AGENDA

MINNEOLA PLANNING & ZONING COMMISSION MEETING

City Hall City Council Chambers
September 14, 2026 at 6:30 P.M.

I. CALL TO ORDER

II. MOMENT OF SILENCE & PLEDGE OF ALLEGIANCE

III. AGENDA REVIEW

IV. PUBLIC COMMENTS

The Minneola City Council will hear questions, comments, and concerns from the public. Action may not be taken by the city council at this meeting; however, questions may be answered by staff or issues may be referred for appropriate staff action.

Note: Pursuant to F.S. 286.0114 and the City of Minneola's Public Participation Policy adopted by Resolution 2013-19, members of the public shall be given a reasonable opportunity to be heard on propositions before the city council. Accordingly, comments, questions, and concerns regarding items listed on this agenda shall be received at the time the city council addresses such items during this meeting.

Pursuant to Resolution 2013-19, public comments are generally limited to three minutes.

V. MINUTES

Item 1.	Planning & Zoning Commission Meeting Minutes - August 3, 2026	Consider a Request to Approve the Minutes from the August 3, 2026 Planning & Zoning Commission Meeting.

VI. COMMISSION DISCUSSION AND ACTION ITEMS

Item 2.	Ordinance 2026-20 Grassy Lake Industrial Rezoning	An Ordinance of the City Council of the City of Minneola, Florida, Rezoning for 14.52± Acres Generally Located East of US Highway 27 and South of Citrus Grove Road From "Commercial-Planned Unit Development" (PUD-C) to "Industrial-

		Planned Unit Development” (PUD-I) Within the City of Minneola; Providing for Conditions and Contingencies; Providing for Severability; Providing for an Effective Date.
Item 3.	Ordinance 2026-21 Grassy Lake Industrial Comp Plan Amendment	An Ordinance of the City Council of the City of Minneola, Florida, Providing for a Textual Amendment to the City's Comprehensive Plan Amendment to Amend Policy 1-2.11.4 Entitled "Grassy Lake Holdings Commercial Development" to “Grassy Lake Holdings Industrial” Providing for a Comprehensive Plan Amendment to the City’s Future Land Use Map of the City of Minneola's Comprehensive Plan From " Grassy Lake Holdings Commercial Development" to “Grassy Lake Holdings Industrial” for Approximately 14.52 Acres Generally Located East of US Highway 27 and South of Citrus Grove Road; Providing for Conditions and Contingencies; Directing the City Clerk to Transmit the Amendment to the Appropriate Governmental Agencies Pursuant to Chapter 163, Florida Statutes; Providing for Severability; Providing for an Effective Date.
Item 4.	Resolution 2026-15 Grassy Lake Industrial Developer Agreement	A Resolution of the City Council of the City of Minneola, Florida, Approving the Grassy Lake Industrial Planned Unit Development Agreement; Providing for Severability; and Providing for an Effective Date.
Item 5.	Site Plan - Grassy Lake Industrial	Consider Approval of a Site Plan for 14.52± Acres Generally Located East of US Highway 27 and South of Citrus Grove Road for Commercial and Industrial Use Buildings.

VII. FINAL PUBLIC COMMENTS

Note: Pursuant to F.S. 286.0114 and the City of Minneola’s Public Participation Policy adopted by Resolution 2013-19, members of the public shall be given a reasonable opportunity to be heard on propositions before the city council. Accordingly, comments, questions, and concerns regarding items listed on this agenda shall be received at the time the city council addresses

such items during this meeting. Pursuant to Resolution 2013-19, public comments are generally limited to three minutes.

VIII. REPORTS

City Planner Joyce Heffington, AICP

AGENDA SUMMARY
Planning & Zoning Commission Meeting
September 14, 2026

Agenda Item: 1.
Subject Title: Planning & Zoning Commission Meeting Minutes - August 3, 2026

Objective:
Consider a Request to Approve the Minutes from the August 3, 2026 Planning & Zoning Commission Meeting.

Summary:

Exhibits:
1. P&Z Minutes August 3, 2026

Options:

Fiscal Impact:

Staff Recommendation:

Minneola Planning & Zoning Commission
Meeting Minutes
August 3, 2026, at 6:30 PM
Minneola City Hall

Chair Denise Calderon called the City of Minneola Planning & Zoning Commission meeting to order. Commissioners Ken Rose, Nicole Martin, and William McCoy were also present. Staff members in attendance included Gabriela Castro of Inspire Placemaking Partners, who provided contract planning services; Senior Planner Tom Grimms; Planning Technician John Lozano; and CRA Administrator Joyce Heffington.

CALL TO ORDER

Chairperson Denise Calderon called the meeting to order at 6:30 p.m.

MOMENT OF SILENCE & PLEDGE OF ALLEGIANCE

A moment of silence was observed and the Pledge of Allegiance was led by Commissioner McCoy.

AGENDA REVIEW

There were no changes to the agenda, however, Commissioner Martin noted Item 5 was not updated on some printed agendas and confirmed the revised agenda was published on the portal.

PUBLIC COMMENTS

There were no public comments.

DISCUSSION AND ACTION ITEMS

Item 1: Planning & Zoning Commission Meeting Minutes – June 1, 2026

MOTION by Commissioner Rose, SECONDED by Commissioner Martin to approve the June 1, 2026, Planning & Zoning Commission meeting minutes as presented.

AYE: Calderon, Martin, McCoy, Rose

NAY: None

MOTION PASSED: 4-0

Item 2: Resolution 2026-06 Conditional Use Permit – Mavis Tire (Quasi-Judicial)

Gabriela Castro summarized the proposed ±7,095-square-foot motor vehicle service center on a B-1 parcel within a larger commercial site. She explained that the site would use internal access, would not add new driveways on U.S. 27, and would provide internal parking and loading. She

stated that the setbacks and buffers would meet code, the architecture would comply with applicable requirements, signage would be reviewed during permitting, utilities were available, and no detrimental impacts were anticipated. She also noted that rooftop equipment must be screened and that the landscaping must comply with the City's approved plant list.

Jimmy Crawford, attorney representing the applicant, concurred with staff's presentation and requested adjusted operating hours. He requested that the business remain open until 8:30 p.m. on Thursdays for emergency repairs and customer pickup, from 8:00 a.m. to 5:00 p.m. on Saturdays, and from 9:00 a.m. to 5:00 p.m. on Sundays.

The Commission discussed native plant substitutions, ecological stormwater practices, pedestrian frontage improvements such as planters and shade, parking canopies and landscape islands to reduce the heat-island effect, and controls for light spill, including full-cutoff fixtures and timers. The Commission also confirmed that all repair work would be conducted inside the service bays and that vehicles awaiting parts could be parked on-site.

Public Comment

Kevin Carey, 20237 Sugarloaf Mountain Road, expressed concerns about light spill exceeding 0.1 foot-candle, potential noise from pneumatic tools, pedestrian connectivity, and a discrepancy in the number of service bays.

The applicant agreed to revise the photometric plan to eliminate light spill, add an internal pedestrian connection, verify that the bay count was consistent throughout the application materials, and consider quieter equipment. The applicant stated that these details would be addressed before the item was presented to the City Council.

MOTION by Commissioner Martin, SECONDED by Commissioner McCoy, to recommend approval with the following conditions and recommendations: increase native landscaping, including substituting specified ornamental species with appropriate Florida natives; increase parking lot canopy and/or add front planters where feasible to mitigate heat island effects; incorporate ecological stormwater features where feasible, such as wetland-specific plantings and naturalized edges; enhance the pedestrian frontage and add an internal pedestrian connection to the spine road; revise the photometric plan to eliminate off-site light spill and consider full cutoff fixtures and timers; provide a noise study or equivalent analysis addressing shop equipment noise and anticipated off-site impacts; adopt staff recommendations, including rooftop equipment screening, compliance with the City's approved plant list, and signage review at permitting; and approve operating hours as follows—Monday through Wednesday and Friday from 8:00 a.m. to 6:00 p.m.; Thursday from 8:00 a.m. to 8:30 p.m. limited to emergency repairs and customer pickup during the extended period; Saturday from 8:00 a.m. to 5:00 p.m.; and Sunday from 9:00 a.m. to 5:00 p.m.

AYE: Calderon, Martin, McCoy, Rose

NAY: None

MOTION PASSED: 4-0

Item 3: Resolution 2026-10 – Ace Hardware Variance

Gabriela Castro summarized two requested variances. The first variance would allow a TPO roofing membrane behind parapets on screened flat-roof areas instead of tile or metal roofing. The second variance would provide relief from the architectural treatment requirements for the east elevation to accommodate a functional, open-air garden center adjacent to a utility easement. She stated that staff recommended approval based on the applicable criteria.

Jeff Powell, Powell Studio Architecture, accompanied by the Tools Ace chief executive officer, described the proposed design. He explained that visible peaked roof elements would have metal roofing, while screened flat-roof areas would use TPO roofing. He stated that the east-side garden center would incorporate decorative fencing and columns and that the primary and front façades would include enhanced architectural features and glazing. He also provided updated renderings.

The Commission confirmed that no products would be displayed along the Citrus Grove frontage and that pallets and similar items would be stored within the garden center. The Commission also asked the applicant to consider additional landscape screening where beneficial. Commissioner Martin recommended measures to minimize bird entry into the garden center.

Public Comment

There were no comments.

MOTION by Commissioner Martin, SECONDED by Commissioner Rose to approve both variances with the recommendation to consider bird-prevention measures for the garden center (e.g., deterrent design features to reduce wildlife entrapment).

AYE: Calderon, Martin, McCoy, Rose

NAY: None

MOTION PASSED: 4-0

Item 4: Resolution 2026-11 – Gentle Breeze Drive Variance

Thomas Grimms summarized the request for a variance from the required 25-foot rear setback to 9.6 feet to allow an insulated, solid-roof enclosure. He explained that the original placement of the main structure preserved one of the City's oldest trees and maintained drainage. He also noted the standard conditions for managing runoff.

The Commission noted the applicant's absence and discussed potential runoff impacts on the adjacent properties identified as Lots 40 and 41. The Commission also discussed conducting outreach to the directly affected property owners.

Public Comment

There were no comments.

MOTION by Commissioner Martin, SECONDED by Commissioner McCoy, to approve the variance with the following conditions and recommendations: that the applicant attend the City Council hearing on this item; that runoff and drainage from the enclosure be verified to have no adverse impact on adjacent properties, with any existing swales maintained and runoff directed in accordance with engineering review; and that staff conduct targeted outreach to adjacent property owners (lots 40 and 41) prior to Council consideration and document any feedback.

AYE: Calderon, Martin, McCoy, Rose

NAY: None

MOTION PASSED: 4-0

Item 5: Discussion – Voluntary Conservation Design Checklist

Commissioner Martin presented a voluntary, points-based conservation/stewardship checklist to encourage native landscaping, habitat connectivity, ecological stormwater, dark-sky practices, construction care, and long-term stewardship.

The Commission discussed formatting the checklist with a concise summary of the focus areas on the first page and a bold or graphic overview. The Commission also discussed coordinating with staff and presenting a refined version to the City Council. No formal action was taken.

FINAL PUBLIC COMMENTS

There were no comments.

REPORTS

Commissioner Martin discussed recent changes in the State's classification of gopher tortoises and potential local stewardship and educational initiatives. She suggested that the City explore incentives and mitigation strategies to support the preservation of gopher tortoises within new developments.

ADJOURNMENT

MOTION to adjourn by Commissioner Rose, SECONDED by Commissioner Martin.

AYE: Calderon, Martin, McCoy, Rose

NAY: None

MOTION PASSED: 4-0

(Meeting adjourned at 8:08 p.m.)

_____
Denise Calderon, Chairperson

ATTEST:

_____
John Lozano, Planning Technician

AGENDA SUMMARY
Planning & Zoning Commission Meeting
September 14, 2026

Agenda Item: 2.
Subject Title: Ordinance 2026-20 Grassy Lake Industrial Rezoning

Objective:
An Ordinance of the City Council of the City of Minneola, Florida, Rezoning for 14.52± Acres Generally Located East of US Highway 27 and South of Citrus Grove Road From "Commercial-Planned Unit Development" (PUD-C) to “Industrial- Planned Unit Development” (PUD-I) Within the City of Minneola; Providing for Conditions and Contingencies; Providing for Severability; Providing for an Effective Date.

Summary:
Major Stacy, Owner, for Grassy Lake Holdings, requests rezoning 14.52 ± acres from “Commercial Planned Unit Development” (PUD-C) to “Industrial Planned Unit Development” (PUD-I) for property generally located east of US Highway 27 and north of Citrus Grove Road. Originally the owner was only going to change the Developer Agreement to allow office warehouse (flex space) in the B-1 zoning but now wants more industrial uses as well. Our comprehensive plan shows US Highway 27 for commercial not industrial uses.

Exhibits:
1. Application
2. Ord 2026-20 Rezoning Minneola Commerce - Revised 9.2.26
3. 20250038 BDY-TOPO SURVEY
4. Legal Description
5. Site Plan
6. LUP
7. Grading Plan
8. Minneola Commerce Center FLUM RZ_v1
9. Warranty Deed
10. 277 Minneola Commerce Center TIA v1
11. 240b Minn Commerce Center US N 27 SP3 v1
12. Minneola Commerce Center FLUM RZ_v1
13. Public Hearing Notice Ord 2026-20 Rezoning
14. IMG_0815
15. IMG_0816
16. ADDRESSES

17. Affidavit Rezoning

Options:
1. Approve the ordinance as presented.
2. Approve the ordinance subject to modifications.
3. Postpone the decision.
4. Deny the ordinance.

Fiscal Impact:
Undetermined.

Staff Recommendation:
Staff recommends if approved it be on the condition the former FDOT pond is annexed in and all staff comments be addressed.

CITY OF MINNEOLA, FLORIDA
ZONING MAP AMENDMENT
WITH
COMPREHENSIVE PLAN AMENDMENT
APPLICATION CHECKLIST

This Checklist is based on the relevant provisions of Chapter 98-3, Rezoning, Chapter 98-4(a), Small Scale Comp Plan Amendment (10 acres or less), and Chapter 98-4(b), Large Scale Comp Plan Amendment (10.1 acres or more), of the Minneola Code of Ordinances. The Code is available at www.municode.com. Requirements are minimums that may be adjusted in the pre-application conference.

Please check one:

40 ACRES

__X__ Small Scale Comp Plan Amendment ~~(10 acres or less)~~ - **$1,350**

_____ Large Scale Comp Plan Amendment (10.1 acres or more) - **$2,350**

The following information is required for all Zoning Map & Comp Plan Amendment Applications:

__X__ 1 – Copy of the Legal Description [could be on the survey]
__X__ 1 – Certified copy of the Warranty Deed
__X__ 1 – Copy of the signed and notarized property Owner's Authorization (if applicable)
__X__ 1 – Copy of the completed Application form with Checklist
__X__ 1 – Copy of the completed Adjacent Property Owners form -- or --
__X__ 3 – Copy of the Boundary Survey by a Florida Licenses surveyor @ 24" x 36"
__X__ 3 – Copy of the Conceptual Plan for the subject site @ 24" x 36"
_____ 10 – Copy of the Boundary Survey by a Florida Licenses surveyor @ 24" x 36"
_____ 10 – Copy of the Conceptual Plan for the subject site @ 24" x 36"
__X__ 1 – CD in PDF format including ALL application package text and graphics
__X__ Non-refundable fee per Amendment acreage size listed above

---

The Conceptual Plan will include: GOEM. PLAN & GRADING PLAN PROVIDED

__X__ a) A graphic identification of the points of entry from the adjacent road
__X__ b) The site contours – minimum 10-ft. intervals
__X__ c) A graphic depiction of the proposed density (du/acre) or intensity (FAR) by sub-area (bubble diagrams) or total square footage of all principal structures
__X__ d) A graphic identification of the existing adjacent land use on all sides
__X__ e) A graphic identification of the existing adjacent zoning on all sides of the site
__X__ f) Other requirements identified in the pre-application conference

---

Submit to: Planning Department, 800 N. U.S. Hwy 27, Minneola, FL 34715

CITY OF MINNEOLA, FLORIDA
ZONING MAP AMENDMENT
WITH
COMPREHENSIVE PLAN AMENDMENT
APPLICATION CHECKLIST (continued)

Application Review Process

Development Review Process (DRP)

- A pre-determined level of DRP review shall occur for every application
- The DRP will provide written comments/recommendations to the applicant and the P&Z

Planning and Zoning Commission (P&Z)

- The Planning Dept (Dept) is responsible to ensure the proper legal advertising is done in a timely manner
- The applicant is responsible to correctly post the required signs on the site in a timely manner and pursuant to the instructions provided by the Dept and to remove the signs after the approval process is completed
- The P&Z will provide written comments to the City Council

City Council

- The City Council may conduct one or more public workshops prior to initiating their formal consideration of a small scale comprehensive plan amendment application
- The Dept will advise the applicant of the next available workshop date
- Upon Council's completion of the workshop process the Dept will do an additional legal advertisement and the applicant must again post signs on the site as described above
- The City Council must conduct two public hearings regarding the proposed amendment
- The Council may defer consideration of the subject application at any time

For additional information regarding the application review process, please refer to the Minneola Code of Ordinances:

- Chapter 98-3, Rezoning,
- Chapter 98-4(a), Small Scale Comp Plan Amendment (10 acres or less),
- Chapter 98-4(b), Large Scale Comp Plan Amendment (10.1 acres or more).

The Code is available at www.municode.com.

CITY OF MINNEOLA, FLORIDA
ZONING MAP AMENDMENT
WITH
COMPREHENSIVE PLAN AMENDMENT
APPLICATION

X Small Scale Comp Plan Amendment ___ Large Scale Comp Plan Amendment

(Please check one Comp Plan Amendment type above)

Applicant Name: Drew Thigpen - Pelican Industrial

Applicant Address: [redacted]

Applicant Phone #: 843-469-2517 Fax # or E-mail [redacted]

General Location and/or Street Address: US 27 & Citrus Grove Rd

Alternate Key Number(s): 1031281 & 1031265

Owner Name: Grassy Lake Holdings

Owner Address: [redacted]

Owner Phone #: 407-456-1497 Fax # or E-mail: [redacted]

Site Area (acres or sq. ft.): 14.96

~~~~~~~~~~~~~~~~~~~~~~~~ **EXISTING** ~~~~~~~~~~~~~~~~~~~~~~~~

FLUM: PD-Comm Zoning: PD

Potable Water Source: City Sewage Disposal Method: City

Present Use & List Of Structures By Use: Homeless Encampment - Sheriff Has Authority to Access

Has this site been subject to other development applications in the last two years?

No: Yes If Yes, provide the type of action and date of final action:

Site Permitting - Ongoing

~~~~~~~~~~~~~~~~~~~~~~~~ **PROPOSED** ~~~~~~~~~~~~~~~~~~~~~~~~

FLUM: PD-Ind. Zoning: PD

Potable Water Source: City Sewage Disposal Method: City

Proposed Use: Light Flex Space to serve local residents

Reasons for the request: Provide a location for businesses that serve local residents needs

Adjacent Roadway Classification & LOS: US 27 LOS B (See TIA submitted w/ Site Plan)

Estimated traffic generated by the proposed project: 75 Peak PM Hour Trips

CITY OF MINNEOLA, FLORIDA
ZONING MAP AMENDMENT
WITH
COMPREHENSIVE PLAN AMENDMENT

CERTIFICATION

I, the undersigned, do hereby certify that I have read the application and the relevant guidance material and understand the requirements described therein and that I will fully comply with all City, State and Federal regulations applicable to this project.

