PLANNING AND ZONING BOARD MEETING
CITY OF LAKE CITY
June 11, 2024 at 5:30 PM
Venue: City Hall

AGENDA

The meeting will be held in the City Council Chambers on the second floor of City Hall located at 205 North Marion Avenue, Lake City, FL 32055. Members of the public may also view the meeting on our YouTube channel. YouTube channel information is located at the end of this agenda.

INVOCATION

ROLL CALL

MINUTES

i. Meeting Minutes 04-09-2024

ii. Meeting Minutes 05-14-2024

OLD BUSINESS

iii. **SPR24-05**, Petition submitted by Randall Olney, P.E.. (agent) for Concept Companies (owner), for a Site Plan Review for Dollar General, in the Commercial Intensive Zoning District, and located on parcel 08127-005, which is regulated by the Land Development Regulations section 4.13.

*****Note, meeting on 05-14-2024 was cancelled due to lack of a quorum.*****

iv. *****POSTPONED***SPR23-10**, Petition submitted by Carol Chadwick (agent) for Affiliated Property Management (owner), for a Site Plan Review for Aspire Dental Addition, in the Commercial Intensive Zoning District, and located on Parcel 07604-102, which is regulated by the Land Development Regulations section 4.13.

NEW BUSINESS

v. **SPR24-06**, Petition submitted by Christopher A Gmuer, P.E.. (agent) for ERA Investments (owner), for a Site Plan Review for Lake City Hotels Phase 2, in

the Commercial Intensive Zoning District, and located on parcel 02582-002, which is regulated by the Land Development Regulations section 4.13.

WORKSHOP- None

ADJOURNMENT

YouTube Channel Information

Members of the public may also view the meeting on our YouTube channel at: https://youtube.com/c/CityofLakeCity

Pursuant to 286.0105, Florida Statutes, the City hereby advises the public if a person decides to appeal any decision made by the City Council with respect to any matter considered at its meeting or hearings, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Pursuant to 286.26, Florida Statutes, persons needing special accommodations to participate in this meeting should contact the City Manager's Office at (386) 719-5768.

File Attachments for Item:

i. Meeting Minutes 04-09-2024

PLANNING AND ZONING

MEETING MINUTES

DATE: 04/09/2024

ROLL CALL:

Mrs. McKellum- Present Mr. McMahon- Present Mr. Nelson- Present
Mr. Lydick- Present City Attorney- Clay Martin- Present

MINUTES: March 5, 2024 Planning and Zoning Meeting.
Comments or Revisions: None
Motion to approve 03/05/2024 Meeting Minutes by Mr. Nelson and seconded by Mrs. McKellum.

Ex Parte Communications

Mr. Martin polled the Board if they had any ex parte communications for petitions SPR 24-04, CPA 24-01, and Z 24-01
Mrs. McKellum- No, Mr. McMahon- No, Mr. Nelson- No, and Mr. Lydick- Only the regular exercise of his duties on briefing of the agenda. Mr. Martin asked if it would those conversations affect your ability to render a fair decision.

OLD BUSINESS: None
Petition # LDR 24-03 **Presented By:** Dave Young, CBO
As owner or agent and gives address of:
Petitioner is Sworn in by: Clay Martin, City Attorney

Motion to un-table petition LDR 24-03 by; Mr. McMahon and seconded by Mr. Nelson.
Approved by hand vote unanimously.

Discussion:

Mr. Young introduced text amendment. He stated that this text amendment is bringing up to date the parking requirements to other communities our size. Mr. Lydick asked if there were any major changes other than, adding section 4.2.15.17. Mr. Young stated no.

Mr. Martin asked about the strike thru's and the addition of where is states see section 4.2.15 is different then the ordinance that is prepared for council. Mr. Martin asked which one do we want to be recommended by the board to go to Council? Mr. Lydick and Mr. Martin discussed briefly. Robert stated that we could go with how the ordinance is prepared. Mr. Martin stated that the would change the verbiage to subsection instead of paragraph and leave the numbering as is.

Public Comment:

Carol Chadwick stated that per the Boards request, she believes that the City did a great job. Mr. Lydick asked if she seen anything that look like it may be a problem. She stated that until you start applying it you will not know.

Motion to close public comment by: Mr. Nelson **Seconded by:** Mr. McKellum

Board Discussion:

Mr. Lydick asked if any of the other departments weighed in on the amendment. Robert stated that the other departments were aware of them but they did not weigh in. Robert stated that they City did send the text amendment out to over 700 businesses in the City. He stated that we only go a handful of comments back, all in support of it. Mr. McMahon asked if this would go on to the City Council once approved.
Motion to approve petition LDR 24-03, with the amendments suggested by council by: Mr. McMahon
Motion Seconded By: Mr. Nelson

Mrs. McKellum: Aye **Mr. Nelson:** Aye **Mr. McMahon**: Aye
Mr. Lydick: Aye

NEW BUSINESS:

Petition # SPR24-03 **Presented By:** Brandon Stubbs
As owner or agent and gives address of: 1450 SW SR 47, Lake City, FL
Petitioner is Sworn in by: Mr. Lydick
Staff is Sworn in by: Mr. Martin

Discussion:

Mr. Young introduced petition SPR 24-04. He stated that proposed use of the land is for multi-family and is conducive for use per the Land Development Regulations 4.9.2.3. He stated that after review of the site plan that it is consistent with the Land Development Regulations.

Mr. Kurtz the land is currently vacant. He stated that they plan to put one to three bed room town homes. He stated SRWMD has reviewed the project along with the City and they have no concerns. He stated that FDOT said they need a drainage permit. He stated that they will work on that with FDOT.

Mr. McMahon asked about how many units. Mr. Kurtz stated that they want to put in 192 units. Mr. Lydick asked about the size of the large retention pond. Mr. Kurtz stated that due to the slope of the land they had to do two ponds stair stepped to accommodate for the amount of water.

Mr. Martin asked Mr. Young if he was going to move the staff records into evidence. Mr. Young stated yes.

Exhibits introduced: None

Public Comment:

Loretta Nicholas asked about how this is going to affect them as far as traffic, sewer, and water. Mr. Kurtz stated that as far as water and sewer, this will not impact the citizens. He stated as far as traffic they will use Hall of Fame and will not enter Aster Way.

Motion to close public comment by: Mr. Nelson **Seconded by:** Mrs. McKellum

Board Discussion:

No comments.

Motion to approve SPR24-04 as submitted by: Mr. McMahon **Motion Seconded By:** Mr. Nelson

Mrs. McKellum: Aye **Mr. Nelson:** Aye **Mr. McMahon**: Aye
Mr. Lydick: Aye

Petition # CPA 24-01 **Presented By:** Carol Chadwick
As owner or agent and gives address of: 1208 SW Fairfax Glen
Petitioner is Sworn in by: Mr. Lydick
Staff is Sworn in by: Mr. Martin

Discussion:

Mr. Young introduced petition CPA 24-01. He stated that the City staff has determined the petition is consistent with the Land Development Regulations. He stated that he is introducing the staff records into the record.

Carol stated that they are planning to change the Future Land Use and Zoning to allow for a second phase of Sugarmill Apartments. She stated that the site will be accessed from the existing site. She stated they are planning on 46 dwelling units. Mr. Lydick asked if the property ever had a City zoning. She stated that it has not. Mr. Martin asked if she was going to introduce her application into the record.

Public Comment:

David Kraft stated that he owns the property next to it. He stated that there is water all in his yard and would like them to address this in the future review. Mr. Lydick asked Robert if this was going to be in front of the board. Robert stated yes.

Exhibits introduced: None

Motion to close public comment by: Mrs. McKellum **Seconded by:** Mr. Nelson

Board Discussion: None

Motion to approve CPA24-01 as submitted by: Mr. McMahon **Motion Seconded By:** Mr. Nelson

Mrs. McKellum: Aye **Mr. Nelson:** Aye **Mr. McMahon**: Aye
Mr. Lydick: Aye

Petition # Z 24-01 **Presented By:** Carol Chadwick
As owner or agent and gives address of: 1208 SW Fairfax Glen
Petitioner is Sworn in by: Mr. Lydick
Staff is Sworn in by: Mr. Martin

Discussion:

Mr. Young introduced petition Z 24-01. He stated that the City staff has determined the petition is consistent with the Land Development Regulations. He stated that he is introducing the staff records into the record.

Carol stated that project is the rezoning for the previous project. She stated that she is introducing her application into the record.

Public Comment: None

Exhibits introduced: None

Motion to close public comment by: Mr. Nelson **Seconded by:** Mr. Nelson

Board Discussion: None

Motion to approve Z24-01 as submitted by: Mr. Nelson **Motion Seconded By:** Mr. McMahon

Mrs. McKellum: Aye **Mr. Nelson:** Aye **Mr. McMahon**: Aye
Mr. Lydick: Aye

WORKSHOP: None

ADJOURNMENT

Mr. Lydick closed the meeting.

Motion to Adjourn by: Mr. McMahon
Time: 6:11 pm
Motion Seconded By: Mr. Nelson

_____ _____
Mr. Lydick, Board Chairperson **Date Approved**

_____ _____
Robert Angelo, Secretary **Date Approved**

PLANNING AND ZONING

MEETING MINUTES

File Attachments for Item:

ii. Meeting Minutes 05-14-2024

PLANNING AND ZONING

MEETING MINUTES

DATE: 05/14/2024

ROLL CALL:

Mrs. McKellum- Present Mr. McMahon- Present Mr. Nelson- Not Present
Mr. Lydick- Present City Attorney- Clay Martin- Present

MINUTES:

Comments or Revisions: No Quorum**.**

Ex Parte Communications

No Quorum**.**

OLD BUSINESS: None

NEW BUSINESS:

Petition # SPR24-05 **Presented By:**
As owner or agent and gives address of:
Petitioner is Sworn in by:
Staff is Sworn in by:

Discussion:
No Quorum**.**

Petition # SPR24-05 **Presented By:**
As owner or agent and gives address of:
Petitioner is Sworn in by:
Staff is Sworn in by:

WORKSHOP: None

ADJOURNMENT

Mr. Lydick closed the meeting.

Motion to Adjourn by: Mrs. McKellum
Time: 5:36 pm
Motion Seconded By: Mr. McMahon

PLANNING AND ZONING

MEETING MINUTES

_____ _____

Mr. Lydick, Board Chairperson **Date Approved**

_____ _____

Robert Angelo, Secretary **Date Approved**

File Attachments for Item:

iii. SPR24-05, Petition submitted by Randall Olney, P.E.. (agent) for Concept Companies (owner), for a Site Plan Review for Dollar General, in the Commercial Intensive Zoning District, and located on parcel 08127-005, which is regulated by the Land Development Regulations section 4.13.

*****Note, meeting on 05-14-2024 was cancelled due to lack of a quorum.*****

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

FOR PLANNING USE ONLY
Application # SPR 24-05
Application Fee: $200.00
Receipt No. 2024-00042147
Filing Date 3/21/24
Completeness Date _____

Site Plan Application

A. PROJECT INFORMATION

1. Project Name: Commercial Retail Store - Marvin Burnett
2. Address of Subject Property: Northwest of the intersection of SR 47 and SW Marvin Burnett Road, Lake City, Florida 32025
3. Parcel ID Number(s): 07-4S-17-08127-005
4. Future Land Use Map Designation: Commerical
5. Zoning Designation: Commercial, Intensive
6. Acreage: 2.70
7. Existing Use of Property: Vacant
8. Proposed use of Property: Commercial Retail Store
9. Type of Development (Check All That Apply):
   - [ ] Increase of floor area to an existing structure: Total increase of square footage _____
   - [X] New construction: Total square footage 10,640
   - [ ] Relocation of an existing structure: Total square footage _____

B. APPLICANT INFORMATION

1. Applicant Status ☐ Owner (title holder) ■ Agent
2. Name of Applicant(s): Randall Olney, P.E. Title: Director of Engineering
   Company name (if applicable): CHW
   Mailing Address: 11801 Research Drive
   City: Alachua State: Florida Zip: 32615
   Telephone: (352) 331-1976 Fax: (____) _____ Email: randyo@chw-inc.com

   PLEASE NOTE: Florida has a very broad public records law. Most written communications to or from government officials regarding government business is subject to public records requests. Your e-mail address and communications may be subject to public disclosure.
3. If the applicant is agent for the property owner*.
   Property Owner Name (title holder): Concept Companies
   Mailing Address: 1449 SW 74th Dr. Suite 200
   City: Gainesville State: Florida Zip: 32607
   Telephone: (352) 333-3233 Fax: (____) _____ Email: _____

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

C. ADDITIONAL INFORMATION

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

D. ATTACHMENT/SUBMITTAL REQUIREMENTS

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

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

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

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

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

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

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

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

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

9. Agent Authorization Form (signed and notarized).

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

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

NOTICE TO APPLICANT

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

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

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

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

Randall Olney, P.E.

Applicant/Agent Name (Type or Print)

Applicant/Agent Signature

3/21/24

Date

Applicant/Agent Name (Type or Print)

Applicant/Agent Signature

Date

STATE OF FLORIDA
COUNTY OF Alachua

The foregoing instrument was acknowledged before me this 21st day of 3, 2024, by (name of person acknowledging).

TRINA LEMNAH
Notary Public - State of Florida
Commission # HH 368686
My Comm. Expires Mar 21, 2027
Bonded through National Notary Assn.

(NOTARY SEAL OR STAMP)

Signature of Notary

Trina Lemnah

Printed Name of Notary

Personally Known ✓ OR Produced Identification _____
Type of Identification Produced

March 21, 2024

Robert Angelo
Lake City Growth Management

RE: CRS Lake City Marvin Burnett

Dear Robert:

Please find attached the following items for review:

- Check #0018976 in the amount of $200.00
- Site Plan Application
- Property Appraiser Information
- Agent Authorization Form
- Deed
- Legal Description
- Property Owner Affidavit
- Proof of Tax Payment
- Traffic Study
- Geotechnical Study
- Comprehensive Plan Analysis
- Concurrency Analysis
- Meter Calculations
- Fire Flow Memo
- Lift Station Report
- Stormwater Report
- Signed and Sealed Plans

The ±2.72 acre site is located on SR 47 and SW Marvin Burnett Road in Lake City, Florida on a portion of tax parcel number 07-4S-17-08127-005. The site is currently undeveloped and heavily wooded. The development intent is to construct a ±10,640 s.f. commercial retail store on the parcel with the associated parking, stormwater management, and utility connections. Utility connections consist of a gravity sewer lateral to a private onsite lift station and connection to an existing forcemain within SR 47 ROW. Water and fire protection will be provided by extending a 600' water main along the western ROW of SR 47 and crossing via directional drill under SR 47 to wet tap an existing City water main. Offsite roadway improvements consist of a sidewalk along the project frontage, driveway connection and an eastbound left turn lane to Marvin Burnett Road.

We trust you will find this submittal to be complete for review and approval. If you have any questions, or need additional information, please contact me at (352) 331-1976 or via email at randyo@chw-inc.com.

Sincerely,
CHW

Randall Olney, PE
Director of Engineering, Land Development

\\fs01.chw-inc.local\jobs2\2023\23-0653\Departments\04_Engineering\01_Regulatory Permitting\Municipalities\City\Submittals and Comments\240321\LTR 240321 CRS MB - Cover Letter.docx

Columbia County Property Appraiser

Jeff Hampton

2024 Working Values
updated: 11/23/2023

Parcel: << 07-4S-17-08127-005 (29833) >>

Owner & Property Info

Result: 1 of 0

Owner	ST JOHNS LLC 13820 W NEWBERRY RD STE 100 NEWBERRY, FL 32669		
Site			
Description*	S1/2 OF NE1/4 OF NE1/4 W OF SR-47. 482-143, LE 1318-991, DC 1327- 1297, DC 1327-1298, WD 1330- 1324, 372-81, 804-766, 894- 679, 912-1064, 1037-1953		
Area	9.694 AC	S/T/R	07-4S-17
Use Code**	VACANT (0000)	Tax District	1

*The Description above is not to be used as the Legal Description for this parcel in any legal transaction.
**The Use Code is a FL Dept. of Revenue (DOR) code and is not maintained by the Property Appraiser's office. Please contact your city or county Planning & Zoning office for specific zoning information.

Aerial Viewer Pictometery Google Maps

2023 2022 2019 2016 2013 Sales

Property & Assessment Values

2023 Certified Values		2024 Working Values	
Mkt Land	$266,978	Mkt Land	$266,978
Ag Land	$0	Ag Land	$0
Building	$0	Building	$0
XFOB	$0	XFOB	$0
Just	$266,978	Just	$266,978
Class	$0	Class	$0
Appraised	$266,978	Appraised	$266,978
SOH Cap [?]	$0	SOH Cap [?]	$0
Assessed	$266,978	Assessed	$266,978
Exempt	$0	Exempt	$0
Total Taxable	county:$266,978 city:$266,978 other:$0 school:$266,978	Total Taxable	county:$266,978 city:$266,978 other:$0 school:$266,978

Sales History

Sale Date	Sale Price	Book/Page	Deed	V/I	Qualification (Codes)	RCode
2/6/2017	$70,000	1330/1324	WD	I	Q	01
7/7/2016	$100	1318/0991	LE	I	U	14
4/7/1995	$727,500	0804/0766	WD	V	U	35
7/31/1990	$127	1037/1953	WD	V	U	03
7/21/1990	$127	1036/1953	WD	V	U	03

Building Characteristics

Bldg Sketch	Description*	Year Blt	Base SF	Actual SF	Bldg Value
NONE					

Extra Features & Out Buildings (Codes)

Code	Desc	Year Blt	Value	Units	Dims
NONE					

Land Breakdown

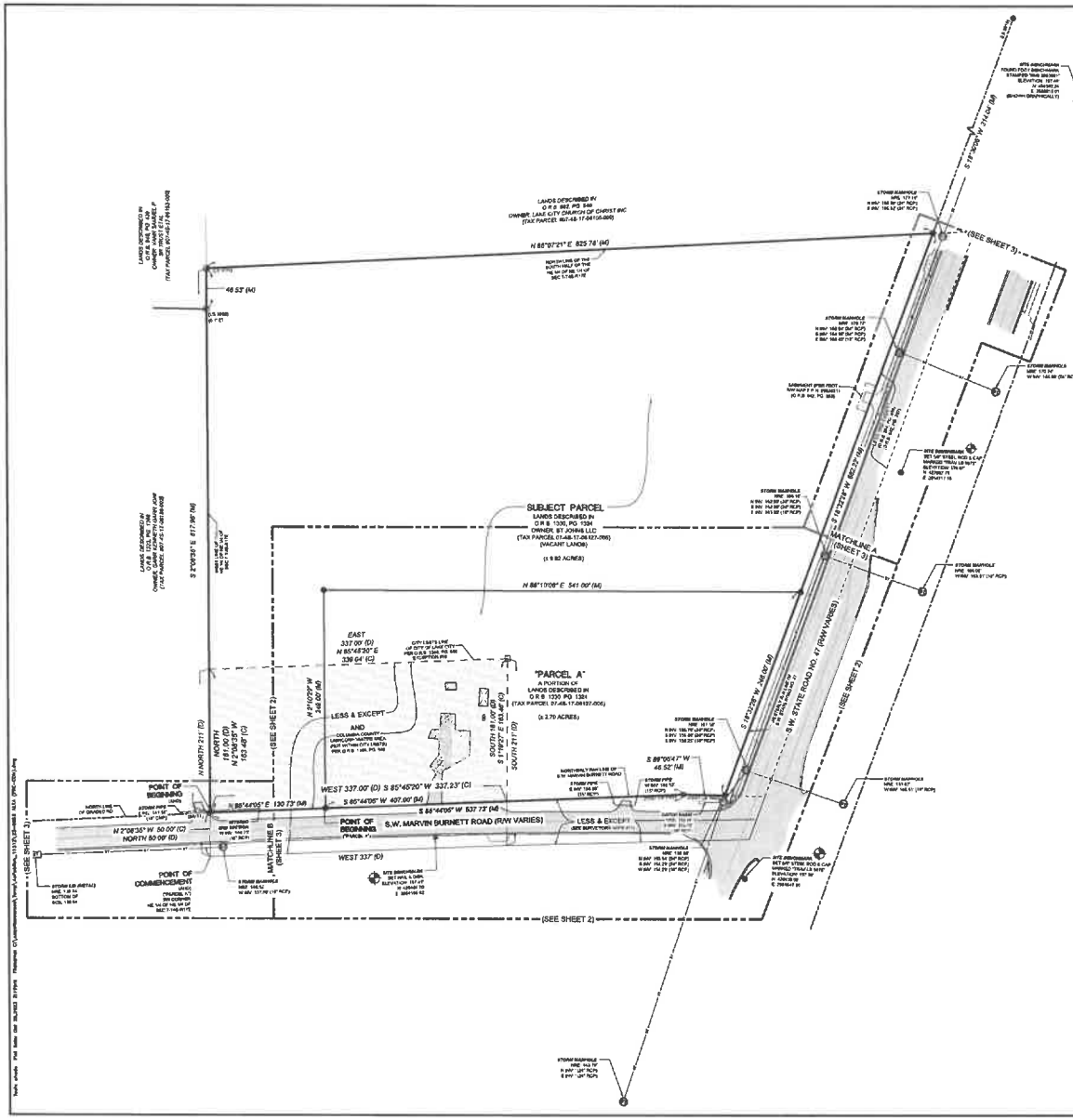
Code	Desc	Units	Adjustments	Eff Rate	Land Value
0000	VAC RES (MKT)	1.000 AC	1.0000/1.0000 1.0000/ /	$35,500 /AC	$35,500
0000	VAC RES (MKT)	8.694 AC	1.0000/1.0000 1.0000/.7500000 /	$26,625 /AC	$231,478

Search Result: 1 of 0

by: GrizzlyLogic.com

ALTA/NSPS LAND TITLE SURVEY

LOCATED IN THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA



DESCRIPTION: SUBJECT PARCEL (AS FURNISHED PER FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NUMBER 1100078642, COMMITMENT DATE JUNE 9, 2021)

THE SOUTH 181.00 FEET OF THE NORTH 392.00 FEET OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST AS LIES WEST OF ER NO. 47, LESS AND EXCEPT: BEGIN AT THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 7, AND RUN NORTH ALONG WEST LINE OF SAID NORTHEAST 1/4 OF THE NORTHEAST 1/4 211 FEET; THENCE RUN EAST 337 FEET; THENCE RUN SOUTH 211 FEET; THENCE RUN WEST 337 FEET TO THE POINT OF BEGINNING

AND

COMMENCE AT THE SW CORNER OF THE NE 1/4 OF NE 1/4 OF SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST AND RUN NORTH ALONG WEST LINE OF NE 1/4 OF NE 1/4 661.00 FEET MORE OR LESS TO THE NORTH RIGHT OF WAY LINE OF GRADED COUNTY ROAD FOR POINT OF BEGINNING; THENCE CONTINUE NORTH ALONG WEST LINE OF THE NE 1/4 OF NE 1/4 FOR 161.00 FEET; THENCE RUN EAST, PARALLEL TO THE SOUTH LINE OF THE NE 1/4 OF NE 1/4, 337.00 FEET; THENCE RUN SOUTH PARALLEL TO THE WEST LINE OF THE NE 1/4 OF NE 1/4 FOR 161.00 FEET MORE OR LESS TO THE NORTH RIGHT OF WAY LINE OF SAID GRADED COUNTY ROAD; THENCE RUN WEST PARALLEL TO THE SOUTH LINE OF THE NE 1/4 OF NE 1/4 AND ALONG NORTH RIGHT OF WAY LINE OF SAID GRADED COUNTY ROAD 337.00 FEET MORE OR LESS TO THE POINT OF BEGINNING

LESS ANY PORTION LYING WITHIN ORDER OF TAKING IN BOOK 884, PAGE 689, AND BOOK 942, PAGE 293
(SEE SURVEYOR'S NOTE #17)

DESCRIPTION: PARCEL "A" (PREPARED BY THIS SURVEYOR)

A TRACT OF LAND BEING A PORTION OF LANDS AS DESCRIBED IN OFFICIAL RECORDS BOOK 1330 PAGE 1334 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA SITUATED IN THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF AFOREMENTIONED NORTHEAST QUARTER (NE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA, THENCE NORTH 02°09'35" WEST ALONG WEST LINE OF SAID NORTHEAST QUARTER (NE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) A DISTANCE OF 661.00 FEET TO THE NORTHERLY RIGHT OF WAY LINE OF S.W. MARVIN BURNETT ROAD (RIGHT OF WAY WIDTH VARIES), THENCE DEPARTING SAID WEST LINE NORTH 85°44'05" EAST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, A DISTANCE OF 130.73 FEET TO THE POINT OF BEGINNING; THENCE NORTH 02°13'29" WEST A DISTANCE OF 348.00 FEET; THENCE NORTH 88°11'06" EAST, A DISTANCE OF 541.00 FEET TO THE WESTERLY RIGHT OF WAY LINE OF S.W. STATE ROAD NO. 47 (RIGHT OF WAY WIDTH VARIES), THENCE SOUTH 01°19'09" WEST, ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 348.00 FEET; THENCE CONTINUE ALONG SAID WESTERLY RIGHT OF WAY LINE, SOUTH 06°19'07" WEST A DISTANCE OF 48.62 FEET TO THE INTERSECTION OF SAID WESTERLY RIGHT OF WAY LINE AND AFOREMENTIONED NORTHERLY RIGHT OF WAY LINE OF S.W. MARVIN BURNETT ROAD; THENCE SOUTH 85°44'05" WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE A DISTANCE OF 497.90 FEET TO THE POINT OF BEGINNING

SAID TRACT OF LAND CONTAINING 2.79 ACRES MORE OR LESS

SURVEYOR'S NOTES

1. COORDINATES SHOWN HEREON ARE BASED ON STATE PLANE FLORIDA NORTH ZONE COORDINATES (NAD 83 (2011)) PROJECTED FROM RTK NETWORK GPS SOLUTION
2. VERTICAL DATUM IS SHOWN IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS DERIVED FROM FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) VERTICAL CONTROL MONUMENT NAMED 2903001847, WHICH IS A FDOT BRASS DISK STAMPED "BM3 2903001", WITH A PUBLISHED ELEVATION OF 157.46 FEET
3. UTILITY NOTE: OBSERVED EVIDENCE OF UTILITIES HAS BEEN SHOWN PURSUANT TO SECTION 5.E.IV.ANALYSIS, MINIMUM STANDARD DETAIL REQUIREMENTS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS PHYSICALLY LOCATED THE ENCROACHMENTS LISTED
4. THE SURVEYOR HAS NO KNOWLEDGE OF UNDERGROUND FOUNDATIONS WHICH MAY ENCROACH
5. FENCING, SYMBOLS AND MONUMENTATION SHOWN HEREON MAY BE EXAGGERATED FOR PICTORIAL PURPOSES ONLY AND MAY NOT BE SHOWN TO SCALE
6. IN THE OPINION OF THIS SURVEYOR, THE PERIMETER LINES AS SHOWN HEREON REPRESENT THE LOCATION OF THE BOUNDARY LINES OF THE SUBJECT PARCEL IN RELATION TO THE DESCRIPTION OF RECORD AND THOSE EXISTING LAND CORNERS FOUND TO BE ACCEPTABLE BY THIS SURVEYOR
7. THIS SURVEY WAS PRODUCED WITH THE BENEFIT OF FURNISHED TITLE INFORMATION (AS FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NUMBER 1100078642, COMMITMENT DATE JUNE 9, 2021). A SEARCH OF THE PUBLIC RECORDS WAS NOT BEEN PERFORMED BY THE SURVEYOR
8. INFORMATION FROM FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAPS, SHOWN ON THIS MAP WAS CURRENT AS OF THE REFERENCED DATE. MAP REVISIONS AND AMENDMENTS ARE PERIODICALLY MADE BY LETTER AND MAY NOT BE REFLECTED ON THE MOST CURRENT MAP
9. THERE WERE NO MARKED PARKING SPACES OBSERVED AT THE TIME OF THIS SURVEY
10. THERE WAS NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS BEING CONDUCTED AT THE TIME OF THIS SURVEY
11. THERE WAS NO EVIDENCE OF CHANGES IN STREET RIGHT OF WAY LINES. THERE WAS NO OBSERVED EVIDENCE OF CURRENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS. THERE WAS NO OBSERVED EVIDENCE OF CURRENT SIDEWALK CONSTRUCTION OR REPAIRS
12. THERE IS NO OBSERVED EVIDENCE OF SITE USE AS A CEMETERY, SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL
13. ONLY TREES 24" IN DIAMETER OR GREATER MEASURED AT CHEST HEIGHT ARE SHOWN HEREON
14. ADDITIONAL POINTS MAY BE FOUND BY TURNING ON THE SURVEY LAYERS IN THE SUPPLIED DIGITAL FILE
15. TOPOGRAPHIC INFORMATION SHOWN HEREON BASED ON ORIGINAL SURVEY. CONTOURS SHOWN HEREON REFLECT 1-FOOT INTERVALS
16. PROJECT LIMITS ARE PER CLIENT SPECIFICATIONS
17. THE FURNISHED LEGAL DESCRIPTION DOES NOT LESS OUT A SECTION OF RIGHT OF WAY FOR S.W. MARVIN BURNETT ROAD AND STATE ROAD NO. 47 FROM THE SUBJECT PARCEL
18. THIS SURVEY IS A TOTAL OF THREE (3) SHEETS. SEE SHEET ONE (1) FOR OVERALL BOUNDARY INFORMATION FOR THE SUBJECT PARCEL AND PARCEL "A". SEE SHEET TWO (2) AND THREE (3) FOR DETAILED TOPOGRAPHIC INFORMATION AND IMPROVEMENT LOCATIONS FOR PARCEL "A" AND CLIENT SPECIFIED AREAS

SCHEDULE B-2 (AS FURNISHED PER FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NUMBER 1100078642, COMMITMENT DATE JUNE 9, 2021)

ITEM NO. 9: UNABLE TO DETERMINE IF THE PROPERTY IS SUBJECT TO THE ORDINANCE NO. 91-ANN AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 912, PAGE 1183. (THE DESCRIPTION APPEARS TO BE IN ERROR AND DOES NOT CLOSE)

ITEM NO. 10: THIS PROPERTY IS SUBJECT TO THE ORDINANCE NO. 2019-2127 AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 1368, PAGE 848. (AS SHOWN HEREON)

LEGEND:

(D) = DATA BASED ON FURNISHED DESCRIPTION
(M) = DATA BASED ON FIELD MEASUREMENTS
FEMA = FEDERAL EMERGENCY MANAGEMENT AGENCY
F.I.R.M. = FLOOD INSURANCE RATE MAP
NAVD = NORTH AMERICAN VERTICAL DATUM
INV = INVERT
GALV = GALVANIZED METAL PIPE
R/W = RIGHT OF WAY
O.R.B. = OFFICIAL RECORDS BOOK
PG. = PAGE
ID = IDENTIFICATION
LAO = LAUREL OAK TREE
LO = LIVE OAK TREE
ELM = WINGED ELM TREE
PINE = PINE TREE
PEC = PECAN TREE
RO = RED OAK TREE

- BENCH MARK
- TREE (SIZE/TYPE NOTED)
- POB = POINT OF BEGINNING
- POC = POINT OF COMMENCEMENT
- 5' 115.5' = SPOT ELEVATION (METHOD/USE)
- 3' 124.45' = SPOT ELEVATION (IMPROVEMENT)
- FOUND 4"X4" CONCRETE MONUMENT (AS NOTED)
- FOUND 5/8" STEEL ROD & CAP (AS NOTED)
- SET 1/2" STEEL ROD & CAP (LB 5075)
- GUY ANCHOR
- SIGN (MARKED AS NOTED)
- CONCRETE LIGHT POLE
- WOODEN POWER POLE
- STORM MANHOLE
- MAILBOX
- CMS RANK
- MITERED END SECTION
- STORM SEWER MANHOLE
- OVERHEAD WIRE
- SANITARY SEWER PIPE
- WATER LINE (PER PLANS)
- FENCE (4' WIRE)
- ASPHALT SURFACE
- CONCRETE SURFACE
- ADA WARNING SURFACE
- AREA OUTSIDE OF CITY LIMITS

FLOOD ZONE

THIS PROPERTY IS LOCATED IN FEDERAL FLOOD ZONE "X", AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS INTERPOLATED FROM FEMA F.I.R.M. PANEL NO. 292 OF 552, (COMMUNITY NUMBER & PANEL NO. "12023 C0292 D AND 12040C 0292 D, EFFECTIVE DATE: NOVEMBER 2, 2018

ZONING RESTRICTIONS: (AS FURNISHED)

CI- COMMERCIAL INTENSIVE
MINIMUM SETBACK REQUIREMENTS:
- FRONT: 30 FEET
- SIDE: NONE
- REAR: 15 FEET

PARKING REQUIREMENTS:
- 57 SPACES (1 ADA SPACES)

SURVEYOR'S CERTIFICATION:

TO: CONCEPT DEVELOPMENT INC., A FLORIDA CORPORATION; PROVIDENCE TITLE COMPANY, LLC AND FIRST AMERICAN TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6, 8(a), 9, 11, 13, 14, 16, 17 AND 18, OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON OCTOBER 18, 2021.

CHAD A. COLSON
FLORIDA SURVEYOR & MAPPER CERTIFICATE NUMBER 7142
CHAD@CHWINC.COM

CHAD A. COLSON, PSM, Certificate No. 7142, STATE OF FLORIDA, Professional Surveyor and Mapper

10/25/2023
DATE OF PLAT OR MAP

CHW
Professional Consultants
1980 Research Drive
Alachua, Florida 32615
352.331.1976
www.chwinc.com
FL Reg. FLORIDA CA-5075

This map prepared by
CHAD A. COLSON
(SEE SURVEYOR'S CERTIFICATION)
Certificate of Authorization No. L.B. 5075
NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER
Professional Surveyor & Mapper No. License No. 7142

SCALE	1" = 60'
DRAWN BY	JM
CHECKED BY	CAC
FIELD BOOK & PAGE	N/A
DATE	10-06-2023
PROJECT NUMBER	23-0653

SHEET NO. 1 OF 3

ALTA/NSPS LAND TITLE SURVEY

LOCATED IN THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA

SURVEYOR'S NOTES:

1. COORDINATES SHOWN HEREON ARE ARE BASED ON STATE PLANE FLORIDA NORTH ZONE COORDINATES (NAD 83 (2011)) PROJECTED FROM RTK NETWORK GPS SOLUTION
2. VERTICAL DATUM IS SHOWN IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS DERIVED FROM FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) VERTICAL CONTROL MONUMENT NAMED 29030010BM1 WHICH IS A FOOT BRASS DISK STAMPED "BM1 2903001", WITH A PUBLISHED ELEVATION OF 187.48 FEET
3. UTILITY NOTE: OBSERVED EVIDENCE OF UTILITIES HAS BEEN SHOWN PURSUANT TO SECTION 6 PARAGRAPH E (IV) OF THE ALTA/NSPS MINIMUM STANDARD DETAIL REQUIREMENTS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES
4. THE SURVEYOR HAS NO KNOWLEDGE OF UNDERGROUND FOUNDATIONS WHICH MAY ENCROACH
5. FENCING, SYMBOLS AND MONUMENTATION SHOWN HEREON MAY BE EXAGGERATED FOR PICTORIAL PURPOSES ONLY AND MAY NOT BE SHOWN TO SCALE
6. IN THE OPINION OF THIS SURVEYOR, THE PERIMETER LINES AS SHOWN HEREON REPRESENT THE LOCATION OF THE BOUNDARY LINES OF THE SUBJECT PARCEL IN RELATION TO THE DESCRIPTION OF RECORD AND THOSE EXISTING LAND CORNERS FOUND TO BE ACCEPTABLE BY THIS SURVEYOR
7. THIS SURVEY WAS PRODUCED WITH THE BENEFIT OF FURNISHED TITLE INFORMATION VIA FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NUMBER 1100996642, COMMITMENT DATE JUNE 9, 2023. A SEARCH OF THE PUBLIC RECORDS HAS NOT BEEN PERFORMED BY THE SURVEYOR
8. INFORMATION FROM FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAP(S), SHOWN ON THIS MAP WAS CURRENT AS OF THE REFERENCED DATE. MAP REVISIONS AND AMENDMENTS ARE PERIODICALLY MADE BY LETTER AND MAY NOT BE REFLECTED ON THE MOST CURRENT MAP.
9. THERE WERE NO MARKED PARKING SPACES OBSERVED AT THE TIME OF THIS SURVEY
10. THERE WAS NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS BEING CONDUCTED AT THE TIME OF THIS SURVEY
11. THERE WAS NO EVIDENCE OF CHANGES IN STREET RIGHT OF WAY LINES. THERE WAS NO OBSERVED EVIDENCE OF CURRENT STREET CONSTRUCTION OR REPAIRS. THERE WAS NO OBSERVED EVIDENCE OF CURRENT SIDEWALK CONSTRUCTION OR REPAIRS
12. THERE IS NO OBSERVED EVIDENCE OF SITE USE AS A CEMETERY, SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL
13. ONLY TREES 24" IN DIAMETER OR GREATER (MEASURED AT CHEST HEIGHT) ARE SHOWN HEREON
14. ADDITIONAL POINTS MAY BE FOUND BY TURNING ON THE "SANGLOE" LAYERS IN THE SUPPLIED DIGITAL FILE
15. TOPOGRAPHIC INFORMATION SHOWN HEREON BASED ON GROUND SURVEY. CONTOURS SHOWN HEREON REFLECT 1-FOOT INTERVALS
16. PROJECT LIMITS ARE PER CLIENT SPECIFICATIONS
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VICINITY MAP - NOT TO SCALE

GRAPHIC SCALE
0 15 30 60

LEGEND

(D) = DATA BASED ON FURNISHED DESCRIPTION
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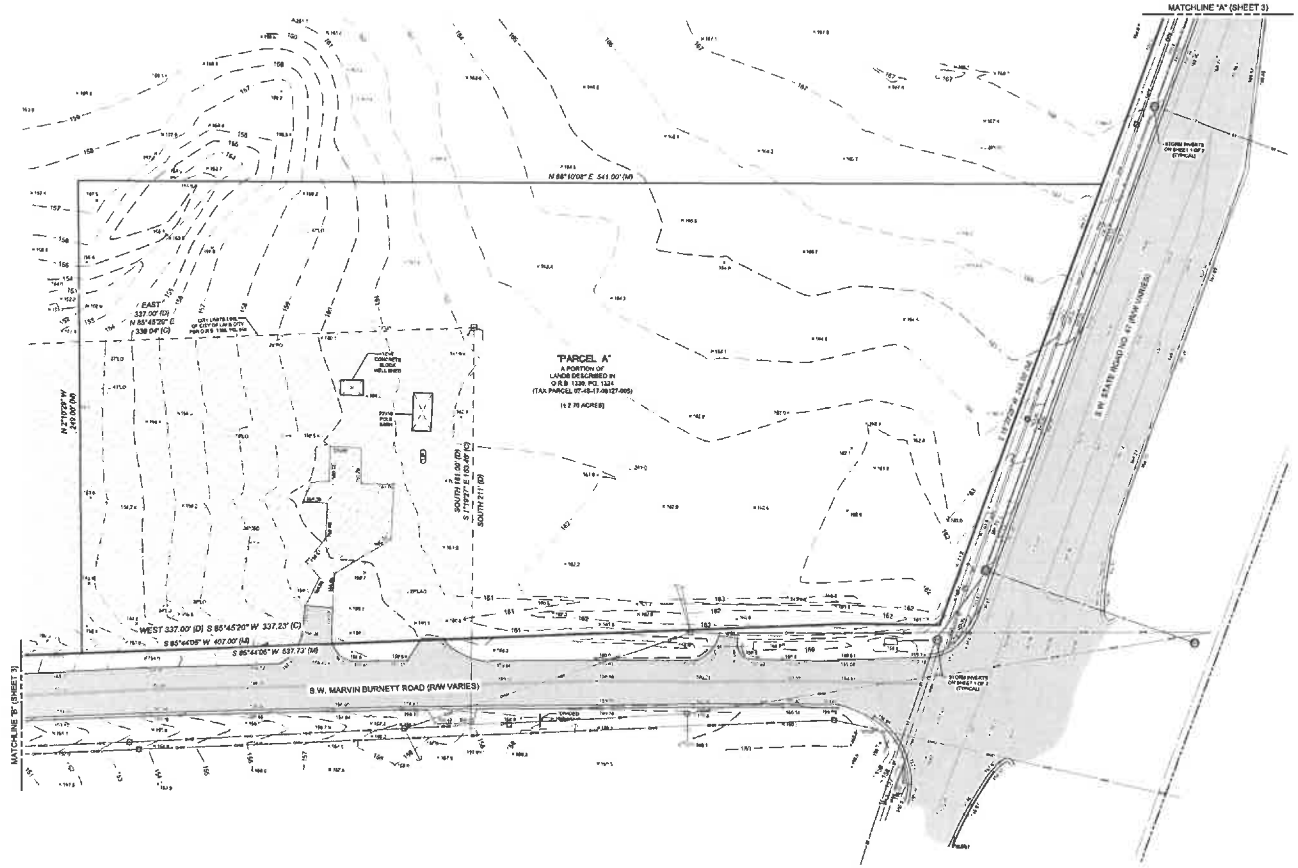
OAK = OAK TREE
PINE = PINE TREE
PEC = PECAN TREE
RO = RED OAK TREE
= BENCHMARK
= TREE (SIZE/TYPE NOTED)
= CONTOUR LINE
× 158.5 = SPOT ELEVATION (PERVIOUS)
× 165.45 = SPOT ELEVATION (IMPERVIOUS)
= FOUND 4"X4" CONCRETE MONUMENT (AS NOTED)
= FOUND 5/8" STEEL ROD & CAP (AS NOTED)
= SET 5/8" STEEL ROD & CAP (LB 5075)
= GUY ANCHOR
= SIGN (MARKED AS NOTED)
= WOODEN POWER POLE
= CONCRETE LIGHT POLE
= MAILBOX
= GAS TANK
= MITERED END SECTION
= STORM SEWER MANHOLE
— OHW — = OVERHEAD WIRE
— SS — = SANITARY SEWER PIPE
— (W) — = WATER LINE (PER PLANS)
— (FM) — = FORCE MAIN (PER PLANS)
— X — = FENCE (4' WIRE)
= ASPHALT SURFACE
= CONCRETE SURFACE
= ADA WARNING SURFACE
= AREA OUTSIDE OF CITY LIMITS



This map prepared by: Certificate of Authorization No. L.B. 5075 NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OR ELECTRONIC DIGITAL SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER	CHAD A. COLSON (SEE SURVEYOR'S CERTIFICATION) Professional Surveyor & Mapper File License No. 7142	TECHNICIAN: NAD; CREW CHIEF: JM; CHECKED BY: CAC; FIELD BOOK & PAGE: 71/67	SURVEY DATE: 10-08-2023; REVISION DATE: N/A; PROJECT NUMBER: 23-0653	CERTIFIED TO: (SEE SURVEYOR'S CERTIFICATION)	SCALE: 1" = 30' VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CHW Professional Consultants
11801 Research Drive Alachua, Florida 32615 (352) 331-1976 www.chw-inc.com
est. 1988 FLORIDA CA-5075

SHEET NO. 2 OF 3

ALTA/NSPS LAND TITLE SURVEY

LOCATED IN THE NORTHEAST QUARTER (NE 1/4)
OF THE NORTHEAST QUARTER (NE 1/4) OF
SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST,
CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA

SURVEYOR'S NOTES:

1. COORDINATES SHOWN HEREON ARE ARE BASED ON STATE PLANE FLORIDA NORTH ZONE COORDINATES (NAD 83 (2011)) PROJECTED FROM RTK NETWORK GPS SOLUTION
2. VERTICAL DATUM IS SHOWN IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS DERIVED FROM FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) VERTICAL CONTROL MONUMENT NAMED 2903J001BM1 WHICH IS A FOOT BRASS DISK STAMPED "BM1 2903J001" WITH A PUBLISHED ELEVATION OF 187.48 FEET
3. UTILITY NOTE: OBSERVED EVIDENCE OF UTILITIES HAS BEEN SHOWN PURSUANT TO SECTION 6 PARAGRAPH E (IV) OF THE ALTA/NSPS MINIMUM STANDARD DETAIL REQUIREMENTS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES
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7. THIS SURVEY WAS PRODUCED WITH THE BENEFIT OF FURNISHED TITLE INF[illegible] FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NUMBER 11009942, COMMITMENT DATE: JUNE 9, 2023. A SEARCH OF THE PUBLIC RECORDS HAS NOT BEEN [illegible] THE SURVEYOR.
8. INFORMATION FROM FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAP(S), SHOWN ON THIS MAP WAS CURRENT AS OF THE REFERENCED DATE. MAP REVISIONS AND AMENDMENTS ARE PERIODICALLY MADE BY LETTER AND MAY NOT BE REFLECTED ON THE MOST CURRENT MAP
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12. THERE IS NO OBSERVED EVIDENCE OF SITE USE AS A CEMETERY, SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
13. ONLY TREES 24" IN DIAMETER OR GREATER (MEASURED AT CHEST HEIGHT) ARE SHOWN HEREON
14. ADDITIONAL POINTS MAY BE FOUND BY TURNING ON THE "V-NODE" LAYERS IN THE SUPPLIED DIGITAL FILE
15. TOPOGRAPHIC INFORMATION SHOWN HEREON BASED ON GROUND SURVEY. CONTOURS SHOWN HEREON REFLECT 1-FOOT INTERVALS
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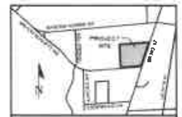

VICINITY MAP - NOT TO SCALE

N

GRAPHIC SCALE
0 15 30 60

LEGEND

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PEC = PECAN TREE
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= BENCHMARK
= TREE (SIZE/TYPE NOTED)
156 = CONTOUR LINE
× 156.5 = SPOT ELEVATION (PERVIOUS)
× 185.45 = SPOT ELEVATION (IMPERVIOUS)
= FOUND 4"X4" CONCRETE MONUMENT (AS NOTED)
= FOUND 5/8" STEEL ROD & CAP (AS NOTED)
= SET 5/8" STEEL ROD & CAP (LB 5075)
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= SIGN (MARKED AS NOTED)
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= CONCRETE LIGHT POLE
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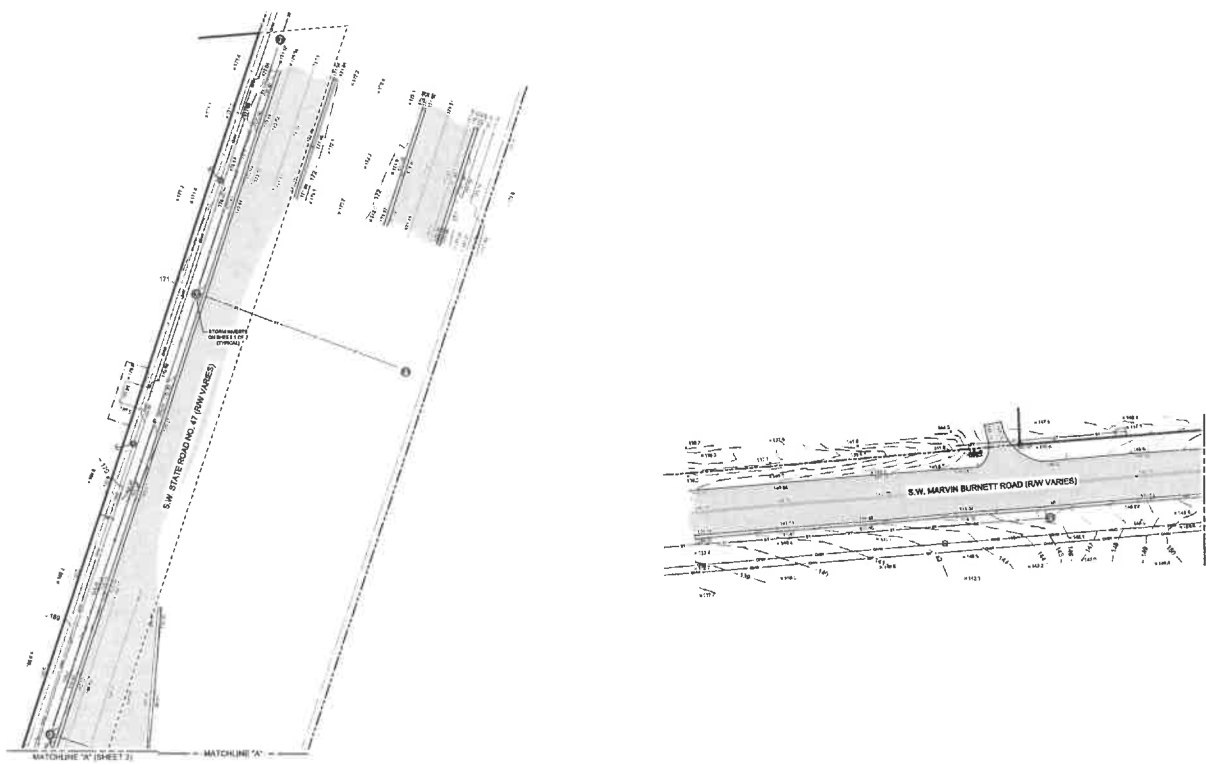


This map prepared by: Certificate of Authorization No. L.B. 5075 NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OR ELECTRONIC DIGITAL SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER	CHAD A. COLSON (SEE SURVEYOR'S CERTIFICATION) Professional Surveyor & Mapper Fla. License No. 7142	NAD; CREW CHIEF: JLM; CHECKED BY: CAC; FIELD BOOK & PAGE: 71/67	SURVEY DATE: 10-06-2023; REVISION DATE: N/A; PROJECT NUMBER: 23-0653	(SEE SURVEYOR'S CERTIFICATION)	SCALE: 1" = 30'; VERIFY SCALE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CHW Professional Consultants
11801 Research Drive
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
FLORIDA CA-5075

SHEET NO.: 3 OF 3

CONSTRUCTION PLANS
FOR:

COMMERCIAL RETAIL STORE
MARVIN BURNETT

LAKE CITY, FLORIDA

SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST

SUBMITTED TO:

CITY OF LAKE CITY
COLUMBIA COUNTY
FLORIDA DEPARTMENT OF TRANSPORTATION
FLORIDA DEPARTMENT OF ENVIROMENTAL PROTECTION
SUWANNEE RIVER WATER MANAGEMENT DISTRICT

DEVELOPER/APPLICANT
MATT CASON, PRESIDENT
CONCEPT DEVELOPMENT, INC.
3324 W. UNIVERSITY AVE. #151
GAINESVILLE, FL 32607
(352) 333-3233

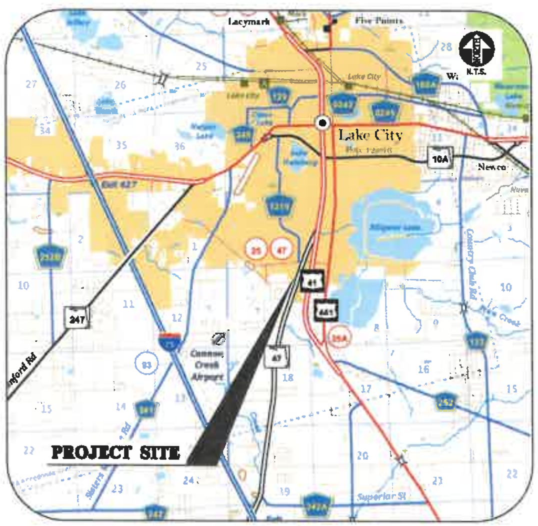
OWNER
ST. JOHNS LIMITED LIABILITY COMPANY
13820 W. NEWBERRY ROAD, SUITE 100
NEWBERRY, FL 32669

SURVEYOR OF RECORD
CHAD A. COLSON
CHW
11801 RESEARCH DRIVE
ALACHUA, FL 32615
(352) 331-1976

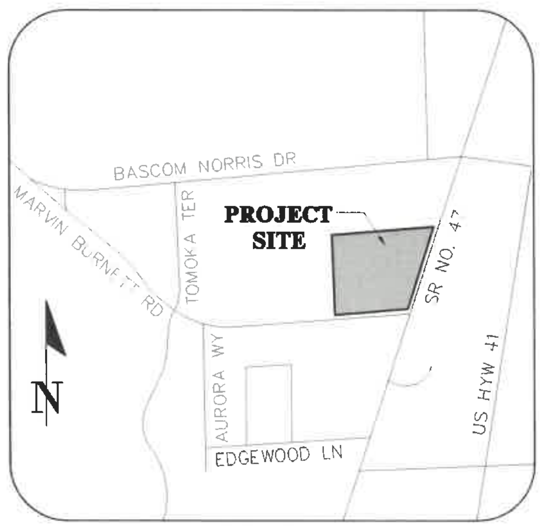
ENGINEER OF RECORD
RANDALL S. OLNEY P.E.
CHW
11801 RESEARCH DRIVE
ALACHUA, FL 32615
(352) 331-1976

LANDSCAPE ARCHITECT
BRIAN D. BORTON, R.L.A.
BORTON DESIGN, INC.
1354 N. KYLE WAY
SAINT JOHNS, FLORIDA 32259
(904) 287-1996

SHEET INDEX



LOCATION MAP



VICINITY MAP

TRAFFIC STATEMENT:

PROPOSED LAND USE	ITE LU	AREA	RATE	AADT	AM PEAK	PM PEAK
VARIETY STORE	(814)	10,640 S.F.	63.66	677	32	71

1.) BASED ON ITE 11TH EDITION.

PARKING REQUIREMENT:
REQUIRED: (1 SPACE/150 S.F.) x 8,504 S.F. OF NON STORAGE FLOOR AREA= 57 SPACES
PROVIDED: 57 SPACES

ADA PARKING REQUIREMENT:
REQUIRED: 3 SPACES
PROVIDED: 3 SPACES

DEVELOPMENT DATA

ZONING: COMMERCIAL INTENSIVE (CI)		
FLU: COMMERCIAL (COM)		
	ON-SITE	
DEVELOPMENT AREA:	117,612 S.F.	2.70 AC
BUILDING AREA	10,640 S.F.	9%
SMF	19,819 S.F.	17%
IMPERVIOUS AREA:	44,786 S.F.	38%
OPEN SPACE:	53,007 S.F.	45%
TAX ID: #07-4S-17-08127-005		
TYPE OF CONSTRUCTION: PER FBC 2020, TYPE II B		

BEFORE YOU DIG!
CALL SUNSHINE STATE ONE CALL OF FLORIDA
AT LEAST TWO FULL BUSINESS DAYS BEFORE DIGGING OR DISTURBING EARTH
1-800-432-4770
811 Know what's below. Call before you dig.

11801 Research Drive
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 1985 FLORIDA CA-5075
CHW Professional Consultants

SCALE: N/A
VERIFY SCALE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

CONSTRUCTION/BID REVISIONS

SUBMITTALS: 03/29/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT

CLIENT: CONCEPT DEVELOPMENT, INC.
PROJECT: COMMERCIAL RETAIL STORE MARVIN BURNETT
SHEET TITLE: COVER SHEET AND INDEX

G. WADZINSKI
DESIGNER: C. MENHENNETT
QUALITY CONTROL: R. OLNEY, P.E.
PROJECT NUMBER: 23-0653

RANDALL SCOTT OLNEY
FL PE No. 68382
SHEET NO. C0.00

GENERAL NOTES

1. THE TOPOGRAPHIC AND EXISTING INFORMATION SHOWN HEREON WERE TAKEN FROM A TOPOGRAPHIC SURVEY PREPARED BY CHW, AND DATED OCTOBER 6, 2023.
2. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAS BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. THE RESPECTIVE UTILITY COMPANIES SHALL RELOCATE ALL UTILITIES THAT INTERFERE WITH THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY COMPANIES DURING THE RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
3. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE APPROPRIATE UTILITY COMPANIES IN ORDER TO ALLOW MARKING OF THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES IN ADVANCE OF CONSTRUCTION BY CALLING THE FLORIDA SUNSHINE STATE ONE-CALL CENTER, INC. AT 1-800-432-4770 OR 811. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY "SUNSHINE" 48 HOURS PRIOR TO ANY CLEARING OF CONSTRUCTION TO IDENTIFY ALL UTILITY LOCATIONS. NO CONSTRUCTION ACTIVITY MAY OCCUR UNTIL THE UTILITIES HAVE BEEN PROPERLY MARKED.
4. THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL LOCATION AND VERTICAL LOCATION OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF THE PROJECT ENVELOPE SHOWN PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL CALL ALL UTILITY COMPANIES TO HAVE THE LOCATIONS OF ALL UTILITIES FIELD MARKED PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONTINUING CONSTRUCTION.
5. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR.
6. ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS BEFORE COMMENCING CONSTRUCTION WORK, UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. ADDITIONAL COSTS ARE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.
7. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK INCLUDING LANDSCAPING.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY AND/OR MUNICIPALITY INSTRUCTIONS.
9. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND SHALL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. TRENCHES SHALL BE KEPT DRY WHILE PIPES ARE BEING PLACED. DEWATERING SHALL BE USED AS REQUIRED, AND PERMITTED THROUGH LOCAL GOVERNMENTAL AGENCIES AND WATER MANAGEMENT DISTRICT PER CURRENT REGULATIONS AT THE SOLE COST OF THE CONTRACTOR.
11. CONTRACTOR TO REVIEW GEOTECHNICAL REPORT AND BORINGS PRIOR TO BIDDING THE PROJECT AND FOLLOW OUTLINED CONSTRUCTION TECHNIQUES.
12. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SERVICES OF AN APPROVED TESTING LABORATORY AND/OR SOILS ENGINEER, APPLICABLE REGULATORY AGENCIES, AND AS MAY BE FOUND IN THE ENGINEERING CONSTRUCTION DRAWINGS OR SPECIFICATIONS. CONTRACTOR TO VERIFY ALL TESTING WITH THE OWNER PRIOR TO COMMENCING CONSTRUCTION. UPON COMPLETION OF THE WORK, THE TESTING LABORATORY AND/OR SOILS ENGINEER MUST SUBMIT TO THE OWNER'S ENGINEER CERTIFICATIONS STATING THAT ALL REQUIREMENTS HAVE BEEN MET.
13. INSTALL SILT FENCE PRIOR TO SITE DEMOLITION OR NEW SITE CONSTRUCTION. INSTALL SILT FENCE PER FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL AND PROVIDE TOE-IN. THE CONTRACTOR SHALL MAINTAIN THE SILT FENCE IN WORKING ORDER THROUGHOUT THE CONSTRUCTION PHASE. THE PROJECT SILT FENCE SHALL BE INSPECTED DAILY AND ANY CORRECTIVE MEASURES SHALL BE COMPLETED WITHIN 24 HOURS.
14. ALL TREE BARRICADES AND SILT FENCING SHALL BE INSTALLED AND INSPECTED BY THE CITY OF LAKE CITY PRIOR TO COMMENCEMENT OF ANY DEMOLITION OR CONSTRUCTION ACTIVITIES.
15. THE CONTRACTOR IS TO PREPARE THE SITE PRIOR TO BEGINNING ACTUAL CONSTRUCTION IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
16. ALL DELETERIOUS MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER'S ENGINEER OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED AND REMOVED FROM THE SITE. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE AREAS.
17. CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS SHALL BE SODDED, SEEDED, MULCHED, OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL, AS DIRECTED BY THESE PLANS. IMMEDIATELY FOLLOWING CONSTRUCTION PER LOCAL INSPECTOR.
18. WORK BEING PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON THE SITE BY OTHER CONTRACTORS AND/OR UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES.
19. ALL PAVEMENT DIMENSIONS SHOWN ARE TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
20. THE GOVERNING STANDARDS AND SPECIFICATIONS, UNLESS STATED OTHERWISE SHALL BE PER FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS (FY 2023-24 ROAD CONSTRUCTION), AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FY 2023-24), AS AMENDED BY CONTRACT DOCUMENTS. ALL MATERIALS AND METHODS SHALL MEET FDOT SPECIFICATIONS AND SHALL BE PRODUCED OR OBTAINED FROM AN FDOT APPROVED SOURCE.
21. ALL NEW TRAFFIC CONTROL DEVICES (SIGNS AND PAVEMENT MARKINGS) SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND FDOT STANDARDS.
22. ALL STRIPING WITHIN THE COLUMBIA COUNTY RIGHT OF WAY SHALL BE PLACED FIRST AS TEMPORARY STRIPING FOLLOWED BY APPLICATION OF THERMOPLASTIC STRIPING 30 DAYS LATER.
23. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PROPER BENCHMARKS ON-SITE. EXISTING BENCH MARKS SCHEDULED FOR REMOVAL SHALL BE RELOCATED AT CONTRACTORS EXPENSE AND RE-ESTABLISHED BY A LICENSED SURVEYOR.
24. ALL HANDICAP RAMPS SHALL COMPLY WITH THE FLORIDA ACCESSIBILITY CODE AND AMERICANS WITH DISABILITIES ACT.
25. A PRE-CONSTRUCTION CONFERENCE SHALL BE REQUIRED. THE CONTRACTOR, ENGINEER OF RECORD, AND THE OWNER SHALL MEET WITH THE CITY OF LAKE CITY PUBLIC WORKS DEPARTMENT PRIOR TO INITIATION OF SITE CONSTRUCTION.
26. ANY CHANGE ORDER REQUESTS, SITE REVISIONS, AND PAY REQUESTS MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD.
27. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING AS NEEDED THROUGHOUT ALL CONSTRUCTION ACTIVITIES COVERED BY THESE PLANS. DEWATERING SHALL BE DONE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS, FY 2023-24 EDITION, SECTION 120.
28. THE CONTRACTOR IS RESPONSIBLE FOR THE PERFORMANCE AND COST OF ALL CLEARING AND GRUBBING AND ALL WORK OF REMOVAL, DISPOSAL, AND REPAIR OR REPLACEMENT OF EXISTING IMPROVEMENTS WHERE SHOWN IN THE PLANS, OR ORDERED BY THE ENGINEER TO BE REMOVED, OR WHERE REQUIRED BECAUSE OF THE CONSTRUCTION OPERATIONS, IN ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS (THIS INCLUDES BUT IS NOT LIMITED TO PROPOSED PIPING, STRUCTURES, UTILITIES, PAVING, CURBING, ETC.).
29. AN AS-BUILT SURVEY MAY BE REQUIRED BY REGULATORY AGENCIES. CONTRACTOR TO COORDINATE WITH PROJECT OWNER FOR COMPLETION OF AS-BUILT SURVEYS PRIOR TO PROJECT / PERMIT CLOSE-OUT.

MAINTENANCE OF TRAFFIC (MOT) NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR CREATING A MAINTENANCE OF TRAFFIC (MOT) PLAN FOR CONSTRUCTION ACTIVITY THAT OCCURS WITHIN THE PUBLIC RIGHT-OF-WAY, INCLUDING BUT NOT LIMITED TO SIDEWALK WORK AND ACTIVITIES THAT REQUIRE A LANE (OR ROAD) CLOSURE, SUCH AS CONNECTION TO SEWER MANHOLES AND WATER MAINS. THE MOT PLAN MUST BE CREATED BY A REGISTERED PROFESSIONAL ENGINEER WHO IS CERTIFIED TO DO SO BY THE FDOT MOT CERTIFICATION TRAINING. THE MOT PLAN MUST ALSO BE IN ACCORDANCE WITH FDOT STANDARDS PLANS AND FDOT STANDARD SPECIFICATIONS REQUIREMENTS AND MUST BE REVIEWED AND APPROVED BY THE FDOT.
2. THE CONTRACTOR SHALL SUBMIT THE MOT TO THE APPROPRIATE REGULATORY AUTHORITY PRIOR TO WORK REQUIRING THE MOT FOR APPROVAL. NO WORK IN THE ROW SHALL OCCUR UNTIL THE MOT IS APPROVED.

DEMOLITION GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLITION MATERIALS IN A SAFE AND LAWFUL MANNER. THE CONTRACTOR SHALL SALVAGE TO THE OWNER ANY ITEM AS DETERMINED BY THE OWNER. ONCE DEMOLISHED, MATERIAL SHALL BE DISPOSED OF PROPERLY AND IMMEDIATELY.
2. REMOVE ALL IMPROVEMENTS DEFINED ON THE DEMOLITION PLAN. SALVAGE ITEMS TO OWNER AS DEFINED BY THE OWNER'S REPRESENTATIVE AND CONSTRUCTION DOCUMENT SPECIFICATIONS.
3. EXISTING PAVEMENT AND SIDEWALK EDGES THAT BORDER NEW CONSTRUCTION OR DEMOLITION ARE TO BE SAW-CUT TO PROVIDE A SMOOTH TRANSITION.
4. ALL EXISTING TREES ARE TO REMAIN UNLESS OTHERWISE NOTED.
5. ROOTS LARGER THAN 1 INCH IN DIAMETER ON TREES TO BE PRESERVED THAT ARE ENCOUNTERED DURING CONSTRUCTION MUST BE CUT CLEANLY AND COVERED OVER WITH SOIL BY THE END OF THE WORKING DAY.
6. ALL ASPHALT AND LIMEROCK WILL BE COMPLETELY REMOVED FROM AREAS THAT WILL BE LANDSCAPED. IN PARTICULAR, AREAS WHERE ASPHALT WILL BE REMOVED MUST HAVE THE TOP HARD SURFACE, LIMEROCK, AND COMPACTED SOIL REMOVED. REPLACEMENT SOIL SHALL BE CLEAN DEEP FILL OF PH 5.5 - 6.5. THE DEPTH OF UNCOMPACTED SOIL PRIOR TO PLANTING MUST BE AT LEAST 3 FEET TO ACCOMMODATE FUTURE TREE ROOT GROWTH. NO LIMEROCK, LARGE STONES, OR OTHER CONSTRUCTION DEBRIS CAN REMAIN IN AREAS TO BE LANDSCAPED.

PAVING, GRADING, AND DRAINAGE GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL PRACTICES DURING CONSTRUCTION TO MINIMIZE ON-SITE EROSION/SEDIMENTATION AND TO PROTECT AGAINST DAMAGE TO OFF SITE PROPERTY. THE FOLLOWING PRACTICES SHALL BE EMPLOYED:
   - A. A. EROSION AND SEDIMENTATION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. AREAS OF OFF-SITE DISCHARGE DURING CONSTRUCTION SHALL BE PROTECTED WITH A SEDIMENT BARRIER PER FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL TO PREVENT OFF-SITE DISCHARGE OF SEDIMENTS. A SILT BARRIER SHALL SPECIFICALLY BE REQUIRED, CONSTRUCTED, AND MAINTAINED AS INDICATED ON THIS SHEET. TEMPORARY SEED AND MULCH SHOULD BE USED TO CONTROL ON-SITE EROSION WHEN IT IS NOT PRACTICAL TO ESTABLISH PERMANENT VEGETATION. SOD SHALL BE PLACED AS EARLY AS POSSIBLE ON ALL SLOPES STEEPER THAN 5 (FT) HORIZONTAL TO 1 (FT) VERTICAL. SOD SHALL BE PINNED AS REQUIRED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED IN WORKING ORDER THROUGHOUT THE CONSTRUCTION PHASE. THE CONTRACTOR SHALL INSPECT AND REPAIR AS NECESSARY THE EROSION/SEDIMENTATION PROTECTION AT THE END OF EACH WORKING DAY.
   - B. NOTE: EROSION/SEDIMENTATION CONTROL SHALL BE PLACED PRIOR TO SITE EXCAVATION AND SHALL REMAIN IN PLACE UNTIL SITE VEGETATION AND LANDSCAPING IS COMPLETE.
   - C. B. ALL INLET STRUCTURES AND PIPE SHALL BE PROTECTED FROM SILTATION BY CONSTRUCTING INLET PROTECTION AS DEFINED BY THESE PLANS OR IN THE FDOT STANDARDS. IF SILTATION OCCURS, THE CONTRACTOR IS RESPONSIBLE TO REMOVE SILTATION AS PART OF THE BASE CONTRACT AT NO ADDITIONAL COST TO THE OWNER.
   - D. C. EXCAVATED STORMWATER FACILITIES SHALL BE CONSTRUCTED AS PART OF THE INITIAL CONSTRUCTION. THE FACILITIES SHALL BE ROUGH GRADED TO THE DESIGN ELEVATIONS. AFTER THE CONTRIBUTING DRAINAGE AREA IS STABILIZED, THE FACILITIES BOTTOM SHALL BE OVER-EXCAVATED BY SIX INCHES, SCARIFIED, BACKFILLED WITH ARCHER FILL (HAVING NO MORE THAN 5% PASSING NO. 200 SIEVE), AND GRADED TO FINAL DESIGN GRADES. EXCESS AND UNSUITABLE SOILS SHALL BE REMOVED FROM THE BASIN (REMOVE ALL ACCUMULATED SILTS, CLAYS, ORGANIC, AND DEBRIS). FINALLY, SCARIFY AND RAKE BOTTOM AND VEGETATE.
   - E. D. PERMANENT VEGETATIVE STABILIZATION SHALL BE APPLIED ON FINE GRADED SITES AS SOON AS PRACTICAL. TEMPORARY SEEDING SHOULD BE EMPLOYED TO PREVENT EXPOSURE OF BARREN SOILS UNTIL PERMANENT VEGETATION CAN BE APPLIED.
   - F. E. ALL SLOPES 1:3 OR STEEPER REQUIRE LAPPED OR PEGGED SOD.
   - G. F. EROSION, SEDIMENT AND TURBIDITY CONTROL ARE THE RESPONSIBILITY OF THE CONTRACTOR. THESE DELINEATED MEASURES ARE THE MINIMUM REQUIRED, WITH ADDITIONAL CONTROLS TO BE UTILIZED AS NEEDED, DEPENDENT UPON ACTUAL SITE CONDITIONS AND CONSTRUCTION OPERATION.
   - H. G. ALL SYNTHETIC BALES, SILT FENCE, AND OTHER EROSION CONTROL MEASURES SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL MAINTAIN IN HIS POSSESSION A COPY OF THE WATER MANAGEMENT DISTRICT CONSTRUCTION PERMIT. HE SHALL BE RESPONSIBLE FOR ADHERENCE TO ALL CONDITIONS CONTAINED IN THE PERMIT.
3. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
4. CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE OWNER AND OWNER'S ENGINEER SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO BE USED ON THIS SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE. ENGINEER'S APPROVAL OF A SHOP DRAWING DOES NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR THE PERFORMANCE OF THE ITEM.
5. THE COST OF ALL TESTING OF COMPACTION AND OTHER REQUIRED TESTS SHALL BE PAID BY THE CONTRACTOR AND MADE AVAILABLE TO THE ENGINEER OF RECORD DURING SITE INSPECTIONS.
6. GENERAL CONTRACTOR TO CONTACT ENGINEER OF RECORD AND THE OWNER REPRESENTATIVE 48 HOURS IN ADVANCE PRIOR TO BACKFILLING TRENCHES FOR FIELD INSPECTION AND PRIOR TO LAYING ASPHALT FOR FIELD INSPECTION.
7. CONTRACTOR IS TO SUBMIT FDOT APPROVED ASPHALT DESIGN MIXES TO THE OWNER'S REPRESENTATIVE AND ENGINEER OF RECORD BEFORE ANY WORK IS TO COMMENCE ON PROJECT. THE MIXTURE AT THE PLANT OR ON THE ROAD SHALL NOT EXCEED 335 DEGREES. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND PROVIDE TEMPERATURE READINGS PRIOR TO LAYING ASPHALT.
8. AS DETERMINED NECESSARY AND DIRECTED BY THE CITY OF LAKE CITY PUBLIC WORKS DEPARTMENT OR ENGINEER OF RECORD, THE CONTRACTOR SHALL UNDERCUT ALL UNSUITABLE MATERIAL 24 INCHES BELOW THE BOTTOM OF ANY PROPOSED LIMEROCK BASE, AND SHALL BACKFILL WITH FILL MATERIAL MEETING FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. SEE FDOT INDEX 120-001 AND 120-002.
9. PROVIDE LEVEL PLATFORM IN FRONT OF ALL EGRESS DOORS. THE FLOOR SURFACE ON BOTH SIDES OF A DOOR SHALL BE AT THE SAME ELEVATION. THE FLOOR SURFACE OR LANDING ON EACH SIDE OF THE DOOR SHALL EXTEND FROM THE DOOR IN THE CLOSED POSITION A DISTANCE EQUAL TO THE DOOR WIDTH AND SHALL COMPLY WITH SECTION 4.13.6 MANEUVERING CLEARANCES AT DOORS OF THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION.
10. RAMPS SHALL HAVE LEVEL LANDINGS AT THE BOTTOM AND TOP OF EACH RAMP RUN. CURB RAMPS ARE NOT REQUIRED TO HAVE LANDINGS. LANDINGS SHALL HAVE THE FOLLOWING FEATURES:
    - A. THE LANDING SHALL BE AT LEAST AS WIDE AS THE RAMP RUN LEADING TO IT.
    - B. ALL LANDINGS ON RAMPS SHALL BE NOT LESS THAN 60" CLEAR, AND THE BOTTOM OF EACH RAMP SHALL HAVE NOT LESS THAN 72" OF STRAIGHT AND LEVEL CLEARANCE.
    - C. IF RAMPS CHANGE DIRECTION AT LANDINGS, THE MINIMUM LANDING SIZE SHALL BE 60"X60". IF A RAMP RUN HAS A RISE GREATER THAN 6" OR A HORIZONTAL PROJECTION GREATER THAN 72" THEN IT SHALL HAVE HANDRAILS ON BOTH SIDES. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. HANDRAILS SHALL BE SHOWN ON THE SITE PLAN.
11. THE CONTRACTOR SHALL STOCKPILE TOPSOIL AND CONSTRUCTION MATERIALS IN AREAS DESIGNATED BY THE OWNER.
12. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING RECORD DRAWINGS AS NOTED IN NOTE #29 UNDER SITE GENERAL NOTES.
13. ALL CONCRETE USED SHALL BE 2,500 PSI MINIMUM.
14. ALL WELLS, CLEANOUTS, MANHOLE TOPS, PULL BOX COVERS AND OTHER UTILITY APPURTENANCES IN THE AREA OF REDEVELOPMENT SHALL BE PROTECTED AND TOPS ADJUSTED TO MATCH PROPOSED GRADES.
15. CONTRACTOR SHALL SAW CUT, TACK, AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS ANY EXISTING PAVEMENT.
16. SOD SHALL BE PLACED AROUND ALL STRUCTURES AS DIRECTED BY THE FDOT INDEX 524-001 AND FDOT INDEX 425- AND 430- SERIES AS APPROPRIATE. ALL OTHER DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
17. ALL STORM SEWER CURB AND DITCH BOTTOM INLETS SHALL CONFORM TO THE APPLICABLE FDOT INDEX. ALL DRAINAGE STRUCTURES WITH GRATES THAT ARE LOCATED IN GRASSED AREAS SHALL HAVE THE GRATE CHAINED TO THE STRUCTURE USING AN EYE BOLT AND CHAIN.
18. ALL CONCRETE STRUCTURES SHALL HAVE ALL EXPOSED EDGES CHAMFERED 3/4" AND CLASS I SURFACE FINISH.
19. ALL HDPE FITTINGS AND CONNECTORS SHALL BE WATER TIGHT. SEE SPECIFICATIONS FOR MORE INFORMATION.
20. COMPACTION OF ALL MATERIALS SHALL BE LIMITED TO STATIC MODE ONLY, UNLESS DIRECTED OTHERWISE BY THE ENGINEER OF RECORD.
21. ALL RCP PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION SECTION 430.

WATER AND WASTEWATER GENERAL NOTES

1. MATERIALS AND CONSTRUCTION METHODS FOR WATER AND WASTEWATER SYSTEMS SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY CODES, PLANS, AND SPECIFICATIONS FOR CONSTRUCTION, LATEST REVISION THEREOF AND SUPPLEMENTAL SPECIFICATIONS THERETO. APPROVAL AND CONSTRUCTION OF ALL UTILITY EXTENSIONS AND CONNECTIONS MUST BE COORDINATED THROUGH THE REGULATORY AGENCY DEPARTMENT FOR PUBLIC UTILITIES.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES TO DISCONNECT OR REMOVE THEIR FACILITIES PRIOR TO REMOVING OR DEMOLISHING ANY EXISTING STRUCTURES FROM THE SITE.
3. THE CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY UTILITY FIELD LOCATION AND RELOCATION AS REQUIRED.
4. THE COST OF ALL TESTING OF COMPACTION AND OTHER REQUIRED TESTS SHALL BE PAID BY THE CONTRACTOR AND MADE AVAILABLE TO THE ENGINEER OF RECORD DURING SITE INSPECTIONS.
5. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON GRAVITY SEWERS IN ACCORDANCE WITH THE REGULATORY JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION AND NOTIFICATION OF PARTIES US THE CONTRACTOR'S RESPONSIBILITY.
6. ALL FORCE MAINS SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION AND NOTIFICATION OF PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.
7. CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE OWNER AND OWNER'S ENGINEER SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO BE USED ON THIS SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE. ENGINEER'S APPROVAL OF A SHOP DRAWING DOES NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR THE PERFORMANCE OF THE ITEM.
8. A HORIZONTAL SEPARATION OF TEN FEET PREFERRED, BUT NO LESS THAN SIX FEET. SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND GRAVITY OR PRESSURE WASTEWATER MAINS, WASTEWATER FORCE MAINS, AND RECLAIMED WATER MAINS NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. A HORIZONTAL SEPARATION OF TEN FEET PREFERRED. BUT NO LESS THAN THREE FEET. SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND VACUUM WASTEWATER MAINS. A HORIZONTAL SEPARATION OF THREE FEET SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND STORM SEWERS, STORMWATER FORCE MAINS. AND RECLAIMED WATER MAINS REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
9. WHEN POTABLE WATER MAINS CROSS OTHER PIPES, THE TWO PIPES SHALL HAVE JOINTS A MINIMUM OF SIX FEET FROM THE CROSSING. WHEN POTABLE WATER MAINS CROSS UNDERNEATH OTHER PIPES. THE MINIMUM VERTICAL SEPARATION IS TWELVE INCHES. WHEN POTABLE WATER MAINS CROSS ABOVE PRESSURE WASTEWATER MAINS, WASTEWATER FORCE MAINS, AND RECLAIMED WATER MAINS, THE MINIMUM VERTICAL SEPARATION IS TWELVE INCHES. WHEN POTABLE WATER MAINS CROSS ABOVE GRAVITY AND VACUUM WASTEWATER MAINS, STORM SEWERS, AND STORMWATER FORCE MAINS, THE PREFERRED VERTICAL SEPARATION IS TWELVE INCHES AND THE THE MINIMUM VERTICAL SEPARATION IS SIX INCHES.
10. ALL WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
11. RESTRAINED JOINTS SHALL BE PROVIDED AT ALL FITTINGS AND HYDRANTS IN ACCORDANCE WITH AWWA STANDARDS.
12. ALL PVC WATER SERVICE LINES SHALL BE SCH 40 PVC.
13. THE SITE WORK CONTRACTOR SHALL ENGAGE THE SERVICES OF A LICENSED UNDERGROUND UTILITY AND EXCAVATION CONTRACTOR TO INSTALL THE NEW WATER SERVICE LINE AND FORCE MAIN CONNECTIONS.
14. ALL SANITARY SEWER SERVICE LATERALS SHALL BE 4" PVC SDR 35 OR 6" PVC SDR 35 WITH A CLEAN-OUT LOCATED PER THE PLANS. MINIMUM SLOPE FOR 4" LATERALS SHALL BE 1.0% AND A MINIMUM CLEANOUT SPACING OF 75 FEET ON-CENTER AND MINIMUM SLOPE FOR 6" LATERALS SHALL BE 0.6% AND A MINIMUM CLEANOUT SPACING OF 100 FEET ON-CENTER.
15. PUBLIC UTILITY EASEMENTS WILL BE PROVIDED AS REQUIRED FOR ALL UTILITIES SHOWN HEREON BY METES AND BOUND DESCRIPTION AND IN ACCORDANCE WITH THE REGULATORY AGENCY DEPARTMENT FOR PUBLIC UTILITIES.

ELECTRIC SERVICE GENERAL NOTES

1. ALL ELECTRICAL UTILITIES AND INFORMATION SHOWN ON THE CIVIL PLANS ARE FOR LOCATION AND COORDINATION PURPOSES ONLY. REFER TO ELECTRICAL PLANS BY OTHERS FOR THE ELECTRICAL DESIGN AND DETAILS.
2. ELECTRIC DESIGN PROVIDED BY OTHERS.

FDOT GENERAL NOTES

1. ALL WORK PERFORMED WITHIN THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY SHALL CONFORM TO THE FOLLOWING:
   - A. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FY 2023-24).
   - B. FDOT STANDARD PLANS (FY 2023-24 ROAD CONSTRUCTION)
   - C. FDOT DESIGN MANUAL (2024)
   - D. FDOT FLEXIBLE PAVEMENT DESIGN MANUAL FOR NEW CONSTRUCTION AND PAVEMENT REHABILITATION

   SHOULD A CONFLICT ARISE BETWEEN THE DETAILS SHOWN IN THE PLANS AND THE DEPARTMENT OF TRANSPORTATION STANDARDS THE ENGINEER/PERMITTEE SHALL IMMEDIATELY CONFER WITH THE DEPARTMENT'S ENGINEER IN ORDER TO RESOLVE THE DISCREPANCY. IN NO CASE WILL ANYTHING LESS THAT THE DEPARTMENT'S MINIMUM STANDARD BE ALLOWED.
2. ALL TRAFFIC STRIPING AND MARKINGS ARE TO BE LEAD-FREE. NON-SOLVENT BASED THERMOPLASTIC.
3. REMOVAL OF EXISTING STRIPING SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD.
4. ALL CURB AND GUTTER AND SIDEWALK WILL BE REMOVED AND REPLACED JOINT TO JOINT.
5. ALL DISTURBED AREA WITH THE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY WILL RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREA DISTURBED (BERMUDA IN RURAL, CENTIPEDE IN UTILITY STRIPS).

CHW Professional Consultants
11801 Research Drive
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075

SCALE: N/A

SUBMITTALS: 03/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT

CLIENT: CONCEPT DEVELOPMENT, INC.
PROJECT: COMMERCIAL RETAIL STORE MARVIN BURNETT
SHEET TITLE: GENERAL NOTES

TECHNICIAN: G. WADZINSKI
DESIGNER: C. MENHENNETT
QUALITY CONTROL: R. OLNEY, P.E.
PROJECT NUMBER: 23-0653

RANDALL SCOTT OLNEY
FL PE No. 68182

SHEET NO. C0.10

ABBREVIATIONS

SYMBOLS	
'	FEET (WHEN USED WITH LENGTHS)
°	DEGREES
'	MINUTES (WHEN USED WITH ANGLES)
"	SECONDS
%	PERCENT
@	AT
A	
AASHTO	ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AC	ACRES
ADA	AMERICAN WITH DISABILITIES ACT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ARCH	ARCHITECT
ARV	AIR RELEASE VALVE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
B	
BC	BACK OF CURB
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
BM	BENCHMARK
BMP	BEST MANAGEMENT PRACTICE
BOC	BACK OF CURB
BVCS	BEGIN VERTICAL CURVE STATION
BVCE	BEGIN VERTICAL CURVE ELEVATION
BW	BOTTOM OF WALL
BSL	BUILDING SETBACK LINE
C	
CATV	CABLE TELEVISION
CI	CURB INLET
CIP	CAST IRON PIPE
CLDIP	CEMENT LINE DUCTILE IRON PIPE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
COORD	COORDINATE
CR	COUNTY ROAD
C/O	CLEANOUT
D	
DBH	DIAMETER AT BREAST HEIGHT
DE	DRAINAGE EASEMENT
DEG	DEGREE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DWG	DRAWING
E	
e	RATE OF ELEVATION
E	EAST
EA	EACH
EL	ELEVATION
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EOR	ENGINEER OF RECORD
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE
ESMT	EASEMENT
EVCS	END VERTICAL CURVE STATION
EVCE	END VERTICAL CURVE ELEVATION
EX	EXISTING
F	
FAC	FLORIDA ADMINISTRATIVE CODE
FBR	FLORIDA BEARING RATIO
FC	FRICTION COURSE
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
FHWA	FLORIDA HIGHWAY ADMINISTRATION
FIG	FIGURE
FM	FORCE MAIN
FOC	FACE OF CURB
FS	FLORIDA STATUTES
FT	FEET
G	
GALV	GALVANIZED
GM	GAS MAIN
GV	GATE VALVE
H	
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
I	
ID	IDENTIFICATION
INV	INVERT
INV EL	INVERT ELEVATION
IP	IRON PIPE
K	
K	VERTICAL CURVE RATE OF CHANGE
L	
L	LENGTH
LA	LANDSCAPE ARCHITECT
LBR	LIMEROCK BEARING RATIO
LDR	LAND DEVELOPMENT REGULATION
LF	LINEAR FEET
LP	LOW POINT
LT	LEFT
M	
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
N	
N	NORTH
N E	NORTHING - EASTING
N/A	NOT APPLICABLE
NAVD	NORTH AMERICAN VERTICAL DATUM OF 1988
NGVD	NATIONAL GEODETIC VERTICAL DATUM OF 1929
NO	NUMBER
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NTS	NOT TO SCALE
O	
OC	ON CENTER
OHW	OVERHEAD WIRE
ORB	OFFICIAL RECORDS BOOK
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
P	
PAVT	PAVEMENT
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PE	POLYETHYLENE
PERF	PERFORATED
PIV	POST INDICATOR VALVE
PROP	PROPOSED
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PUE	PUBLIC UTILITY EASEMENT
PVI	POINT OF VERTICAL INTERSECTION
R	
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RPM	RAISED REFLECTIVE PAVEMENT MARKER
RPZ	REDUCED PRESSURE ZONE
RT	RIGHT
RWM	RECLAIMED WATER MAIN
R/W	RIGHT-OF-WAY
S	
S	SOUTH
SAN	SANITARY
SHWE	SEASONAL HIGH WATER ELEVATION
SF	SILT FENCE
SL	SLOPE
SP	SUPERPAVE
SR	STATE ROAD
SS	SANITARY SEWER
ST	STORM
STA	STATION
STD	STANDARD
T	
TB	TREE BARRICADE
TCE	TEMPORARY CONSTRUCTION EASEMENT
TEMP	TEMPORARY
TOB	TOP OF BANK
TV	TELEVISION
TW	TOP OF WALL
TYP	TYPICAL
U	
USF	UNITED STATES FOUNDRY
USGS	UNITED STATES GEOLOGICAL SURVEY
UTIL	UTILITY
V	
V	VERTICAL
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
W	
W	WEST
W	WATER
W/	WITH
WM	WATER MAIN
WW	WASTEWATER
WWF	WELDED WIRE FABRIC

SIGNAGE

SIGNS ARE PER FDOT SPECIFICATIONS OR PER MUTCD. SIGN POSTS AND INSTALLATION SHALL BE PER FDOT INDEX NO. 700-010. SIGN PLACEMENT SHALL BE PER FDOT INDEX NO. 700-101.

- FTP-20-06 (12" X 18") PER FDOT INDEX NO. 700-102
- R1-1 "STOP" - SEE PLANS FOR SIZE

SITE INFORMATION

- EX. PROPERTY LINE
- LANDSCAPE BUFFER LINE
- BUILDING SETBACK LINE
- WETLAND LIMITS LINE
- WETLAND SETBACK LINE
- CENTER LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SF — SILT FENCE LINE
- TB — TREE BARRICADE LINE
- EX. STRUCTURE OR BUILDING
- PROPOSED BUILDING
- PROPOSED ASPHALTIC PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED DETECTABLE WARNING SURFACE
- DIRECTIONAL TRAFFIC ARROW PER FDOT INDEX NO. 17346
- WATERSHED DIVIDE
- EX. ELEVATION CONTOUR
- PROPOSED CONTOUR
- EX. SPOT ELEVATION
- 83.23 PROPOSED SPOT ELEVATION
- DIRECTION OF SURFACE DRAINAGE FLOW
- PROPOSED SWALE LINE
- EX. FENCE
- PROPOSED FENCE
- EX. TREE (SIZE & TYPE)
- EX. TREE (TREE ID)
- EX. TREE TO BE REMOVED (SIZE & TYPE)
- EX. TREE TO BE REMOVED (TREE ID)
- PROJECT BENCHMARK

STORMWATER

THE PROPOSED STORMWATER STRUCTURES DEPICTED BELOW ARE DRAWN PER FDOT SPECIFICATIONS AND TO SCALE WHEN SHOWN ON THE PLAN SHEETS.

- ST — EX. GRAVITY STORMWATER MAIN
- P-ST — PROPOSED GRAVITY STORMWATER MAIN (PIPE LENGTHS ARE FROM N-E LOCATION OF A STRUCTURE TO N-E LOCATION OF A STRUCTURE)
- EX. STORMWATER MANHOLE
- (N-E LOCATION, TOP/RIM ELEV. LOCATION) PROPOSED 48" DIA. STORMWATER MANHOLE PER FDOT INDEX. NO. 425-001 AND 425-010
- (N-E LOCATION, TOP/GRATE ELEV. LOCATION) PROPOSED CIRCULAR AREA DRAIN
- (N-E LOCATION, TOP/GRATE ELEV. LOCATION) PROPOSED SQUARE AREA DRAIN
- (N-E LOCATION, TOP ELEV. LOCATION) PROPOSED TYPE 1 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP ELEV. LOCATION) PROPOSED TYPE 2 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP ELEV. LOCATION) PROPOSED TYPE 3 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP ELEV. LOCATION) PROPOSED TYPE 4 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP ELEV. LOCATION) PROPOSED TYPE 5 CURB INLET TOP PER FDOT INDEX NO. 425-021 (SEE PLANS FOR BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP ELEV. LOCATION) PROPOSED TYPE 6 CURB INLET TOP PER FDOT INDEX NO. 425-021 (SEE PLANS FOR BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP/GRATE ELEV. LOCATION) PROPOSED TYPE 9 CURB INLET TOP PER FDOT INDEX NO. 425-024 (SEE PLANS FOR BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP/GRATE ELEV. LOCATION) PROPOSED TYPE 'C' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP/GRATE ELEV. LOCATION) PROPOSED TYPE 'D' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP/GRATE ELEV. LOCATION) PROPOSED TYPE 'E' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP/GRATE ELEV. LOCATION) PROPOSED TYPE 'F' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-053 (SEE PLANS FOR BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP/GRATE ELEV. LOCATION) PROPOSED TYPE 'G' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-053 (SEE PLANS FOR BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP/GRATE ELEV. LOCATION) PROPOSED TYPE 'H' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)
- (N-E LOCATION, TOP/GRATE ELEV. LOCATION) PROPOSED TYPE 'J' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-054 (SEE PLANS FOR BOTTOM SPECIFICATION)
- (PIPE INV. LOCATION, N-E LOCATION) PROPOSED U-TYPE CONCRETE ENDWALLS WITH GRATES PER FDOT INDEX NO. 430-010 (SEE PLANS FOR SIZE)
- (N-E LOCATION, INV. ELEV. LOCATION) PROPOSED FLARED END SECTION PER FDOT INDEX NO. 430-020 (SEE PLANS FOR SIZE)
- (N-E LOCATION, PIPE INV. ELEV. LOCATION) PROPOSED CROSS DRAIN MITERED END SECTION PER FDOT INDEX NO. 430-021 (SEE PLANS FOR SIZE)
- (N-E LOCATION, PIPE INV. ELEV. LOCATION) PROPOSED SIDE DRAIN MITERED END SECTION PER FDOT INDEX NO. 430-022 (SEE PLANS FOR SIZE)
- S-10 PROPOSED STORMWATER STRUCTURE ID TAG

POTABLE AND RECLAIMED WATER

- W — EX. POTABLE WATER MAIN
- P-W — PROPOSED POTABLE WATER MAIN
- RCW — EX. RECLAIMED WATER MAIN
- P-RCW — PROPOSED RECLAIMED WATER MAIN
- 11.25° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)
- 22.5° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)
- 45° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)
- 90° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)
- TEE (POTABLE AND RCW)
- CROSS (POTABLE AND RCW)
- BLOWOFF ASSEMBLY (POTABLE AND RCW)
- REDUCER (POTABLE AND RCW)
- EX. GATE VALVE AND BOX (POTABLE AND RCW)
- PROPOSED GATE VALVE AND BOX (POTABLE AND RCW)
- EX. AIR RELEASE VALVE (POTABLE AND RCW)
- POST INDICATOR VALVE (POTABLE AND RCW)
- EX. FIRE HYDRANT ASSEMBLY
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED SAMPLE POINT
- EX. WATER METER (POTABLE AND RCW)
- PROPOSED POTABLE WATER METER
- PROPOSED POTABLE WATER BACK FLOW PREVENTER
- PROPOSED RECLAIMED WATER METER
- EX. WATER WELL
- EX. HOSE BIB (POTABLE AND RECLAIMED)
- PROPOSED HOSE BIB (POTABLE AND RECLAIMED)
- PROPOSED FITTING ID TAG (POTABLE AND RECLAIMED)

WASTEWATER

- WW — EX. GRAVITY WASTEWATER MAIN
- P-WW — PROPOSED GRAVITY WASTEWATER MAIN (PIPE LENGTHS ARE FROM N-E LOCATION OF A STRUCTURE TO N-E LOCATION OF A STRUCTURE)
- FM — EX. WASTEWATER FORCE MAIN
- P-FM — PROPOSED WASTEWATER FORCE MAIN
- EX. WASTEWATER MANHOLE
- (N-E LOCATION, RIM ELEV. LOCATION) PROPOSED WASTEWATER MANHOLE
- EX. WASTEWATER CLEANOUT
- PROPOSED WASTEWATER CLEANOUT
- PROPOSED WASTEWATER GREASE TRAP
- MH# PROPOSED WASTEWATER MANHOLE ID
- 11.25° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)
- 22.5° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)
- 45° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)
- 90° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)
- WYE W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)
- EX. PLUG VALVE AND BOX (WW FORCE MAIN)
- PROPOSED PLUG VALVE AND BOX (WW FORCE MAIN)
- EX. AIR RELEASE VALVE (WW FORCE MAIN)
- PROPOSED AIR RELEASE VALVE (WW FORCE MAIN)

MISCELLANEOUS UTILITIES

THE PROPOSED UTILITIES BELOW ARE DESIGN BY OTHERS AND ARE DEPICTED FOR COORDINATION PURPOSES ONLY. REFER TO PLANS BY OTHERS FOR EXACT LOCATIONS, DIMENSION, AND DETAILS.

- P-ATT — PROPOSED AT&T LINE
- BC — EX. BURIED CABLE LINE
- P-BC — PROPOSED BURIED CABLE LINE
- BTEL — EX. BURIED TELEPHONE LINE
- P-TEL — PROPOSED TELEPHONE LINE
- CATV — EX. CABLE TELEVISION LINE
- P-TV — PROPOSED CABLE/TELEVISION LINE
- FO — EX. FIBER OPTIC LINE
- UGTEL — EX. UNDERGROUND TELEPHONE LINE
- EX. TELEPHONE PEDESTAL
- EX. TELEVISION/CABLE PEDESTAL
- CHW — EX. CHILLED WATER MAIN
- P-CHW — PROPOSED CHILLED WATER MAIN
- FIRE — EX. FIRE MAIN
- P-FIRE — PROPOSED FIRE MAIN
- IRR — EX. IRRIGATION LINE
- P-IRR — PROPOSED IRRIGATION LINE
- STEAM — EX. STEAM LINE
- P-STEAM — PROPOSED STEAM LINE
- P-CLAY — PROPOSED CLAY ELECTRIC LINE
- E — EX. ELECTRIC LINE
- P-E — PROPOSED ELECTRIC LINE
- EN — EX. ENERGY LINE
- P-LIGHT — PROPOSED PRIVATE LIGHTING LINE
- OHW — EX. OVERHEAD WIRE LINE
- UGE — EX. UNDERGROUND ELECTRIC LINE
- EX. LIGHT
- EX. UTILITY POLE
- EX. UTILITY POLE
- EX. WOOD POWER POLE
- EX. GUY ANCHOR
- PROPOSED TRANSFORMER
- GAS — EX. GAS LINE
- P-GAS — PROPOSED GAS LINE
- EX. GAS MARKER
- EX. GAS MARKER

NOTES:
1. THIS LEGEND IS ALL INCLUSIVE AND MAY INCLUDE ITEMS NOT A PART OF THIS PLAN SET.

2. SYMBOLS SHOWN ON THIS SHEET ARE FOR ILLUSTRATIVE PURPOSES ONLY. UNLESS NOTED OTHERWISE, SYMBOLS IN THESE PLANS MAY NOT BE REPRESENTATIVE OF SIZE.

CHW Professional Consultants
11801 Research Drive
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075

SCALE: N/A
VERIFY SCALE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY

SUBMITTALS: 03/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT

CLIENT: CONCEPT DEVELOPMENT, INC.
PROJECT: COMMERCIAL RETAIL STORE MARVIN BURNETT
SHEET TITLE: LEGEND

PROJECT MANAGER: G. WADZINSKI
DESIGNER: C. MENHENNETT
QUALITY CONTROL: R. OLNEY, P.E.
PROJECT NUMBER: 23-0653

RANDALL SCOTT OLNEY
FL PE No. 68382

SHEET NO. C0.11

I. INTRODUCTION

THIS DOCUMENT WAS PREPARED IN ORDER TO ILLUSTRATE COMPLIANCE WITH CHAPTER 62-621.300 (4) OF THE FLORIDA ADMINISTRATIVE CODE, WHICH PERTAINS TO THE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. THE ADMINISTRATIVE CODE GRANTS THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) THE AUTHORITY TO REGULATE POINT SOURCE DISCHARGE OF STORMWATER FROM CONSTRUCTION SITES. THIS DOCUMENT ESTABLISHES A STORMWATER POLLUTION PREVENTION PLAN FOR THE SITE USING STANDARD PRACTICE AND BEST MANAGEMENT PRACTICES (BMPs) AND IS ORGANIZED TO CORRESPOND TO 62-621.300(4)(a) GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES FDEP FORM 62-621.300(4)(b) IS TO BE SUBMITTED IN CONJUNCTION WITH THIS DOCUMENT. CONTRACTOR(S) MUST FILL IN THE ACTIVITIES SEQUENCE (SECTION II. B. BELOW) AND SIGN THIS SHEET (REFER TO SIGNATURE TABLE THIS SHEET) AND RETAIN THIS SHEET AND ALL FOLLOWING SWPPP SHEETS ON SITE. ALTERNATIVELY, CONTRACTOR(S) MAY PREPARE AND SIGN THEIR OWN SWPP PLAN MEETING THE REQUIREMENTS. IF THE SITE OR CONTRACTOR ACTIVITIES REQUIRE ANY BMPs THAT ARE NOT DESCRIBED ON THIS SHEET, THE CONTRACTOR MUST PREPARE AN ALTERNATIVE OR ADDITIONAL SWPPP DOCUMENT CONTAINING THE NECESSARY BMPs.

II. SITE DESCRIPTION

COUNTY:	COLUMBIA COUNTY, FLORIDA
SECTION, TOWNSHIP, RANGE:	SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST
COUNTY PARCEL NO.:	PORTION OF #07-4S-17-08127-005
STREET ADDRESS:	NORTHWEST OF THE INTERSECTION OF MARVIN BURNETT ROAD AND STATE ROAD 47
PROJECT AREA:	2.70 ACRES
SITE LOCATION MAP	SEE COVER SHEET OF CONSTRUCTION

A. NATURE OF CONSTRUCTION ACTIVITY

THE PROPOSED DEVELOPMENT INCLUDES THE CONSTRUCTION OF A ±10,640 SF COMMERCIAL RETAIL STORE, PARKING AREA, STORMWATER MANAGEMENT SYSTEM, AND ASSOCIATED UTILITY INFRASTRUCTURE. THE PROJECT SITE IS LOCATED ALONG AT THE INTERSECTION OF MARVIN BURNETT ROAD AND STATE ROAD 47, IN LAKE CITY, FLORIDA. THE PROJECT SITE TOTAL AREA IS APPROXIMATELY 2.70 ACRES.

B. SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES - CONTRACTOR MUST FILL IN DAYS

DAYS

FROM____TO____ PRIOR TO CONSTRUCTION, SILT FENCING AND TREE PROTECTION FENCING SHALL BE INSTALLED AND ALL EXISTING STORM DRAINAGE SWALE AND INLETS SHALL BE PROTECTED IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, DATED JULY 2013, AND THESE PLANS.

FROM____TO____ THE CONSTRUCTION SERVICE ENTRANCE SHALL BE STABILIZED TO MINIMIZE THE CREATION OF DUST AND OFF-SITE TRACKING OF SEDIMENTS.

FROM____TO____ ONLY THE AREA COMPRISING THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CLEARED AND GRUBBED OF UNWANTED VEGETATION.

FROM____TO____ THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CONSTRUCTED.

FROM____TO____ IF SUITABLE, THE EXCAVATED SOIL FROM THE FACILITY(S) MAY BE USED AS FILL FOR ON-SITE GRADING THAT IS DEPICTED IN THESE CONSTRUCTION PLANS. THE CONTRACTOR SHALL DISPOSE OF ALL UNSUITABLE MATERIAL ON-SITE OR OFF-SITE TO A PERMITTED LOCATION.

FROM____TO____ THE REMAINING PORTION OF THE SITE THAT IS TREATED BY THE CONSTRUCTED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CLEARED AND GRUBBED.

FROM____TO____ THE PERMANENT ROADWAYS/DRIVEWAYS SHALL BE ROUGHLY GRADED.

FROM____TO____ THE UNDERGROUND UTILITIES INFRASTRUCTURE AND STORMWATER PIPING SYSTEM SHALL BE INSTALLED. ANY DE-WATERING (PUMPED) SHALL BE DIVERTED TO THE ASSOCIATED STORMWATER MANAGEMENT FACILITY(S).

FROM____TO____ THE PERMANENT ROADWAY/DRIVEWAY SUBGRADE SHALL BE COMPACTED, A LIMEROCK BASE SHALL BE ESTABLISHED, AND THEN FOLLOWED BY AN OVERLAY OF ASPHALT.

FROM____TO____ UPON SIGNIFICANT COMPLETION OF CONSTRUCTION, THE STORMWATER PIPING SYSTEM SHALL BE FLUSHED OUT TO REMOVE ACCUMULATED DEBRIS AND SEDIMENT.

FROM____TO____ UPON COMPLETION OF THE DEBRIS AND SEDIMENT REMOVAL FROM THE STORMWATER PIPING SYSTEM, THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE FINE GRADED AND SHALL BE EXCAVATED A MINIMUM OF SIX INCHES BELOW THE DESIGN BOTTOM ELEVATION AND REPLACED WITH FILL HAVING A MINIMUM PERMEABILITY RATE OF 20 FEET/DAY WITH A MAXIMUM OF 5% SOIL FINES PASSING THE NO. 200 SIEVE. THE BOTTOM SHALL BE SCARIFIED AND STABILIZED ACCORDING TO THESE PLANS. ONCE COMPLETED, NO HEAVY MACHINERY SHALL BE ALLOWED WITHIN THE STORMWATER MANAGEMENT FACILITY(S).

FROM____TO____ ALL REMAINING DISTURBED AREAS WITHIN THE CONSTRUCTION AREA SHALL BE COMPLETELY GRASSED AND/OR LANDSCAPED ACCORDING TO THESE PLANS. TURF ESTABLISHMENT SHALL BE PER FDOT STANDARD SPECIFICATIONS SECTION 570. EVIDENCE OF GROWTH MUST BE PRESENT PRIOR TO REMOVAL OF SILT FENCING AND OTHER EROSION CONTROL APPLICATIONS.

C. SITE DEVELOPMENT DATA:

TOTAL PROJECT SITE AREA:	2.70 ACRES
TOTAL SITE AREA TO BE DISTURBED:	2.55 ACRES
TOTAL IMPERVIOUS AREA (AS SHOWN IN CONSTRUCTION DRAWINGS):	0.93 ACRES
TOTAL DETENTION VOLUME:	1.14 ACRE-FEET
TOTAL OPEN AREA:	1.91 ACRES

D. SOIL CONDITIONS AND STORMWATER QUALITY

THE NRCS DATA FOR THE SITE REVEALS THAT THE SITE SOILS ARE COMPRISED OF BLANTON FINE SAND (0 TO 5 PERCENT SLOPE), ICHETUCKNEE FINE SAND (5 TO 8 PERCENT SLOPE), MASCOTTE FINE SAND, AND PELHAM FINE SAND (0 TO 2 PERCENT SLOPE). GSE ENGINEERING & CONSULTING, INC. CONDUCTED A GEOTECHNICAL EXPLORATION OF THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) LOCATION IN DECEMBER OF 2023. THE INVESTIGATION REVEALED THAT THE PROJECT SITE'S SURFACE SOILS HAVE THE FOLLOWING CHARACTERISTICS:

DEPTH TO EFFECTIVE OR MOBILIZED AQUIFER:	8 FEET BELOW SURFACE
DEPTH TO SEASONAL HIGH WATER TABLE:	2 FEET BELOW SURFACE
HORIZONTAL HYDRAULIC CONDUCTIVITY:	10 FEET/DAY
UNSATURATED VERTICAL INFILTRATION:	10 FEET/DAY

DESIGN PERCOLATION RATES FOR THE STORMWATER MANAGEMENT FACILITY(S) WERE DETERMINED BASED ON LABORATORY PERMEABILITY TEST RESULTS FROM BORING SAMPLES TAKEN WITHIN THE LIMITS OF THE STORMWATER MANAGEMENT FACILITY(S). A FACTOR OF SAFETY OF 2 WAS APPLIED TO THE RATES FOR USE IN THE STORMWATER CALCULATIONS.

THE STORMWATER MANAGEMENT FACILITY(S) WAS DESIGNED TO PROVIDE RATE AND VOLUME CONTROL AND WATER QUALITY TREATMENT OF THE STORMWATER RUNOFF RESULTING FROM THE POST DEVELOPMENT SITE UNDER 100-YEAR CRITICAL STORM EVENT RAINFALL CONDITIONS. THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) DEPICTS THE POST-DEVELOPMENT WATERSHED(S) LIMITS AND THE TABLE BELOW SUMMARIZES EACH WATERSHED.

WATERSHED ID	POST DEVELOPMENT AREA (ACRES)	POST DEVELOPMENT RUNOFF FACTOR (CN)	POST DEVELOPMENT IMPERVIOUS AREA (ACRES)	STORMWATER MANAGEMENT FACILITY TYPE	FACILITY DETENTION CAPACITY (ACRE FEET)	100-YEAR FLOOD ELEVATION (FT)
DA-1	3.29	72	0.93	DRY RETENTION	1.14	158.78

E. SITE MAP

PLEASE SEE THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) FOR DETAILS.

F. STORMWATER OUTFALL LOCATION AND RECEIVING WATER BODY

THE SMF 1 OUTFALL STRUCTURE IS LOCATED AT THE NORTHWEST PORTION OF THE PROJECT (30 09'40" N, 82 34'50" W). THE ASSOCIATED RECEIVING WATER BODY IS AN UNNAMED SLOUGH

III. CONTROLS TO REDUCE POLLUTION

AS OUTLINED IN THE SUWANNEE RIVER WATER MANAGEMENT DISTRICT (SRWMD) PERMIT, ALL CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED IN A MANNER AS TO NOT VIOLATE STATE WATER QUALITY STANDARDS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE. IF SITE CONDITIONS ARE SUCH THAT ADDITIONAL CONTROL MEASURES ARE REQUIRED OTHER THAN WHAT IS SPECIFIED IN THE EROSION AND SEDIMENTATION CONTROL PLAN, THEN THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES. THESE MEASURES MUST BE INSPECTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PHASE AND UNTIL AS DIRECTED BY THESE PLANS. THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) AND SECTION IV BELOW PROVIDE DETAILS ON THE SPECIFIC CONTROL MEASURES TO REDUCE STORMWATER POLLUTION.

IV. EROSION AND SEDIMENT CONTROLS

A. STABILIZATION PRACTICES

EXISTING TREES AND NATURAL VEGETATION TO REMAIN ON-SITE SHALL BE PROTECTED BY TREE BARRICADE FENCING AS DEPICTED ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21). TYPE III SILT FENCING SHALL PROTECT ALL DRAINAGE STRUCTURES AND SHALL BUFFER AREAS WITH POTENTIAL TO CONTRIBUTE OFF SITE RUNOFF AND AS SPECIFICALLY DEPICTED ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21). STABILIZATION MEASURES SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS, IN PORTIONS OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED. AS SPECIFIED IN SECTION II.B. ABOVE, UPON COMPLETION OF CONSTRUCTION, ALL STORMWATER MANAGEMENT FACILITIES SHALL BE SCRAPED CLEAN OF ACCUMULATED SEDIMENT AFTER THE COMPLETION OF CONSTRUCTION. ALL TURF ESTABLISHMENT SHALL BE PERFORMED MEETING THE REQUIREMENTS OF SECTION 570 OF THE STANDARD SPECIFICATIONS. EVIDENCE OF GROWTH MUST BE PRESENT PRIOR TO FINAL RELEASE.

B. STRUCTURE PRACTICES

AS DEPICTED IN THE STORMWATER POLLUTION PREVENTION PLAN (C0.21), A STORMWATER MANAGEMENT SYSTEM WILL BE CONSTRUCTED AND WILL BE COMPRISED OF A DRY RETENTION FACILITY AND A STORM PIPE CONVEYANCE SYSTEM. TO PREVENT EROSION DURING CONSTRUCTION, TYPE III SILT FENCING WILL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS. ALL EXISTING AND PROPOSED STORM DRAINS AND DRAINAGE SWALES SHALL BE PROTECTED ACCORDING TO THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, DATED JULY 2013 OR PER DETAILS PROVIDED ON SHEET C0.21 UNTIL CONSTRUCTION IS COMPLETE. THE STORM PIPE CONVEYANCE SYSTEM SHALL BE FLUSHED OUT TO REMOVE ALL ACCUMULATED DEBRIS AND SEDIMENT UPON COMPLETION OF CONSTRUCTION

C. DRAINAGE LOCATIONS THAT SERVE AREAS WITH LESS THAN 10 DISTURBED ACRES

AS SPECIFIED IN THE "SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES," THE SMF(S) WILL BE CONSTRUCTED PRIOR TO CLEARING AND GRUBBING OUTSIDE OF THE SMF(S) AREAS AND CONSTRUCTION OF THE PERMANENT PAVED AREAS. THE TOTAL CONTRIBUTING DRAINAGE AREA TO THE STORMWATER MANAGEMENT SYSTEM IS APPROXIMATELY 3.29 ACRES AND WILL CONSIST OF APPROXIMATELY 2.54 ACRES OF DISTURBED CONSTRUCTION AREA. THEREFORE, NO ADDITIONAL SEDIMENT TRAP BASINS ARE NECESSARY TO PROVIDE SEDIMENT STORAGE ON-SITE DURING CONSTRUCTION. AS SHOWN ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21), THE PROPOSED STORMWATER MANAGEMENT SYSTEM WILL PREVENT OFF-SITE EROSION DURING CONSTRUCTION. SILT FENCES OR EQUIVALENT SEDIMENT CONTROLS SHALL BE INSTALLED AT SIDE SLOPE AND DOWN SLOPE BOUNDARIES, INLET LOCATION, OUTLET LOCATIONS, AND OTHER LOCATIONS AS SHOWN ON THE STORMWATER POLLUTION PREVENTION PLAN, AS REQUIRED. BY COMPLETION OF CONSTRUCTION, THE SIDE SLOPES, SWALES, AND ALL DISTURBED AREAS SHALL BE STABILIZED WITH GRASS AND LANDSCAPING AS SPECIFIED ON THE CONSTRUCTION DRAWINGS.

D. DRAINAGE LOCATIONS THAT SERVE AREAS WITH MORE THAN 10 DISTURBED ACRES

NOT APPLICABLE, SEE SECTION C, ABOVE.

V. STORMWATER MANAGEMENT

A. BEST MANAGEMENT PRACTICES

AFTER CONSTRUCTION, THE STORMWATER MANAGEMENT SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH THE SPECIFIED STORMWATER MAINTENANCE NOTES IN THE INCLUDED CONSTRUCTION DRAWINGS AND/OR RESPECTIVE MAINTENANCE REPORTS. SPECIFICALLY, THE PROPOSED SMF(S) SHALL BE MOWED REGULARLY IN THE SPECIFIED AREAS, STORM PIPES AND STRUCTURES WILL BE INSPECTED SEMI-ANNUALLY AND CLEANED ANNUALLY, SMF(S) SIDE SLOPES SHALL BE MAINTAINED TO PREVENT EROSION, AND LANDSCAPING AND GRASS THAT PREVENTS EROSION SHALL BE MAINTAINED. ADDITIONALLY, REMEDIAL ACTIONS SHALL BE TAKEN SHOULD THE SMF(S) NOT PERFORM AS DESIGNED.

B. VEGETATED SWALES

WHEN VEGETATED SWALES ARE UTILIZED, SILT FENCING OR EQUIVALENT SEDIMENT CONTROLS SHALL BE INSTALLED AT ADEQUATE INTERVALS TO COLLECT SEDIMENT ALONG THE SWALE. THE SEDIMENT SHALL BE REMOVED WHEN SEDIMENT REACHES ONE-THIRD OF THE HEIGHT OF THE SILT FENCING. SEE THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) FOR DETAILS AND LOCATIONS, AS REQUIRED.

