

**City of Port St. Joe  
Planning, Development, and Review Board Regular Meeting  
January 3, 2023 at 4:00 P.M.**

**Jay Rish  
Minnie Likely  
Rawlis Leslie  
Phil Earley**

**Hal Keels  
Travis Burge  
Letha Mathews**

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**PLEDGE OF ALLEGIANCE AND MOMENT OF SILENCE**

**ROLL CALL OF THE BOARD**

**CONSENT AGENDA:**

**August 2, 2022 Regular Meeting Minutes**

**Pages 1-4**

**BUSINESS ITEMS**

- **Special Exception Request** **Pages 5-14**
  - **Phil Earley 122 Gulf Coast Circle**
- **Development Order Request** **Pages 15-22**
  - **Rish Family Plaza**  
**Parcels 04830-006R thru 04830-016R**
- **Development Order Request** **Pages 23-97**
  - **St. Joe Company- Windmark Beach North Townhomes**  
**Parcel #04227-000R**

**\*You are hereby notified that in accordance with Florida Statutes, you have the right to appeal any decision made by the Board with respect to any matter considered at the above referenced meeting. You may need to ensure that a verbatim record of the proceedings is made which may need to include evidence and testimony upon which the appeal is based.**

City of Port St. Joe  
Regular Meeting  
Planning, Development & Review Board  
August 2, 2022

**Minutes**

**Pledge of Allegiance and Moment of Silence**

**Roll Call of the Board**

Present		Absent	
Board	Staff	Board	Staff
Jay Rish Travis Burge Hal Keels Rawlis Leslie*	Jim Anderson Charlotte Pierce Mike Lacour Clinton McCahill Kristin Ayala-Crane James Brannan	Phil Earley Minnie Likely Letha Mathews	Bo Creel

After ascertaining that a quorum was present, Chairman Rish called the meeting to order. Phil Earley, Minnie Likely, and Letha Mathews notified City Staff they would not be able to attend the meeting today. \*Mr. Leslie joined the meeting at 4:10 P.M.

**Consent Agenda**

*Minutes of the June 7, 2022, continued until June 14, 2022, Regular Meeting Minutes.*

A Motion was made by Hal Keels, second by Rawlis Leslie, to approve the Minutes. All in favor; Motion carried 4-0.

**Business Items**

*Final Plat Approval of the Cove at Plantation Bluff; Long Avenue Partners LLC – Ralph Rish:*

Chairman Rish stated that he would be abstaining from voting on this as it would be inured to his special private gain or loss. Form 8B Memorandum of Voting Conflict For County, Municipal, And Other Local Public Officers as completed by Chairman Rish is attached to these Minutes.

Caleb Brown representing Dewberry Engineers for Ralph Rish, gave an overview of the request. He requested that Final Plant approval be given contingent upon the list of items in the attached letter from Ralph Rish along with updating the HOA Documents.

A motion was made by Hal Keels, second by Travis Burge, to recommend approval of the Final Plat to the City Commission contingent upon the conditions listed in Mr. Rish's letter. All in favor; Motion carried 3-0 with Chairman Rish abstaining.

There being no further business to come before the Board, a Motion was made by Hal Keels, second by Rawlis Leslie, to adjourn the meeting at 4:20 P.M. All in favor; Motion carried 4-0.

\_\_\_\_\_  
Charlotte M. Pierce City Clerk

\_\_\_\_\_  
Date

\_\_\_\_\_  
Jay Rish, Chairman

\_\_\_\_\_  
Date

# FORM 8B MEMORANDUM OF VOTING CONFLICT FOR COUNTY, MUNICIPAL, AND OTHER LOCAL PUBLIC OFFICERS

LAST NAME—FIRST NAME—MIDDLE NAME <i>Rosen William Joseph</i>		NAME OF BOARD, COUNCIL, COMMISSION, AUTHORITY, OR COMMITTEE Planning, Development, and Review Board	
MAILING ADDRESS <i>P.O. Box 9</i>		THE BOARD, COUNCIL, COMMISSION, AUTHORITY OR COMMITTEE ON WHICH I SERVE IS A UNIT OF:	
CITY Port St. Joe, FL	COUNTY Gulf	<input checked="" type="checkbox"/> CITY <input type="checkbox"/> COUNTY <input type="checkbox"/> OTHER LOCAL AGENCY NAME OF POLITICAL SUBDIVISION: City of Port St. Joe	
DATE ON WHICH VOTE OCCURRED		MY POSITION IS: <input type="checkbox"/> ELECTIVE <input checked="" type="checkbox"/> APPOINTIVE	

## WHO MUST FILE FORM 8B

This form is for use by any person serving at the county, city, or other local level of government on an appointed or elected board, council, commission, authority, or committee. It applies to members of advisory and non-advisory bodies who are presented with a voting conflict of interest under Section 112.3143, Florida Statutes.

Your responsibilities under the law when faced with voting on a measure in which you have a conflict of interest will vary greatly depending on whether you hold an elective or appointive position. For this reason, please pay close attention to the instructions on this form before completing and filing the form.

## INSTRUCTIONS FOR COMPLIANCE WITH SECTION 112.3143, FLORIDA STATUTES

A person holding elective or appointive county, municipal, or other local public office **MUST ABSTAIN** from voting on a measure which would inure to his or her special private gain or loss. Each elected or appointed local officer also **MUST ABSTAIN** from knowingly voting on a measure which would inure to the special gain or loss of a principal (other than a government agency) by whom he or she is retained (including the parent, subsidiary, or sibling organization of a principal by which he or she is retained); to the special private gain or loss of a relative; or to the special private gain or loss of a business associate. Commissioners of community redevelopment agencies (CRAs) under Sec. 163.356 or 163.357, F.S., and officers of independent special tax districts elected on a one-acre, one-vote basis are not prohibited from voting in that capacity.

For purposes of this law, a "relative" includes only the officer's father, mother, son, daughter, husband, wife, brother, sister, father-in-law, mother-in-law, son-in-law, and daughter-in-law. A "business associate" means any person or entity engaged in or carrying on a business enterprise with the officer as a partner, joint venturer, coowner of property, or corporate shareholder (where the shares of the corporation are not listed on any national or regional stock exchange).

### ELECTED OFFICERS:

In addition to abstaining from voting in the situations described above, you must disclose the conflict:

PRIOR TO THE VOTE BEING TAKEN by publicly stating to the assembly the nature of your interest in the measure on which you are abstaining from voting; and

WITHIN 15 DAYS AFTER THE VOTE OCCURS by completing and filing this form with the person responsible for recording the minutes of the meeting, who should incorporate the form in the minutes.

### APPOINTED OFFICERS:

Although you must abstain from voting in the situations described above, you are not prohibited by Section 112.3143 from otherwise participating in these matters. However, you must disclose the nature of the conflict before making any attempt to influence the decision, whether orally or in writing and whether made by you or at your direction.

IF YOU INTEND TO MAKE ANY ATTEMPT TO INFLUENCE THE DECISION PRIOR TO THE MEETING AT WHICH THE VOTE WILL BE TAKEN:

- You must complete and file this form (before making any attempt to influence the decision) with the person responsible for recording the minutes of the meeting, who will incorporate the form in the minutes. (Continued on page 2)

### APPOINTED OFFICERS (continued)

- A copy of the form must be provided immediately to the other members of the agency.
- The form must be read publicly at the next meeting after the form is filed.

IF YOU MAKE NO ATTEMPT TO INFLUENCE THE DECISION EXCEPT BY DISCUSSION AT THE MEETING:

- You must disclose orally the nature of your conflict in the measure before participating.
- You must complete the form and file it within 15 days after the vote occurs with the person responsible for recording the minutes of the meeting, who must incorporate the form in the minutes. A copy of the form must be provided immediately to the other members of the agency, and the form must be read publicly at the next meeting after the form is filed.

### DISCLOSURE OF LOCAL OFFICER'S INTEREST

I, William J. Box, Jr., hereby disclose that on 8-2, 20 22:

(a) A measure came or will come before my agency which (check one or more)

- ☒ inured to my special private gain or loss;
- ☐ inured to the special gain or loss of my business associate, \_\_\_\_\_;
- ☐ inured to the special gain or loss of my relative, \_\_\_\_\_;
- ☐ inured to the special gain or loss of \_\_\_\_\_, by whom I am retained; or
- ☐ inured to the special gain or loss of \_\_\_\_\_, which is the parent subsidiary, or sibling organization or subsidiary of a principal which has retained me.

(b) The measure before my agency and the nature of my conflicting interest in the measure is as follows:

If disclosure of specific information would violate confidentiality or privilege pursuant to law or rules governing attorneys, a public officer, who is also an attorney, may comply with the disclosure requirements of this section by disclosing the nature of the interest in such a way as to provide the public with notice of the conflict.

8-2-22  
Date Filed

[Signature]  
Signature

NOTICE: UNDER PROVISIONS OF FLORIDA STATUTES §112.317, A FAILURE TO MAKE ANY REQUIRED DISCLOSURE CONSTITUTES GROUNDS FOR AND MAY BE PUNISHED BY ONE OR MORE OF THE FOLLOWING: IMPEACHMENT, REMOVAL OR SUSPENSION FROM OFFICE OR EMPLOYMENT, DEMOTION, REDUCTION IN SALARY, REPRIMAND, OR A CIVIL PENALTY NOT TO EXCEED \$10,000.

Date: July 27, 2022

To: City of Port St. Joe  
Jim Anderson

From: Ralph Rish

Re: The Cove at Palmetto Bluff

Dear Mr. Anderson,

It is our understanding that the planning board needs some clarification in regards to the final plat submitted for the Cove at Palmetto Bluff Subdivision and what we are asking for as conditional approvals. Please see the clarifications below.

1. The Homeowner Association (HOA) and Covenants and Restrictions have been completed and are attached with this letter.
2. The FDEP Permits for Water and Sewer apply to the full completion of both the Cove and the Retreat phases of the Palmetto Bluff Subdivision. Partial clearances for the Cove portion shall be completed as described in items 3 through 5 below.
3. A partial FDEP clearance for the water system will be requested for the watermain from its tie-in point on long avenue to the 8" gate valve located at the East end of Palmetto Bluff Trail and the watermain running South down Cove Lane. This will cover the service requirements for lots associated with the Cove. We will obtain the partial clearance from FDEP prior to the signing of the final plat.
4. A partial FDEP clearance for the sewer system will be requested for the force main from its beginning point at the cul-de-sac of Cove Lane to its termination point at the lift station serving Sacred Heart Hospital. Excluded from this certification request will be the 2" force main that is to serve lots 49-65, 91-93, and 99-106 in the Retreat Phase. As part of the clearance request the easement running through Sacred Heart's property shall be approved and in place. This partial clearance shall cover all service requirements for the lots associated with the Cove.
5. Proposed upgrades to the Sacred Heart Lift Station shall take place prior to the certification of the Retreat Phase of Palmetto Bluff Subdivision.
6. Due to wet weather, a portion of the stormwater structures have not been installed at this point. Prior to the signing of the plat, these will be installed and approved by the appropriate city staff.
7. The road is proposed to have two (2) 1-inch lifts of asphalt for final completion. Prior to the signing of the plat, one (1) 1-inch lift will be completed. We acknowledge that we will still be responsible for the final lift of asphalt prior to the road dedication to the city.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Ralph Rish  
RRish@Dewberry.com  
850-227-5137

**CITY OF PORT ST. JOE  
SPECIAL EXCEPTION REQUEST APPLICATION**

Property Address: 122 GULF COAST CIRCLE Zoning: RESIDENTIAL  
Property Owner: PHIL/DEBBIE EARLEY Phone: 850-227-6241  
Mailing Address: P.O. BOX 131 City, State, and Zip: PORT ST. JOE, FL  
Parcel Number: 03039-525R Applicant if different: \_\_\_\_\_

Phil Earley  
Owner signature

Swore to and subscribed before me this 14 day of Oct. 2022. Personally known or  
produced identification FL License.

K. Ayala Crane  
Signature of Notary Public



**PUBLIC NOTICE**

**A SIGN WILL BE POSTED FOR FIFTEEN DAYS ON THE PROPERTY SEEKING THE SPECIAL EXCEPTION  
AND A NOTICE WILL BE PUBLISHED IN THE LOCAL NEWSPAPER.**

**APPLICATION REQUIREMENTS:**

Application Fee - \$300

A letter indicating the section of the LDR under which special exception is being requested

Legal Description of Property

Copy of the Deed

Copy of the Survey

Site plan of the proposed improvements

Phil Earley  
Owner Signature

10/14/22  
Date

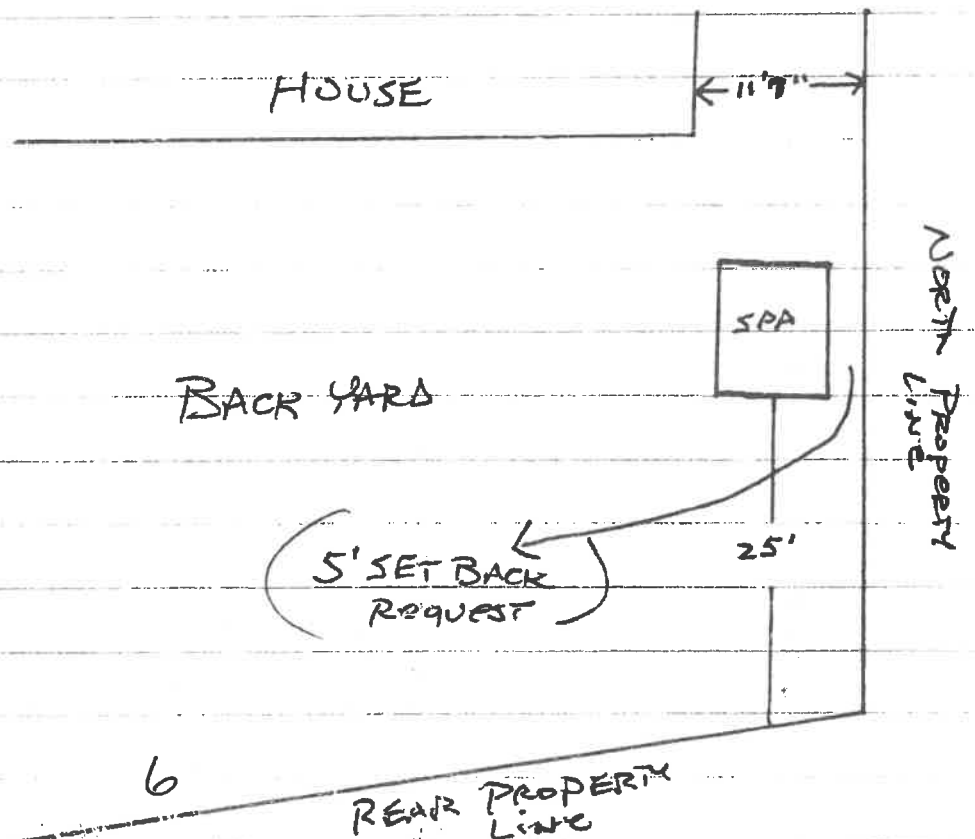
Phil Earley  
Applicant Signature

10/14/22  
Date

10/15/22

I AM REQUESTING A SPECIAL EXEMPTION  
OF 5' (CITY SET BACK 10') ON THE NORTH SIDE  
OF MY PROPERTY LOCATED AT 122 GULF COAST  
CIRCLE IN PORT ST. JOE. I WANT TO PLACE  
A ABOVE GROUND SWIM SPA (INFORMATION  
ATTACHED). ALTHOUGH THE SPA IS PORTABLE  
IT REQUIRES BEING PLACED ON PAVERS OR  
CONCRETE FOR SUPPORT.

Phil Enley



Prepared by and return to:  
Novak Law Group, PLLC  
402 Reid Avenue  
Port St. Joe, Florida 32456

File No: 21898

[Space Above This Line For Recording Data]

## Warranty Deed

(STATUTORY FORM - SECTION 689.02, F.S.)

This Indenture made this 21<sup>st</sup> day of April 2021 between TRULAND HOMES, LLC, an Alabama Limited Liability Company whose post office address is 29891 Woodrow Lane, Suite 100, Spanish Fort, Alabama 36527 grantor\*, and B. PHILLIP EARLEY AND DEBORAH M. EARLEY, husband and wife whose post office address is P.O. Box 131, Port St. Joe, FL 32456 grantee\*,

Witnesseth that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Gulf, Florida, to-wit:

Lot 25, SOUTHGATE SUBDIVISION, according to the plat thereof recorded in Plat Book 4, Page 17, in the Public Records of Gulf County, Florida.

This is not the homestead of the Grantor.

and said grantor does hereby fully warrant the title to said land and will defend the same against lawful claims of all persons whomsoever.

\* "Grantor" and "Grantee" are used for singular or plural, as context requires.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.



Signed, sealed and delivered in our presence:

Truland Homes, LLC, an Alabama Limited  
Liability Company

By: [Signature] (Seal)  
Jeff Wayne, Division President and  
Authorized Signor

29891 Woodrow Lane, Suite 100  
Spanish Fort, Alabama 36527

[Signature]  
Witness

Terrie Mullins  
Printed Name of Witness

[Signature]  
Witness

AMBER MULLINS  
Printed Name of Witness

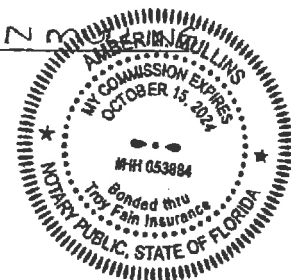
STATE OF FLORIDA

COUNTY OF BAY

The foregoing instrument was acknowledged before me by means of (✓) physical presence or ( )  
online notarization this 20 day of April 2021 by Jeff Wayne, Division President and Authorized  
Signor of Truland Homes, LLC, an Alabama Limited Liability Company (✓) who is personally known to  
me or ( ) who has produced a valid driver's license as identification.

[Signature]  
NOTARY

PRINTED NAME; AMBER N MULLINS  
MY COMMISSION EXPIRES:



**Parcel Summary**

**Parcel ID** 03039-525R  
**Location Address** 122 GULF COAST CIR  
 PORT ST JOE 32456  
**Brief Tax Description\*** SOUTHGATE SUB PB 4 PG 17 LOT 25 ORB 665/827 FR WALKER MAP 69B  
 \*The Description above is not to be used on legal documents.  
**Property Use Code** VACANT (000000)  
**Sec/Twp/Rng** 18-8S-10W  
**Tax District** City of Port St Joe (District 5)  
**Millage Rate** 16.9855  
**Acreage** 0.275  
**Homestead** N

[View Map](#)
**Owner Information**

**Primary Owner**  
 Truland Homes LLC  
 29891 Woodrow Ln  
 Ste 100  
 Spanish Fort, AL 36527

**Land Information**

Code	Land Use	Number of Units	Unit Type	Frontage	Depth
530000	SOUTHGATE	1.00	LT	80	150

**Sales**

Mult Parcel	Sale Date	Sale Price	Instrument	Book	Page	Qualification	Vacant/Improved	Grantor	Grantee
Y	05/10/2019	\$205,000	WD	665	827	Qualified (Q)	Vacant	WALKER WANDA M	TRULAND HOMES LLC
N	06/06/2003	\$300,000	WD	309	206	Unqualified (U)	Vacant	PREBLE RISH & ASSOC ISLAND PROP LLC ET AL	WALKER RICHARD C & WANDA M
N	06/06/2003	\$100	QC	309	205	Unqualified (U)	Vacant	GULF COUNTY PROPERTIES INC	RISH WILLIAM J JR & RONALD B PICKETT

**Valuation**

	2020 Certified Values	2019 Certified Values	2018 Certified Values
Building Value	\$0	\$0	\$0
Extra Features Value	\$0	\$0	\$0
Land Value	\$35,000	\$35,000	\$35,000
Land Agricultural Value	\$0	\$0	\$0
Agricultural (Market) Value	\$0	\$0	\$0
Just (Market) Value	\$35,000	\$35,000	\$35,000
Assessed Value	\$35,000	\$19,766	\$17,969
Exempt Value	\$0	\$0	\$0
Taxable Value	\$35,000	\$19,766	\$17,969
Maximum Save Our Homes Portability	\$0	\$15,234	\$17,031

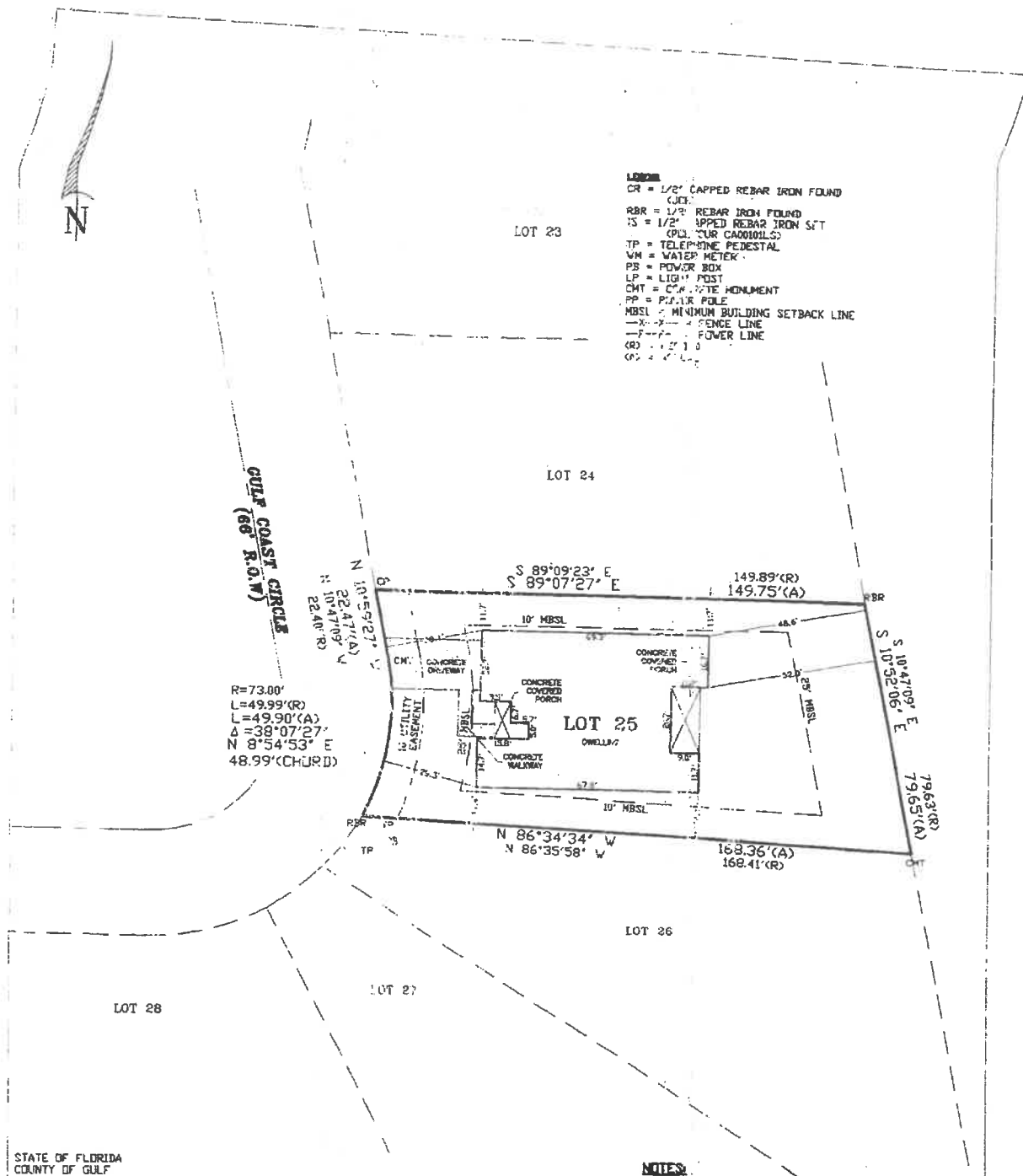
\*Just (Market) Value\* description - This is the value established by the Property Appraiser for ad valorem purposes. This value does not represent anticipated selling price.

No data available for the following modules: Residential Buildings, Commercial Buildings, Extra Features, Sketches.



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Last Data Upload: 3/16/2021 5:58:02 PM



STATE OF FLORIDA  
COUNTY OF GULF

I, J. BRETT ORRELL, A REGISTERED LAND SURVEYOR IN THE STATE OF FLORIDA, HEREBY STATE THAT ALL PARTS OF THIS SURVEY AND DRAWING HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CURRENT REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR SURVEYING IN THE STATE OF FLORIDA TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

LOT 25, SOUTHGATE SUBDIVISION

AS RECORDED IN PLAT BOOK 4 PAGES 17 IN THE OFFICE OF THE CLERK OF CIRCUIT COURT OF GULF COUNTY, FLORIDA; I FURTHER STATE THAT THE BUILDINGS NOW ERECTED ON SAID LOT ARE WITHIN THE BOUNDARIES OF SAME; THERE ARE NO ENCROACHMENTS BY ADJOINING PROPERTY, EXCEPT AS SHOWN; THERE ARE NO RIGHTS OF WAY EASEMENTS OR JOINT DRIVEWAYS ON, TO OR ACROSS SAID LAND VISIBLE ON THE SURFACE, EXCEPT AS SHOWN; THERE ARE NO ELECTRIC OR TELEPHONE WIRES (EXCLUDING WIRES WHICH SERVE THE PREMISES ONLY) OR STRUCTURES OR SUPPORTS THEREOF INCLUDING POLES, ANCHORS AND GUY WIRES ON OR OVER SAID PREMISES, EXCEPT AS SHOWN; THIS DRAWING ALSO DOES NOT REFLECT ANY TITLE OR EASEMENT RESEARCH OTHER THAN WHAT IS VISIBLE ON THE GROUND OR PROVIDED BY THE CLIENTS CONVEYANCE; AND THAT THE SCALE OF DRIVES, WALKS, FENCES AND ETC. ARE IN SOME INSTANCE EXAGGERATED FOR THE PURPOSE OF DETAIL.

ACCORDING TO MY SURVEY THIS 27th DAY OF MARCH, 2021.

J. BRETT ORRELL, P.L.S. FOR LICENSE NO. LS-913

DRIVE: FIELD SK: SEAL: 3-2013  
D02 N/A  
1010-910E  
FILE NAME: 2103-1187 S-48  
GULF COUNTY  
6390 JACKSON RD.  
MOBILE, AL 36619  
PHONE: (251) 666-2016  
www.poly-surveying.com

**POLY**  
SURVEYING

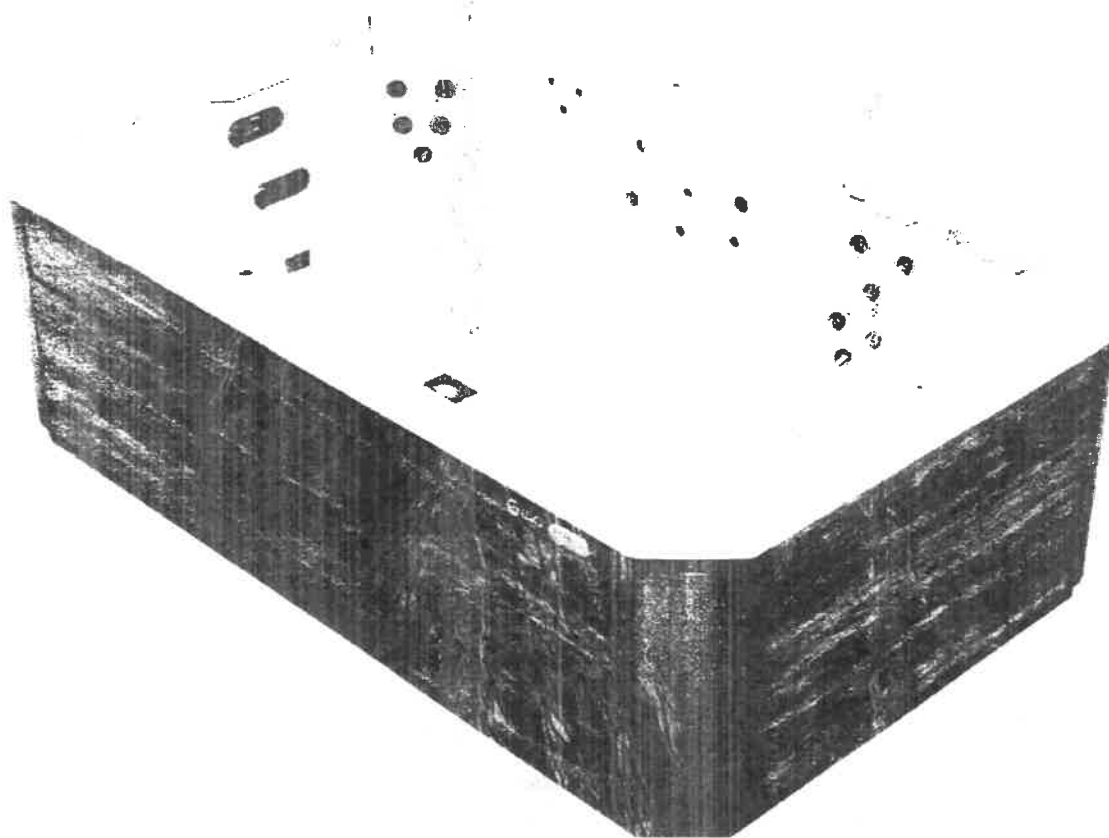
REGISTERED IN COUNTY  
7070 S. ONE DRIVE  
DAPHNE, AL 36526  
PHONE: (251) 626-0455  
E-MAIL: MAR@poly-surveying.com

SCALE 1" = 20'	
DATE 3/27/2021	DRAWN BY: NP.W
DATE SURVEYED 3/25/2021	CHECKED BY: J.B.O.

NOTE: ONLY ORIGINAL ENHANCED DRAWINGS ARE TO SCALE

Peaceful Life Sale - Up to \$2,500 Rebate. Learn More.

View the S150 in My Backyard



Available at Select Dealers

# BULLFROG SPAS

## MODEL S150

4 Reviews

Available Seats: 13

JetPaks: 4

Enjoy an upgraded backyard water experience unlike any other with the all-

**DESIGN MY SPA & GET A PRICE**

## More Details about the S150

Enjoy an upgraded backyard water experience unlike any other with the all-new Swim Series by Bullfrog. Customizable fitness programs, resistance training, and space for any number of low-impact, water-based workouts. Splash around on the unique splash pad area. With an ample number of multilevel seats, you'll have plenty of room to lounge or relax away tension, all year round, right from the comfort of your own backyard. No other product offers the same level of customization available with the patented JetPak Therapy System™. Swim Series is built with legendary Bullfrog durability designed for an endless variety of uses, and a remarkably functional layout you're certain to love.

**Size:** 94" x 152" x 52" (2.38m x 3.86m x 1.32m)

**Therapy Pumps:** 2

**Multi-Function Auxiliary Controls:** 1

**Gross Weight:** 2000 lbs/907 kg

- b. Offstreet parking and loading areas where required; with particular attention to the items in subsection a. above and the economic, noise, glare or odor effects of the special exception on adjoining properties and properties generally in the district;
  - c. Refuse and service areas, with particular reference to the items in subsection a. and b. above;
  - d. Utilities with reference to location, availability and compatibility;
  - e. Screening and buffering with reference to type, dimensions and character;
  - f. Signs, if any, and proposed exterior lighting with reference to glare, traffic safety, economic effect and compatibility and harmony with properties in the district;
  - g. Required yards and other open space;
  - h. General compatibility with adjacent properties and other property in the district.
- (6) Any restrictions imposed as a condition of granting the special exception, such as limitations on size or square footage, including future expansions, shall be specified at the time the special exception is granted.