I understand that the application fee is non-refundable.

I further understand that I am responsible to reimburse the City for the actual advertising costs, mailing costs, **AND** the actual consultants' review fees, if any. Said fees shall be paid within 30 days of receipt of the City's invoice **OR** further processing of the application will cease until the invoice is paid in full.

I understand that only application packages that are determined complete by the Department will be scheduled for review.

Applicant Signature

8/15/26
Date

****

Payment Record for Office Use:

Applicant Name: _____

Application for: _____

Amount: _____ Check #: _____

Amount: _____ Check #: _____

Rec'd by: _____ Date: _____ Receipt #: _____

City of Minneola

ZONING MAP AMMENDMENT WITH COMPREHENSIVE PLAN AMMENDMENT

Owner's Authorization

(required if the property owner is not the applicant)

STATE OF FLORIDA
COUNTY OF LAKE

Before me, the undersigned authority, personally appeared Drew Thigpen

who is being by me first duly sworn on oath, deposes and says:

1. That he/she is the property owner of the subject parcels in this application.
2. That he/she desires to apply for Comp plan & rezone on land generally located at:
   US 27 & Citrus Grove Road 062226000300004700 & 062226000300006300
3. That he/she has appointed Major Stacy to act as agent in his/her behalf to accomplish the above.

Owner's Signature

This is to certify that on July 18th, 20 25 before me, an officer duly authorized to take acknowledgements in the State and County aforesaid, personally appeared Major Stacy he/she is personally know to me or has produced

SEAL

Danielle L. McDougall
Notary Public
State of Florida
Comm# HH592298
Expires 10/4/2028

Danielle L. McDougall

Danielle L. McDougall
Acknowledger Name

HH592298
Serial Number

10-04-2028
My Commission Expires

CITY OF MINNEOLA, FLORIDA
ZONING MAP AMENDMENT
WITH
COMPREHENSIVE PLAN AMENDMENT
ADJACENT PROPERTY OWNERS

Type a list of owner's names and mailing addresses for all properties lying within 300 feet of all sides of the property described in the attached application, as recorded on the current County tax rolls, or attach photocopies of the appropriate Property Record Cards. [not both]

Alternate Key #	Property Owner	Address (include zip code)
1028965	CITRUS GROVE ROAD HOLDINGS LLC	15 CREEKWOOD WAY, HILLSBOROUGH, CA 94010
3793049	DOORSAMMY CHOONMATTIE	17350 US HIGHWAY 27, CLERMONT, FL 34715-9272
3826439	FALZONE SHERRY & TOBIAS T	17358 N US HIGHWAY 27, CLERMONT, FL 34715
1031265	GRASSY LAKE HOLDINGS LLC	5832 WOODBINE DR, BELL ISLE, FL 32809
1061270	VISTA GRANDE PROPERTIES	13940 ASHTON PARK WAY, MINNEOLA, FL 34715
1031273	GHULAM DAYANAND & JASMA	9229 195TH PL, HOLLIS, NY 11423
1066549	OPEN DOOR BAPTIST OF CLERMONT INC	17140 US HIGHWAY 27, CLERMONT, FL 34715
1108942	ZAVY ENTERPRISES LLC	23825 INTEGRITY WAY, SORRENTO, FL 32776
1591881	DE NOYELLES JOHN TRUSTEE	3149 SCRUB OAK TRL, OVIEDO, FL 32765
1591902	PROFESSIONAL RESOURCE DEVELOPMENT INC	1200 NETWORK CENTRE DR STE 2, EFFINGHAM, IL 62401
1509572	SOUTH LAKE COUNTY LODGE #1615	17335 US HIGHWAY 27, CLERMONT, FL 34715-9220
1065186	DUKE ENERGY CENTER	PO BOX 37996, CHARLOTTE, NC 28237-7996
1108977	FIELDS EQUIPMENT COMPANY INC	PO BOX 113, WINTER HAVEN, FL 32882-0113

Use additional pages as necessary

ORDINANCE 2026-20

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MINNEOLA, FLORIDA, REZONING APPROXIMATELY 13.32 ACRES GENERALLY LOCATED EAST OF U.S. HIGHWAY 27 AND SOUTH OF CITRUS GROVE ROAD FROM COMMERCIAL PLANNED UNIT DEVELOPMENT (PUD-C) TO INDUSTRIAL PLANNED UNIT DEVELOPMENT (PUD-I); APPROVING AND INCORPORATING THE DEVELOPMENT AGREEMENT GOVERNING DEVELOPMENT OF THE PROPERTY; PROVIDING CONDITIONS AND CONTINGENCIES; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Grassy Lake Holdings, LLC (the "Owner"), has requested that approximately 13.32 acres of real property generally located east of U.S. Highway 27 and south of Citrus Grove Road be rezoned; and

WHEREAS, notice of the proposed rezoning and public hearings has been provided in accordance with applicable law; and

WHEREAS, the approximately 13.32 acres described in Exhibit "A" (the "Property") are presently designated "Grassy Lake Holdings Commercial Development" on the City's Future Land Use Map and are zoned Commercial-Planned Unit Development (PUD-C); and

WHEREAS, the City Council is considering Ordinance 2026-21 to amend Comprehensive Plan Policy 1-2.11.4 and the Future Land Use Map designation for the Property to "Grassy Lake Holdings Industrial Development"; and

WHEREAS, Owner has requested that the Property be rezoned to Industrial-Planned Unit Development (PUD-I) to allow the Property to be developed as a coordinated industrial and limited accessory commercial project, subject to the conditions imposed by this Ordinance and the Development Agreement; and

WHEREAS, the First Amended and Restated Development Agreement between the City and Owner (the "Development Agreement") establishes binding permitted uses, prohibited uses, development standards, infrastructure obligations, utility conditions, and other requirements governing development of the Property; and

WHEREAS, the Development Agreement also addresses a separate approximately 1.199-acre parcel presently owned by the Florida Department of Transportation (the "FDOT Parcel"), but the FDOT Parcel is not included within the Property rezoned by this Ordinance and must be acquired by the applicant, annexed into the City, and separately approved for the applicable future land use and zoning designations before development may occur on that parcel; and

WHEREAS, after considering the application and the competent substantial evidence presented at duly noticed public hearings, the City Council finds that the rezoning is consistent with the City's Comprehensive Plan, compatible with the surrounding area, and in the public interest, subject to the conditions and contingencies stated in this Ordinance and the Development Agreement; and

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MINNEOLA, FLORIDA, AS FOLLOWS:

Section 1. The property consists of approximately 13.32 acres generally located east of U.S. Highway 27 and south of Citrus Grove Road and is more particularly described in **Exhibit "A"** attached hereto and incorporated herein by reference (the "Property").

Section 2. The Property is rezoned from Commercial-Planned Unit Development (PUD-C) to Industrial-Planned Unit Development (PUD-I). Development of the Property shall comply with the Development Agreement attached hereto as **Exhibit "B"** and incorporated herein by reference (the "Development Agreement"). Data centers, data center facilities, large-scale data centers, and large load customer facilities are prohibited on the Property, whether proposed as principal, accessory, ancillary, incidental, or mixed uses. If the Development Agreement conflicts with this Ordinance, this Ordinance shall control. No amendment to the Development Agreement that modifies a permitted use, prohibited use, intensity, development standard, or other zoning condition shall be effective unless approved through the process required for an amendment to this PUD-I zoning approval.

Nothing in this Ordinance rezones or grants development rights to the approximately 1.199-acre FDOT parcel addressed in the Development Agreement. That parcel must be acquired by the Owner, annexed into the City, and separately rezoned before development may occur on that parcel.

Section 3. If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portion of this Ordinance.

Section 4. This Ordinance shall become effective immediately upon adoption; provided, however, that the rezoning shall not become operative until Ordinance 2026-21 becomes effective and the Development Agreement has been executed by the City and Owner and recorded in the Public Records of Lake County, Florida. Nothing in this Ordinance authorizes development before all applicable site-plan, concurrency, utility-capacity, and other development approvals have been obtained.

PASSED AND ORDAINED this _____ day of _____, 2026 by the City Council of the City of Minneola, Florida.

_____
PAM SERVISS, Mayor

ATTEST:

_____
KRISTINE THOMPSON, City Clerk

Passed First Reading _____

Passed Second Reading _____

Approved as to form:

_____
SCOTT A. GERKEN, City Attorney

EXHIBIT "A"

PARCEL 1

THAT PORTION OF THE NORTHWEST¼ OF THE SOUTHWEST¼ OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, LYING EAST OF THE EASTERLY RIGHT-OF-WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), LESS *ANO EXCEPT THE NORTH 570 FEET THEREOF ANO THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.*

THE ABOVE DESCRIBED PROPERTY IS *ALSO DESCRIBED* AS *FOLLOWS:*

BEGIN AT THE SOUTHEAST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHWEST ¼ OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA; THENCE NORTH 00°09'20" EAST ALONG THE EAST BOUNDARY OF THE SAID NORTHWEST ¼ OF THE SOUTHWEST¼, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NORTHWEST¼ OF THE SOUTHWEST 1/4; THENCE NORTH 89°50'01" WEST ALONG THE SAID SOUTH BOUNDARY, 704.047 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27); THENCE SOUTH 14°00'27" EAST ALONG SAID EASTERLY RIGHT-OF-WAY LINE 307.47 FEET TO THE NORTHWESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA; THENCE NORTH 75°59'33" *EAST, 152.00 FEET TO THE NORTHWESTERLY CORNER OF SAID RETENTION AREA; THENCE SOUTH 14°00'27" EAST 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA; THENCE SOUTH* 75°59'33" *WEST, 152 FEET TO THE AFORESAID EASTERLY RIGHT-OF WAY LINE OF STATE ROAD NO. 25; THENCE SOUTH 14°00'27" EAST, ALONG THE SAID RIGHT-OF-WAY LINE 146.26 FEET TO THE SOUTH BOUNDARY OF THE AFORESAID NORTHWEST¼ OF THE SOUTHWEST ¼ OF SECTION 6; THENCE SOUTH 89°39'42" EAST ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.*

THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA WHICH IS *NOT INCLUDED HEREIN* IS *DESCRIBED* AS *FOLLOWS:*

THAT PART OF THE SOUTH 12.7 ACRES LYING EAST OF THE COUNTY ROAD, IN THE NORTHWEST ¼ OF THE SOUTHWEST 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LYING IN LAKE COUNTY, FLORIDA, LYING WITHIN 220 FEET EAST OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200; SOUTH OF STATION 64+90.00 ANO NORTH OF STATION 61+70.00 SAID SURVEY LINE ANO SAID STATIONS BEING DESCRIBED ANO LOCATED AS *FOLLOWS:*

BEGIN ON THE NORTH LINE OF THE NORTWEST ¼ OF THE SOUTHWEST ¼ OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26, EAST, AT A POINT 405.38 FEET EAST OF THE NORTHWEST CORNER OF SAID NORTHWEST ¼ OF SOUTHWEST ¼, THENCE RUN SOUTH 13°58'00" EAST, A DISTANCE OF 912.54 FEET TO STATION 64+90.00; THENCE CONTINUE SOUTH 13°58'00" EAST, A DISTANCE OF 320 FEET TO STATION 61+70.00; THENCE CONTINUE SOUTH 13°58'00" EAST, A DISTANCE OF 100 FEET.

PARCEL 2:

BEGINNING 1044.05 FEET NORTH OF SOUTHEAST CORNER OF SOUTHWEST ¼ OF THE SOUTHWEST 1/4; SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST; RUN NORTH 85.58' WEST TO RIGHT-OF-WAY OF HIGHWAY; THENCE NORTHWESTERLY ALONG SAID RIGHT-OF-WAY TO NORTH LINE OF SAID SOUTHWEST ¼ OF SOUTHWEST ¼; THENCE EAST TO NORTHEAST CORNER OF SAID SOUTHWEST ¼ OF SOUTHWEST 1/4, THENCE SOUTH TO POINT OF BEGINNING.

EXHIBIT “B”
DEVELOPMENT AGREEMENT

LEGAL DESCRIPTION:

PARCEL 1:

THAT PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA LYING EAST OF THE EASTERLY LINE OF THE RIGHT-OF-WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.

THE ABOVE PROPERTY IS ALSO DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF THE NW 1/2 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THENCE N.00 DEGREES 09'20" E. ALONG THE EAST BOUNDARY OF THE SAID NW 1/4 OF THE SW 1/4, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NW 1/4 OF THE SW 1/4, THENCE N. 89 DEGREES 50'01" W. ALONG THE SAID SOUTH BOUNDARY, 704.47 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), THENCE S. 14 DEGREES 00'27" E. ALONG SAID EASTERLY RIGHT-OF-WAY LINE 307.47 FEET TO THE NORTHWESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THENCE N. 75 DEGREES 59'33" E. 152 FEET TO THE NORTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 14 DEGREES 00'27" E. 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 75 DEGREES 59'33" W. 152.00 FEET TO THE AFORESAID EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25, THENCE S. 14 DEGREES 00'27" E. ALONG THE SAID RIGHT-OF-WAY LINE 146.26 FEET TO THE SOUTH BOUNDARY OF THE AFORESAID NW 1/4 OF THE SW 1/4 OF SECTION 6, THENCE S. 89 DEGREES 39'42" E. ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.

THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA WHICH IS NOT INCLUDED HEREIN IS DESCRIBED AS FOLLOWS:

THAT PART OF: THE SOUTH 12.7 ACRES LYING E OF THE COUNTY ROAD, IN THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST", LYING IN LAKE COUNTY, FLORIDA LYING WITHIN 220 FEET E OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200; S OF STATION 64+90.00 AND N. OF STATION 61+70.00 SAID SURVEY LINE AND SAID STATIONS BEING DESCRIBED AND LOCATED AS FOLLOWS: BEGIN ON THE N LINE OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, T22S, R26E, AT A POINT 405.38 FEET E OF THE NW CORNER OF SAID NW 1/4 OF THE SW 1/4 THENCE RUN S 13 DEGREES 58'00" E, A DISTANCE OF 912.54 FEET TO STATION 64+90.00; THENCE CONTINUE S 13 DEGREES 58'00" E, A DISTANCE OF 320 FEET TO STATION 61+70.00; THENCE CONTINUE S 13 DEGREES 58'00"E, A DISTANCE OF 100 FEET.

CONTAINING 48,640 SQ. FT. (1.199 ACRES), MORE OR LESS, EXCLUSIVE OF ROAD RIGHT OF WAY.

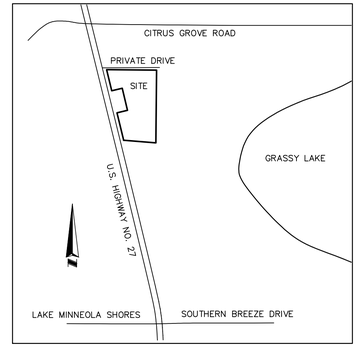
PARCEL 2:

BEGINNING 1044.05 FEET N OF SE CORNER OF SW 1/4 OF SW 1/4, SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN N 85 DEGREES 58' W TO RIGHT-OF-WAY OF HIGHWAY; THENCE NWLY ALONG SAID RIGHT-OF-WAY TO N LINE OF SAID SW 1/4 OF SW 1/4, THENCE E TO NE CORNER OF SAID SW 1/4 OF SW 1/4, THENCE S TO POINT OF BEGINNING.

SURVEYOR'S NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON THE STATE PLANE COORDINATE SYSTEM EAST ZONE NORTH AMERICAN DATUM (NAD) OF 1983 WITH 2011 ADJUSTMENT AND DERIVING A BEARING BASED ON THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST AS BEING S89°12'21"E.
2. THERE MAY BE EASEMENTS AND RESTRICTIONS OF RECORD AND/OR PRIVATE AGREEMENTS NOT FURNISHED TO THIS SURVEYOR OR SHOWN ON THIS BOUNDARY SURVEY THAT MAY AFFECT PROPERTY RIGHTS AND/OR LAND USE RIGHTS OF THE SUBJECT PROPERTY.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A COMMITMENT FOR TITLE INSURANCE.
4. THERE MAY BE ENVIRONMENTAL ISSUES AND/OR OTHER MATTERS REGULATED BY VARIOUS DEPARTMENTS OF FEDERAL, STATE OR LOCAL GOVERNMENTS AFFECTING THE SUBJECT PROPERTY NOT SHOWN ON THIS SURVEY
5. THIS SURVEY WAS PERFORMED FOR THE SOLE AND EXCLUSIVE BENEFIT OF THE ENTITIES LISTED HEREON AND SHALL NOT BE RELIED UPON BY ANY OTHER ENTITY OR INDIVIDUAL WHOMSOEVER.
6. ADJOINING PARCEL OWNER AND RECORDING INFORMATION DELINEATED HEREON WAS OBTAINED FROM THE LAKE COUNTY PROPERTY APPRAISER'S PUBLIC WEBSITE.
7. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER OR AN ELECTRONIC SIGNATURE THAT IS IN COMPLIANCE WITH FLORIDA ADMINISTRATIVE CODE 5J-17.062.
8. UNLESS OTHERWISE NOTED OR SHOWN HEREON, THERE ARE NO APPARENT AND/OR UNOBSTRUCTED, ABOVE GROUND ENCROACHMENTS. THE DISPOSITION OF ANY POTENTIAL ENCROACHING IMPROVEMENTS SHOWN IS BEYOND THE PROFESSIONAL PURVIEW OF THE SURVEYOR AND SUBJECT TO LEGAL INTERPRETATION.
9. SUBJECT PROPERTY SHOWN HEREON IS IN ZONE X, AREA OF MINIMAL FLOOD HAZARD, ACCORDING TO FLOOD INSURANCE RATE MAP PANEL NUMBER 12069C0560E, MAP REVISED 12/18/2021. THE ABOVE STATEMENT IS FOR INFORMATION ONLY AND THIS SURVEYOR ASSUMES NO LIABILITY FOR THE CORRECTNESS OF THE CITED MAP(S). IN ADDITION, THE ABOVE STATEMENT DOES NOT REPRESENT THIS SURVEYOR'S OPINION OF THE PROBABILITY OF FLOODING.
10. ELEVATIONS SHOWN HEREON ARE BASED ON 4"x4" CONCRETE MONUMENT WITH LAKE COUNTY GEODETIC CONTROL CAP, BENCHMARK NUMBER LK 155, ELEVATION BEING 224.784', NORTH AMERICAN VERTICAL DATUM 1988 (NAVD).
11. THE ACCURACY OF THE SURVEY MEASUREMENTS USED FOR THIS SURVEY MEETS OR EXCEEDS THE EXPECTED USE OF THE PROPERTY DESCRIBED HEREON. (COMMERCIAL/HIGH RISK) 1 FOOT IN 10,000 FEET.
12. THE GRAPHICAL REPRESENTATION OF THE UTILITY LINES SHOWN HEREON ARE FOR VISUAL REFERENCE ONLY AND DO NOT REPRESENT ACTUAL PIPE, CONDUIT, OR CABLE DIAMETER DIMENSIONS
13. THIS DRAWING WAS PREPARED IN CONFORMANCE WITH ASCE/UESI/CI 38-22, STANDARD GUIDELINE FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES & ASCE/UESI/CI 75-22, STANDARD GUIDELINE FOR RECORDING AND EXCHANGING UTILITY INFRASTRUCTURE DATA.

