



City of
ALACHUA

THE GOOD LIFE COMMUNITY

FOR PLANNING USE ONLY

Case #: _____
Application Fee: \$ _____
Filing Date: _____
Acceptance Date: _____
Review Type: P&Z

Site Plan Application

Reference City of Alachua Land Development Regulations Article 2.4.9

A. PROJECT

1. Project Name: Holiday Inn
2. Address of Subject Property: 16139 NW Hwy 441 Alachua, FL 32615
3. Parcel ID Number(s): 03053-001-001
4. Existing Use of Property: Vacant
5. Future Land Use Map Designation: Commercial
6. Zoning Designation: Commercial, Intensive (CI)
7. Acreage: 4.24 Acres

B. APPLICANT

1. Applicant's Status ☐ Owner (title holder) ☒ Agent
2. Name of Applicant(s) or Contact Person(s): Sergio Reyes, P.E. Title: President
Company (if applicable): eda engineers-surveyors-planners, inc.
Mailing address: 2404 NW 43rd St
City: Gainesville State: FL ZIP: 32606
Telephone: 352-373-3541 FAX: 352-373-7249 e-mail: sreyes@edafl.com
3. If the applicant is agent for the property owner*:
Name of Owner (title holder): Hipp Investments, LLC
Mailing Address: 14610 NW 129th Terrace
City: Alachua State: FL ZIP: 32615

* Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

C. ADDITIONAL INFORMATION

1. Is there any additional contact for sale of, or options to purchase, the subject property? ☒ Yes ☐ No
If yes, list names of all parties involved: MPH Hotels
If yes, is the contract/option contingent or absolute? ☐ Contingent ☒ Absolute

D. ATTACHMENTS

1. Site Plan including but not limited to:
 - a. Name, location, owner, and designer of the proposed development.
 - b. Zoning of the subject property.
 - c. Vicinity map - indicating general location of the site and all abutting streets and properties.
 - d. Complete legal description.
 - e. Statement of Proposed Uses.
 - f. Location of the site in relation to adjacent properties, including the means of ingress and egress to such properties and any screening or buffers along adjacent properties.
 - g. Date, north arrow, and graphic scale (not to exceed one (1) inch equal to fifty (50) feet.)
 - h. Area and dimensions of site.
 - i. Location of all property lines, existing right-of-way approaches, sidewalks, curbs, and gutters.
 - j. Access and points of connection to utilities (electric, potable water, sanitary sewer, gas, etc.)
 - k. Location and dimensions of all existing and proposed parking areas and loading areas.
 - l. Location, size, and design of proposed landscaped areas (including existing trees and required landscaped buffer areas) with detail illustrating compliance with Section 6.2.2 of the Land Development Regulations.

- m. Location and size of any lakes, ponds, canals, or other waters and waterways.
- n. Structures and major features – fully dimensioned – including setbacks, distances between structures, floor area, width of driveways, parking spaces, property or lot lines, and floor area ratio.
- o. Location of waste receptacles and detail of waste receptacle screening.
- p. For development consisting of a nonresidential use, except for single tenant retail sales and services uses greater than or equal to 20,000 square feet in area and except for use types within the industrial services, manufacturing and production, warehouse freight and movement, waste-related services, and wholesale sales use categories:
 - i. Architectural plans and dimension plans which demonstrate compliance with the design standards for business uses as provided in Section 6.8.2 of the LDRs, including:
 - (a) Calculation of glazing of the front façade.
 - (b) Calculation of the area of ground floor façades subject to glazing.
 - (c) Detail on the architectural plans and dimension plans depicting façade massing and/or alternatives to required façade massing.
 - (d) Sufficient plan detail and calculations of each material utilized in each façade.
- q. For development consisting of a nonresidential use where a single tenant is greater than or equal to 20,000 square feet in area:
 - i. Architectural plans and dimension plans which demonstrate compliance with the design standards for single tenant retail sales and service uses greater than or equal to 20,000 square feet in area as provided in Section 6.8.3 of the LDRs, including:
 - (a) Calculation of glazing of the façades facing streets, residential uses, and vacant residential/agricultural land.
 - (b) Calculation of the area of ground floor façades subject to glazing.
 - (c) If glazing alternatives are used, calculation of area of alternative materials used.
 - (d) Detail on the architectural plans and dimension plans depicting façade massing and/or alternatives to required façade massing.
 - (e) Color architectural plans depicting the color of all materials used in the façade.
- r. For development consisting of one or more of the following: Multi-family residential; Hotel; or Mobile Home Park:
 - 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. Floor area of dwelling units.
 - vi. Number of proposed parking spaces.
 - vii. Street layout.
 - viii. Layout of mobile home stands (for mobile home parks only).
 - ix. City of Alachua Public School Student Generation Form.

Sheet Size: 24" X 36" with 3" left margin and ½" top, bottom, and right margins

- 2. Stormwater management plan - including the following:
 - a. Existing contours at one (1) foot intervals based on U.S. Coastal and Geodetic Datum.
 - b. Proposed finished floor elevation of each building site.
 - 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 surfacewater management Statement of proposed uses on the site plan
- 3. Fire Department Access and Water Supply: The design criteria shall be Chapter 18 of the Florida Fire Prevention Code. Plans must be on separate sealed sheets and must be prepared by a professional Fire engineer licensed in the State of Florida. Fire flow calculations must be provided for each newly constructed building. When required, fire flow calculations shall be 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. All calculations must be demonstrated and provided. All calculations and specifications must be on the plans and not on separate sheets. All fire protection plans are reviewed and approved by the Alachua County Fire Marshal.
- 4. Concurrency Impact Analysis showing the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools in accordance with Article 2.4.14 of the Land Development Regulations.
- 5. Analysis of Consistency with the City of Alachua Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy.)

For commercial project Applications:

- a. In addition to submitting specific written information regarding your **commercial** development's compliance with the relevant Goals, Objectives, and Policies of the City of Alachua Comprehensive Plan, you must respond directly to the standards listed below. You should be specific in terms of how your commercial development will comply with these standards.

Policy 1.3.d Design and performance standards

The following criteria shall apply when evaluating commercial development proposals:

1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;
2. Buffering from adjacent existing/potential uses;
3. Open space provisions and balance of proportion between gross floor area and site size;
4. Adequacy of pervious surface area in terms of drainage requirements;
5. Placement of signage;
6. Adequacy of site lighting and intrusiveness of lighting upon the surrounding area;
7. Safety of on-site circulation patterns (patron, employee and delivery vehicles), including parking layout and drive aisles, and points of conflict;
8. Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations;
9. Unique features and resources which may constrain site development, such as soils, existing vegetation and historic significance; and
10. Performance based zoning requirements, which may serve as a substitute for or accompany land development regulations in attaining acceptable site design.
11. Commercial uses shall be limited to an intensity of less than or equal to .50 floor area ratio for parcels 10 acres or greater, .50 floor area ratio for parcels less than 10 acres but 5 acres or greater, a .75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio to parcels 1 acre or less.

For industrial project Applications:

- b. In addition to submitting specific written information regarding your **industrial** development's compliance with the relevant Goals, Objectives, and Policies of the City of Alachua Comprehensive Plan, you must respond directly to the standards listed below. You should be specific in terms of how your industrial development will comply with these standards.

Policy 1.5.d

The City shall develop performance standards for industrial uses in order to address the following:

1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;
2. Buffering from adjacent existing/potential uses;
3. Open space provisions and balance of proportion between gross floor area and site size;
4. Adequacy of pervious surface area in terms of drainage requirements;
5. Placement of signage;
6. Adequacy of site lighting and intrusiveness of lighting upon the surrounding area;
7. Safety of on-site circulation patterns (patron, employee and delivery vehicles, trucks), including parking layout and drive aisles, and points of conflict;
8. Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations;
9. Unique features and resources which may constrain site development, such as soils, existing vegetation and historic significance; and
10. Performance based zoning requirements that may serve as a substitute for or accompany land development regulations in attaining acceptable site design.
11. Industrial uses shall be limited to an intensity of less than or equal to .50 floor area ratio for parcels 10 acres or greater, .50 floor area ratio for parcels less than 10 acres by 5 acres or greater, .75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio for parcels 1 acre or less.

6. For Site Plans for Buildings Less than 80,000 Square Feet in Area: One (1) set of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications.
For Site Plans for Buildings Greater than or Equal to 80,000 Square Feet in Area: Two (2) sets of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications.
7. Neighborhood Meeting Materials, including:
 - i. Copy of the required published notice (advertisement) – must be published a newspaper of general circulation, as defined in Article 10 of the City's Land Development Regulations
 - ii. Copy of written notice (letter) sent to all property owners within 400 feet and to all persons/organizations registered with the City to receive notice, and mailing labels or list of those who received written notice
 - iii. Written summary of meeting – must include (1) those in attendance; (2) a summary of the issues related to the development proposal discussed; (3) comments by those in attendance about the development proposal; and, (4) any other information deemed appropriate.
8. Legal description with tax parcel number, separate from all other documentation on 8.5" x 11" paper.
9. Proof of ownership (i.e., copy of deed.)
10. Proof of payment of taxes.
11. Environmental Resource Permit (or Letter of Exemption) from the Suwannee River Water Management District or 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 from the Florida Department of Environmental Protection pursuant to Section 403.814(12), Florida Statutes.
12. If access is from a County Road, access management permit from Alachua County Public Works (or documentation providing evidence that a permit application has been submitted).
13. If access is from a State Road, access management permit from Florida Department of Transportation (or documentation providing evidence that a permit application has been submitted).
14. **Fee.** Please see fee schedule for fee determination. No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any necessary technical review or additional reviews of the application beyond the initial engineering review fee will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any legislative and/or quasi-judicial action of any kind on the petition, appeal, or development application.

All 14 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge.

Sergio Reyes

Signature of Applicant

Signature of Co-applicant

Sergio Reyes, President

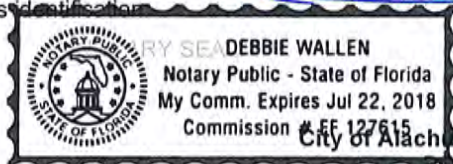
Typed or printed name and title of applicant

Typed or printed name of co-applicant

State of Florida County of Alachua

The foregoing application is acknowledged before me this 29th day of September, 2016, by Sergio Reyes

_____, who is/are personally known to me, or who has/have produced _____ as identification



Debbie Wallen
Signature of Notary Public, State of Florida

City of Alachua • Planning and Community Development Department
Box 9 • Alachua, FL 32616 • (386) 418-6121



FOR PLANNING USE ONLY

Case #: _____
 Application Fee: \$ _____
 Filing Date: _____
 Acceptance Date: _____
 Review Type: Admin _____

Public School Student Generation Form for Residential Development in the City of Alachua

A. APPLICANT

1. Applicant's Status (check one):

☐ Owner (title holder)

☒ Agent

2. Name of Applicant(s) or Contact Person(s): Sergio Reyes, P.E. Title: President

Company (if applicable): eda engineers - surveyors - planners, inc.

Mailing address: 2404 NW 43rd Street

City: Gainesville State: FL ZIP: 32606

Telephone: 373-3541 FAX: 373-7249 e-mail: sreyes@edafl.com

3. If the applicant is agent for the property owner*:

Name of Owner (title holder): Hipp Investments, LLC

Mailing Address: 14610 NW 129th Terrace

City: Alachua State: FL ZIP: 32615

* Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

B. PROJECT

1. Project Name: Holiday Inn

2. Address of Subject Property: 16139 NW Hwy 441, Alachua, FL 32615

3. Parcel ID Number(s): 03053-001-001

4. Section 09 Township 08 Range 18 Grant N/A Acreage: 4.24 Acres

5. Existing Use of Property: Vacant

6. Future Land Use Map Designation: Commercial

7. Zoning Designation: Commercial, Intensive (CI)

8. Development Data (check all that apply):

☐ Single Family Residential

Number of Units _____

☐ Multi-Family Residential

Number of Units _____

☒ Exempt (see exempt developments on page 2)

9. Review Type:

Preliminary Development Order

☐ Comprehensive Plan Amendment

☐ Large Scale

☐ Small Scale

☐ Site Specific Amendment to the Official Zoning Atlas (Rezoning)

☐ Revised

Final Development Order

☐ Preliminary Plat

☐ Final Plat

☒ Site Plan

10. School Concurrency Service Areas (SCSA): Based on the project location, identify the corresponding SCSA for each school type. Maps of the SCSAs can be obtained from the Alachua County Growth Management Department Map Gallery by clicking on the "Public Schools" tab: http://growth-management.alachuacounty.us/gis_services/map_gallery/

Elementary: Irby (K-2) and Alachua (3-5)

Middle: Melbane

High: Santa Fe High School

City of Alachua ♦ Planning and Community Development Department
 PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121

Revised April 30, 2014

Explanation of Student Generation Calculation: Student Generation is calculated based on the type of residential development and the type of schools. The number of students stations (by school type – Elementary, Middle and High School) used for calculating the school concurrency impacts is equal to the number of dwelling units by housing type multiplied by the student generation multiplier (for housing type & school type) established by the School Board. **Calculations are rounded to the nearest whole number.** Student Generation for each school type is calculated individually, in order to correctly assess the impact on the School Concurrency Service Area (SCSA) for each school type (Elementary, Middle and High School).

of Elementary School Student Stations = # of housing units x Elementary school student generation multiplier
 # of Middle School Student Stations = # of housing units x Middle school student generation multiplier
 # of High School Student Stations = # of housing units x High school student generation multiplier

Student Generation Calculations: Single Family Residential Development

Elementary School	_____ units	x	_____ Elementary School Multiplier*	_____ Student Stations**
Middle School	_____ units	x	_____ Middle School Multiplier*	_____ Student Stations**
High School	_____ units	x	_____ High School Multiplier*	_____ Student Stations**

Student Generation Calculations: Multi-Family Residential Development

Elementary School	_____ units	x	_____ Elementary School Multiplier*	_____ Student Stations**
Middle School	_____ units	x	_____ Middle School Multiplier*	_____ Student Stations**
High School	_____ units	x	_____ High School Multiplier*	_____ Student Stations**

* Student generation multipliers may be obtained from SBAC at:

http://www.sbac.edu/pages/ACPS/Departments_Programs/DepartmentsAF/D_thru_F/FacilitiesMainConstr/Local_Certification_Packets/City_of_Alachua

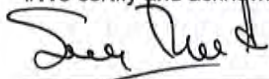
** Round to the nearest whole number

EXEMPT DEVELOPMENTS (check all that apply):

- ☐ Existing legal lots eligible for a building permit.
- ☐ Development that includes residential uses that has received final development plan approval prior to the effective date for public school concurrency, or has received development plan approval prior to June 24, 2008, provided the development approval has not expired.
- ☐ Amendments to final development orders for residential development approved prior to the effective date of public school concurrency, and which do not increase the number of students generated by the development.
- ☐ Age-restricted developments that prohibit permanent occupancy by persons of school age, provided this condition is satisfied in accordance with the standards of the Public Schools Facilities Element or the ILA.
- ☐ Group quarters that do not generate public school students, as described in the ILA.

A completeness review of the application will be conducted within 5 business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge.



Signature of Applicant

Signature of Co-applicant

Sergio Reyes, President

Typed or printed name and title of applicant

Typed or printed name of co-applicant

State of Florida County of Alachua

The foregoing application is acknowledged before me this 15th day of December, 2016 by Sergio

Reyes, who is/are personally known to me, or who has/have produced _____ as identification.

NOTARY SEAL


 Signature of Notary Public, State of Florida



Stephanie Sutton
 NOTARY PUBLIC
 STATE OF FLORIDA
 Comm# GG040315
 Expires 10/19/2020

City of Alachua ♦ Planning and Community Development Department
 PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121

Certification

This application for a determination of adequacy of public schools to accommodate the public school students generated by the proposed development has been reviewed for compliance with the school concurrency management program and in accordance with the ILA. The following determinations have been made:

☐ **Approved** based upon the following findings:

Elementary SCSA: _____

- ☐ Capacity Available
- ☐ Capacity Available in 3 years
- ☐ Capacity Available in Adjacent SCSA

Middle SCSA: _____

- ☐ Capacity Available
- ☐ Capacity Available in 3 years
- ☐ Capacity Available in Adjacent SCSA

High SCSA: _____

- ☐ Capacity Available
- ☐ Capacity Available in 3 years
- ☐ Capacity Available in Adjacent SCSA

Capacity Required: _____

Available Capacity: _____

Available Capacity: _____

Available Capacity: _____

Capacity Required: _____

Available Capacity: _____

Available Capacity: _____

Available Capacity: _____

Capacity Required: _____

Available Capacity: _____

Available Capacity: _____

Available Capacity: _____

☐ **Denied** for reasons stated: _____

☐ **Local Government Certification**

Approved by: _____

Date: _____

☐ **School Board Staff Certification**

Vicki McGrath, Director, Community Planning
School Board of Alachua County
352-955-7400 x 1423

Date: _____



Authorized Agent Affidavit

A. PROPERTY INFORMATION

Address of Subject Property: 16139 NW US HWY 441

Parcel ID Number(s): 03053-001-001

Acreage: 9.5 Acres

B. PERSON PROVIDING AGENT AUTHORIZATION

Name: Virginia Johns Title: Managing Member

Company (if applicable): Hipp Investments, LLC

Mailing Address: 14610 NW 129th Terrace

City: Alachua State: FL ZIP: 32615

Telephone: _____ FAX: _____ e-mail: hipp1000@gmail.com

C. AUTHORIZED AGENT

Name: Sergio Reyes, P.E. Title: President

Company (if applicable): eda engineers-surveyors-planners

Mailing address: 2404 NW 43rd St.

City: Gainesville State: FL ZIP: 32605

Telephone: 352-373-3541 FAX: _____ e-mail: sreyes@edafl.com

D. REQUESTED ACTION:

Lot Split Application and Site Plan Application

I hereby certify that I am the property owner of record, or I have received authorization from the property owner of record to file an application for a development permit related to the property identified above. I authorize the agent listed above to act on my behalf for purposes of this application.

[Signature]
Signature of Applicant

Virginia Johns, Managing Member

Typed or printed name and title of applicant

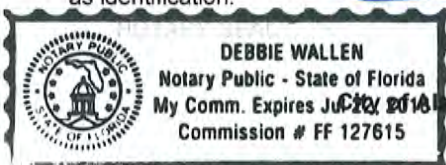
Signature of Co-applicant

Typed or printed name of co-applicant

State of Florida County of Alachua

The foregoing application is acknowledged before me this 21st day of September, 2014 by Virginia Johns

_____, who is/are personally known to me, or who has/have produced _____
as identification.



[Signature]
Signature of Notary Public, State of Florida

City of Alachua ♦ Planning and Community Development Department

PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121

Revised 9/30/2014



2016 Roll Details — Real Estate Account At 16193 NW US HWY 441

Real Estate Account #03053 001 001

Parcel details

Latest bill

Full bill history

Print this page

2016

2015

2014

2013

...

2002

PAID

PAID

PAID

PAID

PAID

Get Bills by Email

PAID 2016-11-28 \$40.27

Receipt #16-0035172

Owner: HIPP INVESTMENTS LLC

14610 NW 129TH TER

ALACHUA, FL 32615

Situs: 16193 NW US HWY 441

Account number: 03053 001 001

Alternate Key: 1011501

Millage code: 1700

Millage rate: 24.6764

Assessed value: 1,700

School assessed value: 1,700

Unimproved land value: 1,700

Property Appraiser

Location is not guaranteed to be accurate.

2016 Annual bill

View

Ad valorem: \$41.95

Non-ad valorem: \$0.00

Total Discountable: 41.95

No Discount NAVA: 0.00

Total tax:

Legal description

COM NW COR SEC S 01 DEG 49 MIN 00 SEC E 1576.08 FT N 88 DEG 33 MIN 13 SEC E 1300.20 FT S 01 DEG 49 MIN 00
SEC E - 1347.44 FT POB S 01 DEG 49 MIN 00 SEC E 1000 FT S 79 DEG 06 MIN 59 SEC E 1279.84 FT N 03 DEG 06 MIN
22 SEC W 1000 - FT N 78 DEG 52 MIN 47 SEC W 1257.95 FT POB (LESS COM NW COR SEC S 1576.08 FT E 1300.20 FT S
2347.44 FT S 79 DEG E - 1022.19 FT POB S 79 DEG E 257.64 FT N 3 DEG W 260.82 FT N 73 DEG W 264.96 FT S 3
DEG E 286.30 FT POB PER OR 2392/782) - (LESS COM NW COR SEC S 1576.08 FT E 1300.20 FT S 1347.44 FT S 1000
FT S 79 DEG E 384.75 FT POB S 79 DEG E 332.33 FT - NLY ALG CURVE 67.22 FT N 74.59 FT NLY ALG CURVE 148.98
Location

Book, page, item: 4076-2345-

Geo number: 09-08-18-03053001001

Range: 18

Township: 08

Section: 09

Neighborhood: 233200.50

Use code: 05500

Total acres: 9.500



**This instrument was prepared
by and upon recording should
be returned to**

Allison E. Campbell, Esq.
Hill Ward Henderson
101 E. Kennedy Boulevard
Suite 3700
Tampa, Florida 33602

Doc Stamp-Deed: \$5,600.00



Parcel Identification Number: 03053-001-001

Consideration: \$800,000.00

Documentary stamp taxes: \$5,600.00

[Space above this line for Recorder's use.]

« SPECIAL WARRANTY DEED »

THIS SPECIAL WARRANTY DEED is made this 28th day of December, 2011, by **CRM FLORIDA PROPERTIES, LLC**, a Georgia limited liability company, whose mailing address is 303 Peachtree Street, N.E., Suite 3600, Atlanta, Georgia 30308, Attention: Legal and Regulatory Affairs Department (the "Grantor"), in favor of **HIPP INVESTMENTS, LLC**, a Delaware limited liability company, whose address is 14610 NW 129th Terrace, Alachua, Florida 32615 (the "Grantee").

W I T N E S S E T H :

That the Grantor, for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration, to it in hand paid, the receipt whereof is hereby acknowledged, by these presents does grant, bargain, sell, alien, remise, release, convey and confirm unto the Grantee, its successors and assigns forever, those certain parcels of land lying and being in the County of Alachua, State of Florida, as more particularly described on Exhibit "A" hereto.

TOGETHER WITH all the tenements, hereditaments, and appurtenances thereto belonging or in anywise appertaining; and

TO HAVE AND TO HOLD the above described Land, with the appurtenances, unto the said Grantee, its successors and assigns, in fee simple forever.

This conveyance is made subject to (i) the lien of real estate taxes, taxes imposed by special assessment and water, sewer, vault, public space and other public charges which are not yet due and payable, (ii) all applicable laws (including zoning, building ordinances and land use regulations), (iii) all easements, restrictions, covenants, agreements, conditions, and other matters of record (however reference thereto shall not serve to re-impose the same), and (iv) all matters

that may be revealed by a current and accurate survey or inspection of the property (collectively, "Permitted Exceptions").

As against all persons claiming by, through, or under the Grantor, the Grantor covenants that the property is free of all encumbrances except for the Permitted Exceptions, that lawful and good right to convey the foregoing property are vested in the Grantor and that the Grantor fully warrants the title to the property and will defend the same against the lawful claims of all persons claiming by, through, or under the Grantor.

[Signature Page Follows]

[SIGNATURE PAGE TO SPECIAL WARRANTY DEED]

IN WITNESS WHEREOF, Grantor has caused these presents to be duly authorized in its name and by those thereunto duly authorized, the day and year first above written.

SIGNATURE WITNESSED BY:

GRANTOR:

CRM FLORIDA PROPERTIES, LLC,
a Georgia limited liability company

By: CRM Properties Manager, LLC,
a Georgia limited liability company, its sole
member

Kristen Hooks
Name: KRISTEN HOOKS

Christina D Redman
Name: CHRISTINA D. REDMAN

By: [Signature]
Daniel Kaiser, Vice President

STATE OF FLORIDA

COUNTY OF Orange

The foregoing instrument was acknowledged before me this 27th day of December, 2011, by Daniel Kaiser as a Vice President of CRM Properties Manager, LLC, a Georgia limited liability company, as the sole member of CRM FLORIDA PROPERTIES, LLC, a Georgia limited liability company, on behalf of such company, who is personally known to me and did not take an oath.

[NOTARY SEAL]

Christina D Redman
Notary Public, State of Florida

Printed Name of Notary Public

My commission expires:

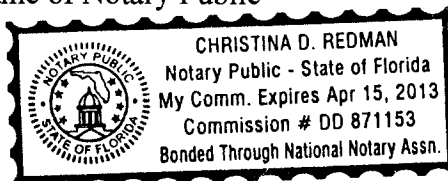


EXHIBIT A

A PORTION OF SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, AND RUN THENCE SOUTH 01°49'00" EAST, ALONG THE WEST BOUNDARY OF SAID SECTION, 1576.08 FEET; THENCE NORTH 88°33'13" EAST, 1300.20 FEET TO THE NORTHWEST CORNER OF THAT CERTAIN TRACT OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 503, PAGE 107 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE SOUTH 01°49'00" EAST, ALONG THE WEST LINE OF SAID CERTAIN TRACT OF LAND, 1347.44 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 01°49'00" EAST, ALONG SAID WEST LINE, 1000.00 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF US. HIGHWAY NO. 441. (STATE ROAD. NOS. 20 AND 25, 200' R/W); THENCE SOUTH 79°06'59" EAST, ALONG SAID RIGHT-OF-WAY LINE, 1279.84 FEET TO A POINT ON THE EAST LINE OF THAT CERTAIN TRACT OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 27, PAGE 296, ET SEQ., OF SAID PUBLIC RECORDS; THENCE NORTH 03°06'22" WEST, ALONG SAID EAST LINE, 1000.00 FEET; THENCE NORTH 78°52'47" WEST, 1257.95 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT:

A PORTION OF SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, AND RUN THENCE SOUTH 01°49'00" EAST, ALONG THE WEST BOUNDARY OF SAID SECTION, 1576.08 FEET; THENCE NORTH 88°33'13" EAST, 1300.20 FEET TO THE NORTHWEST CORNER OF THAT CERTAIN TRACT OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 503, PAGE 107 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE SOUTH 01°49'00" EAST, ALONG THE WEST LINE OF SAID CERTAIN TRACT OF LAND, 2347.44 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF U.S. HIGHWAY NO. 441 (STATE ROAD NOS. 20 AND 25, 200' R/W); THENCE SOUTH 79° 06'59" EAST, ALONG SAID RIGHT-OF-WAY LINE, 1022.19 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 79°06'59" EAST, ALONG SAID RIGHT-OF-WAY LINE, 257.64 FEET TO A POINT ON THE EAST LINE OF THAT CERTAIN TRACT OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 27, PAGE 296, ET SEQ., OF SAID PUBLIC RECORDS; THENCE NORTH 03°06'22" WEST, ALONG SAID EAST LINE, 260.82 FEET; THENCE NORTH 73°45'46" WEST, 264.96 FEET, THENCE SOUTH 03°06'22" EAST, PARALLEL WITH SAID EAST LINE, 286.30 FEET TO THE POINT OF BEGINNING.

Neighborhood Workshop Notice

For a proposed Development Plan for a hotel located at 16139 US Highway 441.

Date: September 20, 2016
Time: 6:00 p.m.
Place: Meeting Room A, Alachua Branch Library
14913 NW 140 Street, Alachua, FL
Contact: **eda** engineers – surveyors – planners at (352) 373-3541

A neighborhood workshop to discuss a proposed Development Plan for a proposed hotel on a portion of tax parcel number 03053-001-001 located at 16139 US Highway 441. This is not a public hearing. The purpose of this meeting is to inform neighboring property owners of the proposed development and to seek their comments.





engineers • surveyors • planners, inc.

Memorandum

To: Ken Blake DATE: August 31, 2016
FROM: Stephanie Sutton
SUBJECT: Neighborhood Meeting – Holiday Inn Alachua

PUBLIC NOTICE

A neighborhood workshop to discuss a proposed Development Plan for a proposed hotel on a portion of tax parcel number 03053-001-001 located at 16139 US Highway 441. This is not a public hearing. The purpose of this meeting is to inform neighboring property owners of the proposed development and to seek their comments.

The meeting will be held on Tuesday, September 20, 2016 at 6:00 p.m. in Meeting Room A of the Alachua Branch Library located at 14913 NW 140 Street, Alachua, FL.



Contact: Sergio Reyes, P.E.
eda engineers – surveyors – planners, inc.
(352) 373-3541

RIO 2016 PARALYMPICS

Horse Countries

American and Canadian equestrians train in Marion

By Carlos E. Medina
Correspondent

Marion County's place as an international equestrian center was reinforced this week as it played host to the U.S. and Canadian Paralympic dressage teams.

Both teams made their final preparations here before heading to the Rio 2016 Paralympics, which will run from Sept. 7-18.

For Lauren Barwick of Team Canada, who lives in Reddick year round, the chance to represent her nation is an honor.

Barwick, who was paralyzed from the waist down in 2000 after a bale of hay fell on her, is one of Canada's top equestrian athletes. Rio will be her fourth straight Paralympics. She won gold and silver during the 2008 Beijing Games and hopes for the best in Rio.

"We're always hoping to medal," Barwick said. "I'm on a relatively new horse. I don't know how he's going to fare yet, but the hopes are a top three finish."

The team was staying at Hope Hall Farm, where Barwick's coach, Traudel Bongers-Steinebach, is based.

"It's an honor to have the team here for their pre-Rio camp," Bongers-Steinebach said. "We all eat breakfast, lunch and supper together. It's great for team spirit."

A native of Germany, she is versed in classic dressage and has found training with a Paralympian very rewarding.

"Lauren is wonderful. She sits so beautifully on the horse people don't know she's paralyzed. She is very talented," Bongers-Steinebach said.

One challenge was training Barwick's horse, Onyx, to perform without getting cues from her legs.

"The horse had to learn these tests without the aid of the legs. It was a



Groom Lauren Massey carries rider Lauren Barwick of the Canadian Paralympic dressage team from Onyx after her practice at Hope Hall Farm in Reddick, Florida on Tuesday, August 30. The Canadian team will gather at Hope Hill then travel to Rio.



Tha Wentz, left, volunteer and staff member and personal assistant to the five members of the US Paralympic equestrian team, give Charlotte Merle-Smith of Ocala, a hug as the team performed a mock demonstration for the public Thursday morning, September 1, 2016, at The Grand Oaks Resort and Museum in Weirsdale, FL. DOUG ENGLE/OCALA STAR-BANNER

you a better rider. It's a much nicer picture when you see a rider that's not really working on a horse." Barwick said Bongers-Steinebach's training has



As Lauren of the Canadian Paralympic team practices at Hope Hall Farm in Reddick, Florida on Tuesday, August 30. The Canadian team will gather at Hope Hill then travel to Rio.

helped her riding. "As a coach and mentor, she's really great because she has no ego in her training. She's willing to work with me. She doing it for the best of the horse and the rider," Barwick said.

About 40 miles to the southeast, Team USA was also in serious preparation for their Rio adventure.

The team was invited to hold their pre-Rio camp at The Grand Oaks Resort in Weirsdale.

The US team is made up of Sydney Collier, Rebecca Hart, Margaret McIntosh, Angela Peavy and Roxanne Trunell.

Team coach, Kai Handt hopes the practice session will help bring cohesion to the team.

"We have a very young team. We have two 18-year-olds this time. It's one of the youngest teams we have ever had. We are fourth in the rankings so we'll see how it goes in Rio. They are doing a great job here at Grand Oaks getting our team together," Handt said.

Much like the Canadians, Team USA is also staying together during the training camp.

"We're living in one big house," Handt said. "The entire team, the grooms, the trainers are all staying on the grounds."

The team held a demonstration Thursday that was open to the public.

"The riders (did) their Olympic tests with judges scoring," Handt said.

Handt also is a native of Germany and operates the North Texas Equestrian Center near Dallas. It is his first Paralympics as the head coach, but he was part of the 2012 London Paralympics as well.

"It's a very good location," Handt said of the Ocala, Marion County area.

"It's conveniently located and the climate conditions are similar to what we will experience in Rio," he said.

The Rio Paralympic equestrian competitions will be held from Sept. 11-16. To learn more about the equestrian components, visit <http://tinyurl.com/zmq3jto>

CONQUERING COSMETICS, MORE

Beauty boss: Miami Beach's Loren Ridinger shares secrets of success

By Nancy Dahlberg
Miami Herald (TNS)

MIAMI — Loren Ridinger has been changing the face of the beauty business as well as internet shopping for more than 20 years, and the entrepreneur and senior executive has no plans to slow down. "It's not in my blood," she says.

With humble beginnings working out of their rental home's garage at the time, she and her husband, JR, co-founded internet retailing giant Market America in 1992, in Greensboro, N.C., where the company is still headquartered. In August, the company held one of its twice yearly empowerment conference there, hosting 25,000 people, and she gave the opening speech. Today, the Ridingers live in Miami Beach, and each February, the Market America World Conference takes over American Airlines Arena in Miami, bringing about 25,000 people to town.

Market America has generated more than \$5.5 billion in accumulated retail sales and individuals have earned more than \$2.0 billion in commissions and retail profits, the company said. In addition to the U.S., the company operates in Canada, Mexico, Australia, Hong Kong, Taiwan, the United Kingdom, Singapore, Mexico and Spain.

Ridinger also founded the award-winning

cosmetics line Motives, her first line. She also created the solution-oriented personal care line Flax and the jewelry collection Loren Jewels. Her daughter Amber is also an entrepreneur, having created DNA Miracles, a line of body and wellness products designed for babies, children and expectant mothers. Loren speaks about entrepreneurship regularly and has mentored young entrepreneurs. Last year, she partnered with Miami Beach startup Flat Out of Heels to create a line of shoes for the young fashion company.

Active on social media, Ridinger blogs regularly on www.LorenWorld.com, named one of Forbes' Top 100 websites for women, and her fashion blog, www.MyFashionCents.com.

Ridinger, senior executive vice president of Market America, serial entrepreneur, fashionista, mentor, mom and grandmother with a third grandchild on the way, surrounds herself with successful people and those who want to be. She calls Jennifer Lopez and Eva Longoria good friends. Still, Ridinger is a self-described private person, who puts socializing at the bottom of her priority list as she manages her many ventures and adventures. She recently took time out to share her views about Market America, entrepreneurship, what's

next and the importance of knowing your "why." Here are excerpts of that conversation.

Q: Regarding your Market America journey, when did you and JR know this was going to be really big? Was that the vision from the beginning or did it evolve?

A: JR has always had that vision. To be honest with you, he's always been a great leader. Even prior to 1992 when the idea was forming, he was a strong believer that the world was fast changing, that technology was fast changing, and people would want to shop at home.

Q: Market America was ahead of its time and has stayed ahead, but that can't be easy when e-commerce trends change so fast. How do you stay relevant in this changing world while at the same time continuing to innovate?

A: That's the key, being relevant all the time with technology changing so fast. ... It's about staying ahead of the curve. JR has always been very connected and taught us to be very connected as a team to who our customers are. We know who she is, we know what she likes, we know what she likes to buy, we know how many children she has and what kind of pets she has. ... Being connected in that fashion to your customers — even for 6 million of them and we have been constantly collecting data about them — we have been able to gear who we are toward her. It's him

too, of course, but generally, the shopper in the house is the woman.

We've always been so connected to our customers, we can't fail. By knowing what people want, we are always creating technology that can work alongside. If people want to find better deals or want to know when the price drops, we have technology to do those things. You really have to be moving at the speed of sound, and that's what we do, what we have done for 20 years. It's been an incredible journey.

Q: Over the years, what are one or two of the most important lessons you have learned — maybe the hard way — about entrepreneurship?

A: To manage my time wisely, that's been a lesson for both of us. It's hard to run a company of this size and still have a life with your children and your grandchildren and juggle

everything. I've learned what may not appear to be normal for other families is normal for us, it works for us. If we have to have

dinner at 10:30 at night or 4:30 in the afternoon, and it works for us based on our schedules, we don't punish ourselves for it.

PUBLIC NOTICE

A Neighborhood Workshop will be held to discuss a proposed development plan for a 4-story office building to contain retail, office, and labs, located on Alachua County Tax Parcel 12893-000-000, located at 804 SW 2nd Avenue. The proposed development plan seeks approval of a new approximately 60,000-sf building.

This is not a public hearing. The workshop's purpose is to inform neighboring property owners of the proposal's nature and to seek their comments.

The workshop is Wednesday, September 21, 2016 at 6:00 p.m. at the Alachua County Library - Headquarters Branch, located at 401 East University Avenue, Gainesville, FL 32601.

Contact:
Holly Simon, EI
Phone Number:
(352) 331-1976

CHW
Professional Consultants

PUBLIC NOTICE

A neighborhood workshop to discuss a proposed Development Plan for a proposed hotel on a portion of tax parcel number 03053-001-001 located at 16139 US Highway 441. This is not a public hearing. The purpose of this meeting is to inform neighboring property owners of the proposed development and to seek their comments.

The meeting will be held on Tuesday, September 20, 2016 at 6:00 p.m. in Meeting Room A of the Alachua Branch Library located at 14913 NW 140 Street, Alachua, FL.

Contact: Sergio Reyes, P.E.
eda engineers - surveyors - planners, inc.
(352) 373-3541



engineers • surveyors • planners, inc.

Neighborhood Meeting Minutes

Project: Holiday Inn Alachua

Meeting Date & Time: September 20, 2016 @ 6:00pm

Location: Meeting Room A
Alachua Branch Library
14913 NW 140 Street, Alachua, FL

Community Participants: 14

Attendees: Residents listed on attached Sign-in-Sheet

Project Representatives:

Engineer: Sergio Reyes, eda
Stephanie Sutton, eda
Rosa Trautz, eda

Owner: Randy Gibbons, MPH Hotels
Mike Holtz, MPH Hotels

Meeting Minutes:

Mr. Reyes introduced eda and the project/proposed hotel. The Holiday Inn Express will have 92 rooms and be 4 stories high. The building will be on north side of property. A retaining wall will be about 8 feet lower than the road in neighborhood. Stormwater system and parking will be to the south of building. There will be one connection/driveway to 167th. Reyes showed the meeting attendees a copy of the site plan for the project and the elevations of the proposed building, then opened the floor to questions from attendees.

Q: When will the project start?

A: This is first step; we will submit to the city next week, the process will take about 4 months, then construction can begin early next year.

Q: What is planned for the trees?

A: We are planning to keep them along the property line, and trees in the area of the building will be removed. A 50 foot buffer from the neighborhood will remain. With a 34 foot drop on site, grading will require the loss of some trees. Landscape will be provided as required by the city. The buffer on this site is 15 feet.

Q: Will there be fencing at the property line?

A: This has not been decided yet and is not required by code. It is not normally provided and there will be a natural buffer between hotel and houses. The pool at the rear will be fenced.

Q: Will there be other amenities, like a restaurant?

A: There will be a small sundries market, pool, gym, and meeting room.

Q: How often are hotels built this close to neighborhoods?

A: This depends on zoning. Hotels are allowed by right, which is fairly common because hotels are considered temporary residential and compatible with residential areas.

Q: Will the hotel face 441?

A: Yes, but it will be difficult to see from the road.

Q: Where will signage be?

A: On the property and on the building. No big interstate sign.

Q/C: There are concerns about security and the retaining wall only being 3 feet at its end. Residents would like to request fencing to protect the neighborhood to deter access from hotel to homes.

Q: Where is the dumpster located?

A: At the west side of the parking lot away from the neighborhood. There will be no vehicle traffic behind the hotel.

Q: What is the expected impact on traffic?

A: 92 rooms for a hotel is minimal compared to phase 2 of the neighborhood and the existing Publix.

Q: Will there be any lights at the rear of the building that would shine into the neighborhood?

A: No, lighting cannot spill into adjacent property by code, and lights have to be full cutoff. The City of Alachua has very restrictive lighting regulations.

Q: How long will it take to get the permits?

A: We are submitting to the city next week, then it will take about 4 months.

Q: Will the hotel have a business meeting rooms?

A: Yes, it will have one that will seat 35-40 people.

Q: Are they hiring?

A: They will be.

Q: How many other parcels are there left to develop?

A: Just one, the sale has not closed yet. There is an offer on the parcel.

Q: What was the motivation for locating the hotel north of 441 rather than south of 441?

A: The property was available and utilities are already available and it's proximate to existing development. Parcels south of 441 are also available.

Q: What are the expected prices of rooms?

A: They will be determined closer to opening.

Q: How long will construction take?

A: 10 months after site work begins, which can take 2 months. Overall, construction may take 12 months.

Holiday InAlachua @ Alachua Library Neighborhood Meeting Sign-In Sheet

Tuesday, September 20, 2016 at 6:00pm

[illegible]

03053-001-002 TALAL PROPERTIES LTD & TAREK 1326 E LUMSDEN RD BRANDON, FL 33511	03053-001-005 A MASON GRACE RENTALS LLC 13929 NW 166TH TER ALACHUA, FL 32615	03053-010-054 SCHULTZ, RICHARD B & CECILIA 1171 APPIAN WAY SANTA ANA, CA 92705
03053-010-014 FORD NATHANIEL M III & TIROSHSA T 16515 NW 165TH TER ALACHUA, FL 32615	03053-010-015 MITCHELL CHARLES E & NANCY E 16530 NW 165TH TER ALACHUA, FL 32615	03053-001-001 HIPPO INVESTMENTS LLC 14610 NW 129TH TER ALACHUA, FL 32615
03053-010-017 NYGAARD & STRATTAN 16567 NW 165TH LN ALACHUA, FL 32615	03053-010-012 FROMHOLT DAVID B & SUSAN E 16575 NW 165TH TER ALACHUA, FL 32615	03053-010-013 JELMBERG MICHAEL & MARY 16545 NW 165TH TER ALACHUA, FL 32615
03053-010-045 NOTO & NOTO 16603 NW 168TH TER Alachua, FL 32615	03053-010-051 HARRIS AARON A 16609 NW 166TH DR ALACHUA, FL 32615	03053-010-048 WESTBROOK BENTON C & DORA H 16602 NW 167TH DR ALACHUA, FL 32615
03053-010-018 WALLACE CHARLES E & PATRICIA A 16621 NW 165TH LN ALACHUA, FL 32615	03053-010-044 GEPHART RALPH G & DOROTHY J 16623 NW 168TH TER ALACHUA, FL 32615	03053-010-011 AXIAK LAURA ANNE 16611 NW 165TH TER ALACHUA, FL 32615
03053-010-046 BOLANOS & MCKERCHER W/H 16642 NW 167TH DR ALACHUA, FL 32615	03053-010-019 MANDARINO TERRANCE M & LISA CLARK 16651 NW 165TH LN ALACHUA, FL 32615	03053-010-053 DAVIS RICHARD E JR & MAUREEN 16624 NW 165TH TER ALACHUA, FL 32615
03053-010-002 DOLBEC RICHARD D II & LAUREN K 16813 NW 165TH LANE Alachua, FL 32615	03053-010-003 GRIEVE THOMAS H & MELISA A 16843 NW 165TH LN ALACHUA, FL 32615	03053-010-001 STEVENS JOHN J & JAMIE N 16775 NW 165TH LANE ALACHUA, FL 32615
03053-010-047 ROGERS, MICHAEL C & FELICIA GA 24644 49TH RD O'BRIEN, FL 32071	03049-000-000 MEGAHEE ENTERPRISES LTD.,LLLP 2632 NW 43RD ST # 2138 GAINESVILLE, FL 32606	03053-010-004 BROOKS TODD B 16873 NW 165TH LN ALACHUA, FL 32615
03053-001-004 ALACHUA-WINDCREST LLC 605 EAST ROBINSON ST STE 340 ORLANDO, FL 32801	03053-010-016 CARTER DIANE S 8502 NW 35TH RD GAINESVILLE, FL 32606	03049-003-000 MURPHY'S LOT LLC 2632 NW 43RD ST STE 2138 GAINESVILLE, FL 32606-7545
		03053-002-000 PATEL, INDIRA K 8706 SADDLEHORN DR IRVING, TX 75063

03053-000-000
CAVACEPPI, SHARLEEN O TRUSTEE
PO BOX 1325
ALACHUA, FL 32616-1325

03053-001-003
RACETRAC PETROLEUM INC
PO BOX 56607
ATLANTA, GA 30343

03061-004-001
CIRCLE K STORES INC
PO BOX 8019
GARY, NC 27512-9998

03053-010-000
HERITAGE OAKS PROPERTY,
OWNERS
PO BOX 969
Alachua, FL 32516

Antoinette Endelicato
5562 NW 93rd Avenue
Gainesville, FL 32653

Dan Rhine
288 Turkey Creek
Alachua, FL 32615

Tom Gorman
9210 NW 59th Street
Alachua, FL 32653

Richard Gorman
5716 NW 93rd Avenue
Alachua, FL 32653

Peggy Arnold
410 Turkey Creek
Alachua, FL 32615

David Forest
23 Turkey Creek
Alachua, FL 32615

John Tingue
333 Turkey Creek
Alachua, FL 32615

President of TCMOA
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Craig Parenteau
FL Department of Environmental Protection
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Gainesville, FL 32641

Jeannette Hinsdale
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Alachua, FL 32616

Lynn Coullias
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Alachua, FL 32615

Lynda Coon
7216 NW 126 Avenue
Alachua, FL 32615

Tamara Robbins
PO Box 2317
Alachua, FL 32616

Dr. Lee A. Niblock
Alachua County Manager
12 SE 1st Street
Gainesville, FL 32601

John Amerson
All County Marion Property Management
2916 NE Jacksonville Rd
Ocala, FL 34479

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PO BOX 8019
GARY, NC 27512-9998

03053-010-000
HERITAGE OAKS PROPERTY,
OWNERS
PO BOX 969
Alachua, FL 32516



Legal Description

Tax Parcel Number 03053-001-001

September 26, 2016

For: Hipp Investments, LLC
Overall

A PORTION OF FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST,
ALACHUA COUNTY, FLORIDA;

BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA AND RUN THENCE SOUTH 01°49'00" EAST ALONG THE WEST BOUNDARY OF SAID SECTION 1576.08 FEET; THENCE NORTH 88°33'13" EAST, 1300.20 FEET TO THE NORTHWEST CORNER OF THAT CERTAIN TRACT OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 503, PAGE 107 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE SOUTH 01°49'00" EAST ALONG THE WEST LINE OF SAID CERTAIN TRACT OF LAND, 2347.44 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF U.S. HIGHWAY NO. 441 (STATE ROAD NO.'S 20 AND 25 - 200' R/W); THENCE CONTINUE SOUTH 79°06'59" EAST, ALONG SAID RIGHT- OF-WAY LINE, 717.08 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 79°06'59" EAST, ALONG SAID RIGHT-OF-WAY LINE, 305.12 FEET TO THE SOUTHWEST CORNER OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 2392, PAGE 782 OF SAID PUBLIC RECORDS; THENCE NORTH 03°06'22" WEST, 286.30 FEET TO THE NORTHWEST CORNER OF SAID CERTAIN PARCEL OF LAND; THENCE SOUTH 73°45'46" EAST, 264.96 FEET TO THE NORTHEAST CORNER OF SAID CERTAIN PARCEL OF LAND AND TO A POINT ON THE EAST LINE OF THAT CERTAIN TRACT OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 27, PAGE 296 OF SAID PUBLIC RECORDS; THENCE NORTH 03°06'22" WEST, ALONG SAID EAST LINE, (OFFICIAL RECORDS BOOK 27, PAGE 296) A DISTANCE OF 738.62 FEET; THENCE NORTH 78°52'28" WEST, 324.76 FEET; THENCE SOUTH 03°06'22" EAST, 205.27 FEET; THENCE SOUTH 60°21'17" WEST, 193.23 FEET TO A POINT LYING ON THE ARC OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 201.00 FEET; THENCE NORTHWESTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 01°18'03", AN ARC DISTANCE OF 4.56 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF NORTH 49°35'13" WEST, 4.56 FEET; THENCE NORTH

50°14'15" WEST, 204.90 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 259.00 FEET; THENCE NORTHWESTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 49°25'53", AN ARC DISTANCE OF 223.45 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF NORTH 25°31'18" WEST, 216.58 FEET; THENCE NORTH 00°48'21" WEST, 52.08 FEET; THENCE NORTH 78°52'28" WEST, 61.33 FEET; THENCE SOUTH 00°48'21" EAST, 65.62 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 320.00 FEET; THENCE SOUTHEASTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 49°25'53", AN ARC DISTANCE OF 276.08 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF SOUTH 25°31'18" EAST, 267.59 FEET; THENCE SOUTH 50°14'15" EAST, 203.09 FEET TO THE BEGINNING OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 200.00 FEET; THENCE SOUTHEASTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 27°09'40", AN ARC DISTANCE OF 94.81 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF SOUTH 36°39'24" EAST, 93.93 FEET; THENCE SOUTH 23°04'34" EAST, 49.38 FEET TO THE BEGINNING OF A CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 150.00 FEET; THENCE SOUTHERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 48°30'51", AN ARC DISTANCE OF 127.01 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF SOUTH 01°10'51" WEST, 123.25 FEET, THE END OF SAID CURVE BEING THE BEGINNING OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 500.00 FEET; THENCE SOUTHWESTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 26°35'29", AN ARC DISTANCE OF 232.05 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD HAVING A BEARING AND DISTANCE OF SOUTH 12°08'33" WEST, 229.98 FEET; THENCE SOUTH 01°09'12" EAST, 74.59 FEET TO THE BEGINNING OF A CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 300.00 FEET; THENCE SOUTHERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 12°50'20", AN ARC DISTANCE OF 67.22 FEET TO THE POINT OF BEGINNING, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF SOUTH 05°15'59" WEST, 67.08 FEET.

CONTAINING 9.53 ACRES (414,954 SQUARE FEET), MORE OR LESS.



Legal Description

Portion of Tax Parcel Number 03053-001-001

September 29, 2016

For: Hipp Investments, LLC
Lot 3A
Hotel Site at Alachua Gateway

A portion of Fractional Section 9, Township 8 South, Range 18 East, Alachua County, Florida; being more particularly described as follows:

Commence at the northwest corner of Fractional Section 9, Township 8 South, Range 18 East, Alachua County, Florida and run thence South $01^{\circ}49'00''$ East, along the west boundary of said Section, 1576.08 feet; thence North $88^{\circ}33'13''$ East, 1300.20 feet to the northwest corner of that certain tract of land as described in Official Records Book 503, page 107 of the Public Records of Alachua County, Florida; thence South $01^{\circ}49'00''$ East, along the west line of said certain tract of land, 1347.88 feet to a 4" X 4" concrete monument (stamped "LB 5091 BARRINEAU") as depicted on 'Heritage Oaks Phase I', a subdivision as per plat thereof, recorded in Plat Book 24, page 79 of said Public Records; thence South $78^{\circ}52'28''$ East, along the south boundary of said Heritage Oaks Phase I, a distance of 933.22 feet to the Point of Beginning; thence continue South $78^{\circ}52'28''$ East, along said south boundary, 324.76 feet to the southeast corner of said Heritage Oaks Phase I and to a point on the east line of that certain tract of land as described in Official Records Book 27, page 296 of said Public Records; thence South $03^{\circ}06'22''$ East, along said east line, 514.31 feet; thence North $73^{\circ}46'22''$ West, 416.85 feet to a point on the east line of an Ingress and Egress, Road Improvements, and Public Utilities Easement Agreement recorded in Official Records Book 4400, page 2104 of said Public Records, said point lying on the arc of a curve, concave southwesterly, having a radius of 301.00 feet; thence northwesterly, along the east line of said Ingress and Egress, Road Improvements and Public Utilities Easement Agreement, through the following three (3) courses: (1) run thence northwesterly along the arc of said curve through a central angle of $19^{\circ}31'14''$, an arc distance of 102.55 feet to the end of said curve, said arc being subtended by a chord having a bearing and distance of North $27^{\circ}02'33''$ West, 102.06 feet, (2) North $36^{\circ}48'10''$ West, 46.40 feet to the beginning of a curve, concave southwesterly, having a radius of 201.00 feet, (3) thence northwesterly, along the arc of said curve, through a central angle of $12^{\circ}08'02''$, an arc distance of 42.57 feet, said arc being subtended by a chord having a bearing and distance of North $42^{\circ}52'11''$ West, 42.49 feet; thence North $60^{\circ}21'17''$ East, 193.23 feet; thence North $03^{\circ}06'22''$ West, 205.27 feet to the Point of Beginning.



Legal Description

Portion of Tax Parcel Number 03053-001-001

September 26, 2016

For: Hipp Investments, LLC
Lot 3B

A PORTION OF FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST,
ALACHUA COUNTY, FLORIDA;

BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA AND RUN THENCE SOUTH 01°49'00" EAST ALONG THE WEST BOUNDARY OF SAID SECTION 1576.08 FEET; THENCE NORTH 88°33'13" EAST, 1300.20 FEET TO THE NORTHWEST CORNER OF THAT CERTAIN TRACT OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 503, PAGE 107 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE SOUTH 01°49'00" EAST ALONG THE WEST LINE OF SAID CERTAIN TRACT OF LAND, 2347.44 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF U.S. HIGHWAY NO. 441 (STATE ROAD NO.'S 20 AND 25 - 200' R/W); THENCE SOUTH 79°06'59" EAST, ALONG SAID RIGHT- OF-WAY LINE, 717.08 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 79°06'59" EAST, ALONG SAID RIGHT-OF-WAY LINE, 305.12 FEET TO THE SOUTHWEST CORNER OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 2392, PAGE 782 OF SAID PUBLIC RECORDS; THENCE NORTH 03°06'22" WEST, 286.30 FEET TO THE NORTHWEST CORNER OF SAID CERTAIN PARCEL OF LAND; THENCE SOUTH 73°45'46" EAST, 264.96 FEET TO THE NORTHEAST CORNER OF SAID CERTAIN PARCEL OF LAND AND TO A POINT ON THE EAST LINE OF THAT CERTAIN TRACT OF LAND AS DESCRIBED IN OFFICIAL RECORDS BOOK 27, PAGE 296 OF SAID PUBLIC RECORDS; THENCE NORTH 03°06'22" WEST, ALONG SAID EAST LINE, (OFFICIAL RECORDS BOOK 27, PAGE 296) A DISTANCE OF 224.31 FEET; THENCE NORTH 73°46'22" WEST, 416.85 FEET TO A POINT ON THE EAST LINE OF AN INGRESS AND EGRESS, ROAD IMPROVEMENTS, AND PUBLIC UTILITIES EASEMENT AGREEMENT RECORDED IN OFFICIAL RECORDS BOOK 4400, PAGE 2104 OF SAID PUBLIC RECORDS, SAID POINT LYING ON THE ARC OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 301.00 FEET; THENCE NORTHWESTERLY, ALONG THE EAST LINE OF SAID INGRESS AND EGRESS,

ROAD IMPROVEMENTS AND PUBLIC UTILITIES EASEMENT AGREEMENT, THROUGH THE FOLLOWING (6) COURSES: (1) RUN THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 19°31'14", AN ARC DISTANCE OF 102.55 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD HAVING A BEARING AND DISTANCE OF NORTH 27°02'33" WEST, 102.06 FEET, (2) NORTH 36°48'10" WEST, 46.40 FEET TO THE BEGINNING OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 201.00 FEET, (3) THENCE NORTHWESTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 13°26'05", AN ARC DISTANCE OF 47.13 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF NORTH 43°31'12" WEST, 47.02 FEET, (4) THENCE NORTH 50°14'15" WEST, 204.90 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 259.00 FEET, (5) THENCE NORTHWESTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 49°25'53", AN ARC DISTANCE OF 223.45 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF NORTH 25°31'18" WEST, 216.58 FEET, (6) THENCE NORTH 00°48'21" WEST, 52.08 FEET TO A POINT ON THE SOUTH BOUNDARY OF 'HERITAGE OAKS PHASE I', A SUBDIVISION AS PER PLAT THEREOF, RECORDED IN PLAT BOOK 24, PAGE 79 OF SAID PUBLIC RECORDS; THENCE NORTH 78°52'28" WEST, ALONG SAID SOUTH BOUNDARY, A DISTANCE OF 61.33 FEET TO A POINT ON THE WEST LINE OF SAID INGRESS AND EGRESS, ROAD IMPROVEMENTS AND PUBLIC UTILITIES EASEMENT AGREEMENT; THENCE SOUTHERLY ALONG SAID WEST LINE THROUGH THE FOLLOWING (9) COURSES: (1) SOUTH 00°48'21" EAST, 65.62 FEET TO THE BEGINNING OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 320.00 FEET, (2) THENCE SOUTHEASTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 49°25'53", AN ARC DISTANCE OF 276.08 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF SOUTH 25°31'18" EAST, 267.59 FEET, (3) THENCE SOUTH 50°14'15" EAST, 203.09 FEET TO THE BEGINNING OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 200.00 FEET, (4) THENCE SOUTHEASTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 27°09'40", AN ARC DISTANCE OF 94.81 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF SOUTH 36°39'24" EAST, 93.93 FEET, (5) THENCE SOUTH 23°04'34" EAST, 49.38 FEET TO THE BEGINNING OF A CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 150.00 FEET, (6) THENCE SOUTHERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 48°30'51", AN ARC DISTANCE OF 127.01 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF SOUTH 01°10'51" WEST, 123.25 FEET, THE END OF SAID CURVE BEING THE BEGINNING OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 500.00 FEET, (7) THENCE SOUTHWESTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 26°35'29", AN ARC DISTANCE OF 232.05 FEET TO THE END OF SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD HAVING A BEARING AND

DISTANCE OF SOUTH $12^{\circ}08'33''$ WEST, 229.98 FEET; (8) THENCE SOUTH $01^{\circ}09'12''$ EAST, 74.59 FEET TO THE BEGINNING OF A CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 300.00 FEET, (9) THENCE SOUTHERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF $12^{\circ}50'20''$, AN ARC DISTANCE OF 67.22 FEET TO THE POINT OF BEGINNING, SAID ARC BEING SUBTENDED BY A CHORD, HAVING A BEARING AND DISTANCE OF SOUTH $05^{\circ}15'59''$ WEST, 67.08 FEET.

CONTAINING 5.28 ACRES (230,064 SQUARE FEET), MORE OR LESS.

December 19, 2016

Adam Hall, AICP
City Planner
City of Alachua
15100 NW 142nd Terrace
Alachua, FL 32616

Re: Completeness Review Response – Holiday Inn Alachua Site Plan and Lot Split

Dear Mr. Hall:

The applicant's responses to the completeness review comments issued on December 13, 2016 are below. Included in this package are the following items:

- 4 Sets of Revised Plans
- 4 Copies of Revised Application Package Materials

DEFICIENCIES TO BE ADDRESSED

Unless otherwise noted, references to code Sections refer to City of Alachua Land Development Regulations.

