project")

TERMS AND CONDITIONS

Pape-Dawson Consulting Engineers, LLC, hereinafter referred to as "Consultant", has agreed to provide Professional Services to Naturewalk Community Development District, hereinafter referred to as "Client," pursuant to the terms set out in a "Proposal Letter Agreement - Scope of Services and Compensation" (the "Proposal") executed by Client and these Terms and Conditions.

ARTICLE 1: SERVICES

Consultant agrees to perform Professional Services (the "Services") in conformance with the descriptions, definitions, terms and conditions as set forth herein and on the Proposal and any Exhibits, rate sheets, and Additional Services Requests subsequently attached hereto or incorporated hereto by reference. This description of Services is intended to be general in nature and is neither a complete description of Consultant's Services nor a limitation on the Services that Consultant is to provide under this Agreement.

ARTICLE 2: PROPOSAL AND ADDITIONAL SERVICES REQUESTS

2.1 These Terms and Conditions, the Proposal and any Exhibits, rate sheets, and Additional Services Requests for this Project are hereby incorporated by reference and are collectively referred to herein as the "Agreement."

2.2 The Proposal, as amended or modified by any Additional Services Requests, shall identify the specific Scope of Services to be performed and the amount and type of compensation for the specific services.

2.3 Client shall authorize and Consultant shall commence work set out in the Proposal and any Additional Services Requests upon Client's execution of the Proposal.

ARTICLE 3: CHANGES

3.1 The Client may at any time, by written Additional Service Request, make changes within the general scope of the Proposal relating to services to be performed for this Project. If such changes cause an increase or decrease in the Consultant's cost of, or time required for, performance of any services, an equitable adjustment shall be made and reflected in a properly executed Amendment.

3.2 The Consultant is not obligated to begin work on a change of scope or deliver that work product until a properly executed Additional Services Request is signed by the Client.

3.3 This Agreement is based on laws and regulations in effect as of the date of execution of this Agreement by Client. Changes after this date to these laws and regulations may be the basis for modifications to Consultant's scope of Services, times of performance, or compensation. In the event that there are modifications and/or additions to legal or regulatory requirements relating to the Services to be performed under this Agreement after the date of execution of this Proposal, the scope of Services, times of performance, and compensation provided for in these Terms and Conditions, the Proposal, and any subsequent Additional Services Requests shall be reflected in an appropriate Additional Services Request.

3.4 Should commencement of the individual tasks or services set out in the Proposal not be initiated within three (3) months of the date of execution of the Proposal by Client, Consultant reserves the right to revise the costs, fees, and scope of work for the tasks or services not yet initiated.

3.5 If after the commencement of work, Consultant's performance of the individual tasks or services is suspended at the instruction of client for a period of three (3) cumulative months, Consultant may at its sole discretion submit to client an invoice for all tasks and services performed prior to suspension, and Client shall pay that invoice within thirty (30) days after receipt. If Client fails to pay the invoice in full within thirty (30) days, Consultant may terminate this Agreement in accordance with the provisions of Article 7.1 herein.

ARTICLE 4: THE TERM

4.1 **Term.** Consultant shall be retained by Client as of the date Client executes the Proposal, Consultant shall complete its Services within a reasonable time, and this Agreement shall remain in effect until the Services have been fully performed or until the Consultant's Services are terminated under provisions of the Agreement.

ARTICLE 5: DUTIES

5.1 **Access.** Client will provide Consultant with access to the Property or to any other site as required by Consultant for performance of the Services.

5.2 **Client furnished Data.** Client shall provide all criteria and full information as to Client's requirements for the Project; designate a person to act with authority on Client's behalf in respect to all aspects of the Project, examine and respond promptly to Consultant's submissions, and give prompt written notice to Consultant whenever he observes or otherwise becomes aware of any defect in the work; and provide any recordings, transcripts, notes, and/or minutes taken during any meetings between Client and Consultant upon request, inclusive of any artificial intelligence-generated documents. If either Client or Consultant intend to record a meeting, the recording party must first notify the other party that the meeting will be recorded, so that the other party may request any such recording or other work product created from the recording.

Client shall also do the following and pay all costs incident thereto: Furnish to Consultant core borings, probings and subsurface exploration, hydrographic surveys, laboratory tests and inspections of samples, materials and equipment and similar data; appropriate professional interpretations of all of the foregoing; environmental assessment and impact statements, and any other information previously made available to the Client, which may be required by Consultant, all of which Consultant may rely upon in performing its services.

Provide such legal, accounting, independent cost estimating and insurance counseling services as may be required for the Project, any auditing service required in respect of constructor(s)' applications for payment, and any inspection services to determine if constructor(s) are performing the work legally.

5.3 **Other Information.** Consultant will rely upon commonly used sources of data, including database searches and agency contacts. Consultant does not warrant the accuracy of the information obtained from those sources and has not been requested to independently verify such information.

5.4 **Indemnity.** The Consultant agrees, to the fullest extent permitted by law, to indemnify and hold the Client harmless for damages and losses arising from the negligent acts, errors or omissions of the Consultant in the performance of the professional services under this Agreement, to the extent that the Consultant is responsible for such damages and losses on a comparative basis of fault and responsibility between the Consultant and the Client. The Consultant is not obligated to indemnify the Client for the Client's own negligence.

Notwithstanding the foregoing, to the fullest extent permitted by law, Consultant shall indemnify and hold the client harmless from and against all claims arising out of or resulting from bodily injury to, or sickness, disease or death of, any employee, agent or representative of Consultant or any of its subcontractors. To the fullest extent permitted by law, Client and Consultant waive against each other, and the other's employees, officers, directors, members, agents, insurers, partners, and consultants or subconsultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to the Project.

5.5 **Ownership of Documents.** All designs, drawings, specifications, documents, and other work products of the Consultant, whether in hard copy or in electronic form, are instruments of service for the Services, whether Services are completed or not. Reuse, change or alteration by the Client or by others acting through or on behalf of the Client of any such instruments or service without the written permission of the Consultant will be at the Client's sole risk. Client agrees to indemnify the Consultant, its officers, partners, employees, and subcontractors from all claims, damages, losses, and costs, including, but not limited to, litigation expenses and attorney's fees, arising out of or related to such unauthorized reuse, change or alteration.

5.6 **Reporting Obligations.** Client has responsibility for complying with all legal reporting obligations. Nothing in the Agreement precludes Consultant from providing any notices or reports that it may be required by law to give to governmental entities.

5.7 **Laboratory Services.** In performing environmental services, Consultant may make use of an independent testing laboratory. Consultant will not, and Client shall not rely upon Consultant to, check the quality or accuracy of the testing laboratory's services.

5.8 **Changed Conditions.** The Client shall rely on the Consultant's judgment as to the continued adequacy of the Agreement in light of occurrences or discoveries that were not originally contemplated by or known to the Consultant, including but not limited to suspension of Consultant's work as set out in Article 3.5 herein. Should Consultant call for contract renegotiation due to such changed conditions, the Consultant shall identify the changed conditions necessitating renegotiation and the Consultant and the Client shall promptly and in good faith enter into renegotiation of this Agreement. If terms cannot be agreed to, the parties agree that either party has the right to terminate the Agreement.

5.9 **Opinions of Cost.** Should Consultant provide any cost opinions, it is understood that those opinions are based on the experience and judgment of Consultant and are merely opinions. Consultant does not warrant that actual costs will not vary from those opinions because, among other things, Consultant has no control over market conditions.

5.10 **Construction Observation.** If construction phase services are included in the basic services, the Consultant shall visit the project at appropriate intervals during construction to become generally familiar with the progress and quality of the contractors' work and to determine if the work is proceeding in general accordance with the Contract Documents. The Client has not retained the Consultant to make detailed inspections or to provide exhaustive or continuous project review and observation services. The Consultant does not guarantee the performance of, and shall have no responsibility for, the acts or omissions of any contractor, subcontractor, supplier or any other entity furnishing materials or performing any work on the project. Consultant shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by Contractor(s) or the safety precautions and programs incident to the work of Contractor(s).

5.11 **Subconsultants.** Consultant may employ such Subconsultants as Consultant deems necessary to assist in the performance or furnishing of the Services, subject to reasonable, timely, and substantive objections by Client.t.

ARTICLE 6: COMPENSATION OF SERVICES

6.1 **Compensation of Services.** Consultant's compensation for services shall be set forth in the Proposal and any subsequent Additional Services Requests.

Compensation. Client agrees to pay Consultant for Professional Services in accordance with the descriptions, definitions, terms and conditions as set forth herein and in the Proposal and any Additional Services Requests, or Amendments subsequently attached hereto or incorporated herein by reference. Expenses directly related to these services, including reproduction, travel, long distance telephone bill, express mail, special deliveries and subcontractor expenses shall include a 10% markup on cost.

Consultant reserves the right to adjust the hourly billing rates set out in the Proposal, Additional Service Requests, and/or Amendments thereto on an annual basis. Consultant shall notify Client of any hourly billing rate adjustments when they go into effect.

Payments. Consultant will invoice Client monthly in accordance with the terms and conditions of this Agreement, the Proposal, and any subsequent Additional Services Requests for Services and reimbursables. Client agrees to promptly pay Consultant at the address or ACH noted in the monthly invoice, the full amount of each such invoice upon receipt. In no event shall Consultant's failure to bill monthly constitute default under the terms and conditions of this Agreement.

6.2 **Sales and Use Tax.** Any State, City and MTA Sales Tax must be collected on Surveying Fees for the establishment of Real Property Boundaries and determining the location of structures or improvements in relation to the boundaries. Charges for prints and reproductions are also subject to a Sales Tax. Client agrees to pay Consultant the applicable Sales Tax on services and said tax is not considered a part of Consultant's compensation for services. In the event subsequent taxes are levied by Federal, State or Local authorities, relating to the services in writing and such modifications as are required shall be made a part of this Agreement.

6.3 **Right to Stop Performance.** If Client does not pay any amount due to Consultant within thirty (30) days after the invoice date, Consultant may, upon three (3) additional days' verbal or written notice to Client, stop performance of the Services until payment of the amount owed has been received.

6.4 **Interest.** Payments due and unpaid to Consultant under the Agreement shall bear interest at the rate of twelve percent (12%) per annum, or lesser if required by law, calculated from the date of the invoice, if the payment is not made within thirty (30) days of the date of the invoice.

6.5 **Attorney's Fees:** In the event Consultants' invoices for services are given to an attorney for collection, or if suit is brought for collection, or if they are collected through probate, bankruptcy, or other judicial proceeding, then Client shall pay Consultant all costs of collection, including the maximum attorney's fees allowed by Law and court costs, in addition to other amounts due..

ARTICLE 7: TERMINATION OF SERVICES

7.1 **Termination**. This Agreement may be terminated without cause at any time prior to completion of Consultant's services, either by Client or by Consultant, upon written notice to the other at the address of record. Upon receipt of written notice from Client to discontinue work, the Consultant shall discontinue work under this Agreement immediately. In the event Client terminates the Agreement based on Client's reasonable opinion the Consultant has failed or refused to prosecute the work efficiently, promptly or with diligence, the Consultant shall have ten (10) days, from the receipt of written notification by Client, to cure such failure to perform in accordance with the terms of this Agreement.

7.2 **Compensation in Event of Termination**. On termination, by either Client or Consultant, Client shall pay Consultant with respect to all contracted services rendered and expenses incurred before termination an amount fixed by applying the Consultant's Standard Hourly Rates, in force at the

time of termination, to all services performed to date, in addition to termination settlement costs the Consultant reasonably incurs relating to commitments which had become firm before the termination.

.

ARTICLE 8: RELATIONSHIP OF PARTIES

8.1 Independent Contractor: It is understood that the relationship of Consultant to Client shall be that of an independent contractor. Neither Consultant nor employees of Consultant shall be deemed to be employees of Client.

ARTICLE 9. LIMITATION OF LIABILITY

9.1 Limitation of Liability. To the fullest extent permitted by law, the total liability of Consultant and its subconsultants and subcontractors to Client for any and all injuries, claims, losses, expenses, or damages whatsoever from any cause or causes, including, but not limited to, strict liability, breach of contract, breach of warranty, negligence, or errors or omissions (collectively "Claims") shall not exceed the Consultant's total fee. In no event will Consultant, its subconsultants or subcontractors be liable for punitive, special, incidental, or consequential damages.

9.2 No Certification. Consultant shall not be required to sign any documents, no matter by whom requested, that would result in Consultant having to certify, guarantee, or warrant the existence of conditions whose existence Consultant cannot ascertain. The Client also agrees not to make resolution of any dispute with Consultant or payments of any amount due to Consultant in any way contingent upon Consultant's signing any such certification.

9.3 Execution of Documents. The Consultant shall not be required to execute any documents subsequent to the signing of this Agreement that in any way might, in the sole judgment of the Consultant, increase the Consultant's risk or the availability or cost of its professional or general liability insurance.

9.4 No Supervision of Contractors. Consultant shall not at any time supervise, direct, control, or have authority over any contractor work, nor shall Consultant have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety at the Project site, nor for any failure of a contractor to comply with laws and regulations applicable to such contractor's furnishing and performing of its work.

9.5 Consultant shall not be responsible for the acts or omissions of any contractor, subcontractor, or supplier, or of any of their agents or employees or of any other persons (except Consultant's own agents, employees, and Subconsultants) at the Project site or otherwise furnishing or performing any work for the Project.

9.5 PURSUANT TO FLA.STAT.ANN. § 558.0035, AN INDIVIDUAL EMPLOYEE, CONSULTANT OR DESIGN PROFESSIONAL PERFORMING PROFESSIONAL SERVICES OR AGENT MAY NOT BE HELD INIVIDUALLY LIABLE FOR NEGLIGENCE.

ARTICLE 10: MISCELLANEOUS

10.1 Entire Agreement. The Agreement (including any exhibits) contains the entire agreement between Consultant and Client, and no oral statements or prior written matter shall be of any force or effect. The Agreement may be modified only by a written document executed by both parties.

10.2 Governing Law. The Agreement shall be governed by and construed in accordance with the laws of the State of Florida.

10.3 Venue. Venue of any action under the Agreement shall be exclusively in the Florida County court where the Services are performed.

10.4 Severability. If any provision of the Agreement is held to be illegal, invalid or unenforceable under present or future laws, such provision shall be fully severable and the Agreement shall be construed and enforced as if such illegal, invalid or unenforceable provision is not a part hereof, and the remaining provisions shall remain in full force and effect. In lieu of any illegal, invalid or unenforceable provision, there shall be added automatically as a part of the Agreement, a provision as similar in its terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

10.5 Construction of Agreement. The parties acknowledge that each party and, if it so chooses, its counsel have reviewed and revised the Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Agreement or any amendments or exhibits.

10.6 Successor and Assigns: Third Party Beneficiary. The Agreement

shall be binding upon Consultant, Client and their respective legal representatives, successors and permitted assigns. Neither Consultant nor Client may assign the Agreement nor any right or obligation under it without the prior written consent of the other party. Nothing in the Agreement restricts Consultant's ability to hire subcontractors in connection with the Services. The Services and any report prepared under this Agreement are for the sole benefit and sole use of Client and are not for the use of any other person. Only Client may rely upon the Agreement and the Services, unless Consultant gives Client prior and specific written approval.

10.7 Dispute Resolution. Any claim, dispute or other matter in question arising out of or related to the Agreement of the Services provided thereunder shall be subject to arbitration. Prior to arbitration, the parties shall endeavor to resolve disputes by mediation. Claims, disputes and other matters in question between the parties that are not resolved by mediation shall be decided by arbitration which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect. The demand for arbitration shall be filed in writing with the other Party to this Agreement and with the American Arbitration Association. No arbitration arising out of or relating to the Agreement shall include, by consolidation or joinder or in any other manner, an additional person or entity not a party to this Agreement. The foregoing agreement to arbitration shall be specifically enforceable in accordance with applicable law in any court having jurisdiction. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction.

10.8 Mediation: Any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to non-binding mediation as a condition precedent to the institution of legal proceedings by either party. If such matter relates to or is the subject of a lien arising out of the Consultant's services, the Consultant may proceed in accordance with applicable law to comply with the lien notice or filing deadlines prior to resolution of the matter by mediation or other legal proceedings.

Each party agrees to include a similar mediation provision in all agreements with independent contractors and consultants retained for the Project and to require all independent contractors and consultants also to include a similar mediation provision in all agreements with their respective subcontractors, suppliers, and subconsultants, thereby providing for mediation as the initial method for dispute resolution between the parties to all those agreements.

The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the county where the project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

10.9 No Warranty. Consultant makes no warranty, either expressed or implied, as to Consultant's findings, recommendations, plans, specifications, or professional advice. Consultant has endeavored to perform its services in accordance with generally accepted standards of practice by recognized professional firms in performing services of a similar nature in

the same locality, under similar circumstances. Client recognizes that neither Consultant nor any of Consultant's subconsultants or subcontractors owes any fiduciary responsibility to Client.

10.10 **Survival of Provisions.** Termination of the Services for any reason whatsoever shall not affect (a) any right or obligation of any party that is accrued or vested prior to such termination, and any provision of the Agreement relating to any such right or obligation shall be deemed to survive the termination of the Services or (b) any continuing obligation, liability or responsibility of Consultant and of Client which would otherwise Survive termination of the Services.

10.11 **NON-SOLICITATION**. During the term of this Agreement and for a period of two (2) years thereafter, neither Client, nor its affiliates, nor any of their respective employees, agents, owners, officers, members, shareholders, or directors ("Client Entities") shall directly, or indirectly through another person or entity: (i) induce or attempt to induce any employee, agent, owner, officer, member, shareholder, director, client, customer, vendor or supplier, or other business relation of Consultant ("Business Relation") to leave the employ of, or terminate its contract, affiliation, or other business relationship with Consultant, (ii) hire or recruit away any Business Relation of Consultant, within two (2) years after such person ceased to be affiliated with Consultant, (iii) induce or attempt to induce any Business Relation of Company to cease doing business with Consultant or its other Business Relations, or (iv) otherwise interfere with, sabotage, or otherwise undermine any of the foregoing relationships.