VICINITY MAP: NOT TO SCALE



LEGEND OF SYMBOLS AND ABBREVIATIONS:

POC	POINT OF COMMENCEMENT		BENCHMARK LOCATION
POB	POINT OF BEGINNING		FOUND CONCRETE MONUMENT AS NOTED
CMP	CORRUGATED METAL PIPE		FOUND IRON ROD OR PIPE AS NOTED
ID	IDENTIFICATION		FOUND AXLE AS NOTED
(D)	DEED		SET 1/2" IRON ROD OR NAIL & DISK LB#8627
EOP	EDGE OF PAVEMENT	MB	MAILBOX
EL	ELEVATION		SINGLE STAND SIGN
CCR#	CERTIFIED CORNER RECORD NUMBER		BACKFLOW PREVENTER
INV	INVERT		FIRE HYDRANT
MES	MITERED END SECTION		NATURAL GAS MARKER
CLF	CHAIN LINK FENCE		NATURAL GAS VALVE
FND.	FOUND		IRRIGATION VALVE
RCP	REINFORCED CONCRETE PIPE		GATE
PG(S)	PAGE(S)		GUY WIRE
OR	OFFICIAL RECORDS BOOK	TR	TELECOMMUNICATION RISER
LB	LICENSED BUSINESS	FV	FIBER OPTIC VAULT
LS	LICENSED SURVEYOR		FIBER OPTIC MARKER
PSM	PROFESSIONAL SURVEYOR AND MAPPER		WOODEN POWER POLE
RLS	REGISTERED LICENSED SURVEYOR		METAL LIGHT POLE
R/W	RIGHT OF WAY	SD	STORM DRAINAGE MANHOLE
SD SD	STORM LINE		AIR RELEASE VALVE
OHW	OVERHEAD WIRE		ELECTRICAL RISER
	CENTERLINE	WM	WATER METER
X	FENCE LINE	26	CONTOUR
		+24.1	SPOT ELEVATION
		O/A	OVERALL
		(M)	MEASURED

GROUND PENETRATING RADAR (GPR):

1. (GPR) INVESTIGATIONS ARE HIGHLY SITE SPECIFIC AND CAN BE LIMITED BY ATTENUATION OF (GPR) SIGNALS BY SUBSURFACE MATERIALS.
2. (GPR) INVESTIGATIONS ARE LIMITED BY UNEVEN TERRAIN CONDITIONS:HIGH GRASS (OVER 3"), BUSHES, FENCES, TREES, DEBRIS, ETC.
3. ALL VERTICALLY STACKED UTILITIES/OBJECTS MAY NOT BE DETECTED, SINCE GPR SIGNALS ARE REFLECTED BY THE TOP MOST UTILITY/OBJECT.
4. SOME UTILITIES/OBJECTS MAY NOT RETURN A REFLECTED SIGNAL TO THE GPR RECEIVER.
5. (GPR) SCANS CANNOT BE MADE IMMEDIATELY NEXT TO BUILDING/OBJECTS DUE TO EQUIPMENT RESTRICTIONS.
6. PIPE WITH LITTLE OR NO LIQUID CONTENT AT THE TIME OF LOCATE WORK MAY NOT BE DETECTED BY GPR.
7. LOCATIONS OF EXISTING UTILITIES DESIGNATED BY (GPR) ARE TO BE DEEMED APPROXIMATE IN NATURE AND IN NO WAY ARE TO BE CONSTRUED AS EXACT. ALLEN UNDERGROUND, INC. (AUI) WILL NOT BE HELD RESPONSIBLE FOR DAMAGE TO EXISTING UTILITIES LOCATED BY GPR EQUIPMENT.

RADIO FREQUENCY \ ELECTROMAGNETIC LOCATING (RF)/(EM):

1. THE NUMBER OF ACCESS POINTS WITHIN DESIGNATED LOCATE AREA(S) MAY BE LIMITED OR NON-EXISTENT.
2. UTILITY OR PROPERTY OWNER MAY RESTRICT OR DENY THE USE OF UTILITY ACCESS POINTS.
3. FIBER & OTHER NON-METALLIC LINES WITH NO OR NON-WORKING TRACER WIRE ARE UNTONEABLE WITH ELECTROMAGNETIC LOCATE EQUIPMENT (EM).
4. LOCATIONS OF EXISTING UTILITIES DESIGNATED BY ELECTROMAGNETIC EQUIPMENT (EM) ARE TO BE DEEMED APPROXIMATE IN NATURE AND IN NO WAY ARE TO BE CONSTRUED AS EXACT. ALLEN UNDERGROUND, INC. (AUI) WILL NOT BE HELD RESPONSIBLE FOR DAMAGE TO EXISTING UTILITIES LOCATED BY RF/EM EQUIPMENT.

LEGEND:

- BTV(QL-B)— QUALITY B BURIED CABLE TV
- BE(QL-B)— QUALITY B BURIED ELECTRICAL
- BT(QL-B)— QUALITY B BURIED TELECOMMUNICATION
- FM(QL-B)— QUALITY B BURIED FORCE MAIN
- BFO(QL-B)— QUALITY B BURIED FIBER OPTIC CABLE
- BG(QL-B)— QUALITY B BURIED GAS LINE
- BW(QL-B)— QUALITY B BURIED WATER LINE

ALLEN & COMPANY
Founded in 1988
SURVEYING • MAPPING
GEOSPATIAL SERVICES
www.allen-company.com
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355 LB#8627

BOUNDARY SURVEY OF HIGHWAY 27 PARCELS

SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST
LAKE COUNTY, FLORIDA

FOR: GREENBERG GIBBONS PROPERTIES

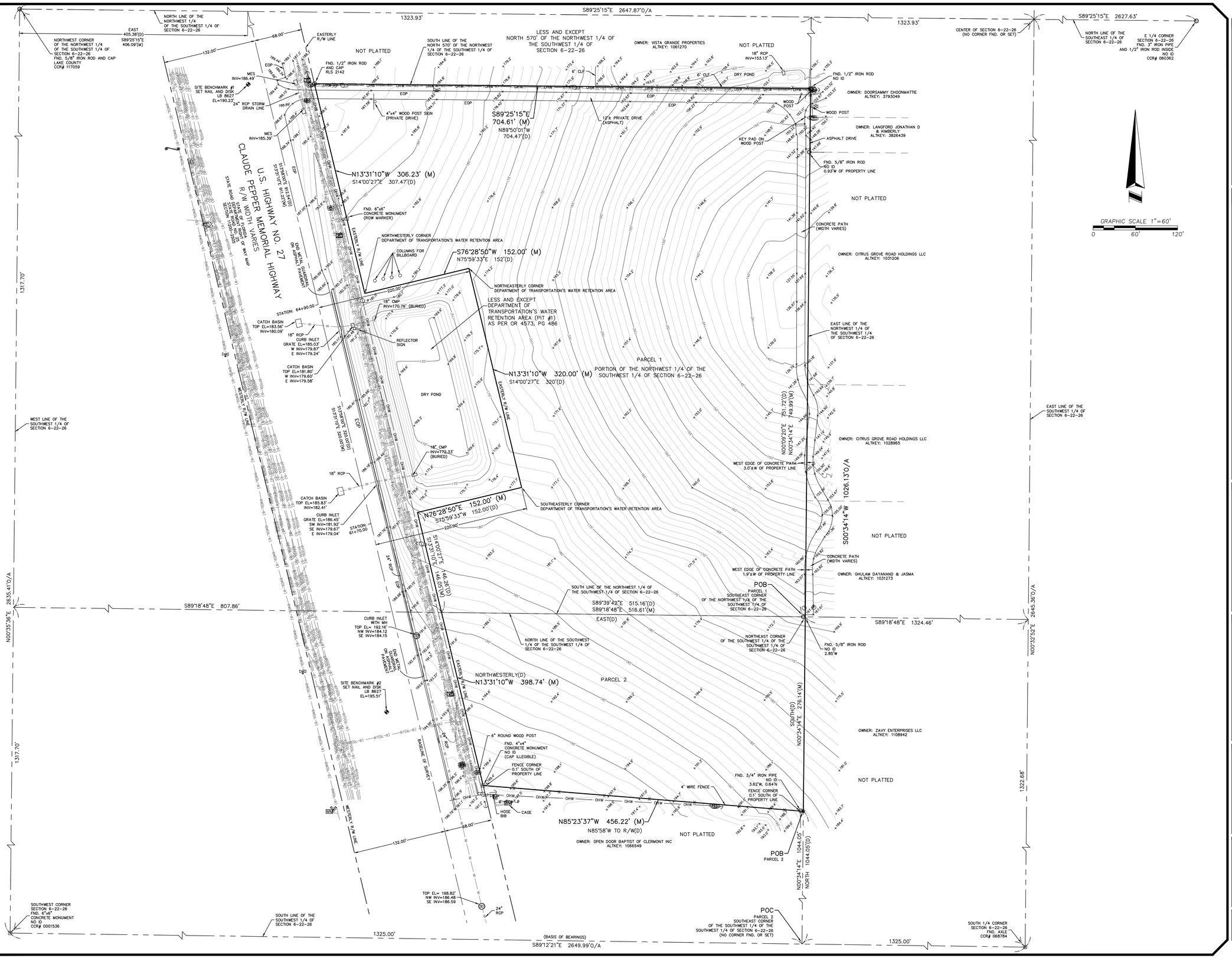
BRICE HELLSTROM, P.S.M. #7296
THE LICENSED BUSINESS #6723 BY:
BRICE HELLSTROM LS7296 STATE OF FLORIDA
Digitally signed by: Brice Hellstrom
DN: CN = Brice Hellstrom email = brice@allen-company.com C = US O = Allen and Company
Date: 2026.02.04 15:49:21 -05'00'

DATE	REVISIONS

JOB #: 20250038
DATE: 3/14/25
SCALE: N/A
CALC BY: BH
FIELD BY: JS
DRAWN BY: TQ
CHECKED BY: BH

SHEET 1 OF 2

Drawing name: L:\Work\20250038\SHEET\20250038 BDY-TOPO Sheet=1



ALLEN & COMPANY
Founded in 1988
SURVEYING • MAPPING
GEOSPATIAL SERVICES
www.allen-company.com
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355 LB#8627

BOUNDARY SURVEY OF HIGHWAY 27 PARCELS

SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST
LAKE COUNTY, FLORIDA

FOR: GREENBERG GIBBONS PROPERTIES

DATE REVISIONS

JOB #:	20250038
DATE:	3/14/25
SCALE:	1" = 60'
CALC BY:	BH
FIELD BY:	JS
DRAWN BY:	TQ
CHECKED BY:	BH

SHEET 2 OF 2

Drawing name: L:\Work\20250038\Dwg\20250038 BH-SHT2 Sheet=2

LEGAL DESCRIPTION:

PARCEL 1:

THAT PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANCE 26 EAST, LAKE COUNTY, FLORIDA LYING EAST OF THE EASTERLY LINE OF THE RICHT— OF— WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY N 0. 27), LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.

THE ABOVE PROPERTY IS ALSO DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF THE N W 1/2 OF THE SW 1/4 OF SECTION 6, TOWNSHIP, 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THEN CE N. 00 DEGREES 09' 20" E. ALONG THE EAST BOUNDARY OF THE SAID N W 1/4 OF THE SW 1/4, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NW 1/4 OF THE SW 1/4, THEN CE N. 89 DECREES 50'01" W. ALONG THE SAID SOUTH BOUNDARY, 704.47 FEET TO THE EASTERLY RICHT— OF— WAY LINE OF STATE ROAD N 0. 25 (U.S. HICHWAY N O. 27), THEN CE S. 14 DECREES 00'27" E. ALONG SAID EASTERLY RIGHT— OF—WAY LINE 307.47 FEET TO THE NOR TH Y/ESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THEN CE N. 75 DEGREES 59'33" E. 152 FEET TO THE NORTHEASTERLY CORNER OF SAID RETEN TION AREA, THENCE S. 14 DECREES 00' 27" E. 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 75 DEGREES 59'33" W. 152.00 FEET TO THE AFORESAID EASTERLY RIGHT— OF— WAY LINE OF STATE ROAD NO. 25, THENCE S. 14 DEGREES 00'27" E. ALONG THE SAID RIGHT— 0F— WAY LINE 146.26 FEET TO THE SOUTH BOUNDAR Y OF THE AFORESAID NW 1/4 OF THE SW 1/4 OF SECTION 6, THENCE S. 89 DEGREES, 39'42" E. ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.

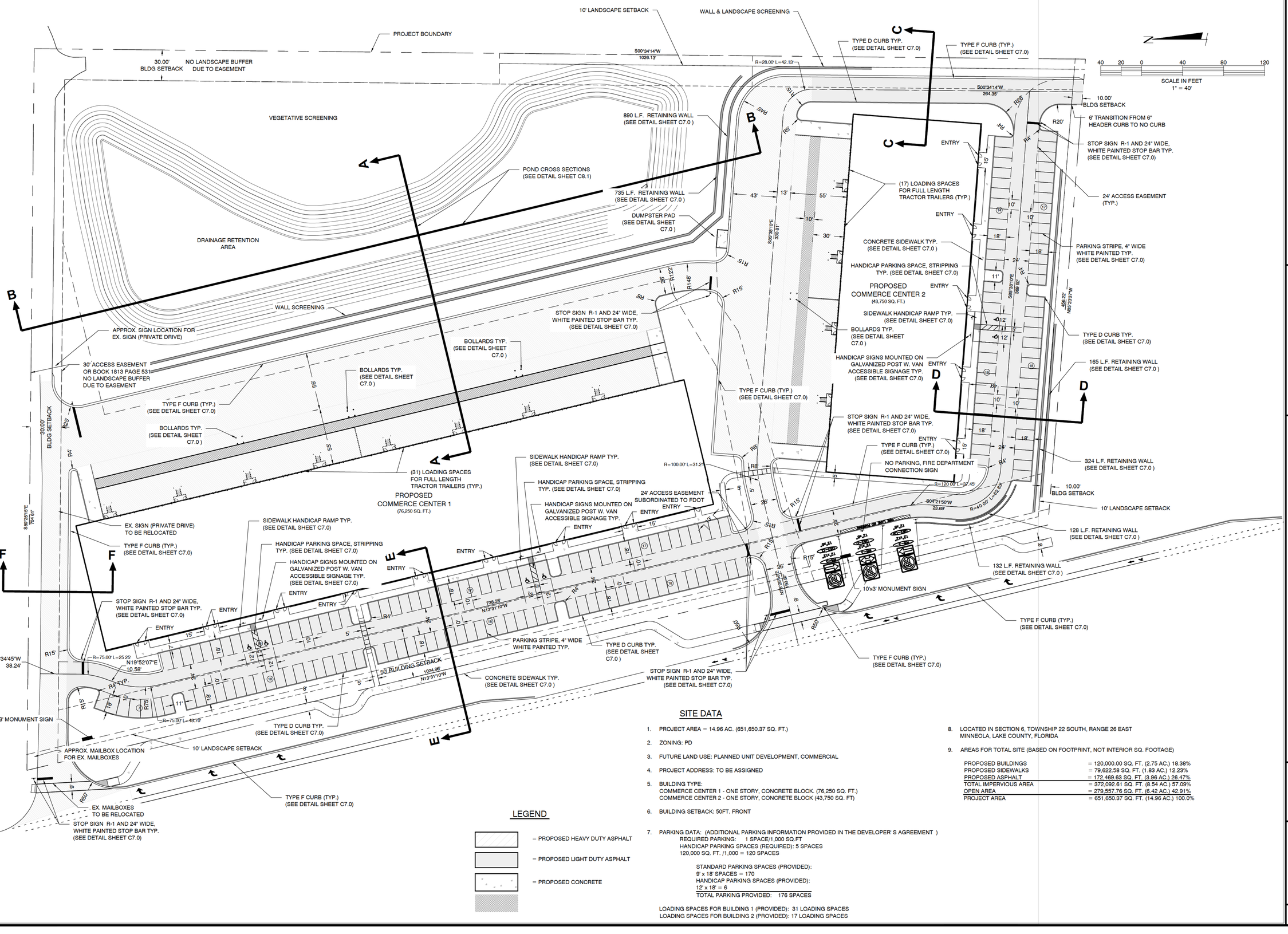
THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA WHICH IS NOT INCLUDED HEREIN IS DESCRIBED AS FOLLOWS:

THAT PART OF: THE SOUTH 12.7 ACRES LYING E OF THE COUNTY ROAD, IN THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANCE 26 EAST", LYING IN LAKE COUNTY, FLORIDA LYING WITHIN 220 FEET E OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200; S OF STATION 64+90.00 AND N. OF STATION 61 + 70.00 SAID SURVEY LINE AND SAID STATION S BEING DESCRIBED AND LOCATED AS FOLLOWS: BEGIN ON THE N LINE OF THE NW 1 /4 OF THE SW 1 /4 OF THE SW 1 /4 THENCE RUN S 13 DECREES 58'00" E, A DISTAN CE OF 912.54 FEET TO STATION 6 4+ 90. 00; THENCE CONTINUE S 13 DEGREES 58'00" E, A DISTANCE OF 320 FEET TO STATION 61 +70.00; THENCE CONTINUE S 13 DEGREES 58'00"E, A DISTANCE OF 100 FEET.