Comments by: Adam Hall, Planner - Office of Planning and Community Development

Per my review so far, the following DRT comments have not been addressed:

1. FLUM Policy 1.3.d.9 has not been addressed in the Comp Plan consistency analysis portion of the application. DRT Comment A.2.
Future Land Use Element Policy 1.3.d creates design and performance standards for commercial development proposals. Policy 1.3.d.9 has not been adequately addressed. Site appears to be potentially constrained by the presence of unsuitable soils (Bivans Sand, 5% to 8% slopes). Please address.

Response: Comprehensive Plan Consistency Analysis has been updated to reflect this policy.

2. The Concurrency Impact Analysis has not been updated. DRT Comment B.1.
The Concurrency Impact Analysis Report references "Table 1" as a data source for available capacities for potable water, wastewater, and solid waste. Table 1 (and Table 2) not provided in Concurrency Impact Analysis Report.

Response: Tables are attached to concurrency analysis.

3. The demarcated pedestrian connection between the parking areas and entrance to the building should connect with pedestrian facilities proposed (sidewalk that runs through parking lot). DRT Comment C.2.b.

In parking lots with 100 parking spaces or more, a pedestrian crosswalk is required between the primary entrance of the structure and the parking area. Crosswalk should be at least 10' feet wide and raised, striped, or otherwise designated with alternative materials.

Response: See sheet C1.00 of the revised plan set for revised crosswalk.

4. Pool equipment has been added to landscape plan, but no screening is shown. Must be screened with wood, masonry, stone, or finished metal or screened with landscaping. DRT comment C.3.j.

Pool equipment or structure not shown on landscaping plans (shown on architectural plans, however); per Section 6.2.3 (D), equipment must be screened with solid wood, masonry, stone, or finished metal.

Response: See revised sheet A-001

5. General landscape comment: the proposed tree counts appear to be slightly off, please verify. Counted trees on site plan meet all landscape requirements, other than those addressed in this email.

Response: See revised landscape plans.

6. Retaining wall details/ specs not found in resubmittal. DRT comment C.4.

Response: See sheet C701.1.

7. No additional row of understory trees along rear property line show in plans as discussed at DRT and as noted in DRT comment C.6.a.i.

Response: See revised landscape plans.

8. Color architectural plans not submitted (will be required at final submittal).

Response: See sheets A200 and A201.

9. Calculation of floor to area ratio does not appear to match proposed square footage and lot size. Please verify and/or show calculation of floor to area ratio.

Response: See revised sheet C0.00.

Comments by: Rodolfo Valladeres, PE, Public Services Director, 12/13/16

1. Manhole; Sheet C4.00 - Referenced sanitary manhole does not 'exist.' Provide sanitary manhole 6 inches above grade and a 10:1 slope to grade.

Response: See revised sheet C4.00 for corrected leader and C4.10 for additional construction detail.

Comments by: A. J. "Jay" Brown, Jr., PE - President, JBrown Professional Group Inc.

Sht. C2.00

1. The valley gutter along NW 167th Blvd. @ the driveway connection was eliminated but the curb transitions were not indicated. The curb upstream of the driveway has to be removed and transitioned from standard C & G to spillout C & G in order for the valley gutter to be eliminated and the drainage to work properly within the curb profile. This should be indicated / detailed on the plans.

Response: See sheet C2.00 of the revised plan set. Curb and gutter transition detail is specified on sheet C2.00.

2. Provide better spot grading at the driveway intersection to make sure the ADA ramps are constructed properly and the crosswalk cross-slope is not steeper than 2.0%. (Previous comment)

Response: See revised sheet C2.00 for additional spot elevations.

3. Provide better spot grading at the ADA parking spaces to assure they are constructed with max slope of 2.0% and the sidewalk transitions are constructed properly. (Previous Comment). A spot at each disabled parking space bay exceeds 2.0%.

Response: See revised sheet C2.00 for additional spot elevations. Grades were checked and annotated on sheet C2.00.

4. Is there a design detail for the retaining wall? What material is the wall supposed to be? Is it masonry or poured-in-place concrete? A note states it is to be designed by others. It is very important this wall is designed properly by a Florida Registered Structural Engineer PE. I suggest the design details for this wall be added to this plan set. (Previous Comment) We were not provided with this design detail although it was mentioned that it was provided to the City. The main point is that a signed & sealed structural engineering design drawing of the retaining wall has been provided to the City.

Response: Retaining wall design is included with this submittal.

5. Suggest showing the building roof storm drain discharge locations and their piping tie-ins to the storm sewer lines provided. (Previous Comment) Does any roof drain discharge to the ground in the NE quadrant of this building? Do not understand why this area, which contains a good bit of impervious area, is not directed to the stormwater retention basin.

Response: There are no roof drains in the NE corner of the building. Sheet C2.00 of the revised plan set has been modified to show which downspouts discharge above ground. Downspouts that are tied into the stormwater system are indicated by the pipe connecting it to the header pipe around the building. The only impervious area not directed to the stormwater system is a small portion of the sidewalk on the NE side of the building.

6. Spot Elevations should be provided on the exterior of the building to identify drainage patterns away from the building. (Previous comment was not addressed)

Response: See revised sheet C2.00 for additional spot elevations. Sht. C2.20

7. A note should be added in the basin plan view which identifies the location of the basin undercut limits per the GSE Geotechnical Report. These limits are to extend to the southeast of the basin to the elevation 98 contour and this is not depicted on the drawings. (Previous Comment)

Response: See revised sheet C2.20.

8. Please clarify on the basin Section A-A if the undercut on the side slopes is 12" thick. (Previous Comment)

Response: See revised sheet C2.20.

Sht. C4.00

1. Not sure what is meant by tapping saddle and box. Remove "box" as appropriate.

Response: See detail on C4.10.

Statement of Proposed Uses

The proposed Holiday Inn will provide hospitality services to residents and visitors to the City of Alachua. The building will be 4 stories with 92 guest rooms.

Comprehensive Plan Consistency

Vision Element:

III. GOALS TO IMPLEMENT THE VISION

GOAL 1: Economic Development: The City of Alachua has a unique business climate. The City is home to corporations, technology incubators, local businesses, and start-up companies. The City will maintain its focus on a welcoming business environment and encourage business development in the downtown area and along the U.S. 441 corridor. Alachua desires to continue to be a home to innovative businesses and an employment center where jobs are provided at every level. The City will continue to encourage the growth and development of established industries, such as biotechnology, and encourage the diversification and expansion of commercial businesses which provide integral services to the City's residents.

Consistency: The proposed Holiday Inn will support and contribute to the type of commercial development that the City of Alachua encourages along the US 441 corporate corridor. The proposed facility will also increase the number of job opportunities in the City and promote the local tourist economy.

Future Land Use Element:

Objective 1.3: Commercial

The City of Alachua shall establish three commercial districts: Community Commercial, Commercial and Central Business District. These districts shall provide a broad range of retail sales and services, as well as office uses, in order to provide for the availability of goods and services, both to the citizens of Alachua and to the citizens of the North Central Florida region.

Consistency: The proposed Holiday Inn will serve the intent of the Commercial Future Land Use designation, as it will provide access to a hotel for guests and the citizens of Alachua in a commercialized, urban portion of the City located in close proximity to the population base and Interstate 75. In addition, the site is consistent

with the policies outlined in Future Land Use Policy 1.3.b and 1.3.d as indicated below:

Policy 1.3.b: Commercial: The Commercial land use category is established to provide for general commercial uses, as well as more intense commercial and highway commercial uses. This is the land use category in which large-scale, regional commercial uses may locate. The following uses are allowed within the Commercial land use category:

- 1. Retail sales and services;*
- 2. Personal services;*
- 3. Financial Institutions;*
- 4. Outdoor recreation and entertainment;*
- 5. Tourist-related uses;*
- 6. Hotels, motels;**
- 7. Commercial shopping centers;*
- 8. Auto-oriented uses;*
- 9. Traditional Mixed-use Neighborhood Planned Developments;*
- 10. Employment Center Planned Developments;*
- 11. Commercial recreation centers;*
- 12. Office/business parks;*
- 13. Limited industrial services;*
- 14. Eating Establishments*

Consistency: As indicated in Policy 1.3(b)(6) above, the proposed Holiday Inn hotel is consistent with and will serve the intent of the Commercial Future Land Use category. The site is a proposed hotel near commercial and residential development near the intersection of I-75 and US Hwy 441.

Policy 1.3.d: Design and performance standards: The following criteria shall apply when evaluating commercial development proposals:

- 1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;*

Consistency: The site plan includes an appropriately designed vehicular connection to an adjacent street and provides a sidewalk for non-vehicular access to the site and driveway for vehicular access.

- 2. Buffering from adjacent existing/potential uses;*

Consistency: A 15 foot rear setback is shown between the site and adjacent residential properties. There is also a 50 foot landscape buffer on the south side of the Heritage Oaks development.

- 3. Open space provisions and balance of proportion between gross floor area and site size;*

Consistency: The proposed project site exceeds the 10% required open space and the proposed building is less than the maximum 0.50 floor area ratio, as demonstrated on the Site Plan.

4. *Adequacy of pervious surface area in terms of drainage requirements;*

Consistency: The Site Plan includes a detailed stormwater and open space plan with design details for an on-site basin area, which demonstrate compliance with all applicable local and state regulations.

5. *Placement of signage;*

Consistency: The permitting of signs will occur under a separate process and those permits shall be prepared in compliance with the applicable criteria.

6. *Adequacy of site lighting and potential impacts of lighting upon the surrounding area. Lighting should be designed to minimize impacts and preserve the ambiance and quality of the nighttime sky by reducing light trespass and light pollution on adjacent properties by utilizing lighting at an appropriate intensity, direction and times to ensure light is not overused or impacting areas where it is not intended;*

Consistency: The Site Plan includes a photometric plan that complies with all elements of the Comprehensive Plan and Land Development Regulations.

7. *Safety of on-site circulation patterns (patron, employee and delivery vehicles), including parking layout and drive aisles, and points of conflict;*

Consistency: The parking area includes sidewalks and crosswalks (with internal and external connectivity) to ensure safe on-site circulation for vehicular and non-vehicular traffic.

8. *Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations;*

Consistency: The Site Plan includes a landscape plan prepared by a registered landscape architect that complies with all elements of the Comprehensive Plan and Land Development Regulations.

9. *Unique features and resources which may constrain site development, such as soils, existing vegetation and historic significance; and*

Consistency: The geotechnical report (Attachment A of the Drainage Design Notes) for soil recommendations to allow development.

10. *Performance based zoning requirements, which may serve as a substitute for or accompany land development regulations in attaining acceptable site design.*

Consistency: No specific performance based zoning requirements apply to this project, other than the standard requirements found in the Land Development Code.

11. *Commercial uses shall be limited to an intensity of less than or equal to .50 floor area ratio for parcels 10 acres or greater, .50 floor area ratio for parcels less than 10 acres but 5 acres or greater, a .75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio to parcels 1 acre or less.*

Consistency: The proposed building to be located on site has less than a 0.50 floor area ratio, as demonstrated on the Site Plan.

Policy 1.3.e: The creation/promotion of strip pattern commercial development shall be discouraged. Infill within established commercial areas is preferred over extension of a strip commercial pattern. Extension of a commercial land use designation may be considered in circumstances where the proposed commercial parcel is located within a block in which at least fifty percent (50%) of the block face (in linear feet) is either currently developed with commercial land uses or is designated for commercial use. In either case, the proposed commercial land use extension shall not encroach into a residential area. Judging the suitability of a location for an extension of commercial land uses shall be based upon the following minimum criteria:

1. *Impacts upon traffic circulation should be anticipated and mitigated through the reservation of right-of-way for road widening and marginal access streets. Access points for commercial complexes shall seek to minimize points of conflict by utilizing frontage roads, providing cross access between parcels or installing shared use curb cuts for access driveways to the maximum extent feasible.*

Consistency: The Site Plan includes an appropriately designed vehicular access point to the adjacent street and includes sidewalks for safe non-vehicular access to the site.

2. *Setbacks and landscaped or other appropriate buffers shall be established to mitigate the visual impacts of commercial development.*

Consistency: The Site Plan includes a landscape plan that complies with all elements of the Comprehensive Plan and Land Development Regulations. A 15 foot rear setback is shown between the site and adjacent residential properties. As a point of information, there is also an existing 50 foot landscape buffer on the south side of the Heritage Oaks development.

3. *A sidewalk or bicycle path shall be required where appropriate, to provide convenient access to surrounding residents and to reduce traffic volumes on the roadways.*

Consistency: The Site Plan includes sidewalks with internal and external interconnectivity to provide convenient access to surrounding residents and reduce traffic volumes on roadways.

Concurrency Impact Analysis Holiday Inn

This proposed building is a 53,792 square foot (92 room) hotel with associated parking and stormwater infrastructure improvements.

Stormwater:

A detailed stormwater management plan is included with this submittal. The proposed stormwater system is designed in compliance with City of Alachua and Suwannee River Water Management District requirements.

Potable Water:

Goal 4: Provide an adequate supply of high quality potable water to customers throughout the service area.

Objective 4.1 Achieve and maintain acceptable levels of service for potable water quality and quality.

Project Impact: For the hotel development (which will have 92 rooms), it is estimated that approximately 9,200 G.P.D. will be used for the proposed hotel (Ch. 64E-6, F.A.C.). The proposed hotel will generate approximately 9,200 G.P.D., based on this calculation 92 rooms x 100 G.P.D./room = 9,200 G.P.D.) As shown in the following table, there is adequate capacity available to support this development.

Table 1. Potable Water Impacts	
System Category	Gallons Per Day
Current Permitted Capacity ¹	2,300,000
Less Actual Potable Water Flows ¹	1,190,000
Reserved Capacity ¹	112,897
Holiday Inn	9,200
Residual Capacity	987,903
Percentage of Permitted Design Capacity Utilized	57.05%
<i>Sources:</i>	
1. City of Alachua Development Monitoring Report, October 2016	

Sanitary Sewer:

Goal 1: Plan for and provide adequate, high quality and economical wastewater service while protecting the environment, especially groundwater resources.

Objective 1.2 Wastewater service will be made available to new development in a manner to promote compact urban growth, promoting development where wastewater service is available, and discouraging urban sprawl.

Project Impact For the hotel development (which will have 92 rooms), it is estimated that approximately 9,200 G.P.D. will be used for the proposed hotel (Ch. 64E-6, F.A.C.). The proposed hotel will generate approximately 9,200 G.P.D., based on this calculation 92 rooms x 100 G.P.D./room = 9,200 G.P.D.) As shown in the following table, there is adequate capacity available to support this development.

Table 2. Sanitary Sewer Impacts	
System Category	Gallons Per Day
Treatment Plant Current Permitted Capacity	1,500,000
Less Actual Treatment Plant Flows ¹	615,000
Reserved Capacity ¹	73,307
Holiday Inn (Hotel)	9,200
Residual Capacity	802,493
Percentage of Permitted Design Capacity Utilized	46.50%
<i>Sources:</i>	
1. City of Alachua Development Monitoring Report, October 2016	

Solid Waste:

Goal 2: The City of Alachua will provide for solid waste disposal service in a sanitary, economic, and environmentally safe manner.

Project Impact: Commercial uses generate approximately 12 pounds per day of solid waste per 1,000 square feet (Environmental Engineering: A Design Approach, Cincero and Cincero, 1996). The proposed facility will generate approximately 646 pounds of solid waste will be generated per day (53,792 SF / 1,000 SF x 12 = 646 pounds per day). As indicated in the following table, the proposed solid waste generated as part of this project will not reduce the level of service in the City of Alachua.

Table 3. Solid Waste Impacts		
System Category	Lbs Per Day	Tons Per Year
Existing Demand ¹	39,152.00	7,145.24
Reserved Capacity ¹	4,866.01	888.05
New River Solid Waste Facility Capacity²	50 years	
1. Bureau of Economic & Business Research, University of Florida, Estimates of Population by County and City in Florida, April 1, 2015; Policy 2.1.a, CFNGAR Element		
2. Darrell O'Neal, Executive Director, New River Solid Waste Association, March 2016		

Traffic:

The proposed use of the project site for commercial (hotel) use will not create a traffic impact that will exceed the approved level of service standards for the impacted roadways.

Affected Comprehensive Plan Roadway Segments:

Segment Number	Segment Description	Lanes	Functional Classification	Area Type	LOS
5 (13, 14 & 15)	US 441 (from SR 235 to north city limits)	4/D	Principal Arterial	Urban Trans	E
<i>1 Source: City of Alachua Comprehensive Plan, Transportation Element.</i>					

Trip Generation:

Land Use	AADT (Enter/Exit)	Peak Hour (Enter/Exit)
Hotel (ITE Code 310)	752 (376/376)	56 (33/23)
<i>1 Source: ITE Trip Generation, 9th Edition. 2 Formulas: ITE Code 310 – AADT – 8.17 trips per room x 92 rooms (50% entering/50% exiting); PM Peak Hour – 0.61 trips per room x 92 rooms (58% entering/42% exiting)</i>		

Projected Impact on Affected Comprehensive Plan Roadway Segments:

Traffic System Category	US 441 Segment 5, (13, 14, 15) ¹	
	AADT	Peak Hour
Maximum Service Volume ²	35,500	3,200
Existing Traffic ³	23,495	2,232
Reserved Trips ⁴	3,769	362
Available Capacity ⁴	8,236	606
Increase/Decrease in Daily Trips Generated by Development	-752	-56
Residual Capacity After Development's Impacts	7,484	550

1 FDOT roadway segment number shown in parenthesis (when applicable.) For the purposes of concurrency management, COA Comprehensive Plan segments that make up a portion of a larger FDOT roadway segment will be evaluated together when determining post development roadway capacity.

2 Source: FDOT 2013 Quality/Level of Service Handbook, Generalized Annual Average Daily Volumes and Generalized Peak Hour Two-Way Volumes for Areas Transitioning to Urbanized Areas or Areas of 5,000 Not in Urbanized Areas.

3 Florida State Highway System Level of Service Report 2013, Florida Department of Transportation, District II, August 2014.

4 Source: City of Alachua July 2016 Development Monitoring Report.

Consistency: The impacts generated by the development will not adversely affect the Level of Service (LOS) of the roadway segment identified above.

Hydrant Flow Test Report

Test Date 9/28/2016

Test Time 11:30am

Location

Holiday Inn - Alachua

Tested by

Gator Fire Equipment

1032 S. Main Street

Gainesville, FL 32601

Tester: John Mallard

Witness: Lance Ashby

Notes

Reading Hydrant: 16130 NW US Hwy 441

Flowing Hydrant: SE corner of 235A & 441

Read Hydrant

81 psi **static pressure**

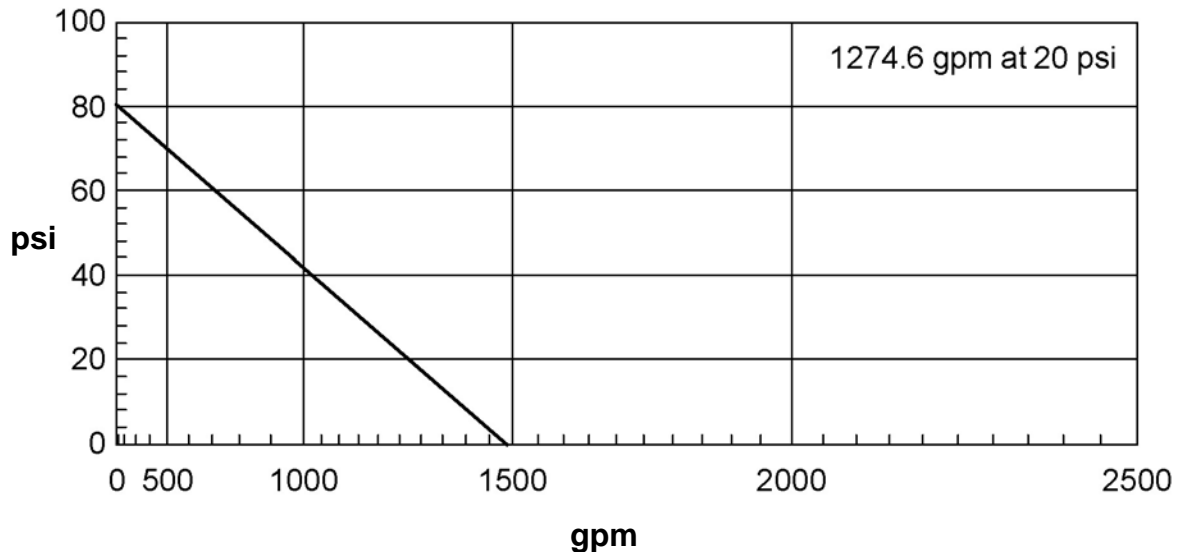
56 psi **residual pressure**

0 ft **hydrant elevation**

Flow Hydrant(s)

Outlet	Elev	Size	C	Pitot Pressure	Flow
#1	10	2.5	.9	22	787 gpm

Flow Graph





374 Hobbs Road • Tampa, FL 33619
(813) 662-9200 • Fax 662-0080

October 28, 2016

City of Alachua,
RE: Holiday Inn Express & Suites
Fire Sprinkler Design

Universal Fire is the fire sprinkler contractor for this project. We have reviewed the plans and we will be installing all quick response heads on this project.

If you have any questions, please call.

Respectfully,
UNIVERSAL FIRE SYSTEMS, INC.

Aaron Jones

PROJECT NAME B4-093-1602 - HOLIDAY INN EXPRESS & SUITES - ALACHUA, FL

Estimated Connected Electrical Loads								
Building	No of Keys	Area Sq. Ft (Approx)	Lighting (VA/SqFt) as per ECBC Table 7.3.1 & 7.3.2	Lighting Load	General Purpose Receptacle Load (VA/SqFt) as per IEEE Table 6.1.2	General Purpose Receptacle Load	HVAC Load (VA/SqFt) as per IEEE Table 6.1.4 & 6.1.5	HVAC Load
HIE Alachua	92 Keys	53650	1.3	69745	1.0	53650.0	6.0	321900

Electrical Demand Calculation - Towne Place				
DESCRIPTION	CONNECTED LOAD IN KVA	DEMAND FACTOR	DEMAND LOAD IN KVA	REMARK
LIGHTING	70	1.0	70	
RCPT	54	AS PER NEC 220.44	32	AS PER NEC 220.44
HVAC	322	1.0	322	AS PER NEC 220.82
MOTOR				AS PER NEC 430.24
PLUMBING	90	1.0	90	
ELEVATOR	48	1.0	48	
TOTAL	584		562	
DESIGN MARGIN@20%			674	
PROPOSED TRANSFORMER : 750 kVA				

Cree Edge™ Series

LED Area/Flood Luminaire

HOLIDAY INN
ALACHUA
TYPE P3

Product Description

The Cree Edge™ Series has a slim, low profile design. Its rugged cast aluminum housing minimizes wind load requirements and features an integral, weathertight LED driver compartment and high performance aluminum heat sinks. Various mounting choices: Adjustable Arm, Direct Arm, Direct Arm Long, or Side Arm (details on page 2). Includes a leaf/debris guard.

Applications: Parking lots, walkways, campuses, car dealerships, office complexes, and internal roadways

Performance Summary

Patented NanoOptic® Product Technology

Made in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed	
Bird Spikes XA-BRDSBK	Backlight Control Shields XA-20BLS-4 - Four-pack - Unpainted stainless steel
Hand-Held Remote XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required	

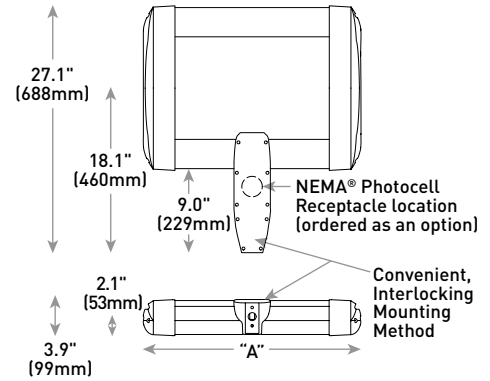
Ordering Information

Example: ARE-EDG-2M-AA-12-E-UL-SV-350

Product	Optic	Mounting*	LED Count (x10)	E	Series	Voltage	Color Options	Drive Current	Options
ARE-EDG	2M Type II Medium 2MB Type II Medium w/BLS 2MP Type II Medium w/Partial BLS 3M Type III Medium	3MB Type III Medium w/BLS 3MP Type III Medium w/Partial BLS 4M Type IV Medium 4MB Type IV Medium w/BLS	4MP Type IV Medium w/Partial BLS 5M Type V Medium 5S Type V Short	AA Adjustable Arm DA Direct Arm DL Direct Long Arm	02 04 06 08 10 12 14 16	E UL Universal 120-277V UH Universal 347-480V	BK Black BZ Bronze SV Silver WH White	350 350mA 525 525mA 700 700mA - Available with 20-60 LEDs	DIM 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current F Fuse - Refer to ML spec sheet for availability with ML options - Available with UL voltage only - Available for U.S. applications only - When code dictates fusing, use time delay fuse HL Hi/Low (Dual Circuit Input) - Refer to HL spec sheet for details - Sensor not included ML Multi-Level - Refer to ML spec sheet for details - Intended for downlight applications at 0° tilt P Photocell - Refer to ML spec sheet for availability with ML options - Available with UL voltage only
FLD-EDG	25 25° Flood 40 40° Flood	70 70° Flood SN Sign	N6 NEMA® 6	AA Adjustable Arm SA Side Arm - Available with 20-60 LEDs					PML Programmable Multi-Level, 20-40° Mounting Height - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt PML2 Programmable Multi-Level, 10-30° Mounting Height - Refer to PML2 spec sheet for details - Intended for downlight applications at 0° tilt R NEMA® Photocell Receptacle - Intended for downlight applications with maximum 45° tilt - Photocell by others - Refer to ML spec sheet for availability with ML options 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire

* Reference EPA and pole configuration suitability data beginning on page 19
NOTE: Price adder may apply depending on configuration

DA Mount



LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	21 lbs. (10kg)
04	12.1" (306mm)	24 lbs. (11kg)
06	14.1" (357mm)	27 lbs. (12kg)
08	16.1" (408mm)	28 lbs. (13kg)
10	18.1" (459mm)	32 lbs. (15kg)
12	20.1" (510mm)	34 lbs. (15kg)
14	22.1" (560mm)	37 lbs. (17kg)
16	24.1" (611mm)	41 lbs. (19kg)

AA/DL/SA Mount - see page 22 for weight & dimensions



US: lighting.cree.com/lighting

T (800) 236-6800 F (262) 504-5415

Rev. Date: V4 09/20/2016

Canada: www.cree.com/canada



T (800) 473-1234 F (800) 890-7507

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile, minimizing wind load requirements
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment and high performance heat sinks
- DA and DL mount utilizes convenient interlocking mounting method. Mounting is rugged die cast aluminum, mounts to 3-6" (76-152mm) square or round pole and secures to pole with 5/16-18 UNC bolts spaced on 2" (51mm) centers
- AA and SA mounts are rugged die cast aluminum and mount to 2" (51mm) IP, 2.375" (60mm) O.D. tenons
- Includes leaf/debris guard
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available
- **Weight:** See Dimensions and Weight Charts on pages 1 and 22

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- DA and DL mounts designed with integral weathertight electrical box with terminal strips (12Ga-20Ga) for easy power hookup
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- **Maximum 10V Source Current:** 20 LED (350mA): 10mA; 20 LED (525 & 700mA) and 40-80 LED: 0.15mA; 100-160 LED: 0.30mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529 when ordered without P or R options
- Consult factory for CE Certified products
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards when ordered with AA, DA and DL mounts
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- DLC qualified. Exceptions apply when ordered with full backlight control or 3MP optic with 20 LEDs. Please refer to www.designlights.org/QPL for most current information
- Meets Buy American requirements within ARRA

Electrical Data*

LED Count (x10)	System Watts 120-480V	Total Current (A)					
		120V	208V	240V	277V	347V	480V
350mA							
02	25	0.21	0.13	0.11	0.10	0.08	0.07
04	46	0.36	0.23	0.21	0.20	0.15	0.12
06	66	0.52	0.31	0.28	0.26	0.20	0.15
08	90	0.75	0.44	0.38	0.34	0.26	0.20
10	110	0.92	0.53	0.47	0.41	0.32	0.24
12	130	1.10	0.63	0.55	0.48	0.38	0.28
14	158	1.32	0.77	0.68	0.62	0.47	0.35
16	179	1.49	0.87	0.77	0.68	0.53	0.39
525mA							
02	37	0.30	0.19	0.17	0.16	0.12	0.10
04	70	0.58	0.34	0.31	0.28	0.21	0.16
06	101	0.84	0.49	0.43	0.38	0.30	0.22
08	133	1.13	0.66	0.58	0.51	0.39	0.28
10	171	1.43	0.83	0.74	0.66	0.50	0.38
12	202	1.69	0.98	0.86	0.77	0.59	0.44
14	232	1.94	1.12	0.98	0.87	0.68	0.50
16	263	2.21	1.27	1.11	0.97	0.77	0.56
700mA							
02	50	0.41	0.25	0.22	0.20	0.15	0.12
04	93	0.78	0.46	0.40	0.36	0.27	0.20
06	134	1.14	0.65	0.57	0.50	0.39	0.29

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

Recommended Cree Edge™ Series Lumen Maintenance Factors (LMF)¹

Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
5°C (41°F)	1.04	1.01	0.99	0.98	0.96
10°C (50°F)	1.03	1.00	0.98	0.97	0.95
15°C (59°F)	1.02	0.99	0.97	0.96	0.94
20°C (68°F)	1.01	0.98	0.96	0.95	0.93
25°C (77°F)	1.00	0.97	0.95	0.94	0.92

¹ Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times

(6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (IDUT) i.e. the packaged LED chip

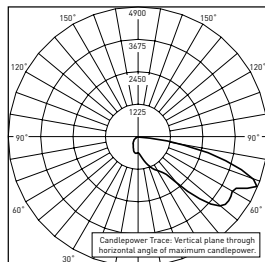
³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (IDUT) i.e. the packaged LED chip

Cree Edge™ LED Area/Flood Luminaire

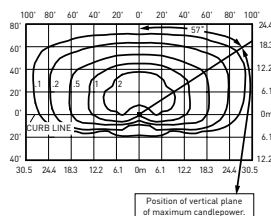
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/area/cree-edge-series-1>

3MB



CSA Test Report #: 6448
ARE-EDG-3MB-**-06-E-UL-700
Initial Delivered Lumens: 7,740



ARE-EDG-3MB-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 12,275
Initial FC at grade







Type III Medium Distribution w/BLS





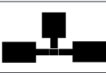




LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,754	B0 U0 G1	1,789	B0 U0 G1
04	3,508	B1 U0 G1	3,578	B1 U0 G1
06	5,202	B1 U0 G2	5,305	B1 U0 G2
08	6,936	B1 U0 G2	7,074	B1 U0 G2
10	8,650	B1 U0 G2	8,821	B1 U0 G2
12	10,380	B1 U0 G3	10,585	B1 U0 G3
14	12,033	B1 U0 G3	12,272	B1 U0 G3
16	13,752	B2 U0 G3	14,025	B2 U0 G3
525mA				
02	2,489	B0 U0 G1	2,542	B0 U0 G1
04	4,979	B1 U0 G2	5,083	B1 U0 G2
06	7,383	B1 U0 G2	7,538	B1 U0 G2
08	9,844	B1 U0 G2	10,050	B1 U0 G3
10	12,275	B1 U0 G3	12,532	B1 U0 G3
12	14,730	B2 U0 G3	15,039	B2 U0 G3
14	17,077	B2 U0 G3	17,434	B2 U0 G3
16	19,516	B2 U0 G3	19,925	B2 U0 G3
700mA				
02	2,938	B1 U0 G1	2,998	B1 U0 G1
04	5,876	B1 U0 G2	5,996	B1 U0 G2
06	8,714	B1 U0 G2	8,891	B1 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit:
www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

Luminaire EPA

Fixed Arm Mount – ARE-EDG-DA						
LED Count (x10)	Single	2 @ 90°	2 @ 180°	3 @ 90°	3 @ 120°	4 @ 90°
						
02	0.60	0.87	1.20	1.47	1.47	1.75
04	0.60	0.87	1.20	1.47	1.47	1.75
06	0.60	0.92	1.20	1.51	1.51	1.83
08	0.60	0.96 N/A with 3" poles	1.20	1.55 N/A with 3" poles	1.55	1.91 N/A with 3" poles
10	0.60	1.00 N/A with 3" poles	1.20	1.60 N/A with 3" poles	1.60	2.00 N/A with 3" poles
12	0.60	1.04 N/A with 3" poles	1.20	1.64 N/A with 3" poles	1.64	2.08 N/A with 3" poles
14	0.60	1.08 N/A with 3" or 4" poles	1.20	1.68 N/A with 3" or 4" poles	1.68	2.16 N/A with 3" or 4" poles
16	0.60	1.12 N/A with 3" or 4" poles	1.20	1.72 N/A with 3" or 4" poles	1.72	2.24 N/A with 3" or 4" poles
Fixed Arm Mount – ARE-EDG-DL						
02	0.75	1.02	1.50	1.77	1.77	1.91
04	0.75	1.02	1.50	1.77	1.77	1.91
06	0.75	1.07	1.50	1.82	1.82	1.98
08	0.75	1.11	1.50	1.86	1.86	2.04
10	0.75	1.15	1.50	1.90	1.90	2.10
12	0.75	1.19	1.50	1.94	1.94	2.16
14	0.75	1.23	1.50	1.98	1.98	2.22
16	0.75	1.27	1.50	2.02	2.02	2.28

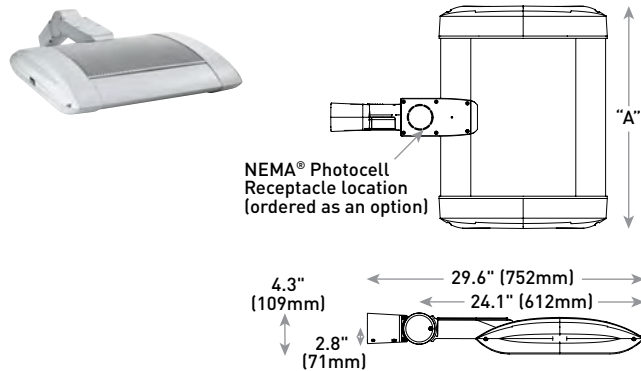
Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA									
LED Count (x10)	Single	2 @ 90°	2 @ 180°	In-Line 2 @ 180°	3 @ 90°	3 @ 120°	In-Line 3 @ 180°	4 @ 90°	In-Line 4 @ 180°
Tenon Configuration If used with Cree tenons, please add tenon EPA with Luminaire EPA									
									
	Vertical: PB-1A*; PT-1; PW-1A3** Horizontal: By others	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(90); PT-2(90)	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(180); PT-2(180)	Vertical: PB-2A*; PB-2R2.375	Vertical: PB-3A*; PB-3R2.375 Horizontal: PD-3A4(90); PT-3(90)	Vertical: PB-3A*; PB-3R2.375 Horizontal: PT-3(120)	Vertical: PB-3A*; PB-3R2.375	Vertical: PB-4A*(90); PB-4R2.375 Horizontal: PD-4A4(90) PT-4(90)	Vertical: PB-4A*(180); PB-4R2.375
0° Tilt									
02	0.66	0.98	1.32	1.32	1.77	1.64	1.98	1.91	2.64
04	0.66	0.98	1.32	1.32	1.64	1.64	1.98	1.97	2.64
06	0.66	1.02	1.32	1.32	1.68	1.68	1.98	2.05	2.64
08	0.66	1.07	1.32	1.32	1.80	1.72	1.98	2.29	2.64
10	0.66	1.11	1.32	1.32	1.76	1.76	1.98	2.21	2.64
12	0.66	1.15	1.32	1.32	1.80	1.80	1.98	2.29	2.64
14	0.66	1.19	1.32	1.32	1.84	1.84	1.98	2.38	2.64
16	0.66	1.23	1.32	N/A	1.89	1.89	N/A	2.46	N/A

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation

** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

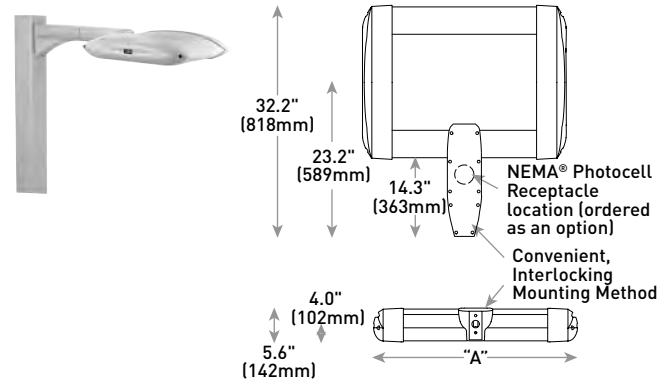
Cree Edge™ LED Area/Flood Luminaire

AA Mount



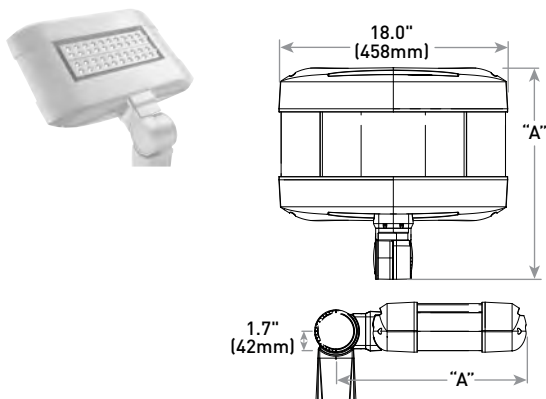
LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	21 lbs. (10kg)
04	12.1" (306mm)	24 lbs. (11kg)
06	14.1" (357mm)	27 lbs. (12kg)
08	16.1" (408mm)	28 lbs. (13kg)
10	18.1" (459mm)	32 lbs. (15kg)
12	20.1" (510mm)	34 lbs. (15kg)
14	22.1" (560mm)	37 lbs. (17kg)
16	24.1" (611mm)	41 lbs. (19kg)

DL Mount



LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	23 lbs. (10kg)
04	12.1" (306mm)	26 lbs. (12kg)
06	14.1" (357mm)	29 lbs. (13kg)
08	16.1" (408mm)	30 lbs. (14kg)
10	18.1" (459mm)	34 lbs. (15kg)
12	20.1" (510mm)	36 lbs. (16kg)
14	22.1" (560mm)	42 lbs. (19kg)
16	24.1" (611mm)	44 lbs. (20kg)

SA Mount



LED Count (x10)	Dim. "A"	Weight
02	16.0" (406mm)	25 lbs. (11kg)
04	18.0" (457mm)	26 lbs. (12kg)
06	20.0" (508mm)	28 lbs. (13kg)

Cree Edge™ Series

LED Area/Flood Luminaire

HOLIDAY INN
ALACHUA
TYPE P4T

Product Description

The Cree Edge™ Series has a slim, low profile design. Its rugged cast aluminum housing minimizes wind load requirements and features an integral, weathertight LED driver compartment and high performance aluminum heat sinks. Various mounting choices: Adjustable Arm, Direct Arm, Direct Arm Long, or Side Arm (details on page 2). Includes a leaf/debris guard.

Applications: Parking lots, walkways, campuses, car dealerships, office complexes, and internal roadways

Performance Summary

Patented NanoOptic® Product Technology

Made in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed	
Bird Spikes XA-BRDSBK	Backlight Control Shields XA-20BLS-4 - Four-pack - Unpainted stainless steel
Hand-Held Remote XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required	

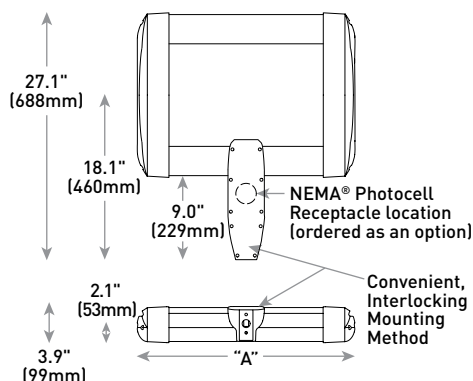
Ordering Information

Example: ARE-EDG-2M-AA-12-E-UL-SV-350

Product	Optic			Mounting*	LED Count (x10)	Series	Voltage	Color Options	Drive Current	Options	
ARE-EDG	2M Type II Medium	3MB Type III Medium w/BLS	4MP Type IV Medium w/Partial BLS	AA Adjustable Arm DA Direct Arm DL Direct Long Arm	02 04 06 08 10 12 14 16	E	UL Universal 120-277V UH Universal 347-480V	BK Black BZ Bronze SV Silver WH White	350 350mA 525 525mA 700 700mA - Available with 20-60 LEDs	DIM 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current F Fuse - Refer to ML spec sheet for availability with ML options - Available with UL voltage only - Available for U.S. applications only - When code dictates fusing, use time delay fuse HL Hi/Low (Dual Circuit Input) - Refer to HL spec sheet for details - Sensor not included ML Multi-Level - Refer to ML spec sheet for details - Intended for downlight applications at 0° tilt P Photocell - Refer to ML spec sheet for availability with ML options - Available with UL voltage only	PML Programmable Multi-Level, 20-40" Mounting Height - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt PML2 Programmable Multi-Level, 10-30" Mounting Height - Refer to PML2 spec sheet for details - Intended for downlight applications at 0° tilt R NEMA® Photocell Receptacle - Intended for downlight applications with maximum 45° tilt - Photocell by others - Refer to ML spec sheet for availability with ML options 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire
FLD-EDG	25 25° Flood	70 70° Flood	N6 NEMA® 6	AA Adjustable Arm SA Side Arm - Available with 20-60 LEDs							

* Reference EPA and pole configuration suitability data beginning on page 19
NOTE: Price adder may apply depending on configuration

DA Mount



LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	21 lbs. (10kg)
04	12.1" (306mm)	24 lbs. (11kg)
06	14.1" (357mm)	27 lbs. (12kg)
08	16.1" (408mm)	28 lbs. (13kg)
10	18.1" (459mm)	32 lbs. (15kg)
12	20.1" (510mm)	34 lbs. (15kg)
14	22.1" (560mm)	37 lbs. (17kg)
16	24.1" (611mm)	41 lbs. (19kg)

AA/DL/SA Mount - see page 22 for weight & dimensions



US: lighting.cree.com/lighting

T (800) 236-6800 F (262) 504-5415

Rev. Date: V4 09/20/2016

Canada: www.cree.com/canada



T (800) 473-1234 F (800) 890-7507

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile, minimizing wind load requirements
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment and high performance heat sinks
- DA and DL mount utilizes convenient interlocking mounting method. Mounting is rugged die cast aluminum, mounts to 3-6" (76-152mm) square or round pole and secures to pole with 5/16-18 UNC bolts spaced on 2" (51mm) centers
- AA and SA mounts are rugged die cast aluminum and mount to 2" (51mm) IP, 2.375" (60mm) O.D. tenons
- Includes leaf/debris guard
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available
- **Weight:** See Dimensions and Weight Charts on pages 1 and 22

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- DA and DL mounts designed with integral weathertight electrical box with terminal strips (12Ga-20Ga) for easy power hookup
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- **Maximum 10V Source Current:** 20 LED (350mA): 10mA; 20 LED (525 & 700mA) and 40-80 LED: 0.15mA; 100-160 LED: 0.30mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529 when ordered without P or R options
- Consult factory for CE Certified products
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards when ordered with AA, DA and DL mounts
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- DLC qualified. Exceptions apply when ordered with full backlight control or 3MP optic with 20 LEDs. Please refer to www.designlights.org/QPL for most current information
- Meets Buy American requirements within ARRA

Electrical Data*							
LED Count (x10)	System Watts 120-480V	Total Current (A)					
		120V	208V	240V	277V	347V	480V
350mA							
02	25	0.21	0.13	0.11	0.10	0.08	0.07
04	46	0.36	0.23	0.21	0.20	0.15	0.12
06	66	0.52	0.31	0.28	0.26	0.20	0.15
08	90	0.75	0.44	0.38	0.34	0.26	0.20
10	110	0.92	0.53	0.47	0.41	0.32	0.24
12	130	1.10	0.63	0.55	0.48	0.38	0.28
14	158	1.32	0.77	0.68	0.62	0.47	0.35
16	179	1.49	0.87	0.77	0.68	0.53	0.39
525mA							
02	37	0.30	0.19	0.17	0.16	0.12	0.10
04	70	0.58	0.34	0.31	0.28	0.21	0.16
06	101	0.84	0.49	0.43	0.38	0.30	0.22
08	133	1.13	0.66	0.58	0.51	0.39	0.28
10	171	1.43	0.83	0.74	0.66	0.50	0.38
12	202	1.69	0.98	0.86	0.77	0.59	0.44
14	232	1.94	1.12	0.98	0.87	0.68	0.50
16	263	2.21	1.27	1.11	0.97	0.77	0.56
700mA							
02	50	0.41	0.25	0.22	0.20	0.15	0.12
04	93	0.78	0.46	0.40	0.36	0.27	0.20
06	134	1.14	0.65	0.57	0.50	0.39	0.29

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

Recommended Cree Edge™ Series Lumen Maintenance Factors (LMF) ¹					
Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
5°C (41°F)	1.04	1.01	0.99	0.98	0.96
10°C (50°F)	1.03	1.00	0.98	0.97	0.95
15°C (59°F)	1.02	0.99	0.97	0.96	0.94
20°C (68°F)	1.01	0.98	0.96	0.95	0.93
25°C (77°F)	1.00	0.97	0.95	0.94	0.92

¹ Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times

(6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (IDUT) i.e. the packaged LED chip

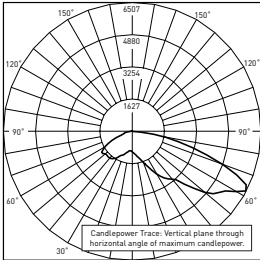
³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (IDUT) i.e. the packaged LED chip

Cree Edge™ LED Area/Flood Luminaire

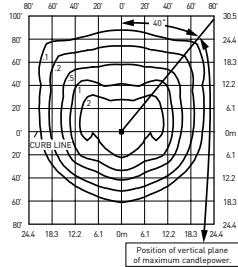
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/area/cree-edge-series-1>

4M



CSA Test Report #: 6438
ARE-EDG-4M-**-06-E-UL-700-40K
Initial Delivered Lumens: 11,367



ARE-EDG-4M-**-10-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 17,504
Initial FC at grade

Type IV Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,501	B1 U0 G1	2,551	B1 U0 G1
04	5,003	B2 U0 G1	5,102	B2 U0 G1
06	7,418	B2 U0 G2	7,565	B2 U0 G2
08	9,891	B2 U0 G2	10,087	B2 U0 G2
10	12,334	B3 U0 G3	12,578	B3 U0 G3
12	14,801	B3 U0 G3	15,094	B3 U0 G3
14	17,158	B3 U0 G3	17,498	B3 U0 G3
16	19,609	B3 U0 G3	19,998	B3 U0 G3
525mA				
02	3,550	B1 U0 G1	3,624	B1 U0 G1
04	7,099	B2 U0 G2	7,248	B2 U0 G2
06	10,527	B2 U0 G2	10,748	B2 U0 G2
08	14,037	B3 U0 G3	14,331	B3 U0 G3
10	17,504	B3 U0 G3	17,870	B3 U0 G3
12	21,004	B3 U0 G3	21,444	B3 U0 G3
14	24,350	B4 U0 G3	24,860	B4 U0 G3
16	27,828	B4 U0 G3	28,411	B4 U0 G3
700mA				
02	4,189	B1 U0 G1	4,275	B1 U0 G1
04	8,379	B2 U0 G2	8,549	B2 U0 G2
06	12,425	B3 U0 G3	12,678	B3 U0 G3







* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens










** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt



Cree Edge™ LED Area/Flood Luminaire

Luminaire EPA

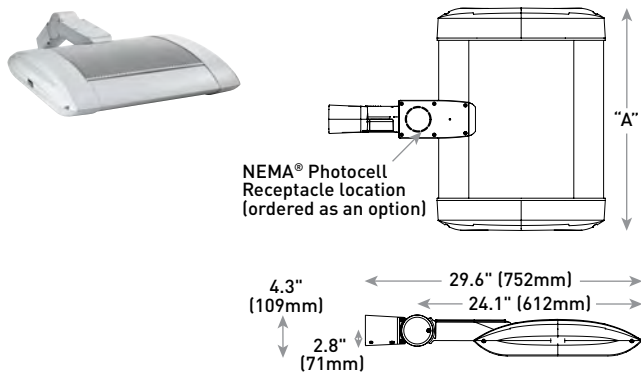
Fixed Arm Mount – ARE-EDG-DA						
LED Count (x10)	Single	2 @ 90°	2 @ 180°	3 @ 90°	3 @ 120°	4 @ 90°
						
02	0.60	0.87	1.20	1.47	1.47	1.75
04	0.60	0.87	1.20	1.47	1.47	1.75
06	0.60	0.92	1.20	1.51	1.51	1.83
08	0.60	0.96 N/A with 3" poles	1.20	1.55 N/A with 3" poles	1.55	1.91 N/A with 3" poles
10	0.60	1.00 N/A with 3" poles	1.20	1.60 N/A with 3" poles	1.60	2.00 N/A with 3" poles
12	0.60	1.04 N/A with 3" poles	1.20	1.64 N/A with 3" poles	1.64	2.08 N/A with 3" poles
14	0.60	1.08 N/A with 3" or 4" poles	1.20	1.68 N/A with 3" or 4" poles	1.68	2.16 N/A with 3" or 4" poles
16	0.60	1.12 N/A with 3" or 4" poles	1.20	1.72 N/A with 3" or 4" poles	1.72	2.24 N/A with 3" or 4" poles
Fixed Arm Mount – ARE-EDG-DL						
02	0.75	1.02	1.50	1.77	1.77	1.91
04	0.75	1.02	1.50	1.77	1.77	1.91
06	0.75	1.07	1.50	1.82	1.82	1.98
08	0.75	1.11	1.50	1.86	1.86	2.04
10	0.75	1.15	1.50	1.90	1.90	2.10
12	0.75	1.19	1.50	1.94	1.94	2.16
14	0.75	1.23	1.50	1.98	1.98	2.22
16	0.75	1.27	1.50	2.02	2.02	2.28

Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA									
LED Count (x10)	Single	2 @ 90°	2 @ 180°	In-Line 2 @ 180°	3 @ 90°	3 @ 120°	In-Line 3 @ 180°	4 @ 90°	In-Line 4 @ 180°
Tenon Configuration If used with Cree tenons, please add tenon EPA with Luminaire EPA									
									
	Vertical: PB-1A*; PT-1; PW-1A3** Horizontal: By others	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(90); PT-2(90)	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(180); PT-2(180)	Vertical: PB-2A*; PB-2R2.375	Vertical: PB-3A*; PB-3R2.375 Horizontal: PD-3A4(90); PT-3(90)	Vertical: PB-3A*; PB-3R2.375 Horizontal: PT-3(120)	Vertical: PB-3A*; PB-3R2.375	Vertical: PB-4A*(90); PB-4R2.375 Horizontal: PD-4A4(90) PT-4(90)	Vertical: PB-4A*(180); PB-4R2.375
0° Tilt									
02	0.66	0.98	1.32	1.32	1.77	1.64	1.98	1.91	2.64
04	0.66	0.98	1.32	1.32	1.64	1.64	1.98	1.97	2.64
06	0.66	1.02	1.32	1.32	1.68	1.68	1.98	2.05	2.64
08	0.66	1.07	1.32	1.32	1.80	1.72	1.98	2.29	2.64
10	0.66	1.11	1.32	1.32	1.76	1.76	1.98	2.21	2.64
12	0.66	1.15	1.32	1.32	1.80	1.80	1.98	2.29	2.64
14	0.66	1.19	1.32	1.32	1.84	1.84	1.98	2.38	2.64
16	0.66	1.23	1.32	N/A	1.89	1.89	N/A	2.46	N/A

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation

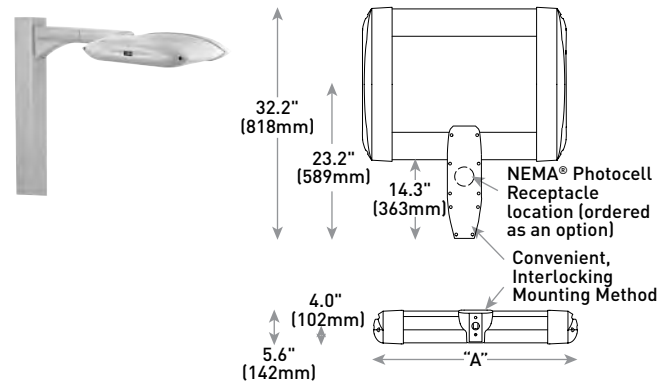
** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

AA Mount



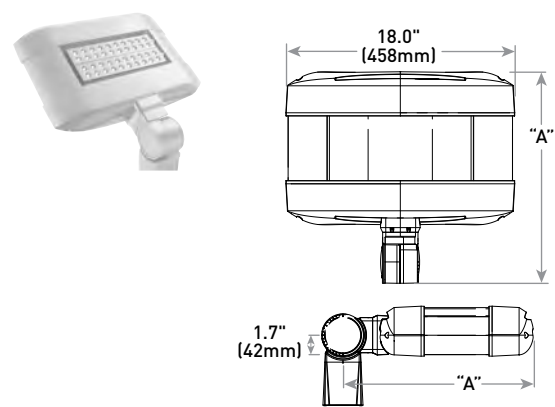
LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	21 lbs. (10kg)
04	12.1" (306mm)	24 lbs. (11kg)
06	14.1" (357mm)	27 lbs. (12kg)
08	16.1" (408mm)	28 lbs. (13kg)
10	18.1" (459mm)	32 lbs. (15kg)
12	20.1" (510mm)	34 lbs. (15kg)
14	22.1" (560mm)	37 lbs. (17kg)
16	24.1" (611mm)	41 lbs. (19kg)

DL Mount



LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	23 lbs. (10kg)
04	12.1" (306mm)	26 lbs. (12kg)
06	14.1" (357mm)	29 lbs. (13kg)
08	16.1" (408mm)	30 lbs. (14kg)
10	18.1" (459mm)	34 lbs. (15kg)
12	20.1" (510mm)	36 lbs. (16kg)
14	22.1" (560mm)	42 lbs. (19kg)
16	24.1" (611mm)	44 lbs. (20kg)

SA Mount



LED Count (x10)	Dim. "A"	Weight
02	16.0" (406mm)	25 lbs. (11kg)
04	18.0" (457mm)	26 lbs. (12kg)
06	20.0" (508mm)	28 lbs. (13kg)

Cree Edge™ Series

LED Pathway Luminaire

HOLIDAY INN
ALACHUA
TYPE B

Product Description

Durable die-cast aluminum luminaire housing mounts directly to 4" (102mm) diameter pole (included) without visible mounting hardware for clean appearance. Pole mounts to rugged die cast aluminum internal flange secured by three 3/8" - 16x6" anchor bolts with 1-1/4" hook (provided). **Note:** T45 Torx 3/8" socket required for head installation. Top mounted LEDs for superior optical performance and light control.