#### **Sec. 2.14. Variances--Requirements and procedures.**

A variance from the terms of these regulations shall not be granted by the planning and development review board unless and until the following requirements or procedures are met:

- (1) A written application for a variance (hardship relief) is submitted to the building inspector demonstrating that a hardship exists based on one of the following conditions:
  - a. That special conditions and circumstances exist which are peculiar to the land, structure or buildings involved and which are not involved and which are not applicable to other lands, structures or buildings in the same district;
  - b. That literal interpretation of the provisions of this Code would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of these regulations;
  - c. That the special conditions and circumstances do not result from the actions of the applicant; or
  - d. That granting the variance requested will not confer on the applicant any special privilege that is denied by these regulations to other lands, structures or buildings in the same district.
- (2) No nonconforming use of neighboring lands, structures or buildings in the same district, and no permitted or nonconforming use of lands, structures or buildings in other districts shall be considered grounds for the issuance of a variance.
- (3) Notice of public hearing shall be given in accordance with the provisions specified under "special exceptions" and a public hearing shall be held. Any

adjoining property owner, or any party whose substantial interest may be affected; may appear in person, or by agent, or attorney.

(4) The planning and development review board shall make a finding that the requirements regarding hardship relief have been met by the applicant for a variance, that the reasons set forth in the application justify the granting of the variance, and that variance is the minimum variance that will make possible the reasonable use of the land, building or structure.

(5) The planning and development review board shall further make a finding that the granting of the variance will be in harmony with the general purpose and intent of these regulations, and will not be injurious to the neighborhood, or otherwise detrimental to the public welfare.

(6) In granting any variance, the planning and development review board may prescribe appropriate conditions and safeguards in conformity with this Code. Violation of such conditions and safeguards, when made a part of the terms under which the variance is granted, shall be deemed a violation of these regulations and punishable as provided by section 1-15 of the Port St. Joe Code of Ordinances.

(7) The planning and development review board shall prescribe a reasonable time limit within which the action for which the variance is required shall be begun or completed, or both. Failure to begin or complete such action within the prescribed time limit shall render the variance null and void.

(8) Under no circumstances shall the planning and development review board grant a variance to allow a use not permissible under the terms of these regulations in the district involved, or any use expressly or by implication prohibited by the terms of these regulations in such district; however, as provided for in these regulations, the planning and development review board may make a "substantially similar use" determination upon request by the development approval authority.

#### **Sec. 2.15. Appeals--Planning and development review board.**

(a) Appeals to the planning and development review board concerning the interpretation or administration of these regulations may be taken by any person aggrieved or by any officer or bureau of the governing body of the city affected by any decision of the building inspector, technical advisory committee, or any administrative official or board. Appeals shall be taken with a reasonable time period, not to exceed 30 days, by filing with the building inspector a notice of appeal specifying the grounds thereof. The building inspector shall forthwith transmit to the planning and development review board all papers constituting the record upon which the action appealed from was taken.

(b) The planning and development review board shall fix a time, not to exceed 30 days from the date the appeal was filed, for the hearing of the appeal, give public notice thereof, as well as due notice to the parties in interest, and render their decision at the hearing. At the hearing, any party may appear in person or by agent or attorney.

(c) An appeal stays all proceedings in furtherance of the action appealed from, unless the official from whom the appeal is taken, certifies to the planning and development review board, after notice of appeal is filed with him, that by reason of facts stated in the certificate, a stay would, in his opinion, cause imminent peril to life and property. Such case proceedings shall not be stayed other than by a restraining order which may be granted by

**CITY OF PORT ST. JOE PLANNING DEPARTMENT  
DEVELOPMENT ORDER APPLICATION PACKET**

**INCOMPLETE SUBMITTALS WILL NOT BE REVIEWED**

(The Building Department requires separate forms and fees to obtain building permits.)

NOTE: THE ADDRESS OF THE PROPERTY MUST BE POSTED PRIOR TO SUBMITTAL.

1. X Two complete sets of plans, drawn to scale.  
Including: A site plan with square feet of living, total square feet, impervious surface,  
and setbacks.  
\*\* Setbacks are measured from the closest overhang to property line\*\*

A site plan showing any protected trees which will be removed from the property.  
(Protected trees are any trees other than pine larger than 8" in diameter measure  
54" from the base of the tree.)

2. X Development Order Packet  
3. \_\_\_\_\_ New Address application  
4. \_\_\_\_\_ Complete City water meter impact form  
5. \_\_\_\_\_ Complete Driveway permit application

*(Please refer to City of Port St. Joe's Land Development Regulations)*

**DESCRIPTION**

Project Address Cecil G Costin Sr. Blvd

Lot Square Footage: 76,838.92 SqFt Dwelling Square Footage: 20,655.00 SqFt

Driveway Square Footage: 510 Sqft (Garrison Ave) Accessory Building Square Footage: N/A

Pool Square Footage: N/A Patio/Deck Square Footage: N/A

Setbacks: Front: 30.0' Left Side: 25.0' Wetland Setback

Rear: 10.0' Right Side: 20.0'

Floor Area Ratio: 26.88% Lot Coverage: 64,261.06 SqFt

Building Height in Feet: 25.0' Impervious Surface: 52,387.63 SqFt

Landscape Buffers: (height x width) N/A Elevation: FFE 13.82'

Grant Brish  
Applicant Name

117 Sailors Cove Dr  
Applicant Address

850-340-1270  
Phone Number

[Signature]  
Applicant Signature

Oct 25, 2022  
Date





**RISH FAMILY PLAZA  
PORT ST. JOE  
GULF COUNTY, FLORIDA**

L. Jack Husband III, P.E.  
Florida Registration No. 69169  
Date: October 05, 2021

A handwritten signature in dark ink, appearing to read "L. Jack Husband III", is written over a horizontal line.

120 N. HWY 71  
P. O. Box 141  
WEWAHITCHKA, FL 32465  
(850) 639-3860  
WWW.SOUTHEASTERNCCE.COM

16

115A SAILORS COVE DR  
P. O. Box 951  
PORT ST. JOE, FL 32457  
(850) 227-1297  
INFO@SOUTHEASTERNCCE.COM



**RISH FAMILY PLAZA  
PORT ST. JOE  
GULF COUNTY, FLORIDA**

**PROJECT DESCRIPTION**

Rish Family Plaza LLC is proposing to construct a new commercial development consisting of a 9 Unit Retail/Office Space on 11 existing parcels located in Section 1 Township 9S Range 11W, of Gulf County, Florida. The proposed development is more specifically located south of the intersection of Cecil G. Costin Sr. Blvd (FL-71) and Garrison Avenue on the north side of FL-71. The lots in which the development is proposed (Gulf County Property Appraiser Numbers: 04830-006R, 04830-007R, 04830-008R, 04830-009R, 04830-010R, 04830-011R, 04830-012R, 04830-013R, 04830-014R, 04830-015R and 04830-016R) for a total of approximately 76,838.92 SqFt (1.76 Acres). The eastern side of the property borders a 20' wide alley (that is not open to the public and has never been developed). The south side of the property borders Cecil B. Costin Blvd. (FL-71). The west side of the property borders Garrison Ave. The north side of the property borders a 20' wide alley (that is not open to the public and has never been developed). The proposed development will consist of a new commercial building designed for Retail/ Office Space.

The development will have a 24' wide asphalt drive aisle with a 6" modified FDOT Type "D" curb along edges of pavement. New drainage inlets and stormwater facilities will be installed throughout the site to capture and provide adequate stormwater treatment. The site will have new storm water management facilities ranging from 1' deep to 3.5' deep with 3:1 side slopes.

The development will also provide a new sidewalk along Cecil G Costin Blvd. (FL-71) connecting to an existing sidewalk stub out at the intersection of Cecil G. Costin Blvd. and Garrison Ave.

To service the potable water needs of development the developer will install 9 new 3/4" water service connections with meters and backflows tapping into an existing 6" water main running parallel to FL-71 on the same side as the development. The developer will also provide a 6" tap on the same existing 6" water main to service a new fire hydrant located on the site. The developer will also provide a 1" tap on the off the existing 6" main for irrigation of the site.

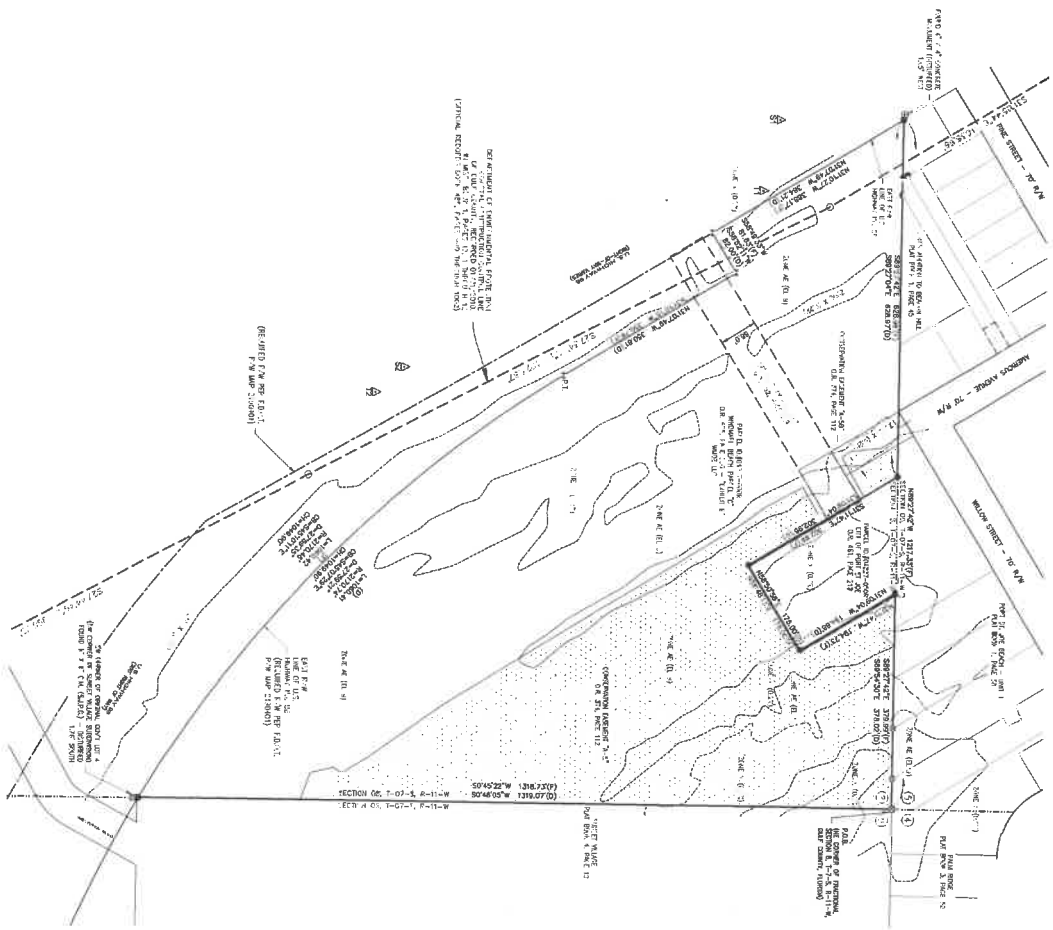
To service the sanitary sewer needs each unit will receive a 4" PVC sanitary lateral. That will connect to existing gravity sewer main running through the median of Cecil G. Costin Blvd. (FL-71).

For additional information please see the attached permit drawings.



[illegible]

LEGAL DESCRIPTION (UNDIARY EASE - PARCEL "C")  
O.R. BOOK 572, PAGE 5927

[illegible][illegible]

BUNDMANA NUR / TOR HOMES - SITE 1

1 INCH = 100 FEET

## 5.1 BOLS & BREVIAZIONE

- [illegible]

## INDEX OF SHEETS

THE BOUNDAry DETAILS, A WINDUP POINT  
OF THE FIRST, AND LEGEND.

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**Dewberry**  
DEWBERRY ENGINEERS INC.  
203 ASBERDEEN PARKWAY  
PANAMA CITY, FLORIDA 32408  
PHONE: 850.522.0644 FAX: 850.522.1911  
WWW.DEWBERRY.COM  
CERTIFICATE OF AUTHORIZATION NO. LB 8011

REVISIONS		
DATE	REVISION	CKD
10/24/2022	ADDED ADDITIONAL TOPO OF U.S. SB FOR F.D.O.T. PERMIT	DB

BOUNDARY & TOPOGRAPHIC SURVEY  
SECTION 08, TOWNSHIP 07  
SOUTH, RANGE 11 WEST  
WINDMARK NORTH TOWNHOMES  
GULF COUNTY, FLORIDA

FIELD DATE	07/14/2022
DRAWING DATE	07/14/2022
BY	
RWD	
APPROVED	
DJB	
PROJECT NO.	50144759
SCALE	1" = 100'



WINDMARK BEACH TOWNHOMES - SITE 1  
 TOPOGRAPHIC SURVEY DETAILS



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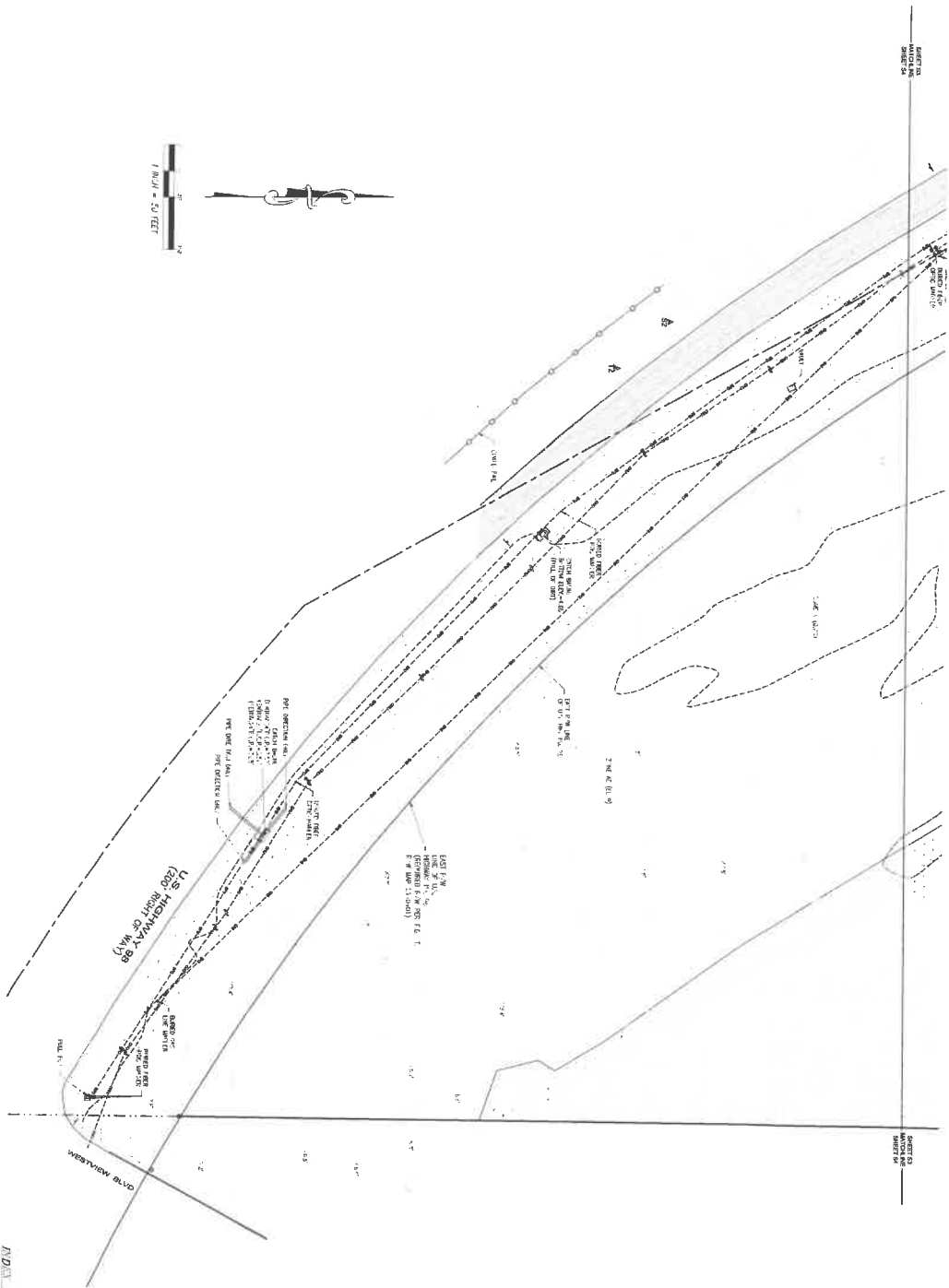
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BOUNDARY & TOPOGRAPHIC SURVEY  
 SECTION 08, TOWNSHIP 07  
 SOUTH, RANGE 11 WEST  
 WINDMARK BEACH TOWNHOMES  
 GULF COUNTY, FLORIDA

DANIEL J. DANIEL, P.E.  
 PROFESSIONAL LAND SURVEYOR NO. 154018

**Dewberry**  
 DEWBERRY ENGINEERS INC.  
 300 NORTHERN AVENUE  
 PANAMA CITY, FLORIDA 32405  
 PHONE: 904.332.3004 FAX: 904.332.1011  
 WWW.DEWBERRY.COM  
 CERTIFICATE OF AUTHORIZATION NO. LB 0011

REVISIONS		CHK
DATE	REVISION	DB
10/24/2022	ADDED ADDITIONAL TOPO OF U.S. 90 FOR F.D.O.T. PERMIT	



NOTES:  
 1. SEE SHEET S4C FOR ADDITIONAL DETAILS.  
 2. SEE SHEET S4C FOR ADDITIONAL DETAILS.  
 3. SEE SHEET S4C FOR ADDITIONAL DETAILS.

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WINDMARK BEACH TOWNHOMES - SITE 1  
 TOPOGRAPHIC SURVEY DETAILS

REVISIONS		CHG
DATE	DESCRIPTION	DB
10/24/2022	ADDED ADDITIONAL TOPO OF U.S. 90 FOR F.O.G.T. PERMIT	

BOUNDARY & TOPOGRAPHIC SURVEY SECTION 08, TOWNSHIP 07 SOUTH, RANGE 11 WEST WINDMARK BEACH TOWNHOMES GULF COUNTY, FLORIDA	DANDEN BARTLEY, P.L.C. PROFESSIONAL LAND SURVEYOR NO. 15408	DATE SIGNED 01/18/2023
DRAWN BY 01/18/2023	CHECKED BY 01/18/2023	PROJECT NO. 00144729
SCALE 1" = 50'	SHEET NO. S4	TOTAL SHEETS 5



Dewberry Engineers Inc.  
203 Aberdeen Parkway  
Panama City, FL 32405

850.522.0644  
850.522.1011 fax  
www.dewberry.com

October 25, 2022

**VIA Hand Delivery**

Mr. Jim Anderson  
City Manager  
City of Port St. Joe  
P.O. Box 278  
Port St. Joe FL 32457

**RE: Windmark Beach North Townhomes  
Development Order Submittal  
Dewberry Project No. 50144759**

Dear Mr. Anderson:

On behalf of The St. Joe Company, Dewberry is pleased to submit this Development Order submittal package to The City of Port St. Joe for the *Windmark Beach North Townhomes* project.

The Windmark Beach North Townhomes project is the construction of a new 78 lot townhome subdivision with supporting roadways, a stormwater management facility, and utilities in Port. St. Joe, FL. The project is east of US Highway 98 and adjacent to the Windmark Beach developments. Access to the site is via US Highway 98.

There will be one (1) stormwater management facility within this project, and it will discharge to unnamed wetlands. The proposed stormwater management facility has been designed to treat and attenuate onsite stormwater runoff to ERP and The City of Port St. Joe requirements.

Please find attached the following documents for your review:

- Development Order Application
- Development Order Fee - \$3,000 Check
- Two (2) S/S Windmark North Townhomes Plan Sets
- Two (2) S/S Windmark North Townhomes Stormwater Management Reports
- Two (2) S/S Lift Station Reports
- E-911 Addressing Application

Additionally, the FDEP Potable Water and Domestic Wastewater permit applications are enclosed for city review and signature. Please notify us if there are any concerns or when the applications are ready for pick-up.

Please review the enclosed materials. If you have any questions or need additional information, please contact us at (850) 571-1199 or you may e-mail me at [cshortt@dewberry.com](mailto:cshortt@dewberry.com).

Sincerely,  
**DEWBERRY**

Christopher Shortt, P.E.  
Project Manager

K:\50144759\_SJC\_Windmark N. Townhomes\Permits\PSJ DO\2022-10-24 DO Submittal







**GULF COUNTY E-911**  
**Official House Number Form**  
1000 Cecil G Costin Sr Blvd Bldg. 500  
Port St. Joe, FL 32456

Email: e911@gulfcounty-fl.gov

[http://www.gulfcounty-fl.gov/county\\_government/e911](http://www.gulfcounty-fl.gov/county_government/e911)

Date: 06/30/2022

Voice: (850) 229-9111

Fax: (850) 665-3427

**REQUESTING A NEW ADDRESS AND VERIFICATION**

- 1) Parcel Number: 04227-000R (ex. 99999-999R)  
Street Name: \_\_\_\_\_  
Location: (Please circle one) Port St Joe Wewahitchka Gulf County (Unincorporated Area)  
2) Has this parcel ever had a building with or without an address on it before today? Yes No  
If yes, what is/was that address? \_\_\_\_\_  
3) Type of Structure to be built or brought in: (check all boxes that apply)  
\_\_\_\_ Commercial-What Type? \_\_\_\_\_ RV \_\_\_\_\_ Utility  
\_\_\_\_ Single Family \_\_\_\_\_ Mobile Home  
\_\_\_\_ Service Upgrade X Other Please Explain New residential townhome development (Windmark Beach)  
4) Name of Property Owner: St. Joe Company  
5) Telephone: ( ) \_\_\_\_\_  
6) Name of person requesting information if different than above: Jason Scarbrough  
7) Telephone: (850) 231-6536 9) Other helpful info: \_\_\_\_\_  
8) Fax: ( ) \_\_\_\_\_ or Email: Jason.scarbrough@joe.com

**After completing the above information please follow the steps below.**

A) Take or fax this form to Gulf County E-911 at 850-229-9115 to receive your official address

B) Take completed form back to the Building Department to start the permitting process.

C) \*MOST IMPORTANTLY! After receiving your address, PLEASE

display it on the construction site and/or house when completed  
where it will be easily seen from the road.

**E-911 DEPARTMENT (located in the EOC)**

**\*This Box for Official Use Only\***

Structure Type Being Addressed: \_\_\_\_\_

Address: \_\_\_\_\_ Map # \_\_\_\_\_

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

**COMMENTS:**

**Disclaimer-** If Gulf County E-911 finds any information supplied to be incorrect or has changed, this address could become void and a new one will be issued so it meets the Enhanced 911 rules and regulations.

**SITE PLAN:**

☒ Check box if site plan attached



## Florida Department of Environmental Protection

### Notification/Application for Constructing a Domestic Wastewater Collection/Transmissions System

#### Part I - General

##### Subpart A: Permit Application Type (Check only one)\*

- ☐ Individual permit for a domestic wastewater collection/transmission system serving **10 or greater** equivalent dwelling units (EDU). An EDU is equal to 3.5 persons. Criteria for an individual permit are contained in Rule 62-604.600(7), F.A.C.  
**Application fee: \$500**
- ☐ Individual permit for a domestic wastewater collection/transmission system serving **less than 10** equivalent dwelling units (EDU). An EDU is equal to 3.5 persons. Criteria for an individual permit are contained in Rule 62-604.600(7), F.A.C.  
**Application fee: \$300**
- ☐ Minor revision to an individual permit for a domestic wastewater collection/transmission system.  
**Application fee: \$250**
- ☒ Notice of Intent to use the general permit for a domestic wastewater collection/transmission system. Criteria for a general permit are contained in Rule 62-604.600(6), F.A.C. Projects not meeting the criteria in Rule 62-604.600(6), F.A.C., must apply for an individual permit.  
**Application fee: \$250**

\*Note: Each non-contiguous project (i.e., projects that are not interconnected or are not located on adjacent streets or in the same neighborhood) requires a separate application and fee.

##### Subpart B: Instructions

- (1) This form shall be completed for all public and private domestic wastewater collection/transmission system construction projects as follows:
  - If this is a Notice of Intent to use the general permit, this notification shall be submitted to the Department at least **30 days** prior to initiating construction.
  - If this is an application for an individual permit, the permit must be obtained prior to initiating construction.
- (2) One copy of the completed form shall be submitted to the appropriate DEP district office or delegated local program along with the appropriate fee, and one copy of the following supporting documents. Checks should be made payable to the Florida Department of Environmental Protection, or the name of the appropriate delegated local program. Forms and documents may be submitted electronically in accordance with the [Wastewater Electronic Document Submission](#) instructions available from DEP's website.
  - If this is a Notice of Intent to use the general permit, attach a site plan or sketch showing the size and approximate location of new or altered gravity sewers, pump stations and force mains; showing the approximate location of manholes and isolation valves; and showing how the proposed project ties into the existing or proposed wastewater facilities. The site plan or sketch shall be signed and sealed by a professional engineer registered in Florida.
  - If this is an application for an individual permit, one set of plans and specifications shall be submitted with this application. The plans and specifications shall include lift station design calculations if a lift station is proposed. Chapters 10 and 20 of *Recommended Standards for Wastewater Facilities*, 2014, provide helpful guidance on the proper preparation of plans and specifications. The plans and specifications shall be signed and sealed by a Professional Engineer registered in Florida.
- (3) All information shall be typed or printed in ink if submitting paper forms. Where attached sheets (or other technical documentation) are utilized in lieu of the blank spaces provided, indicate appropriate cross-references on the form. For Items (1) through (4) of Part II of this application form, if an item is not applicable to your project, indicate "NA" in the appropriate space provided.

## Part II – Project Documentation

### (1) Collection/Transmission System Permittee

Name Jason Scarbrough Title Project Manager  
 Company Name The St. Joe Company  
 Address 130 N Richard Jackson Blvd., Suite 200  
 City Panama City Beach State FL Zip 32407  
 Telephone 850-231-6530 Cell \_\_\_\_\_ Fax \_\_\_\_\_  
 Email jason.scarbrough@joe.com

### (2) General Project Information

Project Name Windmark Beach North Townhomes  
 Project Address \_\_\_\_\_  
 City Port St. Joe State Florida Zip 32456  
 County Gulf Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

Project Description and Purpose (including the total length and material of each diameter of proposed gravity sewers and forcemains, total number of manholes, total number of pump stations, and connections to existing system):

Windmark Beach North Townhomes will include 1 duplex lift station, 1,094 LF of 8" gravity sewer, 5 sanitary sewer manholes, and 1,464 LF of 4" Force Main.

Estimated date for: Start of construction May 2023 Completion of Construction December 2023

Number of connections to existing system or treatment plant 78 Townhomes

### (3) Project Capacity

Type of Unit	Number of Units	Population Per Unit	Total Population (Number of Units x Population Per Unit)	Per Capita Flow in Gallons per Day (GPD)	Total Average Daily Flow in GPD (Total Population x Per Capita Flow)	Peak hour flow in Gallons Per Minute (GPM)
Single-Family Home	78	3	234	100	23400	67
Mobile Home						
Apartment						
Commercial, Institutional, or Industrial Facility*						
Total	NA	NA	1338	NA	23400	67

\* Description of commercial, institutional, and industrial facilities and explanation of method used to estimate per capita flow for these facilities:

PHF=4.12 from Ten State Standards  
 ADF=23400/24/60= 16.3 GPM  
 PHF=16.3x4.12=67 GPM

(4) Pump Station Data (attached additional sheets as necessary)

Location	Type	Maximum Estimated Flow to the Station (GPD)	Average Estimated Flow to the Station (GPD)	Minimum Estimated Flow to the Station (GPD)	Operating Conditions [GPM @ FT (TDH)]
Shown on Plans	Lift Station	96,408	23,400	5,679.6	0-245@92-98'

(5) Collection/Transmission System Design Information

A. This information must be completed for all projects by the applicant's professional engineer, and if applicable, those professional engineers in other disciplines who assisted with the design of the project. The checklist below shall be used for conventional collection/transmission systems while Attachment I to this form shall be used for low pressure sewer systems, including septic tank effluent pump (STEP) systems, and Attachment II shall be used for vacuum sewer systems (include Attachments I or II with the submittal of this form as applicable). These checklists cover important items but are not necessarily completely comprehensive of collection system construction and do not relieve the engineer from designing the collection system following sound engineering practices.

Complete the tables below (or Attachments I or II as applicable) as follows:

- The engineer shall initial each requirement if the project has been designed to comply with the standard or criteria.
- Mark "NA" if the requirement does not apply to this project and provide an explanation in section (5)B.
- Mark "NC" if the project has not been designed to comply with the requirement and provide an explanation in section (5)B, including any rule references.

Note, if the project has not been designed in accordance with the standards and criteria set forth in Rules 62-604.400(1) and (2), F.A.C., an application for an individual permit shall be submitted. However, if Rules 62-604.400(1) and (2), F.A.C., specifically allow for another alternative that will result in an equivalent level of reliability and public health protection, the project can be constructed using the general permit. Also note that each requirement below and in Attachments I and II includes a reference to guidance or rule for further information.

The guidance documents given in the checklists are as follows:

- "RSWF" – Recommended Standards for Wastewater Facilities (2014). Health Research, Inc., Health Education Services Division, P.O. Box 7126, Albany, NY 12224, [www.healthresearch.org](http://www.healthresearch.org)
- "MOPFD-12" – Alternative Sewer Systems, Manual of Practice No. FD-12. Alternative Sewer Systems (1986). Water Environment Federation, 602 Wythe Street, Alexandria, VA 22314, [www.wef.org](http://www.wef.org).
- "FL DSG" – Design and Specification Guidelines for Low Pressure Sewer Systems (1981). Department of Environmental Protection, 2600 Blair Stone Road, MS 3540, Tallahassee, FL 32399-2400, [www.floridadep.gov](http://www.floridadep.gov).
- "EPA ACS" - Alternative Wastewater Collection Systems (1991). EPA/625/1-91/024. NTIS# PB93-1162591N2; National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, [www.ntis.gov](http://www.ntis.gov).

General Requirements

Initials (or "NA" or "NC")	Item Number	Requirement
CS	1	The project is designed based on an average daily flow of 100 gallons per capita plus wastewater flow from industrial plants and major institutional and commercial facilities unless water use data or other justification is used to better estimate the flow. The design includes an appropriate peaking factor, which covers I/I contributions and non-wastewater connections to those service lines. (Note, see Attachment I for low pressure sewer systems) [RSWF 11.243]
CS	2	Procedures are specified for operation of the collection/transmission system during construction if work is performed on a system currently in operation. [RSWF20.15]
CS	3	The project is designed to be located on public rights-of-way, land owned by the permittee, or easements and to be located no closer than 100 feet from a public drinking water supply well and no closer than 75 feet from a private drinking water supply well; or documentation is provided in Part II.(5)B., showing that another alternative will result in an



Initials (or "NA" or "NC")	Item Number	Requirement
		equivalent level of reliability and public health protection. [62-604.400(1)(b) and (c), F.A.C.]
CS	4	The project is designed with no physical connections between a public or private potable water supply system and a sewer or force main and with no water pipes passing through or coming into contact with any part of a sewer manhole. [RSFW 38.1]
CS	5	The project is designed to preclude the deliberate introduction of storm water, surface water, groundwater, roof runoff, subsurface drainage, swimming pool drainage, air conditioning system condensate water, non-contact cooling water except as provided by Rule 62-610.668(1), F.A.C., and sources of uncontaminated wastewater, except to augment the supply of reclaimed water in accordance with Rule 62-610.472(3)(c), F.A.C. [62-604.400(1)(d), F.A.C.]
CS	6	The project is designed so that all new or relocated, buried sewers and force mains, are located in accordance with the separation requirements from water mains and reclaimed water lines of Rules 62-604.400(2)(g) and (h), F.A.C. Note, if the criteria of Rules 62-604.400(2)(g) 4. or (2)(h)3., F.A.C., are used, describe in Part II.(5)B. alternative construction features that will be provided to afford a similar level of reliability and public health protection. [62-604.400(2)(g) and (h), F.A.C.; 62-555.314, F.A.C.]