CONTAINING 48, 640 SQ. FT. (1.199 ACRES), MORE OR LESS, EXCLUSIVE OF ROAD RIGHT OF WAY.

PARCEL 2:

BEGINNING 1044.05 FEET N OF THE SE CORNING OF SW 1/4 OF SW 1/4 SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN N 85 DEGREES 58' W TO RIGHT-OF-WAY OF HIGHWAY; THENCE NWLY ALONG SAID RIGHT-OF-WAY TO N LINE OF SAID SW 1/4 OF SW 1/4, THENCE E TO NE CORNER OF SAID SW 1/4 OF SW 1/4, THENCE S TO POINT OF BEGINNING.



LEGEND

= PROPOSED HEAVY DUTY ASPHALT

= PROPOSED LIGHT DUTY ASPHALT

= PROPOSED CONCRETE

SITE DATA

1. PROJECT AREA = 14.96 AC. (651,650.37 SQ. FT.)
2. ZONING: PD
3. FUTURE LAND USE: PLANNED UNIT DEVELOPMENT, COMMERCIAL
4. PROJECT ADDRESS: TO BE ASSIGNED
5. BUILDING TYPE:
   COMMERCE CENTER 1 - ONE STORY, CONCRETE BLOCK. (76,250 SQ. FT.)
   COMMERCE CENTER 2 - ONE STORY, CONCRETE BLOCK (43,750 SQ. FT)
6. BUILDING SETBACK: 50FT. FRONT
7. PARKING DATA: (ADDITIONAL PARKING INFORMATION PROVIDED IN THE DEVELOPER' S AGREEMENT)
   REQUIRED PARKING: 1 SPACE/1,000 SQ.FT
   HANDICAP PARKING SPACES (REQUIRED): 5 SPACES
   120,000 SQ. FT. /1,000 = 120 SPACES

   STANDARD PARKING SPACES (PROVIDED):
   9' x 18' SPACES = 170
   HANDICAP PARKING SPACES (PROVIDED):
   12' x 18' = 6
   TOTAL PARKING PROVIDED: 176 SPACES

   LOADING SPACES FOR BUILDING 1 (PROVIDED): 31 LOADING SPACES
   LOADING SPACES FOR BUILDING 2 (PROVIDED): 17 LOADING SPACES
8. LOCATED IN SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST MINNEOLA, LAKE COUNTY, FLORIDA
9. AREAS FOR TOTAL SITE (BASED ON FOOTPRINT, NOT INTERIOR SQ. FOOTAGE)

PROPOSED BUILDINGS	= 120,000.00 SQ. FT. (2.75 AC.) 18.38%
PROPOSED SIDEWALKS	= 79,622.58 SQ. FT. (1.83 AC.) 12.23%
PROPOSED ASPHALT	= 172,469.63 SQ. FT. (3.96 AC.) 26.47%
TOTAL IMPERVIOUS AREA	= 372,092.61 SQ. FT. (8.54 AC.) 57.09%
OPEN AREA	= 279,557.76 SQ. FT. (6.42 AC.) 42.91%
PROJECT AREA	= 651,650.37 SQ. FT. (14.96 AC.) 100.0%

BY
REVISIONS
DATE

CFB | CLYMER FARNER BARLEY

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

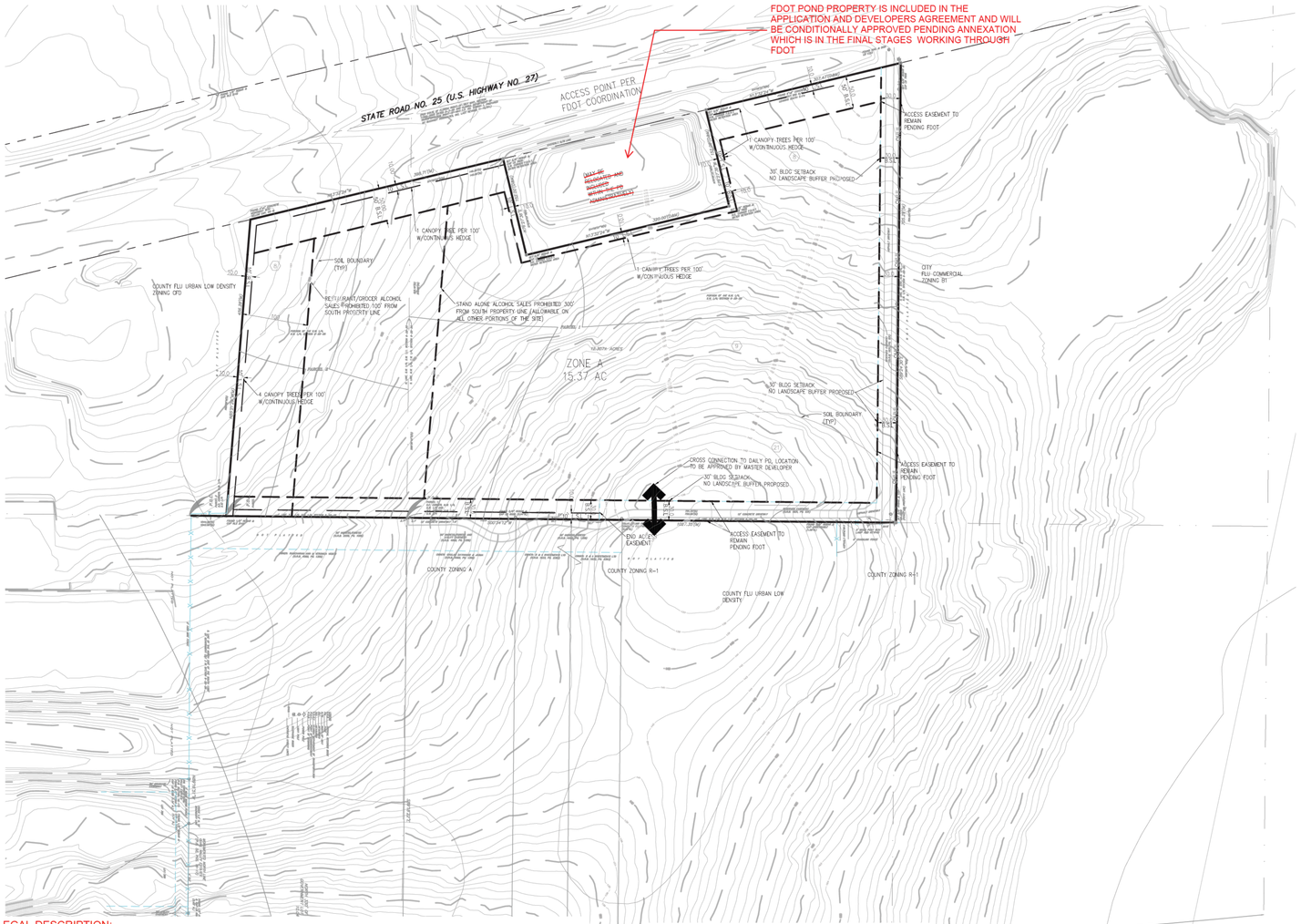
SITE PLAN

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	05- MCC SITE

MAJOR LEE MASCI LICENSED No. 70249 STATE OF FLORIDA PROFESSIONAL ENGINEER

SHEET NUMBER C3.0

I:\LAKENON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\05- MCC SITE.dwg| PLOT DATE: 7/8/2026 3:36 PM| SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS



LEGAL DESCRIPTION:
PARCEL 1:

THAT PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANCE 26 EAST, LAKE COUNTY, FLORIDA LYING EAST OF THE EASTERLY LINE OF THE RICHT— OF— WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY N 0. 27), LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.
THE ABOVE PROPERTY IS ALSO DESCRIBED AS FOLLOWS:
BEGIN AT THE SOUTHEAST CORNER OF THE N W 1/2 OF THE SW 1/4 OF SECTION 6, TOWNSHIP, 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THEN CE N. 00 DEGREES 09' 20" E. ALONG THE EAST BOUNDARY OF THE SAID N W 1/4 OF THE SW 1/4, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NW 1/4 OF THE SW 1/4, THEN CE N. 89 DECREES 50'01" W. ALONG THE SAID SOUTH BOUNDARY, 704.47 FEET TO THE EASTERLY RICHT— OF— WAY LINE OF STATE ROAD N 0. 25 (U.S. HICHWAY N O. 27), THEN CE S. 14 DECREES 00'27" E. ALONG SAID EASTERLY RIGHT— OF—WAY LINE 307.47 FEET TO THE NOR TH Y/ESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THEN CE N. 75 DEGREES 59'33" E. 152 FEET TO THE NORTHEASTERLY CORNER OF SAID RETEN TION AREA, THENCE S. 14 DECREES 00' 27" E. 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 75 DEGREES 59'33" W. 152.00 FEET TO THE AFORESAID EASTERLY RIGHT— OF— WAY LINE OF STATE ROAD NO. 25, THENCE S. 14 DEGREES 00'27" E. ALONG THE SAID RIGHT— 0F— WAY LINE 146.26 FEET TO THE SOUTH BOUNDAR Y OF THE AFORESAID NW 1/4 OF THE SW 1/4 OF SECTION 6, THENCE S. 89 DEGREES, 39'42" E. ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.

THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA WHICH IS NOT INCLUDED HEREIN IS DESCRIBED AS FOLLOWS:

THAT PART OF: THE SOUTH 12.7 ACRES LYING E OF THE COUNTY ROAD, IN THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANCE 26 EAST", LYING IN LAKE COUNTY, FLORIDA LYING WITHIN 220 FEET E OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200; S OF STATION 64+90.00 AND N. OF STATION 61 + 70.00 SAID SURVEY LINE AND SAID STATION S BEING DESCRIBED AND LOCATED AS FOLLOWS: BEGIN ON THE N LINE OF THE NW 1 /4 OF THE SW 1 /4 OF THE SW 1 /4 THENCE RUN S 13 DECREES 58'00" E, A DISTAN CE OF 912.54 FEET TO STATION 6 4+ 90. 00; THENCE CONTINUE S 13 DEGREES 58'00" E, A DISTANCE OF 320 FEET TO STATION 61 +70.00; THENCE CONTINUE S 13 DEGREES 58'00"E, A DISTANCE OF 100 FEET.

CONTAINING 48, 640 SQ. FT. (1.117 ACRES), MORE OR LESS, EXCLUSIVE OF ROAD RIGHT OF WAY.

PARCEL 2:
BEGINNING 1044.05 FEET N OF THE SE CORNING OF SW 1/4 OF SW 1/4 SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN N 85 DEGREES 58' W TO RIGHT-OF-WAY OF HIGHWAY; THENCE NWLY ALONG SAID RIGHT-OF-WAY TO N LINE OF SAID SW 1/4 OF SW 1/4, THENCE E TO NE CORNER OF SAID SW 1/4 OF SW 1/4, THENCE S TO POINT OF BEGINNING.

APPLICANT:
PELICAN INDUSTRIAL
436 E 36TH STREET CHARLOTTE, NC 28205
843-469-2517
DREW THIGPEN

OWNER/DEVELOPER:
GRASSY LAKE HOLDINGS
1521 CHARLOTTE LN ORLANDO FL 32804
407-456-1497
MAJOR STACY,P.E.

ENGINEER:
CLYMER FARNER BARLEY, INC
2221 LEE ROAD SUITE 27 WINTER PARK, FL 32789

SURVEYOR:
ALLEN & COMPANY
16 EAST PLANT STREET WINTER GARDEN, FL 34787
KAYE JAMESON, PSM
407-654-5355

SOIL TYPE	SOIL NAME	HYDROLOGIC GROUP
8	CHANDLER SAND, 0 TO 5% SLOPE	A
9	CHANDLER SAND, 5 TO 12% SLOPE	A
21	LAKE SAND, 0 TO 5% SLOPE	A

100 50 0 100 200 300
SCALE IN FEET
1" = 100'

MINNEOLA COMMERCE CENTER LUP (PROPOSED MODIFICATION TO ORB 5198 PG 628-641)

PROJECT DESCRIPTION:

THE PROJECT PROPOSES TO ANNEX INTO THE CITY AND UTILIZE THE PUD OVERLAY TO ESTABLISH THE PROPOSED USES, DESIGN CRITERIA, ETC., AS OUTLINED HEREIN TO BECOME THE GOVERNING DOCUMENT FOR THE SUBSEQUENT FINAL DESIGN, PERMITTING, AND DEVELOPMENT WITHIN THE PUD. THE 1.1.117 AC FDOT POND WILL BE ANNEXED AND ZONED INCLUDED IN A SEPERATE AMMENDMENT

SITE AREA PROPOSED AREA
536,075 SF Surveyed Existing PUD Area - 12.284 AC
12.31 AC EXISTING FDOT POND AREA
Surveyed Pond to be included - 1.117 AC

EXISTING LAND USE
~~URBAN LOW DENSITY (COUNTY)~~

EXISTING ZONING
~~PARCEL 1 – CP (COUNTY)~~ PD - COMMERCIAL
PARCEL 2 – AG (COUNTY)

PROPOSED ZONING
USES: I-1 & B-1 WITH PD (PLANNED DEVELOPMENT) OVERLAY (CITY OF MINNEOLA)

SETBACKS

FRONT	SEE PLAN
SIDE	SEE PLAN
REAR	SEE PLAN

MAXIMUM BUILDING HEIGHT
MAX – 50 FT (OVER 30' REQUIRES FIRE SUPPRESSION)

EXISTING VEGETATION
GRASS, PINE TREES, PALMETTO

ADJACENT LAND USE
NORTH: WOODED (UNDEVELOPED)
EAST: WOODED RESIDENTIAL UNITS
WEST: COMMERCIAL
SOUTH: CHURCH

OPEN SPACE
20%

WATER
CITY OF MINNEOLA

WASTEWATER
CITY OF MINNEOLA

RECLAIM WATER
CITY OF MINNEOLA

STORMWATER
STORMWATER MANAGEMENT SYSTEM SHALL BE DESIGNED TO COMPLY WITH THE CITY OF MINNEOLA REGULATIONS AND WATER MANAGEMENT DISTRICT REGULATIONS & FDOT

PROPOSED MAINTENANCE AND OWNERSHIP OF COMMON SPACE AREAS
PROPERTY OWNERS ASSOCIATION WILL MAINTAIN AND OWN ALL COMMON SPACE AND EASEMENTS (WALL, PARK, TRACTS).

~~PROPOSED DENSITY~~
~~MAX DENSITY (COUNTY): 4 DU/AC~~
~~MAX DENSITY (CITY OF MINNEOLA): 8 DU/AC~~
~~MAX DENSITY (CITY OF MINNEOLA): 12 BEDS/AC~~

FAR
~~FAR (COUNTY): 0.6~~
FAR (CITY OF MINNEOLA): 1.1

ISR
PROPOSED 0.90

SCHOOL AGE CHILDREN
NA

ZONING NOTES:

1. MINIMUM REQUIRED PARKING PROVIDED PER CITY CODE, NO MAXIMUM SHALL APPLY. DEVELOPMENT CRITERIA BASED ON I-1 ~~B-1~~ ZONING AND DEVELOPERS AGREEMENT.
2. 15' MAX RETAINING WALL WHICH CAN BE LOCATED IN THE LANDSCAPE BUFFER. NO MAXIMUM GRADING RESTRICTIONS
3. PHASING PLAN: THE PHASING WILL BE MARKET DEPENDENT, ALL INFRASTRUCTURE INCLUDING UTILITIES, STORMWATER, DRIVEWAY ACCESS POINTS AND PEDESTRIAN CIRCULATION WILL BE DESIGNED SO THAT THE DEVELOPMENT WILL OVERALL BE CONSISTENT WITH THE PD INCLUDING FRONTAGE & LOT DIMENSIONS. INDIVIDUAL OWNERSHIP WILL NOT BE ANALYZED SEPARATELY.
4. THERE IS NOT A MINIMUM PARCEL SIZE OR BUILDING SEPARATION. NO PROPOSED INTERNAL SETBACKS
5. DURATION OF PUD:
   ONCE APPROVED BY THE CITY, THIS PUD WILL REMAIN VALID WITHOUT THE REQUIREMENT OF ANY RENEWAL (ANNUAL OR LIKEWISE) BY THE CITY. THE PUD MAY BE MODIFIED BY OWNER IN THE FUTURE BY WRITTEN APPROVAL OF THE MAYOR OR CITY COUNCIL OR CITY MANAGER OR CITY PLANNER.

