GROWTH MANAGEMENT
205 North Marion Ave.
Lake City, FL 32055
Telephone: (386)719-5750
E-Mail:
growthmanagement@lcfla.com

PLANNING USE ONLY
Application # ~~SPR 23-05~~ SPR23-12
Application Fee: $200.00 5
Receipt No. 2023-00022998
Filing Date 1/6/23
Completeness Date _____

Site Plan Application

A. PROJECT INFORMATION

1. Project Name: The Pines at Forest Meadows
2. Address of Subject Property: 450 NW Lake City Ave Lake City, FL 32055
3. Parcel ID Number(s): 34-3S-16-02461-601 & 34-3S-16-02461-602
4. Future Land Use Map Designation: _____
5. Zoning Designation: Multi-family
6. Acreage: 1 acre
7. Existing Use of Property: Vacant
8. Proposed use of Property: Multi-family
9. Type of Development (Check All That Apply):
   - [ ] Increase of floor area to an existing structure: Total increase of square footage _____
   - [x] New construction: Total square footage 14,268
   - [ ] Relocation of an existing structure: Total square footage _____

B. APPLICANT INFORMATION

1. Applicant Status ☑ Owner (title holder) ☐ Agent
2. Name of Applicant(s): Mark Ganskop Title: Owner
   Company name (if applicable): _____
   Mailing Address: 736 SW Arbor Ln
   City: Lake City State: FL Zip: 32024
   Telephone: (386) 867-0269 Fax: (____) _____ Email: explumbing@outlook.com

   PLEASE NOTE: Florida has a very broad public records law. Most written communications to or from government officials regarding government business is subject to public records requests. Your e-mail address and communications may be subject to public disclosure.
3. If the applicant is agent for the property owner*.
   Property Owner Name (title holder): The Pines at Forest Meadows
   Mailing Address: 175 NW Amenity Ct
   City: Lake City State: FL Zip: 32055
   Telephone: (386) 867-0269 Fax: (____) _____ Email: explumbing@outlook.com

   PLEASE NOTE: Florida has a very broad public records law. Most written communications to or from government officials regarding government business is subject to public records requests. Your e-mail address and communications may be subject to public disclosure.
   ***Must provide an executed Property Owner Affidavit Form authorizing the agent to act on behalf of the property owner.**

C. ADDITIONAL INFORMATION

1. Is there any additional contract for the sale of, or options to purchase, the subject property?
   If yes, list the names of all parties involved: No
   If yes, is the contract/option contingent or absolute: ☐ Contingent ☐ Absolute
2. Has a previous application been made on all or part of the subject property? ☐Yes ☑No
   Future Land Use Map Amendment: ☐Yes _____ ☑No _____
   Future Land Use Map Amendment Application No. _____
   Site Specific Amendment to the Official Zoning Atlas (Rezoning): ☐Yes _____ ☑No _____
   Site Specific Amendment to the Official Zoning Atlas (Rezoning) Application No. _____
   Variance: ☐Yes _____ ☑No _____
   Variance Application No. _____
   Special Exception: ☐Yes _____ ☑No _____
   Special Exception Application No. _____

D. ATTACHMENT/SUBMITTAL REQUIREMENTS

✓ Vicinity Map – Indicating general location of the site, abutting streets, existing utilities, complete legal description of the property in question, and adjacent land use.

✓ Site Plan – Including, but not limited to the following:

a. Name, location, owner, and designer of the proposed development.
b. Present zoning for subject site.
c. Location of the site in relation to surrounding properties, including the means of ingress and egress to such properties and any screening or buffers on such properties.
d. Date, north arrow, and graphic scale not less than one inch equal to 50 feet.
e. Area and dimensions of site (Survey).
f. Location of all property lines, existing right-of-way approaches, sidewalks, curbs, and gutters.
g. Access to utilities and points of utility hook-up.
h. Location and dimensions of all existing and proposed parking areas and loading areas.
i. Location, size, and design of proposed landscaped areas (including existing trees and required landscaped buffer areas).
j. Location and size of any lakes, ponds, canals, or other waters and waterways.
k. Structures and major features fully dimensioned including setbacks, distances between structures, floor area, width of driveways, parking spaces, property or lot lines, and percent of property covered by structures.
l. Location of trash receptacles.
m. For multiple-family, hotel, motel, and mobile home park site plans:
   i. Tabulation of gross acreage.
   ii. Tabulation of density.
   iii. Number of dwelling units proposed.
   iv. Location and percent of total open space and recreation areas.
   v. Percent of lot covered by buildings.

vi. Floor area of dwelling units.
vii. Number of proposed parking spaces.
viii. Street layout.
ix. Layout of mobile home stands (for mobile home parks only).

3. Stormwater Management Plan—Including the following:
   a. Existing contours at one foot intervals based on U.S. Coast and Geodetic Datum.
   b. Proposed finished elevation of each building site and first floor level.
   c. Existing and proposed stormwater management facilities with size and grades.
   d. Proposed orderly disposal of surface water runoff.
   e. Centerline elevations along adjacent streets.
   f. Water management district surface water management permit.

4. Fire Department Access and Water Supply Plan: The Fire Department Access and Water Supply Plan must demonstrate compliance with Chapter 18 of the Florida Fire Prevention Code, be located on a separate signed and sealed plan sheet, and must be prepared by a professional fire engineer licensed in the State of Florida. The Fire Department Access and Water Supply Plan must contain fire flow calculations in accordance with the Guide for Determination of Required Fire Flow, latest edition, as published by the Insurance Service Office ("ISO") and/or Chapter 18, Section 18.4 of the Florida Fire Prevention Code, whichever is greater.

5. Concurrency Impact Analysis: Concurrency Impact Analysis of impacts to public facilities. For commercial and industrial developments, an analysis of the impacts to Transportation, Potable Water, Sanitary Sewer, and Solid Waste impacts are required.

6. Comprehensive Plan Consistency Analysis: An analysis of the application's consistency with the Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies of the Comprehensive Plan and detail how the application complies with said Goals, Objectives, and Policies).

7. Legal Description with Tax Parcel Number (In Word Format).

8. Proof of Ownership (i.e. deed).

9. Agent Authorization Form (signed and notarized).

10. Proof of Payment of Taxes (can be obtained online via the Columbia County Tax Collector's Office).

11. Fee. The application fee for a Site and Development Plan Application is $200.00. No application shall be accepted or processed until the required application fee has been paid.

NOTICE TO APPLICANT

All eleven (11) attachments are required for a complete application. Once an application is submitted and paid for, a completeness review will be done to ensure all the requirements for a complete application have been met. If there are any deficiencies, the applicant will be notified in writing. If an application is deemed to be incomplete, it may cause a delay in the scheduling of the application before the Planning & Zoning Board.

A total of ten (10) copies of proposed site plan application and all support materials must be submitted along with a PDF copy on a CD. See City of Lake City submittal guidelines for additional submittal requirements.

THE APPLICANT ACKNOWLEDGES THAT THE APPLICANT OR AGENT MUST BE PRESENT AT THE PUBLIC HEARING BEFORETHE PLANNING AND ZONING BOARD, AS ADOPTED IN THE BOARD RULES AND PROCEDURES, OTHERWISE THE REQUEST MAY BE CONTINUED TO A FUTURE HEARING DATE.

I hereby certify that all of the above statements and statements contained in any documents or plans submitted herewith are true and accurate to the best of my knowledge and belief.

Mark Gansloop

Applicant/Agent Name (Type or Print)

Applicant/Agent Signature

12/14/2022

Date

Applicant/Agent Name (Type or Print)

Applicant/Agent Signature

Date

STATE OF FLORIDA
COUNTY OF Columbia

The foregoing instrument was acknowledged before me this 14 day of Dec, 2022, by (name of person acknowledging). Mark Gansloop

(NOTARY SEAL

CLAYTON TROY SHAHEEN
Notary Public
State of Florida
Comm# HH223111
Expires 2/1/2026

Signature of Notary

Clayton Shaheen

Printed Name of Notary

Personally Known ✓ OR Produced Identification _____
Type of Identification Produced

CIVIL ENGINEER

AFFINE ENGINEERING AND SURVEYING INC.
128 NW GREEN LANE, LAKE CITY FL, 32625
TELEPHONE: 407-421-5534

SURVEYOR

MARK D. DUREN AND ASSOCIATES, INC
1604 SW SISTERS WELCOME ROAD
LAKE CITY FL 32025
TELEPHONE: 386-758-9831

ENGINEERING PLANS

PINES OF FOREST MEADOWS

COLUMBIA COUNTY FLORIDA

PREPARED FOR

GANSKOP PROPERTIES, LLC

657 NW SAVANNAH CIR. LAKE CITY FL 32055
CONTACT: MARK GASKOP
PHONE: (386) 867-0269

CABLE

COMCAST
2288 SW MAIN BOULEVARD
LAKE CITY, FL
TEL: (407) 513-1351

FIRE

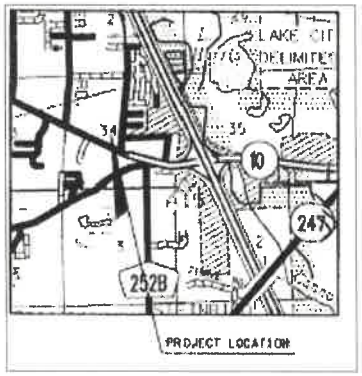
LAKE CITY FIRE DEPARTMEN
225 NW MAIN BLVD.
LAKE CITY, FL
TEL: (386) 752-4344

POWER

FLORIDA POWER & LIGHT
2618 NE BASCOM NORRIS DR
LAKE CITY, FLORIDA 32055
TEL: (800) 226-3545

VICINITY MAP

NTS



SITE DATA

PARCEL ID:	34-3S-16-02461-601
ZONNING:	RO
PROJECT AREA:	± 46,365.20 SF = ±1.064 ACRES
BUILDING SETBACKS:	FRONT 25'; BACK 15'; SIDES 10'

PRE DEVELOPMENT SITE DATA

PRE DEV PERVIOUS AREA:	± 46,365 SF
PRE DEV IMPERVIOUS AREA:	± 0 SF
PRE DEV IMPERVIOUS %	0%
PRE DEV PERVIOUS %	100%

△1

POST DEVELOPMENT SITE DATA

POST DEV OPEN SPACE	± 31,909 SF
POST DEV OPEN SPACE %	68.8%
POST DEV IMPERVIOUS AREA:	± 14,456 SF
POST DEV POND AREA:	± 4,766 SF
POST DEV PERVIOUS AREA:	± 27,143 SF
POST DEV IMPERVIOUS %	41.5%
POST DEV PERVIOUS %	58.5%

△2

PARKING REQUIREMENTS

CODE REQUIREMENTS:	
(MULTI FAMILY DWELLING) 2 SPACES PER UNIT	16
ACCESSIBLE SPACES 1 FOR EVERY 25	1

SPACES PROVIDED:	
(MULTI FAMILY DWELLING) 2 SPACES PER UNIT	16 △2
ACCESSIBLE SPACES 1 FOR EVERY 25	1

SHEET INDEX

PREPARED FOR
GANSKOP PROPERTIES LLC

AFFINE ENGINEERING AND SURVEYING, INC.
CERTIFICATE OF AUTHORIZATION No. 29140

LEGAL DESCRIPTION

LOT 1C AND 2C, FOREST PLANTATION COMMERCIAL SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 7, PAGE 50, PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.

Victor O Marrero

Digitally signed by Victor O Marrero
Date: 2023.07.18 21:12:53 -04'00'

VICTOR O. MARRERO LICENSE No. 78630 STATE OF FLORIDA PROFESSIONAL ENGINEER

VICTOR O. MARRERO
FLORIDA P.E. # 78630

REVISIONS

△2 7/16/23 – REVISED SITE DATA
△1 5/16/23 – REVISED SITE DATA

Sunshine811

COLUMBIA COUNTY SUBMITTAL
NOT FOR CONSTRUCTION

STORM WATER MANAGEMENT SYSTEM DESIGN HAS BEEN DONE IN REASONABLE CONFORMANCE WITH THE SUWANNEE RIVER WATER MANAGEMENT DISTRICT DESIGN CRITERIA AND THE LAKE CITY LAND DEV. REGULATIONS.

AFFINE ENGINEERING AND SURVEYING, INC
CIVIL ENGINEERS SURVEYORS
TELEPHONE NUMBER 407-421-5534
10354 JEPSON STREET, ORLANDO, FLORIDA 32825
CERTIFICATE OF AUTHORIZATION: No 29140

SHEET 1

GENERAL CONSTRUCTION NOTES

1 ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM 88 (NAVD 88)

2 LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS THE CONTRACTOR SHALL VERIFY ALL PERTINENT DATA FOR ACCURACY PRIOR TO BEGINNING CONSTRUCTION

3 THE CONTRACTOR SHALL CHECK THE PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA

4 THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES, AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES, IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, IN ADVANCE OF CONSTRUCTION, BY CALLING "SUNSHINE " AT 1-800-432-4770

5 THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR

6 ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND SURFACE CONSTRUCTION

7 IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTION

8 ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO SHALL BE OF LATEST REVISIONS AND/OR LATEST EDITION

9 ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK

10 THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE OWNER'S ENGINEER, SHOP DRAWING ON ALL PRECAST AND MANUFACTURED ITEMS SPECIFIED FOR THE PROJECT FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE ALL SHOP DRAWINGS ARE TO BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER'S ENGINEER

11 AT LEAST THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND APPROPRIATE AGENCIES, AND SUPPLY THEM WITH ALL REQUIRED SHOP DRAWINGS, THE CONTRACTOR'S NAME, STARTING DATE, PROJECTED SCHEDULE, AND OTHER INFORMATION AS REQUIRED ANY WORK PERFORMED PRIOR TO NOTIFYING THE ENGINEER, OR WITH OUT AGENCY INSPECTOR PRESENT, MAY BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE

12 WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE, SMOOTHLY WITH OTHER WORK BEING PREFORMED ON SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES

13 THE PIPE IN AREAS TO BE PAVED, BACKFILL SHALL BE COMPACTED TO 98% MAXIMUM DENSITY AS DETERMINED BY A A S H T O T-99

14 SITE WORK CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF AT LEAST 3,000 P S I IN 28 DAYS. UNLESS OTHERWISE NOTED

15 CONCRETE REINFORCING SHALL BE BILLET STEEL BARS CONFORMING TO A S T M A615 GRADE OR BETTER

16 ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS UNLESS SPECIFICALLY EXEMPTED BY THE PLANS ADDITIONAL COSTS ARE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION IS TO BE ALLOWED

17 ALL DISTURBED AREAS WHICH ARE NOT TO BE SODDED, ARE TO BE SEEDED AND MULCHED TO F D O T STANDARDS, AND MAINTAINED UNTIL A SATISFACTORY STAND OF BEEN OBTAINED ANY WASHOUTS, REGRADING, RESEEDING, AND GRASSING WORK, AND OTHER EROSION WORK REQUIRED, WILL BE PERFORMED BY THE CONTRACTOR UNTIL THE SYSTEM IS ACCEPTED FOR MAINTENANCE, BY THE REGULATORY AGENCY AND ENGINEER OF RECORD