#### Gravity Sewers

Initials (or "NA" or "NC")	Item Number	Requirement
CS	7	The project is designed with no public gravity sewer conveying raw wastewater less than 8 inches in diameter. [RSWF 33.1]
CS	8	The design considers buoyancy of sewers, and appropriate construction techniques are specified to prevent flotation of the pipe where high groundwater conditions are anticipated. [RSWF 33.3]
CS	9	All sewers are designed with slopes to give mean velocities, when flowing full, of not less than 2.0 feet per second, based on Manning's formula using an "n" value of 0.013; or if it is not practicable to maintain these minimum slopes and the depth of flow will be 0.3 of the diameter or greater for design average flow, the owner of the system has been notified that additional sewer maintenance will be required. The pipe diameter and slope are selected to obtain the greatest practical velocities to minimize solids deposition problems. Oversized sewers are not specified to justify flatter slopes. [RSWF 33.41, 33.42, and 33.43]
CS	10	Sewers are designed with uniform slope between manholes. [RSWF 33.44]
NA	11	Where velocities greater than 10 fps are designed, provisions to protect against displacement by erosion and impact are specified. [RSWF 33.45]
NA	12	Sewers on 20% slopes or greater are designed to be anchored securely with concrete, or equal, anchors spaced as follows: not over 36 feet center to center on grades 20% and up to 35%; not over 24 feet center to center on grades 35% and up to 50%; and not over 16 feet center to center on grades 50% and over. [RSWF 33.46]
CS	13	Sewers 24 inches or less are designed with straight alignment between manholes. Where curvilinear sewers are proposed for sewers greater than 24 inches, the design specifies compression joints; ASTM or specific pipe manufacturer's maximum allowable pipe joint deflection limits are not exceeded; and curvilinear sewers are limited to simple curves which start and end at manholes. [RSWF 33.5]
N/A CS	14	Suitable couplings complying with ASTM specifications are required for joining dissimilar materials. [RSWF 33.7]
	15	Sewers are designed to prevent damage from superimposed loads. [RSWF 33.7]
CS	16	Appropriate specifications for the pipe and methods of bedding and backfilling are provided so as not to damage the pipe or its joints, impede cleaning operations and future tapping, nor create excessive side fill pressures and ovalation of the pipe, nor seriously impair flow capacity. [RSWF 33.81]
CS	17	Appropriate deflection tests are specified for all flexible pipe including PVC. Testing is

Initials (or "NA" or "NC")	Item Number	Requirement
		required after the final backfill has been in place at least 30 days to permit stabilization of the soil-pipe system. Testing requirements specify: 1) no pipe shall exceed a deflection of 5%; 2) using a rigid ball or mandrel for the deflection test with a diameter not less than 95% of the base inside diameter or average inside diameter of the pipe, depending on which is specified in the ASTM specification, including the appendix, to which the pipe is manufactured; and 3) performing the test without mechanical pulling devices. [RSWF 33.85]
CS	18	Leakage tests are specified requiring that: 1) the leakage exfiltration or infiltration does not exceed 100 gallons per inch of pipe diameter per mile per day for any section of the system; 2) exfiltration or infiltration tests be performed with a minimum positive head of 2 feet; and 3) air tests, as a minimum, conform to the test procedure described in ASTM C-828 for clay pipe, ASTM C 924 for concrete pipe, ASTM F-1417 for plastic pipe, and for other materials appropriate test procedures. [RSWF 33.93, 33.94, and 33.95]
NA	19	If an inverted siphon is proposed, documentation of its need is provided in Part II.(5)B. Inverted siphons are designed with: 1) at least two barrels; 2) a minimum pipe size of 6 inches; 3) necessary appurtenances for maintenance, convenient flushing, and cleaning equipment; and 4) inlet and discharge structures having adequate clearances for cleaning equipment, inspection, and flushing. Design provides sufficient head and appropriate pipe sizes to secure velocities of at least 3.0 fps for design average flows. The inlet and outlet are designed so that the design average flow may be diverted to one barrel, and that either barrel may be cut out of service for cleaning. [RSWF 35]

#### Manholes

Initials (or "NA" or "NC")	Item Number	Requirement
CS	20	The project is designed with manholes at the end of each line; at all changes in grade, size, or alignment; at all intersections; and at distances not greater than 400 feet for sewers 15 inches or less and 500 feet for sewers 18 inches to 30 inches, except in the case where adequate modern cleaning equipment is available at distances not greater than 600 feet. [RSWF 34.1]
CS	21	Design requires drop pipes to be provided for sewers entering manholes at elevations of 24 inches or more above the manhole invert. Where the difference in elevation between the incoming sewer and the manhole invert is less than 24 inches, the invert is designed with a fillet to prevent solids deposition. Inside drop connections (when necessary) are designed to be secured to the interior wall of the manhole and provide access for cleaning. Design requires the entire outside drop connection be encased in concrete. [RSWF 34.2]
CS	22	Manholes are designed with a minimum diameter of 48 inches and a minimum access diameter of 24 inches. [RSWF 34.3]
CS	23	Design requires that a bench be provided on each side of any manhole channel when the pipe diameter(s) are less than the manhole diameter and that no lateral sewer, service connection, or drop manhole pipe discharges onto the surface of the bench. [RSWF 34.5]
CS	24	Design requires: 1) manhole lift holes and grade adjustment rings be sealed with non-shrinking mortar or other appropriate material; 2) inlet and outlet pipes be joined to the manhole with a gasketed flexible watertight connection or another watertight connection arrangement that allows differential settlement of the pipe and manhole wall; and 3) watertight manhole covers be used wherever the manhole tops may be flooded by street runoff or high water. [RSWF 34.6]
CS	25	Manhole inspection and testing for water-tightness or damage prior to placing into service are specified. Air testing, if specified for concrete sewer manholes, conforms to the test procedures described in ASTM C-1244. [RSWF 34.7]
NA	26	Electrical equipment specified for use in manholes is consistent with Item 46 of this checklist. [RSWF 34.9]

### Stream Crossings

Initials (or "NA" or "NC")	Item Number	Requirement
NA	27	Sewers and force mains entering or crossing streams are designed to be constructed of ductile iron pipe with mechanical joints or so they will remain watertight and free from changes in alignment or grade or constructed of HDPE with fused joints for directional drilling. Appropriate materials which will not readily erode, cause siltation, damage pipe during placement, or corrode the pipe are specified to backfill the trench. [RSWF 36.21]
NA	28	Stream crossings are designed to incorporate valves or other flow regulating devices (which may include pump stations) on the shoreline or at such distances from the shoreline to prevent discharge in the event the line is damaged. [62-604.400(2)(j)5., F.A.C.]
NA	29	Sewers and force mains entering or crossing streams are designed at a sufficient depth below the natural bottom of the stream bed to protect the line. At a minimum, the project is designed with subaqueous lines to be buried at least three feet below the design or actual bottom, whichever is deeper, of a canal and other dredged waterway or the natural bottom of streams, rivers, estuaries, bays, and other natural water bodies; or if it is not practicable to design the project with less than three-foot minimum cover, alternative construction features (e.g. a concrete cap, sleeve, or some other properly engineered device to insure adequate protection of the line) are described in Part II.C. [62-604.400(2)(j)1., F.A.C., and RSWF 36.11]
NA	30	Specifications require permanent warning signs be placed on the banks of canals, streams, and rivers clearly identifying the nature and location (including depths below design or natural bottom) of subaqueous crossings and suitably fixed signs be placed at the shore, for subaqueous crossings of lakes, bays, and other large bodies of water, and in any area where anchoring is normally expected. [62-604.400(2)(j)2., F.A.C.]
NA	31	Provisions for testing the integrity of subaqueous lines are specified. [62-604.400(2)(j)4., F.A.C.]
NA	32	Supports are designed for all joints in pipes utilized for aerial crossings and to prevent overturning and settlement. Expansion jointing is specified between above ground and below ground sewers and force mains. The design considers the impact of floodwaters and debris. [RSWF 37]
NA	33	Aerial crossings are designed to maintain existing or required navigational capabilities within the waterway and to reserve riparian rights of adjacent property owners. [62-604.400(2)(j)3., F.A.C.]

### Pump Stations

Initials (or "NA" or "NC")	Item Number	Requirement
CS	34	In areas with high water tables, pump stations are designed to withstand flotation forces when empty. When siting the pump station, the design considers the potential for damage or interruption of operation because of flooding. Pump station structures and electrical and mechanical equipment are designed to be protected from physical damage by the 100-year flood. Pump stations are designed to remain fully operational and accessible during the 25-year flood unless lesser flood levels are appropriate based on local considerations, but not less than the 10-year flood. [62-604.400(2)(e), F.A.C.]
CS	35	Pump stations are designed to be readily accessible by maintenance vehicles during all weather conditions. [RSWF 41.2]
CS	36	Wet well and pump station piping is designed to avoid operational problems from the accumulation of grit. [RSWF 41.3]
NA	37	Dry wells, including their superstructure, are designed to be completely separated from the wet well. Common walls are designed to be gas tight. [RSWF 42.21]
CS	38	The design includes provisions to facilitate removing pumps, motors, and other mechanical and electrical equipment. [RSWF 42.22]
	39	The design includes provisions for: 1) suitable and safe means of access for persons wearing self-



Initials (or "NA" or "NC")	Item Number	Requirement
CS		contained breathing apparatus are provided to dry wells, and to wet wells; 2) stairway access to wet wells more than 4 feet deep containing either bar screens or mechanical equipment requiring inspection or maintenance; 3) for built-in-place pump stations, a stairway to the dry well with rest landings at vertical intervals not to exceed 12 feet; 4) for factory-built pump stations over 15 feet deep, a rigidly fixed landing at vertical intervals not to exceed 10 feet unless a manlift or elevator is provided; and 5) where a landing is used, a suitable and rigidly fixed barrier to prevent an individual from falling past the intermediate landing to a lower level. If a manlift or elevator is provided, emergency access is included in the design. [RSWF 42.23]
CS	40	Specified construction materials are appropriate under conditions of exposure to hydrogen sulfide and other corrosive gases, greases, oils, and other constituents frequently present in wastewater. [RSWF 42.25]
CS	41	Multiple pumps are specified, and each pump has an individual intake. Where only two units are specified, they are of the same size. Specified units have capacity such that, with any unit out of service, the remaining units will have capacity to handle the design peak hourly flow. [RSWF 42.31 and 42.36]
NA	42	Bar racks are specified for pumps handling wastewater from 30 inch or larger diameter sewers. Where a bar rack is specified, a mechanical hoist is also provided. The design includes provisions for appropriate protection from clogging for small pump stations. [RSWF 42.322]
CS	43	Pumps handling raw wastewater are designed to pass spheres of at least 3 inches in diameter. Pump suction and discharge openings are designed to be at least 4 inches in diameter. Note, this provision is not applicable to grinder pumps. [RSWF 42.33]
CS	44	The design requires pumps be placed such that under normal operating conditions they will operate under a positive suction head, unless pumps are suction-lift pumps. [RSWF 42.34]
CS	45	The design requires: 1) pump stations be protected from lightning and transient voltage surges; and 2) pump stations be equipped with lightning arrestors, surge capacitors, or other similar protection devices and phase protection. Note, small pump stations serving a single building are not required to provide surge protection devices if not necessary because the pump station is protected by the surge protection device of the single building. [62-604.400(2)(b), F.A.C.]
CS	46	The design requires 1) electrical systems and components (e.g., motors, lights, cables, conduits, switch boxes, control circuits, etc.) in raw wastewater wet wells, or in enclosed or partially enclosed spaces where hazardous concentrations of flammable gases or vapors may be present, comply with the National Electrical Code requirements; 2) electrical equipment located in wet wells be suitable for use under corrosive conditions; 3) each flexible cable be provided with a watertight seal and separate strain relief; 4) a fused disconnect switch located above ground be provided for the main power feed for all pump stations; 5) electrical equipment exposed to weather to meet the requirements of weatherproof equipment NEMA 3R or 4; 6) a 110 volt power receptacle to facilitate maintenance be provided inside the control panel for pump stations that have control panels outdoors; and 7) ground fault interruption protection be provided for all outdoor outlets. [RSWF 42.35]
NA	47	The design requires a sump pump equipped with dual check valves be provided in dry wells to remove leakage or drainage with discharge above the maximum high water level of the wet well. [RSWF 42.37]
CS	48	Pump/pump station design capacities are based on the peak hourly flow and are adequate to maintain a minimum velocity of 2 feet per second in the force main. [RSWF 42.38]
CS	49	The design includes provisions to automatically alternate the pumps in use. [RSWF 42.4]
CS	50	The design requires: 1) suitable shutoff valves be placed on the suction line of pumps/dry pit pumps; 2) suitable shutoff and check valves be placed on the discharge line of each pump (except on screw pumps); 3) a check valve be located between the shutoff valve and the pump; 4) check valves be suitable for the material being handled; 5) check valves be placed on the horizontal portion of discharge piping (except for ball checks, which may be placed in the vertical run); 6) all valves be capable of withstanding normal pressure and

Initials (or "NA" or "NC")	Item Number	Requirement
		water hammer; and 7) all shutoff and check valves be operable from the floor level and accessible for maintenance. [RSWF 42.5]
CS	51	The effective volume of wet wells is based on design average flows and a filling time not to exceed 30 minutes unless the facility is designed to provide flow equalization. The pump manufacturer's duty cycle recommendations were utilized in selecting the minimum cycle time. [RSWF 42.62]
CS	52	The design requires wet well floors have a minimum slope of 1 to 1 to the hopper bottom and the horizontal area of hopper bottoms be no greater than necessary for proper installation and function of the inlet. [RSWF 42.63]
CS	53	For covered wet wells, the design provides for air displacement to the atmosphere, such as an inverted "j" tube or other means. [RSWF 42.64]
CS	54	The design provides for adequate ventilation at all pump stations. Mechanical ventilation shall be provided where the dry well is below the ground surface. Permanently installed ventilation shall be provided if screens or mechanical equipment requiring maintenance or inspection are located in the wet well. Pump stations are designed with no interconnection between the wet well and dry well ventilation systems. [RSWF 42.71]
CS	55	The design requires all intermittently operated ventilation equipment to be interconnected with the respective pit lighting system and the manual lighting/ventilation switch to override the automatic controls. [RSWF 42.73]
NA	56	The design requires the fan wheels of ventilation systems be fabricated from non-sparking material and automatic heating and dehumidification equipment be provided in all dry wells. [RSWF 42.74]
NA	57	If wet well ventilation is continuous, design provides for at least 12 complete 100% fresh air changes per hour; if wet well ventilation is intermittent, design provides for at least 30 complete 100% fresh air changes per hour; and design requires air to be forced into wet wells by mechanical means rather than solely exhausted from the wet well. [RSWF 42.75]
NA	58	If dry well ventilation is continuous, design provides at least 12 complete 100% fresh air changes per hour; and dry well ventilation is intermittent, design provides for at least 30 complete 100% fresh air changes per hour, unless a system of two speed ventilation with an initial ventilation rate of 30 changes per hour for 10 minutes and automatic switch over to 6 changes per hour is used to conserve heat. [RSWF 42.76]
CS	59	Pump stations are designed and located on the site to minimize adverse effects from odors, noise, and lighting. [62-604.400(2)(c), F.A.C.]
CS	60	The design requires pump stations be enclosed with a fence or otherwise designed with appropriate features to discourage the entry of animals and unauthorized persons. Posting of an unobstructed sign made of durable weather resistant material at a location visible to the public with a telephone number for a point of contact in case of emergency is specified. [62-604.400(2)(d), F.A.C.]
CS	61	The design requires suitable devices for measuring wastewater flow at all pump stations. Indicating, totalizing, and recording flow measurement are specified for pump stations with a 350 gpm or greater design peak flow. [RSWF 42.8]
CS	62	The project is designed with no physical connections between any potable water supplies and pump stations. If a potable water supply is brought to a station, reduced-pressure principle backflow-prevention assemblies are specified. [RSWF 42.9 and 62-555.30(4), F.A.C.]

Additional Items to be Completed for Suction-Lift Pump Stations

Initials (or "NA" or "NC")	Item Number	Requirement
NA	63	The design requires all suction-lift pumps to be either self-priming or vacuum-priming and the combined total of dynamic suction-lift at the "pump off" elevation and required net positive suction head at design operating conditions not to exceed 22 feet. For self-priming

Initials (or "NA" or "NC")	Item Number	Requirement
		pumps, the design requires: 1) pumps be capable of rapid priming and repriming at the "lead pump on" elevation with self-priming and repriming accomplished automatically under design operating conditions; 2) suction piping not to exceed the size of the pump suction or 25 feet in total length; and 3) priming lift at the "lead pump on" elevation to include a safety factor of at least 4 feet from the maximum allowable priming lift for the specific equipment at design operating conditions. For vacuum-priming pump stations, the design requires dual vacuum pumps capable of automatically and completely removing air from the suction-lift pumps and the vacuum pumps be adequately protected from damage due to wastewater. [RSWF 43.1]
NA	64	The design requires: 1) suction-lift pump equipment compartments to be above grade or offset and to be effectively isolated from the wet well to prevent a hazardous and corrosive sewer atmosphere from entering the equipment compartment; 2) wet well access not to be through the equipment compartment and to be at least 24 inches in diameter; 3) gasketed replacement plates be provided to cover the opening to the wet well for pump units to be removed for service; and 4) no valving be located in the wet well. [RSWF 43.2]

Additional Items to be Completed for Submersible Pump Stations

Initials (or "NA" or "NC")	Item Number	Requirement
CS	65	Submersible pumps and motors are designed specifically for raw wastewater use, including totally submerged operation during a portion of each pump cycle and to meet the requirements of the National Electrical Code for such units. Provisions for detecting shaft seal failure or potential seal failure are included in the design. [RSWF 44.1]
CS	66	The design requires submersible pumps be readily removable and replaceable without dewatering the wet well or disconnecting any piping in the wet well. [RSWF 44.2]
CS	67	In submersible pump stations, electrical supply, control, and alarm circuits are designed to provide strain relief; to allow disconnection from outside the wet well; and to protect terminals and connectors from corrosion by location outside the wet well or through use of watertight seals. [RSWF 44.31]
CS	68	In submersible pump stations, the design requires the motor control center to be located outside the wet well, readily accessible, and protected by a conduit seal or other appropriate measures meeting the requirements of the National Electrical Code, to prevent the atmosphere of the wet well from gaining access to the control center. If a seal is specified, the motor can be removed and electrically disconnected without disturbing the seal. The design requires control equipment exposed to weather to meet the requirements of weatherproof equipment NEMA 3R or 4. [RSWF 44.32]
CS	69	In submersible pump stations, the design requires: 1) pump motor power cords be flexible and serviceable under conditions of extra hard usage and to meet the requirements of the National Electrical Code standards for flexible cords in wastewater pump stations; 2) ground fault interruption protection be used to de-energize the circuit in the event of any failure in the electrical integrity of the cable; and 3) power cord terminal fittings be corrosion-resistant and constructed in a manner to prevent the entry of moisture into the cable, provided with strain relief appurtenances, and designed to facilitate field connecting. [RSWF 44.33]
CS	70	In submersible pump stations, the design requires all shut-off and check valves be located in a separate valve pit. Provisions to remove or drain accumulated water from the valve pit are included in the design. [RSWF 44.4]



### Emergency Operations for Pump Stations

Initials (or "NA" or "NC")	Item Number	Requirement
CS	71	Pump stations are designed with an alarm system which activates in cases of power failure, sump pump failure, pump failure, unauthorized entry, or any cause of pump station malfunction. Pump station alarms are designed to be telemetered to a facility that is manned 24 hours a day. If such a facility is not available and a 24-hour holding capacity is not provided, the alarm is designed to be telemetered to utility offices during normal working hours and to the home of the responsible person(s) in charge of the lift station during off-duty hours. Note, if an audio-visual alarm system with a self-contained power supply is provided in lieu of a telemetered system, documentation is provided in Part II.(5)B. showing an equivalent level of reliability and public health protection. [RSWF 46]
CS	72	The design requires emergency pumping capability be provided for all pump stations. For pump stations that receive flow from one or more pump stations through a force main or pump stations discharging through pipes 12 inches or larger, the design requires uninterrupted pumping capability be provided, including an in-place emergency generator. Where portable pumping and/or generating equipment or manual transfer is used, the design includes sufficient storage capacity with an alarm system to allow time for detection of pump station failure and transportation and connection of emergency equipment. [62-604.400(2)(a)1. and 2., F.A.C., and RSWF 47.423 and 47.433]
CS	73	The design requires: 1) emergency standby systems to have sufficient capacity to start up and maintain the total rated running capacity of the station, including lighting, ventilation, and other auxiliary equipment necessary for safety and proper operation; 2) special sequencing controls be provided to start pump motors unless the generating equipment has capacity to start all pumps simultaneously with auxiliary equipment operating; 3) a riser from the force main with rapid connection capabilities and appropriate valving be provided for all pump stations to hook up portable pumps; and 4) all pump station reliability design features be compatible with the available temporary service power generating and pumping equipment of the authority responsible for operation and maintenance of the collection/transmission system. [62-604.400(2)(a)3., F.A.C., and RSWF 47.431]
CS	74	The design provides for emergency equipment to be protected from operation conditions that would result in damage to the equipment and from damage at the restoration of regular electrical power. [RSWF 47.411, 47.417, and 47.432]
NA	75	Where independent substations are used for emergency power, each separate substation and its associated transmission lines is designed to be capable of starting and operating the pump station at its rated capacity. [RSWF 47.44]

### Force Mains

Initials (or "NA" or "NC")	Item Number	Requirement
CS	76	Force mains are designed to maintain, at design pumping rates, a cleansing velocity of at least 2 feet per second. The minimum force main diameter specified for raw wastewater is not less than 4 inches. (Not applicable to low pressure sewer systems) [RSWF 49.1]
CS	77	The design requires: 1) branches of intersecting force mains be provided with appropriate valves such that one branch may be shut down for maintenance and repair without interrupting the flow of other branches; and 2) stub-outs on force mains, placed in anticipation of future connections, be equipped with a valve to allow such connection without interruption of service. [62-604.400(2)(f), F.A.C.]
CS	78	The design requires air relief valves be placed at high points in the force main to prevent air locking. [RSWF 49.2]
CS	79	Specified force main pipe and joints are equal to water main strength materials suitable for design conditions. The force main, reaction blocking, and station piping are designed to withstand water hammer pressures and stresses associated with the cycling of wastewater

Initials (or "NA" or "NC")	Item Number	Requirement
		pump stations. [RSWF 49.4]
CS	80	When the Hazen and Williams formula is used to calculate friction losses through force mains, the value for "C" is 100 for unlined iron or steel pipe for design. For other smooth pipe materials, such as PVC, polyethylene, lined ductile iron, the value for C does not exceed 120 (130 for PVC and HDPE) for design. (Not applicable to low pressure sewer systems) [RSWF 49.61]
CS	81	Where force mains are constructed of material, which might cause the force main to be confused with potable water mains, specifications require the force main to be clearly identified. [RSWF 49.7]
CS	82	Leakage tests for force mains are specified including testing methods and leakage limits. [RSWF 49.8]

**Note, if this project is an alternative collection system (i.e. a low pressure sewer system or a vacuum sewer system), complete the checklist items on Attachment I for low pressure sewer systems or Attachment II for vacuum sewer systems. Include the attachment with the submittal. For any items marked "NA" or "NC," provide an explanation in section 5(B).**

B. Explanation for Requirements or Standards Marked "NA" or "NC" in II(5)A above, which includes Attachments I and II (attach additional sheets if necessary):

11-12: Velocities not greater than 10 fps and no sewers with greater than 20% slope

19: No inverted siphons

27-33: No Stream Crossings

37,42,47,56,58: No dry wells

63-64: No suction lift pumps

75: No independent pump stations

14: NO JOINING OF DISSIMILAR MATERIALS FOR GRAVITY SEWER

57: NO DESIGNED VENTILATION (INVERTED J TUBE SIPHON VENTILATION)

### PART III - Certifications

#### (1) Collection/Transmission System Permittee

I, the undersigned owner or authorized representative\* of The St. Joe Company  
am fully aware that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. I agree to retain the design engineer or another professional engineer registered in Florida, to conduct on-site observation of construction, to prepare a certification of completion of construction, and to review record drawings for adequacy. Further, I agree to provide an appropriate operation and maintenance manual for the facilities pursuant to Rule 62-604.500(4), F.A.C., and to retain a professional engineer registered in Florida to examine (or to prepare if desired) the manual. I am fully aware that Department approval must be obtained before this project is placed into service for any purpose other than testing for leaks and testing equipment operation.

Signed [Signature] Date 9.15.22  
Name Jason Scarbrough Title Project Manager

\*Attach a letter of authorization.

#### (2) Owner of Collection/Transmission System

I, the undersigned owner or authorized representative\* of City of Port St. Joe certify that we will be the Owner of this project after it is placed into service. I agree that we will operate and maintain this project\*\* in a manner that will comply with applicable Department rules. Also, I agree that we will promptly notify the Department if we sell or legally transfer ownership of this project.

Signed \_\_\_\_\_ Date \_\_\_\_\_  
Name Jim Anderson Title City Manager  
Company Name City of Port St. Joe  
Address P.O. Box 278  
City Port St. Joe State FL Zip 32457  
Telephone 850-229-8261 Cell \_\_\_\_\_ Fax 850-229-8973  
Email janderson@psj.fl.gov

\* Attach a letter of authorization

\*\*Description of the owner's portion if split \_\_\_\_\_

Second Owner of Collection/Transmission System (if system is divided with different owners)

I, the undersigned owner or authorized representative\* of \_\_\_\_\_ certify that we will be the Owner of this project after it is placed into service. I agree that we will operate and maintain this project in a manner that will comply with applicable Department rules. Also, I agree that we will promptly notify the Department if we sell or legally transfer ownership of this project.

Signed \_\_\_\_\_ Date \_\_\_\_\_  
Name Kevin Pettis Title Plant Manager  
Company Name City of Port St. Joe Utility Services  
Address P.O. Box 278  
City Port St. Joe State FL Zip 32457  
Telephone 850-229-8247 Cell \_\_\_\_\_ Fax 850-229-8973  
Email kpettis@psj.fl.gov

\* Attach a letter of authorization

\*\*Description of the second owner portion if split \_\_\_\_\_

#### (3) Wastewater Facility Serving Collection/Transmission System\*\*

If this is a Notice of Intent to use a general permit, check here:

☒ The undersigned owner or authorized representative\* of the City of Port St. Joe Wastewater Facility wastewater facility

hereby certifies that the above referenced facility has the capacity to receive the wastewater generated by the proposed collection system; is in compliance with the capacity analysis report requirements of Rule 62-600.405, F.A.C.; is not under a Department order associated with effluent violations or the ability to treat wastewater adequately; and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules.

If this is an application for an individual permit, check one:

☐ The undersigned owner or authorized representative\* of the \_\_\_\_\_ wastewater facility hereby certifies that the above referenced facility has and will have adequate reserve capacity to accept the flow from this project and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules.

☐ The undersigned owner or authorized representative\* of the \_\_\_\_\_ wastewater facility hereby certifies that the above referenced facility currently does not have, but will have prior to placing the proposed project into operation, adequate reserve capacity to accept the flow from this project and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules.

Name of Treatment Plant Serving Project City of Port St. Joe  
County Gulf City Port St. Joe  
DEP Facility ID: FL 020206  
Maximum monthly average daily flow over the last 12 month period \_\_\_\_\_ MGD Month(s) used \_\_\_\_\_  
Maximum three-month average daily flow over the last 12 month period \_\_\_\_\_ MGD Month(s) used \_\_\_\_\_  
Current permitted capacity \_\_\_\_\_ MGD ☐ AADF ☐ MADF ☐ TMADF  
Current outstanding flow commitments (including this project) against treatment plant capacity \_\_\_\_\_ MGD

Signed \_\_\_\_\_ Date \_\_\_\_\_  
Name Kevin Pettis Title Plant Manager  
Company Name City of Port St. Joe Utility Services  
Address P.O. Box 278  
City Port St. Joe State FL Zip 32457  
Telephone 850.229.8247 Cell \_\_\_\_\_ Fax \_\_\_\_\_  
Email kpettis@psj.fl.gov

\* Attach a letter of authorization

\*\* If there is an intermediate satellite collection system between the project and the final receiving facility collection system, a letter shall be attached certifying that the intermediate downstream satellite collection system has adequate reserve capacity to accept the flow from this project.



(4) Professional Engineer Registered in Florida

I, the undersigned professional engineer registered in Florida, certify that I am in responsible charge of the preparation and production of engineering documents for this project; that plans and specifications for this project have been completed; that I have expertise in the design of wastewater collection/transmission systems; and that, to the best of my knowledge and belief, the engineering design for this project complies with the requirements of Chapter 62-604, F.A.C.

(Affix Seal)

Signed 

Date 10/25/22

Name Christopher Shortt, P.E.

Florida Registration No. 78424

Company Name Dewberry Engineers Inc.

Address 203 Aberdeen Parkway

City Panama City

State FL

Zip 32405

Telephone 850-571-1199

Cell \_\_\_\_\_

Fax \_\_\_\_\_

Email cshortt@dewberry.com

Portion of the project for which responsible: 100%

Second Engineer (if applicable)

(Affix Seal)

Signed \_\_\_\_\_

Date \_\_\_\_\_

Name \_\_\_\_\_

Florida Registration No. \_\_\_\_\_

Company Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Telephone \_\_\_\_\_

Cell \_\_\_\_\_

Fax \_\_\_\_\_

Email \_\_\_\_\_

Portion of the Project for Which Responsible: \_\_\_\_\_

Third Engineer (if applicable)

(Affix Seal)

Signed \_\_\_\_\_

Date \_\_\_\_\_

Name \_\_\_\_\_ Florida Registration No. \_\_\_\_\_

Company Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone \_\_\_\_\_ Cell \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

Portion of the Project for Which Responsible: \_\_\_\_\_

Fourth Engineer (if applicable)

(Affix Seal)

Signed \_\_\_\_\_

Date \_\_\_\_\_

Name \_\_\_\_\_ Florida Registration No. \_\_\_\_\_

Company Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone \_\_\_\_\_ Cell \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

Portion of the Project for Which Responsible: \_\_\_\_\_



## NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

**INSTRUCTIONS:** This notice shall be completed and submitted by persons proposing to construct projects permitted under the "General Permit for Construction of Water Main Extensions for Public Water Systems" in Rule 62-555.405, F.A.C. AT LEAST 30 DAYS BEFORE BEGINNING CONSTRUCTION OF A WATER MAIN EXTENSION PROJECT, complete and submit one copy of this notice to the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD) along with payment of the proper permit processing fee. (When completed, Part II of this notice serves as the preliminary design report for a water main extension project, and thus, it is unnecessary to submit a separate preliminary design report or drawings, specifications, and design data with this notice.) All information provided in this notice shall be typed or printed in ink. The DEP permit processing fee for projects requiring the services of a professional engineer during design is \$650, and the DEP permit processing fee for projects not requiring the services of a professional engineer during design is \$500.\* Some ACHDs charge a county permit processing fee in addition to the DEP permit processing fee. Checks for permit processing fees shall be made payable to the Department of Environmental Protection or the appropriate ACHD. NOTE THAT A SEPARATE NOTIFICATION AND A SEPARATE PERMIT PROCESSING FEE ARE REQUIRED FOR EACH NON-CONTIGUOUS PROJECT.†

\* Except as noted in paragraphs 62-555.520(3)(a) and (b), F.A.C., projects shall be designed under the responsible charge of one or more professional engineers licensed in Florida.

† Non-contiguous projects are projects that are neither interconnected nor located nearby one another (i.e., on the same site, on adjacent streets, or in the same neighborhood).

### I. General Project Information

A. Name of Project: **Windmark Beach North Townhomes**

B. Description of Project and Its Purpose:

The project is the development of 78 townhome residential lots with supporting roadways, a stormwater management facility, and utilities. A water distribution system will be constructed on site to provide potable flows and fire protection. System components include, but are not limited to: 1,479 LF of 6" WM, 79 water meters, 4 fire hydrant assemblies, and all necessary valves and appurtenances.