Tab 8

FIRST ADDENDUM TO THE CONTRACT FOR DISTRICT MANAGEMENT SERVICES

This First Addendum to the Contract for District Management Services (this **"Addendum"**), is made and entered into as of the 1st day of October, 2026 (the "**Effective Date**"), by and between **NatureWalk Community Development District**, a local unit of special purpose government established pursuant to Chapter 190, Florida Statutes, located in Walton County, Florida (the "**District**"), and **Rizzetta & Company, Inc.**, a Florida corporation (the "**District Manager**").

RECITALS

WHEREAS, the District and the District Manager entered into the Contract for District Management Services dated October 1, 2025 (the "**Contract**"), incorporated by reference herein; and

WHEREAS, the District and the District Manager desire to amend **Exhibit B** - Schedule of Fees section of the Contract as further described in this Addendum; and

WHEREAS, the District and the District Manager each has the authority to execute this Addendum and to perform its obligations and duties hereunder, and each party has satisfied all conditions precedent to the execution of this Addendum so that this Addendum constitutes a legal and binding obligation of each party hereto.

NOW, THEREFORE, based upon good and valuable consideration and the mutual covenants of the parties, the receipt of which and sufficiency of which is hereby acknowledged, the District and the District Manager agree to the changes to amend the Schedule of Fees attached.

The amended Schedule of Fees are hereby ratified and confirmed. All other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF the undersigned have executed this Addendum as of the Effective Date.

(Remainder of this page is left blank intentionally)

Therefore, the District Manager and the District each intend to enter this Addendum, understand the terms set forth herein, and hereby agree to those terms.

ACCEPTED BY:

RIZZETTA & COMPANY, INC.

BY: _____

PRINTED NAME: William J. Rizzetta

TITLE: President

DATE: 4/15/26

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT

BY: _____

PRINTED NAME: _____

TITLE: Chairman/Vice Chairman

DATE: _____

ATTEST:

_____
Vice Chairman/Assistant Secretary
Board of Supervisors

_____
Print Name

Exhibit B – Schedule of Fees

Exhibit B
Schedule of Fees

STANDARD ON-GOING SERVICES:

Standard On-Going Services will be billed in advance monthly pursuant to the following schedule:

	MONTHLY	ANNUALLY
Management:	$3,616.00	$43,392
Administrative:	$835.50	$10,026
Accounting:	$1,442.17	$17,306
Assessment Roll:(1)		$5,408
Financial & Revenue Collections:	$337.50	$4,050
Continuing Disclosure:	$416.67	$5,000
Website Management:	$110.00	$1,320
E-Mail (5 accounts	$100.00	$1,200
Total Standard On-Going Services:	$6,857.84	$87,702

(1) Assessment Roll is to paid in one lump-sum upon completion.

Note: Fees are contingent on Stephanie DeLuna serving as lead District Manager. If/when Ms. DeLuna is no longer serving in that capacity, fees will revert to $66,837 for management, administrative, accounting, assessment roll and financial services. This amount represents a 3% increase compared to the October 1, 2025 contract. Total fees for all services would be $74,357 or a 2.86% increase.

ADDITIONAL SERVICES:	FREQUENCY	RATE
Extended and Continued Meetings	Hourly	$ 400
Additional Meetings (includes meeting prep, attendance and drafting of minutes)	Hourly	$ 400
Estoppel Requests (billed to requestor):		
One Lot (on tax roll)	Per Occurrence	$ 125
Two+ Lots (on tax roll)	Per Occurrence	$ 150
One Lot (direct billed by the District)	Per Occurrence	$ 150
Two–Five Lots (direct billed by the District)	Per Occurrence	$ 200
Six-Ten Lots (direct billed by the District)	Per Occurrence	$ 250
Elevent+ Lots (direct billed by the District)	Per Occurrence	$ 300
Long Term Bond Debt Payoff Requests	Per Occurrence	$ 150/Lot
Two+ Lots	Per Occurrence	Upon Request
Short Term Bond Debt Payoff Requests & Long Term Bond Debt Partial Payoff Requests		
One Lot	Per Occurrence	$ 150
Two – Five Lots	Per Occurrence	$ 200
Six – Ten Lots	Per Occurrence	$ 300
Eleven – Fifteen Lots	Per Occurrence	$ 400
Sixteen+ Lots	Per Occurrence	$ 500
Bond Amortization Schedules	Per Occurrence	$ 600
Special Assessment Allocation Report	Per Occurrence	Upon Request
True-Up Analysis/Report	Per Occurrence	Upon Request
Re-Financing Analysis	Per Occurrence	Upon Request
Bond Validation Testimony	Per Occurrence	Upon Request
Bond Issue Certifications/Closing Documents	Per Occurrence	Upon Request
Electronic communications/E-blasts	Per Occurrence	Upon Request
Special Information Requests	Hourly	Upon Request
Amendment to District Boundary	Hourly	Upon Request
Grant Applications	Hourly	Upon Request
Escrow Agent	Hourly	Upon Request
Continuing Disclosure/Representative/Agent	Annually	Upon Request
Community Mailings	Per Occurrence	Upon Request
Response to Extensive Public Records Requests	Hourly	Upon Request
Litigation Support Services	Hourly	Upon Request

PUBLIC RECORDS REQUESTS FEES:

Public Records Requests will be billed hourly to the District pursuant to the current hourly rates shown below:

JOB TITLE:	HOURLY RATE:
Regional Manager	$ 52.00
District Manager	$ 40.00
Accounting & Finance Staff	$ 28.00
Administrative Support Staff	$ 21.00

LITIGATION SUPPORT SERVICES:

Litigation Support Services shall be billed hourly to the District pursuant to the current hourly rates shown below:

JOB TITLE:	HOURLY RATE:
President	$ 500.00
Chief Financial Officer	$ 450.00
Vice President	$ 400.00
Controller	$ 350.00
Regional District Manager	$ 300.00
Accounting Director	$ 300.00
Finance Manager	$ 300.00
Senior District Manager	$ 275.00
District Manager	$ 250.00
Amenity Services Manager	$ 250.00
Business Development Manager	$ 250.00
Landscape Inspection Services Manager	$ 250.00
Financial Analyst	$ 250.00
Senior Accountant	$ 225.00
Landscape Specialist	$ 200.00
Administrative Support Manager	$ 200.00
Senior Financial Associate	$ 200.00
Senior Administrative Assistant	$ 200.00
Staff Accountant II	$ 200.00
District Coordinator	$ 175.00
Administrative Assistant II	$ 150.00
District Compliance Associate	$ 150.00
Staff Accountant	$ 150.00
Financial Associate	$ 150.00
Administrative Assistant	$ 100.00
Accounting Clerk	$ 100.00
Client Relations Specialist	$ 100.00

Tab 9

PROJECT MANUAL

FOR

LANDSCAPE & IRRIGATION MAINTENANCE SERVICES

NATUREWALK
COMMUNITY DEVELOPMENT DISTRICT

RIZZETTA & COMPANY

April 2026

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT
PROPOSER QUALIFICATION STATEMENT

1. Proposer: GreenEarth Southeast LLC [Company Name]
/_/ A Partnership
/_/ A Corporation
/_/ A Subsidiary Corporation

2. Parent Company Name: American Landscaping Partners

3. Parent Company Address:

Street Address 278 Franklin Rd

P.O. Box (if any) Suite 190

City Brentwood State Tennessee Zip Code 37027

Telephone (615) 398 0725 Fax no. _____

1st Contact Name Sid Sexton Title VP of Operations South

2nd Contact Name Eli Brenlove Title Chief Operating Officer

4. Proposer Company Address (if different):

Street Address _____

P. O. Box (if any) _____

City _____ State _____ Zip Code _____

Telephone _____ Fax no. _____

1st Contact Name _____ Title _____

2nd Contact Name _____ Title _____

5. List the location of the office from which the proposer would provide services to NatureWalk CDD.

Street Address 15167 Hwy 331 Business

City Freeport State FL Zip Code 32439

Telephone (850) 267 0010 Fax No. _____

1st Contract Name Matt Weinrich Title General Manager

6. Is the Proposer incorporated in the State of Florida? Yes (●) No ( )

6.1 If yes, provide the following:

- Is the Company in good standing with the Florida Department of State, Division of Corporations? Yes (●) No ( )

  If no, please explain _____

  _____

  _____

- Date incorporated _____ Charter No. _____

6.2 If no, provide the following:

- The State with whom the Proposer's company is incorporated? _____
- Is the company in good standing with the State? Yes ( ) No ( )

  If no, please explain _____

  _____

- Date incorporated _____ Charter No. _____
- Is the Proposer's company authorized to do business in the State of Florida? Yes (●) No ( )

6.3 If Proposer is not incorporated, please identify the type of business entity (i.e.: Limited Liability Company, Partnership, etc.) and the number of years Proposer has been in the business of providing landscape services.

7. Has the Proposer's company provided services for a community development district or similar community previously? Yes (●) No ( )

7.1 If yes, provide the following:

- Number of contracts Proposer has executed with community development districts and/or similar communities during the past five (5) years and the names of the entities as well as the length of the contract and whether each such community is still a current client.

8. List the Proposer's total annual dollar value of comparable contracts for each of the last three (3) years starting with the latest year and ending with the most current year

(23) $2,654,354, (24) $4,263,040, (25) $4,167,414.

9. What are the Proposer's current insurance limits?

General Liability	$ 1,000,000
Automobile Liability	$ 1,000,000
Umbrella Coverage	$ 5,000,000
Workers Compensation	$ 1,000,000
Expiration Date	02/12/2027

10. Please state whether or not the Proposer or any of its affiliates are presently barred or suspended from bidding or contracting on any state, local, or federal contracts in any state(s)? Yes ◯ No ◉ If so, state the name(s) of the company (ies)_____

_____

The state(s) where barred or suspended _____
State the period(s) of debarment or suspension _____

_____

11. Has the Proposer ever failed to fulfill its obligations under any contract awarded to it? Yes ◯ No ◉ If so, where and why? _____

_____
_____
_____
_____

12. Has any officer or partner of the Proposer ever been an officer, partner, or owner of some other organization that has failed to fulfill job duties or otherwise complete a contract? Yes ◯ No ◉ If so, state name of individual, other organization and reason therefore.

_____
_____
_____
_____

13. List any and all litigation to which the Proposer, any personnel to work at NatureWalk, any officer and/or employee of the Proposer has been a party in the last five (5) years. ___

_____
_____
_____
_____
_____
_____
_____

14. Has the Proposer or any of its affiliates ever been either disqualified or denied prequalification status by a governmental entity? Yes ◯ No ◉ If so, discuss the circumstances surrounding such denial or disqualification as well as the date thereof.____

_____
_____

15. List five (5) current clients including contact persons and telephone numbers as well as their contract value and length of service:

Palm Cove HOA Ethan Hughes (850) 724-0425
Hammock Oaks HOA Christine Funk (904) 955-6449
Parkside Townhomes Deb Coulter (850) 730-1485
Panama City Square Karmen Blackwell (470) 456-6319
Seaview Apts Latitia Lamay (517) 614-5316

16. List three (3) jobs (including company, contact person, and telephone number) lost in the previous twelve (12) months and the reason(s) why:

Magnolia Bay Master Linley Vanacore (850) 830-9408 Price Increase
Magnolia Bay COA Linley Vanacore (850) 830-9408 Price Increase
Aegean Condos Scott Preston (850) 622-2222 Ancillary work warranty

17. Attach current financial statements, prepared within the last one hundred eighty (180) days, showing current financial resources, liabilities, capital equipment and historical financial performance for the past one year.

18. Attach any certifications or documentation regarding educational experience of key personnel that would assist the District(s) in evaluating the quality and experience of such personnel.

19. Key Personnel: Describe any experience of the principal individuals (Foremen, Superintendents, etc.) who are responsible for the actual landscape & irrigation maintenance work of your organization and who will be assigned to this contract if awarded to contractor.

Carlos Alladyce		Operations Mager
Name		Position
Operations	20	9
Type of Work	Yrs. Exp.	Yrs. With Firm
Matt Weinrich		General Manager
Name		Position
Leads all Ops and PNL	25	1
Type of Work	Yrs. Exp.	Yrs. With Firm
Zach Brown		Irrigation Manager
Name		Position
Oversees all Irrigation	14	2.5
Type of Work	Yrs. Exp.	Yrs. With Firm

Kirk Nevers	Field Manager
Name	Position

Supervises Daily Operation	20	19
Type of Work	Yrs. Exp.	Yrs. With Firm

Name	Position

Type of Work	Yrs. Exp.	Yrs. With Firm

The undersigned hereby authorize(s) and request(s) any person, firm or corporation to furnish any pertinent information requested by the NatureWalk CDD or their authorized agents, deemed necessary to verify the statements made in this document or documents attached hereto, or necessary to determine whether the NatureWalk CDD should consider the Proposer for proposing on the landscape services request for proposals, including such matters as the Proposer's ability, standing, integrity, quality of performance, efficiency and general reputation.

GreenEarth SE
Name of Proposer

By: Matt Weinrich

[Type Name and Title of Person Signing]

This _____ day of _____, 20__.

(Corporate Seal)

Sworn to before me this _____ day of _____, 20__.

(Seal) Notary Public/Expiration Date

PROPOSAL FORM
PART IV PRICING

NOTE: This pricing form is intended to cover pricing for the initial one-year term of the contract. It is assumed that prices will remain the same through each of the three potential annual renewal terms. If the Proposer intends to change pricing for any renewal term, then the Proposer should submit multiple pricing forms, one for each renewal term. Otherwise, the prices stated below will be binding for the initial one-year term, and any annual renewal terms.

Having carefully examined the specifications and having thoroughly inspected said property, the undersigned proposes to furnish all labor, materials, and proper equipment for the entire scope of work, in accordance with said specifications, for the sum of:

PART 1

General Landscape Maintenance **$** 117,477.54 **/Year**

Storm Cleanup $85.00 /hr.

Freeze Protection (description of ability) Shutting down of controllers

$_____/application **(Contractor to identify those plants susceptible to freeze and estimate cost to cover per application)**

Hand Watering

$ 78.00 /hr. for employee with hand-held hose

$NA /hr. for water truck/tanker

These prices are informational only and NOT to be included in General Landscape Maintenance Cost

PART 2

Fertilization (All labor and materials) **$** 23,489.68 **/Year**
(Include any and all turf pesticide/herbicide/fungicide mixtures you intend to use throughout the year)

CENTIPEDE (per specifications in Part 2) (if present)				
MONTH	FORMULA	APPLICATION RATE (LBS. N/1000 SF)	TOTAL POUNDS PRODUCT TO BE APPLIED	COST PER APPLICATION
March	15-0-5	.5	26	308.28
May	15-0-5	.5	26	308.28
July	15-0-5	MN+FE	13	308328

CENTIPEDE cont. (per specifications in Part 2) cont.				
Sept	15-0-5	MN+FE+P	13	308.28

ZOYSIA (per specifications in Part 2) (if present)				
MONTH	FORMULA	APPLICATION RATE (LBS. N/1000 SF)	TOTAL POUNDS PRODUCT TO BE APPLIED	COST PER APPLICATION
April	24-0-11+Pre-M	2.5	492	3800.95
May	24-0-11	2	984	6988.24
July	0-0-60+FE/MN		98	411.40
Oct	24-0-11	.5	98	822.80

ORNAMENTALS (per specifications in Part 2)				
MONTH	FORMULA	APPLICATION RATE (LBS. N/1000 SF)	TOTAL POUNDS PRODUCT TO BE APPLIED	COST PER APPLICATION
March	12-0-6	1	196	660.00
May	12-0-6	1	196	660.00
Oct	12-0-6	1	196	660.00

PALMS (per specifications in Part 2)				
MONTH	FORMULA	APPLICATION RATE (1.5 LBS. /100 SF PALM CANOPY)	TOTAL POUNDS PRODUCT TO BE APPLIED	COST PER APPLICATION
March	8-2-12+4mg		25	700.70
May	8-2-12+4mg		25	700.70
Oct	8-2-12+4mg		25	700.70
Nov	8-2-12+4mg		25	700.70

Please list any additional fertilization for those plant materials requiring specialized applications.

SPECIALTY PLANT MATERIALS				
MONTH	FORMULA	PLANTS TO BE FERTILIZED (i.e., Crapes, Loropetalum, Knockout Roses, etc.)	TOTAL POUNDS PRODUCT TO BE APPLIED	COST PER APPLICATION
Feb	10-10-10 or sim	Crapes, Lorepetalum, Ros		2314.00
June	10-10-10 or sim	Crapes, Lorepetalum, Ros		2314.00

The totals in the "Cost per application" column should equal your Total Fertilization Cost for the year.

PART 3

Pest Control (All labor and materials) **$** 3,653.88 **/Year**
(If entire pesticide allowance is required) *

* This is an allowance for treatments of trees, ornamentals, groundcovers, etc. and should include only those pesticides/herbicides not already included in the turf fertilizer section. This dollar amount will not be equally divided amongst the monthly invoices. The portion of the allowance used on any particular event shall be billed the month after services are rendered. Contractor shall continue to be responsible for the eradication/control of all weeds, pests and diseases after the allowance listed above has been exhausted.

OTC Injections will be performed at the discretion of the District's BOS ***(This shall not be included in either the Pest Control cost listed above nor shall it be included in the Grand Total or Contract Amount.)***

OTC Injections (All labor and materials) **$** 23,900.00 **/Year**
(based on your recorded quantities below)

(OTC injections per specs - do not include in Grand Total)

Palm Type	Palm Qty	# of Inoculations per quarter per palm (based on size) (i.e. (2) inoculations per large Canary Palm per 1/4, etc.)	Cost per Individual Inoculation (One Cartridge)	Total Cost per Year (4x per year)
Sabal	17	17	$175.00	$11,900.00
Canary	12	12	$250.00	$12,000.00

The District reserves the right to subcontract out any and all OTC Injection events.