C. VELOCITY DISSIPATION DEVICES AT DISCHARGE POINTS

WHEN DISCHARGE POINTS ARE NOT LOCATED UNDER WATER, RIP RAP PADS HAVE BEEN PROVIDED AT LOCATIONS WHERE NECESSARY DUE TO ANTICIPATED DISCHARGE VELOCITIES. PLEASE SEE THE CONSTRUCTION PLANS FOR DETAILS AND LOCATIONS, AS NEEDED.

VI. CONTROLS FOR OTHER POTENTIAL POLLUTANTS

A. WASTE DISPOSAL

THE CONTRACTOR SHALL PROVIDE LITTER COLLECTION CONTAINERS WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION. CONTRACTOR SHALL DISPOSE OF ALL UNSUITABLE MATERIALS AND CONSTRUCTION DEBRIS IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.

B. DUST CONTROL

TO PREVENT OFF SITE VEHICULAR TRACKING OF SEDIMENTS AND DUST GENERATION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE ESTABLISHED BY THE SITE CONTRACTOR. PLEASE SEE THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) FOR DETAILS AND LOCATION(S).

C. EXISTING VERSUS PROPOSED POTABLE AND SANITARY SEWER SYSTEMS

THERE ARE EXISTING SANITARY SEWER AND POTABLE WATER SYSTEMS LOCATED NEAR THE PROJECT SITE. EXTENSION AND UPGRADES ARE PROPOSED. IF TEMPORARY SANITARY SYSTEMS ARE UTILIZED DURING CONSTRUCTION, THE CONTRACTOR SHALL PROPERLY CONTROL AND DISCHARGE ANY SANITARY WASTE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

D. FERTILIZER & PESTICIDES

THE USE OF FERTILIZERS, HERBICIDES, AND PESTICIDES ON THE PROJECT SITE, WILL BE DIRECTED BY THE LANDSCAPE PLAN AND THE FDOT STANDARD SPECIFICATIONS SECTION 570, TO SUPPORT THE GROWTH OF THE PROPOSED VEGETATION. ESTABLISHING THIS VEGETATION WILL AID IN THE STABILIZATION OF THE PROJECT SITE AND REDUCE EROSION. APPLICATION RATES FOR THE FERTILIZERS, HERBICIDES, AND PESTICIDES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS TO GUARD AGAINST OVER-USE, WHICH CAN LEAD TO VIOLATIONS OF STATE WATER QUALITY STANDARDS.

E. TOXIC MATERIAL

THE CONSTRUCTION SITE WILL BE IN FULL COMPLIANCE WITH STATE AND FEDERAL REQUIREMENTS. A PLASTIC MAT, TAR PAPER, OR OTHER IMPERVIOUS MATERIAL SHALL BE PLACED UNDER AREAS WHERE TOXIC LIQUIDS ARE TO BE OPENED AND STORED.

F. HAZARDOUS MATERIALS

ALL HAZARDOUS MATERIALS SHALL BE STORED IN A SECURE LOCATION, UNDER COVER, AND IN APPROPRIATE TIGHTLY, SEALED CONTAINERS WHEN NOT IN USE. ALL PRODUCTS SHALL BE STORED IN AND USED FROM THE ORIGINAL CONTAINER WITH THE ORIGINAL PRODUCT LABEL. CONTAINERS MUST BE STORED IN A MANNER TO PROTECT THEM FROM THE ELEMENTS AND INCIDENTAL DAMAGE. THE MINIMUM PRACTICAL QUANTITY OF ALL SUCH MATERIALS SHALL BE KEPT ON THE JOB SITE AND SCHEDULED FOR DELIVERY AS CLOSE TO TIME OF USE AS PRACTICAL.

ALL PRODUCTS SHALL BE USED IN STRICT COMPLIANCE WITH THE INSTRUCTIONS ON THE PRODUCT LABEL.

SUFFICIENT EQUIPMENT AND/OR MATERIALS SHALL BE KEPT ONSITE TO CONTAIN AND CLEAN UP SPILLS OF HAZARDOUS MATERIALS IN THE AREAS WHERE THESE MATERIALS ARE STORED OR USED. SPILL CONTROL AND CONTAINMENT KIT SUPPLIES SHALL BE OF SUFFICIENT QUANTITIES AND APPROPRIATE CONTENT TO CONTAIN A SPILL FROM THE LARGEST ANTICIPATED PIECE OF EQUIPMENT AND FROM THE LARGEST ANTICIPATED QUANTITIES OF PRODUCTS STORED ON THE SITE AT ANY GIVEN TIME.

CONTRACTOR TO CONTAIN AND CLEAN UP ANY SPILLS IMMEDIATELY AFTER THEY OCCUR. ANY SPILLS OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF REPORTABLE QUANTITIES AS DEFINED BY EPA, STATE, OR LOCAL AGENCY REGULATIONS SHALL BE REPORTED TO THE APPROPRIATE AGENCIES IN THE REQUIRED TIME FRAMES. THE CONTRACTOR SHALL PROVIDE A WRITTEN NOTICE TO THE OWNER IMMEDIATELY UPON IDENTIFICATION OF ANY SPILL.

ALL EXCESS, USED, OR SPILLED PRODUCTS, INCLUDING CONTAMINATED SOIL, SHALL BE DISPOSED OF BY THE CONTRACTOR IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL AND ALL APPLICABLE REGULATIONS.

VII. APPROVED STATE AND LOCAL PLANS

THE CONSTRUCTION DRAWINGS FOR THE PROJECT WERE APPROVED AND PERMITTED BY THE FOLLOWING AGENCIES:

*CITY OF LAKE CITY
*COLUMBIA COUNTY
*FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
*SUWANNEE RIVER WATER MANAGEMENT DISTRICT
*FLORIDA DEPARTMENT OF TRANSPORTATION

VIII. CONSTRUCTION ACTIVITY DISCHARGES

IN ACCORDANCE WITH THIS PLAN, THERE ARE NO ANTICIPATED DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.

IX. CHANGES TO THE POLLUTION PREVENTION PLAN

THIS STORMWATER POLLUTION PREVENTION PLAN SHALL BE AMENDED TO REFLECT ANY APPLICABLE CHANGE IN A STATE, REGIONAL, OR LOCAL PERMIT FOR WHICH THE PERMITTEE RECEIVES WRITTEN NOTICE. WHEN WRITTEN NOTICE IS RECEIVED, THE PERMITTEE SHALL PROVIDE A RE-CERTIFICATION OF THIS POLLUTION PREVENTION PLAN, WHICH HAS BEEN REVISED TO ADDRESS SUCH CHANGES. AMENDMENTS TO THE PLAN SHALL BE PREPARED, SIGNED, DATE, AND KEPT AS ATTACHMENTS TO THE ORIGINAL PLAN.

X. ALTERNATIVE PERMIT REQUIREMENTS

NO ALTERNATIVE PERMIT REQUIREMENTS ARE REQUESTED.

XI. MAINTENANCE

THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE, INSPECTION SCHEDULE, AND REPAIRS OUTLINED IN THIS PLAN. MAINTENANCE SHALL CONTINUE THROUGHOUT THE PROJECT UNTIL WORK IS COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER CONSTRUCTION IS COMPLETE. IN ADDITION TO THE TIMES MENTIONED IN THE PREVIOUS SECTIONS, THE CONTRACTOR SHALL INITIATE ANY REPAIRS WITHIN 24 HOURS OF BEING REPORTED. IN THE EVENT THAT THE SMF(S) DO NOT PERFORM PROPERLY OR IF A SINKHOLE DEVELOPS, THE PROJECT ENGINEER SHALL BE NOTIFIED TO ASSIST IN COORDINATING REMEDIAL ACTION. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM SILT FENCING WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE SILT FENCE. UPON FINAL COMPLETION OF CONSTRUCTION AND ACCEPTANCE BY BOTH THE CITY AND OWNER, THE OPERATION AND MAINTENANCE ENTITY WILL BE "CONCEPT DEVELOPMENT, INC."

XII. INSPECTIONS

THE CONTRACTOR SHALL INSPECT ALL POINTS OF POTENTIAL DISCHARGE FROM THE PROJECT SITE FOR ALL DISTURBED AREAS ON THE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER. FOR POINTS OF DISCHARGE INTO SURFACE WATERS OF THE STATE OR AN MS4, A QUALIFIED INSPECTOR (PROVIDED BY THE OPERATOR) SHALL PERFORM THE REQUIRED INSPECTIONS. THE CONTRACTOR SHALL INSTALL A RAIN GAUGE AT THE SITE TO MONITOR AND DOCUMENT RAINFALL EVENTS 0.50 INCHES OR GREATER. LOCATIONS WHERE THE SITE IS COMPLETELY CONSTRUCTED AND STABILIZED, SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE A MONTH. ALL INSPECTIONS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION FORM. THE CONTRACTOR MAY USE THEIR OWN FORM (MEETING FDEP SWPPP REQUIREMENTS) OR A SAMPLE FORM FROM FDEP. A SAMPLE CONSTRUCTION FORM IS AVAILABLE AT: "HTTPS://FLORIDADEP.GOV/WATER/STORMWATER/DOCUMENTS/CONSTRUCTION-SWPPP". MORE SPECIFICALLY, THE INSPECTION SHALL ENSURE THE FOLLOWING CATEGORIES.

A. DISTURBED AREAS

ALL DISTURBED AREAS AND AREAS USED FOR MATERIAL STORAGE SHALL BE INSPECTED FOR POLLUTANTS ENTERING THE STORMWATER SYSTEM. THE STORMWATER MANAGEMENT SYSTEM AND EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE INSPECTED TO ENSURE THEY ARE OPERATING CORRECTLY. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF SITE SEDIMENT TRACKING.

B. MAINTENANCE PERFORMANCE

BASED ON THE RESULTS OF THE INSPECTION, ALL MAINTENANCE OPERATIONS NEEDED TO ASSURE PROPER COMPLIANCE WITH THIS PLAN SHALL BE DONE IN A TIMELY MANNER, BUT IN NO CASE LATER THAN 7 DAYS FOLLOWING THE INSPECTION.

C. REPORTING REQUIREMENTS

ALL INSPECTIONS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION FORM. THIS FORM IS CREATED TO SUMMARIZE THE SCOPE OF THE INSPECTION, THE NAME(S) AND QUALIFICATION OF THE INSPECTOR(S), THE DATE OF INSPECTION, RAINFALL DATA, OBSERVATIONS, THE ACTIONS TAKEN TO CORRECT INCIDENTS OF NON-COMPLIANCE WITH THE PROVISIONS OF THIS PLAN. IF NO INCIDENTS OF NON-COMPLIANTS ARE OBSERVED, THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND THE ASSOCIATED PERMIT.

XIII. NON-STORMWATER DISCHARGES

IN ADDITION TO STORMWATER RUNOFF, THIS PLAN APPLIES TO RUNOFF FROM IRRIGATION OPERATIONS AND CONSTRUCTION PRACTICES. THIS PLAN DOES NOT PERTAIN TO DISCHARGES FROM FIRE FIGHTING ACTIVITIES.

XIV. CONTRACTORS CERTIFICATION

THE CONTRACTORS OR SUB-CONTRACTORS SHALL PHOTOCOPY AND COMPLETE THE FORM ON THIS PAGE. IT SHALL BE PROVIDED TO THE OWNER AND KEPT ON FILE PURSUANT TO SECTION XV REGARDING PROJECT RECORDS.

XV. RETENTION OF RECORDS

THE PERMITTEE SHALL RETAIN COPIES OF STORMWATER POLLUTION PREVENTION PLANS AND ALL REPORTS REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED.

THE PERMITTEE SHALL RETAIN A COPY OF THE STORMWATER POLLUTION PREVENTION PLAN AND ALL REPORTS, RECORDS, AND DOCUMENTATION REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE, OR AN APPROPRIATE ALTERNATIVE LOCATION AS SPECIFIED IN THE NOTICE OF INTENT, FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

XVI. NOTICE OF TERMINATION

NOTICE OF TERMINATION:

1. WHERE A SITE HAS BEEN FINALLY STABILIZED AND ALL STORMWATER DISCHARGES AUTHORIZED BY THIS PERMIT ARE ELIMINATED, THE PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION (DEP FORM 62-621.300(6)), SIGNED IN ACCORDANCE WITH PART VII.C OF DEP DOCUMENT NO. 62-621.300(4)(a), WITHIN 14 DAYS OF FINAL STABILIZATION OF THE SITE TO TERMINATE COVERAGE UNDER THIS PERMIT.
2. ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY MEANS THAT ALL DISTURBED SOILS AT THE SITE HAVE BEEN FINALLY STABILIZED AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED OR WILL BE REMOVED AT AN APPROPRIATE TIME, OR THAT ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE SITE THAT ARE AUTHORIZED BY THIS GENERIC PERMIT HAVE OTHERWISE BEEN ELIMINATED.
3. FOR CONSTRUCTION ACTIVITIES WHERE THE OPERATOR CHANGES, THE EXISTING OPERATOR SHALL FILE AN N.O.T. IN ACCORDANCE WITH THIS PART WITHIN 14 DAYS OF RELINQUISHING CONTROL OF THE PROJECT TO A NEW OPERATOR.

THE PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE FOLLOWING ADDRESS:

NPDES STORMWATER NOTICES CENTER, MS# 2510
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

PROJECTS THAT DISCHARGED STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY TO A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) SHALL SUBMIT A COPY OF THE N.O.T. TO THE OPERATOR OF THE MS4.

Contractor/Subcontractor Certification Statement
Stormwater Pollution Prevention Plan

Site Name: Commercial Retail Store - Marvin Burnett
Site Location: Marvin Burnett Road, Lake City, FL 32025
Columbia County, Florida

THE CONTRACTOR(S) OR SUB-CONTRACTOR(S) RESPONSIBLE FOR COMPLYING WITH THIS STORMWATER POLLUTION PREVENTION PLAN SHALL SIGN THE CERTIFICATION STATEMENT BELOW. MULTIPLE COPIES OF THE CERTIFICATION STATEMENT MAY BE NECESSARY DEPENDING ON THE NUMBER OF SUB-CONTRACTORS ASSOCIATED WITH THE PROJECT

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER

DATE	RESPONSIBLE INDIVIDUAL'S NAME	RESPONSIBLE INDIVIDUAL'S SIGNATURE	TITLE	COMPANY NAME, ADDRESS, AND PHONE NUMBER

CHW Professional Consultants
11801 Research Drive
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA-5075

SCALE: N/A
VERIFY SCALE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

CONSTRUCTION/BID REVISIONS

SUBMITTALS: 01/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT

CLIENT: CONCEPT DEVELOPMENT, INC.
PROJECT: COMMERCIAL RETAIL STORE MARVIN BURNETT
SHEET TITLE: STORMWATER POLLUTION PREVENTION NOTES

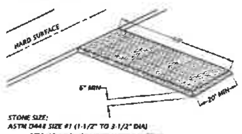
C. WADZINSKI
DESIGNER: C. MENHENNETT
QUALITY CONTROL: R. OLNEY, P.E.
PROJECT NUMBER: 23-0653

RANDALL SCOTT OLNEY
[illegible]
FL PE No. 68382

SHEET NO. C0.20

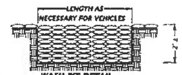
STORMWATER POLLUTION PREVENTION LEGEND
TS = TEMPORARY SEEDING
PS = PERMANENT SEEDING
ML = MULCHING
SD = SOD STABILIZATION
SF = SILT BARRIER
TB = TREE BARRIER
IP = INLET PROTECTION
OP = OUTLET PROTECTION
CO = CONSTRUCTION ENTRANCE/EXIT
REFER TO C0.22 FOR DETAILS.
PROPOSED BUILDING
GRAPHIC SCALE
0 10 20 40
N
CONCEPT DEVELOPMENT, INC.
COMMERCIAL RETAIL STORE
MARVIN BLANETT
STORMWATER POLLUTION PREVENTION PLAN
23-0653
C. WADZINSKI
C. MEN HENNETT
R. OLNEY, P.E.
RANDALL SCOTT DUNN
03/26/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT
1"=30'
CHW Professional Consultants
11801 Research Drive
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA
CA-8076
C0.21

NOTE:
1. CONSTRUCTION EXIT INSTALLATION SHALL REMOVE MUD/SOILS FROM TIRES TO PREVENT TRACKING ONTO PUBLIC ROADS.
2. TOP DRESSING WITH 2" STONE MAY BE REQ'D AS DETERMINED BY THE USE AND FUNCTION OF THE SYSTEM.
3. THE WASH PIT SHOULD BE INSTALLED IF THE STANDARD CONSTRUCTION EXIT DOES NOT SUFFICIENTLY REMOVE SOILS AND WASHING IS REQ'D.

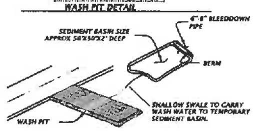


STONE SIZE:
ASTM D448 SIZE #1 (1-1/2" TO 3-1/2" DIA)

STANDARD CONSTRUCTION EXIT



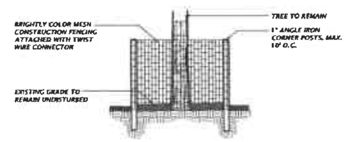
WASH PIT DETAIL



CONSTRUCTION EXIT WITH WASH PIT

TEMPORARY CONSTRUCTION EXIT DETAIL

NTS



TREE PROTECTION DETAIL

NTS

TREE PROTECTION NOTES

1) PROTECTIVE BARRIERS SHALL BE CONSTRUCTED, AS NECESSARY, TO PREVENT THE DESTRUCTION OR DAMAGING OF REGULATED TREES THAT ARE LOCATED WITHIN 50 FEET OF ANY CONSTRUCTION ACTIVITY OR STORAGE OF EQUIPMENT AND MATERIALS.

2) PROTECTIVE BARRIERS SHALL BE PLAINLY VISIBLE AND SHALL CREATE A CONTINUOUS BOUNDARY AROUND TREES OR VEGETATION CLUSTERS IN ORDER TO PREVENT ENCROACHMENT BY MACHINERY, VEHICLES OR STORED MATERIALS.

3) NO TRENCHING ALLOWED WITHIN THE PROTECTIVE BARRIER ZONE. HAND DIG TO INSTALL UTILITY IF APPROVED BY CITY MANAGER OR DESIGNEE. WHERE ROOTS GREATER THAN ONE INCH IN DIAMETER ARE DAMAGED OR EXPOSED, THEY SHALL BE CUT CLEANLY AND RE-COVERED WITH SOIL WITHIN ONE HOUR OF DAMAGE OR EXPOSURE.

4) PROTECTIVE BARRIERS SHALL REMAIN IN PLACE AND INTACT UNTIL SUCH TIME AS LANDSCAPE OPERATIONS BEGIN.

5) LANDSCAPE PREPARATION IN THE PROTECTED AREA SHALL BE LIMITED TO SHALLOW DISCING OF THE AREA. DISCING SHALL BE LIMITED TO A DEPTH OF 4 INCHES.

6) NO BUILDING MATERIALS, MACHINERY OR HARMFUL CHEMICALS SHALL BE PLACED WITHIN PROTECTIVE BARRIERS.

7) THE AMERICAN NATIONAL STANDARDS INSTITUTE A-300 PART V, MANAGEMENT OF TREES AND SHRUBS DURING SITE PLANNING, SITE DEVELOPMENT, AND SITE CONSTRUCTION OR OTHER NATIONALLY RECOGNIZED ARBORICULTURAL STANDARDS SHALL BE USED AS GUIDELINES FOR TREE PROTECTION, PLANTING, PRUNING AND CARE DURING DEVELOPMENT AND CONSTRUCTION.

TYPICAL INSTALLATION SEQUENCE FOR SILT-SAVER FRAME AND FILTER

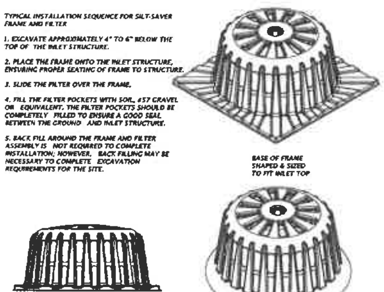
1. EXCAVATE APPROXIMATELY 4" TO 6" BELOW THE TOP OF THE INLET STRUCTURE.

2. PLACE THE FRAME ONTO THE INLET STRUCTURE, ENSURING PROPER SEATING OF FRAME TO STRUCTURE.

3. SLIDE THE FILTER OVER THE FRAME.

4. FILL THE FILTER POCKETS WITH SOIL, #57 GRAVEL OR EQUIVALENT. THE FILTER POCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND INLET STRUCTURE.

5. BACK FILL AROUND THE FRAME AND FILTER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION; HOWEVER, BACK FILLING MAY BE NECESSARY TO COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.



SILT-SAVER® DETAIL

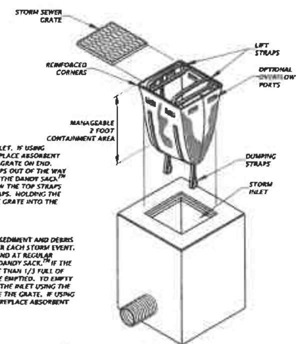
NTS

INSTALLATION:

REMOVE THE GRATE FROM INLET. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND THE GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY SACK™ SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE:

REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE DANDY SACK.™ IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.



DANDY SACK™ DETAIL

NTS

INLET PROTECTION OPTIONS DETAIL

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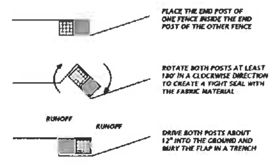
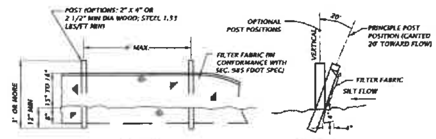


FOR ATTACHING TWO SILT FENCES WHEN TRENCHING IS USED

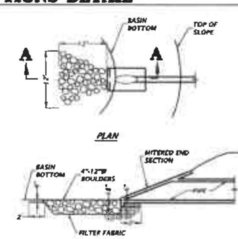
TYPE III SILT FENCE WRAPPING DETAIL

NTS



TYPE III SILT FENCE DETAIL

NTS

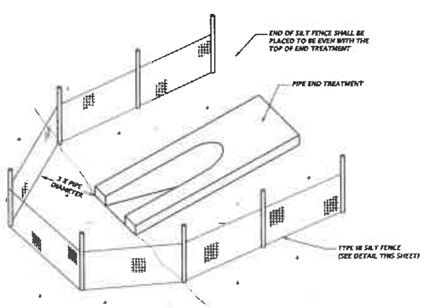


NOTES:

1. ANCHOR FILTER FABRIC BY EXTENDING BEYOND RIPRAP AND BACKFILLING AS SHOWN ON DETAIL.
2. RIPRAP SHALL NOT EXTEND ONTO SIDE SLOPES.
3. ADJUST SHAPE OF APRON WHERE REQUIRED TO MATCH TOE OF SLOPE.
4. BROKEN SLOPE IS NOT ACCEPTABLE.

RIP-RAP EROSION PROTECTION

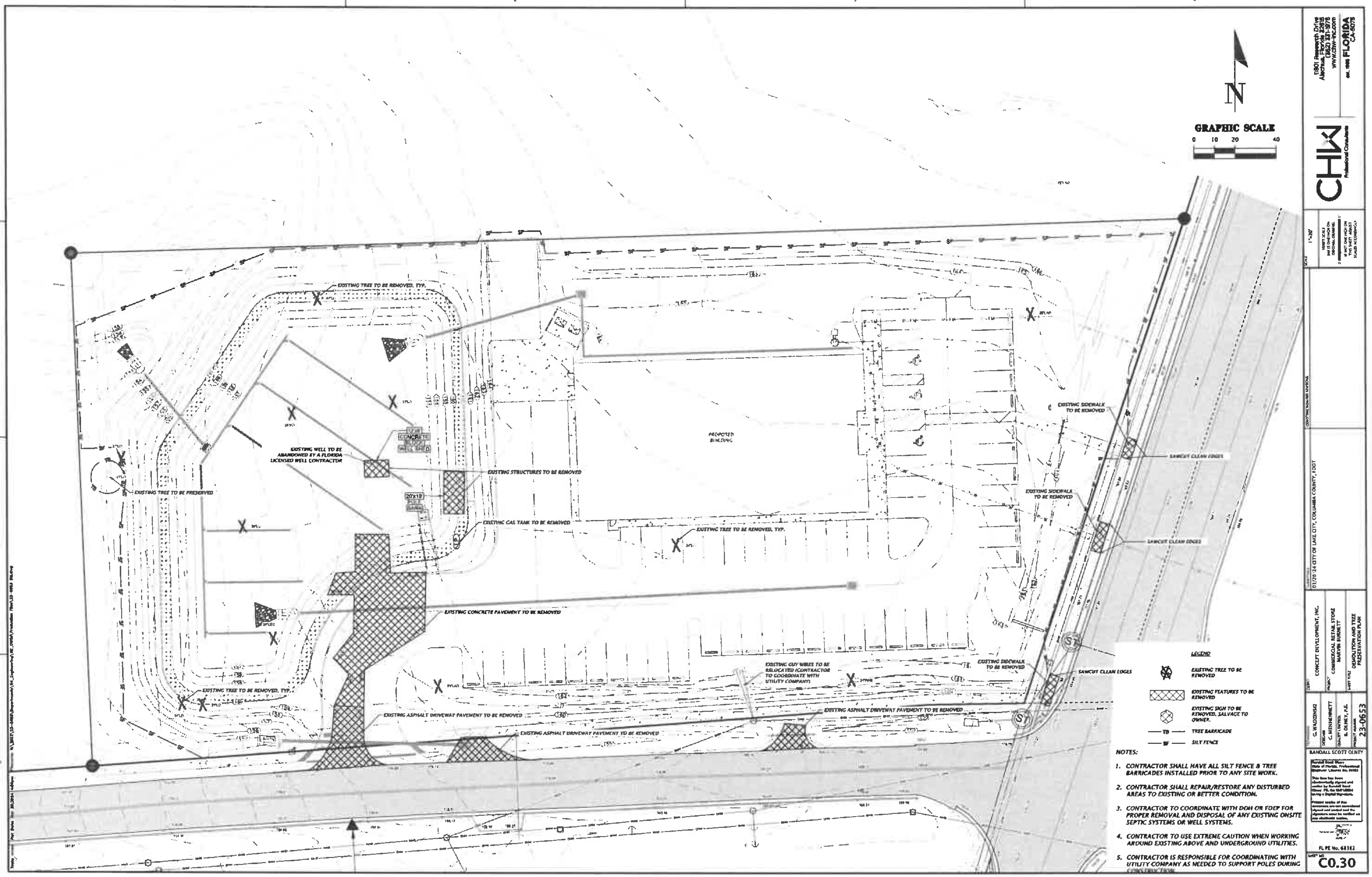
NTS



OUTFALL PROTECTION DETAIL

NTS

CHW Professional Consultants	11801 Research Drive, Alachua, Florida 32615, (352) 331-1976, www.chw-inc.com, est. 1988 FLORIDA CA-5075
SCALE	N/A
VERIFY SCALE	BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
CONSTRUCTION/BID REVISIONS	
SUBMITTALS	03/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT
CLIENT	CONCEPT DEVELOPMENT, INC.
PROJECT	COMMERCIAL RETAIL STORE MARVIN BURNETT
SHEET TITLE	STORMWATER POLLUTION PREVENTION DETAILS
TECHNICIAN	G. WADZINSKI
DESIGNER	C. MENHENNETT
QUALITY CONTROL	R. OLNEY, P.E.
PROJECT NUMBER	23-0653
	RANDALL SCOTT OLNEY
	FL PE No. 68382
SHEET NO.	C0.22


GRAPHIC SCALE
0 10 20 40
N
EXISTING TREE TO BE REMOVED, TYP.
EXISTING TREE TO BE PRESERVED
EXISTING WELL TO BE ABANDONED BY A FLORIDA LICENSED WELL CONTRACTOR
EXISTING STRUCTURES TO BE REMOVED
EXISTING GAS TANK TO BE REMOVED
EXISTING CONCRETE PAVEMENT TO BE REMOVED
EXISTING ASPHALT DRIVEWAY PAVEMENT TO BE REMOVED
EXISTING GUY WIRES TO BE RELOCATED (CONTRACTOR TO COORDINATE WITH UTILITY COMPANY)
PROPOSED BUILDING
EXISTING SIDEWALK TO BE REMOVED
SAWCUT CLEAN EDGES
LEGEND
EXISTING TREE TO BE REMOVED
EXISTING FEATURES TO BE REMOVED
EXISTING SIGN TO BE REMOVED, SALVAGE TO OWNER.
TB TREE BARRICADE
SF SILT FENCE
NOTES:
1. CONTRACTOR SHALL HAVE ALL SILT FENCE & TREE BARRICADES INSTALLED PRIOR TO ANY SITE WORK.
2. CONTRACTOR SHALL REPAIR/RESTORE ANY DISTURBED AREAS TO EXISTING OR BETTER CONDITION.
3. CONTRACTOR TO COORDINATE WITH DOH OR FDEP FOR PROPER REMOVAL AND DISPOSAL OF ANY EXISTING ONSITE SEPTIC SYSTEMS OR WELL SYSTEMS.
4. CONTRACTOR TO USE EXTREME CAUTION WHEN WORKING AROUND EXISTING ABOVE AND UNDERGROUND UTILITIES.
5. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH UTILITY COMPANY AS NEEDED TO SUPPORT POLES DURING CONSTRUCTION.
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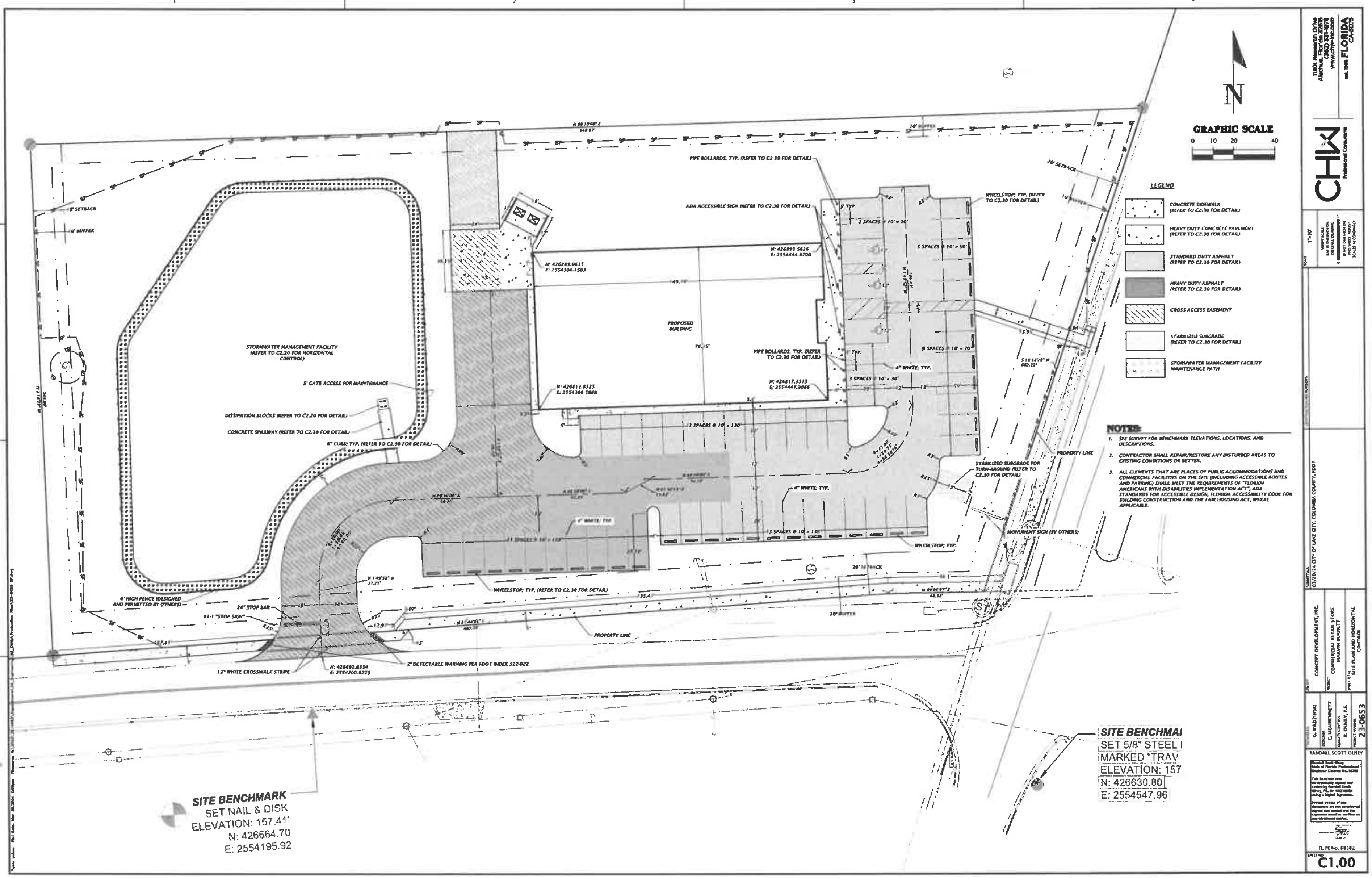
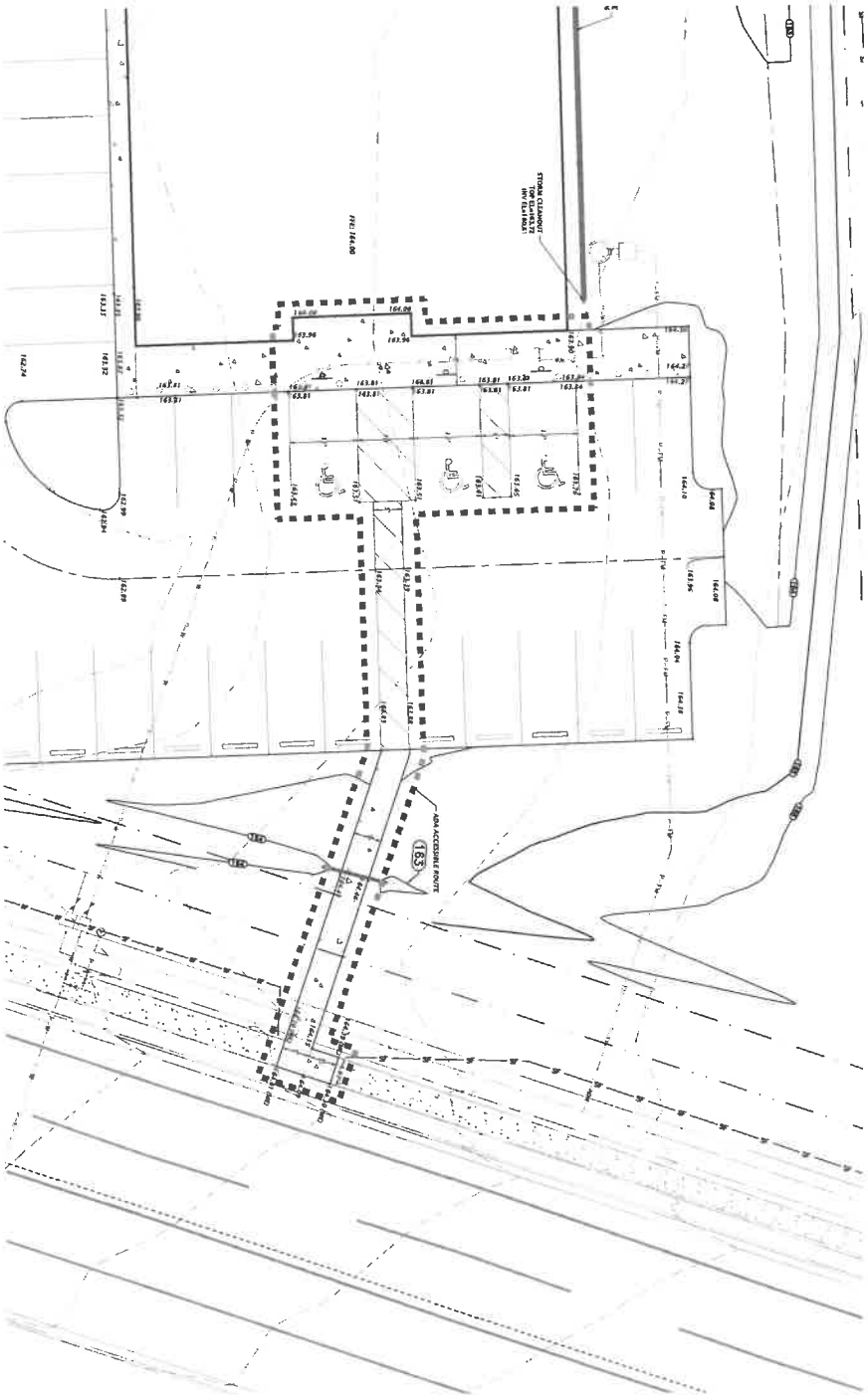
CA-5075
CHW
Professional Consultants
1"=20'
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY
01/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT
CONCEPT DEVELOPMENT, INC.
COMMERCIAL RETAIL STORE
MARVIN BURNETT
DEMOLITION AND TREE PRESERVATION PLAN
G. WADZINSKI
C. MENHENNETT
B. OLNEY, P.E.
23-0653
RANDALL SCOTT OLNEY
FL PE No. 68382
C0.30


GRAPHIC SCALE
0 10 20 40
LEGEND
CONCRETE SIDEWALK (REFER TO C2.30 FOR DETAIL)
HEAVY DUTY CONCRETE PAVEMENT (REFER TO C2.30 FOR DETAIL)
STANDARD DUTY ASPHALT (REFER TO C2.30 FOR DETAIL)
HEAVY DUTY ASPHALT (REFER TO C2.30 FOR DETAIL)
CROSS-ACCESS EASEMENT
STABILIZED SUBGRADE (REFER TO C2.30 FOR DETAIL)
STORMWATER MANAGEMENT FACILITY MAINTENANCE PATH
NOTES:
1. SEE SURVEY FOR BENCHMARK ELEVATIONS, LOCATIONS, AND DESCRIPTIONS.
2. CONTRACTOR SHALL REPAIR/RESTORE ANY DISTURBED AREAS TO EXISTING CONDITIONS OR BETTER.
3. ALL ELEMENTS THAT ARE PLACES OF PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES ON THE SITE (INCLUDING ACCESSIBLE ROUTES AND PARKING) SHALL MEET THE REQUIREMENTS OF "FLORIDA AMERICANS WITH DISABILITIES IMPLEMENTATION ACT", ADA STANDARDS FOR ACCESSIBLE DESIGN, FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION AND THE FAIR HOUSING ACT, WHERE APPLICABLE.
STORMWATER MANAGEMENT FACILITY (REFER TO C2.20 FOR HORIZONTAL CONTROL)
5' GATE ACCESS FOR MAINTENANCE
DISSIPATION BLOCKS (REFER TO C2.20 FOR DETAIL)
CONCRETE SPILLWAY (REFER TO C2.30 FOR DETAIL)
6" CURB; TYP. (REFER TO C2.30 FOR DETAIL)
4' HIGH FENCE (DESIGNED AND PERMITTED BY OTHERS)
24" STOP BAR
R1-1 "STOP SIGN"
12" WHITE CROSSWALK STRIPE
2" DETECTABLE WARNING PER FDOT INDEX 522-002
PROPOSED BUILDING
PIPE BOLLARDS, TYP. (REFER TO C2.30 FOR DETAIL)
ADA ACCESSIBLE SIGN (REFER TO C2.30 FOR DETAIL)
WHEELSTOP; TYP. (REFER TO C2.30 FOR DETAIL)
4" WHITE; TYP.
STABILIZED SUBGRADE FOR TURN-AROUND (REFER TO C2.30 FOR DETAIL)
MONUMENT SIGN (BY OTHERS)
PROPERTY LINE
5' SETBACK
6' BUFFER
10' BUFFER
20' SETBACK
SITE BENCHMARK
SET NAIL & DISK
ELEVATION: 157.41'
N: 426664.70
E: 2554195.92
SITE BENCHMAI
SET 5/8" STEEL I
MARKED "TRAV
ELEVATION: 157
N: 426630.80
E: 2554547.96
CHW Professional Consultants
11801 Research Drive
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
FLORIDA CA-5075
1"=20'
03/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT
CONCEPT DEVELOPMENT, INC.
COMMERCIAL RETAIL STORE MARVIN BURNETT
SITE PLAN AND HORIZONTAL CONTROL
G. WADZINSKI
R. OLNEY, P.E.
23-0653
RANDALL SCOTT OLNEY
FL PE No. 68382
C1.00

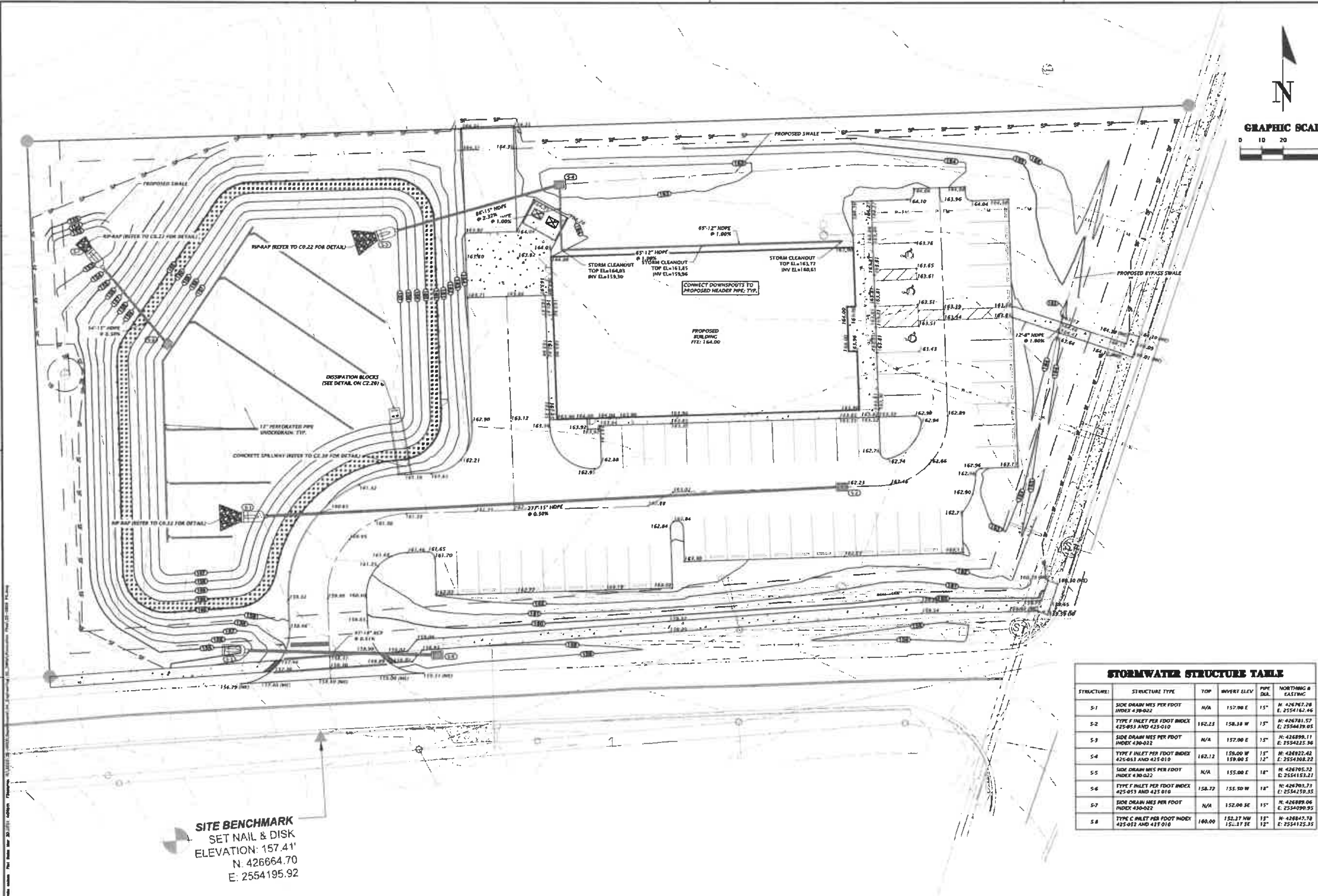


SEE ACCESSIBILITY DETAILS ON SHEET C1.20

GRAPHIC SCALE
0 5 10 20

N

C1.20		TECHNICIAN: G. WADZINSKI DESIGNER: C. MAYHEWNETT QUALITY CONTROL: R. OLNEY, P.E. PROJECT NUMBER: 23-0653	CLIENT: CONCEPT DEVELOPMENT, INC. PROJECT: COMMERCIAL RETAIL STORE MARVIN BUSNETT SHEET TITLE: ACCESSIBILITY PLAN	SUBMITTALS: 03/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT	CONSTRUCTION/BID REVISIONS:	SCALE: 1"=10' VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY	CHW Professional Consultants	11801 Research Drive Alachua, Florida 32615 (352) 331-1976 www.chw-inc.com est. 1946 FLORIDA CA-9076



STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	PIPE DIA.	NORTHING & EASTING
S-1	SIDE DRAIN MES PER FDOT INDEX 430-022	N/A	157.00 E	15"	N: 426767.28 E: 2554162.46
S-2	TYPE F INLET PER FDOT INDEX 425-053 AND 425-010	162.23	158.38 W	15"	N: 426781.57 E: 2554439.05
S-3	SIDE DRAIN MES PER FDOT INDEX 430-022	N/A	157.00 E	15"	N: 426899.11 E: 2554225.36
S-4	TYPE F INLET PER FDOT INDEX 425-053 AND 425-010	162.12	159.00 W 159.00 S	15" 12"	N: 426922.42 E: 2554308.22
S-5	SIDE DRAIN MES PER FDOT INDEX 430-022	N/A	155.00 E	18"	N: 426705.72 E: 2554153.21
S-6	TYPE F INLET PER FDOT INDEX 425-053 AND 425-010	158.72	155.50 W	18"	N: 426703.73 E: 2554250.35
S-7	SIDE DRAIN MES PER FDOT INDEX 430-022	N/A	152.00 SE	15"	N: 426889.06 E: 2554090.95
S-8	TYPE C INLET PER FDOT INDEX 425-052 AND 425-010	160.00	152.37 NW 152.37 SE	15" 12"	N: 426847.78 E: 2554125.35

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est. 1988 FLORIDA
CA-5075

SCALE 1"=20'

SUBMITTALS
03/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT

CONCEPT DEVELOPMENT, INC.

PROJECT
COMMERCIAL RETAIL STORE
MARVIN BURNETT

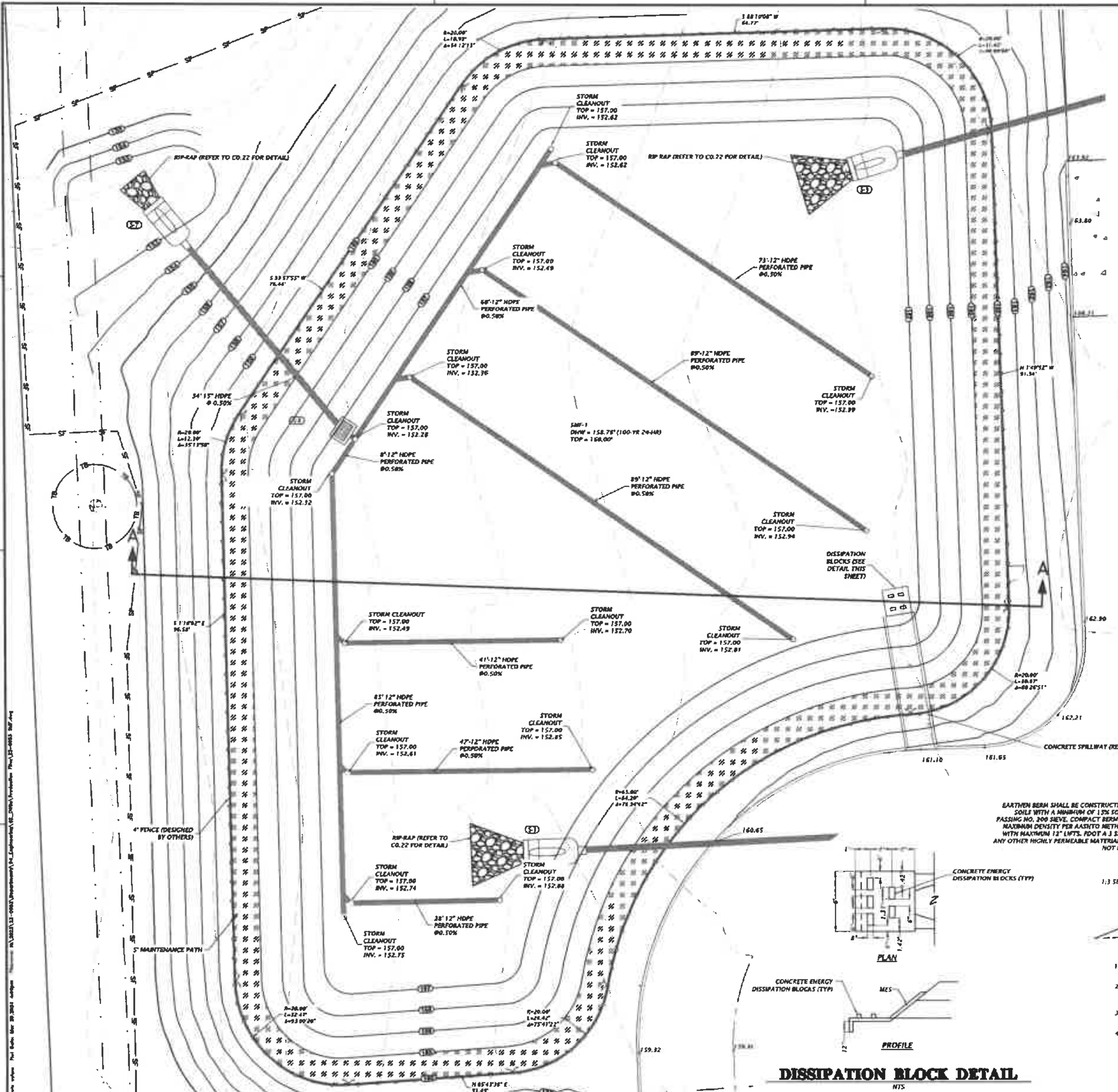
SHEET TITLE
GRADING AND DRAINAGE PLAN

G. WADZINSKI
DESIGNER C. MENHENNETT
QUALITY CONTROL R. OLNEY, P.E.
PROJECT NUMBER 23-0653

RANDALL SCOTT OLNEY

FL PE No. 68382

SHEET NO.
C2.00



STORMWATER STRUCTURE TABLE

STRUCTURE:	STRUCTURE TYPE	TOP	INVERT ELEV	PIPE DIA.	NORTHING & EASTING
S-1	SIDE DRAIN MES PER FDOT INDEX 430-022	N/A	157.00 E	15"	N: 426767.28 E: 2554162.46
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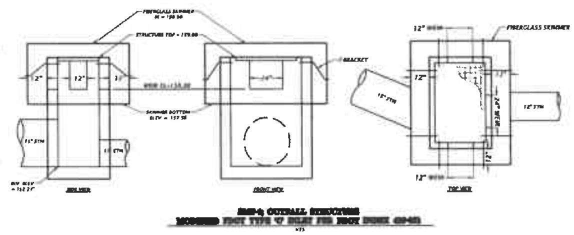
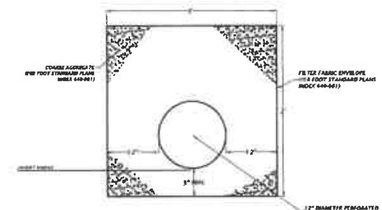
S-8	TYPE C INLET PER FDOT INDEX 425-052 AND 425-010	160.00	152.27 NW 152.27 SE	15" 12"	N: 426847.78 E: 2554125.35

GRAPHIC SCALE 0 5 10 20



SMF-1 OUTFALL STRUCTURE
MODIFIED FDOT TYPE 'C' INLET PER FDOT INDEX 425-052

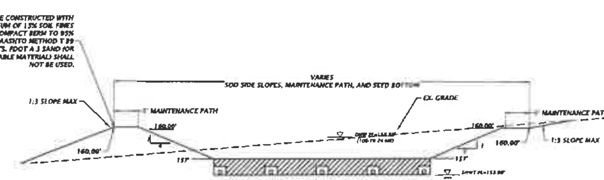


UNDERDRAIN DETAIL

NTS

DISSIPATION BLOCK DETAIL

NTS



1. IF A CONTINUOUS LIMEROCK FORMATION IS ENCOUNTERED IN THE BASIN AREA CONTACT THE ENGINEER OF RECORD. THE LIMEROCK SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 3 FEET BEYOND THE BASIN UNDERCUT LIMITS.
2. IF A SOLUTION PIPE SINKHOLE DOES FORM IN THE STORMWATER BASIN, THEN THE SINKHOLE SHALL BE REPAIRED BY BACKFILLING WITH MATERIAL OF LOWER-PERMEABILITY MATERIAL, SUCH AS CLAYEY SAND OR CLAY. THE MATERIAL SHALL BE COMPACTED AND THE SINKHOLE REPAIR SHOULD BRING THE SURFACE BACK TO AN ELEVATION WHICH IS SLIGHTLY ABOVE THE ORIGINAL BOTTOM, CREATING A SMALL MOUND.
3. IN AREAS WHERE CLAY RICH SOILS ARE ENCOUNTERED AT THE BASIN BOTTOM, UNDERCUT SOILS A MINIMUM OF 2 FEET AND BACKFILL WITH ON-SITE OR IMPORTED SANDS AND SAND WITH SILT (SP-SM) HAVING A MAXIMUM OF 12 PERCENT SOIL FINES PASSING THE NO. 200 SIEVE.
4. AREA ABOVE AND BETWEEN UNDER DRAINS (HATCHED) SHALL BE BACKFILLED WITH ON-SITE OR IMPORTED SANDS AND SAND WITH SILT (SP-SM) HAVING A MAXIMUM OF 12 PERCENT SOIL FINES PASSING THE NO. 200 SIEVE. BACKFILL MATERIAL SHALL HAVE A MINIMUM HORIZONTAL AND VERTICAL INFILTRATION RATE OF 10 FT/DAY.

STORMWATER MANAGEMENT FACILITY #1
CROSS SECTION A-A

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SCALE 1"=10'

03/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT

CONCEPT DEVELOPMENT, INC.

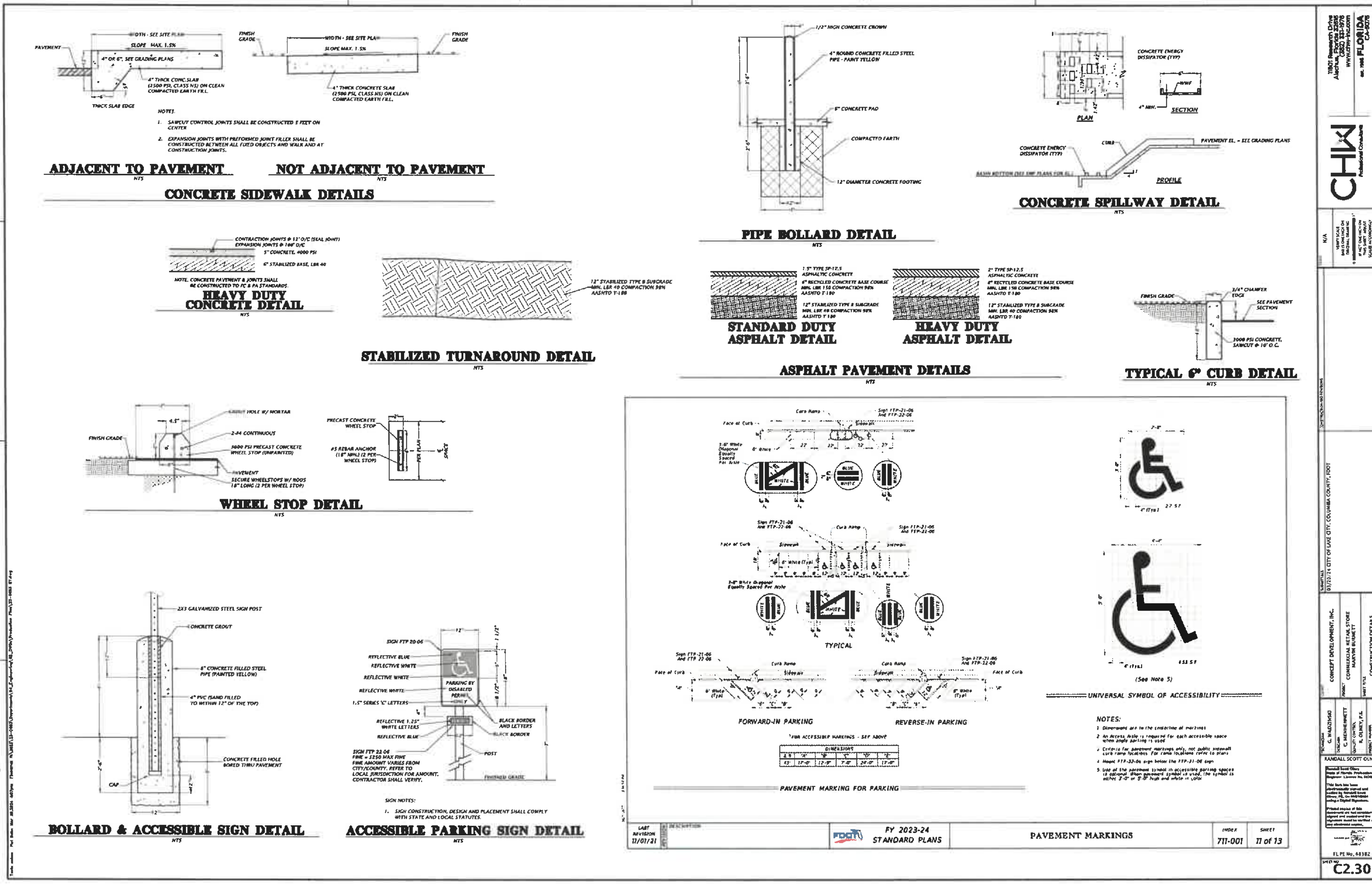
COMMERCIAL RETAIL STORE
MARVIN BURNETT

STORMWATER MANAGEMENT FACILITY PLAN AND DETAILS

G. WADZINSKI
C. MENHENNETT
R. OLNEY, P.E.
23-0653

RANDALL SCOTT OLNEY
FL PE No. 68382

C2.20


ADJACENT TO PAVEMENT
NOT ADJACENT TO PAVEMENT
CONCRETE SIDEWALK DETAILS
NOTES:
1. SAWCUT CONTROL JOINTS SHALL BE CONSTRUCTED 5 FEET ON CENTER
2. EXPANSION JOINTS WITH PREFORMED JOINT FILLER SHALL BE CONSTRUCTED BETWEEN ALL FIXED OBJECTS AND WALK AND AT CONSTRUCTION JOINTS.
HEAVY DUTY CONCRETE DETAIL
STABILIZED TURNAROUND DETAIL
PIPE BOLLARD DETAIL
STANDARD DUTY ASPHALT DETAIL
HEAVY DUTY ASPHALT DETAIL
ASPHALT PAVEMENT DETAILS
CONCRETE SPILLWAY DETAIL
TYPICAL 6" CURB DETAIL
WHEEL STOP DETAIL
BOLLARD & ACCESSIBLE SIGN DETAIL
ACCESSIBLE PARKING SIGN DETAIL
SIGN NOTES:
1. SIGN CONSTRUCTION, DESIGN AND PLACEMENT SHALL COMPLY WITH STATE AND LOCAL STATUTES.
FORWARD-IN PARKING
REVERSE-IN PARKING
TYPICAL
PAVEMENT MARKING FOR PARKING
UNIVERSAL SYMBOL OF ACCESSIBILITY
FY 2023-24 STANDARD PLANS
PAVEMENT MARKINGS
711-001
11 of 13
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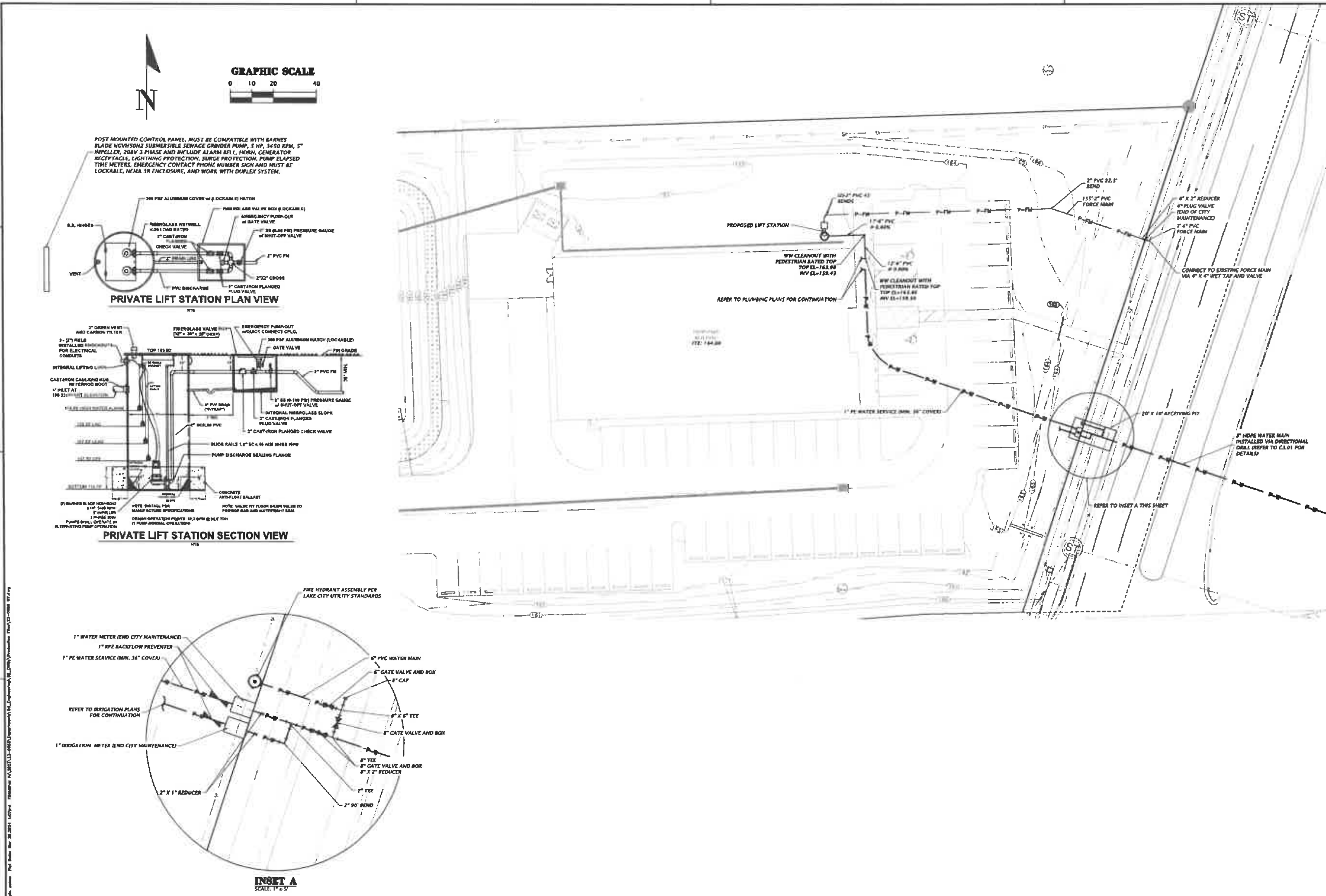
CONCEPT DEVELOPMENT, INC.
COMMERCIAL RETAIL STORE MARVIN BURNETT
CONSTRUCTION DETAILS
03/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT
C. WADZINSKI
C. MENHENNETT
R. OLNEY, P.E.
23-0653
RANDALL SCOTT OLNEY
FL PE No. 68382
C2.30



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SCALE 1"=20'

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SUBMITTALS: 03/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT

CONCEPT DEVELOPMENT, INC.

PROJECT: COMMERCIAL RETAIL STORE MARVIN BURNETT

SHEET TITLE: UTILITY PLAN

TECHNICIAN: G. WADDINGS

DESIGNER: C. MENHENNETT

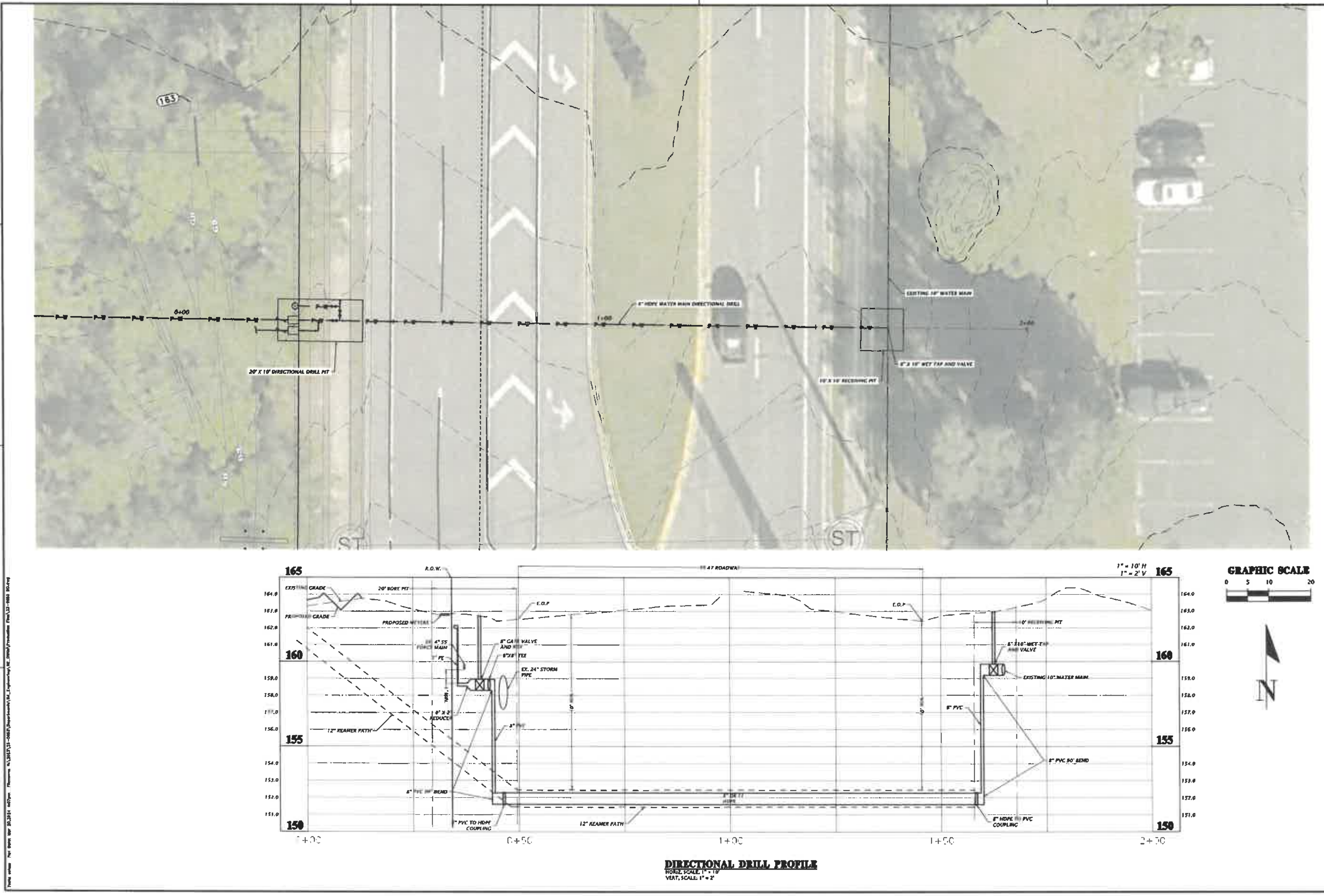
QUALITY CONTROL: R. OLNEY, P.E.

PROJECT NUMBER: 23-0653

RANDALL SCOTT OLNEY

FL PE No. 68382

SHEET NO. C3.00


20' X 10' DIRECTIONAL DRILL PIT
8" HDPE WATER MAIN DIRECTIONAL DRILL
EXISTING 10" WATER MAIN
8" X 10" WET TAP AND VALVE
10' X 10' RECEIVING PIT
GRAPHIC SCALE
0 5 10 20
DIRECTIONAL DRILL PROFILE
HORIZ. SCALE: 1" = 10'
VERT. SCALE: 1" = 2'
1" = 10' H
1" = 2' V
EXISTING GRADE
PROPOSED GRADE
20' BORE PIT
PROPOSED METERS
R.O.W.
E.O.P.
8" GATE VALVE AND BOX
8"X8" TEE
EX. 24" STORM PIPE
12" REAMER PATH
8" PVC TO HDPE COUPLING
8" HDPE TO PVC COUPLING
8" PVC 90° BEND
8" PVC
EXISTING 10" WATER MAIN
10' RECEIVING PIT

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est. 1989 FLORIDA CA-5075

CHW Professional Consultants

SCALE 1"=10'

SUBMITTALS: 03/20/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT

CLIENT: CONCEPT DEVELOPMENT, INC.

PROJECT: COMMERCIAL RETAIL STORE MARVIN BURNETT

SHEET TITLE: DIRECTIONAL DRILL PLAN AND PROFILE

C. WADZINSKI

C. MENHENNETT

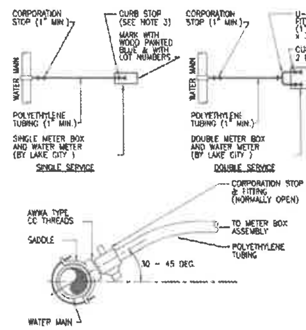
B. OLNEY, P.E.

PROJECT NUMBER: 23-0653

RANDALL SCOTT OLNEY

FL PE No. 68182

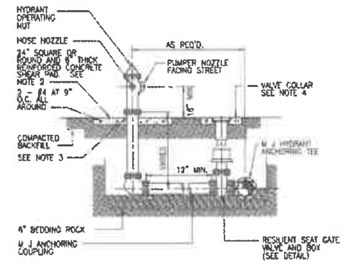
SHEET NO. C3.01



NOTES:
1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/PACK JOINT TYPE CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE AT A CURB STOP(S) WHICH SHALL BE BURIED APPROXIMATELY 3" BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2" X 2" X 18" STAKE WITH THE TOP PAINTED BLUE AND MARKED WITH THE NUMBER OF THE LOT(S) TO BE SERVED.
4. INDENT CURB WITH "W" AT EACH WATER SERVICE LOCATION

CITY OF LAKE CITY
WATER SERVICE CONNECTION DETAILS

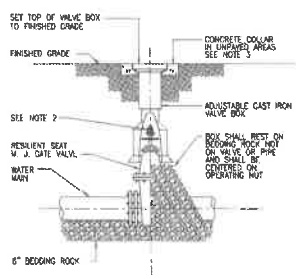
Date	Revisions	Appr.	By	Date: Sept. 1995	Scale: N.T.S.	Dwg: 0405	Fig: 405



NOTES:
1. FIRE HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE, OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
2. THE DEVELOPER MAY INSTALL THE SHEAR PAD RECESSED UP TO 4 INCHES BELOW FINISHED GRADE AND SOD THE RECESSED SECTION.
3. CLEARANCE BETWEEN BOTTOM OF BOLTS AND TOP OF SHEAR PAD SHALL BE A 6" MINIMUM.
4. VALVE COLLAR SHALL BE 18"X18"X6" CONCRETE COLLAR W/4 - #4 BARS

CITY OF LAKE CITY
FIRE HYDRANT ASSEMBLY DETAIL

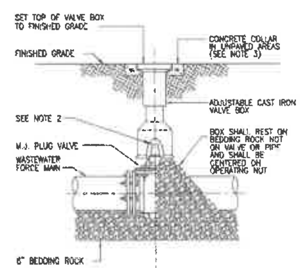
Date	Revisions	Appr.	By	Date: Sept. 1998	Scale: N.T.S.	Dwg: 0402	Fig: 402



NOTES
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE
3. VALVE COLLAR SHALL BE 18"X18"X6" CONCRETE COLLAR W/4 - #4 BARS.

CITY OF LAKE CITY
GATE VALVE AND BOX DETAIL

Date	Revisions	Appr.	By	Date: Sept. 1998	Scale: N.T.S.	Dwg: 0400	Fig: 400



NOTES
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.
3. VALVE COLLAR SHALL BE 18"X18"X6" CONCRETE COLLAR W/4 - #4 BARS

CITY OF LAKE CITY
PLUG VALVE AND BOX DETAIL

Date	Revisions	Appr.	By	Date: Sept. 1998	Scale: N.T.S.	Dwg: 0203	Fig: 203

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www.chw-inc.com
est. 1988 FLORIDA
CA-5075

CHW Professional Consultants

SCALE: N/A

SUBMITTALS: 01/22/24 CITY OF LAKE CITY, COLUMBIA COUNTY, FDOT

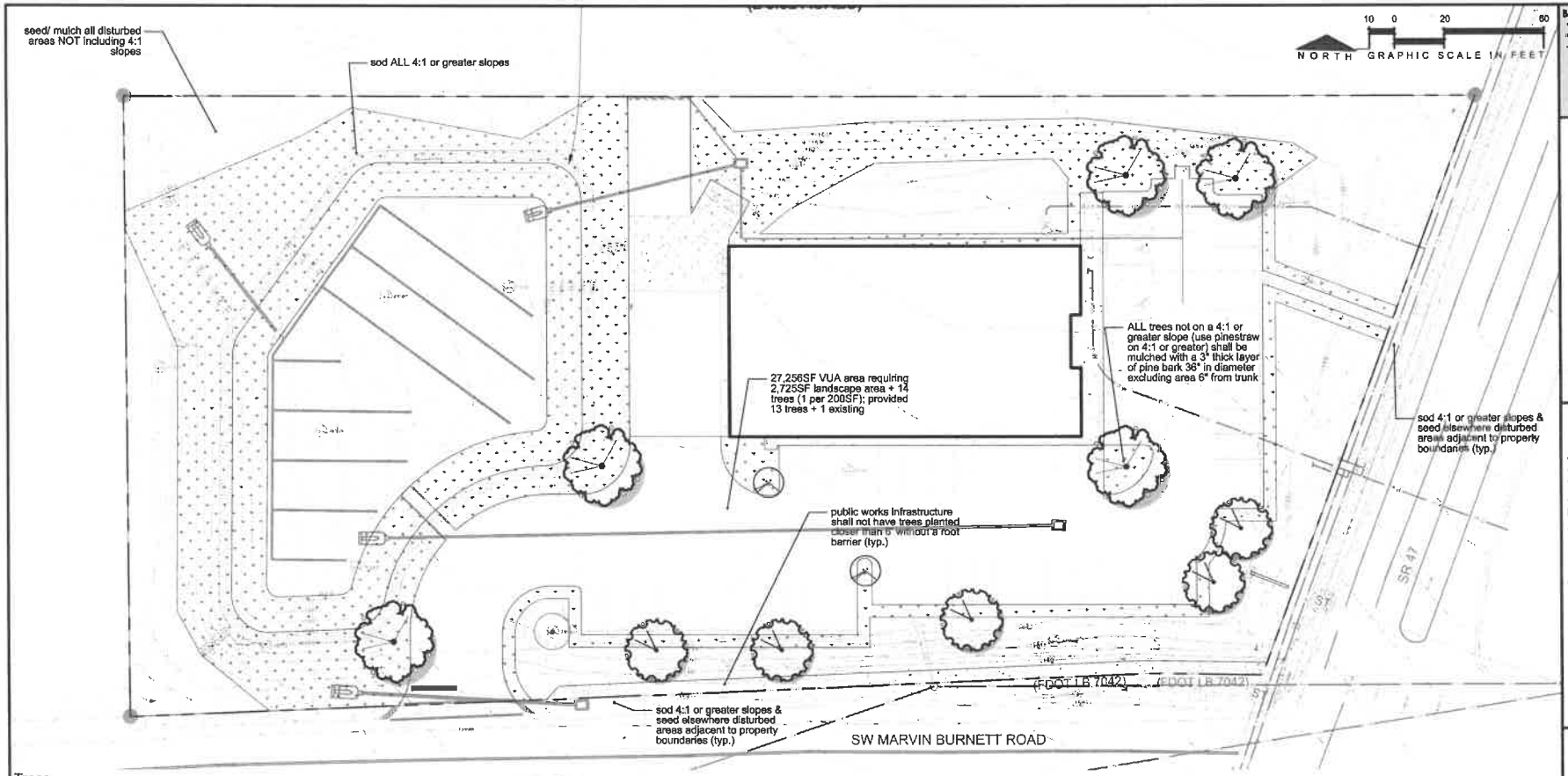
CONSTRUCTION REVISIONS

TECHNICIAN: G. WADZINSKI
DESIGNER: C. MENHENNETT
QUALITY CONTROL: R. OLNEY, P.E.
PROJECT NUMBER: 23-0653

CLIENT: CONCEPT DEVELOPMENT, INC.
PROJECT: COMMERCIAL RETAIL STORE MARVIN BURNETT
SHEET TITLE: UTILITY DETAILS

RANDALL SCOTT OLNEY
FL PE No. 68382

SHEET NO. C3.20



Trees

Quantity	Abbr.	Botanical Name /	Size / Caliper	Spacing	Comments
5		*Quercus virginiana* live oak	4'HT	per plan	
5		*Ulmus elata* winged elm	4'HT	per plan	
2		*Lagerstroemia indica 'Natchez'* crape myrtle	4'HT	per plan	

Groundcovers

235SF x 3" thick		*Pine Bark Nuggets* 3" layer			
32,894SF		*Pasapalum notatum 'Argentine'* bahia grass			
39,652SF		*Pasapalum notatum 'Argentine'* bahia grass seed on basin bottom covered in pinestraw			
0	AJ	*T. asiaticum 'Minima'* asiatic jasmine	1GAL., full	2'OC	
0	PP	*Arachis glabrata 'Ecoturf'* perennial peanut	1G	2'OC	

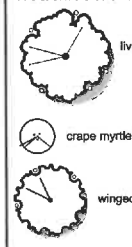
General Notes

1. Contractor shall provide proposed soil amendment quantities on bid form to ensure healthy vigorous growth of plant material, lateral movement of irrigation water within soil, & soil nutrient holding capacity.
2. Any vegetation planted adjacent to a parking stall where it may interfere with a vehicles door opening shall be offset 2' from back of curb. Trim plant material as needed to keep a 6" clearance from back of curb in these areas.
3. ALL mulched areas adjacent to edge of curb, pavement, shall be composed of a compressed 3" thick layer of mulch. Top of mulch shall be 1/2" below edge of adjacent surface so mulch has a containment edge.
4. ALL proposed sod areas adjacent to edge of curb/pavement shall be excavated so the sod does not impede water runoff into the pervious areas.
5. All revisions shall be submitted to Lake City for review and approval prior to installation.

Soil Testing

Existing soil composition has not been tested. Contractor excavate 2' depth all material used in construction of parking lots and buildings inside plant beds and infill with suitable soil and amendments to support healthy growth.

Tree/shrub Identification Key



BORTON DESIGN INC.

REVISIONS:

LANDSCAPE PLAN

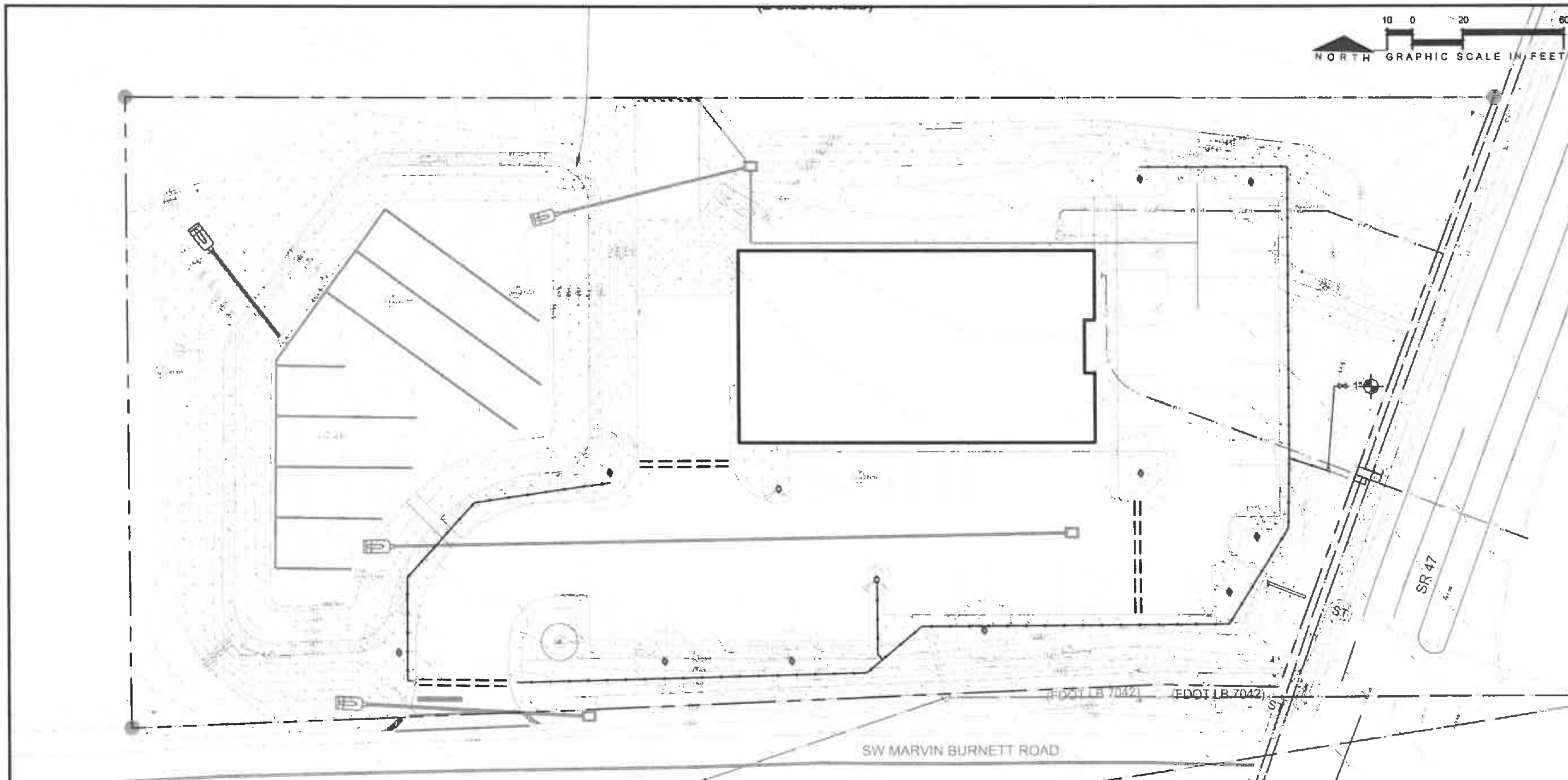
COMMERCIAL RETAIL STORE - MARVIN BURNETT
PREPARED FOR
CONCEPT COMPANIES

BDI NO.	24200
DRAWN BY:	BDB
DESIGNED BY:	BDB
CHECKED BY:	BDB
DATE:	12/19/2023

PLANS PREPARED BY: Brian D Borton 2023.12.19 09:06:51 -05'00'

BRIAN DAVID BORTON FL NO. LA0001708

LS-01



Legend

- sleeve₁,₂ — sleeve₁,₂
- lateral₂
- blank poly tubing
- C controller
- S rain sensor
- control valves
- 1/2" drip shut-off valve
- zone # and flow rate in gallons per minute
- irrigation drip break
- POC lateral/drip point of connection

₁sleeves - Unless specified on plans all sleeves shall be 2". When plans show lateral in pipe, install pipe in sleeve and cap both ends 12" beyond end of sleeve.
₂irrigation lateral lines and sleeving may be diagrammatic in nature and are intended to be installed in suitable locations within property boundaries.

Irrigation Notes

1. Dripline. Drip shall be installed on top of soil and covered with mulch.
2. Control Valves & Regulators. Control valves shall be installed and set 5% over proposed flow.
3. Pipe. 1/2" pipe shall be Class 315 PVC. Piping larger than 1/2" shall use Class 200 PVC.
4. Irrigation materials not identified on irrigation schedule or in specifications as to brand and model # shall be either Rainbird, Nelson, or Hunter and sized appropriately by contractor to meet requirements by the manufacturer. Contractor shall include all materials including quantity, model, size, and installed price for each item on bid form.
5. All irrigation revisions shall be submitted to Lake City for review and approval prior to installation.
6. No irrigation to be provided at sod. Contractor shall irrigate with a water truck as needed for the first two weeks.
7. Pipe shall not be installed within 50% of any existing tree dripline UNLESS piping is installed via a trenchless installation method.

Watering Schedule for Zone 1

Water all plants listed once per day for (60) sixty minutes during the first (30) thirty days and every other day for the next (30) thirty days; thereafter, follow water restrictions per jurisdiction until established. Shrub drip valves may be shut-off after (3) three months. After (1) one year trees should be sufficiently rooted into existing soil for shutdown; however, it is recommended that a review be performed by a certified arborist before shutting off the system. After establishment irrigation should be turned on IF a drought occurs. Bahia grass shall be temporarily watered via hand moved sprinklers for two weeks if rainfall is not occurring as needed.

Number of emitters per tree/shrub	
live oak	2-2gph emitters
winged elm	2-2gph emitters
crape myrtle	2-2gph emitters
walters vib.	1-1gph emitter
asiatic jasmine	1-.5gph emitter

Irrigation Schedule

Quantity	Description
100'	Rainbird XFD blank tubing
1	Rainbird ESP-RZX Series Controller
1	Rainbird WR2 - RC sensor
1	Rainbird 075-DV
1	Rainbird PSI-M50X-100
0	Rainbird QKCHK100 drip filters
0	Netafim 01WPCJL1.2 drip emitter .32GPH
0	Rainbird XB-05PC drip emitter .5GPH
0	Rainbird XB-10PC drip emitter 1GPH
TBD	Rainbird XB-20PC drip emitter 2GPH
0	Rainbird PC-05 drip emitter 5GPH
TBD	Rainbird BVAL50-1S138 drip valve
TBD	1/2" Perma-Loc EndCap w/ Flush Valve
TBD	Rain Bird PVB6RND 6 in. round valve box
TBD	9" 9-gauge galvanized ground staples

BORTON DESIGN INC.

REVISIONS:

IRRIGATION PLAN

COMMERCIAL RETAIL STORE - MARVIN BURNETT
PREPARED FOR
CONCEPT COMAPANIES

BDI NO.	24200
DRAWN BY:	BDB
DESIGNED BY:	BDB
CHECKED BY:	BDB
DATE:	12/19/2023

PLANS PREPARED BY

BRIAN DAVID BORTON FL. NO. LA6667026

LS-02

LANDSCAPE PART 1 GENERAL NOTES

Scope. This section includes all planting of shrubs, trees, ground covers, and other landscape supplementary work shown on the drawings and specified herein, complete.

Applicable Documents. The following publications, specifications, and standards of the issues listed in this paragraph (including the amendments and addenda designated), but referred to hereinafter by basic designation only, form a part of this specification to the extent required by the references thereto.

Publication of Reference. Publications as herein listed shall be held in basic reference:
Grades and Standards for Nursery Plants, Parts I and II, State Department of Agriculture and/or State Plant Board of Florida, Seagle Building, Gainesville, Florida.
State of Florida Fertilizer Law, Office of the Secretary of State, Tallahassee, Florida.
American Standard for Nursery Stock (ANSIZ60.1-), American Association of Nurserymen.
Standards for Tree Care Operations (ANSI A300)
Guideline Specifications to Sodding, America Sod Producers Association (ASPA)

Plant Quantities. All plant quantities shown in the plans are approximate based on the plan locations. The Contractor shall be fully responsible for determining all final plant quantities and shall submit a revised plant schedule with final plant quantities as part of the contract and prior to construction.

Substitutions of Plant Material. If a plant is found to be unavailable, submit proof of non-availability and a proposal for use of equivalent material. When authorized, adjustment of contract amount will be made. No substitutions will otherwise be authorized. To prove non-availability, The Contractor must provide at least eight (8) letters from growers or dealers from the States of Florida and Georgia explaining the non-Availability of the plant material.

On-Site Conditions and Adjustments. The locations of plants, as shown on the plans, are fairly accurate. Planting shall be adjusted only when necessary to accommodate actual as-built conditions on the site and any changes in locations caused thereby shall be made without additional cost to the Owner, Owner's Representative, or Landscape Architect. The Contractor shall immediately notify the Owner's Representative when conditions detrimental to plant growth are encountered, such as rubble fill, lime rock, or obstructions; and when field conditions are different than portrayed on the plans prior to planting. The owner or Owner's Representative may adjust the layout or location of specified plant materials to avoid these areas without additional costs.

Coordination of Plantings. Coordinate all landscape work with the Owner's Representative and other contractors. Plant trees and shrubs after final grades are established and prior to planting of lawns, unless otherwise directed by the Owner's Representative.

Fine Grading. Provide fine grading necessary to establish finish grade in all landscape areas. Fine grading shall include only minor grading to correct random or infrequent grade irregularities of 12" or less, unless otherwise noted on plans.

Liability of Contractor. The Contractor shall be liable for any and all damages to property that result from his performance He shall, without extra cost, restore to original condition any areas and/or construction damaged, defaced, disturbed, or destroyed by him or his workmen.

Tree Tagging. A tree tagging trip may be requested by Owner's Representative prior to approval of plant material. Contractor shall be responsible for providing transportation and accommodations if necessary.

Inferior Materials. Contractor shall reject inferior materials. The Owner's Representative reserves the right to reject any or all materials not meeting the criteria specified herein or determined to be damaged or unhealthy.

Onsite Debris. Contractor shall be responsible for removing and disposing of offsite all stones over 1" in diameter, sticks, roots, and other extraneous matter in planted areas to a depth of 2'. If debris is excessive and results from construction waste please contact Owner's Representative for appropriate actions.

LANDSCAPE PART 2 SUBMITTALS

Soil Testing for Plant Material. The Contractor shall be responsible for testing soils in planted areas to confirm that soil is suitable for healthy plant growth and shall submit a report to the Owner's Representative prior to construction showing test data and any conflicts determined by the contractor.

Seed Certification. All seed must comply with regulatory agencies for fertilizer and herbicide composition.

Inspection Certificates, Manufacturer's Data. Upon request of Representative copies of inspection certificates or manufacturer's data shall be provided for any material used onsite or for existing materials found onsite.

LANDSCAPE PART 3 MATERIALS

General Plant Material Requirements. Provide state inspected, nursery grown plants, and according to the plant schedule unless otherwise specified. Conform to the. "Florida Department of Agriculture Grades and Standards For Nursery Plants", local landscape ordinance, and, where applicable, to ANSI Z60.1 All plant materials shall be Nursery grown, Florida No. 1 stock. All materials shall be healthy, vigorous, free of diseases and insects, pruned for best shape without appearance of "de-horning", and without symptoms of nutritional deficiency. Furnish plants grown under climatic conditions must measure according to sizing required detailed on the drawings. Plants must be naturally bushy, dense, in good foliage, well branched, and of good appearance. The nursery/nurseries from which plants are derived shall be under regulatory inspection by the Florida State Department of Agriculture and/or the Florida State Plant Board, or an equivalent agency if derived from outside the State of Florida. Plants entering from outside the State of Florida must bear the entry certificate of the State Department of Agriculture of the State of Florida. All plant materials will be subject to approval of the Owners or Owner's Representative for quality, size and color.

Soil Additives. Contractor shall be responsible for adding peat, humus, fertilizer, manure, pH adjusters or any other commercially accepted soil additive to ensure normal, healthy plant growth or as noted on the plans.

Balled and Bur lapped Trees. Ensure that field grown material follows local industry standards for root pruning, digging, balling and bur lapping, etc. All balled and bur lapped materials must be hardened off before shipment. All materials are subject to approval by the Owner's Representative prior to shipping to project site. The top 5 inches of natural burlap shall be removed and completely remove any synthetic burlap wrapping or wire cages before installation.

Spaded Trees. Trees shall have been spaded from a commercial nursery field that has been inspected by the Department of Agriculture and Consumer Services within the last 9 months. The Contractor shall provide a copy of the most recent Nursery, Stock dealer and Special Inspection Report for verification upon Owner's Representative request. Ball size shall be at least one size greater than recommended by ANSI Z60.1, American Standard for Nursery Stock, unless otherwise specified. Spaded material is subject to approval and tagging by the Owner's Representative prior to shipping to project site.

Container Plants. Provide container-grown plants with sufficient roots to hold the container soil together after removal from the container. Root bound plants and plants with inadequate root systems are not acceptable.

Surface Mulch. Use mulch type specified in plans. Mulch shall be in a non-decomposed state; not more than one (1) season old.

Herbicides, Insecticides. Chemical sprays, dusts, or gaseous compounds used on or around plant materials, including but not limited to trees, shall be approved for such uses by the Environmental Protection Agency and the Florida Department of Agriculture. and Consumer Services. Such materials as may be used shall not constitute a hazard to human health or interfere with site working conditions and habitation.

Seed Requirements General. Where seeding may be required on the plans, the seed required shall comply with all minimum provisions of the Florida Seed Certification and Testing Law. Noxious weed seeds shall be non-existent and foreign materials shall not exceed two percent.

Sod Requirements General. See plan for specified sod. All sod shall be healthy, strongly rooted and not less than two (2) years old, free of weeds and undesirable native grasses in 16" x 24" pads, 1-1/2" thick. Sod shall conform to "Nursery Grown" grade as established by American Sod Producers Association (ASPA). Sod shall be considered free of weeds if less than 5 weeds are found per 100 square feet of area. Brown, dry irregularly smooth, and/or unfresh sod will be rejected.

LANDSCAPE PART 4 PLANTING PROCEDURES

General. Prior to commencement of any work, the Landscape Contractor shall inspect the site, locate planting areas, placement of guying devices, locate electrical cables, conduits, and other underground and above utilities so that proper precautions and procedures may be followed during and throughout construction. The Contractor shall become familiar with other job trade activity which has an impact upon his work or upon which his work has an impact and shall arrange to carefully coordinate his work with other trades through the Owner's Representative. All planting practices listed herein shall ensure healthy plant growth.

Layout. The location of plants, planting beds and plant quantities, are approximate. The locations and bed lines shall be staked on the project site by the Contractor and approved by the Owner's Representative before any plant pits or beds are dug. The Owner's Representative may adjust plant material locations to meet field conditions. Contractor shall make minor adjustment without additional cost to the Owner.

Finish Grades. The Landscape Contractor is responsible for all fine grading and preparation for planting. Finish grades (top of soil) for all sod areas after settlement shall be one-half inch below the top of abutting curbs, walks, walls and abutments. The finish grade of all plant beds prior to mulching shall be three inches below finish grade of sod, abutting curbs, walks and walls. Three inches of mulch shall be added to all plant beds after planting.

Planting Seasons/Times. The planting of plant materials and lawns may proceed at any time, period, or season agreed upon by the Contractor and Owner or Owner's Representative

Plant Installation. All plants existing rooball top shall be 0-1" above finished grade. Area surrounding tree shall excavated/loosened to 3X the width and 1X depth prior to installation. Plants shall be set plumb and straight. When backfilling lightly tamp layers in 6" lifts. Do not over compact. A ¼" probe should be able to penetrate to a depth of the rootball with hand pressure. A 3" mulch layer shall be applied over rootball excluding the area 6" from the trunk/stem. Stake and install trees according to details. Trees shall be secured loosely and allow trunk to sway. Sod. All areas to be either seeded, sprigged, or sodded shall be prepared in a manner to ensure normal, vigorous and healthy growth.

Fine grade lawn areas to smooth, even surface with with loss, uniformly fine texture. Roll, rake and drag lawn areas, remove ridges and fill depressions with topsoil as required to meet finish grades. In areas to be sodded, allow for sod thickness.

Sod Installation. Lay sod in straight, parallel rows to form a solid mass with tightly fitted joints, without overlap. Stagger strips to offset joints. Work topsoil into minor cracks. On 1:3 slopes or greater, lay sod with long dimension of pads parallel to contours and stake sod as necessary to stabilize. Drive sod stakes flush with top of sod.

Sprigging and Seeding. Sprigging/seeding shall be done in a manner to ensure a quick grow-in period achieving a uniform green lawn prior to final acceptance.

LANDSCAPE PART 5 MAINTENANCE

Plant Material. Maintain all plant materials until Final Acceptance. Maintenance shall include all required watering, cultivation, weeding, mowing, pruning, wound dressing, immediate replacement of dead and unacceptable material, straightening plants which lean or sag, adjustment of plants which are planted too low, and any other procedure consistent with good horticultural practice necessary to ensure normal, vigorous and healthy growth of all planting under the Contract.

Lawn. Maintain lawns until Final Acceptance. Reset settled or eroded sod areas to proper grade. Fill open joints with topsoil. Keep sod free of insects and disease.

LANDSCAPE PART 6 FINAL INSPECTION AND ACCEPTANCE

Final Cleanup. Upon final completion of work and before inspection and acceptance, all aspects of the project site shall be thoroughly and completely cleaned of debris, stains, materials, defacements, and temporary facilities. Likewise, any repairs which are the obligation of this Contractor shall be completed.

Initial Inspection and Acceptance. Inspection shall be made by the Owner or Owner's Representative within (10) ten days of written notification from the Contractor that installation is complete. If all work and materials meet specifications, project will be accepted as is. Materials and work not in compliance with specifications shall be rejected by Owner's Representative and replaced by the contractor within (15) fifteen days of notification by Owner's Representative. Notification will graphically depict all rejected material on plans. Upon replacement of all rejected work and materials by the Contractor, the Owner's Representative shall conduct a final inspection within ten (10) days of written notification from the Contractor that all rejected work has been replaced according to specifications. Approval will be granted upon the acceptance of all replaced material noted on plans. After final acceptance, the Contractor will not be responsible for damage to work resulting from: neglect by Owner, conditions such as floods, excessive wind, severe freezing or abnormal rains; or other activities clearly beyond the Landscape Contractor's control.

LANDSCAPE PART 7 GUARANTEE

Guarantee. All plant materials and trees installed by the Contractor shall be guaranteed for 365 days from the date of final acceptance. The Contractor shall replace at no additional cost to the Owner, all plant materials which die and/or which are not healthy and in a good growing condition during the guarantee period. Replacement of such material shall occur within ten (10) days from Owner's written notification to the Contractor. The 365-day guarantee period for replaced plant materials shall commence on the date of acceptance of the replaced item or items of plant material. The Contractor shall not be required to replace, repair, or restore any portion of the work that is damaged, defaced, disturbed, improperly maintained, and/or destroyed by others after final acceptance.

IRRIGATION PART 1 GENERAL NOTES

Scope. This section includes irrigation and supplementary work shown on the drawings and specified herein, complete.

Applicable Documents. The following publications, specifications, and standards of the issues listed in this paragraph (including the amendments and addenda designated), but referred to hereinafter by basic designation only, form a part of this specification to the extent required by the references thereto.

Publication of Reference. Publications as herein listed shall be held in basic reference:

- HANDBOOK OF TECHNICAL IRRIGATION INFORMATION by Hunter Industries Inc. - 1998
- THE COMPLETE IRRIGATION WORKBOOK by Larry Keesen - 1998
- PUBLICATIONS, NOTES, AND PAPERS by The Center of Irrigation Technology, California State University - Fresno, California
- PUBLICATIONS and STANDARDS by The Florida Irrigation Society - Orlando, Florida
- PUBLICATIONS by The Irrigation Association - Falls Church, Virginia INSTALLATION GUIDE FOR PVC

Irrigation Quantities. All irrigation material quantities shown in the plans are approximate. The Contractor shall be fully responsible for determining all quantities. The Contractor shall submit a revised irrigation schedule with final irrigation quantities as part of the contract and prior to construction.

On-Site Conditions and Adjustments. Irrigation equipment shown on the plans is approximate. Irrigation shall be adjusted to fit actual as-built conditions on the site and any changes in locations caused thereby shall be made without additional cost to the Owner, Owner's Representative, or Landscape Architect.

Liability of Contractor. The Contractor shall be liable for any and all damages to property that result from his performance He shall, without extra cost and by licensed contractors, restore to original condition any areas and/or construction damaged, defaced, disturbed, or destroyed by him or his workmen.

Substitution of Materials. Any substitution from the specified brands, models or sizes shall be submitted to the owner or the owner's representative for approval. Material substitutions or design changes must be shown to comply with the system design intent and rectify any necessary performance changes and be in compliance with all city, state, and federal regulations.

IRRIGATION PART 2 INSTALLATION PROCEDURES

General. Prior to commencement of any work the irrigation Contractor shall obtain all necessary permits and licenses, inspect the site and locate electrical cables, conduits, and other underground and above utilities so that proper precautions and procedures may be followed during and throughout construction. The Contractor shall become familiar with other job trade activity which has an impact upon his work or upon which his work has an impact and shall arrange to carefully coordinate his work with other trades through the Owner's Representative.

Backflow Prevention. Backflow preventer shall be installed according to manufacturer's recommendations.

Filters and Strainers. Filter/Strainers shall be installed per manufacturer's recommendations.

Irrigation Controller. The irrigation controller shall be UL listed, conform to the provisions of the National Electric Code, and properly grounded in accordance with manufacturer's recommendations.

Rainfall Shutoff Device. A rain sensor shall be installed as close as possible to the control equipment and per manufacturer's recommendations. Install the first 18 inches of rain sensor wire below ground level and all wire above ground in conduit. When systems are pressurized by a pump, provision shall be made to ensure shutoff device does not allow pump to activate.

Pipe.

1. Pipe shall be installed at sufficient depth below ground to protect it from hazards such as vehicular traffic. Landscape vehicular traffic areas are those landscaped areas subject to vehicular use such as traffic crossings, parking areas, etc. Depths of cover shall conform to NRCS-FL- 430-DD, Water Conveyance, as follows:
   a. Landscaped Vehicle Traffic Areas - Landscaped areas subject to routine automotive or heavy equipment traffic.

Pipe Size (inches)	Depth of Cover* (inches)
1/2" - 2-1/2"	18"
3"-5"	24"
6" and larger	36"

   b. Non-Traffic and Non-Cultivated Areas

Pipe Size (inches)	Depth of Cover* (inches)
1/2" - 1-1/2"	6"
2"-3"	12"
4"-6"	18"
More than 6"	24"

2. The trench bottom must be uniform, free of debris, and of sufficient width to properly place pipe and support it over its entire length. Make all pipe joints and connections according to the material manufacturer's recommendations. Perform all solvent-weld connections in accordance with ASTM D-2855. Contractor shall install all piping and related materials in accordance with the manufacturer's specifications and the following standards: ASTM D-1785-99, ASTM D-2241-00, ASTM D-2466-01, ASTM D-2464-99, ASTM D-2239-99, ASTM D-2564-96a, ASTM F-656-96a, ASAE S436.
3. Thrust blocks are required on all fittings at dead ends and whenever the line changes direction of 30 degrees or more. Thrust blocks shall be installed in a manner to ensure no pipe shifting occurs. Size thrust blocks in accordance with ASAE Standard S-376.2.
4. Contractor shall flush irrigation system installation at the appropriate stages based on commercially accepted methods.
5. After installation, flushing, and inspection or testing, contractor shall backfill the pipe trench with soil free from rocks or stones larger than 1-inch in diameter in a commercially accepted manner.

Pipe Sleeving. Pipe sleeves shall be at least two pipe sizes larger than the carrier pipe or twice the diameter of the wire bundle to be placed under the paving or roadway, and extending a distance at least equal to its installed depth beyond the paved area. Schedule 40 PVC pipe shall be used for sleeves.

Valves. Valve installation shall allow enough clearance for proper operation and maintenance. Where valves are installed underground, they shall be provided with a valve box with cover extending from grade to the body of the valve. The top of the valve body should have a minimum of 8 inches of cover in non-traffic and non-cultivated areas and 18 inches of cover in traffic areas.

Locate manually operated control valves so they can be operated without wetting the operator.

Valve Boxes. Contractor shall install valve boxes according to the manufacturer's recommendations.

Wire. Electrical control wire shall be sized in accordance with the valve manufacturer's specifications. Install only UL listed direct burial low voltage wire (30 volts or less) with a minimum depth of cover of 12 inches. Provide a sufficient length of wire at each connection to allow for thermal expansion/shrinkage. As a minimum, provide a 12-inch diameter loop at all splices and connections. Terminations at valves will have 24" minimum free wire. Provide common wires with a different color than the power wires (white shall be used for common wires). Use wire connectors that are approved for direct burial. A valve box shall be used for all underground wire splices. Install all above-ground wire runs and wire entries into buildings in conduit.

Sprinklers. Install sprinklers plumb unless they are installed on slopes where they can be tilted as required to prevent erosion. Sprinklers shall be adjusted to avoid unnecessary discharge on pavements and structures. Provide a minimum separation of 4 inches between sprinklers and pavement and 12 inches between sprinklers and vertical structures or as local codes dictate. Riser-mounted sprinklers shall be supported. Swing joints shall be constructed to provide a flexible, leak-free connection between the sprinkler and lateral pipeline to allow movement in any direction and to prevent equipment damage.

Micro Irrigation. Micro-irrigation equipment shall be installed according to the manufacturer's recommendations for the specific application. Stake all surface tubing every three to six feet depending on site conditions and manufacturer's recommendations with eight inch staples.

IRRIGATION PART 3 TESTING, SUBMITTALS, FINAL INSPECTION AND ACCEPTANCE

Testing. All mainlines and laterals shall be tested to be free of leaks. Rainfall shutoff device shall be tested to ensure proper shut-off of control equipment.

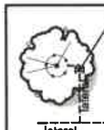
Cleanup. Upon final completion of work and before inspection and acceptance, all aspects of the project site shall be thoroughly and completely cleaned of debris, stains, materials, defacements, and temporary facilities. Likewise, any repairs which are the obligation of this Contractor shall be completed.

Inspections and Acceptance. Inspection shall be made by the Owner or Owner's Representative within (10) ten days of written notification from the Contractor that installation is complete. If all work and materials meet specifications, project will be accepted as is. Materials and work not in compliance with specifications shall be rejected by Owner's Representative and replaced by the contractor within (15) fifteen days of notification by Owner's Representative. Notification will graphically depict all rejected material on plans. Upon replacement of all rejected work and materials by the Contractor, the Owner's Representative shall conduct a final inspection within ten (10) days of written notification from the Contractor that all rejected work has been replaced according to specifications. Approval will be granted upon the acceptance of all replaced material noted on plans.

Post Construction Documentation & Instruction. The Contractor shall provide manufacturer's product literature, operation manuals, testing and inspection certificates, and record drawings to the owner or owner's representative. Record drawings shall show all changes in the design to indicate the actual installation sizes, types, and locations of all equipment and materials with the application for final payment. Contractor shall provide minimal instruction to owner, if applicable, describing any need to know information regarding the daily operation of the system.

IRRIGATION PART 4 GUARANTEES

The irrigation system contractor shall assume full responsibility for the proper installation of the system. Contractor shall guarantee the installation workmanship for a minimum period of one (1) year from date of final acceptance. The irrigation system contractor shall make all necessary, reasonable efforts to handle any warranty claims within the guarantee period in a reasonable time period. The Contractor shall not be required to replace, repair, or restore any portion of the work without additional service fees that are damaged, defaced, disturbed, and/or destroyed by others after final acceptance. Repairs made by other licensed contractors during the guarantee period shall not void the guarantee.



Install Rainbird BVAL50-1S139 or equal shut-off valve at all trees. Install Rainbird or equal XFD blank tubing around each tree with appropriate amount of equally spaced drip emitters. Quantity of Rainbird XB-#PC or equal emitters per tree are specified on the irrigation sheet. Drip shall encircle tree and be offset 2" from edge of rootball. Terminate drip encircling each tree with a compression hose end cap. Secure all emitter locations with ground staples.

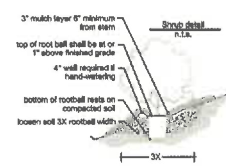
Detail for individual tree drip
Not To Scale

Rainbird or equal XFD blank tubing with Rainbird XB-#PC or equal emitter at same precipitation rate installed overtop of rootball or attach 1/4" tubing to emitter with bug cap to reach plant rootball off of 1/2" tubing when applicable. Use ground staples to secure emitter locations. Start all drip runs with a Rainbird BVAL50-1S139 shut-off valve. Terminate all drip runs with a compression hose end flush cap. Secure all emitter locations with ground staples.

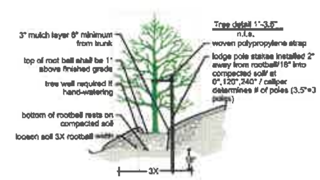
Detail for shrub emitters
Not To Scale

Use ground staples to secure ALL emitter locations. Pressure regulators shall be used in appropriate locations so all emitters receive pressures between 20-50 psi.

Shrub detail
n.t.s.



Tree detail 1"-3.5"
n.t.s.



BORTON DESIGN INC.

REVISIONS:

LANDSCAPE PLAN

Specifications/Details

COMMERCIAL RETAIL STORE - MARVIN BURNETT

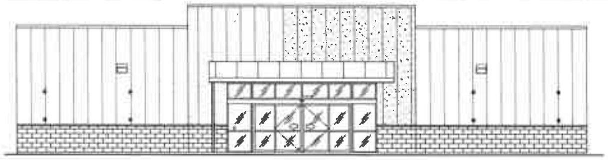
PREPARED FOR
CONCEPT COMAPANIES

BDI NO.	24200
DRAWN BY:	BDB
DESIGNED BY:	BDB
CHECKED BY:	BDB
DATE:	12/19/2023

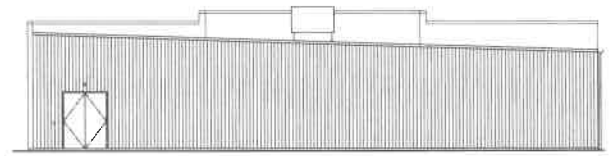
PLANS PREPARED BY

BRIAN DAVID BORTON PL.
NO. LA6667328

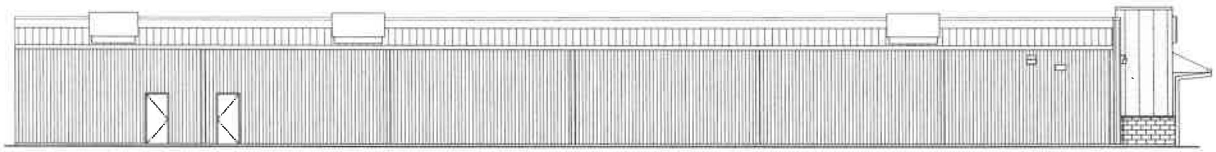
LS-03



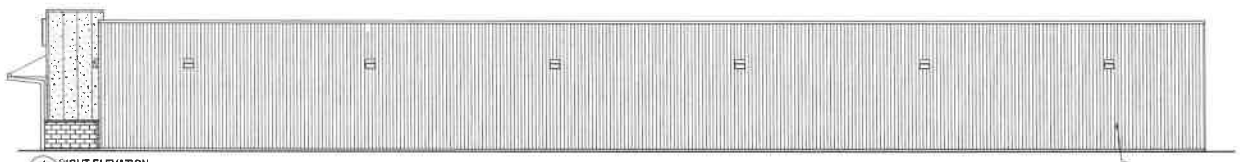
1 FRONT ELEVATION
A2.0 SCALE: 1/8" = 1'-0"



2 REAR ELEVATION
A2.0 SCALE: 1/8" = 1'-0"



3 LEFT ELEVATION
A2.0 SCALE: 1/8" = 1'-0"



4 RIGHT ELEVATION
A2.0 SCALE: 1/8" = 1'-0"

DUMPSTER KEY NOTES

1. TOP OF WALL, BOND BEAM SOLID POURED CONT. W/(2) #5 REBAR
2. SOLID POURED CELL EVERY 48" W/(1) #5 CONT. DRILLED & EPOXIED FROM TOP TO BOTTOM W/12" HOOK EACH END AND MIN. 30" SPLICE
3. 8" SPLIT-FACED CMU W/(1) #5 AT 48" O.C. TYP. (PAINT BLOCK TO MATCH BUILDING
4. FINISHED SLAB
5. 20"x18" CONCRETE FOOTING
6. (2) #5 CONT. W/12" STANDARD HOOK
7. 6" STEEL BOLLARD, POUR SOLID, PAINT TO MATCH BUILDING/CMU. SEE CIVIL PLANS FOR EMBEDMENT.
8. DUMPSTER (NIC)

CONCRETE FOOTING W/REINFORCED CONCRETE AS SHOWN

CONCRETE SHALL BE STANDARD MIX F'c=3000 PSI FOR ALL FOOTINGS AND SLABS OR SHALL BE STANDARD PUMP MIX F'c=3000 PSI. STRENGTH SHALL BE ATTAINED WITHIN 28 DAYS OF PLACEMENT. MIXING, PLACING AND FINISHING SHALL BE PER ACI STANDARDS.