C. Location of Project

1. County Where Project Located: Gulf

2. Description of Project Location:

The project is located north of the Windmark Beach developments in Port St. Joe, Florida. The project is located on the north side US HWY 98.

D. Estimate of Cost to Construct Project: \$120,000

E. Estimate of Dates for Starting and Completing Construction of Project:

May 2023-December 2023

F. Permittee

PWS/Company Name: <u>The St. Joe Company</u>		PWS Identification No.: *	
PWS Type: *	<input type="checkbox"/> Community <input type="checkbox"/> Non-Transient Non-Community <input type="checkbox"/> Transient Non-Community <input type="checkbox"/> Consecutive		
Contact Person: <u>Jason Scarbrough</u>		Contact Person's Title: <u>Project Manager</u>	
Contact Person's Mailing Address: <u>130 Richard Jackson Blvd, Suite 200</u>			
City: <u>Panama City Beach</u>		State: <u>FL</u>	Zip Code: <u>32407</u>
Contact Person's Telephone Number: <u>850-231-8530</u>		Contact Person's Fax Number:	
Contact Person's E-Mail Address: <u>jason.scarbrough@joe.com</u>			

\* This information is required only if the permittee is a public water system (PWS).

G. Public Water System (PWS) Supplying Water to Project

PWS Name: <u>City of Port St. Joe</u>		PWS Identification No.:	
PWS Type:	<input checked="" type="checkbox"/> Community <input type="checkbox"/> Non-Transient Non-Community <input type="checkbox"/> Transient Non-Community <input type="checkbox"/> Consecutive		
PWS Owner: <u>City of Port St. Joe</u>			
Contact Person: <u>Jim Anderson</u>		Contact Person's Title: <u>City Manager</u>	
Contact Person's Mailing Address: <u>P.O. Box 278</u>			
City: <u>Port St. Joe</u>		State: <u>FL</u>	Zip Code: <u>32457</u>
Contact Person's Telephone Number: <u>850-229-8281</u>		Contact Person's Fax Number:	
Contact Person's E-Mail Address: <u>janderson@psj.fl.gov</u>			

# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

Project Name: Windward Beach North Townhomes Permittee: The St. Joe Company

## H. Public Water System (PWS) that Will Own Project After It Is Placed into Permanent Operation

PWS Name: City of Port St. Joe		PWS Identification No.: * 1230545	
PWS Type: * <input type="checkbox"/> Community <input type="checkbox"/> Non-Transient Non-Community <input type="checkbox"/> Transient Non-Community <input type="checkbox"/> Consecutive			
PWS Owner: City of Port St. Joe			
Contact Person: Larry McClamma		Contact Person's Title: Plant Manager	
Contact Person's Mailing Address: P.O. Box 278			
City: Port St. Joe		State: FL	Zip Code: 32457
Contact Person's Telephone Number: 850-229-8247		Contact Person's Fax Number: 850-229-7522	
Contact Person's E-Mail Address:			

\* This information is required only if the owner/operator is an existing PWS.

## I. Professional Engineer(s) or Other Person(s) in Responsible Charge of Designing Project\*

Company Name: Dewberry Engineers Inc		Title(s) of Designer(s): Project Manager	
Designer(s): Christopher Shortt, PE			
Qualifications of Designer(s):			
<input checked="" type="checkbox"/> Professional Engineer(s) Licensed in Florida – License Number(s): 78424			
<input type="checkbox"/> Public Officer(s) Employed by State, County, Municipal, or Other Governmental Unit of State†			
<input type="checkbox"/> Plumbing Contractor(s) Licensed in Florida – License Number(s): ^			
Mailing Address of Designer(s): 203 Aberdeen Pkwy.			
City: Panama City		State: FL	Zip Code: 32405
Telephone Number of Designer(s): 850-571-1199		Fax Number of Designer(s):	
E-Mail Address(es) of Designer(s): cshortt@dewberry.com			

\* Except as noted in paragraphs 62-555.520(3)(a) and (b), F.A.C., projects shall be designed under the responsible charge of one or more professional engineers licensed in Florida.

† Attach a detailed construction cost estimate showing that the cost to construct this project is \$10,000 or less.

^ Attach documentation showing that this project will be installed by the plumbing contractor(s) designing this project, documentation showing that this project involves a public water system serving a single property and fewer than 250 fixture units, and a detailed construction cost estimate showing that the cost to construct this project is \$50,000 or less.

## II. Preliminary Design Report for Project\*

### A. Service Area, Water Use, and Service Pressure Information

1. Design Type and Number of Service Connections, and Average Daily Water Demands and Maximum-Day Water Demands, in the Entire Area to Be Served by the Water Mains Being Constructed Under this Project:

A = Type of Service Connection	B = Number of Service Connections	C = Average Daily Water Demand Per Service Connection, gpd	D = Total Average Daily Water Demand*, gpd (Columns BxC for Residential Service Connections)	E = Total Maximum-Day Water Demand*, gpd
Single-Family Home	78	250	19500	28250
Mobile Home			0	
Apartment			0	
Commercial, Institutional, or Industrial Facility*				
Total	78		19500	28250

a. Description of Commercial, Institutional, or Industrial Facilities and Explanation of Method(s) Used to Estimate Average Daily Water Demand for These Facilities:

N/A

b. Explanation of Peaking Factor(s) or Method(s) Used to Estimate Maximum-Day Water Demand:

The maximum day water demand has been estimated utilizing the average daily water demand multiplied by 1.5

# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

Project Name: Windmark Beach North Townhomes

Permittee: The St. Joe Company

2. Explanation of Peaking Factor(s) or Method(s) Used to Estimate Design Peak-Hour Water Demand and, for Small Water Systems that Use Hydropneumatic Tanks or that Are Not Designed to Provide Fire Protection, Peak Instantaneous Water Demand:

A peaking factors 4.0 has been used to determine peak hour demand. This results in a peak hour demand of 3250 GPH.

3. Design Fire-Flow Rate and Duration:  
1000 gpm for 2 hours

4. Design Service Pressure Range:  
40-80 psi

## B. Project Site Information

1. ATTACH A SITE PLAN OR SKETCH SHOWING THE SIZE AND APPROXIMATE LOCATION OF NEW OR ALTERED WATER MAINS, SHOWING THE APPROXIMATE LOCATION OF HYDRANTS, VALVES, METERS, AND BLOW-OFFS IN SAID MAINS, AND SHOWING HOW SAID MAINS CONNECT TO THE PUBLIC WATER SYSTEM SUPPLYING WATER FOR THE PROJECT.
2. Description of Any Areas Where New or Altered Water Mains Will Cross Above or Under Surface Water or Be Located in Soil that Is Known to Be Aggressive:

No stream crossings are proposed, soils in this area are not known to be aggressive

## C. Information About Compliance with Design and Construction Requirements

1. If this project is being designed to comply with the following requirements, initial in ink before the requirements. If any of the following requirements do not apply to this project or if this project includes exceptions to any of the following requirements as allowed by rule, mark "X" before the requirements and complete Part II.C.2 below. *RSWW* = *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.

CS

- a. This project is being designed to keep existing water mains and service lines in operation during construction or to minimize interruption of water service during construction. [*RSWW* 1.3.a; exceptions allowed under FAC 62-555.330]

CS

- b. All pipe, pipe fittings, pipe joint packing and jointing materials, valves, fire hydrants, and meters installed under this project will conform to applicable American Water Works Association (AWWA) standards. [FAC 62-555.320(21)(b), *RSWW* 8.0, and AWWA standards as incorporated into FAC 62-555.330; exceptions allowed under FAC 62-555.320(21)(c)]

CS

- c. All public water system components, excluding fire hydrants, that will be installed under this project and that will come into contact with drinking water will conform to NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C., or other applicable standards, regulations, or requirements referenced in paragraph 62-555.320(3)(b), F.A.C. [FAC 62-555.320(3)(b); exceptions allowed under FAC 62-555.320(3)(d)]

CS

- d. All pipe and pipe fittings installed under this project will contain no more than 8.0% lead, and any solder or flux used in this project will contain no more than 0.2% lead. [FAC 62-555.322]

CS

- e. All pipe and pipe fittings installed under this project will be color coded or marked in accordance with subparagraph 62-555.320(21)(b)3, F.A.C., using blue as a predominant color. (Underground plastic pipe will be solid-wall blue pipe, will have a co-extruded blue external skin, or will be white or black pipe with blue stripes incorporated into, or applied to, the pipe wall; and underground metal or concrete pipe will have blue stripes applied to the pipe wall. Pipe striped during manufacturing of the pipe will have continuous stripes that run parallel to the axis of the pipe, that are located at no greater than 90-degree intervals around the pipe, and that will remain intact during and after installation of the pipe. If tape or paint is used to stripe pipe during installation of the pipe, the tape or paint will be applied in a continuous line that runs parallel to the axis of the pipe and that is located along the top of the pipe; for pipe with an internal diameter of 24 inches or greater, tape or paint will be applied in continuous lines along each side of the pipe as well as along the top of the pipe. Aboveground pipe will be painted blue or will be color coded or marked like underground pipe.) [FAC 62-555.320(21)(b)3]

CS

- f. All new or altered water mains included in this project are sized after a hydraulic analysis based on flow demands and pressure requirements. ATTACH A HYDRAULIC ANALYSIS JUSTIFYING THE SIZE OF ANY NEW OR ALTERED WATER MAINS WITH AN INSIDE DIAMETER OF LESS THAN THREE INCHES. [FAC 62-555.320(21)(b) and *RSWW* 8.1]



# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

Project Name: Windward Beach North Townhomes

Permittee: The St. Joe Company

- CS g. The inside diameter of new or altered water mains that are included in this project and that are being designed to provide fire protection and serve fire hydrants will be at least six inches. [FAC 62-555.320(21)(b) and RSWW 8.1.2]
- CS h. New or altered water mains that are included in this project and that are not being designed to carry fire flows do not have fire hydrants connected to them. [FAC 62-555.320(21)(b) and RSWW 8.1.5]
- CS i. This project is being designed to minimize dead-end water mains by making appropriate tie-ins where practical. [FAC 62-555.320(21)(b) and RSWW 8.1.6.a]
- CS j. New or altered dead-end water mains included in this project will be provided with a fire or flushing hydrant or blow-off for flushing purposes. [FAC 62-555.320(21)(b) and RSWW 8.1.6.b]
- CS k. Sufficient valves will be provided on new or altered water mains included in this project so that inconvenience and sanitary hazards will be minimized during repairs. [FAC 62-555.320(21)(b) and RSWW 8.2]
- CS l. New or altered fire hydrant leads included in this project will have an inside diameter of at least six inches and will include an auxiliary valve. [FAC 62-555.320(21)(b) and RSWW 8.3.3]
- CS m. All fire hydrants that will be installed under this project and that will have unplugged, underground drains will be located at least three feet from any existing or proposed storm sewer, stormwater force main, pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., or vacuum-type sanitary sewer; at least six feet from any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-10, F.A.C.; and at least ten feet from any existing or proposed "on-site sewage treatment and disposal system." [FAC 62-555.314(4)]
- CS n. At high points where air can accumulate in new or altered water mains included in this project, provisions will be made to remove the air by means of air relief valves, and automatic air relief valves will not be used in situations where flooding of the valve manhole or chamber may occur. [FAC 62-555.320(21)(b) and RSWW 8.4.1]
- CS o. The open end of the air relief pipe from all automatic air relief valves installed under this project will be extended to at least one foot above grade and will be provided with a screened, downward-facing elbow. [FAC 62-555.320(21)(b) and RSWW 8.4.2]
- CS p. New or altered chambers, pits, or manholes that contain valves, blow-offs, meters, or other such water distribution system appurtenances and that are included in this project will not be connected directly to any sanitary or storm sewer, and blow-offs or air relief valves installed under this project will not be connected directly to any sanitary or storm sewer. [FAC 62-555.320(21)(b) and RSWW 8.4.3]
- CS q. New or altered water mains included in this project will be installed in accordance with applicable AWWA standards or in accordance with manufacturers' recommended procedures. [FAC 62-555.320(21)(b), RSWW 8.5.1, and AWWA standards as incorporated into FAC 62-555.330]
- CS r. A continuous and uniform bedding will be provided in trenches for underground pipe installed under this project; backfill material will be tamped in layers around underground pipe installed under this project and to a sufficient height above the pipe to adequately support and protect the pipe; and unsuitably sized stones (as described in applicable AWWA standards or manufacturers' recommended installation procedures) found in trenches will be removed for a depth of at least six inches below the bottom of underground pipe installed under this project. [FAC 62-555.320(21)(b), RSWW 8.5.2]
- CS s. All water main tees, bends, plugs, and hydrants installed under this project will be provided with thrust blocks or restrained joints to prevent movement. [FAC 62-555.320(21)(b) and RSWW 8.5.4]
- CS t. New or altered water mains that are included in this project and that will be constructed of asbestos-cement or polyvinyl chloride pipe will be pressure and leakage tested in accordance with AWWA Standard C603 or C605, respectively, as incorporated into Rule 62-555.330, F.A.C., and all other new or altered water mains included in this project will be pressure and leakage tested in accordance with AWWA Standard C600 as incorporated into Rule 62-555.330. [FAC 62-555.320(21)(b)1 and AWWA standards as incorporated into FAC 62-555.330]
- CS u. New or altered water mains, including fire hydrant leads and including service lines that will be under the control of a public water system and that have an inside diameter of three inches or greater, will be disinfected and bacteriologically evaluated in accordance with Rule 62-555.340, F.A.C. [FAC 62-555.320(21)(b)2 and FAC 62-555.340]
- CS v. New or altered water mains that are included in this project and that will be installed in areas where there are known aggressive soil conditions will be protected through use of corrosion-resistant water main materials, through encasement of the water mains in polyethylene, or through provision of cathodic protection. [FAC 62-555.320(21)(b) and RSWW 8.5.7.d]

# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

Project Name: Windmark Beach North Townhomes

Permittee: The St. Joe Company

CS

- w. New or relocated, underground water mains included in this project will be laid to provide a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed vacuum-type sanitary sewer, storm sewer, stormwater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.; a horizontal distance of at least six feet between the outside of the water main and the outside of any existing or proposed gravity-type sanitary sewer (or a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed gravity-type sanitary sewer if the bottom of the water main will be laid at least six inches above the top of the sewer); a horizontal distance of at least six feet between the outside of the water main and the outside of any existing or proposed pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.; and a horizontal distance of at least ten feet between the outside of the water main and all parts of any existing or proposed "on-site sewage treatment and disposal system." [FAC 62-555.314(1); exceptions allowed under FAC 62-555.314(5)]

CS

- x. New or relocated, underground water mains that are included in this project and that will cross any existing or proposed gravity- or vacuum-type sanitary sewer or storm sewer will be laid so the outside of the water main is at least six inches above the other pipeline or at least 12 inches below the other pipeline; and new or relocated, underground water mains that are included in this project and that will cross any existing or proposed pressure-type sanitary sewer, wastewater or stormwater force main, or pipeline conveying reclaimed water will be laid so the outside of the water main is at least 12 inches above or below the other pipeline. [FAC 62-555.314(2); exceptions allowed under FAC 62-555.314(5)]

CS

- y. At the utility crossings described in Part II.C.1.w above, one full length of water main pipe will be centered above or below the other pipeline so the water main joints will be as far as possible from the other pipeline or the pipes will be arranged so that all water main joints are at least three feet from all joints in vacuum-type sanitary sewers, storm sewers, stormwater force mains, or pipelines conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., and at least six feet from all joints in gravity- or pressure-type sanitary sewers, wastewater force mains, or pipelines conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C. [FAC 62-555.314(2); exceptions allowed under FAC 62-555.314(5)]

\*

- z. New or altered water mains that are included in this project and that will cross above surface water will be adequately supported and anchored, protected from damage and freezing, and accessible for repair or replacement. [FAC 62-555.320(21)(b) and *RSWW* 8.7.1]

\*

- aa. New or altered water mains that are included in this project and that will cross under surface water will have a minimum cover of two feet. [FAC 62-555.320(21)(b) and *RSWW* 8.7.2]

\*

- bb. New or altered water mains that are included in this project and that will cross under surface water courses greater than 15 feet in width will have flexible or restrained, watertight pipe joints and will include valves at both ends of the water crossing so the underwater main can be isolated for testing and repair; the aforementioned isolation valves will be easily accessible and will not be subject to flooding; the isolation valve closest to the water supply source will be in a manhole; and permanent taps will be provided on each side of the isolation valve within the manhole to allow for insertion of a small meter to determine leakage from the underwater main and to allow for sampling of water from the underwater main. [FAC 62-555.320(21)(b) and *RSWW* 8.7.2]

CS

- cc. This project is being designed to include proper backflow protection at those new or altered service connections where backflow protection is required or recommended under Rule 62-555.360, F.A.C., or in *Recommended Practice for Backflow Prevention and Cross-Connection Control*, AWWA Manual M14, as incorporated into Rule 62-555.330, F.A.C.; or the public water system that will own this project after it is placed into operation has a cross-connection control program requiring water customers to install proper backflow protection at those service connections where backflow protection is required or recommended under Rule 62-555.360, F.A.C., or in AWWA Manual M14. [FAC 62-555.360 and AWWA Manual M14 as incorporated into FAC 62-555.330]

CS

- dd. Neither steam condensate, cooling water from engine jackets, nor water used in conjunction with heat exchangers will be returned to the new or altered water mains included in this project. [FAC 62-555.320(21)(b) and *RSWW* 8.8.2]

**NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN  
EXTENSIONS FOR PWSs**

Project Name: Windmark Beach North Townhomes

Permittee: The St. Joe Company

2. Explanation for Requirements Marked "X" in Part II.C.1 Above, Including Justification, Documentation, Assurances, and/or Alternatives as Required by Rule for Exceptions to Requirements in Part II.C.1:

v. No Known aggressive soils

z.-bb. No surface water crossings

I completed Part II of this notice, and the information provided in Part II and on the attachment(s) to Part II is true and accurate to the best of my knowledge and belief.

Signature, Seal, and Date of Professional Engineer (PE) or  
Signature and Date of Other Person in Responsible Charge of  
Designing Project:\*



Printed/Typed Name: Christopher Shortt, PE

License Number of PE or License Number or Title of Other  
Person in Responsible Charge of Designing Project:\*

78424

Portion of Preliminary Design Report for Which Responsible:  
All

Signature, Seal, and Date of Professional Engineer (PE) or  
Signature and Date of Other Person in Responsible Charge of  
Designing Project:\*

Printed/Typed Name:

License Number of PE or License Number or Title of Other  
Person in Responsible Charge of Designing Project:\*

Portion of Preliminary Design Report for Which Responsible:

\* Except as noted in paragraphs 62-555.520(3)(a) and (b), F.A.C., projects shall be designed under the responsible charge of one or more PEs licensed in Florida. If this project is being designed under the responsible charge of one or more PEs licensed in Florida, Part II of this notice shall be completed, signed, sealed, and dated by the PE(s) in responsible charge. If this project is not being designed under the responsible charge of one or more PEs licensed in Florida, Part II shall be completed, signed, and dated by the person(s) in responsible charge of designing this project.



## NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

Project Name: Windmark North Townhomes

Permittee: The St. Joe Company

### III. Certifications

#### A. Certification by Permittee

I am duly authorized to sign this notice on behalf of the permittee identified in Part I.F of this notice. I certify that, to the best of my knowledge and belief, this project complies with Chapter 62-555, F.A.C. I also certify that construction of this project has not begun yet and that, to the best of my knowledge and belief, this project does not include any of the following construction work:

- construction of water mains conveying raw or partially treated drinking water;
- construction of drinking water treatment, pumping, or storage facilities or conflict manholes;
- construction of water mains in areas contaminated by low-molecular-weight petroleum products or organic solvents;
- construction of an interconnection between previously separate public water systems or construction of water mains that create a "new system" as described under subsection 62-555.525(1), F.A.C.; or
- construction of water mains that will remain dry following completion of construction.

(A specific construction permit is required for each project involving any of the above listed construction work.)

I understand that, if this project is designed under the responsible charge of one or more professional engineers (PEs) licensed in Florida, the permittee must retain a Florida-licensed PE to take responsible charge of inspecting construction of this project for the purpose of determining in general if the construction proceeds in compliance with the Department of Environmental Protection construction permit, including the approved preliminary design report, for this project. I understand that the permittee must have complete record drawings prepared for this project. I also understand that the permittee must submit a certification of construction completion to the Department and obtain written approval, or clearance, from the Department before the permittee places this project into operation for any purpose other than disinfection or testing for leaks.

 9.15.22  
Signature and Date

Jason Scarbrough

Printed or Typed Name

Project Manager

Title

#### B. Certification by PWS Supplying Water to Project

I am duly authorized to sign this notice on behalf of the PWS identified in Part I.G of this notice. I certify that said PWS will supply the water necessary to meet the design water demands for this project. As indicated below, the water treatment plant(s) to which this project will be connected has(have) the capacity necessary to meet the design water demands for this project, and I certify that all other PWS components affected by this project also have the capacity necessary to meet the design water demands for this project. I certify that said PWS is in compliance with applicable planning requirements in Rule 62-555.348, F.A.C.; applicable cross-connection control requirements in Rule 62-555.360, F.A.C.; and to the best of my knowledge and belief, all other applicable rules in Chapters 62-550, 62-555, and 62-699, F.A.C.; furthermore, I certify that, to the best of my knowledge and belief, said PWS's connection to this project will not cause said PWS to be in noncompliance with Chapter 62-550 or 62-555, F.A.C. I also certify that said PWS has reviewed the preliminary design report for this project and that said PWS considers the connection(s) between this project and said PWS acceptable as designed.

- Name(s) of Water Treatment Plant(s) to Which this Project Will Be Connected:

City of Port St. Joe

- Total Permitted Maximum Day Operating Capacity of Plant(s), gpd: \_\_\_\_\_
- Total Maximum Day Flow at Plant(s) as Recorded on Monthly Operating Reports During Past 12 Months, gpd: \_\_\_\_\_

\_\_\_\_\_  
Signature and Date

Jim Anderson

Printed or Typed Name

City Manager

Title

#### C. Certification by PWS that Will Own Project After It Is Placed into Permanent Operation

I am duly authorized to sign this notice on behalf of the PWS identified in Part I.H of this notice. I certify that said PWS will own this project after it is placed into permanent operation. I also certify that said PWS has reviewed the preliminary design report for this project and that said PWS considers this project acceptable as designed.

\_\_\_\_\_  
Signature and Date

Larry McClamma

Printed or Typed Name

Plant Manager

Title

# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

Project Name: Windmark Beach North Townhomes

Permittee: The St. Joe Company


## D. Certification by Professional Engineer(s) in Responsible Charge of Designing Project\*

I, the undersigned professional engineer licensed in Florida, am in responsible charge of designing this project. I certify that, to the best of my knowledge and belief, the design of this project complies with Chapter 62-555, F.A.C. I also certify that, to the best of my knowledge and belief, this project is not being designed to include any of the following construction work:

- construction of water mains conveying raw or partially treated drinking water;
- construction of drinking water treatment, pumping, or storage facilities or conflict manholes;
- construction of water mains in areas contaminated by low-molecular-weight petroleum products or organic solvents;
- construction of an interconnection between previously separate public water systems or construction of water mains that create a "new system" as described under subsection 62-555.525(1), F.A.C.; or
- construction of water mains that will remain dry following completion of construction.

(A specific construction permit is required for each project involving any of the above listed construction work.)

Signature, Seal, and Date:



Printed/Typed Name: Christopher Shortt, PE

License Number: 78424

Portion of Preliminary Design Report for Which Responsible:  
All

Signature, Seal, and Date:

Printed/Typed Name:

License Number:

Portion of Preliminary Design Report for Which Responsible:

\* Except as noted in paragraphs 62-555.520(3)(a) and (b), F.A.C., projects shall be designed under the responsible charge of one or more professional engineers (PEs) licensed in Florida. If this project is being designed under the responsible charge of one or more PEs licensed in Florida, Part III.D of this notice shall be completed by the PE(s) in responsible charge. If this project is not being designed under the responsible charge of one or more PEs licensed in Florida, Part III.D does not have to be completed.

### SURVEYOR'S NOTES

1. THIS CASE IS REFERENCED BY NATIONAL LAW ENFORCEMENT COUNCIL ON LAW ENFORCEMENT EDUCATION, "STUDY OF THE NEED FOR A NATIONAL LAW ENFORCEMENT EDUCATION STANDARDS BOARD," 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2

### **▲ SOURCE CONTROL POINTS**

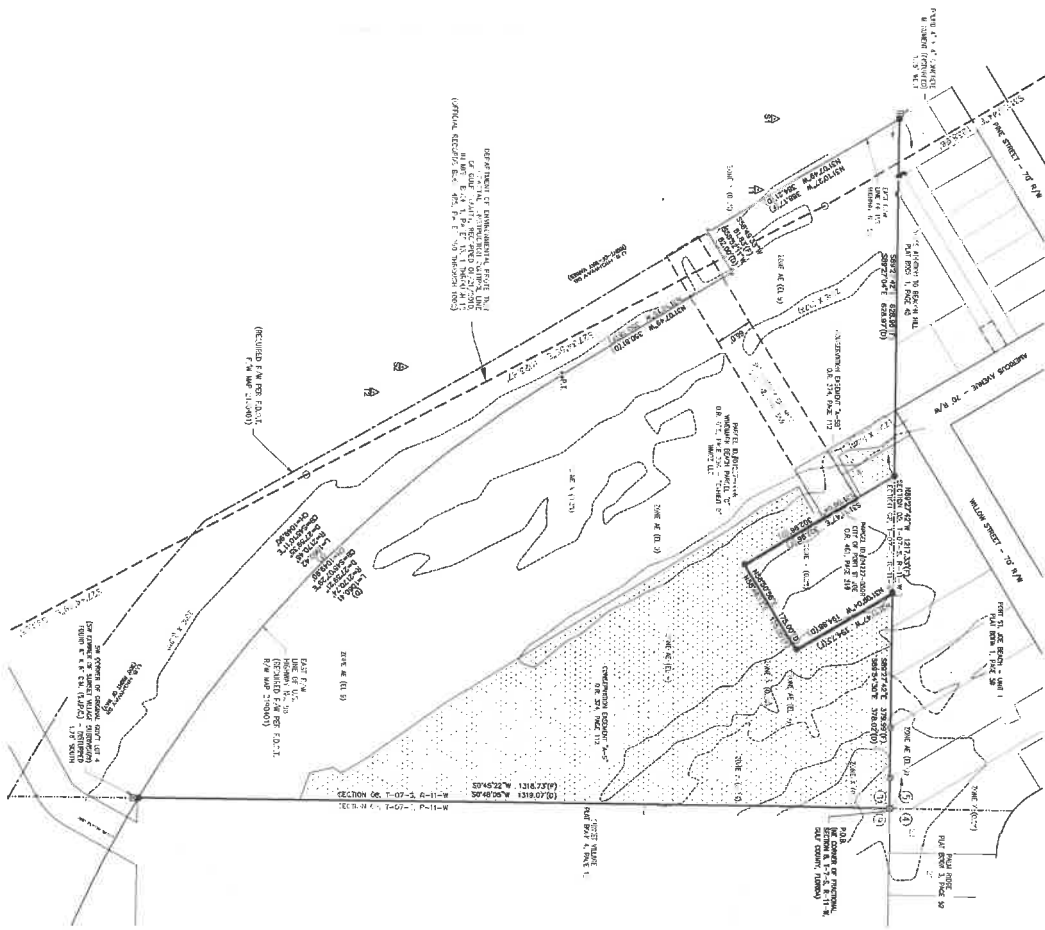
[illegible]

### TEMPORARY SITE CONTROL POINTS

	70°N	60°N	Elev. (meters)
T1	CAPPED BROWN LB. (O1)	17,591.8 <sup>a</sup>	10,37 <sup>b</sup>
T2	CAPPED BROWN LB. (O1)	16,974.4 <sup>c</sup>	18,11 <sup>d</sup>

LEGAL DESCRIPTION (WINDMARK BEACH - PARCEL "C"):  
O.R. BOOK 879, PAGE 382.

THEY ARE THE FIRST OF A SERIES OF 100,000 TO BE PRINTED, AND WILL BE AVAILABLE TO THE PUBLIC FOR THE FIRST TIME IN THE UNITED STATES. THE FIRST OF THE SERIES, WHICH WILL BE AVAILABLE TO THE PUBLIC FOR THE FIRST TIME IN THE UNITED STATES, WILL BE AVAILABLE TO THE PUBLIC FOR THE FIRST TIME IN THE UNITED STATES.

SYMBOLS & ABBREVIATION  
P.C. • NUMBER

- [illegible]

## INDEX OF SHEETS

- 2-5.4. TCPs, PAPERB, SUPPLY, DETAIL.