NOTES:

1. THE MAXIMUM NUMBER OF UNINTERRUPTED PARKING SPACES BETWEEN LANDSCAPING AREAS IS TWENTY (20). PARKING SHOULD BE CLUSTERED TO ACCOMMODATE ADDITIONAL RECREATION AND OUTDOOR DINING.
2. THE LANDSCAPED PARKING ISLANDS WILL BE A MINIMUM OF 150 SQUARE FEET AND SHALL CONTAIN A MINIMUM OF ONE APPROVED TREE AND GROUND COVER OR GRASS.
3. ONCE APPROVED BY THE CITY, THE FINAL ENGINEERING CONSTRUCTION PLANS WILL ACT AS A TREE REMOVAL PERMIT, NO OTHER TREE REMOVAL PERMIT SHALL BE REQUIRED.
4. THE MINIMUM AMOUNT OF REQUIRED TREE REPLACEMENT WILL BE 15 PERCENT OF THE TOTAL DBH OF SPECIMEN TREES OVER 12 INCHES REMOVED PURSUANT TO THE FINAL ENGINEERING PLANS.
5. ARCHITECTURE SHALL REFLECT MEDITERRANEAN / FLORIDA VERNACULAR STYLE AS SHOWN
6. CROSS ACCESS EASEMENTS SHALL BE ADDED AS NEEDED WITH ADJACENT PROPERTIES AND CONSIST OF 24' MINIMUM WIDTH, APPROVED BY THE PD MASTER DEVELOPER.
7. STORMWATER MAY BE LOCATED WITHIN THE LANDSCAPE BUFFER
8. WITH A FLAT ROOF WITH PARAPET, A SOLAR HOT WATER HEATER SHOULD BE UTILIZED IF POSSIBLE
9. INTERIOR AND EXTERIOR LIGHTING SHALL BE LED (UNLESS NOT FEASIBLE PER PROPOSED USE)
10. HVAC SYSTEMS TO BE CONTROLLED BY ZONE DIGITALLY FOR BOTH HUMIDITY AND TEMPERATURE
11. R-30 INSULATION TO BE USED IN CEILING WHERE POSSIBLE WITH A REFLECTIVE ROOF COLOR.
12. EFIS WILL BE APPLIED TO INCREASE INSULATION EFFICIENCY WHERE APPLICABLE
13. PLUMBING MUST CONSIST OF LOW FLOW FIXTURES AND FLUSHLESS URINALS
14. ALL EXTERIOR GLASS TO BE LOW E WITH REFLECTIVE TINTWHERE POSSIBLE EXTENDED OVERHANGS WILL BE USED LIGHTING TO COMPLY WITH DARK SKY REGULATIONS
15. WALKABILITY AND PEDESTRIAN ACCESS SHALL BE MAXIMIZED INCLUDING PARKING LAYOUT AND DUMPSTER ENCLOSURES. NO RATIO OF FRONT OR REAR PARKING SHALL APPLY. A CENTRAL EXCEPTIONS TO THE PD THAT ALLOW INNOVATIVE DESIGNS MAY BE GRANTED BY STAFF OR THE DEVELOPER AS LONG AS THE REQUEST MEETS THE INTENT OF THE PD. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO ROUNDABOUTS, WATER FEATURES AND RAIN GARDENS.
16. THE BILLBOARD ~~SHALL BE REMOVED AFTER CONSTRUCTION PLAN APPROVAL OF THE FIRST PHASE~~ HAS BEEN CFB BORDER
17. ADJACENT PROPERTIES IF ACQUIRED BY THE DEVELOPER, AT THE DEVELOPERS REQUEST, SHALL BE INCLUDED WITHIN THE PD
18. A CENTRAL RECREATIONAL AMENITY SHOULD BE CONSIDERED WHERE FEASIBLE.
19. DENSITIES AND INTENSITIES TO BE APPLIED OVER THE ENTIRE PD.
20. NO OFFSITE IMPROVEMENTS REQUIRED ABOVE THE MINIMUM NECESSARY TO SERVE SUBJECT DEVELOPMENT.
21. OUTDOOR DINING CAN BE K-9 FRIENDLY.

LAND USE PLAN

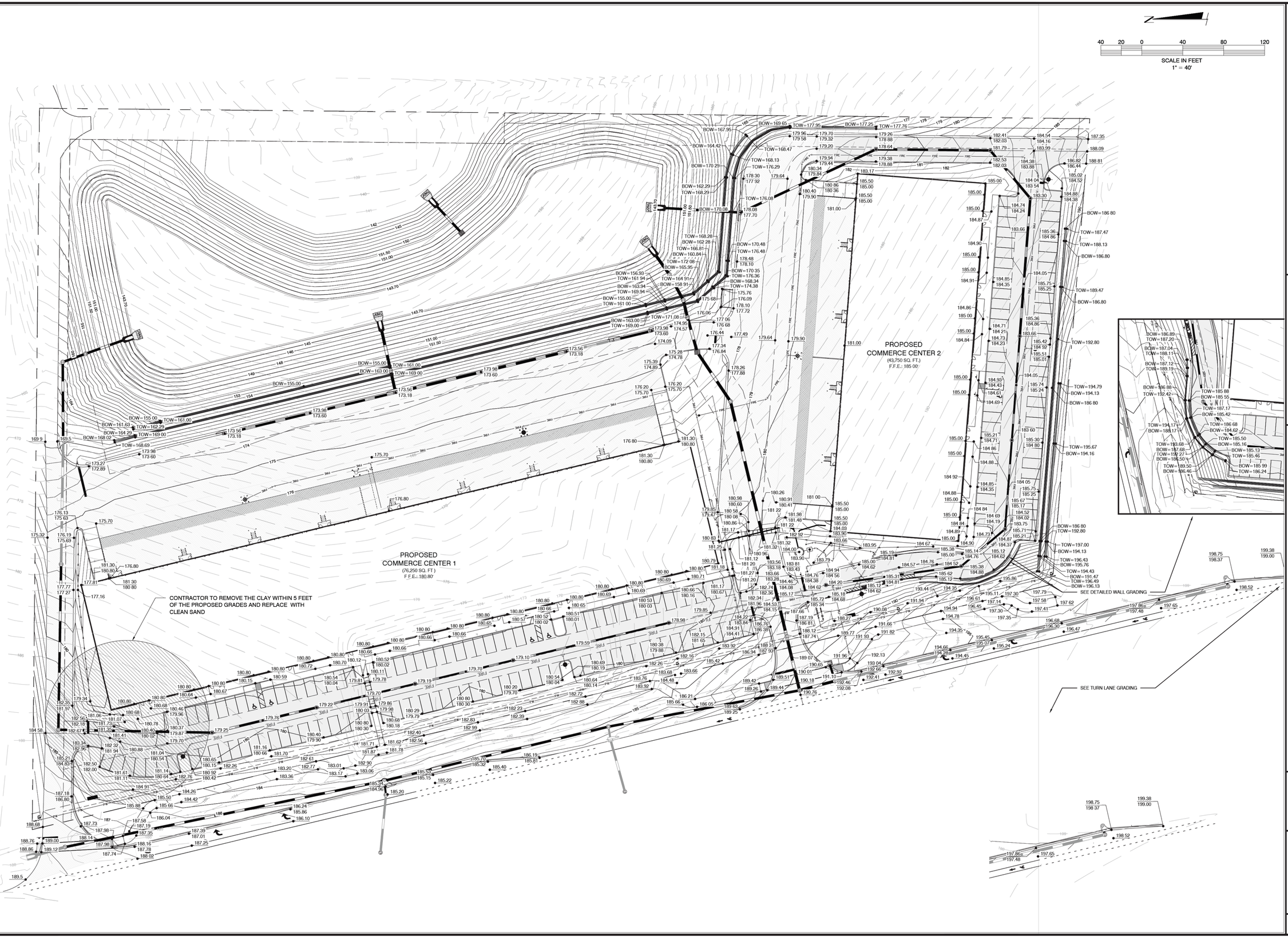
REV.	DATE	DESCRIPTION

~~GRASSY LAKE~~ MINNEOLA COMMERCE CENTER ~~I-USE PD~~
MINNEOLA, LAKE COUNTY, FLORIDA

LUP-01 ~~C-2.0~~

MAJOR LEE STACY, P.E.
REGISTRATION No. 70249

Oct 03,2018 – 9:37am
P:_PROJECT DRAWINGS\MLS-03\Drawings\CAD Civil3D\Base Files\LAND USE\LAND USE NOTES.dwg



REVISIONS

BY	DATE

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

GRADING PLAN

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	05- MCC GRADING

MAJOR LEE MACK
LICENSE
No. 70249
STATE OF FLORIDA
PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Major L. Mack, 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.

SHEET NUMBER C5.0

I:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\05- MCC GRADING.dwg | PLOT DATE: 7/8/2026 3:37 PM SAVE DATE: 7/8/2026 3:37 PM SAVED BY: ACAMPOS

Inspire
PLACEMAKING COLLECTIVE

To: Joyce Heffington, AICP, Minneola CRA Administrator

From: Eric Raasch, AICP, Inspire Project Manager

CC: Gabriela Castro, AICP

Date: August 25, 2026

Reference: Minneola Commerce Center Future Land Use Map Amendment, PUD, and DA Amendment

We have conducted a review of the proposed Future Land Use Map (FLUM), Planned Unit Development rezoning and Development Agreement amendments for the above-referenced project. The site, located within the Minneola city boundaries and consisting of two parcels identified by Parcel Nos. 06-22-26-0003-000-06300 and 06-22-26-0003-000-04700, has an approximate area of 12.42 acres according to Lake County Property Appraiser data.

The request considered here is to amend the subject property's FLUM designation from PD-Commercial to PD-Industrial, and to amend the terms of the Development Agreement dated October 18, 2018, including PD standards. The new agreement is a substantive change to the previous development framework. The proposal shifts the project toward a shallow-bay industrial/flex-commercial development, substantially expands the use framework, changes the architectural character, modifies development standards, adds/redefines property, and extends the agreement term from 10 to 30 years. The proposal also incorporates a 1.199-acre FDOT parcel into the defined "Property", while the parcel remains publicly owned and outside the City limits. The applicant has expressed an intent to request annexation of the parcel. However, an annexation application has not been submitted at the time of this staff report.

Planning

General Comments

1. Staff has not received an annexation request for the FDOT pond. *Inspire recommends that any action taken be contingent on annexation of the FDOT pond parcel into the City*.

2. No Environmental Assessment or Traffic Impact Analysis was provided with this request. However, a listed species survey and FDOT driveway connection TIA were submitted with the associated Site Plan. *Please note that these studies will be considered and reviewed as part of the FLUM / PUD rezoning application.*

3. Please reconcile data across all applications or provide clarification, including:

a. The application states that the site size is 14.96 acres, but the Property Appraiser records for the two parcels indicate a combined acreage of 12.42 acres. The survey submitted with the application package does not provide confirmation of the covered acreage.

b. The application indicates the existing FLU designation as being PD-Commercial, which appears to be consistent with the most current version of the Future Land Use Map. However, the Development Agreement dated October 18, 2018, calls the designation of the property "Grassy Lake Holdings Mixed Use Commercial Development." *Please update the DA.*

c. The proposed Development Agreement includes a legal description that encompasses the 1.191-FDOT parcel, but the legal description provided on the topographic survey by Allen & Company dated 3/14/25 does not. *Please reconcile for consistency.*

Development Agreement

1. The recitals refer to approximately 13.32 acres within the city limits, but the first 2018 agreement covered approximately *12.31 acres*, not 13.32. *Please clarify/reconcile the difference*.

2. The DA is silent on the amount of square footage proposed for the project. *Please add the amount of proposed square feet by use.*

3. The new agreement expressly amends certain provisions of the original development agreement "while ratifying and affirming all remaining terms and conditions." However, the Conditions-precedent section has been removed entirely, rather than updated. The new agreement states that the owner has filed applications for annexation, rezoning, and comprehensive plan amendment for an adjoining 1.191-acre FDOT-owned parcel in unincorporated Lake County, and that the owner has "full power and authority to make, deliver, enter into, and perform pursuant to the terms and conditions of the proposed agreement without submitting an annexation application at this time. The applicant has submitted a warranty deed as providing evidence of ownership or authority, but it is unclear whether this includes the 1.191-acre parcel. *Please submit additional documentation or clarify that the proposed agreement establishes only a future development framework without granting any development rights prior to acquisition and completion of the required annexation, comprehensive plan amendment, and rezoning.* [NOTE: This is *not* a legal opinion; Inspire defers to the City Attorney's Office.]

4. The new agreement appears to retain the B-1/PD framework language but makes development subject to a new Land Use Plan and amended use/standards provisions; overall character is described as shallow-bay industrial and flex commercial. The Land Use Plan exhibit was not included as an exhibit to the DA document, but it is part of the overall application package. *We observe that the graphic (which appears to be from the 2018 approval, relabeled as "Minneola Commerce Center" and renumbered as Sheet "LUP-01") is annotated to show the proposed zoning to be "I-1 & B-1 with PD" under the Project Description, but only "I-1" in the Notes section, so please clarify the proposed zoning.*

5. The new agreement includes broad categories covering light industrial, warehousing, logistics, distribution, fulfillment, flex-space, manufacturing, wholesale, construction/contractor, R&D, office, showroom and service-commercial uses, plus specified NAICS sectors. Notably, the amendment permits all uses within Sectors 31–33, including food, beverage, textile, wood, printing, chemical, plastics/rubber, mineral products, fabricated metal, machinery, electronics, transportation equipment, furniture, medical devices and miscellaneous manufacturing. Specifically, the blanket authorization of NAICS Sectors 31–33 appears broader than the stated "shallow-bay industrial and flex commercial" character and includes uses with substantially different potential impacts, while relying primarily on visual screening doesn't address potential noise, odor, truck activity, vibration, or other operational impacts. *Inspire recommends limiting permitted manufacturing to enclosed, low-impact/light manufacturing and establishing performance standards; or shift to conditional review for the higher-intensity / higher-impact manufacturing uses.*

6. The new list of conditional uses focuses on commercial recreation, day care, gun range, kennel/pet care, laboratories/R&D, motor vehicle sales/repair, nurseries/home-building materials, shopping center, veterinary and similar uses. *Please confirm the status of previous commercial uses such as restaurants, hotels, drive-throughs, and residential-care which are no longer expressly identified and may not be covered by the similarity clause.*

7. The new agreement retains 50-ft height and 20% open space but removes the explicit 90% ISR cap. However, the Land Use Plan retains the 90% ISR cap. *Please clarify the proposed ISR.*

8. Section 5(i) of the proposed DA addresses setbacks. The applicant is proposing setbacks of 30' on the north, 30' on the east, 10' on the south and 50' on the west. These setbacks are generally consistent with the setbacks required in the City's most comparable I-1 District. *Informational comment only. No response required.*

9. Section 5(ii) of the proposed DA addresses landscape buffers. Sec. 110-3(b)(Chart A-1) outlines buffer area requirements by use. Per the chart, PUD buffering is to be reviewed individually with each application. The applicant is proposing I-1 uses and the adjacent properties are zoned B-1 (north), B-1 and Lake County A (east), Lake County CFD (south), and B-1, Utilities, Lake County C-2 (west across US 27 ROW). Based on these designations, the site would warrant a Class C buffer (30') on the north, a Class C buffer (30') on the east, a Class D buffer (30') to the south, and a Class C buffer (30') to the west. The applicant is proposing a 0' buffer on the north (due to an access easement), a 10' buffer on the east, a 10' buffer on the south, and a 10' buffer on the west. *Inspire recommends increasing these buffers due to the increased intensity of the proposed uses.*

10. Section 5(iii) of the proposed DA addresses building height. The applicant is proposing a maximum building height of 50', which exceeds the maximum height of 35' feet for I-1 zoned property. While not prohibited, this information will be presented to City Council for review. *Informational comment only. No response required.*

11. **Section 5(v)** of the proposed DA addresses quantity of off-street parking. **LDC Sec. 122-35(b)(4)** outlines the City's minimum parking requirements. The applicant is proposing parking at a ratio of 1 parking space per 1,000 square feet of gross floor area. Due to the number of proposed permitted uses, the extent that this ratio deviates from code is unknown. For example, the City's parking requirement for manufacturing is 1 parking space per 600 SF of floor area dedicated to manufacturing, please the required parking square footage devoted to other uses (i.e. office). The applicant's request also includes all B-1 uses, some of which have significantly higher parking requirements than 1 space per 1,000 SF. For example, restaurants require 1 space per 2 seats, plus one space per 2 employees. *Inspire recommends reducing the amount of requested uses and providing a parking study to justify the requested reduction.*

12. **Section 5(v)** of the proposed DA addresses the maximum number of parking spaces between landscape islands. **LDC Sec. 110-3(a)(1)** states that the maximum number of uninterrupted spaces between landscaping areas is eight. The applicant is proposing 20 spaces between landscape islands. *Inspire recommends revising the agreement to reduce the number of spaces between landscape islands to a maximum of eight.*

13. **Section 5(v)** of the proposed DA addresses parking space sizing. **LDC Sec. 122-39(b)** states the minimum parking space size within the City. Standard parking spaces shall be 20' long. The applicant is proposing a minimum parking space depth of 17', provided an adjacent sidewalk or pedestrian area of sufficient width is provided to accommodate vehicle overhang. *Inspire recommends compliance with the City's standard parking space requirements, and notes that pedestrian areas should remain unobstructed from vehicles.*

14. **Section 6(i)** of the proposed DA includes building materials. The change in architectural character is appropriate to the proposed industrial/flex use; however, the revised standards provide limited direction regarding building massing, façade articulation and architectural quality. Please note that all architectural treatments will need to comply with **LDC Sec. 94-4**. *Informational comment only. No response required.*

15. **Section 6(iii)** of the proposed DA requests the use of a TPO roof for this project. Per the **LDC Sec. 94-4(f)(9)c.4** tile or metal shall be the dominant roof material. This deviation will be presented to City Council. *Informational comment only. No response required.*

16. **Section 16** of the proposed DA requests the ability to permit grading changes of 16' in lieu of 15'. This deviation will be presented to City Council. *Informational comment only. No response required.*

Comprehensive Plan

1. **FLU Policies 1-1.1.3 and 1-1.1.4** include compatibility standards for residential and non-residential development. *Please provide a narrative that addresses how the proposed FLUM is consistent with the City's Comprehensive Plan policies and compatible with the surrounding land uses.*

2. **FLU Policy 1-1.7.1** requires land use activities to occur on soil types capable of supporting the structures and facilities proposed to be placed on them, Table 1-1 stipulates which land uses are deemed suitable or unsuitable for each soil type. *Please provide a soils map with the proposed land uses to demonstrate compliance with FLU Policy 1-1.7.1.*

3. **FLU Policy 1-3.1.2** requires proposed amendments to the comprehensive plan to demonstrate that all facilities and service capacities are currently available or shall be available after the implementation of scheduled capital improvements, to meet general needs of the proposed land use. *Please provide a public facilities analysis.*

4. **CONS Policy 5-1.3.1** provides standards for maximum impervious surface area by use. *Please provide additional detail regarding proposed uses for the project and demonstrate compliance with the maximum ISR consistent with CONS Policy 5-1.3.1.*

Public Works

1. No comments. Defer to Planning Division.

Fire

1. No comments.

Lake County

1. Pending response.

Engineering

1. Pending response.

INSTRUMENT#:2015003841 OR BK 4573 PG 486 PAGES: 4 1/13/2015 10:25:16 AM
NEIL KELLY, LAKE COUNTY CLERK OF THE CIRCUIT COURT
REC FEES: $35.50 DEED DOC:$1925.00

FIDELITY NATIONAL TITLE GROUP
200 W FORSYTH STREET
STE 1710
JACKSONVILLE FL 32202

This Instrument Prepared By:
G. Alan Howard, Esq.
Milam Howard Nicandri Dees & Gillam, P.A.
14 East Bay Street
Jacksonville, FL 32202

SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED is made as of the 29th day of December, 2014, by and between **Hanmi Bank, *fka* United Central Bank,** ("Grantor"), and **Grassy Lake Holdings, LLC**, a Florida limited liability company, having a mailing address of 389 Broadway Avenue, Orlando, Florida 32803 ("Grantee").