Application of Top Choice for annual treatment of Fire Ants

For informational purposes only, please provide a cost to apply Top Choice for the annual control of fire ants in all Finished Landscaped Areas as described in Scope of Services.
$ 3,233.30 / Year

Top Choice application will be performed at the sole discretion of the District's BOS
(This shall not be included in either the Pest Control cost listed above nor shall it be included in the Grand Total or Contract Amount.)

PART 4

Irrigation (All labor and materials) **$** $47,628.90 **/Year**

Freeze Protection (description of ability) _____
Turn off of Controllers
_____
_____
_____
_____

$ 160.00 application **(do not include in Irrigation Total or Grand Total)**

After hours emergency service hourly rate $ $135.00 /HR. (i.e. broken mainlines, pump & wells, etc.)

Contractor shall provide a list of additional charges and pricing for such items other than routine maintenance as a separate price from this bid.

$ _____ / zone should actual field quantity differ from the quantity of zones stated in the RFP Manual.

PART 5

Annual Installation (All labor and materials) Please provide price per plant.

Contractor shall install (75) - 4" annuals three (3) times per year **per specs** at the direction of the District at $ 6.16 /annual.

$ 461.95 /rotation

$ 1,385.85 /Yr. (based on three (3) rotations) **(Do not include in Grand Total)**

The District reserves the right to subcontract any annual installation to an outside vendor

GRAND TOTAL (PARTS 1, 2, 3 & 4 - This is what contract will be written for)

$ 192,250.00 **/Initial Term.**

FIRST ANNUAL RENEWAL	$ 192,250.00 /*
SECOND ANNUAL RENEWAL	$ 192,250.00 /*
THIRD ANNUAL RENEWAL	$ 192,250.00 /*

***Unless prices are to remain the same throughout the initial contract term and each of the three possible annual renewal periods, the Proposer must supply a complete pricing form for each of the three possible annual renewal periods.**

Contractor/Firm Name Green Earth Southeast LL

Firm Address 15167 Hwy 331 Business Suite B

City/State/Zip Freeport FL 32439

Phone Number 850-267-0100 Fax Number _____

Name and Title of Representative Matt Weinrich General Manager
(Please Print)

Representative's Signature _____

Date 05/16/2026

ADDENDA – Proposer acknowledges the receipt of Addendum No.'s

1. _____ 2. _____ 3. _____ 4. _____ 5. _____

Dated this 5th day of May, 2026

COST BREAKOUT FOR GENERAL LANDSCAPE MAINTENANCE

General Landscape Maintenance

Mowing, hard edging, blowing off hard surfaces:	$ 1551.83 / event
Pond bank mowing, including line-trimming to water's edge:	$ 326.72 / event
Bed detailing, including weeding, soft edging, shrub pruning, delineation and dead-wooding, dead-heading of annuals, trash and landscape litter removal:	$ 326.72 / event
Tree Lifting:	$ 326.72 / event
Palm Pruning, including seed pods, old flower stalks, and inflorescence, vines & volunteers:	$ 3621.18 / event

LANDSCAPE AND IRRIGATION MAINTENANCE
RATES FOR ADDITIONAL SERVICES

Please provide rates for the following items (including overhead and profit) which will be used for any additional work and/or services:

A.	Mowers w/operator	$ 73.72	Hour
B.	Bush-Hog w/operator	$ 173.72	Hour
C.	Tractor w/operator	$ 173.73	Hour
D.	Supervisor with Transportation	$ 95.00	Hour
E.	Laborer with hand equipment	$ 73.72	Hour
F.	Truck w/driver	$ 73.72	Hour
G.	Irrigation Tech	$ 85.00	Hour
H.	Granular Pesticide Applicator		
	Person with Drop Spreader	$ 73.72	Hour
I.	Liquid Pesticide Applicator		
	Person with Spray Truck	$ 73.72	Hour
J.	Granular Fertilizer Applicator		
	Person with Drop Applicator	$ 73.72	Hour
K.	Liquid Fertilizer Applicator		
	Person with Spray Truck	$ 73.72	Hour
L.	Granular Weed Control Applicator		
	Person with Drop Applicator	$ 73.72	Hour
M.	Liquid Weed Control Applicator		
	Person with Spray Truck	$ 73.72	Hour
N.	Laborer for Additional Trash Pick-Up	$ 73.72	Hour
O.	Lump Sum Mowing ([1]), entire community	$ 2,532.00	Per Mow

[1] Mowing shall include mowing, edging, weed eating, weeding of beds, weeding of lawns and blowing and/or vacuuming.

EMERGENCY CLEAN-UP SERVICES

In the event of a declared emergency or disaster, the following services shall be provided on a time and materials basis, at the rates (which include all costs including but not limited to overhead and profit) set forth below:

A. Debris removal personnel unit costs:

Emergency Man Hours $ 120.00 per Hour

N/A $ _____ per Hour

N/A $ _____ per Hour

B. Debris removal equipment unit costs:

Incl $ _____ per Hour

Incl $ _____ per Hour

Incl $ _____ per Hour

C. Other emergency/disaster related unit costs:

Emergency man hours $ 120.00 per Hour

_____ $ _____ per Hour

_____ $ _____ per Hour

Costs for equipment and personnel are only payable for when the equipment and personnel are operating. No stand-by time is eligible for payment. Disaster recovery assistance services shall not exceed 70 hours for each declared emergency or disaster. Contractor shall maintain and supply District all necessary and adequate documentation on all emergency/disaster-related services to support reimbursement by other local, state, or federal agencies. The District reserves the right to contract with an outside vendor for any or all emergency clean-up services.

Under penalties of perjury under the laws of the State of Florida, I represent that I have authority to sign this Proposal Form (including Parts I through IV) on behalf of: _____ ("Proposer") and declare that I have read the foregoing Proposal Form (including Parts I through IV) and that all of the questions are fully and completely answered, and all of the information provided is true and correct.

Dated this _____ day of _____, 2026.

Proposer: _____
By: _____
Title: _____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of _physical presence or_online notarization, this ___ day of _____, 2026, by _____, as _____ of _____, on its behalf. He/She [___] is personally known to me or [___] produced _____ as identification.

_____
Notary Public, State of Florida

Personally Known
OR Produced Identification
Type of Identification _____

SCOPE OF SERVICES

PART 1

GENERAL LANDSCAPE MAINTENANCE

1) MOWING – All grass areas will be mowed on the following schedule:

MARCH 1 – NOVEMBER 1 – Once a week
NOVEMBER 1 – MARCH 1 – Once every two weeks

This schedule estimates that there will be between 41 – 45 cuts annually based on standard growing periods in Florida, however, requires a minimum of 52 visits (weekly) to perform those duties, other than mowing, that cannot remain unattended for two weeks. (i.e., weed control, selective mowing, tree lifting, pruning, debris clearing, and general detailing of property, etc.) Notwithstanding the above, at no time will the turf (or weeds within turf) be allowed to grow beyond a maximum height of five (5) inches. Each mowing should leave the Centipede grass at a height of one and one and one half (1.5) to two and one half (2.5) inches and Zoysia at a height of two (2) to two and one half (2.5) inches. Do not remove more than 1/3 of the height of the leaf blade at anyone mowing. All blades shall be kept sharp at all times to provide a high-quality cut and to minimize disease. The DISTRICT requires mowers to be equipped with a mulching type deck. Clippings may be left on the lawn if no readily visible clumps remain on the grass after mowing. Otherwise, large clumps of clippings MUST either be collected and removed by the CONTRACTOR **OR** be left to dry out on the lawn for no more than one day and then re-distributed across the lawn. This is to re-introduce nutrients in the clippings back into the soil system. In case of fungal disease outbreaks, the clippings will be collected until the disease is under control. The mulching kit must be left in the "closed" position at all times, specifically when mowing pond banks and all parks. Additionally, when mowing pond banks, mowers must be used in a counterclockwise direction. If the conditions are such that it is too wet to mow, crews must line trim this area. Contractor will be responsible for line-trimming these areas during each and every mow event. Contractor is to include in his proposal, any and all necessary equipment, protective clothing or any other gear necessary for crews to perform this work. No "extras" will be billed to the District. The CONTRACTOR shall set a date to restore any noticeable damage caused by the CONTRACTOR'S mowing equipment within twenty-four hours from the time the damage is caused at his sole cost and expense. Contractor shall be responsible for training all its personnel in the technical aspects of the District's Landscape Maintenance Program and general horticultural practices. This training will also include wetland species identification as it relates to pond banks & wetland areas. The Contractor shall be held responsible for all damage to wetlands, littoral shelves, mitigation areas and uplands due to mowing/fertilizing, etc. Weekend work is permitted when necessary upon prior approval.

1A) POND MAINTENANCE - All ponds identified as such on the overall NatureWalk Maintenance Exhibit shall be mowed incorporating the same mowing schedule as the common areas stated above. Line trimming at water's edge, control structures, mitered end sections and any other storm water structures shall occur each and every time the pond is maintained. Pond banks will be trimmed to water's edge. Careful attention must be paid to

mower height on pond banks so as not to scalp at the crest of the pond bank and increase the chances for pond bank erosion. Also, when line trimming to water's edge, Contractor shall be extremely careful not to scalp at the water's edge, increasing chances of pond bank erosion. Line trimming height shall be the same as mowing height (if not slightly higher). Contractor shall keep trimmings from entering water. Excessive clippings shall be hand removed. Blow all clippings away from pond banks. It is understood that trash debris of any kind and other debris within arm's reach of water's edge shall be removed & disposed of by Contractor during every normal service event. Tree and shrub care requirements outlined herein shall equally apply to all pond areas, including but not limited to pruning, clearance, sucker removal, and moss management within and around pond banks and edges.

1B) TRAIL MAINTENANCE - Trail areas shall be maintained on a regular monthly basis, with additional visits as necessary to address conditions that cannot remain unattended between scheduled maintenance cycles, including but not limited to debris removal, selective trimming, invasive and volunteer plant control, edge definition, pruning encroachments, and general detailing. Maintenance shall be performed up to the legally permissible limit adjacent to conservation or preservation areas, as defined by approved plans, recorded plats, buffers, easements, and applicable regulations.

Areas natural in appearance but located outside conservation or preservation areas shall be maintained in a neat and orderly condition and kept reasonably free of dead material, invasive species, and nuisance or volunteer plants, using methods permitted by applicable laws and ordinances. No plant material, branches, or debris shall extend into or over walkways unless clearance exceeds eight (8) feet. Crack weeds within paved trails or hard surfaces shall be maintained using permitted methods consistent with pesticide regulations, stormwater protections, and proximity restrictions; where chemical applications are restricted, mechanical or manual methods shall be utilized. Hard surfaces shall be blown off or cleared of debris as needed, provided debris is not discharged into stormwater systems or adjacent natural areas. Dead or hazardous trees shall be identified and proposed for removal, with all removals subject to required approvals and permitting. All work shall be performed in compliance with Walton County ordinances, State of Florida statutes and rules, wildlife protections, stormwater regulations, and CDD requirements, and any activity restricted by such regulations shall not constitute a failure to perform.

2) EDGING AND TRIMMING – All hard-edged areas (curbs, sidewalks, bike paths, trails, etc.) shall be vertically edged at each and every mowing event and soft-edged areas (tree rings, shrub and groundcover bed lines) shall be edged a minimum of every other week. All edging shall be performed to the sole satisfaction of the DISTRICT. **Chemical edging shall not be permitted anywhere on property**.

AT NO TIME SHALL LAWN BE ALLOWED TO GROW IN AN UNSIGHTLY MANNER. SHOULD THIS OCCUR, CONTRACTOR AGREES TO CORRECT WITHIN TWENTY-FOUR HOURS' NOTICE BY DISTRICT. CONTRACTOR SHALL COMPLETE ALL LAWN MAINTENANCE ACTIVITIES (MOWING, EDGING, LINE TRIMMING, BLOWING OFF SIDEWALKS, DRIVEWAYS, CURB & GUTTERS, ETC.) IN

RELATIVELY SMALL, MANAGEABLE SECTIONS. CONTRACTOR IS NOT TO LEAVE GRASS CLIPPINGS, TRIMMED WEEDS, TURF, DIRT OR DEBRIS ON ANY SURFACES FOR MORE THAN TWO HOURS. PARK SITES, CLUBHOUSES, PARKING LOTS AND ALL OTHER HIGH TRAFFIC AMENITIES ON THE PROPERTY SHALL BE CLEARED IMMEDIATELY AFTER MOWING AND EDGING TAKES PLACE. IF A MOWING EVENT IS MISSED, EVERY EFFORT SHALL BE MADE TO PERFORM THE MOWING SERVICE THE SAME WEEK (INCLUDING SATURDAYS WITH PRIOR APPROVAL). IF THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROVIDE THE DISTRICT A CREDIT FOR FUTURE SERVICES OR ADD A MOWING EVENT TO BE PROVIDED AT A LATER DATE. THE DISTRICT SHALL DETERMINE WHETHER THE CREDIT OR EXTRA MOWING SHALL BE USED.

3) TREE AND SHRUB CARE – All deciduous trees shall be pruned when dormant to ensure proper uniform growth. All evergreen trees shall be pruned in the early summer and fall to ensure proper growth and proper head shape. Sucker growth at the base of the trees shall be removed by hand continuously throughout the year. Aesthetic pruning shall consist of the removal of dead and/or broken branches as often as necessary to have trees appear neat at all times. Branches will be pruned just outside the branch collar. Contractor is responsible for the removal of all branches and limbs up to a 4" diameter and up to a 15' height to keep them from encroaching onto buildings (including roofs), signage structures, play structures, fences & walls, as well as pruned to prevent street lights and traffic signage from being blocked. Additionally, trees shall be pruned over sidewalks, nature trails, parking lots and roadways so as not to interfere with pedestrians or cars. (This is to include maintaining at all times a minimum of ten to fifteen (10-15) feet of clearance under all limbs over sidewalks/turf areas (10') in and outside of ROW's and roads (15'), respectively. This may depend on location and species of tree and shall vary according to DOT specs. All moss hanging from trees (including ball moss) shall be removed up to a height of 15' from **all CDD-maintained trees** on an as-needed basis. During the dormant season, ALL Crape Myrtles shall have ALL mosses removed up to a height of 15'. During this time, all Crape Myrtles less than 15' in height must be pruned. This includes the removal of all seed pods. Crape Myrtles are not to be "hat racked" at any time. Pencil to thumb pruning is the preferred method of Crape Myrtle pruning and shall be performed after threat of frost has passed but before new growth flushes. Any initial removal of all Spanish and Ball Mosses shall be included in the proposals and completed within ninety (90) days of contract commencement.

All shrubs will be pruned as necessary to retain an attractive shape and fullness, removing broken or dead limbs as necessary to provide a neat and clean appearance. Shrubs shall not be clipped into balled or boxed forms unless such forms are required by design. Shrubs shall be pruned in accordance with the intended function of the plant in its present location. Flowering shrubs shall be pruned immediately after the blossoms have cured with top pruning restricted to shaping the terminal growth. All pruning shall be done with horticultural skill and knowledge to maintain an overall acceptable appearance consistent with the current aesthetics of NatureWalk. The Contractor agrees that pruning is an art that must be done under the supervision of a highly trained foreman and shall make provisions for such supervision. Contractor shall sterilize all pruning

equipment prior to pruning the next shrub grouping; particularly when fungal diseases are known to be present. All clippings and debris from pruning will be carted away at the time pruning takes place. It is of utmost importance that all plant material within clear site lines and visibility triangles at roadway intersections and medians is maintained at or below the required heights. It is the Contractor's responsibility to bring to the attention of the District all areas that are not in compliance. If pruning will bring the area into compliance, then the Contractor, after conferring with District's representative, will proceed with the pruning activity. However, if pruning will not bring the area into compliance, perhaps due to permanent existing grades, then another solution will need to be proposed and executed. Contractor will also be responsible to keep pinestraw pulled away from the base of all landscape lights at all times, not just after a top dressing event.

AREAS WHERE WETLANDS ARE ADJACENT TO TURF AREAS (WHETHER ALONG ROADWAYS, MAINTAINED TRACTS BEHIND RESIDENTS OR POND BANKS) CONTRACTOR IS RESPONSIBLE TO KEEP ALL WETLAND MATERIAL CUT BACK AT ALL TIMES AND NOT LET THIS MATERIAL REDUCE THE SIZE OF THE TURF AREA.

Palms: All palms (regardless of height) shall receive pruning as often as necessary to appear neat and clean at all times. This includes the removal of brown and/or broken fronds and inflorescence. Removal of green or even yellowing fronds is unnecessary and pruning palms above the nine o'clock – three o'clock line is prohibited unless there are dead fronds. Fronds should be removed only once they turn brown or become broken or are disrupting flow of pedestrian/vehicular traffic or are hanging on architectural structures. Fruit pods shall be removed prior to development. Tarpaulins shall be used in areas where date palms and other palm fruits may stain sidewalks & pavement including, but not limited to, pool decks. Contractor shall be responsible for the removal of all palm fruit stains. Contractor shall sterilize all pruning equipment prior to pruning the next palm, paying careful attention when pruning Medjool, Sylvester, Reclinata and Canary Palms.