18 CHAPTER 77-163 OF THE FLORIDA STATUTES REQUIRES THAT AN EXCAVATOR NOTIFY ALL GAS UTILITIES A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO EXCAVATING MAPS SHOW ONLY THE APPROXIMATE LOCATION OF GAS MAINS AND DO NOT SHOW SERVICE LINES THE ONLY SAFE AND PROPER WAY TO LOCATE EITHER MAINS OR SERVICE LINES IS BY AN ON-SITE INSPECTION BY THE RESPECTIVE GAS PERSONNEL THEREFORE, EXCAVATORS ARE INSTRUCTED TO TELEPHONE THE RESPECTIVE GAS COMPANY TWO (2) WORKING DAYS BEFORE ENTERING A CONSTRUCTION AREA

19 THE CONTRACTOR SHALL LOCATE AND FLAG ALL PROPERTY CORNERS PRIOR TO FINAL ENGINEERING INSPECTION AND CERTIFICATION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO HAVE PROPERTY CORNERS, WHICH HAVE BEEN LOST DURING CONSTRUCTION, RE-ESTABLISHED BY A PROFESSIONAL LAND SURVEYOR

20 THE SOILS ENGINEER IS TO SUPPLY THE ENGINEER WITH A PHOTOCOPY FOR ALL COMPACTION TESTS, AND ASPHALT RESULTS THE SOILS ENGINEER IS TO CERTIFY REQUIRED BY THE LOCAL REGULATORY AGENCY, AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (F D O T) FOR THE IMPROVEMENTS, AS REQUIRED BY THE ENGINEERING CONSTRUCTION DRAWINGS, HAVE BEEN SATISFIED

21 THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER TESTS WILL BE REQUIRED PURSUANT WITH THE TESTING REQUIREMENTS AS SHOWN ONT THE ENGINEERING CONSTRUCTION DRAWINGS UPON COMPLETION OF THE WORK, THE SOILS ENGINEER IS TO SUBMIT CERTIFICATIONS TO THE OWNER'S ENGINEER, STATING THAT ALL REQUIREMENTS HAVE BEEN MET

22 THE CONTRACTOR IS TO REVIEW THE SOIL REPORTS AND BORINGS PRIOR TO BIDDING THE PROJECT AND COMMENCING CONSTRUCTION

23 IRRIGATION SYSTEM SHALL CONSIST OF SPIGOT AND HOSES WITH IRRIGATION HEADS OR STANDARD COMMERCIAL OUTDOOR SPRINKLERS

24 THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE

25 THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS FOR CONSTRUCTION SITE SAFETY

26 ALL SODDING, SEEDING, AND MULCHING SHALL INCLUDE WATERING AND FERTILIZATION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE AREAS UNTIL THE PROJECT IS COMPLETED AND ACCEPTED BY THE OWNER

27 ALL AREAS WITHIN THE COUNTY RIGHT-OF-WAY DISTURBED THOUGH THE COURSE OF CONSTRUCTION WILL BE RE-GRADED AND SODDED

28 WORK WITHIN PUBLIC RIGHT OF WAY MUST BE IN ACCORDANCE TO FDOT STANDARD PLANS INDEX 102-600 WORK WITHIN THE SHOULDER AND WORK WITHIN THE TRAVEL LANE ACCORDING TO 102-602 & 102-603 RESPECTIVELY

29 RIP RAP TO BE A MINIMUM OF 18" THICK PER FDOT SPECIFICATION 530-2 1 3 2 WITH 12" BEDDING STONE PER 530-2 1 4 AND TYPE D2 GEOTEXTILE FABRIC PER FDOT SPECIFICATION 914

Sunshine811

CLEARING AND EROSION CONTROL NOTES

1 PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY'S TREE ORDINANCE AND DETAILS CONTAINED IN THESE PLANS IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION NO TREES SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER

2 THE CONTRACTOR IS TO PREPARE THE SITE PRIOR TO BEGINNING, ACTUAL CONSTRUCTION IN ACCORDANCE WITH THE SOILS TESTING REPORT COPIES OF THE SOILS REPORT ARE AVAILABLE THROUGH THE OWNER OR THE SOILS TESTING COMPANY QUESTIONS REGARDING SITE PREPARATION REQUIREMENTS DESCRIBED IN THE SOILS REPORT ARE TO BE DIRECTED TO THE SOILS TESTING COMPANY

3 THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION DISTURBED AREAS WILL BE SEEDED, MULCHED, OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION

4 THE TOP 4 " TO 8" OF GROUND REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER

5 ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS ONLY "GRADING BY HAND " IS PERMITTED WITHIN THE CANOPY LINE OF TREES THAT ARE TO REMAIN

6 THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS FOR REMOVING ANY EXISTING STRUCTURES

7 IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES TO DISCONNECT OR REMOVE THEIR FACILITIES PRIOR TO REMOVING OR DEMOLISHING ANY EXISTING STRUCTURES FROM THE SITE

8 THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF THESE UTILITIES WITH THE OWNER OF THE UTILITY THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY ALL UTILITIES WHICH INTERFACE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANIES AND THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY COMPANIES DURING RELOCATION OPERATIONS ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED

9 THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND WILL BE RESPONSIBLE FOR THE DEMOTION AND REMOVAL OF ALL UNDERGROUND AND ABOVE GROUND STRUCTURES THAT WILL NOT BE INCORPORATED WITH THE NEW FACILITIES SHOULD ANY DISCREPANCIES EXIST WITH THE PLANS THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING THE OWNER AND REQUESTING A CLARIFICATION OF THE PLANS PRIOR TO DEMOLITION

10 DURING CONSTRUCTION, ALL STORM SEWER INLET IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD STONE, ETC , WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS

11 ALL EROSION AND SILTATION CONTROL METHODS SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE

12 WHEN CONSTRUCTION IS COMPLETED, THE RETENTION/DETENTION AREAS WILL BE RESHAPED, CLEANED OF SILT, MUD AND DEBRIS, AND RE-SODDED IN ACCORDANCE TO THE PLANS

13 CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, WATERWAYS, AND EXISTING WETLANDS IN ADDITION, THE CONTRACTOR SHALL PLACE STRAW, MULCH, OR OTHER SUITABLE MATERIAL ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES

14 IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION, OR OTHER ACCEPTABLE METHODS

15 THERE IS TO BE NO DISCHARGE (i e PUMPING, SHEET FLOW, SWALE, DITCH, ETC) INTO EXISTING LAKE SYSTEM, WETLAND, OR RIVER, WITHOUT THE USE OF SETTLING PONDS IF THE CONTRACTOR DESIRES TO DISCHARGE INTO THE EXISTING LAKE SYSTEM OR RIVER, A SETTLING POND PLAN MUST BE SUBMITTED AND APPROVED BY THE ENGINEER OF RECORD AND LOCAL REGULATORY AGENCY PRIOR TO CONSTRUCTION

SAFETY NOTES

1 DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT ALL SAFETY REGULATIONS ARE TO BE ENFORCED BY THE CONTRACTOR THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF THIS PERSONNEL LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY O S H A IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION

2 THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS HALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE, AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES, AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS

3 ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U S DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

4 LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY O S H A IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION

5 IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS

PAVING, GRADING, AND DRAINAGE NOTES

1 ALL DELETERIOUS SUBSTANCE MATERIAL, (i.e. MUCK, PEAT, BURIED DEBRIS), ARE TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER COMPACTED AS SHOWN ON THESE PLANS

2 THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING, OR SHORING, AS NECESSARY TRENCHES SHALL BE KEPT DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED DEWATERING SHALL BE USED AS REQUIRED

3 IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED THE CONTRACTOR IS TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES

4 PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE OWNER'S ENGINEER FOR APPROVAL

5 THE CONTRACTOR IS TO PROVIDE A 1/2 " BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER, AT ABUTMENT OF CONCRETE AND ANY STRUCTURE

6 ALL PAVEMENT MARKINGS SHALL BE MADE WITH TRAFFIC PAINT IN ACCORDANCE TO F D O T STANDARD SPECIFICATIONS 971-12 OR 971-13 PARKING STALL STRIPING TO BE 4 " WIDE PAINTED WHITE STRIPES

7 STANDARD INDEXES REFER TO THE LATEST EDITION OF FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS "

8 ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (A S T M C-76) OR HDPE PIPE - ADS N-12 (ASTM D3350) OR APPROVED EQUAL, UNLESS OTHERWISE NOTED ON PLANS

9 P.V.C. STORM PIPE, 12 " AND SMALLER SHALL CONFORM TO A W W A C-900, CLASS 150 STANDARDS, UNLESS OTHERWISE NOTED HDPE PIPE SIZES RANGE FROM 12-60 INCH DIAMETERS AND DESIGNATED AS AASHTO ANNULAR TYPE "S" (n-12 PIPE) THE PIPE SHALL HAVE CIRCULAR CROSS SECTION WITH AN OUTER CORRUGATED PIPE WALL AND A SMOOTH INNER WALL

10 HDPE STORM PIPE JOINTS SHALL CONSIST OF INTEGRAL, CONSTANT DIAMETER IN-LINE BELL AND SPIGOT WITH FACTORY INSTALLED RUBBER GASKET PER ASTM F477 STORM SEWER, SIDE DRAIN AND CROSS DRAIN PIPE SHALL UTILIZE ADS N-12 WT PIPE WITH WATER TIGHT JOINTS SPECIFIED TO MEET A MINIMUM LABORATORY PRESSURE TEST OF 10 8-PSI FOLLOWING ASTM D-3212 EXFILTRATION PIPE SHALL UTILIZE AASHTO CLASS PERFORATED ADS N-12 PIPE WITH SOIL TIGHT JOINTS

11 FITTING FOR HDPE PIPE MAY BE EITHER MOLDED OR FABRICATED AND INCLUDE IN-LINE JOINT FITTINGS SUCH AS COUPLERS AND REDUCERS, BRANCH ASSEMBLY FITTINGS SUCH AS TEES, WYES, AND END CAPS. ONLY FITTINGS SUPPLIED OR RECOMMENDED BY THE MANUFACTURER SHALL BE USED

12 HDPE PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321 AND AS RECOMMENDED BY THE MANUFACTURER

13 ALL HIGH DENSITY POLYETHYLENE (HDPE) PIPE USED FOR CULVERT AND STORM DRAIN APPLICATIONS SHALL CONFORM TO THE REQUIREMENTS FOR AASHTO M294 CURRENT EDITION AND BE CERTIFIED THROUGH THE PLASTICS PIPE INSTITUTE (PPI) THIRD PARTY CERTIFICATION PROGRAM ALL HDPE PIPE DELIVERED AND USED SHALL BEAR THE THIRD PARTY ADMINISTERED PPI SEAL

14 PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO THE CENTER OF DRAINAGE STRUCTURES PIPE LENGTH FOR MITERED END AND FLARED END SECTIONS ARE TO END OF PIPE

15 ALL DRAINAGE STRUCTURE GRATES AND COVERS WITHIN TRAFFIC AREAS SHALL BE TRAFFIC RATED FOR H-20 LOADINGS OR HIGHER

16 THE CONTRACTOR IS TO SOD THE RETENTION/DETENTION POND AS INDICATED ON PLANS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE POND, IF APPLICABLE

17 MATERIALS AND CONSTRUCTION METHODS FOR STREETS AND STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2018, OR LATEST REVISION THEREOF AND SUPPLEMENTAL SPECIFICATIONS THERETO

18 UNDERCUTTING AND/OR OVER EXCAVATING THE RETENTION/DETENTION AREAS WILL NOT BE ALLOWED

19 THE CONTRACTOR SHALL PROVIDE CERTIFIED SURVEY AND AS-BUILT DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL SURVEYOR AND MAPPER REGISTERED IN FLORIDA. THE RECORD DRAWINGS SHALL SHOW FINAL GRADES, INVERTS, AND LOCATIONS OF ALL STORMWATER FACILITIES INCLUDING THE SUBSURFACE DRAINAGE SYSTEM, DRAINAGE STRUCTURES, BERMS & SWALES. THE CONTRACTOR SHALL PROVIDE TEN COPIES OF THE CERTIFIED RECORD DRAWINGS TO THE ENGINEER FOR THE PURPOSE OF CERTIFYING THE STORMWATER MANAGEMENT SYSTEM

20 PVC SURFACE DRAINAGE INLETS SHALL INCLUDE THE DRAIN BASIN TYPE AS INDICATED ON THE CONTRACT DRAWING AND REFERENCED WITHIN THE CONTRACT SPECIFICATIONS THE DUCTILE IRON GRATES (12 " AND 15 " FRAMES ARE CAST IRON) FOR EACH OF THESE FITTINGS ARE TO BE CONSIDERED AN INTEGRAL PART OF THE SURFACE DRAINAGE INLET AND SHALL BE FURNISHED BY THE SAME MANUFACTURER. THE SURFACE DRAINAGE INLETS SHALL BE AS MANUFACTURED BY NYLOPLAST A DIVISION OF ADVANCED DRAINAGE SYSTEMS, INC , OR PRIOR APPROVED EQUAL

21 THE DRAIN BASINS REQUIRED FOR THIS CONTRACT SHALL BE MANUFACTURED FROM PVC PIPE STOCK, UTILIZING A THERMO-MOLDING PROCESS TO REFORM THE PIPE STOCK TO THE SPECIFIED CONFIGURATION. THE DRAINAGE PIPE CONNECTION STUBS SHALL BE MANUFACTURED FROM PVC PIPE SYSTEM. THIS JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR JOINTS FOR DRAIN AND SEWER PLASTIC PIPE USING FLEXIBLE ELASTOMERIC SEALS THE PIPE BELL SPIGOT SHALL BE JOINED TO THE MAIN BODY OF THE DRAIN BASIN OR CATCH BASIN, THE PIPE STOCK USED TO MANUFACTURE THE MAIN BODY AND PIPE STUBS FOR THE SURFACE DRAINAGE INLETS SHALL MEET THE MECHANICAL PROPERTY REQUIREMENTS FOR FABRICATED FITTINGS AS DESCRIBED BY ASTM D3034, STANDARD FOR SEWER PVC PIPE AND FITTINGS, ASTM F1336 STANDARD FOR PVC GASKETED SEWER FITTINGS

22 DIRECT AL ROOF RUN-OFF TO DETENTION AREA

BEDDING AND TRENCHING NOTES

1 Bc = PIPE O.D. Bd = TRENCH WIDTH AT TOP OF PIPE MAX Bd = Bc + 24" MIN Bd = MAX DIM OF BELL + 8" (UNSHEETED TRENCH) MAX DIM OF BELL + 12" (SHEETED TRENCH)
2 DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL BE AS REQUIRED TO REACH SUITABLE FOUNDATION FOR NON-CUSHIONING MATERIAL, DEPTH SHALL BE 6" BELOW BOTTOM OF UTILITY
3 SHEETING SHALL BE DRIVEN BELOW THE UTILITY INVERT IF REQUIRED FOR LATERAL SUPPORT OR UNSUITABLE MATERIAL REMOVAL WHERE DRIVEN BELOW PIPE INVERT, SHEETING SHALL BE CUT OFF A MINIMUM OF 12" ABOVE TOP OF PIPE, OR HIGHER AS AUTHORIZED BY THE ENGINEER, AND LEFT IN PLACE IN NO CASE SHALL SHEETING LEFT IN PLACE EXTEND HIGHER THAN 30" BELOW SURFACE GRADE UNLESS SPECIFICALLY APPROVED BRACING SHALL BE APPROVED AS REQUIRED
4 PROTECTIVE CONCRETE SLABS ARE REQUIRED WHENEVER DEPTH OF COVER IS LESS THAN 36" AND IF APPROVED BY THE UTILITY
5 BACKFILL TO BE COMPACTED TO 98% DENSITY OF AASHTO T180 MOTIFIED PROCTOR IN AREAS TO BE PAVED AND 95% IN OTHERS