R E V I S I O N S		
DATE	REVISION	OK'D
10/24/2022	ADDED ADDITIONAL TOPO OF U.S. 98 FOR F.D.O.T. PERMIT	DB

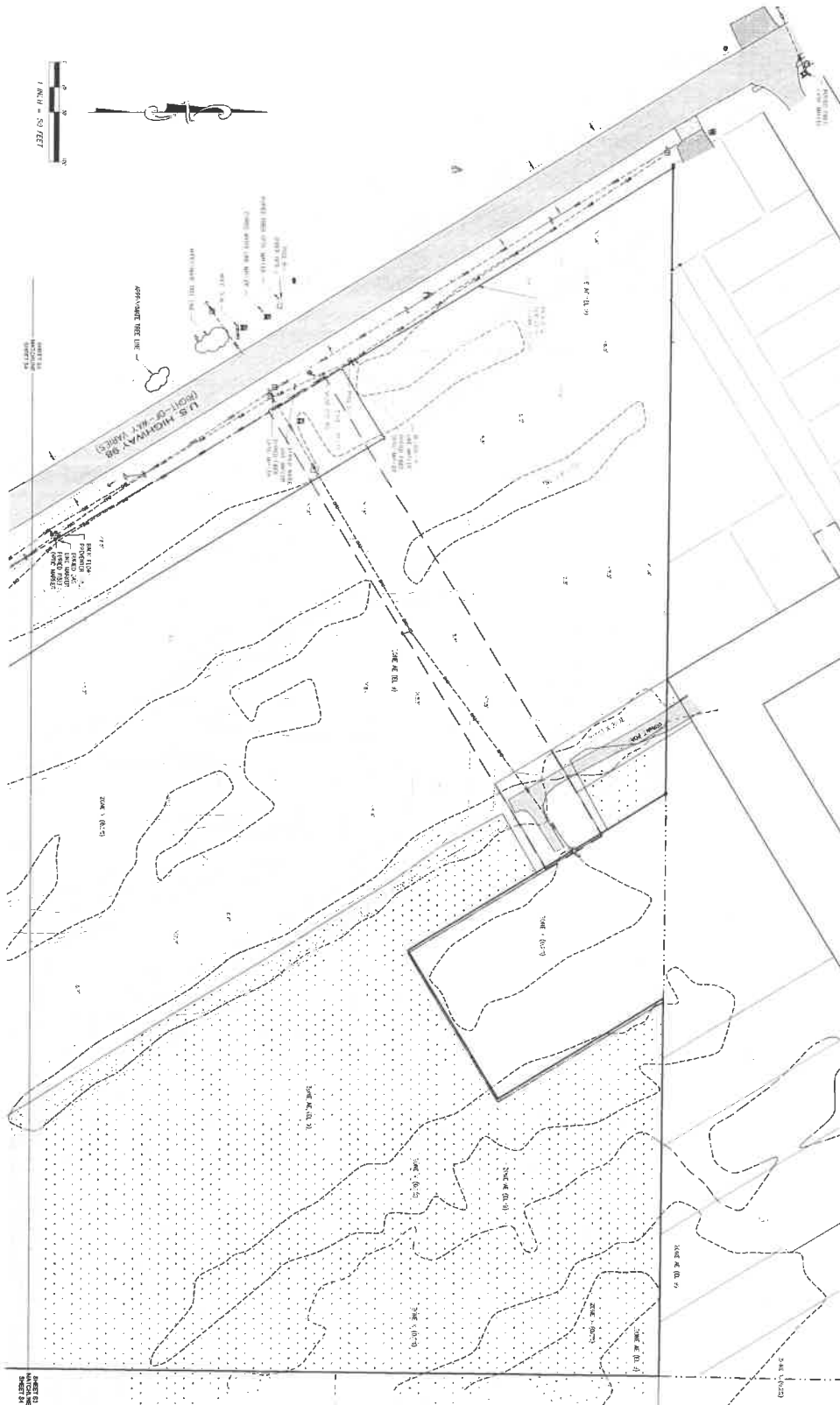
 **Dewberry**  
DEWBERRY ENGINEERS INC.  
203 ABERDEEN PARKWAY  
PANAMA CITY, FLORIDA 32405  
PHONE: 850.522.0644 FAX: 850.522.1011  
WWW.DEWBERRY.COM  
CERTIFICATE OF AUTHORIZATION NO. LB 8011

BOUNDARY & TOPOGRAPHIC SURVEY  
SECTION 08, TOWNSHIP 07  
SOUTH, RANGE 11 WEST  
WINDMARK NORTH TOWNHOMES  
GULF COUNTY, FLORIDA

PROJECT NO.	50144759
SCALE	1" = 100'



WINDMARK BEACH TOWNHOMES - SITE 1  
 TOPOGRAPHIC SURVEY DETAILS



52

INDEX OF SHEETS:  
 1. SITE PLAN  
 2. SITE ELEVATION DETAILS  
 3. SITE EXISTING DETAILS  
 4. TOPOGRAPHIC SURVEY DETAILS

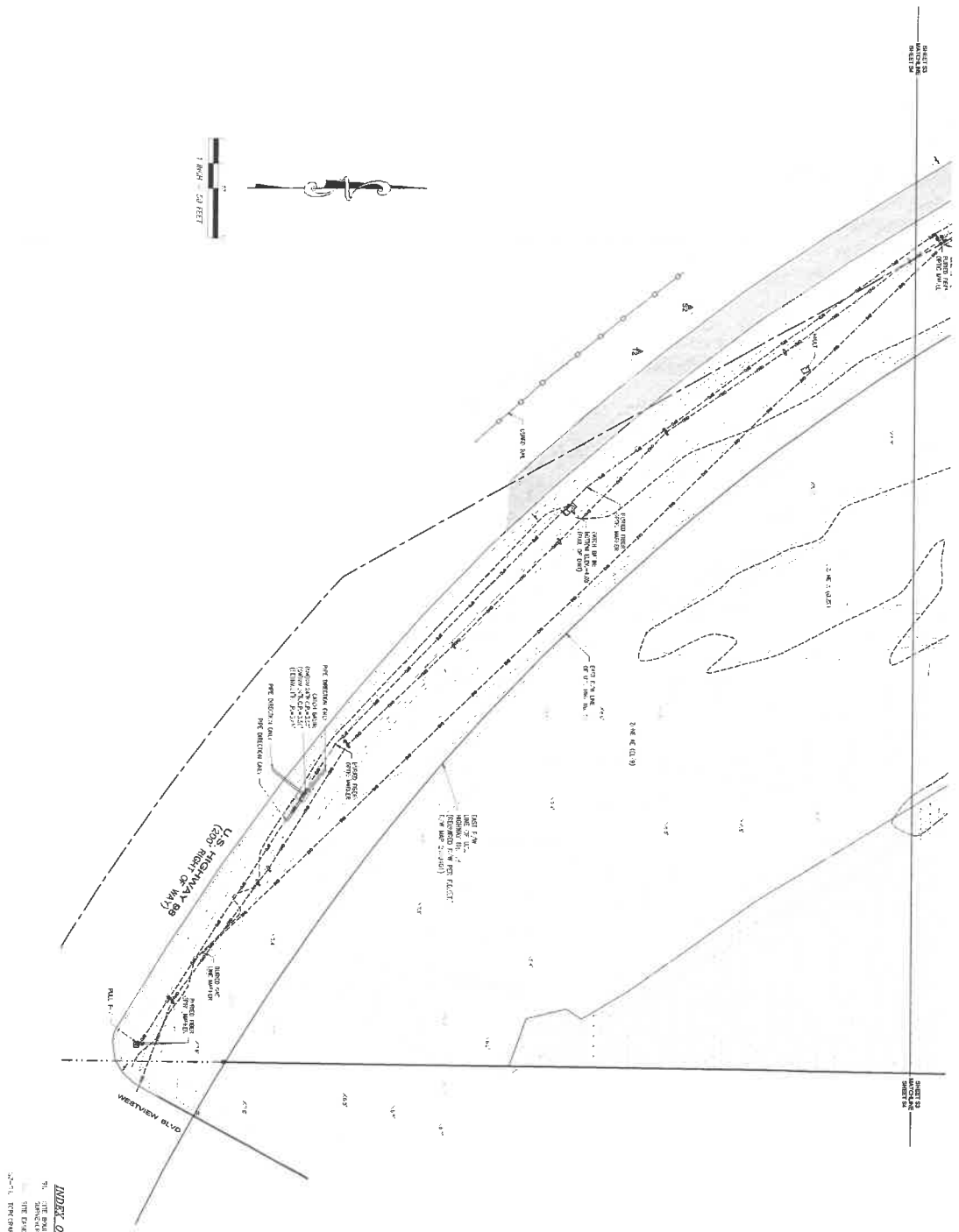
S3

BOUNDARY & TOPOGRAPHIC SURVEY  
 SECTION 08, TOWNSHIP 07  
 SOUTH, RANGE 11 WEST  
 WINDMARK BEACH TOWNHOMES  
 GULF COUNTY, FLORIDA

DATE: 10/24/2022  
 FIELD DATE: 01/14/2022  
 DRAWING DATE: 01/14/2022  
 BY: [Signature]  
 CHECKED: [Signature]  
 APPROVED: [Signature]  
 DEDICATED TO: [Signature]  
 PROFESSIONAL LAND SURVEYOR NO. 154079

**Dewberry**  
 DEWBERRY ENGINEERS INC.  
 200 AMERICAN PARKWAY  
 PANAMA CITY, FLORIDA 32405  
 PHONE: 850.552.2844 FAX: 850.552.1011  
 WWW.DEWBERRY.COM  
 CERTIFICATE OF AUTHORIZATION NO. LB 5011

REVISIONS		CHG
DATE	REVISION	
10/24/2022	ADDED ADDITIONAL TOPO OF U.S. 90 FOR F.D.O.T. PERMIT	09



WINDMARK BEACH TOWNHOMES - SITE 1  
 TOPOGRAPHIC SURVEY DETAILS

53

S4

SCALE  
 1" = 50'

PROJECT NO.  
 50144759

DATE  
 01/11/2022

DATE  
 01/11/2022

BY  
 BT

APPROVED  
 DB

FIELD DATE  
 01/11/2022

BOUNDARY & TOPOGRAPHIC SURVEY  
 SECTION 08, TOWNSHIP 07  
 SOUTH, RANGE 11 WEST  
 WINDMARK BEACH TOWNHOMES  
 GULF COUNTY, FLORIDA

DAVID JON BARNETT, P.L.C. SUE BOND  
 PROFESSIONAL LAND SURVEYOR No. 12438

**Dewberry**  
 DEWBERRY ENGINEERS, INC.  
 250 KENNEDY PARKWAY  
 PANAMA CITY, FLORIDA 32409  
 PHONE: 850.527.2844 FAX: 850.522.1011  
 WWW.DEWBERRY.COM  
 CERTIFICATE OF AUTHORIZATION NO. LB 0011

REVISIONS		DATE	REVISION	BY
		10/24/2022	ADDED ADDITIONAL TOPO OF U.S. 99 FOR F.D.O.T. PERMIT	DB

# WINDMARK BEACH NORTH TOWNHOMES

## STORMWATER MANAGEMENT REPORT

**Prepared for:**



**THE ST. JOE COMPANY  
130 RICHARD JACKSON BLVD, SUITE 200  
PANAMA CITY BEACH, FL 32407**

**Prepared By:**



**OCTOBER 2022**

**PROJECT NO. 50144759**

---

**DEWBERRY**  
203 ABERDEEN PARKWAY  
PANAMA CITY, FLORIDA 32405  
PHONE: 850.522.0644 / FAX: 850.522.1011

# Professional Engineer's Certification

I hereby certify that I am a Licensed Professional Engineer in the State of Florida practicing with Dewberry and that I have supervised the preparation of and approve the evaluations, findings, opinions, conclusions, and technical advice hereby reported for:

**Project:** Windmark North Townhomes  
Stormwater Management Report  
Dewberry Project No. 50144759

**Location:** Port St. Joe, Florida 32456

---

Jonathan Sklarski, P.E.  
Associate Vice President  
License No. 67361

---

Date



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Stormwater Modeling Techniques.....	2
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Erosion Control .....	4-4
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### Supporting Documentation

EXHIBIT 1 – GIS EXHIBITS  
EXHIBIT 2 – NRCS SOILS REPORT  
EXHIBIT 3 – SWMF CALCULATIONS  
EXHIBIT 4 – ICPR INPUT DATA AND RESULTS  
EXHIBIT 5 – DRAINAGE BASIN MAPS  
EXHIBIT 6 – GEOTECHNICAL REPORT  
EXHIBIT 7 – STORMWATER POND OPERATION AND MAINTENANCE PLAN

**ENGINEER'S NARRATIVE  
STORMWATER MANAGEMENT REPORT  
WINDMARK BEACH NORTH TOWNHOMES  
PORT ST. JOE, FLORIDA**

**INTRODUCTION**

The proposed project is the construction of a new 78 lot townhome subdivision, with associated roads, utilities, and a stormwater management system. The project is east of US Highway 98 in Gulf County, FL. Please see **Exhibit 1** for the Project Location Map. Tax parcel ID for the site parcel is:

Parcel: 04227-000R (19.58-ac)

The disturbed project area is situated on approximately 8.86 acres of the above parcel. The site is currently undeveloped and is comprised mostly of flat woodlands. Please see **Sheet C3** of the Engineering Plans for the wetland locations. No new wetland impacts are proposed in this development. A previously permitted outfall location into the wetland system is utilized for stormwater maintenance facility outfall.

**STORMWATER MANAGEMENT OVERVIEW**

**Pre-Developed Conditions**

The existing site is an undeveloped flat woodland with pine trees, dense undergrowth, and sandy trails winding throughout. The soils at this site consist of light gray clean fine sands. In the natural state of the site, the stormwater runoff flows to the wetland system northeast of the project. Please see **Exhibit 5** for the Pre-Development Drainage Basins Map. The natural flow of the stormwater runoff will be considered for pre-versus post-development attenuation for each basin. The drainage area for the project's Pre-Development Basin 1 is approximately 5.92 acres. The stormwater runoff that drains to the northeast wetland system was used to establish the pre-development basin.

**Post-Development Conditions**

Stormwater runoff from the site will be collected and routed via a series of inlets and pipes and routed to a proposed wet detention stormwater management facility (swmf). The stormwater runoff will be treated by one (1) wet detention stormwater management facility (SWMF #1). The runoff from the project area is treated and attenuated before it is discharged. Once water quality and attenuation criteria are met, the outfall will discharge at a controlled rate and overland flow into the wetland system located to the northeast of the project.

## **Wet Detention Stormwater Management Facility #1 (SWMF #1)**

SWMF #1 is designed to treat 8.86-acres of the disturbed limits. An FDOT Type C Inlet structure is proposed in SWMF #1 and will serve as the outfall structure for this facility. Discharge from the outfall structure will be routed via piping to the north of the facility to a bubble up structure surrounded by rip rap to dissipate discharge energy. The discharge will then flow into the wetland system located to the northeast of the project and ultimately flow to the Gulf of Mexico. The stormwater management facility has been designed to recover ½ the treatment volume within 48 to 60 hours with a drawdown orifice. The pond has also been designed to route each storm event without overtopping.

## **STORMWATER MODELING TECHNIQUES**

Interconnected Channel and Pond Routing (ICPR version 4.07.08) was used as the stormwater management facility (SWMF) modeling software. This program has been accepted by numerous regulatory agencies across Florida and is accepted by FEMA for Flood Insurance projects. ICPR uses a link-node concept in conjunction with the basin data to idealize real-world systems. A node is a discrete location in the drainage system where conservation of mass or continuity is maintained. Links are the connections between nodes and are used to transfer or convey water through the drainage conveyance system. The input data, network diagram, and node maximum conditions (maximum stage elevation) are included with this report.

## **DESIGN CRITERIA**

### **Water Quality:**

### **Wet Detention Systems:**

It is an ERP and Port St. Joe requirement to provide treatment of one inch of rainfall over the contributing area, when utilizing wet detention stormwater management facilities. (Part V, Section 8.2 of the ERP Applicant's Handbook Volume II).

**Flood Attenuation:** The site was designed in accordance with ERP and Port St. Joe requirements for flood attenuation. The SWMF has been designed to attenuate the 2-year/24-hour SCS III storm event per ERP requirement. The SWMF has also been designed to attenuate the 25-year/24-hour storm event to meet Port St. Joe attenuation criteria. FDOT and SCS III hydrographs were modeled to determine the pre-development and post-development runoff rates for these events.

## GEOTECHNICAL INFORMATION

Geotechnical information was provided by Magnum Engineering, Inc. on November 18, 2021, to determine the seasonal high-water table elevations and subsurface conditions for the subject project area. A copy of the Geotechnical Report is included in **Exhibit 6** of this report. This geotechnical report contained information needed in the design of an effective pavement and stormwater system for the development area. As part of the geotechnical services ten (10) 5-ft deep hand auger borings were performed in the proposed roadway and the proposed stormwater pond locations. The locations of these borings are marked on the boring location map included in the attached Geotechnical Report (**Exhibit 6**). Based on the enclosed geotechnical information, the groundwater table was estimated to be between 0-ft and <5-ft below existing grade on the project site.

### Wet Stormwater Management Facility #1 (SMWF #1)

The seasonal high groundwater table (SHGWT) used for establishing the permanent pool of the proposed stormwater management facility was determined by HA-8, HA-9, and HA-10. This hand auger estimated the SHGWT to be approximately at existing grade, resulting in a design permanent pool elevation of 7.00. Please reference the Geotechnical Report included in **Exhibit 6**.

## POST DEVELOPMENT TREATMENT ANALYSIS

### Wet Detention Stormwater Management Facility #1 (SWMF #1)

Per ERP Applicant's Handbook Volume II, Section 8.2, the treatment volume required is:

Treatment of 1.0" of rainfall over the basin area

$$TV_{reqd} = 8.86 \text{ acres (basin)} \times 43,560 \frac{ft^2}{\text{acres}} \times 1.0 \text{ in} \times \frac{1 \text{ ft}}{12 \text{ in}} = 32,176 \text{ ft}^3$$

The proposed control elevation of the wet SWMF is 7.00-ft. Utilizing the Wet Pond Calculations Spreadsheet (**Exhibit 3**) the weir invert elevation has been set at 7.50-ft which provides a treatment volume of 35,452 ft<sup>3</sup>. For post-development basin delineations see **Exhibit 5**. The drainage basin for SWMF 1 is 8.86-acres. A 10-minute time of concentration was utilized in the model to represent the basin drainage. The 2-year/24-hour SCS III storm event had a post-development rate of 3.38 cfs. The 25-year/24-hour had a post-development rate of 5.23 cfs. The appropriate land use curve numbers and land uses areas were input into each basin in ICPR (see ICPR Input Data and Results in **Exhibit 4** for curve number input data). The outfall will control the treatment and rate of discharge. The following table contains design information for the stormwater management facilities:

<b>Wet Detention SWMF 1</b>	Top of Bank Elevation:	9.00 ft NAVD88
	Pond Bottom Elevation:	-5.00 ft NAVD88
	Pond Control Elevation:	7.00 ft NAVD88
	Req'd Treatment Volume:	32,176 ft <sup>3</sup>
	Provided Treatment Volume:	35,452 ft <sup>3</sup>
	Overflow Weir Invert Elev. (Two 1.08' H x 1.50' W Slot):	7.50 ft NAVD88
	Max Pond Stage Elevation:	8.60 ft NAVD88 (100yr – 8hr)
	Drawdown Recovery Time:	53 hours

## UNCAPTURED AREAS

The drainage basin for SWMF 1 is 8.86 acres with 0.88 acres being uncaptured area.

This uncaptured area is the result of pervious tie in grading along the perimeter of the site. This uncaptured area has also been routed directly to the pond outfall node in ICPR, so its discharge rate is accounted for in the attenuation analysis.

## PRE-DEVELOPMENT AND POST DEVELOPMENT RUNOFF RATES SWMF 1 & SWMF 2

Storm Event	Pre-Development Runoff Rate (cfs)	Post-Development Runoff Rate (cfs)
002 YR - 024 HR SCS III	<b>11.21</b>	<b>3.38</b>
025 YR - 001 HR	11.87	1.41
025 YR - 002 HR	12.27	3.72
025 YR - 004 HR	11.05	5.78
025 YR - 008 HR	12.86	7.21
025 YR - 024 HR	<b>5.45</b>	<b>5.23</b>
100 YR - 001 HR	15.23	3.17
100 YR - 002 HR	15.88	6.18
100 YR - 004 HR	14.43	8.86
100 YR - 008 HR	16.60	9.75
100 YR - 024 HR	6.98	7.34

## EROSION CONTROL

Best Management Practices for erosion control measures will be utilized throughout the construction phase of this project to protect the existing conditions and to restrict any turbid runoff from entering or leaving the construction site. Temporary stabilization may be utilized as determined necessary. All drainage inlets shall be protected utilizing inlet sediment barriers. Installation details for silt fences, tree barriers and hay bales, where applicable, are

included within this permit application. Please see the Erosion Control Plans in the plan set for specific details.

## **CONCLUSION**

The design of the stormwater management system for this project complies with the following requirements: FDEP ERP, Port St. Joe

The development exceeds the ERP and Port St. Joe requirement to provide treatment of one inch of rainfall over the contributing area for wet detention stormwater management facilities.

The proposed design meets the ERP and Port St. Joe recovery requirement of half of the treatment volume within 48 to 60 hours of the storm event for wet detention facilities.

The proposed design meets the ERP attenuation requirement for stormwater runoff caused by the 2-year/24-hour SCS III storm event.

The proposed design also meets Port St. Joe criteria for attenuation of the 25-year/24-hour storm event.

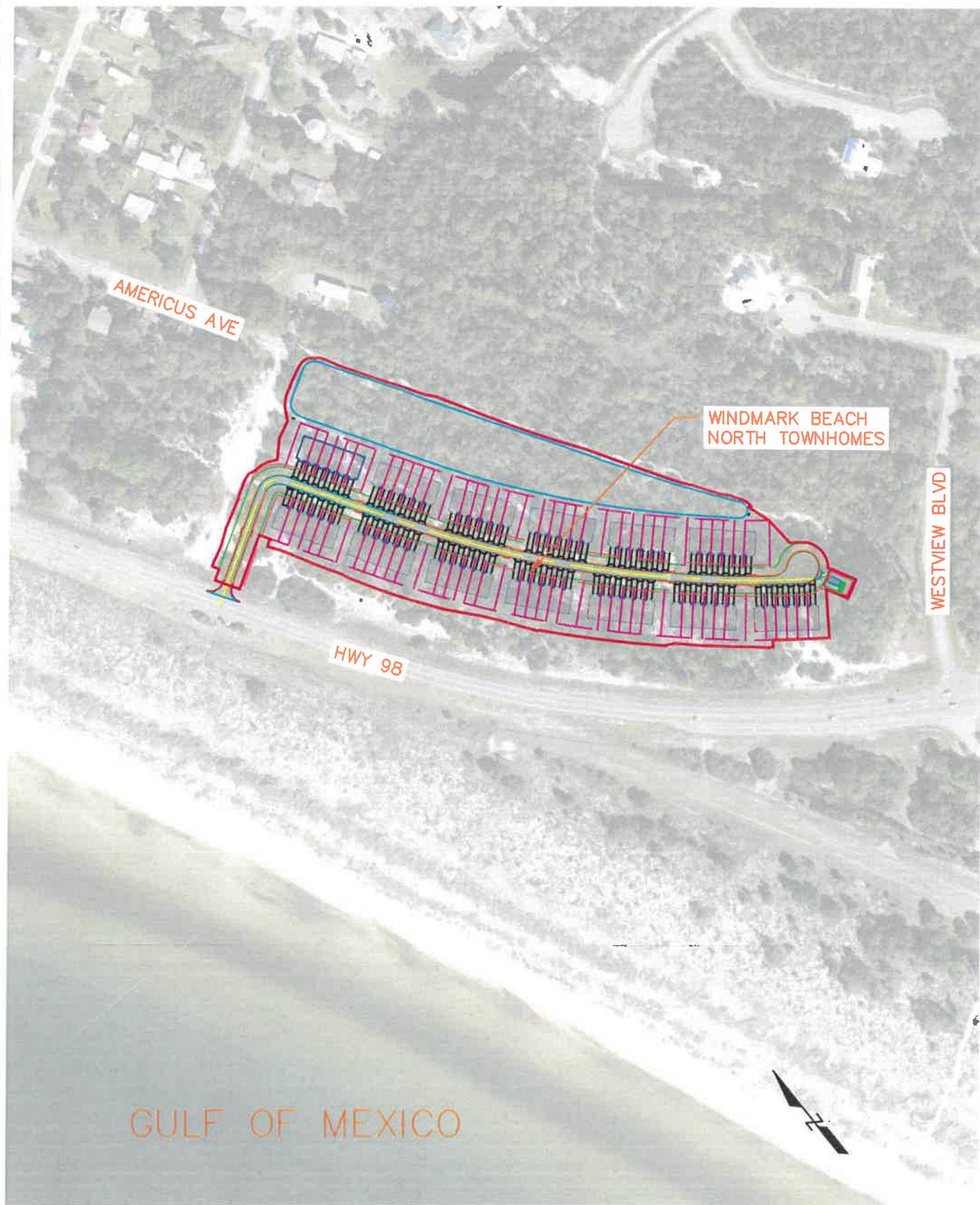
## **FDEP NPDES**

BMP erosion control measures will be utilized throughout the construction phase of this project to restrict any turbid runoff from entering or leaving the construction site. It is the Contractor's responsibility to obtain the NPDES permit and provide appropriate permit administration. Installation details for silt fences and inlet sediment barriers, where applicable, are included within this permit application.

# EXHIBIT 1

## GIS EXHIBITS





September 16, 2022 (08:49:26 EST)

K:\50144759\_SJC\_WINDMARK N. TOWNHOMES\ENGINEERING\STORMWATER CALCS\CAD\WINDMARK NORTH TOWNHOMES PARCELS EXHIBIT.DWG 1 - PL BY: EVANS

EB# 0008794



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203 Aberdeen Parkway, Panama City, FL 32405  
850.522.0644, www.dewberry.com

## PROJECT LOCATION

WINDMARK BEACH NORTH  
TOWNHOMES  
GULF COUNTY, FLORIDA

DATE:  
SEPTEMBER 2022

SCALE:  
1" = 250'

DRAWN:  
EE

CHECKED:  
JS

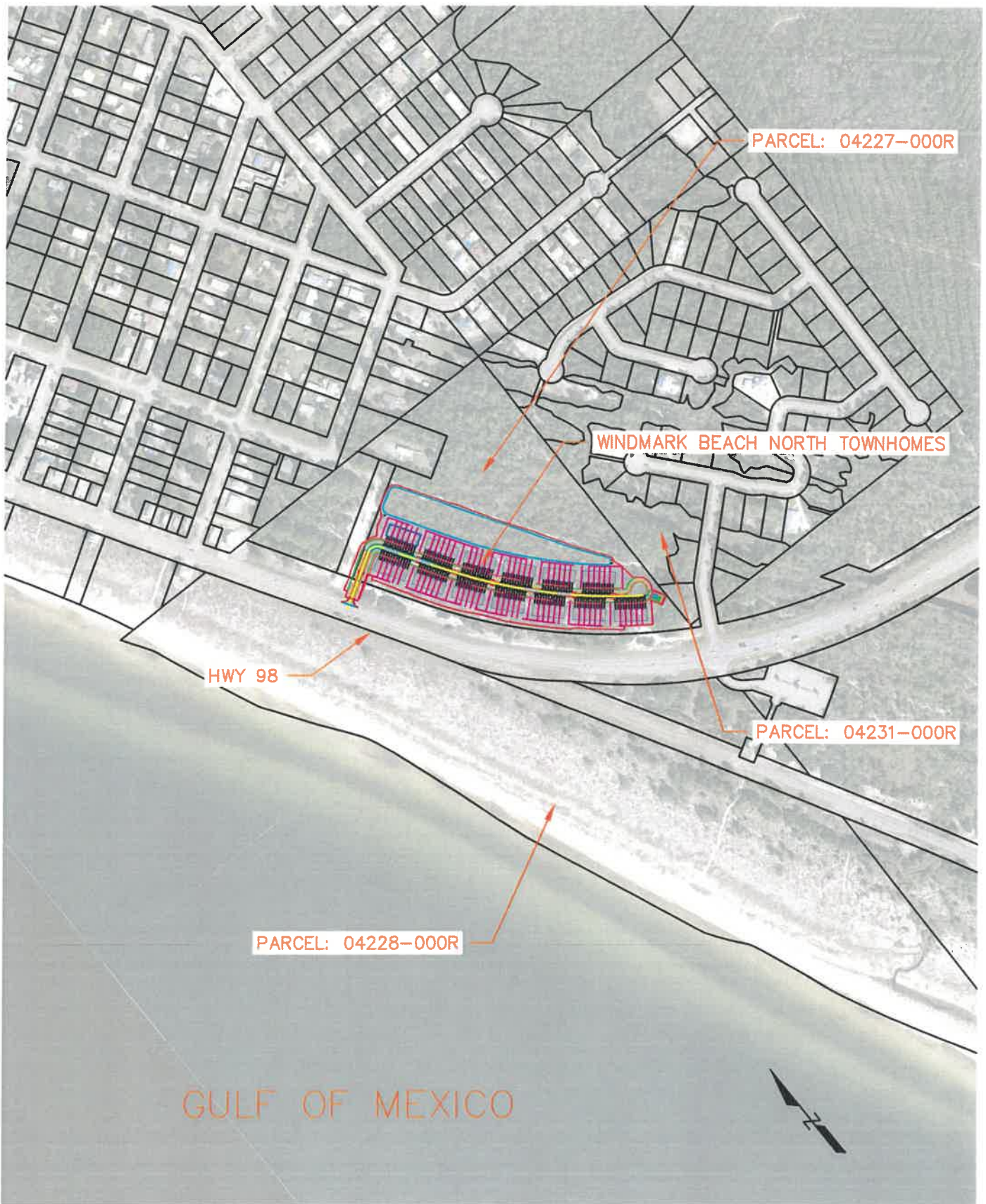
PROJECT NO.

50144759

SHEET

1





September 16, 2022 (08:49:26 EST)  
 K:\50144759 SJC WINDMARK N. TOWNHOMES\ENGINEERING\STORMWATER CALC\SCAD\WINDMARK NORTH TOWNHOMES PARCELS EXHIBIT.DWG 2 - PARCELS BY: EEVANS

EB# 0008794



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 850.522.0644, www.dewberry.com

## PARCELS

WINDMARK BEACH NORTH  
 TOWNHOMES  
 GULF COUNTY, FLORIDA

DATE:  
SEPTEMBER 2022  
 SCALE:  
1" = 250'  
 DRAWN:  
EE  
 CHECKED:  
JS

PROJECT NO.  
50144759  
 SHEET  
2

## EXHIBIT 2

# NRCS SOILS REPORT

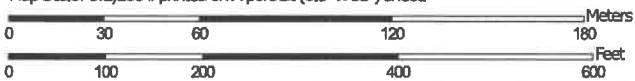


# Hydrologic Soil Group—Gulf County, Florida (bndy)



Soil Map may not be valid at this scale

Map Scale: 1:2,280 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



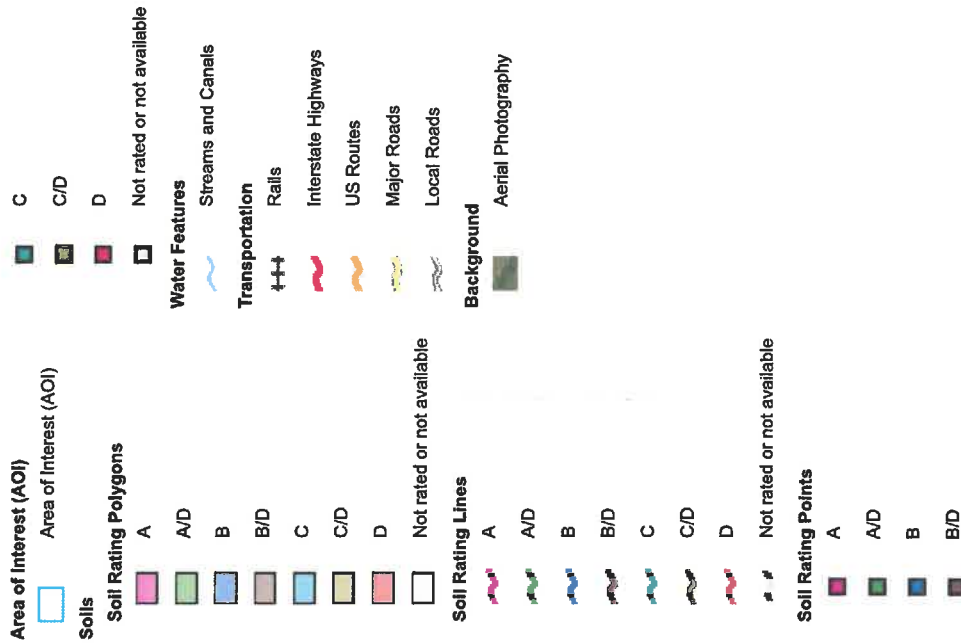
Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

66

9/1/2022  
Page 1 of 4

## MAP LEGEND



## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Gulf County, Florida  
Survey Area Data: Version 18, Sep 7, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 2, 2020—Dec 8, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

*Component Percent Cutoff: None Specified*

*Tie-break Rule: Higher*

## EXHIBIT 3

# SWMF CALCULATIONS

# **WINDMARK BEACH NORTH TOWNHOMES WET POND DESIGN SWMF 1**

## **BASIN DATA:**

### **Post Development Basin Data:**

Impervious Area	3.66	Acres
Uncaptured Area	0.88	Acres
Grass/Natural Area=	2.40	Acres
Pond Area=	1.92	Acres
Offsite Area (CN based on existing land use) =	0.00	Acres
Total Project Area=	8.86	Acres

Runoff Coefficient	Curve Number
0.95	98
0.25	39
0.25	39
1.00	100
0.32	49
0.70	77

## **STORMWATER POND DATA**

elevation (FT.)	TOTAL (SF.)	area (ac.)	avg. area (SF.)	delta H (FT.)	volume (CF)	sum vol. (CF)	sum vol. CY	NOTATIONS
-5.0	18260	0.4192	0	0	0	0	0	
-4.0	20885	0.4794	19572	1.00	19572	19572	725	
-3.0	23611	0.5420	22248	1.00	22248	41820	1549	
-2.0	26436	0.6069	25023	1.00	25023	66844	2476	
-1.0	29354	0.6739	27895	1.00	27895	94738	3509	
0.0	32368	0.7431	30861	1.00	30861	125599	4652	
1.0	35481	0.8145	33925	1.00	33925	159524	5908	
2.0	38689	0.8882	37085	1.00	37085	196609	7282	
3.0	41985	0.9638	40337	1.00	40337	236946	8776	
4.0	43948	1.0069	42967	1.00	42967	279912	10367	
5.0	52418	1.2033	48183	1.00	48183	328095	12152	
6.0	59731	1.3712	56074	1.00	56074	384170	14229	
7.0	67147	1.5415	63439	1.00	63439	447609	16578	Permanent Pool
8.0	74661	1.7140	70904	1.00	70904	518513	19204	
9.0	82275	1.8888	78468	1.00	78468	596981	22110	

Treatment Volume Required (1.0" over Drainage Basin)=	32176	cf
Treatment Volume Provided @ Elev	745	ft
Treatment Volume Set @ Elev	750	ft
Treatment Volume @ Treatment Elevation	35452	cf

## **PERMANENT POOL VOLUME**

28.5 inches/122 days - 14 day residence time during rainy period of year (122 days)

Coef. of Runoff=

0.70 Drainage Area(sf)=

386,116 sf

Volume=(c)(Area in sf)(avg. rainfall in feet)(14 dys/122 dys)=

Permanent Pool Required =	73,810	cf
Permanent Pool Req'd Non-littoral =	110,718	cf
Permanent Pool Provided =	447,609	cf
Mean Permanent Pool Depth =	6.67	ft

## **BLEED DOWN ORIFICE**

No more than 1/2 the treatment volume can discharge within the first 48-60 hours.