W I T N E S S E T H:

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

Witnesseth, that Grantor, for and in consideration of the sum TEN AND NO/100 DOLLARS ($10.00) and other good and valuable consideration the receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys, and confirms to the Grantee, that certain real property, situate, lying, and being in **Lake County, Florida,** more particularly described in Exhibit "A" attached hereto and by this reference made a part hereof ("Property"), subject to the matters set forth on Exhibit "B" attached hereto and by this reference made a part hereof.

Together with all the tenements, hereditaments, and appurtenances thereto belonging or in anywise appertaining.

Grantor certifies that the property described herein is not its constitutional homestead.

To Have and to Hold, the same in fee simple forever.

And, except for the matters set forth on Exhibit "B" attached hereto, Grantor hereby covenants with Grantee that the Property is free from encumbrances made by Grantor and that Grantor will defend the same against the lawful claims of all persons claiming by, through, or under Grantor, but against none other.

IN WITNESS WHEREOF, Grantor has hereunto set Grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

WITNESSES:

Print Name: Michael A. Reeves

Print Name: Allen Peaksclaux

HANMI BANK, *fka* UNITED CENTRAL BANK

By: Kay Miller
Kay Miller
Chief Special Assets Officer

STATE OF TEXAS
COUNTY OF DALLAS

The foregoing instrument was acknowledged before me this 29th day of December, 2014 by Kay Miller, as Chief Special Assets Officer of Hanmi Bank, *fka* United Central Bank, who is [✓] personally known to me or [ ] who produced _____ as identification.

[SEAL]

CAROL GILSTRAP
MY COMMISSION EXPIRES
October 20, 2016

Carol Gilstrap
Print Name: Carol Gilstrap
Notary Public, State of TEXAS
Commission No.:
My Commission Expires: 10-20-2016

EXHIBIT A

LEGAL DESCRIPTION

Parcel 1: That portion of the NW ¼ of the SW ¼ of Section 6, Township 22 South, Range 26 East, Lake County, Florida lying East of the Easterly line of the right-of-way of State Road No. 25 (U.S. Highway No. 27), less and except the North 570 feet thereof and the Department of Transportation's Water Retention Area.

The above property is also described as follows:

Begin at the Southeast corner of the NW ½ of the SW ¼ of Section 6, Township 22 South, Range 26 East, Lake County, Florida, thence N. 00 degrees 09'20" E. along the East boundary of the said NW ¼ of the SW 1/4, a distance of 751.72 feet to the South boundary of the North 570 feet of the said NW ¼ of the SW 1/4 , thence N. 89 degrees 50'01" W. along the said South boundary, 704.47 feet to the Easterly right-of-way line of State Road No. 25 (U.S. Highway No. 27), thence S. 14 degrees 00'27" E. along said Easterly right-of-way line 307.47 feet to the Northwesterly corner of the Department of Transportation's Water Retention Area, thence N. 75 degrees 59'33" E. 152 feet to the Northeasterly corner of said retention area, thence S. 14 degrees 00'27" E. 320 feet to the Southeasterly corner of said retention area, thence S. 75 degrees 59'33" W. 152.00 feet to the aforesaid Easterly right-of-way line of State Road No. 25, thence S. 14 degrees 00'27" E. along the said right-of-way line 146.26 feet to the South boundary of the aforesaid NW ¼ of the SW ¼ of Section 6, thence S. 89 degrees 39'42" E. along the said South boundary, 515.16 feet to the point of beginning.

The Department of Transportation's Water Retention Area which is not included herein is described as follows: That part of: "The South 12.7 acres lying E of the County Road, in the NW ¼ of the SW ¼ of Section 6, Township 22 South, Range 26 East", lying in Lake County, Florida lying within 220 feet E of the Survey line of State Road 25, Section 11200; S of Station 64+90.00 and N. of Station 61+70.00 said survey line and said Stations being described and located as follows: Begin on the N line of the NW ¼ of the SW ¼ of Section 6, T22S, R26E, at a point 405.38 feet E of the NW corner of said NW ¼ of SW ¼ thence run S 13 degrees 58'00" E, a distance of 912.54 feet to Station 64+90.00; thence continue S 13 degrees 58'00" E, a distance of 320 feet to Station 61+70.00; thence continue S 13 degrees 58'00"E, a distance of 100 feet. Containing 48.640 sq. ft. (1.199 acres), more or less, exclusive of road right of way.

Parcel 2: Beginning 1044.05 feet N of SE corner of SW ¼ of SW ¼, Section 6, Township 22 South, Range 26 East, run N 85 degrees 58' W to right-of-way of highway; thence NWly along said right-of-way to N line of said SW ¼ of SW ¼, thence E to NE corner of said SW ¼ of SW ¼, thence S to Point of Beginning.

EXHIBIT B

PERMITTED ENCUMBRANCES

1. The lien of taxes and assessments for the year 2014 and subsequent years.

2. The Easement for ingress and egress reserved in instrument recorded in Official Records Book 1813, page 531 (Parcel 1).

3. The Lease Agreement between J.B.'s of Central Florida, Inc. and POA Acquisition Corporation dated February 11, 1993 and the addendum thereto, as extended on a year-to-year basis.

4. Easements, claims of easements, boundary line disputes, overlaps, encroachments or other matters not shown by the public records which would be disclosed by an accurate survey of the Property.

5. Any claim that any portion of the insured land is sovereign lands of the State of Florida, including submerged, filled or artificially exposed lands accreted to such land.

6. Any lien provided by County Ordinance or by Chapter 159, Florida Statutes, in favor of any city, town, village or port authority for unpaid service charges for service by any water, sewer or gas system supplying the insured land.

7. Rights of tenants occupying all or part of the insured land under unrecorded leases or rental agreements.

To: Joyce Heffington, AICP, Minneola CRA Administrator

From: Eric Raasch, AICP, Inspire Project Manager

CC: Gabriela Castro, AICP

Date: September 1, 2026

Reference: Minneola Commerce Center Traffic Study Review

MAPS has conducted a review of the Access Connection Permit Traffic Study Report for Greenberg Gibbons Light Industrial, dated July 2025, and prepared by Luke Transportation Engineering Consultants. The TIA should follow the methodology/guidelines defined in the Lake-Sumter MPO Traffic Impact Study Methodology and Guidelines (2022). Below are the comments regarding the TIA Report.

1. Background traffic from approved developments in the area or based on historical traffic growth should be applied up to the build-out period. The additional background traffic should be incorporated into the future traffic analysis.

2. Summarize planned improvements in the area up to the buildout year. Reference the Lake-Sumter Metropolitan Planning Organization (LSMPO) Transportation Improvement Program (TIP) and the Florida Department of Transportation (FDOT) 5-year Work Program. An improvement should be considered "programmed" for construction if construction funding is identified with the first 3 years of the Work Program/TIP.

3. Assess which roadways within and outside the one-mile radius are impacted by five percent (5%) of the project's peak hour trips compared to the roadway's two-way peak hour generalized service volume based on the adopted LOS and committed number of lanes as listed in the Lake County CMP Database. This analysis will determine the extent of the study area and if any additional intersections should be analyzed.

4. Include the traffic control timing sheets for the intersection of Citrus Grove Rd and US 27 in the Appendix.

To: GGW Flex Holdings, LLC

From: Eric Raasch, AICP, Inspire Project Manager

CC: Joyce Heffington, AICP; Tom Grimms, AICP; Gabriela Castro, AICP

Date: August 26, 2026

Reference: Minneola Commerce Center US N 27 (Inspire Case #240b)

We have conducted a third review of the **Site Plan** for the above-referenced project. This project is located in the PUD-C zoning district and Planned Unit Development Commercial Future Land Use category. The proposed Project ±13.4-acre development site will consist of 120,000 square feet (SF) of light industrial space in two buildings (76,250 SF and 43,750 SF). The applicant is also proposing a Future Land Use Map (FLUM) amendment and rezoning to PUD – Industrial with an associated updated Development Agreement that will determine the standards for review of this SP application. No site visit was conducted. The following review is based on the applicant's letter of response to staff comments, dated July 14, 2026.

Planning

General Comments

1. This application relies on the annexation of the FDOT stormwater pond within the U.S. 27 right-of-way. No application for annexation has been received at this time. *Inspire recommends that any recommendation on this SP application be contingent on the annexation.*

2. A portion of the subject property is owned by FDOT. *Please submit authorization from FDOT for this SP request.*

3. The applicant has submitted a proposed Development Agreement establishing revised land use, development, and site design standards for the property. The Development Agreement is currently under review and has not yet been approved. The Development Agreement and site plan applications may be processed concurrently; however, the current site plan cannot be approved based on standards contained in the proposed Agreement until the Agreement and all applicable associated entitlements become effective. *Inspire recommends that any approval of this Site Plan be contingent on the approval of the Development Agreement containing the standards that support the proposed site design. Any changes to the terms of the DA will require additional revisions and review of this SP.*

4. In response to a previous Inspire comment pointing to the absence of required concurrent applications, the applicant separately submitted a Future Land Use Map amendment and PD modification application. Inspire has reviewed these applications, together with the draft Development Agreement included in the resubmittal. Comments have been provided separately. *The applications may be processed concurrently, but Inspire defers to the City Attorney's Office on application sequencing.*

5. The total number of bays is not listed. It appears that Commerce Center 1 has 17 entryways and Commerce Center 2 has 10 entryways leading to the conclusion that the maximum possible bays is 17. *Please list the total number of bays on Sheet C3. This number will also be used as the maximum number of tenants.*

6. The applicant has acknowledged that a permit from FWC will be required. *Informational comment. No response is necessary.*

7. No sign package was provided with the second resubmittal. Directional and regulatory sign types and locations are noted on Sheet C3 of the first resubmittal. The applicant states that a complete sign package will be submitted with the building permits. However, Sec. 122.42(3)b.9. also requires "photographs or sketches of proposed signage with dimensions and material type" for site development approval. *Please provide the conceptual signage package for this project.*

CHAPTER 94, Development Standards

8. **Section 94-4(f)(6)** requires a minimum of three building design treatments. The applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. The submitted elevations do not appear to include any of the listed building design treatments. *Please refer to the options in this section and list or show the proposed design elements on the architectural plans.*

9. **Section 94-4(f)(7)b.** states that blank wall areas shall not exceed ten feet in the vertical direction, nor 20 feet in the horizontal direction of any primary facade. The applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. *Please provide dimensions for the blank wall area and reduce the area to comply if needed.*

10. **Section 94-4(f)(9)** requires variation in rooflines. **Subsection (9)b** states that at a minimum of two locations, the roof edge and/or parapet shall have a vertical change from the dominant roof condition, a minimum of two feet. At least one such change shall be located on a primary facade adjacent to a collector or arterial right-of-way. In response, the applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the

first resubmittal, not with the draft DA. Additionally, the roofline appears to lack a height variation. *Please review the roof requirements and revise elevation plans to show height variation.*

11. **Section 94-4(f)(9)c** states that parapets shall be used to conceal roof top equipment and flat roofs. The applicant has provided a line-of-sight diagram showing a 2-ft parapet. However, the Architectural Package previously submitted has not been updated to include this diagram. *Please revise the schematic elevations to incorporate the proposed parapet around the roofline and the provided diagram.*

CHAPTER 110, Landscaping and Tree Protection

12. The applicant states that the landscape buffers were approved on the existing PUD. However, the applicant is in the process of amending the existing PUD to add more intense uses, which have historically necessitated larger buffers based on the City's code. *Please review Inspire's comments on the associated DA amendment regarding landscape buffer widths and revise as needed.*

13. **Section 110-7(a)** states that irrigation shall meet or exceed the criteria for the Florida Water Star certification program. The irrigation plan does not include Florida Water Star certification or applicable irrigation zones Sheet IR100 Note #5 states, "All zones to be low volume drip and bubbler zones". *Please provide a statement on the irrigation plan to state that it will comply with the Florida Water Star certification program and please include applicable irrigation zones on this plan.*

CHAPTER 122, Site Development

14. **Section 122-35** lists the required amount of off-street parking per use. Sheet C3 states that parking is provided at a rate of 1 space per 1,000 SF. It is unclear as to which use in the tables listed in this section was used to reach this rate. *Please define the uses being proposed and provide minimum parking spaces required.*

15. **Section 122-39(c)(2)a.** states that a standard parking space is 10' by 20' and Section 122-39(c)(2) states that reduced width and length may be acceptable if increased landscape and grass areas are included. Spaces have been revised to a size of 10' by 18', not 10' by 20' which are required. The applicant has provided 7' sidewalks instead of increased landscape area. *Inspire recommends providing the required 20' depth, as the current code only allows for reductions based on landscape areas, not pedestrian areas.*

Development Agreement

16. **Section 5** states the approved architectural design and colors. This section states that colors shall be earth tones and natural colors. The proposed color scheme is gray. The applicant states that architectural features are part of the building permit submittal and building

elevations are included in the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. *Please note that the proposed DA will need to be approved to support the proposed building colors.*

17. The land use plan exhibit states that mediterranean / Florida vernacular architecture shall be used. *Please note that the proposed DA will need to be approved to support the proposed building colors.*

Public Works

1. Comments pending.

Engineering

1. **Informational Comment, No Response Required.** The applicant is cautioned that the issuance of City approval does not relieve them of their responsibility from obtaining all other required regulatory approvals and permits. Other permits may include but are not limited to the following:

   FDEP NPDES Construction
   St. Johns River Water Management District (SJRWMD) ERP
   USFW Permit
   FDEP Water
   FDEP Sewer
   FDOT Driveway Connection
   FDOT Right of Way Utilization

2. **Comment Resolved.** The Geotech report provided does not appear to provide recovery analysis parameters such as horizontal conductivity (Kh) and vertical infiltration rate (Iv), safety factors, etc. It is unclear where the design values originate in the stormwater report.

   Applicant provided a revised Geotech report which includes the requested recovery analysis parameters.

3. **Deferred to Planning.** Overall zoning and land use requirements, allotted uses, recreational areas, setbacks, open space, densities, pedestrian access and trail requirements, roadway connection requirements, right-of-way dedication requirements, development agreement criteria, and all other overall approval criteria are deferred to Planning and City Attorney as applicable.

4. Parking spaces must be at minimum 10ft wide and 20ft long as described in LDC 122-35, except where two feet of grassed overhang is provided, in which case the length may be reduced to 18ft.

   Applicant has widened parking spaces to 10ft. They responded that "Their lengths are 18' since the adjacent monolithic sidewalks are 7' to account for 2' of overhang." Per LDC 122-39 (c)(2)b,

reduced length is only acceptable if two feet of grassy overhang is provided. The applicant responds that additional landscaping above code minimum has been provided adjacent to the proposed building. It is unclear if variance is requested for the parking space dimensions.

5. Public to private demarcation on the utility plan is recommended. The 12 inch potable water main adjacent to US 27 is understood to be public. The internal water main, fire line, lift station, and 2-inch force main is understood to be privately owned, operated, and maintained.

    a. **Comment Resolved.** *Applicant has added a callout on Detail A, Utility Plan Sheet C4.1, depicting the beginning of privately owned potable and fire lines. Ownership of the 2-inch force main is not identified.*

    Applicant has also added a callout detailing private ownership of force main, and increased the force main size from 2" to 3" on sheet C4.1.

    b. **Comment Resolved.** *It is unclear if the lift station is to be public or private. Additional comment may be generated upon clarification.*

    Applicant has added a callout and note detailing private ownership of lift station on sheet C4.1.

6. **Comment Resolved.** Note #3 on sheet C4.1 references the Gibson Place Utilities Department.
7. **Comment Resolved.** Material of proposed pipes (water, sewer, fire) not shown on utility plan.

    The applicant has identified the 3-inch force main as HDPE on sheet C4.1. The 3-inch force main is identified as privately owned.

8. **Comment Resolved.** Utility calculations (water, sewer) were not provided.

    Applicant has added utility calculations to sheet C4.1. Lift station calculations were provided. However, the standby diesel pump curves were not included. In addition, a standby diesel pump is provided on the City standard detail on C10.0, however, it is not shown in the site specific plan view on C10.0. Clarification on if the lift station is to be public or privately owned, operated, and maintained is required.

    Applicant has responded that because the lift station is privately owned, operated, and maintained, a standby diesel generator is not required.

9. **Defer to Fire Chief.** Fire flow calculations were not provided.

    Applicant has included fire flow calculations, added a hydrant, and moved two hydrants away from loading zones. Defer fire flow approval and fire hydrant spacing to Fire Chief.

10. **Comment Resolved.** Tie in locations for water and sewer should be called out on the utility plan.

    Applicant has added utility tie in callouts to sheet C4.1.

11. Additional north-south and east-west cross sections should be provided to verify site grading, proposed slopes, cut/fill, and other design elements.

    Applicant has added additional north-south and east-west cross sections as requested, however, 3:1 grading is shown. Grading shall not exceed 4:1 per LDC 122-85 (d)(5). ***It is unclear if the project PUD allows for 3:1 grading. Clarification required.***

12. **Comment Resolved.** Child prevention grates required on mitered end sections.

    Applicant has added child prevention grate call out and detail to sheets C6.0 and C8.0.

13. **Comment Resolved.** The 12-inch public potable pipe should be ductile iron under roadway crossings.

    Applicant has responded "Call outs added to Utility Plan; see sheet C4.1.", but Ductile Iron Pipe does not appear to be called out under paved areas.

    Applicant has called out DIP water main underneath the north entrance, and directionally drilled HDPE underneath the south entrance. A directional drill profile has been added on sheet C4.2.

14. **Comment Resolved.** Finished floor elevations of buildings not provided on grading plan.

    Finished floor elevations have been added to sheet C5.0.

15. Gopher tortoise observed on site. Mitigation required before construction on site begins.

    Applicant responded that "mitigation will be coordinated prior to construction." Defer to Planning and Certification of Occupancy (C.O.) process.

16. **Defer to Planning.** 8 parking spaces maximum without island, per LDC 110-3.

    Applicant responded "Please see note 1 on existing PD. It states the maximum number of spaces between islands is 20." Defer to Planning.

17. **Comment Resolved.** Missing a 12x8" reducer on the Potable water line in Detail A of sheet C4.1

    Applicant has added the 12x8" reducer on sheet C4.1.

18. **Defer to Public Works.** The applicant has provided a 15-foot utility easement along US 27. The city typically requests a 20-foot utility easement along US 27. Discussion recommended.

    Applicant has responded "The easement width was discussed with public works and engineering. Due to the property constraints and by purchasing the FDOT pond, which currently cannot be granted an easement, we agreed 15' is sufficient."

19. **Deferred to Traffic Consultant**. Defer traffic study review to Traffic Consultant.