Victor O Marrero
Digitally signed by Victor O Marrero
Date: 2023.07.18 21:21:51 -04'00'

AFFINE ENGINEERING AND SURVEYING, INC.
CERTIFICATE OF AUTHORIZATION No. 29140

VICTOR O. MARRERO
LICENSE
No. 78630
STATE OF FLORIDA
PROFESSIONAL ENGINEER

VICTOR O. MARRERO
FLORIDA P.E. # 78630

BY	#	DATE

REVISIONS

DRAWN BY VM
CHECKED BY VM
DATE 07/21/23
SCALE 1" = 30'
JOB # 20001

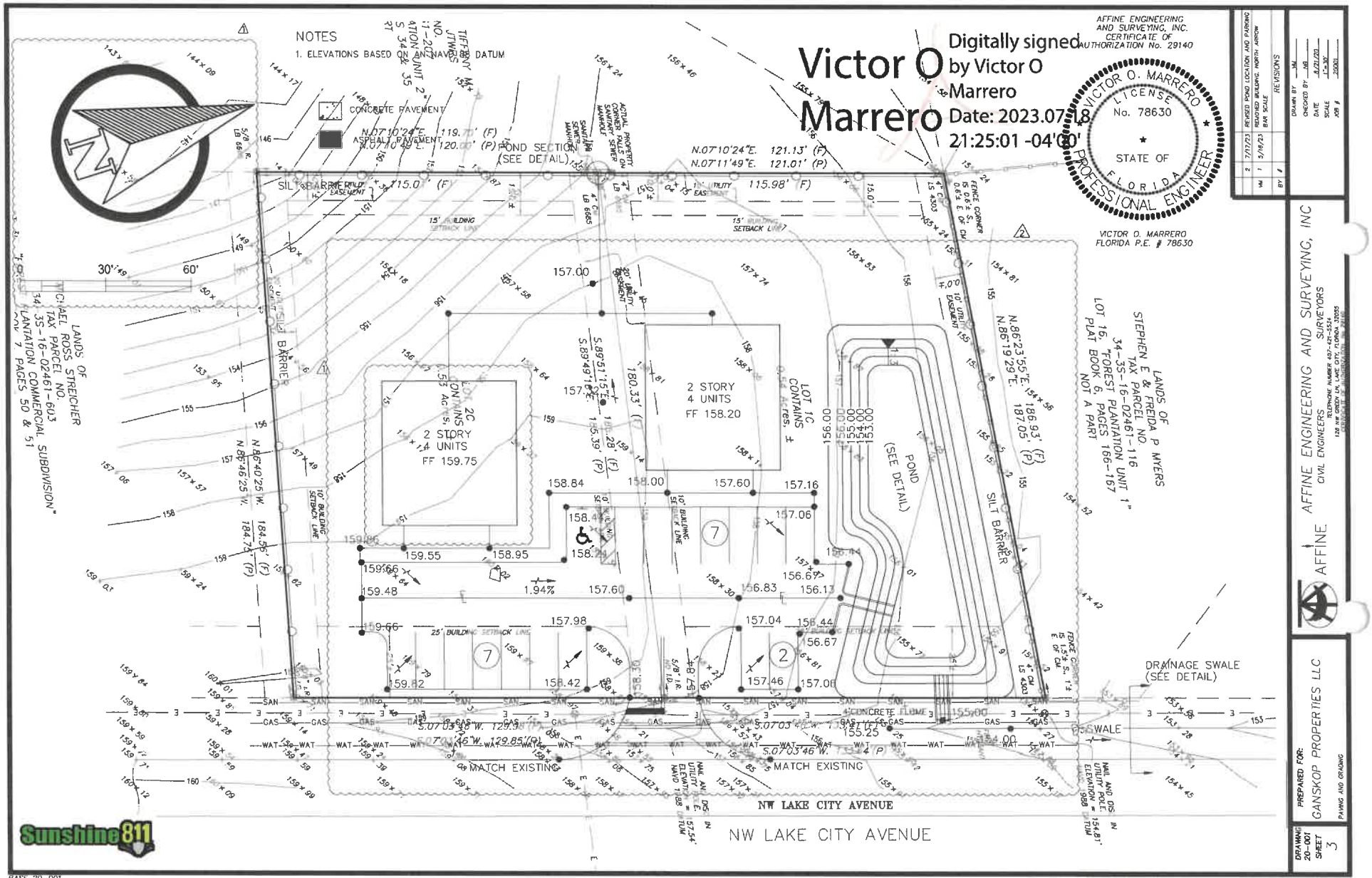
AFFINE
AFFINE ENGINEERING AND SURVEYING, INC
CIVIL ENGINEERS SURVEYORS
TELEPHONE NUMBER 407-421-9514
128 NW GREEN LN, LAKE CITY, FLORIDA 32055
CERTIFICATE OF AUTHORIZATION #29140

PREPARED FOR:
GANSKOP PROPERTIES LLC

DRAWING 20-001
SHEET 2
NOTES

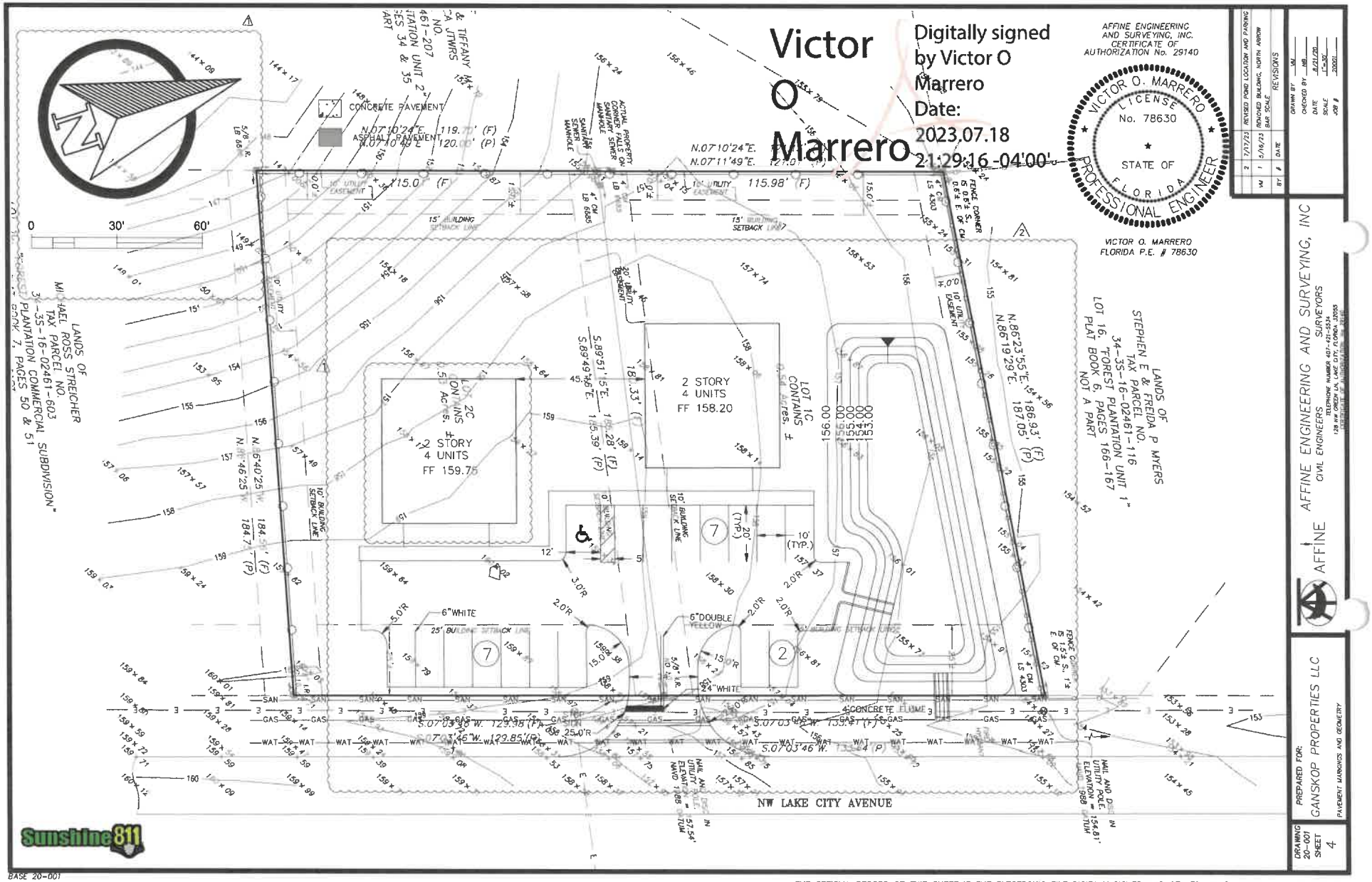
BASE 20-001

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALY SIGNED AND SEALED UNDER RULE 61G15-23.004 F.A.C.



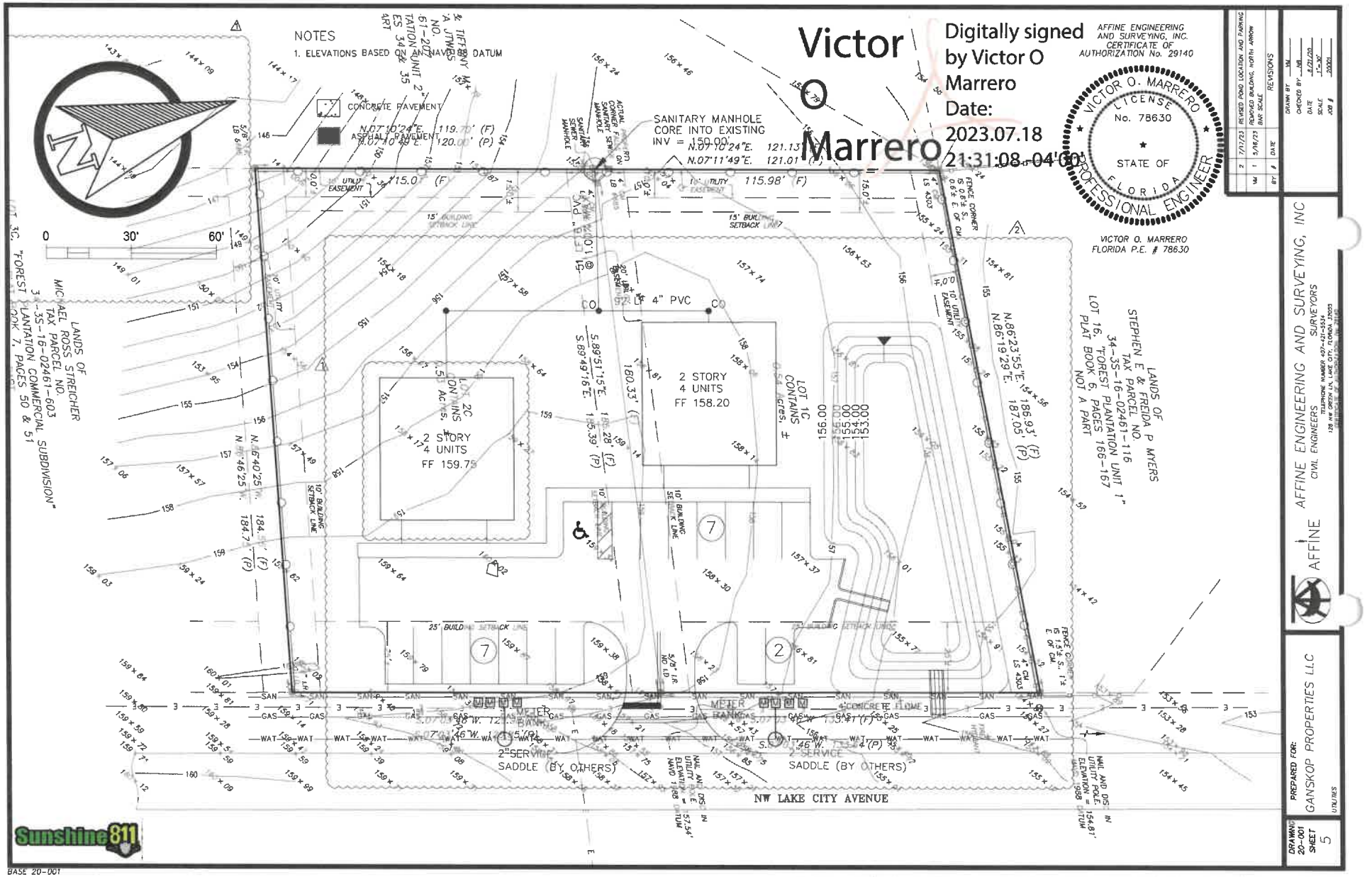
BASE 20-001

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALY SIGNED AND SEALED UNDER RULE 61G15-23.004 F.A.C.



BASE 20-001

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALY SIGNED AND SEALED UNDER RULE 61G15-23.004 F.A.C.