4) WEEDS AND GRASSES – All groundcover, turf areas, shrub beds & tree rings shall be kept reasonably free of weeds and grasses and be neatly cultivated and maintained in an orderly fashion at all times. This may be accomplished by carefully applied applications of pre-& post emergent herbicides as part of fertilizer mixtures and post-emergent herbicide spot treatments on an as-needed basis. Condition of turf is to be determined by the DISTRICT at its sole discretion. All shrub and bed areas shall be maintained each mowing service by removing all weeds, trash and other undesirable material and debris (leaf and other) to keep the area neat and tidy. This is to be accomplished through hand pulling or the careful application of a post-emergent herbicide. **AT NO TIME SHALL POST-EMERGENT HERBICIDES BE PERMITTED WHEN WEEDS HAVE ESTABLISHED THEMSELVES AS TO DOMINATE PLANTING BEDS. <u>HAND PULLING MUST BE PERFORMED</u>.**
NON-SELECTIVE, POST-EMERGENT HERBICIDES SHALL NEVER BE USED TO CONTROL WEED/SOD GROWTH AROUND STRUCTURES OF ANY TYPE (I.E., STREET SIGNS, UTILITY BOXES, STREET LIGHTS, PAVEMENT, TREE RINGS, ETC.) THE FIRST OFFENSE WILL RESULT IN A VERBAL WARNING; THE SECOND OFFENSE WILL RESULT IN A SECOND VERBAL WARNING AND THE BOARD OF SUPERVISORS FOR THE DISTRICT WILL BE NOTIFIED; THE THIRD OFFENSE MAY TERMINATE THIS CONTRACT FOR

CAUSE AT THE DISTRICT'S DISCRETION. CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE REPLACEMENT OF ALL TURF DAMAGED BY THE APPLICATION OR OVERSPRAY OF HERBICIDES (SELECTIVE OR NON-SELECTIVE).

The CONTRACTOR shall be responsible for the replacement of ornamental plants killed or damaged by herbicide application. All fence lines shall be kept clear of landscape shrubs growing through, weeds, undesirable vines and overhanging limbs.

5) MAINTENANCE OF PAVED AREAS – All paved areas (including, but not limited to, pool decks and other paver surfaces, sidewalk expansion joints, curb and gutters, curb and gutter expansion joints, bike lane edges along roadways) shall be kept weed & debris free. This may be accomplished by mechanical means (line trimmer) or by applications of post/pre-emergent herbicides. Weeds greater than two (2) inches in height or width shall be pulled from paved areas, not sprayed. No sprays with dyes may be used on any paved areas. Contractor is not to use non-selective herbicides to eradicate weeds in curb line expansion joints where the chemical can travel back into the turf causing regularly spaced dead patches behind the curbs and sidewalks.

6) CLEAN UP – At no time will CONTRACTOR leave the premises after completion of any work in any type of disarray. All clippings, trimmings, debris, dirt or any other unsightly material shall be removed promptly upon completion of work. CONTRACTOR shall use his own waste disposal methods, never the property dumpsters or natural areas. Grass clippings shall be blown off sidewalks, streets and curbs within a relatively short time frame and are not to be left for more than two hours, unless otherwise noted above. Also grass clippings shall be blown into turf areas, never into defined bed areas or tree rings as these are to be maintained free of grass clippings. Grass clippings at highly trafficked areas (i.e., tennis courts, clubhouse sidewalks, pool areas, walking trails, etc.) shall be blown off immediately after mowing and edging have taken place. **NO CLIPPINGS SHALL BE BLOWN DOWN CURB INLETS.**

6a) LEAF CLEANUP - The CONTRACTOR will provide a minimum of (4) leaf removals annually at the DISTRICT's discretion.

6b) DRAIN CLEARING - The CONTRACTOR will check the drains each for visit for blockage due to plant material or other landscape related debris. The CONTRACTOR will clear these drains as needed.

7) REPLACEMENT OF PLANT MATERIAL – Trees and shrubs in a state of decline should immediately be brought to the attention of the DISTRICT. Dead or unsightly plant material shall be removed upon notification of the DISTRICT. CONTRACTOR shall be responsible for replacement if due to his negligence. New plant material shall be guaranteed for a period of one (1) year for trees, shrubs, ground cover and lawn after final acceptance.

PART 2

FERTILIZATION

Contractor shall abide by all requirements in the RULES OF THE ENVIRONMENTAL PROTECTION COMMISSION OF WALTON COUNTY for CHAPTER 1-15 "FERTILIZER USE AND LANDSCAPE MANAGEMENT" as well as FERTILIZER ORDINANCE 21-42. It is the Contractor's responsibility to become familiar with all the rules and requirements of the Ordinance. Copies of all Certifications of Training shall be supplied to CDD representative with submission of proposals.

NO PERSON SHALL APPLY FERTILIZERS CONTAINING NITROGEN AND/OR PHOSPHORUS TO TURF AND/OR LANDSCAPE PLANTS FROM JUNE 1 THROUGH SEPTEMBER 30. DURING ONE OR MORE OF THE FOLLOWING EVENTS: i) IF IT IS RAINING AT THE APPLICATION SITE, OR ii) WITHIN THE TIME PERIOD DURING WHICH A FLOOD WATCH OR WARNING, OR A TROPICAL STORM WATCH OR WARNING, OR A HURRICANE WATCH OR WARNING IS IN EFFECT FOR ANY PORTION OF WALTON COUNTY, ISSUED BY THE NATIONAL WEATHER SERVICE, OR iii) WITHIN 36 HOURS PRIOR TO A RAIN EVENT GREATER THAN OR EQUAL TO 2 INCHES IN A 24 HOUR PERIOD IS LIKELY.

For purposes of proposing and until a soil test is provided to indicate otherwise, all turf shall be fertilized according to the following IFAS Guidelines for a moderate maintenance level for northwest Florida turf:

All Centipede Sod: (if present)

March	A complete fertilizer based on soil tests + PreM (Centipede requires low nitrogen; IFAS limits total N to ~1 lb. N/1000 SF annually, applied only after green-up)
May	Nitrogen (soluble or slow-release) applied at ≤0.5 lbs. N/1000 SF
July	Summer blends containing iron and manganese only (no nitrogen)
September	Iron and micronutrients only, if color is needed (No fall nitrogen recommended for centipede in North Florida)

All Zoysia Sod: (if present)

April	A complete fertilizer based on soil tests + PreM
May	SRN (Slow-Release Nitrogen applied at >/2.0 lbs. N/1000 SF (cont. >)
July	Summer blends containing iron and manganese (no nitrogen)
October	Nitrogen (soluble or slow-release) applied at ≤0.5 lb. N/1000 SF, only if turf remains actively growing.

Prior to final fertilization selection, a complete soil test should be performed to test for soil pH as well as N, P & K levels. Should change be of merit, the Contractor shall notify the District in

writing prior to the implementation of such change At times environmental conditions may require additional applications of nutrients, augmenting the above fertilization programs to ensure that turf areas are kept uniformly GREEN, healthy and in top condition. It shall be the responsibility of the contractor to determine specific needs and requirements and notify the resident project representative when these additional applications are needed. Fertilizers containing iron shall be immediately removed from all hard surfaces to avoid staining before the sprinklers are activated after application of the fertilizer. Any stains caused by a failure to do so will be the responsibility of the contractor to remove.

Fertilizer shall be applied in a uniform manner. If streaking of the turf occurs, correction will be required immediately at no additional cost to owner. Fertilizer shall be swept/blown off of all hard surfaces onto lawns or beds in order to avoid staining. **IT SHALL BE THE CONTRACTOR'S REPONSIBILITY TO REMOVE ANY STAINS FROM ANY HARD SURFACES ON THE PROPERTY CAUSED BY THEIR MISHANDLING OF FERTILIZER.** Fertilizer shall not be applied within ten (10) feet of the landward extent of any surface water. Spreader deflector shields are required when applying fertilizer by use of any broadcast or rotary spreader. Deflector shields must be positioned such that fertilizer granules are deflected away from all impervious surfaces and surface waters.

SHRUB, TREE & GROUNDCOVER FERTILIZATION:

For purposes of proposing, All SHRUBS, GROUNDCOVERS and TREES shall be fertilized according to the following specifications:

3 Times a year – (March, May, October)
A complete fertilizer (formula will vary according to soil test results) at a rate of 4-6 lbs. N/1000 sq. ft. /year. (A minimum 50% Nitrogen shall be in a slow-release form)

Fertilizer shall be applied by hand in a uniform manner, broadcast around the plants, but never in direct contact with stems or trunks. Fertilizer shall never be piled around plants. All fertilizer remaining on the leaves of the plants is to be brushed or blown off. **IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPLACE ANY PLANT MATERIAL DAMAGED BY FERTILIZATION BURN DUE TO HIS MISHANDLING OF PRODUCT.**

PALM FERTILIZATION:

All Palms shall receive 1 ½ pounds of 8-2-12+4Mg with micronutrients per 100 SF of palm canopy four times per year (March, May, October & late November). The "2" should be reduced to "0" if a soil test indicates there is not a deficiency of Phosphorus in the soil. 100% of the N, K & Mg **MUST** be in slow- release form. All micronutrients must be in water soluble form. Fertilizer shall be broadcast evenly under the dripline of the canopy but must be kept at least 6" from the palm trunk.

The NatureWalk CDD requires that all fertilizer applied to all palms on the CDD property be 8-2-12+4Mg. The fertilizer label shall reflect that 100% of the N, K, Mg, and B sources be in slow-release or controlled-release form and all the Mn, Fe Zn & Cu sources be water soluble (generally

these will be sulfates, except for Fe, which can be chelated with EDTA or DTPA). No source of N, K, Mg or B should be water-soluble. This will be considered an unacceptable fertilizer. The information below reflects the most effective sources for the seven critical elements in Florida landscape palm fertilizers:

Element Recommended Sources:*

N - Sulfur-coated urea, resin (or polymer)-coated urea or ammonium salts, urea-formaldehyde
P - Superphosphate, triple superphosphate, coated diammonium phosphate
K - Sulfur-coated potassium sulfate (may have additional polymer coating)
Mg - Kieserite (magnesium sulfate monohydrate) granules
Mn - Manganese sulfate
Fe - Iron sulfate, FeEDTA and/or FeDTPA
B - Granubor® (sodium borate)

*Based on data from Broschat (1991, 1996, 1997, 2008) and Broschat and Elliott (2005)Archival copy: for current recommendations see http://edis.ifas.ufl.edu or your local extension office.

Fertilizer shall not be billed equally on a monthly basis but invoiced the month after application.

CONTRACTOR shall provide the DISTRICT with PALM fertilizer analysis tags from the fertilizer in order to verify correct formulation and quantity prior to purchase. This is to allow time to verify nutrient sources for the macro and micronutrients ensuring they are in slow-release or water-soluble forms. Payment will not be made until the correct quantity and formulation has been verified and applied. CONTRACTOR must notify the DISTRICT five (5) working days in advance of the day the property is scheduled to be fertilized. Failure on the part of the CONTRACTOR to so notify the DISTRICT may result in the CONTRACTOR forfeiting any and all rights to payment for the applications made without notification.

PART 3

PEST CONTROL

Insects and Disease in Turf: Insect and disease control spraying in turf shall be provided by the Contractor every month with additional spot treatment as needed. During the weekly inspections, the Contractor is responsible for the identification and eradication/control of disease and insect damage including but not limited to scale, mites, fungus, chinch bugs, grubs, nematodes, fire ants, mole crickets, etc. Contractor shall pay for chemicals. Please list all chemicals that you will include in your fertilizer applications in the space allocated for "formula" under the fertilization section in the proposal form. Also include the cost of these chemicals as part of the fertilizer application. Any anticipated additional treatments shall be included in the Pest Control portion of the proposal form.

Insects and Disease Control for Trees, Palms and Plants: The Contractor is responsible for treatment of insects and diseases for all plants. The appropriate insecticide or fungicide will be applied in accordance with state and local regulations, and as weather and environmental conditions permit. Contractor shall pay for chemicals. There are several afflictions that may be detrimental to the health of many trees and palms. Contractor will be fully responsible in the treatment of such afflictions. At the District's discretion, this may include the quarterly inoculation of all palms susceptible to Lethal Yellowing and/or Lethal Bronzing fka Texas Phoenix Palm Decline. The cost of these inoculations should be included as a separate line item in your Pest Control price. Contractor is to identify those species of palms susceptible and supply a list of species and quantities with proposal. Each susceptible palm shall receive quarterly injections. Each injection site/valve can be used only twice. The third quarterly injection requires a new valve and injection site. Contractor is asked to provide cost per injection (material & labor) multiplied by quantity of susceptible palms multiplied by four inoculations per year in proposal form. **The District reserves the right to subcontract out any and all OTC Injection events. This will not be included in the Contract Amount.**

The Contractor is required to inspect all landscaped areas during each visit for indication of pest problems. When control is necessary, it is the responsibility of the Contractor to properly apply low toxicity and target-specific pesticide. If pesticides are necessary, they will be applied on a spot treatment basis when wind drift is a threat.

Careful inspection of the property on each visit is crucial to maintaining a successful program. It is the Contractor's full responsibility to ensure that the person inspecting the property is properly trained in recognizing the symptoms of both insect infestations and plant pathogen damage (funguses, bacteria, etc.). It is also the Contractor's responsibility to treat these conditions in an expedient manner.

It shall also be the Contractor's responsibility to furnish the resident project representative with a copy of the Pest Management Report (a copy of which is included), which they are to complete at every service as well as all certifications (including BMP Certifications) of all pesticide applicators. Contractor shall familiarize themself with all current regulations regarding the applications of pesticides and fertilizers.

If at any time the District should become aware of any pest problems, it will be the Contractor's responsibility to treat pest within five (5) working days of the date of notification.

Fire Ant Control: Contractor is required to inspect property each visit for evidence of fire ant mounds and immediately treat upon evidence of active mounds. In small areas, control can be achieved by individual mound treatment. Active mounds in larger turf areas will require broadcast application of bait. Contractor shall be responsible to knock down and spread out soil once mounds are dead.

For informational purposes only, Contractor is asked to provide the cost for the annual application of Top Choice in all finished landscape areas. UNLESS OTHERWISE DIRECTED, ONLY THOSE AREAS COVERED BY AUTOMATIC IRRIGATION ARE TO BE INCLUDED IN THIS NUMBER. This is not to include pond banks behind the residential properties or between ponds and conservation areas.

Pest Control will not be included as a standard line item in each monthly billing but shall be invoiced as a separate line item the month after service is rendered.

Pest Control shall be included in the Contract Amount.

PART 4

IRRIGATION SYSTEM MONITORING AND MAINTENANCE

Irrigation System. Contractor shall inspect and test the irrigation system components within the limits of the District a minimum of one (1) time per month. Areas shall include all existing irrigation components to date – approximately five (5) pump & wells, five (5) Irrigation Controllers and Fifty-One Zones.

These inspections shall include:

A. Irrigation Controllers
   1. Semi-automatic start of the automatic irrigation controller
   2. Check for proper operation
   3. Program necessary timing changes based on site conditions & time DST
   4. Lubricate and adjust mechanical components
   5. Test back up programming support devices
   6. Ensure the proper operation of each automatic rain shutoff device. If none, provide proposal for the installation to be included in the 30-day irrigation audit.

B. Water Sources
   1. Visual inspection of water source
   2. Clean all ground strainers and filters
   3. Test each pump at design capacities **weekly**; inform District Manager of any problems immediately. This is to minimize the time a water source is down. Contractor shall also confirm weekly that all backflow preventers are on and operating properly, if applicable.
   4. Test automatic protection devices

C. Irrigation Systems
   1. Manual test and inspection of each irrigation zone in its entirety.
   2. Clean and raise heads as necessary
   3. Adjust arc pattern and distance for required coverage areas
   4. Clean out irrigation valve boxes by keeping valve exposed

D. Report
   1. Irrigation operation time
   2. Irrigation start time
   3. Maintenance items performed
   4. General comment and recommendations

The above list is for routine maintenance and adjustment of the existing irrigation system components. Locating and repairing or replacing automatic valves or control wires and irrigation controller or pump repairs as well as other larger scale repairs are to be considered additional items. Contractor shall provide a list of additional charges and pricing for such items other than routine maintenance as a separate price from this proposal.

Routine irrigation maintenance is to be completed monthly. Each zone is to be turned on and operated for as long as necessary to verify proper operation. Each head, seal, nozzle, and strainer is to be inspected for adjustment and shall be aligned, packed, cleaned, and repaired, as necessary. Shrubs, groundcovers, and turf around sprinkler heads shall be trimmed to maintain maximum clearance at all times for the greatest coverage. It shall be the Contractor's responsibility to ensure all drip tubing is covered with pinestraw prior to Contractor leaving the property. All below ground repairs involving valves, pumps and wiring require an estimate for all such repairs. Upon written approval from Management, Contractor shall proceed. In the event of an emergency, Contractor shall make a diligent effort to contact, with the approximate price or estimate of repairs, Management or their assign prior to making such repair.

Upon being awarded contract, Contractor shall have a period of thirty (30) days from date of commencement to perform a thorough audit of the entire irrigation system listing items that need repair/replacement in order for the system to operate properly. A completely separate audit may be provided by the Contractor listing those items that would "improve" the irrigation system. Any action taken regarding the Irrigation Audit will be at the Board of Supervisors' discretion.

Assuming the Board of Supervisors approves the repairs listed in the 30-day audit and after such repairs have been made, after the thirty (30) day period has expired and for the duration of the contract, Contractor shall assume responsibility for any and all unreported maintenance deficiencies, including parts and labor, associated with the irrigation system of 2 inches or less, to include sprinkler heads, nozzles, drip, main and delivery lines and any associated fittings. Once approved, Contractor shall have a period of thirty (30) days to complete all repairs reported in the 30-day audit. The District Manager shall be notified what day and time of the week the irrigation tech will be available servicing the community. The Contractor will keep detailed irrigation reports consisting of run times and correct operation of system. A copy of this report will be maintained by the Contractor and a copy delivered to the District Manager or his designee, along with the weekly report upon request. At no time shall the Contractor leave the property knowing of the need for a repair and not reporting it.