Applications: Landscape, walk-ways and general site lighting

Performance Summary

Patented NanoOptic® Product Technology

Made in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

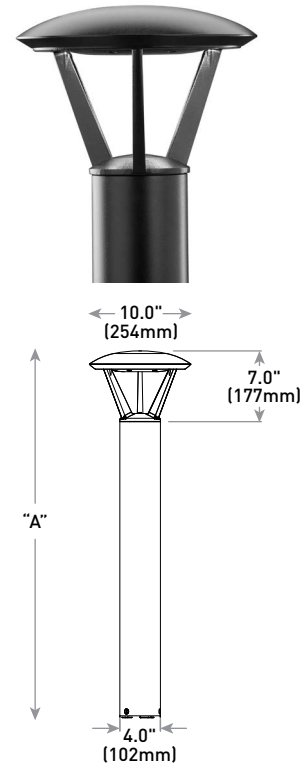
CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed
Upgrade Kit - Used for replacement of existing bollards with a bolt hole circle of 5.75" (146mm) XA-XBP8RSV XA-XBP8RWH XA-XBP8RBK XA-XBP8RBZ



Model	Dim. "A"	Weight*
Landscape (P0)	13" (330mm)	12.7 lbs. (5.8kg)
Landscape (P1)	18" (457mm)	13.3 lbs. (6.0kg)
Pathway (P3)	36" (914mm)	17.9 lbs. (8.1kg)
Pathway (P4)	42" (1068mm)	18.6 lbs. (8.4kg)
Pedestrian (P8)	96" (2438mm)	28.4 lbs (12.9kg)

* Add 4.5 lbs. (2.0kg) for 347-480V

Ordering Information

Example: PWY-EDG-2M-P0-02-E-UL-SV-350

PWY-EDG			02	E				
Product	Optic	Mounting	LED Count (x9)	Series	Voltage	Color Options	Drive Current	Options
PWY-EDG	2M Type II Medium 3M Type III Medium 5M Type V Medium 5S Type V Short	P0 13" (330mm) landscape P1 18" (457mm) landscape P3 36" (914mm) pathway P4 42" (1067mm) pathway P8 96" (2438mm) pedestrian	02	E	UL Universal 120-277V UH* Universal 347-480V - Available with P3, P4, and P8 mounts only 12 120V 27 277V	BK Black BZ Bronze SV Silver WH White	350 350mA 525 525mA - Available with P1, P3, P4, and P8 mounts only	F Fuse - When code dictates fusing, use time delay fuse - Refer to ML spec sheet for availability with ML options HL Hi/Low (Dual Circuit Input) - Available with UL voltage and 525mA driver current only - Refer to HL spec sheet for details - Sensor not included TL Two-Level (175/525 w/integrated sensor control) - Available with 12 or 27 voltages only - Refer to TL spec sheet for details TL2 Two-Level (0/350 w/integrated sensor control) - Available with 12 or 27 voltages only - Refer to TL spec sheet for details TL3 Two-Level (0/525 w/integrated sensor control) - Available with 12 or 27 voltages only - Refer to TL spec sheet for details WB Welded Base Plate - Standard on P8 mount option, available with P3 and P4 mount - Includes welded base cover 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire

* 347-480V utilizes magnetic step-down transformer. For input power for 347-480V, refer to the Electrical Data table



Rev. Date: V5 08/11/2016



US: lighting.cree.com/lighting T (800) 236-6800 F (262) 504-5415

Canada: www.cree.com/canada

T (800) 473-1234 F (800) 890-7507

Cree Edge™ LED Pathway Luminaire

Product Specifications

CONSTRUCTION & MATERIALS

- Durable die-cast aluminum luminaire housing mounts directly to 4" (102mm) diameter pole (included) without visible mounting hardware for clean appearance
- Pole mounts to rugged die cast aluminum internal flange secured by three 3/8"-16x6" anchor bolts with 1-1/4" hook (provided).
Note: T45 Torx 3/8" socket required for head installation
- Top mounted LEDs for superior optical performance and light control
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultradurable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver and white are available
- **Weight:** See Dimension and Weight Chart on pages 1 and 4

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load at 120V
- **Total Harmonic Distortion:** < 20% at full load at 120V
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details

Electrical Data* [A]								
LED Count (x9)	System Watts 120-277V	System Watts 347-480V	Total Current					
			120V	208V	240V	277V	347V	480V
350mA								
02	22	28	0.18	0.12	0.10	0.10	0.09	0.13
525mA								
02	34	40	0.29	0.19	0.17	0.15	0.12	0.13

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

Recommended Cree Edge™ Series Lumen Maintenance Factors (LMF) ¹					
Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
5°C (41°F)	1.04	0.99	0.97	0.95	0.93
10°C (50°F)	1.03	0.98	0.96	0.94	0.92
15°C (59°F)	1.02	0.97	0.95	0.93	0.91
20°C (68°F)	1.01	0.96	0.94	0.92	0.90
25°C (77°F)	1.00	0.95	0.93	0.91	0.89

¹ Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

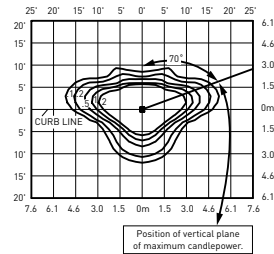
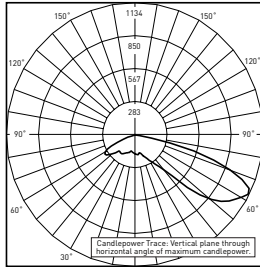
³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

Cree Edge™ LED Pathway Luminaire

Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/bollards-and-pathway/cree-edge-pathway>

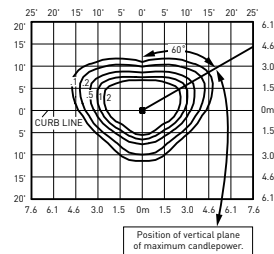
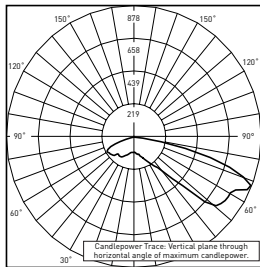
2M



Type II Medium Distribution				
LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,565	B1 U0 G1	1,625	B1 U0 G1
525mA				
02	2,191	B1 U0 G1	2,276	B1 U0 G1

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

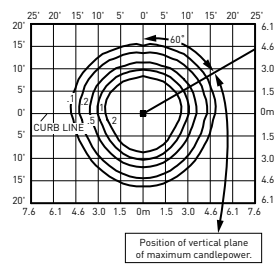
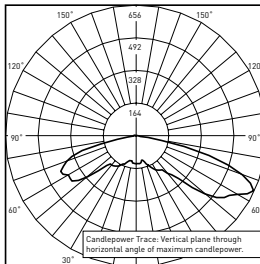
3M



Type III Medium Distribution				
LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,389	B1 U0 G1	1,442	B1 U0 G1
525mA				
02	1,944	B1 U0 G1	2,019	B1 U0 G1

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

5M



Type V Medium Distribution				
LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,666	B1 U2 G1	1,730	B1 U2 G1
525mA				
02	2,333	B2 U2 G2	2,422	B2 U2 G2

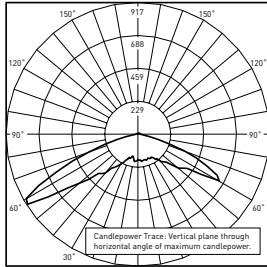
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

Cree Edge™ LED Pathway Luminaire

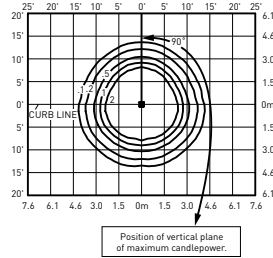
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/bollards-and-pathway/cree-edge-pathway>

55



RESTL Test Report #: PL5759-001
PWY-EDG-5S-**-02-E-UL-350-40K
Initial Delivered Lumens: 1,897



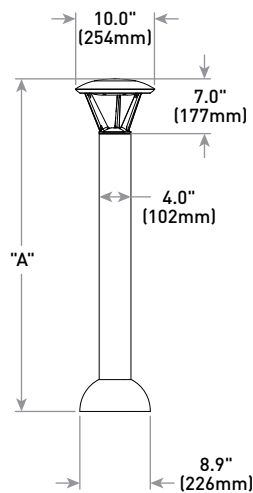
PWY-EDG-5S-**-02-E-UL-350-40K
Mounting Height: 3' (0.9m) A.F.G.
Initial Delivered Lumens: 1,868
Initial FC at grade

Type V Short Distribution				
LED Count (x9)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,868	B1 U2 G1	1,940	B1 U2 G1
525mA				
02	2,615	B1 U2 G1	2,716	B1 U2 G1

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit:
www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

with Welded Base



Model	Dim. "A"	Weight*
Pathway (P3)	36" (914mm)	17.9 lbs. (8.1kg)
Pathway (P4)	42" (1068mm)	18.6 lbs. (8.4kg)
Pedestrian (P8)	96" (2438mm)	28.4 lbs (12.9kg)

* Add 4.5 lbs. (2.0kg) for 347-480V

KR Series

KR6™ LED Specification Downlight – Round 6"

HOLIDAY INN
ALACHUA
TYPE C

Product Description

The KR6™ LED specification downlight features Cree TrueWhite® Technology and delivers beautiful, high-quality light with efficacy up to 76 lumens per watt. Designed for new construction applications, the KR Series is available in a variety of color temperatures, round and square trims with high-quality anodized aluminum reflector finishes, a sloped ceiling adaptor accessory, and a variety of dimming options including Cree Sunset Dimming Technology which provides rich, warm light that transitions from 2700K to 1800K as naturally as an incandescent source.

Performance Summary

Utilizes Cree TrueWhite® Technology

Initial Delivered Lumens: 700-5,300 lumens; Delivered lumen output is typical when using a SSGC type reflector

Input Power: 13-87 watts

Emergency Performance: Up to 1,210 Lumens; 10W; Minimum 90 Minutes

CRI: 90

CCT: 2700K, 3000K, 3500K, 4000K, 5000K

Controls: Triac, 0/1-10V; See control availability chart on page 3

Limited Warranty: 10 years on KR6™ luminaire/1 year on emergency battery pack

* See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed		
Sloped Ceiling Adaptor KRKS6**WW ** 0-35 [order in 5 degree increments]	C-Channel Hanger Bars RBH30C - Pair of 30" (762mm) rigid 3/4" x 1/2" (19mm x 13mm) C-Channel bars RBH24C-1 - Pair of 24" (610mm) x 1-1/2" (38mm) x 1/2" (13mm) standard C-Channel bars	T-Bar Clips RARC7 - Set of four - For use with RBH24C-1 hanger bars Trim Ring KR6TA - White

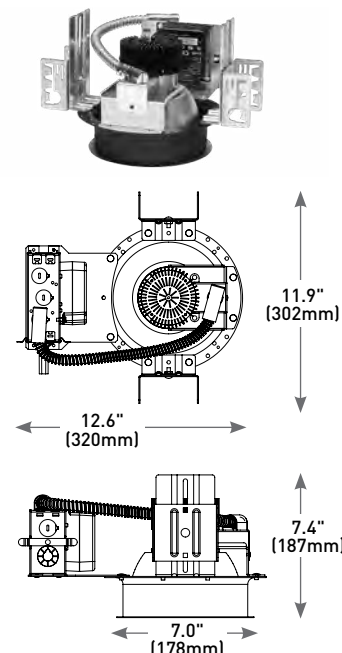
Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:
Example: **Housing:** KR6-20L-35K-120V-10V + **Reflector:** KR6T-SSGC-FF

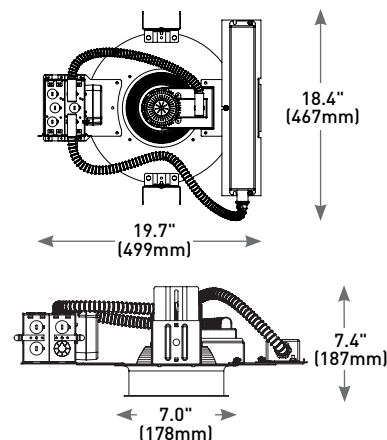
Reflector (Housing must be ordered separately)			
Series	Reflector Finish	Flange Finish	Options
KR6T	SSGC Soft Satin Glow, Clear	FF Matches Reflector WF White Paint	WW Wall Wash

Housing (Reflector must be ordered separately)								
Series	Size	Reflector	Initial Delivered Lumens	Optic	CCT	Voltage	Controls	Options
KR	6 6 inch	Blank Round	9L 13W, 700 Lumens – 54 LPW 13L 18W, 1,100 Lumens – 61 LPW 20L 30W, 1,700 Lumens – 57 LPW 30L 39W, 2,550 Lumens – 65 LPW 40L 44W, 3,350 Lumens – 76 LPW 60L 87W, 5,300 Lumens – 61 LPW - Available on 120V and 277V only	Blank 70° Beam Angle	27K - 2700K - 9L thru 40L only 30K 3000K 35K 3500K 40K 4000K 50K 5000K - Available on 40L and 60L only	120V 120 Volts 277V 277 Volts 347V 347 Volts	Blank - For standard control offering refer to control availability chart on page 3 10V 0/1-10V Dimming - Refer to control availability chart on page 3	WD Sunset Dim - 9L and 13L @ 27K with Triac Dimming only EB7 Emergency Backup - Minimum 90 minutes - 120V, 277V only - Minimum operating temperature: 0°C (32°F)

NOTE: Price adder may apply depending on configuration



Emergency Backup



Rev. Date: V8 08/31/2016



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T (800) 236-6800 F (262) 504-5415

Canada: www.cree.com/canada

T (800) 473-1234 F (800) 890-7507

KR6™ LED Specification Downlight – Round 6"

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIAL

- Low brightness parabolic spun Alzak aluminum cone, 0.06" (2mm) thick with polished radius and continuous self-flange
- Soft Satin Glow Clear finish, standard
- 2" (51mm) aperture throat to accommodate all standard and up to 3" (76mm) thick ceilings and provide flexibility in mounting within grid
- Provided with quick mounting brackets for optional carrying channels
- Light engine, optics, and driver accessible from below ceiling

ELECTRICAL SYSTEM

- **Power Factor:** > 0.9 for 120V and 277V
- **Total Harmonic Distortion:** < 20% at full load
- **Input Power:** 120, 277V, or 347V, 50/60Hz
- **Operating Temperature Range:** -18°C - +40°C (0°F - +104°F); minimum operating temperature with EB7 option is 0°C (32°F)
- **10V Source Current:** 9L & 12L: 0.15mA; 20L-40L: 2.2mA; 60L: 0.11mA

CONTROLS

- For standard control offering refer to control availability chart on page 3
- For use with Class 2 dimming systems only. Reference <http://lighting.cree.com/products/indoor/new-construction-downlights/kr-series> for recommended dimming controls and wiring diagrams

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for thru-wiring 8#12AWG-90°C
- Suitable for damp locations
- Designed for indoor use
- Thermally protected Type NON-IC in accordance with Article 410 of the NEC and UL 1598
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- EnergyStar® certified. Please refer to <https://www.energystar.gov/productfinder/product/certified-light-fixtures/results> for most current information
- RoHS compliant. Consult factory for additional details

Recommended KR Series Lumen Maintenance Factors (LMF)¹

Ambient	Initial Delivered Lumens	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
5°C (41°F)	9L and 13L	1.05	1.04	1.03	1.03	1.02
	20L and 30L	1.03	0.99	0.94	0.90	0.86
	40L and 60L	1.03	0.96	0.90	0.83	0.77
10°C (50°F)	9L and 13L	1.04	1.03	1.03	1.02	1.02
	20L and 30L	1.02	0.97	0.93	0.89	0.85
	40L and 60L	1.03	0.95	0.88	0.82	0.76
15°C (59°F)	9L and 13L	1.03	1.02	1.02	1.01	1.01
	20L and 30L	1.01	0.96	0.91	0.88	0.84
	40L and 60L	1.02	0.94	0.87	0.81	0.75
20°C (68°F)	9L and 13L	1.02	1.01	1.00	1.00	0.99
	20L and 30L	1.01	0.95	0.90	0.87	0.83
	40L and 60L	1.01	0.93	0.86	0.80	0.74
25°C (77°F)	9L and 13L	1.00	1.00	0.99	0.99	0.99
	20L and 30L	1.00	0.94	0.89	0.86	0.82
	40L and 60L	1.00	0.92	0.85	0.79	0.74
30°C (86°F)	9L and 13L	0.99	0.99	0.98	0.98	0.98
	20L and 30L	0.97	0.93	0.88	0.85	0.81
	40L and 60L	0.98	0.91	0.84	0.78	0.73
35°C (95°F)	9L and 13L	0.98	0.97	0.97	0.97	0.97
	20L and 30L	0.96	0.92	0.87	0.84	0.80
	40L and 60L	0.96	0.90	0.83	0.77	0.72
40°C (104°F)	9L and 13L	0.97	0.96	0.96	0.96	0.95
	20L and 30L	0.95	0.90	0.86	0.83	0.79
	40L and 60L	0.95	0.88	0.82	0.76	0.71

¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

Installation

- Recommended ceiling cutout 6.5" (165mm)



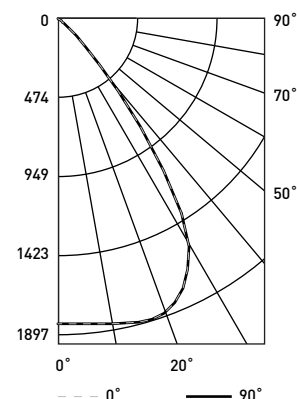
Note: 30L and 40L versions require marked spacing: 24" (600mm) x 12" (300mm) x 1/2" (12mm). 24" (600mm) luminaire to luminaire, 12" (300mm) luminaire to side wall, 1/2" (12mm) above luminaire
60L versions require marked spacing: 48" (1219mm) x 24" (600mm) x 1" (25mm). 48" (1219mm) luminaire to luminaire, 24" (600mm) luminaire to side wall, 1" (25mm) above luminaire

KR6™ LED Specification Downlight – Round 6"

Photometry

KR6-30L-27K-120V W/KR6T-SSGC-FF BASED ON UL REPORT TEST #: 157473

Luminaire photometry has been conducted in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a luminaire efficiency of 100%.



UL Test Report #: 157473
KR6-30L-27K-120V w/KR6T-SSGC-FF
Initial Delivered Lumens: 2,479
Efficacy: 66 LPW
S/M: 1.2

Coefficients Of Utilization – Zonal Cavity Method				
RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	113	110	108	105
2	107	102	97	94
3	101	94	89	84
4	95	87	81	77
5	90	81	75	70
6	85	75	69	64
7	80	70	64	59
8	76	66	59	55
9	72	61	55	51
10	68	58	51	47

Effective Floor Cavity Reflectance: 20%

Reference <http://lighting.cree.com/products/indoor/new-construction-downlights/kr-series> for detailed photometric data

Average Luminance Table [cd/m²]			
Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	19,317	19,317	19,317
55°	4,459	4,459	4,459
65°	2,074	2,074	2,074
75°	931	931	931
85°	0	0	0

Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	1,527	N/A	61.5%
0-40	2,206	N/A	88.8%
0-60	2,462	N/A	99.1%
0-90	2,483	N/A	100.0%
0-180	2,483	N/A	100.0%

Cone of Light		
Distance from Workplane	Footcandles	Beam Diameter
6' (1.8m)	51	7.3' (2.2m)
8' (2.4m)	29	9.7' (3.0m)
10' (3.0m)	18	12.3' (3.7m)
12' (3.7m)	13	14.5' (4.4m)
14' (4.3m)	9	17.4' (5.3m)

Application Reference

Based on KR6-30L-27K-120V W/KR6T-SSGC-FF Luminaire

Open Space					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
4 x 4	2,550	39	65	2.34	155
6 x 6				1.09	74
8 x 8				0.59	42
10 x 10				0.39	27

10' Ceiling, 80/50/20 Reflectances, 2.5' workplane, LLF: 1.0 Initial. Open Space: 50' x 40' x 10'

Corridor					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
4' on Center	2,550	39	65	1.63	77
6' on Center				1.11	52
8' on Center				0.78	37
10' on Center				0.65	31

10' Ceiling, 80/20/50 Reflectances, Light levels on the ground, LLF: 1.0 Initial. Corridor: 6' Wide x 100' Long

Control Availability Chart

Initial Delivered Lumens	Non Dimming			Triac Dimming to 5%			0/1-10V Dimming to 10%		
	120V	277V	347V	120V	277V	347V	120V	277V	347V
9L	N/A	S	N/A	S	N/A	N/A	0	0	0
13L	N/A	S	N/A	S	N/A	N/A	0	0	0
20L	N/A	N/A	N/A	N/A	N/A	N/A	S	S	S
30L	N/A	N/A	N/A	N/A	N/A	N/A	S	S	S
40L	N/A	N/A	N/A	N/A	N/A	N/A	S	S	S
60L	N/A	N/A	N/A	N/A	N/A	N/A	S	S	N/A

S = Standard Offering
0 = Optional Offering

Worksheet for Commercial Water Meter Sizing

Project Name :	Holiday Inn - Alachua		
Customer / Builder Name :	MPH Hotels		
Property Address :	16139 NW US HWY 441 Alachua, FL 32615		

Type	Requirement Per GRU/64E-6 (GPD)	Number of Rooms	Total (GPD)
Hotel	100.00	92	9,200
TOTAL DEMAND			9,200
Peaking Factor			2.5
Operating Period (hrs)			18
Peak Demand			21 gpm
TOTAL DEMAND			21 gpm
NEEDED WATER METER SIZE*			2" Water Meter



NFPA - FIRE FLOW CALCULATION

I. **PROJECT NAME** Holiday Inn Alachua
Alachua, Florida

II. **PROJECT LOCATION**

County: Alachua
General Location: 9 Township: 8 S Range: 18 E
16139 NW US HWY 441
Alachua, Florida

II. **Subject Building**

Construction Class Type III (200)
Building Type Buildings other than One and Two-Family Dwellings
First Floor Building Area 13,600
Number of Stories 4
Fire Sprinklers Available? Yes
Fire Sprinkler Type Automatic Sprinkler System
Fire Sprinkler Reduction 75%
Minimum Building Separation N/A
Building Separation Reduction 0%

Minimum Fire Flow Required 1000
Fire Flow Area Required more than 5000 sf

Minimum Required Fire Flow and Flow Duration for Building
per NFPA 1 - 2009 Edition Table 18.4.5.1.2

Construction Class	Fire Flow Area (sf)	Fire Flow (GPM)	Flow Duration (HR)	Required Flow (GPM)
Type III (200)	53,389.00	5,000.00	4.00	1,250*

*600 GPM required based on NFPA 18.4.5.2.2 and attached letter.



III. Fire Flow Requirements

18.4.5.1 One and Two-Family Dwellings.

18.4.5.1.1 The minimum fire flow and flow duration requirements for One and Two-Family Dwellings having a fire flow area that does not exceed 5,000 sf shall be 1,000 GPM for 1 hour.

18.4.5.1.1.1 A reduction in required fire flow of 50% shall be permitted when the building is provided with an approved automatic sprinkler system.

18.4.5.1.1.2 A reduction in required fire flow of 25% shall be permitted when the building is separated from other buildings by a minimum of 30 ft

18.4.5.1.1.3 A reduction in 18.4.5.1.1.1 & 18.4.5.1.1.2 shall not reduce the required fire flow to less

18.4.5.1.2 Fire flow and flow duration for dwellings having a fire flow area in excess of 5,000 sf shall not be less than that specified in Table 18.4.5.1.2

18.4.5.1.2.1 A reduction in required fire flow of 50% shall be permitted when the building is provided with an approved sprinkler system.

18.4.5.2 Buildings other than One and Two-Family Dwellings.

The minimum fire flow and flow duration for buildings other than One and Two-Family Dwellings shall be as specified in Table 18.4.5.1.2

18.4.5.2.1 A reduction in required fire flow of 75% shall be permitted when the building is protected throughout by an approved automatic sprinkler system. The resulting fire flow shall not be less than 1000 GPM

18.4.5.2.2 A reduction in required fire flow of 75% shall be permitted when the building is protected throughout by an approved automatic sprinkler system, which utilizes quick response sprinklers throughout. The resulting fire flow shall not be less than 600 GPM.

JOINT APPLICATION FOR INDIVIDUAL ENVIRONMENTAL RESOURCE PERMIT/ AUTHORIZATION TO USE STATE-OWNED SUBMERGED LANDS/ FEDERAL DREDGE AND FILL PERMIT

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION/
WATER MANAGEMENT DISTRICTS/
U.S. ARMY CORPS OF ENGINEERS

Effective October 1, 2013



**US Army Corps
of Engineers®**

INSTRUCTIONS FOR USE OF THIS FORM:

This form is designed to assist you in submitting a complete application. All applications must include Section A-General Information for All Activities. Sections B through H list typical information that is needed based on the proposed activities, and are only required as applicable. Part 1-C of Section A will guide you to the correct sections needed based on your proposed activities. Applicants are advised to consult Chapter 62-330, F.A.C., and the Environmental Resource Permit Applicant's Handbook Volumes I and II for information regarding the ERP permitting process and requirements while preparing their application. Internet addresses for Chapter 62-330, F.A.C. and the Applicant's Handbook, Agency contact information, and additional instructions for this form can be found in Attachment 1.

What Sections of the Application Must I Fill Out?

Does the project involve....	Section							
	A- General Information	B- Single Family Projects	C- Wetlands and other Surface Waters	D- Structures or Works in Surface Waters	E- Stormwater Management System	F- State-owned Submerged Lands	G- Mitigation Banks	H- Mines
Fill in wetlands or waters for a single family residence?	X	X						
Docks, shoreline stabilization, seawalls associated with a single family residence?	X	X				X, if applicable		
Wetland impacts (other than associated with an individual residence)?	X		X					
Boating facilities, a marina, jetty, reef, or dredging?	X		X	X		X if applicable		
Any work on state owned submerged land?	X		X			X		
Construction of a stormwater management system?	X		X, if applicable		X			
Constructing a mitigation bank?	X		X		X, if applicable		X	
Creating a mine?	X		X, if applicable					X

Note- if you are required to provide Section B, then you do not have to provide any other Sections, unless the activities are on state-owned submerged lands. In that case, Section F will also be required.

If you have any questions, or would like assistance completing this form, please contact the staff of the nearest office of either the Florida Department of Environmental Protection (DEP) or a Water Management District (WMD) (see Attachment 2).

Section A: General Information for All Activities

PART 1: NAME, APPLICATION TYPE, LOCATION, AND DESCRIPTION OF ACTIVITY

A. Name of project, including phase if applicable: **Holiday Inn Alachua**

B. This is for (check all that apply):

- ☒ Construction or operation of **new** works, activities and/ or a stormwater management system
- ☐ **Conceptual Approval** of proposed works, activities and/ or a stormwater management system
- ☐ Modification or Alteration of **existing** works activities and / or a stormwater management system.
Provide the existing DEP or WMD permit #, if known: _____ Note: Minor modifications do not require completion of this form, and may instead be requested by letter.
- ☐ **Maintenance or repair** of works, activities and/ or stormwater management system previously permitted by the DEP or WMD Provide existing permit #, if known: _____
- ☐ Abandonment or removal of works, activities and/ or stormwater management system
Provide existing DEP or WMD permit #, if known: _____
- ☐ Operation of an **existing unpermitted** stormwater management system.
- ☐ Construction of additional phases of a permitted work, activity and/ or stormwater management system.
Provide the existing DEP or WMD permit #, if known: _____

C. **List the type of activities proposed. Check all that apply, and provide the supplemental information requested in each of the referenced application sections. Please also reference Applicant's Handbooks I and II for the type of information that may be needed.**

- ☐ Activities associated with one single-family residence, duplex, triplex, or quadruplex that do not qualify for an exemption or a Noticed General Permit: **Provide the information requested in Section B. Do not complete Section C.**
- ☐ Activities within wetlands or surface waters, or within 25 feet of a wetland or surface water, (not including the activities associated with an individual residence). *Examples include dredging, filling, outfall structures, docks, piers, over-water structures, shoreline stabilization, mitigation, reclamation, restoration/ enhancement.* **Provide the information requested in Section C.**
- ☐ Activities within navigable or flowing surface waters such as a multi-slip dock or marina, dry storage facility, dredging, bridge, breakwaters, reefs, or other offshore structures: **In addition to Section C, also provide the information requested in Section D.**
- ☐ Activities that are (or may be) located within, on or over state-owned submerged lands (See Chapter 18-21, F.A.C. <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=18-21>): **In addition to Section B or C, also provide the information requested in Section F**

- ☒ Construction or alteration of a stormwater management system serving residential, commercial, transportation, industrial, agricultural, or other land uses, or a solid waste facility (excluding mines that are regulated by DEP). **Provide the information requested in Section E.**
- ☐ Creation or modification of Mitigation Bank (refer to Chapter 62-342, F.A.C. <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-342>): **Provide the information requested in Section G.**
- ☐ Mines (as defined by in Section 2.0 of Applicant's Handbook Volume I) that are regulated by the DEP: **Provide the information requested in Section H.**
- ☐ Other, describe: _____ Please contact the Agency to determine which additional sections of the application are needed. See Attachment 1 for Agency contacts.

D. Describe in general terms the proposed project, system, works, or other activities. For permit modifications, please briefly describe the changes requested to the permit: **The construction of a 92 room hotel with associated paving, stormwater, and utility improvements. The proposed stormwater system is a dry detention basin handling 1.65 acres of impervious area.**

E. For activities in, on, or over wetlands or other surface waters, check the type of federal dredge and fill permit requested (if known): ☐ Individual ☐ Programmatic General permit #: SAJ

☐ General ☐ Nationwide permit #:NWP ☒ Not Applicable ☐ Not sure

F. Project/Activity Street/Road Address or other location (if applicable): **16139 NW US HWY 441**

G.

City: **Alachua** County(ies) **Alachua** Zip: **32615**

Note: For utility, road, or ditch/canal activities, provide a starting and ending point using street names and nearest house numbers or provide length of project in miles along named streets or highways.

H. Project location map and Section, Township, and Range information (use additional sheets if needed): **Please attach a location map showing the location and boundaries of the proposed activity in relation to major intersections or other landmarks. The map should also contain a north arrow and a graphic scale; show Section(s), Township(s), and Range(s); and must be of sufficient detail to allow a person unfamiliar with the site to find it.**

Land Grant name, if applicable:

Section(s): 9 Township: 8S Range: 18E

H. Latitude (DMS) _____ Longitude (DMS) _____ (Taken from central location of the activity). Explain source for obtaining latitude and longitude (i.e. U.S.G.S. Quadrangle Map, GPS, online resource):

I. Tax Parcel Identification Number(s): **03053-001-001**

[Number may be obtained from property tax bill or from the county property appraiser's office; if on multiple parcels, provide multiple Tax Parcel Identification Numbers]

- J. Directions to Site (from major roads; include distances and landmarks as applicable):
- K. Project area or phase area: **4.25** acres
- L. Name of waterbody(ies) (if known) in which activities will occur or into which the system will discharge:

Receiving Waterbody	Class Type	Outstanding Florida Water	Aquatic Preserve
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The following questions (M-O) are not applicable to activities related to a single-family residence, including private single-family residential docks, piers, seawalls or boat ramps.

- M. Is it part of a larger plan of development or sale? ☒ yes ☐ no
- N. Impervious or semi-impervious area excluding wetlands and other surface waters (if applicable): **1.65** acres or square feet
- O. Volume of water the system is capable of impounding (if applicable): **2.781** acre- feet.

PART 2: SUPPLEMENTAL INFORMATION, AND PERMIT HISTORY

- A. Is this an application to modify an existing Environmental Resource Permit, or to construct or implement part of a multi-phase project, such as a project with a Conceptual Approval permit? ☐ Yes ☒ No *If you answered "yes", please provide permit numbers below:*

AGENCY	DATE	PERMIT/ APPLICATION NO.	PROJECT NAME

- B. Indicate if there have been any **pre-application meeting(s)** or other discussions about the proposed project, system or activity. If so, please provide the date(s), location(s) of the meeting, and the name(s) of Agency staff that attended the meeting(s):

AGENCY	DATE	LOCATION	MEETING ATTENDEES

- C. **Attach a depiction (plan and section views), which clearly shows the works or other activities proposed to be constructed.** Use multiple sheets, if necessary, a scale sufficient to show the location and type of works, and include a north arrow and a key to any symbols used. **Specific information to be included in the plans is based on the activities proposed and is further described in Sections B-H.** However, supplemental information may be required based on the specific circumstances or location of the proposed works or other activities.
- D. Processing Fee: **Please submit the application processing fee along with this application form and supplemental information.** Processing fees vary based on the size of the activity, the type of permit

applied for, and the reviewing Agency. Please reference Attachment 3 to determine the appropriate fee.

PART 3: APPLICANT AND ASSOCIATED PARTIES INFORMATION

Instructions: Permits are only issued to entities having sufficient real property interest as described in Section 4.2.3 (d) of Applicant's Handbook Volume I. Please attach evidence of sufficient real property interest over the land upon which the activities subject to the application will be conducted, including mitigation (if applicable). Refer to Section 4.2.3 (d) for acceptable ownership or real property interest documentation. For corporations, list a person who is a registered agent or officer of the corporation who has the legal authority to bind the corporation.

A. APPLICANT (ENTITY MUST HAVE SUFFICIENT REAL PROPERTY INTEREST) <input type="checkbox"/> THIS IS A CONTACT PERSON FOR ADDITIONAL INFORMATION			
Name: Last: Gibbons		First: Randy	Middle:
Title:		Company: MPH Hotels, Inc.	
Address: 100 2nd Avenue South, Ste. 1103-S			
City: St. Petersburg		State: FL	Zip: 33701
Home Telephone: (727)914-8885		Work Telephone:	
Cell Phone:		Fax:	
E-mail Address: rgibbons@mphhotels.com			
Correspondence will be sent via email. Check here to receive correspondence via US Mail: <input type="checkbox"/>			
B. LAND OWNER(S) (IF DIFFERENT OR IN ADDITION TO APPLICANT) <input type="checkbox"/> CHECK HERE IF LAND OWNER IS ALSO A CO-APPLICANT			
Name: Last: Johns		First: Virginia	Middle:
Title:		Company: HIPP Investments, LLC	
Address: 14610 NW 129th Terrace			
City: Alachua		State: FL	Zip: 32615
Home Telephone:		Work Telephone:	
Cell Phone:		Fax:	
E-mail Address: vj@jchipp.com			
Correspondence will be sent via email. Check here to receive correspondence via US Mail: <input type="checkbox"/>			
C. OPERATION AND MAINTENANCE ENTITY (see Applicant's Handbook I, Section 12.3)			
Entity Name:		Contact: Last: Gibbons	First: Randy Middle:
Title:		Company: MPH Hotels, Inc.	
Address: 100 2nd Avenue South, Ste. 1103-S			
City: St. Petersburg		State: FL	Zip: 33701
Home Telephone: (727)914-8885		Work Telephone:	
Cell Phone:		Fax:	
E-mail Address: rgibbons@mphhotels.com			
Correspondence will be sent via email. Check here to receive correspondence via US Mail: <input type="checkbox"/>			

D. CO-APPLICANT (IF DIFFERENT OR IN ADDITION TO APPLICANT AND OWNER)		
Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:	Work Telephone:	
Cell Phone:	Fax:	
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: <input type="checkbox"/>		
E. ENGINEERING CONSULTANT <input checked="" type="checkbox"/> THIS IS A CONTACT PERSON FOR ADDITIONAL INFORMATION		
Name: Last: Reyes	First: Sergio	Middle:
Title: President	Company: eda engineers - surveyors - planners, inc.	
Address: 2404 NW 43rd St		
City: Gainesville	State: FL	Zip: 32606
Home Telephone:	Work Telephone: 352-373-3541	
Cell Phone:	Fax:	
E-mail Address: sreyes@edafl.com		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: <input type="checkbox"/>		
F. ENVIRONMENTAL CONSULTANT <input type="checkbox"/> THIS IS A CONTACT PERSON FOR ADDITIONAL INFORMATION		
Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:	Work Telephone:	
Cell Phone:	Fax:	
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: <input type="checkbox"/>		
G. AGENT AUTHORIZED TO SECURE PERMIT (IF DIFFERENT FROM CONSULTANT) <input type="checkbox"/> THIS IS A CONTACT PERSON FOR ADDITIONAL INFORMATION		
Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:	Work Telephone:	
Cell Phone:	Fax:	
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: <input type="checkbox"/>		

If necessary, please add additional pages for other contacts and property owners related to this project.

Additional Addresses

Applicant	
------------------	--

Land Owner	
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Operation and Maintenance Entity	
---	--

Engineering Consultant	
-----------------------------------	--

Environmental Consultant	
-------------------------------------	--

Agent	
--------------	--

Compliance Entity	
--------------------------	--


Consultant	
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DRAINAGE DESIGN NOTES

Prepared for
Holiday Inn Alachua

I hereby certify that the design of the stormwater management system for the project known as Holiday Inn Alachua meets all of the requirements and has been designed substantially in accordance with the Suwannee River Water Management District Design Criteria.

Professional Engineer of Record:


Sergio J. Reyes, P.E.
Cert. No. 47311



eda engineers surveyors planners, inc.
2404 NW 43rd St
Gainesville, FL 32608

Table of Contents

Drainage Design Notes

Attachment A	Soil Borings
Attachment B	Pre and Post-Development Drainage Map
Attachment C	Pre and Post-Development Conditions PONDS 3.2 Model
Attachment D	Recovery Analysis for WQTV in 72 hrs, 1/2 Volume in 7 days, and Full Volume in 30 days PONDS Model
Attachment E	Soils Map
Attachment F	Pipe Sizing

DRAINAGE DESIGN NOTES

PROJECT NAME: Holiday Inn - Alachua
Alachua, FL

PROJECT LOCATION:

County: Alachua

Sections: 9 Township: 8 S Range: 18 E

General Location: 16139 NW US HWY 441
Alachua, FL

GENERAL PROJECT INFORMATION

The construction of a 92 room hotel. The proposed development includes paving, grading, utility, and stormwater management improvements.

A. DRAINAGE AND DESIGN CRITERIA

1. Suwannee River Water Management District (SRWMD) Meet requirements of 40C-42.
2. City of Alachua Land Development Code City of Alachua Land Development Code (Article 6.9.3)

B. SITE SOILS INFORMATION

GSE conducted a subsurface investigation on the site and summarized their findings in the report No. 12872, dated September 19, 2016. A copy of the report is provided in Attachment A.

C. EXISTING SITE CONDITIONS

The existing site contains primarily Type B and D soils with no existing impervious area. The topography of the site ranges from an elevation of 132 to 95.

D. DRAINAGE DESCRIPTION

1. Pre-development Conditions

In pre-development conditions, Drainage Area One is collected by an existing pipe system along the west side of NW 167th Blvd that conveys the runoff to an existing sink near US 441 and Drainage Area Two discharges to the southeast.

2. Post-development Conditions

- a) The proposed project consists of one drainage area, which is conveyed to a proposed dry detention basin that will discharge to the southeast as in predevelopment conditions.
- b) The discharge rate and volume is controlled to be below pre-development conditions of Pre-Development Drainage Area Two. 1 foot or more of freeboard is provided for the dry detention

E. DRAINAGE DESIGN

1. DRAINAGE AREA

Pre-Development Drainage

Drainage Area One Collected by Ex. Storm System	Area (sf)	Area (Acres)	Curve CN
Existing Impervious	0	0.00	98.0
Open 'D' Soils - Good Condition	6,550	0.15	80.0
Open 'B' Soils - Good Condition	15,283	0.35	61.0
TOTALS	21,833	0.50	66.7

Drainage Area Two Runoff to Southeast	Area (sf)	Area (Acres)	Curve CN
Existing Impervious	0	0.00	98.0
Open 'D' Soils - Fair Condition	63,419	1.46	80.0
Open 'B' Soils - Fair Condition	42,279	0.97	61.0
TOTALS	105,698	2.43	72.4

Post-Development Drainage

Drainage Area One Outfall to Southeast	Area (sf)	Area (Acres)	Curve CN	Runoff Coefficient	DCIA %
Impervious	72,541	1.67	98.0	0.95	
Basin	26,063	0.60	100.0	0.20	
Open	28,924	0.66	71.4	0.20	
TOTALS	127,528	2.93	92.4	0.63	57%

2. BASIN STORAGE DATA

Dry Detention Basin

Stage (MSL)	Area (SF)	Area (ac)	Volume (CF)	Vol. V1 (AC-FT)
102.00	11735.55	0.269	0	0
103.00	14396.05	0.330	13,066	0.300
103.02	14451.34	0.332	13,354	0.307
104.00	17160.78	0.394	28,844	0.662
105.00	20027.66	0.460	47,438	1.089
106.00	22995.16	0.528	68,950	1.583
107.00	26062.89	0.598	93,479	2.146
108.00	29230.90	0.671	121,126	2.781

3. WATER QUALITY TREATMENT VOLUME

The basin will provide water quality treatment volume per SRWMD and City of Alachua criteria.

SRWMD Requirement: The minimum stormwater treatment volume shall be the runoff from the first 2.0 inches of rainfall from the design storm

City of Alachua Requirement: The first one-half inch of stormwater runoff shall be treated in an off line retention system or according to other best management practices as described in the SRWMD's Surface Water Management Permitting Manual, as amended

	SRWMD Volume (cf)	CoA Volume (cf)	Treatment Required (cf)	Treat. Vol Provided
Proposed Basin	13,319	5,314	13,319	13,354

4. BASIN GEOMETRY & DETAILS

Basin Perimeter	804.5
Equivalent basin width (ft)	57.0
Equivalent basin length (ft)	345.3
Average unsaturated area (sf)	11,736

5. SUBSURFACE INVESTIGATION INFORMATION

Based on the Soils Report No. 12872 revised by GSE on September 19, 2016, the recommendations of the soil characteristics are summarized below:

Report No. 12872	
Soil Boring	P1-P4
Depth Confined layer (ft)	98.00
Depth of SHWT (ft)	98.00
Vertical (ft/d)	15.00
Horizontal (ft/d)	20.00
Fillable porosity (%)	25.00

The soil parameters above can only be obtained if the basin is undercut by 4 feet. The outfall structure will have an invert below the undercut bottom elevation and a rectangular orifice covered by filter fabric, in order to discharge the water quality treatment volume from the undercut area below the basin.

6. STAGE-STORAGE DISCHARGE INFORMATION

The dry detention system will have the following structures for discharge and recovery. The WQTV recovery time was analyzed using PONDS 3.2 Slug Load. In order to analyze the recovery for half of the inflow volume in seven days and the full inflow volume in thirty days, PONDS 3.2 detailed results can be seen in Attachment D and a summary below:

Discharge Structure

Rectangular Weir:

Elevation	106.75
Length (ft)	2.50

Rectangular Orifice (To Discharge WQTV):

Elevation	98.00
Size (in)	24.00" x 48.00"

Recovery

WQTV Treatm. Vol (cf)	13,319
Time (hrs)	6.00

One Half of Volume within Seven Days Recovery

Storm Event	1/2 Stage (elevation)	Recovery (days)
100yr-1hr	103.20	1.21
100yr-2hr	103.43	2.29
100yr-4hr	103.77	3.04
100yr-8hr	104.05	3.83
100yr-24hr	104.58	4.88
100yr-3d	104.86	4.58
100yr-7d	104.92	5.00
100yr-10d	104.86	5.00

Total Volume within Thirty Days Recovery

Storm Event	Recovery Stage (elevation)	Recovery (days)	Back to Back Required	Back to Back Stage
100yr-1hr	102.00	8.33	N/A	N/A
100yr-2hr	102.00	12.29	N/A	N/A
100yr-4hr	102.00	18.75	N/A	N/A
100yr-8hr	102.00	25.38	N/A	N/A
100yr-24hr	102.00	Back to Back	Yes (102.33)	106.54
100yr-3d	102.00	Back to Back	Yes (102.58)	106.92
100yr-7d	102.00	Back to Back	Yes (102.85)	107.00
100yr-10d	102.00	Back to Back	Yes (102.86)	106.93

Based on results, there will be no flooding during back to back storms.

7. STORM ROUTING RESULTS

The computer program POND3 3.2 was used to route the design storms through the proposed detention systems, as well as the pre-development conditions. The 100-yr critical storms were analyzed as required by SRWMD. The input data and storm routing results can be seen in the Attachment C.

Storm Event	Basin 1 Stage	Rates		Volume	
		Pre (cfs)	Post (cfs)	Pre (ac-ft)	Post (ac-ft)
100 yr-1 hr	104.18	7.50	0.00	0.36	0.00
100 yr-2 hr	104.58	6.80	0.00	0.52	0.00
100 yr-4 hr	105.11	5.22	0.00	0.74	0.00
100 yr-8 hr	105.53	6.05	0.00	0.96	0.00
100 yr-24 hr	106.40	2.18	0.00	1.52	0.00
100 yr-72 hr	106.83	1.56	0.17	2.05	0.09
100 yr-168 hr	106.92	1.10	0.54	2.48	0.26
100 yr-240 hr	106.83	1.45	0.17	2.87	0.28
WQTV	103.02	0.00	0.00	0.00	0.00



Holiday Inn Alachua

Pre Development DA 1

Time of Concentration

Overall Flow Length (ft)	420.0
Initial Elevation	132.00
Final Elevation	111.00

Sheet Flow

L = Flow Length (ft)	300.0
n = Mannings Roughness Coefficient	Grass
	n = 0.180
S = slope of hydraulic grade line (ft/ft)	0.057
P2 = 2 year, 24 hour rainfall (in.)	4.8

$$T = \frac{0.007(nL)^{0.8}}{(P_2)^{0.5} s^{0.4}} \quad T_c = 0.24 \text{ hr}$$

$$T_c = 14.70 \text{ min}$$

Shallow Concentrated Flow

L= Length of Shallow Concentrated Flow (ft)	120.0 Unpaved
	0.0 Paved
Unpaved Velocity (ft/s)	2.95
Paved Velocity (ft/s)	NA
S = Slope of Hydraulic Grade Line (ft/ft)	0.033

$$T_{\text{unpaved}} = \frac{L}{16.1345 \times S^{0.5}} \quad T_c = 0.68 \text{ min}$$

$$T_{\text{paved}} = \frac{L}{20.3282 \times S^{0.5}} \quad T_c = 0 \text{ min}$$

Total Time of Concentration

15.38 min



Holiday Inn Alachua

Pre Development DA 2

Time of Concentration

Overall Flow Length (ft)	629.0
Initial Elevation	132.00
Final Elevation	96.00

Sheet Flow

L = Flow Length (ft)	300.0
n = Mannings Roughness Coefficient	Grass
	n = 0.180
S = slope of hydraulic grade line (ft/ft)	0.063
P2 = 2 year, 24 hour rainfall (in.)	4.8

$$T = \frac{0.007(nL)^{0.8}}{(P_2)^{0.5} s^{0.4}} \quad T_c = 0.23 \text{ hr}$$

$$T_c = 14.06 \text{ min}$$

Shallow Concentrated Flow

L= Length of Shallow Concentrated Flow (ft)	329.0 Unpaved
	0.0 Paved
Unpaved Velocity (ft/s)	3.67
Paved Velocity (ft/s)	NA
S = Slope of Hydraulic Grade Line (ft/ft)	0.052

$$T_{\text{unpaved}} = \frac{L}{16.1345 \times S^{0.5}} \quad T_c = 1.50 \text{ min}$$

$$T_{\text{paved}} = \frac{L}{20.3282 \times S^{0.5}} \quad T_c = 0 \text{ min}$$

Total Time of Concentration

15.55 min



Holiday Inn Alachua

Post Development DA 1

Time of Concentration

Overall Flow Length (ft)	715
Initial Elevation	122.00
Final Elevation	102.00

Sheet Flow

L = Flow Length (ft)	300.0
n = Mannings Roughness Coefficient	Asphalt
	n = 0.030
S = slope of hydraulic grade line (ft/ft)	0.030
P2 = 2 year, 24 hour rainfall (in.)	4.8

$$T = \frac{0.007(nL)^{0.8}}{(P_2)^{0.5} S^{0.4}} \quad T_c = 0.08 \text{ hr}$$

$$T_c = 4.52 \text{ min}$$

L = Flow Length (ft)	0.0
n = Mannings Roughness Coefficient	Smooth
	n = 0.011
S = Slope of Hydraulic Grade Line (ft/ft)	0.028
P2 = 2 year, 24 hour rainfall (in.)	4.8

$$T = \frac{0.007(nL)^{0.8}}{(P_2)^{0.5} S^{0.4}} \quad T_c = 0.000 \text{ hr}$$

$$T_c = 0.000 \text{ min}$$

Shallow Concentrated Flow

L = Length of Shallow Concentrated Flow (ft)	0.0 Unpaved
	415.0 Paved
Unpaved Velocity (ft/s)	2.74
Paved Velocity (ft/s)	3.46
S = Slope of Hydraulic Grade Line (ft/ft)	0.029

$$T_{\text{unpaved}} = \frac{L}{16.1345 \times S^{0.5}} \quad T_c = 0.00 \text{ min}$$

$$T_{\text{paved}} = \frac{L}{20.3282 \times S^{0.5}} \quad T_c = 2.001 \text{ min}$$

Total Time of Concentration

6.52 min

Attachment A

Soil Borings



Engineering & Consulting, Inc.

**SUMMARY REPORT OF A
GEOTECHNICAL SITE EXPLORATION**

**HOLIDAY INN ALACHUA
ALACHUA, ALACHUA COUNTY, FLORIDA**

GSE PROJECT No. 12872

Prepared For:

MPH HOTELS, INC.

SEPTEMBER 2016

Certificate of Authorization No. 27430



Engineering & Consulting, Inc.

September 19, 2016

Mr. Randy Gibbons
MPH Hotels, Inc.
100 2nd Avenue South
St. Petersburg, Florida 33701

Subject: Summary Report of a Geotechnical Site Exploration
Holiday Inn Alachua
Alachua, Alachua County, Florida
GSE Project No. 12872

Dear Mr. Gibbons:

GSE Engineering & Consulting, Inc. (GSE) is pleased to submit this geotechnical site exploration report for the above referenced project.

Presented herein are the findings and conclusions of our exploration, including the geotechnical parameters and recommendations to assist with building foundation, stormwater management, and pavement designs.

GSE appreciates this opportunity to have assisted you on this project. If you have any questions or comments concerning this report, please contact us.

Sincerely,

GSE Engineering & Consulting, Inc.

Corey A. Dunlap, P.E.
Senior Geotechnical Engineer
Florida Registration No. 77678



Digitally signed by Kenneth L.Hill
DN: c=US, o=IdenTrust ACES Business
Representative, ou=GSE ENGINEERING
AND CONSULTING INC, cn=Kenneth L
Hill,
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Date: 2016.09.19 10:28:34 -04'00'

Kenneth L. Hill, P.E.
Principal Geotechnical Engineer
Florida Registration No. 40146

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1.0 INTRODUCTION

1.1 General

GSE Engineering & Consulting, Inc. (GSE) has completed this geotechnical exploration for the proposed Holiday Inn hotel to be located in Alachua, Alachua County, Florida. This exploration was performed in accordance with GSE Proposal No. 2016-220 dated August 11, 2016. Mr. Michael P. Holtz, President of MPH Hotels, Inc., authorized our services.

1.2 Project Description

This project will consist of a hotel to be located along the east side of NW 167th Boulevard in Alachua, Alachua County, Florida (Figure 1). Mr. Sergio Reyes, P.E. with EDA Engineers-Surveyors-Planners, Inc. (EDA) provided information about the project including a preliminary site plan entitled "Concept Plan – Option 1" dated August 6, 2016 which illustrates the proposed site layout and topography.

After our site exploration, another site plan was provided showing some changes to the parking lot and stormwater management facility configuration. Additionally, we were informed the finished floor elevation would be set at 124 feet and a retaining wall would be constructed on the northwest corner of the property to lower the site grades. The existing site grades in the area of the building generally slope down from 129 feet at the northwest corner to 115 feet at the southeast corner. This suggests the grades at the northwest corner of the building will be cut at least 5 feet and the grades at the southeast corner of the building will be filled at least 9 feet. At this time, it is unclear whether a stem wall for the structure will be utilized to raise the finished floor or whether this entire portion of the site will be filled. Based on the preliminary plan provided, we assume the entire portion of the site near the southeast corners of the building and parking lot will be filled.

The hotel structure is proposed for the northern portion of the site. The building will be four stories tall with a ground floor area of $\pm 14,500$ square feet. A pool will be located on the north side of the hotel. The hotel construction type has not yet been determined. We anticipate the hotel construction will be concrete for the first story and wood frame above. Structural loads have not yet been determined. For the purpose of this evaluation, we assume the structural loads will be less than 6 kips per foot for load bearing walls and less than 200 kips for columns.

A parking lot will be located just south of the hotel, and a stormwater management facility is proposed for the southern portion of the property. The current plan for the stormwater management facility is to cut into grade on the northwest portion of the basin, and create a berm on the southeast portion of the basin to retain the stormwater. We understand a dry retention basin is proposed, and the top elevation of the basin is 108 feet and the bottom elevation of the basin is 102 feet.

A recent aerial photograph of the site was obtained. The site plan and aerial photograph were used in preparation of this exploration and report. In an effort to complete this report in a timely manner so that other engineering disciplines may be engaged and the design process continue moving forward, we have made some assumptions about the final designs. Should the final designs differ from the above assumptions, the Geotechnical Engineer shall be notified of the changes and given the opportunity to reevaluate the geotechnical recommendations within this report.

1.3 Purpose

The purpose of this geotechnical exploration was to determine the general subsurface conditions, evaluate these conditions with respect to the proposed construction, and prepare geotechnical parameters and recommendations to assist with building foundation, stormwater management, and pavement designs.

2.0 FIELD AND LABORATORY TESTS

2.1 General Description

The procedures used for field sampling and testing are in general accordance with industry standards of care and established geotechnical engineering practices for this geographic region. This exploration consisted of performing six (6) Standard Penetration Test (SPT) borings to depths of 30 feet below land surface (bls) in the area of the proposed building, one (1) SPT boring to a depth of 20 feet bls in the area of the proposed pool, four (4) auger borings to depths of 5 feet bls in the area of the parking lot, and four (4) auger borings to depths of 15 feet bls in the area of the proposed stormwater management facility.

The soil borings were performed at the approximate locations as shown on Figure 2. The borings were located at the site using the provided site plan, Global Positioning System (GPS) coordinates, and obvious site features as reference. The boring locations should be considered approximate. The soil borings were performed on August 30 and August 31, 2016.

2.2 Auger Borings

The auger borings were performed in accordance with ASTM D1452. The borings were performed with flight auger equipment that was rotated into the ground in a manner that reduces soil disturbance. After penetrating to the required depth, the auger was retracted and the soils collected on the auger flights were field classified and placed in sealed containers. Representative samples of each stratum were retained from the auger boring. Results from the auger borings are provided in Section 5.1.

2.3 Standard Penetration Test Borings

The soil borings were performed with a drill rig employing mud rotary drilling techniques and Standard Penetration Testing (SPT) in accordance with ASTM D1586. The SPTs were performed continuously to 10 feet and at 5-foot intervals thereafter. Soil samples were obtained at the depths where the SPTs were performed. The soil samples were classified in the field, placed in sealed containers, and returned to our laboratory for further evaluation.

After drilling to the sampling depth and flushing the borehole, the standard two-inch O.D. split-barrel sampler was seated by driving it 6 inches into the undisturbed soil. Then the sampler was driven an additional 12 inches by blows of a 140-pound hammer falling 30 inches. The number of blows required to produce the next 12 inches of penetration were recorded as the penetration resistance (N-value). These values and the complete SPT boring logs are provided in Section 5.2.

Upon completion of the sampling, the boreholes were abandoned in accordance with Water Management District guidelines.

2.4 Soil Laboratory Tests

The soil samples recovered from the soil borings were returned to our laboratory, and examined to confirm the field descriptions. Representative samples were then selected for laboratory testing. The laboratory tests consisted of seventeen (17) percent soil fines passing the No. 200 sieve determinations, seventeen (17) natural moisture content determinations, five (5) Atterberg Limits tests, and three (3) constant head hydraulic conductivity tests. These tests were performed in order to aid in classifying the soils and to further evaluate their engineering properties. The laboratory tests are provided in Section 5.3.

3.0 FINDINGS

3.1 Surface Conditions

Mr. Jeandona Doreste with GSE visited the site on August 25, 2016 to observe the site conditions and mark the boring locations. Mr. Doreste revisited the site on August 26, 2016 with a representative of Jason Kite, LLC to clear lanes that provide access to the boring locations for the drilling equipment.

The site is located along the east side of NW 167th Boulevard just north of U.S. Highway 441. The property is bordered by a residential neighborhood to the north, commercial developments to the west and south, and planted pine trees to the east. The site appears to have been previously cleared and burned. However, thick scrub brush has overtaken the site since the site was burned. A few medium to large trees are sporadically located on the site.

The topography at the site is gently to moderately sloping down toward the southeast from the northwest. The regional topography is also gently to moderately sloping down toward the south. The provided preliminary site plan also contains existing topography information. The plan indicates the site grades generally range from 98 feet at the southeast corner to 130 feet at the northwest corner.

3.2 Subsurface Conditions

The locations of the auger and SPT borings are provided on Figure 2. Complete logs for the borings are provided in Sections 5.1 and 5.2. Descriptions for the soils encountered are accompanied by the Unified Soil Classification System symbol (SM, SP-SM, etc.) and are based on visual examination of the recovered soil samples and the laboratory tests performed. Stratification boundaries between the soil types should be considered approximate, as the actual transition between soil types may be gradual.

The auger borings located in the proposed stormwater management facility indicate the subsurface conditions are relatively consistent. The borings generally encountered interbedded strata of clayey to very clayey sand (SC) and sandy clay to clay (CL/CH) to depths of approximately 11 to 15 feet bls. These soils are generally underlain by silty clayey sand to very silty clayey sand (SM-SC) to the explored depths of 15 feet bls. Auger boring P-1 was performed on the uphill side of the proposed basin location, and initially penetrated 7 feet of silty sand (SM). The underlying silty clayey sand (SM-SC) layer was not encountered by this boring. Auger boring P-4 initially penetrated a 12 inch thick layer of silty sand (SM).

The auger borings located in the proposed parking lot area indicate the subsurface conditions are relatively variable. The borings generally encountered interbedded strata of silty sand (SM), clayey to very clayey sand (SC), and sandy clay (CH) from ground surface to the explored depths of up to 5 feet bls.

The SPT borings performed in the building area and pool indicate the subsurface conditions are relatively consistent. The borings initially penetrated 0.5 to 3 feet of sand with silt and silty sand (SP-SM, SM). This was underlain by interbedded strata of clayey to very clayey sand (SC) and sandy clay to clay (CL/CH, CH) to depths ranging between 9 to 21 feet bls. Beneath the clay-rich layer, interbedded strata of silty sand, clayey sand, and silty clayey sand (SM, SC, SM-SC) soils were then encountered to the explored depths of up to 30 feet bls.

The SPTs performed in the borings indicate the surficial sand with silt and silty sand (SP-SM, SM) soils are generally in medium dense conditions with N-values ranging from 14 to 22 blows per foot. The underlying clay-rich soils (SC, CL/CH, CH) are generally in medium dense to dense and stiff to very stiff conditions with N-values ranging between 9 and 37 blows per foot. The deeper silty and clayey soils (SM, SC, SM-SC) are generally in loose to dense conditions with N-values ranging from 9 to 38 blows per foot.

Groundwater was not encountered in the borings within the explored depths at the time of drilling.

3.3 Review of Published Data

The site is mapped as two soil series by the Soil Conservation Service (SCS) Soil Survey for Alachua County¹. The following soil descriptions are from the Soil Survey.

Bivans sand, 5 to 8 percent slopes – This is a sloping, poorly drained soil on short breaking slopes and along hillsides of the uplands. The areas are irregular and elongated in shape. They range from about 5 to 40 acres.

Typically, the surface layer is dark gray sand about 5 inches thick. The subsurface layer is light brownish gray sand about 5 inches thick. It has a few nodules of ironstone and fragments of phosphatic limestone. The subsoil extends to a depth of 59 inches. The upper 20 inches is gray sandy clay and a few nodules of ironstone and fragments of phosphatic limestone. The next 29 inches is gray, mottled sandy clay. Between depths of 59 and 80 inches, the underlying material is gray, mottled sandy clay.

Included with this soil in mapping are small areas of Blichton, Boardman, Lochloosa, and Wacahoota soils. Small areas of soils that are similar to Bivans soils but that have a very dark gray or black loamy sand surface layer 8 to 12 inches thick over a sandy clay loam subsoil are also included in some areas. Small areas of Bivans soil that have slopes of 2 to 5 percent are included. Total included areas are about 15 percent or less.

In this Bivans soil, the subsurface layer and upper part of the subsoil are saturated by a perched water table for 1 to 3 months during most years. Wetness is caused mainly by hillside seepage. Surface runoff is rapid. The available water capacity is low to medium. Permeability is moderate to moderately rapid in the surface and subsurface layers. It is very slow to slow in the subsoil. Natural fertility is low to medium, and the organic matter content is moderately low to moderate in the surface layer.

Kendrick sand, 5 to 8 percent slopes. This sloping, well drained soil is usually in elongated areas on long slopes of uplands. The areas are small to relatively large and range from about 10 to 125 acres.

Typically, the surface layer is grayish brown sand about 6 inches thick. The subsurface layer is yellowish brown sand to a depth of 24 inches. The subsoil extends to a depth of 76 inches or more. The upper 5 inches of the subsoil is yellowish brown, mottled sandy loam; the next 27 inches is strong brown sandy clay loam; and the lower 20 inches is yellowish brown, mottled sandy clay loam.

¹ Soil Survey of Alachua County, Florida. Soil Conservation Service, U.S. Department of Agriculture.