20. New Comment. The applicant proposes a directional drill of the potable water line under the project driveway. Per previous DRC meeting, this was per FDOT requirements. FDOT rationale for the HDD is unclear. The HDD depth is 18'+ deep. The proposed utility easement is 15' wide. It is unclear how the City would access the line in the future if required. Discussion warranted.

Fire

1. Approved.

Lake County

1. Comments pending.

Inspire
PLACEMAKING COLLECTIVE

To: Joyce Heffington, AICP, Minneola CRA Administrator

From: Eric Raasch, AICP, Inspire Project Manager

CC: Gabriela Castro, AICP

Date: August 25, 2026

Reference: Minneola Commerce Center Future Land Use Map Amendment, PUD, and DA Amendment

We have conducted a review of the proposed Future Land Use Map (FLUM), Planned Unit Development rezoning and Development Agreement amendments for the above-referenced project. The site, located within the Minneola city boundaries and consisting of two parcels identified by Parcel Nos. 06-22-26-0003-000-06300 and 06-22-26-0003-000-04700, has an approximate area of 12.42 acres according to Lake County Property Appraiser data.

The request considered here is to amend the subject property's FLUM designation from PD-Commercial to PD-Industrial, and to amend the terms of the Development Agreement dated October 18, 2018, including PD standards. The new agreement is a substantive change to the previous development framework. The proposal shifts the project toward a shallow-bay industrial/flex-commercial development, substantially expands the use framework, changes the architectural character, modifies development standards, adds/redefines property, and extends the agreement term from 10 to 30 years. The proposal also incorporates a 1.199-acre FDOT parcel into the defined "Property", while the parcel remains publicly owned and outside the City limits. The applicant has expressed an intent to request annexation of the parcel. However, an annexation application has not been submitted at the time of this staff report.

Planning

General Comments

1. Staff has not received an annexation request for the FDOT pond. *Inspire recommends that any action taken be contingent on annexation of the FDOT pond parcel into the City*.

2. No Environmental Assessment or Traffic Impact Analysis was provided with this request. However, a listed species survey and FDOT driveway connection TIA were submitted with the associated Site Plan. *Please note that these studies will be considered and reviewed as part of the FLUM / PUD rezoning application.*

3. Please reconcile data across all applications or provide clarification, including:

a. The application states that the site size is 14.96 acres, but the Property Appraiser records for the two parcels indicate a combined acreage of 12.42 acres. The survey submitted with the application package does not provide confirmation of the covered acreage.

b. The application indicates the existing FLU designation as being PD-Commercial, which appears to be consistent with the most current version of the Future Land Use Map. However, the Development Agreement dated October 18, 2018, calls the designation of the property "Grassy Lake Holdings Mixed Use Commercial Development." *Please update the DA.*

c. The proposed Development Agreement includes a legal description that encompasses the 1.191-FDOT parcel, but the legal description provided on the topographic survey by Allen & Company dated 3/14/25 does not. *Please reconcile for consistency.*

Development Agreement

1. The recitals refer to approximately 13.32 acres within the city limits, but the first 2018 agreement covered approximately *12.31 acres*, not 13.32. *Please clarify/reconcile the difference*.

2. The DA is silent on the amount of square footage proposed for the project. *Please add the amount of proposed square feet by use.*

3. The new agreement expressly amends certain provisions of the original development agreement "while ratifying and affirming all remaining terms and conditions." However, the Conditions-precedent section has been removed entirely, rather than updated. The new agreement states that the owner has filed applications for annexation, rezoning, and comprehensive plan amendment for an adjoining 1.191-acre FDOT-owned parcel in unincorporated Lake County, and that the owner has "full power and authority to make, deliver, enter into, and perform pursuant to the terms and conditions of the proposed agreement without submitting an annexation application at this time. The applicant has submitted a warranty deed as providing evidence of ownership or authority, but it is unclear whether this includes the 1.191-acre parcel. *Please submit additional documentation or clarify that the proposed agreement establishes only a future development framework without granting any development rights prior to acquisition and completion of the required annexation, comprehensive plan amendment, and rezoning.* [NOTE: This is *not* a legal opinion; Inspire defers to the City Attorney's Office.]

4. The new agreement appears to retain the B-1/PD framework language but makes development subject to a new Land Use Plan and amended use/standards provisions; overall character is described as shallow-bay industrial and flex commercial. The Land Use Plan exhibit was not included as an exhibit to the DA document, but it is part of the overall application package. *We observe that the graphic (which appears to be from the 2018 approval, relabeled as "Minneola Commerce Center" and renumbered as Sheet "LUP-01") is annotated to show the proposed zoning to be "I-1 & B-1 with PD" under the Project Description, but only "I-1" in the Notes section, so please clarify the proposed zoning.*

5. The new agreement includes broad categories covering light industrial, warehousing, logistics, distribution, fulfillment, flex-space, manufacturing, wholesale, construction/contractor, R&D, office, showroom and service-commercial uses, plus specified NAICS sectors. Notably, the amendment permits all uses within Sectors 31–33, including food, beverage, textile, wood, printing, chemical, plastics/rubber, mineral products, fabricated metal, machinery, electronics, transportation equipment, furniture, medical devices and miscellaneous manufacturing. Specifically, the blanket authorization of NAICS Sectors 31–33 appears broader than the stated "shallow-bay industrial and flex commercial" character and includes uses with substantially different potential impacts, while relying primarily on visual screening doesn't address potential noise, odor, truck activity, vibration, or other operational impacts. *Inspire recommends limiting permitted manufacturing to enclosed, low-impact/light manufacturing and establishing performance standards; or shift to conditional review for the higher-intensity / higher-impact manufacturing uses.*

6. The new list of conditional uses focuses on commercial recreation, day care, gun range, kennel/pet care, laboratories/R&D, motor vehicle sales/repair, nurseries/home-building materials, shopping center, veterinary and similar uses. *Please confirm the status of previous commercial uses such as restaurants, hotels, drive-throughs, and residential-care which are no longer expressly identified and may not be covered by the similarity clause.*

7. The new agreement retains 50-ft height and 20% open space but removes the explicit 90% ISR cap. However, the Land Use Plan retains the 90% ISR cap. *Please clarify the proposed ISR.*

8. Section 5(i) of the proposed DA addresses setbacks. The applicant is proposing setbacks of 30' on the north, 30' on the east, 10' on the south and 50' on the west. These setbacks are generally consistent with the setbacks required in the City's most comparable I-1 District. *Informational comment only. No response required.*

9. Section 5(ii) of the proposed DA addresses landscape buffers. Sec. 110-3(b)(Chart A-1) outlines buffer area requirements by use. Per the chart, PUD buffering is to be reviewed individually with each application. The applicant is proposing I-1 uses and the adjacent properties are zoned B-1 (north), B-1 and Lake County A (east), Lake County CFD (south), and B-1, Utilities, Lake County C-2 (west across US 27 ROW). Based on these designations, the site would warrant a Class C buffer (30') on the north, a Class C buffer (30') on the east, a Class D buffer (30') to the south, and a Class C buffer (30') to the west. The applicant is proposing a 0' buffer on the north (due to an access easement), a 10' buffer on the east, a 10' buffer on the south, and a 10' buffer on the west. *Inspire recommends increasing these buffers due to the increased intensity of the proposed uses.*

10. Section 5(iii) of the proposed DA addresses building height. The applicant is proposing a maximum building height of 50', which exceeds the maximum height of 35' feet for I-1 zoned property. While not prohibited, this information will be presented to City Council for review. *Informational comment only. No response required.*

11. **Section 5(v)** of the proposed DA addresses quantity of off-street parking. **LDC Sec. 122-35(b)(4)** outlines the City's minimum parking requirements. The applicant is proposing parking at a ratio of 1 parking space per 1,000 square feet of gross floor area. Due to the number of proposed permitted uses, the extent that this ratio deviates from code is unknown. For example, the City's parking requirement for manufacturing is 1 parking space per 600 SF of floor area dedicated to manufacturing, please the required parking square footage devoted to other uses (i.e. office). The applicant's request also includes all B-1 uses, some of which have significantly higher parking requirements than 1 space per 1,000 SF. For example, restaurants require 1 space per 2 seats, plus one space per 2 employees. *Inspire recommends reducing the amount of requested uses and providing a parking study to justify the requested reduction.*

12. **Section 5(v)** of the proposed DA addresses the maximum number of parking spaces between landscape islands. **LDC Sec. 110-3(a)(1)** states that the maximum number of uninterrupted spaces between landscaping areas is eight. The applicant is proposing 20 spaces between landscape islands. *Inspire recommends revising the agreement to reduce the number of spaces between landscape islands to a maximum of eight.*

13. **Section 5(v)** of the proposed DA addresses parking space sizing. **LDC Sec. 122-39(b)** states the minimum parking space size within the City. Standard parking spaces shall be 20' long. The applicant is proposing a minimum parking space depth of 17', provided an adjacent sidewalk or pedestrian area of sufficient width is provided to accommodate vehicle overhang. *Inspire recommends compliance with the City's standard parking space requirements, and notes that pedestrian areas should remain unobstructed from vehicles.*

14. **Section 6(i)** of the proposed DA includes building materials. The change in architectural character is appropriate to the proposed industrial/flex use; however, the revised standards provide limited direction regarding building massing, façade articulation and architectural quality. Please note that all architectural treatments will need to comply with **LDC Sec. 94-4**. *Informational comment only. No response required.*

15. **Section 6(iii)** of the proposed DA requests the use of a TPO roof for this project. Per the **LDC Sec. 94-4(f)(9)c.4** tile or metal shall be the dominant roof material. This deviation will be presented to City Council. *Informational comment only. No response required.*

16. **Section 16** of the proposed DA requests the ability to permit grading changes of 16' in lieu of 15'. This deviation will be presented to City Council. *Informational comment only. No response required.*

Comprehensive Plan

1. **FLU Policies 1-1.1.3 and 1-1.1.4** include compatibility standards for residential and non-residential development. *Please provide a narrative that addresses how the proposed FLUM is consistent with the City's Comprehensive Plan policies and compatible with the surrounding land uses.*

2. **FLU Policy 1-1.7.1** requires land use activities to occur on soil types capable of supporting the structures and facilities proposed to be placed on them, Table 1-1 stipulates which land uses are deemed suitable or unsuitable for each soil type. *Please provide a soils map with the proposed land uses to demonstrate compliance with FLU Policy 1-1.7.1.*

3. **FLU Policy 1-3.1.2** requires proposed amendments to the comprehensive plan to demonstrate that all facilities and service capacities are currently available or shall be available after the implementation of scheduled capital improvements, to meet general needs of the proposed land use. *Please provide a public facilities analysis.*

4. **CONS Policy 5-1.3.1** provides standards for maximum impervious surface area by use. *Please provide additional detail regarding proposed uses for the project and demonstrate compliance with the maximum ISR consistent with CONS Policy 5-1.3.1.*

Public Works

1. No comments. Defer to Planning Division.

Fire

1. No comments.

Lake County

1. Pending response.

Engineering

1. Pending response.

CITY OF MINNEOLA
P.O. BOX 678
MINNEOLA, FL 34755
(352) 394-3598

NOTICE OF PUBLIC HEARING

ORDINANCE 2026-20

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MINNEOLA, FLORIDA, REZONING 14.52± ACRES GENERALLY LOCATED EAST OF US HIGHWAY 27 AND SOUTH OF CITRUS GROVE ROAD FROM "COMMERCIAL-PLANNED UNIT DEVELOPMENT" (PUD-C) TO "INDUSTRIAL-PLANNED UNIT DEVELOPMENT" (PUD-I) WITHIN THE CITY OF MINNEOLA; PROVIDING FOR CONDITIONS AND CONTINGENCIES; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

The City of Minneola **Planning and Zoning Commission** will make a recommendation to the City of Minneola City Council on **Monday, September 14, 2026 at 6:30 p.m**. at the Minneola City Hall located at 800 North U.S. 27, Minneola, FL.

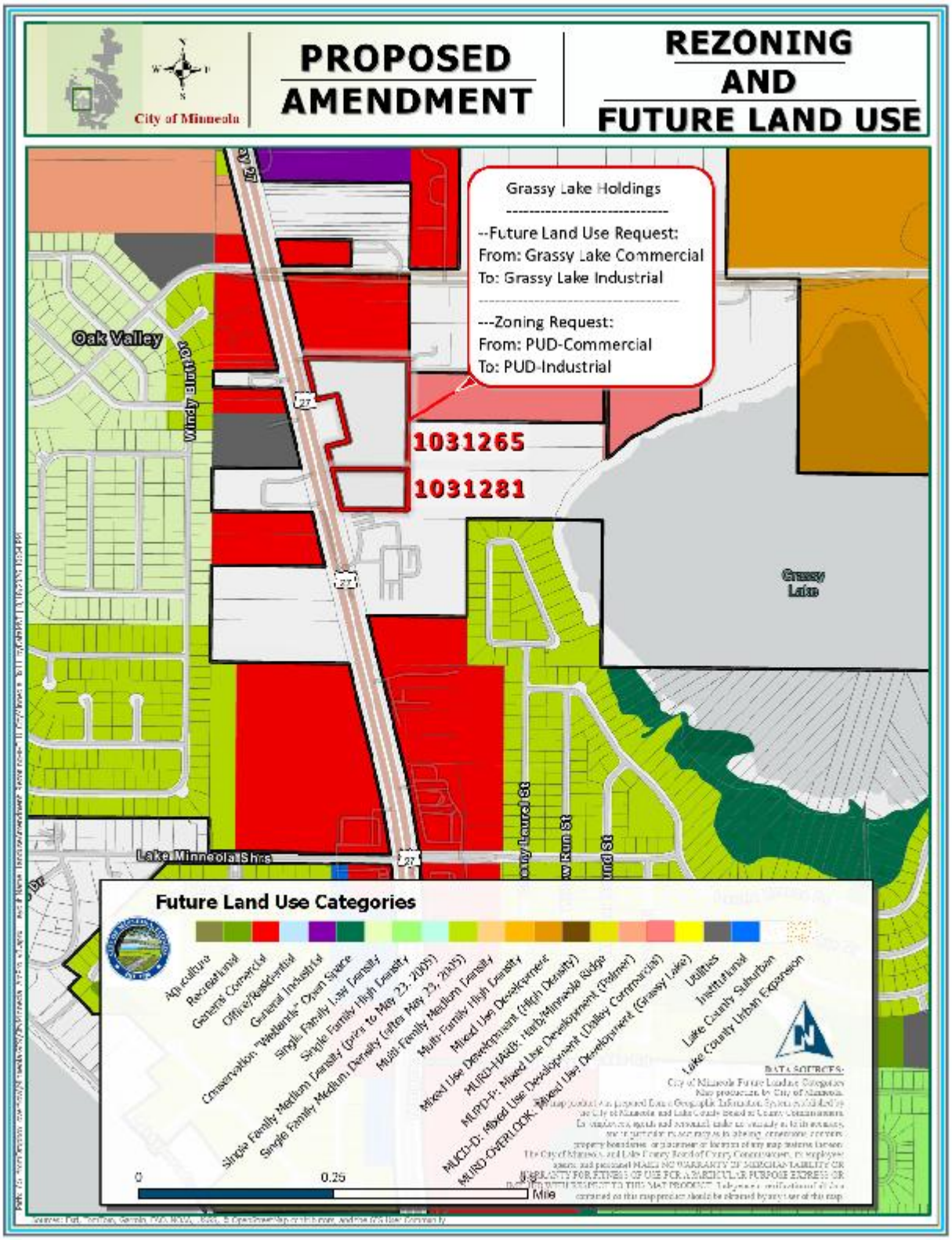
The Minneola **City Council** will hold public hearings on the proposed rezoning on **Tuesday, September 15, 2026** and **Tuesday, October 6, 2026 at 6:30 p.m**. at the Minneola City Hall. The request is for a zoning designation change for approximately 14.52 acres generally located east of U.S. Highway 27 south of Citrus Grove Road from "Commercial-PUD" to "Industrial-PUD".

The staff report on the case shall be sent to the City Council and will be available to the general public at least five (5) days prior to the hearing on the case. The complete legal description for the property described herein by metes and bounds and a copy of the ordinance may be obtained from the City Clerk. Interested parties may appear and be heard with regard to this proposed ordinance.

A person who decides to appeal any decision made by any board, agency, or council with respect to any matter considered at such meeting or hearing, will need a record of the proceedings. For such purposes, any such person may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is based (Florida Statutes, 286.0105).

The City of Minneola Land Development Code and the proposed Ordinance are available for inspection at the City Hall, located at 800 North U.S. 27, Minneola, FL, during normal working hours 8:30 a.m. to 5 p.m.

PERSONS WITH DISABILITIES NEEDING ASSISTANCE TO PARTICIPATE IN ANY OF THESE PROCEEDINGS SHOULD CONTACT KRISTINE THOMPSON, CITY CLERK AT (352) 394-3598 EXT 111 AT LEAST 48 HOURS BEFORE THE DATE OF THE SCHEDULED HEARING.