CONCRETE SHALL BE PER MANUFATURER'S PRODUCT GUIDE ASTM C-90 REQUIREMENTS WITH MEDIUM SURFACE FINISH.

MORTAR SHALL BE TYPE 'M' OR 'N' FOR ALL MASONRY UNITS.

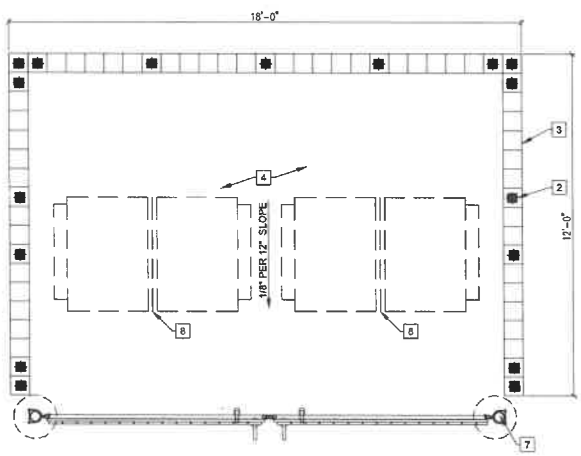
DUMPSTER ENCL. CONCRETE SPECS:

CONSTRUCT FOOTING w/REINFORCED CONCRETE AS SHOWN.

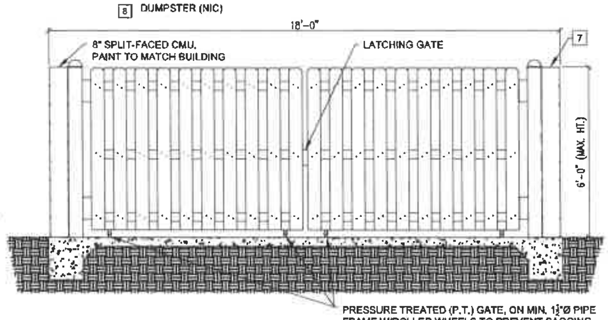
CONCRETE SHALL BE STANDARD MIX F'c = 3000 PSI FOR ALL FOOTINGS AND SLABS OR SHALL BE STANDARD PUMP MIX F'c = 3000 PSI. STRENGTH SHALL BE ATTAINED WITHIN 28 DAYS OF PLACEMENT. MIXING, PLACING AND FINISHING SHALL BE AS PER ACI STANDARDS.

CONCRETE BLOCK PER ASTM C-90 REQUIREMENTS WITH MEDIUM SURFACE FINISH. SEE SPECS ON A-12.

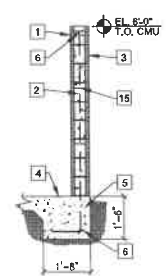
USE TYPE 'M' OR 'N' MORTAR TO LAY UP CONCRETE MASONRY BLOCK.



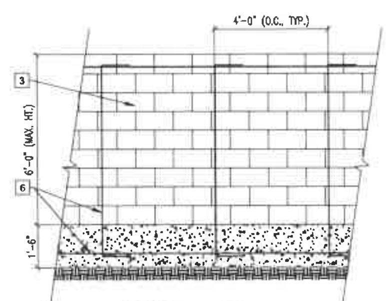
4A DUMPSTER ENCLOSURE PLAN
C2 SCALE: 1/2" = 1'-0"



4B DUMPSTER ENCLOSURE ELEVATION
C2 SCALE: 1/2" = 1'-0"



4C TYP. SECTION
C2 SCALE: 1/2" = 1'-0"



4D REBAR ELEVATION
C2 SCALE: 1/2" = 1'-0"

JAMES BLYTHE
REGISTERED ARCHITECT
RA LEED AP BD+C
1459 SW 74 DR
GAINESVILLE, FL 32607
AR94452

CONCEPT COMPANIES
1448 SW 74th DR, SU. 200 / GAINESVILLE, FL 32607
LICENCE# CGC-1505491
PH 877-306-1029 FAX 800-218-7806
WWW.CONCEPTCOMPANIES.NET

DOLLAR GENERAL
SR 47
LAKE CITY, FL 32025
STORE # TBD
PLAN '12480B' - 12,480 SQ. FT.

DRAWING DATE / DRAWN BY: 12/1/23 - JEM
REVISION DATE / REVISED BY:
PROJECT NUMBER: 4000.255
DRAWING TITLE: EXTERIOR ELEVATIONS & EXTERIOR FINISH SCHEDULE
SHEET NO: C2

MEMORANDUM

CRS Marvin Burnett

23-0653

CHW Professional Consultants

To: The City of Lake City

From: Randall Olney, P.E.

Date: March 20, 2024

RE: CRS Marvin Burnett – Meter Sizing Calculations

The following is a calculation for meter sizing for the proposed project based on the City of Lake City Utility Standards.

CRS Marvin Burnett Building data is based on the information available from the project architect at the time of this memo. Any changes to the building data will void the provided meter sizing calculation and requires a revised analysis to verify calculations are compliant with the City of Lake City Utility Standards criteria.

PROJECT NAME: CRS Marvin Burnett
PROJECT No.: 23-0653
FILE PATH: N:\2023\23-0653\Departments\04_Engineering\01_Regulatory Permitting\Utilities\Meter Sizing

ADF and ADF METER SIZING CALCULATIONS

Proposed Average Daily Flow – Stores per Bathroom = 200 gpd per bathroom per FAC 62E-6

Proposed Average Water Demand	2 bathrooms	X	200 gpd	400	gpd
			Total=	400	gpd
Proposed Average Water Demand ERC (Eqv. Residential Connection =350)				1.14	ERC
Peak Water Demand ERC (PF=4)				4.6	ERC
Peak Flow for Meter Sizing based on ADF (PF = 4, over 16 hours)				1.67	gpm
Peak Flow meter size per Lake City Utility Standards 2010				5/8	inch

Use 5/8" Meter with 1" RPZ Backflow Preventer

Randall Scott Olney

Digitally signed by Randall Scott Olney
DN: E=randyo@chw-inc.com, CN=Randall Scott Olney, O=Randall Scott Olney, L=Alachua, S=Florida, C=US
Date: 2024.03.21 13:50:11-04'00'

Randall Olney, FL P.E. No. 68382

03/21/2024

Date

Randall Scott Olney, State of Florida, Professional Engineer, License No. 68382

This item has been electronically signed and sealed by Randall Scott Olney, PE. On 03/21/2024 using a Digital Signature.

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

CHW
Professional Consultants

CRS Marvin Burnett

Private Lift Station Report

3/20/2024

Prepared for:
Florida Department of Environmental Protection
City of Lake City Utility Department

Prepared on behalf of:
Concept Development, Inc.
1449 SW 74th Drive. Suite 200
Gainesville, FL 32607

Prepared by:
Randall S. Olney
CHW

Randall Scott Olney
Digitally signed by Randall Scott Olney
DN: E=rsolney@chw-inc.com, CN=Randall Scott Olney, O=Randall Scott Olney, L=Alachua, S=Florida, C=US
Date: 2024.03.21 13:51:50-04'00'

Randall Scott Olney, State of Florida, Professional Engineer, License No. 68382

This item has been electronically signed and sealed by Randall Scott Olney, PE. On 03/21/2024 using a Digital Signature.

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

23-0653
N:\2023\23-0653\Departments\04_Engineering\01_Regulatory Permitting\Utilities\Lift Station

Professional Consultants

Project Number: 23-0653
Project Name: CRS Marvin Burnett
Date: 1/16/2024
Calculated by: JHP
Checked by: CCM

Flow Generation

Notes: 1) Estimated sewage flow per FAC 62-6.008, Table I

2	Water closets	X	200 gpd	400	gpd

Total average daily flow =	400	GPD
Average Daily In-Flow (Based on 16-hour Operation period) =	0.42	gpm
Peak Hour Factor =	4.0	
Design In-Flow =	1.7	gpm

Wetwell Design

	PROPOSED	
Desired Cycle Time =	30	min
Design In-Flow =	1.7	gpm
Average Daily Flow =	0.4	gpm
Minimum Storage Volume =	9.4	gallons
=	1.3	ft^3
Wetwell Diameter =	4.0	ft
Minimum Storage Depth =	0.10	ft
Actual Storage Depth =	0.13	ft
Actual Storage Volume =	12.22	gallons
Rim Elevation =	163.80	ft
Invert Elevation =	159.33	ft
High Water Alarm Elevation =	158.83	ft
Lag Pump on Elevation =	158.33	ft
Lead Pump on Elevation =	157.83	ft
Pumps off Elevation =	157.70	ft
Bottom of Wetwell Elevation =	155.70	ft
Highest Point Along Force Main =	166.40	ft
Height of Wetwell =	8.10	ft

$$Min\_Volume = \frac{T}{\frac{1}{DF - ADF} + \frac{1}{ADF}}$$

Force Main Hydraulics

Inside Wet Well/Valve Box Pipe Diameter =	2.0	in
Onsite Forcemain Pipe Diameter =	2.0	in
Offsite Forcemain Pipe Diameter =	4.0	in
Hazen-Williams C =	120	

Calculation for friction head loss:

$$H_L = L \frac{10.5}{D^{4.87}} \left(\frac{Q}{C} \right)^{1.852}$$

Normal Operating Tie-in Pressure =	35.0	psi
=	80.9	ft
Static Elevation Head =	8.7	ft

Project Number: 23-0653
Project Name: CRS Marvin Burnett
Date: 1/16/2024
Calculated by: JHP
Checked by: CCM

Equivalent Length of Straight Pipe for Fittings

$$L_2 = L_1\left(\frac{D_2}{D_1}\right)^{4.87}$$

Fitting Type			Equivalent Length (ft)	x	Quantity	=	Subtotal (ft) Eq. Length of same diam. PVC	Subtotal (ft) Eq. Length of 2 in. PVC Pipe
Inside Pump Station and Valve Vault	**2.00**	**in**						
Straight Pipe			12	x	1	=	12.0	12.0
90° Bend			3.1	x	2	=	6.2	6.2
Plug Valve			2.6	x	1	=	2.6	2.6
Tee Branch Flow			6.6	x	1	=	6.6	6.6
Check Valve			17.0	x	1	=	17.0	17.0
Gate Valve			1.5	x	1	=	1.5	1.5
Onsite Forcemain	**2.00**	**in**						
Straight Pipe			155	x	1	=	155.0	155.0
22.5° Bend			1.7	x	1	=	1.7	1.7
45° Bend			1.7	x	4	=	6.8	6.8
90° Bend			3.1	x	0	=	0.0	0.0
Check Valve			17.0	x	0	=	0.0	0.0
Plug Valve			2.6	x	1	=	2.6	2.6
Offsite Forcemain (Proposed)	**4.00**	**in**						
Straight Pipe			2	x	1	=	2.0	0.1
11.25° Bend			3.5	x	0	=	0.0	0.0
22.5° Bend			3.5	x	0	=	0.0	0.0
45° Bend			3.5	x	0	=	0.0	0.0
Tee Branch Flow			12.0	x	1	=	12.0	0.4
Check Valve			38.0	x	0	=	0.0	0.0
Gate Valve			2.5	x	1	=	2.5	0.1

NORMAL CONDITION:

Total Proposed Force Main Length = 169 ft (Includes length within lift station)
Total Proposed Effective Force Main Length = 213 ft

Out-Flow Design

Pump Run Time = 0.50 min
Design Out-Flow = 24.4 gpm
Design Out-Flow Velocity = 2.5 ft/s (No less than 2.0 ft/s, No more than 8 ft/s)

System Performance Curve

Flow (gpm)	*Normal Operation (with tie-in pressure)* Head (ft)
0	89.6
10	90.3
20	92.3
30	95.4
40	99.5
50	104.6
60	110.7
70	117.7
80	125.6
90	134.3
100	144.0
110	154.5
120	165.9
130	178.1
140	191.1
150	204.9
160	219.6
170	235.0
180	251.3
190	268.3
200	286.1
210	304.7
220	324.1
230	344.2
240	365.1
250	386.7
260	409.1
270	432.2
280	456.1
290	480.7
300	506.1
310	532.2
320	559.0
330	586.5
340	614.7
350	643.7
360	673.4
370	703.8

Pump Curve

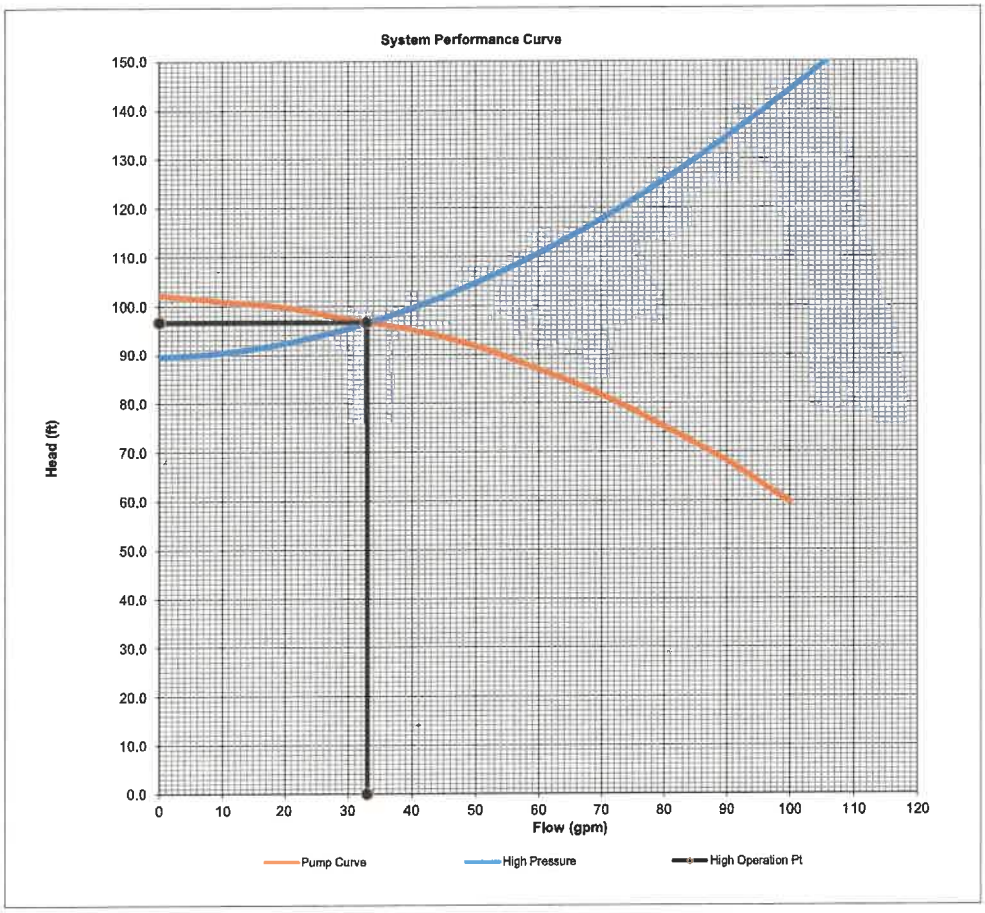
One Pump - Simplex Flow (gpm)	Head (ft)
0	102.2
10	100.9
20	99.7
30	97.3
40	95.1
50	91.7
60	86.9
70	81.7
80	75.2
90	68.1
100	59.7

Professional Consultants

Project Number: 23-0653
Project Name: CRS Marvin Burnett
Date: 1/16/2024
Calculated by: JHP
Checked by: CCM

Pump Specifications:

Pump:	Barnes	Imp Dia:	5	
Model:	NGVH50N2	Power:	5	hp
Discharge Flange Dia:	2.5"	Electrial Req:	3 Phase	
Speed:	3450	Voltage:	208	V



Professional Consultants

Project Number: 23-0653
Project Name: CRS Marvin Burnett
Date: 1/16/2024
Calculated by: JHP
Checked by: CCM

Design Operation Point (1 Pump - Normal Operation)

Flow (gpm)	Velocity (fps) in 2" FM	Head (ft)
33.0	3.4	96.6

System Performance at Normal Operation Design Point

Forcemain Velocity = 3.37 ft/s

Pump Run Time = 0.37 min

$$Pump\ Run\ Time = \frac{Storage\ Volume}{Design\ Operation\ Flow}$$

Cycle Time = 29.70 min
0.49 hrs

$$Cycle\ Time = \frac{Storage\ Volume}{ADF} + Pump\ Run\ Time$$

Fiberglass Wetwell

Displaced Volume =	101.8	cf
Unit Weight of Water =	62.4	pcf
Weight of Displaced Water =	6,352	lb
Bouyant Weight of Concrete =	77.60	pcf
Bouyant Weight of Soil above Concrete Ring =	47.60	pcf
Width of Bouyancy Concrete Ring =	1	ft
Required Height of Bouyancy Concrete Ring =	1.97	ft

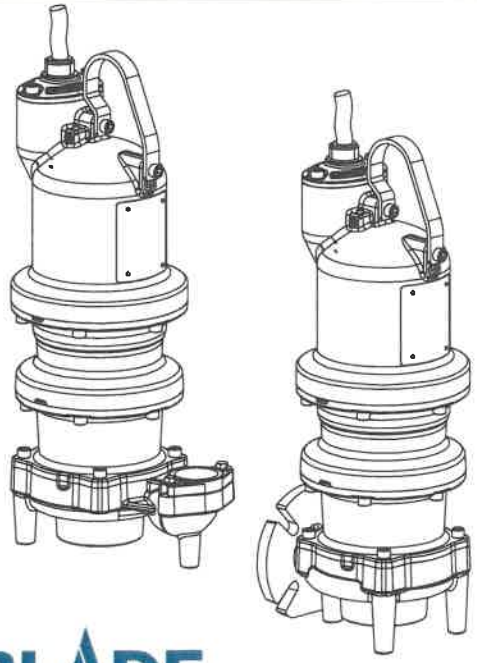
Submersible Grinder Pumps

Specifications:

DISCHARGE:		
	NGV Vertical	2" NPT
	NGVH Flange	2"/2.50"/3", Horizontal
	NGVHH Flange	2.50"/3", Horizontal
LIQUID TEMPERATURE		104°F (40°C) Continuous
VOLUTE		Cast Iron ASTM A-48, Class 30
MOTOR HOUSING		Cast Iron ASTM A-48, Class 30
SEAL PLATE		Cast Iron ASTM A-48, Class 30
IMPELLER:	*Design*	12 Vane,Vortex, With Pump Out Vanes On Back Side. Dynamically Balanced, ISO G6.3
	Material	Cast Iron ASTM A-48, Class 30
SHREDDING RING		Hardened 440C Stainless Steel, Rockwell® C-55
CUTTER		Hardened 440C Stainless Steel, Rockwell® C-55
SHAFT		416 Stainless Steel
SQUARE RINGS		Buna-N
HARDWARE		300 Series Stainless Steel
PAINT		Axalta™ Corlar® Epoxy, Two Coats
SEAL:	*Design*	Tandem Mechanical, Oil Filled Reservoir
	Material	Rotating Faces - Carbon Stationary Faces - Ceramic Elastomer - Buna-N Hardware -300 Series Stainless
CORD ENTRY		Custom Molded, Quick Connected for Sealing and Strain Relief
POWER CORD		CSA Certified Submersible Power Cable 2000V - Ordered Separately
UPPER BEARING:		
	Design	Single Row, Ball, Oil Lubrication
	Load	Radial
LOWER BEARING:		
	Design	Double Row, Ball, Oil Lubrication
	Load	Radial & Thrust
MOTOR:	*Design*	NEMA B Three Phase Torque Curve Oil-Filled, Squirrel Cage Induction, Inverter Duty rated per NEMA MG1
	Insulation	Class H Varnish & Magnet Wire
SINGLE PHASE		Requires overload protection to be included in control panel. Requires start components to be included in panel. Provided with pump
THREE PHASE		Requires overload protection to be included in control panel
MOISTURE SENSORS		Normally Open (N/O), Requires relay in control panel
TEMPERATURE SENSOR		Normally Closed (N/C) To be wired in series with control circuit
OPTIONAL EQUIPMENT		Seal Material, Impeller Trims, Cord Length, Leg Kit, 3" Spool Kit

C SP US
LR16567

SWPA MEMBER



BLADE

Series: NGV
3, 5 , 7.5 & 10HP,
3450RPM, 60Hz

Sample Specifications: Section 3 Page 12.

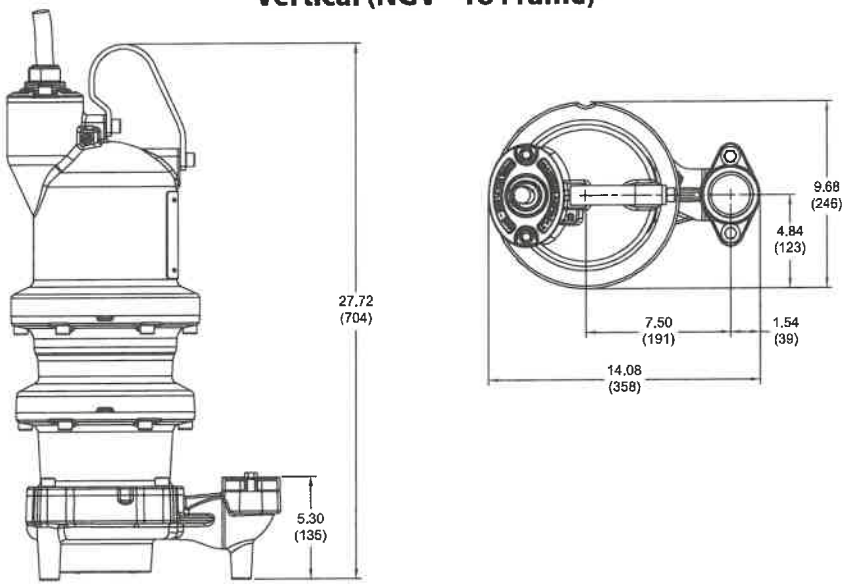
DESCRIPTION:

THE GRINDER PUMP IS DESIGNED TO **REDUCE** DOMESTIC, COMMERCIAL, INSTITUTIONAL AND LIGHT INDUSTRIAL SEWAGE TO A FINELY GROUND SLURRY.

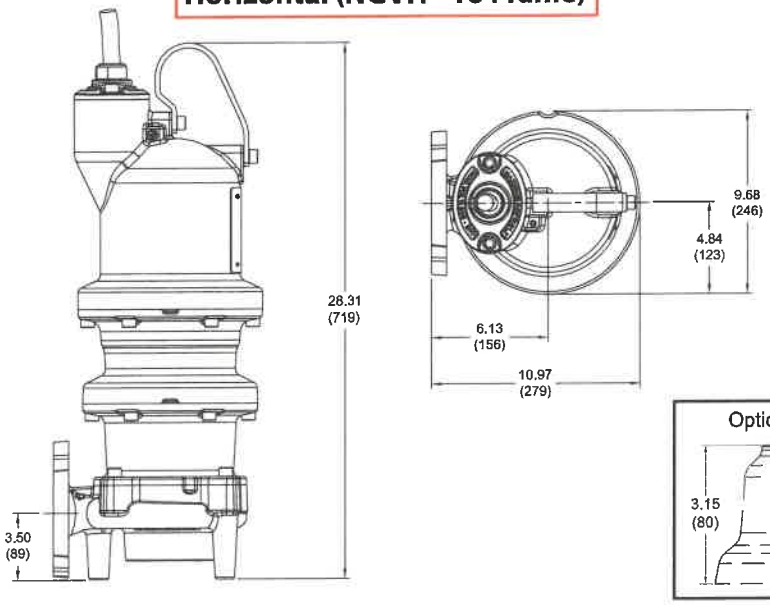
WARNING:
CANCER AND REPRODUCTIVE HARM - WWW.P65WARNINGS.CA.GOV

Vertical (NGV - 18 Frame)

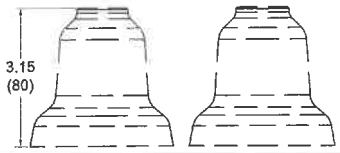
inches (mm)



Horizontal (NGVH - 18 Frame)



Optional Leg Kit - p/n 125506



IMPORTANT !

1.) MOISTURE AND TEMPERATURE SENSORS MUST BE CONNECTED TO VALIDATE THE WARRANTY.
2.) A SPECIAL MOISTURE SENSOR RELAY IS REQUIRED IN THE CONTROL PANEL FOR PROPER OPERATION OF THE MOISTURE SENSORS. CONTACT BARNES PUMPS FOR INFORMATION CONCERNING MOISTURE SENSING RELAYS FOR CUSTOMER SUPPLIED CONTROL PANELS.
3.) THESE PUMPS ARE CSA LISTED FOR PUMPING WATER AND WASTEWATER. **DO NOT USE TO PUMP FLAMMABLE LIQUIDS.**
4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.
5.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS 1 DIVISION 1 HAZARDOUS LOCATIONS.

Submersible Grinder Pumps

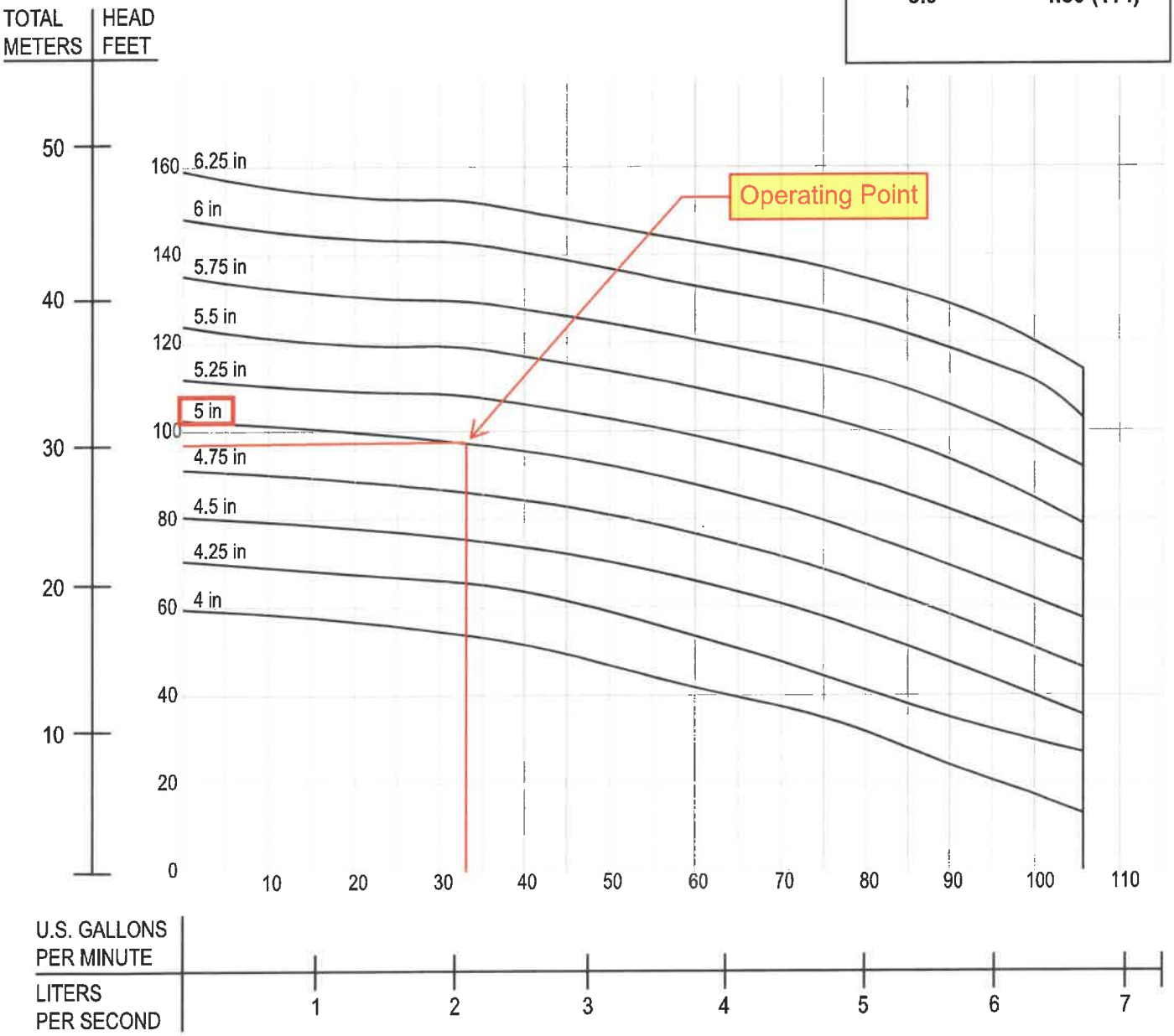
BLADE NGVH Pump - Horizontal													
MODEL NO	PART NO	HP	VOLT	PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	SERVICE FACTOR	LOCKED ROTOR AMPS	DRIVER FRAME	CORD P/N ▲	CORD SIZE	CORD O.D.
NGVH3072	141350N	3.0	208	1	60	3450	J	25.0	1.0	113.2	18	125496	12/4 - 18/4	.86 ± .02
			230				M	23.2		131.2				
NGVH30N2	141351N	3.0	208	3	60	3450	P	12.1	1.0	85.4	18	125496	12/4 - 18/4	.86 ± .02
			230					12.6		95.2				
			460					6.3		47.6		125497	12/4 - 18/4	.86 ± .02
NGVH3052	141353N	3.0	575	3	60	3450	P	5.0	1.0	38.1	18	125497	12/4 - 18/4	.86 ± .02
NGVH5072	141354N	5.0	208	1	60	3450	E	34.1	1.0	113.2	18	125498	8/4 - 18/4	1.12 ± .02
			230				G	29.9		131.2				
NGVH50N2	141355N	5.0	208	3	60	3450	J	17.8	1.0	85.4	18	125496	12/4 - 18/4	.86 ± .02
			230					16.0		95.2				
			460					8.0		47.6		125497	12/4 - 18/4	.86 ± .02
NGVH5052	141357N	5.0	575	3	60	3450	J	6.4	1.0	38.1	18	125497	12/4 - 18/4	.86 ± .02
NGVH75N2	141358N	7.5	208	3	60	3450	M	28.0	1.0	173.9	18	125496	12/4 - 18/4	.86 ± .02
			230					28.2		201.0				
			460					14.1		100.5		125497	12/4 - 18/4	.86 ± .02
NGVH7552	141360N	7.5	575	3	60	3450	M	11.3	1.0	80.4	18	125497	12/4 - 18/4	.86 ± .02

NOTE: A 3" Pipe Spool Kit is recommended for use of a NGVH with a 3x3 BAF.

IMPORTANT !
Moisture and Temperature sensor leads are integral to power cord.
Pump rated for operation at ± 10% voltage at motor.
▲ Cord Suffix: XC - 30 Feet, XF - 50 Feet, XJ - 75 Feet, or XL - 100 Feet.
▲ Cord sold separately.
Single Phase pumpes require start components to be included in panel. Provided with pump.

Submersible Grinder Pumps

STANDARD IMPELLER SIZES	
Pump HP	**Impeller Dia. in. (mm)**
7.5	6.25 (159)
5.0	5.25 (133)
3.0	4.50 (114)



Testing is performed with water, specific gravity 1.0 @ 68° F @ (20°C), other fluids may vary performance

MEMORANDUM

CRS Marvin Burnett

23-0653

CHW Professional Consultants

To: City of Lake City

From: Randall S. Olney, PE

Date: March 20, 2024

RE: CRS Marvin Burnett– Required Fire Flow

The following is a calculation for the required fire flow for the proposed project based on the NFPA 1: Fire Code.

Building data is based on the information available from the project architect at the time of this memo. Any changes to the building data will void the provided fire flow calculation and requires a revised analysis to verify the building complies with the applicable fire protection criteria. The building will not be protected by an approved automatic fire sprinkler system.

NFPA Required Flow Calculations:

Building: **Commercial Retail Store**
Construction Type: II (000)
Fire Flow Area: ±10,640 SF

Required Fire Flow per NFPA Table 18.4.5.1.2: 2,250 gpm

Available Fire Flow:

Based on the hydrant flow data supplied by the City of Lake City, the total available fire flow at 20 PSI is as follows:

Total Available: **2,345 gpm**

Minimum Required Fire Flow to be provided: **2,250 gpm**

Conclusions:

The total available flow (2,345 GPM) is higher than the minimum required (2,250 GPM).

As part of this development, a new hydrant will be installed onsite.

Randall Scott Olney

Digitally signed by Randall Scott Olney
DN: E=randyo@chw-inc.com, CN=Randall Scott Olney, O=Randall Scott Olney, L=Alachua, S=Florida, C=US
Date: 2024.03.21 13:51:12-04'00'

Date: 03/21/2024

Randall S. Olney, P.E. 68382

Randall Scott Olney, State of Florida, Professional Engineer, License No. 68382

This item has been electronically signed and sealed by Randall Scott Olney, PE. On 03/21/2024 using a Digital Signature.

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City of Lake City
Water flow report

HYDRANT # & LOCATION: 701 SW State Road 47 DATE: 12/4/2023

TEST BY: Al/Brandon Day: Monday Time: 9:10 Minutes: 2

WATER SUPPLIED BY: Municipal

PURPOSE OF TEST: request

DATA

FLOW HYDRANT(S)	A1	A2	A3
SIZE OPENING:	2.5	2.5	2.5
COEFFICIENT:	0.8		
PITOT READING:	40		
GPM:	943	0	0

TOTAL FLOW DURING TEST: 943 GPM

STATIC READING: 74 PSI RESIDUAL: 64 PSI

RESULTS: AT 20 PSI RESIDUAL 2345 GPM AT 0 PSI 2780 GPM

ESTIMATED CONSUMPTION: 1887 GAL.

REMARKS:

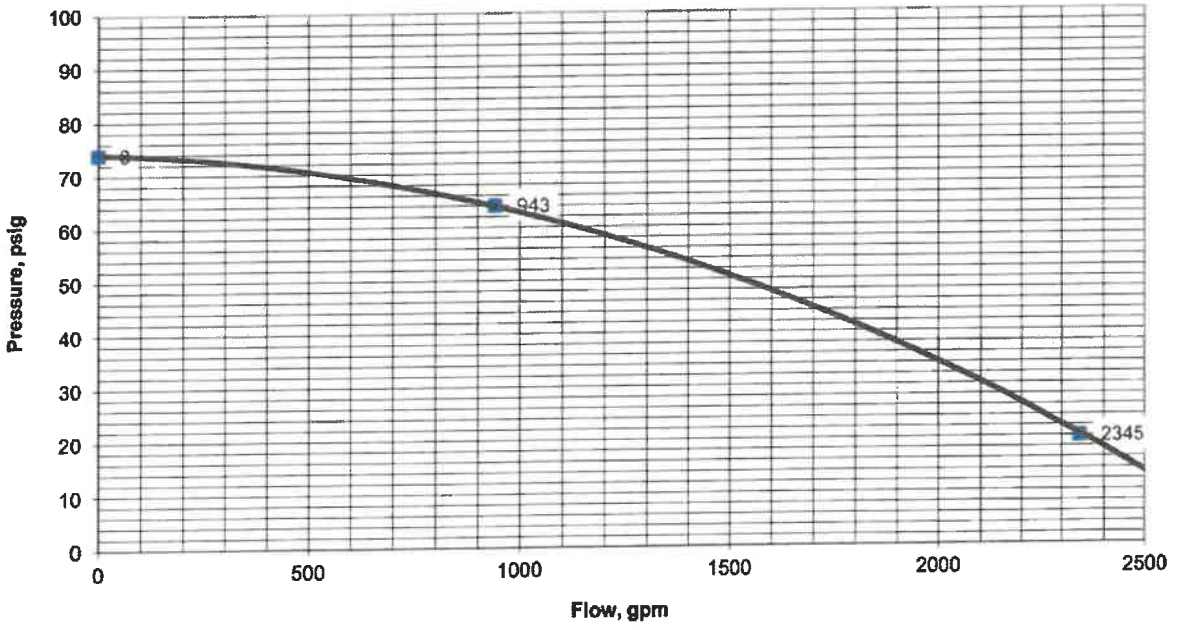

Table 18.4.5.1.2 Minimum Required Fire Flow and Flow Duration for Buildings

Fire Flow Area ft² (× 0.0929 for m²)					Fire Flow gpm[1] (× 3.785 for L/min)	Flow Duration (hours)
I(443), I(332), II(222)*	II(111), III(211)*	IV(2HH), V(111)*	II(000), III(200)*	V(000)*		
0–22,700	0–12,700	0–8200	0–5900	0–3600	1500	2
22,701–30,200	12,701–17,000	8201–10,900	5901–7900	3601–4800	1750	
30,201–38,700	17,001–21,800	10,901–12,900	7901–9800	4801–6200	2000	
38,701–48,300	21,801–24,200	12,901–17,400	9801–12,600	6201–7700	2250	
48,301–59,000	24,201–33,200	17,401–21,300	12,601–15,400	7701–9400	2500	
59,001–70,900	33,201–39,700	21,301–25,500	15,401–18,400	9401–11,300	2750	
70,901–83,700	39,701–47,100	25,501–30,100	18,401–21,800	11,301–13,400	3000	3
83,701–97,700	47,101–54,900	30,101–35,200	21,801–25,900	13,401–15,600	3250	
97,701–112,700	54,901–63,400	35,201–40,600	25,901–29,300	15,601–18,000	3500	
112,701–128,700	63,401–72,400	40,601–46,400	29,301–33,500	18,001–20,600	3750	
128,701–145,900	72,401–82,100	46,401–52,500	33,501–37,900	20,601–23,300	4000	4
145,901–164,200	82,101–92,400	52,501–59,100	37,901–42,700	23,301–26,300	4250	
164,201–183,400	92,401–103,100	59,101–66,000	42,701–47,700	26,301–29,300	4500	
183,401–203,700	103,101–114,600	66,001–73,300	47,701–53,000	29,301–32,600	4750	
203,701–225,200	114,601–126,700	73,301–81,100	53,001–58,600	32,601–36,000	5000	
225,201–247,700	126,701–139,400	81,101–89,200	58,601–65,400	36,001–39,600	5250	
247,701–271,200	139,401–152,600	89,201–97,700	65,401–70,600	39,601–43,400	5500	
271,201–295,900	152,601–166,500	97,701–106,500	70,601–77,000	43,401–47,400	5750	
Greater than 295,900	Greater than 166,500	106,501–115,800	77,001–83,700	47,401–51,500	6000	
		115,801–125,500	83,701–90,600	51,501–55,700	6250	
		125,501–135,500	90,601–97,900	55,701–60,200	6500	
		135,501–145,800	97,901–106,800	60,201–64,800	6750	
		145,801–156,700	106,801–113,200	64,801–69,600	7000	
		156,701–167,900	113,201–121,300	69,601–74,600	7250	
		167,901–179,400	121,301–129,600	74,601–79,800	7500	
		179,401–191,400	129,601–138,300	79,801–85,100	7750	
		Greater than 191,400	Greater than 138,300	Greater than 85,100	8000	

*Types of construction are based on NFPA 220.
[1]Measured at 20 psi (139.9 kPa).

COMPREHENSIVE PLAN CONSISTENCY ANALYSIS

CRS Marvin Burnett

23-0653

Professional Consultants

To:	Robert Angelo, City of Lake City Growth Management
From:	Braxton Linton III, Project Planner
Date:	December 7th, 2023
RE:	CRS Marvin Burnett – Comprehensive Plan Consistency Analysis

This Concurrency Analysis is submitted for CRS Marvin Burnett Lake City. The proposed use is a ±10,640-square-foot Commercial Retail Store and associated parking and stormwater. The site is on a portion of tax parcel is 07-4S-17-08127-005 in Columbia County, FL. A lot split is being completed on the site to create a 2.72-acre parcel adjacent to the intersection. One driveway connection will be to Marvin Burnett Road which is a county road. The future land use category is Commercial, and the zoning district is Commercial, Intensive (CI).

The following analysis estimates potential impacts on Lake City public facilities that may result from the proposed development. The following tables include data obtained within the City Comprehensive Plan and Florida Administrative Code (F.A.C.).

Future Land Use Element

Policy I.1.1: The location of higher density residential, high intensity commercial and heavy industrial uses shall be directed to areas adjacent to arterial or collector roads, identified on the Future Traffic Circulation Map, where public facilities are available to support such higher density or intensity.

COMMERCIAL
Lands classified as commercial use consist of areas used for the sale, rental, and Distribution of products or performance of services, as well as public, charter and private elementary, middle and high schools. In addition, off-site signs, churches and other house of worship, private clubs and lodges, residential dwelling units, which existed within this category on the date of adoption of this objective, and other similar uses compatible with commercial uses may be approved as special exceptions and be subject to an intensity of less than or equal to 0.25 floor area ratio except withing the (CG) Commercial, General, (CI) Commercial, Intensive, (C-CBD) Commercial-Central Business District and (CHI) Commercial, Highway Interchange districts being subject to intensity of less than or equal to 1.0 floor area ratio.

The proposed use, a Commercial Retail Store, is considered a retail use, which is consistent with the Commercial FLU category. Development will be consistent with standards set forth by the Commercial FLU category and CI Zoning District.

Objective I.2 The City shall adopt performance standards which regulate the location of land development consistent with topography and soil conditions and the availability of facilities and services.

The site is composed of three soils:

1. **Blanton Fine Sand, 0 to 5 percent slopes (hydro group: A)**

(904) 619-6521 | 8465 Merchants Way, Suite 102, Jacksonville, FL 32222
(352) 331-1976 | 11801 Research Drive, Alachua, FL 32615
(352) 414-4621 | 2100 SE 17th Street, Unit 802, Ocala, FL 34471
www.chw-inc.com

2. **Pelham Fine Sand, 0 to 2 percent slopes (hydro group: B/D)**
3. **Ichetucknee Fine Sand, 5 to 8 percent slopes (hydro group: D)**

According to the NRCS soil database, these soil types are conducive to the proposed development, which is also demonstrated on adjacent sites with similar uses and soil types.

Currently, there are no buildings located on the project site, there are developments to the north and east of the site.

Objective I.3 The City shall require that all proposed development be approved only where the public facilities meet or exceed the adopted level of service standard

Currently, there is no development on the project site. The proposed commercial retail store does not result in a degradation of Level of Service (LOS) standards, as is demonstrated in the Concurrency Impact Analysis memorandum submitted as part of this application.

Policy I.6.2 The City shall continue to include provisions for drainage, stormwater management, open space and safe and convenient on-site traffic flow including the provisions of needed vehicle parking for all development.

The proposed development will have onsite stormwater management facilities and adhere to all open space requirements set forth in Lake City's LDR. Safe and convenient on-site traffic flow will include one ingress and egress point on Marvin Burnett Road which is a county road. Parking will adhere to standards set in Lake City's LDR.

Objective I.6.5 The City shall continue to require that where a commercial or industrial use is erected or expanded on land abutting a residential district, then the proposed use shall provide a landscaped buffer. A masonry or wood opaque structure may be substituted for the planted buffer.

The subject property, specifically tax parcel 07-4S-17-08127-005, abuts a residential district to on the southwestern boundary. A landscape buffer is provided following guidelines from Lake City's LDR as shown in the landscape plan.

Transportation Element

Objective II.1: Level of Service

The City shall establish a safe, convenient, and efficient level of service standard which shall be maintained for all roadways.

The proposed Commercial Retail Store (Institute of Transportation Engineers (ITE) Land Use Code 814) will not result in a degradation of transportation Level of Service (LOS) standards. Demonstrated in the Concurrency Impact Analysis memorandum submitted as part of this application, there will be 447 net total projected daily trips.

Policy II.1.2 The City shall control the number and frequency of connection and access points of driveways and roads to arterials and collectors by requiring access points for state roads to be in conformance with Chapter 14-96 and 14-97, Florida Administrative Code, and the following requirements for non-state roads:

1. Permitting 1 access point for ingress and egress purposes to a single property or development.

The subject property includes one ingress and egress point one ingress and egress point on Marvin Burnett Road which is a county road.

Policy II.1.3 The City shall continue to require development to provide safe and convenient on-site traffic flow, which includes the provisions for vehicle parking.

Safe and convenient on-site traffic flow will be achieved by having one ingress and egress point one ingress and egress point on Marvin Burnett Road which is a county road. The parking lot will adhere to parking requirements set forth in Lake City's LDR.

Conservation Element

Policy V.5.2: Soils. The City shall protect soil resources through erosion and sedimentation control, by requiring proper design criteria on specific soils.

In an effort to conserve potable water, that at least 50 percent of the following required landscaped areas be comprised of vegetation native or indigenous to the north Florida area:

1. 10 percent of offstreet parking areas;

Parking area landscaped islands have been provided as shown in the landscape plan.

2. 10 foot buffer between residential and commercial uses;

This buffer has been provided following guidelines from Lake City's LDR as shown in the landscape plan.

3. 15 foot buffer between single family uses and multi-family uses or mobile home parks; and

Not Applicable.

4. 25 foot buffer between residential and industrial uses.

Not Applicable.

Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater aquifer Recharge Element

Objective IV.3: The City shall coordinate the extension of, or increase in the capacity of facilities by scheduling the completion of public sanitary sewer improvements concurrent with projected demand.

Policy IV.3.1: The City hereby establishes the following Level of Service standards for sanitary sewer facilities:

FACILITY TYPE	LEVEL OF SERVICE STANDARD
City of Lake City Community Sanitary Sewer System	135 gallons per capita per day

The proposed development will allow a use of ±10,640 sq. ft. of nonresidential use. As is demonstrated in the Concurrency Impact Analysis submitted as part of this application, this facility is estimated to use 1,064 Gallons Per day by the proposed use.

Objective IV.4: The City shall continue to coordinate the extension of, or increase in the capacity of solid waste facilities by scheduling the completion of public facility improvements and requiring that they are concurrent with projected demand.

Policy IV.4.1: The City hereby establishes the following level of service standards for solid waste disposal facilities:

FACILITY TYPE	LEVEL OF SERVICE STANDARD
Solid Waste Landfill	.85 tons per capita per year Residual capacity of landfill

The proposed development will allow a use of ±10,640sq. ft. of nonresidential use. As is demonstrated in the Concurrency Impact Analysis submitted as part of this application, this facility is estimated to use 233.02 lbs./day and 42.53 tons/year.

Objective IV.6: The City shall continue to coordinate the extension of, or increase in the capacity of potable water facilities by scheduling the completion of public facility improvements and requiring that they are concurrent with projected demand.

Policy IV.4.1: The City hereby establishes the following level of service standards for potable water.

FACILITY TYPE	LEVEL OF SERVICE STANDARD
City of Lake City	150 gallons per capita per day Residual capacity of landfill

The proposed development will allow a use of ±10,640 sq. ft. of nonresidential use. As is demonstrated in the Concurrency Impact Analysis submitted as part of this application, this facility is estimated to use 1,064 Gallons Per day by the proposed use.

CONCURRENCY ANALYSIS

CRS Marvin Burnett

23-0653

CHW Professional Consultants

To: Robert Angelo, City of Lake City Growth Management

From: Braxton Linton III, Project Planner

Date: December 7th, 2023

Re: CRS Marvin Burnett – Concurrency Impact Analysis

This Concurrency Analysis is submitted for CRS Marvin Burnett Lake City. The proposed use is a ±10,640-square-foot Commercial Retail Store and associated parking and stormwater. The site is on a portion of tax parcel is 07-4S-17-08127-005 in Columbia County, FL. A lot split is being completed on the site to create a 2.72 acre parcel adjacent to the intersection. One driveway connection will be to Marvin Burnett Road which is a county road. The future land use category is Commercial, and the zoning district is Commercial, Intensive (CI).

The following analysis estimates potential impacts on Lake City public facilities that may result from the proposed development. The following tables include data obtained within the City Comprehensive Plan and Florida Administrative Code (F.A.C.).

Roadways / Transportation

Trip generation figures are based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition.

Table 1: Projected Trip Generation

Land Use[1] (ITE)	Variable KSF	Daily	AM Peak			PM Peak		
		Total	Total	In	Out	Total	In	Out
Variety Store (ITE 814)	10.640	677	32	18	14	71	36	35
Pass-by Rate: = 34%*		230	11	6	5	24	12	12
Net Total Project Trips		**447**	**21**	**12**	**9**	**47**	**24**	**23**

1. *Source: ITE Trip Generation 11th Edition*
** The IT Trip Generation Manual, 11th Edition provides a pass-by rate of 34% during the PM peak but does not provide a pass-by rate for the AM and daily conditions, therefore, a pass-by rate of 34% is applied to the AM and daily scenarios.*

Conclusion: Approval of this application may generate **447** daily vehicle trips. This is not anticipated to negatively impact the adopted LOS for adjacent and nearby roadways.

Potable Water / Sanitary Sewer / Solid Waste

Table 2: Projected Potable Water Impacts

Land Use	Maximum Units	Gallons Per Day[1]	Estimated Demand (GPD)
Shopping center without food or laundry	10,640	.01 gallons / sq. ft. / day	1,064

1. *Source: Ch. 62E-6.008, Table 1, Florida Administrative Code*

Conclusion: The project site will be served by the existing Lake City potable water infrastructure. The subject property is served by Lake City's potable water, and it's anticipated to generate 1,064 Gallons per day.

Table 3: Projected Sanitary Sewer Impacts

Land Use	Maximum Units	Gallons Per Day[1]	Estimated Demand (GPD)
Shopping center without food or laundry	10,640	.01 gallons / sq. ft. / day	1,064

1. *Source: Ch. 62E-6.008, Table 1, Florida Administrative Code*

Conclusion: The project site will be served by the existing Lake City wastewater infrastructure. The subject property is served by Lake City's sanitary sewer, and it's anticipated to generate 1,064 Gallons per day.

Table 4: Projected Solid Waste Impacts

Land Use	Units	Solid Waste Generated (lbs/day)[1]	Solid Waste Generated (tons/year)[2]
Nonresidential	10,640 sq. ft.	233.02	42.53

1. *Formulas per Sincero and Sincero; Environmental Engineering: A Design Approach. Prentice Hall, New Jersey, 1996.*
   a. *Formula used, nonresidential: (((12 lbs. / 1,000 sq. ft./day * [10,640 sq. ft.]) * 365)/2,000)*
2. *Formula used, pounds per day to tons per year: ([lbs/day] * 0.005) * 365*

Conclusion: Solid waste facility capacity exists to adequately serve the intended office development for the subject property. The subject property is served by Lake City's solid waste, and it's anticipated to generate 233.02 pounds per day and 42.53 tons per year.

GSE Engineering & Consulting, Inc.

SUMMARY REPORT OF A GEOTECHNICAL SITE EXPLORATION – REVISION 1

DOLLAR GENERAL – LAKE CITY SW MARVIN BURNETT LAKE CITY, COLUMBIA COUNTY, FLORIDA

GSE PROJECT NO. 16251

Prepared For:

CONCEPT DEVELOPMENT, INC.

DECEMBER 2023

GSE Engineering & Consulting, Inc.

December 7, 2023

Andrea Barnett
Concept Development, Inc.
1449 SW 74th Drive, Suite 200
Gainesville, Florida 32607

Subject: Summary Report of a Geotechnical Site Exploration – Revision 1
Dollar General – Lake City SW Marvin Burnett
Lake City, Columbia County, Florida
GSE Project No. 16251

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, pavement, and stormwater management designs. This revision includes recommended soil parameters for stormwater management design with underdrains.

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.

JASON E. GOWLAND LICENSE No.66467 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Jason E Gowland
Digitally signed by Jason E Gowland
Date: 2023.12.07 15:39:40 -05'00'
on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Angelina X. Liu, E.I.
Staff Engineer

Jason E. Gowland, P.E.
Principal Engineer
Florida Registration No. 66467

AXL / JEG: tlf
Q:\Projects\16251 Dollar General – Lake City SW Marvin Burnett\16251 Rev.1.docx

Distribution: Addressee (1 - Electronic)
File (1)

GSE Engineering & Consulting, Inc.
5590 SW 64th Street, Suite B
Gainesville, Florida 32608
(352) 377-3233 Phone ◆ (352) 377-0335 Fax
www.gseengineering.com

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LIST OF FIGURES

Figure

1.0 INTRODUCTION

1.1 General

GSE Engineering & Consulting, Inc. (GSE) has completed this geotechnical exploration for the proposed commercial retail store located on SW Marvin Burnett Road in Lake City, Columbia County, Florida. This exploration was performed in accordance with GSE Proposal No. 2023-589 dated September 12, 2023. Ms. Andrea Barnett authorized our services on September 15, 2023.

1.2 Project Description

We understand that you are coordinating due diligence related work related to the development of this site into a commercial retail store. The site is located on the northwest corner of the State Road 47 and SW Marvin Burnett Road intersection in Lake City, Columbia County, Florida. The site is approximately +/-2.72 acres.

You provided GSE with information about the project. We understand the project will consist of an approximate 10,640 square foot building, a parking lot, and a stormwater management facility.

The structure is expected to be a single-story, high wall concrete masonry unit (CMU) and steel frame construction. Structural loads have not been provided but are expected to be on the order of 1 to 2 kips per foot for non-load bearing CMU walls, and less than 50 kips for columns. The finished floor of the structure is anticipated to be constructed within 1 to 2 feet of the existing site grades.

The building will be located in the northern portion of the site. The parking lot will be located west, south, and east of the structure. The stormwater management facility will be located on the western portion of the site.

A recent aerial photograph of the site was obtained and reviewed. The site plan and aerial photograph were used in preparation of this exploration and 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 five (5) Standard Penetration Test (SPT) borings to a depth of 20 feet below land surface (bls) within the proposed building area, five (5) auger borings to a depth of 5 feet bls in the area of the parking lot and driveways, and five (5) auger borings to depths of 15 feet bls in the area of the 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 September 20, 2023.

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, the standard two-inch O.D. split-barrel sampler was seated by driving it 6 inches into the undisturbed soil. The sampler was then 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 nine (9) percent soil fines passing the No. 200 sieve, nine (9) natural moisture content determinations, two (2) 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

Karen Roylos with GSE visited the site on September 18, 2023 to observe the site conditions and mark the boring locations. Mr. Jason Kite with Jason Kite, LLC was retained by GSE to clear lanes to allow access to the boring locations for drilling equipment.

The majority of the site is densely vegetated with trees, scattered saw palmettos, shrubs, vines and weedy groundcover. Portions of the site were densely vegetated and more difficult to traverse. To the south of the site is SW Marvin Burnett Road. State Road 47 is located east of the site. Undeveloped wooded land borders the site to the north and west.

The topography at the site is moderately sloping from northeast towards southwest. Regional topography can be characterized as gently to moderately sloping. The Lake City West USGS Topographic Map indicates the ground surface elevations at the site are near 155 to 165 feet[1] NAVD 88.

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 within the proposed parking lot and driveways encountered relatively similar soil conditions. Auger borings A-1 to A-3 encountered poorly graded sand, and sand with silt (SP, SP-SM) to the explored depths of 5 feet bls. Auger borings A-4 and A-5 initially encountered sand with silt (SP-SM) to depths of 1.5 to 3.5 feet bls. This was underlain by clayey to very clayey sand (SC, SC/CL) to the explored depths of 5 feet bls.

The auger borings located within the stormwater management facility encountered relatively consistent soil conditions. Auger boring P-1 encountered 6 feet of silty sand, and poorly graded sand (SM, SP) overlying clayey to very clayey sand, and clay with sand (SC, SC/CL, CL/CH) to the explored depth of 15 feet bls. Auger borings P-2 to P-4 initially encountered poorly graded sand, sand with silt, and silty sand (SP, SP-SM, SM) to depths of 2 to 5 feet bls, overlying silty clayey sand, and clayey to very clayey sand (SM-SC, SC, SC/CL) to depths of 7 to 10.5 feet bls. This was underlain by sand with silt (SP-SM) to depths of 12 to 13.5 feet bls, followed by clay-rich soils (CL/CH) to the explored depth of 15 feet bls. Auger boring P-5 initially encountered 5.5 feet of clayey sand (SC) and 5 feet of sand with silt (SP-SM) overlying clay with sand (CL/CH) to a depth of 12.5 feet bls. This was underlain by sand with silt (SP-SM) to the explored depth of 15 feet bls.

[1] United States Geological Survey, Lake City West Quadrangle, 2021.

The SPT borings located within the proposed building footprint indicate the soils across these areas are relatively consistent. SPT boring B-1 initially encountered 3 feet of sand with silt (SP-SM), and 4.5 feet of sandy clay (CL) overlying sand with clay, and poorly graded sand (SP-SC, SP) to a depth of 12 feet bls. This was underlain by clay (CL/CH) to the explored depth of 20 feet bls. SPT borings B-2 to B-5 encountered poorly graded sand, sand with silt, sand with clay, silty sand, and silty clayey sand (SP, SP-SM, SP-SC, SM-SC) with some interbedded layers of clayey to very clayey sand (SC, SC/CL) to depths of 13.5 to 17.5 feet bls. This was underlain by clay-rich (CL, CL/CH) soils to the explored depths of 20 feet bls.

The sandy soils (SP, SP-SM, SP-SC) encountered are generally in a very loose to dense condition with N-values ranging from 2 to 45 blows per foot. The silty sand, silty clayey sand, and clayey to very clayey sands (SM, SM-SC, SC, SC/CL) encountered are generally in a very loose to dense condition with N-values ranging from 4 to 38 blows per foot. The sandy clay, clay with sand, and clay (CL/CH, CL) encountered are generally in a very soft to hard condition with N-values ranging from 3 to 33 blows per foot.

Weight-of-rod strength material was encountered in SPT boring B-2 at depth range from 13.5 to 14.5 feet bls. This isolated occurrence is likely related to depositional characteristics of the soil materials and transitions between material types.

The groundwater table was encountered in the auger and SPT borings at depths of 6.1 to 8.8 feet bls at the time of our investigation.

3.3 Review of Published Data

The majority of the site is mapped as three soil series by the Soil Conservation Service (SCS) Soil Survey for Columbia County[2]. The following soil descriptions are from the Soil Survey.

Blanton fine sand, 0 to 5 percent slopes

Map Unit Setting

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

Map Unit Composition

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

[2] Soil Survey of Hamilton County, Florida. Soil Conservation Service, U.S. Department of Agriculture.

Description of Blanton

Setting

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

Typical profile

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

Properties and qualities

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

Interpretive groups

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

Minor Components

Albany

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

Troup

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

Chipley

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

Alpin

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

Ichetucknee fine sand, 5 to 8 percent slopes

Map Unit Setting

- *National map unit symbol:* vrt4
- *Elevation:* 330 to 660 feet
- *Mean annual precipitation:* 50 to 58 inches
- *Mean annual air temperature:* 64 to 72 degrees F
- *Frost-free period:* 258 to 288 days
- *Farmland classification:* Not prime farmland

Map Unit Composition

- *Ichetucknee and similar soils:* 80 percent
- *Minor components:* 20 percent
- *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Ichetucknee

Setting

- *Landform:* Hills on marine terraces, ridges on marine terraces
- *Landform position (three-dimensional):* Interfluve, side slope
- *Down-slope shape:* Convex
- *Across-slope shape:* Linear
- *Parent material:* Sandy and clayey marine deposits over limestone

Typical profile

- *A - 0 to 4 inches:* fine sand
- *E - 4 to 7 inches:* fine sand
- *Bg - 7 to 75 inches:* clay
- *2R - 75 to 79 inches:* weathered bedrock

Properties and qualities

- *Slope:* 5 to 8 percent
- *Depth to restrictive feature:* 50 to 75 inches to lithic bedrock
- *Drainage class:* Somewhat poorly drained
- *Runoff class:* Negligible
- *Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)
- *Depth to water table:* About 18 to 36 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
- *Sodium adsorption ratio, maximum:* 4.0
- *Available water supply, 0 to 60 inches:* Moderate (about 8.4 inches)

Interpretive groups

- *Land capability classification (irrigated):* None specified
- *Land capability classification (nonirrigated):* 6e
- *Hydrologic Soil Group:* D
- *Forage suitability group:* Loamy and clayey soils on rises, knolls, and ridges of mesic uplands (G138XA322FL)
- *Other vegetative classification:* Loamy and clayey soils on rises, knolls, and ridges of mesic uplands (G138XA322FL)
- *Hydric soil rating:* No

Minor Components

Goldsboro

- *Percent of map unit:* 10 percent
- *Landform:* Knolls on marine terraces, ridges on marine terraces
- *Landform position (three-dimensional):* Interfluve
- *Down-slope shape:* Convex
- *Across-slope shape:* Linear
- *Other vegetative classification:* Loamy and clayey soils on flats and rises of mesic lowlands (G138XA331FL)
- *Hydric soil rating:* No

Ocilla

- *Percent of map unit:* 10 percent
- *Landform:* Rises on marine terraces
- *Landform position (three-dimensional):* Interfluve
- *Down-slope shape:* Convex
- *Across-slope shape:* Linear
- *Other vegetative classification:* Sandy over loamy soils on rises and knolls of mesic uplands (G138XA231FL)
- *Hydric soil rating:* No

Pelham fine sand, 0 to 2 percent slopes

Map Unit Setting

- *National map unit symbol:* 2tg56
- *Elevation:* 0 to 190 feet
- *Mean annual precipitation:* 48 to 63 inches
- *Mean annual air temperature:* 57 to 79 degrees F
- *Frost-free period:* 251 to 293 days
- *Farmland classification:* Not prime farmland

Map Unit Composition

- *Pelham and similar soils:* 75 percent
- *Minor components:* 25 percent
- *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Pelham

Setting

- *Landform:* Flatwoods
- *Landform position (three-dimensional):* Talf
- *Down-slope shape:* Linear
- *Across-slope shape:* Linear
- *Parent material:* Sandy and loamy marine deposits

Typical profile

- *A - 0 to 6 inches:* fine sand
- *Eg - 6 to 26 inches:* fine sand
- *Btg1 - 26 to 42 inches:* sandy clay loam
- *Btg2 - 42 to 83 inches:* sandy clay loam

Properties and qualities

- *Slope:* 0 to 2 percent
- *Depth to restrictive feature:* More than 80 inches
- *Drainage class:* Poorly drained
- *Runoff class:* High
- *Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 5.95 in/hr)
- *Depth to water table:* About 6 to 12 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
- *Sodium adsorption ratio, maximum:* 4.0
- *Available water supply, 0 to 60 inches:* Moderate (about 7.0 inches)

Interpretive groups

- *Land capability classification (irrigated):* None specified
- *Land capability classification (nonirrigated):* 3w
- *Hydrologic Soil Group:* B/D
- *Ecological site:* F153AY060NC - Wet Loamy Flats and Depressions
- *Forage suitability group:* Sandy over loamy soils on flats of hydric or mesic lowlands (G153AA241FL)
- *Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G153AA241FL)
- *Hydric soil rating:* No

Minor Components

Unnamed

- *Percent of map unit:* 13 percent
- *Landform:* Flatwoods
- *Landform position (three-dimensional):* Talf
- *Down-slope shape:* Linear
- *Across-slope shape:* Linear
- *Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G153AA241FL)
- *Hydric soil rating:* Yes

Albany

- *Percent of map unit:* 6 percent
- *Landform:* Flatwoods
- *Landform position (three-dimensional):* Talf
- *Microfeatures of landform position:* Rises
- *Down-slope shape:* Convex
- *Across-slope shape:* Convex
- *Ecological site:* F153AY040NC - Moist Loamy Rises and Flats
- *Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
- *Hydric soil rating:* No

Meggett

- *Percent of map unit:* 3 percent
- *Landform:* Flatwoods
- *Landform position (three-dimensional):* Talf
- *Down-slope shape:* Linear
- *Across-slope shape:* Linear
- *Ecological site:* F153AY090NC - Flooded Mineral Soil Floodplains and Terraces
- *Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G153AA341FL)
- *Hydric soil rating:* Yes

Surrency

- *Percent of map unit:* 3 percent
- *Landform:* Drainageways, depressions
- *Landform position (three-dimensional):* Dip
- *Down-slope shape:* Linear, concave
- *Across-slope shape:* Convex, concave
- *Ecological site:* F153AY060NC - Wet Loamy Flats and Depressions
- *Other vegetative classification:* Sandy over loamy soils on stream terraces, flood plains, or in depressions (G153AA245FL)
- *Hydric soil rating:* Yes

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-surface to 15 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 sand with silt, silty sand, silty sand with clay, sand with clay, clayey sand, very clayey sand, and sandy clay. The tested sand with silt (SP-SM) contains approximately 11 percent soil fines passing the No. 200 sieve with a natural moisture content of about 8.7 percent. The tested silty sand, and silty sand with clay (SM, SM-SC) contains approximately 14 to 27 percent soil fines passing the No. 200 sieve with natural moisture contents of about 7.8 to 18 percent. The tested sand with clay (SP-SC) contains approximately 11 percent soil fines passing the No. 200 sieve with a natural moisture content of about 17 percent. The tested clayey sand (SC) contains approximately 30 percent soil fines passing the No. 200 sieve with a natural moisture content of about 13 percent. The tested very clayey sand (SC/CL) contains approximately 34 percent soil fines passing the No. 200 sieve with a natural moisture content of about 18 percent. The tested sandy clay (CL) contains approximately 56 to 62 percent soil fines passing the No. 200 sieve with natural moisture contents of about 17 to 23 percent.

Atterberg Limits tests indicate the tested sandy clay (CL) has Liquid Limit (LL) values of 35 and 41, Plastic Limit (PL) values of 15 to 18, and Plasticity Index (PI) values of 17 and 26. These values correspond to materials with low potential (LL < 50) to marginal potential (PI ≤ 35) for expansive behavior[3].

The constant head hydraulic conductivity test results indicate the near-surface silty sand (SM) has hydraulic conductivity values of 0.8 to 1.1 feet per day. The tested clayey sand (SC) has no flow. Tests were not conducted on the deeper very clayey sand due to the limitations of the test method on soils having moderate to high fines content, but these soils are expected to have permeability values at least one order of magnitude lower than the sandy soils.

[3] 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

The groundwater table was encountered in the borings at depths of 6.1 to 8.8 feet bls at the time of our exploration. The Soil Survey indicates the groundwater table is typically at a depth of near-surface to 6 feet bls. We anticipate the seasonal high groundwater table will be near depths of 1 to 3.5 feet bls. Estimates for the seasonal high groundwater table are shown on the individual boring logs.

4.3 Building Foundations

The SPT borings located within the proposed building footprint indicate the soils across these areas are relatively consistent. SPT boring B-1 initially encountered 3 feet of sand with silt (SP-SM), and 4.5 feet of sandy clay (CL) overlying sand with clay, and poorly graded sand (SP-SC, SP) to a depth of 12 feet bls. This was underlain by clay (CL/CH) to the explored depth of 20 feet bls. SPT borings B-2 to B-5 encountered poorly graded sand, sand with silt, sand with clay, silty sand, and silty clayey sand (SP, SP-SM, SP-SC, SM-SC) with some interbedded layers of clayey to very clayey sand (SC, SC/CL) to depths of 13.5 to 17.5 feet bls. This was underlain by clay-rich (CL, CL/CH) soils to the explored depths of 20 feet bls.

Based upon the soil conditions encountered and our limited understanding of the structural loads and site grading, 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 2,500 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 majority of the near-surface soils, 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 Flexible Pavement

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.

The seasonal high groundwater table is estimated to be approximately 12 inches to about 3.5 feet beneath existing grade across the site. We recommend a minimum of either 12 to 24 inches of separation (depending upon the pavement section design) be present between the bottom of the base course and the estimated seasonal high groundwater table. If this separation cannot be achieved by site grading, GSE recommends underdrains be used beneath the base course.

4.4.1 Stabilized Subgrade

If a crushed limerock or recycled concrete base is used, we recommend a stabilized subgrade be located beneath the base. The stabilized subgrade should have a minimum Limerock Bearing Ratio (LBR) of 40, with minimum thicknesses of 6 inches for automobile parking areas and 12 inches for driveways.

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).

4.4.2 Base Course

The base course can consist of either crushed limerock, soil cement, or recycled concrete. If you should use a soil cement base course, a stabilized subgrade is not required.

Limerock should have an LBR of at least 100, be obtained from a FDOT approved source and meet FDOT gradation requirements. The base course thickness should be a minimum of 6 inches in automobile parking areas, and 8 inches in driveway areas. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557). We recommend a minimum 24 inches separation between the bottom of the limerock base course and the estimated seasonal high-water table. If site grading does not allow for this separation, we recommend underdrains be considered.

Soil cement can consist of an imported material or a blend of the on-site soils and cement. A mix design should be performed to determine the optimum cement content. We recommend the soil cement have a minimum 28-day compressive strength of 500 psi. Soil cement can be blended off-site (in a pug mill) or on site. Soil cement pills should be cast from each day's production to verify the recommended compressive strength has been achieved at 28 days. We recommend the soil cement base course be a minimum of 8 inches thick throughout the project. We recommend a minimum 18 inches separation between the bottom of the soil cement base course and the estimated seasonal high-water table. If site grading does not allow for this separation, we recommend underdrains be considered.

Recycled concrete should have an LBR of at least 150, be obtained from a FDOT approved source and meet FDOT gradation requirements. The base course thickness should be a minimum of 8 inches. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557). We recommend a minimum 12 inches separation between the bottom of the recycled concrete base course and the estimated seasonal high-water table. If site grading does not allow for this separation, we recommend underdrains be considered.

4.4.3 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.

4.5 Rigid Pavement

Concrete pavement is a rigid pavement that results in smaller load transfers to the subgrade soils than flexible pavement. For concrete pavement subgrade, we recommend using the existing surficial sands or recommended clean sand (SP) fill, compacted to at least 98 percent of the Modified Proctor maximum dry density without additional stabilization with the following stipulations:

1. Subgrade soils must be compacted to at least 98 percent of Modified Proctor maximum dry density to a depth of at least 2 feet prior to placement of concrete.
2. The surface of the subgrade soils must be smooth and any disturbances or wheel rutting corrected prior to placement of the concrete.
3. The subgrade soils must be moistened prior to placement of concrete.
4. Concrete pavement thickness should be uniform throughout, with the exception of thickened edges (curb or footing).
5. The bottom of the pavement should be separated from the estimated seasonal high groundwater level by at least 18 inches.
6. Limerock or any other impermeable base is not suitable unless it meets the minimum recommended permeability of 10 ft/day.
7. The upper 12 inches of subgrade underlying the base course must also be "free-draining" and water that enters the base and subgrade must be allowed to seep out by gravity or if this is not possible, underdrains must be incorporated into the subgrade. A "bathtub" condition within the base/subgrade must be avoided.

Our recommendations for slab thickness for both light-duty and heavy-duty concrete pavements is based on a.) subgrade soils are compacted to 98 percent of the Modified Proctor maximum dry density, b.) modulus of subgrade reaction (k) of 200 pounds per cubic inch, c.) a 20-year design life, and d.) previously stated design parameters. For an anticipated light-duty traffic group, a minimum pavement thickness of 5.5 inches is recommended, using Table 2.4 from the ACI 330 Guide for Design and Construction of Concrete Parking Lots, ACI 330R-01. For an anticipated heavy-duty traffic group, a minimum pavement thickness of 8 inches is recommended, using Table 3.4 from the FDOT *Rigid Pavement Design Manual*, January 2019.

We recommend using concrete with a minimum 28-day compressive strength of 4,000 pounds per square inch and a minimum 28-day flexural strength (modulus of rupture) of at least 600 pounds per square inch based on the third point loading of concrete beam test samples. Maximum control joint spacing of 12.5 by 12.5 feet is suggested for light-duty concrete pavements. Maximum control joint spacing of 15 by 15 feet is suggested for heavy-duty concrete pavements. Layout of sawcut control joints should form square panels, and the depth of sawcut joint should be at least 1/4 of the concrete slab thickness. The joints should be sawed within six hours of concrete placement or as soon as the concrete has developed sufficient strength to support workers and equipment.

For further details on concrete pavement construction, refer to "Guide to Jointing Non-reinforced Concrete Pavements" published by the Florida Concrete and Products Associates, Inc. and "Building Quality Concrete Parking Areas", published by the Portland Cement Association.

4.6 Site Preparation

The soils at this site should be suitable for supporting the proposed construction using normal, good practice site preparation procedures. 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, 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

Temporary dewatering may be necessary for this project. If needed, 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 Proof Compaction

Compact the subgrade to a density of at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). The specified compaction should be obtained to a depth of 1 foot below the foundation bottoms and the existing grade prior to placing fill. Vibratory roller equipment should not be used within approximately 100 feet of existing structures. Lighter "walk-behind" compaction equipment may be used to achieve the degree of compaction.

Should clayey sand be encountered at the bearing surface, this material should be probed and visually confirmed to be unyielding in the upper 12 inches in lieu of density testing. If the foundation excavations penetrate the clayey sand, the excavation should be performed in a manner that reduces soil disturbance. Clayey sand soils (with fines content in excess of 15 percent) that are removed and replaced or appreciably disturbed need to be re-compacted to 98 percent of the Standard Proctor maximum dry density (ASTM D698).

4.6.5 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. 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 50 linear feet of continuous footing and every other column footing, per foot depth of fill or native material. We recommend a compaction test be performed for each 2,500 square feet of floor area or 10,000 square feet of pavement area per foot of fill or native material, or a minimum of three tests each, whichever is greater. Test all footing excavations to a depth of 12 inches at the frequencies stated above.

4.8 Stormwater Management

The auger borings located within the stormwater management facility encountered relatively consistent soil conditions. Auger boring P-1 encountered 6 feet of silty sand, and poorly graded sand (SM, SP) overlying clayey to very clayey sand, and clay with sand (SC, SC/CL, CL/CH) to the explored depth of 15 feet bls. Auger borings P-2 to P-4 initially encountered poorly graded sand, sand with silt, and silty sand (SP, SP-SM, SM) to depths of 2 to 5 feet bls, overlying silty clayey sand, and clayey to very clayey sand (SM-SC, SC, SC/CL) to depths of 7 to 10.5 feet bls. This was underlain by sand with silt (SP-SM) to depths of 12 to 13.5 feet bls, followed by clay-rich soils (CL/CH) to the explored depth of 15 feet bls. Auger boring P-5 initially encountered 5.5 feet of clayey sand (SC) and 5 feet of sand with silt (SP-SM) overlying clay with sand (CL/CH) to a depth of 12.5 feet bls. This was underlain by sand with silt (SP-SM) to the explored depth of 15 feet bls.

The water table was encountered in the auger borings at depths of 7.5 to 8.8 feet bls at the time of our exploration. We anticipate the seasonal high groundwater table to be at depths of 1 to 2.5 feet bls.

The laboratory permeability tests indicate the surficial layers of silty sand (SM) has hydraulic conductivity values of 0.8 to 1.1 feet per day, and clayey sand (SC) has no flow. The deeper very clayey sand encountered below the surficial sandy soils is friable and will have permeability values at least one order of magnitude lower than the sandy soils. The underlying dense soils and clay-rich soils are expected to be confining soils.

Mr. Cole Menhennett with CHW confirmed the proposed stormwater management facility as a dry pond via email. We understand that the current design will consider underdrains. We understand that imported clean sand will be used for the backfill for the underdrains. This revision includes soil parameters considering and underdrain design with clean sand backfill.

Based upon our findings and test results, our recommended soil parameters for the stormwater management design in the explored areas are presented below. The recommended parameters consider the results of the permeability tests, wash 200 determinations, and our experience with these types of soils. The parameters below do not consider a factor of safety.

Proposed Stormwater Management Facility

1. Base elevation of effective or mobilized aquifer (average depth of confining layer) equal to 8 feet bls.
2. Unsaturated vertical infiltration rate of 10 foot per day.
3. Horizontal hydraulic conductivity equal to 10 feet per day.
4. Specific yield (fillable porosity) of 20 percent.
5. Average seasonal high groundwater table depth equal to 2 feet bls.
6. Average seasonal low groundwater table depth equal to 6 feet bls.

In areas where clay-rich soils are present at the basin bottom, we recommend these soils be undercut a minimum of 2 feet and backfilled with the on-site sands and sands with silt (SP, SP-SM) having a maximum of 12 percent soil fines passing the No. 200 sieve. This fill should also be used above the bottom of the underdrains. The intent of this undercutting and replacement is to provide a more uniform sand "blanket" at the basin bottom that allows the migration of water to the underdrains. This sand blanket will also reduce the potential for clay-fines leaching out of the soils when water is present in the basin that can result in a thin layer of confining type material on the basin bottom that can reduce the effectiveness of the basin.

4.9 Fill Suitability

The soils encountered at this site within the explored depths range from sands (SP) to clays (CL/CH). A discussion of the suitability for reuse as structural fill for each soil classification according to the Unified Soil Classification System (USCS) designation is provided below.

SP, SP/SM – Sands (SP) and sand with silt (SP/SM) have less than 5 percent and 12 percent soil fines passing the No. 200 sieve, respectively, and are typically well draining soils that are suitable for reuse as structural fill. The sands with silt may require moisture conditioning (drying) to make the material more workable. These soils will require stockpiling and drying before they are reused if they are excavated from below the water table.

SM – Silty sands (SM) can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Silty sands are typically non-plastic or have low plasticity, and can be reused as structural fill with precautions. Silty sands can be moisture sensitive and difficult to work and compact and can rut if the moisture content is near or above the optimum moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable silty sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Silty sands with more than 30 percent soil fines are especially moisture sensitive, and are not recommended for reuse as structural fill. These soils will behave more as sandy silt, and for this reason, very silty sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SM/ML. Silty sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

SC – Clayey sand (SC) soils can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Clayey sands can have a high range of plasticity, varying from a PI of 7 or greater and plotting above the A-line to highly plastic. Friable clayey sands are typically suitable for use as structural fill with precautions. Clayey sands will be moisture sensitive and difficult to work and compact and can rut during placement if the moisture content is near or above the natural moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable clayey sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Clayey sands with more than 30 percent soil fines passing the No. 200 sieve are especially moisture sensitive and are typically highly plastic, and are not recommended for reuse as structural fill. These soils will behave more as sandy clay, and for this reason, very clayey sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SC/CH or SC/CL. Clayey sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

ML, MH, CL, CH – Silts and clays are not suitable materials for reuse as structural fill.

When using on-site soils as fill materials, we recommend the silty and clayey sand soils (SM, SC) be used in the lower depths of the fill. Sand and sand with silt (SP, SP-SM) should be used in the upper portions of the fill. We recommend a minimum of 2 feet of sand (SP, SP-SM) cover the silty and clayey sand fill materials to reduce the potential for soggy surface conditions due to the low permeability characteristics of the silty and clayey sand materials.

4.10 Surface Water Control and Landscaping

Roof gutters should be considered 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. 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 any 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.

5.0 FIELD DATA

5.1 Auger Boring Logs

GSE Engineering & Consulting, Inc.
GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER A-1**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING NE CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 3.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0				(SP) Brown and gray SAND
1		AU 1		
2				2.0
		AU 2		(SP) Pale gray and brown SAND
3				▽
4				
5				5.0
				Bottom of borehole at 5.0 feet.

DATE PERFORMED 9/20/2023 **BORING NUMBER A-2**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING NE CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 3.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0				(SP-SM) Dark brown and gray SAND with silt
1		AU 1		*%PASS-200 = 11* *MC = 8.7*
2				2.5
		AU 2		(SP) Pale brown SAND
3				▽
4				
5				5.0
				Bottom of borehole at 5.0 feet.

(Continued Next Page)

GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER A-3**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
AT TIME OF DRILLING NE CHECKED BY AXL
ESTIMATED SEASONAL HIGH 3.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0				(SP-SM) Brown and gray SAND with silt
1		AU 1		
2				2.0
		AU 2		(SP) Pale gray and brown SAND
3				
4				
5				5.0
				Bottom of borehole at 5.0 feet.

DATE PERFORMED 9/20/2023 **BORING NUMBER A-4**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
AT TIME OF DRILLING NE CHECKED BY AXL
ESTIMATED SEASONAL HIGH 3.0 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0				(SP-SM) Brown and gray SAND with silt
1		AU 1		1.5
2				(SC/CL) Brown, gray, and orange very clayey SAND
3		AU 2		*%PASS-200 = 34* *MC = 18*
4				
5				5.0
				Bottom of borehole at 5.0 feet.

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5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER A-5**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING NE CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 3.0 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0		AU 1		(SP-SM) Brown and gray SAND with silt
1				
2				
3				▽
				3.5
		AU 2		(SC) Brown and gray clayey SAND
4				
5				5.0
				Bottom of borehole at 5.0 feet.

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5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER P-1**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
AT TIME OF DRILLING 7.5 ft CHECKED BY AXL
ESTIMATED SEASONAL HIGH 2.5 ft
NOTES

DATE PERFORMED 9/20/2023 **BORING NUMBER P-2**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
AT TIME OF DRILLING 7.8 ft CHECKED BY AXL
ESTIMATED SEASONAL HIGH 2.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0.0				(SM) Gray and brown silty SAND
2.5		AP 1		*%PASS-200 = 14* *MC = 7.8* *k_h = 1.1 ft/day*
4.0		AU 2		(SP) Brown and gray SAND with trace of clay
5.0				
6.0				(SC/CL) Pale gray and brown very clayey SAND
7.5		AU 3		
10.0				
12.0		AU 4		(CL/CH) Gray CLAY with sand
12.5				
13.5		AU 5		(SC) Brown and orange clayey SAND
15.0				Bottom of borehole at 15.0 feet.

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0.0		AU 1		(SP) Brown and gray SAND
2.5				
3.5		AU 2		(SC) Brown and orange clayey SAND
5.0				
6.5		AU 3		(SM-SC) Gray, brown, and orange silty clayey SAND
7.5				
10.0				
10.5		AU 4		(SP-SM) Pale gray and brown SAND with silt
12.5				
13.5		AU 5		(CL/CH) Pale gray and brown CLAY with sand
15.0				Bottom of borehole at 15.0 feet.

(Continued Next Page)

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GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER P-3**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING 7.5 ft CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 1.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0.0		AP 1		(SM) Brown silty SAND
				%PASS-200 = 15
				▽ *MC = 9.7*
				k_h = 0.8 ft/day
2.5		AU 2		2.0 (SC) Brown, gray, and orange clayey SAND
5.0				
7.5		AU 3		7.0 ▼ (SP-SM) Pale gray and pale brown SAND with silt
10.0				
12.5		AU 4		12.0 (CL/CH) Green CLAY with sand
15.0				15.0 Bottom of borehole at 15.0 feet.

DATE PERFORMED 9/20/2023 **BORING NUMBER P-4**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING 8.8 ft CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 2.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0.0		AU 1		(SP-SM) Brown and gray SAND with silt
				▽
2.5				
5.0		AU 2		5.0 (SC) Brown, gray, and orange clayey SAND
7.5		AU 3		7.5 (SC/CL) Brown, gray, and orange very clayey SAND
				▼
10.0		AU 4		10.0 (SP-SM) Pale brown and pale gray SAND with silt
12.5		AU 5		12.5 (CL/CH) Brown and gray CLAY with sand
15.0				15.0 Bottom of borehole at 15.0 feet.

(Continued Next Page)

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Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER P-5**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING 8.8 ft CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 1.0 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0.0				(SC) Brown and gray clayey SAND
2.5		AP 1		*%PASS-200 = 30* *MC = 13* *k_h = NF*
5.0				
		AU 2		(SP-SM) Brown, gray, and orange SAND with silt
7.5				
10.0		AU 3		(CL/CH) Gray and brown CLAY with sand
12.5		AU 4		(SP-SM) Brown and orange SAND with silt
15.0				Bottom of borehole at 15.0 feet.

5.5
10.5
12.5
15.0

5.2 Standard Penetration Test Soil Boring Logs

GSE Engineering & Consulting, Inc.
GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

BORING NUMBER B-1

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 9/20/23 **COMPLETED** 9/20/23
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Flight Auger
▼ **AT TIME OF DRILLING** 6.5 ft
LOGGED BY WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 3.5 ft
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		(SP-SM) Very loose brown SAND with silt		SPT 1	1-1-1 (2)	35	18	17	56	17	20 40 60 80
			3	SPT 2	1-2-3 (5)						
5		▽ (CL) Firm to very stiff brown, gray, and orange sandy CLAY		SPT 3	4-6-9 (15)						
		▼		SPT 4	7-10-11 (21)						
			7.5	SPT 5	8-11-12 (23)						
		(SP-SC) Medium dense brown, gray, and orange SAND with clay	9.5	SPT 6	9-10-14 (24)						
10		(SP) Medium dense pale gray and brown SAND									
			12								
		(CL/CH) Firm to stiff green and orange CLAY		SPT 7	3-4-5 (9)						
15											
				SPT 8	2-3-4 (7)						
20			20								
		Bottom of borehole at 20.0 feet.									

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GSE Engineering & Consulting, Inc.
GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

BORING NUMBER B-2

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 9/20/23 **COMPLETED** 9/20/23
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Flight Auger
▼ **AT TIME OF DRILLING** 6.1 ft
LOGGED BY WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 3.5 ft
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		(SP-SM) Very loose gray and brown SAND with silt		SPT 1	1-2-2 (4)						20 40 60 80
			3	SPT 2	1-2-2 (4)						
5		▽ (SM-SC) Very loose to medium dense gray, brown, and orange silty clayey SAND		SPT 3	2-4-6 (10)						
		▼		SPT 4	7-9-8 (17)						
				SPT 5	7-8-10 (18)						
			8.5								
10		(SP-SC) Very loose to medium dense pale gray and brown SAND with clay		SPT 6	7-9-10 (19)						
		Weight-of-Rod from 13.5 to 14.5 ft bls.	14.5	SPT 7	0-0-3 (3)						
15		(CL/CH) Soft gray sandy CLAY									
			16.5								
		(CL/CH) Firm green and orange CLAY									
				SPT 8	3-3-4 (7)						
20			20								
		Bottom of borehole at 20.0 feet.									

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GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

BORING NUMBER B-3

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 9/20/23 **COMPLETED** 9/20/23
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Flight Auger
▼ **AT TIME OF DRILLING** 6.1 ft
LOGGED BY WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 3.5 ft
NOTES

DEPTH (ft)	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, %
0	(SP-SM) Very loose gray and brown SAND with silt	2.5	SPT 1	1-1-1 (2)					
	(SP) Loose pale gray SAND	4.5	SPT 2	1-2-4 (6)					
5	(SP-SC) Loose to gray and brown SAND with clay	6	SPT 3	2-4-5 (9)					
	(SC/CL) Medium dense to dense gray, brown, and orange very clayey SAND		SPT 4	6-2-9 (11)					
10			SPT 5	7-9-11 (20)					
		13.5	SPT 6	14-16-22 (38)					
15	(CL) Firm gray sandy CLAY		SPT 7	2-3-3 (6)	41	15	26	62	23
	(CL/CH) Green and orange CLAY	16							
20		20							
	Bottom of borehole at 20.0 feet.								

▲ SPT N VALUE ▲
20 40 60 80

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GSE Engineering
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Telephone: 3523773233

BORING NUMBER B-4

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 9/20/23 **COMPLETED** 9/20/23
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Flight Auger
▼ **AT TIME OF DRILLING** 6.5 ft
LOGGED BY WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 3.5 ft
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 ▲ (20 40 60 80)
0		(SP-SM) Very loose gray and brown SAND with silt									
			3	SPT 1	1-1-2 (3)						
		(SP) Medium dense pale gray and brown SAND		SPT 2	4-7-11 (18)						
5				SPT 3	7-5-6 (11)						
			6	SPT 4	3-4-5 (9)						
		(SM-SC) Loose to medium dense gray, brown, and orange silty SAND with clay		SPT 5	5-7-14 (21)				27	18	
			9	SPT 6	12-10-9 (19)						
10		(SC) gray and brown clayey SAND									
			13								
		(SP-SC) Medium dense gray, brown, and orange SAND with clay		SPT 7	4-9-12 (21)						
15											
			17								
		(CL/CH) Firm green and gray sandy CLAY		SPT 8	3-3-4 (7)						
20			20								
		Bottom of borehole at 20.0 feet.									

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GSE Engineering & Consulting, Inc.
GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

BORING NUMBER B-5

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 9/20/23 **COMPLETED** 9/20/23
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Flight Auger
▼ **AT TIME OF DRILLING** 6.5 ft
LOGGED BY WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 3.5 ft
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		(SP-SM) Very loose brown and gray SAND with silt		SPT 1	1-1-2 (3)						
			3	SPT 2	4-7-8 (15)						
5		▽ (SP) Medium dense pale brown and pale gray SAND		SPT 3	10-11-13 (24)						
		▼		SPT 4	10-8-9 (17)						
			8	SPT 5	7-8-11 (19)						
10		(SP-SC) Medium dense to dense brown and orange SAND with clay	10	SPT 6	17-21-24 (45)				11	17	
		(SP) Medium dense pale brown and gray SAND									
15				SPT 7	5-7-9 (16)						
			17.5								
		(CL/CH) Hard pale gray sandy CLAY		SPT 8	8-14-19 (33)						
20			20								
		Bottom of borehole at 20.0 feet.									

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5.3 Laboratory Results

GSE Engineering & Consulting, Inc.

SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 16251

Project Name: Dollar General - Lake City SW Marvin Burnett

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Hydraulic Conductivity (ft/day)	Unified Soil Classification
A-2	1-1.5	Dark brown and gray SAND with silt	8.7				11			SP-SM
A-4	3-3.5	Brown, gray, and orange very clayey SAND	18				34			SC/CL
B-1	4-5.5	Brown, gray, and orange sandy CLAY	17	35	18	17	56			CL
B-3	13.5-15	Gray sandy CLAY	23	41	15	26	62			CL
B-4	7-8.5	Gray, brown, and orange silty SAND with clay	18				27			SM-SC
B-5	8.5-10	Pale brown and gray SAND with clay	17				11			SP-SC
P-1	2-4	Gray and brown silty SAND	7.8				14		1.1	SM
P-3	0-2	Brown silty SAND	9.7				15		0.8	SM
P-5	3-5	Brown and gray clayey SAND	13				30		NF	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	Gravels	Clean Gravels	Cu ≥ 4 and 1 ≤ Cc ≤ 3		GW	Well graded GRAVEL
More than 50% retained on No. 200 sieve	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 ≥ 6 and 1 ≤ Cc ≤ 3		SW	Well graded SAND
	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% ≤ 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% ≤ 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	Clays	inorganic	50% ≤ fines < 70%		CL/CH	Sandy CLAY
50% or more passes the No. 200 sieve			70% ≤ fines < 85%		CL/CH	CLAY with sand
			fines ≥ 85%		CL/CH	CLAY
	Silts and Clays	inorganic	PI > 7 and plots on/above "A" line		CL	Lean CLAY
	Liquid Limit less than 50		PI < 4 or plots below "A" line		ML	SILT
		organic	Liquid Limit - oven dried / Liquid Limit - not dried < 0.75		OL	Organic clay / Organic silt
	Silts and Clays	inorganic	PI plots on or above "A" line		CH	Fat CLAY
	Liquid Limit 50 or more		PI plots below "A" line		MH	Elastic SILT
		organic	Liquid Limit - oven dried / Liquid Limit - not dried < 0.75		OH	Organic clay / 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
	0 - 4	Very Loose
	5 - 10	Loose
SANDS:	11 - 30	Medium dense
	31 - 50	Dense
	OVER 50	Very Dense

	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

	No. OF BLOWS, N	CONSISTENCY
	0 - 2	Very Soft
	3 - 4	Soft
SILTS & CLAYS:	5 - 8	Firm
	9 - 15	Stiff
	16 - 30	Very Stiff
	31 - 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 their 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

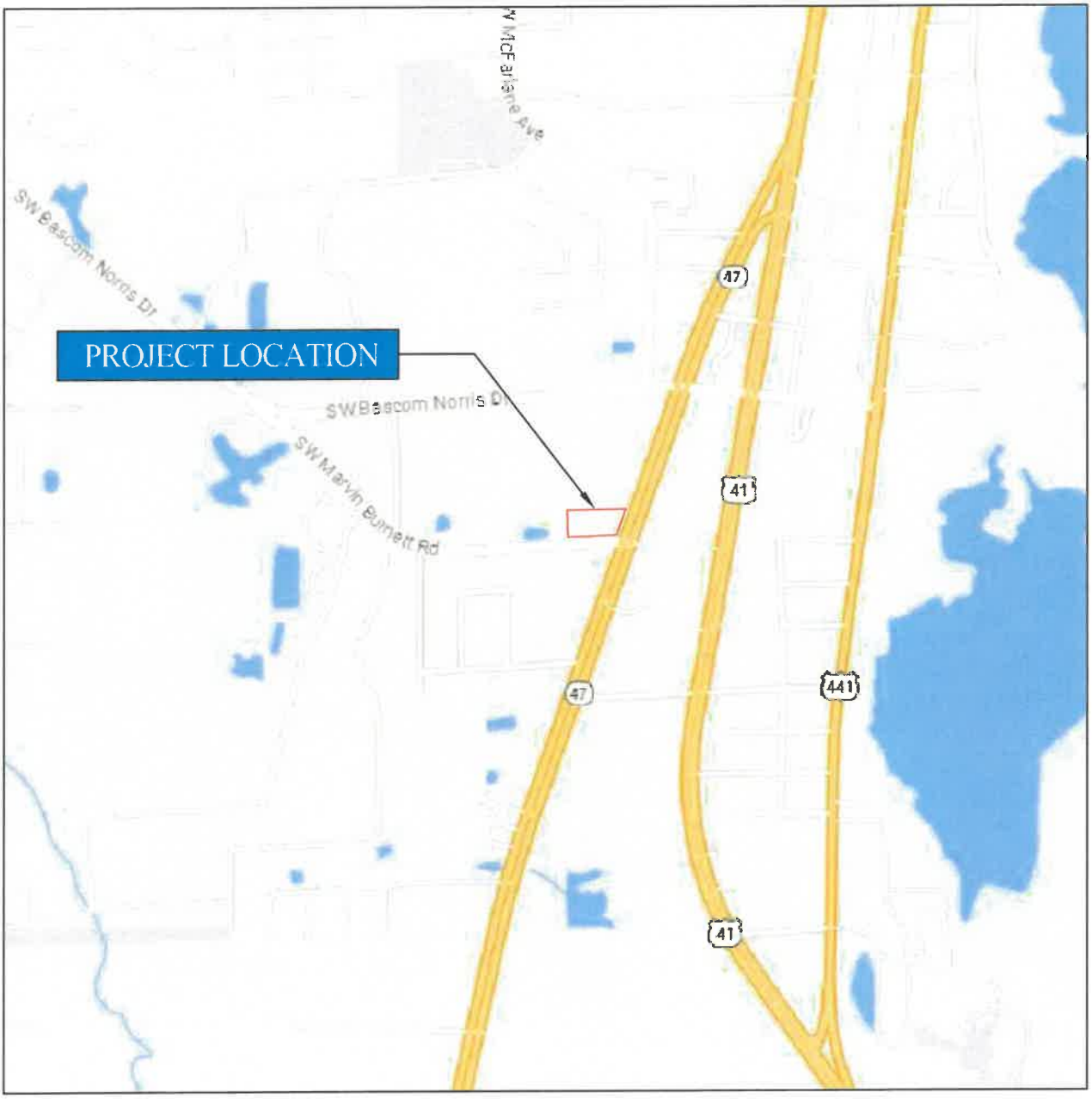
The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on Figure 2. This report does not reflect any variations that may occur between these borings.

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.

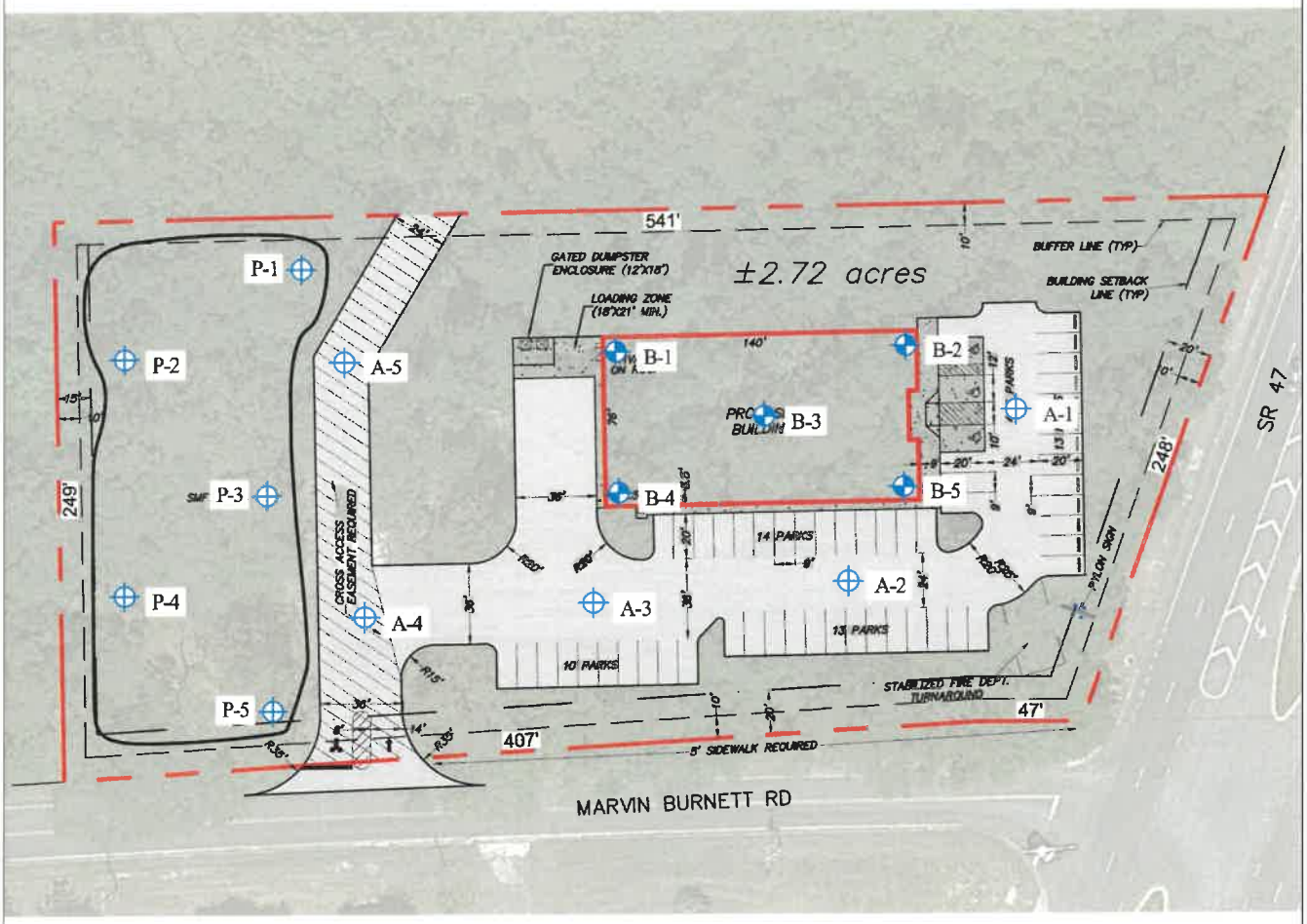
6.5 Misinterpretation of Soil Engineering Report

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



DOLLAR GENERAL - LAKE CITY SW MARVIN BURNETT LAKE CITY, COLUMBIA COUNTY, FLORIDA GSE PROJECT NO. 16251	PROJECT SITE LOCATION MAP		
	DESIGNED BY: AXL CHECKED BY : JEG DRAWN BY : EEW	GSE Engineering & Consulting, Inc.	FIGURE 1



LEGEND:

- SPT BORING
- AUGER BORING

NORTH

0 80'

SCALE: 1" = 80' APPROX.

DOLLAR GENERAL - LAKE CITY
SW MARVIN BURNETT
LAKE CITY, COLUMBIA COUNTY, FLORIDA
GSE PROJECT NO. 15396

SITE PLAN SHOWING APPROXIMATE LOCATIONS OF FIELD TESTS

DESIGNED BY: AXL
CHECKED BY : JEG
DRAWN BY : AXL

GSE Engineering & Consulting, Inc.

FIGURE 2

LEGAL DESCRIPTION

23-0653

CHW Professional Consultants

DATE: OCTOBER 25, 2023
PROJECT NAME: DG LAKE CITY ALTA
PROJECT NO: 23-0653
DESCRIPTION FOR: PARCEL A

A TRACT OF LAND BEING A PORTION OF LANDS AS DESCRIBED IN OFFICIAL RECORDS BOOK 1330 PAGE 1324 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA, SITUATED IN THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF AFOREMENTIONED NORTHEAST QUARTER (NE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA; THENCE NORTH 02°08'35" WEST, ALONG WEST LINE OF SAID NORTHEAST QUARTER (NE 1/4) OF THE NORTHEAST QUARTER, A DISTANCE OF 50.00 FEET TO THE NORTHERLY RIGHT OF WAY LINE OF S.W. MARVIN BURNETT ROAD (RIGHT OF WAY WIDTH VARIES); THENCE DEPARTING SAID WEST LINE, NORTH 85°44'05" EAST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, A DISTANCE OF 130.73 FEET TO THE **POINT OF BEGINNING**; THENCE NORTH 02°10'29" WEST, A DISTANCE OF 249.00 FEET; THENCE NORTH 88°10'08" EAST, A DISTANCE OF 541.00 FEET TO THE WESTERLY RIGHT OF WAY LINE OF S.W. STATE ROAD NO. 47 (RIGHT OF WAY WIDTH VARIES); THENCE SOUTH 18°32'28" WEST, ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 248.00 FEET; THENCE, CONTINUE ALONG SAID WESTERLY RIGHT OF WAY LINE, SOUTH 89°06'47" WEST, A DISTANCE OF 46.52 FEET TO THE INTERSECTION OF SAID WESTERLY RIGHT OF WAY LINE AND AFOREMENTIONED NORTHERLY RIGHT OF WAY LINE OF S.W. MARVIN BURNETT ROAD; THENCE SOUTH 85°44'05" WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE A DISTANCE OF 407.00 FEET TO THE **POINT OF BEGINNING**.

SAID TRACT OF LAND CONTAINING 2.70 ACRES, MORE OR LESS.

PROPERTY OWNER AFFIDAVIT

Property Owner Name:	**Owner Mailing Address:**
St. Johns Limited Liability Company	13820 W. Newberry Road, Suite 100 Newberry, FL 32669

Owner phone:

Owner email:

Property County: Columbia

Parcel ID #: 07-4S-17-08127-005

Agent:
Concept Development, Inc. and Concept Construction of North Florida, Inc.
1449 SW 74th Drive, Suite 200
Gainesville, FL 32607
(352) 333-3233

Authorized Actions of Agent:
Design and submission of documentation, forms and plans and application for all permits as required from those regulatory agencies having jurisdiction over the Property (e.g. County, City, Water Management District, FDOT, FDEP, etc.) and on-site access for inspections, testing, data collection, etc.

I hereby certify that I am the owner of record. I hereby authorize the above listed agents to act on my behalf for the purposes of any and all applications and securing the above requested actions.

St. Johns Limited Liability Company,
a Florida limited liability company

By: _____
William B. Martin
Its: Manager

STATE OF FLORIDA
COUNTY OF Alachua

The foregoing instrument was acknowledged before me this 30th day of June, 2023, by William. B. Martin, as Manager of St. Johns Limited Liability Company, a Florida limited liability company, on behalf of said company who is personally known to me or has produced _____ as identification.

JAMES D. SALTER
Commission # HH 253673
Expires May 30, 2026

_____
Notary Public, State of Florida at Large

This instrument prepared by
and after recording return to:

John C. Bovay, Attorney at Law
901 N.W. 57th Street
Gainesville, Florida 32605

Inst:2005003121 Date:02/09/2005 Time:15:12
Doc Stamp-Deed : 0.70
DC,P.DeWitt Cason,Columbia County B:1037 P:1953

[redacted]
07-4S-[redacted]
Property Appraiser's Parcel
Identification Number(s)

WARRANTY DEED

The Grantor, William B. Martin, as Trustee of the William B. Martin Trust, dated July 31, 1990, in consideration of Ten and grants and conveys to the Grantee, St. Johns, LLC (a Florida limited liability company), whose mailing address is 2841 NW 41st Street, Gainesville, Florida 32606, the real property in Columbia County, Florida, described as follows:

> The South ½ of the Northeast ¼ of the Northeast ¼ of Section 7, Township 4 South, Range 17 East as lies West of S.R. No. 47; LESS AND EXCEPT: Begin at the Southwest Corner of the Northeast ¼ of the Northeast ¼ of said Section 7, and run North along West Line of said Northeast ¼ of the Northeast ¼ 211 feet; thence run East 337 feet; thence run South 211 feet; thence run West 337 feet to the Point of Beginning.

The Grantor warrants that the property is free of all encumbrances, except the lien for real estate taxes not yet due and payable and restrictions, reservations, and easements of record, and that lawful seisin of and good right to convey the property are vested in the Grantor. The Grantor hereby fully warrants the title to the property and will defend the same against the lawful claims of all persons.

This deed was prepared without examination of title or legal opinion, but upon information, including the legal description and the ownership interest, supplied by the Grantor.

The interest conveyed is not the homestead of the Grantor.

Inst:2005003121 Date:02/09/2005 Time:15:12
Doc Stamp-Deed : 0.70
DC,P.DeWitt Cason,Columbia County B:1037 P:1954

Signed on February 4, 2005.

Signed in the presence of:

Print Name: Joseph W Sanderlin

William B. Martin, as Trustee of the
William B. Martin Trust, dated July 31, 1990
2841 NW 41st Street
Gainesville, Florida 32606

Print Name: Julia Cook

Two witnesses as to
William B. Martin, as Trustee of the
William B. Martin Trust, dated July 31, 1990

STATE OF FLORIDA
COUNTY OF ALACHUA

The foregoing instrument was acknowledged before me on February 4, 2005, by William B. Martin.

Notary Public--State of Florida
Print Notary Name: _____
My Commission Number is: _____
My Commission Expires: _____

Personally Known ✓
Produced Identification _____
Type of Identification _____

JOHN C. BOVAY
Comm# DD0308617
Expires 8/3/2008
Bonded thru (800)432-4254
Florida Notary Assn., Inc

GROWTH MANAGEMENT DEPARTMENT
205 North Marion Ave, Lake City, FL 32055
Phone: 386-719-5750
E-mail: growthmanagement@lcfla.com

AGENT AUTHORIZATION FORM

I, MatthewCason (owner name), owner of property parcel number 07-4S-17-08127-005 (parcel number), do certify that the below referenced person(s) listed on this form is/are contracted/hired by me, the owner, or, is an officer of the corporation; or, partner as defined in Florida Statutes Chapter 468, and the said person(s) is/are authorized to sign, speak and represent me as the owner in all matters relating to this parcel.

Printed Name of Person Authorized	Signature of Authorized Person
1. Randall Olney (CHW)	1.
2.	2.
3.	3.
4.	4.
5.	5.

I, the owner, realize that I am responsible for all agreements my duly authorized agent agrees with, and I am fully responsible for compliance with all Florida Statutes, City Codes, and Land Development Regulations pertaining to this parcel.

If at any time the person(s) you have authorized is/are no longer agents, employee(s), or officer(s), you must notify this department in writing of the changes and submit a new letter of authorization form, which will supersede all previous lists. Failure to do so may allow unauthorized persons to use your name and/or license number to obtain permits.

Owner Signature (Notarized) 12-15-2023 Date

NOTARY INFORMATION:
STATE OF: Florida COUNTY OF: Alachua

The above person, whose name is Matt Cason, personally appeared before me and is known by me or has produced identification (type of I.D.) on this 15 day of December, 2023.

NOTARY'S SIGNATURE (Seal/Stamp)

Notary Public State of Florida
Sonia R. Hopewell
My Commission HH 428758
Expires 8/2/2027

Detail by Entity Name

Florida Limited Liability Company
ST. JOHNS LIMITED LIABILITY COMPANY

Filing Information

Document Number	L05000000431
FEI/EIN Number	20-3739691
Date Filed	12/23/2004
Effective Date	01/01/2005
State	FL
Status	ACTIVE

Principal Address

13820 W Newberry Rd
Suite 100
GAINESVILLE, FL 32669

Changed: 01/14/2018

Mailing Address

13820 W Newberry Rd
Suite 100
GAINESVILLE, FL 32669

Changed: 01/14/2018

Registered Agent Name & Address

Martin, William B
13820 W Newberry Road
Suite 100
Newberry, FL 32669

Name Changed: 03/10/2019

Address Changed: 03/10/2019

Authorized Person(s) Detail

Name & Address

Title MGR

Banks, Judith
13820 W Newberry Road
Suite 100
Newberry, FL 32669

Title MGR

Martin, William B
13820 W Newberry Rd
Suite 100
GAINESVILLE, FL 32669

Annual Reports

Report Year	Filed Date
2022	02/23/2022
2023	02/08/2023
2024	02/12/2024

Document Images

02/12/2024 -- ANNUAL REPORT	View image in PDF format
02/08/2023 -- ANNUAL REPORT	View image in PDF format
02/23/2022 -- ANNUAL REPORT	View image in PDF format
01/24/2021 -- ANNUAL REPORT	View image in PDF format
01/18/2020 -- ANNUAL REPORT	View image in PDF format
03/10/2019 -- ANNUAL REPORT	View image in PDF format
01/14/2018 -- ANNUAL REPORT	View image in PDF format
01/14/2017 -- ANNUAL REPORT	View image in PDF format
03/02/2016 -- ANNUAL REPORT	View image in PDF format
01/25/2015 -- ANNUAL REPORT	View image in PDF format
01/21/2014 -- ANNUAL REPORT	View image in PDF format
02/13/2013 -- ANNUAL REPORT	View image in PDF format
01/06/2012 -- ANNUAL REPORT	View image in PDF format
01/21/2011 -- ANNUAL REPORT	View image in PDF format
01/19/2010 -- ANNUAL REPORT	View image in PDF format
03/12/2009 -- ANNUAL REPORT	View image in PDF format
02/25/2008 -- ANNUAL REPORT	View image in PDF format
02/27/2007 -- ANNUAL REPORT	View image in PDF format
06/21/2006 -- ANNUAL REPORT	View image in PDF format
12/23/2004 -- Florida Limited Liabilites	View image in PDF format

Detail by Entity Name

Florida Profit Corporation
CONCEPT COMPANIES, INC.

Filing Information

Document Number	P14000067003
FEI/EIN Number	47-1672849
Date Filed	08/07/2014
Effective Date	07/08/2009
State	FL
Status	ACTIVE
Last Event	CONVERSION
Event Date Filed	08/07/2014
Event Effective Date	NONE

Principal Address

1449 SW 74th Drive
Suite 200
Gainesville, FL 32607

Changed: 04/18/2022

Mailing Address

1449 SW 74th Drive
Suite 200
Gainesville, FL 32607

Changed: 04/18/2022

Registered Agent Name & Address

Burch, Stephanie
1449 SW 74th Drive
Suite 200
Gainesville, FL 32607

Name Changed: 04/18/2022

Address Changed: 04/18/2022

Officer/Director Detail

Name & Address

Title Founder and Principal

Crawford, Brian S
1449 SW 74th Drive
Suite 200
Gainesville, FL 32607

Title President

Cason, Matthew
1449 SW 74th Drive
Suite 200
Gainesville, FL 32607

Title CEO

Banks, Nick
1449 SW 74th Drive
Suite 200
Gainesville, FL 32607

Annual Reports

Report Year	Filed Date
2022	04/18/2022
2023	03/03/2023
2024	03/11/2024

Document Images

03/11/2024 -- ANNUAL REPORT	View image in PDF format
03/03/2023 -- ANNUAL REPORT	View image in PDF format
04/18/2022 -- ANNUAL REPORT	View image in PDF format
04/02/2021 -- ANNUAL REPORT	View image in PDF format
06/09/2020 -- ANNUAL REPORT	View image in PDF format
02/13/2019 -- ANNUAL REPORT	View image in PDF format
04/26/2018 -- ANNUAL REPORT	View image in PDF format
04/27/2017 -- ANNUAL REPORT	View image in PDF format
04/15/2016 -- ANNUAL REPORT	View image in PDF format
04/22/2015 -- ANNUAL REPORT	View image in PDF format
08/07/2014 -- Domestic Profit	View image in PDF format

Columbia County Tax Collector

generated on 3/20/2024 3:04:29 PM EDT

Tax Record

Last Update: 3/20/2024 3:02:58 PM EDT

Register for eBill

Ad Valorem Taxes and Non-Ad Valorem Assessments

The information contained herein does not constitute a title search and should not be relied on as such.