Included with this soil are small areas of soils that are similar to Kendrick soils but have a brownish yellow or yellowish brown loamy subsoil less than 20 inches below the surface or have fine sand surface and subsurface layers. Also included are a few areas of soils that are sandy clay at a depth of 20 to 40 inches. Small areas of Arredondo, Blichton, Gainesville, and Lochloosa soils are in some areas. A few areas of Kendrick soils have 2 to 5 percent slopes or 8 to 12 percent slopes. Small moderately eroded spots are included in some areas. Limestone boulders and sinkholes are in some areas and are shown by appropriate symbols. Total included areas are about 20 percent.

In this Kendrick soil, the available water capacity is low in the sandy surface and subsurface layers and medium to high in the subsoil. Permeability is rapid in the sandy surface and subsurface layers, moderate in the upper part of the subsoil, and slow to moderately slow in the lower part. Natural fertility is low in the sandy layers and medium in the loamy subsoil. Organic matter content is low. The water table is more than 72 inches below the surface. Surface runoff is medium.

3.4 Laboratory Soil Analysis

Selected soil samples recovered from the soil borings were analyzed for the percent soil fines passing the No. 200 sieve, natural moisture content, Atterberg Limits, and hydraulic conductivity. Samples selected for laboratory testing were collected at depths ranging from near ground surface up to 20 feet bls. These tests were performed to confirm visual soil classification and evaluate their engineering properties. The complete laboratory report is provided in Section 5.3.

The laboratory tests indicate the tested soils consist of silty sand, clayey sand, silty clayey sand, very clayey sand, sandy clay, and clay with sand. The tested silty sand (SM) contains approximately 18 to 26 percent soil fines passing the No. 200 sieve with natural moisture contents of about 11 to 17 percent. The tested clayey sand (SC) contains approximately 29 percent soil fines passing the No. 200 sieve with a natural moisture content of about 19 percent. The tested silty clayey sand (SC-SM) contains approximately 28 percent soil fines passing the No. 200 sieve with a natural moisture content of about 22 percent. The tested very clayey sand (SC) contains approximately 30 to 45 percent soil fines passing the No. 200 sieve with natural moisture contents of about 14 to 28 percent. The tested sandy clay (CL/CH, CH) contains approximately 57 to 68 percent soil fines passing the No. 200 sieve with natural moisture contents of about 33 to 51 percent. The tested clay with sand (CH) contains approximately 73 to 81 percent soil fines passing the No. 200 sieve with natural moisture contents of about 41 to 53 percent.

The Atterberg Limits tests indicate the tested sandy clay to clay with sand (CL/CH, CH) has Liquid Limit (LL) values of 69 to 95, Plastic Limit (PL) values of 26 to 53, and Plasticity Index (PI) values of 17 to 69. Overall, these values generally correspond to materials with high potential ($LL > 60$ and $PI > 35$) for expansive behavior².

The constant head hydraulic conductivity test results indicate the near-surface silty sand (SM) has hydraulic conductivity values of 0.2 to 0.6 feet per day. The tested deeper silty clayey sand with lenses of clay (SM-SC) did not flow suggesting this type of soil is confining.

² U.S. Department of the Army USA, 1983, Foundations in Expansive Soils, TM 5-818-7, p. 4-1.

4.0 EVALUATION AND RECOMMENDATIONS

4.1 General

The following recommendations are made based upon our understanding of the proposed construction, a review of the attached soil borings and laboratory test data, and experience with similar projects and subsurface conditions. If plans or the location of proposed construction changes from those discussed previously, GSE requests the opportunity to review and possibly amend our recommendations with respect to those changes.

The final design of a foundation system is dependent upon adequate integration of geotechnical and structural engineering considerations. Consequently, GSE must review the final foundation design in order to evaluate the effectiveness and applicability of our initial analyses, and to determine if additional recommendations may be warranted. Without such a review, the recommendations presented herein could be misinterpreted or misapplied resulting in potentially unacceptable performance of the foundation system.

The performance of site improvements may be sensitive to their post-construction relationship to site groundwater levels, seepage zones, or soil/rock characteristics exposed at final site grades. GSE recommends that use of boring information for final design of all site improvements be predicated on proper horizontal and vertical control of borings.

In this section of the report, we present our geotechnical parameters and recommendations to assist with building foundation, stormwater management, and pavement designs as well as our general site preparation guidelines.

4.2 Groundwater

Groundwater was not encountered in the boreholes at the time of the drilling operation. The County Soil Survey indicates the seasonal high groundwater table should be at a depth of greater than 72 inches. However, considering the relatively uniform layer of clay-rich soils, we expect the seasonal high groundwater table to be a perched condition that will develop on top of the clay-rich soils after periods of intense or sustained seasonal rainfall. The seasonal high groundwater table is expected to dissipate down the hill toward the southeast relatively quickly.

4.3 Building Foundations

The soil borings near the proposed building footprint indicate the soils at the site are relatively consistent. The borings indicate approximately 0.5 to 3 feet of sand with silt and silty sand overlies clay-rich soils to depths ranging between 9 to 21 feet bls. These soils are generally underlain by interbedded strata of silty sand, clayey sand, and silty clayey sand.

The laboratory tests indicate the near-surface clay-rich soils generally have high potential for expansive behavior. These types of soils are relatively common in this portion of Alachua County. Structures supported by expansive soils are subject to differential foundation movement as these soils expand and contract with varying moisture fluctuations. Therefore, we recommend these soils be undercut and replaced. Our undercutting recommendations are detailed in Section 4.4.

Based upon the soil conditions encountered, our limited understanding of the structural loads and site grading, and the recommended undercutting operation, we recommend the building be supported by conventional, shallow strip and/or spread foundations. We recommend the shallow foundations be designed for a maximum allowable gross bearing pressure of 4,000 psf. The gross bearing pressure is defined as the soil contact pressure that can be imposed from the maximum structural loads, weight of the concrete foundations, and weight of the soil above the foundations. The foundations should be designed based upon the maximum load that could be imposed by all loading conditions.

The foundations should be embedded a minimum of 18 inches below the lowest adjacent grade. Interior foundations or thickened sections should be embedded a minimum of 12 inches. The foundations should have minimum widths of 18 inches for strip footings, and 24 inches for columns, even though the maximum soil bearing pressure may not be fully developed.

Due to the mostly sandy nature of the undercut backfill, we expect settlement to be mostly elastic in nature. The majority of the settlement will occur on application of the loads, during and immediately following construction. Using the recommended maximum bearing pressure, the assumed maximum structural loads, and the field and laboratory test data which we have correlated into the strength and compressibility characteristics of the subsurface soils, we estimate the total settlements of the structure to be 1 inch or less, with approximately half of it occurring upon load application (during construction).

Differential settlement results from differences in applied bearing pressures and the variations in the compressibility characteristics of the subsurface soils. For the building pad prepared as recommended, we anticipate differential settlement of less than 1/2 inch.

Post-construction settlement of the structures will be influenced by several interrelated factors, such as (1) subsurface stratification and strength/compressibility characteristics of the bearing soils; (2) footing size, bearing level, applied loads, and resulting bearing pressures beneath the foundation; (3) site preparation and earthwork construction techniques used by the contractor, and (4) external factors, including but not limited to vibration from off-site sources and groundwater fluctuations beyond those normally anticipated for the naturally-occurring site and soil conditions which are present.

Our settlement estimates for the structure are based upon our limited understanding of the structural loads and site grading and the use of successful adherence to the site preparation recommendations presented later in this report. Any deviation from our project understanding and/or our site preparation recommendations could result in an increase in the estimated post-construction settlement of the structure.

4.4 Building Undercut

Considering the amount of expansive soils located near ground surface beneath the proposed structure, we recommend a mass undercutting operation be performed. The intent of the undercutting program is to remove the expansive soils from the majority of the “active zone” and replace them with non-expansive fill. Figure 3 illustrates the typical building undercut detail.

We recommend the undercut be performed to a minimum depth of 7 feet beneath the finished floor elevation. At the time of this report, the finished floor elevation has been set at 124 feet, indicating the undercut bottom elevation will be 117 feet.

We recommend the undercut begin at the southeast side of the building and proceed up the hill toward the northwest. The undercut should be performed for the entire building profile, and a minimum of 8 feet beyond the edges of the building.

The undercut beneath the building profile should initially be backfilled with 18 inches of crushed limerock. Outside of the building profile, the outer edge of the undercut should be backfilled with 6 inches of crushed limerock, creating a slope down toward the outer edge of the undercut from the building profile. The crushed limerock backfill should meet FDOT gradation requirements and be compacted in maximum 6-inch loose lifts to a minimum density of 98 percent of the Modified Proctor maximum dry density (ASTM D-1557). The intent of initially backfilling the undercut with crushed limestone is to create a buffer of impermeable material that prevents moisture fluctuations in the underlying expansive soils.

Above the crushed limerock, clean sand may be used to backfill the remaining portions of the undercut. Considering the amount of unsuitable soils on-site, we anticipate the undercut backfill to be imported. The clean sand fill should be compacted in maximum 12-inch loose lifts to a minimum 95 percent of the Modified Proctor maximum dry density (ASTM D1557).

Considering the undercut will be extended into confining soils and the backfill will consist of clean sand, a “bowl effect” will be created beneath the structure. Therefore, it is imperative that surface and ground water be intercepted prior to entering the undercut. We recommend an FDOT Type II underdrain be installed to prevent surface and groundwater from permeating into the undercut area. The underdrain should be located on the outside of the undercut on top of the crushed limerock backfill as illustrated in Figure 3. The underdrain should be located on the south, west, and north portions of the undercut area. The underdrain should be sloped such that water is able to freely flow out of the drain, and the discharge point should be located such that water does not back up into the drain.

The long term performance of the underdrain is imperative to proper foundation performance. Therefore, we recommend cleanouts be located at an appropriate spacing in the underdrain so adequate maintenance can be performed. Failure of the underdrain could result in differential foundation movement of the structure. Furthermore, proper grading away from the structure and surface water management on all sides of the building should be maintained such that stormwater cannot enter the undercut area.

Considering the undercut will be cut into the hillside, there is a chance for sand seems to leach trapped groundwater into the excavation. This is commonly known as hillside seepage. This should be accounted for by the contractor, and a contingency plan should be developed should this condition occur.

We recommend the undercutting and backfilling be performed under the observation of the Geotechnical Engineer of record. The Geotechnical Engineer should meet with the earthwork contractor to confirm the locations of the recommended undercutting prior to commencing work. The Geotechnical Engineer should inspect the bottom of the undercuts prior to the contractor placing the backfill. Field density tests should be performed on the undercut backfill at a minimum of 1 test for each 2,500 square feet of building area for each 1-foot lift of fill material.

The above recommendations are based in part on the preliminary grading plan, the finished floor elevation, and an assumed foundation embedment of 2 to 3 feet. The Geotechnical Engineer shall review final grading and foundation plans prior to construction to ensure the above recommendations remain valid for the final design.

4.5 Pavements

Overall soil conditions encountered by our borings at this site are suitable for supporting conventional limerock base and asphalt wearing surface pavements. We have not been provided the anticipated traffic loading conditions; therefore, the following pavement component recommendations should be used only as guidelines. The below recommendations are intended to be minimums. Increasing base course and asphalt thicknesses would increase the design life of the pavement.

We recommend a minimum separation of 24 inches be present between the bottom of the base course and the top of the clay-rich soils containing greater than about 25 percent soil fines. The provided preliminary grading plan suggests that the east end of the parking lot will likely be constructed on top of fill soils and the west end of the parking lot will likely be constructed at grade. Considering this preliminary information, review of the boring logs suggests this separation will likely be present along the majority of the parking lot. However, should the site grading change and portions of the parking lot be constructed beneath existing grades, the Geotechnical Engineer shall be notified and given the opportunity to determine whether undercutting is required to achieve the 24-inch separation.

In areas where the minimum 24 inch separation is not able to be achieved through grading design, we recommend these soils be undercut. The undercut should extend a minimum of 24 inches beneath the bottom of the base course. The undercut should extend laterally until the clay-rich soils are no longer encountered and free-draining sandy soils have been penetrated. The undercut should be backfilled with either on-site or imported sandy free-draining soils containing less than 10 percent soil fines. The backfill should be placed in maximum 24-inch loose lifts that are compacted to a minimum 95 percent of the Modified Proctor maximum dry density (ASTM D1557).

4.5.1 Stabilized Subgrade

The stabilized subgrade should have a minimum Limerock Bearing Ratio (LBR) of 40, with a minimum thickness of 12 inches. The stabilized subgrade can be imported material or a mixture of imported and on-site material. If a mix is proposed, a mix design should be performed to determine the optimum mix proportions. The stabilized subgrade should be compacted to a minimum of 98 percent of the Modified Proctor maximum dry density (ASTM D1557) for soils with less than 15 percent fines content. Soils with 15 percent or greater fines content should be compacted to 100 percent of the Standard Proctor maximum dry density (ASTM D698).

4.5.2 Base Course

The base course should consist of crushed limerock having a LBR of at least 100. Limerock should be obtained from a FDOT approved source, and should meet FDOT gradation requirements. The base course thickness should be a minimum of 6 inches in automobile parking areas and 8 inches in driveways. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557).

The constructability of differing base course thicknesses may be difficult, and having a uniform 8-inch thick base course may be more practical.

4.5.3 Wearing Surface

The asphalt-wearing surface should consist of an FDOT Type SP Hot Mix Asphalt mixture. For automobile parking areas, the thickness should be a minimum of 1.5 inches. For driveway areas, the thickness should be a minimum of 2 inches. The asphalt-wearing surface should consist of an SP-12.5 mix. The asphalt should be compacted to at least 95 percent of the mix design density.

The constructability of differing asphalt thicknesses may be difficult, and having a uniform 2-inch thick asphalt wearing surface may be more practical.

4.6 Site Preparation

A mass undercutting operation for the structure is recommended considering the amount of near-surface expansive soils and is discussed in Section 4.4. The following recommendations are our general guidelines for site preparation.

4.6.1 Stripping

Strip the construction limits and 10 feet beyond the perimeter of all grass, roots, topsoil, pavement, and other deleterious materials. You should expect to strip to depths of 12 or more inches. Deeper stripping will likely be necessary due to major root systems present at the site.

4.6.2 Dewatering

Considering the amount of excavations into hillsides, temporary dewatering may be necessary for this project. We anticipate dewatering can be accomplished with sumps placed near the construction area, or with underdrains connected to a vacuum pump.

In any case, the site should always be graded to promote runoff and limit the amount of ponding. Localized ponding of stormwater is expected without proper grading during construction, and could render previously acceptable surfaces unacceptable.

4.6.3 Proof-Rolling

Proof-roll the subgrade with heavy rubber-tired equipment, such as a loaded front-end loader or dump truck, to identify any loose or soft zones not found by the soil borings. The proof-rolling should be monitored by a geotechnical engineer or qualified technician. Undercut or otherwise treat these zones as recommended by the geotechnical engineer in this report.

4.6.4 Fill Placement

Imported fill placed to raise the site grades should consist of clean sand having less than 10 percent passing the No. 200 sieve. On-site soils meeting the requirements of Section 4.9 may also be used as structural fill. However, we do not anticipate many of the native soils to be suitable for structural fill. The fill should be placed in maximum 12-inch loose lifts that are compacted to at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). If lighter “walk-behind” compaction equipment is used, this may require lifts of 4 inches or less to achieve the required degree of compaction.

4.7 Quality Control and Construction Materials Testing

It should be noted that the geotechnical engineering design does not end with the advertisement of the construction documents. As the geotechnical engineer of record, GSE is the most qualified to perform the construction materials testing that will be required for this project.

The benefits of having the geotechnical engineer of record also perform the construction materials testing are numerous. If GSE continues to be involved with the project through construction, we will be able to constantly re-evaluate and possibly alter our geotechnical recommendations in a timely and cost effective manner once final design and construction techniques are developed. This often results in cost savings for the project.

We recommend performing compaction testing beneath the concrete floor slab and the building foundations. We recommend one test be performed every 2,500 square feet of undercut area beneath the building per foot of backfill. We recommend a compaction test be performed for each 10,000 square feet of pavement area per foot of fill or native material, or a minimum of three tests each, whichever is greater.

4.8 Stormwater Management

The soil conditions at the stormwater management facility are relatively consistent. The borings generally encountered confining silty and clayey soils from near ground surface to the explored depths of 15 feet bls. Auger boring P-1 was performed on the uphill side of the proposed basin location and initially penetrated 7 feet of silty sand. However, after shifting the basin configuration, this boring is no longer located within the proposed basin area.

The current plan for the proposed basin is a dry retention basin with top elevation of 108 feet and bottom elevation of 102 feet. A berm is proposed for the southeast portion of the basin to retain the stormwater. Considering the results of the borings, the confining layer depth will be situated at the basin bottom elevation. Therefore, some undercutting of the basin bottom will be required.

We recommend the entire basin bottom be undercut a minimum of 4 feet. Considering a basin bottom elevation of 102 feet, the bottom of the undercut will be situated at elevation 98 feet. We recommend the undercut be extended laterally toward the southeast until the native site grade topography contour of 98 feet has been intersected. The undercut should be backfilled with imported clean sand fill having a maximum of 5 percent soil fines passing the No. 200 sieve and a minimum hydraulic conductivity of 20 feet per day. The undercut backfill should be placed in maximum 24-inch loose lifts and compacted to no greater than 90 percent of the Modified Proctor maximum dry density (ASTM D1557).

Large cuts into the hillside on the north end of the proposed basin location could encounter sand seams within the confining soils that allow trapped groundwater to percolate into the basin. This should be accounted for during the basin design and construction.

The seasonal high groundwater table is expected to be a perched condition that will develop on top of the confining soils. The laboratory permeability tests indicate the tested native silty sand (SM) has hydraulic conductivity values of approximately 0.2 to 0.6 feet per day. However, the majority of this material will be removed by the basin construction.

Based upon the preliminary design provided, the results of the soil borings and laboratory tests, and the recommended undercutting operation, our recommended soil parameters for the stormwater management design in the explored areas are presented below. The parameters below do not consider a factor of safety. Considering the basin will be cut into the confining soils on the north end, the basin will only be able to recover through the undercut recommended on the southeast side of the basin. The below parameters consider this condition, but the stormwater recovery design should also take this into account. Should recovery of the basin not be achievable with this condition, underdrains or some other type of recovery aide may be required.

1. Base elevation of effective or mobilized aquifer (average elevation of confining layer) equal to 98 feet.
2. Unsaturated vertical infiltration rate of 15 feet per day.
3. Horizontal hydraulic conductivity equal to 20 feet per day.
4. Specific yield (fillable porosity) of 25 percent.
5. Average seasonal high groundwater table elevation equal to 98 feet.

The above parameters have been determined based upon the basin design provided at the time of this report. Should the basin configuration be changed, the Geotechnical Engineer shall be notified of the changes and given the opportunity to determine whether the above parameters are applicable to the new basin configuration.

4.9 Fill Suitability

The majority of the soils that will be excavated from this site are expected to be unsuitable clay-rich soils. These soils with greater than 25 percent soil fines are not considered a suitable source of structural fill.

Some of the lighter silty and clayey sand soils (SM, SC) can be used as structural fill, but these soils are a less desirable source of fill because they are more moisture sensitive and more difficult to work and compact. If you wish to use the on-site clayey and silty sand soils we recommend they contain less than 25 percent soil fines (Passing the No. 200 sieve) with a Plasticity Index less than 10 and Liquid Limit less than 40. Mixing of soils with higher fines content with those with less fines content may increase their overall workability.

4.10 Surface Water Control and Landscaping

Roof gutters should be used to divert runoff away from the building. The gutter downspouts should discharge a minimum of 10 feet from the structure to reduce the amount of water collecting around the foundations and entering the undercut backfill. Where possible, the gutter downspouts should discharge directly into the storm sewer system or onto the asphalt paved areas in order to reduce the amount of water collecting around the foundations. Grading of the site should be such that water is diverted away from the building on all sides to reduce the potential for erosion and water infiltration along the foundation.

With respect to landscaping, it is recommended that existing and planted trees and large “tree-like” shrubbery with potential for developing large root systems be planted a minimum distance of half their mature height, and preferably their expected final height, away from the structure. The purpose of this is to reduce the potential for foundation or slab movements from the growth of root systems as the landscaping matures.

Consideration should also be given to using landscaping that has a low water demand, so that excessive irrigation is not conducted around the structures.

If excavations for underground utilities encounter the clay-rich soils, the excavations should be made such that they do not trap water (i.e. “swimming pool” or “bowl” effect). Sloping the excavations, installing underdrains, or extending the excavation to a more pervious area can achieve this. Allowing surface water to become trapped within utility trenches or other excavations (including footings) serves as a potential water source for the clay, which can result in shrink swell of these soils. Furthermore, during construction, surface water within the building areas must be controlled such that the water does not become trapped and represent a source of water for the underlying clay-rich soils. Mismanagement of the surface water during construction within the building footprint could result in subsequent post-construction slab movement.

The above recommendations are intended to maintain relatively consistent moisture contents within the clay-rich expansive soils encountered by the borings and to prevent surface water from entering the undercut backfill area. The importance of proper surface water control and landscaping placement cannot be overemphasized in accomplishing this objective.

5.0 FIELD DATA

5.1 Auger Boring Logs



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 Gainesville, Florida 32608
 Telephone: (352) 377-3233
 Fax: (352) 377-0335

CLIENT MPH Hotels, Inc.

PROJECT NAME Holiday Inn Alachua

PROJECT NUMBER 12872

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 8/30/2016 **BORING NUMBER R-1**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH NA

NOTES Ground Elevation: 118 ft

DATE PERFORMED 8/30/2016 **BORING NUMBER R-2**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH NA

NOTES Ground Elevation: 115 ft

AB 2 PORTRAIT - GINT STD US.GDT - 9/15/16 13:41 - P:\GENERAL\PROJECTS\12872 HOLIDAY INN ALACHUA\12872 BORINGS\12872 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0				0.0			
		AU 1	(SM) Dark gray silty SAND %PASS - 200 = 24 MC = 16			AU 1	(SM) Dark gray silty SAND
				0.5			
						AU 2	(SC) Gray and brown clayey SAND with trace limestone
		AU 2	(SM) Dark brown silty SAND	1.5			
2.5				2.5			
						AU 3	(CH) Greenish gray sandy CLAY %PASS - 200 = 68 MC = 33 LL = 95 ; PL = 26 ; PI = 69
5.0				5.0			
			Bottom of borehole at 5.0 feet.				Bottom of borehole at 5.0 feet.

(Continued Next Page)



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CLIENT MPH Hotels, Inc.

PROJECT NAME Holiday Inn Alachua

PROJECT NUMBER 12872

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 8/30/2016 **BORING NUMBER R-3**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH NA

NOTES Ground Elevation: 114 ft

DATE PERFORMED 8/30/2016 **BORING NUMBER R-4**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

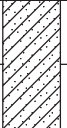

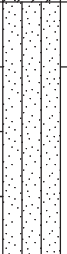

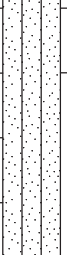

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH NA

NOTES Ground Elevation: 109 ft

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0				0.0			
		AU 1	(SC) Brown and gray very clayey SAND %PASS - 200 = 45 MC = 27			AU 1	(SM) Dark gray silty SAND %PASS - 200 = 19 MC = 11
			1.0				1.0
		AU 2	(SM) Dark brown silty SAND			AU 2	(SC) Dark brown clayey SAND
2.5				2.5			
		AU 3				AU 3	(CH) Gray sandy CLAY
5.0			5.0	5.0			5.0
			Bottom of borehole at 5.0 feet.				Bottom of borehole at 5.0 feet.



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CLIENT MPH Hotels, Inc.

PROJECT NAME Holiday Inn Alachua

PROJECT NUMBER 12872

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 8/30/2016 **BORING NUMBER P-1**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH NA

NOTES Ground Elevation: 113 ft

DATE PERFORMED 8/30/2016 **BORING NUMBER P-2**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH NA

NOTES Ground Elevation: 110 ft

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0				0.0			
		AU 1	(SM) Dark gray silty SAND			AU 1	(CL/CH) Pale gray and tan CLAY with sand
						AU 2	(SC) Dark brown clayey SAND with trace limestone %PASS - 200 = 29 MC = 19
2.5		AU 2 PS	%PASS - 200 - 18 MC = 12 $k_h = 0.6$ ft per day	2.5		AU 3	(CL/CH) Brown and gray sandy CLAY with trace limestone
5.0				5.0			
7.5		AU 3	(CL/CH) Pale green and orange CLAY with sand	7.5		AU 4	
10.0		AU 4		10.0			
12.5				12.5		AU 5 PS	(SM-SC) Pale gray silty clayey SAND with lenses of clay %PASS - 200 = 28 MC = 22 $k_h = \text{No Flow}$
13.0		AU 5	(CL/CH) Brown CLAY with sand	13.0			
15.0				15.0			
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

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CLIENT MPH Hotels, Inc.

PROJECT NAME Holiday Inn Alachua

PROJECT NUMBER 12872

PROJECT LOCATION Alachua, Alachua County, Florida

DATE PERFORMED 8/30/2016 **BORING NUMBER P-3**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH NA

NOTES Ground Elevation: 109 ft

DATE PERFORMED 8/30/2016 **BORING NUMBER P-4**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY CAD

▽ ESTIMATED SEASONAL HIGH NA

NOTES Ground Elevation: 103 ft

AB 2 PORTRAIT - GINT STD US.GDT - 9/15/16 13:38 - P:\GENERAL\PROJECTS\12872 HOLIDAY INN ALACHUA\12872 BORINGS\12872 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0				0.0			
		AU 1 PS	(SC) Dark brown clayey SAND			AU 1 PS	(SM) Dark gray silty SAND %PASS - 200 = 18 MC = 17
		AU 2	(SC) Grayish brown very clayey SAND with trace limestone %PASS - 200 = 32 MC = 27			AU 2	$k_h = 0.2 \text{ ft per day}$ (SC) Dark brown very clayey SAND %PASS - 200 = 37 MC = 22
2.5				2.5			
		AU 3	(SC) Gray clayey SAND with lenses of clay				
3.0				3.0			
5.0		AU 4	(CL/CH) Pale greenish gray and orange CLAY	5.0		AU 3	(CL/CH) Greenish gray CLAY
7.5		AU 5		7.5		AU 4	(CL/CH) Pale green sandy CLAY
10.0				10.0			
		AU 6	(CL/CH) Gray CLAY with sand			AU 5	(SM-SC) Pale greenish gray very silty clayey SAND
11.0				11.0			
		AU 7	(SM-SC) Pale gray very silty clayey SAND				
12.5				12.5			
15.0			Bottom of borehole at 15.0 feet.	15.0			Bottom of borehole at 15.0 feet.

5.2 Standard Penetration Test Soil Boring Logs



GSE Engineering & Consulting, Inc.
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BORING NUMBER B-1

CLIENT MPH Hotels, Inc.

PROJECT NAME Holiday Inn Alachua

PROJECT NUMBER 12872

PROJECT LOCATION Alachua, Alachua County, Florida

DATE STARTED 8/30/16 **COMPLETED** 8/30/16

GROUND ELEVATION 128 ft **HOLE SIZE**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NE

LOGGED BY WDI **CHECKED BY** CAD

▽ **ESTIMATED SEASONAL HIGH** NA

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
		(SP-SM) Medium dense brown SAND with silt and cemented sand fragments	2	SPT 1	15-10-12 (22)						
		(SC) Medium dense brown cemented very clayey SAND with limestone fragments	5	SPT 2	8-9-10 (19)						
5		(CH) Very stiff green and orange sandy CLAY	9	SPT 3	14-12-13 (25)						
				SPT 4	8-8-10 (18)						
				SPT 5	7-7-11 (18)						
10		(CH) Very stiff green and orange CLAY with sand and traces of flint rock	12	SPT 6	11-12-15 (27)						
		(SM) Medium dense pale gray silty SAND									
15				SPT 7	7-8-5 (13)						
20				SPT 8	9-11-12 (23)				26	13	
25				SPT 9	6-7-8 (15)						
30				SPT 10	10-9-12 (21)						
		Bottom of borehole at 30.0 feet.	30								

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BORING NUMBER B-2

CLIENT MPH Hotels, Inc.

PROJECT NAME Holiday Inn Alachua

PROJECT NUMBER 12872

PROJECT LOCATION Alachua, Alachua County, Florida

DATE STARTED 8/30/16 **COMPLETED** 8/30/16

GROUND ELEVATION 122 ft **HOLE SIZE**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NE

LOGGED BY WDI **CHECKED BY** CAD

▼ **ESTIMATED SEASONAL HIGH** NA

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
0.5		(SM) Brown silty SAND (No Sample)	0.5								
		(SC) Medium dense dark brown very clayey SAND with traces of limestone	3	SPT 1	17-11-10 (21)						
		(CH) Very stiff greenish gray CLAY with sand and traces of limestone	5	SPT 2	8-10-10 (20)						
5				SPT 3	8-9-13 (22)						
			7	SPT 4	9-9-15 (24)						
		(SC) Dense gray clayey SAND		SPT 5	8-17-20 (37)						
10				SPT 6	11-16-15 (31)						
			12								
		(SM-SC) Medium dense to dense pale gray silty clayey SAND		SPT 7	15-18-20 (38)						
15											
				SPT 8	6-7-10 (17)						
20											
			22								
		(SM) Medium dense pale gray silty SAND		SPT 9	7-9-11 (20)						
25											
		Blow counts for sample 10 not recorded.		SPT 10							
30		Bottom of borehole at 30.0 feet.	30								

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BORING NUMBER B-3

CLIENT MPH Hotels, Inc.

PROJECT NAME Holiday Inn Alachua

PROJECT NUMBER 12872

PROJECT LOCATION Alachua, Alachua County, Florida

DATE STARTED 8/30/16 **COMPLETED** 8/30/16

GROUND ELEVATION 118 ft **HOLE SIZE**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NE

LOGGED BY WDI **CHECKED BY** CAD

▼ **ESTIMATED SEASONAL HIGH** NA

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
0.5		(SM) Brown silty SAND (No Sample)	0.5								
		(CL/CH) Stiff dark brown and orange sandy CLAY with cemented sand fragments		SPT 1	2-3-6 (9)						
				SPT 2	6-8-9 (17)	70	53	17	57	51	
5				SPT 3	5-7-7 (14)						
		(CH) Stiff to very stiff green CLAY	6	SPT 4	5-6-6 (12)						
				SPT 5	7-10-8 (18)						
9			9	SPT 6	10-10-10 (20)						
10		(SM-SC) Medium dense pale gray silty clayey SAND									
			12								
		(SC) Medium dense pale gray clayey SAND		SPT 7	4-6-7 (13)						
15											
		(SM-SC) Medium dense pale gray silty clayey SAND	17								
				SPT 8	4-6-9 (15)						
20											
			22								
		(SM) Medium dense pale gray silty SAND		SPT 9	4-5-6 (11)						
25											
			27								
		(SC) Loose pale gray clayey SAND		SPT 10	3-4-5 (9)						
30		Bottom of borehole at 30.0 feet.	30								

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BORING NUMBER B-4

CLIENT MPH Hotels, Inc.

PROJECT NAME Holiday Inn Alachua

PROJECT NUMBER 12872

PROJECT LOCATION Alachua, Alachua County, Florida

DATE STARTED 8/30/16 **COMPLETED** 8/30/16

GROUND ELEVATION 124 ft

HOLE SIZE

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NE

LOGGED BY WDI **CHECKED BY** CAD

▽ **ESTIMATED SEASONAL HIGH** NA

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
		(SM) Medium dense dark gray silty SAND		SPT 1	5-6-8 (14)						
			3	SPT 2	8-10-10 (20)						
5		(SC) Medium dense brown and orange very clayey SAND with cemented sand and limestone		SPT 3	13-10-12 (22)						
			7	SPT 4	7-8-8 (16)						
		(CH) Stiff to very stiff green and orange CLAY with sand		SPT 5	8-9-9 (18)	69	20	49	81	45	
10				SPT 6	7-5-8 (13)						
			12								
		(SM) Medium dense pale gray silty SAND		SPT 7	6-9-7 (16)						
15											
				SPT 8	9-13-10 (23)						
20											
				SPT 9	5-6-5 (11)						
25											
				SPT 10	8-10-10 (20)						
30		Bottom of borehole at 30.0 feet.	30								

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BORING NUMBER B-5

CLIENT MPH Hotels, Inc.

PROJECT NAME Holiday Inn Alachua

PROJECT NUMBER 12872

PROJECT LOCATION Alachua, Alachua County, Florida

DATE STARTED 8/30/16 **COMPLETED** 8/30/16

GROUND ELEVATION 121 ft **HOLE SIZE**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NE

LOGGED BY WDI **CHECKED BY** CAD

▼ **ESTIMATED SEASONAL HIGH** NA

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0		(SM) Brown silty SAND (No Sample)									20 40 60 80
1.5		(SC) Medium dense to dense brown cemented very clayey SAND with limestone	1.5	SPT 1	8-8-8 (16)				30	14	
4.5		(CH) Stiff green and red CLAY	4.5	SPT 2	10-15-18 (33)						
5		(CH) Stiff green and red CLAY	5	SPT 3	12-7-7 (14)						
6		(CH) Stiff to very stiff green and orange CLAY with sand	6	SPT 4	6-8-8 (16)						
7		(CH) Stiff to very stiff green and orange CLAY with sand	7	SPT 5	7-7-7 (14)						
8		(CH) Stiff to very stiff green and orange CLAY with sand	8	SPT 6	7-7-7 (14)						
11		(SC) Gray clayey SAND with lenses of clay (No Sample)	11								
14.5		(CH) Stiff Green CLAY	14.5	SPT 7	7-6-7 (13)						
17		(SC) Medium dense gray clayey SAND with lenses of clay	17								
21		(SM) Medium dense pale gray silty SAND	21	SPT 8	7-7-10 (17)						
25		(SM) Medium dense pale gray silty SAND	25	SPT 9	5-6-7 (13)						
30		(SM) Medium dense pale gray silty SAND	30	SPT 10	8-8-8 (16)						
30		Bottom of borehole at 30.0 feet.	30								

SPT BORINGS - GINT STD US GDT - 9/15/16 13:36 - P:\GENERAL\PROJECTS\12872 BORINGS\12872 BORINGS.GPJ



GSE Engineering & Consulting, Inc.
5590 SW 64th Street, Suite B
Gainesville, Florida 32608
Telephone: (352) 377-3233
Fax: (352) 377-0335

BORING NUMBER B-6

CLIENT MPH Hotels, Inc.

PROJECT NAME Holiday Inn Alachua

PROJECT NUMBER 12872

PROJECT LOCATION Alachua, Alachua County, Florida

DATE STARTED 8/30/16 **COMPLETED** 8/30/16

GROUND ELEVATION 116 ft **HOLE SIZE**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NE

LOGGED BY WDI **CHECKED BY** CAD

▽ **ESTIMATED SEASONAL HIGH** NA

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
		(SM) Brown silty SAND (No Sample)	1								
		(SC) Very loose to medium dense brown very clayey SAND with cemented sand fragments	1	SPT 1	1-1-2 (3)				31	28	
			4	SPT 2	5-6-8 (14)						
5		(CH) Very stiff gray and dark orange CLAY with sand	6	SPT 3	6-8-8 (16)	83	36	47	73	53	
		(CH) Stiff green and orange sandy CLAY	7	SPT 4	4-6-6 (12)						
		(CH) Very stiff green CLAY		SPT 5	7-8-10 (18)						
				SPT 6	9-11-11 (22)						
10			12								
		(SM) Medium dense pale gray silty SAND		SPT 7	4-7-8 (15)						
15			17								
		(SM-SC) Medium dense pale gray silty clayey SAND		SPT 8	3-5-10 (15)						
20			22								
		(SM) Medium dense pale gray silty SAND		SPT 9	5-5-8 (13)						
25											
				SPT 10	3-5-6 (11)						
30		Bottom of borehole at 30.0 feet.	30								

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GSE Engineering & Consulting, Inc.
5590 SW 64th Street, Suite B
Gainesville, Florida 32608
Telephone: (352) 377-3233
Fax: (352) 377-0335

BORING NUMBER W-1

CLIENT MPH Hotels, Inc.

PROJECT NAME Holiday Inn Alachua

PROJECT NUMBER 12872

PROJECT LOCATION Alachua, Alachua County, Florida

DATE STARTED 8/30/16 **COMPLETED** 8/30/16

GROUND ELEVATION 128 ft

HOLE SIZE

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NE

LOGGED BY WDI **CHECKED BY** CAD

▼ **ESTIMATED SEASONAL HIGH** NA

NOTES

SPT BORINGS - GINT STD US.GDT - 9/15/16 13:36 - P:\GENERAL\PROJECTS\12872 BORINGS\12872 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
		(SM) Medium dense dark brown silty SAND with cemented sand	2.5	SPT 1	14-9-10 (19)						
		(SC) Medium dense brown and orange very clayey SAND with trace limestone	4	SPT 2	7-8-9 (17)						
5		(CH) Very stiff green and orange sandy CLAY		SPT 3	13-11-14 (25)						
			7	SPT 4	9-10-11 (21)						
		(SC) Medium dense dark gray very clayey SAND with trace limestone	8.5	SPT 5	6-7-10 (17)						
		(SC) Medium dense pale gray clayey SAND		SPT 6	12-13-16 (29)						
10			12								
		(SM-SC) Medium dense pale gray silty clayey SAND		SPT 7	5-6-7 (13)						
15											
				SPT 8	11-12-13 (25)						
20		Bottom of borehole at 20.0 feet.	20								

5.3 Laboratory Results



SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 12872

Project Name: Holiday Inn Alachua

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Coefficient of Permeability (ft/day)	Unified Soil Classification
R-1	0 - 0.5	Dark gray silty SAND	16				24			SM
R-2	3 - 3.5	Greenish gray sandy CLAY	33	95	26	69	68			CH
R-3	0 - 0.5	Brown and gray very clayey SAND	27				45			SC
R-4	0 - 0.5	Dark gray silty SAND	11				19			SM
B-1	18.5 - 20	Pale gray silty SAND	13				26			SM
B-2	4 - 5.5	Greenish gray CLAY with sand and traces of limestone	41	94	34	60	76			CH
B-3	2.5 - 4	Dark brown and orange sandy CLAY with cemented sand fragments	51	70	53	17	57			CL/CH
B-4	7 - 8.5	Green and orange CLAY with sand	45	69	20	49	81			CH
B-5	2.5 - 4	Brown cemented very clayey SAND with limestone	14				30			SC
B-6	1 - 2.5	Brown very clayey SAND with cemented sand fragments	28				31			SC
B-6	4 - 5.5	Gray and dark orange CLAY with sand	53	83	36	47	73			CH



SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 12872

Project Name: Holiday Inn Alachua

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Coefficient of Permeability (ft/day)	Unified Soil Classification
P-1	2 - 4	Dark brown silty SAND	12				18		0.6	SM
P-2	1 - 1.5	Dark brown clayey SAND with trace limestone	19				29			SC
P-2	11 - 13	Pale gray silty clayey SAND with lenses of clay	22				28		No Flow	SM-SC
P-3	1 - 1.5	Grayish brown very clayey SAND with trace limestone	27				32			SC
P-4	0 - 1	Dark gray silty SAND	17				18		0.2	SM
P-4	1 - 1.5	Dark brown very clayey SAND	22				37			SC

5.4 Key to Soil Classification

KEY TO SOIL CLASSIFICATION CHART

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests				SYMBOLS		GROUP NAME
				GRAPHIC	LETTER	
COARSE-GRAINED SOILS More than 50% retained on No. 200 sieve	Gravels	Clean Gravels	$Cu \geq 4$ and $1 \leq Cc \leq 3$		GW	Well graded GRAVEL
	More than 50% of coarse fraction retained on No. 4 sieve	Less than 5% fines	$Cu < 4$ and/or $1 > Cc > 3$		GP	Poorly graded GRAVEL
		Gravels with fines	Fines classify as ML or MH		GM	Silty GRAVEL
		More than 12% fines	Fines classify as CL or CH		GC	Clayey GRAVEL
		Sands	Clean Sands	$Cu \geq 6$ and $1 \leq Cc \leq 3$		SW
	50% or more of coarse fraction passes No. 4 sieve	Less than 5% fines	$Cu < 6$ and/or $1 > Cc > 3$		SP	Poorly graded SAND
		Sand with fines	Fines classify as ML or MH		SP-SM	SAND with silt
		$5\% \leq \text{fines} < 12\%$	Fines classify as CL or CH		SP-SC	SAND with clay
		Sand with fines	Fines classify as ML or MH		SM	Silty SAND
		$12\% \leq \text{fines} < 30\%$	Fines classify as CL or CH		SC	Clayey SAND
		Sand with fines	Fines classify as ML or MH		SM	Very silty SAND
		30% fines or more	Fines classify as CL or CH		SC	Very clayey SAND
FINE-GRAINED SOILS 50% or more passes the No. 200 sieve	Clays	inorganic	$50\% \leq \text{fines} < 70\%$		CL/CH	Sandy CLAY
			$70\% \leq \text{fines} < 85\%$		CL/CH	CLAY with sand
			$\text{fines} \geq 85\%$		CL/CH	CLAY
	Silts and Clays	inorganic	$PI > 7$ and plots on/above "A" line		CL	Lean CLAY
			$PI < 4$ or plots below "A" line		ML	SILT
	Liquid Limit less than 50	organic	<u>Liquid Limit - oven dried</u> < 0.75		OL	<u>Organic clay</u>
			Liquid Limit - not dried		OL	Organic silt
	Silts and Clays	inorganic	PI plots on or above "A" line		CH	Fat CLAY
			PI plots below "A" line		MH	Elastic SILT
	Liquid Limit 50 or more	organic	<u>Liquid Limit - oven dried</u> < 0.75		OH	<u>Organic clay</u>
Liquid Limit - not dried				OH	Organic silt	
HIGHLY ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor				PT	PEAT

CORRELATION OF PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY

No. OF BLOWS, N	RELATIVE DENSITY		No. OF BLOWS, N	CONSISTENCY
0 - 4	Very Loose		0 - 2	Very Soft
5 - 10	Loose		3 - 4	Soft
SANDS: 11 - 30	Medium dense	SILTS &	5 - 8	Firm
31 - 50	Dense	CLAYS:	9 - 15	Stiff
OVER 50	Very Dense		16 - 30	Very Stiff
			31 - 50	Hard
			OVER 50	Very Hard

No. OF BLOWS, N	RELATIVE DENSITY
0 - 8	Very Soft
9 - 18	Soft
LIMESTONE: 19 - 32	Moderately Hard
33 - 50	Hard
OVER 50	Very Hard

SAMPLE GRAPHIC TYPE LEGEND



Location
of SPT
Sample



Location
of Auger
Sample

PARTICLE SIZE IDENTIFICATION

BOULDERS:	Greater than 300 mm
COBBLES:	75 mm to 300 mm
GRAVEL:	Coarse - 19.0 mm to 75 mm
	Fine - 4.75 mm to 19.0 mm
SANDS:	Coarse - 2.00 mm to 4.75 mm
	Medium - 0.425 mm to 2.00 mm
	Fine - 0.075 mm to 0.425 mm
SILTS & CLAYS:	Less than 0.075 mm

LABORATORY TEST LEGEND

LL	=	Liquid Limit, %
PL	=	Plastic Limit, %
PI	=	Plasticity Index, %
% PASS - 200	=	Percent Passing the No. 200 Sieve
MC	=	Moisture Content, %
ORG	=	Organic Content, %
k_h	=	Horizontal Hydraulic Conductivity, ft/day

6.0 LIMITATIONS

6.1 Warranty

This report has been prepared for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

6.2 Auger and SPT Borings

The determination of soil type and conditions was performed from the ground surface to the maximum depth of the borings, only. Any changes in subsurface conditions that occur between or below the borings would not have been detected or reflected in this report.

Soil classifications that were made in the field are based upon identifiable textural changes, color changes, changes in composition or changes in resistance to penetration in the intervals from which the samples were collected. Abrupt changes in soil type, as reflected in boring logs and/or cross sections may not actually occur, but instead, be transitional.

Depth to the water table is based upon observations made during the performance of the auger and SPT borings. This depth is an estimate and does not reflect the annual variations that would be expected in this area due to fluctuations in rainfall and rates of evapotranspiration.

6.3 Site Figures

The measurements used for the preparation of the figures in this report were made using the provided site plan and by estimating distances from existing structures and site features. Figures in this report were not prepared by a licensed land surveyor and should not be interpreted as such.

6.4 Unanticipated Soil Conditions

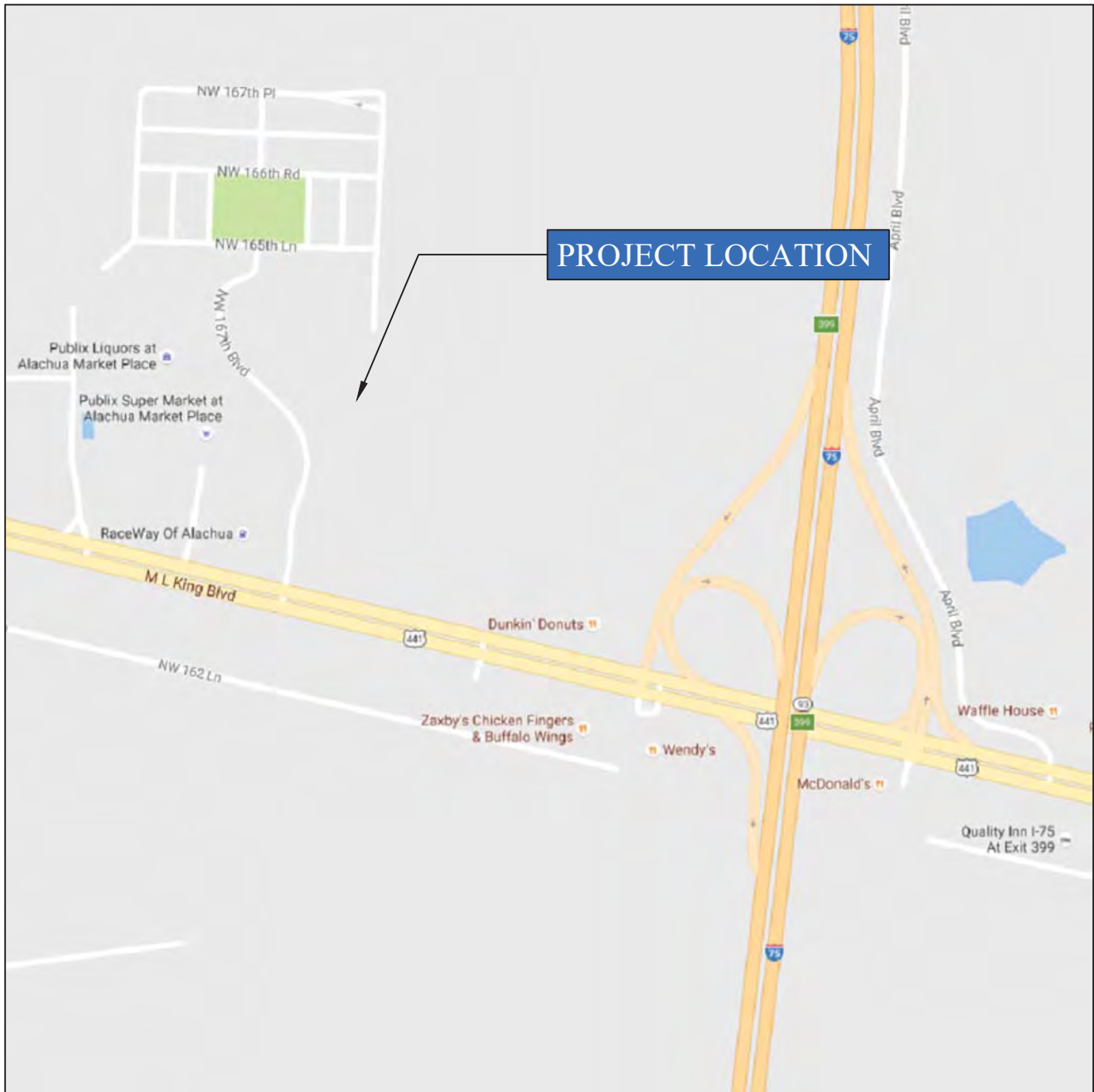
The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on Figure 2. This report does not reflect any variations that may occur between these borings.

The nature and extent of variations between borings may not become known until excavation begins. If variations appear, we may have to re-evaluate our recommendations after performing on-site observations and noting the characteristics of any variations.

6.5 Misinterpretation of Soil Engineering Report

GSE Engineering & Consulting, Inc. is responsible for the conclusions and opinions contained within this report based upon the data relating only to the specific project and location discussed herein. If others make the conclusions or recommendations based upon the data presented, those conclusions or recommendations are not the responsibility of GSE.

FIGURES



 NORTH
 NOT TO SCALE

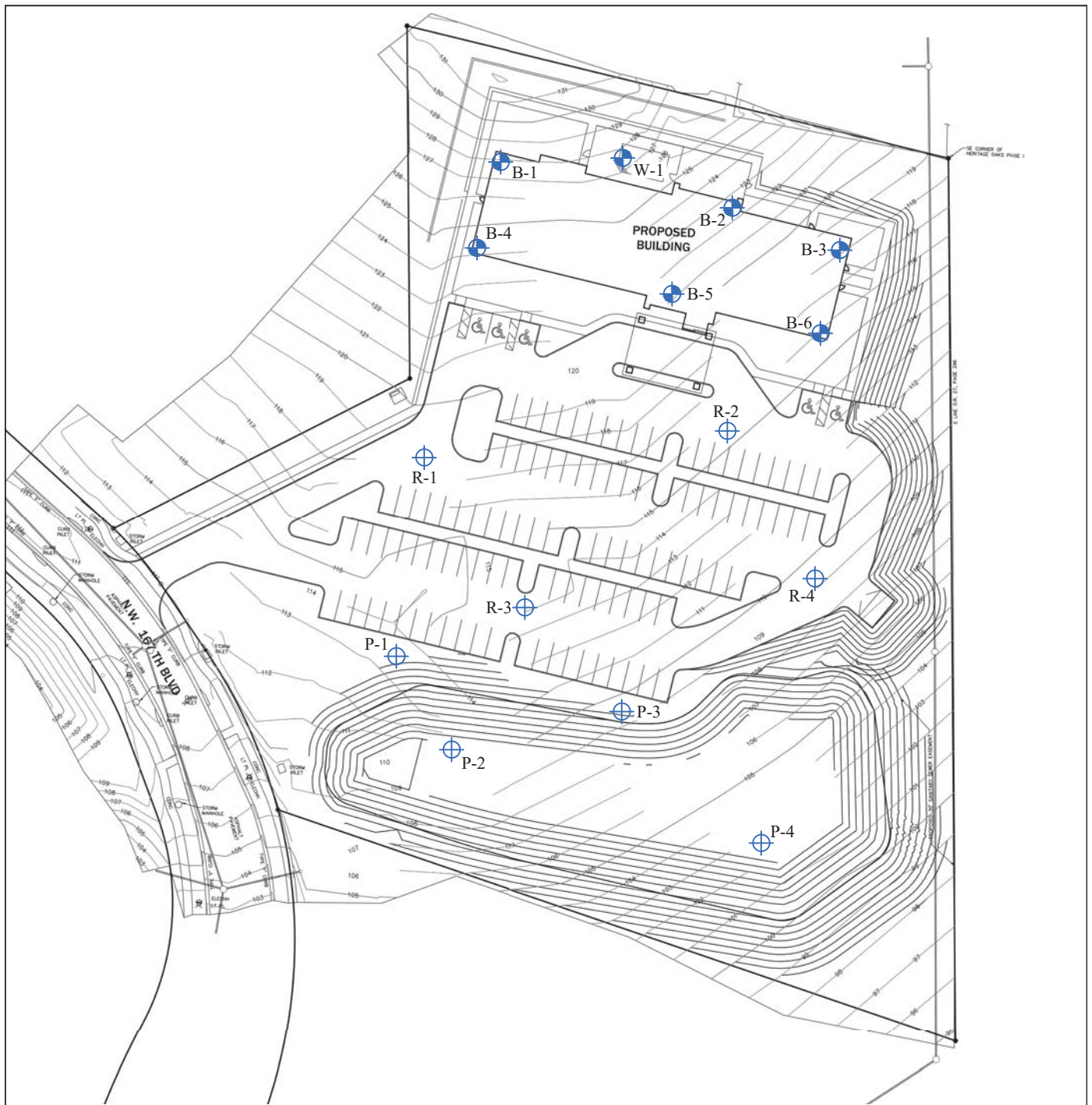
HOLIDAY INN ALACHUA
 ALACHUA, ALACHUA COUNTY, FLORIDA
 GSE PROJECT NO. 12872

PROJECT SITE LOCATION MAP



DESIGNED BY: CAD
 CHECKED BY: KLH
 DRAWN BY: JMG

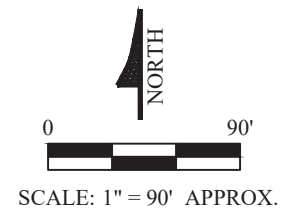


FIGURE
 1



LEGEND :

-  SPT BORING
-  AUGER BORING



HOLIDAY INN ALACHUA
ALACHUA, ALACHUA COUNTY, FLORIDA
GSE PROJECT NO. 12872

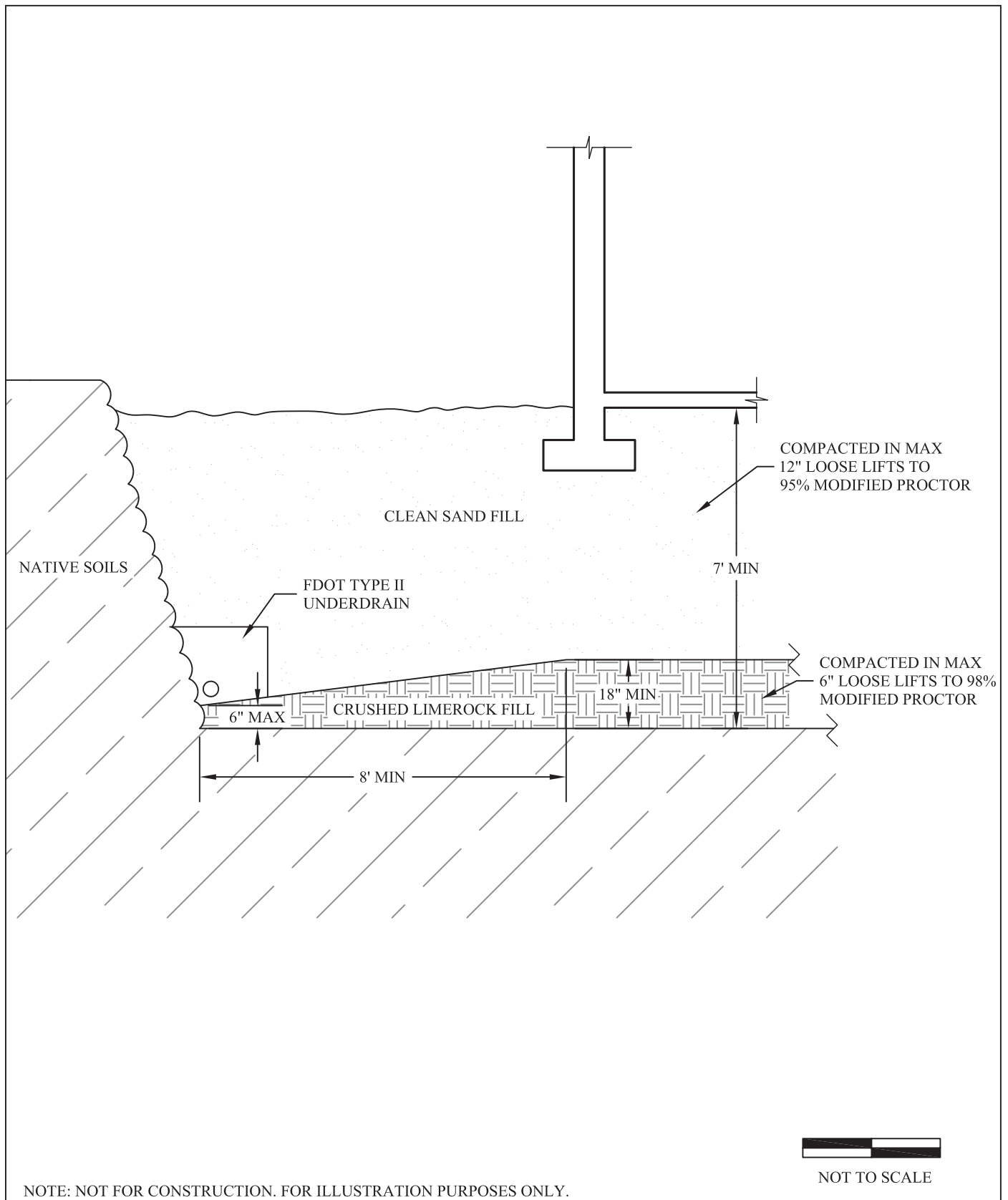
**SITE PLAN SHOWING APPROXIMATE
LOCATIONS OF FIELD TESTS**


DESIGNED BY : CAD
CHECKED BY : KLH
DRAWN BY : JMG



FIGURE

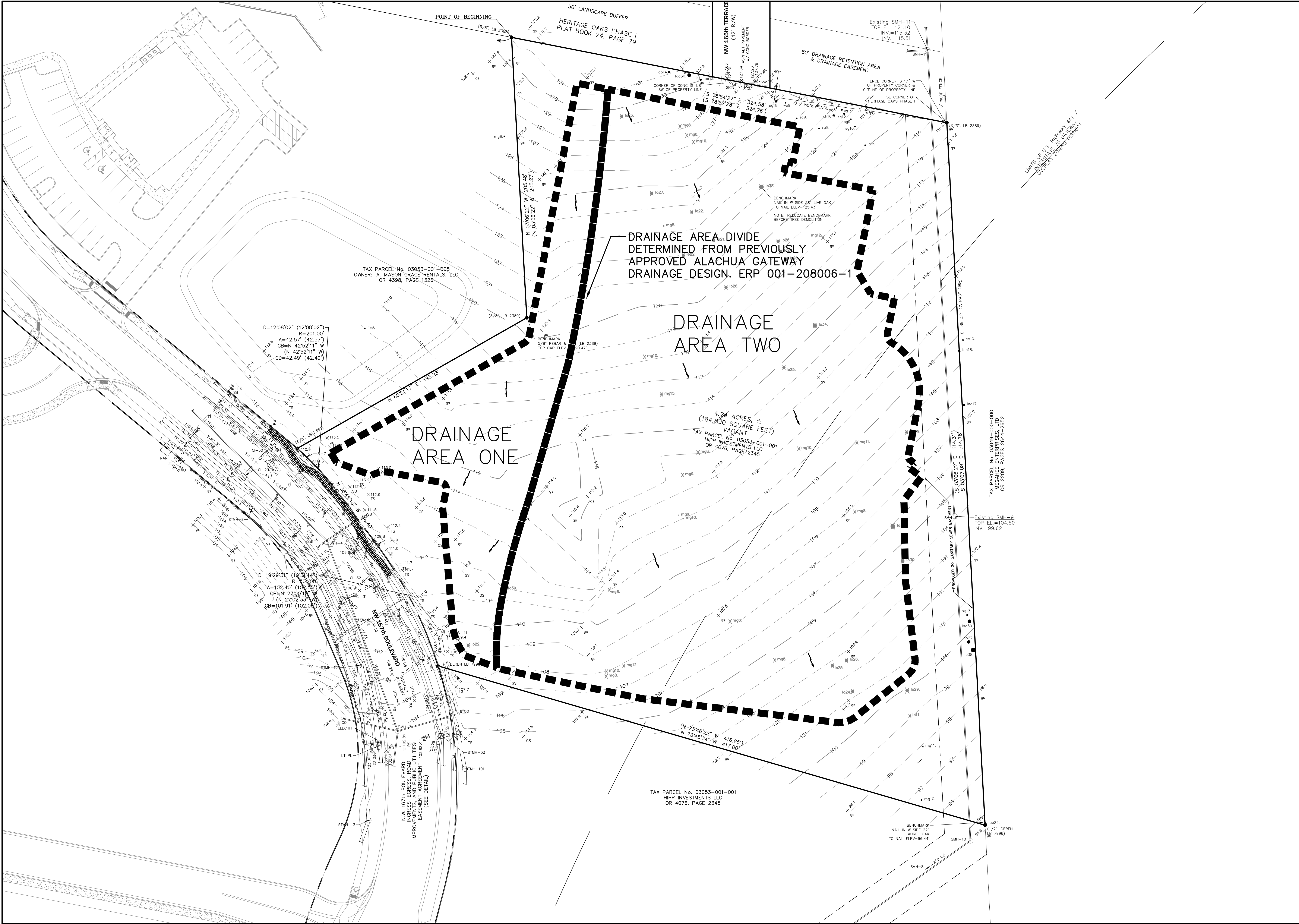
2



HOLIDAY INN ALACHUA ALACHUA, ALACHUA COUNTY, FLORIDA GSE PROJECT NO. 12872	BUILDING UNDERCUT DETAIL		
	DESIGNED BY: CAD CHECKED BY: KLH DRAWN BY: JMG		FIGURE 3

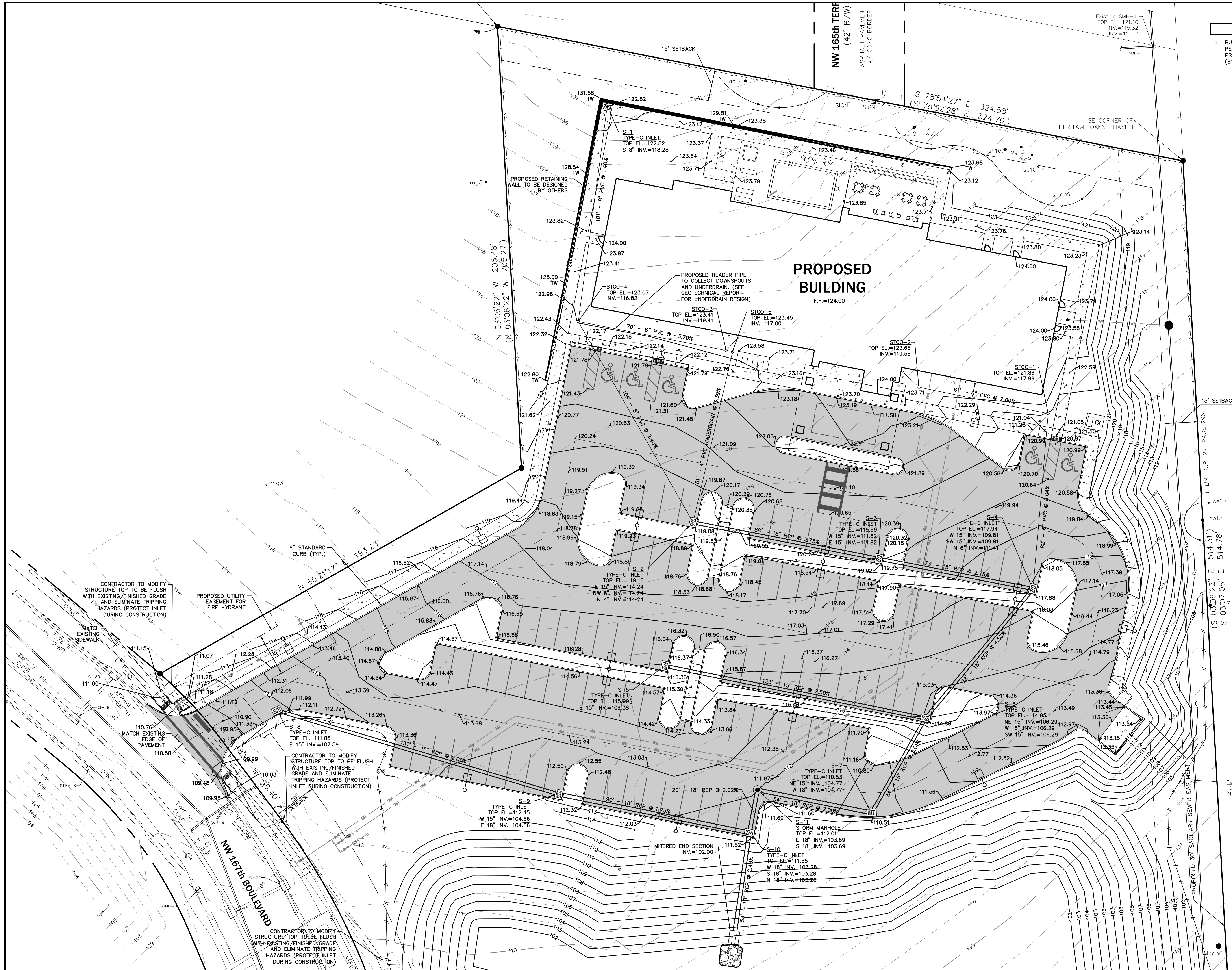
Attachment B

Pre and Post-Development Drainage Map



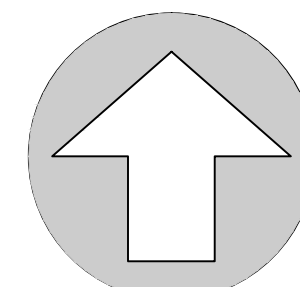
Project phase:		COUNTY SUBMITTAL		Project:		Project:		
Designed: S&P	Drawn: MAB	Checked: TAR		County: ALACHUA	City: ALACHUA, FLORIDA	Project: HOLIDAY INN ALACHUA	Project: HOLIDAY INN ALACHUA	
Project No: 16-233	Date: 09/20/16	Professional Engineer of Record:		City: ALACHUA, FLORIDA	City: ALACHUA, FLORIDA	City: ALACHUA, FLORIDA	City: ALACHUA, FLORIDA	
Professional Engineer of Record:			Professional Engineer of Record:		Professional Engineer of Record:		Professional Engineer of Record:	
Sergio J. Reyes, P.E.			Sergio J. Reyes, P.E.		Sergio J. Reyes, P.E.		Sergio J. Reyes, P.E.	
Engineer			Engineer		Engineer		Engineer	
Certificate No. 47311			Certificate No. 47311		Certificate No. 47311		Certificate No. 47311	
Sheet No.:			Sheet No.:		Sheet No.:		Sheet No.:	
C2.00			C2.00		C2.00		C2.00	
Date:			Date:		Date:		Date:	
Comment:			Comment:		Comment:		Comment:	

\\eng\projects\Holiday Inn - Alachua\Plans\Current\DWG\H162331.dwg, C2.00 - P&G, 12/5/2015 11:23:13 AM, Meagan Dickey



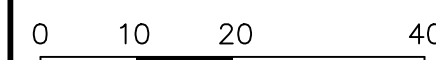
GENERAL NOTES

- BUILDING UNDERDRAIN SHALL BE INSTALLED PER GEOTECHNICAL SITE EXPLORATION (GSE PROJECT #12872) AND FOUNDATION PLANS (BY OTHERS).