1/2 Treatment Volume:

16,088 cf

Discharge rate:

0.0745 cfs (@ T=60hrs)

0.0931 cfs (@ T=48hrs)

Orifice equation :

$Q=C \times A \times (\text{sq. ft. of } 2 \times g \times h)$

C=

0.6

Q=

0.07 cfs (T=60hrs)

0.09 cfs (T=48hrs)

g=

32.2 ft/s^2

average h=

$(h_1+h_2)/2$

0.39 ft

Solving for Area =

0.0248 sf

0.0310 sf

diameter=

2.13 inches (T=60hrs)

2.38 inches (T=48hrs)

USE 2.25 DIA ORIFICE



## EXHIBIT 4

### ICPR INPUT DATA AND RESULTS

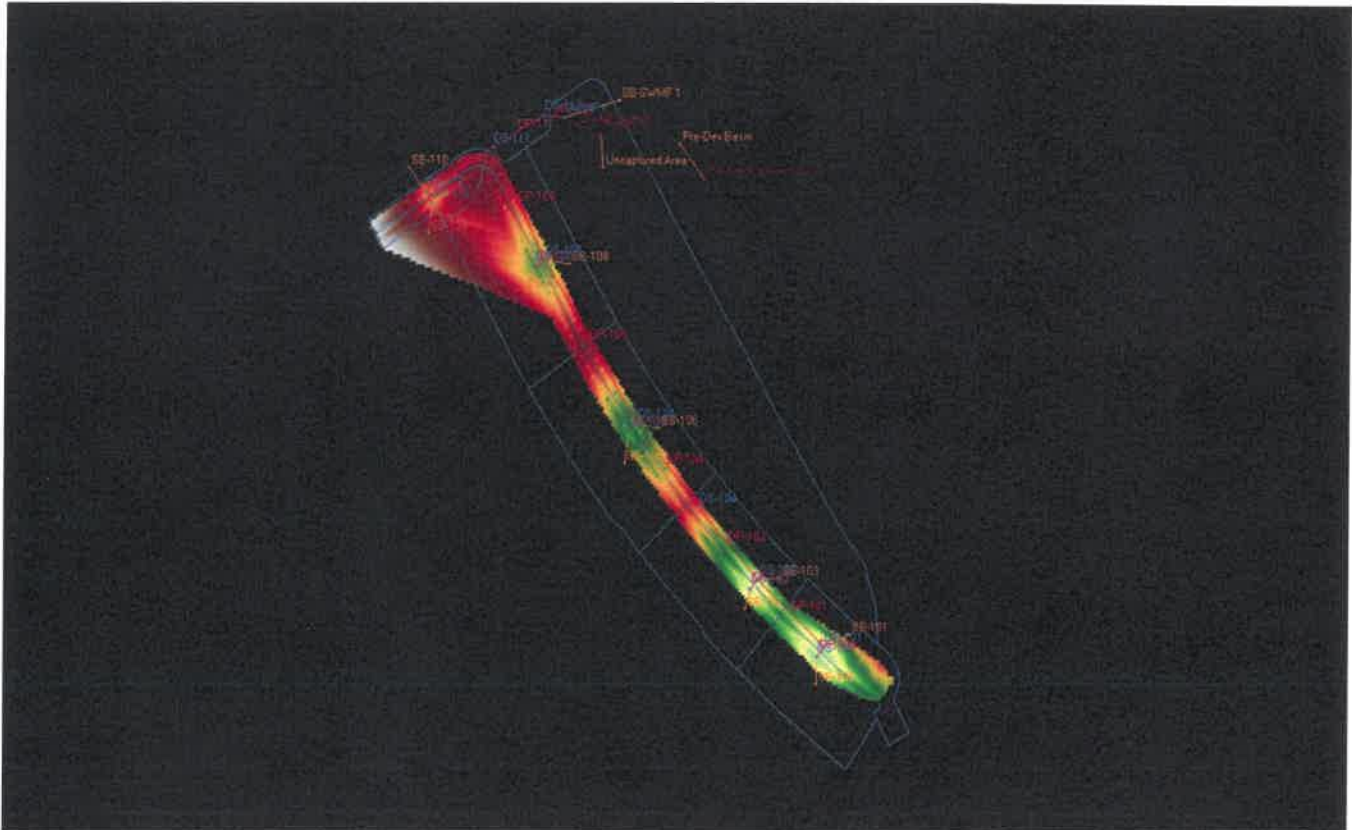
# Windmark Beach North Townhomes

## ICPR INPUT DATA & RESULTS

**Dewberry Project Number: 50144759**

(September 2022)

### Node Diagram



Simulation: 002-024 (SCS III)

Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:49:15 PM  
Program Version: ICPRA 4.07.08

Run Mode: Normal

Year	Month	Day	Hour (hr)
0	0	0	0.0000
0	0	0	32.0000

Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
60.0000	0.1000	900.0000
Min Calculation Time:	30.0000	
Max Calculation Time:		

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

Groundwater

Year	Month	Day	Hour (hr)	Time Increment (min)
0	0	0	0.0000	60.0000

Recent File

Save Restart: False

Resources & Lookup Tables

Resources	Lookup Tables
Rainfall Folder:	Boundary Stage Set:
Reference ET Folder:	Extern Hydrograph Set:
Unit Hydrograph Folder:	Curve Number Set: 1
	Green-Ampt Set:
	Vertical Layers Set: 1
	Impervious Set:
	Roughness Set:
	Crop Coef Set:
	Fillable Porosity Set:

IC50144759\_SJC\_Windmark N. Townhomes\Engineering\Stormwater Calcul\ICPRDesign\ICPR4 9/19/2022 13:17

Conductivity Set:  
Leakage Set:

Tolerances & Options

Time Marching: SAOR  
Max Iterations: 6  
Over-Relax Weight: 0.5 dec  
Fact:

dZ Tolerance: 0.0010 ft  
Max dZ: 1.0000 ft  
Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

Dft Damping (2D): 0.0050 ft  
Min Node Srf Area (2D): 100 ft2  
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr  
ET for Manual Basins: False

Smp/Man Basin Rain Opt: Global  
OF Region Rain Opt: Global  
Rainfall Name: ~SCSIII-24  
Rainfall Amount: 6.40 in  
Storm Duration: 24.0000 hr

Dft Damping (1D): 0.0050 ft  
Min Node Srf Area (1D): 100 ft2  
Energy Switch (1D): Energy

Comment:

Simulation: 025-001

Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:49:59 PM  
Program Version: ICPRA 4.07.08

Run Mode: Normal

Year	Month	Day	Hour (hr)
0	0	0	0.0000
0	0	0	4.0000

Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
60.0000	0.1000	900.0000
Min Calculation Time:	60.0000	
Max Calculation Time:		

Output Time Increments

Hydrology

Year	Month	Day	Hour (hr)	Time Increment (min)
0	0	0	0.0000	15.0000

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Surface Hydraulics

Year	Month	Day	Hour (hr)	Time Increment (min)
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour (hr)	Time Increment (min)
0	0	0	0.0000	360.0000

Recent File

Save Restart: False

Resources & Lookup Tables

Resources	Lookup Tables
Rainfall Folder: ICPR3	Boundary Stage Set:
Reference ET Folder: ~Unit Hydrograph	Extern Hydrograph Set:
Folder: ICPR3	Curve Number Set: 1
	Green-Ampt Set:
	Vertical Layers Set: 1
	Impervious Set:
	Roughness Set:
	Crop Coef Set:
	Fillable Porosity Set:
	Conductivity Set:
	Leakage Set:

Tolerances & Options

Time Marching: SAOR  
Max Iterations: 6  
Over-Relax Weight: 0.5 dec  
Fact:

dZ Tolerance: 0.0010 ft  
Max dZ: 1.0000 ft  
Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

Dft Damping (2D): 0.0050 ft  
Min Node Srf Area (2D): 1 ft2  
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr  
ET for Manual Basins: False

Smp/Man Basin Rain Opt: Global  
OF Region Rain Opt: Global  
Rainfall Name: ~FDOT-1  
Rainfall Amount: 3.80 in  
Storm Duration: 1.0000 hr

Dft Damping (1D): 0.0050 ft  
Min Node Srf Area (1D): 113 ft2  
Energy Switch (1D): Energy

Comment:

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Simulation: 025-001

Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:50:06 PM  
Program Version: ICPRA 4.07.08

Run Mode: Normal

Year	Month	Day	Hour (hr)
0	0	0	0.0000
0	0	0	6.0000

Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
60.0000	0.1000	900.0000
Min Calculation Time:	60.0000	
Max Calculation Time:		

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

Groundwater

Year	Month	Day	Hour (hr)	Time Increment (min)
0	0	0	0.0000	360.0000

Recent File

Save Restart: False

Resources & Lookup Tables

Resources	Lookup Tables
Rainfall Folder: ICPR3	Boundary Stage Set:
Reference ET Folder: ~Unit Hydrograph	Extern Hydrograph Set:
Folder: ICPR3	Curve Number Set: 1
	Green-Ampt Set:
	Vertical Layers Set: 1
	Impervious Set:
	Roughness Set:
	Crop Coef Set:
	Fillable Porosity Set:

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Conductivity Set:  
Leakage Set:

**Tolerances & Options**

Time Marching: SAOR  
Max Iterations: 6  
Over-Relax Weight: 0.5 dec  
Fact:  
dZ Tolerance: 0.0010 ft

IA Recovery Time: 24.0000 hr  
ET for Manual Basins: False

Smp/Man Basin Rain Opt: Global  
OF Region Rain Opt: Global  
Rainfall Name: ~FDOT-2  
Rainfall Amount: 5.00 in  
Storm Duration: 2.0000 hr

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

Drift Damping (2D): 0.0050 ft  
Min Node Srf Area (2D): 1 ft2  
Energy Switch (2D): Energy

Drift Damping (1D): 0.0050 ft  
Min Node Srf Area (1D): 113 ft2  
Energy Switch (1D): Energy

Comment:

Simulation: 025-004  
Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:50:15 PM  
Program Version: ICPRA 4.07.08

**General**

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	10.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		60.0000	

**Output Time Increments**

**Hydrology**

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0	0.0000
				15.0000

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Simulation: 025-008  
Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:50:25 PM  
Program Version: ICPRA 4.07.08

**General**

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	20.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		60.0000	

**Output Time Increments**

**Hydrology**

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0	0.0000
				15.0000

**Surface Hydraulics**

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0	0.0000
				15.0000

**Groundwater**

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0	0.0000
				360.0000

**Restart File**

Save Restart: False

**Resources & Lookup Tables**

**Resources**

Rainfall Folder: ICPRA3  
Reference ET Folder:  
Unit Hydrograph Folder: ICPRA3

**Lookup Tables**

Boundary Stage Set:  
Extern Hydrograph Set:  
Curve Number Set: 1

Green-Ampt Set:  
Vertical Layers Set:  
Impervious Set: 1  
Roughness Set:  
Crop Coef Set:  
Fillable Porosity Set:

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**Surface Hydraulics**

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0	0.0000
				15.0000

**Groundwater**

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0	0.0000
				360.0000

**Restart File**

Save Restart: False

**Resources & Lookup Tables**

**Resources**

Rainfall Folder: ICPRA3  
Reference ET Folder:  
Unit Hydrograph Folder: ICPRA3

**Lookup Tables**

Boundary Stage Set:  
Extern Hydrograph Set:  
Curve Number Set: 1

Green-Ampt Set:  
Vertical Layers Set:  
Impervious Set: 1  
Roughness Set:  
Crop Coef Set:  
Fillable Porosity Set:  
Conductivity Set:  
Leakage Set:

**Tolerances & Options**

Time Marching: SAOR  
Max Iterations: 6  
Over-Relax Weight: 0.5 dec  
Fact:  
dZ Tolerance: 0.0010 ft

IA Recovery Time: 24.0000 hr  
ET for Manual Basins: False

Smp/Man Basin Rain Opt: Global  
OF Region Rain Opt: Global  
Rainfall Name: ~FDOT-4  
Rainfall Amount: 6.00 in  
Storm Duration: 4.0000 hr

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

Drift Damping (2D): 0.0050 ft  
Min Node Srf Area (2D): 1 ft2  
Energy Switch (2D): Energy

Drift Damping (1D): 0.0050 ft  
Min Node Srf Area (1D): 113 ft2  
Energy Switch (1D): Energy

Comment:

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Conductivity Set:  
Leakage Set:

**Tolerances & Options**

Time Marching: SAOR  
Max Iterations: 6  
Over-Relax Weight: 0.5 dec  
Fact:  
dZ Tolerance: 0.0010 ft

IA Recovery Time: 24.0000 hr  
ET for Manual Basins: False

Smp/Man Basin Rain Opt: Global  
OF Region Rain Opt: Global  
Rainfall Name: ~FDOT-8  
Rainfall Amount: 7.60 in  
Storm Duration: 8.0000 hr

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

Drift Damping (2D): 0.0050 ft  
Min Node Srf Area (2D): 1 ft2  
Energy Switch (2D): Energy

Drift Damping (1D): 0.0050 ft  
Min Node Srf Area (1D): 113 ft2  
Energy Switch (1D): Energy

Comment:

Simulation: 025-014  
Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:50:49 PM  
Program Version: ICPRA 4.07.08

**General**

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		60.0000	

**Output Time Increments**

**Hydrology**

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0	0.0000
				15.0000

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**Simulation: 100-001**

Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:51:24 PM  
Program Version: ICPRA 4.07.08

**General**

Run Mode: Normal

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

**Groundwater**

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

**Restart File**

Save Restart: False

**Resources & Lookup Tables**

Resources	Lookup Tables
Rainfall Folder: ICPR3	Boundary Stage Set:
Reference ET Folder:	Extern Hydrograph Set:
Unit Hydrograph Folder: ICPR3	Curve Number Set: 1
	Green-Ampt Set:
	Vertical Layers Set: 1
	Impervious Set:
	Roughness Set:
	Crop Coef Set:
	Fillable Porosity Set:
	Conductivity Set:
	Leakage Set:

**Tolerances & Options**

Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 6	ET for Manual Basins: False
Over-Relax Weight: 0.5 dec	
Fact:	
dZ Tolerance: 0.0010 ft	Smp/Man Basin Rain Opt: Global
Max dZ: 1.0000 ft	OF Region Rain Opt: Global
Link Optimizer Tol: 0.0001 ft	Rainfall Name: ~FDOT-24
Edge Length Option: Automatic	Rainfall Amount: 10.80 in
	Storm Duration: 24.0000 hr
Dft Damping (2D): 0.0050 ft	Dft Damping (1D): 0.0050 ft
Min Node Srf Area 1 R2	Min Node Srf Area 113 R2
(2D):	(1D):
Energy Switch (2D): Energy	Energy Switch (1D): Energy

Comment:

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9/18/2022 13:17

**Simulation: 100-001**

Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:51:24 PM  
Program Version: ICPRA 4.07.08

**General**

Run Mode: Normal

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	0.0000
0	0	0	0	4.0000

**Hydrology [sec]**      **Surface Hydraulics [sec]**      **Groundwater [sec]**

Min Calculation Time: 60.0000      0.1000      900.0000  
Max Calculation Time:      60.0000

**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

**Groundwater**

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

**Restart File**

Save Restart: False

**Resources & Lookup Tables**

Resources	Lookup Tables
Rainfall Folder: ICPR3	Boundary Stage Set:
Reference ET Folder:	Extern Hydrograph Set:
Unit Hydrograph Folder: ICPR3	Curve Number Set: 1
	Green-Ampt Set:
	Vertical Layers Set: 1
	Impervious Set:
	Roughness Set:
	Crop Coef Set:
	Fillable Porosity Set:

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**Conductivity Set:**

**Leakage Set:**

**Tolerances & Options**

Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 6	ET for Manual Basins: False
Over-Relax Weight: 0.5 dec	
Fact:	
dZ Tolerance: 0.0010 ft	Smp/Man Basin Rain Opt: Global
Max dZ: 1.0000 ft	OF Region Rain Opt: Global
Link Optimizer Tol: 0.0001 ft	Rainfall Name: ~FDOT-1
Edge Length Option: Automatic	Rainfall Amount: 4.50 in
	Storm Duration: 1.0000 hr
Dft Damping (2D): 0.0050 ft	Dft Damping (1D): 0.0050 ft
Min Node Srf Area 1 R2	Min Node Srf Area 113 R2
(2D):	(1D):
Energy Switch (2D): Energy	Energy Switch (1D): Energy

Comment:

Simulation: 100-002

Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:51:31 PM  
Program Version: ICPRA 4.07.08

**General**

Run Mode: Normal

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	0.0000
0	0	0	0	6.0000

**Hydrology [sec]**      **Surface Hydraulics [sec]**      **Groundwater [sec]**

Min Calculation Time: 60.0000      0.1000      900.0000  
Max Calculation Time:      60.0000

**Output Time Increments**

**Hydrology**

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

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9/18/2022 13:17

**Simulation: 100-002**

Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:51:31 PM  
Program Version: ICPRA 4.07.08

**General**

Run Mode: Normal

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	0.0000
0	0	0	0	6.0000

**Hydrology [sec]**      **Surface Hydraulics [sec]**      **Groundwater [sec]**

Min Calculation Time: 60.0000      0.1000      900.0000  
Max Calculation Time:      60.0000

**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

**Groundwater**

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

**Restart File**

Save Restart: False

**Resources & Lookup Tables**

Resources	Lookup Tables
Rainfall Folder: ICPR3	Boundary Stage Set:
Reference ET Folder:	Extern Hydrograph Set:
Unit Hydrograph Folder: ICPR3	Curve Number Set: 1
	Green-Ampt Set:
	Vertical Layers Set: 1
	Impervious Set:
	Roughness Set:
	Crop Coef Set:
	Fillable Porosity Set:
	Conductivity Set:
	Leakage Set:

**Tolerances & Options**

Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 6	ET for Manual Basins: False
Over-Relax Weight: 0.5 dec	
Fact:	
dZ Tolerance: 0.0010 ft	Smp/Man Basin Rain Opt: Global
Max dZ: 1.0000 ft	OF Region Rain Opt: Global
Link Optimizer Tol: 0.0001 ft	Rainfall Name: ~FDOT-2
Edge Length Option: Automatic	Rainfall Amount: 6.00 in
	Storm Duration: 2.0000 hr
Dft Damping (2D): 0.0050 ft	Dft Damping (1D): 0.0050 ft
Min Node Srf Area 1 R2	Min Node Srf Area 113 R2
(2D):	(1D):
Energy Switch (2D): Energy	Energy Switch (1D): Energy

Comment:

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9/18/2022 13:17

Simulation: 100-004

Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:51:39 PM  
Program Version: ICPRA 4.07.08

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	10.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		60.0000	

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0		0.0000
				360.0000

Restart File

Save Restart: False

Resources &amp; Lookup Tables

Resources

Rainfall Folder: ICPRA3  
Reference ET Folder:  
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:  
Extrem Hydrograph Set:  
Curve Number Set: 1

Green-Ampt Set:  
Vertical Layers Set:  
Impervious Set: 1  
Roughness Set:  
Crop Coef Set:  
Fillable Porosity Set:

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Conductivity Set:  
Leakage Set:

Tolerances &amp; Options

Time Marching: SAOR  
Max Iterations: 6  
Over-Relax Weight: 0.5 dec  
Fact:  
dZ Tolerance: 0.0010 ft  
Max dZ: 1.0000 ft  
Link Optimizer Tol: 0.0001 ft  
Edge Length Option: Automatic  
Dft Damping (2D): 0.0050 ft  
Min Node Srf Area (2D): 1 ft2  
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr  
ET for Manual Basins: False

Smp/Man Basin Rain Opt: Global  
OF Region Rain Opt: Global  
Rainfall Name: ~FDOT-4  
Rainfall Amount: 7.40 in  
Storm Duration: 4.0000 hr

Dft Damping (1D): 0.0050 ft  
Min Node Srf Area (1D): 113 ft2  
Energy Switch (1D): Energy

Comment:

Simulation: 100-004

Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:51:51 PM  
Program Version: ICPRA 4.07.08

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	20.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		60.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0		0.0000
				15.0000

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Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0		0.0000
				15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0		0.0000
				360.0000

Restart File

Save Restart: False

Resources &amp; Lookup Tables

Resources

Rainfall Folder: ICPRA3  
Reference ET Folder:  
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:  
Extrem Hydrograph Set:  
Curve Number Set: 1

Green-Ampt Set:  
Vertical Layers Set:  
Impervious Set: 1  
Roughness Set:  
Crop Coef Set:  
Fillable Porosity Set:  
Conductivity Set:  
Leakage Set:

Tolerances &amp; Options

Time Marching: SAOR  
Max Iterations: 6  
Over-Relax Weight: 0.5 dec  
Fact:  
dZ Tolerance: 0.0010 ft  
Max dZ: 1.0000 ft  
Link Optimizer Tol: 0.0001 ft  
Edge Length Option: Automatic  
Dft Damping (2D): 0.0050 ft  
Min Node Srf Area (2D): 1 ft2  
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr  
ET for Manual Basins: False

Smp/Man Basin Rain Opt: Global  
OF Region Rain Opt: Global  
Rainfall Name: ~FDOT-4  
Rainfall Amount: 9.36 in  
Storm Duration: 8.0000 hr

Dft Damping (1D): 0.0050 ft  
Min Node Srf Area (1D): 113 ft2  
Energy Switch (1D): Energy

Comment:

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Simulation: 100-004

Scenario: Scenario1  
Run Date/Time: 9/19/2022 12:52:18 PM  
Program Version: ICPRA 4.07.08

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		60.0000	

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0		0.0000
				360.0000

Restart File

Save Restart: False

Resources &amp; Lookup Tables

Resources

Rainfall Folder: ICPRA3  
Reference ET Folder:  
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:  
Extrem Hydrograph Set:  
Curve Number Set: 1

Green-Ampt Set:  
Vertical Layers Set:  
Impervious Set: 1  
Roughness Set:  
Crop Coef Set:  
Fillable Porosity Set:

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Conductivity Set:  
Leakage Set:

#### Entrances & Options

Time Marching: SAOR  
Max Iterations: 6  
Over-Relax Weight: 0.5 dec  
Fact:  
dZ Tolerance: 0.0010 ft  
Max dZ: 1.0000 ft  
Link Optimizer Tol: 0.0001 ft  
Edge Length Option: Automatic  
Dft Damping (2D): 0.0050 ft  
Min Node Srf Area (2D): 1 ft2  
Energy Switch (2D): Energy  
IA Recovery Time: 24.0000 hr  
ET for Manual Basins: False  
Smp/Han Basin Rain Opt: Global  
OF Region Rain Opt: Global  
Rainfall Name: ~PDOT-24  
Rainfall Amount: 13.44 in  
Storm Duration: 24.0000 hr  
Dft Damping (1D): 0.0050 ft  
Min Node Srf Area (1D): 113 ft2  
Energy Switch (1D): Energy

Comment:

#### Simple Basin: SB-100

Scenario: Scenario1  
Node: Pre-Development Basin  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 31.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 5.9210 ac  
Curve Number: 63.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

#### Simple Basin: SB-100

Scenario: Scenario1

Node: DS-100  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.6200 ac  
Curve Number: 76.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

#### Simple Basin: SB-101

Scenario: Scenario1  
Node: DS-101  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.4180 ac  
Curve Number: 75.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

#### Simple Basin: SB-102

Scenario: Scenario1  
Node: DS-102  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484

Peaking Factor: 484.0  
Area: 0.6190 ac  
Curve Number: 76.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

#### Simple Basin: SB-103

Scenario: Scenario1  
Node: DS-103  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.3720 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

#### Simple Basin: SB-105

Scenario: Scenario1  
Node: DS-105  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.8070 ac  
Curve Number: 77.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

#### Simple Basin: SB-106

Scenario: Scenario1  
Node: DS-106  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.4740 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

#### Simple Basin: SB-107

Scenario: Scenario1  
Node: DS-107  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.8000 ac  
Curve Number: 76.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

#### Simple Basin: SB-108



Scenario: Scenario1  
 Node: DS-108  
 Hydrograph Method: NRCS Unit Hydrograph  
 Infiltration Method: Curve Number  
 Time of Concentration: 10.0000 min  
 Max Allowable Q: 9999.00 cfs  
 Time Shift: 0.0000 hr  
 Unit Hydrograph: UH484  
 Peaking Factor: 484.0  
 Area: 0.5170 ac  
 Curve Number: 73.0  
 % Impervious: 0.00  
 % DCIA: 0.00  
 % Direct: 0.00  
 Rainfall Name:

Comment:

Simple Basin: SB-109

Scenario: Scenario1  
 Node: DS-109  
 Hydrograph Method: NRCS Unit Hydrograph  
 Infiltration Method: Curve Number  
 Time of Concentration: 10.0000 min  
 Max Allowable Q: 9999.00 cfs  
 Time Shift: 0.0000 hr  
 Unit Hydrograph: UH484  
 Peaking Factor: 484.0  
 Area: 0.1540 ac  
 Curve Number: 67.0  
 % Impervious: 0.00  
 % DCIA: 0.00  
 % Direct: 0.00  
 Rainfall Name:

Comment:

Simple Basin: SB-110

Scenario: Scenario1  
 Node: DS-110  
 Hydrograph Method: NRCS Unit Hydrograph  
 Infiltration Method: Curve Number  
 Time of Concentration: 10.0000 min  
 Max Allowable Q: 9999.00 cfs  
 Time Shift: 0.0000 hr

Unit Hydrograph: UH484  
 Peaking Factor: 484.0  
 Area: 0.1300 ac  
 Curve Number: 62.0  
 % Impervious: 0.00  
 % DCIA: 0.00  
 % Direct: 0.00  
 Rainfall Name:

Comment:

Simple Basin: SB-SWMF-1

Scenario: Scenario1  
 Node: SWMF 1  
 Hydrograph Method: NRCS Unit Hydrograph  
 Infiltration Method: Curve Number  
 Time of Concentration: 10.0000 min  
 Max Allowable Q: 99999.00 cfs  
 Time Shift: 0.0000 hr  
 Unit Hydrograph: UH484  
 Peaking Factor: 484.0  
 Area: 3.0600 ac  
 Curve Number: 90.0  
 % Impervious: 0.00  
 % DCIA: 0.00  
 % Direct: 0.00  
 Rainfall Name:

Comment:

Simple Basin: Uncaptured Area

Scenario: Scenario1  
 Node: Outfall  
 Hydrograph Method: NRCS Unit Hydrograph  
 Infiltration Method: Curve Number  
 Time of Concentration: 10.0000 min  
 Max Allowable Q: 99999.00 cfs  
 Time Shift: 0.0000 hr  
 Unit Hydrograph: UH484  
 Peaking Factor: 484.0  
 Area: 0.8800 ac  
 Curve Number: 39.0  
 % Impervious: 0.00  
 % DCIA: 0.00  
 % Direct: 0.00

Rainfall Name:

Comment:

Node: DS-109

Scenario: Scenario1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 7.00 ft  
 Warning Stage: 9.17 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
9.65	0.0006	25
9.70	0.0014	61
9.95	0.0002	9
9.17	0.0002	9

Comment: Rim Elev: 9.17  
 Sump Elev: 4.95  
 Desc: FDOT Type V Inlet

Node: DS-101

Scenario: Scenario1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 7.00 ft  
 Warning Stage: 9.17 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
9.64	0.0006	25
9.70	0.0011	80
9.41	0.0002	9
9.17	0.0002	9

Comment: Rim Elev: 9.46  
 Sump Elev: 4.91  
 Desc: FDOT Type V Inlet

Node: DS-102

Scenario: Scenario1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs

Initial Stage: 7.00 ft  
 Warning Stage: 9.30 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
9.75	0.0011	50
9.80	0.0024	104
9.90	0.0050	217
10.00	0.0149	650
6.05	0.0002	9
9.30	0.0002	9

Comment: Rim Elev: 9.55  
 Sump Elev: 5.05  
 Desc: FDOT Type V Inlet

Node: DS-103

Scenario: Scenario1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 7.00 ft  
 Warning Stage: 9.30 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
9.78	0.0006	25
9.80	0.0014	63
9.90	0.0046	200
10.00	0.0138	600
10.10	0.0298	1300
5.10	0.0002	9
9.30	0.0002	9

Comment: Rim Elev: 9.30  
 Sump Elev: 4.10  
 Desc: FDOT Type V Inlet

Node: DS-104

Scenario: Scenario1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 7.00 ft  
 Warning Stage: 10.81 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
4.80	0.0002	9
10.81	0.0002	9

Comment: Rim Elev: 10.81  
Sump Elev: 3.80  
Desc: FDOT Type P7 Manhole

Node: CG-105

Scenario: Scenario1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 7.00 ft  
Warning Stage: 9.91 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
6.10	0.0002	9
9.91	0.0002	9
10.12	0.0011	50
10.20	0.0025	108
10.30	0.0069	300
10.40	0.0241	1050

Comment: Rim Elev: 9.91  
Sump Elev: 5.10  
Desc: FDOT Type V Inlet

Node: CG-106

Scenario: Scenario1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 7.00 ft  
Warning Stage: 9.91 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
10.11	0.0006	25
10.20	0.0017	75
10.30	0.0075	325
10.40	0.0218	950
3.96	0.0002	9
9.91	0.0002	9

Comment: Rim Elev: 9.91  
Sump Elev: 3.46  
Desc: FDOT Type V Inlet

Base Flow: 0.00 cfs  
Initial Stage: 7.00 ft  
Warning Stage: 10.48 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
10.60	0.0006	25
10.71	0.0011	46
10.80	0.0017	75
10.90	0.0075	325
6.95	0.0002	9
10.48	0.0002	9

Comment: Rim Elev: 10.48  
Sump Elev: 5.95  
Desc: FDOT Type V Inlet

Node: CG-110

Scenario: Scenario1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 7.00 ft  
Warning Stage: 10.48 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
10.62	0.0006	25
10.70	0.0010	43
10.80	0.0023	100
10.90	0.0086	375
6.91	0.0002	9
10.48	0.0002	9

Comment: Rim Elev: 10.48  
Sump Elev: 5.91  
Desc: FDOT Type V Inlet

Node: DG-111

Scenario: Scenario1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 7.00 ft  
Warning Stage: 11.37 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
2.47	0.0002	9
11.37	0.0002	9

Node: DG-107

Scenario: Scenario1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 7.00 ft  
Warning Stage: 10.13 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
10.23	0.0006	25
10.25	0.0006	27
10.30	0.0008	34
10.35	0.0009	40
10.40	0.0011	46
10.45	0.0032	138
10.50	0.0063	275
3.40	0.0002	9
10.13	0.0002	9

Comment: Rim Elev: 10.13  
Sump Elev: 5.60  
Desc: FDOT Type V Inlet

Node: CG-108

Scenario: Scenario1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 3.36 ft  
Warning Stage: 10.13 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
10.25	0.0006	25
10.30	0.0008	33
10.40	0.0011	48
10.50	0.0052	225
10.60	0.0207	900
2.86	0.0002	9
10.13	0.0002	9