Watering schedules shall meet all government regulations, and zone times will be adjusted depending on job conditions, climactic conditions and all watering restrictions of Walton County or any other governmental agencies. It is the responsibility of the Contractor to ensure the turf and plant material remains healthy. If the Contractor finds that the irrigation system cannot adequately cover the District in the allotted time, it will be the Contractor's responsibility to bring this to the attention of the District representative and apply for a variance. **Violations and/or fines imposed by any local or state agency will be deducted from the Contractor's monthly payment unless a previous agreement has been executed by both parties.**

Emergency service shall be available after normal working hours and an emergency telephone number will be provided to Management or their assign. Broken mainlines and irrigation valves stuck in the "open" position are to be considered emergencies. **Freeze Protection.** The Contractor shall describe ability and cost per application to provide freeze protection for pumps/wells.

The CONTRACTOR must contact the DISTRICT for pre-approval for irrigation repairs and then supply documentation which provides the completed scope of work along with the cost of labor and materials listed separately. This document will be attached to the DISTRICT Work Authorization. Invoicing for out of contract services must list the approved Work Authorization number.

PART 5

ANNUAL INSTALLATION

Planting of Annuals. After prior approval by the Board of Supervisors, Contractor shall replace approximately 75 annuals in 4" pots up to three (3) times per year in existing CDD-maintained areas and maintain annuals to ensure a healthy appearance. The Contractor will have the type of annual to be installed pre-approved by the District or its representative in writing. An Annual Options Presentation for the entire year stipulating plant options and timing for each rotation shall be submitted to the District shortly after execution of contract in order for the District or its representative to select annual choice(s). Annuals shall be hand watered at the time of installation. The Contractor will remove dead or dying annuals before the appearance of such annuals could be reasonably described as an eyesore. If the beds are left bare prior to the next planting, the Contractor will keep such beds free of weeds at all times until the next planting rotation occurs. Timing shall be centered on a holiday rotation being planted no later than the end of the first week of December and rotate accordingly every four months. (April and Aug.)

Annual installation price shall include the removal of all dead annuals prior to placing new plants, regular deadheading, necessary soil adjustments, soil additives, fungicides, and **monthly slow-release** nutritional requirements **at no additional cost to District.** Contractor shall replace at his expense any annual that dies, fails to thrive or is damaged by insects/disease. Contractor shall also include in the spring rotation (March) **at no additional cost to District**, a major renovation of all annual beds. A potting mix specifically blended for annuals shall be used at this time and shall be replenished as necessary prior to each changeout throughout the year. All annual beds shall be raised eight to ten (8" – 10") inches and covered with a layer of Pine Fines 1" thick. **All this shall be provided at no additional cost to the District.**

This item will not be included in the contract amount. Contractor shall provide a price per 4" plant as requested and shall submit with proposal. This work shall be invoiced separately in the month after service is rendered.

The District reserves the right to subcontract out any and all annual installation events.

PART 6

MONTHLY RIDE-ALONG

RIDE-ALONG - Each month the CONTRACTOR must tour the property with a representative of the DISTRICT.

PART 7

WORK AUTHORIZATION PROCESS

OUT OF SCOPE SERVICES - All services not outlined in this scope would be billed additionally and require an approved Work Authorization from the DISTRICT. Any services performed out of scope (including, but not limited to, the scope of service and irrigation) without written authorization from the DISTRICT will be completed at the CONTRACTOR'S expense. Invoicing for out of contract services must list the approved Work Authorization number.

[THE END]

LANDSCAPE MAINTENANCE AGREEMENT BY AND BETWEEN NATUREWALK COMMUNITY DEVELOPMENT DISTRICT AND GREENEARTH SOUTHEAST, LLC

THIS AGREEMENT ("Agreement") is made and entered into this __ day of _____ 2026, by and between:

NatureWalk Community Development District, a special-purpose unit of local government established and existing pursuant to Chapter 190, *Florida Statutes*, and the laws of the State of Florida, whose address is 120 Richard Jackson Blvd, Panama City Beach, Florida 32407 ("District"); and

GreenEarth Southeast, LLC, a Florida limited liability company, whose address is 15167 Highway 331 Business, Suite B, Freeport, Florida 32439 (the "Contractor" and, together with the District, "Parties").

RECITALS

WHEREAS, the District was established by ordinance of the Board of County Commissioners of Walton County, Florida, for the purpose of planning, financing, constructing, operating and/or maintaining certain infrastructure; and

WHEREAS, the District desires to retain an independent contractor to provide landscape maintenance services for lands within the District as further identified in this Agreement; and

WHEREAS, Contractor submitted a proposal, attached hereto as **Exhibit A**, and incorporated herein by reference (the "Services"), and represents that it is qualified and willing to serve as a landscape maintenance contractor and provide such Services to the District; and

WHEREAS, the District and Contractor desire to enter into this Agreement for the purposes stated herein and the District and Contractor warrant and agree that they have all right, power and authority to enter into and be bound by this Agreement.

NOW, THEREFORE, in consideration of the recitals, agreements, and mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the Parties, the Parties agree as follows:

1. INCORPORATION OF RECITALS. The recitals stated above are true and correct and by this reference are incorporated herein as a material part of this Agreement.

2. DESCRIPTION OF WORK AND SERVICES.

A. Contractor agrees to provide professional landscape maintenance services within presently accepted standards and in accordance with the terms of this Agreement. Upon all parties executing this Agreement, Contractor shall

provide the District with the specific Services as set forth in this Agreement and the attached Exhibits.

B. While providing the Services, the Contractor shall assign such staff as may be required, and such staff shall be responsible for coordinating, expediting, and controlling all aspects to assure completion of the services.

3. SCOPE OF LANDSCAPE MAINTENANCE SERVICES. The duties, obligations, and responsibilities of the Contractor are those described in the Scope of Services attached hereto as **Exhibit A**. Contractor shall solely be responsible for the means, manner and methods by which its duties, obligations and responsibilities are met to the satisfaction of the District. To the extent that provisions of the Agreement conflict with provisions of **Exhibit A**, this Agreement shall control.

4. MANNER OF CONTRACTOR'S PERFORMANCE. The Contractor agrees, as an independent contractor, to perform the Services as specified in this Agreement or any addendum executed by the Parties or in any authorized written work order by the District issued in connection with this Agreement and accepted by the Contractor. All work shall be performed in a neat and professional manner reasonably acceptable to the District and shall be in accordance with industry standards. The performance of all Services by the Contractor under this Agreement and related to this Agreement shall conform to any written instructions issued by the District.

A. Should any work and/or services be required which are not specified in this Agreement or any change order, addendum, addenda, or work authorization, but which are nevertheless necessary for the proper provision of Services to the District, such work or services shall be fully performed by the Contractor as if described and delineated in this Agreement.

B. The Contractor agrees that the District shall not be liable for the payment of any work or services unless the District, through an authorized representative of the District, authorizes Contractor, in writing, to perform such work.

C. The District shall designate in writing a person to act as the District's representative with respect to the services to be performed under this Agreement. The District's representative shall have complete authority to transmit instructions, receive information, interpret and define the District's policies and decisions with respect to materials, equipment, elements, and systems pertinent to the Contractor's services.

(1) The District hereby designates the District Manager, or his or her designee, to act as its representative.

(2) The Contractor agrees to meet with the District's representative no less than one (1) time per month to walk the property to discuss

conditions, schedules, and items of concern regarding this Agreement.

D. In the event that time is lost due to heavy rains ("Rain Days"), Contractor agrees to reschedule its employees and divide their time accordingly to complete all scheduled services during the time during the same week as any Rain Days, if possible, or within a reasonable time. Contractor shall provide services on Saturdays if needed to make up Rain Days, but shall not provide services on Sundays.

E. Contractor shall use all due care to protect the property of the District, its residents, and landowners from damage. Contractor agrees to repair any damage resulting from Contractor's activities and work within twenty-four (24) hours.

F. Contractor shall be obligated to ensure that all trees, plants or other vegetation that are located near any roadways and being maintained in accordance with this Agreement comply with all local, State and Federal line-of-sight requirements.

5. COMPENSATION; TERM.

A. As compensation for Services described in this Agreement, the District agrees to pay the Contractor $_____, in twelve (12) equal monthly payments of $ _____. The term of this agreement shall run from _____, 2026 through _____, 2027. The Agreement may be automatically renewed for four (4) additional, one (1) year terms, unless written notice is provided by either party thirty (30) days prior to the expiration of the Agreement.

B. If the District should desire additional work or services, or to add additional lands to be maintained, the Contractor agrees to negotiate in good faith to undertake such additional work or services. Upon successful negotiations, the Parties shall agree in writing to an addendum, addenda, work authorization, or change order(s) to this Agreement. A form of work authorization is attached hereto. The Contractor shall be compensated for such agreed additional work or services based upon a payment amount acceptable to the Parties and agreed to in writing.

Additional services not included in the Scope of Services can be provided by the Contractor. However, no additional services shall be provided unless previously authorized by the District in writing. Fees for such additional services shall be as provided for in the attached Price Quotation, or, if not identified, as negotiated between the District and the Contractor, reduced in writing, prior to the start of such additional services.

C. If the District should desire additional work or services, or to add additional lands to be maintained, the Contractor agrees to negotiate in good faith to undertake such additional work or services. Upon successful negotiations, the Parties shall agree in writing to an addendum, addenda, work authorization, or change order(s) to this Agreement. The Contractor shall be compensated for such agreed additional work or services based upon a payment amount acceptable to the Parties and agreed to in writing.

D. The District may require, as a condition precedent to making any payment to the Contractor, that all subcontractors, materialmen, suppliers or laborers be paid and require evidence, in the form of Lien Releases or partial Waivers of Lien, to be submitted to the District by those subcontractors, materialmen, suppliers or laborers, and further require that the Contractor provide an Affidavit relating to the payment of said indebtedness. Further, the District shall have the right to require, as a condition precedent to making any payment, evidence from the Contractor, in a form satisfactory to the District, that any indebtedness of the Contractor, as to services to the District, has been paid and that the Contractor has met all of the obligations with regard to the withholding and payment of taxes, Social Security payments, Worker's Compensation, Unemployment Compensation contributions, and similar payroll deductions from the wages of employees.

E. Contractor shall maintain records conforming to usual accounting practices. Further, Contractor agrees to render monthly invoices to the District, in writing, which shall be delivered or mailed to the District by the fifth (5th) day of the next succeeding month. These monthly invoices are due and payable within forty-five (45) days of receipt by the District. Each monthly invoice shall include such supporting information as required by Florida law and in accordance with the District's Rules of Procedure.

6. INSURANCE.

A. Contractor or any subcontractor performing the Services described in this Agreement shall maintain throughout the term of this Agreement the following insurance:

(1) Worker's Compensation Insurance in accordance with the laws of the State of Florida.

(2) Commercial General Liability Insurance covering the Contractor's legal liability for bodily injuries, with limits of not less than $1,000,000 combined single limit bodily injury and property damage liability, and covering at least the following hazards:

(i) Independent Contractors Coverage for bodily injury and property damage in connection with subcontractors' operation.

(3) Employer's Liability Coverage with limits of at least $1,000,000 (one million dollars) per accident or disease.

(4) Automobile Liability Insurance for bodily injuries in limits of not less than $1,000,000 combined single limit bodily injury and for property damage, providing coverage for any accident arising out of or resulting from the operation, maintenance, or use by the Contractor of any owned, non-owned, or hired automobiles, trailers, or other equipment required to be licensed.

B. The District, its staff, consultants, agents and supervisors shall be named as additional insureds and certificate holders. Contractor shall furnish the District with the Certificate of Insurance evidencing compliance with this requirement. No certificate shall be acceptable to the District unless it provides that any change or termination within the policy periods of the insurance coverage, as certified, shall not be effective within thirty (30) days of prior written notice to the District. Insurance coverage shall be from a reputable insurance carrier, licensed to conduct business in the State of Florida, and such carrier shall have a Best's Insurance Reports rating of at least A-VII.

C. If Contractor fails to have secured and maintained the required insurance, the District has the right (without any obligation to do so, however), to secure such required insurance in which event, Contractor shall pay the cost for that required insurance and shall furnish, upon demand, all information that may be required in connection with the District's obtaining the required insurance.

7. INDEMNIFICATION.

A. Obligations under this section shall include the payment of all settlements, judgments, damages, liquidated damages, penalties, forfeitures, back pay awards, court costs, arbitration and/or mediation costs, litigation expenses, attorney fees, and paralegal fees (incurred in court, out of court, on appeal, or in bankruptcy proceedings), any interest, expenses, damages, penalties, fines, or judgments against the District, all as actually incurred.

B. Contractor agrees to indemnify and hold harmless the District and its officers, agents, employees, successors, assigns, members, affiliates, or representatives from any and all liability, claims, actions, suits, liens, demands, costs, interest, expenses, damages, penalties, fines, judgments against the District, or loss or damage, whether monetary or otherwise,

arising out of, wholly or in part by, or in connection with the Services to be performed by Contractor, its subcontractors, its employees and agents in connection with this Agreement, including litigation, mediation, arbitration, appellate, or settlement proceedings with respect thereto. Additionally, nothing in this Agreement requires Contractor to indemnify the District for the District's percentage of fault if the District is adjudged to be more than 50% at fault for any claims against the District and Contractor as jointly liable parties; however, Contractor shall indemnify the District for any and all percentage of fault attributable to Contractor for claims against the District, regardless whether the District is adjudged to be more or less than 50% at fault. Contractor further agrees that nothing herein shall constitute or be construed as a waiver of the District's limitations on liability contained in section 768.28, *Florida Statutes*, or other statute.

8. COMPLIANCE WITH GOVERNMENTAL REGULATION. Contractor shall keep, observe, and perform all requirements of applicable local, State, and Federal laws, rules, regulations, or ordinances. If Contractor fails to notify the District in writing within five (5) days of the receipt of any notice, order, required to comply notice, or a report of a violation or an alleged violation, made by any local, State, or Federal governmental body or agency or subdivision thereof with respect to the services being rendered under this Agreement or any action of Contractor or any of its agents, servants, employees, or materialmen, or with respect to terms, wages, hours, conditions of employment, safety appliances, or any other requirements applicable to provision of services, or fails to comply with any requirement of such agency within five (5) days after receipt of any such notice, order, request to comply notice, or report of a violation or an alleged violation, the District may terminate this Agreement, such termination to be effective immediately upon the giving of notice of termination.

9. LIENS AND CLAIMS. The Contractor shall promptly and properly pay for all labor employed, materials purchased, and equipment hired by it to perform under this Agreement. The Contractor shall keep the District's property free from any materialmen's or mechanic's liens and claims or notices in respect to such liens and claims, which arise by reason of the Contractor's performance under this Agreement, and the Contractor shall immediately discharge any such claim or lien. In the event that the Contractor does not pay or satisfy such claim or lien within three (3) business days after the filing of notice thereof, the District, in addition to any and all other remedies available under this Agreement, may terminate this Agreement to be effective immediately upon the giving of notice of termination.

10. DEFAULT AND PROTECTION AGAINST THIRD PARTY INTERFERENCE. A default by either Party under this Agreement shall entitle the other to all remedies available at law or in equity, which may include, but not be limited to, the right of damages, injunctive relief, and/or specific performance. The District shall be solely responsible for enforcing its rights under this Agreement against any interfering third party. Nothing contained in this Agreement shall limit or impair the District's right to protect its rights from interference by a third party to this Agreement.

11. CUSTOM AND USAGE. It is hereby agreed, any law, custom, or usage to the contrary notwithstanding, that the District shall have the right at all times to enforce the conditions and

agreements contained in this Agreement in strict accordance with the terms of this Agreement, notwithstanding any conduct or custom on the part of the District in refraining from so doing; and further, that the failure of the District at any time or times to strictly enforce its rights under this Agreement shall not be construed as having created a custom in any way or manner contrary to the specific conditions and agreements of this Agreement, or as having in any way modified or waived the same.

12. SUCCESSORS. This Agreement shall inure to the benefit of and be binding upon the heirs, executors, administrators, successors, and assigns of the Parties to this Agreement, except as expressly limited in this Agreement.

13. TERMINATION. The District agrees that Contractor may terminate this Agreement with cause by providing thirty (30) days written notice of termination to the District; provided, however, that the District shall be provided a reasonable opportunity to cure any failure under this Agreement. Contractor agrees that the District may terminate this Agreement immediately with cause by providing written notice of termination to Contractor; however, that Contractor shall be provided a reasonable opportunity to cure any failure under this Agreement. The District shall provide thirty (30) days' written notice of termination without cause. Upon any termination of this Agreement, Contractor shall be entitled to payment for all work and/or services rendered up until the effective termination of this Agreement, subject to whatever claims or off-sets the District may have against the Contractor.

14. PERMITS AND LICENSES. All permits and licenses required by any governmental agency directly for the District shall be obtained and paid for by the District. All other permits or licenses necessary for Contractor to perform under this Agreement shall be obtained and paid for by the Contractor.

15. ASSIGNMENT. Neither the District nor Contractor may assign this Agreement without the prior written approval of the other. Any purported assignment without such written approval shall be void.

16. INDEPENDENT CONTRACTOR STATUS. In all matters relating to this Agreement, Contractor shall be acting as an independent contractor. Neither Contractor nor employees of the Contractor, if there are any, are employees of the District under the meaning or application of any Federal or State Unemployment or Insurance Laws or Old Age Laws or otherwise. Contractor agrees to assume all liabilities or obligations imposed by any one or more of such laws with respect to employees of Contractor, if there are any, in the performance of this Agreement. Contractor shall not have any authority to assume or create any obligation, express or implied, on behalf of the District and Contractor shall have no authority to represent the District as an agent, employee, or in any other capacity, unless otherwise set forth in this Agreement.

17. HEADINGS FOR CONVENIENCE ONLY. The descriptive headings in this Agreement are for convenience only and shall neither control nor affect the meaning or construction of any of the provisions of this Agreement.