NORTH

SCALE: 1"= 20'



GRAPHIC SCALE



engineers • surveyors • planners

2646 NW 42nd ST. GAINESVILLE, FLORIDA 32606-4402
TEL: (352) 373-3341 FAX: (352) 373-3349
www.candsonline.com

HOLIDAY INN ALACHUA
CITY OF ALACHUA, FLORIDA

PAVING, GRADING AND DRAINAGE PLAN

Project phase: CITY OF ALACHUA RESUBMITTAL

Designed: S. J. [Signature]

Project No.: 162331

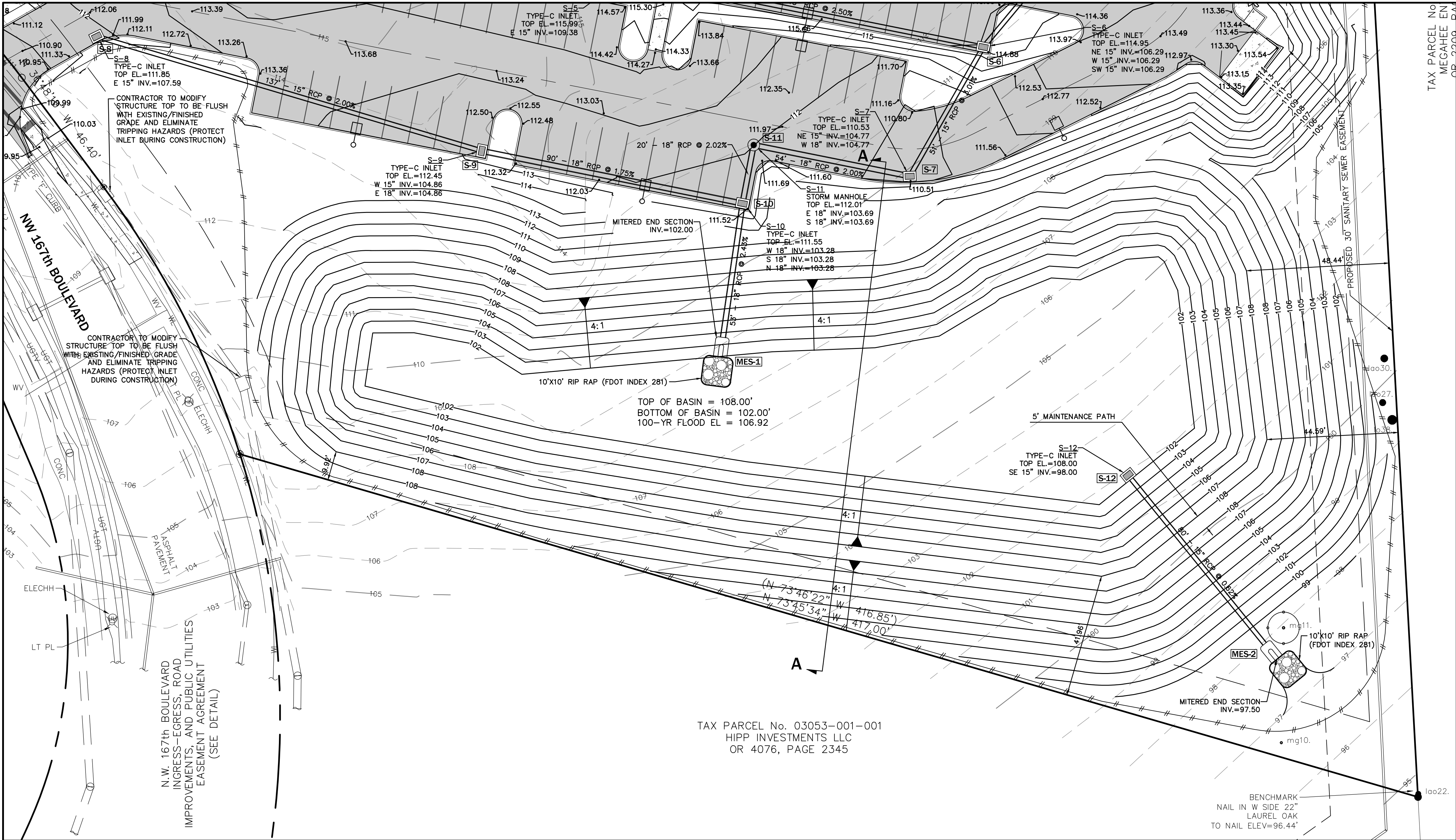
Professional Engineer of Record: [Signature]

State of: FLORIDA

Engineer's License No.: 13311

Sheet No.:

C2.00



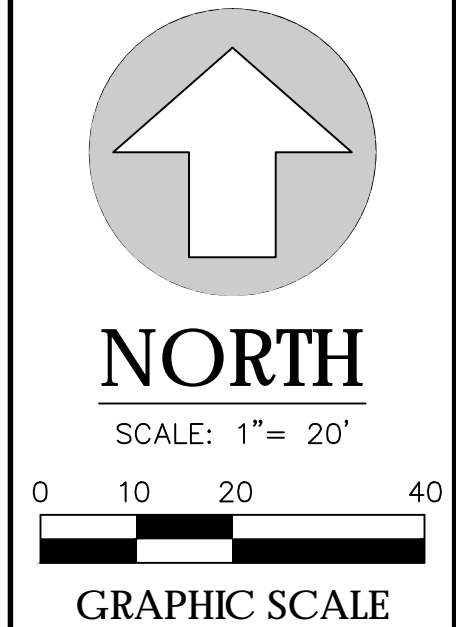
ENGINEER'S CERTIFICATION

1. **ENGINEER'S CERTIFICATION:**
I HEREBY CERTIFY THAT THE DESIGN OF THE STORMWATER MANAGEMENT SYSTEM FOR THE PROJECT KNOWN AS "HOLIDAY INN ALACHUA" MEETS ALL THE REQUIREMENTS AND HAS BEEN DESIGNED SUBSTANTIALLY IN ACCORDANCE WITH THE ALACHUA COUNTY STORMWATER MANAGEMENT ORDINANCE.

SERGIO REYES, P.E.

MAINTENANCE NOTES

1. **MAINTENANCE RESPONSIBILITY:**
THE PROPERTY OWNER WILL BE THE ENTITY RESPONSIBLE FOR THE MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM.
2. **MAINTENANCE PLAN:**
- A. BASINS SHALL BE MOWED REGULARLY TO AVOID EXCESSIVE VEGETATIVE GROWTH. MOWING SCHEDULE SHOULD BE MONTHLY DURING WINTER MONTHS AND MORE FREQUENTLY (BIWEEKLY) DURING SUMMER MONTHS.
 - B. BASIN SHALL BE CLEANED OUT ANNUALLY OF ANY ACCUMULATED SEDIMENTATION BUILDUP. IF THE BASINS ARE SHOWING EXCESSIVE SEDIMENTATION ACCUMULATION AT THE BASIN BOTTOM, THE BASIN BOTTOM SHALL BE SCRAPED CLEAN MORE OFTEN AS THE CONDITION DICTATES.
 - C. BASIN SIDE SLOPES SHALL BE MAINTAINED WITH A GOOD STAND OF GRASS. SEASONAL GRASSES SHALL BE PLANTED TO AVOID EROSION (WINTER RYE, SUMMER MILLET).
 - D. BASINS THAT DO NOT DRAWDOWN PROPERLY AND MAINTAIN STANDING WATER FOR AN EXTENDED PERIOD OF TIME MAY REQUIRE REMEDIAL. THE ENGINEER SHALL BE NOTIFIED TO HELP COORDINATE REMEDIAL ACTION IN THE EVENT THIS OCCURS.
 - E. THE REQUIRED LANDSCAPING SHALL BE MAINTAINED IN A SOUND CONDITION AT ALL TIMES. ANY DEAD LANDSCAPING MATERIALS SHALL BE REPLACED IMMEDIATELY TO ASSURE PUBLIC SAFETY.



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TEL: (352) 273-3241 FAX: (352) 273-3249
www.cds40.com mls@aol.com

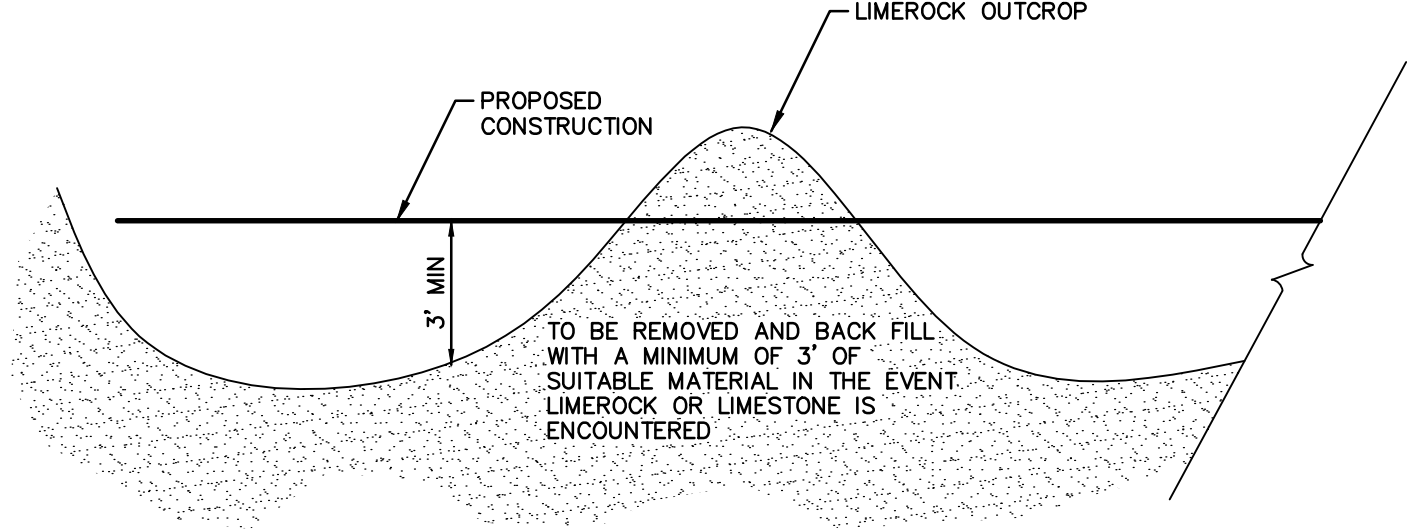
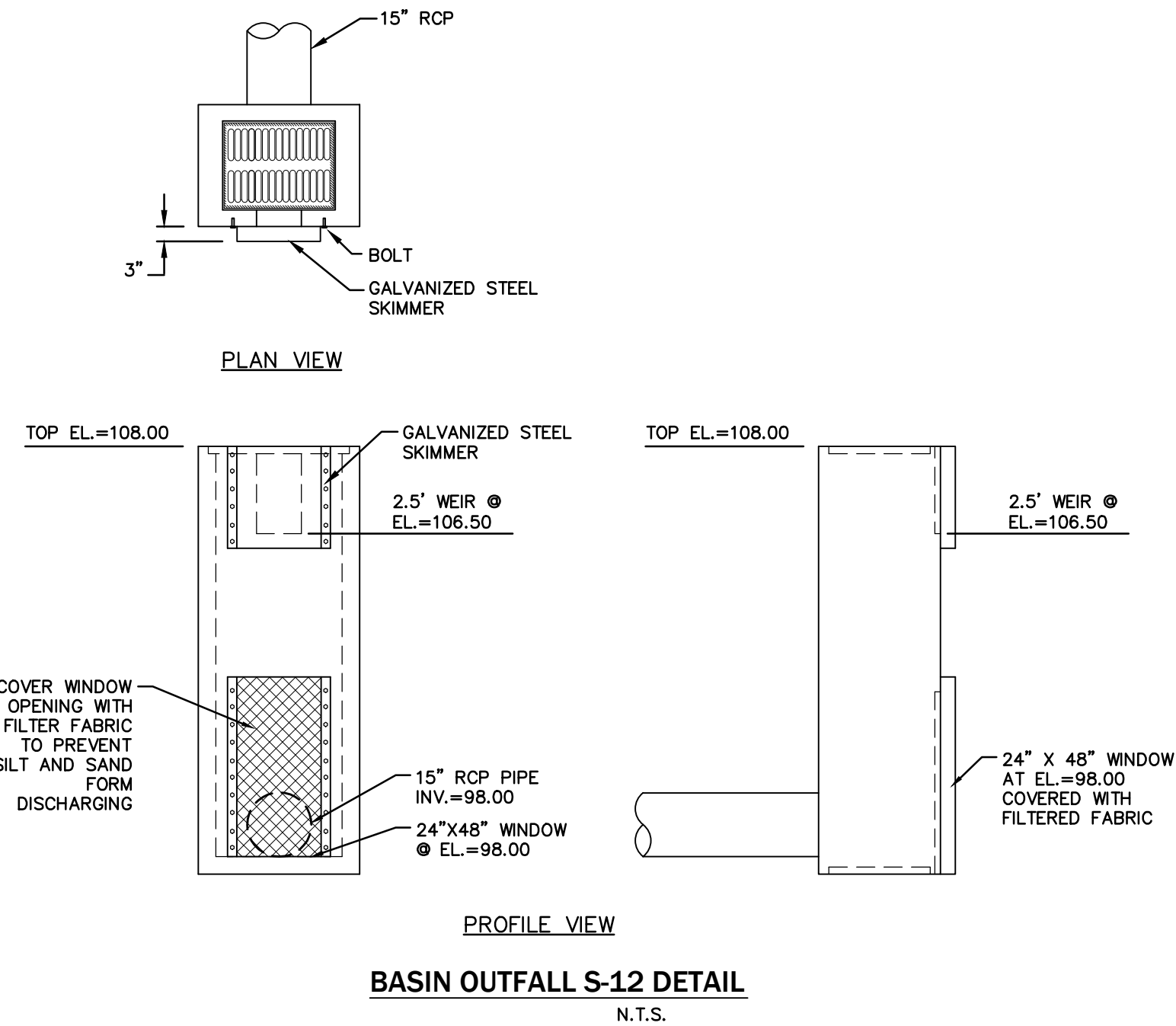
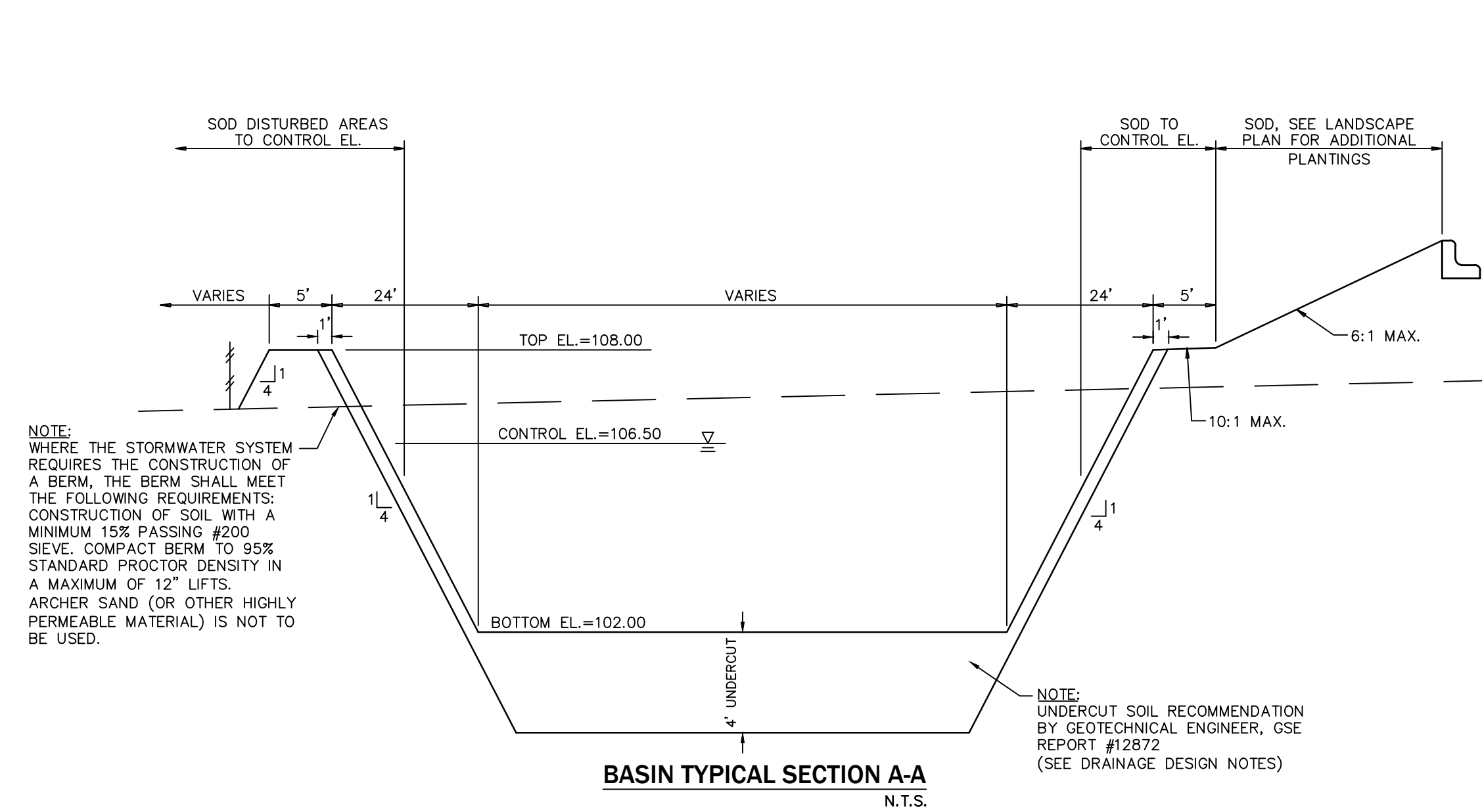
**HOLIDAY INN ALACHUA
CITY OF ALACHUA, FLORIDA**

BASIN DETAILS

Project: **CITY OF ALACHUA RESUBMITTAL**
Designed: Sergio Reyes, P.E.
Project No: 15-001
Checked: TAR
Date: 07/20/2016
Professional Engineer of Record: Sergio J. Reyes, P.E.
State of: FLORIDA
Engineer's License No: 15311

Project Phase: **CITY OF ALACHUA RESUBMITTAL**

Sheet No.: **C2.20**



- NOTES:**
- IF LIMESTONE OR LIMEROCK OUTCROP IS ENCOUNTERED DURING CONSTRUCTION OF THE BASIN, THE AREA WILL BE OVER-EXCAVATED A MINIMUM OF THREE FEET AND BACKFILLED WITH SUITABLE SOILS TO MEET THE SENSITIVE KARST AREA REQUIREMENTS.
 - IN THE EVENT A SINKHOLE, CAVITIES OR CHIMNEYS DEVELOPS WITHIN THE STORMWATER BASIN, THE FOLLOWING TREATMENT SHALL BE PERFORMED: THE OWNER SHALL NOTIFY SUWANNEE RIVER WATER MANAGEMENT DISTRICT PRIOR TO REMEDIAL ACTION UNLESS POSTPONING THE REPAIR ACTIVITY REPRESENTS AN ENDANGERMENT TO PUBLIC SAFETY. THE SINKHOLE SHALL BE BACKFILLED WITH A SANDY CLAY MIXTURE. THE SANDY CLAY SHALL BE PLACED IN SIX INCH LIFTS WITHIN THE FINAL THREE FEET OF FILL AND ROLLED WITH A HEAVILY LOADED RUBBER TIRE EQUIPMENT. SHOULD SINKHOLE ACTIVITY CONTINUE REPEATEDLY WITHIN A CONFINED AREA, THE OWNER SHALL CONSULT A GEOTECHNICAL ENGINEER TO DETERMINE WHETHER ANY ALTERNATIVE REMEDIAL MEASURES ARE REQUIRED.

LIMEROCK OUTCROP REMOVAL DETAIL
N.T.S.

Attachment C

Pre and Post-Development Conditions

PONDS 3.2 Model

PONDS Version 3.2.0239
Retention Pond Recovery - Refined Method
Copyright 2011
Devo Seereeram, Ph.D., P.E.

Project Data

Project Name: Pre Holiday Inn Alachua
Simulation Description: Pre Development Conditions
Project Number:
Engineer :
Supervising Engineer:
Date: 12-05-2016

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 0.00
Water Table Elevation, [WT] (ft datum): 0.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 0.00
Fillable Porosity, [n] (%): 0.00
Vertical infiltration was not considered.

Geometry Data

Equivalent Pond Length, [L] (ft): 0.0
Equivalent Pond Width, [W] (ft): 0.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

<u>Stage</u> <u>(ft datum)</u>	<u>Area</u> <u>(ft²)</u>
-----------------------------------	-----------------------------

Discharge Structures

Discharge Structure #1 is inactive
Discharge Structure #2 is inactive
Discharge Structure #3 is inactive

PONDS Version 3.2.0239
Retention Pond Recovery - Refined Method
Copyright 2011
Devo Seereeram, Ph.D., P.E.

Scenario Input Data

Scenario 1 :: FDOT 1 Hour - 1 hr - 100 yr

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

Basin Area (acres) 2.430
Time Of Concentration (minutes) 15.6
DCIA (%) 0.0
Curve Number 72.4
Design Rainfall Depth (inches) 4.4
Design Rainfall Duration (hours) 1.0
Shape Factor UHG 323
Rainfall Distribution FDOT 1 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 2 :: FDOT 2 Hour - 2 hr - 100 yr

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

Basin Area (acres) 2.430
Time Of Concentration (minutes) 15.6
DCIA (%) 0.0
Curve Number 72.4
Design Rainfall Depth (inches) 5.4
Design Rainfall Duration (hours) 2.0
Shape Factor UHG 323
Rainfall Distribution FDOT 2 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 3 :: FDOT 4 Hour - 4 hr - 100 yr

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

Basin Area (acres) 2.430
Time Of Concentration (minutes) 15.6
DCIA (%) 0.0
Curve Number 72.4
Design Rainfall Depth (inches) 6.7
Design Rainfall Duration (hours) 4.0
Shape Factor UHG 323
Rainfall Distribution FDOT 4 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

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Scenario Input Data (cont'd.)

Scenario 4 :: FDOT 8 Hour - 8 hr - 100 yr

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

Basin Area (acres) 2.430
Time Of Concentration (minutes) 15.6
DCIA (%) 0.0
Curve Number 72.4
Design Rainfall Depth (inches) 8.0
Design Rainfall Duration (hours) 8.0
Shape Factor UHG 323
Rainfall Distribution FDOT 8 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 5 :: FDOT 24 Hour - 24 hr - 100 yr

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

Basin Area (acres) 2.430
Time Of Concentration (minutes) 15.6
DCIA (%) 0.0
Curve Number 72.4
Design Rainfall Depth (inches) 11.0
Design Rainfall Duration (hours) 24.0
Shape Factor UHG 323
Rainfall Distribution FDOT 24 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 6 :: FDOT 72 Hour - 72 hr - 100 yr

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

Basin Area (acres) 2.430
Time Of Concentration (minutes) 15.6
DCIA (%) 0.0
Curve Number 72.4
Design Rainfall Depth (inches) 13.8
Design Rainfall Duration (hours) 72.0
Shape Factor UHG 323
Rainfall Distribution FDOT 72 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

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Scenario Input Data (cont'd.)

Scenario 7 :: FDOT 168 Hour - 168 hr - 100 yr

Hydrograph Type:	Inline SCS
• Modflow Routing:	Not routed
Repetitions:	1
Basin Area (acres)	2.430
Time Of Concentration (minutes)	15.6
DCIA (%)	0.0
Curve Number	72.4
Design Rainfall Depth (inches)	16.0
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 323
Rainfall Distribution	FDOT 168 Hour
Initial ground water level (ft datum)	0.00 (default)
No times after storm specified.	

Scenario 8 :: FDOT 240 Hour - 240 hr - 100 yr

Hydrograph Type:	Inline SCS
• Modflow Routing:	Not routed
Repetitions:	1
Basin Area (acres)	2.430
Time Of Concentration (minutes)	15.6
DCIA (%)	0.0
Curve Number	72.4
Design Rainfall Depth (inches)	18.0
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 323
Rainfall Distribution	FDOT 240 Hour
Initial ground water level (ft datum)	0.00 (default)
No times after storm specified.	

Worst Case Scenarios

Selection Criteria: <default - All scenarios with valid results>

Maximum Stage = none

Scenarios considered: None

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Summary of Results :: Scenario 1 :: FDOT 1 Hour - 1 hr - 100 yr

	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	0.760		7.4994	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.350			15714.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.384			15714.9
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	0.760		7.4994	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.350			15714.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.384			15714.9
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.

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Summary of Results :: Scenario 2 :: FDOT 2 Hour - 2 hr - 100 yr

	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	0.898		6.7995	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	3.352			22519.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	3.386			22519.9
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	0.898		6.7995	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	3.352			22519.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	3.386			22519.9
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.

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Summary of Results :: Scenario 3 :: FDOT 4 Hour - 4 hr - 100 yr

	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	2.523		5.2205	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	5.356			32142.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	5.391			32142.9
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	2.523		5.2205	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	5.356			32142.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	5.391			32142.9
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.

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Summary of Results :: Scenario 4 :: FDOT 8 Hour - 8 hr - 100 yr

	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	4.043		6.0489	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	9.365			41943.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	9.399			41943.3
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	4.043		6.0489	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	9.365			41943.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	9.399			41943.3
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.

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Summary of Results :: Scenario 5 :: FDOT 24 Hour - 24 hr - 100 yr

	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	12.025		2.1753	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	25.364			66329.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	25.398			66329.6
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	12.025		2.1753	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	25.364			66329.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	25.398			66329.6
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.

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Summary of Results :: Scenario 6 :: FDOT 72 Hour - 72 hr - 100 yr

	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	59.988		1.5604	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	73.361			89254.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	73.396			89254.4
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	59.988		1.5604	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	73.361			89254.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	73.396			89254.4
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 - 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.

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Summary of Results :: Scenario 7 :: FDOT 168 Hour - 168 hr - 100 yr

	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	159.992		1.1048	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	169.322			107838.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	169.391			107838.0
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	159.992		1.1048	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	169.322			107838.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	169.391			107838.0
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 - 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.

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Summary of Results :: Scenario 8 :: FDOT 240 Hour - 240 hr - 100 yr

	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	184.008		1.4499	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	241.301			124892.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	241.405			124892.0
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	184.008		1.4499	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	241.301			124892.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	241.405			124892.0
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 - 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.

Attachment D

Recovery Analysis for WQTV in 72 hrs, 1/2 Volume in 7 days, and Full Volume in 30 days

PONDS Model

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Project Data

Project Name: Holiday Inn Alachua
Simulation Description: Recovery
Project Number:
Engineer :
Supervising Engineer:
Date: 09-29-2016

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 97.75
Water Table Elevation, [WT] (ft datum): 98.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 10.00
Fillable Porosity, [n] (%): 25.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 7.5
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 22995.2

Geometry Data

Equivalent Pond Length, [L] (ft): 345.3
Equivalent Pond Width, [W] (ft): 57.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft ²)
102.00	11735.6
103.00	14396.1
103.05	14534.3
104.00	17160.8
105.00	20027.7
106.00	22995.2
107.00	26062.9
108.00	29230.9

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Scenario Input Data

Scenario 1 :: 13245 ft³ slug load

Hydrograph Type: Slug Load
Modflow Routing: Routed with infiltration

Treatment Volume (ft³) 13245

Initial ground water level (ft datum) 98.00 (default)

<u>Time After Storm Event (days)</u>	<u>Time After Storm Event (days)</u>
0.100	2.000
0.250	2.500
0.500	3.000
1.000	3.500
1.500	4.000

Worst Case Scenarios

Selection Criteria: <default - All scenarios with valid results>

Maximum Stage = 103.0119 ft datum

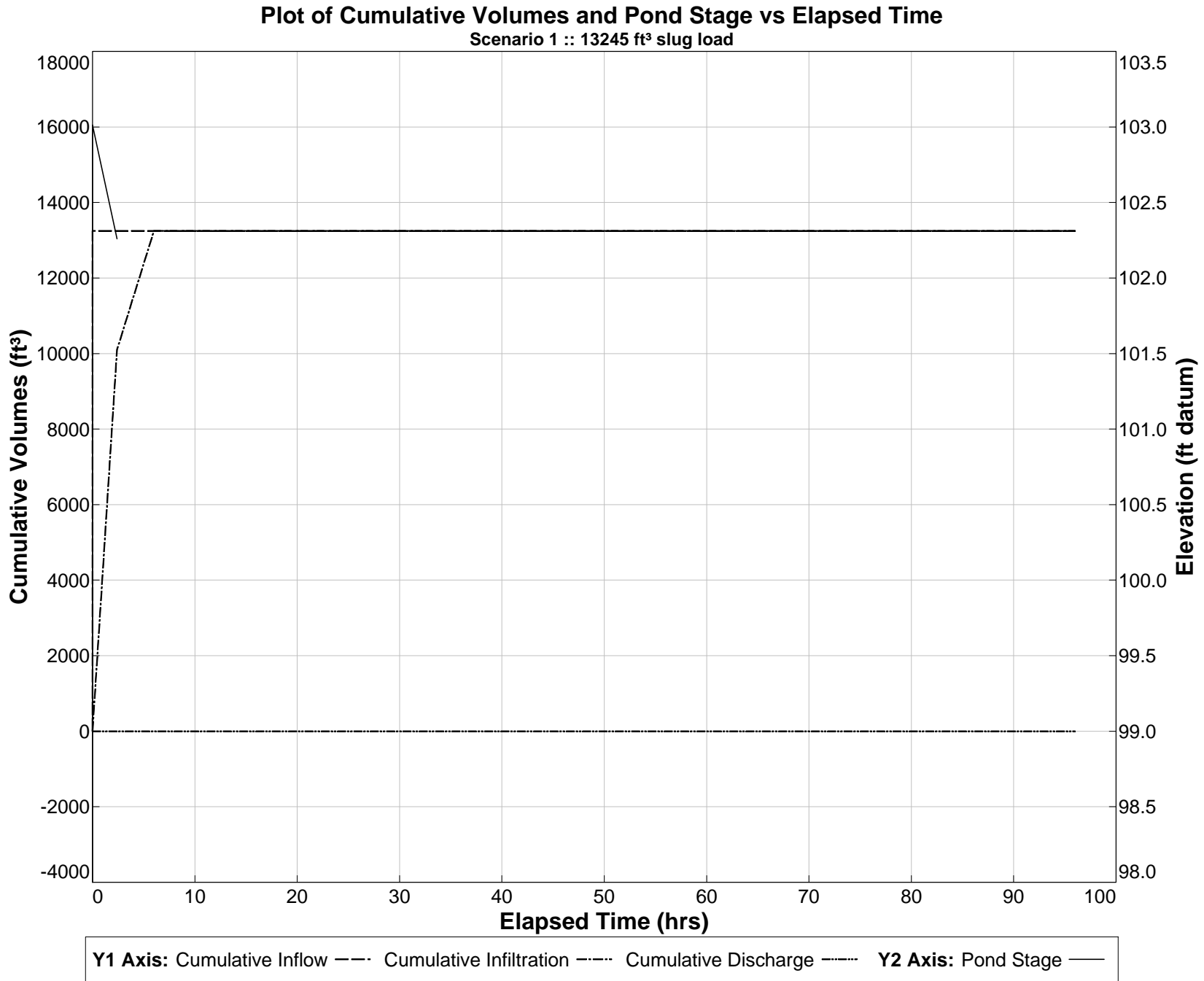
For scenario 1 at Time = 1.666667E-03 hours
Scenario Description: 13245 ft³ slug load

Scenarios considered: 1 to 1

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Detailed Results :: Scenario 1 :: 13245 ft³ slug load

Elapsed Time (hours)	Inflow Rate (ft ³ /s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft ³ /s)	Overflow Discharge (ft ³ /s)	Cumulative Inflow Volume (ft ³)	Cumulative Infiltration Volume (ft ³)	Cumulative Discharge Volume (ft ³)	Flow Type
0.000	2207.5000	0.0000	98.000	0.00000	0.00000	0.0	0.0	0.0	N.A.
0.002	2207.5000	0.0000	103.012	1.25258	0.00000	13245.0	7.5	0.0	U/P
2.400	0.0000	0.0000	102.260	0.70173	0.00000	13245.0	10102.6	0.0	U/P
6.000	0.0000	0.0000	----	----	----	13245.0	13245.0	0.0	dry
12.000	0.0000	0.0000	----	----	----	13245.0	13245.0	0.0	dry
24.000	0.0000	0.0000	----	----	----	13245.0	13245.0	0.0	dry
36.000	0.0000	0.0000	----	----	----	13245.0	13245.0	0.0	dry
48.000	0.0000	0.0000	----	----	----	13245.0	13245.0	0.0	dry
60.000	0.0000	0.0000	----	----	----	13245.0	13245.0	0.0	dry
72.000	0.0000	0.0000	----	----	----	13245.0	13245.0	0.0	dry
84.000	0.0000	0.0000	----	----	----	13245.0	13245.0	0.0	dry
96.000	0.0000	0.0000	----	----	----	13245.0	13245.0	0.0	dry



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Project Data

Project Name: Holiday Inn Alachua
Simulation Description: Recovery
Project Number:
Engineer :
Supervising Engineer:
Date: 12-05-2016

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 97.95
Water Table Elevation, [WT] (ft datum): 98.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 10.00
Fillable Porosity, [n] (%): 25.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 22995.16
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 7.5

Geometry Data

Equivalent Pond Length, [L] (ft): 345.3
Equivalent Pond Width, [W] (ft): 57.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft ²)
102.00	11735.6
103.00	14396.1
103.02	14451.3
104.00	17160.8
105.00	20027.7
106.00	22995.2
107.00	26062.9
108.00	29230.9

Discharge Structures

Discharge Structure #1 is active as orifice

Structure Parameters

Description: Discharge Orifice

Orifice elevation, (ft datum):	105.6667
Orifice coefficient:	4.9
Orifice area, (ft²):	.0873
Orifice exponent:	.5

Tailwater - disabled, free discharge

Discharge Structure #2 is inactive

Discharge Structure #3 is inactive

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Scenario Input Data

Scenario 1 :: FDOT 1 Hour - 1 hr - 100 yr

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

Basin Area (acres) 2.930
Time Of Concentration (minutes) 6.5
DCIA (%) 57.0
Curve Number 71.4
Design Rainfall Depth (inches) 4.4
Design Rainfall Duration (hours) 1.0
Shape Factor UHG 323
Rainfall Distribution FDOT 1 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

Scenario 2 :: FDOT 2 Hour - 2 hr - 100 yr

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

Basin Area (acres) 2.930
Time Of Concentration (minutes) 6.5
DCIA (%) 57.0
Curve Number 71.4
Design Rainfall Depth (inches) 5.4
Design Rainfall Duration (hours) 2.0
Shape Factor UHG 323
Rainfall Distribution FDOT 2 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

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Scenario Input Data (cont'd.)

Scenario 3 :: FDOT 4 Hour - 4 hr - 100 yr

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

Basin Area (acres) 2.930
 Time Of Concentration (minutes) 6.5
 DCIA (%) 57.0
 Curve Number 71.4
 Design Rainfall Depth (inches) 6.7
 Design Rainfall Duration (hours) 4.0
 Shape Factor UHG 323
 Rainfall Distribution FDOT 4 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

Scenario 4 :: FDOT 8 Hour - 8 hr - 100 yr

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

Basin Area (acres) 2.930
 Time Of Concentration (minutes) 6.5
 DCIA (%) 57.0
 Curve Number 71.4
 Design Rainfall Depth (inches) 8.0
 Design Rainfall Duration (hours) 8.0
 Shape Factor UHG 323
 Rainfall Distribution FDOT 8 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

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Scenario Input Data (cont'd.)

Scenario 5 :: FDOT 24 Hour - 24 hr - 100 yr

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

Basin Area (acres) 2.930
Time Of Concentration (minutes) 6.5
DCIA (%) 57.0
Curve Number 71.4
Design Rainfall Depth (inches) 11.0
Design Rainfall Duration (hours) 24.0
Shape Factor UHG 323
Rainfall Distribution FDOT 24 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

Scenario 6 :: FDOT 72 Hour - 72 hr - 100 yr

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

Basin Area (acres) 2.930
Time Of Concentration (minutes) 6.5
DCIA (%) 57.0
Curve Number 71.4
Design Rainfall Depth (inches) 13.8
Design Rainfall Duration (hours) 72.0
Shape Factor UHG 323
Rainfall Distribution FDOT 72 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

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Scenario Input Data (cont'd.)

Scenario 7 :: FDOT 168 Hour - 168 hr - 100 yr

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

Basin Area (acres) 2.930
Time Of Concentration (minutes) 6.5
DCIA (%) 57.0
Curve Number 71.4
Design Rainfall Depth (inches) 16.0
Design Rainfall Duration (hours) 168.0
Shape Factor UHG 323
Rainfall Distribution FDOT 168 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

Scenario 8 :: FDOT 240 Hour - 240 hr - 100 yr

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

Basin Area (acres) 2.930
Time Of Concentration (minutes) 6.5
DCIA (%) 57.0
Curve Number 71.4
Design Rainfall Depth (inches) 18.0
Design Rainfall Duration (hours) 240.0
Shape Factor UHG 323
Rainfall Distribution FDOT 240 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

Worst Case Scenarios

Selection Criteria: <default - All scenarios with valid results>

Maximum Stage = 106.6708 ft datum

For scenario 7 at Time = 160.1602 hours

Scenario Description: FDOT 168 Hour - 168 hr - 100 yr

Scenarios considered: 1 to 8

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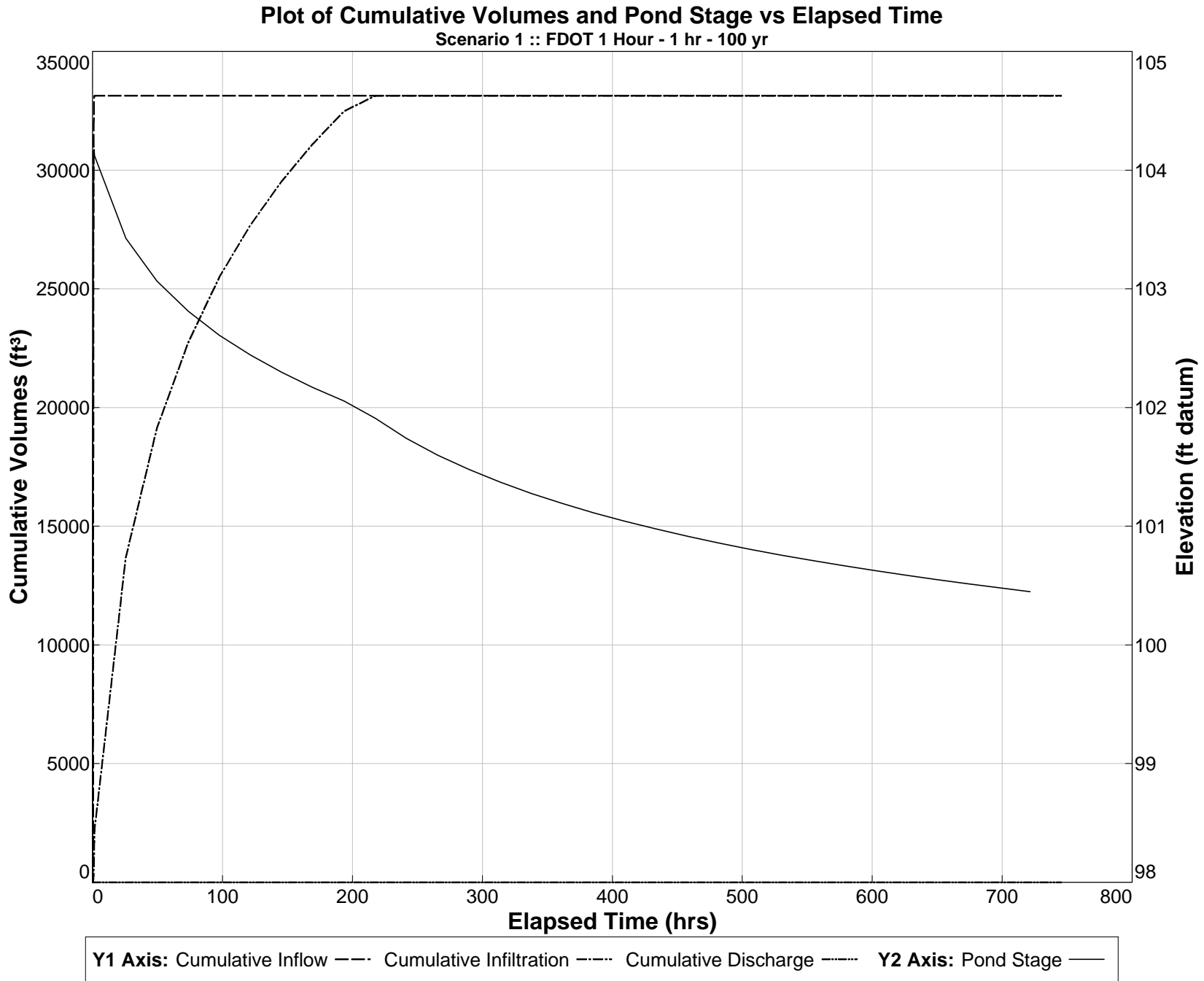
Detailed Results :: Scenario 1 :: FDOT 1 Hour - 1 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
0.000	0.0000	0.0000	98.000	0.00000	0.00000	0.0	0.0	0.0	N.A.
0.014	0.0000	0.0000	98.000	0.00000	0.00000	0.0	0.0	0.0	U
0.029	0.0000	0.0000	98.000	0.00000	0.00000	0.0	0.0	0.0	U
0.043	0.0000	0.0000	98.000	0.00017	0.00000	0.0	0.0	0.0	U
0.058	0.0007	0.0000	98.009	0.00143	0.00000	0.0	0.0	0.0	U
0.072	0.0044	0.0000	98.079	0.00597	0.00000	0.1	0.1	0.0	U
0.087	0.0145	0.0000	98.342	0.01747	0.00000	0.6	0.6	0.0	U
0.101	0.0365	0.0000	99.051	0.04419	0.00000	2.0	2.0	0.0	U
0.116	0.0893	0.0000	100.801	0.06278	0.00000	5.3	5.3	0.0	U
0.130	0.1885	0.0000	102.000	0.04160	0.00000	12.5	8.5	0.0	U/S
0.145	0.3526	0.0000	102.001	0.02105	0.00000	26.6	9.6	0.0	S
0.159	0.5892	0.0000	102.003	0.02211	0.00000	51.2	10.7	0.0	S
0.174	0.8665	0.0000	102.007	0.02324	0.00000	89.1	11.9	0.0	S
0.188	1.1613	0.0000	102.011	0.02443	0.00000	142.0	13.1	0.0	S
0.203	1.4607	0.0000	102.017	0.02569	0.00000	210.4	14.4	0.0	S
0.217	1.7976	0.0000	102.024	0.02702	0.00000	295.4	15.8	0.0	S
0.232	2.2026	0.0000	102.033	0.02843	0.00000	399.7	17.3	0.0	S
0.246	2.7105	0.0000	102.043	0.02994	0.00000	527.8	18.8	0.0	S
0.261	3.3146	0.0000	102.056	0.03155	0.00000	685.0	20.4	0.0	S
0.275	3.9234	0.0000	102.072	0.03327	0.00000	873.7	22.1	0.0	S
0.290	4.4994	0.0000	102.090	0.03510	0.00000	1093.4	23.9	0.0	S
0.304	5.0398	0.0000	102.111	0.03707	0.00000	1342.2	25.7	0.0	S
0.319	5.6269	0.0000	102.134	0.03917	0.00000	1620.4	27.7	0.0	S
0.333	6.3369	0.0000	102.159	0.04143	0.00000	1932.4	29.8	0.0	S
0.348	7.2498	0.0000	102.188	0.04386	0.00000	2286.7	32.0	0.0	S
0.362	8.3486	0.0000	102.221	0.04650	0.00000	2693.5	34.4	0.0	S
0.377	9.4901	0.0000	102.258	0.04937	0.00000	3158.8	36.9	0.0	S
0.391	10.6085	0.0000	102.300	0.05248	0.00000	3682.9	39.6	0.0	S
0.406	11.6567	0.0000	102.346	0.05585	0.00000	4263.6	42.4	0.0	S
0.420	12.6369	0.0000	102.396	0.05950	0.00000	4897.2	45.4	0.0	S
0.435	13.5493	0.0000	102.449	0.06347	0.00000	5580.1	48.6	0.0	S
0.449	14.4079	0.0000	102.504	0.06776	0.00000	6309.2	52.0	0.0	S
0.464	15.2182	0.0000	102.563	0.07242	0.00000	7081.9	55.6	0.0	S
0.478	15.9783	0.0000	102.624	0.07746	0.00000	7895.5	59.6	0.0	S
0.493	16.6886	0.0000	102.687	0.08292	0.00000	8747.5	63.7	0.0	S
0.507	17.3315	0.0000	102.751	0.08883	0.00000	9634.7	68.2	0.0	S
0.522	17.8763	0.0000	102.817	0.09522	0.00000	10552.9	73.0	0.0	S
0.536	18.2788	0.0000	102.884	0.10212	0.00000	11495.8	78.1	0.0	S
0.551	18.5232	0.0000	102.952	0.10956	0.00000	12455.6	83.7	0.0	S
0.565	18.6555	0.0000	103.019	0.11756	0.00000	13425.3	89.6	0.0	S
0.580	18.7468	0.0000	103.085	0.12618	0.00000	14400.7	95.9	0.0	S
0.594	18.8335	0.0000	103.152	0.13544	0.00000	15380.8	102.7	0.0	S
0.609	18.8804	0.0000	103.217	0.14540	0.00000	16364.4	110.0	0.0	S
0.623	18.8114	0.0000	103.282	0.15609	0.00000	17347.4	117.9	0.0	S
0.638	18.5498	0.0000	103.345	0.16753	0.00000	18321.8	126.3	0.0	S
0.652	18.0442	0.0000	103.406	0.17974	0.00000	19276.1	135.4	0.0	S
0.666	17.4053	0.0000	103.465	0.19275	0.00000	20200.7	145.1	0.0	S
0.681	16.7610	0.0000	103.521	0.20659	0.00000	21091.7	155.5	0.0	S
0.695	16.1801	0.0000	103.574	0.22129	0.00000	21950.8	166.6	0.0	S
0.710	15.6499	0.0000	103.625	0.23690	0.00000	22781.0	178.6	0.0	S
0.724	15.1216	0.0000	103.674	0.25344	0.00000	23583.5	191.3	0.0	S
0.739	14.5435	0.0000	103.720	0.27093	0.00000	24357.1	205.0	0.0	S
0.753	13.8757	0.0000	103.765	0.28938	0.00000	25098.3	219.6	0.0	S
0.768	13.1861	0.0000	103.806	0.30879	0.00000	25804.1	235.2	0.0	S
0.782	12.5334	0.0000	103.845	0.32917	0.00000	26474.8	251.8	0.0	S
0.797	11.9526	0.0000	103.882	0.35053	0.00000	27113.4	269.5	0.0	S
0.811	11.3790	0.0000	103.917	0.37284	0.00000	27721.9	288.4	0.0	S
0.826	10.7513	0.0000	103.950	0.39607	0.00000	28299.1	308.4	0.0	S
0.840	9.9975	0.0000	103.981	0.42015	0.00000	28840.2	329.7	0.0	S
0.855	9.0710	0.0000	104.008	0.44496	0.00000	29337.5	352.3	0.0	S
0.869	8.1081	0.0000	104.033	0.47042	0.00000	29785.6	376.1	0.0	S
0.884	7.1936	0.0000	104.055	0.49641	0.00000	30184.6	401.3	0.0	S
0.898	6.3830	0.0000	104.073	0.52284	0.00000	30538.7	427.9	0.0	S
0.913	5.6745	0.0000	104.090	0.54960	0.00000	30853.2	455.9	0.0	S
0.927	5.0571	0.0000	104.104	0.57657	0.00000	31133.0	485.2	0.0	S
0.942	4.5116	0.0000	104.117	0.60360	0.00000	31382.6	516.0	0.0	S
0.956	4.0183	0.0000	104.128	0.63054	0.00000	31605.0	548.2	0.0	S
0.971	3.5778	0.0000	104.137	0.65722	0.00000	31803.2	581.8	0.0	S
0.985	3.1861	0.0000	104.145	0.68347	0.00000	31979.6	616.8	0.0	S
1.000	2.8424	0.0000	104.152	0.70909	0.00000	32136.8	653.1	0.0	S
1.014	2.5250	0.0000	104.158	0.73388	0.00000	32276.8	690.7	0.0	S
1.029	2.2396	0.0000	104.163	0.75766	0.00000	32401.0	729.7	0.0	S
1.043	1.9718	0.0000	104.167	0.78020	0.00000	32510.8	769.8	0.0	S
1.058	1.7132	0.0000	104.170	0.80131	0.00000	32607.0	811.0	0.0	S

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Detailed Results (cont,d.) :: Scenario 1 :: FDOT 1 Hour - 1 hr - 100 yr