Victor O Marrero

Digitally signed by Victor O Marrero
Date: 2023.07.18 21:31:08-04'00'

AFFINE ENGINEERING AND SURVEYING, INC.
CERTIFICATE OF AUTHORIZATION No. 29140

VICTOR O. MARRERO
LICENSE No. 78630
STATE OF FLORIDA
PROFESSIONAL ENGINEER

VICTOR O. MARRERO
FLORIDA P.E. # 78630

BY	#	DATE	REVISIONS
VM	1	5/16/23	REMOVED BUILDING, NORTH ARROW BAR SCALE
	2	7/17/23	REVISED POND LOCATION AND PARKING

DRAWN BY: VM
CHECKED BY: VM
DATE: 4/27/20
SCALE: 1"=30'
JOB #: 20001

AFFINE ENGINEERING AND SURVEYING, INC
CIVIL ENGINEERS SURVEYORS
AFFINE
TELEPHONE NUMBER 407-421-5534
128 NW GREEN LN, LAKE CITY, FLORIDA 32055

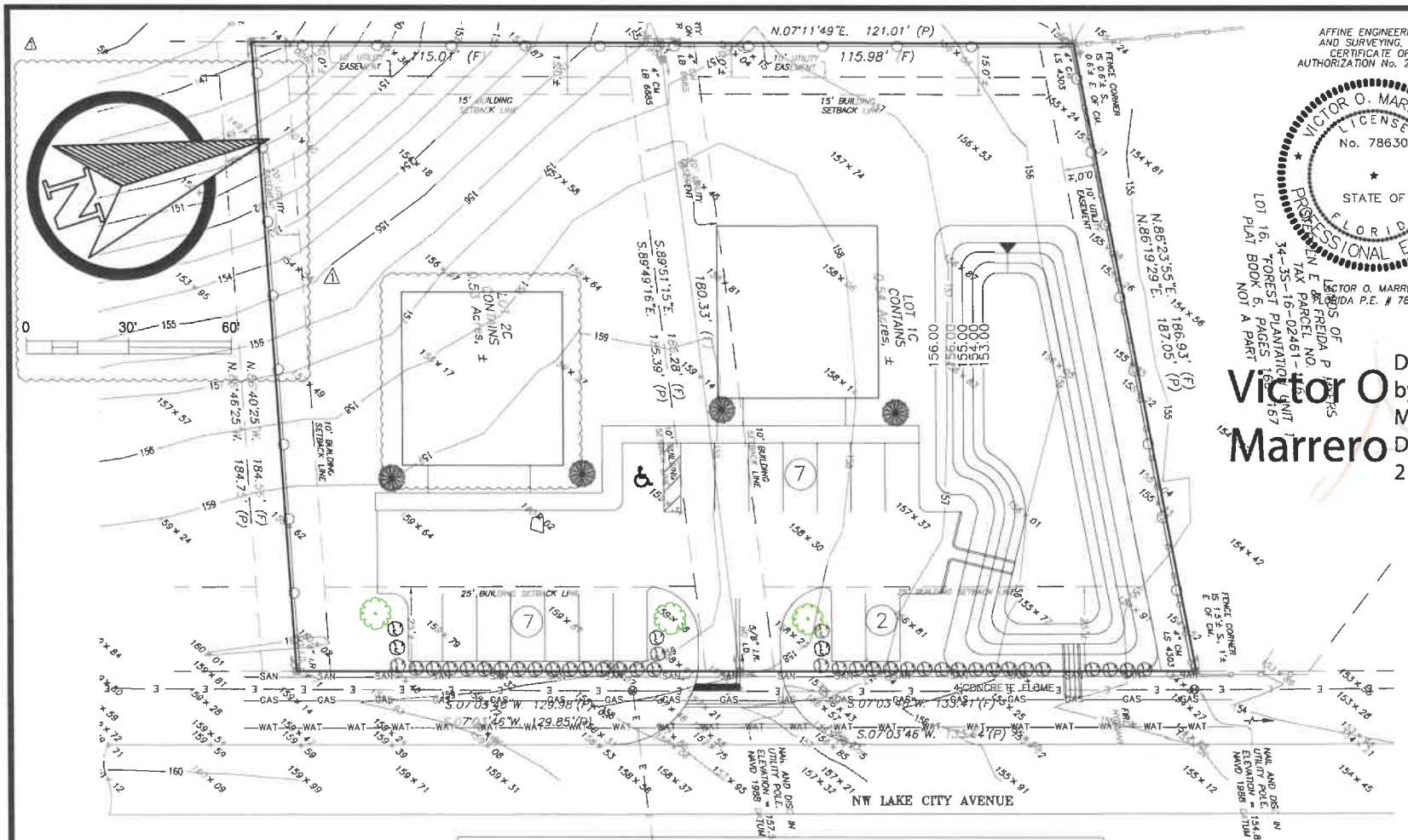
PREPARED FOR:
GANSKOP PROPERTIES LLC

UTILITIES

DRAWING 20-001
SHEET 5

BASE 20-001

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALY SIGNED AND SEALED UNDER RULE 61G15-23.004 F.A.C.



AFFINE ENGINEERING AND SURVEYING, INC.
CERTIFICATE OF AUTHORIZATION No. 29140

VICTOR O. MARRERO
LICENSE
No. 78630
STATE OF FLORIDA
PROFESSIONAL ENGINEER

VICTOR O. MARRERO
FLORIDA P.E. # 78630

LOT 16, PLAT BOOK 6, PAGES 15 & 16, "FOREST PLANTATION UNIT 1" NOT A PART OF
TAX PARCEL NO. 34-3S-16-02461-000
LANDS OF FREIDA P. MARKS

Victor O Marrero
Digitally signed by Victor O Marrero
Date: 2023.07.18 21:33:58 -04'00'

NOTES

1. ELEVATIONS BASED ON AN NAVD 88 DATUM

TREE AND SHRUBBERY REQUIREMENTS

MAP SYMBOL	COMMON NAME	SCIENTIFIC NAME	NO.	SIZE	NOTES
	DWARF BURFORD HOLLY / LOROPETALUM	ILEX CORNUTA'BURFORDII NANA' / LOROPETALUM CHINENSE	0	1 GAL	(1) PLANT FOR EVERY 20 SF
	DWARF AZALEAS / KNOCK OUT ROSE	RHODODENDRON ATLANTICUM / ROSA RADRAZZ	40	1 GAL	(1) PLANT FOR EVERY 16 SF
	CRAPE MYRTLE	LAGERSTROEMIA	4	2" CAL (MIN.)	
	LIVE OAK	QUERCUS VIRGINIANA	4	4" CAL (MIN.)	

Sunshine 811

NO.	DATE	BY	REVISIONS
2	7/17/23	NB	REVISED POND LOCATION AND PARKING
1	5/16/23	NB	REVISED BUILDING, NORTH ARROW
NW			BAR SCALE

DRAWN BY: SM
CHECKED BY: NB
DATE: 3/21/20
SCALE: 1"=30'
JOB #: 20001

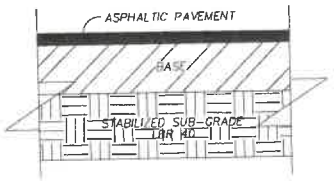
AFFINE
AFFINE ENGINEERING AND SURVEYING, INC
CIVIL ENGINEERS SURVEYORS
TELEPHONE NUMBER 407-421-5534
128 NW GREEN LN, LAKE CITY, FLORIDA 32055
CERTIFICATE NO. 29140 CERTIFICATE NO. LB6885

PREPARED FOR:
GANSKOP PROPERTIES LLC
LANDSCAPING

DRAWING 20-001
SHEET 6

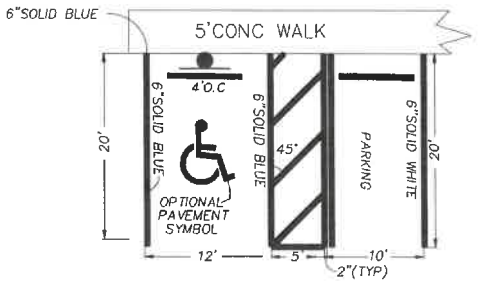
BASE 20-001

PAVEMENT DESIGN

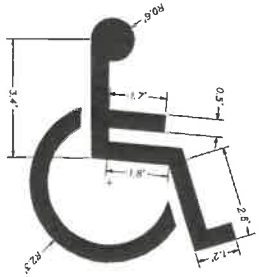


ASPHALT	1.5"	TYPE SP 12.5 ASPHALTIC CONCRETE SURFACE COURSE
BASE	6"	LIMEROCK BASE MIN. LBR 100 COMPACT TO FDOT STANDARDS
BASE	12"	STABILIZED SUB-BASE LBR 40 COMPACT TO FDOT STANDARDS

H.C. PARKING



NOTE: SUGGESTED HANDICAP PARKING LAYOUT SEE PARKING PLAN FOR PROPOSED LOCATION



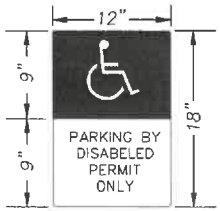
PARKING SYMBOL

NTS.

AFFINE ENGINEERING AND SURVEYING, INC.
CERTIFICATE OF AUTHORIZATION No. 29140

VICTOR O. MARRERO
LICENSE
No. 78630
STATE OF FLORIDA
PROFESSIONAL ENGINEER

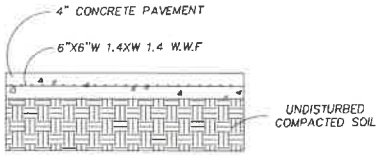
VICTOR O. MARRERO
FLORIDA P.E. # 78630



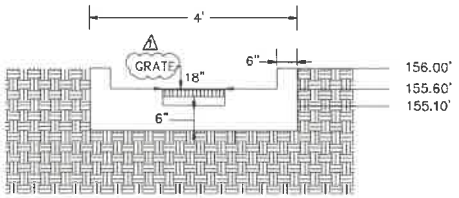
SIGN DETAIL

NTS

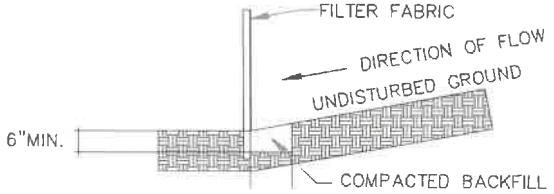
SIDEWALK SECTION



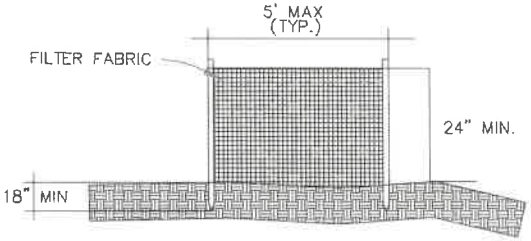
CONCRETE FLUME



EROSSION CONTROL



EROSSION CONTROL



Victor O Marrero
Digitally signed by Victor O Marrero
Date: 2023.07.18 21:35:25 -04'00'

Sunshine 811

NO.	BY	DATE	REVISIONS
1	VM	5/16/23	ADDED GRATE
2	VM	7/17/23	REVISED CONCRETE WDR

DRAWN BY VM
CHECKED BY MB
DATE 5.23.23
SCALE AS NOTED
JOB # 20001

AFFINE ENGINEERING AND SURVEYING, INC
CIVIL ENGINEERS SURVEYORS
TELEPHONE NUMBER 407-421-5534
158 NW CRESCENT LAKE DRIVE, PORT ST. LUCIE, FLORIDA 34986
CERTIFICATE OF AUTHORIZATION NO. LB 29140

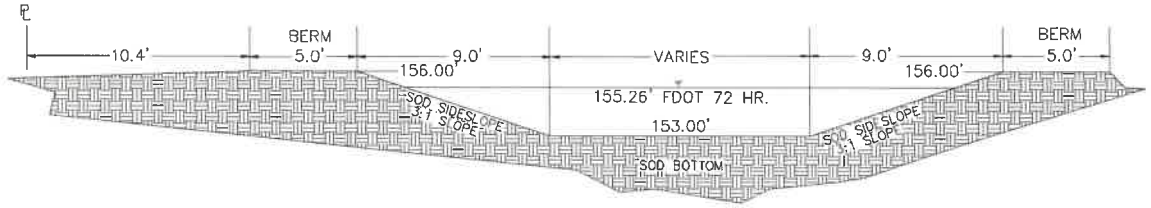
PREPARED FOR:
GANSKOP PROPERTIES LLC

DETAILS-1

DRAWING 20-001
SHEET 7

BASE 20-001

POND SECTION



AFFINE ENGINEERING AND SURVEYING, INC.
CERTIFICATE OF AUTHORIZATION No. 29140

VICTOR O. MARRERO LICENSE No. 78630 STATE OF FLORIDA PROFESSIONAL ENGINEER

VICTOR O. MARRERO
FLORIDA P.E. # 78630

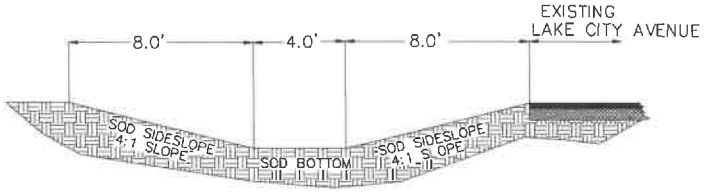
Victor O Marrero

Digitally signed by Victor O Marrero
Date: 2023.07.18 21:36:43 -04'00'

BY	#	DATE	REVISIONS
VM	1	7/17/23	REVISED POND LOCATION AND PARKING
	2		

DRAWN BY VM
CHECKED BY MR
DATE 8/21/20
SCALE 1"=30'
JOB # 20001

DRAINAGE SWALE



AFFINE ENGINEERING AND SURVEYING, INC
CIVIL ENGINEERS
SURVEYORS
TELEPHONE NUMBER 407-421-5534
138 NW MAIN BLVD LAKE CITY, FLORIDA 32055
CERTIFICATE OF AUTHORIZATION NUMBER 29140

PREPARED FOR:
GANSKOP PROPERTIES LLC

DETAILS-2

DRAWING 20-001
SHEET 8

Sunshine811

BASE 20-001

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALY SIGNED AND SEALED UNDER RULE 61G15-23.004 F.A.C.

FLORIDA DEPARTMENT OF
Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

SELF-CERTIFICATION FOR A STORMWATER MANAGEMENT SYSTEM IN UPLANDS SERVING LESS THAN 10 ACRES OF TOTAL PROJECT AREA AND LESS THAN 2 ACRES OF IMPERVIOUS SURFACES

Owner(s)/Permittee(s):	Mark Ganskop, Mark Ganskop
File No:	0437238001EG
File Name:	THE PINES AT FOREST MEADOWS
Site Address:	450 NW Lake City Ave Lake City FL - 32055 4823
County:	Columbia
Latitude:	30° 11' 10.2893"
Longitude:	-82° 42' 3.3519"
Total Project Area:	1
Total Impervious Surface Area:	0.64
Approximate Date of Commencement of Construction:	10/15/2023
Registered Florida Professional:	Victor Omar Marrero
License No.:	78630
Company:	

Date: July 05, 2023

Mark Ganskop certified through the Department's Enterprise Self-Service Application portal that the project described above was designed by the above-named Florida registered professional to meet the following requirements:

(a)The total project area involves less than 10 acres and less than 2 acres of impervious surface;
(b)Activities will not impact wetlands or other surface waters;
(c)Activities are not conducted in, on, or over wetlands or other surface waters;
(d)Drainage facilities will not include pipes having diameters greater than 24 inches, or the hydraulic equivalent, and will not use pumps in any manner;
(e)The project is not part of a larger common plan, development, or sale; and
(f)The project does not:
1.Cause adverse water quantity or flooding impacts to receiving water and adjacent lands;

2.Cause adverse impacts to existing surface water storage and conveyance capabilities;
3.Cause a violation of state water quality standards; or
4.Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to s. 373.042 or a work of the district established pursuant to s. 373.086, F.S.

This certification was submitted before initiation of construction of the above project. The system is designed, and will be operated and maintained in accordance with applicable rules adopted pursuant to part IV of chapter 373, F.S. There is a rebuttable presumption that the discharge from such system will comply with state water quality standards.Therefore, construction, alteration, and maintenance of the stormwater management system serving this project is authorized in accordance with s.403.814(12), F.S.

In accordance with s. 373.416(2), F.S., if ownership of the property or the stormwater management system is sold or transferred to another party, continued operation of the system is authorized only if notice is provided to the Department within 30 days of the sale or transfer.This notice can be submitted to:

FDEP Northeast District
8800 Baymeadows Way West
Jacksonville, FL32256

This certification was submitted along with the following electronic documents:

File Description
Plans

If you have submitted this certification as a Florida Registered Professional, you may wish to sign and seal this certification, and return a copy to the Department, in accordance with your professional practice act requirements under Florida Statutes.