18. ENFORCEMENT OF AGREEMENT. In the event that either the District or Contractor is required to enforce this Agreement by court proceedings or otherwise, then the prevailing party shall be entitled to recover all fees and costs incurred, including reasonable attorneys' fees, paralegal fees and costs for trial, alternative dispute resolution, or appellate proceedings.

19. AGREEMENT. This instrument, together with its Exhibit, shall constitute the final and complete expression of this Agreement between the District and Contractor relating to the subject matter of this Agreement. Should there be any conflict between the terms of this agreement and **Exhibit A**, the terms of this Agreement shall control.

20. AMENDMENTS. Amendments to and waivers of the provisions contained in this Agreement may be made only by an instrument in writing which is executed by both the District and the Contractor.

21. AUTHORIZATION. The execution of this Agreement has been duly authorized by the appropriate body or official of the District and Contractor, both the District and Contractor have complied with all the requirements of law, and both the District and Contractor have full power and authority to comply with the terms and provisions of this instrument.

22. NOTICES. All notices, requests, consents and other communications under this Agreement ("Notices") shall be in writing and shall be delivered, mailed by First Class Mail, postage prepaid, or overnight delivery service, to the parties, as follows:

A.	**If to the District:**	NatureWalk Community Development District 120 Richard Jackson Blvd Panama City Beach, FL 32407 Attn: District Manager
	With a copy to:	Kutak Rock LLP 107 West College Avenue Tallahassee, Florida 32301 Attn: District Counsel
B.	**If to Contractor:**	GreenEarth Southeast, LLC. 15167 Highway 331 Business, Suite B Freeport, Florida 32439 Attn: _____

Except as otherwise provided in this Agreement, any Notice shall be deemed received only upon actual delivery at the address set forth above. Notices delivered after 5:00 p.m. (at the place of delivery) or on a non-business day, shall be deemed received on the next business day. If any time for giving Notice contained in this Agreement would otherwise expire on a non-business day, the Notice period shall be extended to the next succeeding business day. Saturdays, Sundays, and legal holidays recognized by the United States government shall not be regarded as business days. Counsel for the District and counsel for the Contractor may deliver Notice on behalf of the District and the Contractor. Any party or other person to whom Notices are to be sent or copied may notify

the other parties and addressees of any change in name or address to which Notices shall be sent by providing the same on five (5) days written notice to the parties and addressees set forth herein.

23. THIRD PARTY BENEFICIARIES. This Agreement is solely for the benefit of the District and Contractor and no right or cause of action shall accrue upon or by reason, to or for the benefit of any third party not a formal party to this Agreement. Nothing in this Agreement expressed or implied is intended or shall be construed to confer upon any person or corporation other than the District and Contractor any right, remedy, or claim under or by reason of this Agreement or any of the provisions or conditions of this Agreement; and all of the provisions, representations, covenants, and conditions contained in this Agreement shall inure to the sole benefit of and shall be binding upon the District and Contractor and their respective representatives, successors, and assigns.

24. CONTROLLING LAW; VENUE. This Agreement and the provisions contained in this Agreement shall be construed, interpreted, and controlled according to the laws of the State of Florida. Venue for any dispute shall be in a court of appropriate jurisdiction in Walton County, Florida.

25. EFFECTIVE DATE. This Agreement shall be effective after execution by both the District and Contractor.

26. PUBLIC RECORDS. Contractor understands and agrees that all documents of any kind provided to the District in connection with this Agreement may be public records, and, accordingly, Contractor agrees to comply with all applicable provisions of Florida law in handling such records, including, but not limited, to Section 119.0701, *Florida Statutes*. Contractor acknowledges that the designated public records custodian for the District is Stephanie DeLuna ("Public Records Custodian"). Among other requirements and to the extent applicable by law, Contractor shall 1) keep and maintain public records required by the District to perform the service; 2) upon request by the Public Records Custodian, provide the District with the requested public records or allow the records to be inspected or copied within a reasonable time period at a cost that does not exceed the cost provided in Chapter 119, *Florida Statutes*; 3) ensure that public records which are exempt or confidential, and exempt from public records disclosure requirements, are not disclosed except as authorized by law for the duration of the contract term and following the contract term if Contractor does not transfer the records to the Public Records Custodian of the District; and 4) upon completion of the contract, transfer to the District, at no cost, all public records in Contractor's possession or, alternatively, keep, maintain and meet all applicable requirements for retaining public records pursuant to Florida laws. When such public records are transferred by Contractor, Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the District in a format that is compatible with Microsoft Word or Adobe PDF formats.

IF CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, *FLORIDA STATUTES*, TO CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 850-334-9055,

SDELUNA@RIZZETTA.COM, 120 RICHARD JACKSON BOULEVARD, SUITE 220, PANAMA CITY, FLORIDA 32407.

27. SEVERABILITY. The invalidity or unenforceability of any one or more provisions of this Agreement shall not affect the validity or enforceability of the remaining portions of this Agreement, or any part of this Agreement not held to be invalid or unenforceable.

28. ARM'S LENGTH TRANSACTION. This Agreement has been negotiated fully between the District and the Contractor as an arm's length transaction. The District and the Contractor participated fully in the preparation of this Agreement with the assistance of their respective counsel. In the case of a dispute concerning the interpretation of any provision of this Agreement, the parties are each deemed to have drafted, chosen, and selected the language, and any doubtful language will not be interpreted or construed against any party.

29. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which when executed and delivered shall be an original; however, all such counterparts together shall constitute, but one and the same instrument.

30. E-VERIFY REQUIREMENTS. Contractor shall comply with and perform all applicable provisions of Section 448.095, *Florida Statutes*. Accordingly, beginning January 1, 2021, to the extent required by Florida Statute, Contractor shall register with and use the United States Department of Homeland Security's E-Verify system to verify the work authorization status of all newly hired employees. The District may terminate this Agreement immediately for cause if there is a good faith belief that Contractor has knowingly violated Section 448.091, *Florida Statutes*.

If Contractor anticipates entering into agreements with a subcontractor for the Work, Contractor will not enter into the subcontractor agreement without first receiving an affidavit from the subcontractor regarding compliance with Section 448.095, *Florida Statutes*, and stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. Contractor shall maintain a copy of such affidavit for the duration of the agreement and provide a copy to the District upon request.

In the event that the District has a good faith belief that a subcontractor has knowingly violated Section 448.095, *Florida Statutes*, but Contractor has otherwise complied with its obligations hereunder, the District shall promptly notify Contractor. Contractor agrees to immediately terminate the agreement with the subcontractor upon notice from the District. Further, absent such notification from the District, Contractor or any subcontractor who has a good faith belief that a person or entity with which it is contracting has knowingly violated s. 448.09(1), Florida Statutes, shall promptly terminate its agreement with such person or entity.

By entering into this Agreement, Contractor represents that no public employer has terminated a contract with Contractor under Section 448.095(2)(c), *Florida Statutes*, within the year immediately preceding the date of this Agreement.

31. COMPLIANCE WITH SECTION 20.055, FLORIDA STATUTES. Contractor agrees to comply with section 20.055(5), *Florida Statutes*, to cooperate with the inspector general in any investigation, audit, inspection, review, or hearing pursuant such section and to incorporate in all subcontracts the obligation to comply with section 20.055(5), *Florida Statutes.*

{*Signatures on Following Page*}

IN WITNESS WHEREOF, the parties execute this agreement the day and year first written above.

ATTEST:

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT

_____
Secretary/Assistant Secretary

_____
Chairperson, Board of Supervisors

GREENEARTH SOUTHEAST, LLC.

_____
By: _____

_____
By:_____
Its:_____

Attachments:
Form of Work Authorization
Exhibit A: Scope of Services

Form of Work Authorization

GREENEARTH SOUTHEAST, LLC,
WORK AUTHORIZATION NO. ___

THIS WORK AUTHORIZATION ("Work Authorization") is presented according to the requirements of that certain Landscape Maintenance Agreement between the District and Contractor dated _____("Agreement"), and is made and entered into this ____ day of_____, 20__, by and between:

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT, a local unit of special-purpose government established pursuant to Chapter 190, Florida Statutes, being situated in Walton County, Florida ("District"); and

GREENEARTH SOUTHEAST, LLC, with a mailing address at 15167 Highway 331 Business Suite B, Freeport, Florida 32459 (hereinafter "Contractor").

SECTION 1. SCOPE OF SERVICES. Contractor shall provide the services set forth on the proposal attached hereto as **Exhibit A** and incorporated herein by reference ("Services") in accordance with the terms of the Agreement. The Agreement and this Work Authorization shall be controlling over any conflict between either document and the provisions of **Exhibit A**. **For any Services that involve the installation of new plants, Contractor will ensure that the plant materials have working irrigation available or that such plant materials are otherwise adequately irrigated as necessary to allow for grow-in, establishment, and survival.**

SECTION 2. COMPENSATION. Payment of compensation for the Services under this Work Authorization shall be based upon the Agreement and as set forth in **Exhibit A**.

SECTION 3. ACCEPTANCE. Acceptance of this Work Authorization will authorize the Contractor to complete the Services as specified in **Exhibit A,** and is indicated by the signature of the authorized representative of the District and the Contractor in the spaces provided below. Contractor shall perform the Services in accordance with the terms and conditions of the Agreement, which, except to the extent expressly altered or changed in this Work Authorization, remain in full force and effect.

(SIGNATURES APPEAR ON FOLLOWING PAGE)

IN WITNESS WHEREOF, the parties hereto have caused this Work Authorization to be executed the day and year first above written.

Attest:	**NATUREWALK COMMUNITY DEVELOPMENT DISTRICT**
_____	_____
Assistant Secretary/Secretary	By:_____
	Its: Chairman, Board of Supervisors
_____	
Print Name	
	GREEN EARTH SOUTHEAST, LLC
_____	_____
Witness	By: _____
	Its: _____

Exhibit A: Proposal

Exhibit A
Scope of Services

Tab 10

Proposed Budget
Naturewalk Community Development District
General Fund

Fiscal Year 2026/2027

	Chart of Accounts Classification	Actual YTD through 06/30/26	Projected Annual Totals 2025/2026	Annual Budget for 2025/2026	Projected Budget variance for 2025/2026	Budget for 2026/2027	Budget Increase (Decrease) vs 2025/2026
1							
2	**ASSESSMENT REVENUES**						
3							
4	***Special Assessments***						
5	Tax Roll	$ 938,344	$ 938,344	$ 936,603	$ 1,741	$ 1,025,308	$ 88,705
6							
7	**Assessment Revenue Subtotal**	**$ 938,344**	**$ 938,344**	**$ 936,603**	**$ 1,741**	**$ 1,025,308**	**$ 88,705**
8							
9	**OTHER REVENUES**						
10							
11	Balance Forward from Prior Year	$ 600	$ 600	$ -	$ 600	$ -	$ -
12	Interest Earnings	$ 8,232	$ 10,976	$ -	$ 10,976	$ -	$ -
13							
14	**Other Revenue Subtotal**	**$ 8,832**	**$ 11,576**	**$ -**	**$ 11,576**	**$ -**	**$ -**
15							
16	**TOTAL REVENUES**	**$ 947,176**	**$ 949,920**	**$ 936,603**	**$ 13,317**	**$ 1,025,308**	**$ 88,705**
17							
18	**EXPENDITURES - ADMINISTRATIVE**						
19							
20	***Legislative***						
21	Supervisor Fees	$ 6,400	$ 8,533	$ 12,000	$ 3,467	$ 12,000	$ -
22	***Financial & Administrative***						

Proposed Budget
Naturewalk Community Development District
General Fund

Fiscal Year 2026/2027

	Chart of Accounts Classification	Actual YTD through 06/30/26	Projected Annual Totals 2025/2026	Annual Budget for 2025/2026	Projected Budget variance for 2025/2026	Budget for 2026/2027	Budget Increase (Decrease) vs 2025/2026
23	Accounting Services	$ 12,980	$ 17,307	$ 17,306	$ (1)	$ 17,306	$ -
24	Administrative Services	$ 7,300	$ 9,733	$ 9,734	$ 1	$ 10,026	$ 292
25	Arbitrage Rebate Calculation	$ -	$ -	$ 450	$ 450	$ 450	$ -
26	Assessment Roll	$ 5,408	$ 5,408	$ 5,408	$ -	$ 5,408	$ -
27	Auditing Services	$ -	$ -	$ 3,350	$ 3,350	$ 3,550	$ 200
28	Disclosure Report	$ 3,750	$ 3,750	$ 5,000	$ 1,250	$ 5,000	$ -
29	District Engineer	$ 22,158	$ 29,544	$ 40,000	$ 10,456	$ 40,000	$ -
30	District Management	$ 21,294	$ 28,392	$ 28,392	$ -	$ 43,392	$ 15,000
31	Dues, Licenses & Fees	$ 248	$ 156	$ 175	$ 19	$ 175	$ -
32	Financial & Revenue Collections	$ 3,038	$ 4,051	$ 4,050	$ (1)	$ 4,050	$ -
33	Legal Advertising	$ 1,605	$ 2,140	$ 3,500	$ 1,360	$ 2,000	$ (1,500)
34	Miscellaneous Administrative Fees	$ 108	$ 144	$ 2,000	$ 1,856	$ 2,000	$ -
35	Public Officials Liability Insurance	$ 2,427	$ 2,427	$ 3,100	$ 673	$ 3,330	$ 230
36	Room Rentals	$ 1,250	$ 467	$ 1,800	$ 1,333	$ 1,800	$ -
37	Supervisor Workers Comp Insurance	$ 850	$ 1,133	$ 850	$ (283)	$ 850	$ -
38	Trustees Fees	$ 3,231	$ 4,308	$ 7,000	$ 2,692	$ 7,754	$ 754
39	Website Hosting, Maintenance, Backup & Email	$ 4,500	$ 5,000	$ 6,000	$ 1,000	$ 5,000	$ (1,000)
40	***Legal Counsel***						
41	District Counsel	$ 42,577	$ 56,769	$ 50,000	$ (6,769)	$ 55,000	$ 5,000
42	Litigation / Mediation	$ -	$ -	$ 5,000	$ 5,000	$ 5,000	$ -
43							
44	**Administrative Subtotal**	**$ 139,124**	**$ 179,262**	**$ 205,115**	**$ 25,853**	**$ 224,091**	**$ 18,976**

Proposed Budget
Naturewalk Community Development District
General Fund

Fiscal Year 2026/2027

	Chart of Accounts Classification	Actual YTD through 06/30/26	Projected Annual Totals 2025/2026	Annual Budget for 2025/2026	Projected Budget variance for 2025/2026	Budget for 2026/2027	Budget Increase (Decrease) vs 2025/2026
45							
46	**EXPENDITURES - FIELD OPERATIONS**						
47							
48	***Electric Utility Services***						
49	Utility - Electricity	$ 17,331	$ 23,108	$ 21,600	$ (1,508)	$ 23,174	$ 1,574
50	***Stormwater Control***						
51	Aquatic Maintenance	$ 6,912	$ 9,216	$ 9,500	$ 284	$ 9,785	$ 285
52	Fountain Repairs	$ 1,656	$ 2,208	$ 2,275	$ 67	$ 2,275	$ -
53	Stormwater Monitoring & Maintenance	$ -	$ 22,500	$ 22,500	$ -	$ 25,000	$ 2,500
54	Stormwater System Maintenance	$ -	$ -	$ 10,000	$ 10,000	$ 25,000	$ 15,000
55	***Other Physical Environment***						
56	Fence Repairs/ Bulkhead Repairs	$ 3,949	$ 22,544	$ 25,000	$ 2,456	$ 25,000	$ -
57	General Liability Insurance	$ 2,831	$ 4,759	$ 3,500	$ (1,259)	$ 3,883	$ 383
58	Irrigation Repairs	$ 1,004	$ 10,339	$ 12,000	$ 1,661	$ 12,000	$ -
59	Landscape - Mulch	$ 29,225	$ 28,863	$ 60,000	$ 31,137	$ 65,000	$ 5,000
60	Landscape Maintenance	$ 233,725	$ 311,633	$ 160,000	$ (151,633)	$ 192,250	$ 32,250
61	Landscape Replacement, Plants, Shrubs, Trees, Enhanchments	$ 481	$ 641	$ 25,000	$ 24,359	$ 50,000	$ 25,000
62	Pedestrian Path Lighting	$ -	$ -	$ -	$ -	$ -	$ -
63	Property Insurance	$ 36,305	$ 69,145	$ 53,000	$ (16,145)	$ 46,550	$ (6,450)
64	Tree Services / Palm tree Services	$ -	$ -	$ 4,000	$ 4,000	$ 4,000	$ -
65	Well Maintenance	$ -	$ -	$ 14,300	$ 14,300	$ 14,300	$ -
66	***Road & Street Facilities***						

Proposed Budget
Naturewalk Community Development District
General Fund

Fiscal Year 2026/2027

	Chart of Accounts Classification	Actual YTD through 06/30/26	Projected Annual Totals 2025/2026	Annual Budget for 2025/2026	Projected Budget variance for 2025/2026	Budget for 2026/2027	Budget Increase (Decrease) vs 2025/2026
67	Bridge Repair	$ 49,201	$ 65,601	$ 80,000	$ 14,399	$ 80,000	$ -
68	Roadway Repair & Maintenance	$ 81,669	$ 108,892	$ 117,000	$ 8,108	$ 120,000	$ 3,000
69	Security Camera Equipment Lease	$ 2,500	$ 3,333	$ 5,000	$ 1,667	$ 5,000	$ -
70	Sidewalk Maintenance & Repair	$ 1,975	$ 2,633	$ 6,000	$ 3,367	$ 6,000	$ -
71	Street Light/Decorative Light Maintenance	$ 3,087	$ 4,116	$ 10,000	$ 5,884	$ 10,000	$ -
72	Street Sign Repair & Replacement	$ 132	$ 176	$ 2,000	$ 1,824	$ 2,000	$ -
73	Trail Path Maintenance	$ -	$ -	$ 15,000	$ 15,000	$ 15,000	$ -
74	***Contingency***						
75	Miscellaneous Contingency	$ 51,288	$ 22,900	$ 73,813	$ 50,913	$ 65,000	$ (8,813)
76							
77	**Field Operations Subtotal**	**$ 523,271**	**$ 712,608**	**$ 731,488**	**$ 18,880**	**$ 801,217**	**$ 69,729**
78							
79	**TOTAL EXPENDITURES**	**$ 662,395**	**$ 891,870**	**$ 936,603**	**$ 44,733**	**$ 1,025,308**	**$ 88,705**
80							
81	**EXCESS OF REVENUES OVER EXPENDITURES**	**$ 284,781**	**$ 58,050**	**$ -**	**$ 58,050**	**$ -**	**$ -**
82							