Account Number	Tax Type	Tax Year
R08127-005	REAL ESTATE	2023

Mailing Address
ST JOHNS LLC
13820 W NEWBERRY RD STE 100
NEWBERRY FL 32669

Property Address

GEO Number
074S17-08127-005

Exempt Amount	Taxable Value
See Below	See Below

Exemption Detail
NO EXEMPTIONS

Millage Code
001

Escrow Code

Legal Description (click for full description)
07-4S-17 0000/00009.69 Acres S1/2 OF NE1/4 OF NE1/4 W OF SR-47. 482-143, LE 1318-991, DC 1327- 1297, DC 1327-1298, WD 1330- 1324, 372-81, 804-766, 894- 679, 912-1064, 1037-1953

Ad Valorem Taxes

Taxing Authority	Rate	Assessed Value	Exemption Amount	Taxable Value	Taxes Levied
CITY OF LAKE CITY	4.9000	266,978	0	$266,978	$1,308.19
BOARD OF COUNTY COMMISSIONERS	7.8150	266,978	0	$266,978	$2,086.43
COLUMBIA COUNTY SCHOOL BOARD					
DISCRETIONARY	0.7480	266,978	0	$266,978	$199.70
LOCAL	3.2170	266,978	0	$266,978	$858.87
CAPITAL OUTLAY	1.5000	266,978	0	$266,978	$400.47
SUWANNEE RIVER WATER MGT DIST	0.3113	266,978	0	$266,978	$83.11
LAKE SHORE HOSPITAL AUTHORITY	0.0001	266,978	0	$266,978	$0.03

Total Millage	18.4914	Total Taxes	$4,936.80

Non-Ad Valorem Assessments

Code	Levying Authority	Amount
XLCF	CITY FIRE ASSESSMENT	$61.26

Total Assessments	$61.26
Taxes & Assessments	$4,998.06

If Paid By	Amount Due
	$0.00

Date Paid	Transaction	Receipt	Item	Amount Paid
11/27/2023	PAYMENT	9921508.0001	2023	$4,798.14

Prior Years Payment History

Prior Year Taxes Due

NO DELINQUENT TAXES

TRAFFIC IMPACT STUDY

Variety Retail Store
Marvin Burnett Road
Lake City, Florida

October 3, 2023

prepared for:
FLORIDA DOT DISTRICT 2
and
THE CITY OF LAKE CITY

submitted on behalf of:
Concept Development, Inc.

prepared by:
HAGEN CONSULTING SERVICES, LLC

HAGEN CONSULTING SERVICES, LLC

PROFESSIONAL ENGINEER ENDORSEMENT

I hereby certify that I am a Registered Professional Engineer in the State of Florida and currently practicing as the principal of Hagen Consulting Services, LLC.

Hagen Consulting Services, LLC is authorized via Registry No: 27955 to operate as an Engineering Business by the Florida Board of Professional Engineers, State of Florida, Department of Professional Regulation.

I have prepared or supervised the preparation of the evaluation, findings, conclusions, recommendations, and professional opinions/advice contained in this document. My endorsement constitutes my approval of these items.

PROJECT: Marvin Burnett Road Retail Store
LOCATION: Lake City, Florida
CLIENT: Concept Development, Inc.

The results contained in this report were developed using procedures and references standard to the transportation engineering practice. These references and procedures were applied using professional judgment and experience.

Name: Lawrence T. Hagen, P.E., PTOE, RSP
Florida P.E. No.: 43968

Lawrence T Hagen

Digitally signed by Lawrence T Hagen
Date: 2023.10.03 08:20:11 -04'00'

This item has been digitally signed and sealed by Lawrence T. Hagen on the date adjacent to the seal.

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

TABLE OF CONTENTS

LIST OF FIGURES AND TABLES

FIGURES

TABLES

EXECUTIVE SUMMARY

The results of the traffic impact analysis for the proposed variety retail store location at the intersection of State Road 47 and SW Marvin Burnett Road near the City of Lake City show that the traffic generated by the development will not have a significant impact on the operation of the roadway network surrounding it. The existing STOP-Controlled intersection adjacent to the project site will continue to operate well with the addition of the projected traffic from the development. Additionally, the nearby intersection of SW Bascom Norris Drive and SW Marvin Burnett Road will also continue to operate well.

The project location is within Columbia County south of the City of Lake City, Florida and State Road 47 is under the jurisdiction of the Florida DOT, District 2. This study utilized turning movement count data for the AM and PM Peak Hours collected by Hagen Consulting Services in July of 2023. The turning movement count information for the AM and PM Peak Hours of traffic were adjusted using a seasonal adjustment factor from FDOT's Peak Season Factor Category Report and a growth factor was applied to adjust traffic volumes to the build-out year (2024). The adjusted traffic volumes were then analyzed with and without the project traffic utilizing the Highway Capacity Manual (HCM) procedures.

The project traffic was developed using the Institute of Transportation Engineers (ITE) *Trip Generation* – 11th Edition. The ITE Land Use Code for a variety retail store was used to estimate the trips generated by the proposed 12,480 square foot building. The trips were then distributed on the transportation network to estimate the traffic impacts.

The HCM analysis showed that the intersections, and hence the roadway network adjacent to the site, will be able to accommodate the traffic from the proposed development without a significant degradation in operational performance. Traffic conditions in the area will continue to operate at a very good level that meets the needs of the traveling public.

INTRODUCTION

Hagen Consulting Services, LLC is assisting Concept Development, Inc. with the transportation impacts for the proposed new 10,640 square foot variety retail store in Columbia County, Florida. The site will serve the southern Lake City area. The proposed retail store site is located on SW Marvin Burnett Road, at the intersection with State Road 47. State Road 47 is under the jurisdiction of the Florida Department of Transportation, District Two. The proposed site will have a connection to SW Marvin Burnett Road. The site currently is undeveloped and heavily wooded. There is a single family home foundation and accessory shed and propane tank on the site. The project location is shown in **Figure 1** below.

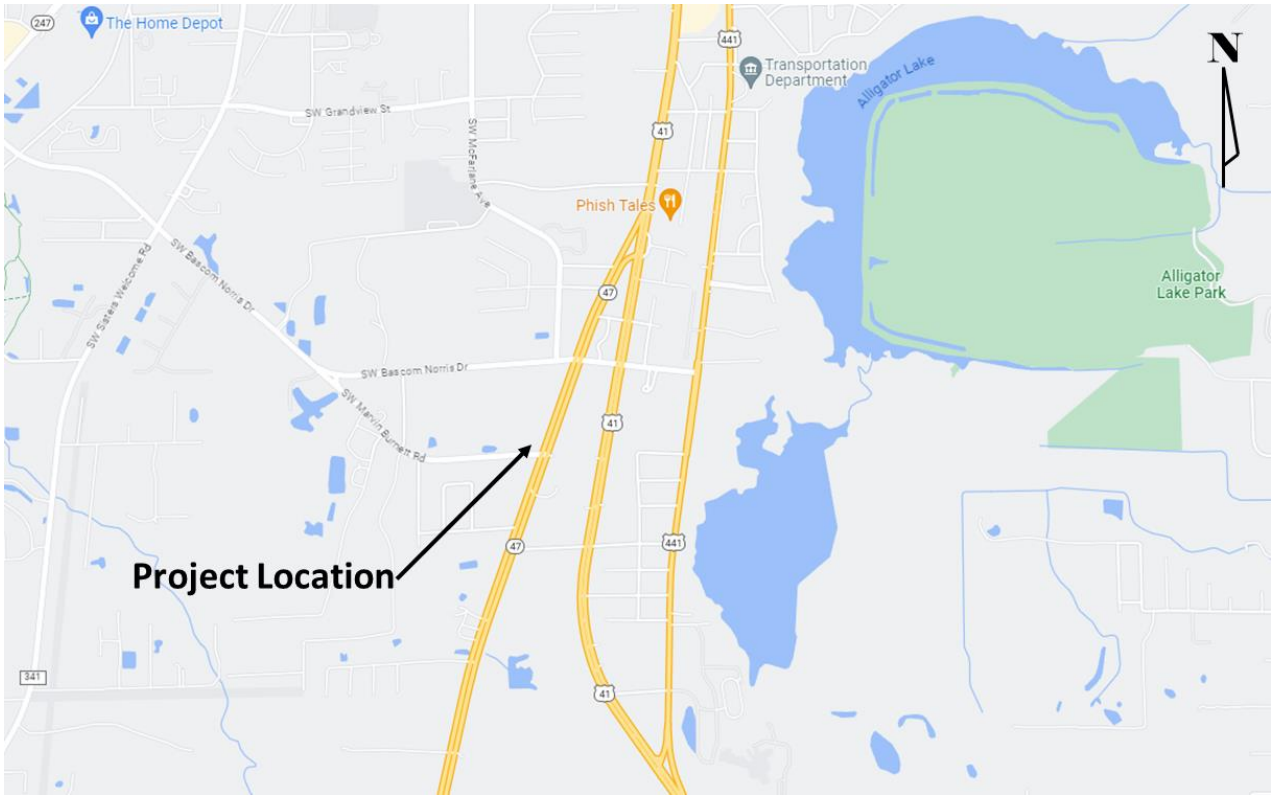


Figure 1 - Project Location Map

The preliminary site plan for the proposed retail store is shown in **Figure 2** on the following page.

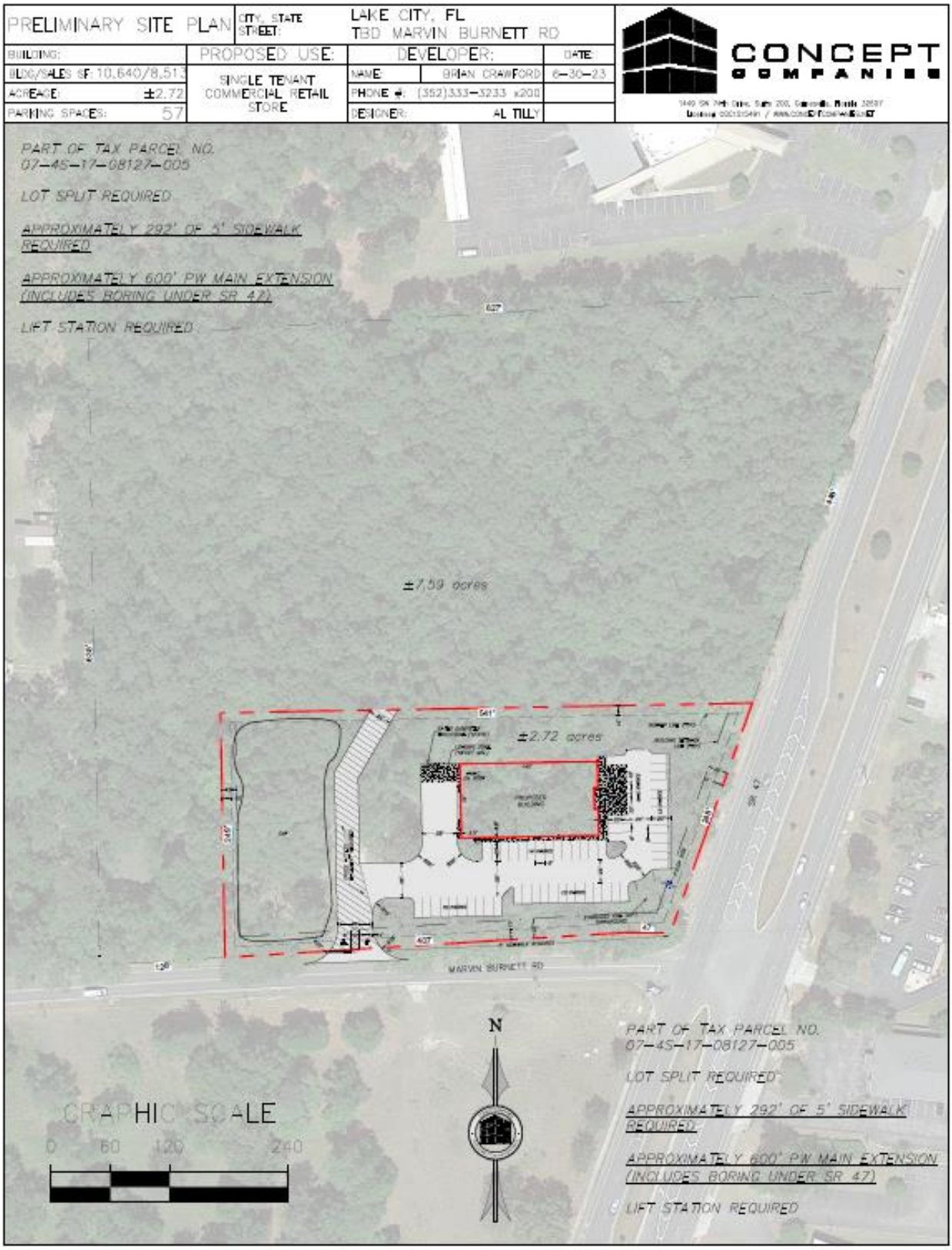


Figure 2 - Preliminary Site Plan

The 11th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation* is the recognized authoritative source for estimating the trips generated by developments such as the proposed variety retail store facility. According to *Trip Generation*, a variety retail facility such as proposed here falls under ITE Land Use Code 814 – Variety Store. The assessment of the traffic impacts of the proposed variety retail store will be based on the impacts to traffic in the AM and PM peak hour periods.

The traffic impacts of the proposed development will be based on a Highway Capacity Software analysis of the operation of the signalized intersection adjoining the site both with and without the traffic generated by the development. A comparison of the delay and Level Of Service (LOS) with and without the project traffic will serve as the basis of the analysis.

EXISTING CONDITIONS

State Road 47 is a four-lane divided highway with an urban typical section (curb and gutter). The posted speed limit in the vicinity of the project site is 45 miles per hour. There are existing bike lanes and sidewalks on both sides of the roadway. State Road 47 is classified as an Urban Minor Arterial. There are existing NB and SB left turn lanes at the Marvin Burnett Road intersection. Marvin Burnett Road is a two-lane roadway that is functionally classified as a minor collector rural with a posted speed of 35 miles per hour. The cross-section features a flush shoulder on the north side of the road and the south side has raised curb. There are currently no bike lanes or sidewalks present.

Existing AM and PM Peak Hour turning movement counts were collected at the intersection of State Road 47 and Marvin Burnett Road. Two hours of AM Peak data (7:00 AM – 9:00 AM) and two hours of PM Peak data (4:00 PM – 6:00 PM) were collected. From these counts, the AM Peak Hour (7:30 – 8:30 AM) and PM Peak Hour (4:30 – 5:30 PM) turning movement counts were determined. The AM and PM Peak Hour turning movement counts are shown in **Figure 3** below.

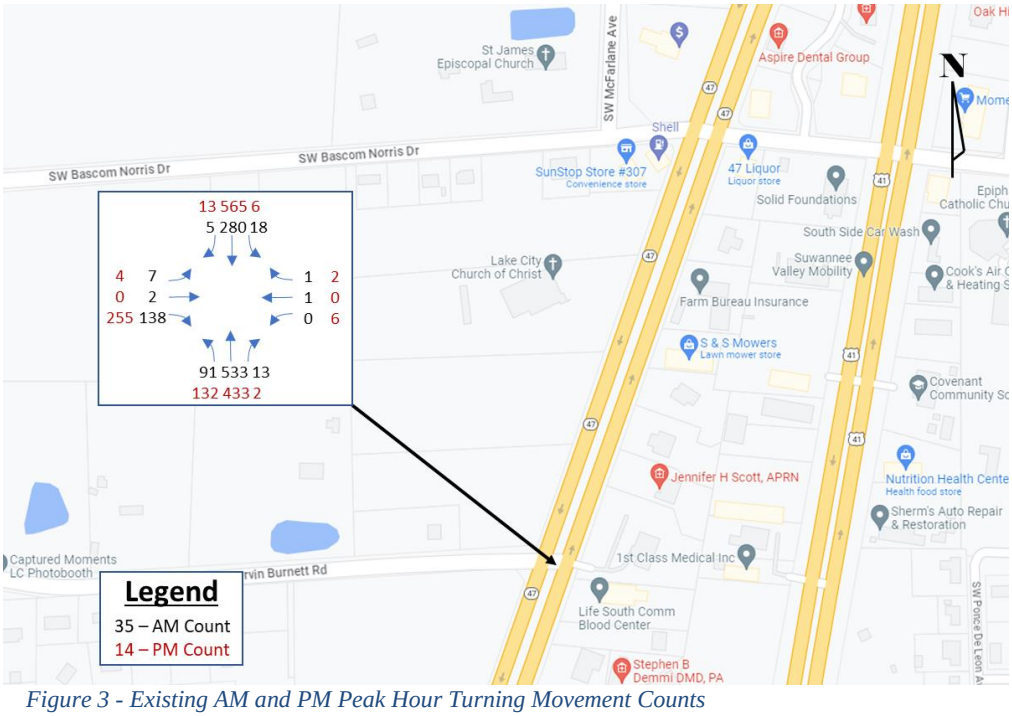


Figure 3 - Existing AM and PM Peak Hour Turning Movement Counts

The raw turning movement count data for the AM and PM Peak Hour is included in Appendix A.

TRIP GENERATION

The Institute of Transportation Engineers (ITE) *Trip Generation* 11th Edition was used to calculate the project trip estimates for the new land use at the project site. Trip generations estimates are shown in terms of daily traffic, as well as the AM and PM peak hours. The proposed Variety Retail Store falls under ITE Land Use Code 814 – Variety Store. The trip generation information for the proposed Variety Retail Store is shown in Table 1 below.

TABLE 1: Trip Generation
Variety Retail Store – ITE Land Use 814 – 10,640 SF
Lake City, Florida

				Distribution		Trips		
Period	ITE Rate	Units	Trips	% In	% Out	In	Out	Net
Weekday	T = 63.66 (X)	10.64	677	50%	50%	339	338	677
AM Peak	T = 3.04 (X)	10.64	32	55%	45%	18	14	32
PM Peak	T = 6.70 (X)	10.64	71	51%	49%	36	35	71

Source: ITE 11th Edition of Trip Generation - Units: 1,000 square feet Gross Floor Area

The 2021 Pass-By Tables for ITE's *Trip Generation* indicate a 34% pass-by rate for Land Use 814. This means that 34% of the trips generated are existing pass-by trips, and the net new trips represent 66% of the estimated *Trip Generation* number.

TABLE 2: Net Trip Generation with Pass-By Reduction

				Distribution		Net Trips		
Period	Trips	Pass-By	Net Trips	% In	% Out	In	Out	Net
Weekday	677	34%	447	50%	50%	224	224	447
AM Peak	32	34%	21	55%	45%	12	10	21
PM Peak	71	34%	47	51%	49%	24	23	47

The trip generation data is then used to develop the external distribution of project trips onto the adjacent roadway network from the project site. The next section of the report presents information on the trip distribution.

TRIP DISTRIBUTION

The distribution of project trips on the roadway network is a manual assignment derived from the AM and PM peak period traffic data collected on the adjacent roadway and a review of existing locations of interacting land-uses. The distribution is based on engineering judgment of the expected routes that patrons would take to / from the proposed development. The project has access just on SW Marvin Burnett Road. The AM and PM Peak Hour Project Trip Distribution is shown in **Figure 4** below.

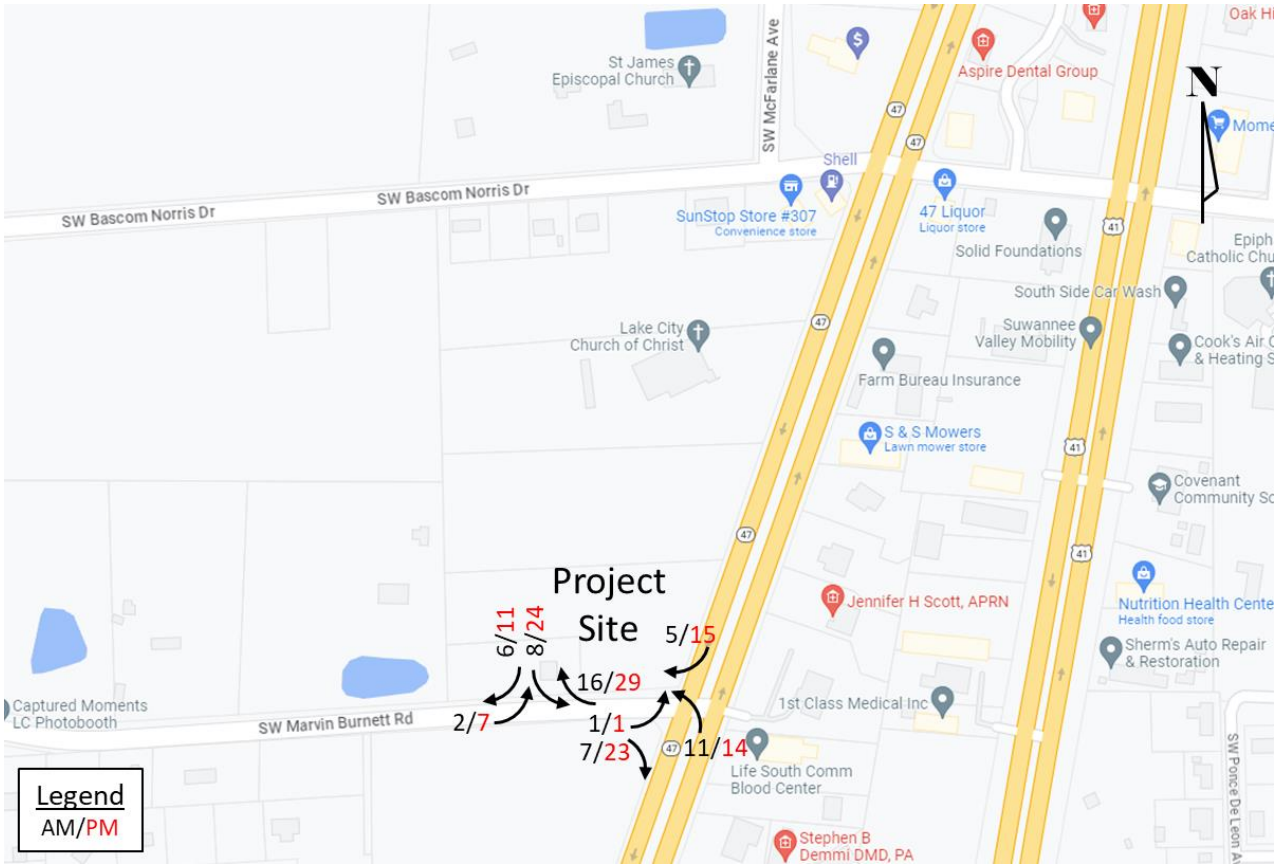


Figure 4 - Peak Hour Project Trip Distribution

LEFT TURN LANE ANALYSIS – Marvin Burnett Road

The criteria for evaluating left turn lanes are established in *NCHRP Report 457: Evaluating Intersection Improvements: An Engineering Study Guide*. The highest left turning volume into the project site from Marvin Burnett Road is the PM Peak Hour left turn volume of 7 vehicles. The left + through + right turn volumes are added together to compute the "advancing volume." The through + right turning volumes opposing the left turn are used as the "opposing volume."

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

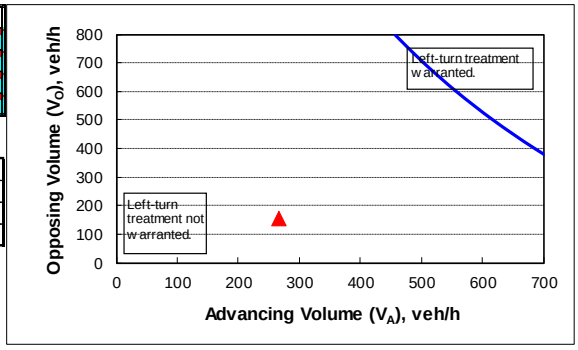
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	3%
Advancing volume (V_A), veh/h:	266
Opposing volume (V_O), veh/h:	156

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	898
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

RIGHT TURN LANE ANALYSIS – Marvin Barnett Road

Similarly, the criteria for evaluating right turn lanes are established in *NCHRP Report 457: Evaluating Intersection Improvements: An Engineering Study Guide*. For this analysis, we need to enter the major road speed, the major road volume (through + right), and the right turn volume.

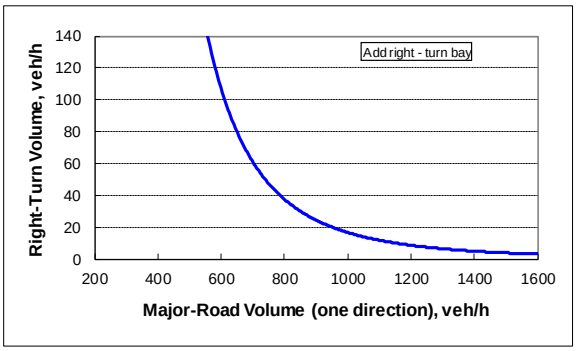
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	35
Major-road volume (one direction), veh/h:	156
Right-turn volume, veh/h:	29

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	14198
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



RIGHT TURN LANE ANALYSIS – State Road 47

As indicated previously, the criteria for evaluating right turn lanes are established in *NCHRP Report 457: Evaluating Intersection Improvements: An Engineering Study Guide*. For this analysis, we need to enter the major road speed, the major road volume (left + through + right), and the right turn volume.

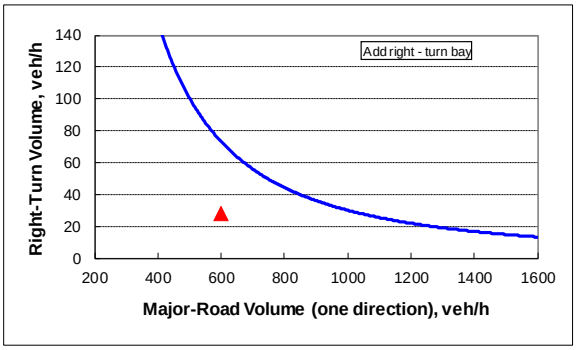
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	599
Right-turn volume, veh/h:	28

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	73
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



INTERSECTION LEVEL OF SERVICE (LOS) ANALYSIS

The roadway Level Of Service (LOS) analysis is conducted using the procedures outlined in the Transportation Research Board's *Highway Capacity Manual* (HCM). The HCM procedures represent the state-of-the-practice for the analysis of transportation facilities.

Existing turning movement count data was collected on Tuesday, July 18, 2023 at the intersection of State Road 47 and SW Marvin Burnett Road. Two hours of turning movement count data were collected for both the AM peak period (7 AM to 9 AM) and the PM peak period (4 PM to 6 PM). Out of that two-hours of data collection in each period, the overall AM peak hour of 7:30 AM to 8:30 AM and the overall PM peak hour of 4:30 PM to 5:30 PM were used in the analysis. A seasonal adjustment of 1.02 is then applied based on FDOT Peak Season Factor Category Report for Columbia County (included in Appendix A). A growth factor of 3% is then added to the volumes to convert to 2024 (expected build-out year) volumes. The AM peak hour volumes along with the assigned new project trips are provided in **Table 3** below. The PM peak hour volumes along with the assigned new project trips are provided in **Table 4** below.

Table 3 – AM Peak Hour Volumes

Roadway	State Road 47						SW Marvin Burnett Road					
Approach	Northbound			Southbound			Eastbound			Westbound		
Movement	Lt	Thru	Rt	Lt	Thru	Rt	Lt	Thru	Rt	Lt	Thru	Rt
2023	91	533	13	18	280	5	7	2	138	0	1	1
Seasonal	93	544	13	18	286	5	7	2	141	0	1	1
2024	96	560	14	19	294	5	7	2	145	0	1	1
Project	11	0	0	0	0	5	1	0	7	0	0	0
Total	107	560	14	19	294	10	8	2	152	0	1	1

Table 4 – PM Peak Hour Volumes

Roadway	State Road 47						SW Marvin Burnett Road					
Approach	Northbound			Southbound			Eastbound			Westbound		
Movement	Lt	Thru	Rt	Lt	Thru	Rt	Lt	Thru	Rt	Lt	Thru	Rt
2023	132	433	2	6	565	13	4	0	255	6	0	2
Seasonal	135	442	2	6	576	13	4	0	260	6	0	2
2024	139	455	2	6	594	14	4	0	268	6	0	2
Project	14	0	0	0	0	15	1	0	23	0	0	0
Total	153	455	2	6	594	29	5	0	291	6	0	2

The Highway Capacity Software (HCS) Two-Way Stop-Controlled intersection module was utilized in analyzing the no-build and the build-out traffic volumes at the intersection of SR 47 and Marvin Burnett Road. The results from the HCS analyses are summarized in **Table 5** and **Table 6** below. The outputs from HCS are included in Appendix B.

Table 5 – Intersection Level Of Service (AM)

Roadway	State Road 47				SW Marvin Burnett Road			
Approach	Northbound		Southbound		Eastbound		Westbound	
MOE	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
No-Build	8.3	A	9.0	A	11.3	B	19.4	C
Build	8.3	A	9.0	A	11.5	B	20.1	C

Table 6 – Intersection Level Of Service (PM)

Roadway	State Road 47				SW Marvin Burnett Road			
Approach	Northbound		Southbound		Eastbound		Westbound	
MOE	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
No-Build	9.8	A	8.5	A	15.9	C	28.8	D
Build	10.0	B	8.5	A	17.2	C	35.0	E

The HCS analyses show that the impacts of the proposed variety retail store development on the operation of the intersection are minimal in the AM period. In the PM period, the westbound approach degrades from LOS D to LOS E, despite the fact that the project assigns no trips to the westbound approach. The westbound approach is a minor approach to the intersection and even in the LOS E scenario is operating at a volume to capacity ratio of 0.07 with an hourly flow rate of just nine vehicles. The HCS two-way stop-controlled analysis is well known for being overly pessimistic, and this is an example of that. An average delay of 35 seconds is not an intolerable scenario for those vehicles.

The City of Lake City requested that the intersection of SW Bascom Norris Drive and SW Marvin Burnett Road also be analyzed for this project. Existing turning movement count data was also collected on Tuesday, July 18, 2023 at this intersection. Two hours of turning movement count data were collected for both the AM peak period (7 AM to 9 AM) and the PM peak period (4 PM to 6 PM). Out of that two-hours of data collection in each period, the overall AM peak hour of 7:30 AM to 8:30 AM and the overall PM peak hour of 4:45 PM to 5:45 PM were used in the analysis. A seasonal adjustment of 1.02 is then applied based on FDOT Peak Season Factor Category Report for Columbia County. A growth factor of 3% is then added to the volumes to convert to 2024 (expected build-out year) volumes. The AM peak hour volumes along with the assigned new project trips are provided in **Table 7** below. The PM peak hour volumes along with the assigned new project trips are provided in **Table 8** below. For this analysis, a worst-case scenario where all of the project trips from the proposed retail site are presumed to make a northbound left at the intersection.

Table 7 – AM Peak Hour Volumes

Roadway	SW Marvin Burnett Road						SW Bascom Norris Drive					
Approach	Northbound			Southbound			Eastbound			Westbound		
Movement	Lt	Thru	Rt	Lt	Thru	Rt	Lt	Thru	Rt	Lt	Thru	Rt
2023	102	0	0	-	-	-	0	234	0	0	249	0
Seasonal	104	0	0	-	-	-	0	239	0	0	254	0
2024	107	0	0	-	-	-	0	246	0	0	262	0
Project	6	0	0	-	-	-	0	0	0	0	0	0
Total	113	0	0	-	-	-	0	246	0	0	262	0

Table 8 – PM Peak Hour Volumes

Roadway	SW Marvin Burnett Road						SW Bascom Norris Drive					
Approach	Northbound			Southbound			Eastbound			Westbound		
Movement	Lt	Thru	Rt	Lt	Thru	Rt	Lt	Thru	Rt	Lt	Thru	Rt
2023	145	0	2	-	-	-	0	205	0	0	422	0
Seasonal	148	0	2	-	-	-	0	209	0	0	430	0
2024	152	0	2	-	-	-	0	215	0	0	443	0
Project	11	0	0	-	-	-	0	0	0	0	0	0
Total	163	0	2	-	-	-	0	215	0	0	443	0

The intersection of Bascom Norris Drive and Marvin Burnett Road is a somewhat unusual T-intersection: Bascom Norris Drive is the major street that does not stop, and Marvin Burnett Road intersects and is controlled by a STOP sign. However, the left turn from Bascom Norris Drive WB onto Marvin Burnett Road is prohibited, and the right turn from Bascom Norris Drive EB onto Marvin Burnett Road is a free-flowing movement that is channelized and unimpeded. Thus, the only movement that has any control delay is the northbound left or right turn from Marvin Barnett Road onto Bascom Norris Drive. The layout of the intersection is shown in **Figure 5** below.

Figure 5 - SW Bascom Norris Dr & SW Marvin Burnett Rd

The results from the HCS analyses are summarized in **Table 9** and **Table 10** below. The outputs from HCS are included in Appendix B.

Table 9 – Intersection Level Of Service (AM)

Roadway	SW Marvin Burnett Road				SW Bascom Norris Drive			
Approach	Northbound		Southbound		Eastbound		Westbound	
MOE	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
No-Build	15.8	C	-	-	-	-	-	-
Build	16.1	C	-	-	-	-	-	-

Table 10 – Intersection Level Of Service (PM)

Roadway	SW Marvin Burnett Road				SW Bascom Norris Drive			
Approach	Northbound		Southbound		Eastbound		Westbound	
MOE	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
No-Build	24.6	C	-	-	-	-	-	-
Build	26.0	D	-	-	-	-	-	-

The HCS analyses show that the impact of the project traffic on the intersection of SW Marvin Burnett Road and SW Bascom Norris Drive is minimal. Although in the PM period the LOS does go from C to D, it is only an increase of 1.4 seconds of delay per vehicle. This movement operates with a volume to capacity ratio of just 0.54 in the PM period with the project traffic.

CONCLUSIONS AND RECOMMENDATIONS

Based on the foregoing data and analysis provided, the following conclusions and recommendations are offered:

Conclusions:

- The proposed variety retail store is estimated to generate 32 trips in the AM Peak Hour and 71 trips in the PM Peak Hour. To be conservative in the analyses, these numbers were used. If the pass-by reductions from ITE are used, the net trips would be 21 in the AM Peak Hour and 47 in the PM Peak Hour.
- The additional traffic generated by the proposed variety retail store will not have a noticeable impact on the adjoining STOP-controlled intersections and will not degrade the performance of the transportation network.
- Neither left-turn lanes nor right-turn lanes are warranted on either State Road 47 or on SW Marvin Burnett Road. There is very little disruption to traffic with the addition of the project driveways and the generated project traffic.

Recommendations:

- Approve the project for construction and approve the associated driveway connection onto SW Marvin Burnett Road.

APPENDIX A: TURNING MOVEMENT COUNTS

SR 47 & SW Marvin Burnett - TMC

Tue Jul 18, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091860, Location: 30.160196, -82.645384, Site Code: SR 47 & Marvin Burnett

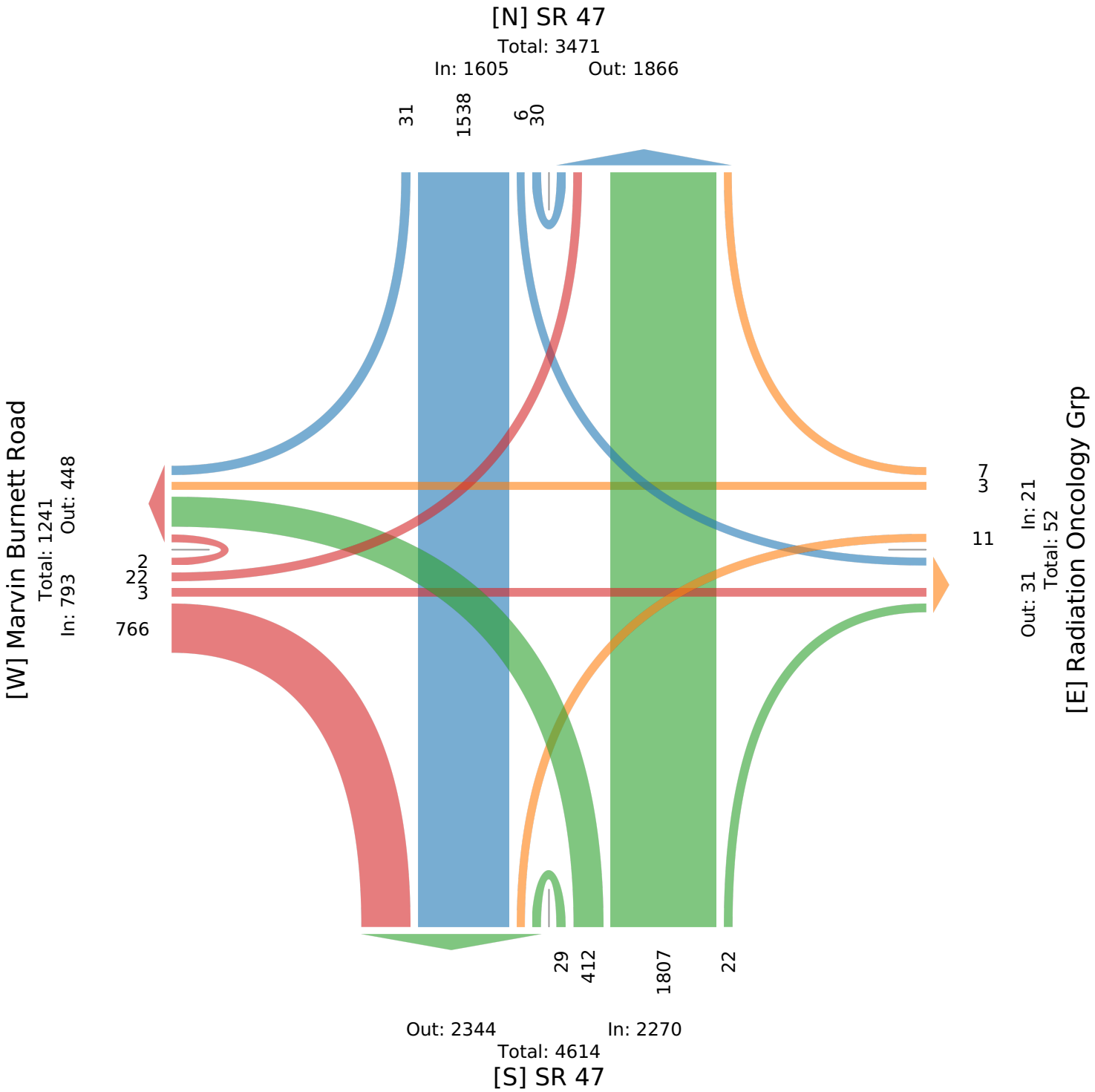
Provided by: Hagen Consulting Services
361 Strawder Road, Ray City, GA, 31645, US

Leg	Marvin Burnett Road					Radiation Oncology Grp					SR 47					SR 47					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2023-07-18 7:00AM	0	0	17	0	**17**	0	0	0	0	**0**	13	91	2	0	**106**	0	58	1	1	**60**	**183**
7:15AM	1	0	16	0	**17**	0	0	0	0	**0**	16	140	2	0	**158**	0	42	0	0	**42**	**217**
7:30AM	2	0	34	0	**36**	0	0	0	0	**0**	20	163	3	0	**186**	2	63	1	4	**70**	**292**
7:45AM	0	0	35	0	**35**	0	1	0	0	**1**	27	150	3	0	**180**	1	82	2	4	**89**	**305**
Hourly Total	3	0	102	0	**105**	0	1	0	0	**1**	76	544	10	0	**630**	3	245	4	9	**261**	**997**
8:00AM	2	0	31	0	**33**	0	0	1	0	**1**	23	121	5	0	**149**	0	63	2	4	**69**	**252**
8:15AM	3	2	38	0	**43**	0	0	0	0	**0**	20	99	2	1	**122**	1	72	0	2	**75**	**240**
8:30AM	0	1	33	0	**34**	0	1	2	0	**3**	28	117	1	0	**146**	0	54	1	2	**57**	**240**
8:45AM	3	0	40	1	**44**	0	0	2	0	**2**	32	137	1	0	**170**	1	65	0	2	**68**	**284**
Hourly Total	8	3	142	1	**154**	0	1	5	0	**6**	103	474	9	1	**587**	2	254	3	10	**269**	**1016**
4:00PM	2	0	51	0	**53**	1	0	0	0	**1**	33	90	0	1	**124**	0	124	3	2	**129**	**307**
4:15PM	3	0	71	0	**74**	1	1	0	0	**2**	27	92	0	1	**120**	0	103	3	1	**107**	**303**
4:30PM	1	0	64	0	**65**	3	0	0	0	**3**	21	117	1	1	**140**	0	141	3	4	**148**	**356**
4:45PM	0	0	67	0	**67**	0	0	1	0	**1**	35	96	0	3	**134**	0	137	0	1	**138**	**340**
Hourly Total	6	0	253	0	**259**	5	1	1	0	**7**	116	395	1	6	**518**	0	505	9	8	**522**	**1306**
5:00PM	1	0	63	0	**64**	3	0	0	0	**3**	36	133	1	9	**179**	0	147	7	0	**154**	**400**
5:15PM	2	0	61	0	**63**	0	0	1	0	**1**	21	97	0	6	**124**	0	140	3	1	**144**	**332**
5:30PM	2	0	66	1	**69**	3	0	0	0	**3**	36	88	0	6	**130**	1	148	4	1	**154**	**356**
5:45PM	0	0	79	0	**79**	0	0	0	0	**0**	24	76	1	1	**102**	0	99	1	1	**101**	**282**
Hourly Total	5	0	269	1	**275**	6	0	1	0	**7**	117	394	2	22	**535**	1	534	15	3	**553**	**1370**
Total	22	3	766	2	**793**	11	3	7	0	**21**	412	1807	22	29	**2270**	6	1538	31	30	**1605**	**4689**
% Approach	2.8%	0.4%	96.6%	0.3%	-	52.4%	14.3%	33.3%	0%	-	18.1%	79.6%	1.0%	1.3%	-	0.4%	95.8%	1.9%	1.9%	-	-
% Total	0.5%	0.1%	16.3%	0%	**16.9%**	0.2%	0.1%	0.1%	0%	**0.4%**	8.8%	38.5%	0.5%	0.6%	**48.4%**	0.1%	32.8%	0.7%	0.6%	**34.2%**	-
Lights and Motorcycles	21	3	759	2	**785**	11	2	7	0	**20**	410	1743	22	28	**2203**	6	1489	28	29	**1552**	4560
% Lights and Motorcycles	95.5%	100%	99.1%	100%	**99.0%**	100%	66.7%	100%	0%	**95.2%**	99.5%	96.5%	100%	96.6%	**97.0%**	100%	96.8%	90.3%	96.7%	**96.7%**	97.2%
Heavy	1	0	7	0	**8**	0	1	0	0	**1**	2	64	0	1	**67**	0	49	3	1	**53**	129
% Heavy	4.5%	0%	0.9%	0%	**1.0%**	0%	33.3%	0%	0%	**4.8%**	0.5%	3.5%	0%	3.4%	**3.0%**	0%	3.2%	9.7%	3.3%	**3.3%**	2.8%

*L: Left, R: Right, T: Thru, U: U-Turn

SR 47 & SW Marvin Burnett - TMC
Tue Jul 18, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091860, Location: 30.160196, -82.645384, Site Code: SR 47 & Marvin Burnett

Provided by: Hagen Consulting Services
361 Strawder Road, Ray City, GA, 31645, US



SR 47 & SW Marvin Burnett - TMC

Tue Jul 18, 2023
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091860, Location: 30.160196, -82.645384, Site Code: SR 47 & Marvin Burnett

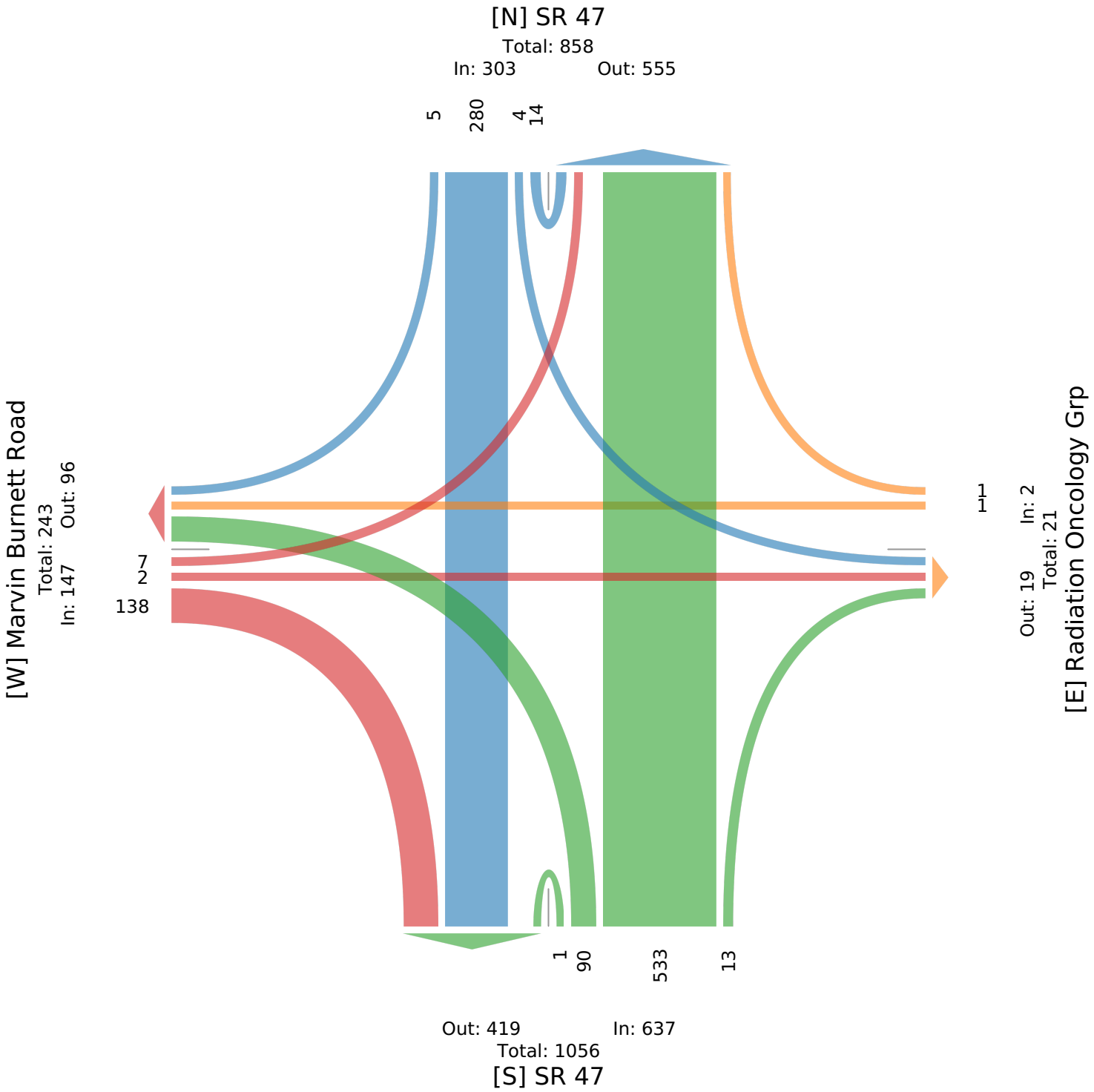
Provided by: Hagen Consulting Services
361 Strawder Road, Ray City, GA, 31645, US

Leg	Marvin Burnett Road					Radiation Oncology Grp					SR 47					SR 47					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2023-07-18 7:30AM	2	0	34	0	**36**	0	0	0	0	**0**	20	163	3	0	**186**	2	63	1	4	**70**	**292**
7:45AM	0	0	35	0	**35**	0	1	0	0	**1**	27	150	3	0	**180**	1	82	2	4	**89**	**305**
8:00AM	2	0	31	0	**33**	0	0	1	0	**1**	23	121	5	0	**149**	0	63	2	4	**69**	**252**
8:15AM	3	2	38	0	**43**	0	0	0	0	**0**	20	99	2	1	**122**	1	72	0	2	**75**	**240**
Total	7	2	138	0	**147**	0	1	1	0	**2**	90	533	13	1	**637**	4	280	5	14	**303**	**1089**
% Approach	4.8%	1.4%	93.9%	0%	**-**	0%	50.0%	50.0%	0%	**-**	14.1%	83.7%	2.0%	0.2%	**-**	1.3%	92.4%	1.7%	4.6%	**-**	-
% Total	0.6%	0.2%	12.7%	0%	**13.5%**	0%	0.1%	0.1%	0%	**0.2%**	8.3%	48.9%	1.2%	0.1%	**58.5%**	0.4%	25.7%	0.5%	1.3%	**27.8%**	-
PHF	0.583	0.250	0.908	-	**0.855**	-	0.250	0.250	-	**0.500**	0.833	0.817	0.650	0.250	**0.856**	0.500	0.854	0.625	0.875	**0.851**	0.893
Lights and Motorcycles	7	2	137	0	**146**	0	0	1	0	**1**	89	515	13	1	**618**	4	272	3	13	**292**	1057
% Lights and Motorcycles	100%	100%	99.3%	0%	**99.3%**	0%	0%	100%	0%	**50.0%**	98.9%	96.6%	100%	100%	**97.0%**	100%	97.1%	60.0%	92.9%	**96.4%**	97.1%
Heavy	0	0	1	0	**1**	0	1	0	0	**1**	1	18	0	0	**19**	0	8	2	1	**11**	32
% Heavy	0%	0%	0.7%	0%	**0.7%**	0%	100%	0%	0%	**50.0%**	1.1%	3.4%	0%	0%	**3.0%**	0%	2.9%	40.0%	7.1%	**3.6%**	2.9%

*L: Left, R: Right, T: Thru, U: U-Turn

SR 47 & SW Marvin Burnett - TMC
Tue Jul 18, 2023
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091860, Location: 30.160196, -82.645384, Site Code: SR 47 & Marvin Burnett

Provided by: Hagen Consulting Services
361 Strawder Road, Ray City, GA, 31645, US



SR 47 & SW Marvin Burnett - TMC

Tue Jul 18, 2023
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091860, Location: 30.160196, -82.645384, Site Code: SR 47 & Marvin Burnett

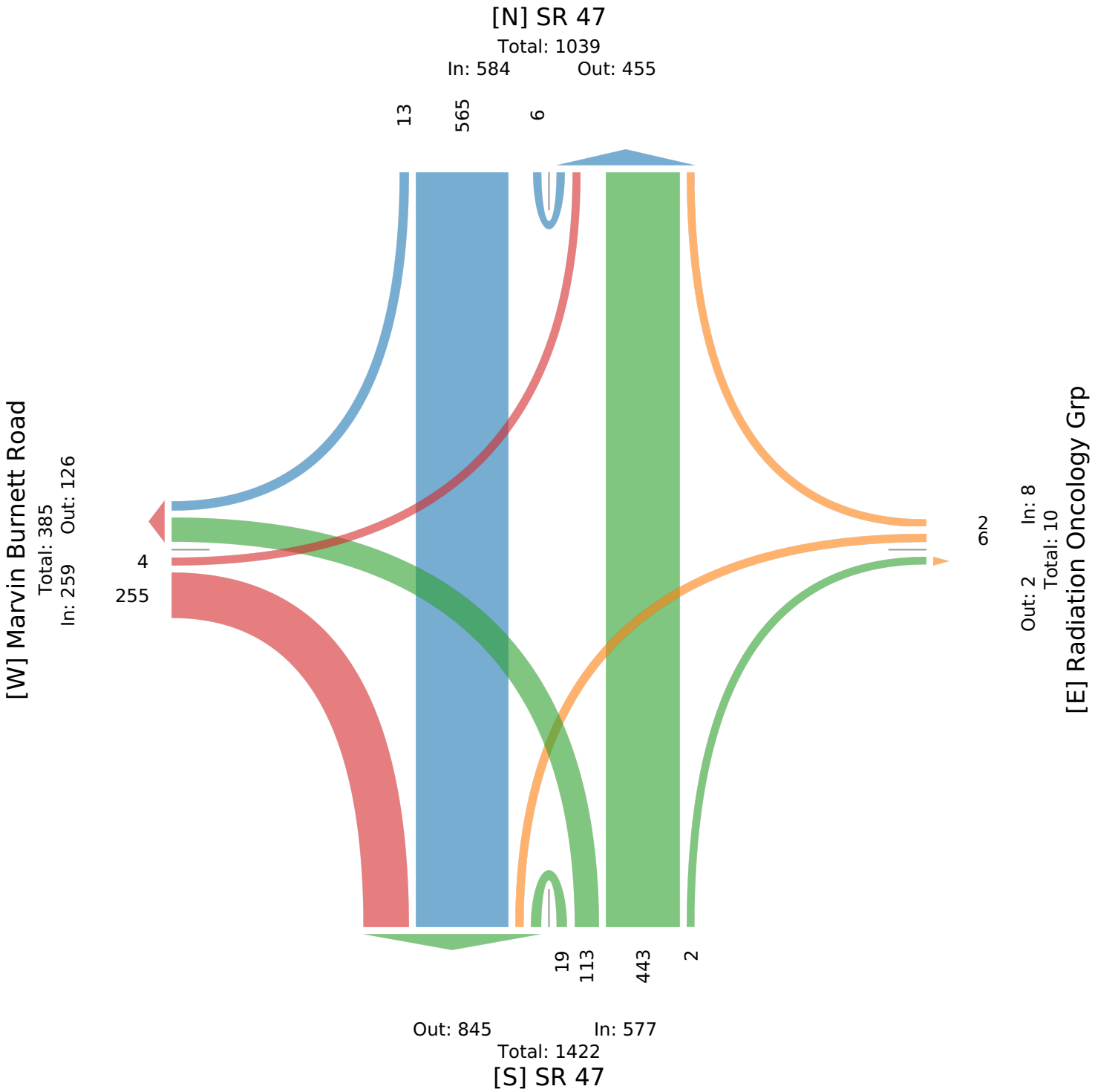
Provided by: Hagen Consulting Services
361 Strawder Road, Ray City, GA, 31645, US

Leg	Marvin Burnett Road					Radiation Oncology Grp					SR 47					SR 47					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2023-07-18 4:30PM	1	0	64	0	**65**	3	0	0	0	**3**	21	117	1	1	**140**	0	141	3	4	**148**	**356**
4:45PM	0	0	67	0	**67**	0	0	1	0	**1**	35	96	0	3	**134**	0	137	0	1	**138**	**340**
5:00PM	1	0	63	0	**64**	3	0	0	0	**3**	36	133	1	9	**179**	0	147	7	0	**154**	**400**
5:15PM	2	0	61	0	**63**	0	0	1	0	**1**	21	97	0	6	**124**	0	140	3	1	**144**	**332**
Total	4	0	255	0	**259**	6	0	2	0	**8**	113	443	2	19	**577**	0	565	13	6	**584**	**1428**
% Approach	1.5%	0%	98.5%	0%	**-**	75.0%	0%	25.0%	0%	**-**	19.6%	76.8%	0.3%	3.3%	**-**	0%	96.7%	2.2%	1.0%	**-**	-
% Total	0.3%	0%	17.9%	0%	**18.1%**	0.4%	0%	0.1%	0%	**0.6%**	7.9%	31.0%	0.1%	1.3%	**40.4%**	0%	39.6%	0.9%	0.4%	**40.9%**	-
PHF	0.500	-	0.951	-	**0.966**	0.500	-	0.500	-	**0.667**	0.785	0.833	0.500	0.528	**0.806**	-	0.961	0.464	0.375	**0.948**	0.893
Lights and Motorcycles	3	0	253	0	**256**	6	0	2	0	**8**	113	430	2	18	**563**	0	549	12	6	**567**	1394
% Lights and Motorcycles	75.0%	0%	99.2%	0%	**98.8%**	100%	0%	100%	0%	**100%**	100%	97.1%	100%	94.7%	**97.6%**	0%	97.2%	92.3%	100%	**97.1%**	97.6%
Heavy	1	0	2	0	**3**	0	0	0	0	**0**	0	13	0	1	**14**	0	16	1	0	**17**	34
% Heavy	25.0%	0%	0.8%	0%	**1.2%**	0%	0%	0%	0%	**0%**	0%	2.9%	0%	5.3%	**2.4%**	0%	2.8%	7.7%	0%	**2.9%**	2.4%

*L: Left, R: Right, T: Thru, U: U-Turn

SR 47 & SW Marvin Burnett - TMC
Tue Jul 18, 2023
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091860, Location: 30.160196, -82.645384, Site Code: SR 47 & Marvin Burnett

Provided by: Hagen Consulting Services
361 Strawder Road, Ray City, GA, 31645, US



Marvin Burnett & Bascom Norris - TMC

Tue Jul 18, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091861, Location: 30.163397, -82.655082, Site Code: Marvin Burnett & Bascom Norris

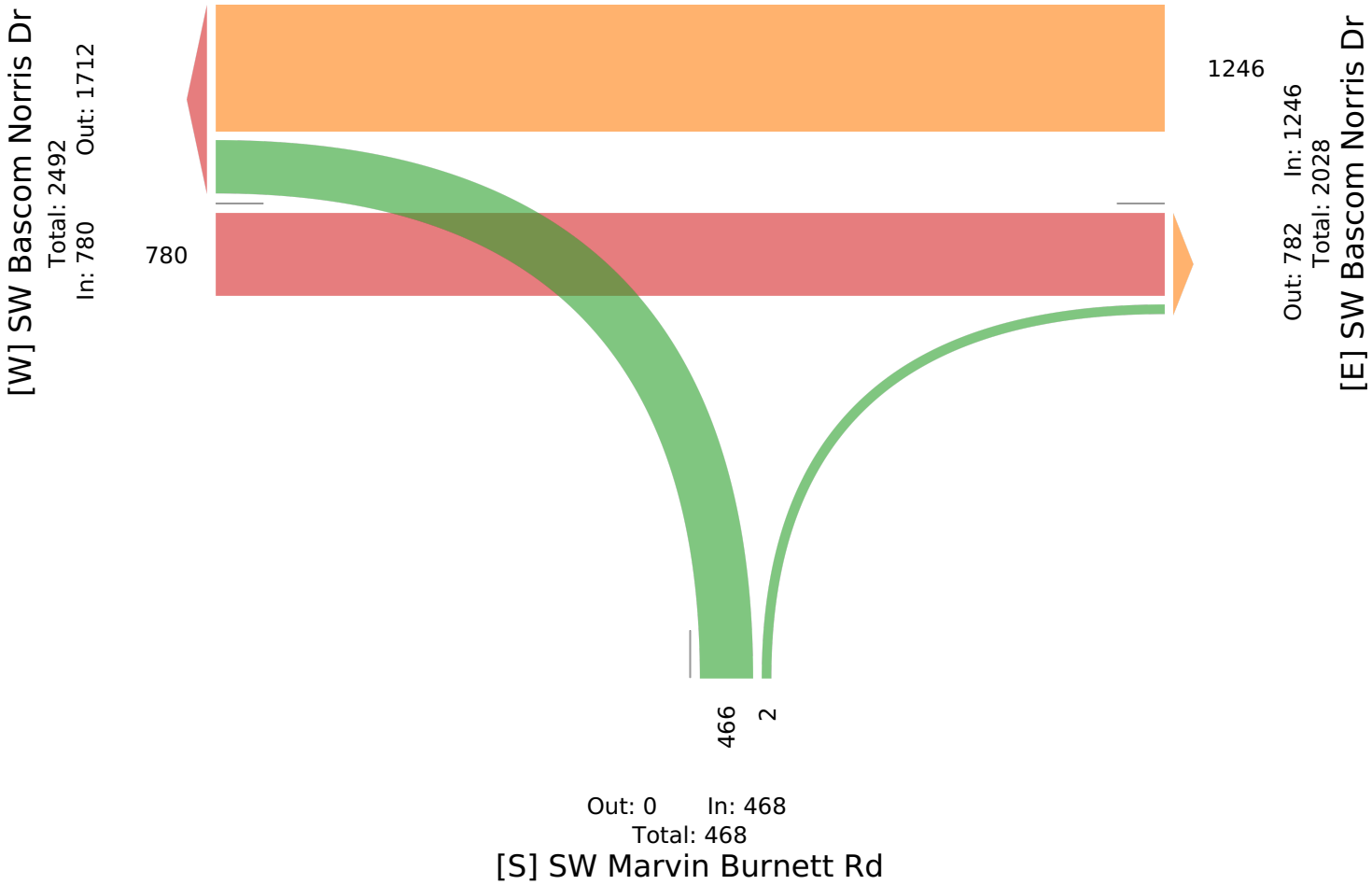
Provided by: Hagen Consulting Services
361 Strawder Road,
Ray City, GA, 31645, US

Leg Direction	SW Bascom Norris Dr Eastbound				SW Bascom Norris Dr Westbound				SW Marvin Burnett Rd Northbound				
Time	T	R	U	**App**	L	T	U	**App**	L	R	U	**App**	**Int**
2023-07-18 7:00AM	33	0	0	**33**	0	27	0	**27**	16	0	0	**16**	**76**
7:15AM	31	0	0	**31**	0	48	0	**48**	16	0	0	**16**	**95**
7:30AM	59	0	0	**59**	0	63	0	**63**	21	0	0	**21**	**143**
7:45AM	78	0	0	**78**	0	63	0	**63**	34	0	0	**34**	**175**
Hourly Total	201	0	0	**201**	0	201	0	**201**	87	0	0	**87**	**489**
8:00AM	41	0	0	**41**	0	58	0	**58**	24	0	0	**24**	**123**
8:15AM	56	0	0	**56**	0	65	0	**65**	23	0	0	**23**	**144**
8:30AM	49	0	0	**49**	0	57	0	**57**	26	0	0	**26**	**132**
8:45AM	41	0	0	**41**	0	74	0	**74**	38	0	0	**38**	**153**
Hourly Total	187	0	0	**187**	0	254	0	**254**	111	0	0	**111**	**552**
4:00PM	43	0	0	**43**	0	103	0	**103**	36	0	0	**36**	**182**
4:15PM	52	0	0	**52**	0	107	0	**107**	38	0	0	**38**	**197**
4:30PM	48	0	0	**48**	0	97	0	**97**	20	0	0	**20**	**165**
4:45PM	48	0	0	**48**	0	95	0	**95**	32	0	0	**32**	**175**
Hourly Total	191	0	0	**191**	0	402	0	**402**	126	0	0	**126**	**719**
5:00PM	52	0	0	**52**	0	142	0	**142**	35	0	0	**35**	**229**
5:15PM	58	0	0	**58**	0	98	0	**98**	22	1	0	**23**	**179**
5:30PM	47	0	0	**47**	0	87	0	**87**	56	1	0	**57**	**191**
5:45PM	44	0	0	**44**	0	62	0	**62**	29	0	0	**29**	**135**
Hourly Total	201	0	0	**201**	0	389	0	**389**	142	2	0	**144**	**734**
Total	780	0	0	**780**	0	1246	0	**1246**	466	2	0	**468**	**2494**
% Approach	100%	0%	0%	**-**	0%	100%	0%	**-**	99.6%	0.4%	0%	**-**	-
% Total	31.3%	0%	0%	**31.3%**	0%	50.0%	0%	**50.0%**	18.7%	0.1%	0%	**18.8%**	-
Lights and Motorcycles	759	0	0	**759**	0	1221	0	**1221**	461	2	0	**463**	2443
% Lights and Motorcycles	97.3%	0%	0%	**97.3%**	0%	98.0%	0%	**98.0%**	98.9%	100%	0%	**98.9%**	98.0%
Heavy	21	0	0	**21**	0	25	0	**25**	5	0	0	**5**	51
% Heavy	2.7%	0%	0%	**2.7%**	0%	2.0%	0%	**2.0%**	1.1%	0%	0%	**1.1%**	2.0%

*L: Left, R: Right, T: Thru, U: U-Turn

Marvin Burnett & Bascom Norris - TMC
Tue Jul 18, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091861, Location: 30.163397, -82.655082, Site Code: Marvin Burnett & Bascom Norris

Provided by: Hagen Consulting Services
361 Strawder Road,
Ray City, GA, 31645, US



Marvin Burnett & Bascom Norris - TMC

Tue Jul 18, 2023
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091861, Location: 30.163397, -82.655082, Site Code: Marvin Burnett & Bascom Norris

Provided by: Hagen Consulting Services
361 Strawder Road,
Ray City, GA, 31645, US

Leg / Direction	SW Bascom Norris Dr Eastbound				SW Bascom Norris Dr Westbound				SW Marvin Burnett Rd Northbound				
Time	T	R	U	**App**	L	T	U	**App**	L	R	U	**App**	**Int**
2023-07-18 7:30AM	59	0	0	**59**	0	63	0	**63**	21	0	0	**21**	**143**
7:45AM	78	0	0	**78**	0	63	0	**63**	34	0	0	**34**	**175**
8:00AM	41	0	0	**41**	0	58	0	**58**	24	0	0	**24**	**123**
8:15AM	56	0	0	**56**	0	65	0	**65**	23	0	0	**23**	**144**
Total	234	0	0	**234**	0	249	0	**249**	102	0	0	**102**	**585**
% Approach	100%	0%	0%	**-**	0%	100%	0%	**-**	100%	0%	0%	**-**	-
% Total	40.0%	0%	0%	**40.0%**	0%	42.6%	0%	**42.6%**	17.4%	0%	0%	**17.4%**	-
PHF	0.750	-	-	**0.750**	-	0.958	-	**0.958**	0.750	-	-	**0.750**	0.836
Lights and Motorcycles	222	0	0	**222**	0	240	0	**240**	99	0	0	**99**	561
% Lights and Motorcycles	94.9%	0%	0%	**94.9%**	0%	96.4%	0%	**96.4%**	97.1%	0%	0%	**97.1%**	95.9%
Heavy	12	0	0	**12**	0	9	0	**9**	3	0	0	**3**	24
% Heavy	5.1%	0%	0%	**5.1%**	0%	3.6%	0%	**3.6%**	2.9%	0%	0%	**2.9%**	4.1%

*L: Left, R: Right, T: Thru, U: U-Turn

Marvin Burnett & Bascom Norris - TMC
Tue Jul 18, 2023
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091861, Location: 30.163397, -82.655082, Site Code: Marvin Burnett & Bascom Norris

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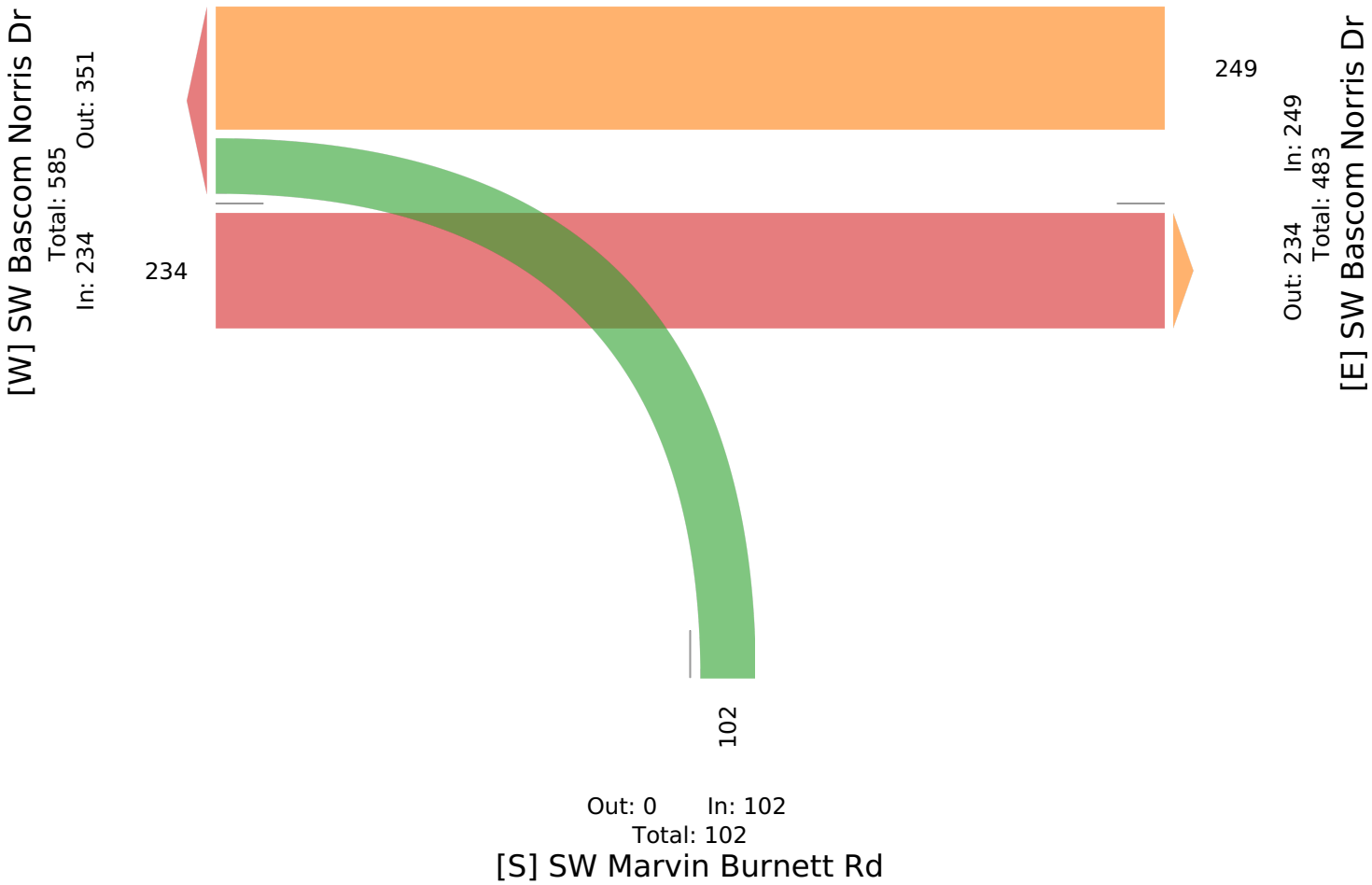

Marvin Burnett & Bascom Norris - TMC

Tue Jul 18, 2023
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091861, Location: 30.163397, -82.655082, Site Code: Marvin Burnett & Bascom Norris

Provided by: Hagen Consulting Services
361 Strawder Road,
Ray City, GA, 31645, US

Leg Direction	SW Bascom Norris Dr Eastbound				SW Bascom Norris Dr Westbound				SW Marvin Burnett Rd Northbound				
Time	T	R	U	**App**	L	T	U	**App**	L	R	U	**App**	**Int**
2023-07-18 4:45PM	48	0	0	**48**	0	95	0	**95**	32	0	0	**32**	**175**
5:00PM	52	0	0	**52**	0	142	0	**142**	35	0	0	**35**	**229**
5:15PM	58	0	0	**58**	0	98	0	**98**	22	1	0	**23**	**179**
5:30PM	47	0	0	**47**	0	87	0	**87**	56	1	0	**57**	**191**
Total	205	0	0	**205**	0	422	0	**422**	145	2	0	**147**	**774**
% Approach	100%	0%	0%	**-**	0%	100%	0%	**-**	98.6%	1.4%	0%	**-**	-
% Total	26.5%	0%	0%	**26.5%**	0%	54.5%	0%	**54.5%**	18.7%	0.3%	0%	**19.0%**	-
PHF	0.884	-	-	**0.884**	-	0.743	-	**0.743**	0.647	0.500	-	**0.645**	0.845
Lights and Motorcycles	204	0	0	**204**	0	416	0	**416**	144	2	0	**146**	766
% Lights and Motorcycles	99.5%	0%	0%	**99.5%**	0%	98.6%	0%	**98.6%**	99.3%	100%	0%	**99.3%**	99.0%
Heavy	1	0	0	**1**	0	6	0	**6**	1	0	0	**1**	8
% Heavy	0.5%	0%	0%	**0.5%**	0%	1.4%	0%	**1.4%**	0.7%	0%	0%	**0.7%**	1.0%

*L: Left, R: Right, T: Thru, U: U-Turn

Marvin Burnett & Bascom Norris - TMC
Tue Jul 18, 2023
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy)
All Movements
ID: 1091861, Location: 30.163397, -82.655082, Site Code: Marvin Burnett & Bascom Norris

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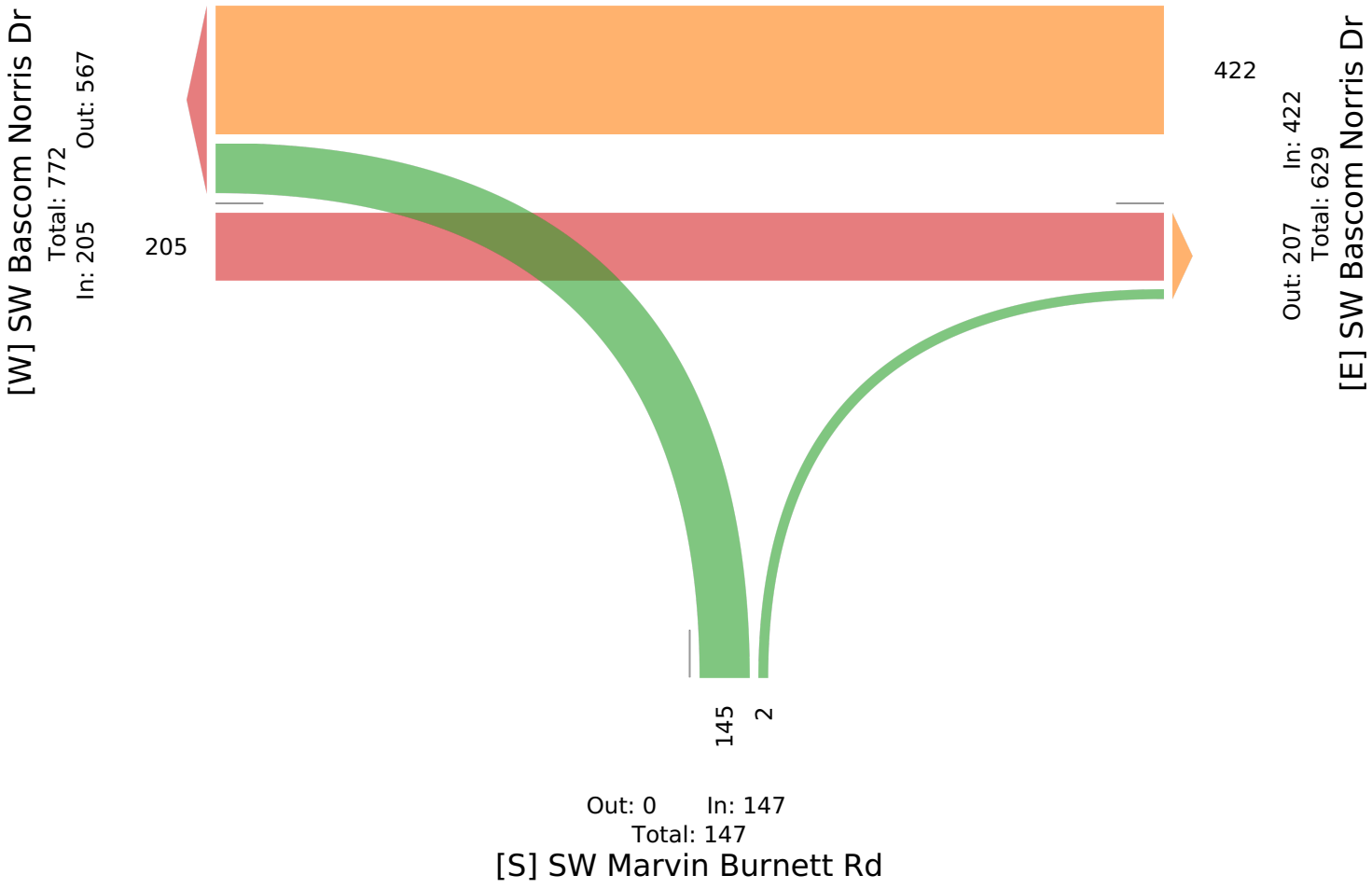


2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 2900 COLUMBIA COUNTYWIDE

MOCF: 0.98

WEEK	DATES	SF	PSCF
1	01/01/2022 - 01/01/2022	1.02	1.04
2	01/02/2022 - 01/08/2022	1.05	1.07
3	01/09/2022 - 01/15/2022	1.08	1.10
4	01/16/2022 - 01/22/2022	1.07	1.09
5	01/23/2022 - 01/29/2022	1.05	1.07
6	01/30/2022 - 02/05/2022	1.03	1.05
7	02/06/2022 - 02/12/2022	1.02	1.04
8	02/13/2022 - 02/19/2022	1.00	1.02
9	02/20/2022 - 02/26/2022	1.00	1.02
10	02/27/2022 - 03/05/2022	0.99	1.01
11	03/06/2022 - 03/12/2022	0.99	1.01
*12	03/13/2022 - 03/19/2022	0.98	1.00
*13	03/20/2022 - 03/26/2022	0.98	1.00
*14	03/27/2022 - 04/02/2022	0.98	1.00
*15	04/03/2022 - 04/09/2022	0.97	0.99
*16	04/10/2022 - 04/16/2022	0.97	0.99
*17	04/17/2022 - 04/23/2022	0.97	0.99
*18	04/24/2022 - 04/30/2022	0.97	0.99
*19	05/01/2022 - 05/07/2022	0.97	0.99
*20	05/08/2022 - 05/14/2022	0.97	0.99
*21	05/15/2022 - 05/21/2022	0.98	1.00
*22	05/22/2022 - 05/28/2022	0.98	1.00
*23	05/29/2022 - 06/04/2022	0.99	1.01
*24	06/05/2022 - 06/11/2022	0.99	1.01
25	06/12/2022 - 06/18/2022	1.00	1.02
26	06/19/2022 - 06/25/2022	1.00	1.02
27	06/26/2022 - 07/02/2022	1.01	1.03
28	07/03/2022 - 07/09/2022	1.02	1.04
29	07/10/2022 - 07/16/2022	1.03	1.05
30	07/17/2022 - 07/23/2022	1.02	1.04
31	07/24/2022 - 07/30/2022	1.01	1.03
32	07/31/2022 - 08/06/2022	1.01	1.03
33	08/07/2022 - 08/13/2022	1.00	1.02
34	08/14/2022 - 08/20/2022	0.99	1.01
35	08/21/2022 - 08/27/2022	1.00	1.02
36	08/28/2022 - 09/03/2022	1.00	1.02
37	09/04/2022 - 09/10/2022	1.01	1.03
38	09/11/2022 - 09/17/2022	1.01	1.03
39	09/18/2022 - 09/24/2022	1.00	1.02
40	09/25/2022 - 10/01/2022	0.99	1.01
41	10/02/2022 - 10/08/2022	0.98	1.00
42	10/09/2022 - 10/15/2022	0.97	0.99
43	10/16/2022 - 10/22/2022	0.98	1.00
44	10/23/2022 - 10/29/2022	0.99	1.01
45	10/30/2022 - 11/05/2022	1.00	1.02
46	11/06/2022 - 11/12/2022	1.01	1.03
47	11/13/2022 - 11/19/2022	1.02	1.04
48	11/20/2022 - 11/26/2022	1.02	1.04
49	11/27/2022 - 12/03/2022	1.02	1.04
50	12/04/2022 - 12/10/2022	1.02	1.04
51	12/11/2022 - 12/17/2022	1.02	1.04
52	12/18/2022 - 12/24/2022	1.05	1.07
53	12/25/2022 - 12/31/2022	1.08	1.10

* PEAK SEASON

23-FEB-2023 09:11:19 830UPD 2_2900_PKSEASON.TXT

APPENDIX B: HIGHWAY CAPACITY ANALYSES

HCS Two-Way Stop-Control Report

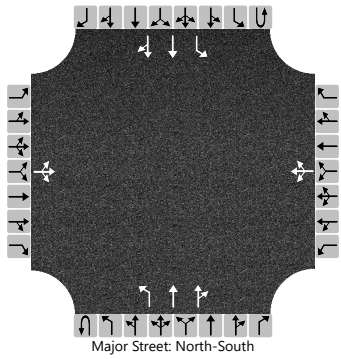
General Information

Analyst	L. Hagen
Agency/Co.	Hagen Consulting Services
Date Performed	10/2/2023
Analysis Year	2024
Time Analyzed	AM Peak Period
Intersection Orientation	North-South
Project Description	No-build scenario

Site Information

Intersection	SR 47 & Marvin Burnett Road
Jurisdiction	Columbia County
East/West Street	SW Marvin Burnett Road
North/South Street	SR 47
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		7	2	145		0	1	1	0	96	560	14	0	19	294	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			173				2			108				21		
Capacity, c (veh/h)			743				252			1213				929		
v/c Ratio			0.23				0.01			0.09				0.02		
95% Queue Length, Q_{95} (veh)			0.9				0.0			0.3				0.1		
Control Delay (s/veh)			11.3				19.4			8.3				9.0		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)	11.3				19.4				1.2				0.5			
Approach LOS	B				C				A				A			

HCS Two-Way Stop-Control Report

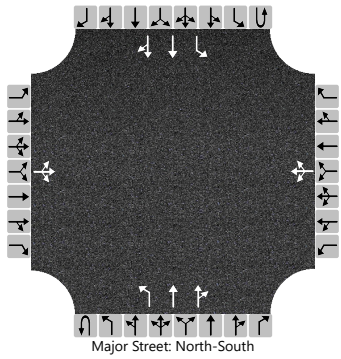
General Information

Analyst	L. Hagen
Agency/Co.	Hagen Consulting Services
Date Performed	10/2/2023
Analysis Year	2024
Time Analyzed	AM Peak Period
Intersection Orientation	North-South
Project Description	Build scenario

Site Information

Intersection	SR 47 & Marvin Burnett Road
Jurisdiction	Columbia County
East/West Street	SW Marvin Burnett Road
North/South Street	SR 47
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		8	2	152		0	1	1	0	107	560	14	0	19	294	10
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			182				2			120				21		
Capacity, c (veh/h)			732				241			1207				929		
v/c Ratio			0.25				0.01			0.10				0.02		
95% Queue Length, Q_{95} (veh)			1.0				0.0			0.3				0.1		
Control Delay (s/veh)			11.5				20.1			8.3				9.0		
Level of Service (LOS)			B				C			A				A		
Approach Delay (s/veh)		11.5				20.1				1.3				0.5		
Approach LOS		B				C				A				A		

HCS Two-Way Stop-Control Report

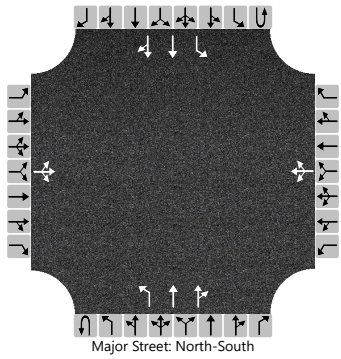
General Information

Analyst	L. Hagen
Agency/Co.	Hagen Consulting Services
Date Performed	10/2/2023
Analysis Year	2024
Time Analyzed	PM Peak Period
Intersection Orientation	North-South
Project Description	No-build scenario

Site Information

Intersection	SR 47 & Marvin Burnett Road
Jurisdiction	Columbia County
East/West Street	SW Marvin Burnett Road
North/South Street	SR 47
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		4	0	268		6	0	2	0	139	455	2	0	6	594	14
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			306				9			156				7		
Capacity, c (veh/h)			634				160			899				1041		
v/c Ratio			0.48				0.06			0.17				0.01		
95% Queue Length, Q_{95} (veh)			2.6				0.2			0.6				0.0		
Control Delay (s/veh)			15.9				28.8			9.8				8.5		
Level of Service (LOS)			C				D			A				A		
Approach Delay (s/veh)	15.9				28.8				2.3				0.1			
Approach LOS	C				D				A				A			

HCS Two-Way Stop-Control Report

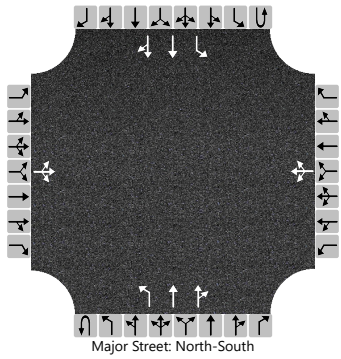
General Information

Analyst	L. Hagen
Agency/Co.	Hagen Consulting Services
Date Performed	10/2/2023
Analysis Year	2024
Time Analyzed	PM Peak Period
Intersection Orientation	North-South
Project Description	Build scenario

Site Information

Intersection	SR 47 & Marvin Burnett Road
Jurisdiction	Columbia County
East/West Street	SW Marvin Burnett Road
North/South Street	SR 47
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		5	0	291		6	0	2	0	153	455	2	0	6	594	29
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			333				9			172				7		
Capacity, c (veh/h)			622				129			886				1041		
v/c Ratio			0.53				0.07			0.19				0.01		
95% Queue Length, Q_{95} (veh)			3.2				0.2			0.7				0.0		
Control Delay (s/veh)			17.2				35.0			10.0				8.5		
Level of Service (LOS)			C				E			B				A		
Approach Delay (s/veh)	17.2				35.0				2.5				0.1			
Approach LOS	C				E				A				A			

HCS Two-Way Stop-Control Report

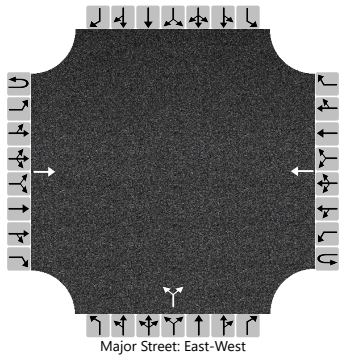
General Information

Analyst	L. Hagen
Agency/Co.	Hagen Consulting Services
Date Performed	10/2/2023
Analysis Year	2024
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	No-build scenario

Site Information

Intersection	Bascom Norris & Marvin Burnett
Jurisdiction	Columbia County
East/West Street	Bascom Norris Drive
North/South Street	Marvin Burnett Road
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			T				T				LR					
Volume (veh/h)			246				262			107		0				
Percent Heavy Vehicles (%)										3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.1		6.2				
Critical Headway (sec)										6.43		6.23				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)											127					
Capacity, c (veh/h)											459					
v/c Ratio											0.28					
95% Queue Length, Q_{95} (veh)											1.1					
Control Delay (s/veh)											15.8					
Level of Service (LOS)											C					
Approach Delay (s/veh)										15.8						
Approach LOS										C						

HCS Two-Way Stop-Control Report

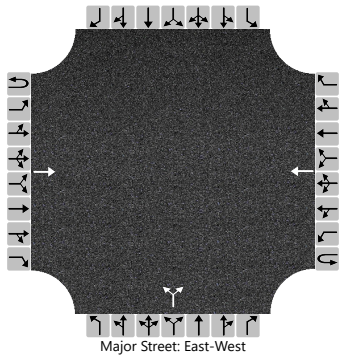
General Information

Analyst	L. Hagen
Agency/Co.	Hagen Consulting Services
Date Performed	10/2/2023
Analysis Year	2024
Time Analyzed	AM Peak
Intersection Orientation	East-West
Project Description	Build scenario

Site Information

Intersection	Bascom Norris & Marvin Burnett
Jurisdiction	Columbia County
East/West Street	Bascom Norris Drive
North/South Street	Marvin Burnett Road
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			T				T				LR					
Volume (veh/h)			246				262			113		0				
Percent Heavy Vehicles (%)										3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.1		6.2				
Critical Headway (sec)										6.43		6.23				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)											135					
Capacity, c (veh/h)											459					
v/c Ratio											0.29					
95% Queue Length, Q_{95} (veh)											1.2					
Control Delay (s/veh)											16.1					
Level of Service (LOS)											C					
Approach Delay (s/veh)										16.1						
Approach LOS										C						

HCS Two-Way Stop-Control Report

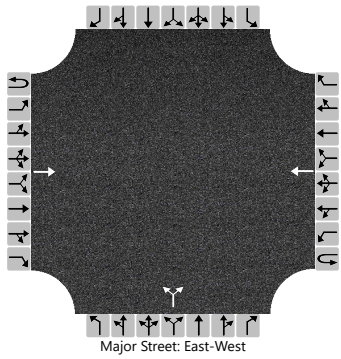
General Information

Analyst	L. Hagen
Agency/Co.	Hagen Consulting Services
Date Performed	10/2/2023
Analysis Year	2024
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	No-build scenario

Site Information

Intersection	Bascom Norris & Marvin Burnett
Jurisdiction	Columbia County
East/West Street	Bascom Norris Drive
North/South Street	Marvin Burnett Road
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			T				T				LR					
Volume (veh/h)			215				443			152		0				
Percent Heavy Vehicles (%)										3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.1		6.2				
Critical Headway (sec)										6.43		6.23				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)											181					
Capacity, c (veh/h)											361					
v/c Ratio											0.50					
95% Queue Length, Q_{95} (veh)											2.7					
Control Delay (s/veh)											24.6					
Level of Service (LOS)											C					
Approach Delay (s/veh)										24.6						
Approach LOS										C						

HCS Two-Way Stop-Control Report

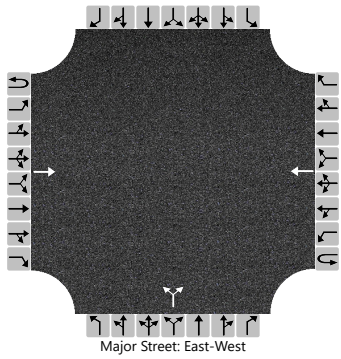
General Information

Analyst	L. Hagen
Agency/Co.	Hagen Consulting Services
Date Performed	10/2/2023
Analysis Year	2024
Time Analyzed	PM Peak
Intersection Orientation	East-West
Project Description	Build scenario

Site Information

Intersection	Bascom Norris & Marvin Burnett
Jurisdiction	Columbia County
East/West Street	Bascom Norris Drive
North/South Street	Marvin Burnett Road
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration			T				T				LR					
Volume (veh/h)			215				443			163		0				
Percent Heavy Vehicles (%)										3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										7.1		6.2				
Critical Headway (sec)										6.43		6.23				
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)										3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)											194					
Capacity, c (veh/h)											361					
v/c Ratio											0.54					
95% Queue Length, Q_{95} (veh)											3.0					
Control Delay (s/veh)											26.0					
Level of Service (LOS)											D					
Approach Delay (s/veh)										26.0						
Approach LOS										D						

Stormwater Management System Report

CRS Marvin Burnett

Prepared For: Concept Development, Inc.

Submitted To: City of Lake City and Suwannee River Water Management District

Date: 03/20/2024
PN# 23-0653
PM: Randall S. Olney, P.E.

Address: 1449 SW 74th Drive
Suite 200
Gainesville, Florida 32607

www.chw-inc.com

CHW Professional Consultants

Engineer's Certification Statement

I hereby certify that the design of the stormwater management systems for the project known as CRS Marvin Burnett has been designed substantially in accordance with the City of Lake City, the Suwannee River Water Management District, and the Florida Department of Transportation applicable rules and regulations.

Randall Scott Olney, State of Florida, Professional Engineer, License No. 68382

This item has been electronically signed and sealed by Randall Scott Olney, PE. On 03/21/2024 using a Digital Signature.

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

Randall Scott Olney

Digitally signed by Randall Scott Olney
DN: E=randyo@chw-inc.com, CN=Randall Scott Olney, O=Randall Scott Olney, L=Alachua, S=Florida, C=US
Date: 2024.03.21 13:52:58-04'00'

Randall S. Olney, FL PE No. 68382

03/21/2024

Date

Contents **Page**

Figures

Appendices

Introduction

The CRS Marvin Burnett project proposes the development of a ±10,640 sf commercial retail store with associated parking, stormwater, and utility infrastructure. The total proposed site area is ± 2.70 acres, located along the northwest corner of the intersection of State Road 47 and SW Marvin Burnett Road in Lake City, Florida.

The project site is located on a portion of tax parcel #07-4S-17-08127-005 according to the Columbia County Property Appraiser's website. Figure 1 provides a Location Map and Figure 2 depicts the site on a portion of the Lake City West USGS Quadrangle Map. The site is located in Section 7, Township 4 South, Range 17 East in Columbia County, Florida.

Refer to the accompanying engineering plans for details about the proposed construction and demolition regarding this project.

Design Criteria

The design criteria for the proposed stormwater management facility (SMF) is based upon the criteria set forth by the City of Lake City (CLC), the Suwannee River Water Management District (SRWMD), and the Florida Department of Transportation (FDOT) for a dry retention system design in a closed watershed. The criteria are as follows:

1. Provide Peak Discharge Rate Attenuation: Attenuate the post-development peak discharge rates to be less than the pre-development peak discharge rates for:
    a. The 100 year – 1 hour, 100 year – 2 hour, 100 year – 4 hour, 100 year – 8 hour, 100 year – 24 hour storm events (SRWMD).
    b. The 3, 5, 10, 25, 50, and 100-year frequency analysis of the 1, 2, 4, 8, 24, 72, 168, and 240-hr storm events (FDOT).

2. Provide Peak Discharge Volume Attenuation: Attenuate the post-development peak discharge volumes to be less than the pre-development peak discharge volume for:
    a. The 100 year – 1 hour, 100 year – 2 hour, 100 year – 4 hour, 100 year – 8 hour, 100 year – 24 hour storm events (SRWMD).
    b. The 3, 5, 10, 25, 50, and 100-year frequency analysis of the 1, 2, 4, 8, 24, 72, 168, and 240-hr storm events (FDOT).

3. Provide Water Quality Treatment Volume (WQTV): The minimum stormwater treatment volume shall be the runoff from the first 2.0 inch of runoff from the design storm. WQTV must be recovered within 72 hours (SRWMD).

4. Freeboard: Retention ponds shall have a freeboard of 1 foot above the maximum stage in order to function properly during storms greater than the design storm (SRWMD).

5. Provide Volume Recovery: Retention systems must have one-half of the total volume available within 7 days following the end of the design storm event, and the total volume must be recovered within 30 days following the end of the storm event (SRWMD and FDOT).

Alternatively, if recovery requirements cannot be met, back-to-back storms can be routed through the system (SRWMD).

6. Fencing: Any water retention areas that have a potential of holding water in excess of one (1) foot depth to be fenced with a four (4) foot high fence and screened by trees or shrubbery (CLC).

City of Lake City, SRWMD, and FDOT also require that best management practices be employed to control erosion, sedimentation, and that an operation and maintenance entity be established.

Site Characteristics

Physical characteristics of the site are described in the following sections. Additional details are provided in the accompanying Engineering plans.

Site Topography

The existing site is undeveloped and heavily wooded with existing pavement and structures that are to be removed. The project site is bordered by a single-family residence to the west, a church to the north, State Road 47 to the east, and Marvin Burnett Road to the south. The site is sloped from the northeast to the southwest. Site topography ranges from EL. ± 167.00' (NAVD 88) in the northeast corner of the site to EL. ± 152.60' (NAVD 88) in the southwest corner.

Please refer to the accompanying engineering plans for details.

Pre-Development Drainage

Pre-development drainage consists of two watersheds: Pre-Development Watershed #1 (Pre DA-1) and Pre-Development Watershed #2 (Pre DA-2). Pre DA-1 is ±2.03 acres in size and includes a portion of offsite area to the north of the site as well as most of the western portion of the project site. Stormwater runoff from Pre DA-1 flows via sheet flow and shallow concentrated flow to a natural low area along the western boundary of the site. Pre DA-2 is ±1.79 acres in size and includes offsite area to the north as well as the eastern portion of the project site. Stormwater runoff from Pre DA-2 flows via sheet flow and shallow concentrated flow into the SR-47 (FDOT) storm sewer system.

Refer to Figure 4 for a NRCS Soils Map. Refer to Figure 6 for more information on the pre-development watershed.

Post-Development Drainage

Post-Development drainage consists of two watersheds: Post-Development Watershed #1 (Post DA-1) and Post-Development Watershed #2 (Post DA-2). Post DA-1 comprises ±3.29 acres including ±0.93 acres of impervious area as well as a portion of offsite area. Stormwater runoff from Post DA-1 will be routed via sheet flow and shallow concentrated flow to a stormwater pipe conveyance system and into the proposed stormwater management facility (SMF-1). Post DA-2 comprises

±0.53 acres including ±0.02 acres of impervious area from a small portion of sidewalk. Stormwater runoff from Post DA-2 will be routed via sheet flow and shallow concentrated flow to the SR-47 (FDOT) storm sewer system as in the pre-development condition. The drainage area discharging to the FDOT system is greatly reduced in comparison to pre-development. Additionally, the CN of this area did not increase. Therefore, it is assumed that runoff rates and volumes have been reduced for each design storm event and these watersheds were not included in the drainage model.

SMF-1 is designed as a dry retention facility that will retain and infiltrate the difference between pre-development and post-development runoff volume. The top of bank for SMF-1 is set at EL. 160.00' while the bottom of pond is at EL. 157.00' with 4:1 side slope. The resulting total storage volume is ±49,744 cf. An underdrain system is proposed to lower the seasonal high-water table and meet recovery requirements. An outfall structure has been provided, which enables discharge to the existing depression beyond the western border of the site, mimicking the pre-development drainage patterns.

Refer to Figure 7 for more information on the post-development watershed.

Soils Information

The National Resource Conservation Service (NRCS) Soil Survey for Columbia County describes the near surface soil profile for the project area as *Blanton fine sand* (0 – 5% slopes) of hydrologic soil group rating of 'A', *Ichetucknee fine sand* (5 – 8% slopes) of hydrologic soil group rating of 'D', *Mascotte fine sand* of hydrologic soil group rating of 'B/D', *Pelham fine sand* (0 – 2% slopes) of hydrologic soil group rating of 'B/D'. Refer to Figure 4 for the NRCS Soils Map.

A site-specific soils investigation was conducted by GSE Engineering & Consulting, Inc. on October 11th, 2023 and the report was later revised on December 7th, 2023. Based on the Summary Report of Geotechnical Site Exploration, the following design parameters were recommended for the stormwater management facility calculations. Refer to Appendix C for further details.

SMF-1

- Average ground elevation of borings within proposed SMF-1 area: 156.70' (NAVD 88)
- Base elevation of effective or mobilized aquifer: 148.70' (NAVD 88)
- Average seasonal high groundwater table elevation: *152.99' (NAVD 88)
- Horizontal hydraulic conductivity: 10 feet per day (5 feet per day used in calculations)
- Unsaturated vertical infiltration rate: 10 feet per day (5 feet per day used in calculations)
- Specific yield (fillable porosity): 20%

*Seasonal high-water table established based on highest invert of the underdrain system.

Drainage Analysis

The proposed stormwater management system (SMF-1) has been designed to provide attenuation of the discharge rates and volumes for the 100 year – 1 hour, 100 year – 2 hour, 100 year – 4 hour, 100 year – 8 hour, and 100 year – 24 hour storm events. Since the portion of the site draining towards the FDOT ROW (Post DA-2) is minimal and has been reduced from its pre- development

condition (Pre DA-2), the FDOT storms were not modeled. SMF-1 should recover one-half of the total volume available within 7 days following the end of the design storm event, and the total volume must be recovered within 30 days. Additionally, the stormwater management system is designed to retain the water quality treatment volume and recover this volume within 72 hours.

Appendix A contains details and calculations as well as a section for routing results, recovery analysis, hydraulic calculations, and general drainage calculations.

Analysis Methodology

The drainage analysis was conducted using the computer program PONDS (v3.3) to generate runoff hydrographs and route the runoff hydrographs through the proposed stormwater system. The required storm events were analyzed using SRWMD rainfall amounts for the pre-development and post-development watersheds.

Unit Hydrograph Parameters

Unit hydrograph parameters required for the drainage analysis include run-off curve number (CN), time of concentration (Tc), and drainage area. Values used in the analysis are summarized as follows:

<u>Pre-Development Watershed #1 (Pre DA-1):</u>

Watershed Area =	2.03 ac.
Impervious Area (Existing) =	0.02 ac.
Woods (Good, Type 'A' Soil) =	0.47 ac.
Woods (Good, Type 'D' Soil) =	1.55 ac.

CN = 66
Tc = 29 min.

<u>Post-Development Watershed #1 (Post DA-1):</u>

Watershed Area =	3.29 ac.
Impervious Area =	0.93 ac.
Stormwater Management Facility =	0.45 ac.
Open Space (Good, Type 'A' Soil) =	1.29 ac.
Open Space (Good, Type 'D' Soil) =	0.62 ac.

CN = 72
Tc = 10 min.*

*Time of Concentration is assumed to be 10 minutes.

Pond Storage

Stage-storage values for the proposed stormwater management facilities are provided in Appendix A.

Water Quality Treatment Volume (WQTV)

Per SRWMD, the required water quality treatment volume (WQTV) required for a dry retention system is 2.0 inch of runoff over the drainage area, that must draw down within 72 hours. The WQTV calculations and modeling results are summarized in Table 1, additional details can be found in appendix A.

Table 1: Post Development Watershed Water Quality Treatment

Stormwater Management Facility	Required WQTV (cf)	Peak Elevation at WQTV (ft)	Time to Recover WQTV (hours)
SMF-1	12,483	157.87	< 6

Run-off and Facility Routing Results

The routing results for Pre DA-1 and Post DA-1 (SMF-1) are summarized in Tables 2 and 3. Table 2 displays the peak stage, freeboard, and recovery time for the analyzed storm events, while Table 3 displays the discharge rates and volumes for pre and post-development. Detailed results and calculations are provided in Appendix A.

Table 2: Pre DA-1 vs. Post DA-1 Routing Results

Storm Event	Peak Stage (ft.)	Freeboard (ft)	Full Volume Recovery (days after storm)
SRWMD 100YR-1HR	158.14	1.86	< 1
SRWMD 100YR-2HR	158.35	1.65	< 1
SRWMD 100YR-4HR	158.46	1.54	< 1
SRWMD 100YR-8HR	158.61	1.39	< 4
SRWMD 100YR-24HR	158.78	1.22	< 7

Table 3: Pre DA-1 vs. Post DA-1 Attenuation Results

Storm Event	Discharge Rates (cfs)			Discharge Volumes (cf)		
	Pre	Post	Change	Pre	Post	Change
SRWMD 100YR-1HR	4.27	0.31	-3.96	8,901	463	-8439
SRWMD 100YR-2HR	5.47	1.28	-4.19	13,242	4,512	-8730
SRWMD 100YR-4HR	6.46	1.93	-4.53	18,428	10,552	-7876
SRWMD 100YR-8HR	7.25	3.00	-4.25	25,727	17,171	-8556
SRWMD 100YR-24HR	6.67	4.28	-2.39	40,983	37,974	-3009

Summary and Conclusions

The proposed drainage system meets CLC, SRWMD, and FDOT criteria for dry retention system designs in a closed watershed. The criteria are as follows:

1. Provide Peak Discharge Rate Attenuation: SMF-1 attenuates the post-development peak discharge rates to be less than the pre-development peak discharge rates for:
    a. The 100 year – 1 hour, 100 year – 2 hour, 100 year – 4 hour, 100 year – 8 hour, 100 year – 24 hour storm events (SRWMD).
    b. The 3, 5, 10, 25, 50, and 100-year frequency analysis of the 1, 2, 4, 8, 24, 72, 168, and 240-hr storm events (FDOT).

2. Provide Peak Discharge Volume Attenuation: SMF-1 attenuates the post-development peak discharge volumes to be less than the pre-development peak discharge volume for:
    a. The 100 year – 1 hour, 100 year – 2 hour, 100 year – 4 hour, 100 year – 8 hour, 100 year – 24 hour storm events (SRWMD).
    b. The 3, 5, 10, 25, 50, and 100-year frequency analysis of the 1, 2, 4, 8, 24, 72, 168, and 240-hr storm events (FDOT).

3. Provide Water Quality Treatment Volume (WQTV): SMF-1 has been designed to retain the runoff from the first 2.0 inch of runoff from the design storm. WQTV is recovered within 72 hours. (SRWMD).

4. Freeboard: SMF-1 provides 1 foot of freeboard above the maximum stage in order to function properly during storms greater than the design storm (SRWMD).

5. Provide Volume Recovery: SMF-1 provides half of the total available volume within 7 days after the end of all storm events, and provides the total available volume within 30 days after the end of all storm events (SRWMD and FDOT).

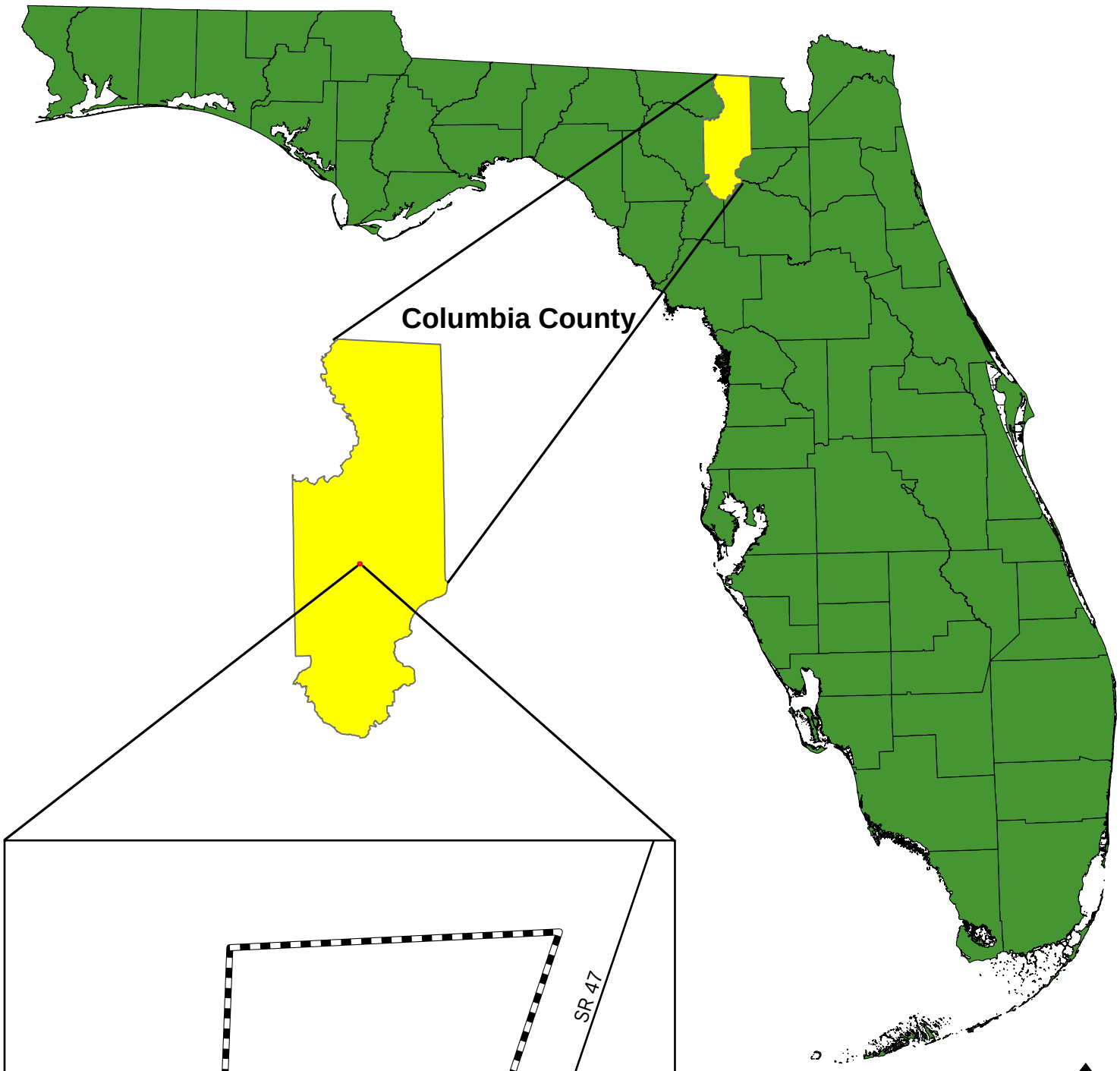
6. Fencing: SMF-1 has the potential to hold water in excess of one (1) foot depth, therefore a (4) foot high fence and sufficient screening by trees and shrubbery is proposed. (CLC).

Based on the information provided, the project is eligible for approval by City of Lake City, SRWMD, and FDOT.