Comment: Rim Elev: 10.13  
Sump Elev: 2.36  
Desc: FDOT Type V Inlet

Node: CG-109

Scenario: Scenario1  
Type: Stage/Area

Comment: Rim Elev: 11.37  
Sump Elev: 1.57  
Desc: FDOT Type P7 Manhole

Node: CG-112

Scenario: Scenario1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 7.00 ft  
Warning Stage: 9.50 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
2.26	0.0002	9
9.50	0.0002	9

Comment: Rim Elev: 9.50  
Sump Elev: 1.76  
Desc: FDOT Type P7 Manhole

Node: Outlet

Scenario: Scenario1  
Type: Time/Stage  
Base Flow: 0.00 cfs  
Initial Stage: 6.75 ft  
Warning Stage: 7.00 ft  
Boundary Stage:

Time	Height	Flow	Area	Stage [ft]
0	0	0	0.0000	6.75
0	0	0	999999.0000	6.75

Comment:

Node: Pre-Development Basin

Scenario: Scenario1  
Type: Time/Stage  
Base Flow: 0.00 cfs  
Initial Stage: 6.00 ft  
Warning Stage: 1.00 ft  
Boundary Stage:

Year	Month	Day	Hour	Stage (ft)
0	0	0	0.0000	0.00
0	0	0	99999.0000	0.00

Comment:

Node: SWM1.1

Scenario: Scenario1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 7.00 ft  
 Warning Stage: 9.00 ft

Stage (ft)	Area (sq ft)	Area (sq ft)
-5.00	0.4192	18260
-4.00	0.4794	20883
-3.00	0.5420	23610
-2.00	0.6069	26437
-1.00	0.6739	29355
0.00	0.7431	32369
1.00	0.8145	35480
2.00	0.8882	38690
3.00	0.9638	41983
4.00	1.0089	43948
5.00	1.2033	52416
6.00	1.3712	59729
7.00	1.5415	67148
8.00	1.7140	74662
9.00	1.8888	82276

Comment:

Scenario	Scenario1	Upstream	Downstream
From Node	DS-100	Invert: 5.95 ft	Invert: 5.91 ft
To Node	DS-101	Manning's N: 0.0120	Manning's N: 0.0120
Link Count	1	Geometry: Circular	Geometry: Circular
Flow Direction	Both	Max Depth: 1.51 ft	Max Depth: 1.51 ft
Damping	0.0000 ft	Bottom Cap	Bottom Cap
Length	20.00 ft	Default: 0.00 ft	Default: 0.00 ft
FHWA Code	0	Op Table:	Op Table:
Entr Loss Coef	0.50	Ref Node:	Ref Node:
Exit Loss Coef	0.50	Manning's N: 0.0000	Manning's N: 0.0000
Bend Loss Coef	0.70	Tap Cap	Tap Cap
Bend Location	0.00 dec	Default: 0.00 ft	Default: 0.00 ft
Energy Switch	Energy	Op Table:	Op Table:

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Energy Switch: Energy	Ref Node: Manning's N: 0.0000	Ref Node: Manning's N: 0.0000
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Comment: Material: HP STORM PP

Scenario	Scenario1	Upstream	Downstream
From Node	DS-101	Invert: 5.41 ft	Invert: 5.10 ft
To Node	DS-103	Manning's N: 0.0120	Manning's N: 0.0120
Link Count	1	Geometry: Circular	Geometry: Circular
Flow Direction	Both	Max Depth: 2.00 ft	Max Depth: 2.00 ft
Damping	0.0000 ft	Bottom Cap	Bottom Cap
Length	154.20 ft	Default: 0.00 ft	Default: 0.00 ft
FHWA Code	0	Op Table:	Op Table:
Entr Loss Coef	0.50	Ref Node:	Ref Node:
Exit Loss Coef	0.50	Manning's N: 0.0000	Manning's N: 0.0000
Bend Loss Coef	0.00	Tap Cap	Tap Cap
Bend Location	0.00 dec	Default: 0.00 ft	Default: 0.00 ft
Energy Switch	Energy	Op Table:	Op Table:
		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000

Comment: Material: HP STORM PP

Scenario	Scenario1	Upstream	Downstream
From Node	DS-102	Invert: 6.05 ft	Invert: 6.01 ft
To Node	DS-103	Manning's N: 0.0120	Manning's N: 0.0120
Link Count	1	Geometry: Circular	Geometry: Circular
Flow Direction	Both	Max Depth: 1.51 ft	Max Depth: 1.51 ft
Damping	0.0000 ft	Bottom Cap	Bottom Cap
Length	20.00 ft	Default: 0.00 ft	Default: 0.00 ft
FHWA Code	0	Op Table:	Op Table:
Entr Loss Coef	0.50	Ref Node:	Ref Node:
Exit Loss Coef	0.50	Manning's N: 0.0000	Manning's N: 0.0000
Bend Loss Coef	0.70	Tap Cap	Tap Cap
Bend Location	0.00 dec	Default: 0.00 ft	Default: 0.00 ft
Energy Switch	Energy	Op Table:	Op Table:
		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000

Comment: Material: HP STORM PP

Scenario	Scenario1	Upstream	Downstream
From Node	DS-103	Invert: 5.10 ft	Invert: 4.80 ft
To Node	DS-104	Manning's N: 0.0120	Manning's N: 0.0120
Link Count	1	Geometry: Circular	Geometry: Circular

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Link Count: 1	Max Depth: 2.01 ft	Max Depth: 2.01 ft
Flow Direction: Both	Bottom Cap	Bottom Cap
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 150.38 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.50	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.50	Tap Cap	Tap Cap
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: Material: HP STORM PP

Scenario	Scenario1	Upstream	Downstream
From Node	DS-104	Invert: 4.80 ft	Invert: 4.46 ft
To Node	DS-106	Manning's N: 0.0120	Manning's N: 0.0120
Link Count	1	Geometry: Circular	Geometry: Circular
Flow Direction	Both	Max Depth: 2.01 ft	Max Depth: 2.01 ft
Damping	0.0000 ft	Bottom Cap	Bottom Cap
Length	167.83 ft	Default: 0.00 ft	Default: 0.00 ft
FHWA Code	0	Op Table:	Op Table:
Entr Loss Coef	0.50	Ref Node:	Ref Node:
Exit Loss Coef	0.50	Manning's N: 0.0000	Manning's N: 0.0000
Bend Loss Coef	0.00	Tap Cap	Tap Cap
Bend Location	0.00 dec	Default: 0.00 ft	Default: 0.00 ft
Energy Switch	Energy	Op Table:	Op Table:
		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000

Comment: Material: HP STORM PP

Scenario	Scenario1	Upstream	Downstream
From Node	DS-105	Invert: 6.10 ft	Invert: 6.06 ft
To Node	DS-106	Manning's N: 0.0120	Manning's N: 0.0120
Link Count	1	Geometry: Circular	Geometry: Circular
Flow Direction	Both	Max Depth: 1.51 ft	Max Depth: 1.51 ft
Damping	0.0000 ft	Bottom Cap	Bottom Cap
Length	20.00 ft	Default: 0.00 ft	Default: 0.00 ft
FHWA Code	0	Op Table:	Op Table:
Entr Loss Coef	0.50	Ref Node:	Ref Node:
Exit Loss Coef	0.50	Manning's N: 0.0000	Manning's N: 0.0000
Bend Loss Coef	0.70	Tap Cap	Tap Cap
Bend Location	0.00 dec	Default: 0.00 ft	Default: 0.00 ft
Energy Switch	Energy	Op Table:	Op Table:
		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000

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Comment: Material: HP STORM PP

Scenario	Scenario1	Upstream	Downstream
From Node	DS-106	Invert: 3.96 ft	Invert: 3.36 ft
To Node	DS-109	Manning's N: 0.0120	Manning's N: 0.0120
Link Count	1	Geometry: Circular	Geometry: Circular
Flow Direction	Both	Max Depth: 2.50 ft	Max Depth: 2.50 ft
Damping	0.0000 ft	Bottom Cap	Bottom Cap
Length	298.73 ft	Default: 0.00 ft	Default: 0.00 ft
FHWA Code	0	Op Table:	Op Table:
Entr Loss Coef	0.50	Ref Node:	Ref Node:
Exit Loss Coef	0.50	Manning's N: 0.0000	Manning's N: 0.0000
Bend Loss Coef	0.00	Tap Cap	Tap Cap
Bend Location	0.00 dec	Default: 0.00 ft	Default: 0.00 ft
Energy Switch	Energy	Op Table:	Op Table:
		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000

Comment: Material: HP STORM PP

Scenario	Scenario1	Upstream	Downstream
From Node	DS-107	Invert: 3.40 ft	Invert: 3.36 ft
To Node	DS-108	Manning's N: 0.0120	Manning's N: 0.0120
Link Count	1	Geometry: Circular	Geometry: Circular
Flow Direction	Both	Max Depth: 1.51 ft	Max Depth: 1.51 ft
Damping	0.0000 ft	Bottom Cap	Bottom Cap
Length	20.00 ft	Default: 0.00 ft	Default: 0.00 ft
FHWA Code	0	Op Table:	Op Table:
Entr Loss Coef	0.50	Ref Node:	Ref Node:
Exit Loss Coef	0.50	Manning's N: 0.0000	Manning's N: 0.0000
Bend Loss Coef	0.70	Tap Cap	Tap Cap
Bend Location	0.00 dec	Default: 0.00 ft	Default: 0.00 ft
Energy Switch	Energy	Op Table:	Op Table:
		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000

Comment: Material: HP STORM PP

Scenario	Scenario1	Upstream	Downstream
From Node	DS-108	Invert: 2.86 ft	Invert: 2.47 ft
To Node	DS-111	Manning's N: 0.0120	Manning's N: 0.0120
Link Count	1	Geometry: Circular	Geometry: Circular
Flow Direction	Both	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Damping	0.0000 ft	Bottom Cap	Bottom Cap

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Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 192.73 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.50	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.50	Top Cap	
Bend Loss Coef: 0.70	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: Material: HP STORM PP

Scenario: Scenario1	Invert: 6.95 ft	Invert: 6.91 ft
From Node: DS-109	Manning's N: 0.0120	Manning's N: 0.0120
To Node: DS-110	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 1.51 ft	Max Depth: 1.51 ft
Flow Direction: Both	Bottom Cap	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 20.00 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.50	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.50	Top Cap	
Bend Loss Coef: 0.70	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: Material: HP STORM PP

Scenario: Scenario1	Invert: 6.91 ft	Invert: 3.69 ft
From Node: DS-110	Manning's N: 0.0120	Manning's N: 0.0120
To Node: DS-111	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 1.51 ft	Max Depth: 1.51 ft
Flow Direction: Both	Bottom Cap	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 137.33 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.50	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.50	Top Cap	
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: Material: HP STORM PP

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Scenario: Scenario1	Invert: 2.47 ft	Invert: 2.26 ft
From Node: DS-111	Manning's N: 0.0120	Manning's N: 0.0120
To Node: DS-112	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Flow Direction: Both	Bottom Cap	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 102.59 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.50	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.50	Top Cap	
Bend Loss Coef: 0.33	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: Material: HP STORM PP

Scenario: Scenario1	Invert: 2.26 ft	Invert: 1.50 ft
From Node: DS-112	Manning's N: 0.0120	Manning's N: 0.0120
To Node: SWMF 1	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Flow Direction: Both	Bottom Cap	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 36.45 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.50	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 1.00	Top Cap	
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: Material: HP STORM PP

Scenario: Scenario1	Invert: 3.00 ft	Invert: 3.00 ft
From Node: SWMF 1	Manning's N: 0.0120	Manning's N: 0.0120
To Node: Outfall	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 1.50 ft	Max Depth: 1.50 ft
Flow Direction: Both	Bottom Cap	
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: 70.56 ft	Top Cap	

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FHWA Code: 0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef: 0.50	Op Table:	Op Table:
Exit Loss Coef: 1.00	Ref Node:	Ref Node:
Bend Loss Coef: 0.50	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location: 0.00 dec		
Energy Switch: Energy		

Weir Comment:

Weir Count: 1	Default: 0.00 ft
Weir Flow Direction: Both	Op Table:
Damping: 0.0000 ft	Ref Node:
Weir Type: Sharp Crested Vertical	Top Cap
Geometry Type: Circular	Default: 0.00 ft
Invert: 6.50 ft	Op Table:
Control Elevation: 7.00 ft	Ref Node:
Max Depth: 0.19 ft	Manning's N: 0.0000

Weir Comment:

Weir Count: 2	Default: 0.00 ft
Weir Flow Direction: Both	Op Table:
Damping: 0.0000 ft	Ref Node:
Weir Type: Sharp Crested Vertical	Top Cap
Geometry Type: Rectangular	Default: 0.00 ft
Invert: 7.50 ft	Op Table:
Control Elevation: 7.50 ft	Ref Node:
Max Depth: 1.08 ft	Manning's N: 0.0000
Max Width: 1.50 ft	Weir Default: 3.200
Fillet: 0.00 ft	Weir Table:
	Orifice Default: 0.600
	Orifice Table:

Weir Comment:

Weir Count: 1	Default: 0.00 ft
Weir Flow Direction: Both	Op Table:
Damping: 0.0000 ft	Ref Node:
Weir Type: Horizontal	Top Cap
Geometry Type: Rectangular	Default: 0.00 ft
Invert: 8.75 ft	Op Table:
Control Elevation: 8.75 ft	Ref Node:
Max Depth: 3.00 ft	Manning's N: 0.0000

Weir Comment:

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Max Width: 2.00 ft  
Fillet: 0.00 ftWeir Default: 3.200  
Weir Table:  
Orifice Default: 0.600  
Orifice Table:

Weir Comment:

Drop Structure Comment:

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-100	002-024 (SCS III)	9.17	8.78	-0.0011	1.96	1.91	100
DS-100	025-001	9.17	8.94	-0.0010	2.48	2.34	113
DS-100	025-002	9.17	8.91	-0.0010	2.33	2.22	113
DS-100	025-004	9.17	8.39	-0.0010	1.34	1.31	113
DS-100	025-008	9.17	8.82	-0.0010	1.64	1.60	113
DS-100	025-024	9.17	8.19	-0.0010	0.58	1.17	113
DS-100	100-001	9.17	10.11	-0.0010	3.28	3.09	113
DS-100	100-002	9.17	10.05	-0.0010	3.08	2.92	113
DS-100	100-004	9.17	6.98	-0.0010	1.81	1.77	113
DS-100	100-008	9.17	9.63	-0.0010	2.13	2.09	113
DS-100	100-024	9.17	8.44	-0.0010	0.75	1.17	113

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-101	002-024 (SCS III)	9.17	8.75	-0.0012	3.19	3.15	170
DS-101	025-001	9.17	8.89	-0.0012	3.92	3.84	169
DS-101	025-002	9.17	8.86	-0.0012	3.73	3.66	169
DS-101	025-004	9.17	8.38	-0.0012	2.19	2.95	169
DS-101	025-008	9.17	8.80	-0.0012	2.69	2.95	169
DS-101	025-024	9.17	8.19	-0.0012	1.32	2.95	169
DS-101	100-001	9.17	10.02	-0.0012	5.17	5.08	169
DS-101	100-002	9.17	9.97	-0.0012	4.91	4.82	169
DS-101	100-004	9.17	8.95	-0.0012	2.96	2.95	169
DS-101	100-008	9.17	9.59	-0.0012	3.50	3.46	169
DS-101	100-024	9.17	8.44	-0.0012	1.32	2.95	169

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Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-102	002-024 (SCS III)	9.30	8.74	-0.0022	3.95	1.90	100
DS-102	025-001	9.30	8.88	-0.0011	2.48	2.33	113
DS-102	025-002	9.30	8.86	-0.0011	2.33	2.22	113
DS-102	025-004	9.30	8.37	-0.0011	1.34	1.30	113
DS-102	025-008	9.30	8.60	-0.0011	1.63	1.60	113
DS-102	025-024	9.30	8.19	-0.0011	0.58	1.24	113
DS-102	100-001	9.30	10.00	-0.0011	3.28	3.10	650
DS-102	100-002	9.30	9.95	-0.0011	3.08	2.92	469
DS-102	100-004	9.30	8.95	-0.0011	1.81	1.76	113
DS-102	100-008	9.30	9.55	-0.0011	2.12	2.08	113
DS-102	100-024	9.30	8.44	-0.0011	0.75	1.24	113

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-103	002-024 (SCS III)	9.30	8.70	-0.0014	6.17	7.13	282
DS-103	025-001	9.30	8.82	-0.0014	7.51	7.45	279
DS-103	025-002	9.30	8.81	-0.0014	7.17	7.11	279
DS-103	025-004	9.30	8.36	-0.0014	4.22	7.10	279
DS-103	025-008	9.30	8.77	-0.0014	5.21	7.10	279
DS-103	025-024	9.30	8.18	-0.0014	4.17	7.10	279
DS-103	100-001	9.30	9.92	-0.0014	9.73	9.59	279
DS-103	100-002	9.30	9.88	-0.0014	9.33	9.23	279
DS-103	100-004	9.30	8.92	-0.0014	5.72	7.10	279
DS-103	100-008	9.30	9.54	-0.0014	6.79	7.10	279
DS-103	100-024	9.30	8.43	-0.0014	4.17	7.10	279

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-104	002-024 (SCS III)	10.81	8.56	-0.0040	7.13	9.75	241
DS-104	025-001	10.81	8.61	-0.0036	7.45	9.79	237
DS-104	025-002	10.81	8.61	-0.0036	7.11	9.79	237
DS-104	025-004	10.81	8.33	-0.0036	7.10	9.79	237
DS-104	025-008	10.81	8.67	-0.0036	7.10	9.79	237
DS-104	025-024	10.81	8.18	-0.0036	7.10	9.79	237

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Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-104	100-001	10.81	9.55	-0.0036	9.59	9.79	237
DS-104	100-002	10.81	9.54	-0.0036	9.23	9.79	237
DS-104	100-004	10.81	8.82	-0.0036	7.10	9.79	237
DS-104	100-008	10.81	9.36	-0.0036	7.10	9.79	237
DS-104	100-024	10.81	8.41	-0.0036	7.10	9.79	237

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-105	002-024 (SCS III)	9.91	8.46	-0.0022	2.80	2.58	100
DS-105	025-001	9.91	8.47	-0.0020	3.36	3.23	113
DS-105	025-002	9.91	8.49	-0.0020	3.13	3.03	113
DS-105	025-004	9.91	8.31	-0.0020	1.79	2.23	113
DS-105	025-008	9.91	8.60	-0.0020	2.16	2.23	113
DS-105	025-024	9.91	8.17	-0.0020	1.01	2.23	113
DS-105	100-001	9.91	9.32	-0.0020	4.41	4.21	113
DS-105	100-002	9.91	9.33	-0.0020	4.12	3.96	113
DS-105	100-004	9.91	8.75	-0.0020	2.41	2.37	113
DS-105	100-008	9.91	9.24	-0.0020	2.80	2.76	113
DS-105	100-024	9.91	8.39	-0.0020	1.01	2.23	113

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-106	002-024 (SCS III)	9.91	8.40	-0.0020	12.29	23.68	402
DS-106	025-001	9.91	8.38	-0.0195	12.27	23.68	395
DS-106	025-002	9.91	8.40	-0.0195	11.82	23.68	395
DS-106	025-004	9.91	8.30	-0.0195	11.82	23.68	395
DS-106	025-008	9.91	8.55	-0.0195	11.82	23.68	395
DS-106	025-024	9.91	8.17	-0.0195	11.82	23.68	395
DS-106	100-001	9.91	9.16	-0.0195	15.98	23.68	395
DS-106	100-002	9.91	9.18	-0.0195	15.27	23.68	395
DS-106	100-004	9.91	8.70	-0.0195	11.82	23.68	395
DS-106	100-008	9.91	9.17	-0.0195	11.82	23.68	395
DS-106	100-024	9.91	8.38	-0.0195	11.82	23.68	395

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Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-107	002-024 (SCS III)	10.13	8.25	-0.0148	7.64	14.78	100
DS-107	025-001	10.13	8.15	-0.0131	7.44	14.78	113
DS-107	025-002	10.13	8.19	-0.0131	7.44	14.78	113
DS-107	025-004	10.13	8.26	-0.0131	7.44	14.78	113
DS-107	025-008	10.13	8.44	-0.0131	7.44	14.78	113
DS-107	025-024	10.13	8.16	-0.0131	7.44	14.78	113
DS-107	100-001	10.13	8.77	-0.0131	7.44	14.78	113
DS-107	100-002	10.13	8.62	-0.0131	7.44	14.78	113
DS-107	100-004	10.13	8.62	-0.0131	7.44	14.78	113
DS-107	100-008	10.13	8.98	-0.0131	7.44	14.78	113
DS-107	100-024	10.13	8.36	-0.0131	7.44	14.78	113

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-108	002-024 (SCS III)	10.13	8.19	0.0282	73.21	13.98	579
DS-108	025-001	10.13	8.07	0.0258	73.24	17.02	575
DS-108	025-002	10.13	8.12	0.0258	73.24	16.24	575
DS-108	025-004	10.13	8.25	0.0258	73.24	9.58	575
DS-108	025-008	10.13	8.40	0.0258	73.24	11.83	575
DS-108	025-024	10.13	8.16	0.0258	73.24	9.18	575
DS-108	100-001	10.13	8.63	0.0258	73.24	22.28	575
DS-108	100-002	10.13	8.69	0.0258	73.24	21.28	575
DS-108	100-004	10.13	8.60	0.0258	73.24	12.97	575
DS-108	100-008	10.13	8.91	0.0258	73.24	15.41	575
DS-108	100-024	10.13	8.35	0.0258	73.24	9.18	575

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-109	002-024 (SCS III)	10.48	8.04	0.0010	6.38	0.50	100
DS-109	025-001	10.48	7.85	0.0008	0.41	0.40	113
DS-109	025-002	10.48	8.02	0.0009	0.42	0.45	113
DS-109	025-004	10.48	8.22	0.0009	0.26	0.45	113
DS-109	025-008	10.48	8.33	0.0010	0.34	0.53	113
DS-109	025-024	10.48	8.15	0.0005	0.12	0.25	113

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Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-109	100-001	10.48	8.24	0.0007	0.50	0.60	113
DS-109	100-002	10.48	8.32	0.0010	0.59	0.69	113
DS-109	100-004	10.48	8.94	0.0010	0.36	0.55	113
DS-109	100-008	10.48	8.72	0.0010	0.46	0.64	113
DS-109	100-024	10.48	8.33	-0.0007	0.17	0.39	113

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-110	002-024 (SCS III)	10.48	8.03	-0.0010	0.76	0.68	100
DS-110	025-001	10.48	7.85	-0.0009	0.66	0.62	113
DS-110	025-002	10.48	8.02	-0.0010	0.72	0.65	113
DS-110	025-004	10.48	8.22	0.0010	0.63	0.61	113
DS-110	025-008	10.48	8.32	0.0010	0.78	0.65	113
DS-110	025-024	10.48	8.15	-0.0008	0.34	0.46	113
DS-110	100-001	10.48	8.24	0.0010	0.98	0.88	113
DS-110	100-002	10.48	8.32	-0.0010	1.08	0.92	113
DS-110	100-004	10.48	8.54	-0.0010	0.81	0.66	113
DS-110	100-008	10.48	8.72	0.0010	0.98	0.79	113
DS-110	100-024	10.48	8.33	-0.0010	0.52	0.57	113

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
DS-111	002-024 (SCS III)	11.37	8.03	-0.0296	27.29	34.76	100
DS-111	025-001	11.37	7.84	-0.0265	27.16	34.78	113
DS-111	025-002	11.37	8.02	-0.0265	27.16	34.78	113
DS-111	025-004	11.37	8.22	-0.0265	27.16	34.78	113
DS-111	025-008	11.37	8.32	-0.0265	27.16	34.78	113
DS-111	025-024	11.37	8.15	-0.0265	27.16	34.78	113
DS-111	100-001	11.37	8.23	-0.0265	27.16	34.78	113
DS-111	100-002	11.37	8.31	-0.0265	27.16	34.78	113
DS-111	100-004	11.37	8.54	-0.0265	27.16	34.78	113
DS-111	100-008	11.37	8.71	-0.0265	27.16	34.78	113
DS-111	100-024	11.37	8.33	-0.0265	27.16	34.78	113

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Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
DS-112	002-024 (SCS III)	9.50	7.98	-0.0055	26.87	27.25	100
DS-112	025-001	9.50	7.76	-0.0056	26.64	27.12	113
DS-112	025-002	9.50	8.01	-0.0056	26.64	27.12	113
DS-112	025-004	9.50	8.20	-0.0056	26.64	27.12	113
DS-112	025-008	9.50	8.31	-0.0056	26.64	27.12	113
DS-112	025-024	9.50	8.14	-0.0056	26.64	27.12	113
DS-112	100-001	9.50	7.99	-0.0055	26.64	27.12	113
DS-112	100-002	9.50	8.23	-0.0056	26.64	27.12	113
DS-112	100-004	9.50	8.49	-0.0056	26.64	27.12	113
DS-112	100-008	9.50	8.61	-0.0056	26.64	27.12	113
DS-112	100-024	9.50	8.31	-0.0056	26.64	27.12	113

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Outfall	002-024 (SCS III)	7.00	6.75	0.0000	3.38	0.00	0
Outfall	025-001	7.00	6.75	0.0000	1.41	0.00	0
Outfall	025-002	7.00	6.75	0.0000	3.72	0.00	0
Outfall	025-004	7.00	6.75	0.0000	5.78	0.00	0
Outfall	025-008	7.00	6.75	0.0000	7.21	0.00	0
Outfall	025-024	7.00	6.75	0.0000	5.23	0.00	0
Outfall	100-001	7.00	6.75	0.0000	3.17	0.00	0
Outfall	100-002	7.00	6.75	0.0000	6.18	0.00	0
Outfall	100-004	7.00	6.75	0.0000	8.86	0.00	0
Outfall	100-008	7.00	6.75	0.0000	9.75	0.00	0
Outfall	100-024	7.00	6.75	0.0000	7.34	0.00	0

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Pre-Development Basin	002-024 (SCS III)	1.00	0.00	0.0000	11.21	0.00	0
Pre-Development Basin	025-001	1.00	0.00	0.0000	11.87	0.00	0
Pre-Development Basin	025-002	1.00	0.00	0.0000	12.27	0.00	0
Pre-Development Basin	025-004	1.00	0.00	0.0000	11.05	0.00	0

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Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Pre-Development Basin	025-008	1.00	0.00	0.0000	12.85	0.00	0
Pre-Development Basin	025-024	1.00	0.00	0.0000	5.45	0.00	0
Pre-Development Basin	100-001	1.00	0.00	0.0000	15.23	0.00	0
Pre-Development Basin	100-002	1.00	0.00	0.0000	15.88	0.00	0
Pre-Development Basin	100-004	1.00	0.00	0.0000	14.43	0.00	0
Pre-Development Basin	100-008	1.00	0.00	0.0000	16.60	0.00	0
Pre-Development Basin	100-024	1.00	0.00	0.0000	6.98	0.00	0

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
SWMP 1	002-024 (SCS III)	9.00	7.98	0.0006	26.75	26.87	74494
SWMP 1	025-001	9.00	7.76	0.0009	35.92	26.64	72847
SWMP 1	025-002	9.00	8.01	0.0009	32.65	26.64	74736
SWMP 1	025-004	9.00	8.19	0.0005	18.68	26.64	76680
SWMP 1	025-008	9.00	8.29	0.0004	21.78	26.64	76902
SWMP 1	025-024	9.00	8.14	0.0001	7.92	26.64	75716
SWMP 1	100-001	9.00	7.96	0.0010	45.59	26.64	74347
SWMP 1	100-002	9.00	8.22	0.0008	41.58	26.64	76329
SWMP 1	100-004	9.00	8.47	0.0005	24.58	26.64	78223
SWMP 1	100-008	9.00	8.59	0.0005	27.91	26.64	79181
SWMP 1	100-024	9.00	8.30	0.0001	9.97	26.64	76952

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Up Velocity [fps]	Max Down Velocity [fps]	Max Avg Velocity [fps]
DP-100	002-024 (SCS III)	1.91	-0.54	-0.51	1.07	1.07	1.07
DP-100	025-001	2.34	-0.56	-0.49	1.31	1.31	1.31
DP-100	025-002	2.22	-0.56	0.53	1.25	1.25	1.25
DP-100	025-004	1.31	-0.56	0.52	1.13	1.13	1.13

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Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Up Velocity [fps]	Max Down Velocity [fps]	Max Avg Velocity [fps]
DP-100	025-008	1.60	-0.56	-0.50	1.13	1.13	1.13
DP-100	025-024	1.17	-0.56	0.58	1.13	1.13	1.13
DP-100	100-001	3.09	-0.56	-0.50	1.74	1.74	1.74
DP-100	100-002	2.92	-0.56	0.56	1.64	1.64	1.64
DP-100	100-004	1.77	-0.56	0.56	1.13	1.13	1.13
DP-100	100-008	2.09	-0.56	-0.50	1.17	1.17	1.17
DP-100	100-024	1.17	-0.56	0.58	1.13	1.13	1.13

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Up Velocity [fps]	Max Down Velocity [fps]	Max Avg Velocity [fps]
DP-101	002-024 (SCS III)	3.15	-1.38	0.96	1.27	1.04	1.16
DP-101	025-001	3.84	-1.32	-0.90	1.28	1.22	1.22
DP-101	025-002	3.66	-1.32	0.92	1.28	1.16	1.17
DP-101	025-004	2.95	-1.32	-0.98	1.28	1.06	1.17
DP-101	025-008	2.95	-1.32	-0.96	1.28	1.06	1.17
DP-101	025-024	2.95	-1.32	-1.00	1.28	1.06	1.17
DP-101	100-001	5.08	-1.32	0.92	1.62	1.62	1.62
DP-101	100-002	4.82	-1.32	0.88	1.53	1.53	1.53
DP-101	100-004	2.95	-1.32	0.94	1.28	1.06	1.17
DP-101	100-008	3.46	-1.32	-0.99	1.28	1.10	1.17
DP-101	100-024	2.95	-1.32	-1.02	1.28	1.06	1.17

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Up Velocity [fps]	Max Down Velocity [fps]	Max Avg Velocity [fps]
DP-102	002-024 (SCS III)	1.90	-0.54	0.55	1.25	1.28	1.27
DP-102	025-001	2.33	-0.56	0.49	1.33	1.38	1.35
DP-102	025-002	2.22	-0.56	0.49	1.33	1.38	1.35
DP-102	025-004	1.30	-0.56	0.54	1.33	1.38	1.35
DP-102	025-008	1.60	-0.56	0.50	1.33	1.38	1.35
DP-102	025-024	1.24	-0.56	-0.63	1.33	1.38	1.35
DP-102	100-001	3.10	-0.56	0.50	1.74	1.74	1.74
DP-102	100-002	2.92	-0.56	0.48	1.64	1.64	1.64
DP-102	100-004	1.76	-0.56	0.56	1.33	1.38	1.35
DP-102	100-008	2.08	-0.56	0.61	1.33	1.38	1.35
DP-102	100-024	1.24	-0.56	0.62	1.33	1.38	1.35

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Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Up Velocity [fps]	Max Down Velocity [fps]	Max Avg Velocity [fps]
DP-103	002-024 (SCS III)	7.13	-3.22	0.90	2.50	2.36	2.43
DP-103	025-001	7.45	-3.03	-0.79	2.51	2.38	2.44
DP-103	025-002	7.11	-3.03	-0.95	2.51	2.38	2.44
DP-103	025-004	7.10	-3.03	-0.92	2.51	2.38	2.44
DP-103	025-008	7.10	-3.03	0.89	2.51	2.38	2.44
DP-103	025-024	7.10	-3.03	0.98	2.51	2.38	2.44
DP-103	100-001	9.59	-3.03	0.81	3.01	3.01	3.01
DP-103	100-002	9.23	-3.03	0.86	2.90	2.90	2.90
DP-103	100-004	7.10	-3.03	0.85	2.51	2.38	2.41
DP-103	100-008	7.10	-3.03	0.90	2.51	2.38	2.44
DP-103	100-024	7.10	-3.03	0.95	2.51	2.38	2.44