I, Victor Omar Marrero, License No. 78630, do hereby certify that the above information is true and accurate, based upon my knowledge, information and belief. In the space below, affix signature, date, seal, company name, address and certificate of authorization (if applicable).

This sealed certification may be submitted to the Department, either electronically (as an attachment in Adobe PDF or other secure, digital format) at DEP_NED@dep.state.fl.us, or as a hardcopy, at the postal address below:

FDEP Northeast District
8800 Baymeadows Way West
Jacksonville, FL32256

City of Lake City
Water flow report

HYDRANT # & LOCATION: NW Lake City Ave and NW Huntsboro ST DATE: 6/27/2023

TEST BY: Al/Daniel Day: Friday Time: 11:00 Minutes: 2

WATER SUPPLIED BY: Municipal

PURPOSE OF TEST: request

DATA

FLOW HYDRANT(S)	A1	A2	A3
SIZE OPENING:	2.5	2.5	2.5
COEFFICIENT:	0.8		
PITOT READING:	45		
GPM:	1001	0	0

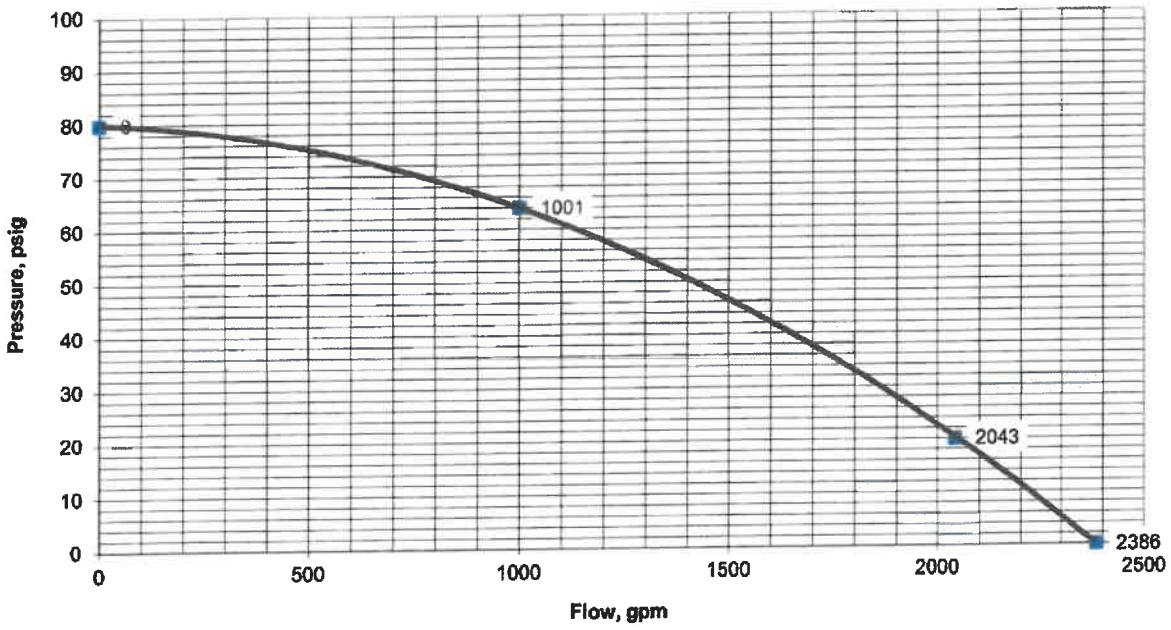
TOTAL FLOW DURING TEST: 1001 GPM

STATIC READING: 80 PSI RESIDUAL: 64 PSI

RESULTS: AT 20 PSI RESIDUAL 2043 GPM AT 0 PSI 2386 GPM

ESTIMATED CONSUMPTION: 2001 GAL.

REMARKS:



Affine Engineering and Surveying, Inc.

Drainage Report
Pines of Forest Meadows
Lake City, Florida

Pines of Forest Meadows
Lake City, Florida

Project Description

The project is located off Lake City Avenue, Lots 1C and 2C, Forest Plantation Commercial Subdivision in Section 34, Township 3 South, Range 16 East, Lake City, Florida. The parcel number is 34-3S-16-601. The project involves constructing apartment buildings, parking, and other areas associated with the apartments. A retention pond will also be constructed for stormwater management.

Existing Site Conditions

The project site is a recently cleared mostly open area. See Appendix A for location map. The project is not located in a flood area. See Appendix B for map.

The USDA soil report indicates the project site has Blanton fine sand with Hydrologic Soil Group A. Holes were dug in 2 locations to a depth of approximately 48" and the soil found is consistent with the USDA classification. See Appendix C for soil map.

Proposed Stormwater Management Plan

A retention/detention pond will be used for storm water management. The plan calls for treatment of the runoff from the first 1 inch of rainfall for water quality treatment. Proposed mitigation for water quantity shall approximate the rate and volume of storm water runoff that occurred under the site's natural unimproved or existing state as required by Section 7.3.4 of the Lake City Land Development Regulations and by State Stormwater Regulations.

Pond Elevation			
Elevation	Area (sq ft)	Area (ac)	Volume (cu ft)
156.0	4,766	0.109	10,139
155.5	4,283	0.098	7,877
155.0	3,799	0.087	5,857
154.5	3,354	0.077	4,068
154.0	2,909	0.067	2,503
153.5	2,503	0.057	1,150
153.0	2,096	0.048	0

WATER QUALITY

DESCRIPTION	AREA (SQ.FT.)	AREA (AC)	C		COMPOSITE	
Buildings	4,764.00	0.109	0.95	4,525.80		
Exist. Imp.	-	0.000	0.80	-		
Pond	4,766.00	0.109	1.00	4,766.00		
Drives/Parking	9,692.00	0.222	0.95	9,207.40		
Open	7,977.00	0.183	0.20	1,595.40		
TOTAL	27,199.00	0.624		20,094.60	0.74	

Treatment Volume required 0.74 x 1" x 27,199 = 1,675 Cu. Ft.
Treatment Volume available below weir at 155.1 = 6,241 Cu. Ft.

WATER QUANTITY

Pre-Developed Conditions

DESCRIPTION	AREA (SQ. FT)	AREA (AC)	CN		COMPOSITE	
Buildings	-	0.000		0.00		
Exist. Imp.	-	0.000		0.00		
Pond	-	0.000		0.00		
Drives/Parking	-	0.000		0.00		
Open	27,199.00	0.624	56	34.97		
TOTAL	27,199.00	0.624		34.97	56.0	

Post-Developed Conditions

DESCRIPTION	AREA (SQ. FT.)	AREA (AC)	CN		COMPOSITE	
Buildings	4,764.00	0.109	98	10.718		
Exist. Imp.	-	0.000		0.000		
Pond	4,766.00	0.109	100	10.941		
Drives/Parking	9,692.00	0.222	98	21.805		
Open	7,977.00	0.183	56	10.255		
TOTAL	27,199.00	0.624		53.719	86.0	

Summary of Results

Event (hours)	Elevation (feet)	Rate Pre (cfs)	Rate Post (cfs)	Volume Pre (cf)	Volume Post (cf)
1	154.86	1.16	0.00	1,493.30	0.00
2	155.04	1.07	0.00	2,478.20	0.00
4	155.23	0.75	0.19	3,725.20	380.10
8	155.24	0.96	0.22	5,564.70	637.80
24	155.21	0.33	0.15	9,608.10	3,092.50
72	155.27	0.30	0.30	14,220.90	4,846.40
168	155.23	0.22	0.21	17,256.30	3,997.20
240	155.26	0.29	0.28	21,368.30	4,842.10

See App endix D for Detail Ponds Output.

Please contact me at 407.421.5534 if you have any questions.

Respectfully,

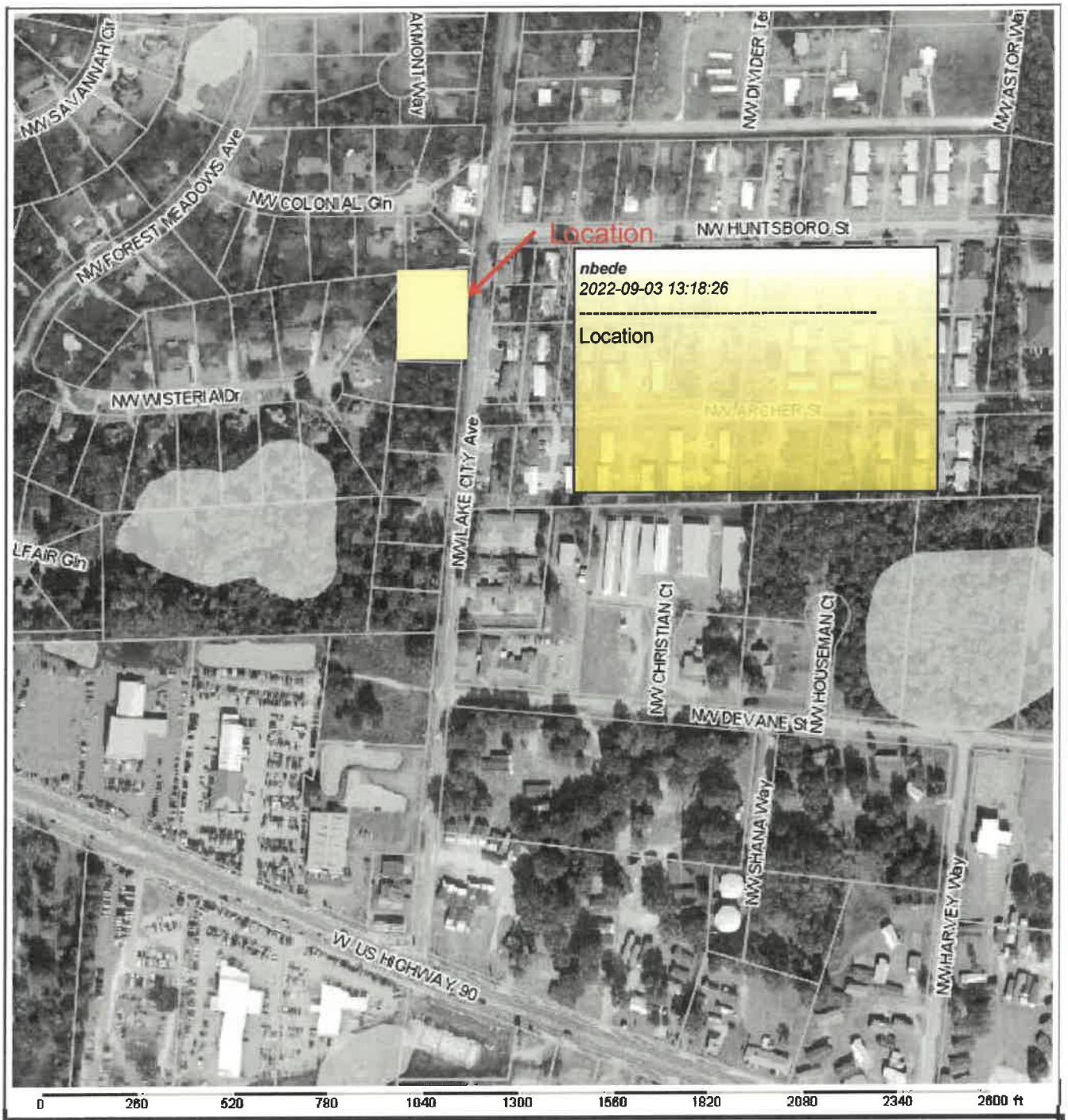
Victor O. Marrero, P.E.

Victor O Marrero

Digitally signed by Victor O Marrero
Date: 2023.07.18 21:11:18 -04'00'

7/15/2023

Appendix A



Columbia County Property Appraiser

Jeff Hampton | Lake City, Florida 1386-758-1083

PARCEL: 34-35-16-02461-602 (10095) | VACANT COMMERCIAL (1000) | 0.53 AC

LOT 2C FOREST PLANTATION COMMERCIAL S/O. WO 1231-151, DC 1356-1857, WO 1404-899,

GANSKOP PROPERTIES LLC

Owner: 736 SW ARBOR LN
LAKE CITY, FL 32024

Site:

Sales	1124/2020	$50,000	V (Q)
Info	31812012	$58,400	V (U)

2022 Working Values

Mkt Lnd	$26,261	Appraised	$26,261
Ag Lnd	$0	Assessed	$26,261
Bldg	$0	Exempt	$0
XFOB	$0		county:$26,261
Just	$26,261	Total	city:$26,261
		Taxable	other:$0
			school:$26,261

NOTES:

Columbia County, FL

Appendix B


COLUMBIA COUNTY
UNINCORPORATED AREAS
120070
12023C0280D
eff. 11/2/2018
LOCATION
CITY OF
LAKE CITY
120406
12023C0290D
eff. 11/2/2018
Zone A

Appendix C

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Columbia County, Florida

Ganscop LC Ave.