Figure 1

Project Location Map

Project Location Map
CRS Marvin Burnett



CHW Professional Consultants
11801 Research Drive,
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
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C

Document Path: \\fs01.chw-inc.local\jobs2\2023\23-0653\Admin & Information\07_Maps\GIS\APRXs\CRS Lake City\CRS Lake City.aprx Prepared by Employee ### Date: 11/22/2023

Figure 2

USGS Quadrangle Map

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CRS Marvin Burnett Quad Map

0 600 1,200
Feet

N

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Figure 3

Aerial Map

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CRS Marvin Burnett Aerial Map

0 60 120
Feet

N

175

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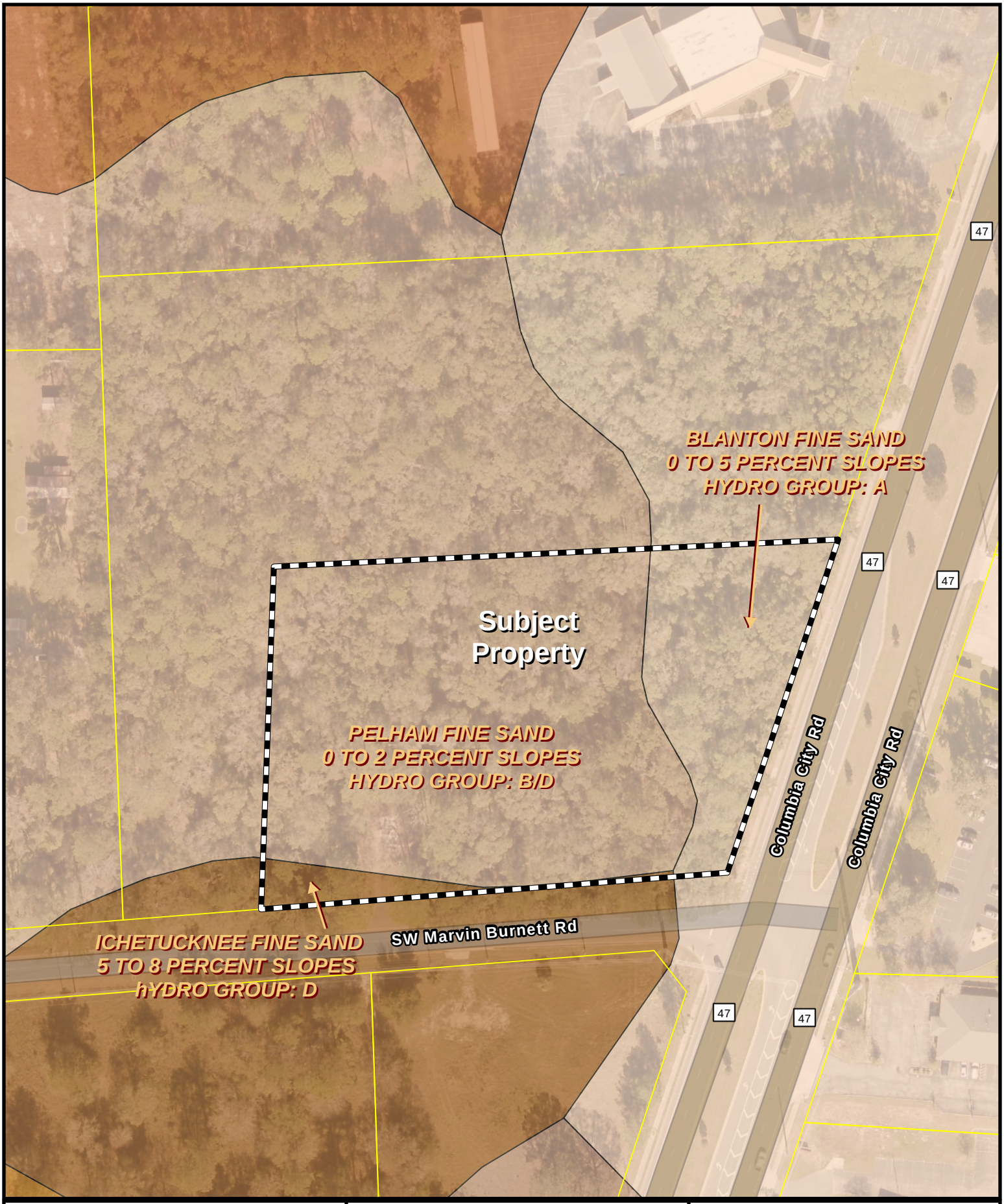
Figure 4

NRCS Soils Map



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CRS Marvin Burnett
NRCS Soils Map

0 60 120
Feet

N

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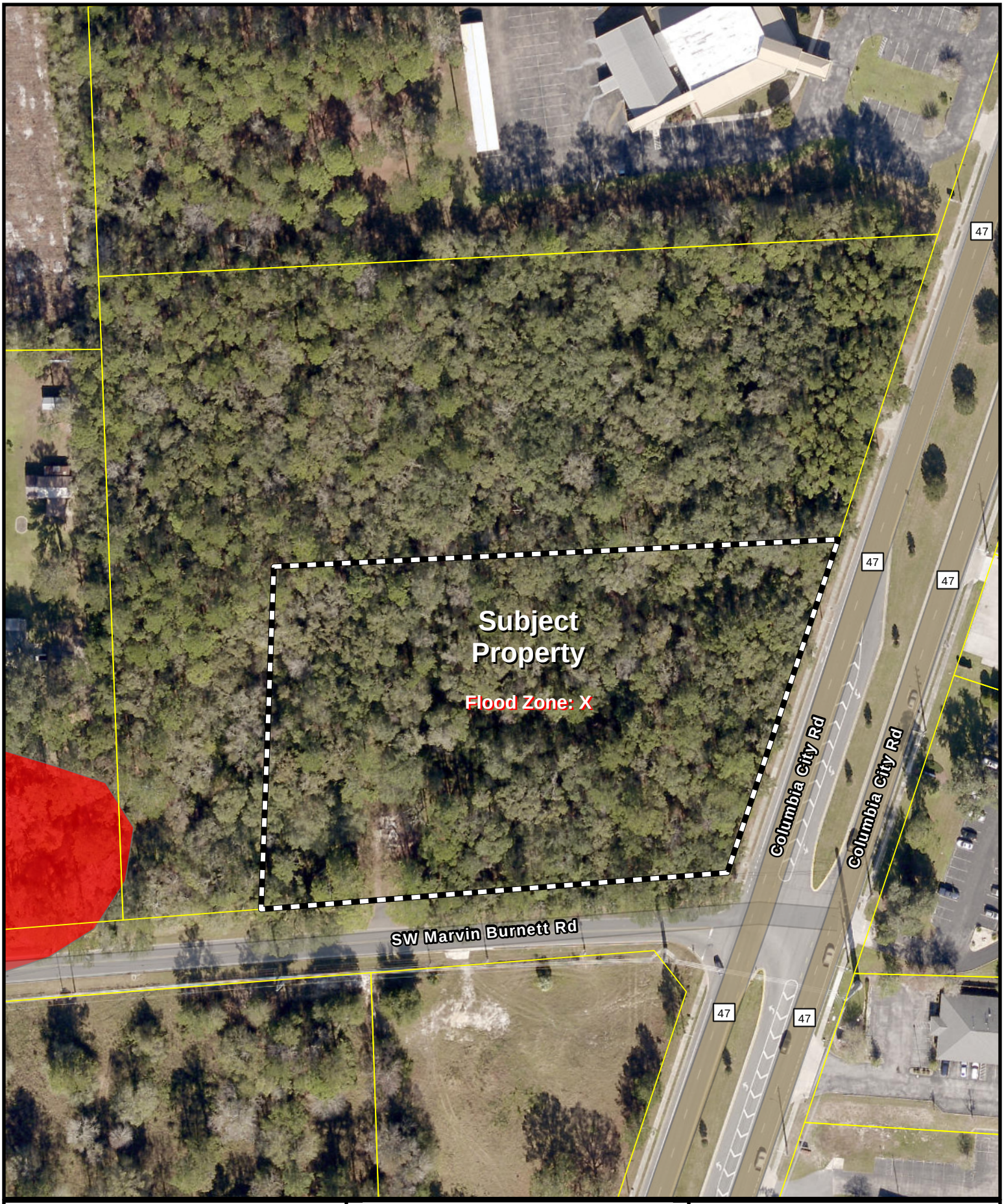
Figure 5

FEMA Flood Map



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CRS Marvin Burnett
FEMA Flood Map

0 60 120
Feet

N

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Figure 6

Pre-Development Drainage Map

LEGEND

PRE-DEVELOPMENT WATERSHED 1 (PRE DA-1) BOUNDARY:

PRE-DEVELOPMENT WATERSHED 2 (PRE DA-2) BOUNDARY:

EXISTING IMPERVIOUS AREA TO BE REMOVED:

PRE-DEVELOPMENT DRAINAGE FLOW PATTERNS:

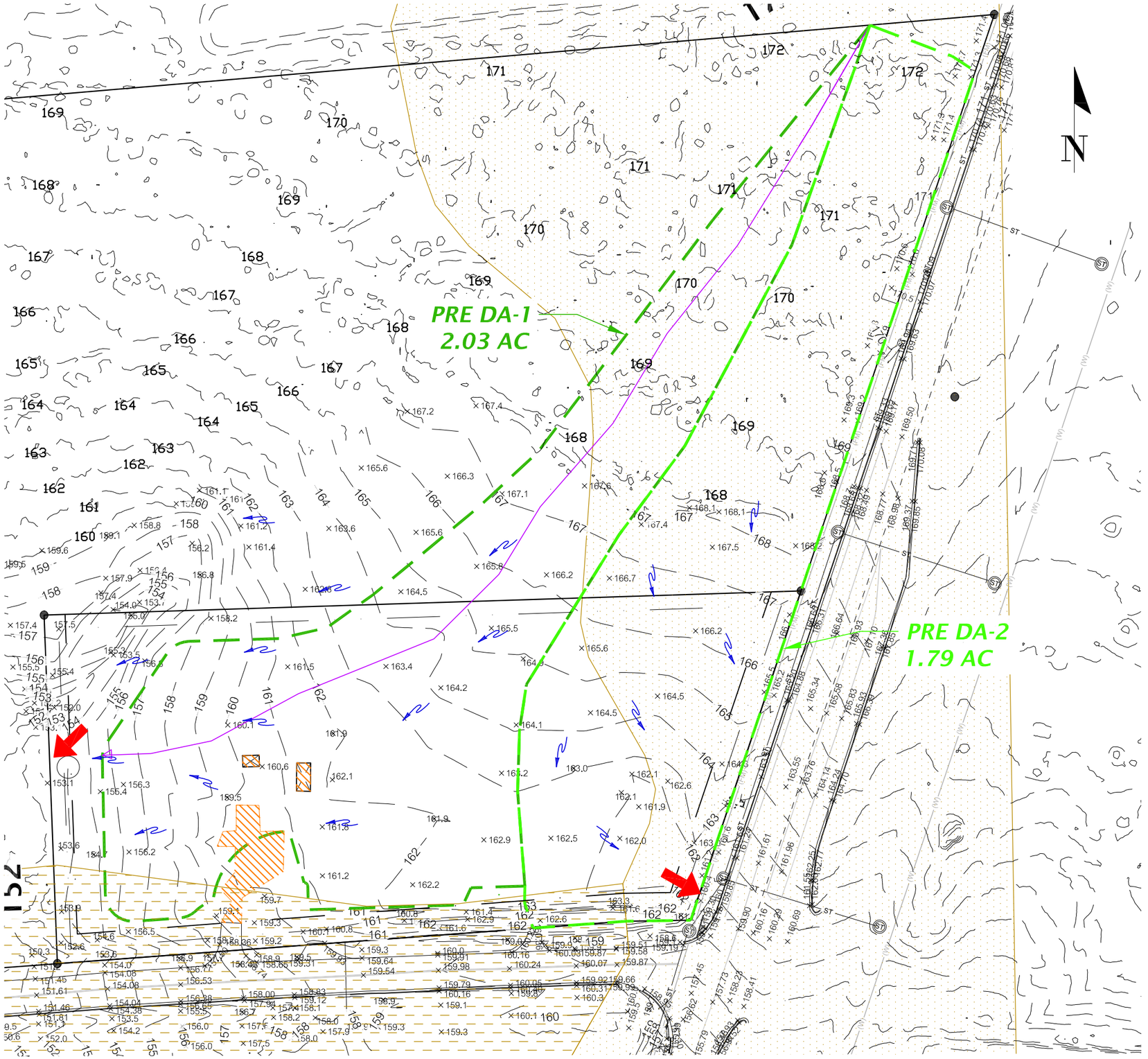
PRE-DEVELOPMENT TIME OF CONCENTRATION

PRE-DEVELOPMENT DISCHARGE POINT:

TYPE 'A' SOILS

TYPE 'D' SOILS

NOTE: ALL SOILS ARE TYPE 'B/D' UNLESS OTHERWISE NOTED



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Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 1988 FLORIDA CA #30015
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SCALE: 1"=75'

VERIFY SCALE BAR IS CORRECT FOR ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY.

CONSTRUCTION REVISIONS:

SUBMITTALS:

CLIENT: CONCEPT COMPANIES, LLC.

PROJECT: CRS MARVIN BURNETT

SHEET TITLE: PRE-DEVELOPMENT DRAINAGE MAP

TECHNICIAN: CCM

TEMPLATE: CCM

QUALITY CONTROL: RSO

PROJECT NUMBER: 23-0653

SHEET NUMBER: FIGURE 1

Figure 7

Post-Development Drainage Map

LEGEND

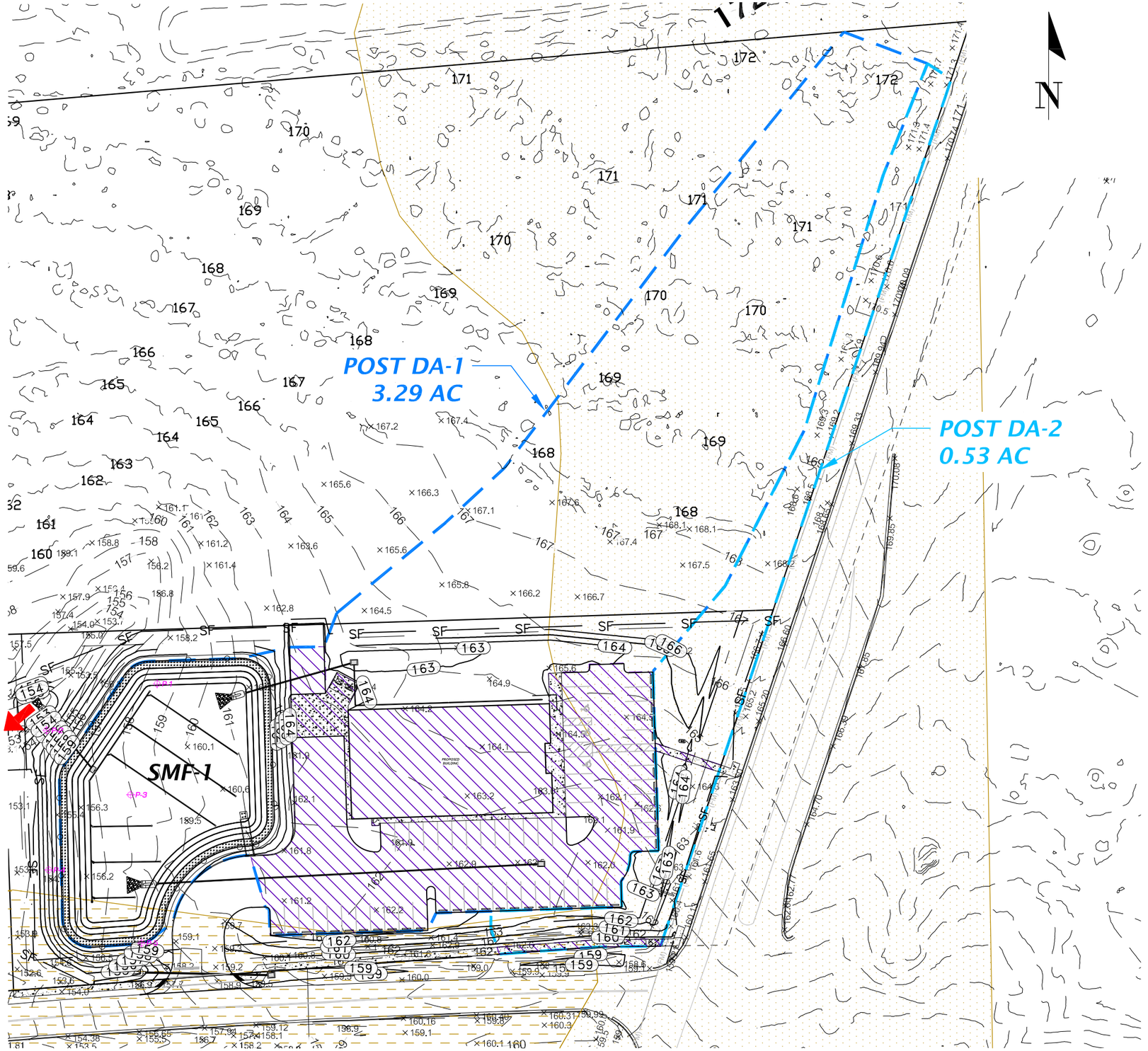
POST-DEVELOPMENT WATERSHED 1 (POST DA-1) BOUNDARY:

POST-DEVELOPMENT WATERSHED 2 (POST DA-2) BOUNDARY:

POST-DEVELOPMENT DISCHARGE POINT:

PROPOSED ONSITE IMPERVIOUS AREA:

SOIL BORING LOCATION: *P-4*



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SCALE: 1"=75'

VERIFY SCALE BAR IS CORRECT FOR ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY.

CONSTRUCTION RECORD DRAWING

SUBMITTALS:

CLIENT: CONCEPT COMPANIES, LLC.

PROJECT: CRS MARVIN BURNETT

SHEET TITLE: POST-DEVELOPMENT DRAINAGE EXHIBIT

TECHNICIAN: CCM

DESIGNER: CCM

QUALITY CONTROL: RSO

PROJECT NUMBER: 23-0653

SHEET NUMBER: FIGURE 2

Appendix A

Drainage Calculations and
Computer Model Output

Project Number: 23-0653
Project Name: CRS Marvin Burnett
Calculated by: JHP
Checked by: CCM
Date: 1/4/2024

CURVE NUMBER CALCULATIONS:

Pre DA-1								
Total Area:	88,582	s.f.	2.03	ac.	CN	CN * Area	C	C * Area
Woods (Good, Group "A" Soil)	20,340	s.f.	0.47	ac.	30	610200	0.2	4068
Woods (Good, Group "D" Soil)	67,311	s.f.	1.55	ac.	77	5182947	0.2	13462.2
Exisitng Impervious Area	931	s.f.	0.02	ac.	98	91238	0.95	884.45

Weighted C: **0.21**
Weighted CN: **66**
Time of Concentration: **29** minutes

Post DA-1								
Total Area:	143,411	s.f.	3.29	ac.	CN	CN * Area	C	C * Area
Open Space (Good, Group "A" Soil)	56,007	s.f.	1.29	ac.	39	2184273	0.2	11201.4
Open Space (Good, Group "D" Soil)	27,102	s.f.	0.62	ac.	80	2168160	0.2	5420.4
Impervious Area	40,483	s.f.	0.93	ac.	98	3967334	0.95	38458.85
Stormwater Management Facility	19,819	s.f.	0.45	ac.	100	1981900	1	19819

Weighted C: **0.52**
Weighted CN: **72**
Time of Concentration: **10** minutes

WQTV CALCULATIONS: SMF-1 (Dry Retention)

SRWMD WQTV Calculation:		
Runoff from the first 2.0" of rainfall		
2" x Drainage Area:	23901.83	c.f.
C =	**0.52**	
SRWMD WQTV:	**12,483**	**c.f.**

Pre DA-2						
Total Area:	77,911	s.f.	1.79	ac.	CN	CN * Area
Woods (Good, Group "A" Soil)	62,699	s.f.	1.44	ac.	30	1880970
Woods (Good, Group "D" Soil)	15,212	s.f.	0.35	ac.	77	1171324

Weighted CN: **39**

Post DA-2						
Total Area:	23,090	s.f.	0.53	ac.	CN	CN * Area
Woods (Good, Group "A" Soil)	9,873	s.f.	0.23	ac.	30	296190
Open Space (Good, Group "A" Soil)	11,246	s.f.	0.26	ac.	39	438594
Open Space (Good, Group "D" Soil)	1,162	s.f.	0.03	ac.	80	92960
Impervious Area	809	s.f.	0.02	ac.	98	79282

Weighted CN: **39**

Project Number: 23-0653
Project Name: CRS Marvin Burnett
Calculated by: JHP
Checked by: CCM
Date: 1/4/2024

Tc CALCULATIONS:

	SHEET FLOW					SHALLOW CONCENTRATED FLOW					CHANNEL / PIPE FLOW										
BASIN	Manning's n (--)	Flow Length L (ft)	2-Year 24-Hour Rain, P2 (in)	Land Slope s (ft/ft)	Tt1 (hr)	Paved or Unpvd. (P or U)	Flow Length L (ft)	Water-course Slope, s (ft/ft)	Avg. Velocity V (ft/s)	Tt2 (hr)	Cross-Section Area, a (ft^2)	Wetted Perim. Pw (ft)	Hydraulic Radius r (ft)	Pipe Slope s (ft/ft)	Manning n (--)	Avg. Velocity V (ft/s)	Flow Length L (ft)	Tt3 (hr)	ID #	Tc (hr)	Tc (min)
Pre DA-1	0.4	100	4.2	0.011	**0.40**	U	694	0.023	2.44	**0.08**	-	-	-	-	-	-	-	**-**	PRE DA-1	0.48	**29**

If Tc less than 10 minutes, 10 minutes was assumed per FDOT standards

TIME OF CONCENTRATION VALUES DETERMINED USING TR-55 METHODOLOGY.

SHEET FLOW:

$$Tt = \frac{0.007\,(nL)^{0.8}}{(P2)^{0.5}s^{0.4}}$$

SHALLOW CONCENTRATED FLOW:

1. For slopes < 0.005 ft/ft
   Unpaved $V=16.1345\,s^{0.5}$
   Paved $V=20.3282\,s^{0.5}$

2. For slopes > 0.005 ft/ft
Velocity per Figure 3-1, TR-55

CHANNEL/PIPE FLOW:

$$V = \frac{1.49 r^{2/3} s^{1/2}}{n}$$

$$Tt = \frac{L}{3600\,V}$$

STAGE-STORAGE CALCULATIONS:

Post-Development: SMF-1 Stage-Storage Relationship				
ELEV.	**AREA (SF)**	**AREA (AC.)**	**STORAGE (CF)**	**STORAGE VOLUME (AC-FT)**
157.00	13,469	0.3092	0	0.00
158.00	15,494	0.3557	14,482	0.33
159.00	17,606	0.4042	31,032	0.71
160.00	19,819	0.4550	49,744	1.14

Geotech Borings	
Boring #	Ex. Grade EL.
P-1	158.50
P-2	154.00
P-3	158.00
P-4	154.75
P-5	158.25
Avg.	**156.70**

WQTV =	12,483	cf	SHWT =	*152.99	ft
WQTV EL. =	157.86	ft	Confining Layer =	148.70	ft
			Kv =	5.00	ft/day
Weir Elevation =	158.00	ft	Kh =	5.00	ft/day
			Porosity =	20	%
Eq. Length =	200	ft			
Eq. Width =	83	ft	Depth =	3.00	ft
			Perimeter =	566	ft

*Established based on Invert of Underdrain System

PIPE CALCS: CRS Marvin Burnett (23-0653)

Structure No.		Invert Elev.		Length	Slope	Dia.	C	Tc	i	A	A	Q (cfs) Actual		Q Allowed	Pipe A	V - Full Flow	Pipe R	Minor Loss	Minor Loss	Loss	HGL		ToG/ EoP	F.B.
From	To	U.S.	D.S.	(ft)	(ft/foot)	(in)		(min)	(in/hr)	(sf)	(ac)	Inc	Cumul	(cfs)	(sq-ft)	(fps)	(ft)	Coeff.	(ft)	(ft)	U.S.	D.S.		(in)
S-2	S-1	158.38	157.00	277	0.0050	15	0.95	10	6.2	18163	0.42	2.5	2.5	4.94	1.2	4.0	0.31	0.5	0.03	0.3	158.51	158.14	162.23	45
C/O-1	C/O-2	160.61	159.96	65	0.0100	12	0.95	10	6.2	3547	0.08	0.5	0.5	3.86	0.8	4.9	0.25	0.5	0.00	0.0	160.93	160.91	163.72	34
C/O-2	C/O-3	159.96	159.30	65	0.0102	12	0.95	10	6.2	3547	0.08	0.5	1.0	3.89	0.8	5.0	0.25	0.5	0.01	0.0	160.91	160.86	163.85	35
C/O-3	S-4	159.30	159.00	30	0.0100	12	0.95	10	6.2	3547	0.08	0.5	1.4	3.86	0.8	4.9	0.25	0.8	0.04	0.0	160.86	160.78	164.03	38
S-4	S-3	159.00	157.00	86	0.0233	15	0.80	10	6.2	76339	1.75	8.7	10.1	10.67	1.2	8.7	0.31	0.8	0.85	1.8	160.78	158.14	162.12	16

1. ToG = Top of Grate/EoP = Edge of Pavement
2. FB = Free Board
3. Rainfall intensity is based on the FDOT Zone 3 Rainfall Intensity-Duration-Frequency curve for the 3 year - 10 min storm event (6.2 inches/hr)
4. The tailwater condition was set at the peak stage for the 100 year - 1 hour storm event of the receiving SMF.

Pre-Development Model

Project Data

Project Name:	CRS Marvin Burnett
Simulation Description:	Pre-Development
Project Number:	23-0653
Engineer :	Jarrett Pearson
Supervising Engineer:	Cole Menhennett
Date:	12-28-2023

Scenario Input Data

Scenario 1 :: SRWMD 100YR-1HR

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

Basin Area (acres)	2.030
Time Of Concentration (minutes)	29.0
DCIA (%)	0.0
Curve Number	66
Design Rainfall Depth (inches)	4.2
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	SCS Type II Florida Modified

Initial ground water level (ft datum) 154.70 (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)
0.250	6.250	12.250	18.250	24.250
0.500	6.500	12.500	18.500	24.500
0.750	6.750	12.750	18.750	24.750
1.000	7.000	13.000	19.000	25.000
1.250	7.250	13.250	19.250	25.250
1.500	7.500	13.500	19.500	25.500
1.750	7.750	13.750	19.750	25.750
2.000	8.000	14.000	20.000	26.000
2.250	8.250	14.250	20.250	26.250
2.500	8.500	14.500	20.500	26.500
2.750	8.750	14.750	20.750	26.750
3.000	9.000	15.000	21.000	27.000
3.250	9.250	15.250	21.250	27.250
3.500	9.500	15.500	21.500	27.500
3.750	9.750	15.750	21.750	27.750
4.000	10.000	16.000	22.000	28.000
4.250	10.250	16.250	22.250	28.250
4.500	10.500	16.500	22.500	28.500
4.750	10.750	16.750	22.750	28.750
5.000	11.000	17.000	23.000	29.000
5.250	11.250	17.250	23.250	29.250
5.500	11.500	17.500	23.500	29.500
5.750	11.750	17.750	23.750	29.750
6.000	12.000	18.000	24.000	30.000

Scenario Input Data (cont'd.)

Scenario 2 :: SRWMD 100YR-2HR

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

Basin Area (acres)	2.030
Time Of Concentration (minutes)	29.0
DCIA (%)	0.0
Curve Number	66
Design Rainfall Depth (inches)	5.1
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	SCS Type II Florida Modified

Initial ground water level (ft datum) 154.70 (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)
0.250	6.250	12.250	18.250	24.250
0.500	6.500	12.500	18.500	24.500
0.750	6.750	12.750	18.750	24.750
1.000	7.000	13.000	19.000	25.000
1.250	7.250	13.250	19.250	25.250
1.500	7.500	13.500	19.500	25.500
1.750	7.750	13.750	19.750	25.750
2.000	8.000	14.000	20.000	26.000
2.250	8.250	14.250	20.250	26.250
2.500	8.500	14.500	20.500	26.500
2.750	8.750	14.750	20.750	26.750
3.000	9.000	15.000	21.000	27.000
3.250	9.250	15.250	21.250	27.250
3.500	9.500	15.500	21.500	27.500
3.750	9.750	15.750	21.750	27.750
4.000	10.000	16.000	22.000	28.000
4.250	10.250	16.250	22.250	28.250
4.500	10.500	16.500	22.500	28.500
4.750	10.750	16.750	22.750	28.750
5.000	11.000	17.000	23.000	29.000
5.250	11.250	17.250	23.250	29.250
5.500	11.500	17.500	23.500	29.500
5.750	11.750	17.750	23.750	29.750
6.000	12.000	18.000	24.000	30.000

Scenario Input Data (cont'd.)

Scenario 3 :: SRWMD 100YR-4HR

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

Basin Area (acres)	2.030
Time Of Concentration (minutes)	29.0
DCIA (%)	0.0
Curve Number	66
Design Rainfall Depth (inches)	6.1
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	SCS Type II Florida Modified

Initial ground water level (ft datum) 154.70 (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)
0.250	6.250	12.250	18.250	24.250
0.500	6.500	12.500	18.500	24.500
0.750	6.750	12.750	18.750	24.750
1.000	7.000	13.000	19.000	25.000
1.250	7.250	13.250	19.250	25.250
1.500	7.500	13.500	19.500	25.500
1.750	7.750	13.750	19.750	25.750
2.000	8.000	14.000	20.000	26.000
2.250	8.250	14.250	20.250	26.250
2.500	8.500	14.500	20.500	26.500
2.750	8.750	14.750	20.750	26.750
3.000	9.000	15.000	21.000	27.000
3.250	9.250	15.250	21.250	27.250
3.500	9.500	15.500	21.500	27.500
3.750	9.750	15.750	21.750	27.750
4.000	10.000	16.000	22.000	28.000
4.250	10.250	16.250	22.250	28.250
4.500	10.500	16.500	22.500	28.500
4.750	10.750	16.750	22.750	28.750
5.000	11.000	17.000	23.000	29.000
5.250	11.250	17.250	23.250	29.250
5.500	11.500	17.500	23.500	29.500
5.750	11.750	17.750	23.750	29.750
6.000	12.000	18.000	24.000	30.000

Scenario Input Data (cont'd.)

Scenario 4 :: SRWMD 100YR-8HR

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

Basin Area (acres)	2.030
Time Of Concentration (minutes)	29.0
DCIA (%)	0.0
Curve Number	66
Design Rainfall Depth (inches)	7.4
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	SCS Type II Florida Modified

Initial ground water level (ft datum) 154.70 (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)
0.250	6.250	12.250	18.250	24.250
0.500	6.500	12.500	18.500	24.500
0.750	6.750	12.750	18.750	24.750
1.000	7.000	13.000	19.000	25.000
1.250	7.250	13.250	19.250	25.250
1.500	7.500	13.500	19.500	25.500
1.750	7.750	13.750	19.750	25.750
2.000	8.000	14.000	20.000	26.000
2.250	8.250	14.250	20.250	26.250
2.500	8.500	14.500	20.500	26.500
2.750	8.750	14.750	20.750	26.750
3.000	9.000	15.000	21.000	27.000
3.250	9.250	15.250	21.250	27.250
3.500	9.500	15.500	21.500	27.500
3.750	9.750	15.750	21.750	27.750
4.000	10.000	16.000	22.000	28.000
4.250	10.250	16.250	22.250	28.250
4.500	10.500	16.500	22.500	28.500
4.750	10.750	16.750	22.750	28.750
5.000	11.000	17.000	23.000	29.000
5.250	11.250	17.250	23.250	29.250
5.500	11.500	17.500	23.500	29.500
5.750	11.750	17.750	23.750	29.750
6.000	12.000	18.000	24.000	30.000

Scenario Input Data (cont'd.)

Scenario 5 :: SRWMD 100YR-24HR

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

Basin Area (acres)	2.030
Time Of Concentration (minutes)	29.0
DCIA (%)	0.0
Curve Number	66
Design Rainfall Depth (inches)	9.8
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	SCS Type II Florida Modified

Initial ground water level (ft datum) 154.70 (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)
0.250	6.250	12.250	18.250	24.250
0.500	6.500	12.500	18.500	24.500
0.750	6.750	12.750	18.750	24.750
1.000	7.000	13.000	19.000	25.000
1.250	7.250	13.250	19.250	25.250
1.500	7.500	13.500	19.500	25.500
1.750	7.750	13.750	19.750	25.750
2.000	8.000	14.000	20.000	26.000
2.250	8.250	14.250	20.250	26.250
2.500	8.500	14.500	20.500	26.500
2.750	8.750	14.750	20.750	26.750
3.000	9.000	15.000	21.000	27.000
3.250	9.250	15.250	21.250	27.250
3.500	9.500	15.500	21.500	27.500
3.750	9.750	15.750	21.750	27.750
4.000	10.000	16.000	22.000	28.000
4.250	10.250	16.250	22.250	28.250
4.500	10.500	16.500	22.500	28.500
4.750	10.750	16.750	22.750	28.750
5.000	11.000	17.000	23.000	29.000
5.250	11.250	17.250	23.250	29.250
5.500	11.500	17.500	23.500	29.500
5.750	11.750	17.750	23.750	29.750
6.000	12.000	18.000	24.000	30.000

Sort-By-Category Report

Scenarios Considered: 1 to 5

Discharge - Rate - Maximum Positive

Rank	Scenario Number	Maximum Positive Discharge Rate (ft^3/s)	Time (hours)	Description
1	4	7.25	4.25	SRWMD 100YR-8HR
2	5	6.67	12.12	SRWMD 100YR-24HR
3	3	6.46	2.32	SRWMD 100YR-4HR
4	2	5.47	1.35	SRWMD 100YR-2HR
5	1	4.27	0.84	SRWMD 100YR-1HR

Discharge - Cumulative Volume - Maximum Positive

Rank	Scenario Number	Maximum Positive Cumulative Discharge Volume (ft^3)	Time (hours)	Description
1	5	40983.17	25.58	SRWMD 100YR-24HR
2	4	25726.74	9.60	SRWMD 100YR-8HR
3	3	18428.31	5.54	SRWMD 100YR-4HR
4	2	13241.67	3.61	SRWMD 100YR-2HR
5	1	8901.35	2.58	SRWMD 100YR-1HR

Post-Development Model

Project Data

Project Name:	CRS Marvin Burnett
Simulation Description:	Post-Development DA-1
Project Number:	23-0653
Engineer :	Jarrett Pearson
Supervising Engineer:	Cole Menhennett
Date:	01-04-2024

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum):	148.70
Water Table Elevation, [WT] (ft datum):	152.99
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day):	5.00
Fillable Porosity, [n] (%):	20.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day):	5.0
Maximum Area For Unsaturated Infiltration, [Av] (ft²):	19819.0

Geometry Data

Equivalent Pond Length, [L] (ft):	200.0
Equivalent Pond Width, [W] (ft):	83.0

Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft²)
157.00	13469.0
158.00	15494.0
159.00	17606.0
160.00	19819.0

Discharge Structures

Discharge Structure #1 is active as weir

Structure Parameters

Description: WQTV

Weir elevation, (ft datum):	158.00
Weir coefficient:	3.13
Weir length, (ft):	2
Weir exponent:	1.5

Tailwater - disabled, free discharge

Discharge Structure #2 is inactive

Discharge Structure #3 is inactive

Scenario Input Data

Scenario 1 :: SRWMD 100YR-1HR

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

Basin Area (acres)	3.290
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	72
Design Rainfall Depth (inches)	4.2
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	SCS Type II Florida Modified

Initial ground water level (ft datum) 152.99 (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)
0.250	6.250	12.250	18.250	24.250
0.500	6.500	12.500	18.500	24.500
0.750	6.750	12.750	18.750	24.750
1.000	7.000	13.000	19.000	25.000
1.250	7.250	13.250	19.250	25.250
1.500	7.500	13.500	19.500	25.500
1.750	7.750	13.750	19.750	25.750
2.000	8.000	14.000	20.000	26.000
2.250	8.250	14.250	20.250	26.250
2.500	8.500	14.500	20.500	26.500
2.750	8.750	14.750	20.750	26.750
3.000	9.000	15.000	21.000	27.000
3.250	9.250	15.250	21.250	27.250
3.500	9.500	15.500	21.500	27.500
3.750	9.750	15.750	21.750	27.750
4.000	10.000	16.000	22.000	28.000
4.250	10.250	16.250	22.250	28.250
4.500	10.500	16.500	22.500	28.500
4.750	10.750	16.750	22.750	28.750
5.000	11.000	17.000	23.000	29.000
5.250	11.250	17.250	23.250	29.250
5.500	11.500	17.500	23.500	29.500
5.750	11.750	17.750	23.750	29.750
6.000	12.000	18.000	24.000	30.000

Scenario Input Data (cont'd.)

Scenario 2 :: SRWMD 100YR-2HR

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

Basin Area (acres)	3.290
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	72
Design Rainfall Depth (inches)	5.1
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	SCS Type II Florida Modified

Initial ground water level (ft datum) 152.99 (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)
0.250	6.250	12.250	18.250	24.250
0.500	6.500	12.500	18.500	24.500
0.750	6.750	12.750	18.750	24.750
1.000	7.000	13.000	19.000	25.000
1.250	7.250	13.250	19.250	25.250
1.500	7.500	13.500	19.500	25.500
1.750	7.750	13.750	19.750	25.750
2.000	8.000	14.000	20.000	26.000
2.250	8.250	14.250	20.250	26.250
2.500	8.500	14.500	20.500	26.500
2.750	8.750	14.750	20.750	26.750
3.000	9.000	15.000	21.000	27.000
3.250	9.250	15.250	21.250	27.250
3.500	9.500	15.500	21.500	27.500
3.750	9.750	15.750	21.750	27.750
4.000	10.000	16.000	22.000	28.000
4.250	10.250	16.250	22.250	28.250
4.500	10.500	16.500	22.500	28.500
4.750	10.750	16.750	22.750	28.750
5.000	11.000	17.000	23.000	29.000
5.250	11.250	17.250	23.250	29.250
5.500	11.500	17.500	23.500	29.500
5.750	11.750	17.750	23.750	29.750
6.000	12.000	18.000	24.000	30.000

Scenario Input Data (cont'd.)

Scenario 3 :: SRWMD 100YR-4HR

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

Basin Area (acres)	3.290
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	72
Design Rainfall Depth (inches)	6.1
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	SCS Type II Florida Modified

Initial ground water level (ft datum) 152.99 (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)
0.250	6.250	12.250	18.250	24.250
0.500	6.500	12.500	18.500	24.500
0.750	6.750	12.750	18.750	24.750
1.000	7.000	13.000	19.000	25.000
1.250	7.250	13.250	19.250	25.250
1.500	7.500	13.500	19.500	25.500
1.750	7.750	13.750	19.750	25.750
2.000	8.000	14.000	20.000	26.000
2.250	8.250	14.250	20.250	26.250
2.500	8.500	14.500	20.500	26.500
2.750	8.750	14.750	20.750	26.750
3.000	9.000	15.000	21.000	27.000
3.250	9.250	15.250	21.250	27.250
3.500	9.500	15.500	21.500	27.500
3.750	9.750	15.750	21.750	27.750
4.000	10.000	16.000	22.000	28.000
4.250	10.250	16.250	22.250	28.250
4.500	10.500	16.500	22.500	28.500
4.750	10.750	16.750	22.750	28.750
5.000	11.000	17.000	23.000	29.000
5.250	11.250	17.250	23.250	29.250
5.500	11.500	17.500	23.500	29.500
5.750	11.750	17.750	23.750	29.750
6.000	12.000	18.000	24.000	30.000

Scenario Input Data (cont'd.)

Scenario 4 :: SRWMD 100YR-8HR

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

Basin Area (acres)	3.290
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	72
Design Rainfall Depth (inches)	7.4
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	SCS Type II Florida Modified

Initial ground water level (ft datum) 152.99 (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)
0.250	6.250	12.250	18.250	24.250
0.500	6.500	12.500	18.500	24.500
0.750	6.750	12.750	18.750	24.750
1.000	7.000	13.000	19.000	25.000
1.250	7.250	13.250	19.250	25.250
1.500	7.500	13.500	19.500	25.500
1.750	7.750	13.750	19.750	25.750
2.000	8.000	14.000	20.000	26.000
2.250	8.250	14.250	20.250	26.250
2.500	8.500	14.500	20.500	26.500
2.750	8.750	14.750	20.750	26.750
3.000	9.000	15.000	21.000	27.000
3.250	9.250	15.250	21.250	27.250
3.500	9.500	15.500	21.500	27.500
3.750	9.750	15.750	21.750	27.750
4.000	10.000	16.000	22.000	28.000
4.250	10.250	16.250	22.250	28.250
4.500	10.500	16.500	22.500	28.500
4.750	10.750	16.750	22.750	28.750
5.000	11.000	17.000	23.000	29.000
5.250	11.250	17.250	23.250	29.250
5.500	11.500	17.500	23.500	29.500
5.750	11.750	17.750	23.750	29.750
6.000	12.000	18.000	24.000	30.000

Scenario Input Data (cont'd.)

Scenario 5 :: SRWMD 100YR-24HR

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

Basin Area (acres)	3.290
Time Of Concentration (minutes)	10.0
DCIA (%)	0.0
Curve Number	72
Design Rainfall Depth (inches)	9.8
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	SCS Type II Florida Modified

Initial ground water level (ft datum) 152.99 (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)
0.250	6.250	12.250	18.250	24.250
0.500	6.500	12.500	18.500	24.500
0.750	6.750	12.750	18.750	24.750
1.000	7.000	13.000	19.000	25.000
1.250	7.250	13.250	19.250	25.250
1.500	7.500	13.500	19.500	25.500
1.750	7.750	13.750	19.750	25.750
2.000	8.000	14.000	20.000	26.000
2.250	8.250	14.250	20.250	26.250
2.500	8.500	14.500	20.500	26.500
2.750	8.750	14.750	20.750	26.750
3.000	9.000	15.000	21.000	27.000
3.250	9.250	15.250	21.250	27.250
3.500	9.500	15.500	21.500	27.500
3.750	9.750	15.750	21.750	27.750
4.000	10.000	16.000	22.000	28.000
4.250	10.250	16.250	22.250	28.250
4.500	10.500	16.500	22.500	28.500
4.750	10.750	16.750	22.750	28.750
5.000	11.000	17.000	23.000	29.000
5.250	11.250	17.250	23.250	29.250
5.500	11.500	17.500	23.500	29.500
5.750	11.750	17.750	23.750	29.750
6.000	12.000	18.000	24.000	30.000

Scenario 6 :: WQTV

Hydrograph Type: Slug Load
Modflow Routing: Routed with infiltration

Treatment Volume (ft^3) 12483

Initial ground water level (ft datum) 152.99 (default)

Scenario Input Data (cont'd.)

Scenario 6 (cont'd.) :: Slug Load :: WQTV

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

Sort-By-Category Report

Scenarios Considered: 1 to 6

Stage - Maximum

Rank	Scenario Number	Maximum Stage (ft datum)	Time (hours)	Description
1	5	158.78	12.58	SRWMD 100YR-24HR
2	4	158.61	4.47	SRWMD 100YR-8HR
3	3	158.46	2.64	SRWMD 100YR-4HR
4	2	158.35	1.89	SRWMD 100YR-2HR
5	1	158.14	1.13	SRWMD 100YR-1HR
6	6	157.87	0.00	WQTV

Discharge - Rate - Maximum Positive

Rank	Scenario Number	Maximum Positive Discharge Rate (ft^3/s)	Time (hours)	Description
1	5	4.28	12.58	SRWMD 100YR-24HR
2	4	3.00	4.47	SRWMD 100YR-8HR
3	3	1.93	2.64	SRWMD 100YR-4HR
4	2	1.28	1.89	SRWMD 100YR-2HR
5	1	0.31	1.13	SRWMD 100YR-1HR
6	6	None	N.A.	WQTV

Discharge - Cumulative Volume - Maximum Positive

Rank	Scenario Number	Maximum Positive Cumulative Discharge Volume (ft^3)	Time (hours)	Description
1	5	37974.45	30.58	SRWMD 100YR-24HR
2	4	17170.97	8.47	SRWMD 100YR-8HR
3	3	10552.48	4.58	SRWMD 100YR-4HR
4	2	4512.00	2.58	SRWMD 100YR-2HR
5	1	462.72	1.58	SRWMD 100YR-1HR
6	6	None	N.A.	WQTV

Detailed Results :: *Scenario 1 :: SRWMD 100YR-1HR*

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	152.990	0.00000	0.00000	0.0	0.0	0.0	N.A.
0.022	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.044	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.067	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.089	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.111	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.133	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.156	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.178	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.200	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.222	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.244	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.267	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.289	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.311	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.333	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.356	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.378	0.0000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	U
0.400	0.0000	0.0000	152.990	0.00120	0.00000	0.0	0.0	0.0	U
0.422	0.0048	0.0000	152.990	0.01123	0.00000	0.2	0.2	0.0	U
0.444	0.0353	0.0000	152.990	0.05641	0.00000	1.8	1.8	0.0	U
0.467	0.1503	0.0000	152.992	0.28887	0.00000	9.2	9.2	0.0	U
0.489	0.8197	0.0000	153.002	0.63289	0.00000	48.0	48.0	0.0	U
0.511	3.0541	0.0000	157.007	0.78234	0.00000	203.0	110.5	0.0	U/P
0.533	7.3661	0.0000	157.033	0.78715	0.00000	619.8	173.2	0.0	U/P
0.556	13.2100	0.0000	157.089	0.79551	0.00000	1442.8	236.4	0.0	U/P
0.578	18.1747	0.0000	157.176	0.80685	0.00000	2698.2	300.5	0.0	U/P
0.600	20.6736	0.0000	157.283	0.81971	0.00000	4252.1	365.5	0.0	U/P
0.622	20.8533	0.0000	157.395	0.83258	0.00000	5913.2	431.6	0.0	U/P
0.644	19.2460	0.0000	157.502	0.84432	0.00000	7517.2	498.7	0.0	U/P
0.667	16.5416	0.0000	157.596	0.85437	0.00000	8948.7	566.7	0.0	U/P
0.689	13.9483	0.0000	157.674	0.86274	0.00000	10168.3	635.4	0.0	U/P
0.711	11.8984	0.0000	157.738	0.86972	0.00000	11202.2	704.8	0.0	U/P
0.733	10.2784	0.0000	157.793	0.87561	0.00000	12089.2	774.6	0.0	U/P
0.756	8.9361	0.0000	157.839	0.88063	0.00000	12857.8	844.9	0.0	U/P
0.778	7.8660	0.0000	157.879	0.88496	0.00000	13529.9	915.5	0.0	U/P
0.800	6.9880	0.0000	157.913	0.88872	0.00000	14124.1	986.4	0.0	U/P
0.822	6.2744	0.0000	157.943	0.89202	0.00000	14654.6	1057.7	0.0	U/P
0.844	5.6997	0.0000	157.969	0.89496	0.00000	15133.5	1129.2	0.0	U/P
0.867	5.2272	0.0000	157.993	0.89764	0.00000	15570.6	1200.9	0.0	U/P
0.889	4.8274	0.0000	158.014	0.90011	0.01044	15972.8	1272.8	0.4	U/P
0.911	4.4846	0.0000	158.033	0.90236	0.03797	16345.3	1344.9	2.4	U/P
0.933	4.1987	0.0000	158.051	0.90441	0.07132	16692.6	1417.2	6.7	U/P
0.956	3.9662	0.0000	158.067	0.90628	0.10723	17019.2	1489.6	13.9	U/P
0.978	3.7655	0.0000	158.081	0.90800	0.14413	17328.5	1562.2	23.9	U/P
1.000	3.5795	0.0000	158.094	0.90957	0.18099	17622.2	1634.9	36.9	U/P
1.022	3.3573	0.0000	158.106	0.91097	0.21671	17899.7	1707.7	52.8	U/P
1.044	3.0563	0.0000	158.117	0.91215	0.24959	18156.3	1780.6	71.5	U/P
1.067	2.6439	0.0000	158.125	0.91306	0.27735	18384.3	1853.6	92.6	U/P
1.089	2.1539	0.0000	158.131	0.91365	0.29779	18576.2	1926.7	115.6	U/P
1.111	1.6654	0.0000	158.135	0.91394	0.30981	18729.0	1999.8	139.9	U/P
1.133	1.2315	0.0000	158.136	0.91396	0.31371	18844.8	2073.0	164.8	U/P
1.156	0.8803	0.0000	158.135	0.91376	0.31073	18929.3	2146.1	189.8	U/P
1.178	0.6289	0.0000	158.133	0.91341	0.30262	18989.7	2219.2	214.3	U/P
1.200	0.4528	0.0000	158.129	0.91294	0.29108	19032.9	2292.2	238.1	U/P
1.222	0.3260	0.0000	158.125	0.91240	0.27735	19064.1	2365.2	260.8	U/P
1.244	0.2330	0.0000	158.121	0.91182	0.26226	19086.5	2438.2	282.4	U/P
1.267	0.1669	0.0000	158.116	0.91119	0.24642	19102.5	2511.1	302.7	U/P
1.289	0.1190	0.0000	158.111	0.91055	0.23026	19113.9	2584.0	321.8	U/P
1.311	0.0845	0.0000	158.105	0.90990	0.21408	19122.0	2656.8	339.6	U/P
1.333	0.0599	0.0000	158.100	0.90923	0.19809	19127.8	2729.6	356.1	U/P
1.356	0.0421	0.0000	158.095	0.90857	0.18244	19131.9	2802.3	371.3	U/P
1.378	0.0293	0.0000	158.089	0.90791	0.16723	19134.7	2874.9	385.3	U/P
1.400	0.0201	0.0000	158.084	0.90725	0.15251	19136.7	2947.5	398.1	U/P
1.422	0.0134	0.0000	158.079	0.90660	0.13835	19138.0	3020.1	409.7	U/P
1.444	0.0086	0.0000	158.074	0.90595	0.12475	19138.9	3092.6	420.2	U/P
1.467	0.0049	0.0000	158.068	0.90531	0.11175	19139.5	3165.1	429.7	U/P
1.489	0.0023	0.0000	158.063	0.90468	0.09934	19139.8	3237.5	438.1	U/P
1.511	0.0007	0.0000	158.058	0.90405	0.08755	19139.9	3309.8	445.6	U/P
1.533	0.0000	0.0000	158.053	0.90343	0.07638	19139.9	3382.1	452.2	U/P
1.556	0.0000	0.0000	158.048	0.90282	0.06584	19139.9	3454.4	457.9	U/P
1.578	0.0000	0.0000	158.043	0.90177	0.05593	19139.9	3526.6	462.7	U/P
7.578	0.0000	0.0000	156.339	0.35071	0.00000	19139.9	18677.2	462.7	U/S
13.578	0.0000	0.0000	156.032	0.00000	0.00000	19139.9	18677.2	462.7	S

Detailed Results (cont,d.) :: *Scenario 2 :: SRWMD 100YR-2HR*

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
1.644	2.8768	0.0000	158.329	0.93836	1.18168	23236.3	2444.0	1097.9	U/P
1.667	2.8113	0.0000	158.333	0.93878	1.20074	23463.9	2519.1	1193.2	U/P
1.689	2.7507	0.0000	158.336	0.93914	1.21770	23686.3	2594.2	1289.9	U/P
1.711	2.6872	0.0000	158.339	0.93946	1.23263	23903.9	2669.4	1387.9	U/P
1.733	2.6123	0.0000	158.341	0.93973	1.24535	24115.8	2744.5	1487.1	U/P
1.756	2.5262	0.0000	158.343	0.93993	1.25561	24321.4	2819.7	1587.1	U/P
1.778	2.4400	0.0000	158.344	0.94008	1.26331	24520.0	2894.9	1687.9	U/P
1.800	2.3649	0.0000	158.345	0.94018	1.26864	24712.2	2970.1	1789.1	U/P
1.822	2.3054	0.0000	158.346	0.94024	1.27203	24899.0	3045.4	1890.8	U/P
1.844	2.2636	0.0000	158.346	0.94027	1.27397	25081.8	3120.6	1992.6	U/P
1.867	2.2352	0.0000	158.346	0.94029	1.27492	25261.7	3195.8	2094.6	U/P
1.889	2.2139	0.0000	158.346	0.94029	1.27517	25439.7	3271.0	2196.6	U/P
1.911	2.1931	0.0000	158.346	0.94027	1.27485	25616.0	3346.2	2298.6	U/P
1.933	2.1665	0.0000	158.346	0.94024	1.27390	25790.4	3421.5	2400.5	U/P
1.956	2.1306	0.0000	158.346	0.94019	1.27214	25962.3	3496.7	2502.4	U/P
1.978	2.0834	0.0000	158.345	0.94011	1.26931	26130.8	3571.9	2604.0	U/P
2.000	2.0249	0.0000	158.344	0.94000	1.26515	26295.1	3647.1	2705.4	U/P
2.022	1.9305	0.0000	158.343	0.93982	1.25906	26453.4	3722.3	2806.4	U/P
2.044	1.7813	0.0000	158.342	0.93956	1.24989	26601.8	3797.5	2906.7	U/P
2.067	1.5542	0.0000	158.339	0.93917	1.23598	26735.3	3872.6	3006.2	U/P
2.089	1.2738	0.0000	158.335	0.93863	1.21577	26848.4	3947.7	3104.2	U/P
2.111	0.9890	0.0000	158.330	0.93793	1.18876	26938.9	4022.8	3200.4	U/P
2.133	0.7342	0.0000	158.324	0.93710	1.15562	27007.8	4097.8	3294.2	U/P
2.156	0.5253	0.0000	158.317	0.93616	1.11765	27058.2	4172.7	3385.1	U/P
2.178	0.3755	0.0000	158.309	0.93515	1.07648	27094.2	4247.6	3472.9	U/P
2.200	0.2706	0.0000	158.301	0.93410	1.03363	27120.1	4322.4	3557.3	U/P
2.222	0.1954	0.0000	158.293	0.93303	0.99016	27138.7	4397.0	3638.2	U/P
2.244	0.1399	0.0000	158.284	0.93195	0.94675	27152.1	4471.6	3715.7	U/P
2.267	0.1004	0.0000	158.275	0.93087	0.90387	27161.7	4546.2	3789.7	U/P
2.289	0.0717	0.0000	158.267	0.92980	0.86184	27168.6	4620.6	3860.4	U/P
2.311	0.0511	0.0000	158.258	0.92874	0.82086	27173.5	4694.9	3927.7	U/P
2.333	0.0363	0.0000	158.250	0.92770	0.78106	27177.0	4769.2	3991.7	U/P
2.356	0.0255	0.0000	158.241	0.92667	0.74251	27179.5	4843.4	4052.7	U/P
2.378	0.0177	0.0000	158.233	0.92566	0.70526	27181.2	4917.5	4110.6	U/P
2.400	0.0121	0.0000	158.225	0.92467	0.66930	27182.4	4991.5	4165.6	U/P
2.422	0.0081	0.0000	158.217	0.92370	0.63462	27183.2	5065.4	4217.7	U/P
2.444	0.0052	0.0000	158.210	0.92275	0.60121	27183.8	5139.3	4267.2	U/P
2.467	0.0030	0.0000	158.202	0.92182	0.56904	27184.1	5213.0	4314.0	U/P
2.489	0.0014	0.0000	158.195	0.92090	0.53807	27184.3	5286.8	4358.3	U/P
2.511	0.0005	0.0000	158.188	0.92000	0.50827	27184.3	5360.4	4400.1	U/P
2.533	0.0000	0.0000	158.180	0.91913	0.47960	27184.3	5434.0	4439.6	U/P
2.556	0.0000	0.0000	158.173	0.91826	0.45203	27184.3	5507.4	4476.9	U/P
2.578	0.0000	0.0000	158.167	0.91737	0.42553	27184.3	5580.9	4512.0	U/P
8.578	0.0000	0.0000	156.340	0.39564	0.00000	27184.3	22672.3	4512.0	U/S
14.578	0.0000	0.0000	156.033	0.00000	0.00000	27184.3	22672.3	4512.0	S
20.578	0.0000	0.0000	155.832	0.00000	0.00000	27184.3	22672.3	4512.0	S
26.578	0.0000	0.0000	155.680	0.00000	0.00000	27184.3	22672.3	4512.0	S
32.578	0.0000	0.0000	155.558	0.00000	0.00000	27184.3	22672.3	4512.0	S
38.578	0.0000	0.0000	155.455	0.00000	0.00000	27184.3	22672.3	4512.0	S
44.578	0.0000	0.0000	155.366	0.00000	0.00000	27184.3	22672.3	4512.0	S
50.578	0.0000	0.0000	155.288	0.00000	0.00000	27184.3	22672.3	4512.0	S
56.578	0.0000	0.0000	155.219	0.00000	0.00000	27184.3	22672.3	4512.0	S
62.578	0.0000	0.0000	155.156	0.00000	0.00000	27184.3	22672.3	4512.0	S
68.578	0.0000	0.0000	155.099	0.00000	0.00000	27184.3	22672.3	4512.0	S
74.578	0.0000	0.0000	155.047	0.00000	0.00000	27184.3	22672.3	4512.0	S
80.578	0.0000	0.0000	154.998	0.00000	0.00000	27184.3	22672.3	4512.0	S
86.578	0.0000	0.0000	154.954	0.00000	0.00000	27184.3	22672.3	4512.0	S
92.578	0.0000	0.0000	154.912	0.00000	0.00000	27184.3	22672.3	4512.0	S
98.578	0.0000	0.0000	154.873	0.00000	0.00000	27184.3	22672.3	4512.0	S
104.578	0.0000	0.0000	154.836	0.00000	0.00000	27184.3	22672.3	4512.0	S
110.578	0.0000	0.0000	154.801	0.00000	0.00000	27184.3	22672.3	4512.0	S
116.578	0.0000	0.0000	154.768	0.00000	0.00000	27184.3	22672.3	4512.0	S
122.578	0.0000	0.0000	154.737	0.00000	0.00000	27184.3	22672.3	4512.0	S
128.578	0.0000	0.0000	154.708	0.00000	0.00000	27184.3	22672.3	4512.0	S
134.578	0.0000	0.0000	154.680	0.00000	0.00000	27184.3	22672.3	4512.0	S
140.578	0.0000	0.0000	154.653	0.00000	0.00000	27184.3	22672.3	4512.0	S
146.578	0.0000	0.0000	154.628	0.00000	0.00000	27184.3	22672.3	4512.0	S
152.578	0.0000	0.0000	154.603	0.00000	0.00000	27184.3	22672.3	4512.0	S
158.578	0.0000	0.0000	154.580	0.00000	0.00000	27184.3	22672.3	4512.0	S
164.578	0.0000	0.0000	154.557	0.00000	0.00000	27184.3	22672.3	4512.0	S
170.578	0.0000	0.0000	154.536	0.00000	0.00000	27184.3	22672.3	4512.0	S
176.578	0.0000	0.0000	154.515	0.00000	0.00000	27184.3	22672.3	4512.0	S
182.578	0.0000	0.0000	154.495	0.00000	0.00000	27184.3	22672.3	4512.0	S
188.578	0.0000	0.0000	154.476	0.00000	0.00000	27184.3	22672.3	4512.0	S

Detailed Results (cont,d.) :: *Scenario 3 :: SRWMD 100YR-4HR*

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
3.289	1.6884	0.0000	158.378	0.94412	1.45726	32414.7	5467.0	6451.7	U/P
3.311	1.6908	0.0000	158.375	0.94370	1.43741	32549.9	5542.5	6567.5	U/P
3.333	1.6865	0.0000	158.372	0.94328	1.41816	32685.0	5618.0	6681.7	U/P
3.356	1.6727	0.0000	158.368	0.94286	1.39929	32819.4	5693.5	6794.4	U/P
3.378	1.6482	0.0000	158.365	0.94245	1.38050	32952.2	5768.9	6905.6	U/P
3.400	1.6107	0.0000	158.362	0.94202	1.36146	33082.5	5844.2	7015.3	U/P
3.422	1.5651	0.0000	158.358	0.94157	1.34190	33209.6	5919.6	7123.4	U/P
3.444	1.5196	0.0000	158.355	0.94112	1.32172	33333.0	5994.9	7230.0	U/P
3.467	1.4789	0.0000	158.351	0.94065	1.30104	33452.9	6070.2	7334.9	U/P
3.489	1.4456	0.0000	158.347	0.94017	1.28002	33569.9	6145.4	7438.1	U/P
3.511	1.4219	0.0000	158.343	0.93969	1.25892	33684.6	6220.6	7539.7	U/P
3.533	1.4055	0.0000	158.339	0.93921	1.23796	33797.7	6295.8	7639.6	U/P
3.556	1.3939	0.0000	158.336	0.93874	1.21731	33909.6	6370.9	7737.8	U/P
3.578	1.3855	0.0000	158.332	0.93828	1.19706	34020.8	6445.9	7834.3	U/P
3.600	1.3799	0.0000	158.328	0.93782	1.17726	34131.4	6521.0	7929.3	U/P
3.622	1.3760	0.0000	158.325	0.93737	1.15798	34241.7	6596.0	8022.7	U/P
3.644	1.3736	0.0000	158.321	0.93694	1.13922	34351.7	6671.0	8114.6	U/P
3.667	1.3720	0.0000	158.318	0.93651	1.12099	34461.5	6745.9	8205.0	U/P
3.689	1.3711	0.0000	158.314	0.93610	1.10330	34571.2	6820.8	8294.0	U/P
3.711	1.3706	0.0000	158.311	0.93569	1.08615	34680.9	6895.7	8381.6	U/P
3.733	1.3704	0.0000	158.308	0.93530	1.06951	34790.5	6970.5	8467.8	U/P
3.756	1.3702	0.0000	158.305	0.93492	1.05338	34900.1	7045.3	8552.7	U/P
3.778	1.3677	0.0000	158.302	0.93454	1.03771	35009.7	7120.1	8636.4	U/P
3.800	1.3606	0.0000	158.299	0.93417	1.02239	35118.8	7194.9	8718.8	U/P
3.822	1.3466	0.0000	158.296	0.93380	1.00726	35227.1	7269.6	8799.9	U/P
3.844	1.3273	0.0000	158.293	0.93342	0.99218	35334.0	7344.3	8879.9	U/P
3.867	1.3057	0.0000	158.290	0.93305	0.97704	35439.4	7418.9	8958.7	U/P
3.889	1.2832	0.0000	158.287	0.93267	0.96182	35542.9	7493.6	9036.3	U/P
3.911	1.2614	0.0000	158.284	0.93228	0.94650	35644.7	7568.2	9112.6	U/P
3.933	1.2401	0.0000	158.281	0.93190	0.93112	35744.8	7642.7	9187.7	U/P
3.956	1.2168	0.0000	158.278	0.93150	0.91566	35843.0	7717.3	9261.6	U/P
3.978	1.1871	0.0000	158.274	0.93110	0.90001	35939.2	7791.8	9334.2	U/P
4.000	1.1521	0.0000	158.271	0.93069	0.88406	36032.8	7866.2	9405.5	U/P
4.022	1.1018	0.0000	158.268	0.93025	0.86757	36122.9	7940.7	9475.6	U/P
4.044	1.0235	0.0000	158.264	0.92977	0.85005	36207.9	8015.1	9544.3	U/P
4.067	0.8987	0.0000	158.260	0.92923	0.83066	36284.8	8089.4	9611.5	U/P
4.089	0.7409	0.0000	158.256	0.92861	0.80857	36350.4	8163.8	9677.1	U/P
4.111	0.5789	0.0000	158.250	0.92790	0.78349	36403.2	8238.0	9740.8	U/P
4.133	0.4312	0.0000	158.244	0.92713	0.75569	36443.6	8312.2	9802.4	U/P
4.156	0.3085	0.0000	158.238	0.92629	0.72579	36473.2	8386.4	9861.6	U/P
4.178	0.2204	0.0000	158.231	0.92542	0.69459	36494.3	8460.4	9918.4	U/P
4.200	0.1588	0.0000	158.224	0.92453	0.66288	36509.5	8534.4	9972.7	U/P
4.222	0.1147	0.0000	158.217	0.92363	0.63120	36520.4	8608.3	10024.5	U/P
4.244	0.0820	0.0000	158.209	0.92273	0.59988	36528.3	8682.2	10073.7	U/P
4.267	0.0589	0.0000	158.202	0.92183	0.56915	36533.9	8756.0	10120.5	U/P
4.289	0.0420	0.0000	158.195	0.92094	0.53917	36538.0	8829.7	10164.8	U/P
4.311	0.0299	0.0000	158.188	0.92007	0.51003	36540.9	8903.3	10206.8	U/P
4.333	0.0213	0.0000	158.181	0.91920	0.48180	36542.9	8976.9	10246.5	U/P
4.356	0.0150	0.0000	158.174	0.91835	0.45450	36544.4	9050.4	10283.9	U/P
4.378	0.0104	0.0000	158.167	0.91751	0.42815	36545.4	9123.8	10319.2	U/P
4.400	0.0071	0.0000	158.161	0.91668	0.40273	36546.1	9197.2	10352.5	U/P
4.422	0.0048	0.0000	158.154	0.91587	0.37825	36546.6	9270.5	10383.7	U/P
4.444	0.0031	0.0000	158.148	0.91507	0.35468	36546.9	9343.7	10413.0	U/P
4.467	0.0018	0.0000	158.141	0.91429	0.33200	36547.1	9416.9	10440.5	U/P
4.489	0.0009	0.0000	158.135	0.91351	0.31019	36547.2	9490.0	10466.2	U/P
4.511	0.0003	0.0000	158.129	0.91276	0.28922	36547.2	9563.1	10490.2	U/P
4.533	0.0000	0.0000	158.123	0.91201	0.26909	36547.2	9636.1	10512.5	U/P
4.556	0.0000	0.0000	158.117	0.91128	0.24976	36547.2	9709.0	10533.3	U/P
4.578	0.0000	0.0000	158.111	0.90990	0.23121	36547.2	9781.9	10552.5	U/P
10.578	0.0000	0.0000	157.182	0.35377	0.00000	36547.2	23509.0	10552.5	U/S
16.578	0.0000	0.0000	157.069	0.05754	0.00000	36547.2	25065.0	10552.5	S
22.578	0.0000	0.0000	156.950	0.02152	0.00000	36547.2	25994.7	10552.5	S
28.578	0.0000	0.0000	156.719	0.00000	0.00000	36547.2	25994.7	10552.5	S
34.578	0.0000	0.0000	156.537	0.00000	0.00000	36547.2	25994.7	10552.5	S
40.578	0.0000	0.0000	156.387	0.00000	0.00000	36547.2	25994.7	10552.5	S
46.578	0.0000	0.0000	156.259	0.00000	0.00000	36547.2	25994.7	10552.5	S
52.578	0.0000	0.0000	156.147	0.00000	0.00000	36547.2	25994.7	10552.5	S
58.578	0.0000	0.0000	156.048	0.00000	0.00000	36547.2	25994.7	10552.5	S
64.578	0.0000	0.0000	155.958	0.00000	0.00000	36547.2	25994.7	10552.5	S
70.578	0.0000	0.0000	155.878	0.00000	0.00000	36547.2	25994.7	10552.5	S
76.578	0.0000	0.0000	155.804	0.00000	0.00000	36547.2	25994.7	10552.5	S
82.578	0.0000	0.0000	155.736	0.00000	0.00000	36547.2	25994.7	10552.5	S
88.578	0.0000	0.0000	155.673	0.00000	0.00000	36547.2	25994.7	10552.5	S
94.578	0.0000	0.0000	155.614	0.00000	0.00000	36547.2	25994.7	10552.5	S

Detailed Results (cont,d.) :: *Scenario 4 :: SRWMD 100YR-8HR*

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
8.222	0.0696	0.0000	158.052	0.90330	0.07386	49421.5	16989.3	17144.9	U/P
8.244	0.0498	0.0000	158.047	0.90272	0.06409	49426.3	17061.5	17150.4	U/P
8.267	0.0358	0.0000	158.042	0.90214	0.05471	49429.7	17133.7	17155.2	U/P
8.289	0.0255	0.0000	158.038	0.90156	0.04582	49432.1	17205.8	17159.2	U/P
8.311	0.0182	0.0000	158.033	0.90097	0.03747	49433.9	17277.9	17162.5	U/P
8.333	0.0129	0.0000	158.028	0.90039	0.02971	49435.1	17350.0	17165.2	U/P
8.356	0.0091	0.0000	158.024	0.89981	0.02260	49436.0	17422.0	17167.3	U/P
8.378	0.0064	0.0000	158.019	0.89924	0.01619	49436.6	17494.0	17168.8	U/P
8.400	0.0044	0.0000	158.014	0.89866	0.01056	49437.1	17565.9	17169.9	U/P
8.422	0.0030	0.0000	158.010	0.89809	0.00581	49437.4	17637.8	17170.6	U/P
8.444	0.0020	0.0000	158.005	0.89752	0.00213	49437.5	17709.6	17170.9	U/P
8.467	0.0011	0.0000	158.000	1.15253	0.00002	49437.7	17781.4	17171.0	U/P
8.489	0.0006	0.0000	157.993	1.05693	0.00000	49437.7	17894.0	17171.0	U/S
8.511	0.0002	0.0000	157.989	0.70395	0.00000	49437.8	17950.5	17171.0	S
8.533	0.0000	0.0000	157.986	0.69816	0.00000	49437.8	18006.6	17171.0	S
8.556	0.0000	0.0000	157.982	0.68940	0.00000	49437.8	18062.2	17171.0	S
8.578	0.0000	0.0000	157.979	0.68240	0.00000	49437.8	18116.9	17171.0	S
14.578	0.0000	0.0000	157.750	0.12199	0.00000	49437.8	21590.3	17171.0	S
20.578	0.0000	0.0000	157.630	0.07204	0.00000	49437.8	23387.1	17171.0	S
26.578	0.0000	0.0000	157.540	0.05534	0.00000	49437.8	24702.6	17171.0	S
32.578	0.0000	0.0000	157.466	0.04630	0.00000	49437.8	25777.7	17171.0	S
38.578	0.0000	0.0000	157.401	0.04039	0.00000	49437.8	26702.7	17171.0	S
44.578	0.0000	0.0000	157.343	0.03613	0.00000	49437.8	27522.5	17171.0	S
50.578	0.0000	0.0000	157.291	0.03286	0.00000	49437.8	28263.3	17171.0	S
56.578	0.0000	0.0000	157.242	0.03026	0.00000	49437.8	28942.2	17171.0	S
62.578	0.0000	0.0000	157.197	0.02812	0.00000	49437.8	29570.6	17171.0	S
68.578	0.0000	0.0000	157.155	0.02632	0.00000	49437.8	30157.0	17171.0	S
74.578	0.0000	0.0000	157.115	0.02478	0.00000	49437.8	30707.7	17171.0	S
80.578	0.0000	0.0000	157.077	0.02345	0.00000	49437.8	31227.6	17171.0	S
86.578	0.0000	0.0000	157.040	0.02227	0.00000	49437.8	31720.5	17171.0	S
92.578	0.0000	0.0000	157.006	0.01265	0.00000	49437.8	32189.6	17171.0	S
98.578	0.0000	0.0000	156.905	0.00179	0.00000	49437.8	32266.8	17171.0	S
104.578	0.0000	0.0000	156.803	0.00000	0.00000	49437.8	32266.8	17171.0	S
110.578	0.0000	0.0000	156.711	0.00000	0.00000	49437.8	32266.8	17171.0	S
116.578	0.0000	0.0000	156.626	0.00000	0.00000	49437.8	32266.8	17171.0	S
122.578	0.0000	0.0000	156.548	0.00000	0.00000	49437.8	32266.8	17171.0	S
128.578	0.0000	0.0000	156.475	0.00000	0.00000	49437.8	32266.8	17171.0	S
134.578	0.0000	0.0000	156.407	0.00000	0.00000	49437.8	32266.8	17171.0	S
140.578	0.0000	0.0000	156.343	0.00000	0.00000	49437.8	32266.8	17171.0	S
146.578	0.0000	0.0000	156.283	0.00000	0.00000	49437.8	32266.8	17171.0	S
152.578	0.0000	0.0000	156.226	0.00000	0.00000	49437.8	32266.8	17171.0	S
158.578	0.0000	0.0000	156.172	0.00000	0.00000	49437.8	32266.8	17171.0	S
164.578	0.0000	0.0000	156.121	0.00000	0.00000	49437.8	32266.8	17171.0	S
170.578	0.0000	0.0000	156.072	0.00000	0.00000	49437.8	32266.8	17171.0	S
176.578	0.0000	0.0000	156.026	0.00000	0.00000	49437.8	32266.8	17171.0	S
182.578	0.0000	0.0000	155.981	0.00000	0.00000	49437.8	32266.8	17171.0	S
188.578	0.0000	0.0000	155.938	0.00000	0.00000	49437.8	32266.8	17171.0	S
194.578	0.0000	0.0000	155.897	0.00000	0.00000	49437.8	32266.8	17171.0	S
200.578	0.0000	0.0000	155.858	0.00000	0.00000	49437.8	32266.8	17171.0	S
206.578	0.0000	0.0000	155.820	0.00000	0.00000	49437.8	32266.8	17171.0	S
212.578	0.0000	0.0000	155.783	0.00000	0.00000	49437.8	32266.8	17171.0	S
218.578	0.0000	0.0000	155.748	0.00000	0.00000	49437.8	32266.8	17171.0	S
224.578	0.0000	0.0000	155.714	0.00000	0.00000	49437.8	32266.8	17171.0	S
230.578	0.0000	0.0000	155.681	0.00000	0.00000	49437.8	32266.8	17171.0	S
236.578	0.0000	0.0000	155.650	0.00000	0.00000	49437.8	32266.8	17171.0	S
242.578	0.0000	0.0000	155.619	0.00000	0.00000	49437.8	32266.8	17171.0	S
248.578	0.0000	0.0000	155.589	0.00000	0.00000	49437.8	32266.8	17171.0	S
254.578	0.0000	0.0000	155.560	0.00000	0.00000	49437.8	32266.8	17171.0	S
260.578	0.0000	0.0000	155.532	0.00000	0.00000	49437.8	32266.8	17171.0	S
266.578	0.0000	0.0000	155.505	0.00000	0.00000	49437.8	32266.8	17171.0	S
272.578	0.0000	0.0000	155.479	0.00000	0.00000	49437.8	32266.8	17171.0	S
278.578	0.0000	0.0000	155.453	0.00000	0.00000	49437.8	32266.8	17171.0	S
284.578	0.0000	0.0000	155.428	0.00000	0.00000	49437.8	32266.8	17171.0	S
290.578	0.0000	0.0000	155.404	0.00000	0.00000	49437.8	32266.8	17171.0	S
296.578	0.0000	0.0000	155.380	0.00000	0.00000	49437.8	32266.8	17171.0	S
302.578	0.0000	0.0000	155.357	0.00000	0.00000	49437.8	32266.8	17171.0	S
308.578	0.0000	0.0000	155.335	0.00000	0.00000	49437.8	32266.8	17171.0	S
314.578	0.0000	0.0000	155.313	0.00000	0.00000	49437.8	32266.8	17171.0	S
320.578	0.0000	0.0000	155.292	0.00000	0.00000	49437.8	32266.8	17171.0	S
326.578	0.0000	0.0000	155.271	0.00000	0.00000	49437.8	32266.8	17171.0	S
332.578	0.0000	0.0000	155.251	0.00000	0.00000	49437.8	32266.8	17171.0	S
338.578	0.0000	0.0000	155.231	0.00000	0.00000	49437.8	32266.8	17171.0	S
344.578	0.0000	0.0000	155.211	0.00000	0.00000	49437.8	32266.8	17171.0	S
350.578	0.0000	0.0000	155.192	0.00000	0.00000	49437.8	32266.8	17171.0	S

Detailed Results (cont,d.) :: *Scenario 5 :: SRWMD 100YR-24HR*

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
48.578	0.0000	0.0000	157.790	0.04142	0.00000	75765.1	26523.4	37974.5	S
54.578	0.0000	0.0000	157.733	0.03772	0.00000	75765.1	27373.4	37974.5	S
60.578	0.0000	0.0000	157.681	0.03474	0.00000	75765.1	28152.7	37974.5	S
66.578	0.0000	0.0000	157.632	0.03228	0.00000	75765.1	28874.2	37974.5	S
72.578	0.0000	0.0000	157.586	0.03021	0.00000	75765.1	29547.2	37974.5	S
78.578	0.0000	0.0000	157.543	0.02843	0.00000	75765.1	30179.2	37974.5	S
84.578	0.0000	0.0000	157.502	0.02689	0.00000	75765.1	30775.5	37974.5	S
90.578	0.0000	0.0000	157.463	0.02554	0.00000	75765.1	31340.8	37974.5	S
96.578	0.0000	0.0000	157.425	0.02433	0.00000	75765.1	31878.7	37974.5	S
102.578	0.0000	0.0000	157.389	0.02325	0.00000	75765.1	32392.0	37974.5	S
108.578	0.0000	0.0000	157.355	0.02228	0.00000	75765.1	32883.3	37974.5	S
114.578	0.0000	0.0000	157.322	0.02140	0.00000	75765.1	33354.6	37974.5	S
120.578	0.0000	0.0000	157.289	0.02059	0.00000	75765.1	33807.7	37974.5	S
126.578	0.0000	0.0000	157.258	0.01985	0.00000	75765.1	34244.2	37974.5	S
132.578	0.0000	0.0000	157.228	0.01917	0.00000	75765.1	34665.4	37974.5	S
138.578	0.0000	0.0000	157.199	0.01854	0.00000	75765.1	35072.5	37974.5	S
144.578	0.0000	0.0000	157.170	0.01795	0.00000	75765.1	35466.4	37974.5	S
150.578	0.0000	0.0000	157.143	0.01741	0.00000	75765.1	35848.2	37974.5	S
156.578	0.0000	0.0000	157.116	0.01690	0.00000	75765.1	36218.5	37974.5	S
162.578	0.0000	0.0000	157.089	0.01642	0.00000	75765.1	36578.1	37974.5	S
168.578	0.0000	0.0000	157.064	0.01597	0.00000	75765.1	36927.7	37974.5	S
174.578	0.0000	0.0000	157.039	0.01554	0.00000	75765.1	37267.9	37974.5	S
180.578	0.0000	0.0000	157.014	0.01210	0.00000	75765.1	37599.1	37974.5	S
186.578	0.0000	0.0000	156.967	0.00443	0.00000	75765.1	37790.6	37974.5	S
192.578	0.0000	0.0000	156.889	0.00000	0.00000	75765.1	37790.6	37974.5	S
198.578	0.0000	0.0000	156.818	0.00000	0.00000	75765.1	37790.6	37974.5	S
204.578	0.0000	0.0000	156.752	0.00000	0.00000	75765.1	37790.6	37974.5	S
210.578	0.0000	0.0000	156.690	0.00000	0.00000	75765.1	37790.6	37974.5	S
216.578	0.0000	0.0000	156.632	0.00000	0.00000	75765.1	37790.6	37974.5	S
222.578	0.0000	0.0000	156.577	0.00000	0.00000	75765.1	37790.6	37974.5	S
228.578	0.0000	0.0000	156.525	0.00000	0.00000	75765.1	37790.6	37974.5	S
234.578	0.0000	0.0000	156.475	0.00000	0.00000	75765.1	37790.6	37974.5	S
240.578	0.0000	0.0000	156.428	0.00000	0.00000	75765.1	37790.6	37974.5	S
246.578	0.0000	0.0000	156.382	0.00000	0.00000	75765.1	37790.6	37974.5	S
252.578	0.0000	0.0000	156.338	0.00000	0.00000	75765.1	37790.6	37974.5	S
258.578	0.0000	0.0000	156.296	0.00000	0.00000	75765.1	37790.6	37974.5	S
264.578	0.0000	0.0000	156.256	0.00000	0.00000	75765.1	37790.6	37974.5	S
270.578	0.0000	0.0000	156.216	0.00000	0.00000	75765.1	37790.6	37974.5	S
276.578	0.0000	0.0000	156.179	0.00000	0.00000	75765.1	37790.6	37974.5	S
282.578	0.0000	0.0000	156.142	0.00000	0.00000	75765.1	37790.6	37974.5	S
288.578	0.0000	0.0000	156.107	0.00000	0.00000	75765.1	37790.6	37974.5	S
294.578	0.0000	0.0000	156.073	0.00000	0.00000	75765.1	37790.6	37974.5	S
300.578	0.0000	0.0000	156.040	0.00000	0.00000	75765.1	37790.6	37974.5	S
306.578	0.0000	0.0000	156.008	0.00000	0.00000	75765.1	37790.6	37974.5	S
312.578	0.0000	0.0000	155.976	0.00000	0.00000	75765.1	37790.6	37974.5	S
318.578	0.0000	0.0000	155.946	0.00000	0.00000	75765.1	37790.6	37974.5	S
324.578	0.0000	0.0000	155.917	0.00000	0.00000	75765.1	37790.6	37974.5	S
330.578	0.0000	0.0000	155.888	0.00000	0.00000	75765.1	37790.6	37974.5	S
336.578	0.0000	0.0000	155.860	0.00000	0.00000	75765.1	37790.6	37974.5	S
342.578	0.0000	0.0000	155.833	0.00000	0.00000	75765.1	37790.6	37974.5	S
348.578	0.0000	0.0000	155.807	0.00000	0.00000	75765.1	37790.6	37974.5	S
354.578	0.0000	0.0000	155.781	0.00000	0.00000	75765.1	37790.6	37974.5	S
360.578	0.0000	0.0000	155.756	0.00000	0.00000	75765.1	37790.6	37974.5	S
366.578	0.0000	0.0000	155.731	0.00000	0.00000	75765.1	37790.6	37974.5	S
372.578	0.0000	0.0000	155.707	0.00000	0.00000	75765.1	37790.6	37974.5	S
378.578	0.0000	0.0000	155.684	0.00000	0.00000	75765.1	37790.6	37974.5	S
384.578	0.0000	0.0000	155.661	0.00000	0.00000	75765.1	37790.6	37974.5	S
390.578	0.0000	0.0000	155.638	0.00000	0.00000	75765.1	37790.6	37974.5	S
396.578	0.0000	0.0000	155.616	0.00000	0.00000	75765.1	37790.6	37974.5	S
402.578	0.0000	0.0000	155.595	0.00000	0.00000	75765.1	37790.6	37974.5	S
408.578	0.0000	0.0000	155.574	0.00000	0.00000	75765.1	37790.6	37974.5	S
414.578	0.0000	0.0000	155.554	0.00000	0.00000	75765.1	37790.6	37974.5	S
420.578	0.0000	0.0000	155.534	0.00000	0.00000	75765.1	37790.6	37974.5	S
426.578	0.0000	0.0000	155.514	0.00000	0.00000	75765.1	37790.6	37974.5	S
432.578	0.0000	0.0000	155.495	0.00000	0.00000	75765.1	37790.6	37974.5	S
438.578	0.0000	0.0000	155.476	0.00000	0.00000	75765.1	37790.6	37974.5	S
444.578	0.0000	0.0000	155.457	0.00000	0.00000	75765.1	37790.6	37974.5	S
450.578	0.0000	0.0000	155.439	0.00000	0.00000	75765.1	37790.6	37974.5	S
456.578	0.0000	0.0000	155.421	0.00000	0.00000	75765.1	37790.6	37974.5	S
462.578	0.0000	0.0000	155.404	0.00000	0.00000	75765.1	37790.6	37974.5	S
468.578	0.0000	0.0000	155.386	0.00000	0.00000	75765.1	37790.6	37974.5	S
474.578	0.0000	0.0000	155.370	0.00000	0.00000	75765.1	37790.6	37974.5	S
480.578	0.0000	0.0000	155.353	0.00000	0.00000	75765.1	37790.6	37974.5	S
486.578	0.0000	0.0000	155.337	0.00000	0.00000	75765.1	37790.6	37974.5	S

Detailed Results :: *Scenario 6 :: WQTV*

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	2080.5000	0.0000	152.990	0.00000	0.00000	0.0	0.0	0.0	N.A.
0.002	2080.5000	0.0000	157.870	0.88138	0.00000	12483.0	5.3	0.0	U/P
2.400	0.0000	0.0000	157.369	0.51210	0.00000	12483.0	7372.3	0.0	U/P
6.000	0.0000	0.0000	----	----	----	12483.0	12483.0	0.0	dry
12.000	0.0000	0.0000	----	----	----	12483.0	12483.0	0.0	dry
24.000	0.0000	0.0000	----	----	----	12483.0	12483.0	0.0	dry
36.000	0.0000	0.0000	----	----	----	12483.0	12483.0	0.0	dry
48.000	0.0000	0.0000	----	----	----	12483.0	12483.0	0.0	dry
60.000	0.0000	0.0000	----	----	----	12483.0	12483.0	0.0	dry
72.000	0.0000	0.0000	----	----	----	12483.0	12483.0	0.0	dry
84.000	0.0000	0.0000	----	----	----	12483.0	12483.0	0.0	dry
96.000	0.0000	0.0000	----	----	----	12483.0	12483.0	0.0	dry

Underdrain Analysis

BACKGROUND SEEPAGE PONDS INPUTS

Aquifer Data

Base of Aquifer:	148.7	ft
Seasonal High Water Table:	154.7	ft
Hydraulic Conductivity	5	ft/day
Fillable Porosity	20	%

Geometry: Underdrain Stage Storage

Based on the theoretical volume of water the underdrains could draw down.

ELEV.	AREA (SF)	STORAGE (CF)	STORAGE VOLUME (AC-FT)	
152.00	13,469	0	0.000	*Based on minimum Underdrain Orifice EL. 152.28'
153.00	15,494	14,482	0.332	
154.00	17,606	31,032	0.712	
155.00	19,819	49,744	1.142	**Set above the measured SHWT EL. 154.7'

Volume:	49,744	cf
Area:	19819	sf
Depth:	3.00	ft
Perimeter:	566	ft
Eq. Length:	200	ft
Eq: Width:	83	ft

PONDS Version 3.3.0241
Retention Pond Recovery - Refined Method
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Project Data

Project Name:	CRS Marvin Burnett
Simulation Description:	Background Seepage
Project Number:	23-0653
Engineer :	JHP
Supervising Engineer:	CCM
Date:	01-18-2024

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum):	148.70
Water Table Elevation, [WT] (ft datum):	154.70
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day):	5.00
Fillable Porosity, [n] (%):	20.00

Vertical infiltration was not considered.

Geometry Data

Equivalent Pond Length, [L] (ft):	200.0
Equivalent Pond Width, [W] (ft):	83.0

Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft²)
152.00	13469.0
153.00	15494.0
154.00	17606.0
155.00	19819.0

Discharge Structures

Discharge Structure #1 is active as orifice

Structure Parameters

Description: 12" Underdrain

Orifice elevation, (ft datum):	152.27
Orifice coefficient:	4.9
Orifice area, (ft²):	0.785
Orifice exponent:	0.5

Tailwater - disabled, free discharge

Scenario Input Data

Scenario 1 :: 12" Underdrain

Hydrograph Type:	Baseflow
Modflow Routing:	Routed with infiltration

Seasonal Water Table Fluctuation (ft)	0.01
Duration of Wet Season (days)	120.0
Number of Increments	240
Initial (seasonal low) ground water level (ft datum)	154.69
Recharge is applied inside pond (in addition to outside pond)?	No

Note: when this option is selected, water will be added to the pond to synchronize the rise in the pond level with the rise in the groundwater. Otherwise, no water will be added directly to the pond, and the pond water level will rise as a result of infiltration only.

Detailed Results (cont,d.) *:: Scenario 1 :: 12" Underdrain*

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
2664.000	0.0000	0.0000	152.270	-0.00331	0.00331	0.0	-178509.4	218681.4	S
2676.000	0.0000	0.0000	152.270	-0.00331	0.00331	0.0	-178652.3	218824.3	S
2688.000	0.0000	0.0000	152.270	-0.00330	0.00330	0.0	-178795.1	218967.1	S
2700.000	0.0000	0.0000	152.270	-0.00330	0.00330	0.0	-178937.7	219109.7	S
2712.000	0.0000	0.0000	152.270	-0.00329	0.00329	0.0	-179080.1	219252.1	S
2724.000	0.0000	0.0000	152.270	-0.00329	0.00329	0.0	-179222.4	219394.4	S
2736.000	0.0000	0.0000	152.270	-0.00329	0.00329	0.0	-179364.5	219536.4	S
2748.000	0.0000	0.0000	152.270	-0.00328	0.00328	0.0	-179506.3	219678.3	S
2760.000	0.0000	0.0000	152.270	-0.00328	0.00328	0.0	-179648.1	219820.1	S
2772.000	0.0000	0.0000	152.270	-0.00327	0.00327	0.0	-179789.6	219961.6	S
2784.000	0.0000	0.0000	152.270	-0.00327	0.00327	0.0	-179931.0	220103.0	S
2796.000	0.0000	0.0000	152.270	-0.00327	0.00327	0.0	-180072.2	220244.2	S
2808.000	0.0000	0.0000	152.270	-0.00326	0.00326	0.0	-180213.2	220385.2	S
2820.000	0.0000	0.0000	152.270	-0.00326	0.00326	0.0	-180354.1	220526.1	S
2832.000	0.0000	0.0000	152.270	-0.00325	0.00325	0.0	-180494.8	220666.8	S
2844.000	0.0000	0.0000	152.270	-0.00325	0.00325	0.0	-180635.3	220807.3	S
2856.000	0.0000	0.0000	152.270	-0.00325	0.00325	0.0	-180775.7	220947.7	S
2868.000	0.0000	0.0000	152.270	-0.00324	0.00324	0.0	-180915.9	221087.9	S
2880.000	0.0000	0.0000	152.270	----	---	0.0	-181055.9	221227.9	N.A.

FLOW RATE WHEN SYSTEM ACHIEVES STEADY STATE (120 DAYS) WITH SEASONAL HIGH WATER TABLE ELEVATION

PONDS Underdrain Analysis
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Job Information

Job Name:	23-0653 CRS Marvin Burnett
Engineer:	JHP
Date:	01-18-2024

Input Data

Area at top of pond, [ATOP]:	19819	ft²
Depth of basin, [d]:	3	ft
Aquifer depth below pond bottom, [B]:	8	ft
Desired depth to water table below pond bottom, [R]:	0.5	ft
Hydraulic conductivity of soil, [K]:	10	ft/day
Drain diameter, [D]:	12	in
Thickness of gravel envelope, [t]:	9	in
Thickness of soil cover, [H]:	2	ft
Treatment volume, [PAV]:	31032	ft³
Recovery time, [T]:	30	days
Factor of safety, [FS]:	2	
Background seepage, [qb]:	1.45	gpm
Free discharge / no tailwater		

0.00324 ft^3/s converted to gallons per minute

Results

Computed underdrain spacing, [S]:	106.6505	ft
Computed total length of laterals, [L]:	185.8312	ft
Computed flow rate through outfall, [Q]:	2.717507E-02	ft³/sec
Computed flow rate per lineal foot of lateral, [ql]:	1.462352E-04	ft³/sec/ft

Notes

1. Laterals should be no farther than S/2 from the top of the basin.
2. A gravel envelope at least 3 inches thick is recommended around the underdrain pipes. If a gravel envelope is used, a filter fabric will be required around this envelope.
3. The underdrain pipe should have a filter fabric sock to prevent fines from moving into and clogging the perforated pipe.
4. Ensure outfall elevation for system will allow gravity flow without tailwater backpressure to the underdrains.
5. Theory is applicable where ground water flow is largely in a horizontal direction (i.e., natural gradients less than 1%).
6. Capped and sealed inspection and cleanout ports which extend to the ground surface are recommended at the following locations for each drain pipe:
    a. the terminus
    b. at every 400 feet or every bend of 45 or more degrees, whichever is shortest
7. Underdrain basin should be stabilized with permanent vegetative cover.

Warnings

None.

PONDS Underdrain Analysis
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Devo Seereeram, Ph.D., P.E.

Job Information

Job Name:	23-0653 CRS Marvin Burnett
Engineer:	JHP
Date:	01-18-2024

Input Data

Area at top of pond, [ATOP]:	19819	ft²
Depth of basin, [d]:	3	ft
Aquifer depth below pond bottom, [B]:	8	ft
Desired depth to water table below pond bottom, [R]:	0.5	ft
Hydraulic conductivity of soil, [K]:	10	ft/day
Drain diameter, [D]:	12	in
Thickness of gravel envelope, [t]:	9	in
Thickness of soil cover, [H]:	2	ft
Treatment volume, [PAV]:	12483	ft³
Recovery time, [T]:	3	days
Factor of safety, [FS]:	2	
Background seepage, [qb]:	1.45	gpm
Free discharge / no tailwater		

0.00324 ft^3/s converted to gallons per minute

Results

Computed underdrain spacing, [S]:	55.72212	ft
Computed total length of laterals, [L]:	355.6756	ft
Computed flow rate through outfall, [Q]:	9.955007E-02	ft³/sec
Computed flow rate per lineal foot of lateral, [ql]:	2.798901E-04	ft³/sec/ft

Note

Maximum Underdrain Spacing:	55.7	ft
Provided Underdrain Spacing:	25.0	ft
Minimum Lateral Length:	355	ft
Provided Lateral Length:	375	ft

Notes

1. Laterals should be no farther than S/2 from the top of the basin.
2. A gravel envelope at least 3 inches thick is recommended around the underdrain pipes. If a gravel envelope is used, a filter fabric will be required around this envelope.
3. The underdrain pipe should have a filter fabric sock to prevent fines from moving into and clogging the perforated pipe.
4. Ensure outfall elevation for system will allow gravity flow without tailwater backpressure to the underdrains.
5. Theory is applicable where ground water flow is largely in a horizontal direction (i.e., natural gradients less than 1%).
6. Capped and sealed inspection and cleanout ports which extend to the ground surface are recommended at the following locations for each drain pipe:
    a. the terminus
    b. at every 400 feet or every bend of 45 or more degrees, whichever is shortest
7. Underdrain basin should be stabilized with permanent vegetative cover.

Warnings

None.

Appendix B

Operation and Maintenance Requirements and
Erosion and Sedimentation Control Requirements

Proposed operation and maintenance and soil erosion and sediment control practices are outlined in the following paragraphs.

Surface water Management Facilities

The man-made surface water facility shall be maintained free of sediments and debris. Areas shall be inspected on a routine basis and nuisance plants shall be removed a minimum of twice annually. Grassed areas shall be mowed a minimum of 6 times per year. The natural systems shall be least disturbed as possible. Minimal maintenance is required for the natural and undisturbed areas. All ponds shall be inspected monthly. Monthly documentation shall be noted based upon the inspection findings.

Erosion Control

All erosion damage at spillways, outfall structures, and along pond side slopes shall be repaired (grading and grassing) as conditions occur. All side slopes and other areas disturbed by construction shall be stabilized by sodding, hydro-mulching or other appropriate vegetative or non-vegetative erosion control measures.

Swale/Ditch

All swales, if any, shall be maintained free of debris and sediment. Sediments shall be removed when the depth has been reduced by 20 percent. Sediments removed from swales/ditches should be evenly spread over grassed areas away from the stormwater management facilities.

Culverts, Pipes and Structures

All pipes, if any, shall be inspected bi-annually. Culverts and pipes shall be maintained free of debris and sediment. Sediments removed from culverts and pipes should be evenly spread over grassed areas away from the stormwater management facilities.

The structures and paved flow lines, if any, shall be maintained clear of debris. Remove any debris and silt collected in inlets and pipes as routine inspections dictates.

Inspection Reporting

Annual inspection reports, prepared by a properly licensed professional engineer, should be submitted to the water management district as appropriate. The engineer shall inspect the site and report on the status and function of the system. Noted deficiencies and/or maintenance requirements shall be reported to the owner with recommendations for repairs. Repairs shall be executed.

Limerock/Sinkhole

If continuous limerock is encountered during excavation of the swales/pond or if a sinkhole forms in the area of a drainage swale/pond the engineer of record shall be notified by either the contractor or the established operation and maintenance entity. The engineer of record shall inspect the repaired area upon completion of the repair.

Where continuous limerock is encountered during excavation of the swales/ponds, the limerock shall be over excavated by 2 feet and replaced with clayey soils that extend 2 feet beyond the perimeter of the limerock outcropping. The clayey soil shall have at least 20% passing the no. 200 sieve, compacted to 95% of standard proctor, and compacted in a wet condition with moisture 2% - 4% above optimum.

All swales/ponds shall be inspected monthly for sinkhole occurrence. Should a sinkhole occur, the area shall be repaired as soon as possible. Repair shall include filling (limerock such as road base material, clay/sand mixture, or concrete if necessary). A 2-foot deep cap that extends 2 feet beyond the perimeter of the sinkhole shall be constructed with clayey soils. The clayey soil shall have at least 20% passing the no. 200 sieve, compacted to 95% of standard proctor, and compacted in a wet condition with moisture 2% - 4% above optimum. The clay soil cap shall be re-graded to prevent concentration of waters (ponding) and re-vegetated.

Outfall Structures

All outfall and drawdown orifices are to be inspected bi-annually for sediment or debris in the flow line of weirs or orifices. All sediment and debris should be removed and disposed of in an approved manner.

Operation & Maintenance Entity:

Concept Development, Inc.
1449 SW 74th Drive. Suite 200
Gainesville, FL 32607

Appendix C

Geotechnical Report

GSE Engineering & Consulting, Inc.

SUMMARY REPORT OF A GEOTECHNICAL SITE EXPLORATION – REVISION 1

DOLLAR GENERAL – LAKE CITY SW MARVIN BURNETT
LAKE CITY, COLUMBIA COUNTY, FLORIDA

GSE PROJECT NO. 16251

Prepared For:

CONCEPT DEVELOPMENT, INC.

DECEMBER 2023

GSE Engineering & Consulting, Inc.

December 7, 2023

Andrea Barnett
Concept Development, Inc.
1449 SW 74th Drive, Suite 200
Gainesville, Florida 32607

Subject: Summary Report of a Geotechnical Site Exploration – Revision 1
Dollar General – Lake City SW Marvin Burnett
Lake City, Columbia County, Florida
GSE Project No. 16251

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, pavement, and stormwater management designs. This revision includes recommended soil parameters for stormwater management design with underdrains.

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.

JASON E. GOWLAND LICENSE No.66467 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Jason E Gowland
Digitally signed by Jason E Gowland
Date: 2023.12.07 15:39:40 -05'00'
on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Angelina X. Liu, E.I.
Staff Engineer

Jason E. Gowland, P.E.
Principal Engineer
Florida Registration No. 66467

AXL / JEG: tlf
Q:\Projects\16251 Dollar General – Lake City SW Marvin Burnett\16251 Rev.1.docx

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File (1)

GSE Engineering & Consulting, Inc.
5590 SW 64th Street, Suite B
Gainesville, Florida 32608
(352) 377-3233 Phone ◆ (352) 377-0335 Fax
www.gseengineering.com

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LIST OF FIGURES

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1.0 INTRODUCTION

1.1 General

GSE Engineering & Consulting, Inc. (GSE) has completed this geotechnical exploration for the proposed commercial retail store located on SW Marvin Burnett Road in Lake City, Columbia County, Florida. This exploration was performed in accordance with GSE Proposal No. 2023-589 dated September 12, 2023. Ms. Andrea Barnett authorized our services on September 15, 2023.

1.2 Project Description

We understand that you are coordinating due diligence related work related to the development of this site into a commercial retail store. The site is located on the northwest corner of the State Road 47 and SW Marvin Burnett Road intersection in Lake City, Columbia County, Florida. The site is approximately +/-2.72 acres.

You provided GSE with information about the project. We understand the project will consist of an approximate 10,640 square foot building, a parking lot, and a stormwater management facility.

The structure is expected to be a single-story, high wall concrete masonry unit (CMU) and steel frame construction. Structural loads have not been provided but are expected to be on the order of 1 to 2 kips per foot for non-load bearing CMU walls, and less than 50 kips for columns. The finished floor of the structure is anticipated to be constructed within 1 to 2 feet of the existing site grades.

The building will be located in the northern portion of the site. The parking lot will be located west, south, and east of the structure. The stormwater management facility will be located on the western portion of the site.

A recent aerial photograph of the site was obtained and reviewed. The site plan and aerial photograph were used in preparation of this exploration and 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 five (5) Standard Penetration Test (SPT) borings to a depth of 20 feet below land surface (bls) within the proposed building area, five (5) auger borings to a depth of 5 feet bls in the area of the parking lot and driveways, and five (5) auger borings to depths of 15 feet bls in the area of the 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 September 20, 2023.

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, the standard two-inch O.D. split-barrel sampler was seated by driving it 6 inches into the undisturbed soil. The sampler was then 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 nine (9) percent soil fines passing the No. 200 sieve, nine (9) natural moisture content determinations, two (2) 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

Karen Roylos with GSE visited the site on September 18, 2023 to observe the site conditions and mark the boring locations. Mr. Jason Kite with Jason Kite, LLC was retained by GSE to clear lanes to allow access to the boring locations for drilling equipment.

The majority of the site is densely vegetated with trees, scattered saw palmettos, shrubs, vines and weedy groundcover. Portions of the site were densely vegetated and more difficult to traverse. To the south of the site is SW Marvin Burnett Road. State Road 47 is located east of the site. Undeveloped wooded land borders the site to the north and west.

The topography at the site is moderately sloping from northeast towards southwest. Regional topography can be characterized as gently to moderately sloping. The Lake City West USGS Topographic Map indicates the ground surface elevations at the site are near 155 to 165 feet[1] NAVD 88.

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 within the proposed parking lot and driveways encountered relatively similar soil conditions. Auger borings A-1 to A-3 encountered poorly graded sand, and sand with silt (SP, SP-SM) to the explored depths of 5 feet bls. Auger borings A-4 and A-5 initially encountered sand with silt (SP-SM) to depths of 1.5 to 3.5 feet bls. This was underlain by clayey to very clayey sand (SC, SC/CL) to the explored depths of 5 feet bls.

The auger borings located within the stormwater management facility encountered relatively consistent soil conditions. Auger boring P-1 encountered 6 feet of silty sand, and poorly graded sand (SM, SP) overlying clayey to very clayey sand, and clay with sand (SC, SC/CL, CL/CH) to the explored depth of 15 feet bls. Auger borings P-2 to P-4 initially encountered poorly graded sand, sand with silt, and silty sand (SP, SP-SM, SM) to depths of 2 to 5 feet bls, overlying silty clayey sand, and clayey to very clayey sand (SM-SC, SC, SC/CL) to depths of 7 to 10.5 feet bls. This was underlain by sand with silt (SP-SM) to depths of 12 to 13.5 feet bls, followed by clay-rich soils (CL/CH) to the explored depth of 15 feet bls. Auger boring P-5 initially encountered 5.5 feet of clayey sand (SC) and 5 feet of sand with silt (SP-SM) overlying clay with sand (CL/CH) to a depth of 12.5 feet bls. This was underlain by sand with silt (SP-SM) to the explored depth of 15 feet bls.

[1] United States Geological Survey, Lake City West Quadrangle, 2021.

The SPT borings located within the proposed building footprint indicate the soils across these areas are relatively consistent. SPT boring B-1 initially encountered 3 feet of sand with silt (SP-SM), and 4.5 feet of sandy clay (CL) overlying sand with clay, and poorly graded sand (SP-SC, SP) to a depth of 12 feet bls. This was underlain by clay (CL/CH) to the explored depth of 20 feet bls. SPT borings B-2 to B-5 encountered poorly graded sand, sand with silt, sand with clay, silty sand, and silty clayey sand (SP, SP-SM, SP-SC, SM-SC) with some interbedded layers of clayey to very clayey sand (SC, SC/CL) to depths of 13.5 to 17.5 feet bls. This was underlain by clay-rich (CL, CL/CH) soils to the explored depths of 20 feet bls.

The sandy soils (SP, SP-SM, SP-SC) encountered are generally in a very loose to dense condition with N-values ranging from 2 to 45 blows per foot. The silty sand, silty clayey sand, and clayey to very clayey sands (SM, SM-SC, SC, SC/CL) encountered are generally in a very loose to dense condition with N-values ranging from 4 to 38 blows per foot. The sandy clay, clay with sand, and clay (CL/CH, CL) encountered are generally in a very soft to hard condition with N-values ranging from 3 to 33 blows per foot.

Weight-of-rod strength material was encountered in SPT boring B-2 at depth range from 13.5 to 14.5 feet bls. This isolated occurrence is likely related to depositional characteristics of the soil materials and transitions between material types.

The groundwater table was encountered in the auger and SPT borings at depths of 6.1 to 8.8 feet bls at the time of our investigation.

3.3 Review of Published Data

The majority of the site is mapped as three soil series by the Soil Conservation Service (SCS) Soil Survey for Columbia County[2]. The following soil descriptions are from the Soil Survey.

Blanton fine sand, 0 to 5 percent slopes

Map Unit Setting

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

Map Unit Composition

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

[2] Soil Survey of Hamilton County, Florida. Soil Conservation Service, U.S. Department of Agriculture.

Description of Blanton

Setting

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

Typical profile

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

Properties and qualities

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

Interpretive groups

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

Minor Components

Albany

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

Troup

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

Chipley

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

Alpin

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

Ichetucknee fine sand, 5 to 8 percent slopes

Map Unit Setting

- *National map unit symbol:* vrt4
- *Elevation:* 330 to 660 feet
- *Mean annual precipitation:* 50 to 58 inches
- *Mean annual air temperature:* 64 to 72 degrees F
- *Frost-free period:* 258 to 288 days
- *Farmland classification:* Not prime farmland

Map Unit Composition

- *Ichetucknee and similar soils:* 80 percent
- *Minor components:* 20 percent
- *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Ichetucknee

Setting

- *Landform:* Hills on marine terraces, ridges on marine terraces
- *Landform position (three-dimensional):* Interfluve, side slope
- *Down-slope shape:* Convex
- *Across-slope shape:* Linear
- *Parent material:* Sandy and clayey marine deposits over limestone

Typical profile

- *A - 0 to 4 inches:* fine sand
- *E - 4 to 7 inches:* fine sand
- *Bg - 7 to 75 inches:* clay
- *2R - 75 to 79 inches:* weathered bedrock

Properties and qualities

- *Slope:* 5 to 8 percent
- *Depth to restrictive feature:* 50 to 75 inches to lithic bedrock
- *Drainage class:* Somewhat poorly drained
- *Runoff class:* Negligible
- *Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)
- *Depth to water table:* About 18 to 36 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
- *Sodium adsorption ratio, maximum:* 4.0
- *Available water supply, 0 to 60 inches:* Moderate (about 8.4 inches)

Interpretive groups

- *Land capability classification (irrigated):* None specified
- *Land capability classification (nonirrigated):* 6e
- *Hydrologic Soil Group:* D
- *Forage suitability group:* Loamy and clayey soils on rises, knolls, and ridges of mesic uplands (G138XA322FL)
- *Other vegetative classification:* Loamy and clayey soils on rises, knolls, and ridges of mesic uplands (G138XA322FL)
- *Hydric soil rating:* No

Minor Components

Goldsboro

- *Percent of map unit:* 10 percent
- *Landform:* Knolls on marine terraces, ridges on marine terraces
- *Landform position (three-dimensional):* Interfluve
- *Down-slope shape:* Convex
- *Across-slope shape:* Linear
- *Other vegetative classification:* Loamy and clayey soils on flats and rises of mesic lowlands (G138XA331FL)
- *Hydric soil rating:* No

Ocilla

- *Percent of map unit:* 10 percent
- *Landform:* Rises on marine terraces
- *Landform position (three-dimensional):* Interfluve
- *Down-slope shape:* Convex
- *Across-slope shape:* Linear
- *Other vegetative classification:* Sandy over loamy soils on rises and knolls of mesic uplands (G138XA231FL)
- *Hydric soil rating:* No

Pelham fine sand, 0 to 2 percent slopes

Map Unit Setting

- *National map unit symbol:* 2tg56
- *Elevation:* 0 to 190 feet
- *Mean annual precipitation:* 48 to 63 inches
- *Mean annual air temperature:* 57 to 79 degrees F
- *Frost-free period:* 251 to 293 days
- *Farmland classification:* Not prime farmland

Map Unit Composition

- *Pelham and similar soils:* 75 percent
- *Minor components:* 25 percent
- *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Pelham

Setting

- *Landform:* Flatwoods
- *Landform position (three-dimensional):* Talf
- *Down-slope shape:* Linear
- *Across-slope shape:* Linear
- *Parent material:* Sandy and loamy marine deposits

Typical profile

- *A - 0 to 6 inches:* fine sand
- *Eg - 6 to 26 inches:* fine sand
- *Btg1 - 26 to 42 inches:* sandy clay loam
- *Btg2 - 42 to 83 inches:* sandy clay loam

Properties and qualities

- *Slope:* 0 to 2 percent
- *Depth to restrictive feature:* More than 80 inches
- *Drainage class:* Poorly drained
- *Runoff class:* High
- *Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 5.95 in/hr)
- *Depth to water table:* About 6 to 12 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
- *Sodium adsorption ratio, maximum:* 4.0
- *Available water supply, 0 to 60 inches:* Moderate (about 7.0 inches)

Interpretive groups

- *Land capability classification (irrigated):* None specified
- *Land capability classification (nonirrigated):* 3w
- *Hydrologic Soil Group:* B/D
- *Ecological site:* F153AY060NC - Wet Loamy Flats and Depressions
- *Forage suitability group:* Sandy over loamy soils on flats of hydric or mesic lowlands (G153AA241FL)
- *Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G153AA241FL)
- *Hydric soil rating:* No

Minor Components

Unnamed

- *Percent of map unit:* 13 percent
- *Landform:* Flatwoods
- *Landform position (three-dimensional):* Talf
- *Down-slope shape:* Linear
- *Across-slope shape:* Linear
- *Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G153AA241FL)
- *Hydric soil rating:* Yes

Albany

- *Percent of map unit:* 6 percent
- *Landform:* Flatwoods
- *Landform position (three-dimensional):* Talf
- *Microfeatures of landform position:* Rises
- *Down-slope shape:* Convex
- *Across-slope shape:* Convex
- *Ecological site:* F153AY040NC - Moist Loamy Rises and Flats
- *Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
- *Hydric soil rating:* No

Meggett

- *Percent of map unit:* 3 percent
- *Landform:* Flatwoods
- *Landform position (three-dimensional):* Talf
- *Down-slope shape:* Linear
- *Across-slope shape:* Linear
- *Ecological site:* F153AY090NC - Flooded Mineral Soil Floodplains and Terraces
- *Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G153AA341FL)
- *Hydric soil rating:* Yes

Surrency

- *Percent of map unit:* 3 percent
- *Landform:* Drainageways, depressions
- *Landform position (three-dimensional):* Dip
- *Down-slope shape:* Linear, concave
- *Across-slope shape:* Convex, concave
- *Ecological site:* F153AY060NC - Wet Loamy Flats and Depressions
- *Other vegetative classification:* Sandy over loamy soils on stream terraces, flood plains, or in depressions (G153AA245FL)
- *Hydric soil rating:* Yes

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-surface to 15 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 sand with silt, silty sand, silty sand with clay, sand with clay, clayey sand, very clayey sand, and sandy clay. The tested sand with silt (SP-SM) contains approximately 11 percent soil fines passing the No. 200 sieve with a natural moisture content of about 8.7 percent. The tested silty sand, and silty sand with clay (SM, SM-SC) contains approximately 14 to 27 percent soil fines passing the No. 200 sieve with natural moisture contents of about 7.8 to 18 percent. The tested sand with clay (SP-SC) contains approximately 11 percent soil fines passing the No. 200 sieve with a natural moisture content of about 17 percent. The tested clayey sand (SC) contains approximately 30 percent soil fines passing the No. 200 sieve with a natural moisture content of about 13 percent. The tested very clayey sand (SC/CL) contains approximately 34 percent soil fines passing the No. 200 sieve with a natural moisture content of about 18 percent. The tested sandy clay (CL) contains approximately 56 to 62 percent soil fines passing the No. 200 sieve with natural moisture contents of about 17 to 23 percent.

Atterberg Limits tests indicate the tested sandy clay (CL) has Liquid Limit (LL) values of 35 and 41, Plastic Limit (PL) values of 15 to 18, and Plasticity Index (PI) values of 17 and 26. These values correspond to materials with low potential (LL < 50) to marginal potential (PI ≤ 35) for expansive behavior[3].

The constant head hydraulic conductivity test results indicate the near-surface silty sand (SM) has hydraulic conductivity values of 0.8 to 1.1 feet per day. The tested clayey sand (SC) has no flow. Tests were not conducted on the deeper very clayey sand due to the limitations of the test method on soils having moderate to high fines content, but these soils are expected to have permeability values at least one order of magnitude lower than the sandy soils.

[3] 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

The groundwater table was encountered in the borings at depths of 6.1 to 8.8 feet bls at the time of our exploration. The Soil Survey indicates the groundwater table is typically at a depth of near-surface to 6 feet bls. We anticipate the seasonal high groundwater table will be near depths of 1 to 3.5 feet bls. Estimates for the seasonal high groundwater table are shown on the individual boring logs.

4.3 Building Foundations

The SPT borings located within the proposed building footprint indicate the soils across these areas are relatively consistent. SPT boring B-1 initially encountered 3 feet of sand with silt (SP-SM), and 4.5 feet of sandy clay (CL) overlying sand with clay, and poorly graded sand (SP-SC, SP) to a depth of 12 feet bls. This was underlain by clay (CL/CH) to the explored depth of 20 feet bls. SPT borings B-2 to B-5 encountered poorly graded sand, sand with silt, sand with clay, silty sand, and silty clayey sand (SP, SP-SM, SP-SC, SM-SC) with some interbedded layers of clayey to very clayey sand (SC, SC/CL) to depths of 13.5 to 17.5 feet bls. This was underlain by clay-rich (CL, CL/CH) soils to the explored depths of 20 feet bls.

Based upon the soil conditions encountered and our limited understanding of the structural loads and site grading, 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 2,500 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 majority of the near-surface soils, 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 Flexible Pavement

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.

The seasonal high groundwater table is estimated to be approximately 12 inches to about 3.5 feet beneath existing grade across the site. We recommend a minimum of either 12 to 24 inches of separation (depending upon the pavement section design) be present between the bottom of the base course and the estimated seasonal high groundwater table. If this separation cannot be achieved by site grading, GSE recommends underdrains be used beneath the base course.

4.4.1 Stabilized Subgrade

If a crushed limerock or recycled concrete base is used, we recommend a stabilized subgrade be located beneath the base. The stabilized subgrade should have a minimum Limerock Bearing Ratio (LBR) of 40, with minimum thicknesses of 6 inches for automobile parking areas and 12 inches for driveways.

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).

4.4.2 Base Course

The base course can consist of either crushed limerock, soil cement, or recycled concrete. If you should use a soil cement base course, a stabilized subgrade is not required.

Limerock should have an LBR of at least 100, be obtained from a FDOT approved source and meet FDOT gradation requirements. The base course thickness should be a minimum of 6 inches in automobile parking areas, and 8 inches in driveway areas. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557). We recommend a minimum 24 inches separation between the bottom of the limerock base course and the estimated seasonal high-water table. If site grading does not allow for this separation, we recommend underdrains be considered.

Soil cement can consist of an imported material or a blend of the on-site soils and cement. A mix design should be performed to determine the optimum cement content. We recommend the soil cement have a minimum 28-day compressive strength of 500 psi. Soil cement can be blended off-site (in a pug mill) or on site. Soil cement pills should be cast from each day's production to verify the recommended compressive strength has been achieved at 28 days. We recommend the soil cement base course be a minimum of 8 inches thick throughout the project. We recommend a minimum 18 inches separation between the bottom of the soil cement base course and the estimated seasonal high-water table. If site grading does not allow for this separation, we recommend underdrains be considered.

Recycled concrete should have an LBR of at least 150, be obtained from a FDOT approved source and meet FDOT gradation requirements. The base course thickness should be a minimum of 8 inches. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557). We recommend a minimum 12 inches separation between the bottom of the recycled concrete base course and the estimated seasonal high-water table. If site grading does not allow for this separation, we recommend underdrains be considered.

4.4.3 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.

4.5 Rigid Pavement

Concrete pavement is a rigid pavement that results in smaller load transfers to the subgrade soils than flexible pavement. For concrete pavement subgrade, we recommend using the existing surficial sands or recommended clean sand (SP) fill, compacted to at least 98 percent of the Modified Proctor maximum dry density without additional stabilization with the following stipulations:

1. Subgrade soils must be compacted to at least 98 percent of Modified Proctor maximum dry density to a depth of at least 2 feet prior to placement of concrete.
2. The surface of the subgrade soils must be smooth and any disturbances or wheel rutting corrected prior to placement of the concrete.
3. The subgrade soils must be moistened prior to placement of concrete.
4. Concrete pavement thickness should be uniform throughout, with the exception of thickened edges (curb or footing).
5. The bottom of the pavement should be separated from the estimated seasonal high groundwater level by at least 18 inches.
6. Limerock or any other impermeable base is not suitable unless it meets the minimum recommended permeability of 10 ft/day.
7. The upper 12 inches of subgrade underlying the base course must also be “free-draining” and water that enters the base and subgrade must be allowed to seep out by gravity or if this is not possible, underdrains must be incorporated into the subgrade. A “bathtub” condition within the base/subgrade must be avoided.

Our recommendations for slab thickness for both light-duty and heavy-duty concrete pavements is based on a.) subgrade soils are compacted to 98 percent of the Modified Proctor maximum dry density, b.) modulus of subgrade reaction (k) of 200 pounds per cubic inch, c.) a 20-year design life, and d.) previously stated design parameters. For an anticipated light-duty traffic group, a minimum pavement thickness of 5.5 inches is recommended, using Table 2.4 from the ACI 330 Guide for Design and Construction of Concrete Parking Lots, ACI 330R-01. For an anticipated heavy-duty traffic group, a minimum pavement thickness of 8 inches is recommended, using Table 3.4 from the FDOT *Rigid Pavement Design Manual*, January 2019.

We recommend using concrete with a minimum 28-day compressive strength of 4,000 pounds per square inch and a minimum 28-day flexural strength (modulus of rupture) of at least 600 pounds per square inch based on the third point loading of concrete beam test samples. Maximum control joint spacing of 12.5 by 12.5 feet is suggested for light-duty concrete pavements. Maximum control joint spacing of 15 by 15 feet is suggested for heavy-duty concrete pavements. Layout of sawcut control joints should form square panels, and the depth of sawcut joint should be at least 1/4 of the concrete slab thickness. The joints should be sawed within six hours of concrete placement or as soon as the concrete has developed sufficient strength to support workers and equipment.

For further details on concrete pavement construction, refer to "Guide to Jointing Non-reinforced Concrete Pavements" published by the Florida Concrete and Products Associates, Inc. and "Building Quality Concrete Parking Areas", published by the Portland Cement Association.

4.6 Site Preparation

The soils at this site should be suitable for supporting the proposed construction using normal, good practice site preparation procedures. 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, 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

Temporary dewatering may be necessary for this project. If needed, 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 Proof Compaction

Compact the subgrade to a density of at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). The specified compaction should be obtained to a depth of 1 foot below the foundation bottoms and the existing grade prior to placing fill. Vibratory roller equipment should not be used within approximately 100 feet of existing structures. Lighter "walk-behind" compaction equipment may be used to achieve the degree of compaction.