Proposed Budget
Naturewalk Community Development District
Reserve Fund
Fiscal Year 2026/2027

	Chart of Accounts Classification	Actual YTD through 06/30/26	Projected Annual Totals 2025/2026	Annual Budget for 2025/2026	Projected Budget variance for 2025/2026	Budget for 2026/2027	Budget Increase (Decrease) vs 2025/2026	Comments
1								
2	**ASSESSMENT REVENUES**							
3								
4	***Special Assessments***							
5	Tax Roll	$ -	$ -	$ 75,000	$ (75,000)	$ 75,000	$ -	
6								
7	**Assessment Revenue Subtotal**	**$ -**	**$ -**	**$ 75,000**	**$ (75,000)**	**$ 75,000**	**$ -**	
8								
9	**OTHER REVENUES**							
10								
11	***Interest Earnings***							
12	Interest Earnings	$ -	$ -	$ -	$ -	$ -	$ -	
13	***Other Miscellaneous Revenues***							
14	Balance Forward from Prior Year	$ -	$ -	$ -	$ -	$ -	$ -	
15								
16	**Other Revenue Subtotal**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	
17								
18	**TOTAL REVENUES**	**$ -**	**$ -**	**$ 75,000**	**$ (75,000)**	**$ 75,000**	**$ -**	
19								
20	**EXPENDITURES**							
21								
22	***Contingency***							
23	Capital Reserves	$ -	$ -	$ 75,000	$ 75,000	$ 75,000	$ -	Capital Reserves to fund unforeseen infrastructure repairs and replacement.
24								
25	**TOTAL EXPENDITURES**	**$ -**	**$ -**	**$ 75,000**	**$ 75,000**	**$ 75,000**	**$ -**	
26								
27	**EXCESS OF REVENUES OVER EXPENDITURES**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	
28								

Naturewalk Community Development District

Debt Service

Fiscal Year 2026/2027

Chart of Accounts Classification	Series 2007A	Budget for 2026/2027
REVENUES		
Special Assessments		
Net Special Assessments [1]	$409,119.17	$409,119.17
TOTAL REVENUES	**$409,119.17**	**$409,119.17**
EXPENDITURES		
Administrative		
Debt Service Obligation	$409,119.17	$409,119.17
Administrative Subtotal	**$409,119.17**	**$409,119.17**
TOTAL EXPENDITURES	**$409,119.17**	**$409,119.17**
EXCESS OF REVENUES OVER EXPENDITURES	**$0.00**	**$0.00**

Collection Costs (2%) and Early Payment Discount (4%) applicable to the county:	6.0%
GROSS ASSESSMENTS	**$435,233.16**

Notes:

Tax Roll Collection Costs (2%) and Early Payment Discount (4%) for Walton County is 6.0% of Tax Roll. Budgeted net of tax roll assessments. See Assessment Table.

[1] Maximum Annual Debt Service less Prepaid Assessments received.

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT

FISCAL YEAR 2026/2027 O&M & DEBT SERVICE ASSESSMENT SCHEDULE

2026/2027 O&M Budget:		$1,100,308.00	**2025/2026 O&M Budget:**	$1,011,603.00
Collection Costs:	2%	$23,410.81	**2026/2027 O&M Budget:**	$1,100,308.00
Early Payment Discounts:	4%	$46,821.62		
2026/2027 Total:			**Total Difference:**	

Lot Size	Assessment Breakdown	Per Unit Annual Assessment Comparison		Proposed Increase / Decrease	
		2025/2026	*2026/2027*	*$*	*%*
Single Family 35'	Series 2007A Debt Service	$1,138.28	$1,138.28	$0.00	0.00%
	Operations/Maintenance	$1,998.84	$2,174.11	$175.27	8.77%
	Total	**$3,137.12**	**$3,312.39**	**$175.27**	**5.59%**
Single Family 45'	Series 2007A Debt Service	$1,463.51	$1,463.51	$0.00	0.00%
	Operations/Maintenance	$2,578.50	$2,804.60	$226.10	8.77%
	Total	**$4,042.01**	**$4,268.11**	**$226.10**	**5.59%**
Office Building	Series 2007A Debt Service[(1)]	$0.00	$0.00	$0.00	0.00%
	Operations/Maintenance	$7,335.73	$7,978.98	$643.25	8.77%
	Total	**$7,335.73**	**$7,978.98**	**$643.25**	**8.77%**
Multifamily (Unplatted)	Series 2007A Debt Service	$978.92	$978.92	$0.00	0.00%
	Operations/Maintenance	$1,719.00	$1,869.73	$150.73	8.77%
	Total	**$2,697.92**	**$2,848.65**	**$150.73**	**5.59%**

(1) Debt was prepaid

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT

FISCAL YEAR 2026/2027 O&M & DEBT SERVICE ASSESSMENT SCHEDULE

TOTAL O&M BUDGET		**$1,100,308.00**
COLLECTION COSTS @	**2.0%**	**$23,410.81**
EARLY PAYMENT DISCOUNT@	**4.0%**	**$46,821.62**
TOTAL O&M ASSESSMENT		**$1,170,540.43**

UNITS ASSESSED

LOT SIZE	O&M	SERIES 2007A DEBT SERVICE [1]
SINGLE FAMILY 35	143	80
SINGLE FAMILY 45	153	84
OFFICE BUILDING	1	0
Total Platted	**297**	**164**
MULTIFAMILY	226	226
Total Unplatted	**226**	**226**
Total Community	**523**	**390**

ALLOCATION OF O&M ASSESSMENT

EAU FACTOR	TOTAL EAU's	% TOTAL EAU's	TOTAL O&M BUDGET
1.00	143.00	26.56%	$310,897.62
1.29	197.37	36.66%	$429,103.94
3.67	3.67	0.68%	$7,978.98
	344.04	**63.90%**	**$747,980.55**
0.86	194.36	36.10%	$422,559.88
	194.36	**36.10%**	**$422,559.88**
	538.40	**100.00%**	**$1,170,540.43**

PER LOT ANNUAL ASSESSMENT

O&M	SERIES 2007A DEBT SERVICE [2]	TOTAL [3]
$2,174.11	**$1,138.28**	**$3,312.39**
$2,804.60	**$1,463.51**	**$4,268.11**
$7,978.98	**$0.00**	**$7,978.98**
$1,869.73	**$978.92**	**$2,848.65**

LESS: Walton County Collection Costs (2%) and Early Payment Discount Costs (4%)	**($70,232.43)**
Net Revenue to be Collected	**$1,100,308.00**

[1] Reflects the number of total lots with Series 2007A debt outstanding.

[2] Annual debt service assessment per lot adopted in connection with the Series 2007A bond issue. Annual assessment includes principal, interest, Walton County collection costs and early payment discount costs.

[3] Annual assessment that will appear on November 2026 Walton County property tax bill. Amount shown includes all applicable collection costs. Property owner is eligible for a discount of up to 4% if paid early.

RESOLUTION 2026-06
[FY 2027 APPROPRIATION RESOLUTION]

THE ANNUAL APPROPRIATION RESOLUTION OF THE NATUREWALK COMMUNITY DEVELOPMENT DISTRICT ("DISTRICT") RELATING TO THE ANNUAL APPROPRIATIONS AND ADOPTING THE BUDGET(S) FOR THE FISCAL YEAR BEGINNING OCTOBER 1, 2026, AND ENDING SEPTEMBER 30, 2027; AUTHORIZING BUDGET AMENDMENTS; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, for the fiscal year beginning October 1, 2026, and ending September 30, 2027 ("**FY 2027**"), the District Manager prepared and submitted to the Board of Supervisors ("**Board**") of the NatureWalk Community Development District (**"District"**) prior to June 15, 2026, proposed budget(s) ("**Proposed Budget**") along with an explanatory and complete financial plan for each fund of the District, pursuant to the provisions of Section 190.008(2)(a), *Florida Statute*s; and

WHEREAS, at least sixty (60) days prior to the adoption of the Proposed Budget, the District filed a copy of the Proposed Budget with the local general-purpose government(s) having jurisdiction over the area included in the District pursuant to the provisions of Section 190.008(2)(b), *Florida Statutes*; and

WHEREAS, the Board set a public hearing on the Proposed Budget and caused notice of such public hearing to be given by publication pursuant to Section 190.008(2)(a), *Florida Statutes*; and

WHEREAS, the District Manager posted the Proposed Budget on the District's website in accordance with Section 189.016, *Florida Statutes*; and

WHEREAS, Section 190.008(2)(a), *Florida Statutes*, requires that, prior to October 1st of each year, the Board, by passage of the Annual Appropriation Resolution, shall adopt a budget for the ensuing fiscal year and appropriate such sums of money as the Board deems necessary to defray all expenditures of the District during the ensuing fiscal year.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF THE NATUREWALK COMMUNITY DEVELOPMENT DISTRICT:

SECTION 1. BUDGET

a. The Proposed Budget, attached hereto as **Exhibit A,** as amended by the Board, is hereby adopted in accordance with the provisions of Section 190.008(2)(a), *Florida Statutes* (**"Adopted Budget"**), and incorporated herein by reference; provided, however, that the comparative figures contained in the Adopted Budget may be subsequently revised as deemed necessary by the District Manager to reflect actual revenues and expenditures.

b. The Adopted Budget, as amended, shall be maintained in the office of the District Manager and at the District's Local Records Office and identified as "The Budget for the NatureWalk Community Development District for the Fiscal Year Ending September 30, 2027."

c. The Adopted Budget shall be posted by the District Manager on the District's official website in accordance with Section 189, *Florida Statutes* and shall remain on the website for at least two (2) years.

SECTION 2. APPROPRIATIONS

There is hereby appropriated out of the revenues of the District, for FY 2027, the sum(s) set forth in **Exhibit A** to be raised by the levy of assessments and/or otherwise, which sum is deemed by the Board to be necessary to defray all expenditures of the District during said budget year, to be divided and appropriated as set forth in **Exhibit A.**

SECTION 3. BUDGET AMENDMENTS

Pursuant to Section 189.016, *Florida Statutes*, the District at any time within FY 2027 or within 60 days following the end of the FY 2027 may amend its Adopted Budget for that fiscal year as follows:

a. A line-item appropriation for expenditures within a fund may be decreased or increased by motion of the Board recorded in the minutes, and approving the expenditure, if the total appropriations of the fund do not increase.

b. The District Manager or Treasurer may approve an expenditure that would increase or decrease a line-item appropriation for expenditures within a fund if the total appropriations of the fund do not increase and if either (i) the aggregate change in the original appropriation item does not exceed the greater of $15,000 or 15% of the original appropriation, or (ii) such expenditure is authorized by separate disbursement or spending resolution.

c. Any other budget amendments shall be adopted by resolution and consistent with Florida law. The District Manager or Treasurer must ensure that any amendments to the budget under this paragraph c. are posted on the District's website in accordance with Section 189, *Florida Statutes*, and remain on the website for at least two (2) years.

SECTION 4. APPROVAL OF PRIOR ACTIONS. The actions of the Chairman, Vice Chairman, Secretary, Treasurer, Assistant Secretaries, and all District Staff in finalizing the Adopted Budget, including preparing the Proposed Budget and setting, noticing, and all other actions required for the public hearing on the Proposed Budget, are hereby ratified, approved, and confirmed in all respects.

SECTION 5. SEVERABILITY; EFFECTIVE DATE. The invalidity or unenforceability of any one or more provisions of the Resolution shall not affect the validity or enforceability of the remaining portions of this Resolution, or any part thereof. This Resolution shall take effect immediately upon adoption.

PASSED AND ADOPTED THIS 6th DAY OF AUGUST, 2026.

ATTEST:

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT

_____
Secretary / Assistant Secretary

_____
Chair/Vice Chair, Board of Supervisors

Exhibit A: FY 2027 Budget

Tab 11

RESOLUTION 2026-07
[FY 2027 ASSESSMENT RESOLUTION]

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE NATUREWALK COMMUNITY DEVELOPMENT DISTRICT COMMUNITY DEVELOPMENT DISTRICT PROVIDING FOR FUNDING FOR THE FY 2027 ADOPTED BUDGET(S); PROVIDING FOR THE COLLECTION AND ENFORCEMENT OF SPECIAL ASSESSMENTS, INCLUDING BUT NOT LIMITED TO PENALTIES AND INTEREST THEREON; CERTIFYING AN ASSESSMENT ROLL; PROVIDING FOR AMENDMENTS TO THE ASSESSMENT ROLL; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the NatureWalk Community Development District Community Development District ("**District**") is a local unit of special-purpose government established pursuant to Chapter 190, *Florida Statutes,* for the purpose of providing, operating and maintaining infrastructure improvements, facilities and services to the lands within the District, located in Walton County, Florida ("**County**"); and

WHEREAS, the District has constructed or acquired various infrastructure improvements and provides certain services in accordance with the District's adopted capital improvement plan and Chapter 190, *Florida Statutes*; and

WHEREAS, for the fiscal year beginning October 1, 2026, and ending September 30, 2027 (**"FY 2027"**), the Board of Supervisors ("**Board**") of the District has determined to undertake various operations and maintenance and other activities described in the District's budget (**"Adopted Budget**"), attached hereto as **Exhibit A**; and

WHEREAS, pursuant to Chapter 190, *Florida Statutes*, the District may fund the Adopted Budget through the levy and imposition of special assessments on benefitted lands within the District and, regardless of the imposition method utilized by the District, under Florida law the District may collect such assessments by direct bill, tax roll, or in accordance with other collection measures provided by law; and

WHEREAS, in order to fund the District's Adopted Budget, the District's Board now desires to adopt this Resolution setting forth the means by which the District intends to fund its Adopted Budget.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF THE NATUREWALK COMMUNITY DEVELOPMENT DISTRICT COMMUNITY DEVELOPMENT DISTRICT:

1. **FUNDING.** The District's Board hereby authorizes the funding mechanisms for the Adopted Budget as provided further herein and as indicated in the Adopted Budget attached hereto as **Exhibit A** and the assessment roll attached hereto as **Exhibit B** ("**Assessment Roll**").

2. **OPERATIONS AND MAINTENANCE ASSESSMENTS.**

   a. Benefit Findings. The provision of the services, facilities, and operations as described in **Exhibit A** confers a special and peculiar benefit to the lands within the District, which benefit exceeds or equals the cost of the assessments. The

allocation of the assessments to the specially benefitted lands is shown in **Exhibit A** and **Exhibit B** and is hereby found to be fair and reasonable.

b. O&M Assessment Imposition. Pursuant to Chapter 190, *Florida Statutes*, a special assessment for operations and maintenance ("**O&M Assessment(s)**") is hereby levied and imposed on benefitted lands within the District and in accordance with **Exhibit A** and **Exhibit B**. The lien of the O&M Assessments imposed and levied by this Resolution shall be effective upon passage of this Resolution.

c. Maximum Rate. Pursuant to Section 197.3632(4), *Florida Statutes*, the lien amount shall serve as the "maximum rate" authorized by law for operation and maintenance assessments.

3. **DEBT SERVICE SPECIAL ASSESSMENTS.** The District's Board hereby certifies for collection the FY 2027 installment of the District's previously levied debt service special assessments ("**Debt Assessments**," and together with the O&M Assessments, the "**Assessments**") in accordance with this Resolution and as further set forth in **Exhibit A** and **Exhibit B**, and hereby directs District staff to affect the collection of the same**.**

4. **COLLECTION AND ENFORCEMENT; PENALTIES; INTEREST.** Pursuant to Chapter 190, *Florida Statutes,* the District is authorized to collect and enforce the Assessments as set forth below.

a. Tax Roll Assessments. To the extent indicated in **Exhibit A** and **Exhibit B**, those certain O&M Assessments (if any) and/or Debt Assessments (if any) imposed on the "**Tax Roll Property**" identified in **Exhibit B** shall be collected by the County Tax Collector at the same time and in the same manner as County property taxes in accordance with Chapter 197, *Florida Statutes* ("**Uniform Method**"). That portion of the Assessment Roll which includes the Tax Roll Property is hereby certified to the County Tax Collector and shall be collected by the County Tax Collector in the same manner and time as County property taxes. The District's Board finds and determines that such collection method is an efficient method of collection for the Tax Roll Property.

b. **Direct Bill Assessments** Direct Bill Assessments. The previously levied debt service assessments on the undeveloped property owned by New NatureWalk, LLC, will be collected directly by the District in accordance with Florida law, as set forth in Exhibits "A" and "C." The Series 2007A Bonds debt service assessments directly collected by the District are due in full on December 1, 2021; provided, however, that to the extent permitted by law, the assessments due may be paid in partial, deferred payments and according to the following schedule: 50% due no later than December 1, 2021, and 50% due no later than April 1, 2022. In the event that an assessment payment is not made in accordance with the schedule stated above, the whole assessment – including any remaining partial, deferred payments for Fiscal Year 2021-2022, as well as any future installments of special assessments securing debt service – shall immediately become due and payable; shall accrue interest, penalties in the amount of one percent (1%) per month, and

all costs of collection and enforcement; and shall either be enforced pursuant to a foreclosure action, or, at the District's sole discretion, collected pursuant to the Uniform Method on a future tax bill, which amount may include penalties, interest, and costs of collection and enforcement. Any prejudgment interest on delinquent assessments shall accrue at the applicable rate of any bonds or other debt instruments secured by the special assessments, or, in the case of operations and maintenance assessments, at the applicable statutory prejudgment interest rate. In the event an assessment subject to direct collection by the District shall be delinquent and the District is unable to attain a quorum for two (2) noticed meetings, the District Manager and District Counsel, without further authorization by the Board, may initiate foreclosure proceedings pursuant to Chapter 170, Florida Statutes, or other applicable law to collect and enforce the whole assessment, as set forth herein.

c. **Future Collection Methods.** The District's decision to collect Assessments by any particular method – e.g., on the tax roll or by direct bill – does not mean that such method will be used to collect special assessments in future years, and the District reserves the right in its sole discretion to select collection methods in any given year, regardless of past practices.