December 3, 2021

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

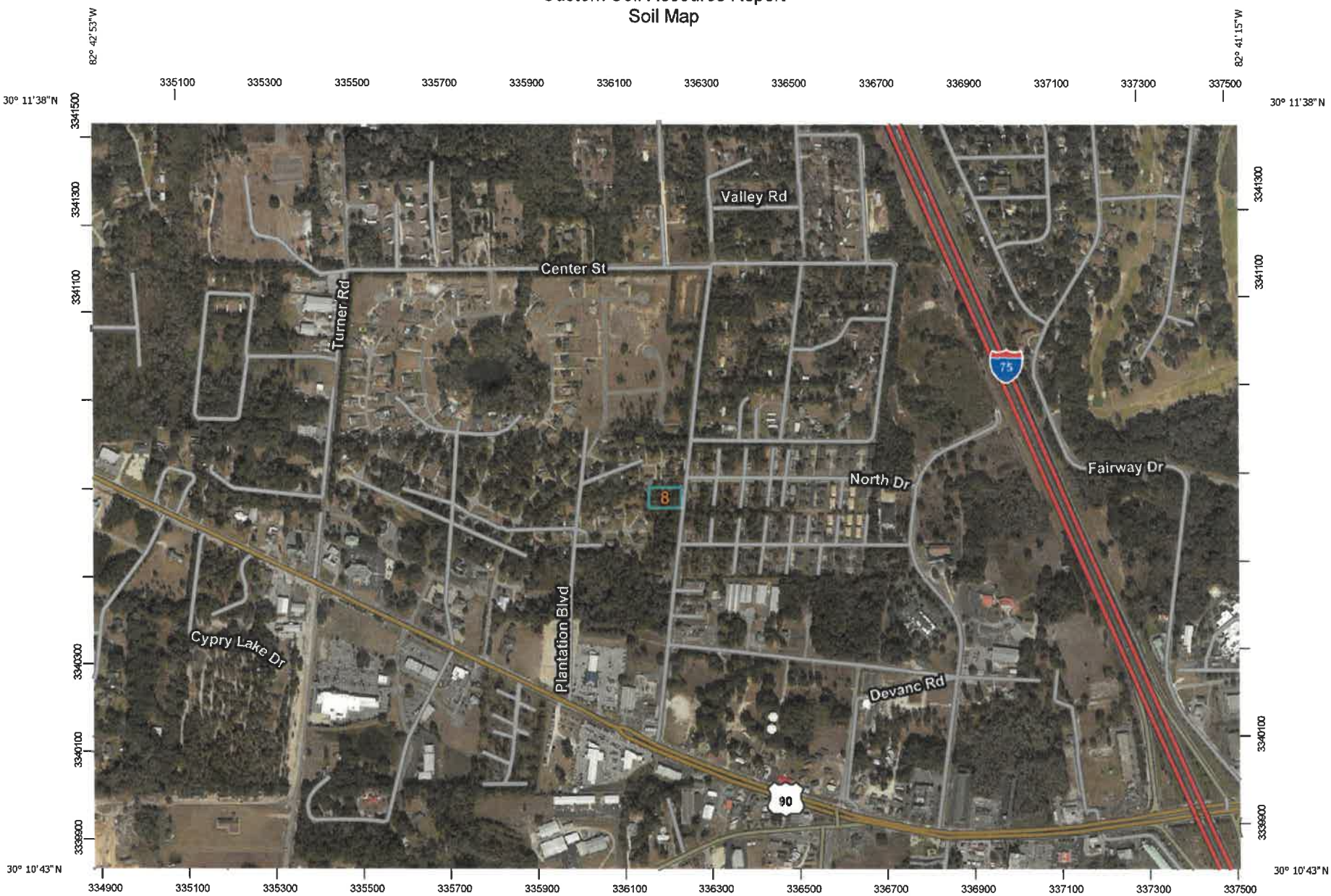
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

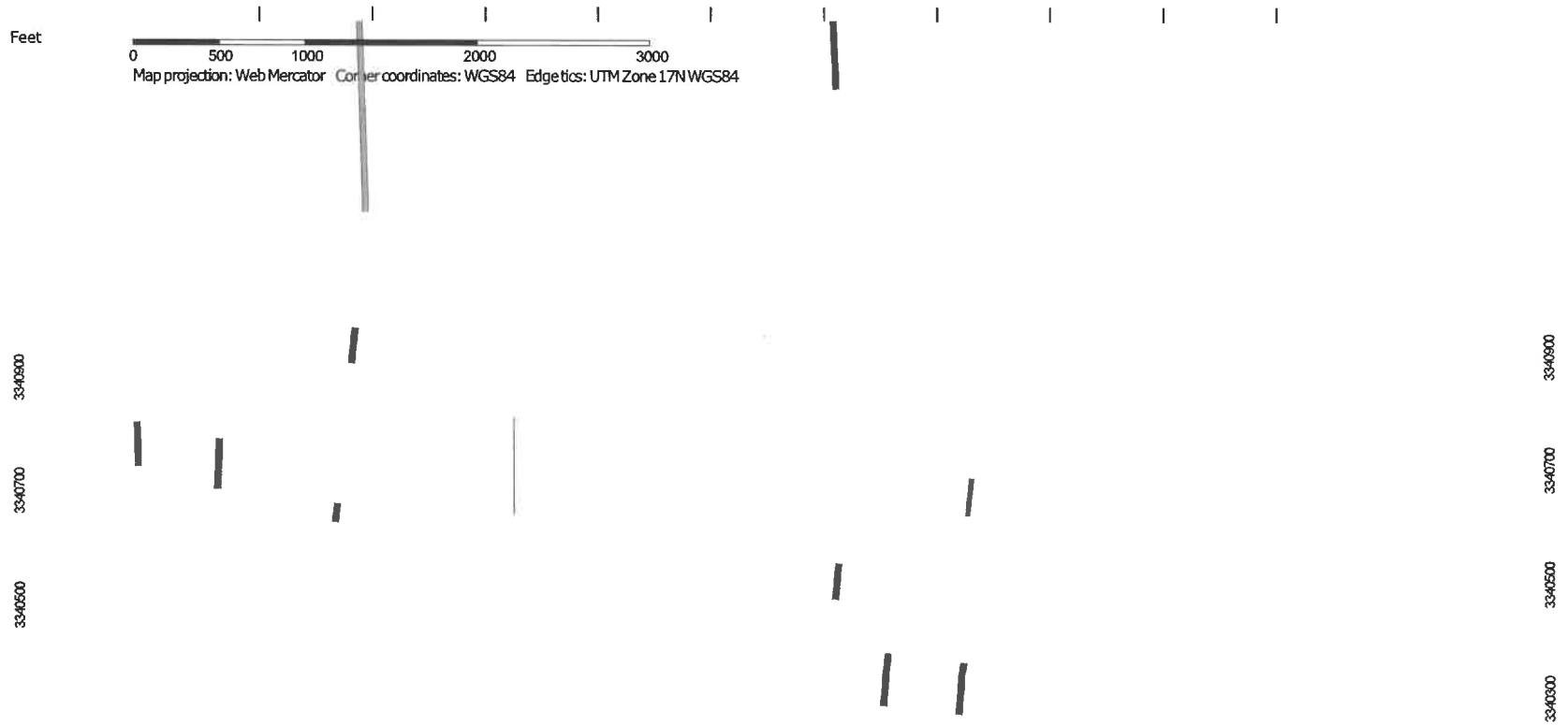
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map




Feet
0
500
1000
2000
3000
Map projection: Web Mercator
Corner coordinates: WGS84
Edge tics: UTM Zone 17N WGS84
340900
340700
340500
340900
340700
340500
340300

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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

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: Columbia County, Florida
Survey Area Data: Version 17, Sep 2, 2021

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

Date(s) aerial images were photographed: Data not available.

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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
8	Blanton fine sand, 0 to 5 percent slopes	0.9	100.0%
Totals for Area of Interest		**0.9**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Columbia County, Florida

8—Blanton fine sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2w0q2
Elevation: 30 to 200 feet
Mean annual precipitation: 51 to 59 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 258 to 310 days
Farmland classification: Not prime farmland

Map Unit Composition

Blanton and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blanton

Setting

Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, interfluve, riser
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 7 inches: fine sand
E - 7 to 52 inches: fine sand
Bt - 52 to 80 inches: fine sandy loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 6.00 in/hr)
Depth to water table: About 42 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G138XA121FL)
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G138XA121FL)
Hydric soil rating: No

Minor Components

Albany

Percent of map unit: 6 percent
Landform: Ridges on marine terraces
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G138XA131FL), North Florida Flatwoods (R138XY004FL)
Hydric soil rating: No

Troup

Percent of map unit: 4 percent
Landform: Ridges, knolls
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G133AA111FL), Longleaf Pine-Turkey Oak Hills (R133AY002FL)
Hydric soil rating: No

Chipley

Percent of map unit: 3 percent
Landform: Knolls on marine terraces, rises on marine terraces, flats on marine terraces
Landform position (two-dimensional): Shoulder, footslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G138XA131FL)
Hydric soil rating: No

Alpin

Percent of map unit: 2 percent
Landform: Flatwoods on marine terraces, knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G138XA111FL), Sand Pine Scrub (R153AY001FL)
Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix D

PONDS Version 3.3.0278
Retention Pond Recovery - Refined Method
Copyright 2012
Devo Seereeram, Ph.D., P.E.

Project Data

Project Name:	Pines of Forest Meadows
Simulation Description:	Lake City Ave Apartments Rev
Project Number:	
Engineer :	
Supervising Engineer:	
Date:	07-15-2023

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum):	146.00
Water Table Elevation, [WT] (ft datum):	151.50
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day):	12.00
Fillable Porosity, [n] (%):	30.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day):	8.0
Maximum Area For Unsaturated Infiltration, [Av] (ft^2):	4766.0

Geometry Data

Equivalent Pond Length, [L] (ft):	121.0
Equivalent Pond Width, [W] (ft):	41.0

Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft^2)
153.00	2096.0
154.00	2909.0
155.00	3799.0
156.00	4766.0

Discharge Structures

Discharge Structure #1 is inactive

Discharge Structures (cont'd.)

Discharge Structure #2 is active as weir

Structure Parameters

Description: Wier

Weir elevation, (ft datum):	155.1
Weir coefficient:	2.861
Weir length, (ft):	1.5
Weir exponent:	1.5

Tailwater - disabled, free discharge

Discharge Structure #3 is active as weir

Structure Parameters

Description: 4' Weir

Weir elevation, (ft datum):	155.6
Weir coefficient:	2.861
Weir length, (ft):	4
Weir exponent:	1.5

Tailwater - disabled, free discharge

Scenario Input Data

Scenario 1 :: FDOT 1 Hour (x1)

Hydrograph Type:	Inline SCS
• **Modflow Routing:**	**Not routed**
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	56
Design Rainfall Depth (inches)	4.2
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario 2 :: FDOT 2 Hour (x1)

Hydrograph Type:	Inline SCS
• **Modflow Routing:**	**Not routed**
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	56
Design Rainfall Depth (inches)	5.1
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario Input Data (cont'd.)

Scenario 3 :: FDOT 4 Hour (x1)

Hydrograph Type:	Inline SCS
• **Modflow Routing:**	**Not routed**
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	56
Design Rainfall Depth (inches)	6.1
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario 4 :: FDOT 8 Hour (x1)

Hydrograph Type:	Inline SCS
• **Modflow Routing:**	**Not routed**
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	56
Design Rainfall Depth (inches)	7.4
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario Input Data (cont'd.)

Scenario 5 :: FDOT 24 Hour (x1)

Hydrograph Type:	Inline SCS
• **Modflow Routing:**	**Not routed**
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	56
Design Rainfall Depth (inches)	9.8
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario 6 :: FDOT 72 Hour (x1)

Hydrograph Type:	Inline SCS
• **Modflow Routing:**	**Not routed**
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	56
Design Rainfall Depth (inches)	12.4
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario Input Data (cont'd.)

Scenario 7 :: FDOT 168 Hour (x1)

Hydrograph Type:	Inline SCS
• **Modflow Routing:**	**Not routed**
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	56
Design Rainfall Depth (inches)	14.0
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario 8 :: FDOT 240 Hour (x1)

Hydrograph Type:	Inline SCS
• **Modflow Routing:**	**Not routed**
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	56
Design Rainfall Depth (inches)	16.1
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario Input Data (cont'd.)

Scenario 9 :: FDOT 1 Hour (x1)

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	86
Design Rainfall Depth (inches)	4.2
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario 10 :: FDOT 2 Hour (x1)

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	86
Design Rainfall Depth (inches)	5.1
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario Input Data (cont'd.)

Scenario 11 :: FDOT 4 Hour (x1)

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	86
Design Rainfall Depth (inches)	6.1
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario 12 :: FDOT 8 Hour (x1)

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	86
Design Rainfall Depth (inches)	7.4
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario Input Data (cont'd.)

Scenario 13 :: FDOT 24 Hour (x1)

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	86
Design Rainfall Depth (inches)	9.8
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario 14 :: FDOT 72 Hour (x1)

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	86
Design Rainfall Depth (inches)	12.4
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario Input Data (cont'd.)

Scenario 15 :: FDOT 168 Hour (x1)

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	86
Design Rainfall Depth (inches)	14.0
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario 16 :: FDOT 240 Hour (x1)

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.624
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	86
Design Rainfall Depth (inches)	16.1
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 151.50 (default)

Time After Storm Event (days)
3.000

Scenario 17 :: 1" of runoff from site

Hydrograph Type:	Slug Load
Modflow Routing:	Routed with infiltration

Treatment Volume (ft^3) 1675

Initial ground water level (ft datum) 151.50 (default)

Scenario Input Data (cont'd.)

Scenario 17 (cont'd.) :: Slug Load :: 1" of runoff from site

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.100	2.000	7.000
0.250	2.500	10.000
0.500	3.000	15.000
1.000	3.500	30.000
1.500	4.000	

Modflow Log

MODFLOW CONTROL PARAMETERS
Perimeter boundary condition: constant head
Maximum iterations of outer loop: 150
Maximum iterations of inner loop: 60
Horizontal conductivity within pond: 1000000 (if ground water mound is expected to intersect pond bottom)
Instantanerous storage coefficient: Volumetric balance
Default head closure tolerance: .01
Default residual closure tolerance: .5
Target water budget error: 1
On failure to converge: Rerun limiting inner loop to one iteration
> Maximum number of iterations of outer loop: 500
Running Average Porosity is active
> Starting on pass: 2
> When outer iteration reaches: 50
> Number of data points: 4
Running Average Pond Stage (for discharge structures with tailwater) is active
> Starting on pass: 2
> When outer iteration reaches: 50
> Number of data points: 4
Grid size: 1000 ft (from pond centerline)
Mound Output: none

Begin Scenario 1 7/15/2023 14:23:32
End Scenario 1 7/15/2023 14:23:32

Begin Scenario 2 7/15/2023 14:23:32
End Scenario 2 7/15/2023 14:23:32

Begin Scenario 3 7/15/2023 14:23:33
End Scenario 3 7/15/2023 14:23:33

Begin Scenario 4 7/15/2023 14:23:33
End Scenario 4 7/15/2023 14:23:33

Begin Scenario 5 7/15/2023 14:23:34
End Scenario 5 7/15/2023 14:23:34

Begin Scenario 6 7/15/2023 14:23:34
End Scenario 6 7/15/2023 14:23:34

Begin Scenario 7 7/15/2023 14:23:35
End Scenario 7 7/15/2023 14:23:35

Begin Scenario 8 7/15/2023 14:23:36
End Scenario 8 7/15/2023 14:23:36

Begin Scenario 9 7/15/2023 14:23:37
End Scenario 9 7/15/2023 14:23:37

Begin Scenario 10 7/15/2023 14:23:37
End Scenario 10 7/15/2023 14:23:37

Begin Scenario 11 7/15/2023 14:23:38
End Scenario 11 7/15/2023 14:23:38

Begin Scenario 12 7/15/2023 14:23:38
End Scenario 12 7/15/2023 14:23:38

Begin Scenario 13 7/15/2023 14:23:39
End Scenario 13 7/15/2023 14:23:39

Begin Scenario 14 7/15/2023 14:23:40

Modflow Log (cont'd.)