Should clayey sand be encountered at the bearing surface, this material should be probed and visually confirmed to be unyielding in the upper 12 inches in lieu of density testing. If the foundation excavations penetrate the clayey sand, the excavation should be performed in a manner that reduces soil disturbance. Clayey sand soils (with fines content in excess of 15 percent) that are removed and replaced or appreciably disturbed need to be re-compacted to 98 percent of the Standard Proctor maximum dry density (ASTM D698).

4.6.5 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. 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 50 linear feet of continuous footing and every other column footing, per foot depth of fill or native material. We recommend a compaction test be performed for each 2,500 square feet of floor area or 10,000 square feet of pavement area per foot of fill or native material, or a minimum of three tests each, whichever is greater. Test all footing excavations to a depth of 12 inches at the frequencies stated above.

4.8 Stormwater Management

The auger borings located within the stormwater management facility encountered relatively consistent soil conditions. Auger boring P-1 encountered 6 feet of silty sand, and poorly graded sand (SM, SP) overlying clayey to very clayey sand, and clay with sand (SC, SC/CL, CL/CH) to the explored depth of 15 feet bls. Auger borings P-2 to P-4 initially encountered poorly graded sand, sand with silt, and silty sand (SP, SP-SM, SM) to depths of 2 to 5 feet bls, overlying silty clayey sand, and clayey to very clayey sand (SM-SC, SC, SC/CL) to depths of 7 to 10.5 feet bls. This was underlain by sand with silt (SP-SM) to depths of 12 to 13.5 feet bls, followed by clay-rich soils (CL/CH) to the explored depth of 15 feet bls. Auger boring P-5 initially encountered 5.5 feet of clayey sand (SC) and 5 feet of sand with silt (SP-SM) overlying clay with sand (CL/CH) to a depth of 12.5 feet bls. This was underlain by sand with silt (SP-SM) to the explored depth of 15 feet bls.

The water table was encountered in the auger borings at depths of 7.5 to 8.8 feet bls at the time of our exploration. We anticipate the seasonal high groundwater table to be at depths of 1 to 2.5 feet bls.

The laboratory permeability tests indicate the surficial layers of silty sand (SM) has hydraulic conductivity values of 0.8 to 1.1 feet per day, and clayey sand (SC) has no flow. The deeper very clayey sand encountered below the surficial sandy soils is friable and will have permeability values at least one order of magnitude lower than the sandy soils. The underlying dense soils and clay-rich soils are expected to be confining soils.

Mr. Cole Menhennett with CHW confirmed the proposed stormwater management facility as a dry pond via email. We understand that the current design will consider underdrains. We understand that imported clean sand will be used for the backfill for the underdrains. This revision includes soil parameters considering and underdrain design with clean sand backfill.

Based upon our findings and test results, our recommended soil parameters for the stormwater management design in the explored areas are presented below. The recommended parameters consider the results of the permeability tests, wash 200 determinations, and our experience with these types of soils. The parameters below do not consider a factor of safety.

Proposed Stormwater Management Facility

1. Base elevation of effective or mobilized aquifer (average depth of confining layer) equal to 8 feet bls.
2. Unsaturated vertical infiltration rate of 10 foot per day.
3. Horizontal hydraulic conductivity equal to 10 feet per day.
4. Specific yield (fillable porosity) of 20 percent.
5. Average seasonal high groundwater table depth equal to 2 feet bls.
6. Average seasonal low groundwater table depth equal to 6 feet bls.

In areas where clay-rich soils are present at the basin bottom, we recommend these soils be undercut a minimum of 2 feet and backfilled with the on-site sands and sands with silt (SP, SP-SM) having a maximum of 12 percent soil fines passing the No. 200 sieve. This fill should also be used above the bottom of the underdrains. The intent of this undercutting and replacement is to provide a more uniform sand "blanket" at the basin bottom that allows the migration of water to the underdrains. This sand blanket will also reduce the potential for clay-fines leaching out of the soils when water is present in the basin that can result in a thin layer of confining type material on the basin bottom that can reduce the effectiveness of the basin.

4.9 Fill Suitability

The soils encountered at this site within the explored depths range from sands (SP) to clays (CL/CH). A discussion of the suitability for reuse as structural fill for each soil classification according to the Unified Soil Classification System (USCS) designation is provided below.

SP, SP/SM – Sands (SP) and sand with silt (SP/SM) have less than 5 percent and 12 percent soil fines passing the No. 200 sieve, respectively, and are typically well draining soils that are suitable for reuse as structural fill. The sands with silt may require moisture conditioning (drying) to make the material more workable. These soils will require stockpiling and drying before they are reused if they are excavated from below the water table.

SM – Silty sands (SM) can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Silty sands are typically non-plastic or have low plasticity, and can be reused as structural fill with precautions. Silty sands can be moisture sensitive and difficult to work and compact and can rut if the moisture content is near or above the optimum moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable silty sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Silty sands with more than 30 percent soil fines are especially moisture sensitive, and are not recommended for reuse as structural fill. These soils will behave more as sandy silt, and for this reason, very silty sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SM/ML. Silty sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

SC – Clayey sand (SC) soils can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Clayey sands can have a high range of plasticity, varying from a PI of 7 or greater and plotting above the A-line to highly plastic. Friable clayey sands are typically suitable for use as structural fill with precautions. Clayey sands will be moisture sensitive and difficult to work and compact and can rut during placement if the moisture content is near or above the natural moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable clayey sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Clayey sands with more than 30 percent soil fines passing the No. 200 sieve are especially moisture sensitive and are typically highly plastic, and are not recommended for reuse as structural fill. These soils will behave more as sandy clay, and for this reason, very clayey sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SC/CH or SC/CL. Clayey sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

ML, MH, CL, CH – Silts and clays are not suitable materials for reuse as structural fill.

When using on-site soils as fill materials, we recommend the silty and clayey sand soils (SM, SC) be used in the lower depths of the fill. Sand and sand with silt (SP, SP-SM) should be used in the upper portions of the fill. We recommend a minimum of 2 feet of sand (SP, SP-SM) cover the silty and clayey sand fill materials to reduce the potential for soggy surface conditions due to the low permeability characteristics of the silty and clayey sand materials.

4.10 Surface Water Control and Landscaping

Roof gutters should be considered 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. 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 any 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.

5.0 FIELD DATA

5.1 Auger Boring Logs

GSE Engineering & Consulting, Inc.
GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER A-1**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING NE CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 3.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0				(SP) Brown and gray SAND
1		AU 1		
2				2.0
		AU 2		(SP) Pale gray and brown SAND
3				▽
4				
5				5.0
				Bottom of borehole at 5.0 feet.

DATE PERFORMED 9/20/2023 **BORING NUMBER A-2**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING NE CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 3.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0				(SP-SM) Dark brown and gray SAND with silt
1		AU 1		*%PASS-200 = 11* *MC = 8.7*
2				2.5
		AU 2		(SP) Pale brown SAND
3				▽
4				
5				5.0
				Bottom of borehole at 5.0 feet.

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GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER A-3**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING NE CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 3.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0				(SP-SM) Brown and gray SAND with silt
		AU 1		
1				
2				2.0
		AU 2		(SP) Pale gray and brown SAND
3				
				▽
4				
5				5.0
				Bottom of borehole at 5.0 feet.

DATE PERFORMED 9/20/2023 **BORING NUMBER A-4**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING NE CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 3.0 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0				(SP-SM) Brown and gray SAND with silt
		AU 1		
1				1.5
2				(SC/CL) Brown, gray, and orange very clayey SAND
		AU 2		
3				▽ *%PASS-200 = 34* *MC = 18*
4				
5				5.0
				Bottom of borehole at 5.0 feet.

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5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER A-5**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING NE CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 3.0 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm^2)	MATERIAL DESCRIPTION
0		AU 1		(SP-SM) Brown and gray SAND with silt
1				
2				
3				▽
				3.5
4		AU 2		(SC) Brown and gray clayey SAND
5				5.0
				Bottom of borehole at 5.0 feet.

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GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER P-1**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING 7.5 ft CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 2.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0.0				(SM) Gray and brown silty SAND
2.5		AP 1		*%PASS-200 = 14* *MC = 7.8* *k_h = 1.1 ft/day*
		AU 2		4.0 (SP) Brown and gray SAND with trace of clay
5.0				6.0 (SC/CL) Pale gray and brown very clayey SAND
7.5		AU 3		
10.0				12.0
12.5		AU 4		(CL/CH) Gray CLAY with sand
		AU 5		13.5 (SC) Brown and orange clayey SAND
15.0				15.0 Bottom of borehole at 15.0 feet.

DATE PERFORMED 9/20/2023 **BORING NUMBER P-2**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING 7.8 ft CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 2.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0.0		AU 1		(SP) Brown and gray SAND
2.5				▽
		AU 2		3.5 (SC) Brown and orange clayey SAND
5.0				6.5 (SM-SC) Gray, brown, and orange silty clayey SAND
7.5		AU 3		▼
10.0				10.5
12.5		AU 4		(SP-SM) Pale gray and brown SAND with silt
		AU 5		13.5 (CL/CH) Pale gray and brown CLAY with sand
15.0				15.0 Bottom of borehole at 15.0 feet.

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GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER P-3**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING 7.5 ft CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 1.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0.0		AP 1		(SM) Brown silty SAND
				%PASS-200 = 15 ▽ *MC = 9.7* *k_h = 0.8 ft/day*
2.5		AU 2		2.0 (SC) Brown, gray, and orange clayey SAND
5.0				
7.5		AU 3		7.0 ▼ (SP-SM) Pale gray and pale brown SAND with silt
10.0				
12.5		AU 4		12.0 (CL/CH) Green CLAY with sand
15.0				15.0 Bottom of borehole at 15.0 feet.

DATE PERFORMED 9/20/2023 **BORING NUMBER P-4**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING 8.8 ft CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 2.5 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0.0		AU 1		(SP-SM) Brown and gray SAND with silt
2.5				▽
5.0		AU 2		5.0 (SC) Brown, gray, and orange clayey SAND
7.5		AU 3		7.5 (SC/CL) Brown, gray, and orange very clayey SAND ▼
10.0		AU 4		10.0 (SP-SM) Pale brown and pale gray SAND with silt
12.5		AU 5		12.5 (CL/CH) Brown and gray CLAY with sand
15.0				15.0 Bottom of borehole at 15.0 feet.

(Continued Next Page)

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GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 9/20/2023 **BORING NUMBER P-5**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS: LOGGED BY WDI
▼ AT TIME OF DRILLING 8.8 ft CHECKED BY AXL
▽ ESTIMATED SEASONAL HIGH 1.0 ft
NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	CPT (kg/cm²)	MATERIAL DESCRIPTION
0.0				(SC) Brown and gray clayey SAND
2.5		AP 1		*%PASS-200 = 30* *MC = 13* *k_h = NF*
5.0				
5.5		AU 2		(SP-SM) Brown, gray, and orange SAND with silt
7.5				
10.0				
10.5		AU 3		(CL/CH) Gray and brown CLAY with sand
12.5				
12.5		AU 4		(SP-SM) Brown and orange SAND with silt
15.0				
15.0				Bottom of borehole at 15.0 feet.

5.2 Standard Penetration Test Soil Boring Logs

GSE Engineering & Consulting, Inc.
GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

BORING NUMBER B-1

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 9/20/23 **COMPLETED** 9/20/23
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Flight Auger
▼ **AT TIME OF DRILLING** 6.5 ft
LOGGED BY WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 3.5 ft
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		(SP-SM) Very loose brown SAND with silt		SPT 1	1-1-1 (2)						20 40 60 80
			3	SPT 2	1-2-3 (5)						
5		▽ (CL) Firm to very stiff brown, gray, and orange sandy CLAY		SPT 3	4-6-9 (15)	35	18	17	56	17	
		▼		SPT 4	7-10-11 (21)						
			7.5	SPT 5	8-11-12 (23)						
		(SP-SC) Medium dense brown, gray, and orange SAND with clay		SPT 6	9-10-14 (24)						
10			9.5								
		(SP) Medium dense pale gray and brown SAND									
			12								
		(CL/CH) Firm to stiff green and orange CLAY		SPT 7	3-4-5 (9)						
15											
				SPT 8	2-3-4 (7)						
20			20								
		Bottom of borehole at 20.0 feet.									

GSE Engineering & Consulting, Inc.
GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

BORING NUMBER B-2

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 9/20/23 **COMPLETED** 9/20/23
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Flight Auger
▼ **AT TIME OF DRILLING** 6.1 ft
LOGGED BY WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 3.5 ft
NOTES

DEPTH (ft)	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	(SP-SM) Very loose gray and brown SAND with silt		SPT 1	1-2-2 (4)						
		3	SPT 2	1-2-2 (4)						
5	(SM-SC) Very loose to medium dense gray, brown, and orange silty clayey SAND ▽ ▼		SPT 3	2-4-6 (10)						
			SPT 4	7-9-8 (17)						
			SPT 5	7-8-10 (18)						
		8.5								
10	(SP-SC) Very loose to medium dense pale gray and brown SAND with clay		SPT 6	7-9-10 (19)						
	Weight-of-Rod from 13.5 to 14.5 ft bls.									
		14.5	SPT 7	0-0-3 (3)						
15	(CL/CH) Soft gray sandy CLAY									
		16.5								
	(CL/CH) Firm green and orange CLAY									
			SPT 8	3-3-4 (7)						
20		20								
	Bottom of borehole at 20.0 feet.									

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GSE Engineering & Consulting, Inc.
GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

BORING NUMBER B-3

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 9/20/23 **COMPLETED** 9/20/23
GROUND ELEVATION **HOLE SIZE**
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Flight Auger
AT TIME OF DRILLING 6.1 ft
LOGGED BY WDI **CHECKED BY** AXL
ESTIMATED SEASONAL HIGH 3.5 ft
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		(SP-SM) Very loose gray and brown SAND with silt		SPT 1	1-1-1 (2)						
			2.5								
		(SP) Loose pale gray SAND		SPT 2	1-2-4 (6)						
			4.5	SPT 3	2-4-5 (9)						
5		(SP-SC) Loose to gray and brown SAND with clay									
			6	SPT 4	6-2-9 (11)						
		(SC/CL) Medium dense to dense gray, brown, and orange very clayey SAND		SPT 5	7-9-11 (20)						
10				SPT 6	14-16-22 (38)						
			13.5								
		(CL) Firm gray sandy CLAY		SPT 7	2-3-3 (6)	41	15	26	62	23	
15			16								
		(CL/CH) Green and orange CLAY									
20			20								
		Bottom of borehole at 20.0 feet.									

20 40 60 80

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Gainesville, FL 32608
Telephone: 3523773233

BORING NUMBER B-4

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 9/20/23 **COMPLETED** 9/20/23
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Flight Auger
▼ **AT TIME OF DRILLING** 6.5 ft
LOGGED BY WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 3.5 ft
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		(SP-SM) Very loose gray and brown SAND with silt		SPT 1	1-1-2 (3)						
			3	SPT 2	4-7-11 (18)						
5		▽ (SP) Medium dense pale gray and brown SAND		SPT 3	7-5-6 (11)						
			6	SPT 4	3-4-5 (9)						
		▼ (SM-SC) Loose to medium dense gray, brown, and orange silty SAND with clay		SPT 5	5-7-14 (21)				27	18	
			9	SPT 6	12-10-9 (19)						
10		(SC) gray and brown clayey SAND									
			13								
		(SP-SC) Medium dense gray, brown, and orange SAND with clay		SPT 7	4-9-12 (21)						
15											
			17								
		(CL/CH) Firm green and gray sandy CLAY									
20			20	SPT 8	3-3-4 (7)						
		Bottom of borehole at 20.0 feet.									

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GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

BORING NUMBER B-5

CLIENT Concept Development, Inc.
PROJECT NAME Dollar General - Lake City SW Marvin Burnett
PROJECT NUMBER 16251
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 9/20/23 **COMPLETED** 9/20/23
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR Whitaker Drilling, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Flight Auger
▼ **AT TIME OF DRILLING** 6.5 ft
LOGGED BY WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 3.5 ft
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		(SP-SM) Very loose brown and gray SAND with silt		SPT 1	1-1-2 (3)						20 40 60 80
			3	SPT 2	4-7-8 (15)						
5		(SP) Medium dense pale brown and pale gray SAND		SPT 3	10-11-13 (24)						
				SPT 4	10-8-9 (17)						
			8	SPT 5	7-8-11 (19)						
10		(SP-SC) Medium dense to dense brown and orange SAND with clay	10	SPT 6	17-21-24 (45)				11	17	
		(SP) Medium dense pale brown and gray SAND									
15				SPT 7	5-7-9 (16)						
			17.5								
		(CL/CH) Hard pale gray sandy CLAY		SPT 8	8-14-19 (33)						
20			20								
		Bottom of borehole at 20.0 feet.									

5.3 Laboratory Results

GSE Engineering & Consulting, Inc.

SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 16251

Project Name: Dollar General - Lake City SW Marvin Burnett

Boring Number	Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Hydraulic Conductivity (ft/day)	Unified Soil Classification
A-2	1-1.5	Dark brown and gray SAND with silt	8.7				11			SP-SM
A-4	3-3.5	Brown, gray, and orange very clayey SAND	18				34			SC/CL
B-1	4-5.5	Brown, gray, and orange sandy CLAY	17	35	18	17	56			CL
B-3	13.5-15	Gray sandy CLAY	23	41	15	26	62			CL
B-4	7-8.5	Gray, brown, and orange silty SAND with clay	18				27			SM-SC
B-5	8.5-10	Pale brown and gray SAND with clay	17				11			SP-SC
P-1	2-4	Gray and brown silty SAND	7.8				14		1.1	SM
P-3	0-2	Brown silty SAND	9.7				15		0.8	SM
P-5	3-5	Brown and gray clayey SAND	13				30		NF	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	Gravels	Clean Gravels	$Cu \geq 4$ and $1 \leq Cc \leq 3$			**GW**	Well graded GRAVEL
More than 50% retained on No. 200 sieve	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**	Well graded SAND
	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% ≤ 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% ≤ 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	Clays	inorganic	50% ≤ fines < 70%			**CL/CH**	Sandy CLAY
50% or more passes the No. 200 sieve			70% ≤ fines < 85%			**CL/CH**	CLAY with sand
			fines ≥ 85%			**CL/CH**	CLAY
	Silts and Clays	inorganic	PI > 7 and plots on/above "A" line			**CL**	Lean CLAY
	Liquid Limit less than 50		PI < 4 or plots below "A" line			**ML**	SILT
		organic	Liquid Limit - oven dried / Liquid Limit - not dried	< 0.75		**OL**	Organic clay / Organic silt
	Silts and Clays	inorganic	PI plots on or above "A" line			**CH**	Fat CLAY
	Liquid Limit 50 or more		PI plots below "A" line			**MH**	Elastic SILT
		organic	Liquid Limit - oven dried / Liquid Limit - not dried	< 0.75		**OH**	Organic clay / Organic silt
HIGHLY ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor					**PT**	PEAT

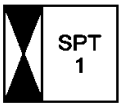
CORRELATION OF PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY

	No. OF BLOWS, N	RELATIVE DENSITY
	0 - 4	Very Loose
	5 - 10	Loose
SANDS:	11 - 30	Medium dense
	31 - 50	Dense
	OVER 50	Very Dense

	No. OF BLOWS, N	CONSISTENCY
	0 - 2	Very Soft
SILTS	3 - 4	Soft
&	5 - 8	Firm
CLAYS:	9 - 15	Stiff
	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/da

6.0 LIMITATIONS

6.1 Warranty

This report has been prepared for our client for their 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

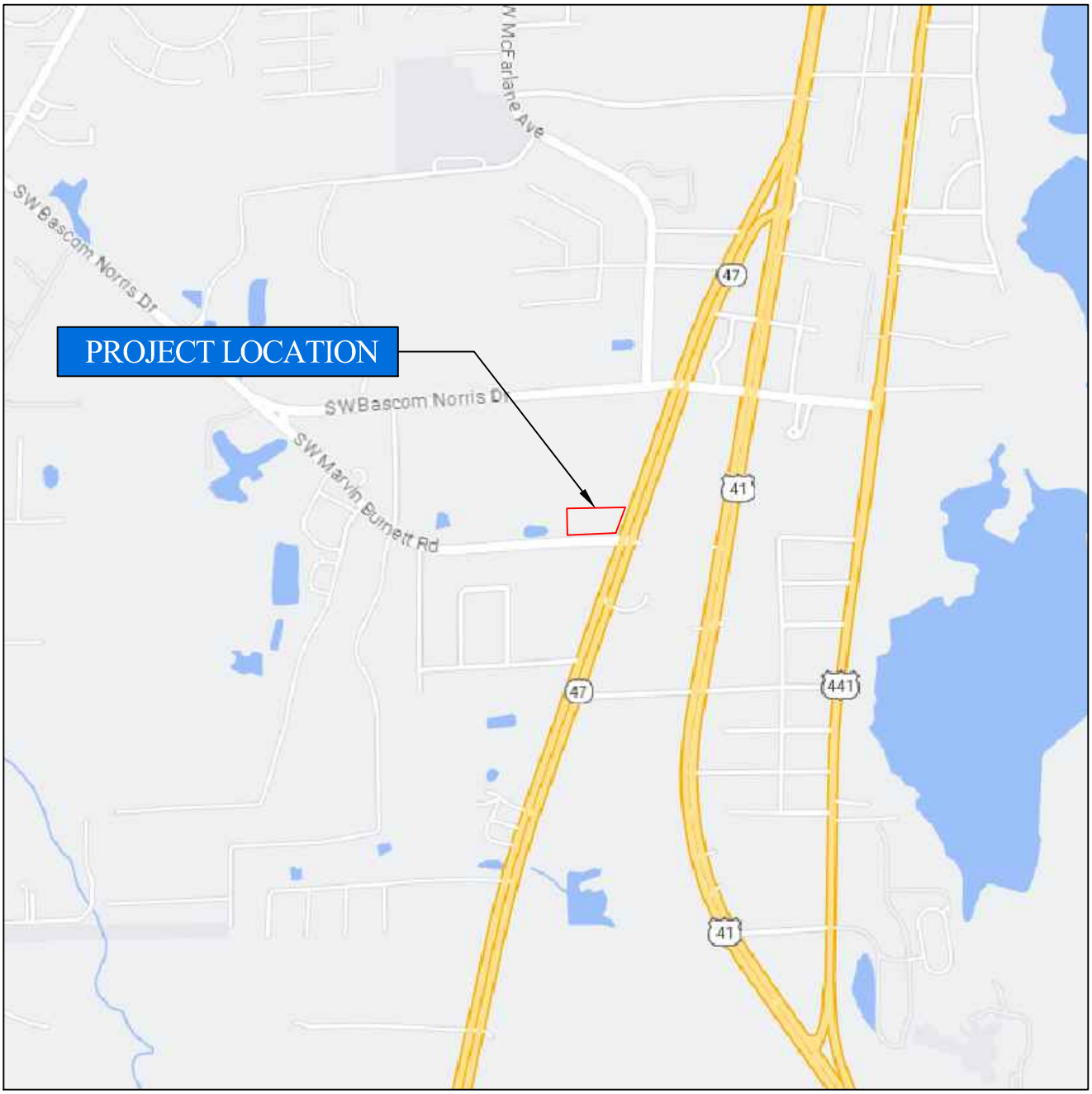
The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on Figure 2. This report does not reflect any variations that may occur between these borings.

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

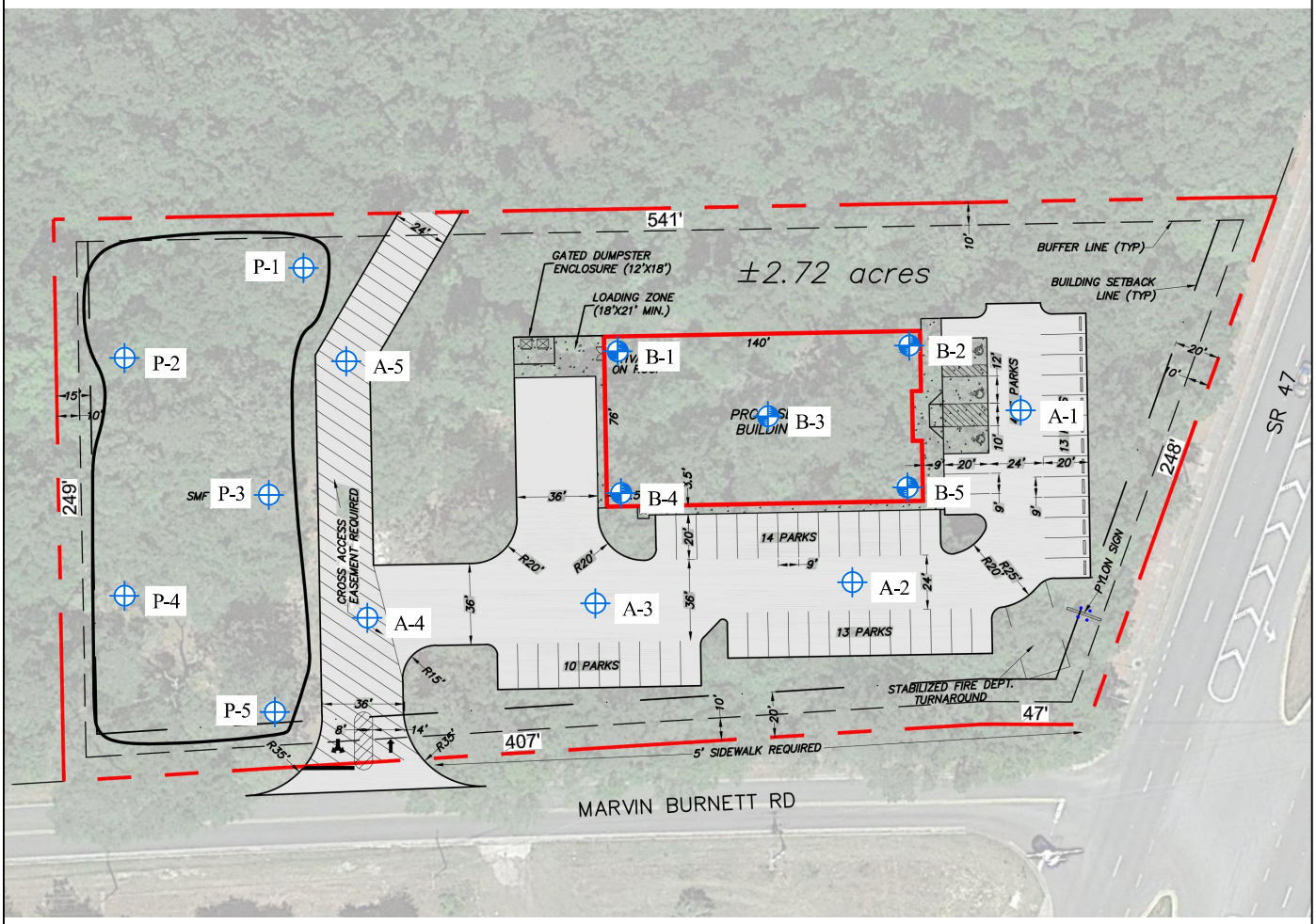
DOLLAR GENERAL - LAKE CITY
SW MARVIN BURNETT
LAKE CITY, COLUMBIA COUNTY, FLORIDA
GSE PROJECT NO. 16251

PROJECT SITE LOCATION MAP

DESIGNED BY: AXL
CHECKED BY : JEG
DRAWN BY : EEW

GSE Engineering & Consulting, Inc.

FIGURE 1



LEGEND:

- SPT BORING
- AUGER BORING

NORTH

0 80'

SCALE: 1" = 80' APPROX.

DOLLAR GENERAL - LAKE CITY
SW MARVIN BURNETT
LAKE CITY, COLUMBIA COUNTY, FLORIDA
GSE PROJECT NO. 15396

SITE PLAN SHOWING APPROXIMATE LOCATIONS OF FIELD TESTS

DESIGNED BY: AXL
CHECKED BY : JEG
DRAWN BY : AXL

GSE Engineering & Consulting, Inc.

FIGURE 2

DEPARTMENT OF GROWTH MANAGEMENT
205 North Marion Avenue
Lake City, Florida 32055
Telephone: (386) 719-5750
growthmanagement@lcfla.com

REVIEW REPORT TO PLANNING AND ZONING, BOARD OF ADJUSTMENT AND HISTORICAL COMMITTEES' BY STAFF FOR SITE PLAN REVIEW, SPECIAL EXCEPTIONS, VARIANCES, COMPREHENSIVE PLAN AMENDMENTS/ ZONING AND CERTIFICATE OF APPROPRIATENESS

Date: 03/21/2024

Request Type: Site Plan Review (SPR) ■ Special Exception (SE) ☐ Variances (V) ☐

Comprehensive Plan Amendment/Zoning (CPA/Z) ☐ Certificate of Appropriateness (COA) ☐

Project Number: SPR24-05

Project Name: Commercial Retail Store- Dollar General

Project Address: TBD

Project Parcel Number: 08127-005

Owner Name: Concept Companies

Owner Address: 1449 SW 74th Dr. Suite 200

Owner Contact Information: Telephone Number: 352-333-3233 Email: _____

Owner Agent Name: Randall Olney, P.E.

Owner Agent Address: 11801 Research Drive, Alaucha, FL 32615

Owner Agent Contact Information: Telephone: 352-331-1976 Email: randyo@chw-inc.com

The City of Lake City staff has reviewed the application and documents provided for the above request and have determined the following.

Growth Management – Building Department, Planning and Zoning, Code Enforcement, Permitting

Building Department: **Reviewed by:** DocuSigned by: 6A9220F9CF20485... **Date:** 3/22/2024

No comments at this time

Planning and Zoning: **Reviewed by:** DocuSigned by: Robert Angelo F0D1ED33B98E4BE... **Date:** 3/26/2024

The property is zoned Commercial Intensive. All permitted uses in Commercial General are permitted in Commercial Intensive per section 4.13.2. Retail stores are a permitted use per section 4.12.2.1.

Business License: **Reviewed by:** DocuSigned by: Marshall Sova E8B18D144D974CD... **Date:** 3/22/2024

Will need to apply for occupational license

Code Enforcement: Reviewed by: DocuSigned by: Marshall Sova E8B18D144D974CD... **Date:** 3/22/2024

No liens, codes or violations

Permitting: Reviewed by: DocuSigned by: Ann Jones F5E79CA4532C435... **Date:** 3/22/2024

not at this time

Utilities – Water, Sewer, Gas, Water Distribution/Collections, Customer Service

Water Department: Reviewed by: DocuSigned by: Mike Osborn 896E039544B74E3... **Date:** 3/22/2024

None at this time

Sewer Department: Reviewed by: DocuSigned by: Cody Pridgeon DBA01EF55AD249B... **Date:** 3/22/2024

None

Gas Department: Reviewed by: DocuSigned by: Steve Brown 8B57D0CE8F2F4B5... **Date:** 3/22/2024

Cannot comment wit no address.

Water Distribution/Collection: Reviewed by: DocuSigned by: Brian Scott F599EB612578 4F8... **Date:** 4/2/2024

no comment at this time

Customer Service: Reviewed by: DocuSigned by: Shasta Pelham 6BD97A03165D4E0... **Date:** 4/9/2024

A tap application will need to be submitted in order to request city utilities. The utility fees will be calculated upon approval of the tap application.

Public Safety – Public Works, Fire Department, Police Department

Public Works: **Reviewed by:** DocuSigned by: Steve Brown 8B57D0CE8F2F4B5... **Date:** 3/22/2024

No comment.

Fire Department: **Reviewed by:** DocuSigned by: Joshua Wininger 6AA3758BA88A46E... **Date:** 3/22/2024

I have no issues

Police Department: **Reviewed by:** DocuSigned by: Sue Tull B8537435BEAC4D8... **Date:** 3/22/2024

no concerns at this time

NOTE: Please provide separate pages for comments that will not fit in provided spaces and please label the pages for your department and for the project.

State and County- FDOT, Suwannee River Water Management, School Board, Columbia County

FDOT: Reviewed by: _____ **Date:** _____

Suwannee River Water Management: Reviewed by: DocuSigned by: Garrett Spencer 650C0305882B42D... **Date:** 3/25/2024

The project will require an ERP Permit. It is recommended that the applicant schedule a pre-application meeting with SRWMD staff to go over the permitting requirements.

School Board: Reviewed by: DocuSigned by: Keith Hatcher 98699F1916BC425... **Date:** 3/25/2024

No comments at this time.

County: Reviewed by: DocuSigned by: Chad Williams 35A47263EAB7416... **Date:** 4/9/2024

A driveway permit will be required. The County is currently in the process of permitting several developments west of this location along Bascom Norris Drive. For that reason, we ask that the applicant and agencies pay careful attention to the traffic issue. This comment is provided by the County Engineer based only on the information contained in the application provided. This response does not constitute the engineer's professional opinion with respect to the project and does not constitute approval of any committee or board for Columbia County.

NOTE: Please provide separate pages for comments that will not fit in provided spaces and please label the pages for your department and for the project.

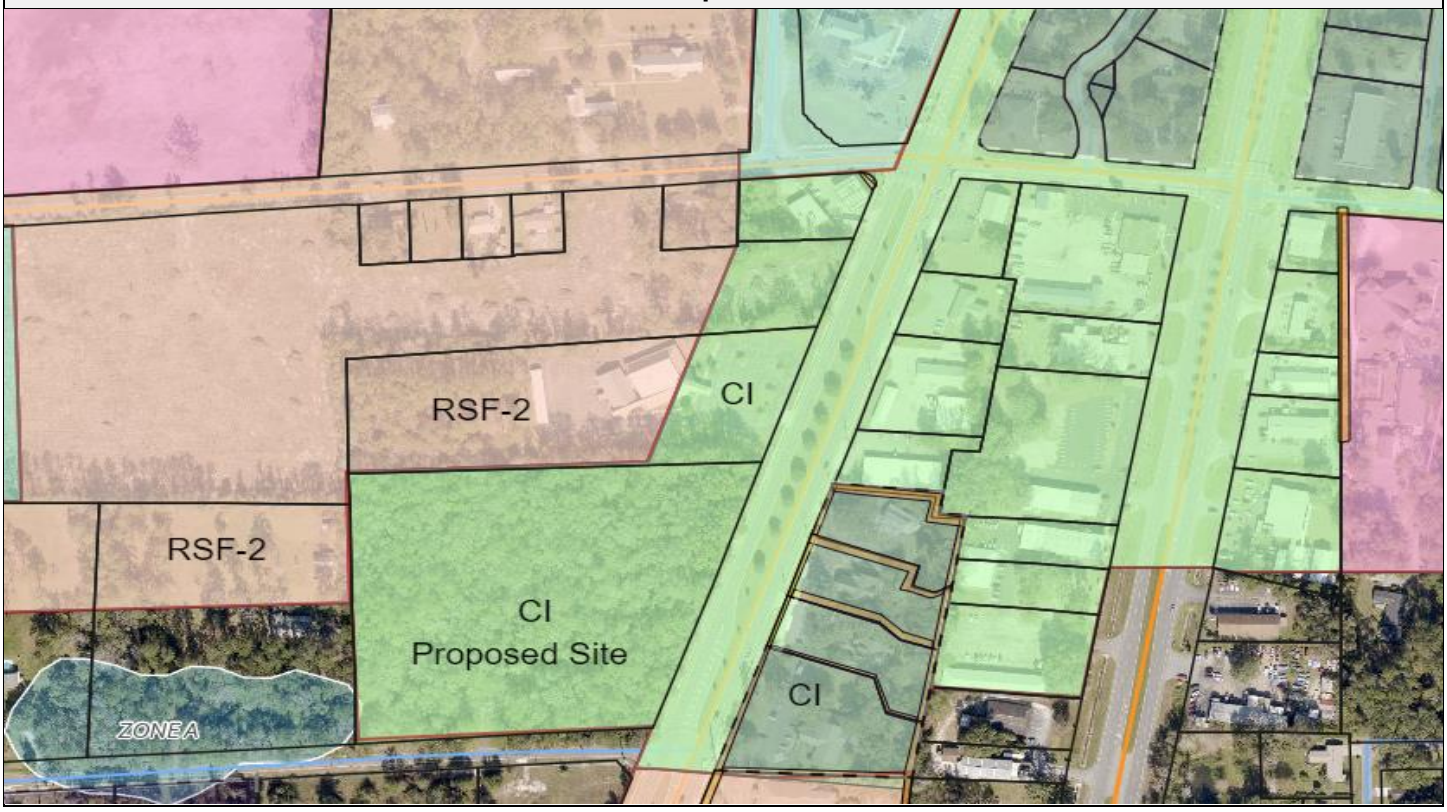
LAKE CITY GROWTH MANAGEMENT
STAFF ANALYSIS REPORT

Project Information	
Project Name and Case No.	Dollar General site plan review
Applicant	Randall Olney, PE
Owner	Concept Companies
Requested Action	Site plan review for Dollar General, retail store, on parcel 08127-005
Hearing Date	05-14-2024
Staff Analysis/Determination	Sufficient for Review
Prepared By	Robert Angelo

Subject Property Information	
Size	+/- 2.70 Acres
Location	Corner of Marvin Burnett and Hwy 47
Parcel Number	08127-000
Future Land Use	Commercial
Proposed Future Land Use	Commercial
Current Zoning District	Commercial Intensive
Proposed Zoning	Commercial Intensive
Flood Zone-BFE	Flood Zone X and A Base Flood Elevation-N/A

Land Use Table				
Direction	**Future Land Use**	**Zoning**	**Existing Use**	**Comments**
N	Residential Moderate	RSF-2	Residential	
E	Residential Moderate	RSF-2	Residential	
S	County		Vacant	County Jurisdiction
W	Commercial	CI	Medical Office	

Map of Location



Picture of Location

Summary of Request
Applicant has petitioned for a site plan review for the above parcels to build a retail store.

Commercial Retail Store
SW Marvin Burnett Rd.

Site Plan Application

CHW
Professional Consultants

City of Lake City
Planning and Zoning Board
May 14, 2024

Context Map

ILLUSTRATION 1A: CONTEXT MAP

A portion of Columbia County Tax Parcel # 07-4S-17-08127-005

CHW AN NV5 COMPANY

www.chw-inc.com

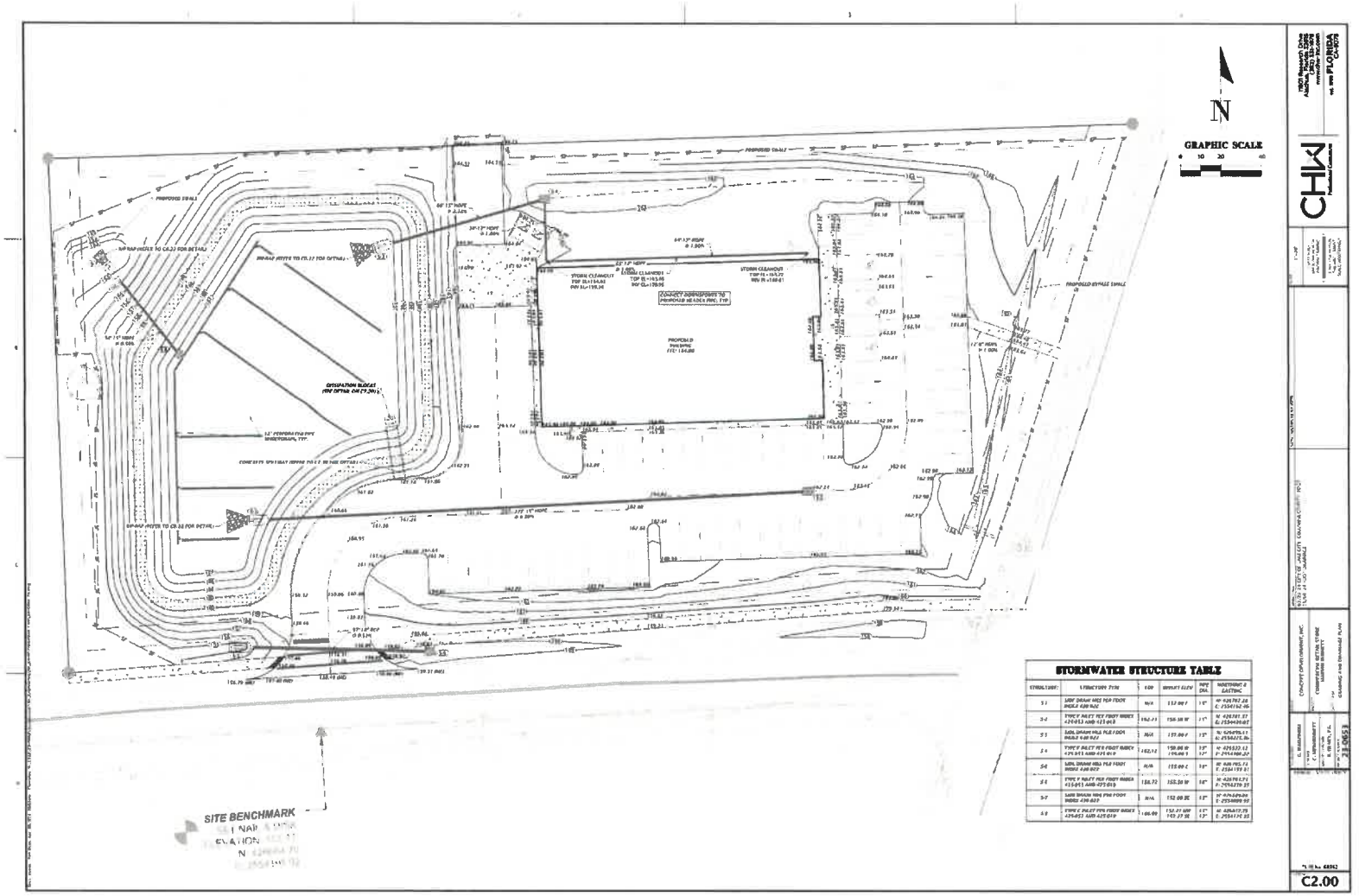
APPLICATION TYPE:

Site Plan

INTENT:

Construct a 10,640 SF Commercial Retail Store with associated parking, utility infrastructure, and stormwater management system on Columbia County tax parcel #08127-005.

Development Plan



Contact Information

Cole Menhennett, EI
Address: 11801 Research Drive
Alachua, FL 32615
Phone: 386.518.6514
Email: cole.menhennett@nv5.com

CHW
Professional Consultants


PUBLIC NOTICE

CITY OF LAKE CITY
NOTICE
LAND USE ACION

A PUBLIC HEARING IS SCHEDULED TO CONCIDER A REQUEST FOR:

SPR24.05, a petition by Randall Olney, P.E., as agent, to request a Site Plan Review approval be granted as provided for in Section 4.13 of the Land Development Regulations, to get approval on site plan for Dollar General for a property located in the Commercial Intensive zoning district, in accordance with the submittal of the petition dated March 21, 2024, to be located on parcels 08127-005

WHEN;	June 11, 2024 at 5:30pm or as soon after.
WHERE:	City Council Meeting Room, Second Floor, City Hall, located at 205 North Marion Avenue, Lake City, Florida. Members of the public may also view the meeting on our YouTube channel at: https://www.youtube.com/c/CityofLakeCity.

Copies of the site plan application are available for public inspection by contacting the Growth Management office at growthmanagement@lcfla.com or by calling 386-719-5820.

At the aforementioned public hearing, all interested parties may be heard with respect to the amendment.

FOR MORE INFORMAITON CONTACT
ROBERT ANGELO
PLANNING AND ZONING TECHNICIAN
AT 386-719-5820

Angelo, Robert

From: LCR-Classifieds <classifieds@lakecityreporter.com>
Sent: Tuesday, May 28, 2024 11:00 AM
To: Angelo, Robert
Subject: RE: 78430 78431 78432 RE: Non-Legal Ad for P&Z, BOA, and HPA for 06-11-2024

Confirmed!

Thank you much,
Kymberlee Harrison 386-754-0401
Support your local news source while reaching our community of loyal subscribers
Serving:
COLUMBIA • SUWANNEE • LAFAYETTE • HAMILTON
1086 SW Main Blvd. Ste 103, Lake City, FL 32055
PH 386-754-0401
Why Local Newsprint Advertising?
1 Newspaper readers are ENGAGED
2 Newspapers are viewed as TRUSTWORTHY

From: Angelo, Robert <AngeloR@lcfla.com>
Sent: Tuesday, May 28, 2024 10:59 AM
To: LCR-Classifieds <classifieds@lakecityreporter.com>
Subject: RE: 78430 78431 78432 RE: Non-Legal Ad for P&Z, BOA, and HPA for 06-11-2024

Looks Good

Thank You
Robert Angelo
City of Lake City
Growth Management
growthmanagement@lcfla.com
386-719-5820

PLEASE NOTE: Florida has a very broad public records law. Most written communications to or from City officials regarding City business are public records available to the public and media upon request. Your email communications may be subject to public disclosure.

From: LCR-Classifieds <classifieds@lakecityreporter.com>
Sent: Tuesday, May 28, 2024 10:37 AM
To: Angelo, Robert <AngeloR@lcfla.com>
Subject: 78430 78431 78432 RE: Non-Legal Ad for P&Z, BOA, and HPA for 06-11-2024

Here you go!
P&Z 2x8 247.50

Historic: 2x6.25 206.25
BOA: 2x6 198.00

Thank you much,
Kymberlee Harrison 386-754-0401
Support your local news source while reaching our community of loyal subscribers
Serving:
COLUMBIA • SUWANNEE • LAFAYETTE • HAMILTON
1086 SW Main Blvd. Ste 103, Lake City, FL 32055
PH 386-754-0401
Why Local Newsprint Advertising?
1 Newspaper readers are ENGAGED
2 Newspapers are viewed as TRUSTWORTHY

From: Angelo, Robert <AngeloR@lcfla.com>
Sent: Friday, May 24, 2024 3:49 PM
To: LCR-Classifieds <classifieds@lakecityreporter.com>
Subject: Non-Legal Ad for P&Z, BOA, and HPA for 06-11-2024

Kym

Please publish this ad in the body of the paper as a display ad in the **May 30, 2024** paper.

Thank You
Robert Angelo
City of Lake City
Growth Management
growthmanagement@lcfla.com
386-719-5820

NOTICE OF PUBLIC MEETING
CITY OF LAKE CITY
PLANNING AND ZONING BOARD

THIS SERVES AS PUBLIC NOTICE the Planning and Zoning Board will hold a meeting on Tuesday, June 11, 2024 at 5:30 PM or as soon after.

Agenda items-

1. SPR 24-05, Petition submitted by Randall Olney, P.E., (agent) for Concept Companies, (owner), for a Site Plan Review for Dollar General, in a Commercial Intensive zoning district, and located on parcel 08127-005, which is regulated by the Land Development Regulations Section 4.13.
2. SPR 24-06, Petition submitted by Christopher A. Gmuer, P.E., (agent) for ERA Investments, LLC, (owner), for a Site Plan Review for Lake City Hotels Phase 2, in a Commercial Intensive zoning district, and located on parcel 02582-002, which is regulated by the Land Development Regulations Section 4.13.
3. SPR 23-10, Petition submitted by Carol Chadwick, P.E., (agent) for Affiliated Property Management, (owner), for a Site Plan Review for Aspire Dental Addition, in a Residential Office zoning district, and located on parcel 07604-102, which is regulated by the Land Development Regulations Section 4.10.

Meeting Location: City Council Chambers located on the 2nd Floor of City Hall at 205 North Marion Avenue, Lake City, FL 32055.

Members of the public may also view the meeting on our YouTube channel at:
https://www.youtube.com/c/CityofLakeCity

Pursuant to 286.0105, Florida Statutes, the City hereby advises the public if a person decides to appeal any decision made by the City with respect to any matter considered at its meetings or hearings, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

SPECIAL REQUIREMENTS: Pursuant to 286.26, Florida Statutes, persons needing special accommodations to participate in this meeting should contact the City Manager's Office at (386) 719-5768.

Robert Angelo
Planning and Zoning Tech.

CITY OF LAKE CITY CUSTOMER SERVICE BUILDING
173 NW HILLSBORO STREET
LAKE CITY, FL 32055

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Planning and Zoning Tech.


PUBLIC NOTICE

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NOTICE
LAND USE ACTION

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WHEN:	May 14, 2024 5:30 p.m.
WHERE:	City Council Meeting Room, Second Floor, City Hall, located at 205 North Marion Avenue, Lake City, Florida. Members of the public may also view the meeting on our YouTube channel at: https://www.youtube.com/c/CityofLakeCity.

Copies of the site plan review application are available for public inspection by contacting the Office of Growth Management at growthmanagement@lcfla.com or by calling 386.719.5820.

At the aforementioned public hearing, all interested parties may be heard with respect to the Certificate of Appropriateness.

FOR MORE INFORMATION CONTACT
ROBERT ANGELO
PLANNING & ZONING TECHNICIAN
AT 386.719.5820

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Agenda items-

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2. **LDR 24-04**, Text amendment to the Land Development Regulations Sections 2.1, 4.2, 4.4, 4.5 and 4.6, to add definitions and add provisions for ADU's, Accessory Dwelling Units, and Tiny Homes for the City of Lake City.

Meeting Location: City Council Chambers located on the 2nd Floor of City Hall at 205 North Marion Avenue, Lake City, FL 32055.

Members of the public may also view the meeting on our YouTube channel at: https://www.youtube.com/c/CityofLakeCity

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Robert Angelo
Planning and Zoning Tech

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Robert Angelo
Planning and Zoning Tech.

Angelo, Robert

From: LCR-Classifieds <classifieds@lakecityreporter.com>
Sent: Monday, April 29, 2024 11:20 AM
To: Angelo, Robert
Subject: 73990 73992 73991 RE: Non-Legal Ad for P&Z, BOA, and HPA for 05-14-2024
Attachments: 73991.pdf; 73992.pdf; 73990.pdf

Robert, all are scheduled to publish on May 2. Approval due by tomorrow please
P&Z: 3 col x 5.5 $272.25
Historic: 3 col x 4.5 $222.75
BOA: 3 col x 4 $198

Thank you much,
Kymberlee Harrison 386-754-0401
Support your local news source while reaching our community of loyal subscribers
Serving:
COLUMBIA • SUWANNEE • HAMILTON • LAFAYETTE
1086 SW Main Blvd. Ste 103, Lake City, FL 32055
PH 386-754-0401
Why Local Newsprint Advertising?
1 Newspaper readers are ENGAGED
2 Newspapers are viewed as TRUSTWORTHY

From: Angelo, Robert <AngeloR@lcfla.com>
Sent: Monday, April 29, 2024 8:57 AM
To: LCR-Classifieds <classifieds@lakecityreporter.com>
Subject: Non-Legal Ad for P&Z, BOA, and HPA for 05-14-2024

Kym

Please publish this ad in the body of the paper as a display ad in the **May 2, 2024** paper.

Thank You
Robert Angelo
City of Lake City
Growth Management
growthmanagement@lcfla.com
386-719-5820

PLEASE NOTE: Florida has a very broad public records law. Most written communications to or from City officials regarding City business are public records available to the public and media upon request. Your email communications may be subject to public disclosure.

NOTICE OF PUBLIC MEETING
CITY OF LAKE CITY
PLANNING AND ZONING BOARD

THIS SERVES AS PUBLIC NOTICE the Planning and Zoning Board will hold a meeting on Tuesday, May 14, 2024 at 5:30 PM or as soon after.

Agenda items-

1. **SPR 24-05,** Petition submitted by Randall Olney, P.E., (agent) for Concept Companies, (owner), for a Site Plan Review for Dollar General, in a Commercial Intensive zoning district, and located on parcel 08127-005, which is regulated by the Land Development Regulations Section 4.13.
2. **LDR 24-04**, Text amendment to the Land Development Regulations Sections 2.1, 4.2, 4.4, 4.5 and 4.6, to add definitions and add provisions for ADU's, Accessory Dwelling Units, and Tiny Homes for the City of Lake City.

Meeting Location: City Council Chambers located on the 2nd Floor of City Hall at 205 North Marion Avenue, Lake City, FL 32055.

Members of the public may also view the meeting on our YouTube channel at: https://www.youtube.com/c/CityofLakeCity

Pursuant to 286.0105, Florida Statutes, the City hereby advises the public if a person decides to appeal any decision made by the City with respect to any matter considered at its meetings or hearings, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

SPECIAL REQUIREMENTS: Pursuant to 286.26, Florida Statutes, persons needing special accommodations to participate in this meeting should contact the City Manager's Office at (386) 719-5768.

Robert Angelo
Planning and Zoning Tech.

CITY OF LAKE CITY
Florida's Gateway Est. 1859

April 22, 2024

To Whom it May Concern

On May 14, 2024 the Planning and Zoning Board will be having a meeting at 5:30pm at 205 N. Marion. At this meeting we will be hearing a petition submitted by Randall Olaney, PE, as agent, for Concept Companies, owner, for a site plan review, SPR24-05, for parcel 08127-005, The site plan is to build a retail store-Dollar General located within the Commercial Intensive (CI) zoning district.

If you have any questions or concerns please call 386-752-2031 ext. 820 or email growthmanagement@lcfla.com.

Robert Angelo

Planning and Zoning Tech
City of Lake City

Columbia County Property Appraiser - Sales Report

Name	Address1	Address2	Address3	City	State	ZIP
FRENVEY, INC	P O BOX 2095	.	LAKE CITY	FL	32056	
ST JOHNS LLC	13820 W NEWBERRY RD STE 100	.	NEWBERRY	FL	32669	
VANN SAMUEL P SR TRUST ETAL	131 W DUVAL STREET	.	LAKE CITY	FL	32055	
NFD DEVELOPERS LLC	P O BOX 2166	.	LAKE CITY	FL	32056	
GARR KENNETH	229 SW MARVIN BURNETT RD	.	LAKE CITY	FL	32024	
BAKER CHESTER	47 BURNT SWAMPP RD	.	EAST KINGSTON	NH	03827	
JAA INVESTMENT PROPERTIES, LLC	312 SW PILOTS WAY	.	LAKE CITY	FL	32024	
LAKE CITY CHURCH OF CHRIST INC	656 SW STATE RD 47	.	LAKE CITY	FL	32025	
KAMPMEYER ERVIN L LIVING TRUST	681 SW ST RD 47	.	LAKE CITY	FL	32025	
MARTIN CELIA S AS TRUSTEE	CELIA S MARTIN REV TRUST	973 SW STATE RD 47	LAKE CITY	FL	32025	
HAYDEN DONALD B	733 SW SR 47	.	LAKE CITY	FL	32025	
POLMERSKI LAVONNA B	423 NW CLUBVIEW CR	.	LAKE CITY	FL	32055	
CANCER CENTERS OF NORTH FLORIDA LLC	PO BOX 80610	.	INDIANAPOLIS	IN	46280	
CIVITAN REGIONAL BLOOD CENTER INC	D/B/A LIFESOUTH COMMUNITY BLOOD CENTERS, INC	4039 NEWBERRY RD	GAINESVILLE	FL	32607	
LAKE CITY, COLUMBIA COUNTY CHAMBER OF COMMERCE, INC	875 SW SR 47	.	LAKE CITY	FL	32025	

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11801 Research Dr
Alachua, FL. 32615

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FRENVEY, INC
PO BOX 2095
LAKE CITY, FL 32056

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11801 Research Dr
Alachua, FL. 32615

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ST JOHNS LLC
13820 W NEWBERRY RD STE 100
NEWBERRY, FL 32669

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1. Article Addressed to:

FRENVEY, INC
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LAKE CITY, FL 32056

9590 9402 8047 2349 1485 30

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1. Article Addressed to:

ST JOHNS LLC
13820 W NEWBERRY RD STE 100
NEWBERRY, FL 32669

9590 9402 8047 2349 1485 09

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3117

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A. Signature
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D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

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VANN SAMUEL P SR TRUST ETAL
131 W DUVAL STREET
LAKE CITY, FL 32055

CHW
11801 Research Dr
Alachua, FL. 32615

CERTIFIED MAIL

7022 3330 0001 1921 3131

FIRST-CLASS

US POSTAGE PITNEY BOWES

ZIP 32615
02 7H
0001252164

$ 008.69⁰

APR 23 2024

NFD DEVELOPERS LLC
PO BOX 2166
LAKE CITY, FL 32056

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1. Article Addressed to:

VANN SAMUEL P SR TRUST ETAL
131 W DUVAL STREET
LAKE CITY, FL 32055

9590 9402 8047 2349 1484 93

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3124

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
- ☐ Adult Signature
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- ☐ Collect on Delivery Restricted Delivery
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1. Article Addressed to:

NFD DEVELOPERS LLC
PO BOX 2166
LAKE CITY, FL 32056

9590 9402 8047 2349 1484 86

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3131

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
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0001252164

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GARR KENNETH
299 SW MARVIN BURNETT RD
LAKE CITY, FL 32024

CHW
11801 Research Dr
Alachua, FL. 32615

CERTIFIED MAIL

7022 3330 0001 1921 3155

FIRST-CLASS

US POSTAGE PITNEY BOWES

ZIP 32615
02 7H
0001252164

$ 008.69⁰
APR 23 2024

BAKER CHESTER
47 BURNT SWAMPP RD
EAST KINGSTON, NH 03827

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1. Article Addressed to:

GARR KENNETH
299 SW MARVIN BURNETT RD
LAKE CITY, FL 32024

9590 9402 8047 2349 1484 79

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3148

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☑ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
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BAKER CHESTER
47 BURNT SWAMPP RD
EAST KINGSTON, NH 03827

9590 9402 8047 2349 1484 62

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3155

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
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11801 Research Dr
Alachua, FL. 32615

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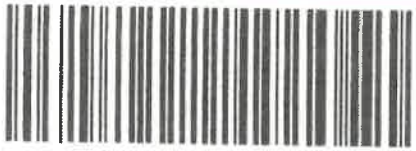

7022 3330 0001 1921 3162

FIRST-CLASS

US POSTAGE IMI PITNEY BOWES

ZIP 32615
02 7H
0001252164

$ 008.69⁰
APR 23 2024

JAA INVESTMENT PROPERTIES, LLC
312 SW PILOTS WAY
LAKE CITY, FL 32024

CHW
11801 Research Dr
Alachua, FL. 32615

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7022 3330 0001 1921 3179

FIRST-CLASS

US POSTAGE IMI PITNEY BOWES

ZIP 32615
02 7H
0001252164

$ 008.69⁰
APR 23 2024

LAKE CITY CHURCH OF CHRIST INC
656 SW STATE RD 47
LAKE CITY, FL 32025

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1. Article Addressed to:

JAA INVESTMENT PROPERTIES, LLC
312 SW PILOTS WAY
LAKE CITY, FL 32024

9590 9402 8047 2349 1484 55

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3162

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
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- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
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1. Article Addressed to:

LAKE CITY CHURCH OF CHRIST INC
656 SW STATE RD 47
LAKE CITY, FL 32025

9590 9402 8047 2349 1484 48

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3179

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
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- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
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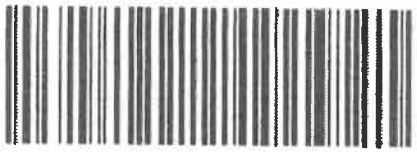
11801 Research Dr
Alachua, FL. 32615



7022 3330 0001 1921 3186

FIRST-CLASS

US POSTAGE PITNEY BOWES

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02 7H
0001252164

$ 008.69⁰
APR 23 2024

KAMPMEYER ERVIN L LIVING TRUST
681 SW ST RD 47
LAKE CITY, FL 32025

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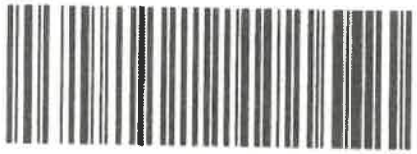
CHW
11801 Research Dr
Alachua, FL. 32615



7022 3330 0001 1921 3193

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US POSTAGE PITNEY BOWES

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0001252164

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APR 23 2024

MARTIN CELIA S AS TRUSTEE
CELIA S MARVIN REV TRUST
973 SW STATE RD 47
LAKE CITY, FL 32025

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1. Article Addressed to:

KAMPMEYER ERVIN L LIVING TRUST
681 SW ST RD 47
LAKE CITY, FL 32025

9590 9402 8047 2349 1484 31

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3186

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A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

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3. Service Type
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- ☐ Adult Signature Restricted Delivery
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- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
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1. Article Addressed to:

MARTIN CELIA S AS TRUSTEE
CELIA S MARVIN REV TRUST
973 SW STATE RD 47
LAKE CITY, FL 32025

9590 9402 8047 2349 1484 24

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3193

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A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

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If YES, enter delivery address below: ☐ No

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11801 Research Dr
Alachua, FL. 32615

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FIRST-CLASS

US POSTAGE PITNEY BOWES

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0001252164

$ 008.69⁰

APR 23 2024

HAYDEN DONALD B
733 SW SR 47
LAKE CITY, FL 32025

CHW
11801 Research Dr
Alachua, FL. 32615

CERTIFIED MAIL®

7022 3330 0001 1921 3216

FIRST-CLASS

US POSTAGE PITNEY BOWES

ZIP 32615
02 7H
0001252164

$ 008.69⁰

APR 23 2024

POLMERSKI LAVONNA B
423 NW CLUBVIEW CR
LAKE CITY, FL 32055

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1. Article Addressed to:

HAYDEN DONALD B
733 SW SR 47
LAKE CITY, FL 32025

9590 9402 8047 2349 1484 17

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3209

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
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- ☐ Collect on Delivery
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1. Article Addressed to:

POLMERSKI LAVONNA B
423 NW CLUBVIEW CR
LAKE CITY, FL 32055

9590 9402 8047 2349 1479 53

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3216

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

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- ☐ Adult Signature Restricted Delivery
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- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

CHW
11801 Research Dr
Alachua, FL. 32615

CERTIFIED MAIL®

7022 3330 0001 1921 3223

FIRST-CLASS

US POSTAGE IMI PITNEY BOWES

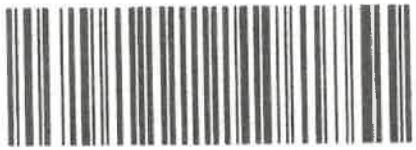
ZIP 32615
02 7H
0001252164

$ 008.69⁰
APR 23 2024

LAKE CITY, COLUMBIA COUNTY
CHAMBER OF COMMERCE, INC
875 SW SR 47
LAKE CITY, FL 32025

CHW
11801 Research Dr
Alachua, FL. 32615

CERTIFIED MAIL®



7022 3330 0001 1921 3339

FIRST-CLASS

US POSTAGE IMI PITNEY BOWES

ZIP 32615
02 7H
0001252164

$ 008.69⁰
APR 23 2024

CANCER CENTERS OF NORTH FLORIDA
LLC
PO BOX 80610
INDIANAPOLIS, IN 46280

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

LAKE CITY, COLUMBIA COUNTY
CHAMBER OF COMMERCE, INC
875 SW SR 47
LAKE CITY, FL 32025

9590 9402 8047 2349 1484 00

2. Article Number (Transfer from service label)
7022 3330 0001 1921 3223

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☑ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

CANCER CENTERS OF NORTH FLORIDA
LLC
PO BOX 80610
INDIANAPOLIS, IN 46280

9590 9402 8047 2349 1479 60

2. Article Number (Transfer from service label)
7022 3330 0001 1921 3339

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☑ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
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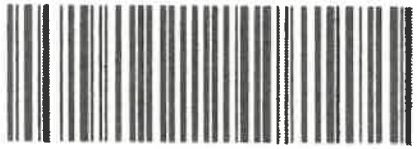
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

CHW
11801 Research Dr
Alachua, FL. 32615

CERTIFIED MAIL®



7022 3330 0001 1921 3322

FIRST-CLASS

US POSTAGE IMI PITNEY BOWES

ZIP 32615
02 7H
0001252164

$ 008.69⁰
APR 23 2024

CIVITAN REGIONAL BLOOD CENTER INC
D/B/A LIFESOUTH COMMUNITY BLOOD
CENTERS, INC
4039 NEWBERRY RD
GAINESVILLE, FL 32607

315

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT
OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

CIVITAN REGIONAL BLOOD CENTER INC
D/B/A LIFESOUTH COMMUNITY BLOOD CENTERS, INC
4039 NEWBERRY RD
GAINESVILLE, FL 32607

9590 9402 8047 2349 1479 77

2. Article Number *(Transfer from service label)*
7022 3330 0001 1921 3322

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by *(Printed Name)*

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☑ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery (over $500)
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

File Attachments for Item:

iv. ***POSTPONED*SPR23-10**, Petition submitted by Carol Chadwick (agent) for Affiliated Property Management (owner), for a Site Plan Review for Aspire Dental Addition, in the Commercial Intensive Zoning District, and located on Parcel 07604-102, which is regulated by the Land Development Regulations section 4.13.

Project Summary

Project Name: Aspire Dental Addition

Project Number: SPR23-10

Parcel Number: 07604-102

Project Notes

- Project type: Site Plan Review
- Future land use is: Commercial
- Zoning designation is: Commercial Intensive
- Proposed use of the property: 699 square feet addition
- Land is conducive for use: A dental office is a conducive use, per the LDR section 4.13.2 and 4.12.2.5. However, per section 4.12.11.5, a dental office is required to have one (1) parking space for every 150 square feet of floor area. With the addition, the building would have 3,977 square feet of floor area. This would require 27 parking spaces. The site has eight paved parking spots and an undefined number of parking spots in a gravel area.
- See staff review for notes from directors and city staff for their comments.

Project Summary

Project SPR23-10 is for a site plan review and has been reviewed by city staff. Application is sufficient for review. After review of the petition the city staff has determined that the petition is not consistent with the land development regulations due to the fact of not having the required amount of parking. At this time the City has no other concerns.

DEPARTMENT OF GROWTH MANAGEMENT
205 North Marion Avenue
Lake City, Florida 32055
Telephone: (386) 719-5750
growthmanagement@lcfla.com

REVIEW REPORT TO PLANNING AND ZONING, BOARD OF ADJUSTMENT AND HISTORICAL COMMITTEES' BY STAFF FOR SITE PLAN REVIEW, SPECIAL EXCEPTIONS, VARIANCES, COMPREHENSIVE PLAN AMENDMENTS/ ZONING AND CERTIFICATE OF APPROPRIATENESS

Date: 04/17/2023

Request Type: Site Plan Review (SPR) ☑ Special Exception (SE) ☐ Variances (V) ☐

Comprehensive Plan Amendment/Zoning (CPA/Z) ☐ Certificate of Appropriateness (COA) ☐

Project Number: SPR23-10

Project Name: Aspire Dental Addition

Project Address: 1788 SW Barnett Way, Lake City, FL

Project Parcel Number: 05-4S-17-07604-102

Owner Name: Affiliated Property Management

Owner Address: 14506 NW 11th Place, Newberry, FL 32669

Owner Contact Information: Telephone Number: 386-752-2836 Email: aspiredentallc@gmail.com

Owner Agent Name: Carol Chadwick

Owner Agent Address: 1208 SW Fairfax Glen, Lake City, FL 32025

Owner Agent Contact Information: Telephone: 307-680-1772 Email: ccpewyo@gmail.com

The City of Lake City staff has reviewed the application and documents provided for the above request and have determined the following.

Growth Management – Building Department, Planning and Zoning, Code Enforcement, Permitting

Building Department: Reviewed by: _____ **Date:** _____

Comments: _____

_____

_____

Planning and Zoning: Reviewed by: _____ **Date:** 4/24/23

Comments: Per section 4.12.11.5 of the LDR, a dental office is required to have one parking space for every 150 square feet of floor space. The site is required to have 27 space based on proposed site plan.

Business License: Reviewed by: Marshall Sova
Marshall Sova (Apr 18, 2023 12:02 EDT) **Date:** _____

Comments: _____

_____

_____

Code Enforcement: Reviewed by: Marshall Sova
Marshall Sova (Apr 18, 2023 12:02 EDT) **Date:** _____

Comments: _____

_____

_____

Permitting: Reviewed by: _____ **Date:** _____

Comments: _____

_____

_____

Utilities – Water, Sewer, Gas, Water Distribution/Collections, Customer Service

Water Department: Reviewed by: Michael Osborn Jr. Michael Osborn Jr. (Apr 21, 2023 12:55 EDT) **Date:** _____

Comments: _____

Sewer Department: Reviewed by: Cody Pridgeon Cody Pridgeon (Apr 18, 2023 13:03 EDT) **Date:** _____

Comments: See attached email from Cody Pridgeon

Gas Department: Reviewed by: Steve Brown Steve Brown (Apr 24, 2023 08:15 EDT) **Date:** _____

Comments: _____

Water Distribution/Collection: Reviewed by: Brian Scott Brian Scott (Apr 24, 2023 07:42 EDT) **Date:** _____

Comments: _____

Customer Service: Reviewed by: _____ **Date:** _____

Comments: _____

Public Safety – Public Works, Fire Department, Police Department

Public Works: Reviewed by: Steve Brown (Apr 24, 2023 08:15 EDT) **Date:** _____

Comments: _____

_____

_____

Fire Department: Reviewed by: Dwight Boozer **Date:** _____

Comments: _____

_____

_____

Police Department: Reviewed by: _____ **Date:** _____

Comments: _____

_____

_____

Please provide separate pages for comments that will not fit in provided spaces and please label the pages for your department and for the project.

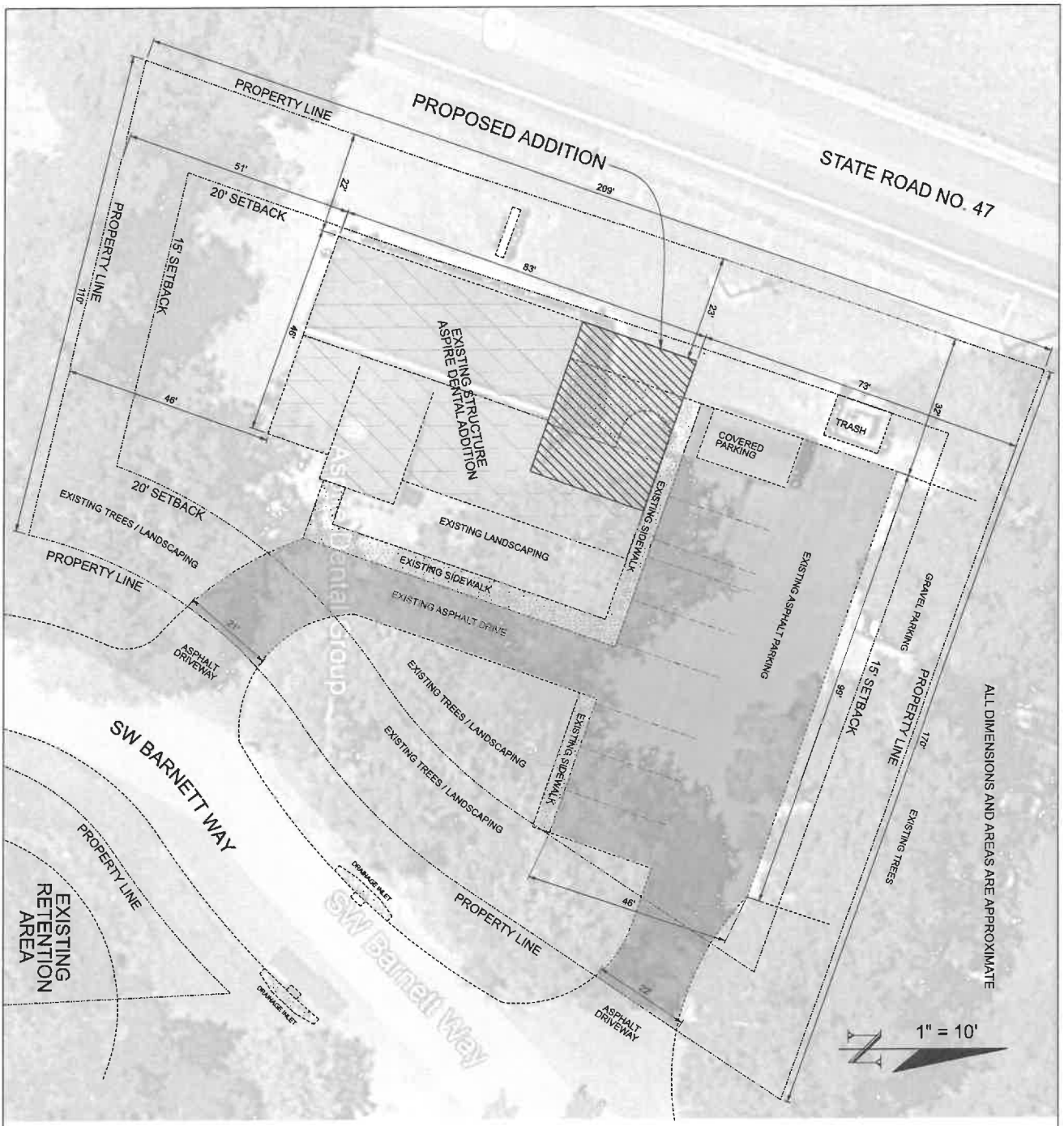
Angelo, Robert

From: Pridgeon, Cody
Sent: Tuesday, April 18, 2023 1:08 PM
To: Angelo, Robert
Cc: Pelham, Shasta; Johnson, Demetrius
Subject: Aspire Dental

Robert the adobe sign thin that was sent to me earlier wouldn't allow me to put in comments so I'm sending you this email. Any dental offices need to comply with City Ordinance No. 2020-2149. This requires them to have a dental amalgam separator on their waste stream prior to entering the Citys collection system.

Cody Pridgeon
City of Lake City Wastewater Director
Office: (386)758-5455
Cell: (352)210-3086

CITY OF LAKE CITY
Florida's Gateway Est. 1859



VICINITY MAP / SITE PLAN

LEGAL DESCRIPTION
LOT 2 OF SOUTHBANK PLACE AS PER PLAT THEREOF RECORDED IN PLAT BOOK 6 PAGE 19 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.

EXISTING / PROPOSED ZONING - MEDICAL OFFICE

TOTAL SITE AREA = .689 ACRES

EXISTING / PROPOSED ASPHALT PARKING = 6354 SF

EXISTING / PROPOSED CONCRETE SIDEWALK = 738 SF

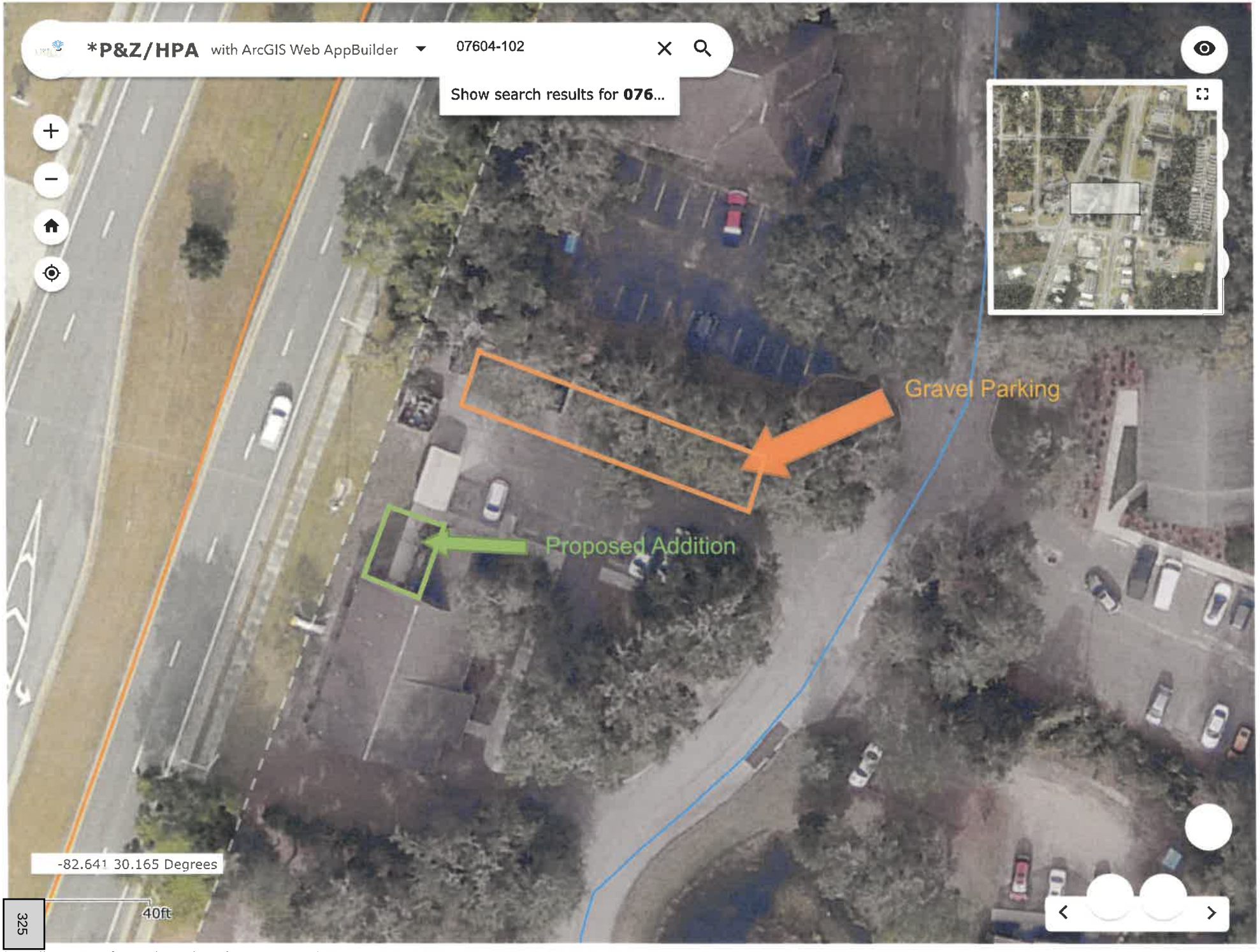
EXISTING STRUCTURE = 3278 SF

PROPOSED ADDITION = 699 SF

SHEET 1 OF 1

ASPIRE DENTAL ADDITION
1788 SW BARNETT WAY
COLUMBIA COUNTY, FL 32025

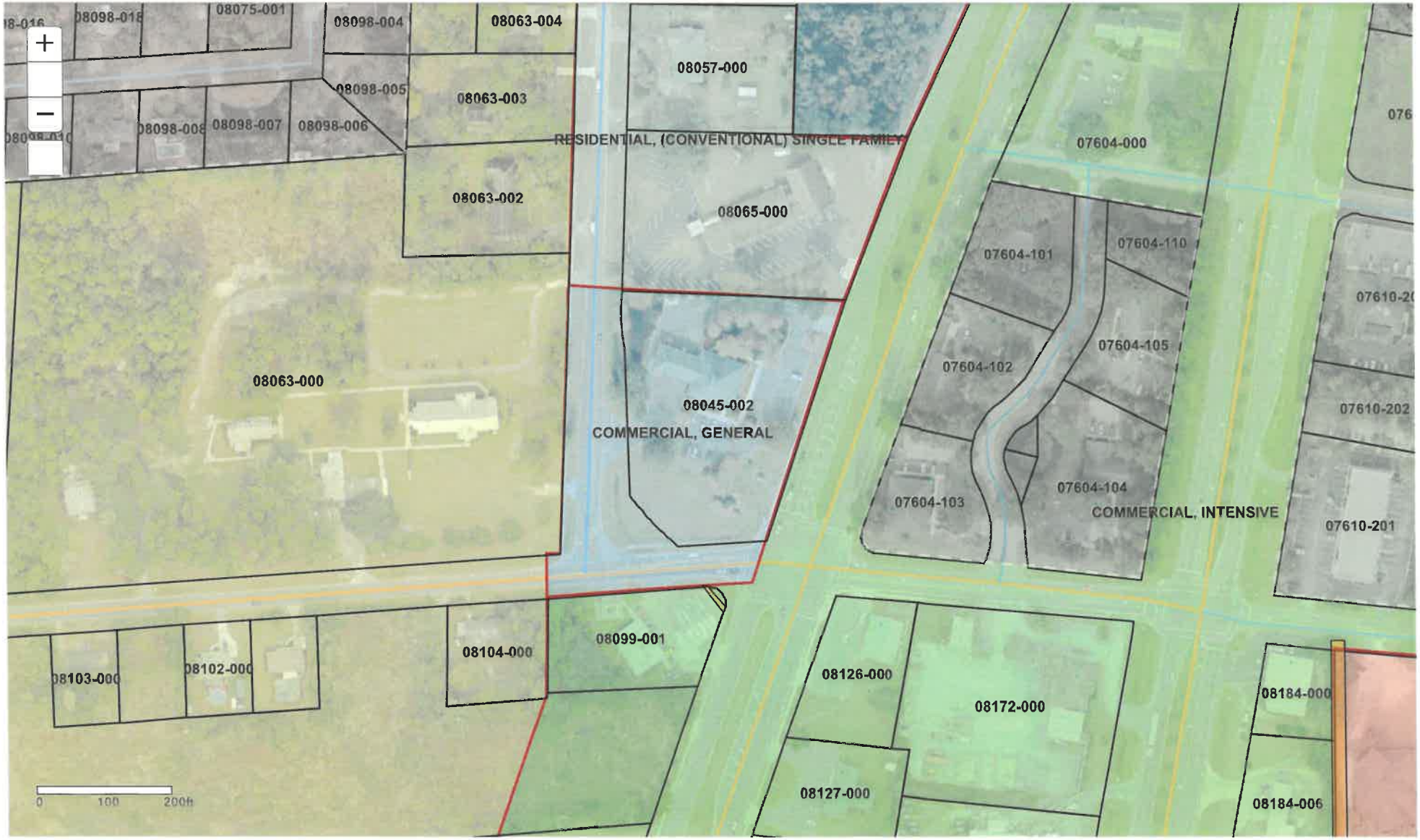
PLANS PREPARED BY:
CHRISTOPHER Q. DICKS, P.E. 64766
4037 SE CR 252, LAKE CITY, FL 32025


*P&Z/HPA with ArcGIS Web AppBuilder
07604-102
Show search results for 076...
Gravel Parking
Proposed Addition
-82.641 30.165 Degrees
40ft
325

Updates are being made weekly. If you have any issues please email gis@lcfla.com

Home *P&Z/HPA

Details Add | Edit Basemap Save Share Prii



Updates are being made weekly. If you have any issues please email gis@lcfla.com

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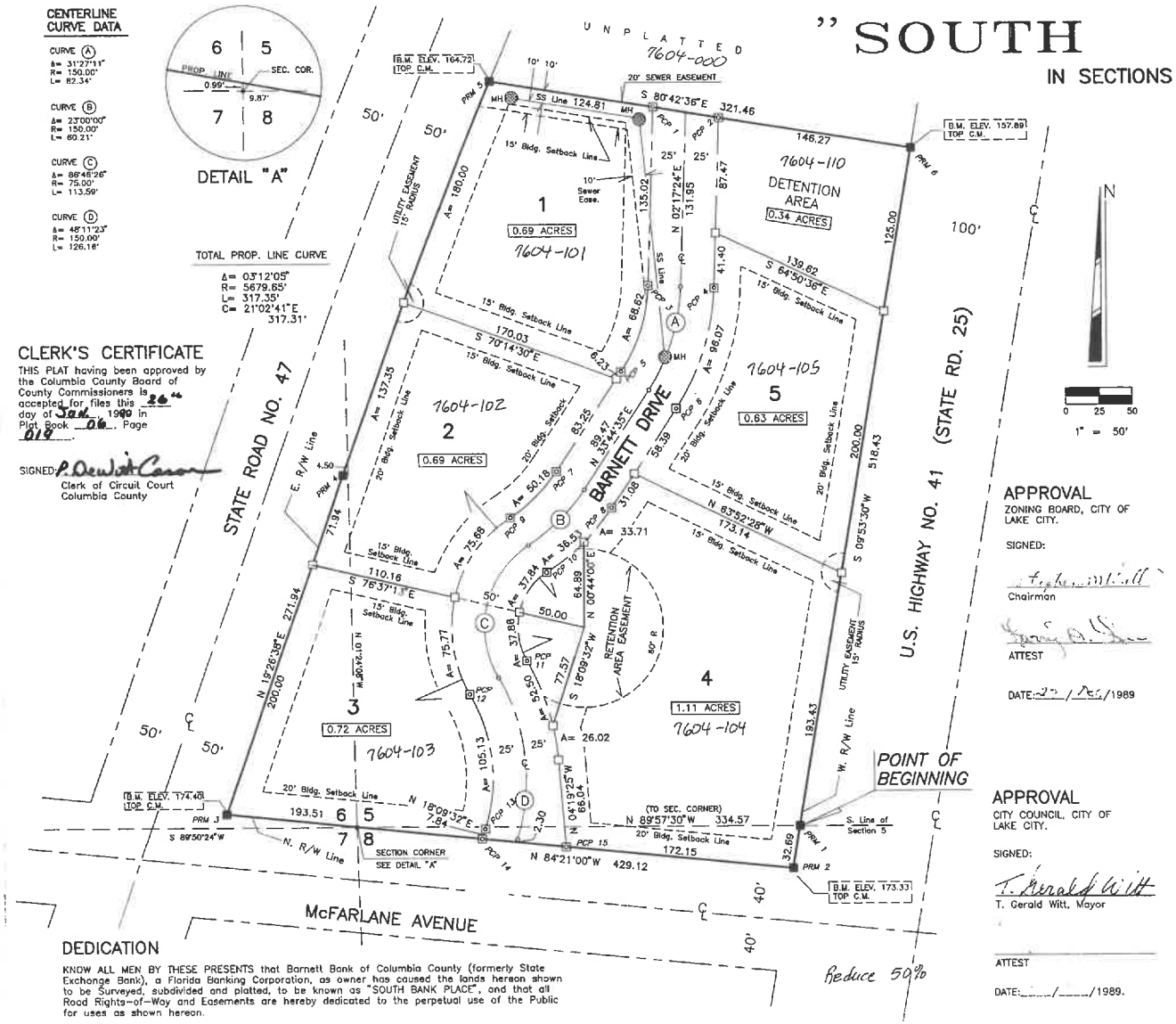
PLAT BOOK 06, PAGE 019

"SOUTH BANK PLACE"

IN SECTIONS 5, 6 & 8, TOWNSHIP 4 SOUTH, RANGE 17 EAST
COLUMBIA COUNTY, FLORIDA
CITY OF LAKE CITY, FLORIDA



CENTERLINE CURVE DATA

CURVE (A)
Δ= 31°27'11"
R= 150.00'
L= 82.34'

CURVE (B)
Δ= 23°00'00"
R= 150.00'
L= 60.21'

CURVE (C)
Δ= 86°46'26"
R= 75.00'
L= 113.59'

CURVE (D)
Δ= 48°11'23"
R= 150.00'
L= 126.16'

TOTAL PROP. LINE CURVE
Δ= 03°12'05"
R= 5679.65'
L= 317.35'
C= 21°02'41"E 317.31'

CLERK'S CERTIFICATE

THIS PLAT having been approved by the Columbia County Board of County Commissioners is accepted for files this 26th day of Jan., 1990 in Plat Book 06, Page 019.

SIGNED: P. DeWitt Cason
Clerk of Circuit Court
Columbia County

DESCRIPTION

BEGIN at the point of intersection of the Westerly Right-of-Way of U.S. Highway No. 41 and the South line of Section 5, Township 4 South, Range 17 East, Columbia County, Florida and run S.09°53'30"W., along said Westerly Right-of-Way line of U.S. Highway No. 41 a distance of 32.69 feet to its intersection with the Northerly Right-of-Way line of McFarlane Avenue; thence N.84°21'00"W. along said Northerly Right-of-Way line 429.12 feet to its intersection with the Easterly Right-of-Way line of State Road No. 47; thence N.19°26'38"E. along said Easterly Right-of-Way line 271.94 feet to the Point of Curve of a curve concave to the East having a radius of 5679.65 feet and a central angle of 03°12'05", said curve also having a Chord bearing of N.21°02'41"E. and a Chord distance of 317.31 feet; thence Northerly along the arc of said curve, being also said Easterly Right-of-Way line of State Road No. 47 a distance of 317.35 feet; thence S.80°42'36"E. 321.46 feet to a point on the Westerly Right-of-Way line of U.S. Highway No. 41; thence S.09°53'30"W. along said Westerly Right-of-Way line 518.43 feet to the POINT OF BEGINNING. Said lands lying partly in the Southwest 1/4 of the Southwest 1/4 of Section 5, partly in the Southeast 1/4 of the Southeast 1/4 of Section 6 and partly in the Northwest 1/4 of the Northwest 1/4 of Section 8, Township 4 South, Range 17 East, Columbia County, Florida. Containing 4.88 acres, more or less.

LEGEND / NOTES

1.) ⊠ = Permanent Reference Monument set, cap stamped PLS 3628, with No. and date.
2.) ⊙ = Permanent Control Point set, cap stamped PLS 3628, with no. and date.
3.) □ = 4"x 4" Concrete Monument set, cap stamped PLS 3628.
4.) ■ = Concrete Monument found in place at time of Survey.
5.) Boundary based on prior Survey of tract by Donald F. Lee and Associates, Inc.
6.) Bearings projected from above referenced Donald F. Lee and Associates Survey.
7.) Field data closure precision complies with Minimum Technical Standards.
8.) This development does not lie in a Flood Zone "A" area according to the F.I.R.M. Flood Hazard maps for this vicinity.

NOTICE: There may be additional restrictions that are not recorded on this Plat that may be found in the Public Records of this County.

NOTICE: All Utility Easements shown on this Plat shall constitute Easements for the construction, installation, maintenance and operation of electricity, telephone, CATV and public utilities which may serve the lands encompassed by this Plat.

APPROVAL

ZONING BOARD, CITY OF LAKE CITY.

SIGNED: [signature]
Chairman

ATTEST [signature]

DATE: 2nd / Dec. /1989

APPROVAL

CITY COUNCIL, CITY OF LAKE CITY.

SIGNED: T. Gerald Witt
T. Gerald Witt, Mayor

ATTEST

DATE: ____/____/1989.

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY this to be a true and correct representation of the land Surveyed and shown hereon, that the Survey was made under my responsible supervision, direction and control, that Permanent Control Points have been set as shown and that the Survey data complies with the Lake City Subdivision Ordinance and Chapter 177 of the Florida Statutes.

SIGNED: [signature]
Donald F. Lee, P.L.S.
Florida Reg. Cert. No. 3628
DATE: ____/____/1989.

SEAL

CITY ATTORNEY'S CERTIFICATE

I HEREBY CERTIFY that I have examined the foregoing Plat and that it complies in form with the Lake City Subdivision Ordinance and Chapter 177 of the Florida Statutes.

SIGNED: [signature] DATE: 12/4/1989.
Herbert Darby
City Attorney

ACCEPTANCE FOR MAINTENANCE

I HEREBY CERTIFY that the improvements have been constructed in an acceptable manner and in accordance with City specifications or that a performance bond or instrument in the amount of $ _____ has been posted to assure completion of all required improvements and maintenance in case of default.

SIGNED: _____ DATE: ____/____/1989.
W. Terry Crews
Director of Public Works

DEDICATION

KNOW ALL MEN BY THESE PRESENTS that Barnett Bank of Columbia County (formerly State Exchange Bank), a Florida Banking Corporation, as owner has caused the lands hereon shown to be Surveyed, subdivided and platted, to be known as "SOUTH BANK PLACE", and that all Road Rights-of-Way and Easements are hereby dedicated to the perpetual use of the Public for uses as shown hereon.

In the event that access is restricted at the North end of Barnett Drive, access will be provided by one of the following methods :

1.) A 50' x 100' easement to the North end of Barnett Drive for a cul-de-sac, or

2.) Construct a cul-de-sac within the confines of the South Bank Place commercial subdivision.

BARNETT BANK OF COLUMBIA COUNTY, LAKE CITY, FLORIDA

BY: [signature]
J. C. Bell, President

Witness

ATTEST: [signature]

SEAL

ACKNOWLEDGEMENT

STATE OF FLORIDA, COUNTY OF COLUMBIA
The Dedication hereon was acknowledged before me this 29th day of December, 1989 by J. C. Bell and George C. Hinckley, President and Sr. Vice-President, respectively, of Barnett Bank of Columbia County, with thier seals affixed hereto.

SIGNED: [signature]
NOTARY PUBLIC, State of Florida at Large
My Commission expires: 7-1-91

SEAL

SHEET NO. 1 OF 1

PREPARED BY :
Donald F. Lee and Associates, Inc.
SURVEYORS ENGINEERS

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CITY OF LAKE CITY

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

FOR PLANNING USE ONLY
Application # SPR23-10
Application Fee $200.00
Receipt No. 2023-00042843
Filing Date 3/31/23
Completeness Date _____

Site Plan Application

A. PROJECT INFORMATION

1. Project Name: Aspire Dental Addition
2. Address of Subject Property: 1788 SW Barnett Way, Lake City
3. Parcel ID Number(s): 05-6S-17-07604-102
4. Future Land Use Map Designation: Commercial
5. Zoning Designation: CI
6. Acreage: 0.489
7. Existing Use of Property: Dental office
8. Proposed use of Property: Dental office
9. Type of Development (Check All That Apply):

[✓] Increase of floor area to an existing structure: Total increase of square footage 699
[ ] New construction: Total square footage _____
[ ] Relocation of an existing structure: Tc square footage _____

B. APPLICANT INFORMATION

1. Applicant Status ☐ Owner (title holder) ☒ Agent
2. Name of Applicant(s): Carol Cradwick, PE Title: Civil Engineer
   Company name (if applicable): —
   Mailing Address: 1208 SW Fairfax Glen
   City: Lake City State: FL Zip: 32025
   Telephone: (307) 680 1772 Fax: (___) _____ Email: ccpewyoe gmail.com

   PLEASE NOTE: Florida has a very broad public records law. Most written communications to or from government officials regarding government business is subject to public records requests. Your e-mail address and communications may be subject to public disclosure.
3. If the applicant is agent for the property owner*.
   Property Owner Name (title holder): Affiliated Property Management
   Mailing Address 14506 NW 11th Place
   City: Newberry State: FL Zip: 32669
   Telephone: (386) 752 3834 Fax: (___) _____ Email: aspiredentalllc gmail

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

C. ADDITIONAL INFORMATION

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

D. ATTACHMENT/SUBMITTAL REQUIREMENTS

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

✔2. Site Plan – Including, but not limited to the following:

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

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

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

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

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

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

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

✓8. Proof of Ownership (i.e. deed).

✓9. Agent Authorization Form (signed and notarized).

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

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

NOTICE TO APPLICANT

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

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

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

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

_____

Applicant/Agent Name (Type or Print)

_____

Applicant/Agent Signature

Applicant/Agent Name (Type or Print)

_____

Applicant/Agent Signature

CAROL J. CHADWICK LICENSE No. 82560 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Carol Chadwick
DN: c=US, o=Florida, dnQualifier=A01410D0000017EB6D924CE0005954C, cn=Carol Chadwick
Date: 2023.03.31 12:30:53 -04'00'

_____ Date

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____day of _____, 20___, by (name of person acknowledging).

_____
Signature of Notary

(NOTARY SEAL or STAMP)

_____
Printed Name of Notary

Personally Known _____ OR Produced Identification _____
Type of Identification Produced


SW MCFARLANE Ave
SW STATE ROAD 47
SW BARNETT Way
SW MAIN Blvd
SW BENTLEY Pl
SW NEWLAND Way
SW MALONE St
EPIPHANY Ct

VICINITY MAP / SITE PLAN

LEGAL DESCRIPTION
LOT 2 OF SOUTHBANK PLACE AS PER PLAT THEREOF RECORDED IN PLAT BOOK 6 PAGE 19 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.

EXISTING / PROPOSED ZONING - MEDICAL OFFICE

TOTAL SITE AREA = .689 ACRES

EXISTING / PROPOSED ASPHALT PARKING = 6354 SF

EXISTING / PROPOSED CONCRETE SIDEWALK = 738 SF

EXISTING STRUCTURE = 3278 SF

PROPOSED ADDITION = 699 SF

SHEET 1 OF 1	ASPIRE DENTAL ADDITION 1788 SW BARNETT WAY COLUMBIA COUNTY, FL 32025	PLANS PREPARED BY: CHRISTOPHER Q. DICKS, P.E. 64766 4037 SE CR 252, LAKE CITY, FL 32025

CAROL CHADWICK, P.E.
Civil Engineer
1208 S.W. Fairfax Glen
Lake City, FL 32025
307.680.1772
ccpewyo@gmail.com
www.carolchadwickpe.com

March 31, 2023

re: Aspire Dental Addition Drainage Memo

Per ERP-4-88-00236, each lot is permitted for 40% impervious area. Please refer to site plan for impervious area summary.

Lot size is 0.689 acres or 30013 s.f. Total impervious surface with this addition will be 11069 s.f. Total allowed impervious surfaces is 12005 s.f.

The proposed design and construction of this site shall not cause adverse impacts to:

- Existing surface water storage
- Conveyance capabilities
- Water quantity
- Flooding conditions
- Minimum flows and levels established by the State of Florida
- Water quality

Please contact me at 307.680.1772 if you have any questions.

Respectfully,

CAROL J. CHADWICK LICENSE No 82560 STATE OF FLORIDA PROFESSIONAL ENGINEER

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DN: c=US, o=Florida, dnQualifier=A01410D0000017EB6D924CE0005954C, cn=Carol Chadwick
Date: 2023.03.31 12:30:30 -04'00'

Carol Chadwick, P.E.

CC Job #FL23105

CAROL CHADWICK, P.E.
Civil Engineer
1208 S.W. Fairfax Glen
Lake City, FL 32025
307.680.1772
ccpewyo@gmail.com
www.carolchadwickpe.com

March 31, 2023

re: Aspire Dental Addition Fire Flow Report

The additional of 699 s.f. of building area will not require additional fire flow from the existing hydrant. Hydrant is located on SW Barnett Way on the northeast corner of the site.

Please contact me at 307.680.1772 if you have any questions.

Respectfully,

CAROL J. CHADWICK LICENSE No. 82560 STATE OF FLORIDA PROFESSIONAL ENGINEER

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DN: c=US, o=Florida, dnQualifier=A01410D0000017EB6D924CE0005954C, cn=Carol Chadwick
Date: 2023.03.31 12:30:19 -04'00'

Carol Chadwick, P.E.

CC Job #FL23105

CAROL CHADWICK, P.E.
Civil Engineer
1208 S.W. Fairfax Glen
Lake City, FL 32025
307.680.1772
ccpewyo@gmail.com
www.carolchadwickpe.com

March 31, 2023

re: Aspire Dental Addition Concurrency Impact Analysis

The site is an existing dental office. The business currently utilizes public sewer and water systems.

Criteria for analyses:

- Trip generation was calculated per the ITE Trip Generation Manual, 9th edition, ITE code 720
- Potable Water Analysis per Chapter 64E-6.008 Florida Administrative Code, Table 1
- Sanitary Sewer Analysis Chapter 64E-6.008 Florida Administrative Code, Table 1
- Environmental Engineering: Tampa Typical Solid Waste Generation Rates

Summary of analyses:

- Trip generation: 43.82 ADT & 5.93 Peak PM trips
- Potable Water: 695 gallons per day
- ~~Potable Water: 695 gallons per day~~
- Solid Waste: 2.98 c.y. per week

See attached Concurrency Worksheet.

Please contact me at 307.680.1772 if you have any questions.

Respectfully,

CAROL J. CHADWICK LICENSE No. 82560 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Carol Chadwick
DN: c=US, o=Florida, dnQualifier=A01410D0000017EB6D924CE0005954C, cn=Carol Chadwick
Date: 2023.03.31 12:30:08 -04'00'

Carol Chadwick, P.E.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
CC Job #FL23105

REVISED CONCURRENCY WORKSHEET

Trip Generation Analysis

ITE Code	ITE Use	ADT Multiplier	PM Peak Multiplier	KSF	Total ADT	Total PM Peak
720	Medical Dental Office	11.01	1.49	3.98	43.82	5.93

*Per employee

Potable Water Analysis

Ch. 64E-6.008, F.A.C. Use	Ch. 64E-6.008, F.A.C. Gallons Per Day (GPD)	Ch. 64E-6.008, F.A.C. Multiplier*	Total (Gallons Per Day)
Medical Dental Office	250 + 15	250 + 13	695.00

* Multiplier is based upon Ch. 64E.6008, Florida Administrative Code and can very from square footage, number of employees, number of seats, or etc. See Ch. 64E-6.008, F.A.C. to determine multiplier. (2 PRACTITIONERS & 13 EMPLOYEES)

Sanitary Sewer Analysis

Ch. 64E-6.008, F.A.C. Use	Ch. 64E-6.008, F.A.C. Gallons Per Day (GPD)	Ch. 64E-6.008, F.A.C. Multiplier*	Total (Gallons Per Day)
Medical Dental Office	250 + 15	250 + 13	695.00

* Multiplier is based upon Ch. 64E.6008, Florida Administrative Code and can very from square footage, number of employees, number of seats, or etc. See Ch. 64E-6.008, F.A.C. to determine multiplier. (2 PRACTITIONERS & 13 EMPLOYEES)

Solid Waste Analysis

Use	Tons Per 100 s.f.	S.F.	Total (c.y. per week)
Medical Office	1.50	3977.00	2.98

CAROL CHADWICK, P.E.
Civil Engineer
1208 S.W. Fairfax Glen
Lake City, FL 32025
307.680.1772
ccpewyo@gmail.com
www.carolchadwickpe.com

March 31, 2023

re: Aspire Dental Addition Comprehensive Plan Consistency Analysis

The Aspire Dental Addition proposed site plan consistent with Lake City's Comprehensive Plan.

Future Land Use Element

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

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

  Consistency: The subject property is an addition to an existing dental office.

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

  Consistency: The subject property is an addition to an existing dental office.

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

  Consistency: The commercial site is zoned CI.

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

  Consistency: The subject property is an addition to an existing dental office.

- Policy 1.1.4 The City shall continue to maintain standards for the coordination and siting of proposed urban development near agricultural or forested areas, or environmentally sensitive

areas (including but not limited to wetlands and floodplain areas) to avoid adverse impact upon existing land uses.

Consistency: The proposed use of the subject property is consistent with commercial properties and will not have any adverse environmental impacts on the existing land uses.

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

  Consistency: No impacts to adjacent land topography or soil conditions will result due to a zooming or land use change of the subject property.

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

  Consistency: The proposed commercial development is compatible with other similar uses in the area and can co-exist without negative impacts to other uses in relative proximity to the development over time.

Please contact me at 307.680.1772 if you have any questions.

Respectfully,

CAROL J. CHADWICK LICENSE No 82560 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Carol Chadwick
DN: c=US, o=Florida, dnQualifier=A01410D0000017EB6D924CE0005954C, cn=Carol Chadwick
Date: 2023.03.31 12:29:45 -04'00'

Carol Chadwick, P.E.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
CC Job #FL23105

PARCEL: 05-4S-17-07604-102

DESCRIPTION:
LOT 2 OF SOUTHBANK PLACE AS PER PLAT THEREOF RECORDED IN PLAT BOOK 6 PAGE 19 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA

Columbia County Property Appraiser

Jeff Hampton

2023 Working Values
updated: 3/30/2023

Parcel: << **05-4S-17-07604-102 (28480)** >>

Aerial Viewer | Pictometery | Google Maps

Owner & Property Info

Result: 1 of 0

Owner	AFFILIATED PROPERTY MANAGEMENT LLC 14506 NW 11TH PLACE NEWBERRY, FL 32669		
Site	1788 SW BARNETT WAY, LAKE CITY		
Description*	LOT 2 SOUTH BANK PLACE. 768-521, 859-1397, 880-2059, CD 884-2282, WD 1466-471,		
Area	0.689 AC	S/T/R	05-4S-17
Use Code**	PROFESS SVC/BLD (1900)	Tax District	1

*The Description above is not to be used as the Legal Description for this parcel in any legal transaction.
**The Use Code is a FL Dept. of Revenue (DOR) code and is not maintained by the Property Appraiser's office. Please contact your city or county Planning & Zoning office for specific zoning information.

Property & Assessment Values

2022 Certified Values		2023 Working Values	
Mkt Land	$67,626	Mkt Land	$67,626
Ag Land	$0	Ag Land	$0
Building	$195,579	Building	$190,220
XFOB	$8,551	XFOB	$8,551
Just	$271,756	Just	$266,397
Class	$0	Class	$0
Appraised	$271,756	Appraised	$266,397
SOH Cap [?]	$0	SOH Cap [?]	$0
Assessed	$271,756	Assessed	$266,397
Exempt	$0	Exempt	$0
Total Taxable	county:$271,756 city:$271,756 other:$0 school:$271,756	Total Taxable	county:$266,397 city:$266,397 other:$0 school:$266,397

Sales History

Sale Date	Sale Price	Book/Page	Deed	V/I	Qualification (Codes)	RCode
4/19/2022	$100	1466/0471	WD	I	U	11
5/18/1999	$68,000	0880/2059	WD	V	U	01
5/28/1998	$68,000	0859/1397	WD	V	Q	
10/27/1992	$48,000	0768/0521	WD	V	U	04

Building Characteristics

Bldg Sketch	Description*	Year Blt	Base SF	Actual SF	Bldg Value
Sketch	OFFICE MED (5200)	1999	3136	3318	$190,220

*Bldg Desc determinations are used by the Property Appraisers office solely for the purpose of determining a property's Just Value for ad valorem tax purposes and should not be used for any other purpose.

Extra Features & Out Buildings (Codes)

Code	Desc	Year Blt	Value	Units	Dims
0164	CONC BIN	1999	$285.00	38.00	0 x 0
0260	PAVEMENT-ASPHALT	1999	$6,175.00	6861.00	0 x 0
0166	CONC,PAVMT	1999	$1,691.00	1127.00	0 x 0
0169	FENCE/WOOD	2012	$100.00	1.00	0 x 0
0060	CARPORT F	2012	$300.00	1.00	0 x 0

Land Breakdown

Code	Desc	Units	Adjustments	Eff Rate	Land Value
1910	MEDIC OFF (MKT)	30,056.000 SF (0.689 AC)	1.0000/1.0000 1.0000/ /	$2 /SF	$67,626

Search Result: 1 of 0

Detail by Entity Name

Florida Limited Liability Company
AFFILIATED PROPERTY MANAGEMENT, LLC

Filing Information

Document Number	L16000074743
FEI/EIN Number	59-3529574
Date Filed	04/18/2016
Effective Date	08/19/1998
State	FL
Status	ACTIVE
Last Event	CONVERSION
Event Date Filed	04/18/2016
Event Effective Date	NONE

Principal Address

14506 N.W. 11TH PL.
NEWBERRY, FL 32669

Mailing Address

14506 N.W. 11TH PL.
NEWBERRY, FL 32669

Registered Agent Name & Address

HARVEY, FRANKIE J
14506 N.W. 11TH PL.
NEWBERRY, FL 32669

Name Changed: 04/28/2017

Authorized Person(s) Detail

Name & Address

Title manager

HARVEY, FRANKIE J
14506 N.W. 11TH PL.
NEWBERRY, FL 32669

Annual Reports

Report Year	Filed Date
2020	02/04/2020

2021	02/10/2021
2022	03/31/2022

Document Images

03/31/2022 -- ANNUAL REPORT	View image in PDF format
02/10/2021 -- ANNUAL REPORT	View image in PDF format
02/04/2020 -- ANNUAL REPORT	View image in PDF format
05/10/2019 -- ANNUAL REPORT	View image in PDF format
04/27/2018 -- ANNUAL REPORT	View image in PDF format
04/28/2017 -- ANNUAL REPORT	View image in PDF format
04/18/2016 -- Florida Limited Liability	View image in PDF format

GROWTH MANAGEMENT DEPARTMENT
205 North Marion Ave, Lake City, FL 32055
Phone: 386-719-5750
E-mail: growthmanagement@lcfla.com

AGENT AUTHORIZATION FORM

I, Robert Harvey (owner name), owner of property parcel number _____ (parcel number), do certify that the below referenced person(s) listed on this form is/are contracted/hired by me, the owner, or, is an officer of the corporation; or, partner as defined in Florida Statutes Chapter 468, and the said person(s) is/are authorized to sign, speak and represent me as the owner in all matters relating to this parcel.

Printed Name of Person Authorized	Signature of Authorized Person
1. Gary Johnson	1. Gary Johnson
2. Helen Tarr	2. H. Tarr
3. Carol Chadwick, PE	3.
4.	4.
5.	5.

I, the owner, realize that I am responsible for all agreements my duly authorized agent agrees with, and I am fully responsible for compliance with all Florida Statutes, City Codes, and Land Development Regulations pertaining to this parcel.

If at any time the person(s) you have authorized is/are no longer agents, employee(s), or officer(s), you must notify this department in writing of the changes and submit a new letter of authorization form, which will supersede all previous lists. Failure to do so may allow unauthorized persons to use your name and/or license number to obtain permits.

_____ 3.14.2023 _____
Owner Signature (Notarized) Date

NOTARY INFORMATION:
STATE OF: Florida COUNTY OF: Columbia

The above person, whose name is Robert J. Harvey, personally appeared before me and is known by me or has produced identification (type of I.D.) FLDL H610-770-54-447-0 on this 14 day of March, 2023.

Charlene N. Pitman
NOTARY'S SIGNATURE

(Seal/Stamp)

CHARLENE N. PITMAN
Notary Public - State of Florida
Commission # HH 030304
My Comm. Expires Aug 9, 2024

Columbia County Tax Collector

generated on 3/31/2023 11:04:33 AM EDT

Tax Record

Last Update: 3/31/2023 11:02:59 AM EDT

Register for eBill

Ad Valorem Taxes and Non-Ad Valorem Assessments

The information contained herein does not constitute a title search and should not be relied on as such.

Account Number	Tax Type	Tax Year
R07604-102	REAL ESTATE	2022

Mailing Address
AFFILIATED PROPERTY
MANAGEMENT LLC
14506 NW 11TH PLACE
NEWBERRY FL 32669

Property Address
1788 BARNETT LAKE CITY

GEO Number
054S17-07604-102

Exempt Amount	Taxable Value
See Below	See Below

Exemption Detail
NO EXEMPTIONS

Millage Code
001

Escrow Code

Legal Description (click for full description)
05-4S-17 1900/1900.69 Acres LOT 2 SOUTH BANK PLACE. 768-521, 859-1397, 880-2059, CD 884-2282, WD 1466-471,

Ad Valorem Taxes

Taxing Authority	Rate	Assessed Value	Exemption Amount	Taxable Value	Taxes Levied
CITY OF LAKE CITY	4.9000	271,756	0	$271,756	$1,331.60
BOARD OF COUNTY COMMISSIONERS	7.8150	271,756	0	$271,756	$2,123.77
COLUMBIA COUNTY SCHOOL BOARD					
DISCRETIONARY	0.7480	271,756	0	$271,756	$203.28
LOCAL	3.2990	271,756	0	$271,756	$896.52
CAPITAL OUTLAY	1.5000	271,756	0	$271,756	$407.63
SUWANNEE RIVER WATER MGT DIST	0.3368	271,756	0	$271,756	$91.53
LAKE SHORE HOSPITAL AUTHORITY	0.0001	271,756	0	$271,756	$0.03

Total Millage	18.5989	Total Taxes	$5,054.36

Non-Ad Valorem Assessments

Code	Levying Authority	Amount
XLCF	CITY FIRE ASSESSMENT	$519.27

Total Assessments	$519.27
Taxes & Assessments	$5,573.63

If Paid By	Amount Due
	$0.00

Date Paid	Transaction	Receipt	Item	Amount Paid
11/21/2022	PAYMENT	1501182.0001	2022	$5,350.68

Prior Years Payment History

Prior Year Taxes Due

NO DELINQUENT TAXES

File Attachments for Item:

v. SPR24-06, Petition submitted by Christopher A Gmuer, P.E.. (agent) for ERA Investments (owner), for a Site Plan Review for Lake City Hotels Phase 2, in the Commercial Intensive Zoning District, and located on parcel 02582-002, which is regulated by the Land Development Regulations section 4.13.

DEPARTMENT OF GROWTH MANAGEMENT
205 North Marion Avenue
Lake City, Florida 32055
Telephone: (386) 719-5750
growthmanagement@lcfla.com

REVIEW REPORT TO PLANNING AND ZONING, BOARD OF ADJUSTMENT AND HISTORICAL COMMITTEES' BY STAFF FOR SITE PLAN REVIEW, SPECIAL EXCEPTIONS, VARIANCES, COMPREHENSIVE PLAN AMENDMENTS/ ZONING AND CERTIFICATE OF APPROPRIATENESS

Date: 04/29/2024

Request Type: Site Plan Review (SPR) ■ Special Exception (SE) ☐ Variances (V) ☐

Comprehensive Plan Amendment/Zoning (CPA/Z) ☐ Certificate of Appropriateness (COA) ☐

Project Number: SPR 24-06

Project Name: Lake City Hotels Phase 2

Project Address: TBA

Project Parcel Number: 02582-002

Owner Name: ERA Investments, LLC

Owner Address: 162 NW Birdie Pl, Lake City, FL 32055

Owner Contact Information: Telephone Number: 386-984-0732 Email: drpatel@primarycaremedic.com

Owner Agent Name: Christopher A. Gmuer, P.E.