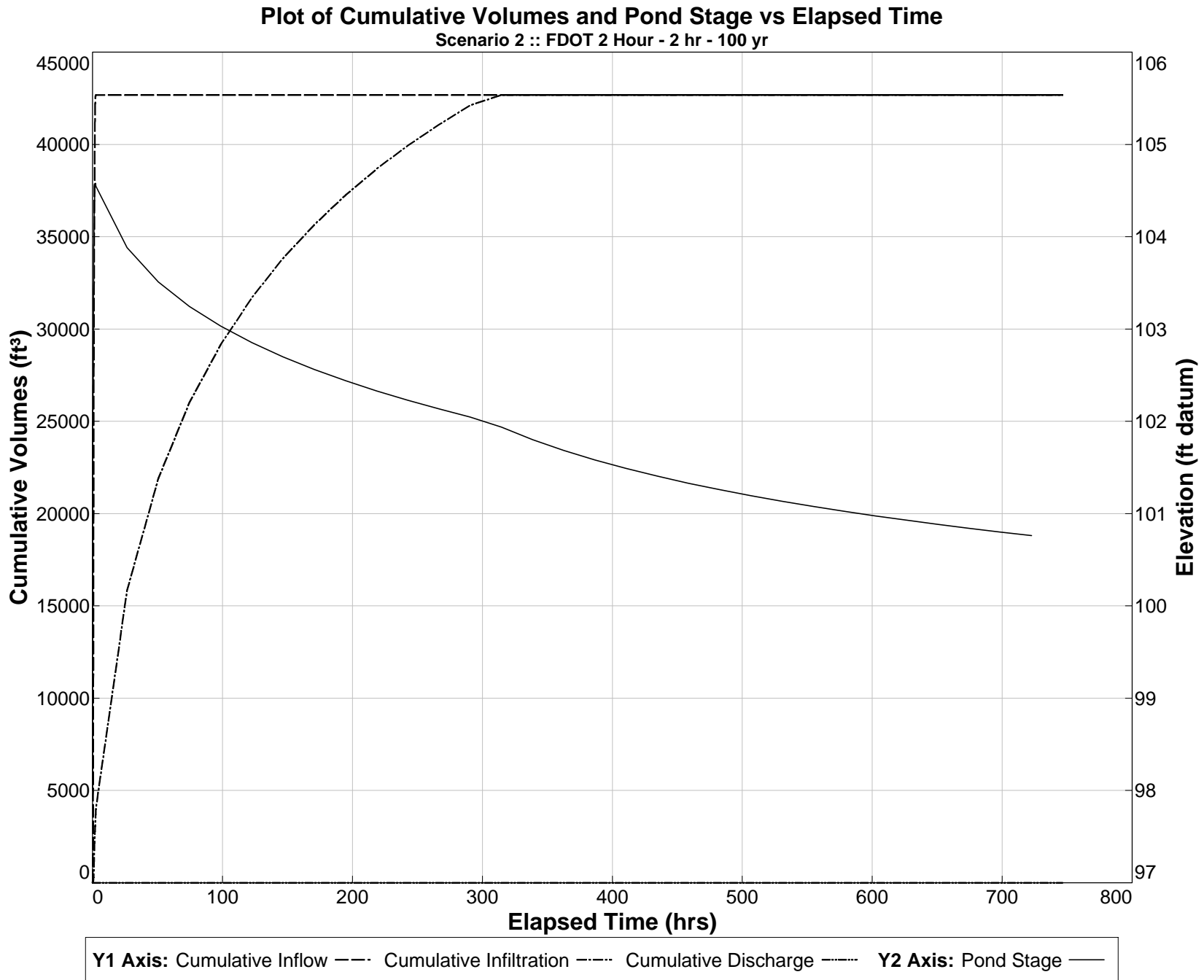
Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
1.072	1.4768	0.0000	104.172	0.82078	0.00000	32690.1	853.4	0.0	S
1.087	1.2649	0.0000	104.174	0.83844	0.00000	32761.6	896.7	0.0	S
1.101	1.0792	0.0000	104.175	0.85413	0.00000	32822.8	940.8	0.0	S
1.116	0.9177	0.0000	104.175	0.86769	0.00000	32874.9	985.8	0.0	S
1.130	0.7786	0.0000	104.175	0.87901	0.00000	32919.1	1031.4	0.0	S
1.145	0.6588	0.0000	104.174	0.88799	0.00000	32956.6	1077.5	0.0	S
1.159	0.5558	0.0000	104.174	0.89454	0.00000	32988.3	1124.0	0.0	S
1.174	0.4682	0.0000	104.172	0.89862	0.00000	33015.0	1170.8	0.0	S
1.188	0.3925	0.0000	104.171	0.90022	0.00000	33037.4	1217.7	0.0	S
1.203	0.3268	0.0000	104.169	0.89934	0.00000	33056.2	1264.7	0.0	S
1.217	0.2695	0.0000	104.168	0.89604	0.00000	33071.7	1311.6	0.0	S
1.232	0.2215	0.0000	104.166	0.89037	0.00000	33084.5	1358.2	0.0	S
1.246	0.1804	0.0000	104.164	0.88242	0.00000	33095.0	1404.4	0.0	S
1.261	0.1455	0.0000	104.162	0.87233	0.00000	33103.5	1450.2	0.0	S
1.275	0.1166	0.0000	104.159	0.86022	0.00000	33110.3	1495.4	0.0	S
1.290	0.0928	0.0000	104.157	0.84625	0.00000	33115.8	1540.0	0.0	S
1.304	0.0731	0.0000	104.155	0.83059	0.00000	33120.1	1583.7	0.0	S
1.318	0.0574	0.0000	104.153	0.81344	0.00000	33123.5	1626.6	0.0	S
1.333	0.0447	0.0000	104.150	0.79498	0.00000	33126.2	1668.6	0.0	S
1.347	0.0347	0.0000	104.148	0.77541	0.00000	33128.3	1709.5	0.0	S
1.362	0.0271	0.0000	104.146	0.75493	0.00000	33129.9	1749.5	0.0	S
1.376	0.0217	0.0000	104.144	0.73374	0.00000	33131.2	1788.3	0.0	S
1.391	0.0173	0.0000	104.142	0.71202	0.00000	33132.2	1826.0	0.0	S
1.405	0.0136	0.0000	104.140	0.68996	0.00000	33133.0	1862.6	0.0	S
1.420	0.0105	0.0000	104.138	0.66775	0.00000	33133.6	1898.0	0.0	S
1.434	0.0080	0.0000	104.136	0.64553	0.00000	33134.1	1932.2	0.0	S
1.449	0.0059	0.0000	104.134	0.62348	0.00000	33134.5	1965.3	0.0	S
1.463	0.0042	0.0000	104.132	0.60173	0.00000	33134.7	1997.3	0.0	S
1.478	0.0030	0.0000	104.130	0.58041	0.00000	33134.9	2028.1	0.0	S
1.492	0.0020	0.0000	104.129	0.55964	0.00000	33135.0	2057.8	0.0	S
1.507	0.0012	0.0000	104.127	0.53951	0.00000	33135.1	2086.5	0.0	S
1.521	0.0007	0.0000	104.126	0.52013	0.00000	33135.2	2114.1	0.0	S
1.536	0.0004	0.0000	104.124	0.50156	0.00000	33135.2	2140.7	0.0	S
1.550	0.0001	0.0000	104.123	0.48388	0.00000	33135.2	2166.4	0.0	S
1.565	0.0000	0.0000	104.121	0.46712	0.00000	33135.2	2191.2	0.0	S
1.579	0.0000	0.0000	104.120	0.45133	0.00000	33135.2	2215.2	0.0	S
1.594	0.0000	0.0000	104.118	0.44350	0.00000	33135.2	2238.3	0.0	S
25.594	0.0000	0.0000	103.425	0.09774	0.00000	33135.2	13704.0	0.0	S
49.594	0.0000	0.0000	103.065	0.05232	0.00000	33135.2	19128.0	0.0	S
73.594	0.0000	0.0000	102.811	0.03677	0.00000	33135.2	22744.6	0.0	S
97.594	0.0000	0.0000	102.610	0.02860	0.00000	33135.2	25482.4	0.0	S
121.594	0.0000	0.0000	102.442	0.02343	0.00000	33135.2	27687.5	0.0	S
145.594	0.0000	0.0000	102.297	0.01980	0.00000	33135.2	29530.4	0.0	S
169.594	0.0000	0.0000	102.169	0.01710	0.00000	33135.2	31109.1	0.0	S
193.594	0.0000	0.0000	102.055	0.01173	0.00000	33135.2	32485.8	0.0	S
217.594	0.0000	0.0000	101.908	0.00376	0.00000	33135.2	33135.2	0.0	S
241.594	0.0000	0.0000	101.740	0.00000	0.00000	33135.2	33135.2	0.0	S
265.594	0.0000	0.0000	101.599	0.00000	0.00000	33135.2	33135.2	0.0	S
289.594	0.0000	0.0000	101.478	0.00000	0.00000	33135.2	33135.2	0.0	S
313.594	0.0000	0.0000	101.371	0.00000	0.00000	33135.2	33135.2	0.0	S
337.594	0.0000	0.0000	101.276	0.00000	0.00000	33135.2	33135.2	0.0	S
361.594	0.0000	0.0000	101.191	0.00000	0.00000	33135.2	33135.2	0.0	S
385.594	0.0000	0.0000	101.113	0.00000	0.00000	33135.2	33135.2	0.0	S
409.594	0.0000	0.0000	101.042	0.00000	0.00000	33135.2	33135.2	0.0	S
433.594	0.0000	0.0000	100.977	0.00000	0.00000	33135.2	33135.2	0.0	S
457.594	0.0000	0.0000	100.916	0.00000	0.00000	33135.2	33135.2	0.0	S
481.594	0.0000	0.0000	100.859	0.00000	0.00000	33135.2	33135.2	0.0	S
505.594	0.0000	0.0000	100.807	0.00000	0.00000	33135.2	33135.2	0.0	S
529.594	0.0000	0.0000	100.758	0.00000	0.00000	33135.2	33135.2	0.0	S
553.594	0.0000	0.0000	100.711	0.00000	0.00000	33135.2	33135.2	0.0	S
577.594	0.0000	0.0000	100.667	0.00000	0.00000	33135.2	33135.2	0.0	S
601.594	0.0000	0.0000	100.626	0.00000	0.00000	33135.2	33135.2	0.0	S
625.594	0.0000	0.0000	100.587	0.00000	0.00000	33135.2	33135.2	0.0	S
649.594	0.0000	0.0000	100.550	0.00000	0.00000	33135.2	33135.2	0.0	S
673.594	0.0000	0.0000	100.515	0.00000	0.00000	33135.2	33135.2	0.0	S
697.594	0.0000	0.0000	100.481	0.00000	0.00000	33135.2	33135.2	0.0	S
721.594	0.0000	0.0000	100.449	0.00000	0.00000	33135.2	33135.2	0.0	S
745.594	0.0000	0.0000	100.418	----	----	33135.2	33135.2	0.0	N.A.



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Detailed Results (cont,d.) :: Scenario 2 :: FDOT 2 Hour - 2 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
2.144	0.5357	0.0000	104.580	0.48658	0.00000	42479.5	3196.3	0.0	S
2.159	0.4684	0.0000	104.580	0.48867	0.00000	42505.6	3221.8	0.0	S
2.173	0.4102	0.0000	104.580	0.49051	0.00000	42528.6	3247.3	0.0	S
2.188	0.3592	0.0000	104.580	0.49211	0.00000	42548.6	3272.9	0.0	S
2.202	0.3147	0.0000	104.579	0.49345	0.00000	42566.2	3298.6	0.0	S
2.217	0.2729	0.0000	104.579	0.49454	0.00000	42581.5	3324.4	0.0	S
2.231	0.2378	0.0000	104.578	0.49538	0.00000	42594.9	3350.2	0.0	S
2.246	0.2067	0.0000	104.577	0.49596	0.00000	42606.4	3376.1	0.0	S
2.260	0.1790	0.0000	104.577	0.49630	0.00000	42616.5	3402.0	0.0	S
2.275	0.1544	0.0000	104.576	0.49639	0.00000	42625.2	3427.9	0.0	S
2.289	0.1326	0.0000	104.575	0.49623	0.00000	42632.7	3453.8	0.0	S
2.304	0.1133	0.0000	104.574	0.49583	0.00000	42639.1	3479.6	0.0	S
2.318	0.0963	0.0000	104.573	0.49519	0.00000	42644.6	3505.5	0.0	S
2.333	0.0813	0.0000	104.571	0.49432	0.00000	42649.2	3531.3	0.0	S
2.347	0.0682	0.0000	104.570	0.49323	0.00000	42653.1	3557.1	0.0	S
2.362	0.0568	0.0000	104.569	0.49192	0.00000	42656.4	3582.7	0.0	S
2.376	0.0472	0.0000	104.568	0.49041	0.00000	42659.1	3608.4	0.0	S
2.391	0.0387	0.0000	104.567	0.48869	0.00000	42661.3	3633.9	0.0	S
2.405	0.0312	0.0000	104.565	0.48677	0.00000	42663.1	3659.4	0.0	S
2.420	0.0247	0.0000	104.564	0.48467	0.00000	42664.6	3684.7	0.0	S
2.434	0.0194	0.0000	104.563	0.48240	0.00000	42665.7	3709.9	0.0	S
2.449	0.0147	0.0000	104.562	0.47995	0.00000	42666.6	3735.0	0.0	S
2.463	0.0108	0.0000	104.560	0.47735	0.00000	42667.3	3760.0	0.0	S
2.478	0.0076	0.0000	104.559	0.47460	0.00000	42667.8	3784.8	0.0	S
2.492	0.0051	0.0000	104.558	0.47172	0.00000	42668.1	3809.5	0.0	S
2.507	0.0032	0.0000	104.556	0.46870	0.00000	42668.3	3834.0	0.0	S
2.521	0.0019	0.0000	104.555	0.46557	0.00000	42668.5	3858.4	0.0	S
2.536	0.0009	0.0000	104.554	0.46232	0.00000	42668.5	3882.6	0.0	S
2.550	0.0003	0.0000	104.552	0.45898	0.00000	42668.6	3906.6	0.0	S
2.565	0.0000	0.0000	104.551	0.45555	0.00000	42668.6	3930.5	0.0	S
2.579	0.0000	0.0000	104.550	0.45204	0.00000	42668.6	3954.1	0.0	S
2.594	0.0000	0.0000	104.549	0.45008	0.00000	42668.6	3977.6	0.0	S
26.594	0.0000	0.0000	103.882	0.10374	0.00000	42668.6	15836.8	0.0	S
50.594	0.0000	0.0000	103.510	0.05891	0.00000	42668.6	21903.5	0.0	S
74.594	0.0000	0.0000	103.243	0.04196	0.00000	42668.6	26016.9	0.0	S
98.594	0.0000	0.0000	103.031	0.03284	0.00000	42668.6	29153.3	0.0	S
122.594	0.0000	0.0000	102.853	0.02701	0.00000	42668.6	31691.2	0.0	S
146.594	0.0000	0.0000	102.699	0.02290	0.00000	42668.6	33819.9	0.0	S
170.594	0.0000	0.0000	102.562	0.01984	0.00000	42668.6	35648.8	0.0	S
194.594	0.0000	0.0000	102.440	0.01745	0.00000	42668.6	37247.5	0.0	S
218.594	0.0000	0.0000	102.329	0.01553	0.00000	42668.6	38663.4	0.0	S
242.594	0.0000	0.0000	102.228	0.01395	0.00000	42668.6	39930.4	0.0	S
266.594	0.0000	0.0000	102.134	0.01263	0.00000	42668.6	41073.8	0.0	S
290.594	0.0000	0.0000	102.047	0.00923	0.00000	42668.6	42113.1	0.0	S
314.594	0.0000	0.0000	101.936	0.00321	0.00000	42668.6	42668.6	0.0	S
338.594	0.0000	0.0000	101.800	0.00000	0.00000	42668.6	42668.6	0.0	S
362.594	0.0000	0.0000	101.683	0.00000	0.00000	42668.6	42668.6	0.0	S
386.594	0.0000	0.0000	101.581	0.00000	0.00000	42668.6	42668.6	0.0	S
410.594	0.0000	0.0000	101.489	0.00000	0.00000	42668.6	42668.6	0.0	S
434.594	0.0000	0.0000	101.406	0.00000	0.00000	42668.6	42668.6	0.0	S
458.594	0.0000	0.0000	101.329	0.00000	0.00000	42668.6	42668.6	0.0	S
482.594	0.0000	0.0000	101.259	0.00000	0.00000	42668.6	42668.6	0.0	S
506.594	0.0000	0.0000	101.194	0.00000	0.00000	42668.6	42668.6	0.0	S
530.594	0.0000	0.0000	101.134	0.00000	0.00000	42668.6	42668.6	0.0	S
554.594	0.0000	0.0000	101.077	0.00000	0.00000	42668.6	42668.6	0.0	S
578.594	0.0000	0.0000	101.024	0.00000	0.00000	42668.6	42668.6	0.0	S
602.594	0.0000	0.0000	100.975	0.00000	0.00000	42668.6	42668.6	0.0	S
626.594	0.0000	0.0000	100.928	0.00000	0.00000	42668.6	42668.6	0.0	S
650.594	0.0000	0.0000	100.883	0.00000	0.00000	42668.6	42668.6	0.0	S
674.594	0.0000	0.0000	100.841	0.00000	0.00000	42668.6	42668.6	0.0	S
698.594	0.0000	0.0000	100.801	0.00000	0.00000	42668.6	42668.6	0.0	S
722.594	0.0000	0.0000	100.763	0.00000	0.00000	42668.6	42668.6	0.0	S
746.594	0.0000	0.0000	100.726	----	----	42668.6	42668.6	0.0	N.A.



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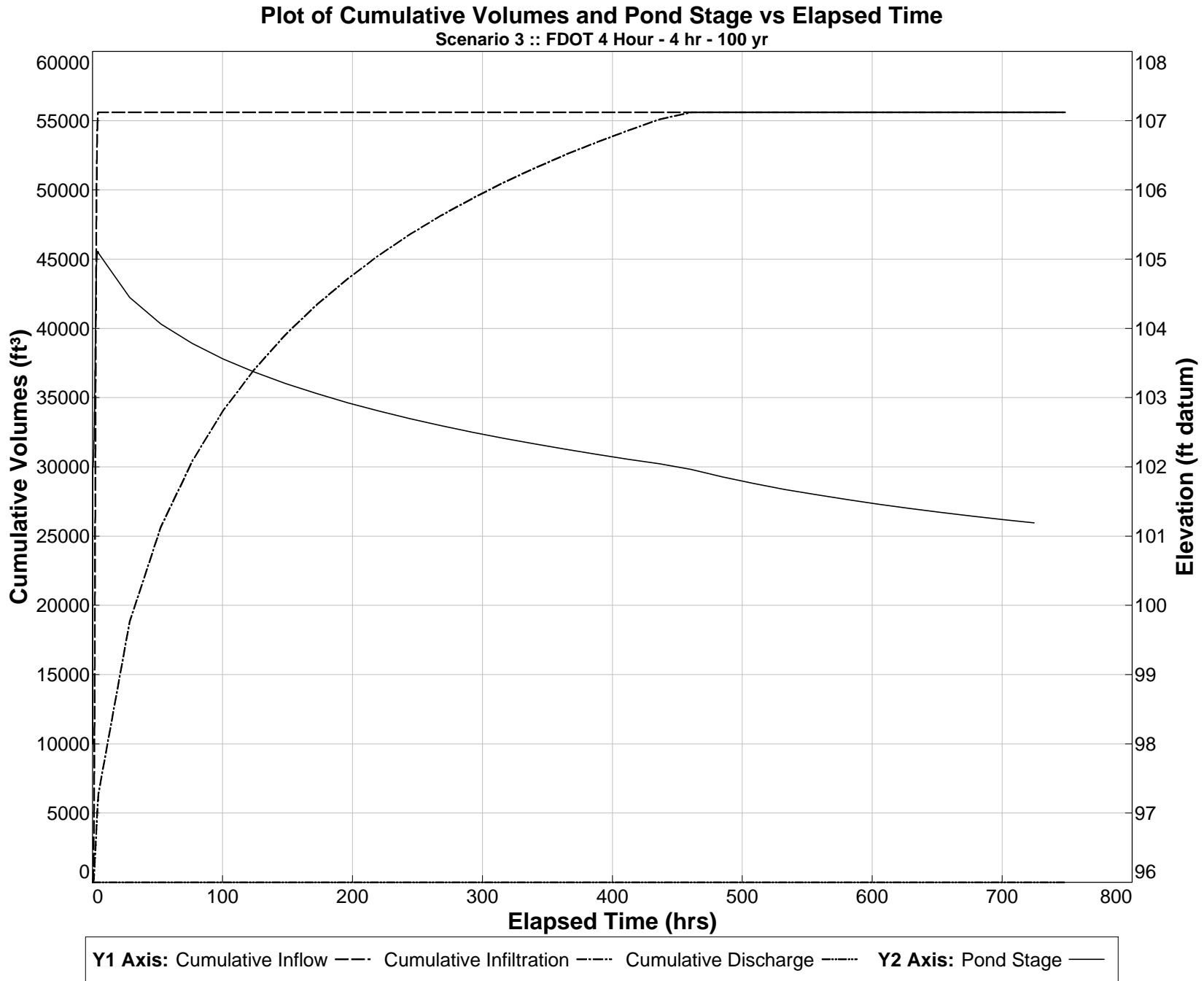
Detailed Results (cont,d.) :: Scenario 3 :: FDOT 4 Hour - 4 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
3.217	2.4307	0.0000	104.977	0.53762	0.00000	51299.2	4318.8	0.0	S
3.231	2.3574	0.0000	104.982	0.53313	0.00000	51424.0	4346.7	0.0	S
3.246	2.2923	0.0000	104.987	0.52866	0.00000	51545.3	4374.4	0.0	S
3.260	2.2341	0.0000	104.991	0.52423	0.00000	51663.4	4401.9	0.0	S
3.274	2.1822	0.0000	104.996	0.51986	0.00000	51778.5	4429.1	0.0	S
3.289	2.1359	0.0000	105.000	0.51555	0.00000	51891.2	4456.1	0.0	S
3.303	2.0946	0.0000	105.004	0.51131	0.00000	52001.5	4482.9	0.0	S
3.318	2.0579	0.0000	105.008	0.50716	0.00000	52109.8	4509.4	0.0	S
3.332	2.0251	0.0000	105.012	0.50310	0.00000	52216.3	4535.8	0.0	S
3.347	1.9963	0.0000	105.016	0.49915	0.00000	52321.1	4561.9	0.0	S
3.361	1.9711	0.0000	105.020	0.49530	0.00000	52424.6	4587.8	0.0	S
3.376	1.9495	0.0000	105.024	0.49156	0.00000	52526.9	4613.6	0.0	S
3.390	1.9303	0.0000	105.027	0.48795	0.00000	52628.0	4639.1	0.0	S
3.405	1.9136	0.0000	105.031	0.48446	0.00000	52728.3	4664.5	0.0	S
3.419	1.8992	0.0000	105.035	0.48110	0.00000	52827.7	4689.7	0.0	S
3.434	1.8872	0.0000	105.039	0.47787	0.00000	52926.5	4714.7	0.0	S
3.448	1.8769	0.0000	105.042	0.47478	0.00000	53024.6	4739.5	0.0	S
3.463	1.8682	0.0000	105.046	0.47183	0.00000	53122.3	4764.2	0.0	S
3.477	1.8612	0.0000	105.049	0.46902	0.00000	53219.6	4788.7	0.0	S
3.492	1.8558	0.0000	105.053	0.46635	0.00000	53316.5	4813.1	0.0	S
3.506	1.8459	0.0000	105.057	0.46382	0.00000	53413.1	4837.4	0.0	S
3.521	1.8203	0.0000	105.060	0.46139	0.00000	53508.7	4861.5	0.0	S
3.535	1.7685	0.0000	105.064	0.45903	0.00000	53602.3	4885.5	0.0	S
3.550	1.6830	0.0000	105.067	0.45671	0.00000	53692.3	4909.4	0.0	S
3.564	1.5750	0.0000	105.070	0.45440	0.00000	53777.3	4933.2	0.0	S
3.579	1.4667	0.0000	105.073	0.45209	0.00000	53856.6	4956.8	0.0	S
3.593	1.3674	0.0000	105.075	0.44982	0.00000	53930.5	4980.3	0.0	S
3.608	1.2822	0.0000	105.077	0.44758	0.00000	53999.6	5003.7	0.0	S
3.622	1.2104	0.0000	105.079	0.44541	0.00000	54064.6	5027.0	0.0	S
3.637	1.1500	0.0000	105.081	0.44332	0.00000	54126.2	5050.2	0.0	S
3.651	1.0989	0.0000	105.083	0.44132	0.00000	54184.8	5073.3	0.0	S
3.666	1.0550	0.0000	105.085	0.43942	0.00000	54241.0	5096.2	0.0	S
3.680	1.0168	0.0000	105.086	0.43762	0.00000	54295.0	5119.1	0.0	S
3.695	0.9834	0.0000	105.088	0.43593	0.00000	54347.2	5141.9	0.0	S
3.709	0.9532	0.0000	105.089	0.43433	0.00000	54397.7	5164.6	0.0	S
3.724	0.9260	0.0000	105.090	0.43284	0.00000	54446.7	5187.2	0.0	S
3.738	0.9027	0.0000	105.092	0.43144	0.00000	54494.4	5209.7	0.0	S
3.753	0.8819	0.0000	105.093	0.43014	0.00000	54540.9	5232.2	0.0	S
3.767	0.8633	0.0000	105.094	0.42894	0.00000	54586.5	5254.6	0.0	S
3.782	0.8467	0.0000	105.095	0.42782	0.00000	54631.0	5276.9	0.0	S
3.796	0.8319	0.0000	105.096	0.42678	0.00000	54674.8	5299.2	0.0	S
3.811	0.8187	0.0000	105.097	0.42583	0.00000	54717.9	5321.5	0.0	S
3.825	0.8070	0.0000	105.098	0.42495	0.00000	54760.3	5343.7	0.0	S
3.840	0.7965	0.0000	105.099	0.42413	0.00000	54802.1	5365.8	0.0	S
3.854	0.7874	0.0000	105.100	0.42338	0.00000	54843.4	5387.9	0.0	S
3.869	0.7795	0.0000	105.101	0.42269	0.00000	54884.3	5410.0	0.0	S
3.883	0.7726	0.0000	105.102	0.42205	0.00000	54924.7	5432.0	0.0	S
3.898	0.7665	0.0000	105.103	0.42146	0.00000	54964.9	5454.0	0.0	S
3.912	0.7612	0.0000	105.104	0.42091	0.00000	55004.7	5476.0	0.0	S
3.926	0.7567	0.0000	105.104	0.42039	0.00000	55044.3	5497.9	0.0	S
3.941	0.7529	0.0000	105.105	0.41992	0.00000	55083.7	5519.8	0.0	S
3.955	0.7496	0.0000	105.106	0.41946	0.00000	55122.9	5541.7	0.0	S
3.970	0.7469	0.0000	105.107	0.41904	0.00000	55161.9	5563.6	0.0	S
3.984	0.7448	0.0000	105.108	0.41863	0.00000	55200.8	5585.4	0.0	S
3.999	0.7431	0.0000	105.109	0.41823	0.00000	55239.6	5607.2	0.0	S
4.013	0.7337	0.0000	105.110	0.41783	0.00000	55278.1	5629.1	0.0	S
4.028	0.7103	0.0000	105.110	0.41740	0.00000	55315.8	5650.8	0.0	S
4.042	0.6656	0.0000	105.111	0.41691	0.00000	55351.7	5672.6	0.0	S
4.057	0.5969	0.0000	105.112	0.41634	0.00000	55384.6	5694.3	0.0	S
4.071	0.5232	0.0000	105.112	0.41567	0.00000	55413.8	5716.0	0.0	S
4.086	0.4523	0.0000	105.112	0.41491	0.00000	55439.2	5737.7	0.0	S
4.100	0.3905	0.0000	105.112	0.41408	0.00000	55461.2	5759.3	0.0	S
4.115	0.3382	0.0000	105.112	0.41318	0.00000	55480.2	5780.9	0.0	S
4.129	0.2941	0.0000	105.112	0.41224	0.00000	55496.7	5802.4	0.0	S
4.144	0.2571	0.0000	105.111	0.41125	0.00000	55511.1	5823.9	0.0	S
4.158	0.2255	0.0000	105.111	0.41022	0.00000	55523.7	5845.3	0.0	S
4.173	0.1982	0.0000	105.110	0.40916	0.00000	55534.7	5866.7	0.0	S
4.187	0.1742	0.0000	105.110	0.40808	0.00000	55544.4	5888.0	0.0	S
4.202	0.1533	0.0000	105.109	0.40697	0.00000	55553.0	5909.3	0.0	S
4.216	0.1336	0.0000	105.109	0.40584	0.00000	55560.5	5930.5	0.0	S
4.231	0.1169	0.0000	105.108	0.40468	0.00000	55567.0	5951.6	0.0	S
4.245	0.1022	0.0000	105.107	0.40351	0.00000	55572.7	5972.7	0.0	S
4.260	0.0890	0.0000	105.106	0.40231	0.00000	55577.7	5993.7	0.0	S
4.274	0.0772	0.0000	105.106	0.40109	0.00000	55582.0	6014.6	0.0	S

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Detailed Results (cont,d.) :: Scenario 3 :: FDOT 4 Hour - 4 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
4.289	0.0667	0.0000	105.105	0.39986	0.00000	55585.8	6035.5	0.0	S
4.303	0.0573	0.0000	105.104	0.39860	0.00000	55589.0	6056.4	0.0	S
4.318	0.0490	0.0000	105.103	0.39733	0.00000	55591.8	6077.1	0.0	S
4.332	0.0415	0.0000	105.102	0.39604	0.00000	55594.1	6097.8	0.0	S
4.347	0.0350	0.0000	105.101	0.39473	0.00000	55596.1	6118.4	0.0	S
4.361	0.0292	0.0000	105.100	0.39341	0.00000	55597.8	6139.0	0.0	S
4.376	0.0243	0.0000	105.099	0.39207	0.00000	55599.2	6159.5	0.0	S
4.390	0.0199	0.0000	105.098	0.39071	0.00000	55600.4	6179.9	0.0	S
4.405	0.0161	0.0000	105.097	0.38934	0.00000	55601.3	6200.2	0.0	S
4.419	0.0128	0.0000	105.096	0.38796	0.00000	55602.1	6220.5	0.0	S
4.434	0.0100	0.0000	105.095	0.38656	0.00000	55602.6	6240.7	0.0	S
4.448	0.0076	0.0000	105.094	0.38515	0.00000	55603.1	6260.8	0.0	S
4.463	0.0056	0.0000	105.093	0.38373	0.00000	55603.5	6280.9	0.0	S
4.477	0.0039	0.0000	105.093	0.38229	0.00000	55603.7	6300.9	0.0	S
4.492	0.0026	0.0000	105.092	0.38085	0.00000	55603.9	6320.8	0.0	S
4.506	0.0017	0.0000	105.091	0.37940	0.00000	55604.0	6340.6	0.0	S
4.521	0.0010	0.0000	105.090	0.37793	0.00000	55604.1	6360.3	0.0	S
4.535	0.0005	0.0000	105.089	0.37647	0.00000	55604.1	6380.0	0.0	S
4.550	0.0002	0.0000	105.088	0.37499	0.00000	55604.1	6399.6	0.0	S
4.564	0.0000	0.0000	105.087	0.37351	0.00000	55604.1	6419.1	0.0	S
4.578	0.0000	0.0000	105.086	0.37203	0.00000	55604.1	6438.6	0.0	S
4.593	0.0000	0.0000	105.085	0.37115	0.00000	55604.1	6457.9	0.0	S
28.593	0.0000	0.0000	104.446	0.11115	0.00000	55604.1	18812.9	0.0	S
52.593	0.0000	0.0000	104.064	0.06712	0.00000	55604.1	25664.4	0.0	S
76.593	0.0000	0.0000	103.784	0.04862	0.00000	55604.1	30411.0	0.0	S
100.593	0.0000	0.0000	103.559	0.03837	0.00000	55604.1	34065.7	0.0	S
124.593	0.0000	0.0000	103.369	0.03173	0.00000	55604.1	37041.9	0.0	S
148.593	0.0000	0.0000	103.204	0.02702	0.00000	55604.1	39549.5	0.0	S
172.593	0.0000	0.0000	103.057	0.02348	0.00000	55604.1	41711.6	0.0	S
196.593	0.0000	0.0000	102.925	0.02071	0.00000	55604.1	43606.8	0.0	S
220.593	0.0000	0.0000	102.805	0.01847	0.00000	55604.1	45289.5	0.0	S
244.593	0.0000	0.0000	102.696	0.01663	0.00000	55604.1	46798.7	0.0	S
268.593	0.0000	0.0000	102.594	0.01510	0.00000	55604.1	48163.8	0.0	S
292.593	0.0000	0.0000	102.500	0.01379	0.00000	55604.1	49407.2	0.0	S
316.593	0.0000	0.0000	102.412	0.01267	0.00000	55604.1	50546.4	0.0	S
340.593	0.0000	0.0000	102.329	0.01169	0.00000	55604.1	51595.7	0.0	S
364.593	0.0000	0.0000	102.252	0.01084	0.00000	55604.1	52566.5	0.0	S
388.593	0.0000	0.0000	102.178	0.01008	0.00000	55604.1	53468.1	0.0	S
412.593	0.0000	0.0000	102.109	0.00941	0.00000	55604.1	54308.5	0.0	S
436.593	0.0000	0.0000	102.043	0.00750	0.00000	55604.1	55094.1	0.0	S
460.593	0.0000	0.0000	101.963	0.00295	0.00000	55604.1	55604.1	0.0	S
484.593	0.0000	0.0000	101.854	0.00000	0.00000	55604.1	55604.1	0.0	S
508.593	0.0000	0.0000	101.760	0.00000	0.00000	55604.1	55604.1	0.0	S
532.593	0.0000	0.0000	101.675	0.00000	0.00000	55604.1	55604.1	0.0	S
556.593	0.0000	0.0000	101.597	0.00000	0.00000	55604.1	55604.1	0.0	S
580.593	0.0000	0.0000	101.527	0.00000	0.00000	55604.1	55604.1	0.0	S
604.593	0.0000	0.0000	101.461	0.00000	0.00000	55604.1	55604.1	0.0	S
628.593	0.0000	0.0000	101.400	0.00000	0.00000	55604.1	55604.1	0.0	S
652.593	0.0000	0.0000	101.342	0.00000	0.00000	55604.1	55604.1	0.0	S
676.593	0.0000	0.0000	101.288	0.00000	0.00000	55604.1	55604.1	0.0	S
700.593	0.0000	0.0000	101.238	0.00000	0.00000	55604.1	55604.1	0.0	S
724.593	0.0000	0.0000	101.189	0.00000	0.00000	55604.1	55604.1	0.0	S
748.593	0.0000	0.0000	101.144	----	----	55604.1	55604.1	0.0	N.A.



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Detailed Results (cont,d.) :: Scenario 4 :: FDOT 8 Hour - 8 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
6.433	1.1162	0.0000	105.385	0.37460	0.00000	63170.0	7798.3	0.0	S
6.448	1.1156	0.0000	105.387	0.37421	0.00000	63228.2	7817.9	0.0	S
6.462	1.1151	0.0000	105.389	0.37384	0.00000	63286.4	7837.4	0.0	S
6.477	1.1146	0.0000	105.391	0.37347	0.00000	63344.5	7856.9	0.0	S
6.491	1.1143	0.0000	105.392	0.37310	0.00000	63402.7	7876.3	0.0	S
6.506	1.1141	0.0000	105.394	0.37274	0.00000	63460.8	7895.8	0.0	S
6.520	1.1140	0.0000	105.396	0.37239	0.00000	63518.9	7915.2	0.0	S
6.534	1.1139	0.0000	105.398	0.37203	0.00000	63577.0	7934.6	0.0	S
6.549	1.1139	0.0000	105.400	0.37169	0.00000	63635.1	7954.0	0.0	S
6.563	1.1139	0.0000	105.402	0.37134	0.00000	63693.2	7973.4	0.0	S
6.578	1.1140	0.0000	105.403	0.37100	0.00000	63751.3	7992.8	0.0	S
6.592	1.1141	0.0000	105.405	0.37066	0.00000	63809.4	8012.1	0.0	S
6.607	1.1141	0.0000	105.407	0.37033	0.00000	63867.5	8031.4	0.0	S
6.621	1.1142	0.0000	105.409	0.36999	0.00000	63925.7	8050.7	0.0	S
6.636	1.1143	0.0000	105.411	0.36965	0.00000	63983.8	8070.0	0.0	S
6.650	1.1144	0.0000	105.413	0.36932	0.00000	64041.9	8089.3	0.0	S
6.665	1.1145	0.0000	105.414	0.36898	0.00000	64100.0	8108.6	0.0	S
6.679	1.1145	0.0000	105.416	0.36864	0.00000	64158.2	8127.8	0.0	S
6.694	1.1146	0.0000	105.418	0.36831	0.00000	64216.3	8147.0	0.0	S
6.708	1.1147	0.0000	105.420	0.36797	0.00000	64274.4	8166.2	0.0	S
6.723	1.1148	0.0000	105.422	0.36763	0.00000	64332.6	8185.4	0.0	S
6.737	1.1148	0.0000	105.424	0.36728	0.00000	64390.7	8204.6	0.0	S
6.752	1.1149	0.0000	105.425	0.36694	0.00000	64448.9	8223.7	0.0	S
6.766	1.1150	0.0000	105.427	0.36659	0.00000	64507.0	8242.9	0.0	S
6.781	1.1151	0.0000	105.429	0.36624	0.00000	64565.2	8262.0	0.0	S
6.795	1.1151	0.0000	105.431	0.36589	0.00000	64623.4	8281.1	0.0	S
6.810	1.1152	0.0000	105.433	0.36553	0.00000	64681.5	8300.1	0.0	S
6.824	1.1153	0.0000	105.435	0.36517	0.00000	64739.7	8319.2	0.0	S
6.839	1.1154	0.0000	105.436	0.36481	0.00000	64797.9	8338.2	0.0	S
6.853	1.1154	0.0000	105.438	0.36445	0.00000	64856.1	8357.3	0.0	S
6.868	1.1155	0.0000	105.440	0.36408	0.00000	64914.2	8376.3	0.0	S
6.882	1.1156	0.0000	105.442	0.36371	0.00000	64972.4	8395.2	0.0	S
6.897	1.1157	0.0000	105.444	0.36333	0.00000	65030.6	8414.2	0.0	S
6.911	1.1157	0.0000	105.446	0.36296	0.00000	65088.8	8433.1	0.0	S
6.926	1.1158	0.0000	105.447	0.36257	0.00000	65147.0	8452.1	0.0	S
6.940	1.1159	0.0000	105.449	0.36219	0.00000	65205.2	8471.0	0.0	S
6.955	1.1160	0.0000	105.451	0.36180	0.00000	65263.4	8489.8	0.0	S
6.969	1.1160	0.0000	105.453	0.36141	0.00000	65321.6	8508.7	0.0	S
6.984	1.1161	0.0000	105.455	0.36101	0.00000	65379.8	8527.5	0.0	S
6.998	1.1162	0.0000	105.457	0.36061	0.00000	65438.1	8546.4	0.0	S
7.013	1.1116	0.0000	105.458	0.36020	0.00000	65496.2	8565.2	0.0	S
7.027	1.0985	0.0000	105.460	0.35977	0.00000	65553.8	8583.9	0.0	S
7.042	1.0727	0.0000	105.462	0.35930	0.00000	65610.4	8602.7	0.0	S
7.056	1.0323	0.0000	105.464	0.35877	0.00000	65665.3	8621.4	0.0	S
7.071	0.9881	0.0000	105.465	0.35819	0.00000	65718.0	8640.1	0.0	S
7.085	0.9452	0.0000	105.467	0.35755	0.00000	65768.4	8658.8	0.0	S
7.100	0.9076	0.0000	105.468	0.35687	0.00000	65816.8	8677.4	0.0	S
7.114	0.8758	0.0000	105.469	0.35616	0.00000	65863.3	8696.0	0.0	S
7.129	0.8490	0.0000	105.471	0.35542	0.00000	65908.3	8714.6	0.0	S
7.143	0.8264	0.0000	105.472	0.35467	0.00000	65952.0	8733.1	0.0	S
7.158	0.8072	0.0000	105.473	0.35391	0.00000	65994.6	8751.6	0.0	S
7.172	0.7906	0.0000	105.474	0.35314	0.00000	66036.2	8770.0	0.0	S
7.186	0.7761	0.0000	105.475	0.35237	0.00000	66077.1	8788.4	0.0	S
7.201	0.7634	0.0000	105.476	0.35160	0.00000	66117.2	8806.8	0.0	S
7.215	0.7515	0.0000	105.477	0.35082	0.00000	66156.7	8825.1	0.0	S
7.230	0.7414	0.0000	105.478	0.35006	0.00000	66195.7	8843.4	0.0	S
7.244	0.7325	0.0000	105.479	0.34929	0.00000	66234.1	8861.6	0.0	S
7.259	0.7245	0.0000	105.480	0.34853	0.00000	66272.1	8879.8	0.0	S
7.273	0.7174	0.0000	105.481	0.34777	0.00000	66309.7	8898.0	0.0	S
7.288	0.7110	0.0000	105.482	0.34703	0.00000	66347.0	8916.1	0.0	S
7.302	0.7053	0.0000	105.483	0.34628	0.00000	66383.9	8934.2	0.0	S
7.317	0.7003	0.0000	105.484	0.34555	0.00000	66420.6	8952.2	0.0	S
7.331	0.6958	0.0000	105.484	0.34482	0.00000	66457.0	8970.2	0.0	S
7.346	0.6918	0.0000	105.485	0.34411	0.00000	66493.2	8988.2	0.0	S
7.360	0.6884	0.0000	105.486	0.34340	0.00000	66529.2	9006.1	0.0	S
7.375	0.6854	0.0000	105.487	0.34269	0.00000	66565.0	9024.0	0.0	S
7.389	0.6827	0.0000	105.488	0.34200	0.00000	66600.7	9041.9	0.0	S
7.404	0.6804	0.0000	105.489	0.34132	0.00000	66636.2	9059.7	0.0	S
7.418	0.6784	0.0000	105.489	0.34064	0.00000	66671.7	9077.5	0.0	S
7.433	0.6768	0.0000	105.490	0.33998	0.00000	66707.0	9095.2	0.0	S
7.447	0.6753	0.0000	105.491	0.33932	0.00000	66742.3	9112.9	0.0	S
7.462	0.6741	0.0000	105.492	0.33868	0.00000	66777.5	9130.6	0.0	S
7.476	0.6732	0.0000	105.493	0.33804	0.00000	66812.6	9148.3	0.0	S
7.491	0.6724	0.0000	105.493	0.33741	0.00000	66847.7	9165.9	0.0	S

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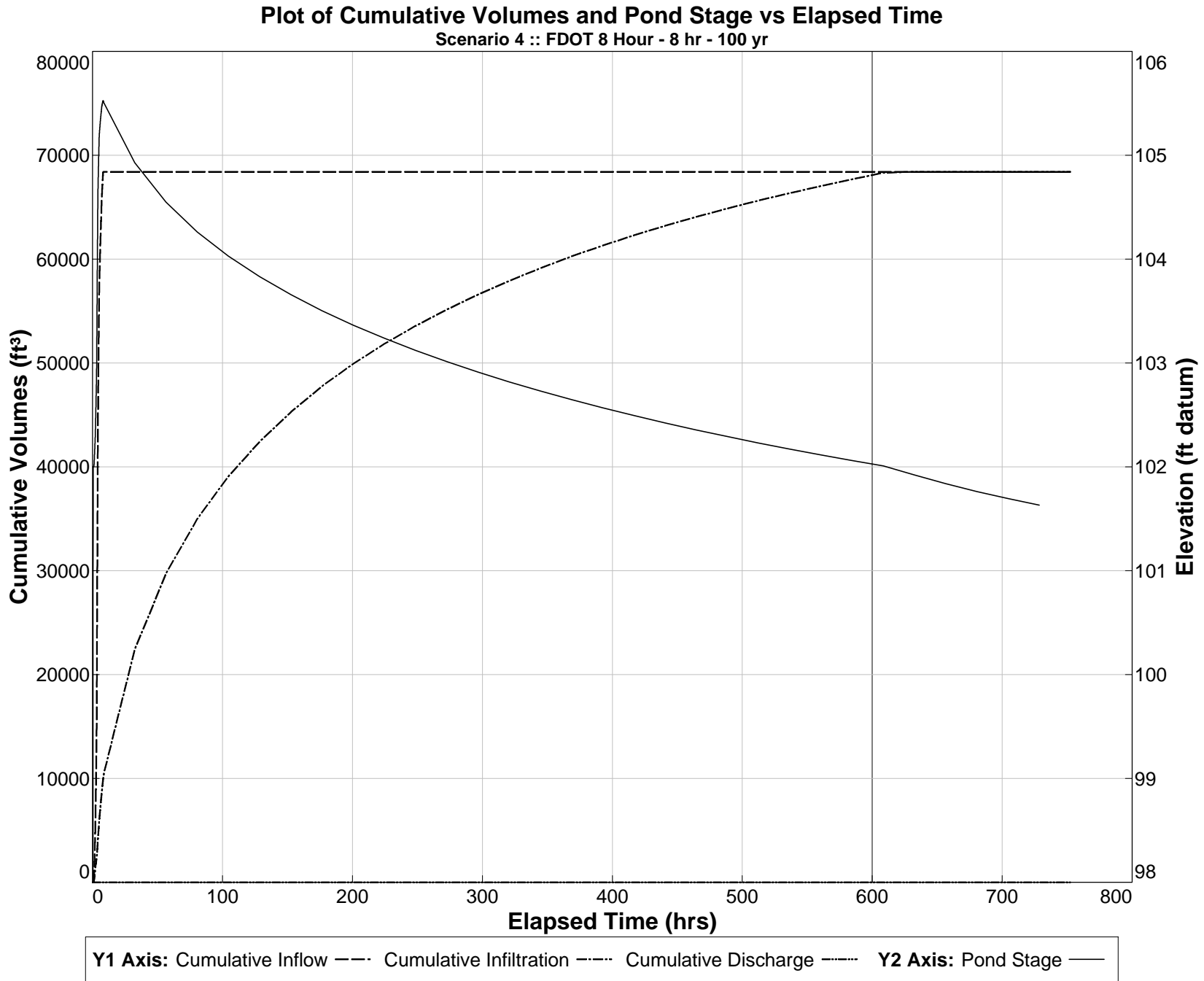
Detailed Results (cont,d.) :: Scenario 4 :: FDOT 8 Hour - 8 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
7.505	0.6718	0.0000	105.494	0.33679	0.00000	66882.7	9183.5	0.0	S
7.520	0.6714	0.0000	105.495	0.33618	0.00000	66917.8	9201.0	0.0	S
7.534	0.6711	0.0000	105.496	0.33558	0.00000	66952.8	9218.5	0.0	S
7.549	0.6710	0.0000	105.497	0.33499	0.00000	66987.8	9236.0	0.0	S
7.563	0.6709	0.0000	105.498	0.33441	0.00000	67022.8	9253.5	0.0	S
7.578	0.6709	0.0000	105.498	0.33384	0.00000	67057.8	9270.9	0.0	S
7.592	0.6709	0.0000	105.499	0.33328	0.00000	67092.8	9288.3	0.0	S
7.607	0.6710	0.0000	105.500	0.33272	0.00000	67127.8	9305.7	0.0	S
7.621	0.6710	0.0000	105.501	0.33218	0.00000	67162.8	9323.0	0.0	S
7.636	0.6710	0.0000	105.502	0.33164	0.00000	67197.8	9340.3	0.0	S
7.650	0.6710	0.0000	105.502	0.33111	0.00000	67232.8	9357.6	0.0	S
7.665	0.6711	0.0000	105.503	0.33059	0.00000	67267.8	9374.9	0.0	S
7.679	0.6711	0.0000	105.504	0.33008	0.00000	67302.8	9392.1	0.0	S
7.694	0.6711	0.0000	105.505	0.32958	0.00000	67337.8	9409.3	0.0	S
7.708	0.6711	0.0000	105.506	0.32909	0.00000	67372.8	9426.5	0.0	S
7.723	0.6712	0.0000	105.507	0.32860	0.00000	67407.8	9443.6	0.0	S
7.737	0.6712	0.0000	105.507	0.32812	0.00000	67442.8	9460.8	0.0	S
7.752	0.6712	0.0000	105.508	0.32765	0.00000	67477.8	9477.9	0.0	S
7.766	0.6712	0.0000	105.509	0.32719	0.00000	67512.8	9494.9	0.0	S
7.781	0.6713	0.0000	105.510	0.32673	0.00000	67547.8	9512.0	0.0	S
7.795	0.6713	0.0000	105.511	0.32628	0.00000	67582.9	9529.0	0.0	S
7.810	0.6713	0.0000	105.512	0.32584	0.00000	67617.9	9546.0	0.0	S
7.824	0.6713	0.0000	105.512	0.32541	0.00000	67652.9	9563.0	0.0	S
7.838	0.6714	0.0000	105.513	0.32498	0.00000	67687.9	9580.0	0.0	S
7.853	0.6714	0.0000	105.514	0.32456	0.00000	67722.9	9596.9	0.0	S
7.867	0.6714	0.0000	105.515	0.32415	0.00000	67758.0	9613.8	0.0	S
7.882	0.6714	0.0000	105.516	0.32374	0.00000	67793.0	9630.7	0.0	S
7.896	0.6715	0.0000	105.517	0.32334	0.00000	67828.0	9647.6	0.0	S
7.911	0.6715	0.0000	105.517	0.32295	0.00000	67863.0	9664.5	0.0	S
7.925	0.6715	0.0000	105.518	0.32256	0.00000	67898.0	9681.3	0.0	S
7.940	0.6715	0.0000	105.519	0.32218	0.00000	67933.1	9698.1	0.0	S
7.954	0.6716	0.0000	105.520	0.32180	0.00000	67968.1	9714.9	0.0	S
7.969	0.6716	0.0000	105.521	0.32143	0.00000	68003.1	9731.7	0.0	S
7.983	0.6716	0.0000	105.522	0.32107	0.00000	68038.2	9748.4	0.0	S
7.998	0.6716	0.0000	105.523	0.32071	0.00000	68073.2	9765.2	0.0	S
8.012	0.6648	0.0000	105.523	0.32034	0.00000	68108.0	9781.9	0.0	S
8.027	0.6453	0.0000	105.524	0.31995	0.00000	68142.2	9798.6	0.0	S
8.041	0.6068	0.0000	105.525	0.31951	0.00000	68174.9	9815.3	0.0	S
8.056	0.5463	0.0000	105.526	0.31899	0.00000	68204.9	9831.9	0.0	S
8.070	0.4798	0.0000	105.526	0.31840	0.00000	68231.7	9848.6	0.0	S
8.085	0.4153	0.0000	105.526	0.31774	0.00000	68255.0	9865.1	0.0	S
8.099	0.3585	0.0000	105.527	0.31702	0.00000	68275.2	9881.7	0.0	S
8.114	0.3104	0.0000	105.527	0.31625	0.00000	68292.7	9898.2	0.0	S
8.128	0.2699	0.0000	105.526	0.31546	0.00000	68307.8	9914.7	0.0	S
8.143	0.2358	0.0000	105.526	0.31465	0.00000	68321.0	9931.1	0.0	S
8.157	0.2067	0.0000	105.526	0.31383	0.00000	68332.5	9947.5	0.0	S
8.172	0.1817	0.0000	105.526	0.31301	0.00000	68342.7	9963.9	0.0	S
8.186	0.1597	0.0000	105.525	0.31219	0.00000	68351.6	9980.2	0.0	S
8.201	0.1405	0.0000	105.525	0.31137	0.00000	68359.4	9996.4	0.0	S
8.215	0.1226	0.0000	105.525	0.31056	0.00000	68366.3	10012.7	0.0	S
8.230	0.1072	0.0000	105.524	0.30975	0.00000	68372.2	10028.8	0.0	S
8.244	0.0937	0.0000	105.524	0.30895	0.00000	68377.5	10045.0	0.0	S
8.259	0.0817	0.0000	105.523	0.30816	0.00000	68382.1	10061.1	0.0	S
8.273	0.0709	0.0000	105.523	0.30738	0.00000	68386.0	10077.1	0.0	S
8.288	0.0613	0.0000	105.522	0.30662	0.00000	68389.5	10093.1	0.0	S
8.302	0.0527	0.0000	105.521	0.30586	0.00000	68392.5	10109.1	0.0	S
8.317	0.0450	0.0000	105.521	0.30512	0.00000	68395.0	10125.0	0.0	S
8.331	0.0382	0.0000	105.520	0.30439	0.00000	68397.2	10140.9	0.0	S
8.346	0.0322	0.0000	105.520	0.30367	0.00000	68399.0	10156.8	0.0	S
8.360	0.0269	0.0000	105.519	0.30296	0.00000	68400.6	10172.6	0.0	S
8.375	0.0224	0.0000	105.518	0.30226	0.00000	68401.8	10188.4	0.0	S
8.389	0.0184	0.0000	105.517	0.30157	0.00000	68402.9	10204.1	0.0	S
8.404	0.0148	0.0000	105.517	0.30090	0.00000	68403.8	10219.9	0.0	S
8.418	0.0118	0.0000	105.516	0.30023	0.00000	68404.5	10235.5	0.0	S
8.433	0.0092	0.0000	105.515	0.29958	0.00000	68405.0	10251.2	0.0	S
8.447	0.0071	0.0000	105.515	0.29893	0.00000	68405.4	10266.8	0.0	S
8.462	0.0052	0.0000	105.514	0.29830	0.00000	68405.8	10282.4	0.0	S
8.476	0.0037	0.0000	105.513	0.29767	0.00000	68406.0	10297.9	0.0	S
8.490	0.0025	0.0000	105.513	0.29706	0.00000	68406.1	10313.4	0.0	S
8.505	0.0016	0.0000	105.512	0.29645	0.00000	68406.3	10328.9	0.0	S
8.519	0.0009	0.0000	105.511	0.29585	0.00000	68406.3	10344.3	0.0	S
8.534	0.0005	0.0000	105.510	0.29526	0.00000	68406.4	10359.8	0.0	S
8.548	0.0002	0.0000	105.510	0.29468	0.00000	68406.4	10375.1	0.0	S
8.563	0.0000	0.0000	105.509	0.29410	0.00000	68406.4	10390.5	0.0	S

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Detailed Results (cont,d.) :: Scenario 4 :: FDOT 8 Hour - 8 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
8.577	0.0000	0.0000	105.508	0.29353	0.00000	68406.4	10405.8	0.0	S
8.592	0.0000	0.0000	105.508	0.29316	0.00000	68406.4	10421.1	0.0	S
32.592	0.0000	0.0000	104.927	0.11180	0.00000	68406.4	22421.0	0.0	S
56.592	0.0000	0.0000	104.547	0.07267	0.00000	68406.4	29740.9	0.0	S
80.592	0.0000	0.0000	104.261	0.05399	0.00000	68406.4	34979.1	0.0	S
104.592	0.0000	0.0000	104.029	0.04312	0.00000	68406.4	39070.3	0.0	S
128.592	0.0000	0.0000	103.831	0.03592	0.00000	68406.4	42430.0	0.0	S
152.592	0.0000	0.0000	103.658	0.03075	0.00000	68406.4	45277.4	0.0	S
176.592	0.0000	0.0000	103.503	0.02682	0.00000	68406.4	47743.3	0.0	S
200.592	0.0000	0.0000	103.364	0.02374	0.00000	68406.4	49912.7	0.0	S
224.592	0.0000	0.0000	103.237	0.02124	0.00000	68406.4	51844.7	0.0	S
248.592	0.0000	0.0000	103.121	0.01917	0.00000	68406.4	53582.2	0.0	S
272.592	0.0000	0.0000	103.013	0.01743	0.00000	68406.4	55157.2	0.0	S
296.592	0.0000	0.0000	102.912	0.01596	0.00000	68406.4	56594.9	0.0	S
320.592	0.0000	0.0000	102.818	0.01469	0.00000	68406.4	57914.8	0.0	S
344.592	0.0000	0.0000	102.730	0.01358	0.00000	68406.4	59132.6	0.0	S
368.592	0.0000	0.0000	102.647	0.01261	0.00000	68406.4	60261.1	0.0	S
392.592	0.0000	0.0000	102.568	0.01174	0.00000	68406.4	61310.7	0.0	S
416.592	0.0000	0.0000	102.494	0.01098	0.00000	68406.4	62290.3	0.0	S
440.592	0.0000	0.0000	102.423	0.01029	0.00000	68406.4	63207.3	0.0	S
464.592	0.0000	0.0000	102.355	0.00966	0.00000	68406.4	64067.8	0.0	S
488.592	0.0000	0.0000	102.291	0.00910	0.00000	68406.4	64877.3	0.0	S
512.592	0.0000	0.0000	102.230	0.00859	0.00000	68406.4	65640.6	0.0	S
536.592	0.0000	0.0000	102.171	0.00812	0.00000	68406.4	66361.7	0.0	S
560.592	0.0000	0.0000	102.115	0.00769	0.00000	68406.4	67044.2	0.0	S
584.592	0.0000	0.0000	102.061	0.00730	0.00000	68406.4	67691.4	0.0	S
608.592	0.0000	0.0000	102.009	0.00414	0.00000	68406.4	68306.0	0.0	S
632.592	0.0000	0.0000	101.922	0.00058	0.00000	68406.4	68406.4	0.0	S
656.592	0.0000	0.0000	101.838	0.00000	0.00000	68406.4	68406.4	0.0	S
680.592	0.0000	0.0000	101.763	0.00000	0.00000	68406.4	68406.4	0.0	S
704.592	0.0000	0.0000	101.694	0.00000	0.00000	68406.4	68406.4	0.0	S
728.592	0.0000	0.0000	101.631	0.00000	0.00000	68406.4	68406.4	0.0	S
752.592	0.0000	0.0000	101.572	----	----	68406.4	68406.4	0.0	N.A.