End Scenario 14 7/15/2023 14:23:42

Begin Scenario 15 7/15/2023 14:23:42
End Scenario 15 7/15/2023 14:23:45

Begin Scenario 16 7/15/2023 14:23:46
End Scenario 16 7/15/2023 14:23:51

Begin Scenario 17 7/15/2023 14:23:52
End Scenario 17 7/15/2023 14:23:52

Sort-By-Category Report

Scenarios Considered: 1 to 17

Stage - Maximum

Rank	Scenario Number	Maximum Stage (ft datum)	Time (hours)	Description
1	14	155.268	60.044	FDOT 72 Hour (x1)
2	16	155.262	184.022	FDOT 240 Hour (x1)
3	12	155.238	5.022	FDOT 8 Hour (x1)
4	15	155.232	160.000	FDOT 168 Hour (x1)
5	11	155.225	3.156	FDOT 4 Hour (x1)
6	13	155.209	19.044	FDOT 24 Hour (x1)
7	10	155.038	1.933	FDOT 2 Hour (x1)
8	9	154.860	1.022	FDOT 1 Hour (x1)
9	17	153.703	0.002	1" of runoff from site
10	1	Not Available	Not Available	FDOT 1 Hour (x1)
11	2	Not Available	Not Available	FDOT 2 Hour (x1)
12	3	Not Available	Not Available	FDOT 4 Hour (x1)
13	4	Not Available	Not Available	FDOT 8 Hour (x1)
14	5	Not Available	Not Available	FDOT 24 Hour (x1)
15	6	Not Available	Not Available	FDOT 72 Hour (x1)
16	7	Not Available	Not Available	FDOT 168 Hour (x1)
17	8	Not Available	Not Available	FDOT 240 Hour (x1)

Infiltration - Cumulative Volume - Maximum Positive

Rank	Scenario Number	Maximum Positive Cumulative Infiltration Volume (ft^3)	Time (hours)	Description
1	16	24725.0	312.578	FDOT 240 Hour (x1)
2	15	20773.4	240.578	FDOT 168 Hour (x1)
3	14	16721.3	144.578	FDOT 72 Hour (x1)
4	13	13295.5	96.578	FDOT 24 Hour (x1)
5	12	10943.3	80.578	FDOT 8 Hour (x1)
6	11	9240.3	76.578	FDOT 4 Hour (x1)
7	10	2651.6	2.578	FDOT 2 Hour (x1)
8	9	1416.0	1.578	FDOT 1 Hour (x1)
9	17	1.5	0.002	1" of runoff from site
10	1	Not Available	Not Available	FDOT 1 Hour (x1)
11	2	Not Available	Not Available	FDOT 2 Hour (x1)
12	3	Not Available	Not Available	FDOT 4 Hour (x1)
13	4	Not Available	Not Available	FDOT 8 Hour (x1)
14	5	Not Available	Not Available	FDOT 24 Hour (x1)
15	6	Not Available	Not Available	FDOT 72 Hour (x1)
16	7	Not Available	Not Available	FDOT 168 Hour (x1)
17	8	Not Available	Not Available	FDOT 240 Hour (x1)

Sort-By-Category Report (cont'd.)

Infiltration - Cumulative Volume - End of Simulation

Rank	Scenario Number	Cumulative Infiltration Volume End Of Simulation (ft^3)	Time (hours)	Description
1	16	24725.0	312.578	FDOT 240 Hour (x1)
2	15	20773.4	240.578	FDOT 168 Hour (x1)
3	14	16721.3	144.578	FDOT 72 Hour (x1)
4	13	13295.5	96.578	FDOT 24 Hour (x1)
5	12	10943.3	80.578	FDOT 8 Hour (x1)
6	11	9240.3	76.578	FDOT 4 Hour (x1)
7	10	8068.6	74.578	FDOT 2 Hour (x1)
8	9	6182.5	73.578	FDOT 1 Hour (x1)
9	17	1675.0	720.000	1" of runoff from site
10	1	Not Available	Not Available	FDOT 1 Hour (x1)
11	2	Not Available	Not Available	FDOT 2 Hour (x1)
12	3	Not Available	Not Available	FDOT 4 Hour (x1)
13	4	Not Available	Not Available	FDOT 8 Hour (x1)
14	5	Not Available	Not Available	FDOT 24 Hour (x1)
15	6	Not Available	Not Available	FDOT 72 Hour (x1)
16	7	Not Available	Not Available	FDOT 168 Hour (x1)
17	8	Not Available	Not Available	FDOT 240 Hour (x1)

Discharge - Rate - Maximum Positive

Rank	Scenario Number	Maximum Positive Discharge Rate (ft^3/s)	Time (hours)	Description
1	1	1.1589	0.689	FDOT 1 Hour (x1)
2	2	1.0672	0.844	FDOT 2 Hour (x1)
3	4	0.9595	4.022	FDOT 8 Hour (x1)
4	3	0.7512	2.533	FDOT 4 Hour (x1)
5	5	0.3284	12.000	FDOT 24 Hour (x1)
6	6	0.2988	59.978	FDOT 72 Hour (x1)
7	14	0.2966	60.044	FDOT 72 Hour (x1)
8	8	0.2906	184.000	FDOT 240 Hour (x1)
9	16	0.2802	184.022	FDOT 240 Hour (x1)
10	12	0.2199	5.022	FDOT 8 Hour (x1)
11	7	0.2174	160.000	FDOT 168 Hour (x1)
12	15	0.2061	160.000	FDOT 168 Hour (x1)
13	11	0.1889	3.156	FDOT 4 Hour (x1)
14	13	0.1538	19.044	FDOT 24 Hour (x1)
15	9	None	N.A.	FDOT 1 Hour (x1)
16	10	None	N.A.	FDOT 2 Hour (x1)
17	17	None	N.A.	1" of runoff from site

Sort-By-Category Report (cont'd.)

Discharge - Cumulative Volume - Maximum Positive

Rank	Scenario Number	Maximum Positive Cumulative Discharge Volume (ft^3)	Time (hours)	Description
1	8	21368.3	240.533	FDOT 240 Hour (x1)
2	7	17256.3	168.533	FDOT 168 Hour (x1)
3	6	14220.9	72.533	FDOT 72 Hour (x1)
4	5	9608.1	24.533	FDOT 24 Hour (x1)
5	4	5564.7	8.533	FDOT 8 Hour (x1)
6	14	4846.4	70.556	FDOT 72 Hour (x1)
7	16	4842.1	217.156	FDOT 240 Hour (x1)
8	15	3997.2	240.578	FDOT 168 Hour (x1)
9	3	3725.2	4.533	FDOT 4 Hour (x1)
10	13	3092.5	24.400	FDOT 24 Hour (x1)
11	2	2478.2	2.533	FDOT 2 Hour (x1)
12	1	1493.3	1.533	FDOT 1 Hour (x1)
13	12	637.8	8.378	FDOT 8 Hour (x1)
14	11	380.1	3.911	FDOT 4 Hour (x1)
15	9	None	N.A.	FDOT 1 Hour (x1)
16	10	None	N.A.	FDOT 2 Hour (x1)
17	17	None	N.A.	1" of runoff from site

Discharge - Cumulative Volume - End of Simulation

Rank	Scenario Number	Cumulative Discharge Volume End Of Simulation (ft^3)	Time (hours)	Description
1	8	21368.3	312.578	FDOT 240 Hour (x1)
2	7	17256.3	240.578	FDOT 168 Hour (x1)
3	6	14220.9	144.578	FDOT 72 Hour (x1)
4	5	9608.1	96.578	FDOT 24 Hour (x1)
5	4	5564.7	80.578	FDOT 8 Hour (x1)
6	14	4846.4	144.578	FDOT 72 Hour (x1)
7	16	4842.1	312.578	FDOT 240 Hour (x1)
8	15	3997.2	240.578	FDOT 168 Hour (x1)
9	3	3725.2	76.578	FDOT 4 Hour (x1)
10	13	3092.5	96.578	FDOT 24 Hour (x1)
11	2	2478.2	74.578	FDOT 2 Hour (x1)
12	1	1493.3	73.578	FDOT 1 Hour (x1)
13	12	637.8	80.578	FDOT 8 Hour (x1)
14	11	380.1	76.578	FDOT 4 Hour (x1)
15	9	0.0	73.578	FDOT 1 Hour (x1)
16	10	0.0	74.578	FDOT 2 Hour (x1)
17	17	0.0	720.000	1" of runoff from site

Summary of Results :: *Scenario 1 :: FDOT 1 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	Not Available	Not Available		
Maximum	Not Available	Not Available		
Inflow				
Rate - Maximum - Positive	0.689		1.1589	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.533			1493.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	73.578			1493.3
Infiltration				
Rate - Maximum - Positive	Not Available		Not Available	
Rate - Maximum - Negative	Not Available		Not Available	
Cumulative Volume - Maximum Positive	Not Available			Not Available
Cumulative Volume - Maximum Negative	Not Available			Not Available
Cumulative Volume - End of Simulation	Not Available			Not Available
Combined Discharge				
Rate - Maximum - Positive	0.689		1.1589	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.533			1493.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	73.578			1493.3
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 2 :: FDOT 2 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	Not Available	Not Available		
Maximum	Not Available	Not Available		
Inflow				
Rate - Maximum - Positive	0.844		1.0672	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.533			2478.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	74.578			2478.2
Infiltration				
Rate - Maximum - Positive	Not Available		Not Available	
Rate - Maximum - Negative	Not Available		Not Available	
Cumulative Volume - Maximum Positive	Not Available			Not Available
Cumulative Volume - Maximum Negative	Not Available			Not Available
Cumulative Volume - End of Simulation	Not Available			Not Available
Combined Discharge				
Rate - Maximum - Positive	0.844		1.0672	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.533			2478.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	74.578			2478.2
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 3 :: FDOT 4 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	Not Available	Not Available		
Maximum	Not Available	Not Available		
Inflow				
Rate - Maximum - Positive	2.533		0.7512	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.533			3725.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	76.578			3725.2
Infiltration				
Rate - Maximum - Positive	Not Available		Not Available	
Rate - Maximum - Negative	Not Available		Not Available	
Cumulative Volume - Maximum Positive	Not Available			Not Available
Cumulative Volume - Maximum Negative	Not Available			Not Available
Cumulative Volume - End of Simulation	Not Available			Not Available
Combined Discharge				
Rate - Maximum - Positive	2.533		0.7512	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.533			3725.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	76.578			3725.2
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 4 :: FDOT 8 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	Not Available	Not Available		
Maximum	Not Available	Not Available		
Inflow				
Rate - Maximum - Positive	4.022		0.9595	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.533			5564.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	80.578			5564.7
Infiltration				
Rate - Maximum - Positive	Not Available		Not Available	
Rate - Maximum - Negative	Not Available		Not Available	
Cumulative Volume - Maximum Positive	Not Available			Not Available
Cumulative Volume - Maximum Negative	Not Available			Not Available
Cumulative Volume - End of Simulation	Not Available			Not Available
Combined Discharge				
Rate - Maximum - Positive	4.022		0.9595	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.533			5564.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	80.578			5564.7
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 5 :: FDOT 24 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	Not Available	Not Available		
Maximum	Not Available	Not Available		
Inflow				
Rate - Maximum - Positive	12.000		0.3284	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.533			9608.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.578			9608.1
Infiltration				
Rate - Maximum - Positive	Not Available		Not Available	
Rate - Maximum - Negative	Not Available		Not Available	
Cumulative Volume - Maximum Positive	Not Available			Not Available
Cumulative Volume - Maximum Negative	Not Available			Not Available
Cumulative Volume - End of Simulation	Not Available			Not Available
Combined Discharge				
Rate - Maximum - Positive	12.000		0.3284	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.533			9608.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.578			9608.1
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 6 :: FDOT 72 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	Not Available	Not Available		
Maximum	Not Available	Not Available		
Inflow				
Rate - Maximum - Positive	59.978		0.2988	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.533			14220.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	144.578			14220.9
Infiltration				
Rate - Maximum - Positive	Not Available		Not Available	
Rate - Maximum - Negative	Not Available		Not Available	
Cumulative Volume - Maximum Positive	Not Available			Not Available
Cumulative Volume - Maximum Negative	Not Available			Not Available
Cumulative Volume - End of Simulation	Not Available			Not Available
Combined Discharge				
Rate - Maximum - Positive	59.978		0.2988	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.533			14220.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	144.578			14220.9
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 7 :: FDOT 168 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	Not Available	Not Available		
Maximum	Not Available	Not Available		
Inflow				
Rate - Maximum - Positive	160.000		0.2174	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.533			17256.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.578			17256.3
Infiltration				
Rate - Maximum - Positive	Not Available		Not Available	
Rate - Maximum - Negative	Not Available		Not Available	
Cumulative Volume - Maximum Positive	Not Available			Not Available
Cumulative Volume - Maximum Negative	Not Available			Not Available
Cumulative Volume - End of Simulation	Not Available			Not Available
Combined Discharge				
Rate - Maximum - Positive	160.000		0.2174	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.533			17256.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.578			17256.3
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 8 :: FDOT 240 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	Not Available	Not Available		
Maximum	Not Available	Not Available		
Inflow				
Rate - Maximum - Positive	184.000		0.2906	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.533			21368.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	312.578			21368.3
Infiltration				
Rate - Maximum - Positive	Not Available		Not Available	
Rate - Maximum - Negative	Not Available		Not Available	
Cumulative Volume - Maximum Positive	Not Available			Not Available
Cumulative Volume - Maximum Negative	Not Available			Not Available
Cumulative Volume - End of Simulation	Not Available			Not Available
Combined Discharge				
Rate - Maximum - Positive	184.000		0.2906	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.533			21368.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	312.578			21368.3
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 9 :: FDOT 1 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	151.50		
Maximum	1.022	154.86		
Inflow				
Rate - Maximum - Positive	0.600		4.0607	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.533			6182.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	73.578			6182.5
Infiltration				
Rate - Maximum - Positive	1.022		0.3408	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.578			1416.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	73.578			6182.5
Combined Discharge				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	73.578			0.0
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	73.578			0.0
Discharge Structure 3 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	73.578			0.0
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 10 :: FDOT 2 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	151.50		
Maximum	1.933	155.04		
Inflow				
Rate - Maximum - Positive	0.822		3.2783	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.533			8068.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	74.578			8068.6
Infiltration				
Rate - Maximum - Positive	1.933		0.3558	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.578			2651.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	74.578			8068.6
Combined Discharge				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	74.578			0.0
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	74.578			0.0
Discharge Structure 3 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	74.578			0.0
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 11 :: FDOT 4 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	151.50		
Maximum	3.156	155.22		
Inflow				
Rate - Maximum - Positive	2.022		1.7199	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.533			10164.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	76.578			10164.9
Infiltration				
Rate - Maximum - Positive	3.933		0.8486	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	76.578			9240.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	76.578			9240.3
Combined Discharge				
Rate - Maximum - Positive	3.156		0.1889	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	3.911			380.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	76.578			380.1
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	3.911			380.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	76.578			380.1
Discharge Structure 3 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	76.578			0.0
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 12 :: FDOT 8 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	151.50		
Maximum	5.022	155.24		
Inflow				
Rate - Maximum - Positive	4.000		1.8041	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.533			12945.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	80.578			12945.5
Infiltration				
Rate - Maximum - Positive	5.044		1.0809	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	80.578			10943.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	80.578			10943.3
Combined Discharge				
Rate - Maximum - Positive	5.022		0.2199	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.378			637.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	80.578			637.8
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - simple weir				
Rate - Maximum - Positive	5.044		0.1861	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.378			637.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	80.578			637.8
Discharge Structure 3 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	80.578			0.0
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 13 :: FDOT 24 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	151.50		
Maximum	19.044	155.21		
Inflow				
Rate - Maximum - Positive	12.000		0.5799	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.533			18411.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.578			18411.3
Infiltration				
Rate - Maximum - Positive	9.289		0.4052	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	96.578			13295.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.578			13295.5
Combined Discharge				
Rate - Maximum - Positive	19.044		0.1538	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.400			3092.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.578			3092.5
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - simple weir				
Rate - Maximum - Positive	19.044		0.1538	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.400			3092.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.578			3092.5
Discharge Structure 3 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.578			0.0
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 14 :: FDOT 72 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	151.50		
Maximum	60.044	155.27		
Inflow				
Rate - Maximum - Positive	59.978		0.3790	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.533			24112.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	144.578			24112.0
Infiltration				
Rate - Maximum - Positive	12.000		0.1580	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	144.578			16721.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	144.578			16721.3
Combined Discharge				
Rate - Maximum - Positive	60.044		0.2966	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	70.556			4846.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	144.578			4846.4
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - simple weir				
Rate - Maximum - Positive	60.044		0.2966	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	70.556			4846.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	144.578			4846.4
Discharge Structure 3 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	144.578			0.0
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 15 :: FDOT 168 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	151.50		
Maximum	160.000	155.23		
Inflow				
Rate - Maximum - Positive	160.000		0.2558	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.533			27692.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.578			27692.1
Infiltration				
Rate - Maximum - Positive	38.222		0.1312	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.578			20773.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.578			20773.4
Combined Discharge				
Rate - Maximum - Positive	160.000		0.2061	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.578			3997.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.578			3997.2
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - simple weir				
Rate - Maximum - Positive	160.000		0.2061	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.578			3997.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.578			3997.2
Discharge Structure 3 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.578			0.0
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 16 :: FDOT 240 Hour (x1)*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	151.50		
Maximum	184.022	155.26		
Inflow				
Rate - Maximum - Positive	184.000		0.3444	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.533			32403.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	312.578			32403.7
Infiltration				
Rate - Maximum - Positive	37.956		0.1618	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	312.578			24725.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	312.578			24725.0
Combined Discharge				
Rate - Maximum - Positive	184.022		0.2802	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	217.156			4842.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	312.578			4842.1
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - simple weir				
Rate - Maximum - Positive	184.022		0.2802	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	217.156			4842.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	312.578			4842.1
Discharge Structure 3 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	312.578			0.0
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results :: *Scenario 17 :: 1" of runoff from site*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	151.50		
Maximum	0.002	153.70		
Inflow				
Rate - Maximum - Positive	0.002		279.1667	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	0.002			1675.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	720.000			1675.0
Infiltration				
Rate - Maximum - Positive	0.002		0.2468	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	0.002			1.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	720.000			1675.0
Combined Discharge				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	720.000			0.0
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	720.000			0.0
Discharge Structure 3 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	720.000			0.0
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	36.000	Dry		1675.0
72 Hour Stage and Infiltration Volume	72.000	Dry		1675.0