5. **ASSESSMENT ROLL; AMENDMENTS.** The Assessment Roll, attached hereto as **Exhibit B,** is hereby certified for collection. The Assessment Roll shall be collected pursuant to the collection methods provided above. The proceeds therefrom shall be paid to the District. The District Manager shall keep apprised of all updates made to the County property roll by the Property Appraiser after the date of this Resolution and shall amend the Assessment Roll in accordance with any such updates, for such time as authorized by Florida law, to the County property roll.

6. **APPROVAL OF PRIOR ACTIONS.** The actions of the Chairman, Vice Chairman, Secretary, Treasurer, Assistant Secretaries, and all District Staff in finalizing the Assessments and Assessment Roll as provided herein are hereby ratified, approved, and confirmed in all respects.

7. **SEVERABILITY; EFFECTIVE DATE.** The invalidity or unenforceability of any one or more provisions of this Resolution shall not affect the validity or enforceability of the remaining portions of this Resolution, or any part thereof. This Resolution shall take effect immediately upon adoption.

[CONTINUED ON NEXT PAGE]

PASSED AND ADOPTED THIS 6th DAY OF AUGUST, 2026.

ATTEST:

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT COMMUNITY DEVELOPMENT DISTRICT

_____
Secretary / Assistant Secretary

By:_____

Its:_____

Exhibit A: Adopted Budget
Exhibit B: Assessment Roll

Proposed Budget
Naturewalk Community Development District
General Fund

Fiscal Year 2026/2027

	Chart of Accounts Classification	Actual YTD through 06/30/26	Projected Annual Totals 2025/2026	Annual Budget for 2025/2026	Projected Budget variance for 2025/2026	Budget for 2026/2027	Budget Increase (Decrease) vs 2025/2026
1							
2	**ASSESSMENT REVENUES**						
3							
4	***Special Assessments***						
5	Tax Roll	$ 938,344	$ 938,344	$ 936,603	$ 1,741	$ 1,025,308	$ 88,705
6							
7	**Assessment Revenue Subtotal**	**$ 938,344**	**$ 938,344**	**$ 936,603**	**$ 1,741**	**$ 1,025,308**	**$ 88,705**
8							
9	**OTHER REVENUES**						
10							
11	Balance Forward from Prior Year	$ 600	$ 600	$ -	$ 600	$ -	$ -
12	Interest Earnings	$ 8,232	$ 10,976	$ -	$ 10,976	$ -	$ -
13							
14	**Other Revenue Subtotal**	**$ 8,832**	**$ 11,576**	**$ -**	**$ 11,576**	**$ -**	**$ -**
15							
16	**TOTAL REVENUES**	**$ 947,176**	**$ 949,920**	**$ 936,603**	**$ 13,317**	**$ 1,025,308**	**$ 88,705**
17							
18	**EXPENDITURES - ADMINISTRATIVE**						
19							
20	***Legislative***						
21	Supervisor Fees	$ 6,400	$ 8,533	$ 12,000	$ 3,467	$ 12,000	$ -
22	***Financial & Administrative***						

Proposed Budget
Naturewalk Community Development District
General Fund

Fiscal Year 2026/2027

	Chart of Accounts Classification	Actual YTD through 06/30/26	Projected Annual Totals 2025/2026	Annual Budget for 2025/2026	Projected Budget variance for 2025/2026	Budget for 2026/2027	Budget Increase (Decrease) vs 2025/2026
23	Accounting Services	$ 12,980	$ 17,307	$ 17,306	$ (1)	$ 17,306	$ -
24	Administrative Services	$ 7,300	$ 9,733	$ 9,734	$ 1	$ 10,026	$ 292
25	Arbitrage Rebate Calculation	$ -	$ -	$ 450	$ 450	$ 450	$ -
26	Assessment Roll	$ 5,408	$ 5,408	$ 5,408	$ -	$ 5,408	$ -
27	Auditing Services	$ -	$ -	$ 3,350	$ 3,350	$ 3,550	$ 200
28	Disclosure Report	$ 3,750	$ 3,750	$ 5,000	$ 1,250	$ 5,000	$ -
29	District Engineer	$ 22,158	$ 29,544	$ 40,000	$ 10,456	$ 40,000	$ -
30	District Management	$ 21,294	$ 28,392	$ 28,392	$ -	$ 43,392	$ 15,000
31	Dues, Licenses & Fees	$ 248	$ 156	$ 175	$ 19	$ 175	$ -
32	Financial & Revenue Collections	$ 3,038	$ 4,051	$ 4,050	$ (1)	$ 4,050	$ -
33	Legal Advertising	$ 1,605	$ 2,140	$ 3,500	$ 1,360	$ 2,000	$ (1,500)
34	Miscellaneous Administrative Fees	$ 108	$ 144	$ 2,000	$ 1,856	$ 2,000	$ -
35	Public Officials Liability Insurance	$ 2,427	$ 2,427	$ 3,100	$ 673	$ 3,330	$ 230
36	Room Rentals	$ 1,250	$ 467	$ 1,800	$ 1,333	$ 1,800	$ -
37	Supervisor Workers Comp Insurance	$ 850	$ 1,133	$ 850	$ (283)	$ 850	$ -
38	Trustees Fees	$ 3,231	$ 4,308	$ 7,000	$ 2,692	$ 7,754	$ 754
39	Website Hosting, Maintenance, Backup & Email	$ 4,500	$ 5,000	$ 6,000	$ 1,000	$ 5,000	$ (1,000)
40	***Legal Counsel***						
41	District Counsel	$ 42,577	$ 56,769	$ 50,000	$ (6,769)	$ 55,000	$ 5,000
42	Litigation / Mediation	$ -	$ -	$ 5,000	$ 5,000	$ 5,000	$ -
43							
44	**Administrative Subtotal**	**$ 139,124**	**$ 179,262**	**$ 205,115**	**$ 25,853**	**$ 224,091**	**$ 18,976**

Proposed Budget
Naturewalk Community Development District
General Fund

Fiscal Year 2026/2027

	Chart of Accounts Classification	Actual YTD through 06/30/26	Projected Annual Totals 2025/2026	Annual Budget for 2025/2026	Projected Budget variance for 2025/2026	Budget for 2026/2027	Budget Increase (Decrease) vs 2025/2026
45							
46	**EXPENDITURES - FIELD OPERATIONS**						
47							
48	***Electric Utility Services***						
49	Utility - Electricity	$ 17,331	$ 23,108	$ 21,600	$ (1,508)	$ 23,174	$ 1,574
50	***Stormwater Control***						
51	Aquatic Maintenance	$ 6,912	$ 9,216	$ 9,500	$ 284	$ 9,785	$ 285
52	Fountain Repairs	$ 1,656	$ 2,208	$ 2,275	$ 67	$ 2,275	$ -
53	Stormwater Monitoring & Maintenance	$ -	$ 22,500	$ 22,500	$ -	$ 25,000	$ 2,500
54	Stormwater System Maintenance	$ -	$ -	$ 10,000	$ 10,000	$ 25,000	$ 15,000
55	***Other Physical Environment***						
56	Fence Repairs/ Bulkhead Repairs	$ 3,949	$ 22,544	$ 25,000	$ 2,456	$ 25,000	$ -
57	General Liability Insurance	$ 2,831	$ 4,759	$ 3,500	$ (1,259)	$ 3,883	$ 383
58	Irrigation Repairs	$ 1,004	$ 10,339	$ 12,000	$ 1,661	$ 12,000	$ -
59	Landscape - Mulch	$ 29,225	$ 28,863	$ 60,000	$ 31,137	$ 65,000	$ 5,000
60	Landscape Maintenance	$ 233,725	$ 311,633	$ 160,000	$ (151,633)	$ 192,250	$ 32,250
61	Landscape Replacement, Plants, Shrubs, Trees, Enhanchments	$ 481	$ 641	$ 25,000	$ 24,359	$ 50,000	$ 25,000
62	Pedestrian Path Lighting	$ -	$ -	$ -	$ -	$ -	$ -
63	Property Insurance	$ 36,305	$ 69,145	$ 53,000	$ (16,145)	$ 46,550	$ (6,450)
64	Tree Services / Palm tree Services	$ -	$ -	$ 4,000	$ 4,000	$ 4,000	$ -
65	Well Maintenance	$ -	$ -	$ 14,300	$ 14,300	$ 14,300	$ -
66	***Road & Street Facilities***						

Proposed Budget
Naturewalk Community Development District
General Fund

Fiscal Year 2026/2027

	Chart of Accounts Classification	Actual YTD through 06/30/26	Projected Annual Totals 2025/2026	Annual Budget for 2025/2026	Projected Budget variance for 2025/2026	Budget for 2026/2027	Budget Increase (Decrease) vs 2025/2026
67	Bridge Repair	$ 49,201	$ 65,601	$ 80,000	$ 14,399	$ 80,000	$ -
68	Roadway Repair & Maintenance	$ 81,669	$ 108,892	$ 117,000	$ 8,108	$ 120,000	$ 3,000
69	Security Camera Equipment Lease	$ 2,500	$ 3,333	$ 5,000	$ 1,667	$ 5,000	$ -
70	Sidewalk Maintenance & Repair	$ 1,975	$ 2,633	$ 6,000	$ 3,367	$ 6,000	$ -
71	Street Light/Decorative Light Maintenance	$ 3,087	$ 4,116	$ 10,000	$ 5,884	$ 10,000	$ -
72	Street Sign Repair & Replacement	$ 132	$ 176	$ 2,000	$ 1,824	$ 2,000	$ -
73	Trail Path Maintenance	$ -	$ -	$ 15,000	$ 15,000	$ 15,000	$ -
74	***Contingency***						
75	Miscellaneous Contingency	$ 51,288	$ 22,900	$ 73,813	$ 50,913	$ 65,000	$ (8,813)
76							
77	**Field Operations Subtotal**	**$ 523,271**	**$ 712,608**	**$ 731,488**	**$ 18,880**	**$ 801,217**	**$ 69,729**
78							
79	**TOTAL EXPENDITURES**	**$ 662,395**	**$ 891,870**	**$ 936,603**	**$ 44,733**	**$ 1,025,308**	**$ 88,705**
80							
81	**EXCESS OF REVENUES OVER EXPENDITURES**	**$ 284,781**	**$ 58,050**	**$ -**	**$ 58,050**	**$ -**	**$ -**
82							

Proposed Budget
Naturewalk Community Development District
Reserve Fund
Fiscal Year 2026/2027

	Chart of Accounts Classification	Actual YTD through 06/30/26	Projected Annual Totals 2025/2026	Annual Budget for 2025/2026	Projected Budget variance for 2025/2026	Budget for 2026/2027	Budget Increase (Decrease) vs 2025/2026	Comments
1								
2	**ASSESSMENT REVENUES**							
3								
4	***Special Assessments***							
5	Tax Roll	$ -	$ -	$ 75,000	$ (75,000)	$ 75,000	$ -	
6								
7	**Assessment Revenue Subtotal**	**$ -**	**$ -**	**$ 75,000**	**$ (75,000)**	**$ 75,000**	**$ -**	
8								
9	**OTHER REVENUES**							
10								
11	***Interest Earnings***							
12	Interest Earnings	$ -	$ -	$ -	$ -	$ -	$ -	
13	***Other Miscellaneous Revenues***							
14	Balance Forward from Prior Year	$ -	$ -	$ -	$ -	$ -	$ -	
15								
16	**Other Revenue Subtotal**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	
17								
18	**TOTAL REVENUES**	**$ -**	**$ -**	**$ 75,000**	**$ (75,000)**	**$ 75,000**	**$ -**	
19								
20	**EXPENDITURES**							
21								
22	***Contingency***							
23	Capital Reserves	$ -	$ -	$ 75,000	$ 75,000	$ 75,000	$ -	Capital Reserves to fund unforeseen infrastructure repairs and replacement.
24								
25	**TOTAL EXPENDITURES**	**$ -**	**$ -**	**$ 75,000**	**$ 75,000**	**$ 75,000**	**$ -**	
26								
27	**EXCESS OF REVENUES OVER EXPENDITURES**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	
28								

Naturewalk Community Development District

Debt Service

Fiscal Year 2026/2027

Chart of Accounts Classification	Series 2007A	Budget for 2026/2027
REVENUES		
Special Assessments		
Net Special Assessments [1]	$409,119.17	$409,119.17
TOTAL REVENUES	**$409,119.17**	**$409,119.17**
EXPENDITURES		
Administrative		
Debt Service Obligation	$409,119.17	$409,119.17
Administrative Subtotal	**$409,119.17**	**$409,119.17**
TOTAL EXPENDITURES	**$409,119.17**	**$409,119.17**
EXCESS OF REVENUES OVER EXPENDITURES	**$0.00**	**$0.00**

Collection Costs (2%) and Early Payment Discount (4%) applicable to the county:	6.0%
GROSS ASSESSMENTS	**$435,233.16**

Notes:

Tax Roll Collection Costs (2%) and Early Payment Discount (4%) for Walton County is 6.0% of Tax Roll. Budgeted net of tax roll assessments. See Assessment Table.

[1] Maximum Annual Debt Service less Prepaid Assessments received.

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT

FISCAL YEAR 2026/2027 O&M & DEBT SERVICE ASSESSMENT SCHEDULE

2026/2027 O&M Budget:		$1,100,308.00	**2025/2026 O&M Budget:**	$1,011,603.00
Collection Costs:	2%	$23,410.81	**2026/2027 O&M Budget:**	$1,100,308.00
Early Payment Discounts:	4%	$46,821.62		
2026/2027 Total:			**Total Difference:**	

Lot Size	Assessment Breakdown	Per Unit Annual Assessment Comparison		Proposed Increase / Decrease	
		2025/2026	*2026/2027*	*$*	*%*
Single Family 35'	Series 2007A Debt Service	$1,138.28	$1,138.28	$0.00	0.00%
	Operations/Maintenance	$1,998.84	$2,174.11	$175.27	8.77%
	Total	**$3,137.12**	**$3,312.39**	**$175.27**	**5.59%**
Single Family 45'	Series 2007A Debt Service	$1,463.51	$1,463.51	$0.00	0.00%
	Operations/Maintenance	$2,578.50	$2,804.60	$226.10	8.77%
	Total	**$4,042.01**	**$4,268.11**	**$226.10**	**5.59%**
Office Building	Series 2007A Debt Service[(1)]	$0.00	$0.00	$0.00	0.00%
	Operations/Maintenance	$7,335.73	$7,978.98	$643.25	8.77%
	Total	**$7,335.73**	**$7,978.98**	**$643.25**	**8.77%**
Multifamily (Unplatted)	Series 2007A Debt Service	$978.92	$978.92	$0.00	0.00%
	Operations/Maintenance	$1,719.00	$1,869.73	$150.73	8.77%
	Total	**$2,697.92**	**$2,848.65**	**$150.73**	**5.59%**

(1) Debt was prepaid

NATUREWALK COMMUNITY DEVELOPMENT DISTRICT

FISCAL YEAR 2026/2027 O&M & DEBT SERVICE ASSESSMENT SCHEDULE

TOTAL O&M BUDGET		**$1,100,308.00**
COLLECTION COSTS @	**2.0%**	**$23,410.81**
EARLY PAYMENT DISCOUNT@	**4.0%**	**$46,821.62**
TOTAL O&M ASSESSMENT		**$1,170,540.43**

UNITS ASSESSED

LOT SIZE	O&M	SERIES 2007A DEBT SERVICE [1]
SINGLE FAMILY 35	143	80
SINGLE FAMILY 45	153	84
OFFICE BUILDING	1	0
Total Platted	**297**	**164**
MULTIFAMILY	226	226
Total Unplatted	**226**	**226**
Total Community	**523**	**390**

ALLOCATION OF O&M ASSESSMENT

EAU FACTOR	TOTAL EAU's	% TOTAL EAU's	TOTAL O&M BUDGET
1.00	143.00	26.56%	$310,897.62
1.29	197.37	36.66%	$429,103.94
3.67	3.67	0.68%	$7,978.98
	344.04	**63.90%**	**$747,980.55**
0.86	194.36	36.10%	$422,559.88
	194.36	**36.10%**	**$422,559.88**
	538.40	**100.00%**	**$1,170,540.43**

PER LOT ANNUAL ASSESSMENT

O&M	SERIES 2007A DEBT SERVICE [2]	TOTAL [3]
$2,174.11	**$1,138.28**	**$3,312.39**
$2,804.60	**$1,463.51**	**$4,268.11**
$7,978.98	**$0.00**	**$7,978.98**
$1,869.73	**$978.92**	**$2,848.65**

LESS: Walton County Collection Costs (2%) and Early Payment Discount Costs (4%)	**($70,232.43)**
Net Revenue to be Collected	**$1,100,308.00**

[1] Reflects the number of total lots with Series 2007A debt outstanding.

[2] Annual debt service assessment per lot adopted in connection with the Series 2007A bond issue. Annual assessment includes principal, interest, Walton County collection costs and early payment discount costs.

[3] Annual assessment that will appear on November 2026 Walton County property tax bill. Amount shown includes all applicable collection costs. Property owner is eligible for a discount of up to 4% if paid early.