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Detailed Results (cont,d.) :: Scenario 5 :: FDOT 24 Hour - 24 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
22.516	0.3167	0.0000	106.165	0.22410	0.30201	97585.2	19330.7	5465.2	S
22.530	0.3165	0.0000	106.165	0.22381	0.30187	97601.7	19342.4	5480.9	S
22.545	0.3163	0.0000	106.164	0.22353	0.30173	97618.2	19354.1	5496.7	S
22.559	0.3162	0.0000	106.164	0.22326	0.30159	97634.7	19365.7	5512.4	S
22.574	0.3162	0.0000	106.163	0.22298	0.30145	97651.2	19377.4	5528.1	S
22.588	0.3162	0.0000	106.163	0.22272	0.30131	97667.7	19389.0	5543.8	S
22.603	0.3162	0.0000	106.162	0.22245	0.30117	97684.2	19400.6	5559.5	S
22.617	0.3162	0.0000	106.162	0.22219	0.30103	97700.7	19412.2	5575.3	S
22.632	0.3162	0.0000	106.162	0.22193	0.30089	97717.2	19423.8	5590.9	S
22.646	0.3162	0.0000	106.161	0.22167	0.30075	97733.7	19435.3	5606.6	S
22.661	0.3162	0.0000	106.161	0.22142	0.30061	97750.2	19446.9	5622.3	S
22.675	0.3162	0.0000	106.160	0.22117	0.30047	97766.7	19458.4	5638.0	S
22.690	0.3162	0.0000	106.160	0.22092	0.30033	97783.2	19470.0	5653.7	S
22.704	0.3162	0.0000	106.159	0.22067	0.30019	97799.7	19481.5	5669.3	S
22.719	0.3162	0.0000	106.159	0.22043	0.30005	97816.2	19493.0	5685.0	S
22.733	0.3162	0.0000	106.158	0.22019	0.29991	97832.7	19504.5	5700.6	S
22.748	0.3162	0.0000	106.158	0.21995	0.29978	97849.1	19516.0	5716.3	S
22.762	0.3162	0.0000	106.157	0.21971	0.29964	97865.6	19527.4	5731.9	S
22.777	0.3162	0.0000	106.157	0.21948	0.29950	97882.1	19538.9	5747.5	S
22.791	0.3162	0.0000	106.157	0.21924	0.29936	97898.6	19550.3	5763.1	S
22.806	0.3162	0.0000	106.156	0.21901	0.29923	97915.1	19561.8	5778.8	S
22.820	0.3162	0.0000	106.156	0.21878	0.29909	97931.6	19573.2	5794.4	S
22.834	0.3162	0.0000	106.155	0.21855	0.29895	97948.1	19584.6	5810.0	S
22.849	0.3163	0.0000	106.155	0.21833	0.29881	97964.6	19596.0	5825.6	S
22.863	0.3163	0.0000	106.154	0.21810	0.29868	97981.1	19607.4	5841.1	S
22.878	0.3163	0.0000	106.154	0.21788	0.29854	97997.6	19618.7	5856.7	S
22.892	0.3163	0.0000	106.153	0.21766	0.29841	98014.1	19630.1	5872.3	S
22.907	0.3163	0.0000	106.153	0.21744	0.29827	98030.6	19641.4	5887.8	S
22.921	0.3163	0.0000	106.152	0.21722	0.29813	98047.1	19652.8	5903.4	S
22.936	0.3163	0.0000	106.152	0.21701	0.29800	98063.6	19664.1	5918.9	S
22.950	0.3163	0.0000	106.152	0.21679	0.29786	98080.1	19675.4	5934.5	S
22.965	0.3163	0.0000	106.151	0.21658	0.29773	98096.6	19686.7	5950.0	S
22.979	0.3163	0.0000	106.151	0.21636	0.29759	98113.1	19698.0	5965.5	S
22.994	0.3163	0.0000	106.150	0.21615	0.29746	98129.6	19709.3	5981.1	S
23.008	0.3163	0.0000	106.150	0.21594	0.29732	98146.1	19720.5	5996.6	S
23.023	0.3163	0.0000	106.149	0.21573	0.29719	98162.6	19731.8	6012.1	S
23.037	0.3162	0.0000	106.149	0.21553	0.29705	98179.1	19743.1	6027.6	S
23.052	0.3162	0.0000	106.149	0.21532	0.29692	98195.6	19754.3	6043.1	S
23.066	0.3161	0.0000	106.148	0.21511	0.29678	98212.0	19765.5	6058.5	S
23.081	0.3160	0.0000	106.148	0.21491	0.29665	98228.5	19776.7	6074.0	S
23.095	0.3160	0.0000	106.147	0.21471	0.29652	98245.0	19787.9	6089.5	S
23.110	0.3159	0.0000	106.147	0.21450	0.29638	98261.5	19799.1	6105.0	S
23.124	0.3159	0.0000	106.146	0.21430	0.29625	98278.0	19810.3	6120.4	S
23.139	0.3158	0.0000	106.146	0.21410	0.29611	98294.4	19821.5	6135.9	S
23.153	0.3158	0.0000	106.146	0.21390	0.29598	98310.9	19832.6	6151.3	S
23.168	0.3158	0.0000	106.145	0.21371	0.29585	98327.4	19843.8	6166.7	S
23.182	0.3157	0.0000	106.145	0.21351	0.29571	98343.8	19854.9	6182.2	S
23.197	0.3157	0.0000	106.144	0.21331	0.29558	98360.3	19866.1	6197.6	S
23.211	0.3157	0.0000	106.144	0.21312	0.29545	98376.8	19877.2	6213.0	S
23.226	0.3157	0.0000	106.143	0.21293	0.29531	98393.3	19888.3	6228.4	S
23.240	0.3157	0.0000	106.143	0.21273	0.29518	98409.7	19899.4	6243.8	S
23.255	0.3157	0.0000	106.142	0.21254	0.29505	98426.2	19910.5	6259.2	S
23.269	0.3156	0.0000	106.142	0.21235	0.29492	98442.7	19921.6	6274.6	S
23.284	0.3156	0.0000	106.142	0.21216	0.29478	98459.1	19932.7	6290.0	S
23.298	0.3156	0.0000	106.141	0.21197	0.29465	98475.6	19943.7	6305.3	S
23.313	0.3156	0.0000	106.141	0.21178	0.29452	98492.0	19954.8	6320.7	S
23.327	0.3156	0.0000	106.140	0.21160	0.29439	98508.5	19965.8	6336.1	S
23.342	0.3156	0.0000	106.140	0.21141	0.29426	98525.0	19976.8	6351.4	S
23.356	0.3156	0.0000	106.140	0.21122	0.29413	98541.4	19987.9	6366.8	S
23.371	0.3156	0.0000	106.139	0.21104	0.29399	98557.9	19998.9	6382.1	S
23.385	0.3156	0.0000	106.139	0.21086	0.29386	98574.4	20009.9	6397.4	S
23.400	0.3156	0.0000	106.138	0.21067	0.29373	98590.8	20020.9	6412.8	S
23.414	0.3156	0.0000	106.138	0.21049	0.29360	98607.3	20031.9	6428.1	S
23.429	0.3156	0.0000	106.137	0.21031	0.29347	98623.7	20042.8	6443.4	S
23.443	0.3156	0.0000	106.137	0.21013	0.29334	98640.2	20053.8	6458.7	S
23.458	0.3156	0.0000	106.137	0.20995	0.29321	98656.7	20064.7	6474.0	S
23.472	0.3156	0.0000	106.136	0.20977	0.29308	98673.1	20075.7	6489.3	S
23.486	0.3156	0.0000	106.136	0.20959	0.29295	98689.6	20086.6	6504.6	S
23.501	0.3156	0.0000	106.135	0.20942	0.29282	98706.1	20097.6	6519.8	S
23.515	0.3156	0.0000	106.135	0.20924	0.29269	98722.5	20108.5	6535.1	S
23.530	0.3156	0.0000	106.134	0.20906	0.29256	98739.0	20119.4	6550.4	S
23.544	0.3156	0.0000	106.134	0.20889	0.29243	98755.4	20130.3	6565.6	S
23.559	0.3156	0.0000	106.134	0.20872	0.29230	98771.9	20141.2	6580.9	S
23.573	0.3156	0.0000	106.133	0.20854	0.29217	98788.4	20152.1	6596.1	S

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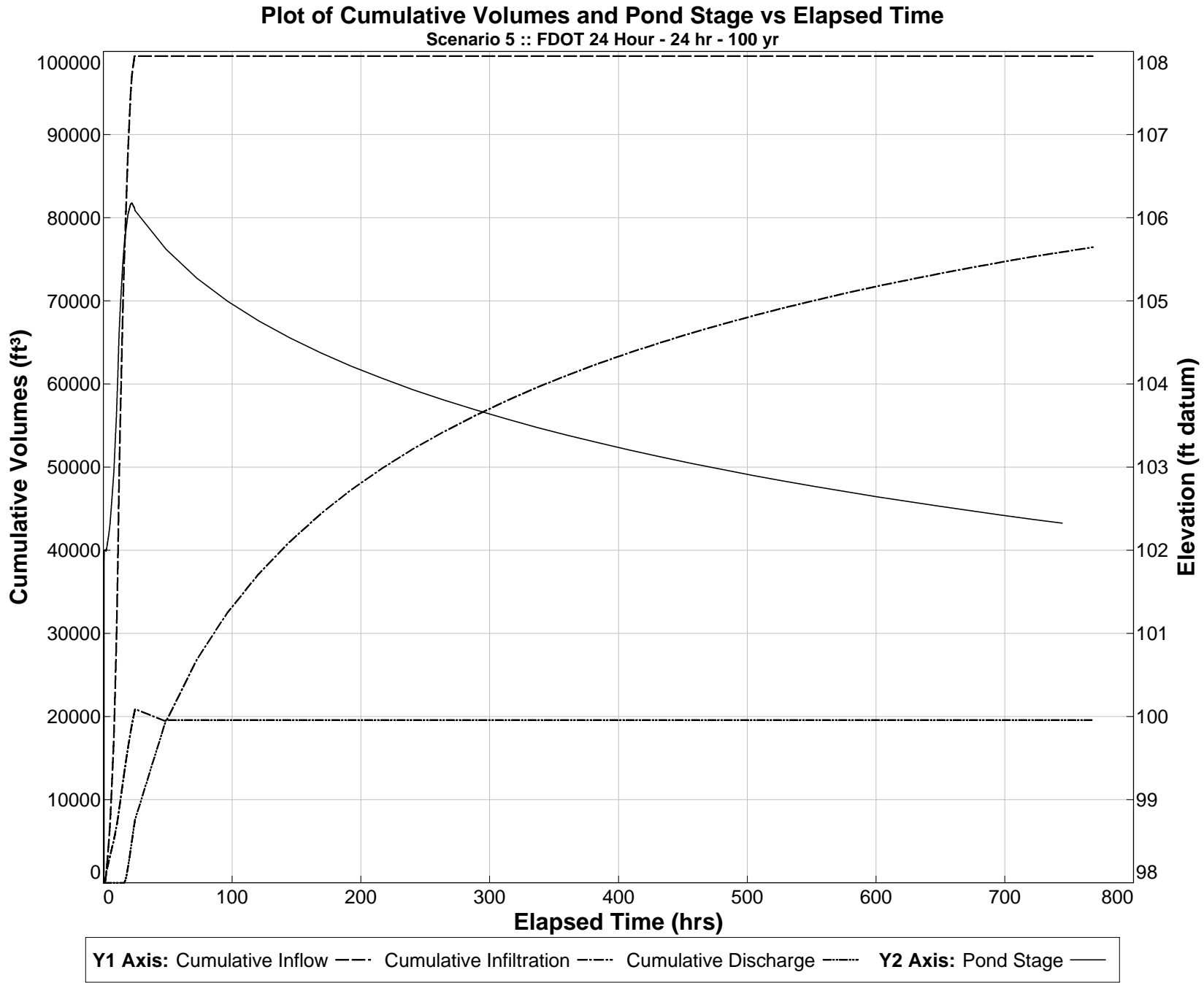
Detailed Results (cont,d.) :: Scenario 5 :: FDOT 24 Hour - 24 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
23.588	0.3156	0.0000	106.133	0.20837	0.29204	98804.8	20162.9	6611.4	S
23.602	0.3156	0.0000	106.132	0.20820	0.29191	98821.3	20173.8	6626.6	S
23.617	0.3156	0.0000	106.132	0.20802	0.29178	98837.8	20184.7	6641.8	S
23.631	0.3156	0.0000	106.132	0.20785	0.29166	98854.2	20195.5	6657.0	S
23.646	0.3156	0.0000	106.131	0.20768	0.29153	98870.7	20206.3	6672.2	S
23.660	0.3156	0.0000	106.131	0.20752	0.29140	98887.1	20217.2	6687.4	S
23.675	0.3156	0.0000	106.130	0.20735	0.29127	98903.6	20228.0	6702.6	S
23.689	0.3156	0.0000	106.130	0.20718	0.29114	98920.1	20238.8	6717.8	S
23.704	0.3156	0.0000	106.130	0.20701	0.29101	98936.5	20249.6	6733.0	S
23.718	0.3156	0.0000	106.129	0.20684	0.29089	98953.0	20260.4	6748.2	S
23.733	0.3156	0.0000	106.129	0.20668	0.29076	98969.5	20271.2	6763.3	S
23.747	0.3157	0.0000	106.128	0.20651	0.29063	98985.9	20282.0	6778.5	S
23.762	0.3157	0.0000	106.128	0.20635	0.29050	99002.4	20292.7	6793.7	S
23.776	0.3157	0.0000	106.128	0.20618	0.29038	99018.9	20303.5	6808.8	S
23.791	0.3157	0.0000	106.127	0.20602	0.29025	99035.3	20314.2	6824.0	S
23.805	0.3157	0.0000	106.127	0.20586	0.29012	99051.8	20325.0	6839.1	S
23.820	0.3157	0.0000	106.126	0.20570	0.29000	99068.2	20335.7	6854.2	S
23.834	0.3157	0.0000	106.126	0.20553	0.28987	99084.7	20346.4	6869.3	S
23.849	0.3157	0.0000	106.126	0.20537	0.28974	99101.2	20357.1	6884.5	S
23.863	0.3157	0.0000	106.125	0.20521	0.28962	99117.6	20367.9	6899.6	S
23.878	0.3157	0.0000	106.125	0.20505	0.28949	99134.1	20378.6	6914.7	S
23.892	0.3157	0.0000	106.124	0.20489	0.28936	99150.6	20389.2	6929.8	S
23.907	0.3157	0.0000	106.124	0.20474	0.28924	99167.0	20399.9	6944.9	S
23.921	0.3157	0.0000	106.124	0.20458	0.28911	99183.5	20410.6	6959.9	S
23.936	0.3157	0.0000	106.123	0.20442	0.28899	99200.0	20421.3	6975.0	S
23.950	0.3157	0.0000	106.123	0.20426	0.28886	99216.4	20431.9	6990.1	S
23.965	0.3157	0.0000	106.122	0.20411	0.28874	99232.9	20442.6	7005.2	S
23.979	0.3157	0.0000	106.122	0.20395	0.28861	99249.4	20453.2	7020.2	S
23.994	0.3157	0.0000	106.122	0.20379	0.28849	99265.8	20463.9	7035.3	S
24.008	0.3136	0.0000	106.121	0.20363	0.28836	99282.2	20474.5	7050.3	S
24.023	0.3063	0.0000	106.121	0.20346	0.28823	99298.4	20485.1	7065.3	S
24.037	0.2909	0.0000	106.120	0.20326	0.28809	99314.0	20495.7	7080.4	S
24.052	0.2656	0.0000	106.120	0.20303	0.28794	99328.5	20506.3	7095.4	S
24.066	0.2348	0.0000	106.119	0.20275	0.28777	99341.6	20516.9	7110.4	S
24.081	0.2040	0.0000	106.119	0.20244	0.28758	99353.0	20527.5	7125.4	S
24.095	0.1762	0.0000	106.118	0.20210	0.28737	99362.9	20538.0	7140.4	S
24.110	0.1524	0.0000	106.117	0.20174	0.28714	99371.5	20548.5	7155.4	S
24.124	0.1323	0.0000	106.117	0.20136	0.28689	99378.9	20559.0	7170.4	S
24.138	0.1154	0.0000	106.116	0.20098	0.28663	99385.4	20569.5	7185.3	S
24.153	0.1011	0.0000	106.115	0.20059	0.28636	99391.0	20580.0	7200.3	S
24.167	0.0888	0.0000	106.114	0.20020	0.28608	99396.0	20590.5	7215.2	S
24.182	0.0780	0.0000	106.113	0.19981	0.28579	99400.3	20600.9	7230.1	S
24.196	0.0686	0.0000	106.112	0.19942	0.28550	99404.1	20611.3	7245.0	S
24.211	0.0601	0.0000	106.111	0.19903	0.28520	99407.5	20621.7	7259.9	S
24.225	0.0525	0.0000	106.110	0.19865	0.28489	99410.4	20632.1	7274.8	S
24.240	0.0459	0.0000	106.109	0.19827	0.28458	99413.0	20642.4	7289.6	S
24.254	0.0400	0.0000	106.108	0.19789	0.28426	99415.2	20652.8	7304.4	S
24.269	0.0348	0.0000	106.107	0.19752	0.28394	99417.2	20663.1	7319.3	S
24.283	0.0301	0.0000	106.106	0.19716	0.28362	99418.9	20673.4	7334.1	S
24.298	0.0259	0.0000	106.105	0.19680	0.28329	99420.3	20683.6	7348.9	S
24.312	0.0222	0.0000	106.104	0.19644	0.28296	99421.6	20693.9	7363.6	S
24.327	0.0189	0.0000	106.103	0.19609	0.28263	99422.7	20704.1	7378.4	S
24.341	0.0159	0.0000	106.102	0.19575	0.28230	99423.6	20714.3	7393.1	S
24.356	0.0134	0.0000	106.101	0.19541	0.28196	99424.3	20724.5	7407.8	S
24.370	0.0111	0.0000	106.100	0.19508	0.28162	99425.0	20734.7	7422.5	S
24.385	0.0092	0.0000	106.099	0.19475	0.28128	99425.5	20744.9	7437.2	S
24.399	0.0075	0.0000	106.098	0.19443	0.28094	99425.9	20755.0	7451.9	S
24.414	0.0060	0.0000	106.097	0.19411	0.28060	99426.3	20765.2	7466.5	S
24.428	0.0047	0.0000	106.096	0.19379	0.28026	99426.6	20775.3	7481.1	S
24.443	0.0036	0.0000	106.095	0.19349	0.27991	99426.8	20785.4	7495.7	S
24.457	0.0027	0.0000	106.094	0.19318	0.27957	99427.0	20795.5	7510.3	S
24.472	0.0019	0.0000	106.093	0.19288	0.27923	99427.1	20805.6	7524.9	S
24.486	0.0013	0.0000	106.092	0.19259	0.27888	99427.2	20815.6	7539.5	S
24.501	0.0009	0.0000	106.091	0.19230	0.27853	99427.2	20825.6	7554.0	S
24.515	0.0005	0.0000	106.090	0.19201	0.27819	99427.3	20835.7	7568.5	S
24.530	0.0003	0.0000	106.089	0.19173	0.27784	99427.3	20845.7	7583.0	S
24.544	0.0001	0.0000	106.088	0.19145	0.27750	99427.3	20855.7	7597.5	S
24.559	0.0000	0.0000	106.087	0.19118	0.27715	99427.3	20865.6	7612.0	S
24.573	0.0000	0.0000	106.085	0.19091	0.27680	99427.3	20875.6	7626.4	S
24.588	0.0000	0.0000	106.084	0.19065	0.27646	99427.3	20885.6	7640.8	S
48.588	0.0000	0.0000	105.620	0.03446	0.00000	99427.3	19419.5	19583.7	S
72.588	0.0000	0.0000	105.272	0.07592	0.00000	99427.3	26840.8	19583.7	S
96.588	0.0000	0.0000	104.993	0.05967	0.00000	99427.3	32537.9	19583.7	S
120.588	0.0000	0.0000	104.759	0.04911	0.00000	99427.3	37151.7	19583.7	S

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Detailed Results (cont,d.) :: Scenario 5 :: FDOT 24 Hour - 24 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
144.588	0.0000	0.0000	104.556	0.04168	0.00000	99427.3	41023.6	19583.7	S
168.588	0.0000	0.0000	104.376	0.03614	0.00000	99427.3	44353.7	19583.7	S
192.588	0.0000	0.0000	104.214	0.03184	0.00000	99427.3	47269.1	19583.7	S
216.588	0.0000	0.0000	104.066	0.02840	0.00000	99427.3	49856.3	19583.7	S
240.588	0.0000	0.0000	103.931	0.02559	0.00000	99427.3	52177.1	19583.7	S
264.588	0.0000	0.0000	103.806	0.02324	0.00000	99427.3	54277.4	19583.7	S
288.588	0.0000	0.0000	103.690	0.02124	0.00000	99427.3	56192.1	19583.7	S
312.588	0.0000	0.0000	103.581	0.01953	0.00000	99427.3	57948.3	19583.7	S
336.588	0.0000	0.0000	103.479	0.01805	0.00000	99427.3	59567.4	19583.7	S
360.588	0.0000	0.0000	103.383	0.01674	0.00000	99427.3	61066.7	19583.7	S
384.588	0.0000	0.0000	103.292	0.01559	0.00000	99427.3	62460.6	19583.7	S
408.588	0.0000	0.0000	103.206	0.01456	0.00000	99427.3	63760.8	19583.7	S
432.588	0.0000	0.0000	103.124	0.01364	0.00000	99427.3	64977.2	19583.7	S
456.588	0.0000	0.0000	103.046	0.01282	0.00000	99427.3	66118.5	19583.7	S
480.588	0.0000	0.0000	102.971	0.01207	0.00000	99427.3	67191.7	19583.7	S
504.588	0.0000	0.0000	102.900	0.01139	0.00000	99427.3	68203.5	19583.7	S
528.588	0.0000	0.0000	102.832	0.01077	0.00000	99427.3	69159.3	19583.7	S
552.588	0.0000	0.0000	102.767	0.01020	0.00000	99427.3	70063.9	19583.7	S
576.588	0.0000	0.0000	102.704	0.00968	0.00000	99427.3	70921.6	19583.7	S
600.588	0.0000	0.0000	102.644	0.00920	0.00000	99427.3	71736.2	19583.7	S
624.588	0.0000	0.0000	102.586	0.00876	0.00000	99427.3	72511.1	19583.7	S
648.588	0.0000	0.0000	102.530	0.00835	0.00000	99427.3	73249.3	19583.7	S
672.588	0.0000	0.0000	102.476	0.00797	0.00000	99427.3	73953.3	19583.7	S
696.588	0.0000	0.0000	102.424	0.00761	0.00000	99427.3	74625.8	19583.7	S
720.588	0.0000	0.0000	102.374	0.00728	0.00000	99427.3	75268.7	19583.7	S
744.588	0.0000	0.0000	102.325	0.00697	0.00000	99427.3	75884.2	19583.7	S
768.588	0.0000	0.0000	102.278	----	----	99427.3	76474.0	19583.7	N.A.



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Detailed Results (cont,d.) :: Scenario 6 :: FDOT 72 Hour - 72 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
70.764	0.1794	0.0000	106.304	0.12979	0.34148	127142.0	35405.3	15655.6	S
70.778	0.1794	0.0000	106.303	0.12971	0.34131	127151.4	35412.0	15673.4	S
70.793	0.1794	0.0000	106.303	0.12963	0.34114	127160.8	35418.8	15691.2	S
70.807	0.1794	0.0000	106.302	0.12955	0.34097	127170.1	35425.6	15709.0	S
70.822	0.1794	0.0000	106.301	0.12946	0.34080	127179.5	35432.3	15726.7	S
70.836	0.1794	0.0000	106.301	0.12938	0.34063	127188.8	35439.1	15744.5	S
70.851	0.1794	0.0000	106.300	0.12930	0.34046	127198.2	35445.8	15762.3	S
70.865	0.1794	0.0000	106.300	0.12921	0.34029	127207.6	35452.6	15780.0	S
70.880	0.1794	0.0000	106.299	0.12913	0.34012	127216.9	35459.3	15797.8	S
70.894	0.1794	0.0000	106.298	0.12906	0.33995	127226.3	35466.0	15815.5	S
70.909	0.1794	0.0000	106.298	0.12897	0.33978	127235.6	35472.8	15833.2	S
70.923	0.1794	0.0000	106.297	0.12889	0.33961	127245.0	35479.5	15851.0	S
70.938	0.1794	0.0000	106.296	0.12881	0.33944	127254.4	35486.2	15868.7	S
70.952	0.1794	0.0000	106.296	0.12873	0.33927	127263.7	35492.9	15886.4	S
70.967	0.1794	0.0000	106.295	0.12865	0.33910	127273.1	35499.6	15904.1	S
70.981	0.1794	0.0000	106.295	0.12858	0.33893	127282.4	35506.3	15921.7	S
70.996	0.1794	0.0000	106.294	0.12849	0.33876	127291.8	35513.1	15939.4	S
71.010	0.1794	0.0000	106.293	0.12841	0.33859	127301.1	35519.8	15957.1	S
71.025	0.1794	0.0000	106.293	0.12833	0.33842	127310.5	35526.5	15974.7	S
71.039	0.1794	0.0000	106.292	0.12825	0.33825	127319.9	35533.1	15992.4	S
71.054	0.1794	0.0000	106.291	0.12817	0.33808	127329.2	35539.8	16010.0	S
71.068	0.1794	0.0000	106.291	0.12809	0.33791	127338.6	35546.5	16027.7	S
71.082	0.1794	0.0000	106.290	0.12802	0.33774	127347.9	35553.2	16045.3	S
71.097	0.1794	0.0000	106.290	0.12794	0.33757	127357.3	35559.9	16062.9	S
71.111	0.1794	0.0000	106.289	0.12786	0.33740	127366.7	35566.5	16080.5	S
71.126	0.1794	0.0000	106.288	0.12778	0.33724	127376.0	35573.2	16098.1	S
71.140	0.1794	0.0000	106.288	0.12770	0.33707	127385.4	35579.9	16115.7	S
71.155	0.1794	0.0000	106.287	0.12763	0.33690	127394.7	35586.5	16133.2	S
71.169	0.1794	0.0000	106.286	0.12755	0.33673	127404.1	35593.2	16150.8	S
71.184	0.1794	0.0000	106.286	0.12747	0.33656	127413.5	35599.8	16168.4	S
71.198	0.1794	0.0000	106.285	0.12739	0.33639	127422.8	35606.5	16185.9	S
71.213	0.1794	0.0000	106.285	0.12732	0.33622	127432.2	35613.1	16203.5	S
71.227	0.1794	0.0000	106.284	0.12724	0.33605	127441.5	35619.8	16221.0	S
71.242	0.1794	0.0000	106.283	0.12716	0.33588	127450.9	35626.4	16238.5	S
71.256	0.1794	0.0000	106.283	0.12709	0.33571	127460.3	35633.0	16256.0	S
71.271	0.1794	0.0000	106.282	0.12702	0.33555	127469.6	35639.7	16273.5	S
71.285	0.1794	0.0000	106.281	0.12694	0.33538	127479.0	35646.3	16291.0	S
71.300	0.1794	0.0000	106.281	0.12686	0.33521	127488.3	35652.9	16308.5	S
71.314	0.1794	0.0000	106.280	0.12679	0.33504	127497.7	35659.5	16326.0	S
71.329	0.1794	0.0000	106.280	0.12671	0.33487	127507.1	35666.1	16343.5	S
71.343	0.1794	0.0000	106.279	0.12663	0.33470	127516.4	35672.7	16360.9	S
71.358	0.1794	0.0000	106.278	0.12656	0.33453	127525.8	35679.3	16378.4	S
71.372	0.1794	0.0000	106.278	0.12649	0.33437	127535.1	35685.9	16395.8	S
71.387	0.1794	0.0000	106.277	0.12641	0.33420	127544.5	35692.5	16413.3	S
71.401	0.1794	0.0000	106.277	0.12634	0.33403	127553.9	35699.1	16430.7	S
71.416	0.1794	0.0000	106.276	0.12626	0.33386	127563.2	35705.7	16448.1	S
71.430	0.1794	0.0000	106.275	0.12618	0.33369	127572.6	35712.3	16465.5	S
71.445	0.1794	0.0000	106.275	0.12611	0.33352	127581.9	35718.9	16482.9	S
71.459	0.1794	0.0000	106.274	0.12604	0.33336	127591.3	35725.4	16500.3	S
71.474	0.1794	0.0000	106.273	0.12596	0.33319	127600.7	35732.0	16517.7	S
71.488	0.1794	0.0000	106.273	0.12589	0.33302	127610.0	35738.6	16535.1	S
71.503	0.1794	0.0000	106.272	0.12582	0.33285	127619.4	35745.2	16552.5	S
71.517	0.1794	0.0000	106.272	0.12575	0.33268	127628.7	35751.7	16569.8	S
71.532	0.1794	0.0000	106.271	0.12567	0.33252	127638.1	35758.3	16587.2	S
71.546	0.1795	0.0000	106.270	0.12559	0.33235	127647.5	35764.8	16604.5	S
71.561	0.1795	0.0000	106.270	0.12552	0.33218	127656.8	35771.4	16621.8	S
71.575	0.1795	0.0000	106.269	0.12546	0.33201	127666.2	35777.9	16639.2	S
71.590	0.1795	0.0000	106.269	0.12538	0.33184	127675.5	35784.5	16656.5	S
71.604	0.1795	0.0000	106.268	0.12531	0.33168	127684.9	35791.0	16673.8	S
71.619	0.1795	0.0000	106.267	0.12524	0.33151	127694.3	35797.5	16691.1	S
71.633	0.1795	0.0000	106.267	0.12516	0.33134	127703.6	35804.1	16708.4	S
71.648	0.1795	0.0000	106.266	0.12508	0.33117	127713.0	35810.6	16725.6	S
71.662	0.1795	0.0000	106.266	0.12502	0.33101	127722.3	35817.1	16742.9	S
71.677	0.1795	0.0000	106.265	0.12495	0.33084	127731.7	35823.6	16760.2	S
71.691	0.1795	0.0000	106.264	0.12488	0.33067	127741.1	35830.1	16777.4	S
71.706	0.1795	0.0000	106.264	0.12480	0.33050	127750.4	35836.7	16794.7	S
71.720	0.1795	0.0000	106.263	0.12473	0.33034	127759.8	35843.2	16811.9	S
71.734	0.1795	0.0000	106.262	0.12467	0.33017	127769.1	35849.7	16829.1	S
71.749	0.1795	0.0000	106.262	0.12459	0.33000	127778.5	35856.2	16846.3	S
71.763	0.1795	0.0000	106.261	0.12452	0.32984	127787.9	35862.7	16863.5	S
71.778	0.1795	0.0000	106.261	0.12445	0.32967	127797.2	35869.2	16880.7	S
71.792	0.1795	0.0000	106.260	0.12439	0.32950	127806.6	35875.6	16897.9	S
71.807	0.1795	0.0000	106.259	0.12431	0.32933	127815.9	35882.1	16915.1	S
71.821	0.1795	0.0000	106.259	0.12424	0.32917	127825.3	35888.6	16932.3	S

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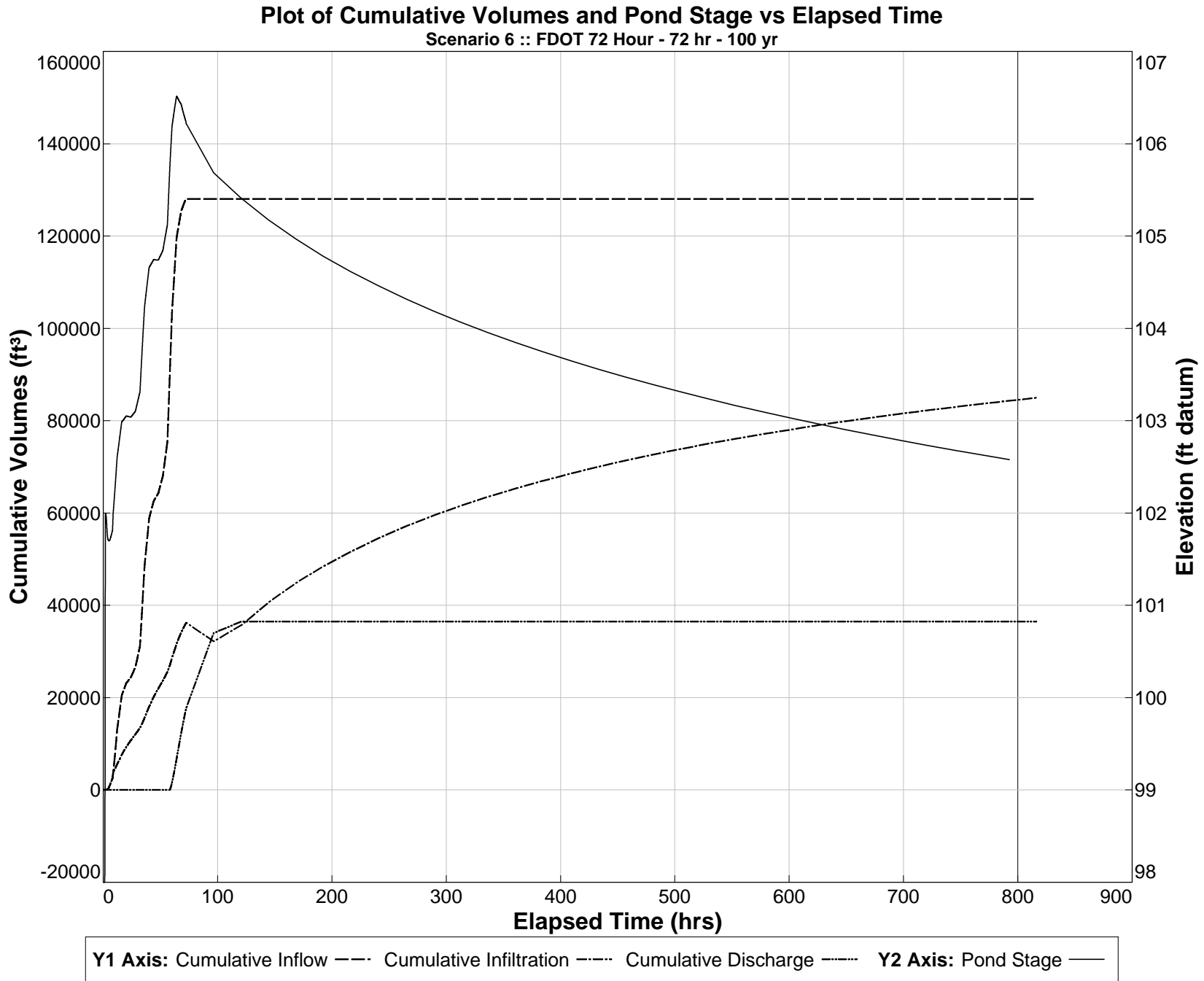
Detailed Results (cont,d.) :: Scenario 6 :: FDOT 72 Hour - 72 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
71.836	0.1795	0.0000	106.258	0.12417	0.32900	127834.7	35895.1	16949.5	S
71.850	0.1795	0.0000	106.258	0.12410	0.32883	127844.0	35901.6	16966.6	S
71.865	0.1795	0.0000	106.257	0.12403	0.32867	127853.4	35908.0	16983.8	S
71.879	0.1795	0.0000	106.256	0.12396	0.32850	127862.8	35914.5	17000.9	S
71.894	0.1795	0.0000	106.256	0.12389	0.32833	127872.1	35921.0	17018.0	S
71.908	0.1795	0.0000	106.255	0.12383	0.32817	127881.5	35927.4	17035.2	S
71.923	0.1795	0.0000	106.255	0.12376	0.32800	127890.8	35933.9	17052.3	S
71.937	0.1795	0.0000	106.254	0.12368	0.32783	127900.2	35940.3	17069.4	S
71.952	0.1795	0.0000	106.253	0.12362	0.32767	127909.5	35946.8	17086.5	S
71.966	0.1795	0.0000	106.253	0.12355	0.32750	127918.9	35953.2	17103.5	S
71.981	0.1795	0.0000	106.252	0.12348	0.32733	127928.3	35959.7	17120.6	S
71.995	0.1795	0.0000	106.252	0.12341	0.32717	127937.6	35966.1	17137.7	S
72.010	0.1780	0.0000	106.251	0.12334	0.32700	127947.0	35972.6	17154.8	S
72.024	0.1734	0.0000	106.251	0.12326	0.32683	127956.1	35979.0	17171.8	S
72.039	0.1641	0.0000	106.250	0.12317	0.32666	127964.9	35985.4	17188.9	S
72.053	0.1490	0.0000	106.249	0.12305	0.32648	127973.1	35991.8	17205.9	S
72.068	0.1314	0.0000	106.249	0.12291	0.32629	127980.4	35998.3	17222.9	S
72.082	0.1140	0.0000	106.248	0.12275	0.32609	127986.8	36004.7	17239.9	S
72.097	0.0984	0.0000	106.247	0.12257	0.32588	127992.3	36011.1	17256.9	S
72.111	0.0852	0.0000	106.246	0.12238	0.32566	127997.1	36017.4	17273.9	S
72.126	0.0740	0.0000	106.246	0.12218	0.32543	128001.3	36023.8	17290.9	S
72.140	0.0646	0.0000	106.245	0.12198	0.32520	128004.9	36030.2	17307.9	S
72.155	0.0566	0.0000	106.244	0.12178	0.32496	128008.1	36036.5	17324.8	S
72.169	0.0497	0.0000	106.243	0.12158	0.32471	128010.8	36042.9	17341.8	S
72.184	0.0437	0.0000	106.242	0.12137	0.32447	128013.3	36049.2	17358.7	S
72.198	0.0384	0.0000	106.241	0.12117	0.32422	128015.4	36055.6	17375.6	S
72.213	0.0336	0.0000	106.240	0.12097	0.32396	128017.3	36061.9	17392.5	S
72.227	0.0294	0.0000	106.239	0.12077	0.32370	128018.9	36068.2	17409.4	S
72.242	0.0257	0.0000	106.238	0.12057	0.32345	128020.4	36074.5	17426.3	S
72.256	0.0224	0.0000	106.238	0.12038	0.32318	128021.6	36080.8	17443.2	S
72.271	0.0194	0.0000	106.237	0.12019	0.32292	128022.7	36087.0	17460.0	S
72.285	0.0168	0.0000	106.236	0.12000	0.32266	128023.6	36093.3	17476.8	S
72.300	0.0145	0.0000	106.235	0.11981	0.32239	128024.5	36099.5	17493.7	S
72.314	0.0124	0.0000	106.234	0.11963	0.32212	128025.2	36105.8	17510.5	S
72.329	0.0105	0.0000	106.233	0.11945	0.32185	128025.8	36112.0	17527.3	S
72.343	0.0089	0.0000	106.232	0.11927	0.32158	128026.3	36118.3	17544.0	S
72.358	0.0074	0.0000	106.231	0.11909	0.32131	128026.7	36124.5	17560.8	S
72.372	0.0062	0.0000	106.230	0.11892	0.32104	128027.0	36130.7	17577.6	S
72.386	0.0051	0.0000	106.229	0.11876	0.32077	128027.3	36136.9	17594.3	S
72.401	0.0041	0.0000	106.228	0.11859	0.32050	128027.6	36143.1	17611.0	S
72.415	0.0033	0.0000	106.227	0.11842	0.32022	128027.8	36149.2	17627.7	S
72.430	0.0026	0.0000	106.226	0.11827	0.31995	128027.9	36155.4	17644.4	S
72.444	0.0020	0.0000	106.225	0.11811	0.31967	128028.0	36161.6	17661.1	S
72.459	0.0015	0.0000	106.224	0.11795	0.31940	128028.1	36167.7	17677.8	S
72.473	0.0011	0.0000	106.223	0.11780	0.31912	128028.2	36173.9	17694.4	S
72.488	0.0007	0.0000	106.222	0.11765	0.31885	128028.3	36180.0	17711.1	S
72.502	0.0005	0.0000	106.221	0.11750	0.31857	128028.3	36186.2	17727.7	S
72.517	0.0003	0.0000	106.220	0.11736	0.31830	128028.3	36192.3	17744.3	S
72.531	0.0001	0.0000	106.219	0.11721	0.31802	128028.3	36198.4	17760.9	S
72.546	0.0001	0.0000	106.219	0.11707	0.31775	128028.3	36204.5	17777.5	S
72.560	0.0000	0.0000	106.218	0.11693	0.31747	128028.3	36210.6	17794.0	S
72.575	0.0000	0.0000	106.217	0.11680	0.31719	128028.3	36216.7	17810.6	S
72.589	0.0000	0.0000	106.216	0.11663	0.31692	128028.3	36222.8	17827.1	S
96.589	0.0000	0.0000	105.685	-0.00325	0.05723	128028.3	32193.2	33990.4	S
120.589	0.0000	0.0000	105.410	0.04865	0.00000	128028.3	35660.4	36462.7	S
144.589	0.0000	0.0000	105.174	0.05291	0.00000	128028.3	40599.9	36462.7	S
168.589	0.0000	0.0000	104.966	0.04541	0.00000	128028.3	44802.8	36462.7	S
192.589	0.0000	0.0000	104.781	0.03965	0.00000	128028.3	48446.9	36462.7	S
216.589	0.0000	0.0000	104.613	0.03510	0.00000	128028.3	51654.7	36462.7	S
240.589	0.0000	0.0000	104.461	0.03142	0.00000	128028.3	54512.7	36462.7	S
264.589	0.0000	0.0000	104.320	0.02839	0.00000	128028.3	57084.5	36462.7	S
288.589	0.0000	0.0000	104.190	0.02584	0.00000	128028.3	59417.8	36462.7	S
312.589	0.0000	0.0000	104.068	0.02366	0.00000	128028.3	61549.0	36462.7	S
336.589	0.0000	0.0000	103.954	0.02179	0.00000	128028.3	63507.0	36462.7	S
360.589	0.0000	0.0000	103.847	0.02016	0.00000	128028.3	65314.9	36462.7	S
384.589	0.0000	0.0000	103.746	0.01873	0.00000	128028.3	66991.3	36462.7	S
408.589	0.0000	0.0000	103.650	0.01746	0.00000	128028.3	68551.5	36462.7	S
432.589	0.0000	0.0000	103.560	0.01633	0.00000	128028.3	70008.5	36462.7	S
456.589	0.0000	0.0000	103.474	0.01531	0.00000	128028.3	71373.0	36462.7	S
480.589	0.0000	0.0000	103.391	0.01440	0.00000	128028.3	72654.4	36462.7	S
504.589	0.0000	0.0000	103.313	0.01357	0.00000	128028.3	73860.6	36462.7	S
528.589	0.0000	0.0000	103.238	0.01281	0.00000	128028.3	74998.4	36462.7	S
552.589	0.0000	0.0000	103.166	0.01212	0.00000	128028.3	76074.1	36462.7	S
576.589	0.0000	0.0000	103.097	0.01149	0.00000	128028.3	77092.8	36462.7	S

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Detailed Results (cont,d.) :: Scenario 6 :: FDOT 72 Hour - 72 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
600.589	0.0000	0.0000	103.031	0.01091	0.00000	128028.3	78059.3	36462.7	S
624.589	0.0000	0.0000	102.967	0.01037	0.00000	128028.3	78977.7	36462.7	S
648.589	0.0000	0.0000	102.905	0.00988	0.00000	128028.3	79851.7	36462.7	S
672.589	0.0000	0.0000	102.846	0.00942	0.00000	128028.3	80684.7	36462.7	S
696.589	0.0000	0.0000	102.789	0.00900	0.00000	128028.3	81479.6	36462.7	S
720.589	0.0000	0.0000	102.734	0.00860	0.00000	128028.3	82239.2	36462.7	S
744.589	0.0000	0.0000	102.680	0.00823	0.00000	128028.3	82965.8	36462.7	S
768.589	0.0000	0.0000	102.629	0.00789	0.00000	128028.3	83661.7	36462.7	S
792.589	0.0000	0.0000	102.579	0.00756	0.00000	128028.3	84328.8	36462.7	S
816.589	0.0000	0.0000	102.530	----	----	128028.3	84968.8	36462.7	N.A.



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Detailed Results (cont,d.) :: Scenario 7 :: FDOT 168 Hour - 168 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
166.188	0.2559	0.0000	106.436	0.10625	0.37525	149205.1	53151.8	16779.4	S
166.202	0.2559	0.0000	106.436	0.10619	0.37513	149218.4	53157.4	16799.0	S
166.217	0.2559	0.0000	106.435	0.10613	0.37501	149231.8	53162.9	16818.5	S
166.231	0.2559	0.0000	106.435	0.10607	0.37490	149245.1	53168.4	16838.1	S
166.246	0.2559	0.0000	106.434	0.10601	0.37478	149258.5	53174.0	16857.6	S
166.260	0.2559	0.0000	106.434	0.10595	0.37466	149271.8	53179.5	16877.2	S
166.275	0.2559	0.0000	106.433	0.10589	0.37454	149285.2	53185.0	16896.7	S
166.289	0.2559	0.0000	106.433	0.10583	0.37443	149298.5	53190.5	16916.2	S
166.304	0.2559	0.0000	106.432	0.10577	0.37431	149311.9	53196.1	16935.8	S
166.318	0.2559	0.0000	106.432	0.10571	0.37419	149325.2	53201.6	16955.3	S
166.332	0.2559	0.0000	106.431	0.10566	0.37407	149338.6	53207.1	16974.8	S
166.347	0.2559	0.0000	106.431	0.10560	0.37396	149351.9	53212.6	16994.3	S
166.361	0.2559	0.0000	106.431	0.10554	0.37384	149365.3	53218.1	17013.8	S
166.376	0.2559	0.0000	106.430	0.10548	0.37372	149378.6	53223.6	17033.3	S
166.390	0.2559	0.0000	106.430	0.10542	0.37360	149392.0	53229.1	17052.8	S
166.405	0.2559	0.0000	106.429	0.10536	0.37349	149405.3	53234.6	17072.3	S
166.419	0.2559	0.0000	106.429	0.10530	0.37337	149418.7	53240.1	17091.8	S
166.434	0.2559	0.0000	106.428	0.10525	0.37325	149432.0	53245.6	17111.2	S
166.448	0.2559	0.0000	106.428	0.10519	0.37313	149445.3	53251.1	17130.7	S
166.463	0.2559	0.0000	106.427	0.10513	0.37302	149458.7	53256.6	17150.2	S
166.477	0.2559	0.0000	106.427	0.10507	0.37290	149472.0	53262.0	17169.6	S
166.492	0.2559	0.0000	106.426	0.10501	0.37278	149485.4	53267.5	17189.1	S
166.506	0.2559	0.0000	106.426	0.10496	0.37267	149498.7	53273.0	17208.5	S
166.521	0.2559	0.0000	106.425	0.10490	0.37255	149512.1	53278.5	17227.9	S
166.535	0.2559	0.0000	106.425	0.10484	0.37243	149525.4	53283.9	17247.4	S
166.550	0.2559	0.0000	106.424	0.10478	0.37232	149538.8	53289.4	17266.8	S
166.564	0.2559	0.0000	106.424	0.10473	0.37220	149552.1	53294.9	17286.2	S
166.579	0.2559	0.0000	106.423	0.10467	0.37208	149565.5	53300.3	17305.6	S
166.593	0.2559	0.0000	106.423	0.10461	0.37197	149578.8	53305.8	17325.0	S
166.608	0.2559	0.0000	106.422	0.10456	0.37185	149592.2	53311.2	17344.4	S
166.622	0.2559	0.0000	106.422	0.10450	0.37173	149605.5	53316.7	17363.8	S
166.637	0.2559	0.0000	106.421	0.10444	0.37162	149618.9	53322.1	17383.2	S
166.651	0.2559	0.0000	106.421	0.10439	0.37150	149632.2	53327.6	17402.6	S
166.666	0.2559	0.0000	106.421	0.10433	0.37138	149645.6	53333.0	17422.0	S
166.680	0.2559	0.0000	106.420	0.10428	0.37127	149658.9	53338.5	17441.3	S
166.695	0.2559	0.0000	106.420	0.10422	0.37115	149672.3	53343.9	17460.7	S
166.709	0.2559	0.0000	106.419	0.10416	0.37104	149685.6	53349.4	17480.1	S
166.724	0.2559	0.0000	106.419	0.10411	0.37092	149699.0	53354.8	17499.4	S
166.738	0.2559	0.0000	106.418	0.10405	0.37080	149712.3	53360.2	17518.7	S
166.753	0.2559	0.0000	106.418	0.10400	0.37069	149725.7	53365.6	17538.1	S
166.767	0.2559	0.0000	106.417	0.10394	0.37057	149739.0	53371.1	17557.4	S
166.782	0.2559	0.0000	106.417	0.10389	0.37046	149752.4	53376.5	17576.7	S
166.796	0.2559	0.0000	106.416	0.10383	0.37034	149765.7	53381.9	17596.1	S
166.811	0.2559	0.0000	106.416	0.10378	0.37022	149779.1	53387.3	17615.4	S
166.825	0.2559	0.0000	106.415	0.10372	0.37011	149792.4	53392.7	17634.7	S
166.840	0.2559	0.0000	106.415	0.10367	0.36999	149805.8	53398.1	17654.0	S
166.854	0.2559	0.0000	106.414	0.10361	0.36988	149819.1	53403.5	17673.3	S
166.869	0.2559	0.0000	106.414	0.10356	0.36976	149832.5	53408.9	17692.6	S
166.883	0.2559	0.0000	106.414	0.10350	0.36965	149845.8	53414.3	17711.9	S
166.898	0.2559	0.0000	106.413	0.10345	0.36953	149859.2	53419.7	17731.1	S
166.912	0.2559	0.0000	106.413	0.10340	0.36941	149872.5	53425.1	17750.4	S
166.927	0.2559	0.0000	106.412	0.10334	0.36930	149885.8	53430.5	17769.7	S
166.941	0.2559	0.0000	106.412	0.10329	0.36918	149899.2	53435.9	17788.9	S
166.956	0.2559	0.0000	106.411	0.10323	0.36907	149912.5	53441.3	17808.2	S
166.970	0.2559	0.0000	106.411	0.10318	0.36895	149925.9	53446.7	17827.4	S
166.985	0.2559	0.0000	106.410	0.10313	0.36884	149939.3	53452.1	17846.7	S
166.999	0.2559	0.0000	106.410	0.10307	0.36872	149952.6	53457.4	17865.9	S
167.013	0.2559	0.0000	106.409	0.10302	0.36861	149965.9	53462.8	17885.1	S
167.028	0.2559	0.0000	106.409	0.10297	0.36849	149979.3	53468.2	17904.4	S
167.042	0.2559	0.0000	106.408	0.10291	0.36838	149992.6	53473.6	17923.6	S
167.057	0.2559	0.0000	106.408	0.10286	0.36826	150006.0	53478.9	17942.8	S
167.071	0.2559	0.0000	106.407	0.10281	0.36815	150019.3	53484.3	17962.0	S
167.086	0.2559	0.0000	106.407	0.10275	0.36803	150032.7	53489.6	17981.2	S
167.100	0.2559	0.0000	106.407	0.10270	0.36792	150046.0	53495.0	18000.4	S
167.115	0.2559	0.0000	106.406	0.10265	0.36780	150059.4	53500.4	18019.6	S
167.129	0.2559	0.0000	106.406	0.10260	0.36769	150072.7	53505.7	18038.8	S
167.144	0.2559	0.0000	106.405	0.10254	0.36757	150086.1	53511.1	18057.9	S
167.158	0.2559	0.0000	106.405	0.10249	0.36746	150099.4	53516.4	18077.1	S
167.173	0.2559	0.0000	106.404	0.10244	0.36734	150112.8	53521.8	18096.3	S
167.187	0.2559	0.0000	106.404	0.10239	0.36723	150126.1	53527.1	18115.4	S
167.202	0.2559	0.0000	106.403	0.10233	0.36711	150139.5	53532.4	18134.6	S
167.216	0.2559	0.0000	106.403	0.10228	0.36700	150152.8	53537.8	18153.7	S
167.231	0.2559	0.0000	106.402	0.10223	0.36689	150166.2	53543.1	18172.9	S
167.245	0.2559	0.0000	106.402	0.10218	0.36677	150179.5	53548.4	18192.0	S

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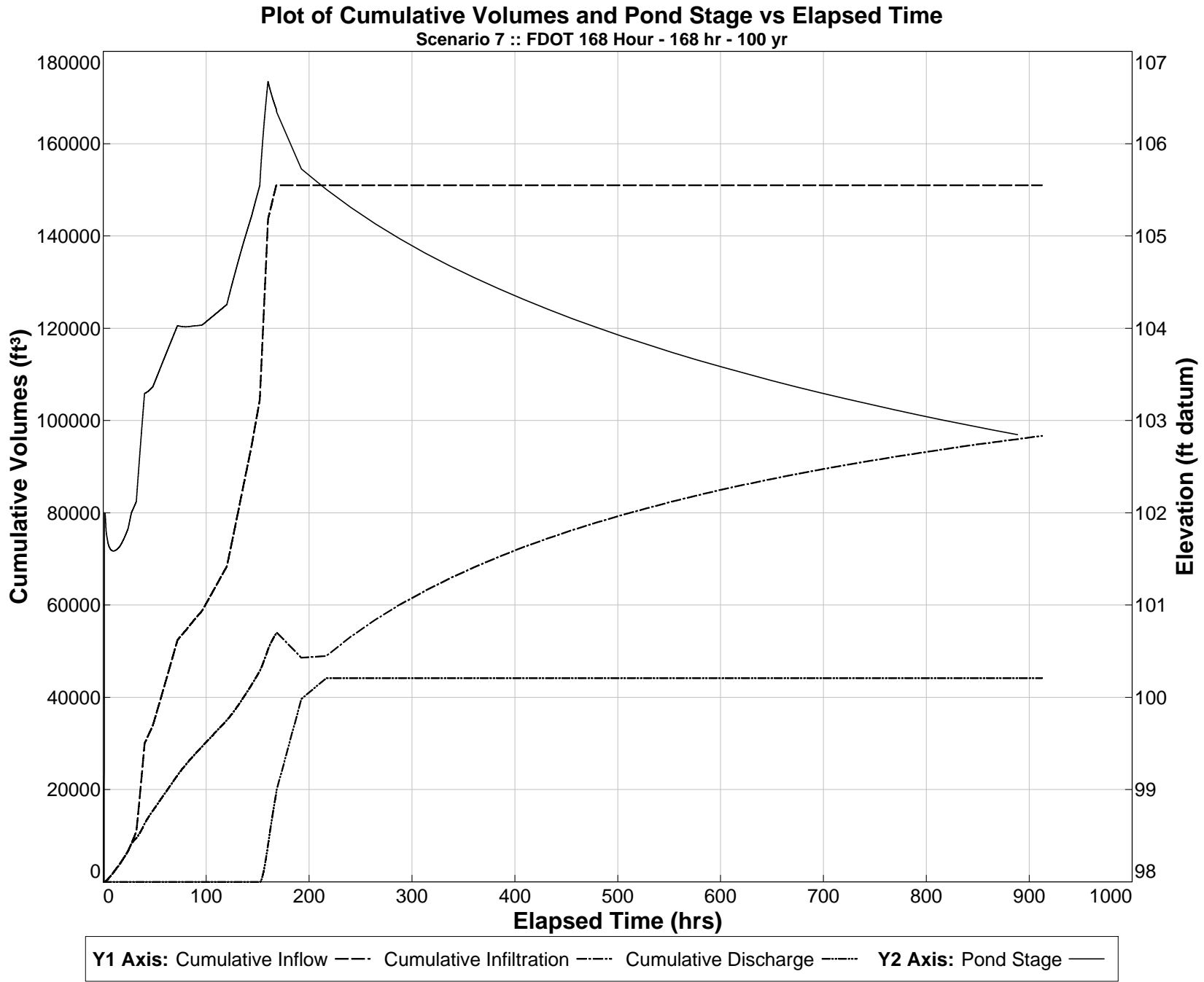
Detailed Results (cont,d.) :: Scenario 7 :: FDOT 168 Hour - 168 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
167.260	0.2559	0.0000	106.401	0.10213	0.36666	150192.9	53553.8	18211.1	S
167.274	0.2559	0.0000	106.401	0.10208	0.36654	150206.2	53559.1	18230.2	S
167.289	0.2559	0.0000	106.401	0.10203	0.36643	150219.6	53564.4	18249.4	S
167.303	0.2559	0.0000	106.400	0.10197	0.36631	150232.9	53569.7	18268.5	S
167.318	0.2559	0.0000	106.400	0.10192	0.36620	150246.3	53575.1	18287.6	S
167.332	0.2559	0.0000	106.399	0.10187	0.36609	150259.6	53580.4	18306.7	S
167.347	0.2559	0.0000	106.399	0.10182	0.36597	150273.0	53585.7	18325.8	S
167.361	0.2559	0.0000	106.398	0.10177	0.36586	150286.3	53591.0	18344.9	S
167.376	0.2559	0.0000	106.398	0.10172	0.36574	150299.7	53596.3	18363.9	S
167.390	0.2559	0.0000	106.397	0.10167	0.36563	150313.0	53601.6	18383.0	S
167.405	0.2559	0.0000	106.397	0.10162	0.36552	150326.4	53606.9	18402.1	S
167.419	0.2559	0.0000	106.396	0.10157	0.36540	150339.7	53612.2	18421.1	S
167.434	0.2559	0.0000	106.396	0.10152	0.36529	150353.1	53617.5	18440.2	S
167.448	0.2559	0.0000	106.396	0.10147	0.36517	150366.4	53622.8	18459.2	S
167.463	0.2559	0.0000	106.395	0.10142	0.36506	150379.8	53628.1	18478.3	S
167.477	0.2559	0.0000	106.395	0.10137	0.36495	150393.1	53633.4	18497.3	S
167.492	0.2559	0.0000	106.394	0.10132	0.36483	150406.5	53638.7	18516.4	S
167.506	0.2559	0.0000	106.394	0.10127	0.36472	150419.8	53643.9	18535.4	S
167.521	0.2560	0.0000	106.393	0.10122	0.36461	150433.2	53649.2	18554.4	S
167.535	0.2560	0.0000	106.393	0.10117	0.36449	150446.5	53654.5	18573.4	S
167.550	0.2560	0.0000	106.392	0.10112	0.36438	150459.9	53659.8	18592.4	S
167.564	0.2560	0.0000	106.392	0.10107	0.36427	150473.2	53665.1	18611.4	S
167.579	0.2560	0.0000	106.391	0.10102	0.36415	150486.6	53670.3	18630.4	S
167.593	0.2560	0.0000	106.391	0.10097	0.36404	150499.9	53675.6	18649.4	S
167.608	0.2560	0.0000	106.391	0.10092	0.36393	150513.3	53680.9	18668.4	S
167.622	0.2560	0.0000	106.390	0.10087	0.36381	150526.6	53686.1	18687.4	S
167.636	0.2560	0.0000	106.390	0.10082	0.36370	150540.0	53691.4	18706.4	S
167.651	0.2560	0.0000	106.389	0.10077	0.36359	150553.3	53696.6	18725.3	S
167.665	0.2560	0.0000	106.389	0.10073	0.36347	150566.7	53701.9	18744.3	S
167.680	0.2560	0.0000	106.388	0.10068	0.36336	150580.0	53707.1	18763.2	S
167.694	0.2560	0.0000	106.388	0.10063	0.36325	150593.4	53712.4	18782.2	S
167.709	0.2560	0.0000	106.387	0.10058	0.36313	150606.7	53717.6	18801.1	S
167.723	0.2560	0.0000	106.387	0.10053	0.36302	150620.1	53722.9	18820.1	S
167.738	0.2560	0.0000	106.387	0.10048	0.36291	150633.4	53728.1	18839.0	S
167.752	0.2560	0.0000	106.386	0.10043	0.36280	150646.8	53733.4	18857.9	S
167.767	0.2560	0.0000	106.386	0.10039	0.36268	150660.1	53738.6	18876.9	S
167.781	0.2560	0.0000	106.385	0.10034	0.36257	150673.5	53743.8	18895.8	S
167.796	0.2560	0.0000	106.385	0.10029	0.36246	150686.8	53749.1	18914.7	S
167.810	0.2560	0.0000	106.384	0.10024	0.36235	150700.2	53754.3	18933.6	S
167.825	0.2560	0.0000	106.384	0.10020	0.36223	150713.5	53759.5	18952.5	S
167.839	0.2560	0.0000	106.383	0.10015	0.36212	150726.9	53764.8	18971.4	S
167.854	0.2560	0.0000	106.383	0.10010	0.36201	150740.3	53770.0	18990.3	S
167.868	0.2560	0.0000	106.383	0.10005	0.36190	150753.6	53775.2	19009.1	S
167.883	0.2560	0.0000	106.382	0.10001	0.36178	150767.0	53780.4	19028.0	S
167.897	0.2560	0.0000	106.382	0.09996	0.36167	150780.3	53785.6	19046.9	S
167.912	0.2560	0.0000	106.381	0.09991	0.36156	150793.7	53790.8	19065.7	S
167.926	0.2560	0.0000	106.381	0.09986	0.36145	150807.0	53796.1	19084.6	S
167.941	0.2560	0.0000	106.380	0.09982	0.36133	150820.4	53801.3	19103.4	S
167.955	0.2560	0.0000	106.380	0.09977	0.36122	150833.7	53806.5	19122.3	S
167.970	0.2560	0.0000	106.379	0.09972	0.36111	150847.1	53811.7	19141.1	S
167.984	0.2560	0.0000	106.379	0.09968	0.36100	150860.4	53816.9	19160.0	S
167.999	0.2560	0.0000	106.379	0.09963	0.36089	150873.8	53822.1	19178.8	S
168.013	0.2532	0.0000	106.378	0.09957	0.36077	150887.0	53827.3	19197.6	S
168.028	0.2455	0.0000	106.378	0.09951	0.36066	150900.0	53832.5	19216.4	S
168.042	0.2304	0.0000	106.377	0.09941	0.36054	150912.5	53837.6	19235.2	S
168.057	0.2069	0.0000	106.377	0.09928	0.36040	150923.9	53842.8	19254.0	S
168.071	0.1814	0.0000	106.376	0.09916	0.36026	150934.0	53848.0	19272.8	S
168.086	0.1569	0.0000	106.375	0.09897	0.36010	150942.8	53853.2	19291.6	S
168.100	0.1355	0.0000	106.375	0.09876	0.35993	150950.4	53858.3	19310.4	S
168.115	0.1173	0.0000	106.374	0.09854	0.35974	150957.0	53863.5	19329.2	S
168.129	0.1020	0.0000	106.373	0.09831	0.35955	150962.8	53868.6	19347.9	S
168.144	0.0891	0.0000	106.373	0.09807	0.35935	150967.7	53873.7	19366.7	S
168.158	0.0782	0.0000	106.372	0.09783	0.35915	150972.1	53878.8	19385.4	S
168.173	0.0687	0.0000	106.371	0.09759	0.35894	150975.9	53883.9	19404.1	S
168.187	0.0604	0.0000	106.370	0.09735	0.35872	150979.3	53889.0	19422.9	S
168.202	0.0532	0.0000	106.369	0.09711	0.35850	150982.3	53894.1	19441.6	S
168.216	0.0463	0.0000	106.368	0.09687	0.35828	150984.9	53899.1	19460.3	S
168.231	0.0406	0.0000	106.367	0.09664	0.35805	150987.1	53904.2	19478.9	S
168.245	0.0354	0.0000	106.366	0.09641	0.35782	150989.1	53909.2	19497.6	S
168.260	0.0309	0.0000	106.366	0.09618	0.35759	150990.8	53914.3	19516.3	S
168.274	0.0268	0.0000	106.365	0.09596	0.35735	150992.3	53919.3	19534.9	S
168.288	0.0231	0.0000	106.364	0.09574	0.35712	150993.6	53924.3	19553.5	S
168.303	0.0199	0.0000	106.363	0.09553	0.35688	150994.8	53929.2	19572.2	S
168.317	0.0170	0.0000	106.362	0.09532	0.35664	150995.7	53934.2	19590.8	S