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Up Velocity [fps]	Max Down Velocity [fps]	Max Avg Velocity [fps]
DP-104	002-024 (SCS III)	9.75	-3.75	1.11	3.29	3.46	3.37
DP-104	025-001	9.79	-3.60	1.03	3.28	3.44	3.36
DP-104	025-002	9.79	-3.60	1.03	3.28	3.44	3.36
DP-104	025-004	9.79	-3.60	1.03	3.28	3.44	3.36
DP-104	025-008	9.79	-3.60	1.03	3.28	3.44	3.36
DP-104	025-024	9.79	-3.60	1.03	3.28	3.44	3.36
DP-104	100-001	9.79	-3.60	1.03	3.28	3.44	3.36
DP-104	100-002	9.79	-3.60	1.03	3.28	3.44	3.36
DP-104	100-004	9.79	-3.60	1.03	3.28	3.44	3.36
DP-104	100-008	9.79	-3.60	1.03	3.28	3.44	3.36
DP-104	100-024	9.79	-3.60	1.03	3.28	3.44	3.36

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Up Velocity [fps]	Max Down Velocity [fps]	Max Avg Velocity [fps]
DP-105	002-024 (SCS III)	2.56	-1.05	0.45	2.11	3.61	2.82
DP-105	025-001	3.23	-1.01	0.43	2.11	3.61	2.82
DP-105	025-002	3.03	-1.01	0.51	2.11	3.61	2.82
DP-105	025-004	2.23	-1.01	0.52	2.11	3.61	2.82
DP-105	025-008	2.23	-1.01	-0.53	2.11	3.61	2.82
DP-105	025-024	2.23	-1.01	-0.50	2.11	3.61	2.82

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Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
DP-105	100-001	4.21	-1.01	0.43	2.37	3.61	2.82
DP-105	100-002	3.96	-1.01	0.43	2.23	3.61	2.82
DP-105	100-004	2.37	-1.01	-0.51	2.11	3.61	2.82
DP-105	100-008	2.76	-1.01	0.48	2.11	3.61	2.82
DP-105	100-024	2.23	-1.01	0.56	2.11	3.61	2.82

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
DP-106	002-024 (SCS III)	23.68	-5.44	1.39	4.82	6.88	5.85
DP-106	025-001	23.68	-5.26	-1.25	4.82	6.88	5.85
DP-106	025-002	23.68	-5.26	-1.25	4.82	6.88	5.85
DP-106	025-004	23.68	-5.26	1.36	4.82	6.88	5.85
DP-106	025-008	23.68	-5.26	1.31	4.82	6.88	5.85
DP-106	025-024	23.68	-5.26	1.30	4.82	6.88	5.85
DP-106	100-001	23.68	-5.26	1.26	4.82	6.88	5.85
DP-106	100-002	23.68	-5.26	-1.25	4.82	6.88	5.85
DP-106	100-004	23.68	-5.26	-1.25	4.82	6.88	5.85
DP-106	100-008	23.68	-5.26	-1.25	4.82	6.88	5.85
DP-106	100-024	23.68	-5.26	1.42	4.82	6.88	5.85

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
DP-107	002-024 (SCS III)	14.78	-7.44	-1.13	8.31	8.56	8.43
DP-107	025-001	14.78	-7.44	-0.97	8.31	8.56	8.43
DP-107	025-002	14.78	-7.44	-0.97	8.31	8.56	8.43
DP-107	025-004	14.78	-7.44	-0.97	8.31	8.56	8.43
DP-107	025-008	14.78	-7.44	-0.97	8.31	8.56	8.43
DP-107	025-024	14.78	-7.44	-0.97	8.31	8.56	8.43
DP-107	100-001	14.78	-7.44	-0.97	8.31	8.56	8.43
DP-107	100-002	14.78	-7.44	-0.97	8.31	8.56	8.43
DP-107	100-004	14.78	-7.44	-0.97	8.31	8.56	8.43
DP-107	100-008	14.78	-7.44	-0.97	8.31	8.56	8.43
DP-107	100-024	14.78	-7.44	-0.97	8.31	8.56	8.43

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
DP-108	002-024 (SCS III)	13.98	-34.76	2.09	-4.92	-7.30	-6.11
DP-108	025-001	17.02	-34.78	1.73	-4.92	-7.30	-6.11
DP-108	025-002	16.24	-34.78	1.84	-4.92	-7.30	-6.11
DP-108	025-004	9.58	-34.78	1.76	-4.92	-7.30	-6.11
DP-108	025-008	11.83	-34.78	2.15	-4.92	-7.30	-6.11
DP-108	025-024	4.50	-34.78	2.18	-4.92	-7.30	-6.11
DP-108	100-001	22.28	-34.78	1.82	-4.92	-7.30	-6.11
DP-108	100-002	21.28	-34.78	1.76	-4.92	-7.30	-6.11
DP-108	100-004	12.97	-34.78	1.85	-4.92	-7.30	-6.11
DP-108	100-008	15.41	-34.78	2.18	-4.92	-7.30	-6.11
DP-108	100-024	5.72	-34.78	2.12	-4.92	-7.30	-6.11

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
DP-109	002-024 (SCS III)	0.50	-0.03	-0.32	0.57	0.35	0.36
DP-109	025-001	0.40	-0.01	-0.21	0.41	0.37	0.39
DP-109	025-002	0.45	-0.01	-0.33	0.43	0.37	0.40
DP-109	025-004	0.45	-0.01	-0.42	0.35	0.33	0.34
DP-109	025-008	0.53	0.00	-0.40	0.35	0.33	0.34
DP-109	025-024	0.25	0.00	-0.24	0.17	0.17	0.17
DP-109	100-001	0.60	-0.01	-0.21	0.39	0.36	0.37
DP-109	100-002	0.69	-0.01	-0.43	0.43	0.40	0.40
DP-109	100-004	0.55	-0.01	-0.48	0.36	0.34	0.35
DP-109	100-008	0.64	0.00	-0.42	0.36	0.36	0.36
DP-109	100-024	0.39	0.00	-0.36	0.23	0.22	0.23

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
DP-110	002-024 (SCS III)	0.68	-0.01	0.52	0.48	0.38	0.43
DP-110	025-001	0.62	-0.05	0.42	0.54	-0.60	0.44
DP-110	025-002	0.65	-0.04	0.52	0.52	-0.51	0.44
DP-110	025-004	0.61	-0.02	0.54	0.57	-0.35	0.39
DP-110	025-008	0.65	-0.02	0.55	0.55	0.37	0.39
DP-110	025-024	0.46	-0.01	-0.43	0.31	0.26	0.28

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
DP-110	100-001	0.88	-0.05	-0.32	0.54	-0.61	0.52
DP-110	100-002	0.92	-0.04	0.54	0.53	-0.54	0.52
DP-110	100-004	0.66	-0.03	0.50	0.53	0.37	0.40
DP-110	100-008	0.79	-0.02	0.57	0.46	0.45	0.45
DP-110	100-024	0.57	-0.01	0.55	0.34	0.32	0.33

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
DP-111	002-024 (SCS III)	14.53	-27.25	-4.59	-3.85	-3.85	-3.85
DP-111	025-001	17.52	-27.12	-4.35	-3.84	-3.84	-3.84
DP-111	025-002	16.78	-27.12	-4.35	-3.84	-3.84	-3.84
DP-111	025-004	9.95	-27.12	-4.35	-3.84	-3.84	-3.84
DP-111	025-008	12.35	-27.12	-4.35	-3.84	-3.84	-3.84
DP-111	025-024	5.64	-27.12	-4.35	-3.84	-3.84	-3.84
DP-111	100-001	23.02	-27.12	-4.35	-3.84	-3.84	-3.84
DP-111	100-002	22.07	-27.12	-4.35	-3.84	-3.84	-3.84
DP-111	100-004	13.48	-27.12	-4.35	-3.84	-3.84	-3.84
DP-111	100-008	16.13	-27.12	-4.35	-3.84	-3.84	-3.84
DP-111	100-024	6.10	-27.12	-4.35	-3.84	-3.84	-3.84

Link Min/Max Conditions [Scenario1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
DP-112	002-024 (SCS III)	14.49	-26.67	1.92	-3.80	-3.80	-3.80
DP-112	025-001	17.47	-26.64	-1.85	-3.77	-3.77	-3.77
DP-112	025-002	16.73	-26.64	-1.88	-3.77	-3.77	-3.77
DP-112	025-004	9.85	-26.64	-1.81	-3.77	-3.77	-3.77
DP-112	025-008	12.30	-26.64	-1.89	-3.77	-3.77	-3.77
DP-112	025-024	4.68	-26.64	-1.91	-3.77	-3.77	-3.77
DP-112	100-001	22.95	-26.64	-1.83	-3.77	-3.77	-3.77
DP-112	100-002	22.01	-26.64	-1.83	-3.77	-3.77	-3.77
DP-112	100-004	13.44	-26.64	-1.83	-3.77	-3.77	-3.77
DP-112	100-008	16.10	-26.64	-1.90	-3.77	-3.77	-3.77
DP-112	100-024	5.90	-26.64	-1.93	-3.77	-3.77	-3.77

Link Min/Max Conditions [Scenario1]

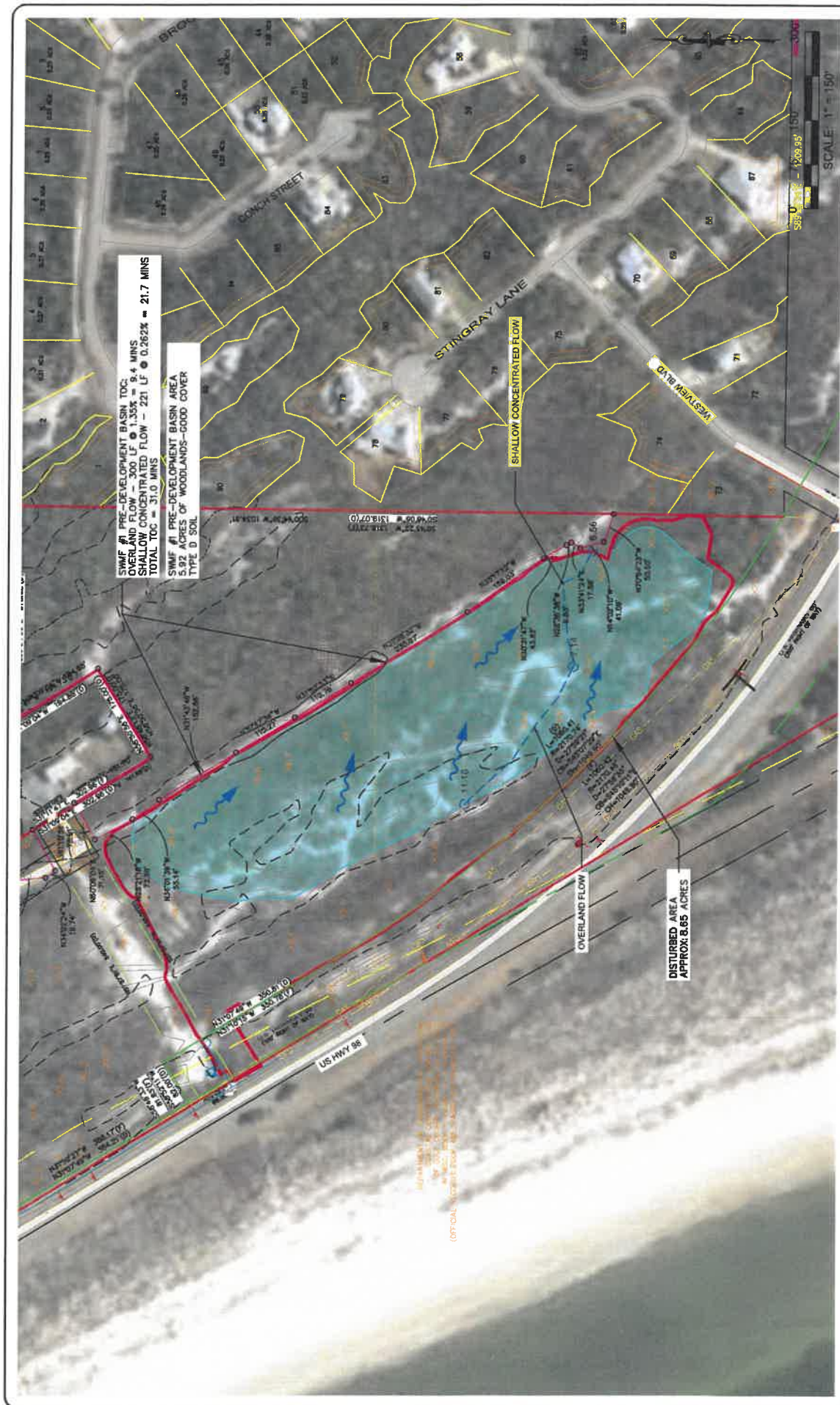
Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
SWMF Outfall - Pipe	002-024 (SCS III)	3.30	0.00	0.01	0.00	0.00	0.00
SWMF Outfall - Weir: 1	002-024 (SCS III)	0.13	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 2	002-024 (SCS III)	3.17	0.00	0.00	2.21	2.21	2.21
SWMF Outfall - Weir: 3	002-024 (SCS II)	0.00	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Pipe	025-001	1.40	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 1	025-001	0.12	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 2	025-001	1.28	0.00	0.00	1.63	1.63	1.63
SWMF Outfall - Weir: 3	025-001	0.00	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Pipe	025-002	3.62	0.00	0.01	0.00	0.00	0.00
SWMF Outfall - Weir: 1	025-002	0.13	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 2	025-002	3.49	0.00	0.00	2.28	2.28	2.28
SWMF Outfall - Weir: 3	025-002	0.00	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Pipe	025-004	5.58	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 1	025-004	0.14	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 2	025-004	5.46	0.00	0.00	2.65	2.65	2.65
SWMF Outfall - Weir: 3	025-004	0.00	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Pipe	025-008	6.91	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 1	025-008	0.14	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 2	025-008	6.79	0.00	-0.01	2.85	2.85	2.85
SWMF Outfall - Weir: 3	025-008	0.00	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Pipe	025-024	5.03	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 1	025-024	0.14	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 2	025-024	4.90	0.00	0.00	2.56	2.56	2.56



Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
SWMF Outfall - Weir: 3	025-024	0.00	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Pipe	100-001	3.10	0.00	0.01	0.00	0.00	0.00
SWMF Outfall - Weir: 1	100-001	0.13	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 2	100-001	2.98	0.00	0.00	2.17	2.17	2.17
SWMF Outfall - Weir: 3	100-001	0.00	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Pipe	100-002	5.97	0.00	0.01	0.00	0.00	0.00
SWMF Outfall - Weir: 1	100-002	0.14	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 2	100-002	5.85	0.00	0.01	2.71	2.71	2.71
SWMF Outfall - Weir: 3	100-002	0.00	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Pipe	100-004	8.39	0.00	0.01	0.00	0.00	0.00
SWMF Outfall - Weir: 1	100-004	0.14	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 2	100-004	8.28	0.00	-0.01	2.89	2.89	2.89
SWMF Outfall - Weir: 3	100-004	0.00	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Pipe	100-008	9.24	0.00	0.01	0.00	0.00	0.00
SWMF Outfall - Weir: 1	100-008	0.14	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 2	100-008	9.14	0.00	0.00	2.89	2.89	2.89
SWMF Outfall - Weir: 3	100-008	0.00	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Pipe	100-024	6.99	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 1	100-024	0.14	0.00	0.00	0.00	0.00	0.00
SWMF Outfall - Weir: 2	100-024	6.87	0.00	0.00	2.86	2.86	2.86
SWMF Outfall - Weir: 3	100-024	0.00	0.00	0.00	0.00	0.00	0.00

## EXHIBIT 5

### DRAINAGE BASIN MAPS



SWMF #1 PRE-DEVELOPMENT BASIN TOC:  
 OVERLAND FLOW - 300 LF @ 1.35% = 9.4 MINS  
 SHALLOW CONCENTRATED FLOW - 221 LF @ 0.262% = 21.7 MINS  
 TOTAL TOC = 31.0 MINS  
 SWMF #1 PRE-DEVELOPMENT BASIN AREA  
 5.92 ACRES OF WOODLANDS-GOOD COVER  
 TYPE D SOIL

OPTIONAL: 10' DEEP DRAINAGE CANAL  
 10' DEEP DRAINAGE CANAL  
 10' DEEP DRAINAGE CANAL  
 10' DEEP DRAINAGE CANAL

NO.	DATE	REVISION	<b>Dewberry</b> 203 Aberdeen Parkway, Panama City, FL 32405 850.522.0644, www.dewberry.com	WINDMARK BEACH NORTH TOWNHOMES PRE-DEVELOPMENT DRAINAGE BASIN MAP	ESB 000794 PROJECT NO. 50144759 SCALE: 1" = 150' DATE: 11/15/22 DRAWN: JMM CHECKED: JMM APPROVED: JMM SHEET 1 OF 2





## EXHIBIT 6

# GEOTECHNICAL REPORT



**MAGNUM ENGINEERING INC**  
**GEOTECHNICAL ENGINEERING**  
**CONSULTANTS**

**GEOTECHNICAL ENGINEERING REPORT**

**WINDMARK NORTH TOWNHOMES**  
**GULF COUNTY, FLORIDA**

**PREPARED FOR:**

**Mr. Jonathan Sklarski, P.E.**  
**Dewberry Engineers, Inc.**  
**203 Aberdeen Parkway**  
**Panama City, Florida 32405**

**429 FLORIDA AVENUE**  
**LYNN HAVEN, FLORIDA 32444**  
**TELEPHONE (850) 258.0994**



**MAGNUM ENGINEERING INC**  
**GEOTECHNICAL ENGINEERING**  
**CONSULTANTS**

November 18, 2021

Mr. Jonathan Sklarski, P.E.  
Dewberry Engineers, Inc.  
203 Aberdeen Parkway  
Panama City, Florida 32405

**SUBJECT:** Windmark North Townhomes – Geotechnical Services for Roadway and Stormwater Ponds  
Gulf County, Florida  
MEI Project No. M121-100-330

Dear Mr. Sklarski:

This letter forwards the results of the geotechnical services performed for the proposed Windmark North Townhomes development in Gulf County, Florida. The purpose of this exploration was to determine soil types, groundwater depths, and the estimated seasonal high groundwater levels in the proposed roadway and stormwater pond areas. In addition, site/soil preparation recommendations and pavement recommendations have been provided for the proposed roadways.

**Project Description and Scope of Work**

The subject site is located east of US Highway 98, south of Pine Street and just north of the Sunset Village Subdivision in Gulf County, Florida. At the time of our exploration, the site was undeveloped, wooded with coastal dune vegetation, and had several trails traversing the property.

Our exploration consisted of performing a total of Ten (10) hand auger borings to a depth of 5-feet deep at the locations shown on the attached boring location plan identified as Figure #1.

**Subsurface Conditions**

The borings generally encountered light gray clean fine sands from the ground surface to the boring termination depths of 5-feet below existing grade. Surficial organics were encountered in borings HA-7 through HA-10. These areas consisted of wetland material and groundwater was encountered at the surface of the borings.

The above subsurface descriptions are of a generalized nature, provided to highlight the major soil strata encountered. The Logs of Boring should be reviewed for specific subsurface conditions at each boring location. The stratifications shown on the Logs of Boring represent the subsurface conditions at the actual boring locations only, and variations in the subsurface conditions can and may occur between boring locations and should therefore be expected. The stratifications represent the approximate boundary between subsurface materials, and the transitions between strata may be gradual.

Figure #1 shows the boring location plan and Figure #2 shows the Logs of Borings for borings HA-1 to HA-10.



### Groundwater Conditions

Groundwater was encountered between the surface and 2.8 feet below existing grade at the time of drilling (November 3, 2021), which was during a period of slightly above normal seasonal rainfall. By definition, the normal seasonal high groundwater table elevation is the highest level of the saturated zone in the soil during a year with normal rainfall. The procedure used in estimating the seasonal high groundwater table is based on adjusting the existing groundwater table encountered upward or downward and taking into consideration factors such as antecedent rainfall, redoximorphic features (identifying soil mottling) and vegetative indicators. The following Table #1 provides the groundwater levels and estimated seasonal high groundwater levels at each boring location. Groundwater levels will fluctuate with rainfall and could vary several feet during typical seasonal fluctuations. Larger fluctuations are possible under severe weather conditions.

**TABLE #1**  
**GROUNDWATER DATA**

TEST LOCATION	DEPTH TO EXISTING GROUNDWATER TABLE (ft)	DEPTH TO ESTIMATED SEASONAL HIGH GROUNDWATER TABLE (ft)
HA-1	1.5 feet	1.5 feet
HA-2	2.2 feet	2.2 feet
HA-3	2.7 feet	2.7 feet
HA-4	2.8 feet	2.8 feet
HA-5	2.2 feet	2.2 feet
HA-6	Surface	Surface
HA-7	Surface	Surface
HA-8	Surface	Surface
HA-9	Surface	Surface
HA-10	Surface	Surface

The following geotechnical related design recommendations have been developed on the basis of the previously described project characteristics and subsurface conditions encountered. If there are any changes in these project criteria, including project location on the site, a review should be made by Magnum Engineering to determine if modifications to the recommendations are warranted.

Once final design plans and specifications are available, a general review by Magnum Engineering is recommended as a means to check that the evaluations made in preparation of this report are correct and that earthwork and foundation recommendations are properly interpreted and implemented

### Site Preparation

The site should be cleared and grubbed of surface vegetation and any other deleterious material. As a minimum, it is recommended the clearing operations extend at least five feet beyond the development perimeters.

Fill and backfill, if required to raise site to final grades, should consist of sandy soils with less than 15 percent passing the No. 200 sieve. These soils should be free of rubble, organics, clay, debris and other unsuitable material. Fill should be placed in lifts on the order of 12 inches or less (in loose thickness) and compacted to 95 percent of the soil's Modified Proctor maximum dry density, per ASTM D-1557.

**Windmark North Townhomes - Geotechnical Services**  
**Gulf County, Florida**  
**Page 3 of 4**

Prior to placing fill soils, where applicable, the top of the ground surface should be compacted to a minimum soil density of 95% of the Modified Proctor Test (ASTM D1557).

Structural fill soils should be placed in maximum 12-inch lifts and compacted to a minimum soil density of 95% of the Modified Proctor Test (ASTM D1557). The top 12 inches of subgrade should be compacted to a minimum soil density of 98% of the Modified Proctor Test (ASTM D1557). The top 12 inches of subgrade should have a minimum LBR value of 40. We recommend that structural fill soils, where planned, have a minimum LBR of 40.

**Pavement Recommendations**

Based on the subsurface conditions encountered in the test borings, we recommend using a graded aggregate base (i.e. limerock or crushed concrete). The base course should be compacted to a minimum soil density of 98% of the Modified Proctor Test (ASTM D1557).

Without benefit of traffic loads, volumes, and serviceability parameters, a pavement section cannot be designed. However, typical pavement in the local area generally consist of a minimum of 1½ inches of FDOT Superpave Mix SP-12.5 or SP-9.5 asphaltic concrete and a minimum of 6 inches of base. Moderate duty traffic areas (e.g. main entrance areas) typically have a minimum pavement section consisting of 2 inches of FDOT Superpave Mix SP-12.5 asphaltic concrete and 8 inches of base.

The above sections represent minimum thicknesses representative of typical, local construction practices, and as such periodic maintenance should be anticipated. All pavement materials and construction procedures should conform to FDOT and/or appropriate city or county requirements

While specific traffic loads and volumes for the project have not been provided, we are providing recommended light-duty and medium-duty pavement sections, which have been successfully utilized for this type of commercial development in the Northwest Florida area.

**Light Duty (General roadway areas)**

- 1 ½ inches Asphalt Concrete (FDOT Superpave Mix SP-12.5 or SP-9.5)
- 6 inches Crushed Limerock or Graded Aggregate Base (minimum LBR 100)
- 12 inches stabilized subgrade (minimum LBR 40)

**Medium Duty (Entrance Lanes, Dumpster Pads)**

- 2 inches Asphaltic Concrete (FDOT Superpave Mix SP-12.5)
- 8 inches Crushed Limerock or Graded Aggregate Base (minimum LBR 100)
- 12 inches Stabilized Subgrade (minimum LBR 40)

The above recommended pavement sections represent minimum design thicknesses and, as such, periodic maintenance should be anticipated. Also, these recommended pavement sections should be confirmed or modified by your Civil Engineer, based on actual traffic and the owner's requirements. The pavement section materials and construction should comply with the Florida DOT and local municipality requirements.

**If the seasonal high groundwater level will be less than 24 inches below the bottom of the base course, we recommend the medium duty pavement section be used.**

**Warranty and Limitations of Study**

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either expressed or implied. Magnum Engineering, Inc. is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report.

Soil conditions at other locations may differ from those encountered in the test borings, and the passage of time may cause the soils conditions to change from those described in this report.

This report is intended for use by the designers of this project. While we have no objections to it being provided for review by parties to this project, it is not a specification document and is not to be used as a part of the specifications. If desired, we can assist in the development of specifications for this project based upon our exploration.

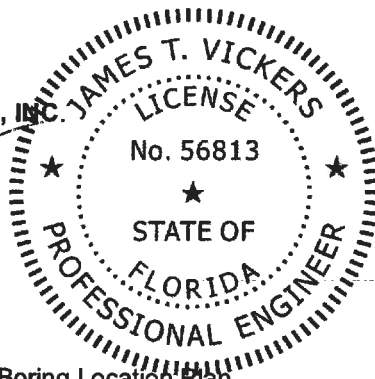
The nature and extent of variation and change in the subsurface conditions at the site may not become evident until the course of construction. Construction monitoring by the geotechnical engineer or his representative is therefore considered necessary to verify the subsurface conditions and to check that the soils connected construction phases are properly carried out. If significant variations or changes are in evidence, it may be necessary to reevaluate the recommendations in this report.

Furthermore, if the project characteristics are altered significantly from those discussed in this report, or if the project information contained in this report is incorrect and additional information becomes available, a review must be made by this office to determine if any modifications in the recommendations will be necessary.

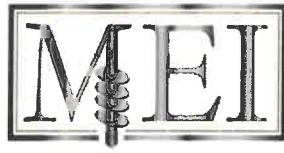
We hope this letter provides sufficient information for the present. If you have any questions or comments, please feel free to call.

Sincerely,  
**MAGNUM ENGINEERING, INC.**

  
JAMES T. VICKERS, P.E.  
Sr. Geotechnical Engineer  
Florida Reg. #56813



Attachments: Figure #1 – Boring Location Plan  
Figure #2 – Logs of Borings

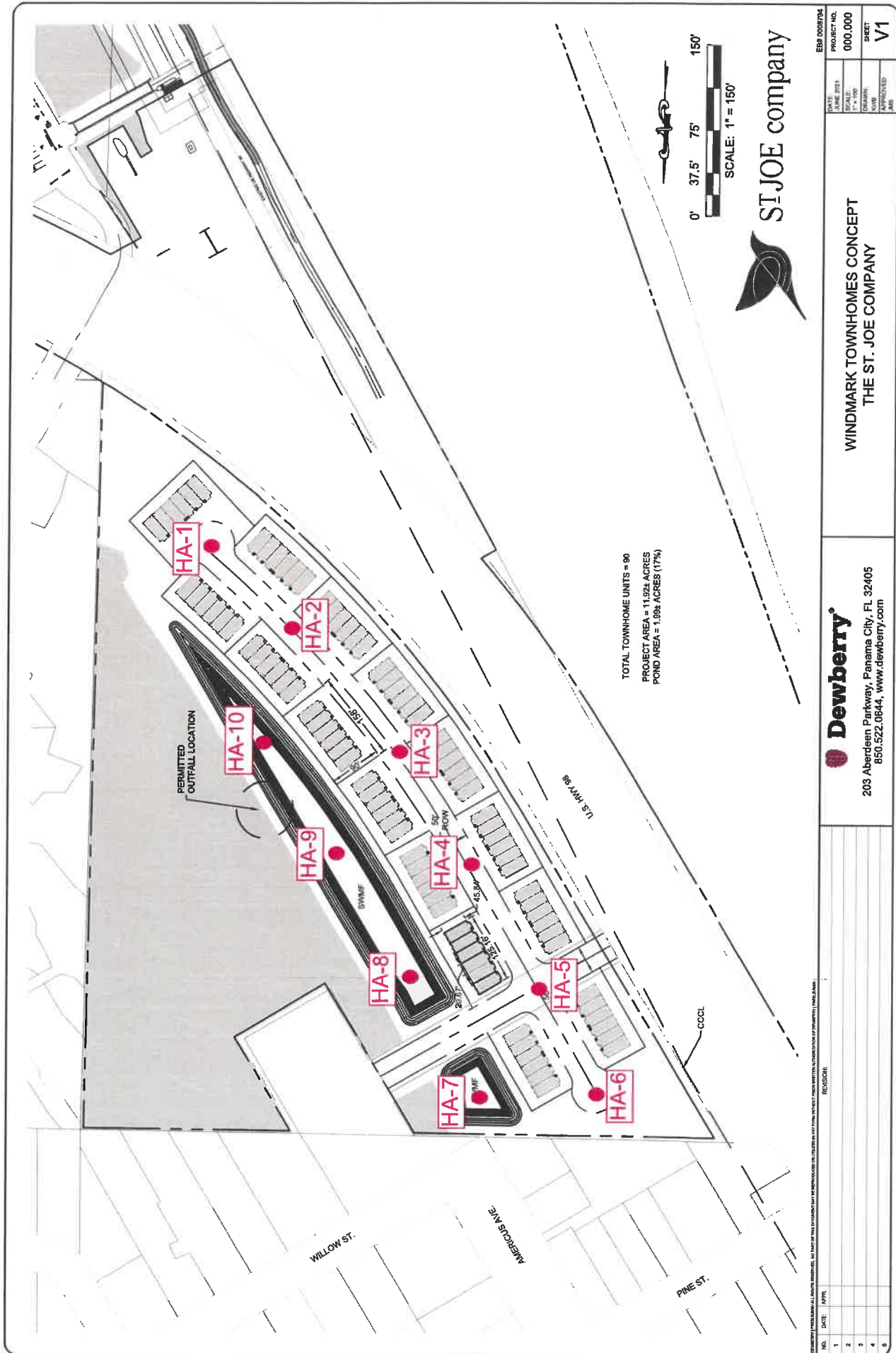


**MAGNUM ENGINEERING INC**  
**GEOTECHNICAL ENGINEERING**  
**CONSULTANTS**

## **BORING LOCATION PLAN**

**FIGURE # 1**

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DATE: JUNE 2021		PROJECT NO.	0000794
DRAWN: J. WELLSARD		PROJECT NO.	000,000
CHECKED: J. WELLSARD		SHEET	V1
DESIGNED: J. WELLSARD		WINDMARK TOWNHOMES CONCEPT	
DATE: JUNE 2021		THE ST. JOE COMPANY	
DRAWN: J. WELLSARD		203 Aberdeen Parkway, Panama City, FL 32405	
CHECKED: J. WELLSARD		850.522.0644, www.dewberry.com	
DESIGNED: J. WELLSARD		Dewberry	
DATE: JUNE 2021		850.522.0644, www.dewberry.com	
DRAWN: J. WELLSARD		203 Aberdeen Parkway, Panama City, FL 32405	
CHECKED: J. WELLSARD		850.522.0644, www.dewberry.com	
DESIGNED: J. WELLSARD		Dewberry	
DATE: JUNE 2021		850.522.0644, www.dewberry.com	
DRAWN: J. WELLSARD		203 Aberdeen Parkway, Panama City, FL 32405	
CHECKED: J. WELLSARD		850.522.0644, www.dewberry.com	
DESIGNED: J. WELLSARD		Dewberry	