Owner Agent Address: 2603 NW 13th Street, Box 314, Gainesville, FL

Owner Agent Contact Information: Telephone: 352-281-4928 Email: chrisg@gmuereng.com

The City of Lake City staff has reviewed the application and documents provided for the above request and have determined the following.

Growth Management – Building Department, Planning and Zoning, Code Enforcement, Permitting

Building Department: **Reviewed by:** DocuSigned by: 6A9220F9CF20485... **Date:** 4/29/2024

No comments at this time

Planning and Zoning: **Reviewed by:** DocuSigned by: Robert Angelo F0D1ED33B98E4BE... **Date:** 5/13/2024

Per section 4.12.2.11, a hotel is a permitted use.

Business License: **Reviewed by:** DocuSigned by: Marshall Sova E8B18D144D974CD... **Date:** 4/29/2024

Will need to apply for a occupational license before opening.

Code Enforcement: Reviewed by: DocuSigned by: Marshall Sova E8B18D144D974CD... **Date:** 4/29/2024

No liens, codes or violations

Permitting: Reviewed by: DocuSigned by: Ann Jones F5E79CA4532C435... **Date:** 4/30/2024

permits will be required

Utilities – Water, Sewer, Gas, Water Distribution/Collections, Customer Service

Water Department: Reviewed by: DocuSigned by: Mike Osborn 896E039544B74E3... **Date:** 4/29/2024

No comments at this time

Sewer Department: Reviewed by: DocuSigned by: Cody Pridgeon DBA01EF55AD249B... **Date:** 4/30/2024

none

Gas Department: Reviewed by: DocuSigned by: Steve Brown 8B57D0CE8F2F4B5... **Date:** 4/30/2024

No comment.

Water Distribution/Collection: Reviewed by: DocuSigned by: Brian Scott F599EB6125784F8... **Date:** 5/17/2024

no comments

Customer Service: Reviewed by: DocuSigned by: Shasta Pelham 6BD97A03165D4E0... **Date:** 5/15/2024

A tap application will need to be submitted in order to request water, sewer, and/or natural gas services. The Utility fees will be calculated upon approval of the tap application.

Public Safety – Public Works, Fire Department, Police Department

Public Works: **Reviewed by:** DocuSigned by: Steve Brown 8B57D0CE8F2F4B5... **Date:** 4/30/2024

No comment.

Fire Department: **Reviewed by:** DocuSigned by: Joshua Welsinger 6AA3758BA88A46E... **Date:** 4/30/2024

I have no issues

Police Department: **Reviewed by:** _____ **Date:** _____

NOTE: Please provide separate pages for comments that will not fit in provided spaces and please label the pages for your department and for the project.

State and County- FDOT, Suwannee River Water Management, School Board, Columbia County

FDOT: Reviewed by: _____ **Date:** _____

Suwannee River Water Management: Reviewed by: DocuSigned by: Garrett Spencer 650C0305882B42D... **Date:** 5/6/2024

The applicant has applied for a permit with SRWMD. The permit number is ERP-023-209165-4.

School Board: Reviewed by: DocuSigned by: keith Hatcher 96699F1916BC425... **Date:** 4/30/2024

No comments at this time.

County: Reviewed by: DocuSigned by: Chad Williams 35A47263EAB7416... **Date:** 5/9/2024

No issues were identified by this office at this time. This comment is provided by the County Engineer based only on the information contained in the application provided. This response does not constitute the engineer's professional opinion with respect to the project and does not constitute approval of any committee or board for Columbia County. Such opinions and approvals, if any, shall be as provided by County code or regulations.

NOTE: Please provide separate pages for comments that will not fit in provided spaces and please label the pages for your department and for the project.

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

FOR PLANNING USE ONLY
Application # SPR24-06
Application Fee: $200.00
Receipt No. 2024-00049966
Filing Date 4/26/24
Completeness Date 4/29/24

Site Plan Application

A. PROJECT INFORMATION

1. Project Name: Lake City Hotels Phase 2
2. Address of Subject Property: N/A
3. Parcel ID Number(s): 35-3S-16-02582-002
4. Future Land Use Map Designation: Commercial
5. Zoning Designation: CI
6. Acreage: 3.971
7. Existing Use of Property: Vacant
8. Proposed use of Property: Hotels
9. Type of Development (Check All That Apply):
   - ( ) Increase of floor area to an existing structure: Total increase of square footage ____
   - (■) New construction: Total square footage 50,850
   - ( ) Relocation of an existing structure: Total square footage ____

B. APPLICANT INFORMATION

1. Applicant Status ☐ Owner (title holder) ■ Agent
2. Name of Applicant(s): Christopher A. Gmuer, PE Title: President
   Company name (if applicable): Gmuer Engineering, LLC
   Mailing Address: 2603 NW 13th Street, Box 314
   City: Gainesville State: FL Zip: 32609
   Telephone: (352) 281-4928 Fax: (____) ____ Email: chrisg@gmuereng.com

   PLEASE NOTE: Florida has a very broad public records law. Most written communications to or from government officials regarding government business is subject to public records requests. Your e-mail address and communications may be subject to public disclosure.
3. If the applicant is agent for the property owner*.
   Property Owner Name (title holder): ERA Investments, LLC
   Mailing Address: 162 NW Birdie Pl
   City: Lake City State: FL Zip: 32055
   Telephone: (386) 984-0732 Fax: (____) ____ Email: drpatel@primarycaremedic.com

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

C. ADDITIONAL INFORMATION

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

D. ATTACHMENT/SUBMITTAL REQUIREMENTS

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

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

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

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

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

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

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

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

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

9. Agent Authorization Form (signed and notarized).

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

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

NOTICE TO APPLICANT

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

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

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

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

Janak Shukla, Manager, ERA Investments, LLC

Applicant/Agent Name (Type or Print)

J R. Shukla. 11/16/23

Applicant/Agent Signature Date

Applicant/Agent Name (Type or Print)

Applicant/Agent Signature Date

STATE OF FLORIDA
COUNTY OF Columbia

The foregoing instrument was acknowledged before me this 16 day of Nov, 2023, by (name of person acknowledging).

APRIL REEVES NOTARY PUBLIC MY COMMISSION EXPIRES 6-22-2027 STATE OF FLORIDA COMMISSION NUMBER HH 370485

(NOTARY SEAL OR STAMP)

April Reeves
Signature of Notary

April Reeves
Printed Name of Notary

Personally Known ✓ OR Produced Identification _____
Type of Identification Produced

2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928
gmuereng.com

April 25, 2024

Department of Growth Management, City of Lake City
205 North Marion Avenue, Lake City, Florida. 32055

Re: Lake City Hotels Phase 2

Dear Staff,

This package is submitted as a Site and Development Plan Application to Lake City. The project proposes the construction of a second hotel with associated parking and utility infrastructure at 3004 W US Hwy 90, Lake City, FL. The hotel will be internal to the site and will connect to the drive isles and utility mains constructed with Phase 1. Please see the list below of items included with this application.

Attachments:

- Fee in the amount of $200.00
- Site Plan Application
- Concurrency Impact Analysis
- Comprehensive Plan Consistency Analysis
- Legal Description (word format)
- Warranty Deed
- Agent Authorization Form
- Proof of Payment of Taxes
- Stormwater Management Report
- Fire Department Access and Water Supply Plan
- SRWMD Permit
- 2 Sets of Plans

Please let us know if you need any additional information for your review.

Sincerely,
Gmuer Engineering, LLC
Christopher A Gmuer, PE
President

LAKE CITY HOTELS

PHASE 2

PROJECT INFORMATION

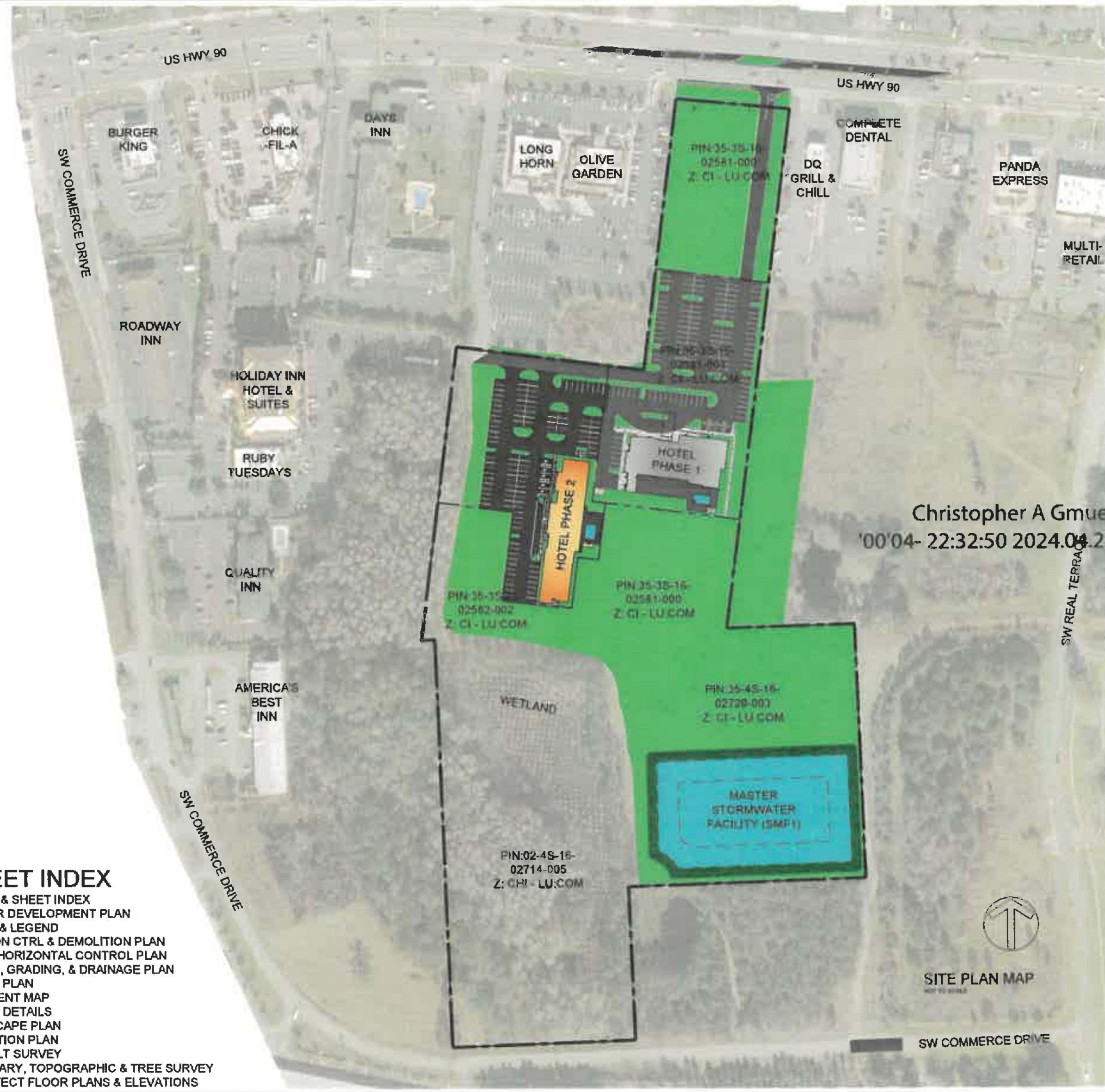
PROJECT NAME: LAKE CITY HOTELS - PHASE 2 at 3004 W US 90
PARCELS: 35-3S-16-02582-002
OWNERS: ERA INVESTMENTS, LLC, 162 NW BIRDIE PL, LAKE CITY, FL 32055
CIVIL ENGINEER: CHRISTOPHER A. GMUER, PE, GMUER ENGINEERING LLC, 2603 NW 13TH ST BOX 314, GAINESVILLE, FL 32609
LAND USE: COMMERCIAL (COUNTY)
ZONING: CI 02-4S-16-02720-003, 0-35-16-02581-000 35-35-16-02582-002; CHI 02-4S-16-02714-005
TOTAL PARCEL AREA: 15.71 ACRES
FLOOD ZONE: THE SUBJECT PROPERTY LIES WITHIN FLOOD ZONE A

SEE INDIVIDUAL SHEETS FOR APPLICABLE ADDITIONAL NOTES

SUMMARY OF APPLICABLE ZONING REQUIREMENTS

DRIVEWAY CONNECTIONS 4.2.3.1	MIN 100' BETWEEN CURB BREAKS PROPOSED: 100'
CURB BREAK WIDTH 4.2.3.2.1	MIN 24' AND MAX 60' PROPOSED: 24'
CURB BREAK LOCATION 4.2.3.3	25' FROM INTERSECTION ROW, 5' FROM PROPERTY LINE PROPOSED: GREATER THAN 25' AND 30' FROM PROPERTY LINES
MIN CURB DIST FROM PROP LINE 4.2.3.3.4	3' FROM PROP LINE PROPOSED: 11'
CURB BREAK FDOT 4.2.3.4.2	FDOT STANDARDS SHALL APPLY ON STATE ROADS PROPOSED: CURRENTLY PERMITTING THROUGH FDOT
TRASH 4.2.6.5	TRASH FACILITIES SHALL BE ENCLOSED PROPOSED: ENCLOSED
LANDSCAPE BUFFER 4.2.11.1	NOT REQUIRED, SEE SECTION 4.13.10.1
LIGHTING 4.2.15.2.4	MUST NOT CAUSE GLARE ON ADJACENT PARCELS
REQUIRED	
PARKING SPACE SIZE 4.2.15.4	10' X 20'
DRIVE ISLE WIDTH 4.2.15.4	22' FOR ONE WAY 90 DEG PARKING AND 24' FOR TWO WAY
HANDICAP SPACE 4.2.15.5	12' X 20' SPACE WITH 5' ISLE - 5 SPACES FOR UP TO 150 SPACES PROPOSED: 5 SPACES
PARKING SPACE ROUNDING 4.2.15.8	ROUND UP WHEN YOU HAVE MORE THAN HALF A SPACE
OFF-STREET LOADING SPACE SIZE 4.2.15.12	12' X 30' WITH VERTICAL CLEAR WIDTH OF 14'
QUANTITY OF LOADING SPACES 4.2.15.15	1 SPACE FOR A HOTEL GREATER THAN 10,000 SF MIN REQ'D HOTEL: "" SF FOOT PRINT X " STORIES = SF
MIN PARKING 4.12.11	HOTEL: 1 SPACE PER ROOM PLUS 2 SPACES CALCULATIONS HOTEL: 2 + 119 ROOMS = 121 SPACES MIN TOTAL REQUIRED: 121 SPACES - INCLUDING HANDICAP PROPOSED: 121 SPACES - INCLUDING HANDICAP
USE 4.12.2	HOTELS ARE AN ALLOWED USE
FRONT SETBACK 4.13.7.1.1	20 FEET FOR ALL STREET FRONTAGES
SIDE SETBACK 4.13.7.1.1	10 FEET
REAR SETBACK 4.13.[illegible].1	15 FEET
MAX HEIGHT 4.13.8	MEET FLORIDA BUILDING CODE STANDARDS
FLOOR AREA RATIO 4.13.9	1.0 PER STRUCTURE PROPOSED HOTEL A: "" SF = "" FAR
MIN LANDSCAPE BUFFER 4.13.10	NOT REQUIRED AS NO ADJACENT PARCELS ARE EITHER ZONED OR USED AS RESIDENTIAL
FRONT PARKING BUFFER 4.13.7.1	10' FEET
WETLAND SETBACK 4.13.7.1	35' FROM ANY STRUCTURE
PERFORMANCE STANDARDS 4.2.18	NONE ARE PROPOSED
SRWMD WETLAND BUFFER	MIN 25 FEET VEGETATED NATURAL BUFFER
FDEP - NPDES	CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE GENERIC PERMIT FOR STORMWATER DISCHARGE FOR LARGE AND SMALL CONSTRUCTION ACTIVITIES AS PART OF THE FLORIDA NPDES STORMWATER PROGRAM

SHEET INDEX



SITE PLAN MAP

Christopher A Gmuer
'00'04- 22:32:50 2024.04.23

PRELIMINARY | BUDGETING | PRICING | CONSTRUCTION

PERMITTING / DESIGN REVISIONS
2023-11-28 INITIAL CONCEPT BASE DRAWING
2023-03-01 30% SUBMITTAL
2023-08-10 90% PLANS FOR CLIENT REVIEW
2024-02-05 90% PLANS FOR CLIENT REVIEW
2024-04-23 INITIAL SUBMITTAL TO LAKE CITY & SRWMD

ENGINEER OF RECORD
CHRISTOPHER A. GMUER
FL PE # 71599
2024-04-23

CHRISTOPHER A. GMUER LICENSE No. 71599 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Christopher A. Gmuer, PE on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

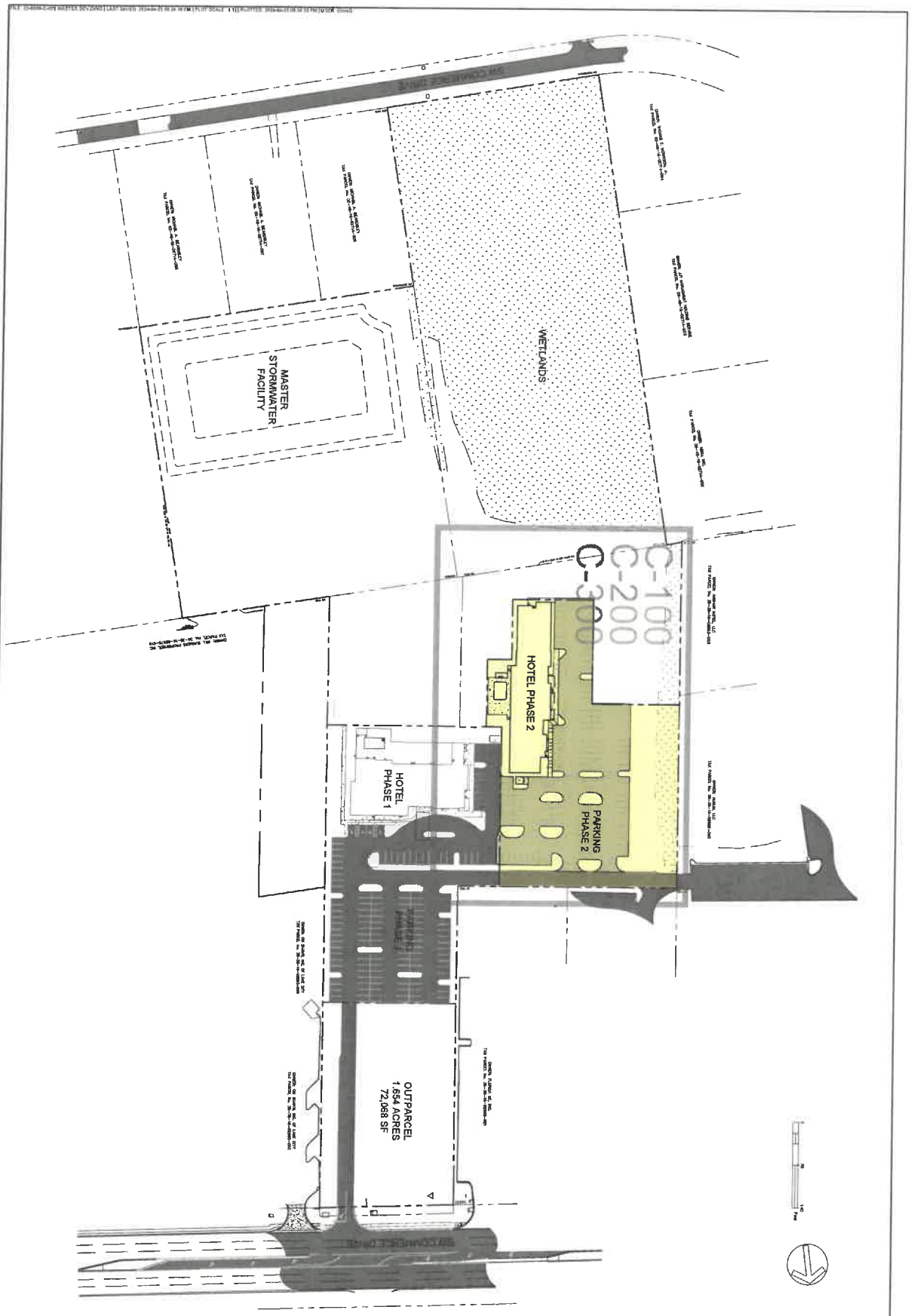
Gmuer ENGINEERING
FL CA # 31533 gmuereng.com (352) 261-4929
2603 NW 13th ST. Box 314 Gainesville, FL 32609

CLIENT	ERA INVESTMENTS LLC
DESIGN	C.A. GMUER, PE
QUALITY CONTROL	C.A. GMUER, PE
SITE PLAN APP #	TBD
WMD APP #	TBD
GEng PROJECT #	23-0008

LAKE CITY HOTELS PHASE 2

COVER AND SHEET INDEX

C-000



MASTER DEVELOPMENT PLAN
C-001

LAKE CITY HOTELS PHASE 2

CLIENT: ERA INVESTMENTS LLC
DESIGN: C.A. GMEUER, PE
QUALITY CONTROL: C.A. GMEUER, PE
SITE PLAN APP #: TBD
WMD APP #: TBD
QEng PROJECT #: 23-0060

Gmuer ENGINEERING
FL CA # 31533 gmueng.com (352) 291-4828
2903 NW 13th ST. Ste 314 Gainesville, FL 32609

STATE OF FLORIDA REGISTERED PROFESSIONAL ENGINEER LICENSE No. 71589 CHRISTOPHER A. GMEUER

PERMITTING / DESIGN REVISIONS
2023-11-28 INITIAL CONCEPT BASE DRAWING
2023-03-01 30% SUBMITTAL
2023-06-16 60% PLANS FOR CLIENT REVIEW
2023-08-08 95% PLANS FOR CLIENT REVIEW
2024-04-23 INITIAL SUBMITTAL TO LAKE CITY & SRWMD

PRICING: PRELIMINARY
CONSTRUCTION: BUDGETING

STORMWATER MINIMUM OPERATION AND MAINTENANCE STANDARDS

STORMWATER INSPECTION REPORTING

EROSION CONTROL AND STABILIZATION

WARRANTIES

DESIGN ELEMENTS AND INFORMATION FURNISHED BY OTHERS

UTILITY LOCATES, RELOCATION, PROTECTION, AND TERMINATION

SAFETY AND TEMPORARY TRAFFIC CONTROL (MAINTENANCE OF TRAFFIC)

GENERAL AND MISCELLANEOUS NOTES

TREE PRESERVATION AND DEMOLITION

PERMITTING, CONSTRUCTION STANDARDS, SUBMITTALS, REQUESTS FOR INFORMATION, INSPECTIONS, TESTING, PUNCH LISTS, RECORD DRAWINGS, AND AS-BUILTS

WORK WITHIN THE COUNTY RIGHT-OF-WAY

5. CCPW SHALL BE NOTIFIED 24 HOURS IN ADVANCE FOR INSPECTION OF PERTINENT STAGES OF CONSTRUCTION WITHIN THEIR RESPECTIVE RIGHT-OF-WAY. SUBGRADE PREPARATION, LIMEROCK PLACEMENT, INSPECTION OF THE SWEPT LIMEROCK BASE PRIOR TO THE PLACEMENT OF ASPHALT, AND OTHERS AS REQUIRED FOR APPROVAL.

STANDARD ABBREVIATIONS

ADJ	ADJACENT
ALUM	ALUMINUM
APT	APARTMENT
ASPH	ASPHALT
B&J	BORE & JACK
BLDG	BUILDING
BM	BENCHMARK
BOC	BACK OF CURB
BOW	BOTTOM OF WALL
BSL	BUILDING SETBACK LINE
C&G	CURB & GUTTER
C1	CURVE ONE
CATV	CABLE TELEVISION
CEC	CLAY ELECTRIC COOPERATIVE
CF	CUBIC FEET
CI	CAST IRON
CIP	CAST-IN-PLACE
CL	CENTER LINE
CLF	CHAIN LINK FENCE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
C/O	CLEAN OUT
COMM	COMMUNICATIONS
CONC	CONCRETE
CY	CUBIC YARD
DBI	DITCH BOTTOM INLET
DDCBP	DOUBLE DETECTOR CHECK BACKFLOW PREVENTER
DEG	DEGREES
DHWL	DESIGN HIGH WATER LEVEL
DI	DUCTILE IRON
DIA	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
E	EAST
EL	ELEVATION
ELEC	ELECTRIC
EOP	EDGE OF PAVEMENT
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE
ESMT	EASEMENT
EX	EXISTING
FOC	FACE OF CURB
FDC	FIRE DEPARTMENT CONNECTION
FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FIRE LINE
FM	FORCE MAIN
FO	FIBER OPTIC
FP	FLOOD PLAIN
FT	FEET
FUT	FUTURE
GALV	GALVANIZED
GV	GATE VALVE
HC	HANDICAP
HORIZ	HORIZONTAL
HR	HOUR
INV	INVERT
LF	LINEAR FEET
L1	LINE ONE
LAT	LATITUDE
LONG	LONGITUDE
LT	LEFT
MAINT	MAINTENANCE
MAX	MAXIMUM
MES	MITERED END SECTION
MH	MANHOLE
MIN	MINIMUM
MO	MONTH
MUTCD	MANUAL ON UNIFORM TRAFFIC DESIGN
N	NORTH
N/A	NOT APPLICABLE
NE	NORTH EAST
NG	NATURAL GRADE
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
NW	NORTH WEST
OC	ON CENTER
PE	PROFESSIONAL ENGINEER
POB	POINT OF BEGINNING
POE	POINT OF ENDING
PL	PROPERTY LINE
PRI	PRIMARY
PRM	PERMANENT REFERENCE MARKER
PSI	POUNDS PER SQUARE INCH
PUE	PUBLIC UTILITY EASEMENT
PUD	PLANNED URBAN DEVELOPMENT
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
RCP	REINFORCED CONCRETE PIPE
REF	REFERENCE
ROW	RIGHT OF WAY
RPZBP	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
RT	RIGHT
S	SOUTH
S/W	SIDEWALK
SE	SOUTH EAST
SF	SQUARE FEET
SG	SWITCH GEAR
SPC	SPACE
SS	SANITARY SEWER
ST	STORM SEWER
STCO	STORM CLEANOUT (TYP ROOF DRAINS)
STA	STATION
STD	STANDARD
STL	STEEL
SW	SOUTH WEST
SY	SQUARE YARD
TBRC	TRAFFIC BEARING RING & COVER
TEL	TELEPHONE
TX	TRANSFORMER
TV	TELEVISION
TOW	TOP OF WALL
TYP	TYPICAL
UTIL	UTILITY
VCP	VITRIFIED CLAY PIPE
VEH	VEHICLE
W	WEST
W/	WITH
WWW	WATER / WASTEWATER
WM	WATER MAIN
WS	WATER SERVICE
WW	WASTEWATER
YR	YEAR

GENERAL LEGEND - SEE PLANS FOR ADDITIONAL CALLOUTS

EXISTING CABLE
EXISTING COMMUNICATIONS
EXISTING ELECTRIC OVERHEAD
EXISTING ELECTRIC UNDERGROUND
EXISTING FIBER OPTIC
EXISTING FIRE
EXISTING FORCEMAIN
EXISTING GAS
EXISTING RECLAIMED WATER
EXISTING STORM
EXISTING TELEPHONE
EXISTING WATER
PROPOSED CABLE
PROPOSED COMMUNICATIONS
PROPOSED ELECTRIC OVERHEAD
PROPOSED ELECTRIC UNDERGROUND
PROPOSED FIBER OPTIC
PROPOSED FIRE
PROPOSED FORCEMAIN
PROPOSED GAS
PROPOSED RECLAIMED WATER
PROPOSED STORM
PROPOSED TELEPHONE
PROPOSED WATER
EXISTING ELEVATION CONTOUR
PROPOSED ELEVATION CONTOUR
SWALE CENTERLINE
PROPOSED GRADE SPOT ELEVATION
SILT FENCE
TREE BARRICADE
SETBACK
BUFFER
PROPERTY BOUNDARY
EXISTING FENCE

STORMWATER POLLUTION PREVENTION PLAN

PRELIMINARY | BUDGETING | PRICING | CONSTRUCTION

PERMITTING / DESIGN REVISIONS
2022-11-29 INITIAL CONCEPT BASE DRAWING
2023-03-01 30% SUBMITTAL
2023-09-19 90% PLANS FOR CLIENT REVIEW
2024-02-05 95% PLANS FOR CLIENT REVIEW
2024-04-23 INITIAL SUBMITTAL TO LAKE CITY & SRWMD

ENGINEER OF RECORD
CHRISTOPHER A. GMUER
FL PE # 71599
2024-04-23

CHRISTOPHER A. GMUER
LICENSE
No. 71599
STATE OF FLORIDA
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Christopher A. Gmuer, PE on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

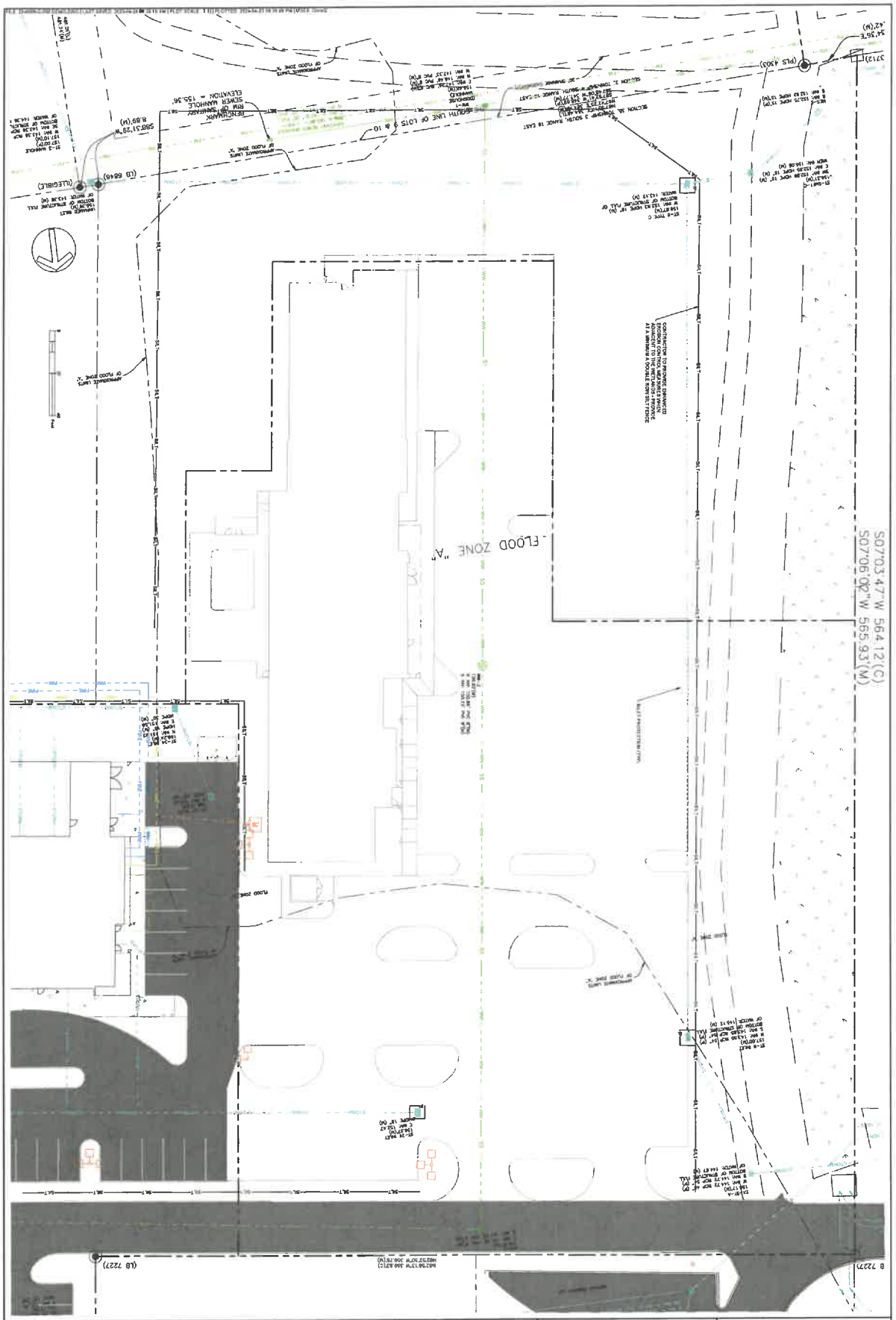
Gmuer ENGINEERING
FL CA # 31533 | gmuereng.com | (352) 261-4828
2603 NW 13th ST. Box 314 | Gainesville, FL 32609

CLIENT: ERA INVESTMENTS LLC
DESIGN: C.A. GMUER, PE
QUALITY CONTROL: C.A. GMUER, PE
SITE PLAN APP #: TBD
WMD APP #: TBD
GEng PROJECT #: 22-0000

LAKE CITY HOTELS PHASE 2

NOTES AND LEGEND

C-010



C-050

DEMOLITION & EROSION CONTROL PLAN

LAKE CITY HOTELS PHASE 2

CLIENT: ERA INVESTMENTS LLC

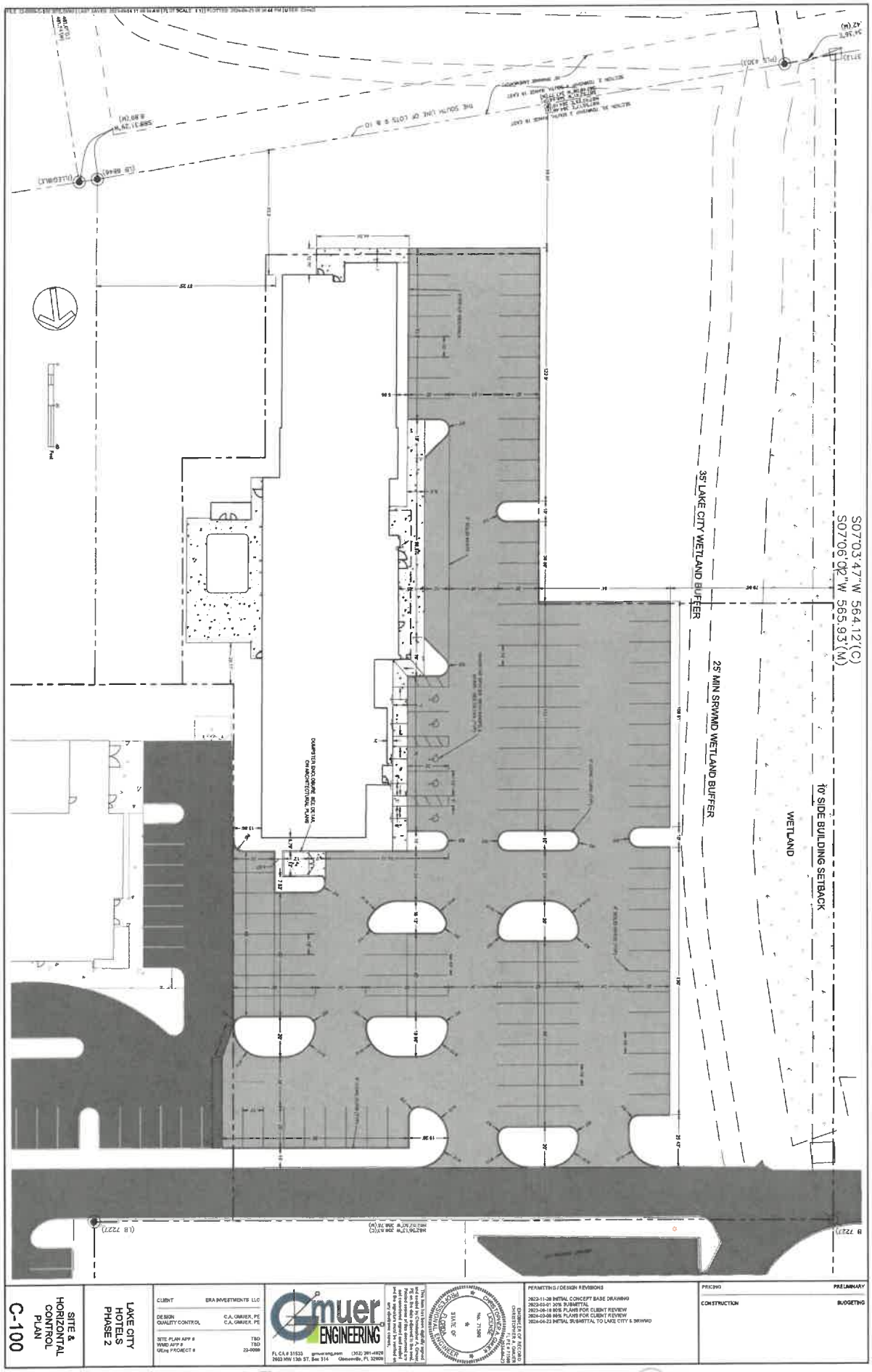
DESIGN: G.A. GMUER, PE
QUALITY CONTROL: G.A. GMUER, PE

SITE PLAN APP #: TBD
WMD APP #: TBD
GEng PROJECT #: 22-0056

Gmuer ENGINEERING
FL C.A.# 31523 gmuereng.com (352) 261-4828
2903 NW 13th ST. Ste 314 Gainesville, FL 32609

PERMITTING / DESIGN REVISIONS
2022-11-29 INITIAL CONCEPT BASE DRAWING
2023-03-01 30% SUBMITTAL
2023-08-10 60% PLANS FOR CLIENT REVIEW
2024-02-06 95% PLANS FOR CLIENT REVIEW
2024-04-23 INITIAL SUBMITTAL TO LAKE CITY & SRWMD

PRICING: PRELIMINARY
CONSTRUCTION: BUDGETING



SITE & HORIZONTAL CONTROL PLAN

C-100

LAKE CITY HOTELS PHASE 2

CLIENT	ERA INVESTMENTS LLC
DESIGN	C.A. GMUER, PE
QUALITY CONTROL	C.A. GMUER, PE
SITE PLAN APP #	TBD
WMD APP #	TBD
GEng PROJECT #	23-0009

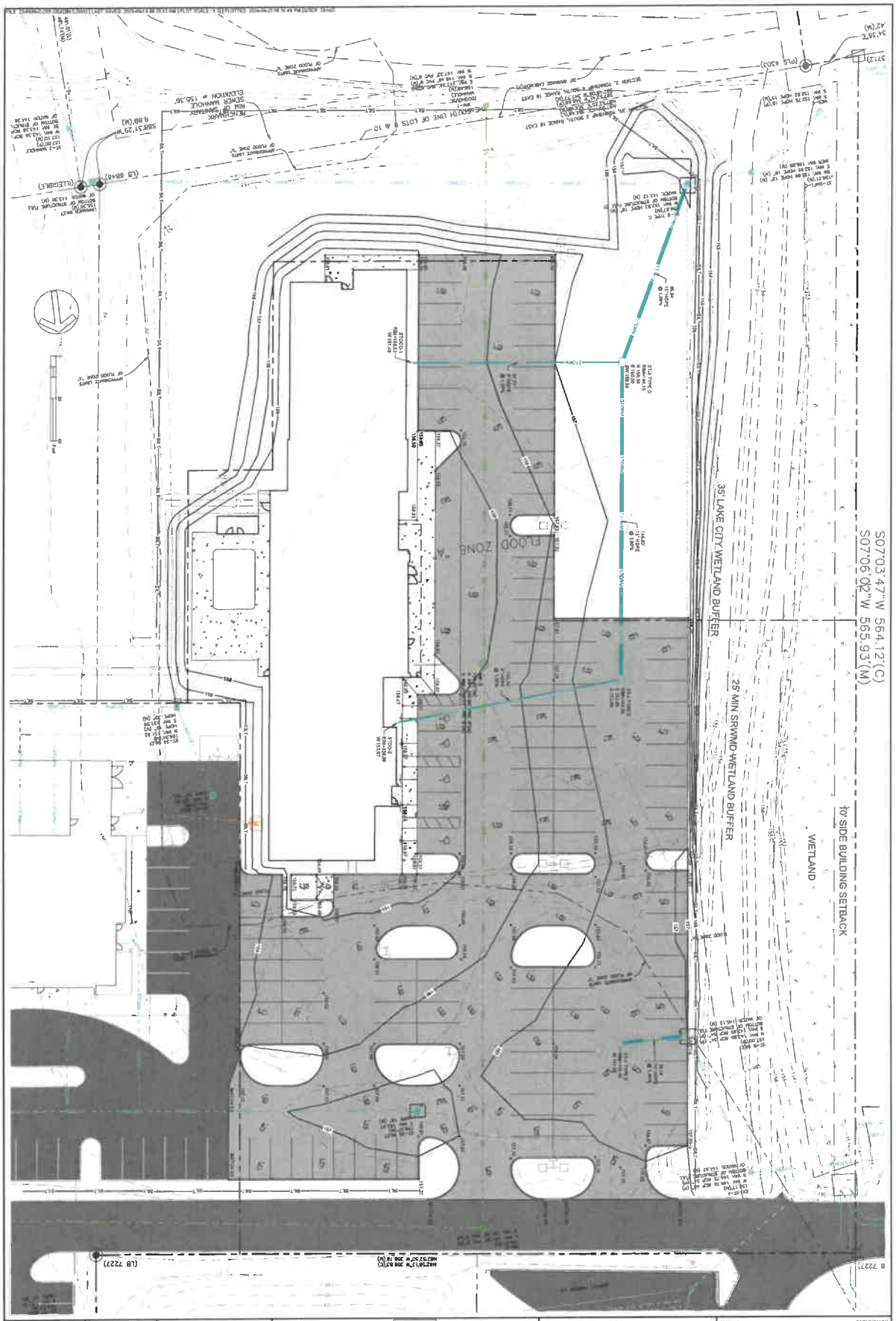
Gmuer ENGINEERING

FL CA # 31533 gmuereng.com (352) 291-4928
3663 NW 13th ST, Ste 314 Gainesville, FL 32609

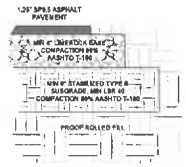
PERMITTING / DESIGN REVISIONS

2023-11-28 INITIAL CONCEPT BASE DRAWING
2023-03-01 2078 SUBMITTAL
2023-06-14 80% PLANS FOR CLIENT REVIEW
2024-03-08 99% PLANS FOR CLIENT REVIEW
2024-04-23 INITIAL SUBMITTAL TO LAKE CITY & SRWMD

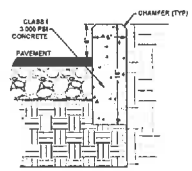
PRICING	PRELIMINARY
CONSTRUCTION	BUDGETING



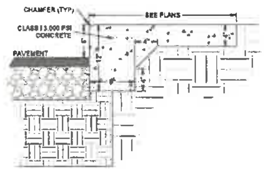
C-200 GRADING & DRAINAGE PLAN	LAKE CITY HOTELS PHASE 2	CLIENT: ERA INVESTMENTS LLC DESIGN: C.A. GAMER, PE QUALITY CONTROL: C.A. GAMER, PE SITE PLAN APP #: TBD WMD APP #: TBD QEA# PROJECT #: 23-0008	Gmuer ENGINEERING FL CA # 31533 gmueneng.com (352) 281-4829 2985 NW 13th ST. Ste 314 Gainesville, FL 32609	PROFESSIONAL ENGINEER STATE OF FLORIDA No. 71586	PERMITTING / DESIGN REVISIONS 2023-11-28 INITIAL CONCEPT BARE DRAWING 2023-03-01 30% SUBMITTAL 2023-08-18 60% PLANS FOR CLIENT REVIEW 2024-02-06 95% PLANS FOR CLIENT REVIEW 2024-04-23 INITIAL SUBMITTAL TO LAKE CITY & SRWMD	PRICING: PRELIMINARY CONSTRUCTION: BUDGETING



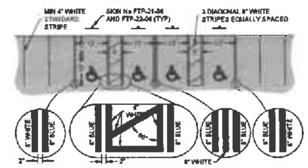
PAVEMENT DESIGN DETAIL
NOT TO SCALE



6" CURB DETAIL
NOT TO SCALE

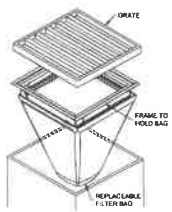


STEP-UP SIDEWALK WITH THICKENED EDGE DETAIL
NOT TO SCALE

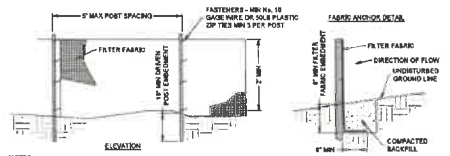


NOTES
1. SEE PLANS FOR LAYOUT AND QUANTITY
2. DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.
3. BLUE PAVEMENT MARKINGS SHALL BE TINTED TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595A.
4. THE FTP-22-06 PANAL SHALL BE MOUNTED BELOW THE FTP-21-06 SIGN.

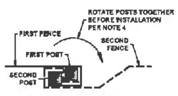
ACCESSIBLE PARKING PAVEMENT MARKING DETAIL
NOT TO SCALE



TYPICAL INLET PROTECTION DETAIL
NOT TO SCALE



NOTES
1. TEMPORARY SILT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. FENCE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED WITH THE FINAL STABILIZATION.
2. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS I, WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
3. FENCE POSTS SHALL BE EITHER WOOD POST WITH A MINIMUM CROSS-SECTIONAL AREA OF 1.5" X 1.5" OR A STANDARD STEEL POST.
4. SPLICE TWO FENCES TOGETHER AT POST LOCATIONS ACCORDING TO SPLICE DETAIL. PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE. ROTATE BOTH POSTS TOGETHER AT LEAST 180 DEGREES TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL. CUT THE FABRIC NEAR THE BOTTOM OF THE POSTS TO ACCOMMODATE THE 6 INCH FLAP. DRIVE BOTH POSTS AND BURY THE FLAP. COMPACT BACKFILL WELL.



TYPICAL SILT FENCE DETAIL
NOT TO SCALE

PRELIMINARY | BUDGETING
PRICING | CONSTRUCTION

PERMITTING / DESIGN REVISIONS
2022-11-28 INITIAL CONCEPT BASE DRAWING
2023-03-01 30% SUBMITTAL
2023-09-18 60% PLANS FOR CLIENT REVIEW
2024-02-05 90% PLANS FOR CLIENT REVIEW
2024-04-23 INITIAL SUBMITTAL TO LAKE CITY & SRWMD

ENGINEER OF RECORD
CHRISTOPHER A. GMUER
FL PE # 71599
2024-04-23

CHRISTOPHER A. GMUER LICENSE No. 71599 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Christopher A. Gmuer, PE on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

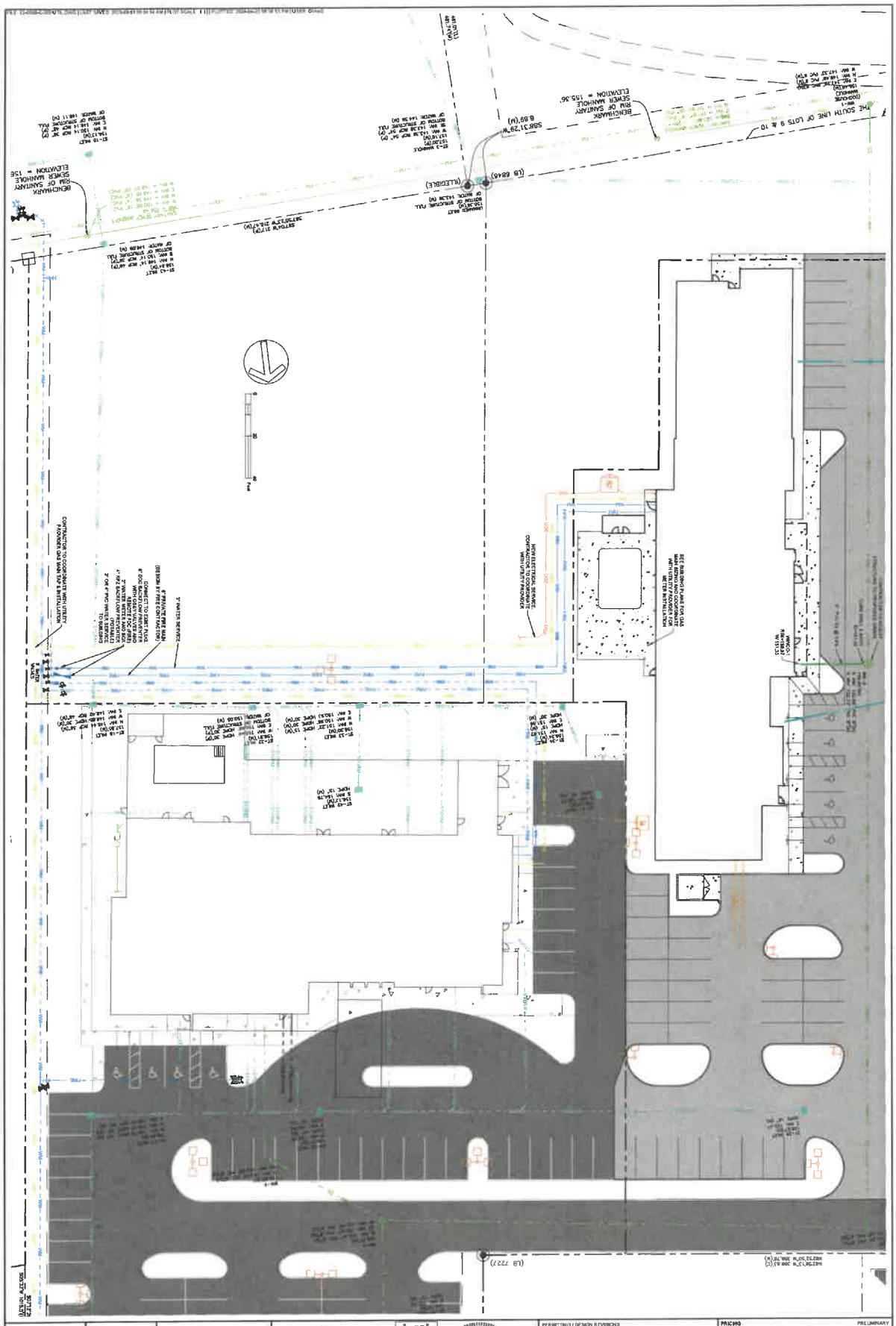
Gmuer ENGINEERING
FL CA # 31535 gmuereng.com (352) 281-4828
2603 NW 13th ST. Box 314 Gainesville, FL 32609

CLIENT: ERA INVESTMENTS LLC
DESIGN: C.A. GMUER, PE
QUALITY CONTROL: C.A. GMUER, PE
SITE PLAN APP #: TBD
WMD APP #: TBD
GEng PROJECT #: 22-0006

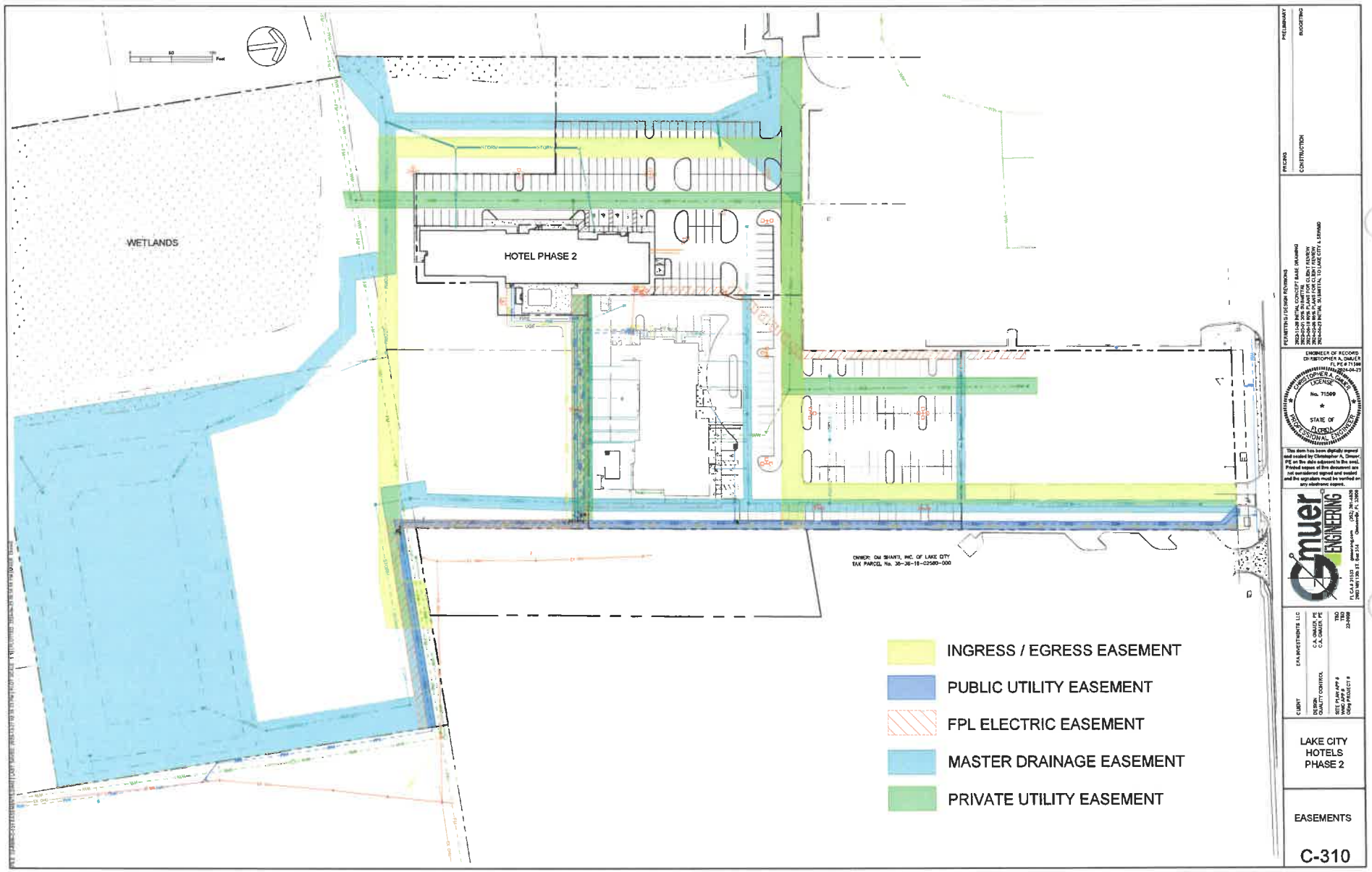
LAKE CITY HOTELS PHASE 2

GRADING & DRAINAGE PLAN

C-201



C-300	UTILITY PLAN	LAKE CITY HOTELS PHASE 2	CLIENT: ERA INVESTMENTS LLC DESIGN: C.A. GMUER, PE QUALITY CONTROL: C.A. GMUER, PE SITE PLAN APP #: TBD WMD APP #: TBD GEng PROJECT #: 22-0008	GMUER ENGINEERING FL CA # 31533 gmuereng.com (352) 281-4926 2883 NW 13th ST, Ste 314 Gainesville, FL 32609	PERMITTING / DESIGN REVISIONS 2023-11-28 INITIAL CONCEPT BASE DRAWING 2024-03-01 90% SUBMITTAL 2023-08-18 90% PLANS FOR CLIENT REVIEW 2024-02-06 90% PLANS FOR CLIENT REVIEW 2024-04-23 INITIAL SUBMITTAL TO LAKE CITY & SRWMD PRICING: PRELIMINARY CONSTRUCTION: BUDGETING


WETLANDS
HOTEL PHASE 2
INGRESS / EGRESS EASEMENT
PUBLIC UTILITY EASEMENT
FPL ELECTRIC EASEMENT
MASTER DRAINAGE EASEMENT
PRIVATE UTILITY EASEMENT
LAKE CITY HOTELS PHASE 2
EASEMENTS
C-310

WATER CONSTRUCTION STANDARDS

SCOPE

INSPECTION AND DISPOSITION OF MATERIALS

TRENCH PREPARATION

HANDLING AND CUTTING PIPE

PIPELINE CONSTRUCTION

SERVICES

PAVING, CURB, GUTTER, AND WALKWAY WORK

TESTING

DISINFECTION

FINAL ACCEPTANCE

SCHEDULE OF MATERIALS

WASTEWATER CONSTRUCTION STANDARDS

SCOPE

INSPECTION AND DISPOSITION OF MATERIALS

PROTECTION OF PROPERTY AND OBSTRUCTIONS

TRENCH PREPARATION

HANDLING AND CUTTING PIPE

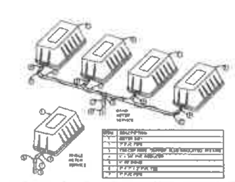
GRAVITY COLLECTION SYSTEM

MANHOLES

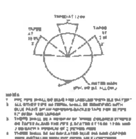
PAVING, CURB, GUTTER, AND WALKWAY WORK

FINAL ACCEPTANCE

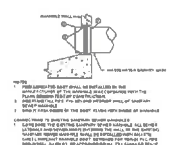
SUMMARY OF CONTRACTOR RESPONSIBILITIES



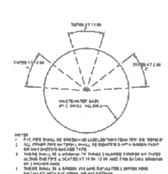
SINGLE & GANG WATER METER ASSEMBLY CONSTRUCTION
NOT TO SCALE



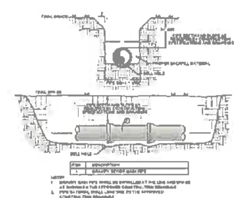
WATER MAIN PIPE IDENTIFICATION
NOT TO SCALE



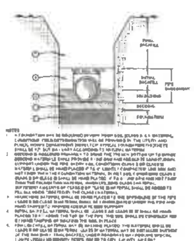
WASTEWATER MANHOLE PIPE CONNECTION CONSTRUCTION
NOT TO SCALE



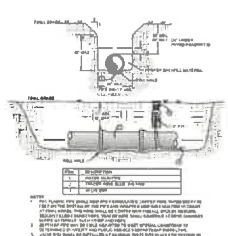
WASTEWATER MAIN PIPE IDENTIFICATION
NOT TO SCALE



WASTEWATER GRAVITY MAIN CONSTRUCTION
NOT TO SCALE



BACKFILLING REQUIREMENTS
NOT TO SCALE



WATER MAIN CONSTRUCTION
NOT TO SCALE

PRICING | PRELIMINARY | CONSTRUCTION | BUDGETING

PERMITTING / DESIGN REVISIONS
2022-11-28 INITIAL CONCEPT BASE DRAWING
2023-03-31 30% SUBMITTAL
2023-08-18 60% PLANS FOR CLIENT REVIEW
2024-02-26 90% PLANS FOR CLIENT REVIEW
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ENGINEER OF RECORD
CHRISTOPHER A. GMUER
FL PE # 71589
2024-04-23

CHRISTOPHER A. GMUER
LICENSE
No. 71589
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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Gmuer ENGINEERING
FL CA # 31532 gmuereng.com (352) 281-4928
2603 NW 13th ST, Box 314 Gainesville, FL 32609

CLIENT ERA INVESTMENTS, LLC
DESIGN C.A. GMUER, PE
QUALITY CONTROL C.A. GMUER, PE
SITE PLAN APP # TBD
WMD APP # TBD
GEng PROJECT # 23-0008

LAKE CITY HOTELS PHASE 2

UTILITY DETAILS

C-350

Trees

Quantity	Abbr.	Botanical Name /	Size / Caliper	Spacing	Comments
9		*Quercus virginiana* live oak	12'HT, 3"CAL	per plan	
15		*Lagerstroemia indica 'Natchez'* crape myrtle	15'HT, 4"CAL	per plan	

Shrubs

50		*Match existing* at pond	18"HT X 18"SPR	per existing	

Groundcovers

324SF x 3" thick		*Pine Bark Nuggets* 3" layer
15,265SF		*Paspalum notatum 'Argentine'* bahia grass

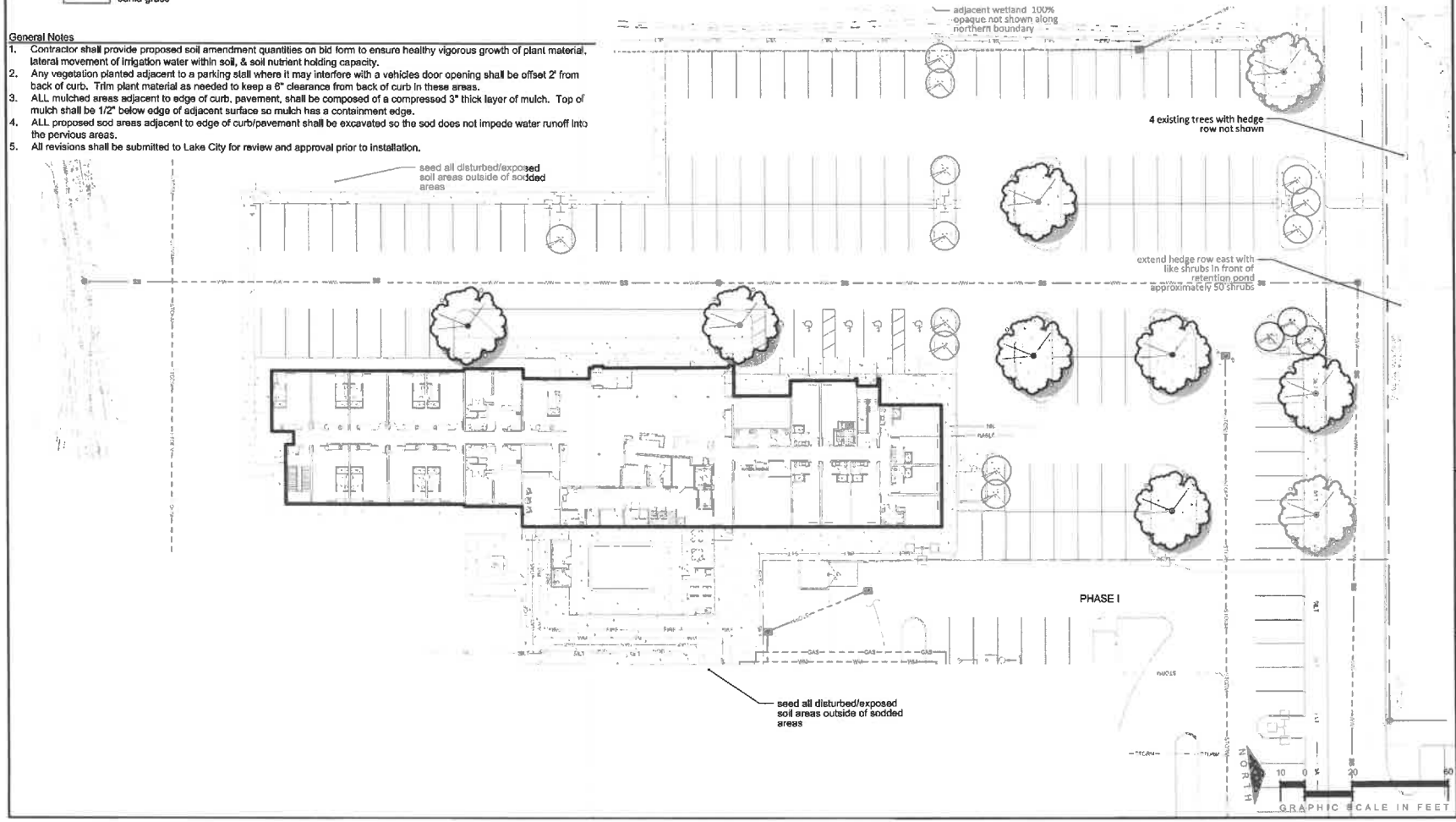
General Notes

1. Contractor shall provide proposed soil amendment quantities on bid form to ensure healthy vigorous growth of plant material, lateral movement of irrigation water within soil, & soil nutrient holding capacity.
2. Any vegetation planted adjacent to a parking stall where it may interfere with a vehicles door opening shall be offset 2' from back of curb. Trim plant material as needed to keep a 6" clearance from back of curb in these areas.
3. ALL mulched areas adjacent to edge of curb, pavement, shall be composed of a compressed 3" thick layer of mulch. Top of mulch shall be 1/2" below edge of adjacent surface so mulch has a containment edge.
4. ALL proposed sod areas adjacent to edge of curb/pavement shall be excavated so the sod does not impede water runoff into the pervious areas.
5. All revisions shall be submitted to Lake City for review and approval prior to installation.

Tree/shrub Identification Key

live oak

crape myrtle



BOLTON DESIGN INC.

LANDSCAPE PLAN

LAKE CITY HOTEL
Phase 2
Lake City, FL

BDI NO. 23219 REVISIONS
DRAWN BY: BDB
DESIGNED BY: BDB
CHECKED BY: BDB
DATE: 9/20/2023

PLANS PREPARED BY
BRIAN DAVID BOLTON PL
NO. LA6667259

LS-01

Legend

- sleeves[1,2]
- lateral[2]
- blank poly tubing
- [C] controller
- [S] rain sensor
- control valves
- 1/2" drip shut-off valve
- zone # and flow rate in gallons per minute

[1] sleeves - Unless specified on plans all sleeves shall be 2". When plans show lateral in pipe, install pipe in sleeve and cap both ends 12" beyond end of sleeve.
[2] irrigation lateral lines and sleeving may be diagrammatic in nature and are intended to be installed in suitable locations within property boundaries.

Number of emitters per tree/shrub

live oak	2-2gph emitters
crape myrtle	2-2gph emitters
hedge @ pond	1-1gph emitter

Irrigation Schedule

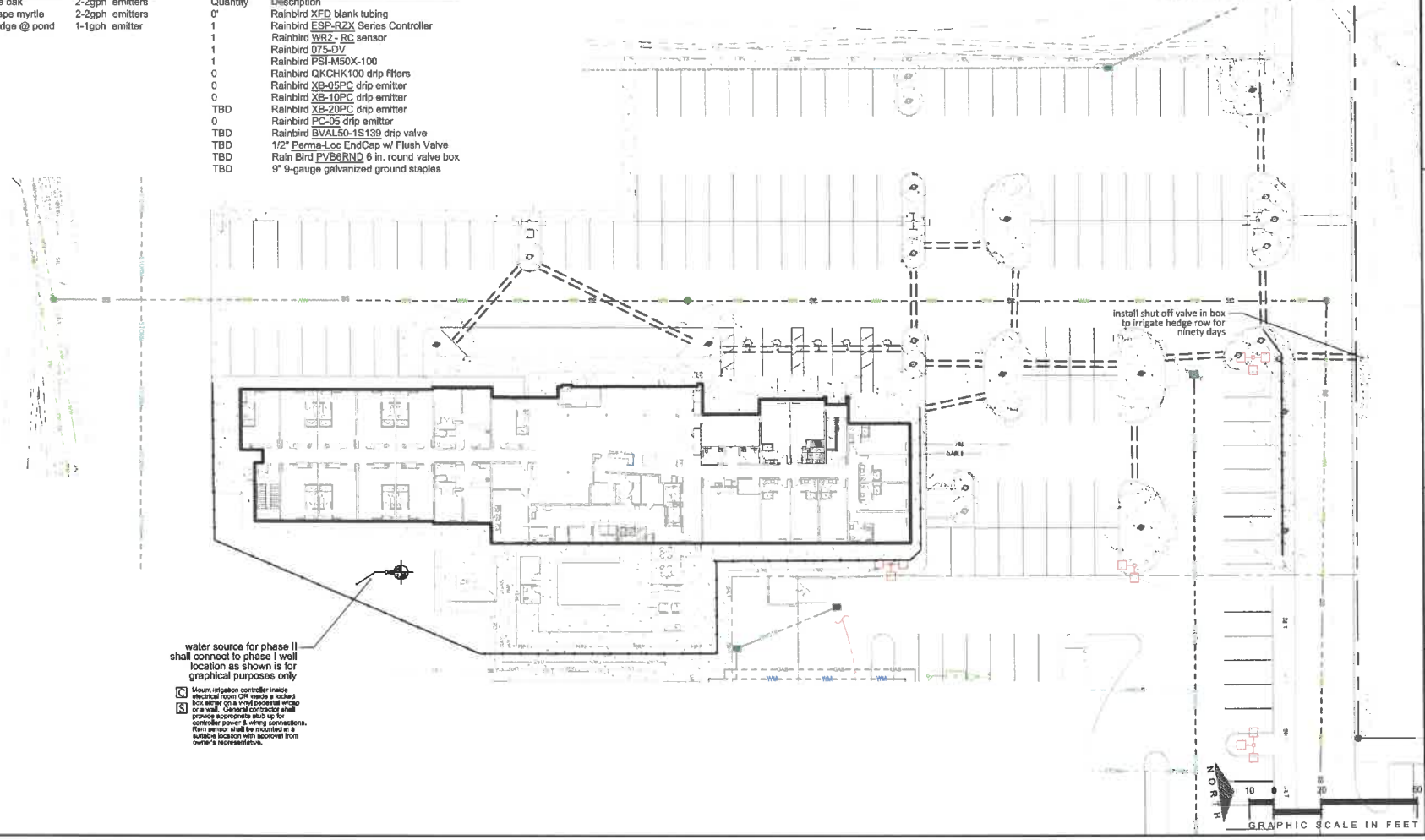
Quantity	Description
0'	Rainbird XFD blank tubing
1	Rainbird ESP-RZX Series Controller
1	Rainbird WR2 - RC sensor
1	Rainbird 075-DV
1	Rainbird PSI-M50X-100
0	Rainbird QKCHK100 drip filters
0	Rainbird XB-05PC drip emitter
0	Rainbird XB-10PC drip emitter
TBD	Rainbird XB-20PC drip emitter
0	Rainbird PC-05 drip emitter
TBD	Rainbird BVAL50-1S139 drip valve
TBD	1/2" Perma-Loc EndCap w/ Flush Valve
TBD	Rain Bird PVB6RND 6 in. round valve box
TBD	9" 9-gauge galvanized ground staples

Irrigation Notes

1. Dripline. Drip shall be installed on top of soil and covered with mulch.
2. Control Valves & Regulators. Control valves shall be installed and set 5% over proposed flow.
3. Pipe. 1/2" pipe shall be Class 315 PVC. Piping larger than 1/2" shall use Class 200 PVC.
4. Irrigation materials not identified on irrigation schedule or in specifications as to brand and model # shall be either Rainbird, Nelson, or Hunter and sized appropriately by contractor to meet requirements by the manufacturer. Contractor shall include all materials including quantity, model, size, and installed price for each item on bid form.
5. All irrigation revisions shall be submitted to Lake City for review and approval prior to installation.
6. No irrigation to be provided at sod. Contractor shall irrigate with a water truck as needed for the first two weeks.
7. Pipe shall not be installed within 50% of any existing tree dripline UNLESS piping is installed via a trenchless installation method.

Watering Schedule for Zone 1 & 2

Water all plants listed once per day for (75) seventy-five minutes during the first (30) thirty days and every other day for the next (30) thirty days; thereafter, follow water restrictions per jurisdiction until established. Shrub drip valves may be shut-off after (3) three months. After (1) one year trees should be sufficiently rooted into existing soil for shutdown; however, it is recommended that a review be performed by a certified arborist before shutting off the system. After establishment irrigation should be turned on IF a drought occurs. Bahia grass shall be temporarily watered via hand moved sprinklers for two weeks if rainfall is not occurring as needed.



BORTON DESIGN INC.

IRRIGATION PLAN

LAKE CITY HOTEL
Phase 2
Lake City, FL

BDI NO.	22319 REVISIONS
DRAWN BY:	BDB
DESIGNED BY:	BDB
CHECKED BY:	BDB
DATE:	9/29/2023

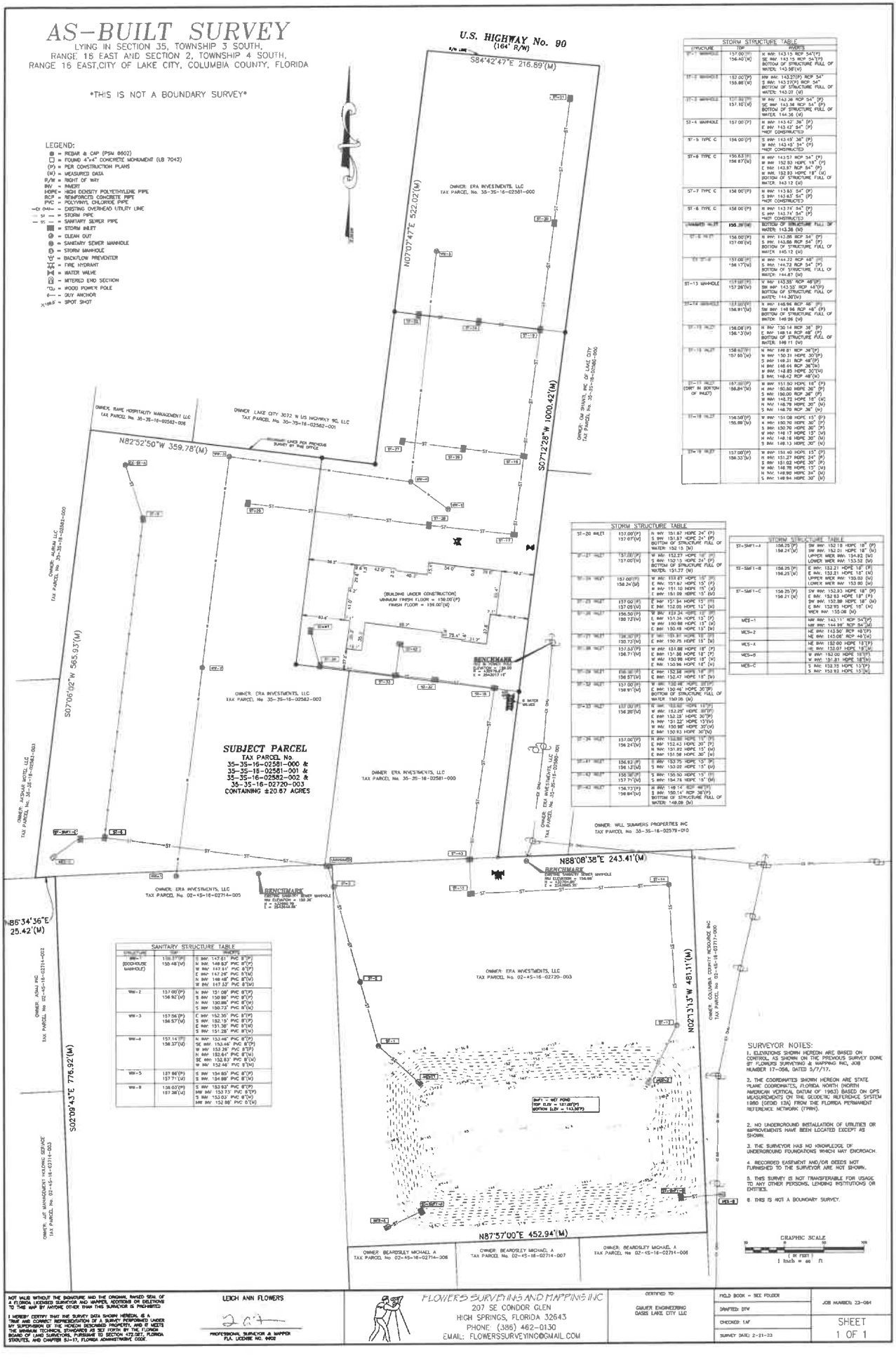
PLANS PREPARED BY:
BRIAN DAVID BORTON FL. REG. LANDSCAPE ARCHITECT

LS-02

AS-BUILT SURVEY

LYING IN SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST AND SECTION 2, TOWNSHIP 4 SOUTH, RANGE 16 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA

THIS IS NOT A BOUNDARY SURVEY



LEGEND:

- ● = REBAR & CAP (PSM 6902)
- □ = FOUND 4"x4" CONCRETE MONUMENT (LB 7042)
- (P) = PER CONSTRUCTION PLANS
- (M) = MEASURED DATA
- R/W = RIGHT OF WAY
- INV = INVERT
- HDPE= HIGH DENSITY POLYETHYLENE PIPE
- RCP = REINFORCED CONCRETE PIPE
- PVC = POLYVINYL CHLORIDE PIPE
- OHU = EXISTING OVERHEAD UTILITY LINE
- SD = STORM PIPE
- SS = SANITARY SEWER PIPE
- = STORM INLET
- = CLEAN OUT
- = SANITARY SEWER MANHOLE
- = STORM MANHOLE
- = BACKFLOW PREVENTER
- = FIRE HYDRANT
- = WATER VALVE
- = MITERED END SECTION
- = WOOD POWER POLE
- = GUY ANCHOR
- X108.8 = SPOT SHOT

STORM STRUCTURE TABLE

STRUCTURE	TOP	INVERTS
ST-1 MANHOLE	157.00'(P) 156.40'(M)	N INV: 143.15 RCP 54"(P) SE INV: 143.15 RCP 54"(P) BOTTOM OF STRUCTURE FULL OF WATER: 143.98'(M)
ST-2 MANHOLE	152.00'(P) 155.86'(M)	NW INV: 143.27'(P) RCP 54" S INV: 143.27'(P) RCP 54" BOTTOM OF STRUCTURE FULL OF WATER: 143.01 (M)
ST-3 MANHOLE	157.82'(P) 157.10'(M)	W INV: 143.39 RCP 54" (P) SE INV: 143.38 RCP 54" (P) BOTTOM OF STRUCTURE FULL OF WATER: 144.36 (M)
S3-4 MANHOLE	157.00'(P)	W INV: 143.42' 36" (P) E INV: 143.42' 84" (P) *NOT CONSTRUCTED
ST-5 TYPE C	154.00'(P)	S INV: 143.45' 36" (P) W INV: 143.45' 54" (P) *NOT CONSTRUCTED
ST-6 TYPE C	156.63'(P) 156.87'(M)	W INV: 143.57' RCP 54" (P) W INV: 152.93 HDPE 18" (P) E INV: 143.87' RCP 54" (P) W INV: 152.93 HDPE 18" (M) BOTTOM OF STRUCTURE FULL OF WATER: 143.12 (M)
ST-7 TYPE C	154.00'(P)	N INV: 143.63' 54" (P) S INV: 143.63' 54" (P) *NOT CONSTRUCTED
ST-8 TYPE C	154.00'(P)	N INV: 143.74' 54" (P) S INV: 143.74' 54" (P) *NOT CONSTRUCTED
ST-9 MANHOLE	155.39'(M)	BOTTOM OF STRUCTURE FULL OF WATER: 143.38 (M)
ST-10 INLET	156.00'(P) 157.00'(M)	W INV: 143.86 RCP 54" (P) S INV: 143.86 RCP 54" (P) BOTTOM OF STRUCTURE FULL OF WATER: 145.12 (M)
ST-11	157.08'(P) 156.17'(M)	W INV: 144.32 RCP 48" (P) S INV: 144.32 RCP 54" (P) BOTTOM OF STRUCTURE FULL OF WATER: 144.87 (M)
ST-12 MANHOLE	157.18'(P) 157.26'(M)	W INV: 143.35' RCP 48"(P) SW INV: 143.35' RCP 48"(P) BOTTOM OF STRUCTURE FULL OF WATER: 144.30'(M)
ST-14 MANHOLE	157.00'(P) 156.91'(M)	N INV: 146.96 RCP 48" (P) SW INV: 146.96 RCP 48" (P) BOTTOM OF STRUCTURE FULL OF WATER: 149.26 (M)
ST-15 INLET	158.08'(P) 156.13'(M)	N INV: 150.14 RCP 36" (P) E INV: 149.14 RCP 48" (P) BOTTOM OF STRUCTURE FULL OF WATER: 149.11 (M)
ST-16 INLET	158.63'(P) 157.85'(M)	W INV: 149.81' RCP 36"(P) N INV: 150.31 HDPE 30"(P) S INV: 149.21 RCP 48"(P) N INV: 148.64 RCP 36"(M) W INV: 148.85 HDPE 30"(M) S INV: 148.42 RCP 48"(M)
ST-17 INLET (DRY IN BOTTOM OF INLET)	157.00'(P) 156.84'(M)	W INV: 151.50 HDPE 18" (P) N INV: 150.80 HDPE 30" (P) S INV: 150.00 RCP 36" (P) W INV: 148.72 HDPE 18" (M) N INV: 148.78 HDPE 30" (M) S INV: 148.70 RCP 36" (M)
ST-18 INLET	156.50'(P) 155.88'(M)	W INV: 151.08 HDPE 15" (P) N INV: 150.70 HDPE 30" (P) S INV: 150.70 HDPE 30" (P) W INV: 149.17 HDPE 15" (M) N INV: 149.18 HDPE 30" (M) S INV: 149.13 HDPE 30" (M)
ST-19 INLET	157.00'(P) 156.33'(M)	W INV: 151.40 HDPE 15" (P) N INV: 151.27 HDPE 24" (P) S INV: 151.02 HDPE 30" (P) W INV: 148.76 HDPE 15" (M) N INV: 148.90 HDPE 24" (M) S INV: 148.94 HDPE 30" (M)

STORM STRUCTURE TABLE

ST-20 INLET	157.00'(P) 157.07'(M)	N INV: 151.67 HDPE 24" (P) S INV: 151.67 HDPE 24" (P) BOTTOM OF STRUCTURE FULL OF WATER: 152.15 (M)
ST-21 INLET	157.00'(P) 157.00'(M)	W INV: 152.27 HDPE 18" (P) S INV: 152.13 HDPE 24" (P) BOTTOM OF STRUCTURE FULL OF WATER: 151.27 (M)
ST-24 INLET	157.00'(P) 158.24'(M)	W INV: 151.87 HDPE 15" (P) E INV: 151.67 HDPE 15" (P) W INV: 151.10 HDPE 15" (M) E INV: 151.09 HDPE 15" (M)
ST-25 INLET	157.00'(P) 157.05'(M)	E INV: 151.94 HDPE 15" (P) E INV: 152.05 HDPE 15" (M)
ST-26 INLET	156.50'(P) 158.72'(M)	W INV: 151.34 HDPE 15" (P) E INV: 151.34 HDPE 15" (P) W INV: 150.98 HDPE 15" (M) E INV: 150.48 HDPE 15" (M)
ST-31 INLET	156.50'(P) 158.73'(M)	W INV: 151.87 HDPE 15" (P) E INV: 150.75 HDPE 15" (M)
ST-32 INLET	157.53'(P) 156.71'(M)	W INV: 151.68 HDPE 18" (P) E INV: 151.38 HDPE 18" (P) W INV: 150.98 HDPE 18" (M) E INV: 150.99 HDPE 18" (M)
ST-33 INLET	156.35'(P) 156.57'(M)	E INV: 152.18 HDPE 18" (P) E INV: 152.47 HDPE 18" (M)
ST-42 INLET	157.00'(P) 158.91'(M)	W INV: 150.46' HDPE 30"(P) E INV: 150.46' HDPE 30"(P) BOTTOM OF STRUCTURE FULL OF WATER: 150.26 (M)
ST-43 INLET	157.00'(P) 156.28'(M)	W INV: 152.50' HDPE 18"(P) W INV: 152.25' HDPE 30"(P) E INV: 152.25' HDPE 30"(P) N INV: 151.22' HDPE 15"(M) W INV: 150.98' HDPE 30"(M) E INV: 150.93 HDPE 30"(M)
ST-34 INLET	157.00'(P) 156.24'(M)	N INV: 152.80 HDPE 15" (P) E INV: 152.43 HDPE 30" (P) N INV: 151.92 HDPE 15" (M) E INV: 151.58 HDPE 30" (M)
ST-41 INLET	156.92'(P) 156.12'(M)	S INV: 153.75 HDPE 15" (P) S INV: 153.02 HDPE 15" (M)
ST-43 INLET	158.38'(P) 157.71'(M)	S INV: 150.50 HDPE 15" (P) S INV: 154.76 HDPE 18" (M)
ST-45 INLET	156.73'(P) 156.84'(M)	W INV: 149.14' RCP 48"(P) S INV: 150.14' RCP 36"(P) BOTTOM OF STRUCTURE FULL OF WATER: 148.09 (M)

STORM STRUCTURE TABLE

ST-SMF1-A	156.25'(P) 156.24'(M)	SW INV: 152.18 HDPE 18" (P) SW INV: 152.01 HDPE 18" (M) UPPER WIER INV: 154.82 (M) LOWER WIER INV: 153.52 (M)
S3-SMF1-B	156.25'(P) 156.25'(M)	E INV: 153.21 HDPE 18" (P) E INV: 153.21 HDPE 18" (M) UPPER WIER INV: 153.80 (M) LOWER WIER INV: 153.80 (M)
ST-SMF1-C	156.25'(P) 156.21'(M)	SW INV: 152.93 HDPE 18" (P) E INV: 152.93 HDPE 18" (P) SW INV: 152.88 HDPE 18" (M) E INV: 152.93 HDPE 18" (M) WIER INV: 155.08 (M)
MES-1		NW INV: 143.11' RCP 54"(P) NW INV: 144.88' RCP 84"(M)
MES-2		NE INV: 143.90' RCP 48"(P) NE INV: 145.08' RCP 48"(M)
MES-A		NE INV: 152.00 HDPE 18"(P) NE INV: 153.01 HDPE 18"(M)
MES-B		W INV: 152.00 HDPE 18"(P) W INV: 151.81 HDPE 18"(M)
MES-C		S INV: 152.73 HDPE 15"(P) S INV: 152.93 HDPE 15"(M)

SANITARY STRUCTURE TABLE

STRUCTURE	TOP	INVERTS
MH-1 (DOG-HOUSE MANHOLE)	156.37'(P) 156.48'(M)	S INV: 147.61' PVC 8"(P) N INV: 148.83' PVC 8"(P) W INV: 147.91' PVC 8"(P) E INV: 147.26' PVC 8"(M) N INV: 148.48' PVC 8"(M) W INV: 147.33' PVC 8"(M)
MH-2	157.00'(P) 156.92'(M)	N INV: 151.08' PVC 8"(P) S INV: 150.88' PVC 8"(P) N INV: 150.88' PVC 8"(M) S INV: 150.73' PVC 8"(M)
MH-3	157.56'(P) 156.57'(M)	E INV: 152.35' PVC 8"(P) S INV: 152.15' PVC 8"(P) E INV: 151.38' PVC 8"(M) S INV: 151.28' PVC 8"(M)
MH-4	157.14'(P) 156.37'(M)	N INV: 153.46' PVC 8"(P) SE INV: 153.46' PVC 8"(P) W INV: 153.26' PVC 8"(P) N INV: 152.64' PVC 8"(M) SE INV: 152.63' PVC 8"(M) W INV: 152.46' PVC 8"(M)
MH-5	157.98'(P) 157.71'(M)	S INV: 154.85' PVC 8"(P) S INV: 154.88' PVC 8"(M)
MH-8	158.03'(P) 157.38'(M)	S INV: 153.83' PVC 8"(P) NW INV: 153.73' PVC 8"(P) S INV: 153.02' PVC 8"(M) NW INV: 152.88' PVC 8"(M)

SURVEYOR NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON CONTROL AS SHOWN ON THE PREVIOUS SURVEY DONE BY FLOWERS SURVEYING & MAPPING INC, JOB NUMBER 17-056, DATED 5/1/17.
2. THE COORDINATES SHOWN HEREON ARE STATE PLANE COORDINATES, FLORIDA NORTH (NORTH AMERICAN VERTICAL DATUM OF 1983) BASED ON GPS MEASUREMENTS ON THE GEODETIC REFERENCE SYSTEM 1980 (GEOID 12A) FROM THE FLORIDA PERMANENT REFERENCE NETWORK (FPRN).
2. NO UNDERGROUND INSTALLATION OF UTILITIES OR IMPROVEMENTS HAVE BEEN LOCATED EXCEPT AS SHOWN.
3. THE SURVEYOR HAS NO KNOWLEDGE OF UNDERGROUND FOUNDATIONS WHICH MAY ENCROACH.
4. RECORDED EASEMENT AND/OR DEEDS NOT FURNISHED TO THE SURVEYOR ARE NOT SHOWN.
5. THIS SURVEY IS NOT TRANSFERABLE FOR USAGE TO ANY OTHER PERSONS, LENDING INSTITUTIONS OR ENTITIES.
6. THIS IS NOT A BOUNDARY SURVEY.

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS OR DELETIONS TO THIS MAP BY ANYONE OTHER THAN THIS SURVEYOR IS PROHIBITED

I HEREBY CERTIFY THAT THE SURVEY DATA SHOWN HEREON, IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY PERFORMED UNDER MY SUPERVISION OF THE HEREON DESCRIBED PROPERTY, AND IT MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 472.027, FLORIDA STATUTES, AND CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE.

LEIGH ANN FLOWERS

PROFESSIONAL SURVEYOR & MAPPER
FLA. LICENSE NO. 6902

FLOWERS SURVEYING AND MAPPING INC
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE (386) 462-0130
EMAIL: FLOWERSSURVEYING@GMAIL.COM

CERTIFIED TO:
CAUJER ENGINEERING
OASIS LAKE CITY LLC

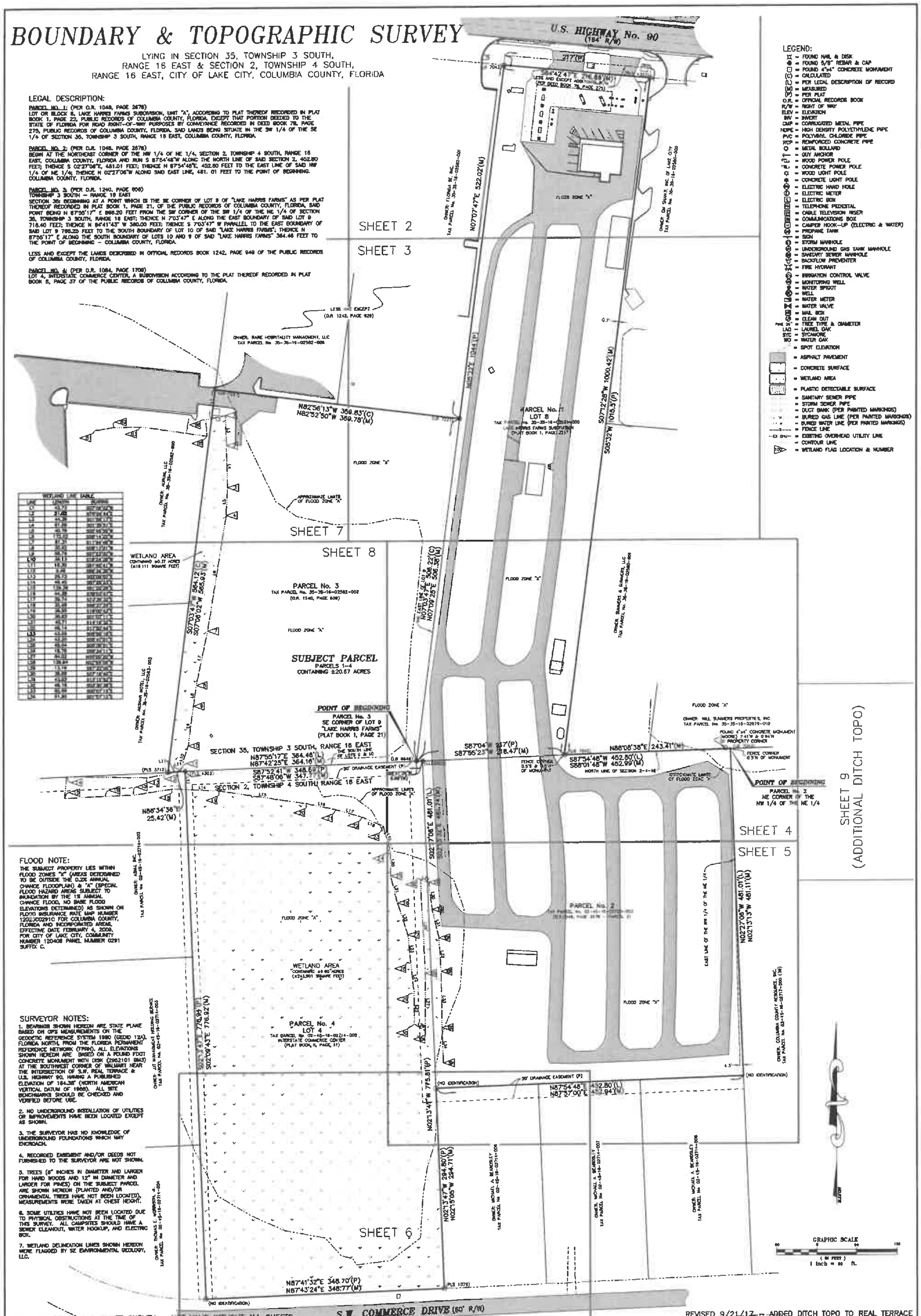
FIELD BOOK = SEE FOLDER
DRAFTED: DTW
CHECKED: LAF
SURVEY DATE: 2-21-23

JOB NUMBER: 23-084

SHEET
1 OF 1

BOUNDARY & TOPOGRAPHIC SURVEY

LYING IN SECTION 35, TOWNSHIP 3 SOUTH,
RANGE 16 EAST & SECTION 2, TOWNSHIP 4 SOUTH,
RANGE 16 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA



LEGAL DESCRIPTION:

PARCEL NO. 1: (PER O.R. 1048, PAGE 2678)
LOT OR BLOCK 8, LAKE HARRIS FARMS SUBDIVISION, UNIT "A", ACCORDING TO PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 22, PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA, EXCEPT THAT PORTION DEEDED TO THE STATE OF FLORIDA FOR ROAD RIGHT-OF-WAY PURPOSES BY CONVEYANCE RECORDED IN DEED BOOK 78, PAGE 275, PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA. SAID LANDS BEING SITUATE IN THE SW 1/4 OF THE SE 1/4 OF SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST, COLUMBIA COUNTY, FLORIDA.

PARCEL NO. 2: (PER O.R. 1048, PAGE 2678)
BEGIN AT THE NORTHEAST CORNER OF THE NW 1/4 OF NE 1/4, SECTION 2, TOWNSHIP 4 SOUTH, RANGE 16 EAST, COLUMBIA COUNTY, FLORIDA AND RUN S 87°54'48"W ALONG THE NORTH LINE OF SAID SECTION 2, 452.80 FEET; THENCE S 02°27'06"E, 481.01 FEET; THENCE N 87°54'48"E, 452.80 FEET TO THE EAST LINE OF SAID NW 1/4 OF NE 1/4; THENCE N 02°27'06"W ALONG SAID EAST LINE, 481.01 FEET TO THE POINT OF BEGINNING. COLUMBIA COUNTY, FLORIDA.

PARCEL NO. 3: (PER O.R. 1240, PAGE 606)
TOWNSHIP 3 SOUTH – RANGE 16 EAST
SECTION 35: BEGINNING AT A POINT WHICH IS THE SE CORNER OF LOT 9 OF "LAKE HARRIS FARMS" AS PER PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 21, OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA, SAID POINT BEING N 87°56'17" E 869.20 FEET FROM THE SW CORNER OF THE SW 1/4 OF THE NE 1/4 OF SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST; THENCE N 7°03'47" E ALONG THE EAST BOUNDARY OF SAID LOT 9 718.40 FEET; THENCE N 84°41'43" W 360.00 FEET; THENCE S 7°03'47" W PARALLEL TO THE EAST BOUNDARY OF SAID LOT 9 788.25 FEET TO THE SOUTH BOUNDARY OF LOT 10 OF SAID "LAKE HARRIS FARMS"; THENCE N 87°56'17" E ALONG THE SOUTH BOUNDARY OF LOTS 10 AND 9 OF SAID "LAKE HARRIS FARMS" 364.46 FEET TO THE POINT OF BEGINNING – COLUMBIA COUNTY, FLORIDA.

LESS AND EXCEPT THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 1242, PAGE 949 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.

PARCEL NO. 4: (PER O.R. 1084, PAGE 1709)
LOT 4, INTERSTATE COMMERCE CENTER, A SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 8, PAGE 37 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.

FLOOD NOTE:
THE SUBJECT PROPERTY LIES WITHIN FLOOD ZONES "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) & "A" (SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD, NO BASE FLOOD ELEVATIONS DETERMINED) AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 12023C0291C FOR COLUMBIA COUNTY, FLORIDA AND INCORPORATED AREAS, EFFECTIVE DATE FEBRUARY 4, 2009, FOR CITY OF LAKE CITY, COMMUNITY NUMBER 120406 PANEL NUMBER 0291 SUFFIX C.

SURVEYOR NOTES:
1. BEARINGS SHOWN HEREON ARE STATE PLANE BASED ON GPS MEASUREMENTS ON THE GEODETIC REFERENCE SYSTEM 1980 (GEOID 12A), FLORIDA NORTH, FROM THE FLORIDA PERMANENT REFERENCE NETWORK (FPRN). ALL ELEVATIONS SHOWN HEREON ARE BASED ON A FOUND FDOT CONCRETE MONUMENT WITH DISK (2962101 BM3) AT THE SOUTHWEST CORNER OF WALMART NEAR THE INTERSECTION OF S.W. REAL TERRACE & U.S. HIGHWAY 90, HAVING A PUBLISHED ELEVATION OF 164.38' (NORTH AMERICAN VERTICAL DATUM OF 1988). ALL SITE BENCHMARKS SHOULD BE CHECKED AND VERIFIED BEFORE USE.

2. NO UNDERGROUND INSTALLATION OF UTILITIES OR IMPROVEMENTS HAVE BEEN LOCATED EXCEPT AS SHOWN.

3. THE SURVEYOR HAS NO KNOWLEDGE OF UNDERGROUND FOUNDATIONS WHICH MAY ENCROACH.

4. RECORDED EASEMENT AND/OR DEEDS NOT FURNISHED TO THE SURVEYOR ARE NOT SHOWN.

5. TREES (6" INCHES IN DIAMETER AND LARGER FOR HARD WOODS AND 12" IN DIAMETER AND LARGER FOR PINES) ON THE SUBJECT PARCEL ARE SHOWN HEREON (PLANTED AND/OR ORNAMENTAL TREES HAVE NOT BEEN LOCATED). MEASUREMENTS WERE TAKEN AT CHEST HEIGHT.

6. SOME UTILITIES HAVE NOT BEEN LOCATED DUE TO PHYSICAL OBSTRUCTIONS AT THE TIME OF THIS SURVEY. ALL CAMPSITES SHOULD HAVE A SEWER CLEANOUT, WATER HOOKUP, AND ELECTRIC BOX.

7. WETLAND DELINEATION LINES SHOWN HEREON WERE FLAGGED BY SE ENVIRONMENTAL GEOLOGY, LLC.

THIS IS PART OF A 9 SHEET SURVEY – NOT VALID WITHOUT ALL SHEETS

REVISED 9/21/17 – ADDED DITCH TOPO TO REAL TERRACE

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS OR DELETIONS TO THIS MAP BY ANYONE OTHER THAN THIS SURVEYOR IS PROHIBITED.

I HEREBY CERTIFY THAT THE SURVEY DATA SHOWN HEREON, IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY PERFORMED UNDER MY SUPERVISION OF THE HEREON DESCRIBED PROPERTY, AND IT MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 472.027, FLORIDA STATUTES, AND CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE.

LEIGH ANN FLOWERS
PROFESSIONAL SURVEYOR & MAPPER
FLA. LICENSE NO. 6682

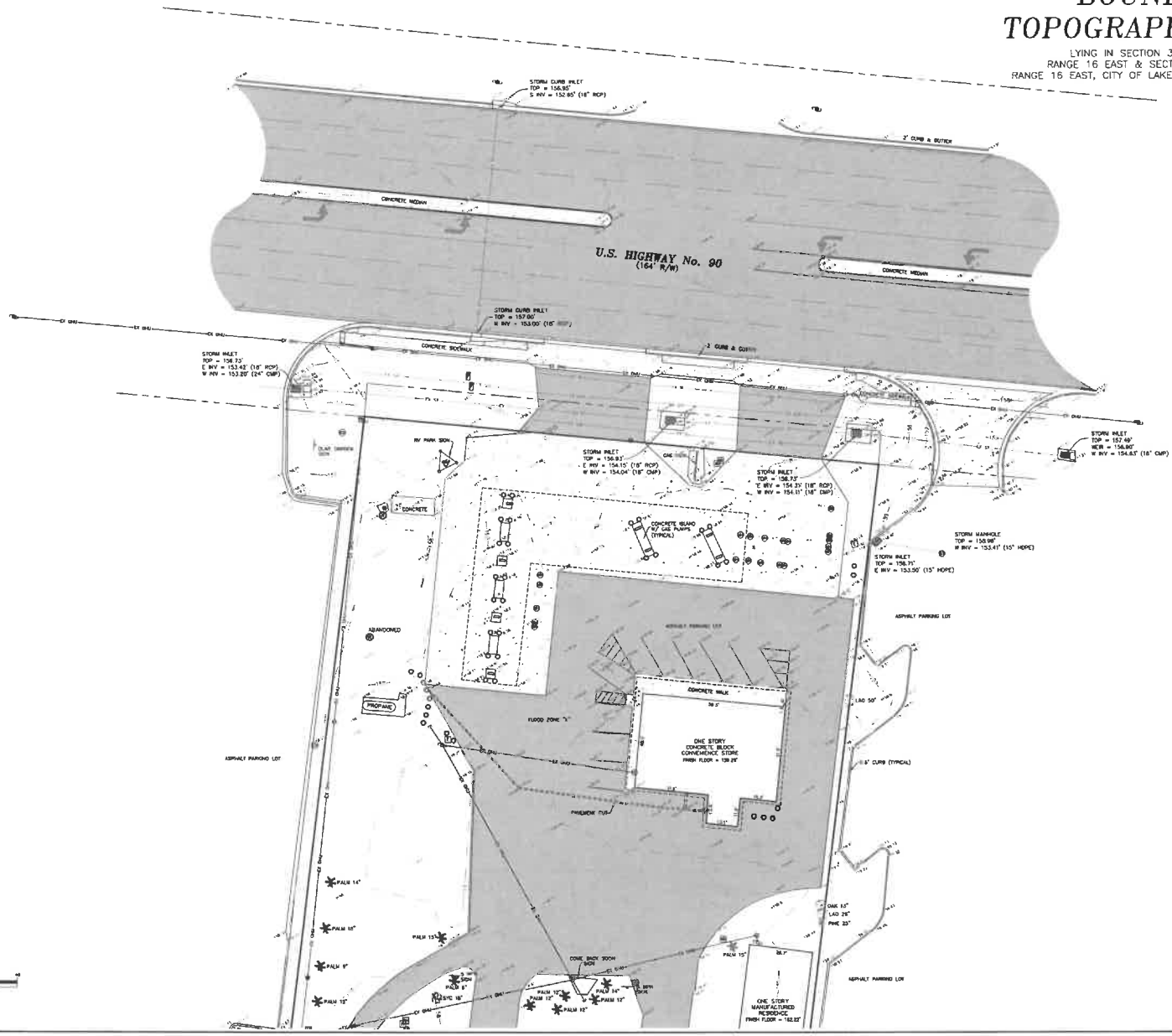
FLOWERS SURVEYING AND MAPPING INC
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE: (386) 454-8147
EMAIL: FLOWERSSURVEYING@GMAIL.COM

CERTIFIED TO:
******

FIELD BOOK – SEE FOLDER
DRAFTED: LAF
CHECKED: LAF
SURVEY DATE: 5/7/17
JOB NUMBER: 17-056

BOUNDARY & TOPOGRAPHIC SURVEY

LYING IN SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST & SECTION 2, TOWNSHIP 4 SOUTH, RANGE 16 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA



SEE SHEET 1 FOR SURVEYOR'S CERTIFICATION, LEGEND, & NOTES
THIS IS PART OF AN 8 SHEET SURVEY - NOT VALID WITHOUT BOTH SHEETS

LDDH ANN FLOWERS

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS OR DELETIONS TO THIS MAP BY ANYONE OTHER THAN THE SURVEYOR IS PROHIBITED.

I HEREBY CERTIFY THAT THE SURVEY DEPICTED HEREON IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY PERFORMED BY ME OR UNDER MY SUPERVISION OF THE BOUNDARIES OF DESCRIBED PROPERTY, AND IT MEETS THE MINIMUM TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 472.027, FLORIDA STATUTES, AND CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE.

PROFESSIONAL SURVEYOR & MAPPER
FLA. CERTIFICATE NO. 6662

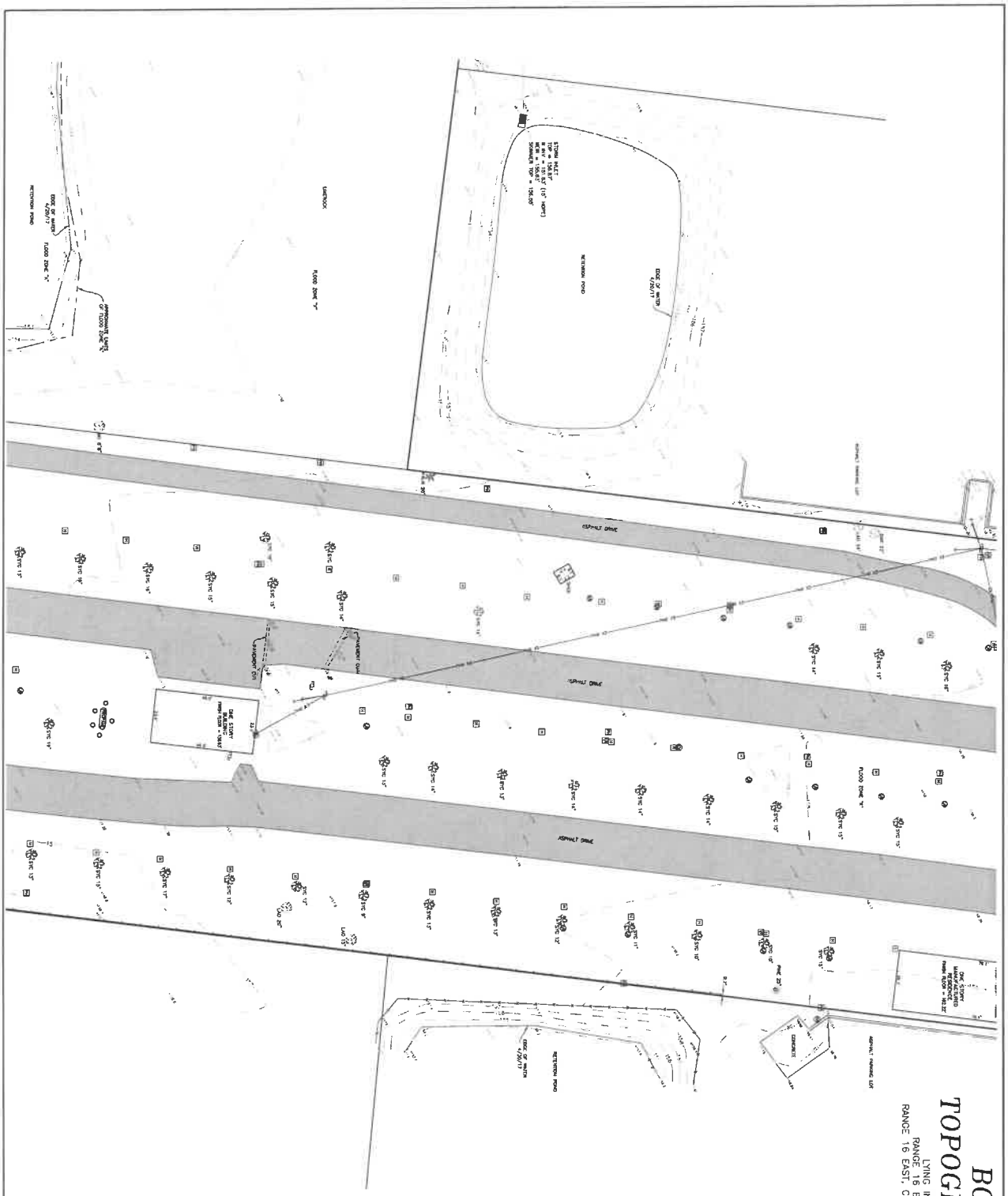
FLOWERS SURVEYING AND MAPPING INC
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE: (386) 454-8147
EMAIL: FLOWERSSURVEYING@GMAIL.COM

CERTIFIED TO:
—

FIELD BOOK - SEE FOLDER
DRAFTED: LAF
CHECKED: LAF
SURVEY DATE: 06/07/17

JOB NUMBER: 17-064

SHEET
2 OF 8



BOUNDARY & TOPOGRAPHIC SURVEY

LYING IN SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST & SECTION 2, TOWNSHIP 4 SOUTH, RANGE 16 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA

SEE SHEET 1 FOR SURVEYOR'S CERTIFICATION, LEGAL DESCRIPTIONS, LEGEND, & NOTES
THIS IS PART OF AN 8 SHEET SURVEY – NOT VALID WITHOUT BOTH SHEETS

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS OR DELETIONS TO THIS MAP BY ANYONE OTHER THAN THIS SURVEYOR IS PROHIBITED.

I HEREBY CERTIFY THAT THE SURVEY DATA SHOWN HEREON, IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY PERFORMED UNDER MY SUPERVISION OF THE HEREON DESCRIBED PROPERTY, AND IT MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 472.027, FLORIDA STATUTES, AND CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE.

LEIGH ANN FLOWERS

PROFESSIONAL SURVEYOR & MAPPER
FLA. LICENSE NO. 6962

FLOWERS SURVEYING AND MAPPING INC
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE: (386) 454-8147
EMAIL: FLOWERSSURVEYING@GMAIL.COM

CERTIFIED TO:

FIELD BOOK – SEE FOLDER	JOB NUMBER: 17-004
DRAFTED: LAF	SHEET 3 OF 8
CHECKED: LAF	
SURVEY DATE: 08/07/17	

BOUNDARY & TOPOGRAPHIC SURVEY

LYING IN SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST & SECTION 2, TOWNSHIP 4 SOUTH, RANGE 16 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA

SEE SHEET 1 FOR SURVEYOR'S CERTIFICATION, LEGAL DESCRIPTIONS, LEGEND, & NOTES
THIS IS PART OF AN 8 SHEET SURVEY – NOT VALID WITHOUT BOTH SHEETS

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS OR DELETIONS TO THIS MAP BY ANYONE OTHER THAN THIS SURVEYOR IS PROHIBITED.

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LEIGH ANN FLOWERS
PROFESSIONAL SURVEYOR & MAPPER
FLA. LICENSE NO. 6502

FLOWERS SURVEYING AND MAPPING INC
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE: (386) 454-8147
EMAIL: FLOWERSSURVEYING@GMAIL.COM

CERTIFIED TO:

FIELD BOOK – SEE FOLDER	JOB NUMBER: 17-056
DRAFTED: LAF	SHEET 4 OF 8
CHECKED: LAF	
SURVEY DATE: 08/07/17	

BOUNDARY & TOPOGRAPHIC SURVEY

LYING IN SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST & SECTION 2, TOWNSHIP 4 SOUTH, RANGE 16 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA

SEE SHEET 1 FOR SURVEYOR'S CERTIFICATION, LEGAL DESCRIPTIONS, LEGEND, & NOTES
THIS IS PART OF AN 8 SHEET SURVEY – NOT VALID WITHOUT BOTH SHEETS

LEIGH ANN FLOWERS

PROFESSIONAL SURVEYOR & MAPPER
FLA. LICENSE NO. 6902

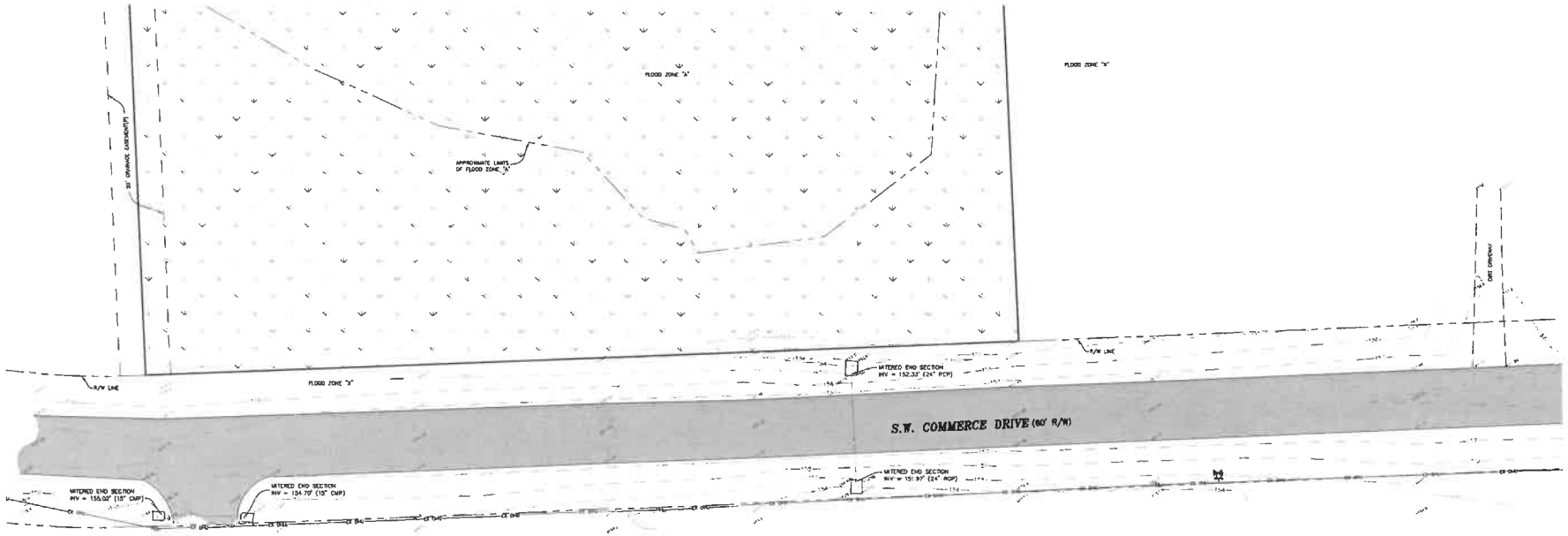
FLOWERS SURVEYING AND MAPPING INC
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE: (386) 454-8147
EMAIL: FLOWERSSURVEYING@GMAIL.COM

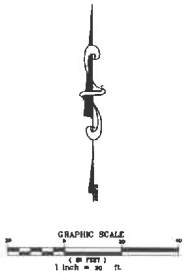
CERTIFIED TO:

FIELD BOOK – SEE FOLDER	JOB NUMBER: 17-056
DRAFTED: LAF	SHEET 5 OF 8
CHECKED: LAF	
SURVEY DATE: 06/07/17	

BOUNDARY & TOPOGRAPHIC SURVEY

LYING IN SECTION 35, TOWNSHIP 3 SOUTH,
RANGE 16 EAST & SECTION 2, TOWNSHIP 4 SOUTH,
RANGE 16 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA





SEE SHEET 1 FOR SURVEYOR'S CERTIFICATION, LEGAL DESCRIPTIONS, LEGEND, & NOTES
THIS IS PART OF AN 8 SHEET SURVEY – NOT VALID WITHOUT BOTH SHEETS

FLOWERS SURVEYING AND MAPPING INC
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE: (386) 454-8147
EMAIL: FLOWERSSURVEYING@GMAIL.COM

CERTIFIED TO:
******

FIELD BOOK – SEE FOLDER
DRAFTED: LAF
CHECKED: LAF
SURVEY DATE: 09/07/17

JOB NUMBER: 17-099

SHEET
6 OF 8

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS OR DELETIONS TO SURVEY MAPS BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING PARTY.