Stage-Area-Storage for Pond

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.00	2,096	0
153.05	2,137	106
153.10	2,177	214
153.15	2,218	324
153.20	2,259	435
153.25	2,299	549
153.30	2,340	665
153.35	2,381	783
153.40	2,421	903
153.45	2,462	1,026
153.50	2,503	1,150
153.55	2,543	1,276
153.60	2,584	1,404
153.65	2,624	1,534
153.70	2,665	1,666
153.75	2,706	1,801
153.80	2,746	1,937
153.85	2,787	2,075
153.90	2,828	2,216
153.95	2,868	2,358
154.00	2,909	2,503
154.05	2,954	2,649
154.10	2,998	2,798
154.15	3,043	2,949
154.20	3,087	3,102
154.25	3,132	3,258
154.30	3,176	3,415
154.35	3,220	3,575
154.40	3,265	3,737
154.45	3,309	3,902
154.50	3,354	4,068
154.55	3,399	4,237
154.60	3,443	4,408
154.65	3,488	4,581
154.70	3,532	4,757
154.75	3,577	4,935
154.80	3,621	5,115
154.85	3,665	5,297
154.90	3,710	5,481
154.95	3,754	5,668
155.00	3,799	5,857
155.05	3,847	6,048
155.10	3,896	6,241
155.15	3,944	6,437
155.20	3,992	6,636
155.25	4,041	6,836
155.30	4,089	7,040
155.35	4,137	7,245
155.40	4,186	7,453
155.45	4,234	7,664
155.50	4,283	7,877
155.55	4,331	8,092
155.60	4,379	8,310
155.65	4,428	8,530
155.70	4,476	8,753
155.75	4,524	8,978
155.80	4,573	9,205
155.85	4,621	9,435
155.90	4,669	9,667
155.95	4,718	9,902
156.00	**4,766**	**10,139**

Affine Engineering and Surveying, Inc.

July 4, 2023

re: Pines of Forest Meadows Impact Analysis

The site is currently vacant. The maximum allowed dwelling units is 8 (4 units per building). Three bedroom dwelling units were used for these calculations.

Criteria for analyses:

- Trip generation was calculated per the ITE Trip Generation Manual, 8th edition, ITE code 220
- Potable Water Analysis per Chapter 64E-6.008 Florida Administrative Code, Table 1
- Sanitary Sewer Analysis Chapter 64E-6.008 Florida Administrative Code, Table 1
- Environmental Engineering: Tampa Typical Solid Waste Generation Rates

Summary of analyses:

- Trip generation: 53 ADT & 5 Peak PM trips

Table 1

Trip Generation Analysis

ITE Code	ITE Use	ADT Multiplier	PM Peak Multiplier	DU	Total ADT	Total PM Peak
220	Apartment	6.65	0.62	8.00	53	5

* FDOT 8th Ed. ITE Trip generation

- Potable Water: 2,400 gallons per day

Table 2

Potable Water Analysis

Ch. 64E-6.008, F.A.C. Use	Ch. 64E-6.008, F.A.C. Gallons Per Day (GPD)	Ch. 64E-6.008, F.A.C. Multiplier*	Total (Gallons Per Day)
Apartment	300.00	8.00	2400.00

* Multiplier is based upon Ch. 64E.6008, Florida Administrative Code and can very from square footage, number of employees, number of seats, or etc. See Ch. 64E-6.008, F.A.C. to determine multiplier.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Job (20001) Ganskop

- Sanitary Sewer Water: 2,400 gallons per day

Table 3

Sanitary Sewer Analysis

Ch. 64E-6.008, F.A.C. Use	Ch. 64E-6.008, F.A.C. Gallons Per Day (GPD)	Ch. 64E-6.008, F.A.C. Multiplier*	Total (Gallons Per Day)
Apartment	300.00	8.00	2400.00

* Multiplier is based upon Ch. 64E.6008, F.A.C. and can very from square footage, number of employees, number of seats, or etc. See Ch. 64E-6.008, F.A.C. to determine multiplier.

- Solid Waste: 17.52 tons per year

Table 4

Solid Waste Analysis

Use	Tons Per Dwelling Unit**	bedrooms	Total (Tons Per Year)
Apartment	4.00	24.00	17.52

**4# per bedroom per day

Please contact me at 407.421.5534 if you have any questions.

Respectfully,

Victor O Marrero

Digitally signed by Victor O Marrero
Date: 2023.07.04 19:49:52 -04'00'

Victor O. Marrero, P.E.

Affine Engineering and Surveying, Inc.

January 24, 2023

re: Lake City Avenue Apartments

The Lake City Avenue Apartments proposed comprehensive plan amendment change is consistent with Lake City's Comprehensive Plan.

Future Land Use Element

GOAL 1 - IN RECOGNITION OF THE IMPORTANCE OF CONSERVING THE NATURAL RESOURCES AND ENHANCING THE QUALITY OF LIFE, THE CITY SHALL DIRECT DEVELOPMENT TO THOSE AREAS WHICH HAVE IN PLACE, OR HAVE AGREEMENTS TO PROVIDE, THE LAND AND WATER RESOURCES, FISCAL ABILITIES AND SERVICE CAPACITY TO ACCOMMODATE GROWTH IN AN ENVIRONMENTALLY ACCEPTABLE MANNER.

- Objective 1.1 The City shall continue to direct future population growth and associated urban development to urban development areas as established within this comprehensive plan.

  Consistency: The subject project fronts Lake City Avenue, and is consistent with the City's Future Land Use plan. The generated traffic will not substantially impact any residential neighborhoods.

- Policy 1.1.1 The City shall limit the location of higher density residential and high intensity commercial and industrial uses to areas adjacent to arterial or collector roads where public facilities are available to support such higher density or intensity. In addition, the City shall enable private sub regional centralized potable water and sanitary sewer systems to connect to public regional facilities, in accordance with the objective and policies for the urban and rural areas within this future land use element of the comprehensive plan.

  Consistency: The subject project has direct access to Lake City Avenue which is collector road where city water and city sewer are available.

- Policy 1.1.2 The City's future land use plan map shall allocate amounts and mixes of land uses for residential, commercial, industrial, public and recreation to meet the needs of the existing and projected future populations and to locate urban land uses in a manner where public facilities may be provided to serve such urban land uses. Urban land uses shall be herein defined as residential, commercial and industrial land use categories.

  Consistency: The subject project is consistent with the surrounding residential multi family and single family uses.

- Policy 1.1.3 The City's future land use plan map shall base the designation of residential, commercial and industrial lands depicted on the future land use plan map upon acreage which can be reasonable expected to develop by the year 2023.

  Consistency: The project is consistent with the future land use map.

- Policy 1.1.4 The City shall continue to maintain standards for the coordination and siting of proposed urban development near agricultural or forested areas, or environmentally sensitive areas (including but not limited to wetlands and floodplain areas) to avoid adverse impact upon existing land uses.

  Consistency: The proposed project will not cause any adverse effects to existing land uses.

- Policy 1.1.5 The City shall continue to regulate and govern future urban development within designated urban development areas in conformance with the land topography and soil conditions, and within an area which is or will be served by public facilities and services.

  Consistency: The proposed project will be in conformance to the land topography and soil conditions and will be served by existing sewer, gas and water systems.

- Policy 1.1.6 The City's land development regulations shall be based on and be consistent with the following land use classifications and corresponding standards for densities and intensities within the designated urban development areas of the City. For the purpose of this policy and comprehensive plan, the phrase "other similar uses compatible with" shall mean land uses that can co-exist in relative proximity to other uses in a stable fashion over time such that no other uses within the same land use classification are negatively impacted directly or indirectly by the use.

  Consistency: The proposed multifamily residential project is compatible with the adjacent properties and can co-exist without negative impacts to other uses in relative proximity to the development over time.

Please contact me at 407.421.5534 if you have any questions.

Respectfully,

Victor O Marrero

Digitally signed by Victor O Marrero
Date: 2023.07.04 19:48:29 -04'00'

Victor O. Marrero, P.E.

Prepared by and return to:

Brent E. Baris P.A.
Brent E. Baris, Esq.
P.O. Box 223
High Springs, FL 32655
(386) 454-0688
File Number: 19-018

[Space Above This Line For Recording Data]

Quit Claim Deed

This Quit Claim Deed made this 5th day of December, 2022 between **Ganskop Properties LLC, a Florida Limited Liability Company**, whose post office address is 175 NW Amenity Ct. Lake City, FL 32055, grantor, and **The Pines at Forest Meadows, LLC, a Florida Limited Liability Company,** whose post office address is 175 NW Amenity Ct. Lake City, FL 32055, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum TEN AND NO/100 DOLLARS ($10.00) and other good and valuable consideration to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, does hereby remise, release, and quitclaim to the said grantee, and grantee's heirs and assigns forever, all the right, title, interest, claim and demand which grantor has in and to the following described land, situate, lying and being in Columbia County, Florida, to-wit:

> Lots 1C and 2C, Forest Plantation Commercial Subdivision, according to the map or plat thereof as recorded in Plat Book 7, Page 50, Public Records of Columbia County, Florida
>
> Subject to zoning, restrictions, prohibitions and requirements imposed by governmental authority; restrictions and matters appearing on the plat or common to the subdivision; public utility easements of record; and taxes for the year 2022 and subsequent years.

This Instrument was prepared by Brent E. Baris, Esq. of Brent E. Baris, P.A. Title to the land described herein has not been examined by Brent E. Baris and no warranty or other representation is made and no opinion (either expressed or implied) is given as to the marketability or condition of the title to the subject property, the quantity of lands included therein, the location of the boundaries thereof, or the existence of liens, unpaid taxes or encumbrances. Grantee by the acceptance and recordation of this document releases the preparer hereof of any liability regarding the above stated matters.

To Have and to Hold, the same together with all and singular the appurtenances thereto belonging or in anywise appertaining, and all the estate, right, title, interest, lien, equity and claim whatsoever of grantors, either in law or equity, for the use, benefit and profit of the said grantee forever.

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 as to both capacities:

Witness Name: Dillan Waters

Mark A. Ganskop, Manager

Witness Name: Robert Shaheen

State of Florida

County of Columbia

The foregoing instrument was acknowledged before me by means of [☑] physical presence or [ ] online notarization, this 5th day of December, 2022 by Mark A. Ganskop, Manager of Ganskop Properties LLC. Mark A. Ganskop [☑] is personally known or [ ] has produced a driver's license as identification.

[Notary Seal]

Notary Public

Printed Name: Robert Shaheen

My Commission Expires: _____

ROBERT SHAHEEN
Notary Public
State of Florida
Comm# HH319149
Expires 10/5/2026

Click on a record below to view more details.

Searches
Account Number
GEO Number
Owner Name
» Printable List
Property Address
Mailing Address

Site Functions
Tax Search
Local Business Tax
Contact Us
County Login
Home

Search Results

R02461-601 - GANSKOP PROPERTIES LLC

Register for eBill

Address:
GANSKOP PROPERTIES LLC
736 SW ARBOR LN
LAKE CITY FL 32024

Assessed Year: 2022

Paid: Y

Legal:
34-3S-16
1000/1000.54 Acres
LOT 1C FOREST PLANTATION
COMMERCIAL S/D. WD 1231-151, DC 1356-1857, WD 1404-899,

GEO Number: 343S16-02461-601

R02461-602 - GANSKOP PROPERTIES LLC

Register for eBill

Address:
GANSKOP PROPERTIES LLC
736 SW ARBOR LN
LAKE CITY FL 32024

Assessed Year: 2022

Paid: Y

Legal:
34-3S-16
1000/1000.53 Acres
LOT 2C FOREST PLANTATION
COMMERCIAL S/D. WD 1231-151, DC 1356-1857, WD 1404-899,

GEO Number: 343S16-02461-602

Search performedon 12/14/2022 2:08:27 PM EST
with Owner Name = GANSKOP PROPERTIES
and Search Type = STARTSWITH
and Show list using = DETAIL

Kyle Keen, Tax Collector

Proudly Serving The People of Columbia County

Site Prov
aument

Search by Owner Name...

print

Page 1 of 1

Click on a record below to view more details.

Searches
- Account Number
- GEO Number
- Owner Name
  - » Printable List
- Property Address
- Mailing Address

Site Functions
- Tax Search
- Local Business Tax
- Contact Us
- County Login
- Home

Search Results

R02461-601 - GANSKOP PROPERTIES LLC

Register for eBill

Address:
GANSKOP PROPERTIES LLC
736 SW ARBOR LN
LAKE CITY FL 32024

Assessed Year: 2022

Paid: Y

Legal:
34-3S-16
1000/1000.54 Acres
LOT 1C FOREST PLANTATION COMMERCIAL S/D. WD 1231-151, DC 1356-1857, WD 1404-899,

GEO Number: 343S16-02461-601

R02461-602 - GANSKOP PROPERTIES LLC

Register for eBill