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Detailed Results (cont,d.) :: Scenario 7 :: FDOT 168 Hour - 168 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
168.332	0.0144	0.0000	106.361	0.09511	0.35639	150996.5	53939.2	19609.4	S
168.346	0.0121	0.0000	106.360	0.09491	0.35615	150997.2	53944.1	19627.9	S
168.361	0.0101	0.0000	106.359	0.09471	0.35591	150997.8	53949.1	19646.5	S
168.375	0.0084	0.0000	106.358	0.09451	0.35566	150998.3	53954.0	19665.1	S
168.390	0.0069	0.0000	106.357	0.09432	0.35541	150998.7	53959.0	19683.6	S
168.404	0.0056	0.0000	106.356	0.09414	0.35517	150999.0	53963.9	19702.2	S
168.419	0.0044	0.0000	106.355	0.09396	0.35492	150999.3	53968.8	19720.7	S
168.433	0.0035	0.0000	106.354	0.09378	0.35467	150999.5	53973.7	19739.2	S
168.448	0.0026	0.0000	106.353	0.09360	0.35442	150999.7	53978.6	19757.7	S
168.462	0.0019	0.0000	106.352	0.09343	0.35417	150999.8	53983.4	19776.2	S
168.477	0.0014	0.0000	106.351	0.09326	0.35392	150999.9	53988.3	19794.6	S
168.491	0.0009	0.0000	106.350	0.09310	0.35367	150999.9	53993.2	19813.1	S
168.506	0.0006	0.0000	106.349	0.09293	0.35342	151000.0	53998.0	19831.5	S
168.520	0.0003	0.0000	106.348	0.09277	0.35317	151000.0	54002.9	19849.9	S
168.535	0.0002	0.0000	106.347	0.09262	0.35292	151000.0	54007.7	19868.4	S
168.549	0.0001	0.0000	106.347	0.09247	0.35267	151000.0	54012.5	19886.8	S
168.564	0.0000	0.0000	106.346	0.09231	0.35242	151000.0	54017.3	19905.1	S
168.578	0.0000	0.0000	106.345	0.09217	0.35217	151000.0	54022.1	19923.5	S
168.593	0.0000	0.0000	106.344	0.09200	0.35192	151000.0	54027.0	19941.9	S
192.593	0.0000	0.0000	105.726	-0.02940	0.10390	151000.0	48612.6	39633.2	S
216.593	0.0000	0.0000	105.505	0.02620	0.00000	151000.0	48946.4	44121.5	S
240.593	0.0000	0.0000	105.308	0.04562	0.00000	151000.0	53139.4	44121.5	S
264.593	0.0000	0.0000	105.129	0.04037	0.00000	151000.0	56828.7	44121.5	S
288.593	0.0000	0.0000	104.966	0.03614	0.00000	151000.0	60115.3	44121.5	S
312.593	0.0000	0.0000	104.816	0.03266	0.00000	151000.0	63073.4	44121.5	S
336.593	0.0000	0.0000	104.677	0.02974	0.00000	151000.0	65758.3	44121.5	S
360.593	0.0000	0.0000	104.547	0.02725	0.00000	151000.0	68212.0	44121.5	S
384.593	0.0000	0.0000	104.426	0.02511	0.00000	151000.0	70467.6	44121.5	S
408.593	0.0000	0.0000	104.311	0.02324	0.00000	151000.0	72551.1	44121.5	S
432.593	0.0000	0.0000	104.203	0.02160	0.00000	151000.0	74483.8	44121.5	S
456.593	0.0000	0.0000	104.101	0.02014	0.00000	151000.0	76283.2	44121.5	S
480.593	0.0000	0.0000	104.004	0.01884	0.00000	151000.0	77964.1	44121.5	S
504.593	0.0000	0.0000	103.912	0.01767	0.00000	151000.0	79538.8	44121.5	S
528.593	0.0000	0.0000	103.824	0.01662	0.00000	151000.0	81018.1	44121.5	S
552.593	0.0000	0.0000	103.740	0.01567	0.00000	151000.0	82411.2	44121.5	S
576.593	0.0000	0.0000	103.659	0.01480	0.00000	151000.0	83726.0	44121.5	S
600.593	0.0000	0.0000	103.582	0.01401	0.00000	151000.0	84969.4	44121.5	S
624.593	0.0000	0.0000	103.508	0.01329	0.00000	151000.0	86147.5	44121.5	S
648.593	0.0000	0.0000	103.437	0.01262	0.00000	151000.0	87265.6	44121.5	S
672.593	0.0000	0.0000	103.368	0.01201	0.00000	151000.0	88328.4	44121.5	S
696.593	0.0000	0.0000	103.302	0.01144	0.00000	151000.0	89340.3	44121.5	S
720.593	0.0000	0.0000	103.238	0.01091	0.00000	151000.0	90304.9	44121.5	S
744.593	0.0000	0.0000	103.177	0.01042	0.00000	151000.0	91225.7	44121.5	S
768.593	0.0000	0.0000	103.117	0.00996	0.00000	151000.0	92105.6	44121.5	S
792.593	0.0000	0.0000	103.060	0.00954	0.00000	151000.0	92947.4	44121.5	S
816.593	0.0000	0.0000	103.004	0.00914	0.00000	151000.0	93753.7	44121.5	S
840.593	0.0000	0.0000	102.950	0.00877	0.00000	151000.0	94526.6	44121.5	S
864.593	0.0000	0.0000	102.898	0.00842	0.00000	151000.0	95268.4	44121.5	S
888.593	0.0000	0.0000	102.847	0.00809	0.00000	151000.0	95980.8	44121.5	S
912.593	0.0000	0.0000	102.798	----	----	151000.0	96665.6	44121.5	N.A.



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Detailed Results (cont,d.) :: Scenario 8 :: FDOT 240 Hour - 240 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
238.024	0.0920	0.0000	105.671	0.06339	0.02866	171273.6	65355.1	44369.0	S
238.038	0.0920	0.0000	105.671	0.06338	0.02866	171278.4	65358.4	44370.5	S
238.052	0.0920	0.0000	105.671	0.06338	0.02866	171283.2	65361.7	44372.0	S
238.067	0.0920	0.0000	105.671	0.06338	0.02866	171288.0	65365.0	44373.5	S
238.081	0.0920	0.0000	105.671	0.06338	0.02866	171292.8	65368.3	44375.0	S
238.096	0.0920	0.0000	105.671	0.06338	0.02866	171297.6	65371.6	44376.5	S
238.110	0.0920	0.0000	105.671	0.06338	0.02866	171302.4	65374.9	44378.0	S
238.125	0.0920	0.0000	105.671	0.06338	0.02866	171307.2	65378.2	44379.5	S
238.139	0.0920	0.0000	105.671	0.06338	0.02866	171312.0	65381.5	44381.0	S
238.154	0.0920	0.0000	105.671	0.06338	0.02866	171316.8	65384.8	44382.5	S
238.168	0.0920	0.0000	105.671	0.06338	0.02866	171321.6	65388.1	44384.0	S
238.183	0.0920	0.0000	105.671	0.06338	0.02866	171326.4	65391.4	44385.4	S
238.197	0.0920	0.0000	105.671	0.06338	0.02866	171331.2	65394.8	44386.9	S
238.212	0.0920	0.0000	105.671	0.06338	0.02866	171336.0	65398.1	44388.4	S
238.226	0.0920	0.0000	105.671	0.06338	0.02866	171340.8	65401.4	44389.9	S
238.241	0.0920	0.0000	105.671	0.06338	0.02866	171345.6	65404.7	44391.4	S
238.255	0.0920	0.0000	105.671	0.06337	0.02866	171350.4	65408.0	44392.9	S
238.270	0.0920	0.0000	105.671	0.06337	0.02866	171355.2	65411.3	44394.4	S
238.284	0.0920	0.0000	105.671	0.06337	0.02866	171360.0	65414.6	44395.9	S
238.299	0.0920	0.0000	105.671	0.06337	0.02866	171364.8	65417.9	44397.4	S
238.313	0.0920	0.0000	105.671	0.06337	0.02866	171369.6	65421.2	44398.9	S
238.328	0.0920	0.0000	105.671	0.06337	0.02866	171374.4	65424.5	44400.4	S
238.342	0.0920	0.0000	105.671	0.06337	0.02865	171379.2	65427.8	44401.9	S
238.357	0.0920	0.0000	105.671	0.06337	0.02865	171384.0	65431.1	44403.4	S
238.371	0.0920	0.0000	105.671	0.06337	0.02865	171388.8	65434.4	44404.9	S
238.386	0.0920	0.0000	105.671	0.06337	0.02865	171393.6	65437.7	44406.4	S
238.400	0.0920	0.0000	105.671	0.06337	0.02865	171398.4	65441.0	44407.9	S
238.415	0.0920	0.0000	105.671	0.06337	0.02865	171403.2	65444.3	44409.4	S
238.429	0.0920	0.0000	105.671	0.06337	0.02865	171408.0	65447.6	44410.9	S
238.444	0.0920	0.0000	105.671	0.06337	0.02865	171412.8	65450.9	44412.3	S
238.458	0.0920	0.0000	105.671	0.06336	0.02865	171417.6	65454.3	44413.8	S
238.473	0.0920	0.0000	105.671	0.06336	0.02865	171422.4	65457.6	44415.3	S
238.487	0.0920	0.0000	105.671	0.06336	0.02865	171427.2	65460.9	44416.8	S
238.502	0.0920	0.0000	105.671	0.06336	0.02865	171432.0	65464.2	44418.3	S
238.516	0.0920	0.0000	105.671	0.06336	0.02865	171436.8	65467.5	44419.8	S
238.531	0.0920	0.0000	105.671	0.06336	0.02865	171441.6	65470.8	44421.3	S
238.545	0.0920	0.0000	105.671	0.06336	0.02865	171446.4	65474.1	44422.8	S
238.560	0.0920	0.0000	105.671	0.06336	0.02865	171451.2	65477.4	44424.3	S
238.574	0.0920	0.0000	105.671	0.06336	0.02865	171456.0	65480.7	44425.8	S
238.589	0.0920	0.0000	105.671	0.06336	0.02865	171460.8	65484.0	44427.3	S
238.603	0.0920	0.0000	105.671	0.06336	0.02865	171465.6	65487.3	44428.8	S
238.618	0.0920	0.0000	105.671	0.06336	0.02865	171470.4	65490.6	44430.3	S
238.632	0.0920	0.0000	105.671	0.06336	0.02865	171475.2	65493.9	44431.8	S
238.647	0.0920	0.0000	105.671	0.06335	0.02865	171480.0	65497.2	44433.3	S
238.661	0.0920	0.0000	105.671	0.06335	0.02865	171484.8	65500.5	44434.8	S
238.676	0.0920	0.0000	105.671	0.06335	0.02865	171489.5	65503.8	44436.3	S
238.690	0.0920	0.0000	105.671	0.06335	0.02865	171494.3	65507.1	44437.8	S
238.704	0.0920	0.0000	105.671	0.06335	0.02865	171499.2	65510.4	44439.3	S
238.719	0.0920	0.0000	105.671	0.06335	0.02865	171504.0	65513.7	44440.7	S
238.733	0.0920	0.0000	105.671	0.06335	0.02865	171508.8	65517.0	44442.2	S
238.748	0.0920	0.0000	105.671	0.06335	0.02865	171513.5	65520.3	44443.7	S
238.762	0.0920	0.0000	105.671	0.06335	0.02865	171518.3	65523.6	44445.2	S
238.777	0.0920	0.0000	105.671	0.06335	0.02865	171523.1	65527.0	44446.7	S
238.791	0.0920	0.0000	105.671	0.06335	0.02865	171527.9	65530.3	44448.2	S
238.806	0.0920	0.0000	105.671	0.06335	0.02865	171532.7	65533.6	44449.7	S
238.820	0.0920	0.0000	105.671	0.06335	0.02865	171537.5	65536.9	44451.2	S
238.835	0.0920	0.0000	105.671	0.06334	0.02865	171542.3	65540.2	44452.7	S
238.849	0.0920	0.0000	105.671	0.06334	0.02865	171547.1	65543.5	44454.2	S
238.864	0.0920	0.0000	105.671	0.06334	0.02865	171551.9	65546.8	44455.7	S
238.878	0.0920	0.0000	105.671	0.06334	0.02865	171556.7	65550.1	44457.2	S
238.893	0.0920	0.0000	105.671	0.06334	0.02865	171561.5	65553.4	44458.7	S
238.907	0.0920	0.0000	105.671	0.06334	0.02865	171566.3	65556.7	44460.2	S
238.922	0.0920	0.0000	105.671	0.06334	0.02865	171571.1	65560.0	44461.7	S
238.936	0.0920	0.0000	105.671	0.06334	0.02865	171575.9	65563.3	44463.2	S
238.951	0.0920	0.0000	105.671	0.06334	0.02865	171580.7	65566.6	44464.7	S
238.965	0.0920	0.0000	105.671	0.06334	0.02865	171585.5	65569.9	44466.1	S
238.980	0.0920	0.0000	105.671	0.06334	0.02865	171590.3	65573.2	44467.6	S
238.994	0.0920	0.0000	105.671	0.06333	0.02865	171595.1	65576.5	44469.1	S
239.009	0.0920	0.0000	105.671	0.06333	0.02865	171599.9	65579.8	44470.6	S
239.023	0.0920	0.0000	105.671	0.06333	0.02865	171604.7	65583.1	44472.1	S
239.038	0.0920	0.0000	105.671	0.06333	0.02865	171609.5	65586.4	44473.6	S
239.052	0.0920	0.0000	105.671	0.06333	0.02865	171614.3	65589.7	44475.1	S
239.067	0.0920	0.0000	105.671	0.06333	0.02865	171619.1	65593.0	44476.6	S
239.081	0.0920	0.0000	105.671	0.06333	0.02865	171623.9	65596.3	44478.1	S

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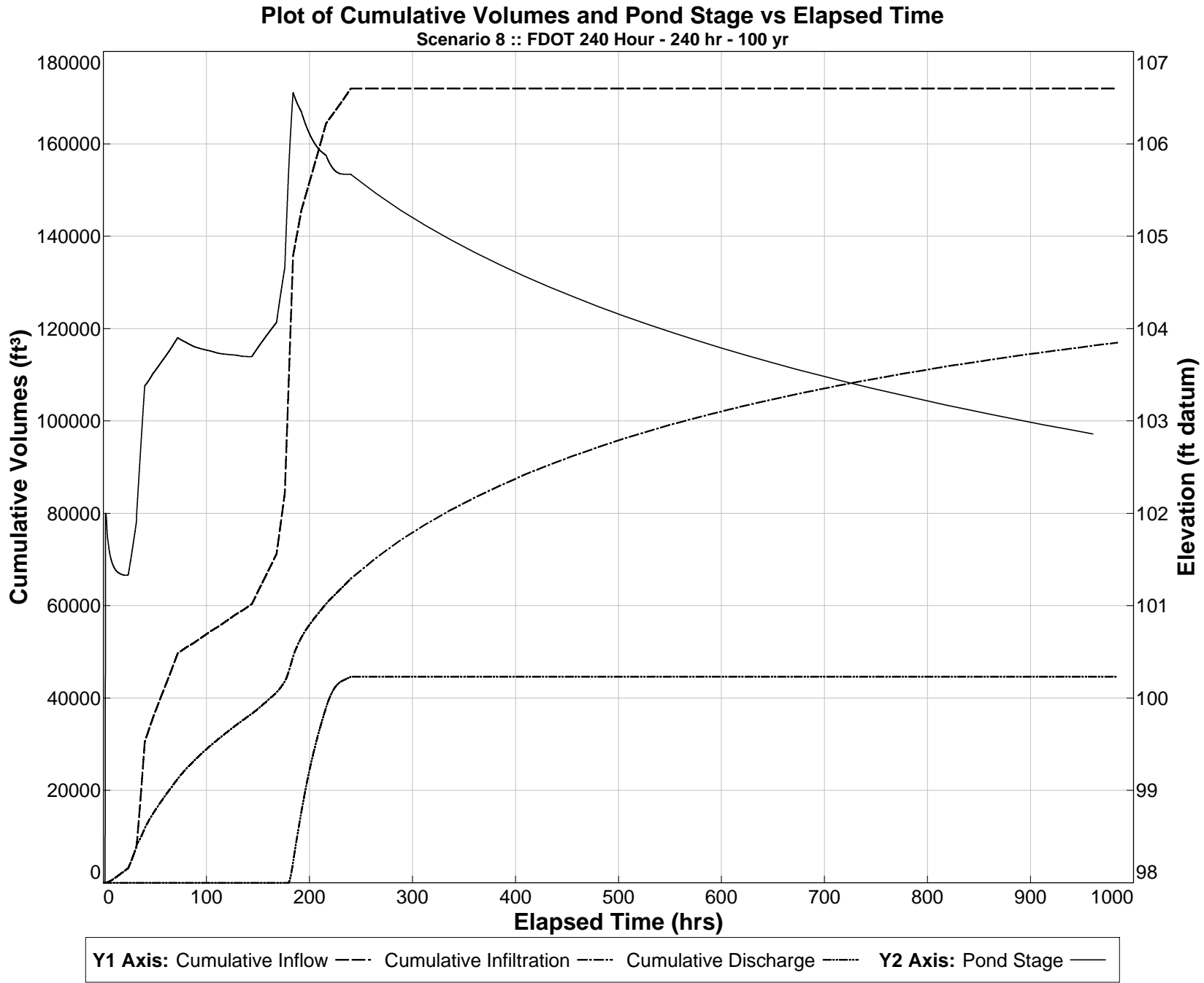
Detailed Results (cont,d.) :: Scenario 8 :: FDOT 240 Hour - 240 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
239.096	0.0920	0.0000	105.671	0.06333	0.02865	171628.7	65599.6	44479.6	S
239.110	0.0920	0.0000	105.671	0.06333	0.02865	171633.5	65602.9	44481.1	S
239.125	0.0920	0.0000	105.671	0.06333	0.02865	171638.3	65606.2	44482.6	S
239.139	0.0920	0.0000	105.671	0.06333	0.02865	171643.1	65609.5	44484.1	S
239.154	0.0920	0.0000	105.671	0.06333	0.02865	171647.9	65612.8	44485.6	S
239.168	0.0920	0.0000	105.671	0.06332	0.02865	171652.7	65616.2	44487.1	S
239.183	0.0920	0.0000	105.671	0.06332	0.02865	171657.5	65619.5	44488.6	S
239.197	0.0920	0.0000	105.671	0.06332	0.02865	171662.3	65622.8	44490.1	S
239.212	0.0920	0.0000	105.671	0.06332	0.02865	171667.1	65626.1	44491.6	S
239.226	0.0920	0.0000	105.671	0.06332	0.02865	171671.9	65629.4	44493.1	S
239.241	0.0920	0.0000	105.671	0.06332	0.02865	171676.7	65632.7	44494.5	S
239.255	0.0920	0.0000	105.671	0.06332	0.02865	171681.5	65636.0	44496.0	S
239.270	0.0920	0.0000	105.671	0.06332	0.02865	171686.3	65639.3	44497.5	S
239.284	0.0920	0.0000	105.671	0.06332	0.02865	171691.1	65642.6	44499.0	S
239.299	0.0920	0.0000	105.671	0.06332	0.02865	171695.9	65645.9	44500.5	S
239.313	0.0920	0.0000	105.671	0.06331	0.02865	171700.7	65649.2	44502.0	S
239.328	0.0920	0.0000	105.671	0.06331	0.02865	171705.5	65652.5	44503.5	S
239.342	0.0920	0.0000	105.671	0.06331	0.02865	171710.3	65655.8	44505.0	S
239.356	0.0920	0.0000	105.671	0.06331	0.02865	171715.1	65659.1	44506.5	S
239.371	0.0920	0.0000	105.671	0.06331	0.02865	171719.9	65662.4	44508.0	S
239.385	0.0920	0.0000	105.671	0.06331	0.02866	171724.7	65665.7	44509.5	S
239.400	0.0920	0.0000	105.671	0.06331	0.02866	171729.5	65669.0	44511.0	S
239.414	0.0920	0.0000	105.671	0.06331	0.02866	171734.3	65672.3	44512.5	S
239.429	0.0920	0.0000	105.671	0.06331	0.02866	171739.1	65675.6	44514.0	S
239.443	0.0920	0.0000	105.671	0.06331	0.02866	171743.9	65678.9	44515.5	S
239.458	0.0920	0.0000	105.671	0.06331	0.02866	171748.7	65682.2	44517.0	S
239.472	0.0920	0.0000	105.671	0.06330	0.02866	171753.5	65685.5	44518.5	S
239.487	0.0920	0.0000	105.671	0.06330	0.02866	171758.3	65688.8	44520.0	S
239.501	0.0920	0.0000	105.671	0.06330	0.02866	171763.1	65692.1	44521.5	S
239.516	0.0920	0.0000	105.671	0.06330	0.02866	171767.9	65695.4	44522.9	S
239.530	0.0920	0.0000	105.671	0.06330	0.02866	171772.7	65698.7	44524.4	S
239.545	0.0920	0.0000	105.671	0.06330	0.02866	171777.5	65702.0	44525.9	S
239.559	0.0920	0.0000	105.671	0.06330	0.02866	171782.3	65705.3	44527.4	S
239.574	0.0920	0.0000	105.671	0.06330	0.02866	171787.1	65708.6	44528.9	S
239.588	0.0920	0.0000	105.671	0.06330	0.02866	171791.9	65711.9	44530.4	S
239.603	0.0920	0.0000	105.671	0.06330	0.02866	171796.7	65715.2	44531.9	S
239.617	0.0920	0.0000	105.671	0.06329	0.02866	171801.5	65718.5	44533.4	S
239.632	0.0920	0.0000	105.671	0.06329	0.02866	171806.3	65721.8	44534.9	S
239.646	0.0920	0.0000	105.671	0.06329	0.02866	171811.0	65725.1	44536.4	S
239.661	0.0920	0.0000	105.671	0.06329	0.02866	171815.8	65728.4	44537.9	S
239.675	0.0920	0.0000	105.671	0.06329	0.02866	171820.6	65731.7	44539.4	S
239.690	0.0920	0.0000	105.671	0.06329	0.02866	171825.5	65735.0	44540.9	S
239.704	0.0920	0.0000	105.671	0.06329	0.02866	171830.3	65738.3	44542.4	S
239.719	0.0920	0.0000	105.671	0.06329	0.02866	171835.0	65741.6	44543.9	S
239.733	0.0920	0.0000	105.671	0.06329	0.02866	171839.8	65744.9	44545.4	S
239.748	0.0920	0.0000	105.671	0.06329	0.02866	171844.6	65748.2	44546.9	S
239.762	0.0920	0.0000	105.671	0.06328	0.02866	171849.4	65751.5	44548.4	S
239.777	0.0920	0.0000	105.671	0.06328	0.02866	171854.2	65754.8	44549.9	S
239.791	0.0920	0.0000	105.671	0.06328	0.02866	171859.0	65758.1	44551.3	S
239.806	0.0920	0.0000	105.671	0.06328	0.02866	171863.8	65761.4	44552.8	S
239.820	0.0920	0.0000	105.671	0.06328	0.02866	171868.6	65764.7	44554.3	S
239.835	0.0920	0.0000	105.671	0.06328	0.02867	171873.4	65768.0	44555.8	S
239.849	0.0920	0.0000	105.671	0.06328	0.02867	171878.2	65771.3	44557.3	S
239.864	0.0920	0.0000	105.671	0.06328	0.02867	171883.0	65774.6	44558.8	S
239.878	0.0920	0.0000	105.671	0.06328	0.02867	171887.8	65777.9	44560.3	S
239.893	0.0920	0.0000	105.671	0.06327	0.02867	171892.6	65781.2	44561.8	S
239.907	0.0920	0.0000	105.671	0.06327	0.02867	171897.4	65784.5	44563.3	S
239.922	0.0920	0.0000	105.671	0.06327	0.02867	171902.2	65787.8	44564.8	S
239.936	0.0920	0.0000	105.671	0.06327	0.02867	171907.0	65791.1	44566.3	S
239.951	0.0920	0.0000	105.671	0.06327	0.02867	171911.8	65794.4	44567.8	S
239.965	0.0920	0.0000	105.671	0.06327	0.02867	171916.6	65797.7	44569.3	S
239.980	0.0920	0.0000	105.671	0.06327	0.02867	171921.4	65801.0	44570.8	S
239.994	0.0920	0.0000	105.671	0.06327	0.02867	171926.2	65804.3	44572.3	S
240.008	0.0914	0.0000	105.671	0.06325	0.02867	171931.0	65807.6	44573.8	S
240.023	0.0892	0.0000	105.671	0.06323	0.02866	171935.7	65810.9	44575.3	S
240.037	0.0846	0.0000	105.671	0.06317	0.02862	171940.2	65814.2	44576.8	S
240.052	0.0772	0.0000	105.671	0.06313	0.02854	171944.5	65817.5	44578.3	S
240.066	0.0682	0.0000	105.671	0.06303	0.02839	171948.3	65820.8	44579.7	S
240.081	0.0592	0.0000	105.671	0.06293	0.02818	171951.6	65824.1	44581.2	S
240.095	0.0512	0.0000	105.671	0.06288	0.02791	171954.5	65827.4	44582.7	S
240.110	0.0442	0.0000	105.671	0.06279	0.02757	171956.9	65830.7	44584.1	S
240.124	0.0384	0.0000	105.671	0.06272	0.02718	171959.1	65833.9	44585.6	S
240.139	0.0335	0.0000	105.671	0.06264	0.02675	171961.0	65837.2	44587.0	S
240.153	0.0294	0.0000	105.671	0.06255	0.02628	171962.6	65840.5	44588.3	S

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Detailed Results (cont,d.) :: Scenario 8 :: FDOT 240 Hour - 240 hr - 100 yr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
240.168	0.0258	0.0000	105.670	0.06249	0.02577	171964.1	65843.7	44589.7	S
240.182	0.0227	0.0000	105.670	0.06240	0.02523	171965.3	65847.0	44591.0	S
240.197	0.0199	0.0000	105.670	0.06232	0.02466	171966.4	65850.2	44592.3	S
240.211	0.0174	0.0000	105.670	0.06224	0.02406	171967.4	65853.5	44593.6	S
240.226	0.0152	0.0000	105.670	0.06215	0.02342	171968.3	65856.7	44594.8	S
240.240	0.0133	0.0000	105.670	0.06208	0.02275	171969.0	65860.0	44596.0	S
240.255	0.0116	0.0000	105.669	0.06200	0.02206	171969.7	65863.2	44597.2	S
240.269	0.0101	0.0000	105.669	0.06192	0.02133	171970.2	65866.4	44598.3	S
240.284	0.0087	0.0000	105.669	0.06185	0.02057	171970.7	65869.7	44599.4	S
240.298	0.0075	0.0000	105.669	0.06178	0.01978	171971.1	65872.9	44600.5	S
240.313	0.0064	0.0000	105.669	0.06170	0.01895	171971.5	65876.1	44601.5	S
240.327	0.0055	0.0000	105.669	0.06163	0.01808	171971.8	65879.3	44602.5	S
240.342	0.0046	0.0000	105.668	0.06156	0.01717	171972.1	65882.5	44603.4	S
240.356	0.0039	0.0000	105.668	0.06149	0.01621	171972.3	65885.7	44604.3	S
240.371	0.0032	0.0000	105.668	0.06141	0.01519	171972.5	65889.0	44605.1	S
240.385	0.0027	0.0000	105.668	0.06133	0.01411	171972.6	65892.2	44605.8	S
240.400	0.0022	0.0000	105.668	0.06124	0.01295	171972.8	65895.4	44606.5	S
240.414	0.0017	0.0000	105.668	0.06114	0.01169	171972.9	65898.5	44607.2	S
240.429	0.0014	0.0000	105.667	0.06103	0.01030	171972.9	65901.7	44607.8	S
240.443	0.0010	0.0000	105.667	0.06086	0.00872	171973.0	65904.9	44608.3	S
240.458	0.0008	0.0000	105.667	0.06056	0.00682	171973.0	65908.1	44608.7	S
240.472	0.0006	0.0000	105.667	0.06007	0.00416	171973.1	65911.2	44609.0	S
240.487	0.0004	0.0000	105.667	0.06064	0.00036	171973.1	65914.3	44609.1	S
240.501	0.0002	0.0000	105.667	0.06157	0.00000	171973.1	65917.6	44609.1	S
240.516	0.0001	0.0000	105.666	0.06164	0.00000	171973.1	65920.8	44609.1	S
240.530	0.0001	0.0000	105.666	0.06162	0.00000	171973.1	65924.0	44609.1	S
240.545	0.0000	0.0000	105.666	0.06160	0.00000	171973.1	65927.2	44609.1	S
240.559	0.0000	0.0000	105.666	0.06158	0.00000	171973.1	65930.4	44609.1	S
240.574	0.0000	0.0000	105.666	0.06156	0.00000	171973.1	65933.6	44609.1	S
240.588	0.0000	0.0000	105.666	0.06154	0.00000	171973.1	65936.8	44609.1	S
264.588	0.0000	0.0000	105.463	0.04765	0.00000	171973.1	70338.9	44609.1	S
288.588	0.0000	0.0000	105.282	0.04188	0.00000	171973.1	74171.0	44609.1	S
312.588	0.0000	0.0000	105.116	0.03743	0.00000	171973.1	77575.8	44609.1	S
336.588	0.0000	0.0000	104.964	0.03383	0.00000	171973.1	80639.7	44609.1	S
360.588	0.0000	0.0000	104.823	0.03083	0.00000	171973.1	83422.3	44609.1	S
384.588	0.0000	0.0000	104.692	0.02828	0.00000	171973.1	85967.6	44609.1	S
408.588	0.0000	0.0000	104.568	0.02608	0.00000	171973.1	88309.3	44609.1	S
432.588	0.0000	0.0000	104.452	0.02416	0.00000	171973.1	90474.1	44609.1	S
456.588	0.0000	0.0000	104.342	0.02246	0.00000	171973.1	92483.5	44609.1	S
480.588	0.0000	0.0000	104.238	0.02096	0.00000	171973.1	94355.4	44609.1	S
504.588	0.0000	0.0000	104.139	0.01961	0.00000	171973.1	96104.9	44609.1	S
528.588	0.0000	0.0000	104.045	0.01841	0.00000	171973.1	97744.5	44609.1	S
552.588	0.0000	0.0000	103.955	0.01732	0.00000	171973.1	99285.3	44609.1	S
576.588	0.0000	0.0000	103.870	0.01633	0.00000	171973.1	100736.6	44609.1	S
600.588	0.0000	0.0000	103.787	0.01543	0.00000	171973.1	102106.7	44609.1	S
624.588	0.0000	0.0000	103.709	0.01461	0.00000	171973.1	103402.7	44609.1	S
648.588	0.0000	0.0000	103.633	0.01385	0.00000	171973.1	104630.9	44609.1	S
672.588	0.0000	0.0000	103.560	0.01316	0.00000	171973.1	105796.8	44609.1	S
696.588	0.0000	0.0000	103.490	0.01252	0.00000	171973.1	106905.4	44609.1	S
720.588	0.0000	0.0000	103.423	0.01193	0.00000	171973.1	107960.9	44609.1	S
744.588	0.0000	0.0000	103.358	0.01138	0.00000	171973.1	108967.2	44609.1	S
768.588	0.0000	0.0000	103.295	0.01087	0.00000	171973.1	109928.0	44609.1	S
792.588	0.0000	0.0000	103.235	0.01040	0.00000	171973.1	110846.3	44609.1	S
816.588	0.0000	0.0000	103.176	0.00995	0.00000	171973.1	111724.9	44609.1	S
840.588	0.0000	0.0000	103.119	0.00954	0.00000	171973.1	112566.5	44609.1	S
864.588	0.0000	0.0000	103.064	0.00915	0.00000	171973.1	113373.3	44609.1	S
888.588	0.0000	0.0000	103.011	0.00878	0.00000	171973.1	114147.6	44609.1	S
912.588	0.0000	0.0000	102.959	0.00844	0.00000	171973.1	114891.3	44609.1	S
936.588	0.0000	0.0000	102.908	0.00812	0.00000	171973.1	115606.1	44609.1	S
960.588	0.0000	0.0000	102.860	0.00781	0.00000	171973.1	116293.9	44609.1	S
984.588	0.0000	0.0000	102.812	----	----	171973.1	116956.2	44609.1	N.A.



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Project Data

Project Name: Holiday Inn Alachua
Simulation Description: Back to Back for 100yr-24hr Storm
Project Number:
Engineer :
Supervising Engineer:
Date: 12-05-2016

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 97.95
Water Table Elevation, [WT] (ft datum): 98.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 10.00
Fillable Porosity, [n] (%): 25.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 22995.16
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 7.5

Geometry Data

Equivalent Pond Length, [L] (ft): 345.3
Equivalent Pond Width, [W] (ft): 57.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft ²)
102.33	11735.6
103.00	14396.1
103.02	14451.3
104.00	17160.8
105.00	20027.7
106.00	22995.2
107.00	26062.9
108.00	29230.9

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Scenario Input Data

Scenario 1 :: FDOT 24 Hour - 24 hr - 100 yr

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

Basin Area (acres) 2.930
Time Of Concentration (minutes) 6.5
DCIA (%) 57.0
Curve Number 71.4
Design Rainfall Depth (inches) 11.0
Design Rainfall Duration (hours) 24.0
Shape Factor UHG 323
Rainfall Distribution FDOT 24 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

Worst Case Scenarios

Selection Criteria: <default - All scenarios with valid results>

Maximum Stage = 106.5435 ft datum

For scenario 1 at Time = 24.06604 hours

Scenario Description: FDOT 24 Hour - 24 hr - 100 yr

Scenarios considered: 1 to 1

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Summary of Results :: Scenario 1 :: FDOT 24 Hour - 24 hr - 100 yr

	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Stage				
Minimum	0.000	98.00		
Maximum	24.066	106.54		
Inflow				
Rate - Maximum - Positive	11.997		2.9890	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.544			99427.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	768.588			99427.3
Infiltration				
Rate - Maximum - Positive	2.463		0.4932	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	768.588			96851.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	768.588			96851.9
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	768.588			0.0
Discharge Structure 1 - 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	768.588			0.0
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.

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Project Data

Project Name: Holiday Inn Alachua
Simulation Description: Back to Back for 100yr-72hr Storm
Project Number:
Engineer :
Supervising Engineer:
Date: 12-05-2016

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 97.95
Water Table Elevation, [WT] (ft datum): 98.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 10.00
Fillable Porosity, [n] (%): 25.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 22995.16
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 7.5

Geometry Data

Equivalent Pond Length, [L] (ft): 345.3
Equivalent Pond Width, [W] (ft): 57.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft ²)
102.58	11735.6
103.00	14396.1
103.02	14451.3
104.00	17160.8
105.00	20027.7
106.00	22995.2
107.00	26062.9
108.00	29230.9

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Scenario Input Data

Scenario 2 :: FDOT 72 Hour - 72 hr - 100 yr

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

Basin Area (acres) 2.930
Time Of Concentration (minutes) 6.5
DCIA (%) 57.0
Curve Number 71.4
Design Rainfall Depth (inches) 13.8
Design Rainfall Duration (hours) 72.0
Shape Factor UHG 323
Rainfall Distribution FDOT 72 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

Worst Case Scenarios

Selection Criteria: <default - All scenarios with valid results>

Maximum Stage = 106.9146 ft datum

For scenario 2 at Time = 64.11333 hours

Scenario Description: FDOT 72 Hour - 72 hr - 100 yr

Scenarios considered: 2 to 2

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Summary of Results :: Scenario 2 :: FDOT 72 Hour - 72 hr - 100 yr

	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Stage				
Minimum	0.000	98.00		
Maximum	64.113	106.91		
Inflow				
Rate - Maximum - Positive	59.984		1.9598	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.546			128028.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	816.589			128028.3
Infiltration				
Rate - Maximum - Positive	9.085		0.6603	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	816.589			112385.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	816.589			112385.6
Combined Discharge				
Rate - Maximum - Positive	64.113		0.5227	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	96.589			10182.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	816.589			10182.5
Discharge Structure 1 - simple weir				
Rate - Maximum - Positive	64.113		0.5227	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	96.589			10182.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	816.589			10182.5
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.

PONDS Version 3.2.0239
Retention Pond Recovery - Refined Method
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Devo Seereeram, Ph.D., P.E.

Project Data

Project Name: Holiday Inn Alachua
Simulation Description: Back to Back for 100yr-168hr Storm
Project Number:
Engineer :
Supervising Engineer:
Date: 12-05-2016

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 97.95
Water Table Elevation, [WT] (ft datum): 98.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 10.00
Fillable Porosity, [n] (%): 25.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 22995.16
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 7.5

Geometry Data

Equivalent Pond Length, [L] (ft): 345.3
Equivalent Pond Width, [W] (ft): 57.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft ²)
102.85	11735.6
103.00	14396.1
103.02	14451.3
104.00	17160.8
105.00	20027.7
106.00	22995.2
107.00	26062.9
108.00	29230.9

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Scenario Input Data

Scenario 3 :: FDOT 168 Hour - 168 hr - 100 yr

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

Basin Area (acres) 2.930
Time Of Concentration (minutes) 6.5
DCIA (%) 57.0
Curve Number 71.4
Design Rainfall Depth (inches) 16.0
Design Rainfall Duration (hours) 168.0
Shape Factor UHG 323
Rainfall Distribution FDOT 168 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

Worst Case Scenarios

Selection Criteria: <default - All scenarios with valid results>

Maximum Stage = 107.0011 ft datum

For scenario 3 at Time = 160.0588 hours

Scenario Description: FDOT 168 Hour - 168 hr - 100 yr

Scenarios considered: 3 to 3

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Summary of Results :: Scenario 3 :: FDOT 168 Hour - 168 hr - 100 yr

	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Stage				
Minimum	0.000	98.00		
Maximum	160.059	107.00		
Inflow				
Rate - Maximum - Positive	160.001		1.3649	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.549			151000.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	912.593			151000.0
Infiltration				
Rate - Maximum - Positive	32.513		0.6012	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	912.593			125474.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	912.593			125474.6
Combined Discharge				
Rate - Maximum - Positive	160.059		0.9840	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	192.593			18951.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	912.593			18951.2
Discharge Structure 1 - simple weir				
Rate - Maximum - Positive	160.059		0.9840	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	192.593			18951.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	912.593			18951.2
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.

PONDS Version 3.2.0239
Retention Pond Recovery - Refined Method
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Project Data

Project Name: Holiday Inn Alachua
Simulation Description: Back to Back for 100yr-240hr Storm
Project Number:
Engineer :
Supervising Engineer:
Date: 12-05-2016

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 97.95
Water Table Elevation, [WT] (ft datum): 98.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 10.00
Fillable Porosity, [n] (%): 25.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 22995.16
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 7.5

Geometry Data

Equivalent Pond Length, [L] (ft): 345.3
Equivalent Pond Width, [W] (ft): 57.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft ²)
102.86	11735.6
103.00	14396.1
103.02	14451.3
104.00	17160.8
105.00	20027.7
106.00	22995.2
107.00	26062.9
108.00	29230.9

PONDS Version 3.2.0239
Retention Pond Recovery - Refined Method
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Scenario Input Data

Scenario 4 :: FDOT 240 Hour - 240 hr - 100 yr

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

Basin Area (acres) 2.930
Time Of Concentration (minutes) 6.5
DCIA (%) 57.0
Curve Number 71.4
Design Rainfall Depth (inches) 18.0
Design Rainfall Duration (hours) 240.0
Shape Factor UHG 323
Rainfall Distribution FDOT 240 Hour

Initial ground water level (ft datum) 98.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
1.000	8.000	15.000	22.000	29.000
2.000	9.000	16.000	23.000	30.000
3.000	10.000	17.000	24.000	31.000
4.000	11.000	18.000	25.000	
5.000	12.000	19.000	26.000	
6.000	13.000	20.000	27.000	
7.000	14.000	21.000	28.000	

Worst Case Scenarios

Selection Criteria: <default - All scenarios with valid results>

Maximum Stage = 106.9297 ft datum

For scenario 4 at Time = 184.1538 hours

Scenario Description: FDOT 240 Hour - 240 hr - 100 yr

Scenarios considered: 4 to 4

PONDS Version 3.2.0239
Retention Pond Recovery - Refined Method
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Summary of Results :: Scenario 4 :: FDOT 240 Hour - 240 hr - 100 yr

	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Stage				
Minimum	0.000	98.00		
Maximum	184.154	106.93		
Inflow				
Rate - Maximum - Positive	183.994		1.7957	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.516			171973.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	984.588			171973.1
Infiltration				
Rate - Maximum - Positive	33.281		0.7152	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	984.588			142407.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	984.588			142407.7
Combined Discharge				
Rate - Maximum - Positive	184.154		0.5956	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	264.588			19962.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	984.588			19962.0
Discharge Structure 1 - simple weir				
Rate - Maximum - Positive	184.154		0.5956	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	264.588			19962.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	984.588			19962.0
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.

Attachment E


Soils Map

Hydrologic Soil Group—Alachua County, Florida



MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils

Soil Rating Polygons





 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines


 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points






 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available


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 1:15,800.

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

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

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

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 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: Alachua County, Florida
 Survey Area Data: Version 16, Nov 19, 2015

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

Date(s) aerial images were photographed: Dec 29, 2010—Jan 22, 2011

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.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Alachua County, Florida (FL001)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
73	Kendrick sand, 5 to 8 percent slopes	B	2.7	55.7%
76	Bivans sand, 5 to 8 percent slopes	C/D	2.2	44.3%
Totals for Area of Interest			4.9	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Attachment F

Pipe Sizing

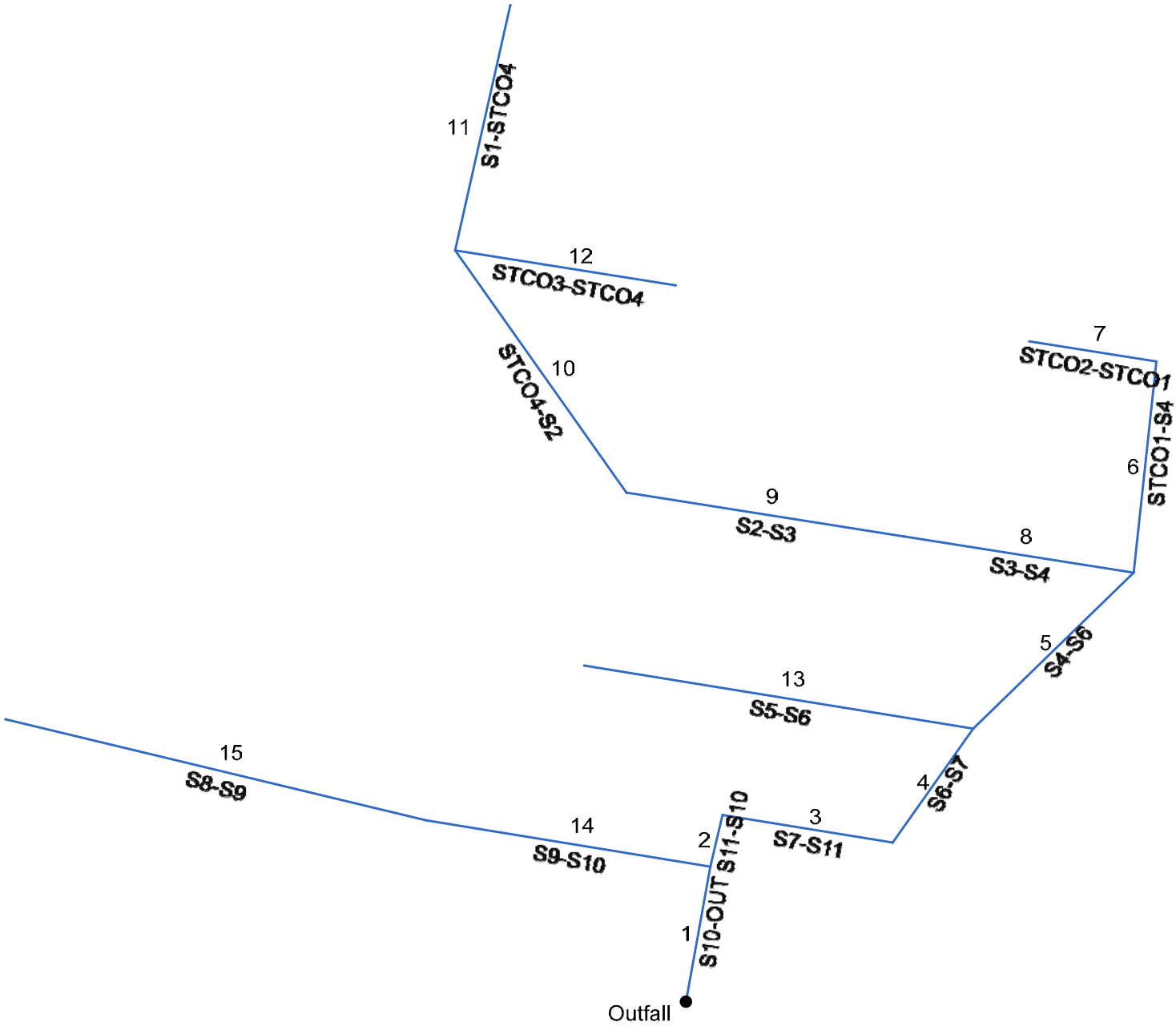
PIPE SIZE CALCULATIONS

RUNOFF COEFFICIENT

Holiday Inn Alachua

Drainage Area	Total Area		Impervious Area	Open Area	C
	S.F.	AC.	C = 0.95	C = 0.20	
S1	7,907.19	0.18	5,139.67	2,767.52	0.69
S2	4,854.18	0.11	4,562.93	291.25	0.91
S3	4,446.45	0.10	4,446.45	0.00	0.95
S4	4,705.81	0.11	4,705.81	0.00	0.95
S5	6,420.23	0.15	5,874.51	545.72	0.89
S6	7,019.10	0.16	6,878.72	140.38	0.94
S7	16,833.43	0.39	13,466.74	3,366.69	0.80
S8	10,441.69	0.24	9,501.94	939.75	0.88
S9	6,056.40	0.14	5,602.17	454.23	0.89
S10	5,333.76	0.12	5,173.75	160.01	0.93
S11			Manhole		
STCO-1	0.00	0.00	0.00	0.00	0.00
STCO-2	7,059.32	0.16	7,059.32	0.00	0.95
STCO-3	3,575.03	0.08	3,575.03	0.00	0.95
STCO-4	0.00	0.00	0.00	0.00	0.00

Hydraflow Storm Sewers Extension for Autodesk® AutoCAD® Civil 3D® Plan



Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1	S10-OUT	9.27	18	Cir	52.624	102.00	103.28	2.432	102.81	104.46	n/a	104.46	End	Grate
2	S11-S10	6.84	18	Cir	20.251	103.28	103.69	2.025	104.46	104.70	n/a	104.70 j	1	Manhole
3	S7-S11	6.88	18	Cir	54.057	103.69	104.77	1.998	104.70	105.78	n/a	105.78	2	Grate
4	S6-S7	5.19	15	Cir	50.565	104.77	106.29	3.006	105.78	107.21	n/a	107.21 j	3	Grate
5	S4-S6	3.67	15	Cir	78.178	106.29	109.81	4.503	107.21	110.58	n/a	110.58 j	4	Grate
6	STCO1-S4	0.94	6	Cir	81.756	111.41	117.99	8.048	111.67	118.46	n/a	118.46	5	None
7	STCO2-STCO1	0.94	6	Cir	40.308	118.35	119.68	3.300	118.71	120.15	0.38	120.15	6	None
8	S3-S4	2.27	15	Cir	73.004	109.81	111.82	2.753	110.58	112.42	n/a	112.42 j	5	Grate
9	S2-S3	1.78	15	Cir	87.931	111.82	114.24	2.752	112.42	114.77	n/a	114.77 j	8	Grate
10	STCO4-S2	1.21	8	Cir	107.561	114.24	116.82	2.399	114.77	117.34	n/a	117.61 j	9	None
11	S1-STCO4	0.77	8	Cir	96.000	116.82	118.28	1.521	117.34	118.69	n/a	118.69 j	10	Grate
12	STCO3-STCO4	0.47	6	Cir	70.007	116.82	119.41	3.700	117.61	119.76	n/a	119.76 j	10	None
13	S5-S6	0.83	15	Cir	123.486	106.29	109.38	2.502	107.21	109.74	n/a	109.74 j	4	Grate
14	S9-S10	1.94	18	Cir	90.386	103.28	104.86	1.748	104.46	105.38	n/a	105.38 j	1	Grate
15	S8-S9	1.31	15	Cir	136.532	104.86	107.59	2.000	105.38	108.04	n/a	108.04 j	14	Grate
Project File: with model run.stm									Number of lines: 15			Run Date: 9/29/2016		
NOTES: Return period = 3 Yrs. ; j - Line contains hyd. jump.														

FL-DOT Report

Line No	To Line	Type of struc	n - Value	Len	Drainage Area			Time of conc	Time of Flow in sect	Inten (I)	Total CA	Add Q	Inlet elev	Elev of HGL			Rise	HGL	ADD		Date: 9/29/2016	
					C1 = 0.2 C2 = 0.5 C3 = 0.9	Total Flow	Elev of Crown					Span		Pipe	Full Flow	Frequency: 3 yrs						
							Elev of Invert									Proj: with model run.stm						
							Increment (ac)					Sub-Total (ac)		Sum CA	Up (ft)	Down (ft)	Fall (ft)	Size (in)	Slope (%)	Vel (ft/s)	Cap (cfs)	Line description
1	End	Grate	0.013	52.624	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	13.82	0.16	5.47	1.70	0.00 9.27	112.81	104.46 104.78 103.28	102.81 103.50 102.00	1.65 1.28	18 18 Cir	3.13 2.43	7.89 9.27	9.27 16.38	S10-OUT	
2	1	MH	0.013	20.251	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	13.73	0.09	5.48	1.25	0.00 6.84	112.41	104.70 105.19 103.69	104.46 104.78 103.28	0.25 0.41	18 18 Cir	1.21 2.02	5.00 8.46	6.84 14.94	S11-S10	
3	2	Grate	0.013	54.057	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	13.51	0.23	5.52	1.25	0.00 6.88	110.53	105.78 106.27 104.77	104.70 105.19 103.69	1.08 1.08	18 18 Cir	2.00 2.00	5.42 8.40	6.88 14.84	S7-S11	
4	3	Grate	0.013	50.565	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	13.31	0.19	5.55	0.94	0.00 5.19	114.90	107.21 107.54 106.29	105.78 106.02 104.77	1.43 1.52	15 15 Cir	2.82 3.01	5.11 9.12	5.19 11.20	S6-S7	
5	4	Grate	0.013	78.178	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	12.89	0.42	5.62	0.65	0.00 3.67	117.94	110.58 111.06 109.81	107.21 107.54 106.29	3.37 3.52	15 15 Cir	4.31 4.50	4.19 11.17	3.67 13.70	S4-S6	
6	5	None	0.012	81.756	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	10.14	0.29	6.17	0.15	0.00 0.94	121.96	118.46 118.49 117.99	111.67 111.91 111.41	6.78 6.58	6 6 Cir	8.30 8.05	6.94 8.78	0.94 1.72	STCO1-S4	
7	6	None	0.012	40.308	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	10.00	0.14	6.20	0.15	0.00 0.94	123.10	120.15 120.18 119.68	118.71 118.85 118.35	1.44 1.33	6 6 Cir	3.57 3.30	5.63 5.62	0.94 1.10	STCO2-STCO1	
8	5	Grate	0.013	73.004	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	12.24	0.64	5.74	0.40	0.00 2.27	119.99	112.42 113.07 111.82	110.58 111.06 109.81	1.84 2.01	15 15 Cir	2.52 2.75	3.37 8.73	2.27 10.71	S3-S4	
9	8	Grate	0.013	87.931	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	11.24	1.00	5.94	0.30	0.00 1.78	119.16	114.77 115.49 114.24	112.42 113.07 111.82	2.35 2.42	15 15 Cir	2.67 2.75	3.33 8.73	1.78 10.71	S2-S3	
10	9	None	0.012	107.561	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	10.72	0.51	6.04	0.20	0.00 1.21	123.07	117.34 117.49 116.82	114.77 114.91 114.24	2.57 2.58	8 8 Cir	2.39 2.40	4.10 5.81	1.21 2.03	STCO4-S2	

NOTES: Intensity = 39.96 / (Inlet time + 7.70) ^ 0.65 (in/hr) ; Time of flow in section is based on full flow.

Project File: with model run.stm

FL-DOT Report

Line No	To Line	Type of struc	n - Value	Len	Drainage Area			Time of conc	Time of Flow in sect	Inten (l)	Total CA	Add Q	Inlet elev	Elev of HGL			Rise	HGL	ADD		Date: 9/29/2016
					C1 = 0.2 C2 = 0.5 C3 = 0.9							Total Flow		Elev of Crown			Span	Pipe	Full Flow	Frequency: 3 yrs	
														Elev of Invert							
				Q	Up	Down	Fall	Size	Slope	Vel	Cap	Line description									
(cfs)	(ft)	(ft)	(ft)	(in)	(%)	(ft/s)	(cfs)														
11	10	Grate	0.012	96.000	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	10.00	0.72	6.20	0.12	0.00 0.77	122.95	118.69 118.95 118.28	117.34 117.49 116.82	1.35 1.46	8 8 Cir	1.41 1.52	3.01 4.62	0.77 1.61	S1-STCO4
12	10	None	0.012	70.007	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	10.00	0.49	6.20	0.08	0.00 0.47	119.95	119.76 119.91 119.41	117.61 117.32 116.82	2.15 2.59	6 6 Cir	3.08 3.70	2.81 5.95	0.47 1.17	STCO3-STCO4
13	4	Grate	0.013	123.486	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	10.00	3.05	6.20	0.13	0.00 0.83	115.90	109.74 110.63 109.38	107.21 107.54 106.29	2.52 3.09	15 15 Cir	2.04 2.50	1.86 8.32	0.83 10.21	S5-S6
14	1	Grate	0.013	90.386	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	12.13	1.31	5.76	0.34	0.00 1.94	112.48	105.38 106.36 104.86	104.46 104.78 103.28	0.93 1.58	18 18 Cir	1.03 1.75	2.41 7.86	1.94 13.88	S9-S10
15	14	Grate	0.013	136.532	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	10.00	2.13	6.20	0.21	0.00 1.31	111.84	108.04 108.84 107.59	105.38 106.11 104.86	2.66 2.73	15 15 Cir	1.95 2.00	2.98 7.44	1.31 9.13	S8-S9

NOTES: Intensity = 39.96 / (Inlet time + 7.70) ^ 0.65 (in/hr) ; Time of flow in section is based on full flow.

Project File: with model run.stm