I HEREBY CERTIFY THAT THE SURVEY FOR A SKETCH, REPORT OR MAP OF SURVEY REPRESENTED HEREON WAS MADE UNDER MY RESPONSIBLE DIRECTION AND SUPERVISION AND THAT IT MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17.051, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

LEIGH ANN FLOWERS
PROFESSIONAL SURVEYOR & MAPPER
FLA. LICENSE NO. 6662

BOUNDARY & TOPOGRAPHIC SURVEY

LYING IN SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST & SECTION 2, TOWNSHIP 4 SOUTH, RANGE 16 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA

SEE SHEET 1 FOR SURVEYOR'S CERTIFICATION, LEGAL DESCRIPTIONS, LEGEND, & NOTES
THIS IS PART OF AN 8 SHEET SURVEY – NOT VALID WITHOUT BOTH SHEETS

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I HEREBY CERTIFY THAT THE SURVEY DATA SHOWN HEREON, IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY PERFORMED UNDER MY SUPERVISION OF THE HEREON DESCRIBED PROPERTY, AND IT MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 472.027, FLORIDA STATUTES, AND CHAPTER 61-17, FLORIDA ADMINISTRATIVE CODE.

LEIGH ANN FLOWERS

PROFESSIONAL SURVEYOR & MAPPER
FLA. LICENSE NO. 6902

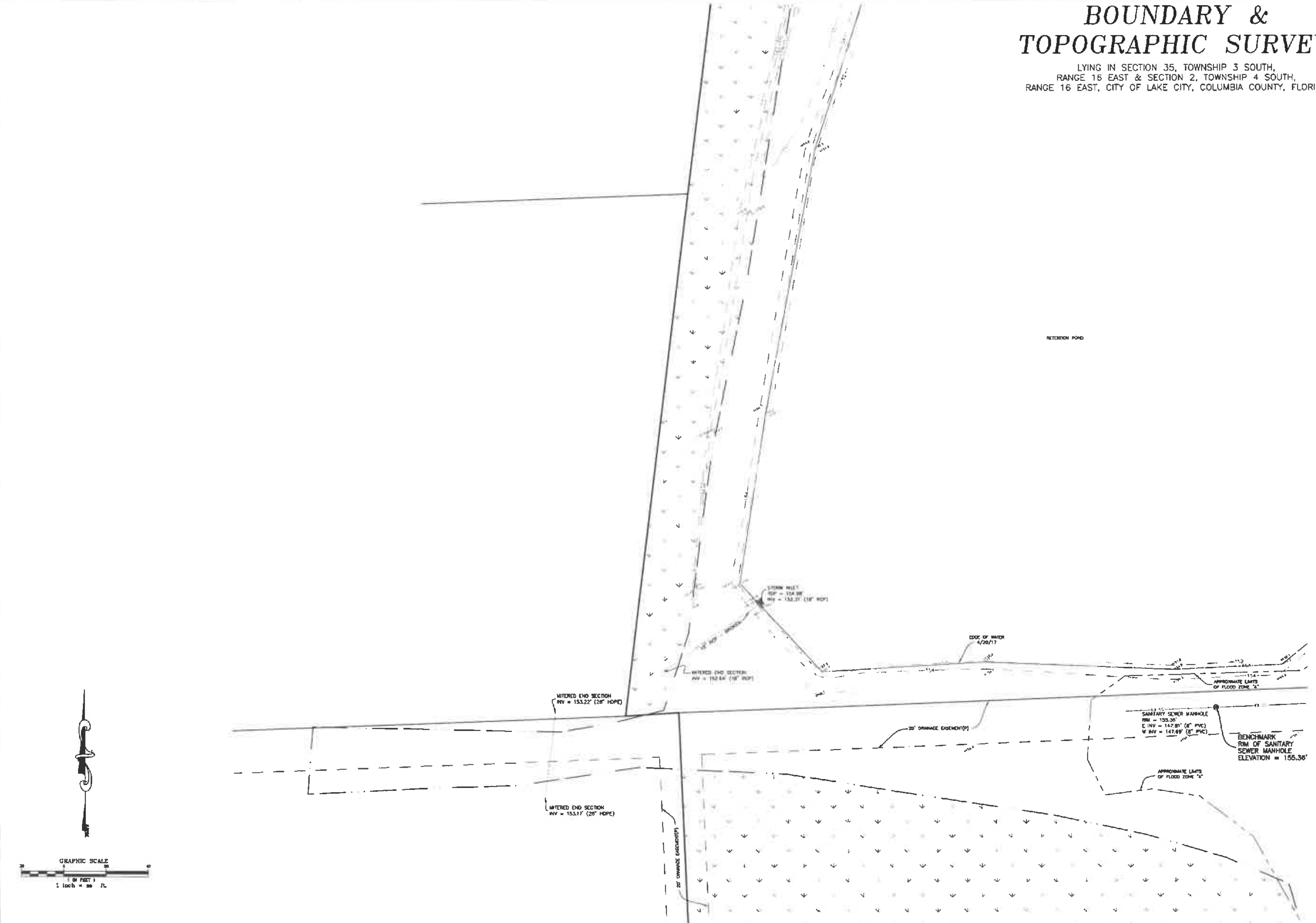
FLOWERS SURVEYING AND MAPPING INC
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE: (386) 454-8147
EMAIL: FLOWERSSURVEYING@GMAIL.COM

CERTIFIED TO:
*****

FIELD BOOK – SEE FOLDER	JOB NUMBER 17-068
DRAFTED: LAF	
CHECKED: LAF	SHEET 7 OF 8
SURVEY DATE: 05/07/17	

BOUNDARY & TOPOGRAPHIC SURVEY

LYING IN SECTION 35, TOWNSHIP 3 SOUTH,
RANGE 16 EAST & SECTION 2, TOWNSHIP 4 SOUTH,
RANGE 16 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA



SEE SHEET 1 FOR SURVEYOR'S CERTIFICATION, LEGAL DESCRIPTIONS, LEGEND, & NOTES

THIS IS PART OF AN 8 SHEET SURVEY – NOT VALID WITHOUT BOTH SHEETS

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS OR DELETIONS TO THIS MAP BY ANYONE OTHER THAN THIS SURVEYOR IS PROHIBITED.

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LEIGH ANN FLOWERS

PROFESSIONAL SURVEYOR & MAPPER
FLA. LICENSE NO. 6602

FLOWERS SURVEYING AND MAPPING INC
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE: (386) 454-8147
EMAIL: FLOWERSSURVEYING@GMAIL.COM

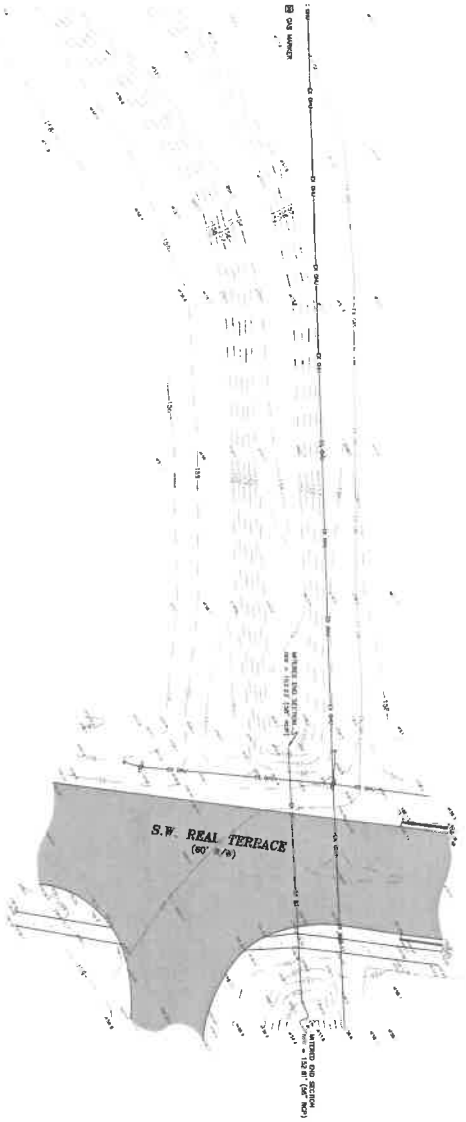
CERTIFIED TO:
******

FIELD BOOK – SEE FOLDER
DRAFTED: LAF
CHECKED: LAF
SURVEY DATE: 06/07/17

JOB NUMBER: 17-056

BOUNDARY & TOPOGRAPHIC SURVEY

LYING IN SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST & SECTION 2, TOWNSHIP 4 SOUTH, RANGE 16 EAST, CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA



GRAPHIC SCALE
1 inch = 40 ft.

NORTH

SEE SHEET 1 FOR SURVEYOR'S CERTIFICATION, LEGAL DESCRIPTIONS, LEGEND, & NOTES
THIS IS PART OF A 9 SHEET SURVEY – NOT VALID WITHOUT BOTH SHEETS

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS OR DELETIONS TO THIS MAP BY ANYONE OTHER THAN THIS SURVEYOR IS PROHIBITED.

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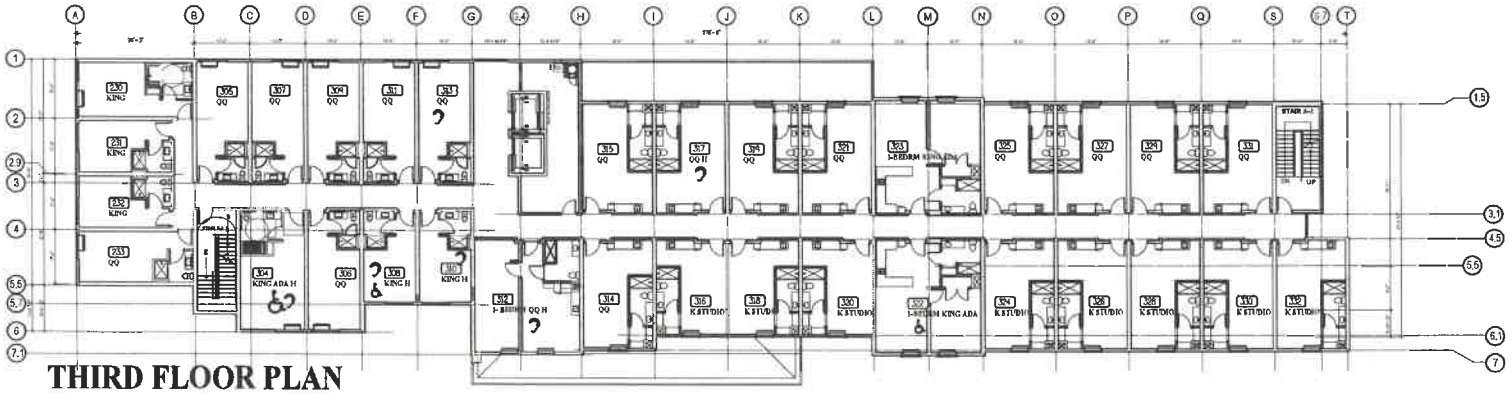
LEIGH ANN FLOWERS

PROFESSIONAL SURVEYOR & MAPPER
FLA. LICENSE NO. 6902

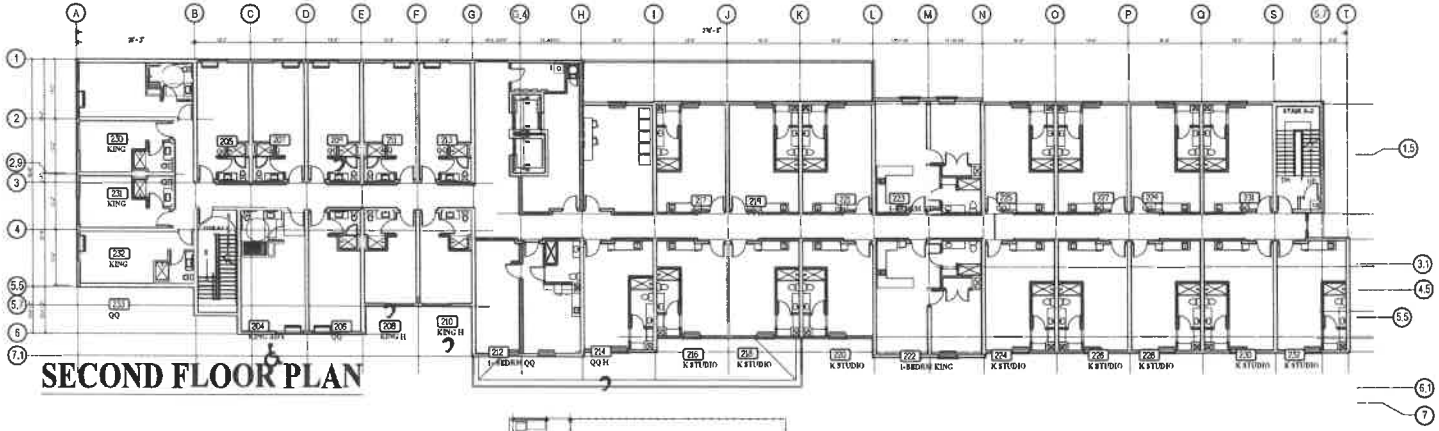
FLOWERS SURVEYING AND MAPPING INC
207 SE CONDOR GLEN
HIGH SPRINGS, FLORIDA 32643
PHONE: (386) 454-8147
EMAIL: FLOWERSSURVEYING@GMAIL.COM

CERTIFIED TO:

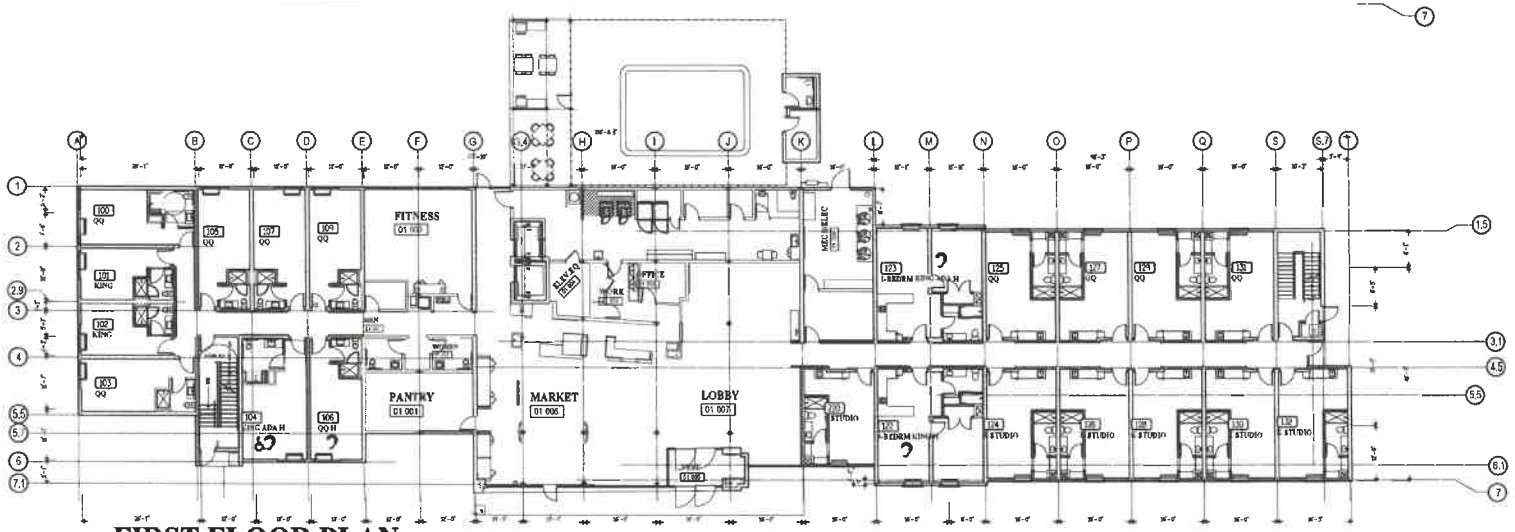
FIELD BOOK – SEE FOLDER	JOB NUMBER: 17-066
DRAWN: LAF	SHEET 9 OF 9
CHECKED: LAF	
SURVEY DATE: 06/07/17	



THIRD FLOOR PLAN



SECOND FLOOR PLAN

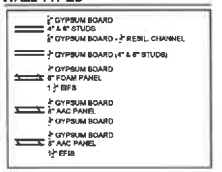


FIRST FLOOR PLAN

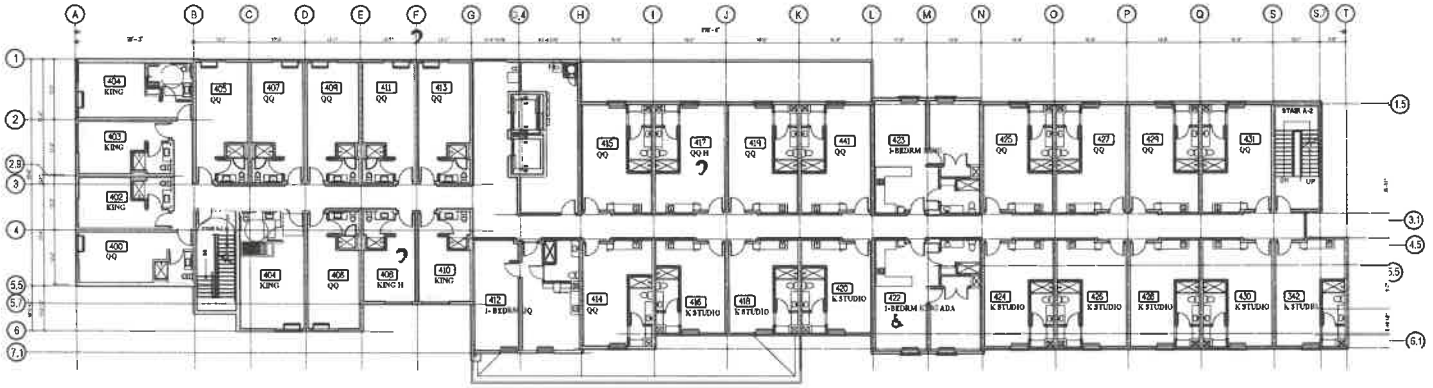
GENERAL NOTES

1. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHT REQUIREMENTS
2. BASIS OF STRUCTURAL DESIGN IS WOOD FRAME.
3. WAYFINDING SIGNAGE BY OWNER. REFER TO SIGNAGE PACKAGE.
4. ALL CONSTRUCTION IS INTENDED TO BE IN CONFORMANCE WITH FEDERAL & STATE LAWS, CURRENT LOCAL ORDINANCES & BUILDING CODES AND ACCESSIBILITY CODES.
5. AUTOMATIC FIRE SPRINKLER SYSTEM MUST BE REVIEWED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.
6. FIRE ALARM SYSTEM IS REQUIRED. SYSTEM MUST BE REVIEWED AND APPROVED BY THE FIRE DEPARTMENT.
7. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH MANUFACTURER ON FIXTURES, EQUIPMENT SUPPLIED PRIOR TO CONSTRUCTION.
8. REFER TO ENLARGED UNIT PLANS FOR UNIT DOOR NUMBERS.
9. WINDOWS WITHIN 24" OF DOOR TO BE SAFETY GLASS. ALL GLAZING IN HAZARDOUS LOCATIONS SHOULD BE TEMPERED FOR IMPACT RESISTANCE. ALL GLASS WITHIN 18" FROM DOOR WITHIN 24" OF ARC FROM DOORS EDGE AND IF BOTTOM OF EDGE OF GLAZING IS LESS THAN 60" ABOVE THE WALKING SURFACE MUCH GLASS SHOULD BE TEMPERED.
10. BLOCKING IS REQUIRED FOR ANY WALL HUNG EQUIPMENT TOILET ACCESSORIES, SHELVING, SHOWNER SEAT, EXTERIOR LIGHTING FIXTURES, ETC.
11. REFER TO ENLARGED PLANS FOR ADDITIONAL INFORMATION INCLUDING DIMENSIONS. ENLARGED PLANS TAKE PRECEDENCE OVER SMALLER SCALED DRAWINGS.
12. FOR DOOR FINISHES, REFER TO DOOR SCHEDULE.

WALL TYPES



avid
CANDLEWOOD SUITES

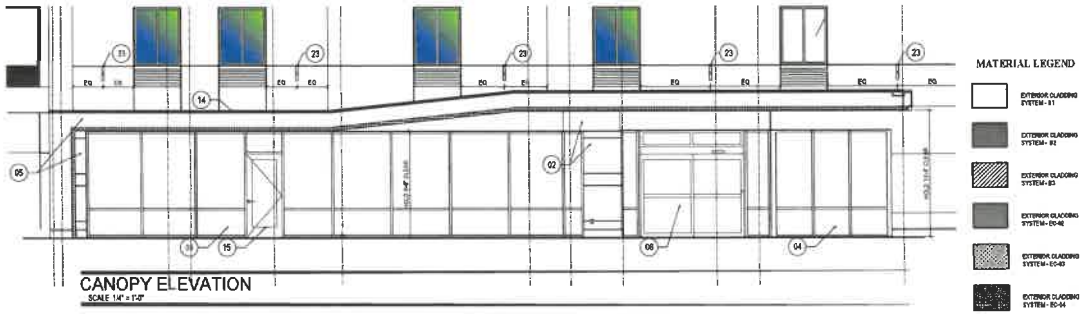


FORTH FLOOR PLAN

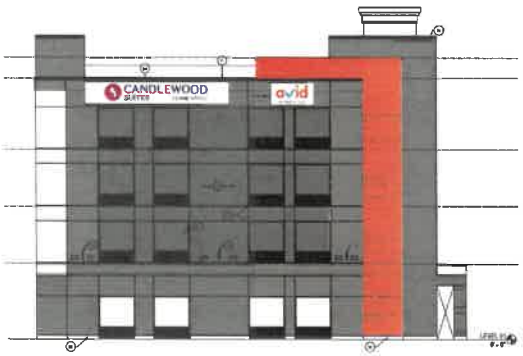
ROOM MATRIX														
	1 BED QQ	1 BED QQ H	1 BED KING	1 BED KING ADA	1 BED KING ADA H	1 BED KING H	KING	KSTUDIO	KING ADA	KING ADA H	KING H	QQ	QQ H	TOTAL
	2	1	3	3	1	1	13	30	1	2	5	53	4	119
HEARING		1			1	1				2	5		4	14
ADA				3	1				1	2				7

SOUTH ELEVATION
SCALE 1/8" = 1'-0"

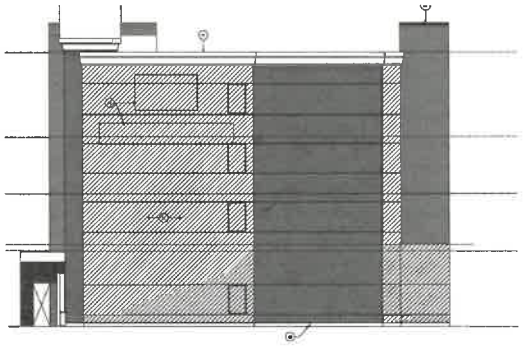
NORTH ELEVATION
SCALE 1/8" = 1'-0"



CANOPY ELEVATION
SCALE 1/4" = 1'-0"

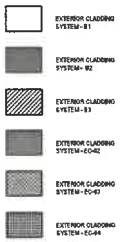


WEST ELEVATION 01



EAST ELEVATION 01
SCALE: 1/8" = 1'-0"

MATERIAL LEGEND



Gmuer ENGINEERING

2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928
gmuereng.com

April 23, 2024

Suwannee River Water Management District

Re: Lake City Hotels Phase 2

This permit modification is submitted for the construction of an additional hotel within the drainage area of the master stormwater management system as permitted under SRWMD ERP 209165-3.

The original master plan was permitted under SRWMD ERP 209165-3 where the proposed wet stormwater facility was designed to provide water quality treatment and stormwater discharge attenuation for a master site plan that included runoff from two existing hotels, an existing restaurant, three new hotels, and two new restaurants, with associated driveway connections and parking. Under this master permit, the following quantities of impervious area were designed to be routed through the proposed wet stormwater management facility.

Permitted Impervious Areas under SRWMD ERP 209165-3		
Impervious (Existing) *	182,297 sf	4.1850 ac
Impervious (Proposed)	335,589 sf	7.7041 ac
Impervious (Future)	23,881 sf	0.5482 ac
Total Permitted Impv.	541,767 sf	12.4373 ac

* Existing Impervious Aera consisted of the Quality Inn, Ruby Tuesdays, and Holiday Inn to the west of the site

Construction began on this permitted master system which included the complete wet stormwater management facility as designed and permitted, the complete master storm piping system that serves this master system. However, the scope of the proposed impervious area was reduced to those site improvements needed to serve the first hotel, Hotel A. This included the driveway connections to the western existing impervious areas, reconstructed driveway to US90, and the surface parking needed for Hotel A. This scope was referenced as Phase 1 in the associated plans and in the remainder of this report. An as-built has been submitted for this change. The resulting impervious area accounting following the Phase 1 construction into the master stormwater system are as follows.

Impervious Areas Accounting with Phase 1 As-Built		
Impervious (Existing) *	182,297 sf	4.1850 ac
Impervious (Phase 1)	107,983 sf	2.4789 ac
Impervious (Future)	251,487 sf	5.7733 ac
Total Permitted Impv.	541,767 sf	12.4373 ac

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

9225 CR 49 • LIVE OAK, FLORIDA 32060 • TELEPHONE 386/362-1001 • 800/226-1066 • FAX 386/362-1056
mysuwanneeriver.com

January 4, 2018

Mahendra Patel
AURUM, L.L.C.
162 NW Birdie Lane
Lake City, FL 32056-0575

SUBJECT: Permit Number ERP-023-209165-3
Lake City Hotels

Dear Mahendra Patel:

Enclosed is your individual permit issued by the Suwannee River Water Management District on January 04, 2018. This permit is a legal document and should be kept with your other important documents. Permit issuance does not relieve you from the responsibility of obtaining any necessary permits from any federal, state, or local agencies for your project.

Noticing Your Permit:
For noticing instructions, please refer to the noticing materials in this package regarding closing the point of entry for someone to challenge the issuance of your permit. Please note that if a timely petition for administrative hearing is filed, your permit will become non-final and any activities that you choose to undertake pursuant to your permit will be at your own risk.

Compliance with Permit Conditions:
To submit your required permit compliance information, go to the District's website at https://permitting.sjrwmd.com/srepermitting/jsp/start.jsp. Click to sign-in to your existing account or to create a new account. Select the "Apply/Submit" tab, select "Submit Compliance Data", enter your permit number, and select "No Specific Date" for the Compliance Due Date Range. You will then be able to view all the compliance submittal requirements for your project. Select "the compliance item that you are ready to submit and then attach the appropriate information or form. The forms to comply with your permit conditions are available at floridaswater.com/permitting under the section "Handbooks, forms, fees, final orders". Click on forms to view all permit compliance forms, then scroll to the ERP application forms section and select the applicable compliance forms. Alternatively, if you have difficulty finding forms or need copies of the appropriate forms, please contact the Resource Management Division at (386) 362-1001.

Transferring Your Permit:
Your permit requires you to notify the District in writing within 30 days of any change in ownership or control of the project or activity covered by the permit, or within 30 days of any change in ownership or control of the real property on which the permitted project or activity is located or occurs. You will need to provide the District with the information specified in rule 62-330.340, Florida Administrative Code (F.A.C.). Generally, this will require you to complete and submit Form 62-330.340(1), "Request to Transfer Permit".

Please note that a permittee is liable for compliance with the permit before the permit is transferred. The District, therefore, recommends that you request a permit transfer in advance in

accordance with the applicable rules. You are encouraged to contact District staff for assistance with this process.

Thank you and please let us know if you have additional questions. For general questions contact us at (386) 362-1001.

Sincerely,

Hugh Thomas
Executive Director

Enclosures: Permit

cc: District Permit File

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

9225 CR 49 • LIVE OAK, FLORIDA 32060 • TELEPHONE 386/362-1001 • 800/226-1066 • FAX 386/362-1056
mysuwanneeriver.com

ERP Individual Permit

PERMITTEE:
Mahendra Patel
AURUM, L.L.C.
162 NW Birdie Lane
Lake City, FL 32056-0575

PERMIT NUMBER: ERP-023-209165-3
DATE ISSUED: January 04, 2018
DATE EXPIRES: January 04, 2023
COUNTY: Columbia
TRS: S35 T3S R16E, S2 T4S R16E

PROJECT: Lake City Hotels

Upon completion, the approved entity to which operation and maintenance maybe transferred pursuant to rule 62-330.310 and 62-330.340 or 40B-4.1130, Florida Administrative Code (F.A.C) shall be:

Mahendra Patel
AURUM, L.L.C.
162 NW Birdie Lane
Lake City, FL 32056-0575

Based on the information provided to the Suwannee River Water Management District (District), the above mentioned project has met the conditions of issuance as found in subsection 62-330.301, subsections 62-330.407 through 62-330.635, or subsection 40B-4.3030, F.A.C. The permit is hereby in effect for the activity description below:

Previous permit was for the construction and operation of a surface water management system serving 6.10 acres of impervious surface on a total project area of 10.10 acres. This modification consists of relocating the master stromwater facility and the addition of 8.25 acres of impervious on a total project area of 17.61 acres. When constructed the project shall be in accordance with the application package submitted by Mahendra Patel, of Aurum, LLC., as an authorized agent for the Columbia County Board of County Commissioners, and the signed and sealed plans certified on October 31, 2017, by Christopher Gmuer, P.E., of Gmuer Engineering, LLC.

As the permittee and/or operation and maintenance entity, it is your responsibility to ensure that adverse off-site impacts do not occur either during or after the construction. Any additional construction or alterations not authorized by this permit may result in flood control or water quality problems both on and off site and will be a violation of District rule.

You and any other substantially affected persons are entitled to request an administrative hearing or mediation. Please refer to the enclosed notice of rights.

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.

2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the District staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.

3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5, F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.

4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the District a fully executed Form 62-330.350(1), "Construction Commencement Notice,"[10-1-13], incorporated by reference herein (http://www.flrules.org/Gateway/reference.asp?No=Ref-02505), indicating the expected start and completion dates. A copy of this form may be obtained from the District, as described in subsection 62-330.010(5), F.A.C. If available, an District website that fulfills this notification requirement may be used in lieu of the form.

5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.

6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:

    1. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex — "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or

    2. For all other activities — "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].

3. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.

7. If the final operation and maintenance entity is a third party:

    1. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.

    2. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

8. The permittee shall notify the District in writing of changes required by any other regulatory District that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

9. This permit does not:

    1. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;

    2. Convey to the permittee or create in the permittee any interest in real property;

    3. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or

    4. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.

10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

11. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.

12. The permittee shall notify the District in writing:

    1. Immediately if any previously submitted information is discovered to be inaccurate; and

    2. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C.

This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

13. Upon reasonable notice to the permittee, District staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.

14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.

16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.

17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the District will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with Rule 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

WITHIN 30 DAYS AFTER COMPLETION OF THE PROJECT, THE PERMITTEE SHALL NOTIFY THE DISTRICT, IN WRITING, THAT THE FACILITIES ARE COMPLETE.

AUTHORIZED BY: Suwannee River Water Management District

By: 

Hugh Thomas
Executive Director

NOTICE OF RIGHTS

1. A person whose substantial interests are or may be determined has the right to request an administrative hearing by filing a written petition with the Suwannee River Water Management District (District), or may choose to pursue mediation as an alternative remedy under Section 120.569 and 120.573, Florida Statutes, (F.S.), before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for pursuing mediation are set forth in Sections 120.569 and 120.57 F.S. Pursuant to Rule 28-106.111, Florida Administrative Code, (F.A.C.), the petition must be filed at the office of the District Clerk at District Headquarters, 9225 C.R. 49, Live Oak, Florida 32060 within twenty-one (21) days of receipt of written notice of the decision or within twenty-one (21) days of newspaper publication of the notice of District decision (for those persons to whom the District does not mail actual notice). A petition must comply with Chapter 28-106, F.A.C.

2. If the Governing Board takes action which substantially differs from the notice of District decision to grant or deny the pe1mit application, a person whose substantial interests are or may be determined has the right to request an administrative hearing or may choose to pursue mediation as an alternative remedy as described above. Pursuant to Rule 28-106.111, F.A.C., the petition must be filed at the office of the District Clerk at District Headquarters, 9225 C.R. 49, Live Oak, Florida 32060 within twenty-one (21) days of receipt of written notice of the decision or within twenty-one (21) days of newspaper publication of the notice of District decision (for those persons to whom the District does not mail actual notice). Such a petition must comply with Chapter 28-106, F.A.C.

3. A substantially interested person has the right to a formal administrative hearing pursuant to Section 120.569 and 120.57(1), F.S., where there is a dispute between the District and the party regarding an issue of material fact. A petition for formal hearing must comply with the requirements set forth in Rule 28-106.201, F.A.C.

4. A substantially interested person has the right to an informal hearing pursuant to Section 120.569 and 120.57(2), F.S., where no material facts are in dispute. A petition for an informal hearing must comply with the requirements set forth in Rule 28-106.301, F.A.C.

5. A petition for an administrative hearing is deemed filed upon receipt of the petition by the Office of the District Clerk at the District Headquarters in Live Oak, Florida.

6. Failure to file a petition for an administrative hearing within the requisite time frame shall constitute a waiver of the right to an administrative hearing pursuant to Rule 28-106.111, F.A.C.

7. The right to an administrative hearing and the relevant procedures to be followed is governed by Chapter 120, Florida Statutes, and Chapter 28-106, F.A.C.

8. Pursuant to Section 120.68, F.S., a person who is adversely affected by final District action may seek review of the action in the District Court of Appeal by filing a notice of appeal pursuant to the Florida Rules of Appellate Procedure, within 30 days of the rendering of the final District action.

9. A party to the proceeding before the District who claims that a District order is inconsistent with the provisions and purposes of Chapter 3 73, F. S., may seek review of the order pursuant to Section 373.114, F.S., by the Florida Land and Water Adjudicatory Commission, by filing a request for review with the Commission and serving a copy of the Department of Environmental Protection and any person named in the order within 20 days of adoption of a rule or the rendering of the District order.

10. For appeals to the District Courts of Appeal, a District action is considered rendered after it is signed on behalf of the District, and is filed by the District Clerk.

11. Failure to observe the relevant time frames for filing a petition for judicial review, or for Commission review, will result in waiver of the right to review.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Notice of Rights has been sent to:

Mahendra Patel
AURUM, L.L.C.
162 NW Birdie Lane
Lake City, FL 32056-0575
(386) 752-2209

This January 04, 2018

Deputy Clerk
Suwannee River Water Management District
9225 C.R. 49
Live Oak, Florida 32060
386.362.1001 or 800.226.1066 (Florida only)

cc: File Number: ERP-023-209165-3

NOTICING INFORMATION
Dear Permittee:

Please be advised that the Suwannee River Water Management District (District) has not published a notice in the newspaper advising the public that it has issued a permit for this project.

Newspaper publication, using the District's form, notifies members of the public of their right to challenge the issuance of the permit. If proper notice is given by newspaper publication, then there is a 21-day time limit to file a petition challenging the issuance of the permit.

To close the point of entry for filing a petition, you may publish (at your own expense) a onetime notice of the District's decision in a newspaper of general circulation within the affected area as defined in Section 50.011 of the Florida Statutes. If you do not publish a newspaper notice, the time to challenge the issuance of your permit will not expire.

A copy of the notice and a partial list of newspapers of general circulation are attached for your convenience. However, you are not limited to those listed newspapers. If you choose to close the point of entry and the notice is published, the newspaper will return to you an affidavit as proof of publication. In accordance with 40B-1.1010(4), F.A.C., a copy of the affidavit shall be provided to the District within 14 days of publication. A scanned copy of the affidavit may be forwarded to Tilda Musgrove by email at *tjm@srwmd.org* (preferred method) or send the original affidavit of publication to:

Tilda Musgrove
Resource Management
9225 CR 49
Live Oak, FL 32060

If you have any questions, please contact me at 386.362.1001.
Sincerely,

Tilda Musgrove

Tilda Musgrove
Business Resource Specialist
Resource Management

NOTICE OF AGENCY ACTION TAKEN BY THE
SUWANNEE RIVER WATER MANAGEMENT DISTRICT

Notice is given that the following permit was issued on _____:
(Name and address of applicant)_____
permit#_____. The project is located in _____County, Section _____, Township _____ South, Range _____ East. The permit authorizes a surface water management system on _____ acres for _____ known as _____. The receiving water body is _____.
A person whose substantial interests are or may be affected has the right to request an administrative hearing by filing a written petition with the Suwannee River Water Management District (District). Pursuant to Chapter 28-106 and Rule 40BB-1.1010, Florida Administrative Code (F.A.C.), the petition must be filed (received) either by delivery at the office of the Resource Management Business Resource Specialist at District Headquarters, 9225 CR 49, Live Oak FL 32060 or by e-mail to tjm@srwmd.org, within twenty-one (21) days of newspaper publication of the notice of intended District decision (for those persons to whom the District does not mail or email actual notice). A petition must comply with Sections 120.54(5)(b)4. and 120.569(2)(c), Florida Statutes (F.S.), and Chapter 28106, F.A.C. The District will not accept a petition sent by facsimile (fax). Mediation pursuant to Section 120.573, F.S., is not available.

A petition for an administrative hearing is deemed filed upon receipt of the complete petition by the District Clerk at the District Headquarters in Live Oak, FL during the District's regular business hours. The District's regular business hours are 8 a.m. – 5 p.m., excluding weekends and District holidays. Petitions received by the District Clerk after the District's regular business hours shall be deemed filed as of 8 a.m. on the next regular District business day.

The right to an administrative hearing and the relevant procedures to be followed are governed by Chapter 120, Florida Statutes, Chapter 28-106, Florida Administrative Code, and Rule 40B-1.1010, Florida Administrative Code. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means the District's final action may be different from the position taken by it in this notice. **Failure to file a petition for an administrative hearing within the requisite time frame shall constitute a waiver of the right to an administrative hearing. (Rule 28-106.111, F.A.C.).**

If you wish to do so, you may request the Notice of Rights for this permit by contacting the Business Resource Specialist in the Division of Resource Management (RM), 9225 CR 49, Live Oak,, FL 32060, or by phone at 386.362.1001.

NEWSPAPER ADVERTISING

ALACHUA
Gainesville Sun Legal Advertising
PO Box 14747
Gainesville, FL 32614
352.372.4222

BRADFORD
Bradford County Telegraph, Legal Advertising
P. O. Drawer A
Starke, FL 32901
904-964-6305/ fax 904-964-8628

COLUMBIA
Lake City Reporter
180 E Duval Street
Lake City, FL 32055
386.754.0401

DIXIE
Dixie County Advocate
174 County Road 351
Cross City, FL 32628
352.498.3312

GILCHRIST
Gilchrist County Journal
207 N Main St
Trenton, FL 32693
352.463.7135

HAMILTON
Jasper News
521 Demorest Street SE
Live Oak, FL 32064
386.362.1734

JEFFERSON
Monticello News
PO Drawer 772
Madison, FL 32344
850.997.3568

LAFAYETTE
Mayo Free Press
521 Demorest Street SE
Live Oak, FL 32064
386.362.1734

LEVY
Levy County Journal
PO Box 159
Bronson, FL 32621
352.486.2312

MADISON
Madison Carrier
PO Drawer 772
Madison, FL 32344
850.973.4141

SUWANNEE
Suwannee Democrat
521 Demorest Street SE
Live Oak, FL 32064
386.364.1734

TAYLOR
Taco Times
PO Box 888
Perry, FL 32348
850.584.5513

UNION
Union County Times
125 E Main Street
Lake Butler, FL 32054
386.496.2261

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

9225 CR 49 • LIVE OAK, FLORIDA 32060 • TELEPHONE 386/362-1001 • 800/226-1066 • FAX 386/362-1056
mysuwanneeriver.com

January 4, 2018

Janak Shukla
ERA INVESTMENTS LLC
3010 W Us Highway 90
Lake City, FL 32055-7711

SUBJECT: Permit Number ERP-023-209165-3
Lake City Hotels

Dear Janak Shukla:

Enclosed is your individual permit issued by the Suwannee River Water Management District on January 04, 2018. This permit is a legal document and should be kept with your other important documents. Permit issuance does not relieve you from the responsibility of obtaining any necessary permits from any federal, state, or local agencies for your project.

Noticing Your Permit:
For noticing instructions, please refer to the noticing materials in this package regarding closing the point of entry for someone to challenge the issuance of your permit. Please note that if a timely petition for administrative hearing is filed, your permit will become non-final and any activities that you choose to undertake pursuant to your permit will be at your own risk.

Compliance with Permit Conditions:
To submit your required permit compliance information, go to the District's website at https://permitting.sjrwmd.com/srepermitting/jsp/start.jsp. Click to sign-in to your existing account or to create a new account. Select the "Apply/Submit" tab, select "Submit Compliance Data", enter your permit number, and select "No Specific Date" for the Compliance Due Date Range. You will then be able to view all the compliance submittal requirements for your project. Select "the compliance item that you are ready to submit and then attach the appropriate information or form. The forms to comply with your permit conditions are available at floridaswater.com/permitting under the section "Handbooks, forms, fees, final orders". Click on forms to view all permit compliance forms, then scroll to the ERP application forms section and select the applicable compliance forms. Alternatively, if you have difficulty finding forms or need copies of the appropriate forms, please contact the Resource Management Division at (386) 362-1001.

Transferring Your Permit:
Your permit requires you to notify the District in writing within 30 days of any change in ownership or control of the project or activity covered by the permit, or within 30 days of any change in ownership or control of the real property on which the permitted project or activity is located or occurs. You will need to provide the District with the information specified in rule 62-330.340, Florida Administrative Code (F.A.C.). Generally, this will require you to complete and submit Form 62-330.340(1), "Request to Transfer Permit".

Please note that a permittee is liable for compliance with the permit before the permit is transferred. The District, therefore, recommends that you request a permit transfer in advance in

accordance with the applicable rules. You are encouraged to contact District staff for assistance with this process.

Thank you and please let us know if you have additional questions. For general questions contact us at (386) 362-1001.

Sincerely,

Hugh Thomas
Executive Director

Enclosures: Permit

cc: District Permit File

ERP Individual Permit

PERMITTEE:
Janak Shukla
ERA INVESTMENTS LLC
3010 W Us Highway 90
Lake City, FL 32055-7711

PERMIT NUMBER: ERP-023-209165-3
DATE ISSUED: January 04, 2018
DATE EXPIRES: January 04, 2023
COUNTY: Columbia
TRS: S35 T3S R16E, S2 T4S R16E

PROJECT: Lake City Hotels

Upon completion, the approved entity to which operation and maintenance maybe transferred pursuant to rule 62-330.310 and 62-330.340 or 40B-4.1130, Florida Administrative Code (F.A.C) shall be:

Mahendra Patel
AURUM, L.L.C.
162 NW Birdie Lane
Lake City, FL 32056-0575

Based on the information provided to the Suwannee River Water Management District (District), the above mentioned project has met the conditions of issuance as found in subsection 62-330.301, subsections 62-330.407 through 62-330.635, or subsection 40B-4.3030, F.A.C. The permit is hereby in effect for the activity description below:

Previous permit was for the construction and operation of a surface water management system serving 6.10 acres of impervious surface on a total project area of 10.10 acres. This modification consists of relocating the master stromwater facility and the addition of 8.25 acres of impervious on a total project area of 17.61 acres. When constructed the project shall be in accordance with the application package submitted by Mahendra Patel, of Aurum, LLC., as an authorized agent for the Columbia County Board of County Commissioners, and the signed and sealed plans certified on October 31, 2017, by Christopher Gmuer, P.E., of Gmuer Engineering, LLC.

As the permittee and/or operation and maintenance entity, it is your responsibility to ensure that adverse off-site impacts do not occur either during or after the construction. Any additional construction or alterations not authorized by this permit may result in flood control or water quality problems both on and off site and will be a violation of District rule.

You and any other substantially affected persons are entitled to request an administrative hearing or mediation. Please refer to the enclosed notice of rights.

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.

2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the District staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.

3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5, F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.

4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the District a fully executed Form 62-330.350(1), "Construction Commencement Notice,"[10-1-13], incorporated by reference herein (http://www.flrules.org/Gateway/reference.asp?No=Ref-02505), indicating the expected start and completion dates. A copy of this form may be obtained from the District, as described in subsection 62-330.010(5), F.A.C. If available, an District website that fulfills this notification requirement may be used in lieu of the form.

5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.

6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:

    1. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex — "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or

    2. For all other activities — "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].

3. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.

7. If the final operation and maintenance entity is a third party:

    1. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.

    2. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

8. The permittee shall notify the District in writing of changes required by any other regulatory District that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

9. This permit does not:

    1. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;

    2. Convey to the permittee or create in the permittee any interest in real property;

    3. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or

    4. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.

10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

11. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.

12. The permittee shall notify the District in writing:

    1. Immediately if any previously submitted information is discovered to be inaccurate; and

    2. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C.

This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

13. Upon reasonable notice to the permittee, District staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.

14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.

16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.

17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the District will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with Rule 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

WITHIN 30 DAYS AFTER COMPLETION OF THE PROJECT, THE PERMITTEE SHALL NOTIFY THE DISTRICT, IN WRITING, THAT THE FACILITIES ARE COMPLETE.

AUTHORIZED BY: Suwannee River Water Management District

By: 

Hugh Thomas
Executive Director

NOTICE OF RIGHTS

1. A person whose substantial interests are or may be determined has the right to request an administrative hearing by filing a written petition with the Suwannee River Water Management District (District), or may choose to pursue mediation as an alternative remedy under Section 120.569 and 120.573, Florida Statutes, (F.S.), before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for pursuing mediation are set forth in Sections 120.569 and 120.57 F.S. Pursuant to Rule 28-106.111, Florida Administrative Code, (F.A.C.), the petition must be filed at the office of the District Clerk at District Headquarters, 9225 C.R. 49, Live Oak, Florida 32060 within twenty-one (21) days of receipt of written notice of the decision or within twenty-one (21) days of newspaper publication of the notice of District decision (for those persons to whom the District does not mail actual notice). A petition must comply with Chapter 28-106, F.A.C.

2. If the Governing Board takes action which substantially differs from the notice of District decision to grant or deny the pe1mit application, a person whose substantial interests are or may be determined has the right to request an administrative hearing or may choose to pursue mediation as an alternative remedy as described above. Pursuant to Rule 28-106.111, F.A.C., the petition must be filed at the office of the District Clerk at District Headquarters, 9225 C.R. 49, Live Oak, Florida 32060 within twenty-one (21) days of receipt of written notice of the decision or within twenty-one (21) days of newspaper publication of the notice of District decision (for those persons to whom the District does not mail actual notice). Such a petition must comply with Chapter 28-106, F.A.C.

3. A substantially interested person has the right to a formal administrative hearing pursuant to Section 120.569 and 120.57(1), F.S., where there is a dispute between the District and the party regarding an issue of material fact. A petition for formal hearing must comply with the requirements set forth in Rule 28-106.201, F.A.C.

4. A substantially interested person has the right to an informal hearing pursuant to Section 120.569 and 120.57(2), F.S., where no material facts are in dispute. A petition for an informal hearing must comply with the requirements set forth in Rule 28-106.301, F.A.C.

5. A petition for an administrative hearing is deemed filed upon receipt of the petition by the Office of the District Clerk at the District Headquarters in Live Oak, Florida.

6. Failure to file a petition for an administrative hearing within the requisite time frame shall constitute a waiver of the right to an administrative hearing pursuant to Rule 28-106.111, F.A.C.

7. The right to an administrative hearing and the relevant procedures to be followed is governed by Chapter 120, Florida Statutes, and Chapter 28-106, F.A.C.

8. Pursuant to Section 120.68, F.S., a person who is adversely affected by final District action may seek review of the action in the District Court of Appeal by filing a notice of appeal pursuant to the Florida Rules of Appellate Procedure, within 30 days of the rendering of the final District action.

9. A party to the proceeding before the District who claims that a District order is inconsistent with the provisions and purposes of Chapter 3 73, F. S., may seek review of the order pursuant to Section 373.114, F.S., by the Florida Land and Water Adjudicatory Commission, by filing a request for review with the Commission and serving a copy of the Department of Environmental Protection and any person named in the order within 20 days of adoption of a rule or the rendering of the District order.

10. For appeals to the District Courts of Appeal, a District action is considered rendered after it is signed on behalf of the District, and is filed by the District Clerk.

11. Failure to observe the relevant time frames for filing a petition for judicial review, or for Commission review, will result in waiver of the right to review.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Notice of Rights has been sent to:

Janak Shukla
ERA INVESTMENTS LLC
3010 W Us Highway 90
Lake City, FL 32055-7711

This January 04, 2018

Deputy Clerk
Suwannee River Water Management District
9225 C.R. 49
Live Oak, Florida 32060
386.362.1001 or 800.226.1066 (Florida only)

cc: File Number: ERP-023-209165-3

NOTICING INFORMATION
Dear Permittee:

Please be advised that the Suwannee River Water Management District (District) has not published a notice in the newspaper advising the public that it has issued a permit for this project.

Newspaper publication, using the District's form, notifies members of the public of their right to challenge the issuance of the permit. If proper notice is given by newspaper publication, then there is a 21-day time limit to file a petition challenging the issuance of the permit.

To close the point of entry for filing a petition, you may publish (at your own expense) a onetime notice of the District's decision in a newspaper of general circulation within the affected area as defined in Section 50.011 of the Florida Statutes. If you do not publish a newspaper notice, the time to challenge the issuance of your permit will not expire.

A copy of the notice and a partial list of newspapers of general circulation are attached for your convenience. However, you are not limited to those listed newspapers. If you choose to close the point of entry and the notice is published, the newspaper will return to you an affidavit as proof of publication. In accordance with 40B-1.1010(4), F.A.C., a copy of the affidavit shall be provided to the District within 14 days of publication. A scanned copy of the affidavit may be forwarded to Tilda Musgrove by email at *tjm@srwmd.org* (preferred method) or send the original affidavit of publication to:

Tilda Musgrove
Resource Management
9225 CR 49
Live Oak, FL 32060

If you have any questions, please contact me at 386.362.1001.
Sincerely,

Tilda Musgrave

Tilda Musgrove
Business Resource Specialist
Resource Management

NOTICE OF AGENCY ACTION TAKEN BY THE
SUWANNEE RIVER WATER MANAGEMENT DISTRICT

Notice is given that the following permit was issued on _____:
(Name and address of applicant)_____
permit#_____. The project is located in _____County, Section _____, Township _____ South, Range _____ East. The permit authorizes a surface water management system on _____ acres for _____ known as _____. The receiving water body is _____.
A person whose substantial interests are or may be affected has the right to request an administrative hearing by filing a written petition with the Suwannee River Water Management District (District). Pursuant to Chapter 28-106 and Rule 40BB-1.1010, Florida Administrative Code (F.A.C.), the petition must be filed (received) either by delivery at the office of the Resource Management Business Resource Specialist at District Headquarters, 9225 CR 49, Live Oak FL 32060 or by e-mail to tjm@srwmd.org, within twenty-one (21) days of newspaper publication of the notice of intended District decision (for those persons to whom the District does not mail or email actual notice). A petition must comply with Sections 120.54(5)(b)4. and 120.569(2)(c), Florida Statutes (F.S.), and Chapter 28106, F.A.C. The District will not accept a petition sent by facsimile (fax). Mediation pursuant to Section 120.573, F.S., is not available.

A petition for an administrative hearing is deemed filed upon receipt of the complete petition by the District Clerk at the District Headquarters in Live Oak, FL during the District's regular business hours. The District's regular business hours are 8 a.m. – 5 p.m., excluding weekends and District holidays. Petitions received by the District Clerk after the District's regular business hours shall be deemed filed as of 8 a.m. on the next regular District business day.

The right to an administrative hearing and the relevant procedures to be followed are governed by Chapter 120, Florida Statutes, Chapter 28-106, Florida Administrative Code, and Rule 40B-1.1010, Florida Administrative Code. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means the District's final action may be different from the position taken by it in this notice. **Failure to file a petition for an administrative hearing within the requisite time frame shall constitute a waiver of the right to an administrative hearing. (Rule 28-106.111, F.A.C.).**

If you wish to do so, you may request the Notice of Rights for this permit by contacting the Business Resource Specialist in the Division of Resource Management (RM), 9225 CR 49, Live Oak,, FL 32060, or by phone at 386.362.1001.

NEWSPAPER ADVERTISING

ALACHUA
Gainesville Sun Legal Advertising
PO Box 14747
Gainesville, FL 32614
352.372.4222

BRADFORD
Bradford County Telegraph, Legal Advertising
P. O. Drawer A
Starke, FL 32901
904-964-6305/ fax 904-964-8628

COLUMBIA
Lake City Reporter
180 E Duval Street
Lake City, FL 32055
386.754.0401

DIXIE
Dixie County Advocate
174 County Road 351
Cross City, FL 32628
352.498.3312

GILCHRIST
Gilchrist County Journal
207 N Main St
Trenton, FL 32693
352.463.7135

HAMILTON
Jasper News
521 Demorest Street SE
Live Oak, FL 32064
386.362.1734

JEFFERSON
Monticello News
PO Drawer 772
Madison, FL 32344
850.997.3568

LAFAYETTE
Mayo Free Press
521 Demorest Street SE
Live Oak, FL 32064
386.362.1734

LEVY
Levy County Journal
PO Box 159
Bronson, FL 32621
352.486.2312

MADISON
Madison Carrier
PO Drawer 772
Madison, FL 32344
850.973.4141

SUWANNEE
Suwannee Democrat
521 Demorest Street SE
Live Oak, FL 32064
386.364.1734

TAYLOR
Taco Times
PO Box 888
Perry, FL 32348
850.584.5513

UNION
Union County Times
125 E Main Street
Lake Butler, FL 32054
386.496.2261

This application is for Phase 2 of the Lake City Hotels project and intends to modify the original master permit with an updated accounting of the impervious associated with Phase 1 and Phase 2. This scope of the Phase 2 project consists of Hotel B and the associated parking lot with drive isle connections to the drive isles of Phase 1. No change to the construction limits, flow patterns, control structures, etc. are proposed with this phase of the project. Please see the site plans for Phase 2 for additional details. The resulting impervious area accounting for the master system following Phase 2 construction will be as follows.

Impervious Areas Accounting with Proposed Phase 2		
Impervious (Existing) *	182,297 sf	4.1850 ac
Impervious (Phase 1)	107,983 sf	2.4789 ac
Impervious (Phase 2)	74,902 sf	1.7195 ac
Impervious (Future)	176,585 sf	4.0538 ac
Total Permitted Impv.	541,767 sf	12.4373 ac

* Existing Impervious Aera consisted of the Quality Inn, Ruby Tuesdays, and Holiday Inn to the west of the site

Please see the following exhibits attached to this stormwater report. Site Plans for the proposed Phase 2 construction have also been submitted for review. Historical details concerning the master permit can be found under SRWMD ERP # 209165-3 as well as previous permit sequences.

Attached Exhibits:

- Master Plan Post-Development Drainage Map permitted under SRWMD ERP # 209165-3
- Site Plan for Phase 1 Hotel A reflecting the current conditions of the site
- Proposed Site Plan for Phase 2 Hotel B reflecting the next phase of the development

Please let us know if you need any additional information for your review.

Sincerely,
Gmuer Engineering, LLC

Christopher A Gmuer, PE
President

Christopher A Gmuer 2024.04.23 20:07:21 '00'04-

CHRISTOPHER A. GMUER LICENSE No. 71599 STATE OF FLORIDA PROFESSIONAL ENGINEER

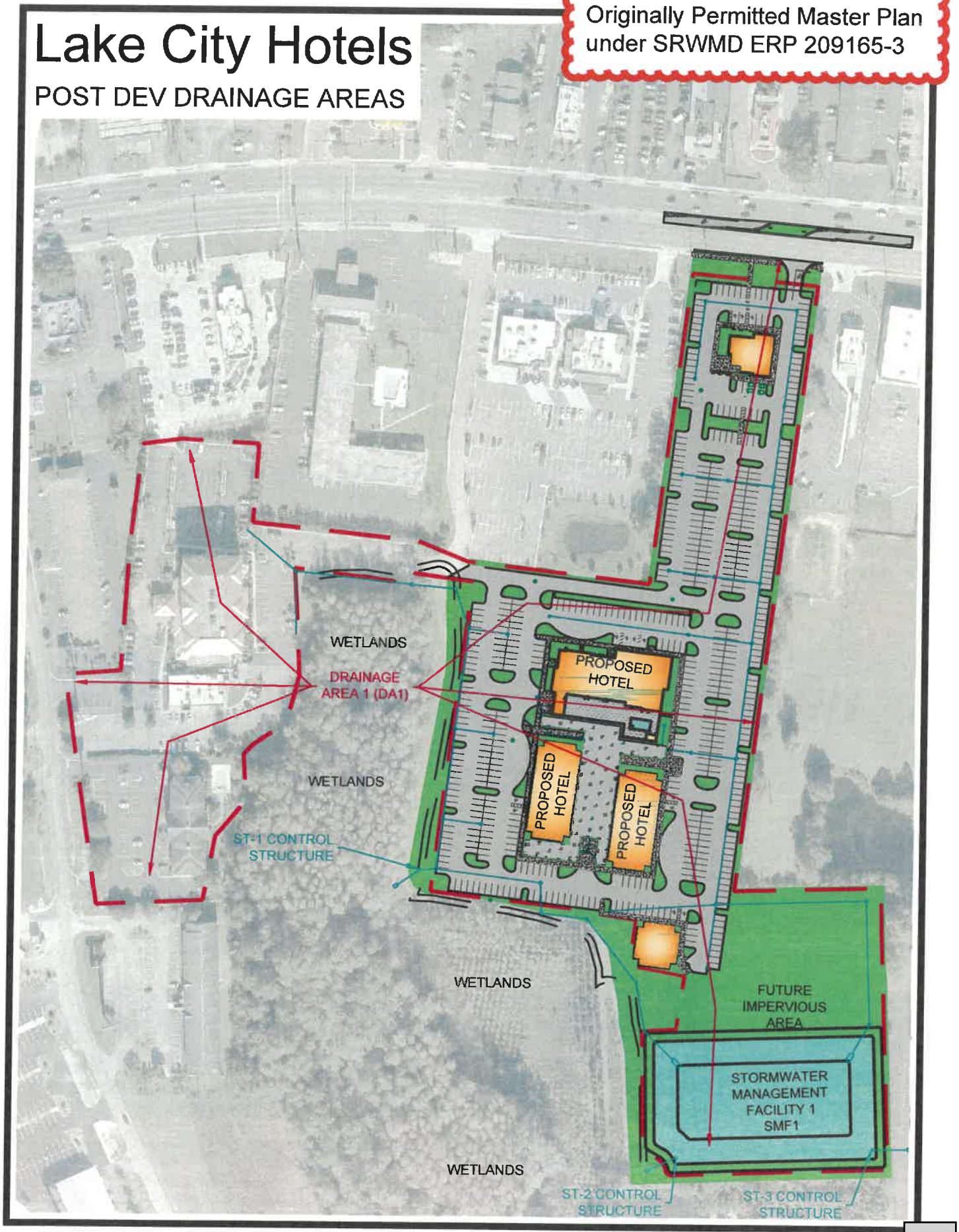
This item has been electronically signed and sealed by Christopher A. Gmuer, PE. using a *SHA* authentication code.

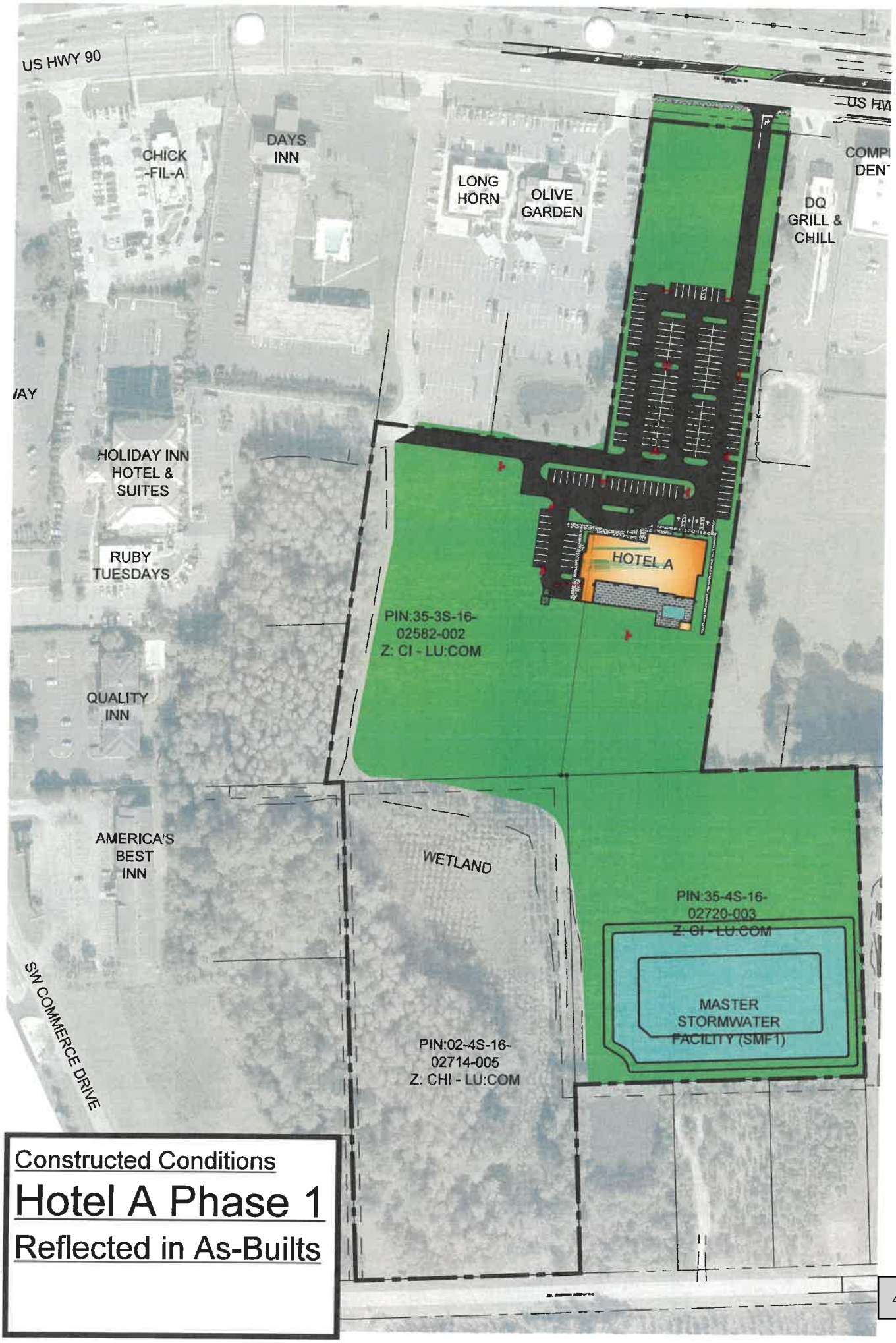
Printed copies of this document are not considered signed and sealed and the *SHA* authentication code must be verified on any electronic copies

Lake City Hotels

POST DEV DRAINAGE AREAS

Originally Permitted Master Plan under SRWMD ERP 209165-3

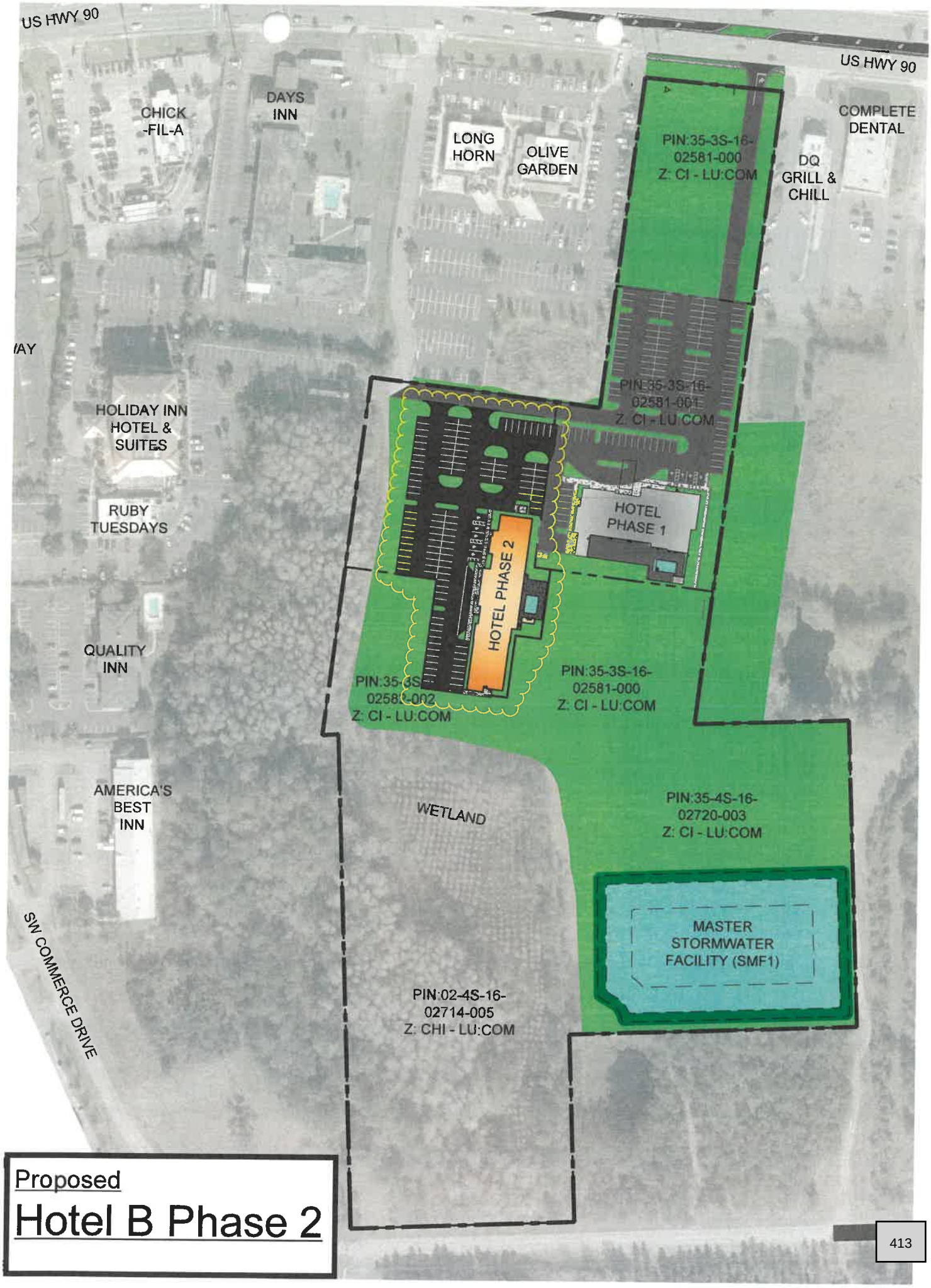




Constructed Conditions

Hotel A Phase 1

Reflected in As-Builts



Proposed

Hotel B Phase 2

2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928
gmuereng.com

Re: Lake City Hotels – Phase 2

Consistency with NFPA 1 Fire Code, Florida Edition, Chap 18

Fire Apparatus Access to the site is being provided via "parking lot lanes" as allowed in 18.2.3.1.2
Fire Apparatus Access to within 50ft of the front and other doors is met as required by 18.2.3.2.1
Parking lots surround the Hotel and are considered access roads per 18.2.3.2.1.2
The parking lot allows access to all parts of the first floor within 150ft per 18.2.3.2.2
The hotel will be protected by an automatic sprinkler system.
The parking lot has multiple access points meeting the multiple access points requirement of 18.2.3.3
All dimensional, surface, turning, grade, etc requirements of 18.2.3.5 for access roads have been met.
A looped water main through the site was constructed as part of the Phase 1 plan to comply with 18.3.1

Fire Flow Requirements for Buildings per NFPA 1 Section 18.4

Building Area = 16,105 SF Footprint X 4-Stories = 64,420 SF GFA, Proposed Use = Hotel
Type of Construction: Either Type II(111), III(211), IV(2HH), or V(111) per NFPA 220
Fire Flow Area: 64,420 SF
Minimum Fire Flow and Duration: 4,500 GPM for 4 Hours (per 18.4.5.2.1)
Qualifies for Approved Automatic Sprinkler System Reduction: Yes, 75% Reduction to 1,125 GPM
Final Minimum Fire Flow and Duration: 1,125 GPM for 2 Hours is the minimum allowed by 18.4.5.3.2 & 4

ISO Fire Flow Calculations are not applicable to sprinklered buildings.

Christopher A Gmuer 2024.04.23 23:06:34 '00'04-

Christopher A Gmuer, PE
FL PE 71599

CHRISTOPHER A. GMUER LICENSE No. 71599 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Christopher A. Gmuer, PE. using a *SHA* authentication code.

Printed copies of this document are not considered signed and sealed and the *SHA* authentication code must be verified on any electronic copies

2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928
gmuereng.com

Lake City Hotels Phase 2
Concurrency Impact Analysis
April 23, 2024

The proposed project adds a second hotel to the site with 119 rooms.

Transportation

Description	Use	Variable	AADT	AM Peak	PM Peak
Hotel	ITE#310	119 Rooms	951	55	70

Potable Water
Average Daily Flow (ADF): 119 Rooms x 100 GPD = 11,900 GPD
Peak Flow: 11,900 GPD x 2 Peaking Factor / 16 Hour Operating Period x 1 hour / 60 min = 25 GPM
Minimum 2" Water Meter with 4" RPZ BF Preventer

Sanitary Sewer
Average Daily Flow (ADF): 119 Rooms x 100 GPD = 11,900 GPD
Peak Flow: 11,900 GPD x 2 Peaking Factor / 16 Hour Operating Period x 1 hour / 60 min = 25 GPM

Solid Waste
2 lbs/ room / day x 119 room x 365 days = 43.5 tons per year

Please let us know if you need any additional information for your review.

Sincerely,
Gmuer Engineering, LLC

Christopher A Gmuer, PE, President

2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928
gmuereng.com

Lake City Hotels Phase 2 - April 23, 2024
Consistency with the Comprehensive Plan

The proposed project adds a second hotel to the site with 119 rooms. The underlying land use for the property is Commercial and the zoning designation is CI, Commercial Intensive. The proposed hotel use is a permitted principal use and structure of the CG zoning district and per 14.13.2 is also a permitted principal use and structure. No special exception required.

The Comprehensive Plan language is provided and followed with the **consistency statement in bold**.

I FUTURE LAND USE ELEMENT
GOAL I - IN RECOGNITION OF THE IMPORTANCE OF ENHANCING THE QUALITY OF LIFE IN THE CITY, DIRECT DEVELOPMENT TO THOSE AREAS WHICH HAVE IN PLACE, OR HAVE AGREEMENTS TO PROVIDE, SERVICE CAPACITY TO ACCOMMODATE GROWTH IN AN ENVIRONMENTALLY ACCEPTABLE MANNER.
The property is zoned for the proposed use and infrastructure to support the proposed development was constructed in the first phase of the project to support this and all future phases.

OBJECTIVE I.1 The City Concurrency Management System shall make available or schedule for availability the public facilities for future growth and urban development as development occurs in order to provide for urban densities and intensities within the City.
The infrastructure to support the proposed development was constructed in the first phase of the project.

Policy I.1.1 The location of higher density residential, high intensity commercial and heavy industrial uses shall be directed to areas adjacent to arterial or collector roads, identified on the Future Traffic Circulation Map, where public facilities are available to support such higher density or intensity.
The proposed development is located in direct proximity to US90 adjacent to other hotels. An outparcel is being retained along the direct frontage of US90 for a restaurant or other use that would benefit from more direct access.

Policy I.1.2 The land development regulations of the City shall be based on and be consistent with the following land use classifications and corresponding standards for densities and intensities and shall establish the following floor area ratio(s) to be applied to each classification of land use:

COMMERCIAL

Lands classified as commercial use consist of areas used for the sale, rental, and distribution of products or performance of services, as well as public, charter and private elementary, middle and high schools. In addition, off-

site signs, churches and other houses of worship, private clubs and lodges, residential dwelling units, which existed within this category on the date of adoption of this objective, and other similar uses compatible with commercial uses may be approved as special exceptions and be subject to an intensity of less than or equal to 0.25 floor area ratio except within the (CG) Commercial, General, (CI) Commercial, Intensive, (C-CBD) Commercial-Central Business District and (CHI) Commercial, Highway Interchange districts being subject to an intensity of less than or equal to 1.0 floor area ratio.

The site is located within the (CI) Commercial, Intensive zoning district and meets the max FAR.

OBJECTIVE I.3 The City shall require that all proposed development be approved only where the public facilities meet or exceed the adopted level of service standard.

The infrastructure to support the proposed development was constructed in the first phase of the project and was designed to support all future phases.

Policy I.3.1 The City shall limit the issuance of development orders and permits to areas where the adopted level of service standards for the provision of public facilities found within the Comprehensive Plan are maintained. This provision also includes areas where development orders were issued prior to the adoption of the Comprehensive Plan.

The infrastructure to support the proposed development was constructed in the first phase of the project and was designed to support all future phases.

II TRANSPORTATION ELEMENT

GOAL II - PROVIDE FOR A TRANSPORTATION SYSTEM WHICH SERVES EXISTING AND FUTURE LAND USES.

Policy II.1.2. The City shall control the number and frequency of connections and access points of driveways and roads to arterials and collectors by requiring access points for state roads to be in conformance with Chapter 14-96 and 14-97, Florida Administrative Code, and the following requirements for non-state roads:

The initial phase of this project master planned and provided a traffic study that implemented the shared driveway connection to US90 and all of the shared internal drive isles interconnections which allow interconnectivity between all the adjacent properties. This includes access to SW Commerce Dr to the west through the Ruby Tuesday and Burger King parking lots, north through the Burger King and Chick-fil-a and LongHorn and Olive Garden parking lots.

Policy II.1.3. The City shall continue to require development to provide safe and convenient on-site traffic flow, which includes the provision for vehicle parking.

This proposed phase continues to follow the master plan outlined in the previous application.

Please let us know if you need any additional information for your review.

Gmuer Engineering, LLC
Christopher A Gmuer, PE
President

LEGAL DESCRIPTION:

PARCEL NO. 1: (PER O.R. 1048, PAGE 2678)
LOT OR BLOCK 8, LAKE HARRIS FARMS SUBDIVISION, UNIT "A", ACCORDING TO PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 22, PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA, EXCEPT THAT PORTION DEEDED TO THE STATE OF FLORIDA FOR ROAD RIGHT-OF-WAY PURPOSES BY CONVEYANCE RECORDED IN DEED BOOK 78, PAGE 275, PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA. SAID LANDS BEING SITUATE IN THE SW 1/4 OF THE SE 1/4 OF SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST, COLUMBIA COUNTY, FLORIDA.

PARCEL NO. 2: (PER O.R. 1048, PAGE 2678)
BEGIN AT THE NORTHEAST CORNER OF THE NW 1/4 OF NE 1/4, SECTION 2, TOWNSHIP 4 SOUTH, RANGE 16 EAST, COLUMBIA COUNTY, FLORIDA AND RUN S 87°54'48"W ALONG THE NORTH LINE OF SAID SECTION 2, 452.80 FEET; THENCE S 02°27'06"E, 481.01 FEET; THENCE N 87°54'48"E, 452.80 FEET TO THE EAST LINE OF SAID NW 1/4 OF NE 1/4; THENCE N 02°27'06"W ALONG SAID EAST LINE, 481. 01 FEET TO THE POINT OF BEGINNING. COLUMBIA COUNTY, FLORIDA.

PARCEL NO. 3: (PER O.R. 1240, PAGE 658)
TOWNSHIP 3 SOUTH – RANGE 16 EAST
SECTION 35: BEGINNING AT A POINT WHICH IS THE SE CORNER OF LOT 9 OF "LAKE HARRIS FARMS" AS PER PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 21, OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA, SAID POINT BEING N 87°55'17" E 868.20 FEET FROM THE SW CORNER OF THE SW 1/4 OF THE NE 1/4 OF SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST; THENCE N 7°03'47" E ALONG THE EAST BOUNDARY OF SAID LOT 9 718.40 FEET; THENCE N 84°41"43" W 360.00 FEET; THENCE S 7°03'47" W PARALLEL TO THE EAST BOUNDARY OF SAID LOT 9 765.25 FEET TO THE SOUTH BOUNDARY OF LOT 10 OF SAID "LAKE HARRIS FARMS"; THENCE N 87°55'17" E ALONG THE SOUTH BOUNDARY OF LOTS 10 AND 9 OF SAID "LAKE HARRIS FARMS" 364.46 FEET TO THE POINT OF BEGINNING – COLUMBIA COUNTY, FLORIDA.

LESS AND EXCEPT THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 1242, PAGE 949 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.

PARCEL NO. 4: (PER O.R. 1084, PAGE 1709)
LOT 4, INTERSTATE COMMERCE CENTER, A SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 5, PAGE 37 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.

This Instrument Prepared By:
RALPH R. DEAS, ESQUIRE
227 SE Hernando Avenue
Lake City, Florida 32025
Telephone: (386) 754-0771

The Preparer of this Instrument has prepared NO Title Examination nor has the Preparer issued any Title Insurance or furnished any opinion regarding title, existence of liens, quantity of lands included, or the location of boundaries. The names, addresses, tax identification numbers and legal description are furnished by a party to this Instrument.

Inst: 201812015461 Date: 07/25/2018 Time: 3:41PM
Page 1 of 3 B: 1365 P: 1047, P.DeWitt Cason, Clerk of Court
Columbia, County, By: BD
Deputy ClerkDoc Stamp-Deed: 0.70

CORRECTIVE SPECIAL WARRANTY DEED

THIS WARRANTY DEED, made and executed this 12th day of June, 2018, by and between ANILKUMAR D. PATEL and HEMA PATEL (also known as HEMLATTA PATEL), husband and wife, 162 NW Birdie Place, Lake City, FL 32055, Grantor(s), and ERA INVESTMENTS, LLC, a Florida limited liability company, 3010 U.S. Highway 90 West, Lake City, Florida 32055, Grantee,

WITNESSETH:

That, for and in consideration of the sum of Ten and no/100 Dollars ($10.00) and other valuable considerations in hand paid by the Grantee to the Grantor(s), the receipt and sufficiency whereof are hereby acknowledged, the Grantor(s) has granted, bargained and sold to the Grantee, and the Grantee's assigns forever, the following-described real property, situate, lying and being in Columbia County, Florida:

See Exhibit A, attached hereto and incorporated herein by reference.

N.B.: The purpose of this Corrective Deed is to correct the description of the property conveyed by that deed recorded at Official Records Book 1334, page 1565-1567, public records of Columbia County, Florida, which failed to set forth the parcel excluded from the deed as a "less-out," a parcel previously conveyed to a stranger to the said deed.

SUBJECT TO restrictions, easements and outstanding mineral rights of record, if any, and taxes after December 31, 2016.

TOGETHER with all the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the same in fee simple forever.

And the Grantor(s) does hereby warrant the title to said land, and will defend the same against the lawful claims of all parties claiming by, through, or under the said Grantor.

IN WITNESS WHEREOF, the Grantor(s) has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered
In Presence of:

Signature of Witness

NIMOY THAKKAR
Printed/Typed Name of Witness

Signature of Witness

MITHILESH AMIN
Printed/Typed Name of Witness

ANILKUMAR D. PATEL (SEAL)

HEMA PATEL (SEAL)
(also known as HEMLATTA PATEL)

STATE OF FLORIDA
COUNTY OF MARION

The foregoing Warranty Deed was acknowledged before me by ANILKUMAR D. PATEL, to me ✓ personally known OR ____ known after production of _____ as identification, and who DID NOT take an oath, and by HEMA PATEL (also known as HEMLATTA PATEL), to me ____ personally known OR ✓ known after production of FLORIDA DRIVER LICENSE as identification, and who DID NOT take an oath, this 12TH day of JUNE, 2018.

Signature of Notary

(Seal if any)

AMIT PATEL
Printed/Typed Name of Notary
Notary Public, State of Florida at Large
Serial No. if any:_____
Commission Expires:_____

AMIT PATEL
Commission # GG 151165
Expires January 21, 2022
Bonded Thru Budget Notary Services

EXHIBIT "A"

TOWNSHIP 3 SOUTH – RANGE 16 EAST

SECTION 35: Beginning at a point which is the Southeast corner of Lot 9 of "Lake Harris Farms" as per plat thereof recorded in Plat Book 1, Page 21 of the public records of Columbia County, Florida, said point being N 87 degrees 55 minutes 17 seconds E 868.20 feet from the Southwest corner of the SW ¼ of the NE ¼ of Section 35, Township 3 South, Range 16 East; thence N 7 degrees 03 minutes 47 seconds E along the East boundary of said Lot 9 718.40 feet; thence N 84 degrees 41 minutes 43 seconds W 360.00 feet; thence S 7 degrees 03 minutes 47 seconds W parallel to the East boundary of said Lot 9 765.25 feet to the South boundary of Lot 10 of said "Lake Harris Farms"; thence N 87 degrees 55 minutes 17 seconds E along the South boundary of Lots 10 and 9 of said "Lake Harris Farms" 364.46 feet to the POINT OF BEGINNING. Columbia County, Florida.

LESS AND EXCEPT that portion of the above-described real property conveyed by Grantors to FLORIDA SE, INC., recorded in Official Records Book 1242, pages 925, 929, and 933, public records of Columbia County, Florida, more particularly described as follows: Commence at the Southeast corner of Lot 9 of "Lake Harris Farms" as per plat thereof recorded in Plat Book 1, Page 21 of the public records of Columbia County, Florida,; thence with the East line of said Lot 9 N 8 degrees 23 minutes 37 seconds E, a distance of 506.22 feet to the POINT OF BEGINNING; thence continue with said East line, N 8 degrees 23 minutes 37 seconds E, a distance of 212.18 feet to the Southeast corner of premises described in Official Records Book 706, page 199; thence with the South line thereof, N 83 degrees 21 minutes 53 seconds W, a distance of 360.00 feet to the West line of said premises described in Official Records Book 1199, page 515; thence with said West line, S 08 degrees 23 minutes 37 seconds W, a distance of 201.13 feet; thence S 81 degrees 36 minutes 23 E, a distance of 359.83 feet to the POINT OF BEGINNING.

TOGETHER WITH a non-exclusive perpetual easement for ingress and egress over and across the West 30 feet of the following-described property:

TOWNSHIP 3 SOUTH – RANGE 16 EAST

SECTION 35: Beginning at a point which is the Southeast corner of Lot 9 of "Lake Harris Farms" as per plat thereof recorded in Plat Book 1, Page 21 of the public records of Columbia County, Florida, said point being N 87 degrees 55 minutes 17 seconds E 868.20 feet from the Southwest corner of the SW ¼ of the NE ¼ of Section 35, Township 3 South, Range 16 East; thence N 7 degrees 03 minutes 47 seconds E along the East boundary of said Lot 9 718.40 feet for the POINT OF BEGINNING; thence continue N 7 degrees 03 minutes 47 seconds E along said East boundary 310.00 feet to the South right-of-way line of State Road No. 10 (U.S. Highway No. 90), said point being 87.00 feet from and at right angle to the survey center line of said State Road; thence N 84 degrees 41 minutes 43 seconds W along said South right-of-way line 312.51 feet to the point of curvature of a right-of-way line curve being concave Southwesterly and having a radius of 3276.57 feet; thence Northwesterly along said South right-of-way line curve, a chord bearing and distance of N 85 degrees 06 minutes 35 seconds W 47.40 feet; thence S 7 degrees 03 minutes 47 seconds W parallel to the East boundary of said Lot 9 309.66 feet; thence S 84 degrees 41 minutes 43 seconds E 360.00 feet to the POINT OF BEGINNING. Columbia County, Florida.

N.B.: Grantor hereby states that the subject property is not the homestead of Grantor or of any member of Grantor's family. Neither the Grantor nor any member of Grantor's family lives or resides on the subject property or on any land adjacent thereto.

GROWTH MANAGEMENT DEPARTMENT
205 North Marion Ave, Lake City, FL 32055
Phone: 386-719-5750
E-mail: growthmanagement@lcfla.com

AGENT AUTHORIZATION FORM

I, ERA Investments, LLC (owner name), owner of property parcel number 35-3S-16-02582-002 (parcel number), do certify that the below referenced person(s) listed on this form is/are contracted/hired by me, the owner, or, is an officer of the corporation; or, partner as defined in Florida Statutes Chapter 468, and the said person(s) is/are authorized to sign, speak and represent me as the owner in all matters relating to this parcel.

Printed Name of Person Authorized	Signature of Authorized Person
1. Christopher A. Gmuer, PE	1.
2.	2.
3.	3.
4.	4.
5.	5.

I, the owner, realize that I am responsible for all agreements my duly authorized agent agrees with, and I am fully responsible for compliance with all Florida Statutes, City Codes, and Land Development Regulations pertaining to this parcel.

If at any time the person(s) you have authorized is/are no longer agents, employee(s), or officer(s), you must notify this department in writing of the changes and submit a new letter of authorization form, which will supersede all previous lists. Failure to do so may allow unauthorized persons to use your name and/or license number to obtain permits.

J R Shukla — Owner Signature (Notarized)

11/16/23 — Date

NOTARY INFORMATION:
STATE OF: Florida COUNTY OF: Columbia

The above person, whose name is _____ personally appeared before me and is known by me or has produced identification (type of I.D.) _____ on this 15 day of Nov, 2023.

_____
NOTARY'S SIGNATURE

APRIL REEVES
NOTARY PUBLIC
(Seal/Stamp)
MY COMMISSION EXPIRES 6-22-2027
STATE OF FLORIDA
COMMISSION NUMBER HH 370485

Details on Back

Last Update: 4/24/2024 1:55:31 AM EDT

Details
Tax Record
» Print View
Legal Desc.
Tax Payment
Payment History
Print Tax Bill NEW!
Change of Address

Searches
Account Number
GEO Number
Owner Name
Property Address
Mailing Address

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

Register for eBill

Ad Valorem Taxes and Non-Ad Valorem Assessments

The information contained herein does not constitute a title search and should not be relied on as such.

Account Number	Tax Type	Tax Year
R02582-002	REAL ESTATE	2023

Mailing Address
ERA INVESTMENTS LLC
162 NW BIRDIE PL
LAKE CITY FL 32055

Property Address

GEO Number
353S16-02582-002

Exempt Amount	Taxable Value
See Below	See Below

Exemption Detail NO EXEMPTIONS

Millage Code 001

Escrow Code

Legal Description (click for full description)
35-3S-16 1001/10013.97 Acres BEG SE COR OF LOT 9 LAKE HARRIS FARMS, RUN NE 718.40 FT, W 360 FT, S 765.25 FT, E 364.46 FT TO POB. BEING PART OF LOTS 9 & 10 LAKE HARRIS FARMS UNIT A. EX 1.75 AC DESC ORB 1242-933 & EX .42 AC DESC IN PART OF WD 1406-321(LYING See Tax Roll For Extra Legal

Ad Valorem Taxes

Taxing Authority	Rate	Assessed Value	Exemption Amount	Taxable Value	Taxes Levied
CITY OF LAKE CITY	4.9000	24,213	0	$24,213	$118.64
BOARD OF COUNTY COMMISSIONERS	7.8150	24,213	0	$24,213	$189.22
COLUMBIA COUNTY SCHOOL BOARD					
DISCRETIONARY	0.7480	24,213	0	$24,213	$18.11
LOCAL	3.2170	24,213	0	$24,213	$77.89
CAPITAL OUTLAY	1.5000	24,213	0	$24,213	$36.32
SUWANNEE RIVER WATER MGT DIST	0.3113	24,213	0	$24,213	$7.54
LAKE SHORE HOSPITAL AUTHORITY	0.0001	24,213	0	$24,213	$0.00

Total Millage	18.4914	Total Taxes	$447.72

Non-Ad Valorem Assessments

Code	Levying Authority	Amount
XLCF	CITY FIRE ASSESSMENT	$61.26

Total Assessments	$61.26
Taxes & Assessments	$508.98

If Paid By	Amount Due
	$0.00

Date Paid	Transaction	Receipt	Item	Amount Paid
11/30/2023	PAYMENT	2101381.0003	2023	$488.62

Prior Years Payment History

Prior Year Taxes Due

NO DELINQUENT TAXES

Detail by Entity Name

Florida Limited Liability Company
ERA INVESTMENTS, LLC

Filing Information

Document Number	L05000041345
FEI/EIN Number	26-0119061
Date Filed	04/21/2005
State	FL
Status	ACTIVE
Last Event	REINSTATEMENT
Event Date Filed	09/27/2017

Principal Address

162 NW BIRDIE PLACE
LAKE CITY, FL 32055

Changed: 05/01/2019

Mailing Address

162 NW BIRDIE PLACE
LAKE CITY, FL 32055

Changed: 05/01/2019

Registered Agent Name & Address

SHUKLA, JANAK
321 SW RIDGE VIEW PLACE
LAKE CITY, FL 32024

Name Changed: 09/27/2017

Address Changed: 05/01/2019

Authorized Person(s) Detail

Name & Address

Title MGR

SHUKLA, JANAK R

3004,US HWY 90 WEST
LAKECITY, FL 32055

Annual Reports

Report Year	Filed Date
2021	03/31/2021
2022	04/25/2022
2023	03/29/2023

Document Images

03/29/2023 -- ANNUAL REPORT	View image in PDF format
04/25/2022 -- ANNUAL REPORT	View image in PDF format
03/31/2021 -- ANNUAL REPORT	View image in PDF format
04/30/2020 -- ANNUAL REPORT	View image in PDF format
05/01/2019 -- ANNUAL REPORT	View image in PDF format
03/28/2018 -- ANNUAL REPORT	View image in PDF format
09/27/2017 -- REINSTATEMENT	View image in PDF format
02/04/2016 -- ANNUAL REPORT	View image in PDF format
02/21/2015 -- ANNUAL REPORT	View image in PDF format
04/19/2014 -- ANNUAL REPORT	View image in PDF format
03/21/2013 -- ANNUAL REPORT	View image in PDF format
02/27/2012 -- ANNUAL REPORT	View image in PDF format
02/21/2011 -- ANNUAL REPORT	View image in PDF format
04/05/2010 -- ANNUAL REPORT	View image in PDF format
03/26/2009 -- ANNUAL REPORT	View image in PDF format
04/29/2008 -- ANNUAL REPORT	View image in PDF format
02/18/2007 -- ANNUAL REPORT	View image in PDF format
02/16/2006 -- ANNUAL REPORT	View image in PDF format
04/21/2005 -- Florida Limited Liabilites	View image in PDF format

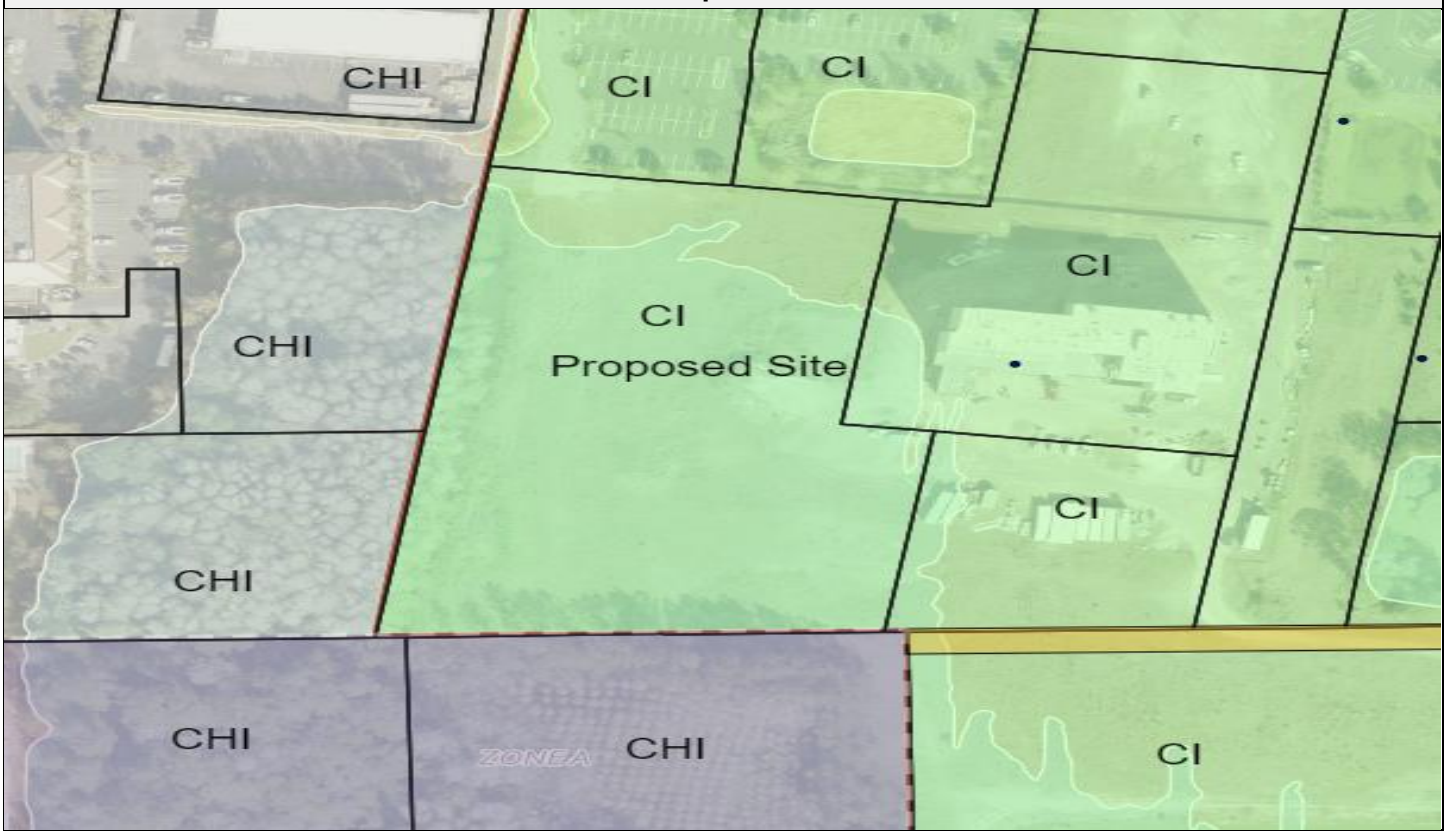
LAKE CITY GROWTH MANAGEMENT
STAFF ANALYSIS REPORT

Project Information	
Project Name and Case No.	Lake City Hotels Phase 2 site plan review SPR24-06
Applicant	Christopher Gmuer, PE
Owner	ERA Investments, LLC
Requested Action	Site plan review for a, hotel, on parcel 02582-002
Hearing Date	06-11-2024
Staff Analysis/Determination	Sufficient for Review
Prepared By	Robert Angelo

Subject Property Information	
Size	+/- 3.971 Acres
Location	Located behind Olive Garden
Parcel Number	02582-002
Future Land Use	Commercial
Proposed Future Land Use	Commercial
Current Zoning District	Commercial Intensive
Proposed Zoning	Commercial Intensive
Flood Zone-BFE	Flood Zone X and A Base Flood Elevation-N/A

Land Use Table				
Direction	**Future Land Use**	**Zoning**	**Existing Use**	**Comments**
N	Commercial	CI	Restaurant	
E	Commercial	CI	Hotel	
S	Commercial	CHI	Vacant	
W	Commercial	CHI	Hotel and Restaurant	

Map of Location



Picture of Location

Summary of Request
Applicant has petitioned for a site plan review for the above parcels to build a hotel. This is phase 2.


PUBLIC NOTICE

CITY OF LAKE CITY
NOTICE
LAND USE ACION

A PUBLIC HEARING IS SCHEDULED TO CONCIDER A REQUEST FOR:

SPR 24-06, a petition by Christopher A. Gmuer, P.E., as agent, to request a Site Plan Review approval be granted as provided for in Section 4.13 of the Land Development Regulations, to get approval on site plan for Lake City Hotels Phase 2 for a property located in the Commercial Intensive zoning district, in accordance with the submittal of the petition dated April 26, 2024, to be located on;

PARCEL 35-3s-16-02582-002
TOWNSHIP 3 SOUTH - RANGE 16 EAST
SECTION 35: BEGINNING AT A POINT WHICH IS THE SE CORNER OF LOT 9 OF "LAKE HARRIS FARMS" AS PER PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 21, OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA, SAID POINT BEING N 87°55'17" E 868.20 FEET FROM THE SW CORNER OF THE SW 1/4 OF THE NE 1/4 OF SECTION 35, TOWNSHIP 3 SOUTH, RANGE 16 EAST; THENCE N 7°03'47" E ALONG THE EAST BOUNDARY OF SAID LOT 9 245.14 FEET; THENCE N 82°47"32" W 67.51 FEET; THENCE N 07°07"10" E 261.13 FEET; THENCE N 82°56"13" W 292.10 FEET; THENCE S 7°03'47" W PARALLEL TO THE EAST BOUNDARY OF SAID LOT 9 564.12 FEET TO THE SOUTH BOUNDARY OF LOT 10 OF SAID "LAKE HARRIS FARMS"; THENCE N 87°55'17" E ALONG THE SOUTH BOUNDARY OF LOTS 10 AND 9 OF SAID "LAKE HARRIS FARMS" 364.46 FEET TO THE POINT OF BEGINNING - COLUMBIA COUNTY, FLORIDA.

WHEN;	June 11, 2024 at 5:30pm or as soon after.
WHERE:	City Council Meeting Room, Second Floor, City Hall, located at 205 North Marion Avenue, Lake City, Florida. Members of the public may also view the meeting on our YouTube channel at: https://www.youtube.com/c/CityofLakeCity.

Copies of the site plan application are available for public inspection by contacting the Growth Management office at growthmanagement@lcfla.com or by calling 386-719-5820.

At the aforementioned public hearing, all interested parties may be heard with respect to the amendment.

FOR MORE INFORMAITON CONTACT
ROBERT ANGELO
PLANNING AND ZONING TECHNICIAN
AT 386-719-5820

Angelo, Robert

From: LCR-Classifieds <classifieds@lakecityreporter.com>
Sent: Tuesday, May 28, 2024 11:00 AM
To: Angelo, Robert
Subject: RE: 78430 78431 78432 RE: Non-Legal Ad for P&Z, BOA, and HPA for 06-11-2024

Confirmed!

Thank you much,
Kymberlee Harrison 386-754-0401
Support your local news source while reaching our community of loyal subscribers
Serving:
COLUMBIA • SUWANNEE • LAFAYETTE • HAMILTON
1086 SW Main Blvd. Ste 103, Lake City, FL 32055
PH 386-754-0401
Why Local Newsprint Advertising?
1 Newspaper readers are ENGAGED
2 Newspapers are viewed as TRUSTWORTHY

From: Angelo, Robert <AngeloR@lcfla.com>
Sent: Tuesday, May 28, 2024 10:59 AM
To: LCR-Classifieds <classifieds@lakecityreporter.com>
Subject: RE: 78430 78431 78432 RE: Non-Legal Ad for P&Z, BOA, and HPA for 06-11-2024

Looks Good

Thank You
Robert Angelo
City of Lake City
Growth Management
growthmanagement@lcfla.com
386-719-5820

PLEASE NOTE: Florida has a very broad public records law. Most written communications to or from City officials regarding City business are public records available to the public and media upon request. Your email communications may be subject to public disclosure.

From: LCR-Classifieds <classifieds@lakecityreporter.com>
Sent: Tuesday, May 28, 2024 10:37 AM
To: Angelo, Robert <AngeloR@lcfla.com>
Subject: 78430 78431 78432 RE: Non-Legal Ad for P&Z, BOA, and HPA for 06-11-2024

Here you go!
P&Z 2x8 247.50

Historic: 2x6.25 206.25
BOA: 2x6 198.00

Thank you much,
Kymberlee Harrison 386-754-0401
Support your local news source while reaching our community of loyal subscribers
Serving:
COLUMBIA • SUWANNEE • LAFAYETTE • HAMILTON
1086 SW Main Blvd. Ste 103, Lake City, FL 32055
PH 386-754-0401
Why Local Newsprint Advertising?
1 Newspaper readers are ENGAGED
2 Newspapers are viewed as TRUSTWORTHY

From: Angelo, Robert <AngeloR@lcfla.com>
Sent: Friday, May 24, 2024 3:49 PM
To: LCR-Classifieds <classifieds@lakecityreporter.com>
Subject: Non-Legal Ad for P&Z, BOA, and HPA for 06-11-2024

Kym

Please publish this ad in the body of the paper as a display ad in the **May 30, 2024** paper.

Thank You
Robert Angelo
City of Lake City
Growth Management
growthmanagement@lcfla.com
386-719-5820

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NOTICE OF PUBLIC MEETING
CITY OF LAKE CITY
PLANNING AND ZONING BOARD

THIS SERVES AS PUBLIC NOTICE the Planning and Zoning Board will hold a meeting on Tuesday, June 11, 2024 at 5:30 PM or as soon after.

Agenda items-

1. SPR 24-05, Petition submitted by Randall Olney, P.E., (agent) for Concept Companies, (owner), for a Site Plan Review for Dollar General, in a Commercial Intensive zoning district, and located on parcel 08127-005, which is regulated by the Land Development Regulations Section 4.13.
2. SPR 24-06, Petition submitted by Christopher A. Gmuer, P.E., (agent) for ERA Investments, LLC, (owner), for a Site Plan Review for Lake City Hotels Phase 2, in a Commercial Intensive zoning district, and located on parcel 02582-002, which is regulated by the Land Development Regulations Section 4.13.
3. SPR 23-10, Petition submitted by Carol Chadwick, P.E., (agent) for Affiliated Property Management, (owner), for a Site Plan Review for Aspire Dental Addition, in a Residential Office zoning district, and located on parcel 07604-102, which is regulated by the Land Development Regulations Section 4.10.

Meeting Location: City Council Chambers located on the 2nd Floor of City Hall at 205 North Marion Avenue, Lake City, FL 32055.

Members of the public may also view the meeting on our YouTube channel at:
https://www.youtube.com/c/CityofLakeCity

Pursuant to 286.0105, Florida Statutes, the City hereby advises the public if a person decides to appeal any decision made by the City with respect to any matter considered at its meetings or hearings, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

SPECIAL REQUIREMENTS: Pursuant to 286.26, Florida Statutes, persons needing special accommodations to participate in this meeting should contact the City Manager's Office at (386) 719-5768.

Robert Angelo
Planning and Zoning Tech.

CITY OF LAKE CITY CUSTOMER SERVICE BUILDING
173 NW HILLSBORO STREET
LAKE CITY, FL 32055

NOTICE OF PUBLIC MEETING
CITY OF LAKE CITY
PLANNING AND ZONING BOARD

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1. **SPR 24-05**, Petition submitted by Randall Olney, P.E., (agent) for Concept Companies, (owner), for a Site Plan Review for Dollar General, in a Commercial Intensive zoning district, and located on parcel 08127-005, which is regulated by the Land Development Regulations Section 4.13.
2. **SPR 24-06**, Petition submitted by Christopher A. Gmuer, P.E., (agent) for ERA Investments, LLC, (owner), for a Site Plan Review for Lake City Hotels Phase 2, in a Commercial Intensive zoning district, and located on parcel 02582-002, which is regulated by the Land Development Regulations Section 4.13.
3. **SPR 23-10**, Petition submitted by Carol Chadwick, P.E., (agent) for Affiliated Property Management, (owner), for a Site Plan Review for Aspire Dental Addition, in a Residential Office zoning district, and located on parcel 07604-102, which is regulated by the Land Development Regulations Section 4.10.

Meeting Location: City Council Chambers located on the 2nd Floor of City Hall at 205 North Marion Avenue, Lake City, FL 32055.

Members of the public may also view the meeting on our YouTube channel at: https://www.youtube.com/c/CityofLakeCity

Pursuant to 286.0105, Florida Statutes, the City hereby advises the public if a person decides to appeal any decision made by the City with respect to any matter considered at its meetings or hearings, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

SPECIAL REQUIREMENTS: Pursuant to 286.26, Florida Statutes, persons needing special accommodations to participate in this meeting should contact the City Manager's Office at (386) 719-5768.

Robert Angelo
Planning and Zoning Tech

CITY OF LAKE CITY
Florida's Gateway Est. 1859

May 13, 2024

To Whom it May Concern,

On June 10, 2024 the Planning and Zoning Board will be having a meeting at 5:30pm at 205 N. Marion. At this meeting we will be hearing a petition submitted by Christopher a. Gmuer, PE, as agent for ERA Investments, LLC, owner, for a site plan review, SPR 24-06, on parcel 02582-002. The site plan review is to build a hotel located within the Commercial Intensive (CI) zoning district.

If you have any questions or concerns please call 386-752-2023 ext. 820 or email me at growthmanagement@lcfla.com.

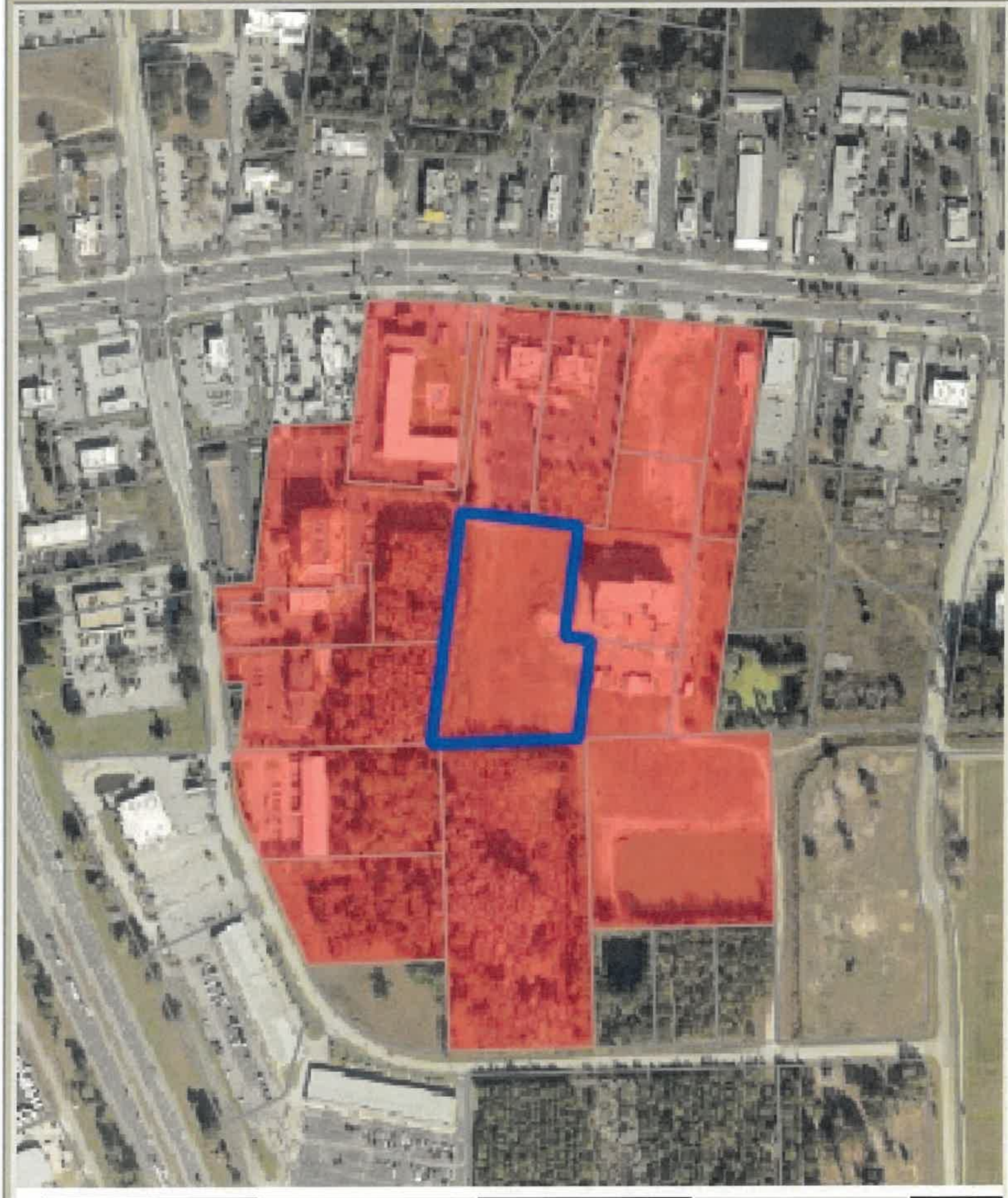
Robert Angelo

Planning and Zoning
City of Lake City

Columbia County Property Appraiser - Sales Report

Name	Address1	Address2	Address3	City	State	ZIP
JIV MANAGEMENT HOLDING SERVICES, LLC	369 TOCCOA PL		JONESBORO	GA	30236	
ERA INVESTMENTS LLC	162 NW BIRDIE PL		LAKE CITY	FL	32055	
ERA INVESTMENTS LLC	162 NW BIRDIE PL		LAKE CITY	FL	32055	
ERA INVESTMENTS LLC	162 NW BIRDIE PL		LAKE CITY	FL	32055	
ERA INVESTMENTS LLC	162 NW BIRDIE PL		LAKE CITY	FL	32055	
AURUM LLC	162 NW BIRDIE PL		LAKE CITY	FL	32055	
STORE MASTER FUNDING XIII LLC	PO BOX 4069		MARYVILLE	TN	37802	
AKSHAR MOTEL LLC	285 SW COMMERCE BLVD		LAKE CITY	FL	32025	
ASMJ INC	339 SW COMMERCE DR		LAKE CITY	FL	32025	
OM SHANTI INC OF LAKE CITY	303 BEVERLY ST SE		LIVE OAK	FL	32064	
OASIS LAKE CITY LLC	162 NW BIRDIE PL		LAKE CITY	FL	32055	
ERA INVESTMENTS LLC	162 NW BIRDIE PL		LAKE CITY	FL	32055	
LAKE CITY 3072 W US HIGHWAY 90, LLC	250 JOHN KNOX RD	SUITE 6	TALLAHASSEE	FL	32303	
RARE HOSPITALITY MANAGMENT LLC	100 DARDEN CENTER DRIVE		ORLANDO	FL	32837	
R S MOTEL CORP	3696 W US HWY 90		LAKE CITY	FL	32055	

GIS Buffer



Certified Mail Receipts for June 10th P&Z Meeting
Site Plan Hotels Phase 2

9589 0710 5270 2044 9908 49

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LAKE CITY, FL 32055

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339 SW COMMERCE DR
LAKE CITY, FL 32025

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AKSHAR MOTEL, LLC
285 SW COMMERCE BLVD
LAKE CITY, FL 32025

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STORE MASTER
FUNDING XIII, LLC
PO BOX 4069
MARYVILLE TN, 37802

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AURIJM, LLC
162 NW BIRDIE PL
LAKE CITY, FL 32055

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162 NW BIRDIE PL
LAKE CITY, FL 32055