PROPOSED AMENDMENT
REZONING AND FUTURE LAND USE
City of Minneola
Grassy Lake Holdings
--Future Land Use Request:
From: Grassy Lake Commercial
To: Grassy Lake Industrial
---Zoning Request:
From: PUD-Commercial
To: PUD-Industrial
1031265
1031281
Oak Valley
Windy Bluff Dr
Grassy Lake
Lake Minneola Shores
Future Land Use Categories
Agriculture
Recreational
General Commercial
Office/Residential
General Industrial
Conservation "Wetlands" Open Space
Single Family Low Density
Single Family High Density
Single Family Medium Density (prior to May 23, 2005)
Single Family Medium Density (after May 23, 2005)
Multi-Family Medium Density
Multi-Family High Density
Mixed Use Development
Mixed Use Development (High Density)
MURD-HARB: Hartz/Minneola Ridge
MURD-P: Mixed Use Development (Palmer)
MUCD-D: Mixed Use Development (Dalloy Commercial)
MURD-OVERLOOK: Mixed Use Development (Grassy Lake)
Utilities
Institutional
Lake County Suburban
Lake County Urban Expansion
0
0.25
Mile

CITY OF MINNEOLA
CITY OF MINNEOLA
CITY OF MINNEOLA

CITY OF MINNEOLA
CITY OF MINNEOLA
CITY OF MINNEOLA

OwnerNam	OwnerAddr	OwnerCity	OwnerState	OwnerZip
FIELDS EC	PO BOX 11	WINTER H	FL	32882-0113
GRASSY L	5832 WOO	BELL ISLE	FL	32809
OMBS LLC	PO BOX 12	CLERMON	FL	34712-0788
OPEN DOC	17140 US H	CLERMON	FL	34715
ZAVY ENT	23825 INTE	SORRENT	FL	32776
CITRUS GI	15 CREEK	HILLSBOR	CA	94010
GHULAM D	9229 195TI	HOILLIS	NY	11423
DOORSAM	17350 US H	CLERMON	FL	34715-9272
FALZONE	17358 N US	CLERMON	FL	34715
QUINN CE	41634 CR 4	LEESDBUI	FL	34788
VISTA GR/	13940 ASH	MINNEOLA	FL	34715
CLEM CON	10800 CLA	LEESBUR(	FL	34788
CONGREG	12205 CITI	CLERMON	FL	34715
SCHMIDT I	6420 LU EI	GROVELAI	FL	34736-9747
LAKE CO E	315 W MAI	TAVARES	FL	32778
PROFESSI	1200 NETV	EFFINGHA	IL	62401
DE NOYEL	3149 SCRL	OVIEDO	FL	32765
SOUTH LA	17335 US H	CLERMON	FL	34715-9220
DUKE ENE	PO BOX 37	CHARLKIC	NC	28237-7996
CRA CITY	800 N HWY	MINNEOLA	FL	34715

AFFIDAVIT OF PUBLICATION

Clermont Sun

Published Weekly

Clermont, Lake County, Florida

Case No. 2026-20

STATE OF FLORIDA
COUNTY OF LAKE

Before the undersigned authority, Steven Dykes, personally appeared who on oath says that she is the Classified Advertising Legal Clerk of Clermont Sun, a newspaper published at Clermont in Lake County, Florida; that the attached copy or reprint of the advertisement, to the right, being a Public Notice, was published in said newspaper by print in the issues of or by publication on the newspaper's website, if authorized, on:

September 02, 2026

Affiant further says that the Clermont Sun newspaper complies with all legal requirements for publication in chapter 50, Florida Statutes.

Steven Dykes

Sworn to and subscribed before me this 2nd day of September 2026 by Steven Dykes, who is personally

Ashley N. Abear, Clerk, Notary Number: #HH211536
Notary expires: December 27, 2025

00012418 00215704

Joyce Heffington
CITY OF MINNEOLA
P.O BOX 678
MINNEOLA, FL 3475

Notary Public State of Florida
Ashley Abear
My Commission HH 744101
Expires 12/27/2029

CITY OF MINNEOLA
P.O. BOX 678
MINNEOLA, FL 34755
(352) 394 3598

NOTICE OF PUBLIC HEARING

ORDINANCE 2026-20

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MINNEOLA, FLORIDA, REZONING 14.52+ ACRES GENERALLY LOCATED EAST OF US HIGHWAY 27 AND SOUTH OF CITRUS GROVE ROAD FROM "COMMERCIAL-PLANNED UNIT DEVELOPMENT" (PUD-C) TO "INDUSTRIAL-PLANNED UNIT DEVELOPMENT" (PUD-I) WITHIN THE CITY OF MINNEOLA; PROVIDING FOR CONDITIONS AND CONTINGENCIES; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

The City of Minneola **Planning and Zoning Commission** will make a recommendation to the City of Minneola City Council on **Monday, September 14, 2026 at 6:30 p.m.** at the Minneola City Hall located at 800 North U.S. 27, Minneola, FL.

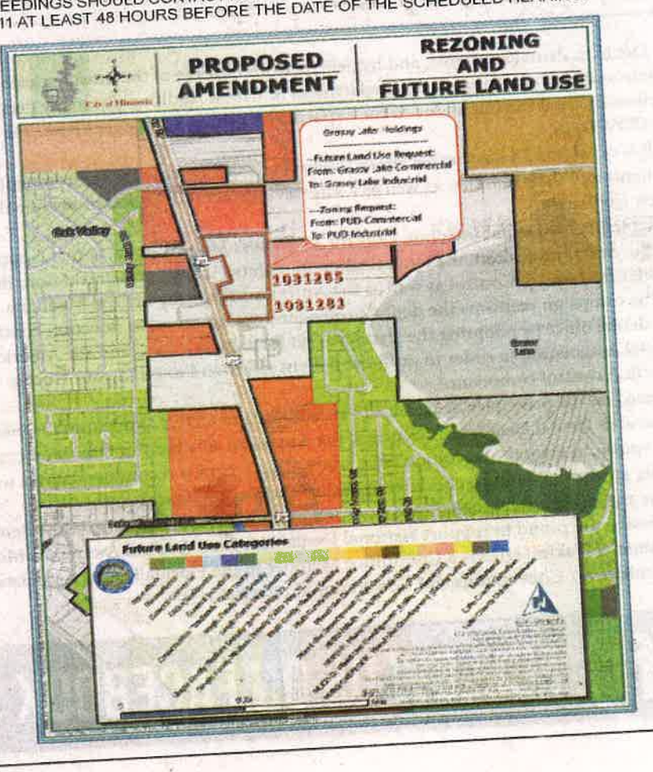
The Minneola **City Council** will hold public hearings on the proposed rezoning on **Tuesday, September 15, 2026** and **Tuesday, October 6, 2026 at 6:30 p.m.** at the Minneola City Hall. The request is for a zoning designation change for approximately 14.52 acres generally located east of U.S. Highway 27 south of Citrus Grove Road from "Commercial-PUD" to "Industrial-PUD".

The staff report on the case shall be sent to the City Council and will be available to the general public at least five (5) days prior to the hearing on the case. The complete legal description for the property described herein by metes and bounds and a copy of the ordinance may be obtained from the City Clerk. Interested parties may appear and be heard with regard to this proposed ordinance.

A person who decides to appeal any decision made by any board, agency, or council with respect to any matter considered at such meeting or hearing, will need a record of the proceedings. For such purposes, any such person may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is based (Florida Statutes, 286.0105).

The City of Minneola Land Development Code and the proposed Ordinance are available for inspection at the City Hall, located at 800 North U.S. 27, Minneola, FL, during normal working hours 8:30 a.m. to 5 p.m.

PERSONS WITH DISABILITIES NEEDING ASSISTANCE TO PARTICIPATE IN ANY OF THESE PROCEEDINGS SHOULD CONTACT KRISTINE THOMPSON, CITY CLERK AT (352) 394 3598 EXT 111 AT LEAST 48 HOURS BEFORE THE DATE OF THE SCHEDULED HEARING.



AGENDA SUMMARY
Planning & Zoning Commission Meeting
September 14, 2026

Agenda Item: 3.
Subject Title: Ordinance 2026-21 Grassy Lake Industrial Comp Plan Amendment

Objective:
An Ordinance of the City Council of the City of Minneola, Florida, Providing for a Textual Amendment to the City's Comprehensive Plan Amendment to Amend Policy 1-2.11.4 Entitled "Grassy Lake Holdings Commercial Development" to “Grassy Lake Holdings Industrial” Providing for a Comprehensive Plan Amendment to the City’s Future Land Use Map of the City of Minneola's Comprehensive Plan From " Grassy Lake Holdings Commercial Development" to “Grassy Lake Holdings Industrial” for Approximately 14.52 Acres Generally Located East of US Highway 27 and South of Citrus Grove Road; Providing for Conditions and Contingencies; Directing the City Clerk to Transmit the Amendment to the Appropriate Governmental Agencies Pursuant to Chapter 163, Florida Statutes; Providing for Severability; Providing for an Effective Date.

Summary:
Major Stacy, Owner, for Grassy Lake Holdings, requests a future land use change from “Grassy Lake Holdings Commercial Development” to “Grassy Lake Holdings Industrial” for 14.52 ± acres of property generally located east of US Highway 27 and north of Citrus Grove Road. Originally the owner was only going to change the Developer Agreement to allow office warehouse (flex space) in the B-1 zoning but now wants more industrial uses as well. Our comprehensive plan shows US Highway 27 for commercial not industrial uses.

Exhibits:
1. Application
2. Ord 2026-21 Amending Comp Plan Grassy Lake Holdings - Revised 9.2.26
3. LUP 8.20.26
4. Site Plan
5. Grading Plan
6. Minneola Commerce Center FLUM RZ_v1
7. 277 Minneola Commerce Center TIA v1
8. 240b Minn Commerce Center US N 27 SP3 v1
9. 20250038 BDY-TOPO SURVEY
10. Legal Description
11. Warranty Deed

12. Public Hearing Notice Ord 2026-21 Comp Plan
13. ADDRESSES
14. IMG_0815
15. IMG_0816
16. Affidavit Comp Plan

Options:
1. Approve the ordinance as presented.
2. Approve the ordinance subject to modifications.
3. Postpone the decision.
4. Deny approval of the ordinance.

Fiscal Impact:
Undetermined.

Staff Recommendation:
Staff recommends if approved it be on the condition the former FDOT pond is annexed in and all staff comments be addressed.

CITY OF MINNEOLA, FLORIDA
ZONING MAP AMENDMENT
WITH
COMPREHENSIVE PLAN AMENDMENT
APPLICATION CHECKLIST

This Checklist is based on the relevant provisions of Chapter 98-3, Rezoning, Chapter 98-4(a), Small Scale Comp Plan Amendment (10 acres or less), and Chapter 98-4(b), Large Scale Comp Plan Amendment (10.1 acres or more), of the Minneola Code of Ordinances. The Code is available at www.municode.com. Requirements are minimums that may be adjusted in the pre-application conference.

Please check one:

40 ACRES

__X__ Small Scale Comp Plan Amendment ~~(10 acres or less)~~ - **$1,350**

_____ Large Scale Comp Plan Amendment (10.1 acres or more) - **$2,350**

The following information is required for all Zoning Map & Comp Plan Amendment Applications:

__X__ 1 – Copy of the Legal Description [could be on the survey]
__X__ 1 – Certified copy of the Warranty Deed
__X__ 1 – Copy of the signed and notarized property Owner's Authorization (if applicable)
__X__ 1 – Copy of the completed Application form with Checklist
__X__ 1 – Copy of the completed Adjacent Property Owners form -- or --
__X__ 3 – Copy of the Boundary Survey by a Florida Licenses surveyor @ 24" x 36"
__X__ 3 – Copy of the Conceptual Plan for the subject site @ 24" x 36"
_____ 10 – Copy of the Boundary Survey by a Florida Licenses surveyor @ 24" x 36"
_____ 10 – Copy of the Conceptual Plan for the subject site @ 24" x 36"
__X__ 1 – CD in PDF format including ALL application package text and graphics
__X__ Non-refundable fee per Amendment acreage size listed above

---

The Conceptual Plan will include: GOEM. PLAN & GRADING PLAN PROVIDED

__X__ a) A graphic identification of the points of entry from the adjacent road
__X__ b) The site contours – minimum 10-ft. intervals
__X__ c) A graphic depiction of the proposed density (du/acre) or intensity (FAR) by sub-area (bubble diagrams) or total square footage of all principal structures
__X__ d) A graphic identification of the existing adjacent land use on all sides
__X__ e) A graphic identification of the existing adjacent zoning on all sides of the site
__X__ f) Other requirements identified in the pre-application conference

---

Submit to: Planning Department, 800 N. U.S. Hwy 27, Minneola, FL 34715

CITY OF MINNEOLA, FLORIDA
ZONING MAP AMENDMENT
WITH
COMPREHENSIVE PLAN AMENDMENT
APPLICATION CHECKLIST (continued)

Application Review Process

Development Review Process (DRP)

- A pre-determined level of DRP review shall occur for every application
- The DRP will provide written comments/recommendations to the applicant and the P&Z

Planning and Zoning Commission (P&Z)

- The Planning Dept (Dept) is responsible to ensure the proper legal advertising is done in a timely manner
- The applicant is responsible to correctly post the required signs on the site in a timely manner and pursuant to the instructions provided by the Dept and to remove the signs after the approval process is completed
- The P&Z will provide written comments to the City Council

City Council

- The City Council may conduct one or more public workshops prior to initiating their formal consideration of a small scale comprehensive plan amendment application
- The Dept will advise the applicant of the next available workshop date
- Upon Council's completion of the workshop process the Dept will do an additional legal advertisement and the applicant must again post signs on the site as described above
- The City Council must conduct two public hearings regarding the proposed amendment
- The Council may defer consideration of the subject application at any time

For additional information regarding the application review process, please refer to the Minneola Code of Ordinances:

- Chapter 98-3, Rezoning,
- Chapter 98-4(a), Small Scale Comp Plan Amendment (10 acres or less),
- Chapter 98-4(b), Large Scale Comp Plan Amendment (10.1 acres or more).

The Code is available at www.municode.com.

CITY OF MINNEOLA, FLORIDA
ZONING MAP AMENDMENT
WITH
COMPREHENSIVE PLAN AMENDMENT
APPLICATION

X Small Scale Comp Plan Amendment ___ Large Scale Comp Plan Amendment

(Please check one Comp Plan Amendment type above)

Applicant Name: Drew Thigpen - Pelican Industrial

Applicant Address: [redacted]

Applicant Phone #: 843-469-2517 Fax # or E-mail: [redacted]

General Location and/or Street Address: US 27 & Citrus Grove Rd

Alternate Key Number(s): 1031281 & 1031265

Owner Name: Grassy Lake Holdings

Owner Address: [redacted]

Owner Phone #: 407-456-1497 Fax # or E-mail: [redacted]

Site Area (acres or sq. ft.): 14.96

~~~~~~~~~~~~~~~~~~~~~~~~ **EXISTING** ~~~~~~~~~~~~~~~~~~~~~~~~

FLUM: PD-Comm Zoning: PD

Potable Water Source: City Sewage Disposal Method: City

Present Use & List Of Structures By Use: Homeless Encampment - Sheriff Has Authority to Access

Has this site been subject to other development applications in the last two years?

No: Yes If Yes, provide the type of action and date of final action: Site Permitting - Ongoing

~~~~~~~~~~~~~~~~~~~~~~~~ **PROPOSED** ~~~~~~~~~~~~~~~~~~~~~~~~

FLUM: PD-Ind. Zoning: PD

Potable Water Source: City Sewage Disposal Method: City

Proposed Use: Light Flex Space to serve local residents

Reasons for the request: Provide a location for businesses that serve local residents needs

Adjacent Roadway Classification & LOS: US 27 LOS B (See TIA submitted w/ Site Plan)

Estimated traffic generated by the proposed project: 75 Peak PM Hour Trips

CITY OF MINNEOLA, FLORIDA
ZONING MAP AMENDMENT
WITH
COMPREHENSIVE PLAN AMENDMENT

CERTIFICATION

I, the undersigned, do hereby certify that I have read the application and the relevant guidance material and understand the requirements described therein and that I will fully comply with all City, State and Federal regulations applicable to this project.

I understand that the application fee is non-refundable.

I further understand that I am responsible to reimburse the City for the actual advertising costs, mailing costs, **AND** the actual consultants' review fees, if any. Said fees shall be paid within 30 days of receipt of the City's invoice **OR** further processing of the application will cease until the invoice is paid in full.

I understand that only application packages that are determined complete by the Department will be scheduled for review.

Applicant Signature

8/15/26
Date

****

Payment Record for Office Use:

Applicant Name: _____

Application for: _____

Amount: _____ Check #: _____

Amount: _____ Check #: _____

Rec'd by: _____ Date: _____ Receipt #: _____

City of Minneola

ZONING MAP AMMENDMENT WITH COMPREHENSIVE PLAN AMMENDMENT

Owner's Authorization

(required if the property owner is not the applicant)

STATE OF FLORIDA
COUNTY OF LAKE

Before me, the undersigned authority, personally appeared Drew Thigpen

who is being by me first duly sworn on oath, deposes and says:

1. That he/she is the property owner of the subject parcels in this application.
2. That he/she desires to apply for Comp plan & rezone on land generally located at:
   US 27 & Citrus Grove Road 062226000300004700 & 062226000300006300
3. That he/she has appointed Major Stacy to act as agent in his/her behalf to accomplish the above.

Owner's Signature

This is to certify that on July 18th, 20 25 before me, an officer duly authorized to take acknowledgements in the State and County aforesaid, personally appeared Major Stacy he/she is personally know to me or has produced

SEAL

Danielle L. McDougall
Notary Public
State of Florida
Comm# HH592298
Expires 10/4/2028

Danielle L. McDougall

Danielle L. McDougall
Acknowledger Name

HH592298
Serial Number

10-04-2028
My Commission Expires

CITY OF MINNEOLA, FLORIDA
ZONING MAP AMENDMENT
WITH
COMPREHENSIVE PLAN AMENDMENT
ADJACENT PROPERTY OWNERS

Type a list of owner's names and mailing addresses for all properties lying within 300 feet of all sides of the property described in the attached application, as recorded on the current County tax rolls, or attach photocopies of the appropriate Property Record Cards. [not both]

Alternate Key #	Property Owner	Address (include zip code)
1028965	CITRUS GROVE ROAD HOLDINGS LLC	15 CREEKWOOD WAY, HILLSBOROUGH, CA 94010
3793049	DOORSAMMY CHOONMATTIE	17350 US HIGHWAY 27, CLERMONT, FL 34715-9272
3826439	FALZONE SHERRY & TOBIAS T	17358 N US HIGHWAY 27, CLERMONT, FL 34715
1031265	GRASSY LAKE HOLDINGS LLC	5832 WOODBINE DR, BELL ISLE, FL 32809
1061270	VISTA GRANDE PROPERTIES	13940 ASHTON PARK WAY, MINNEOLA, FL 34715
1031273	GHULAM DAYANAND & JASMA	9229 195TH PL, HOLLIS, NY 11423
1066549	OPEN DOOR BAPTIST OF CLERMONT INC	17140 US HIGHWAY 27, CLERMONT, FL 34715
1108942	ZAVY ENTERPRISES LLC	23825 INTEGRITY WAY, SORRENTO, FL 32776
1591881	DE NOYELLES JOHN TRUSTEE	3149 SCRUB OAK TRL, OVIEDO, FL 32765
1591902	PROFESSIONAL RESOURCE DEVELOPMENT INC	1200 NETWORK CENTRE DR STE 2, EFFINGHAM, IL 62401
1509572	SOUTH LAKE COUNTY LODGE #1615	17335 US HIGHWAY 27, CLERMONT, FL 34715-9220
1065186	DUKE ENERGY CENTER	PO BOX 37996, CHARLOTTE, NC 28237-7996
1108977	FIELDS EQUIPMENT COMPANY INC	PO BOX 113, WINTER HAVEN, FL 32882-0113

Use additional pages as necessary

ORDINANCE 2026-21

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MINNEOLA, FLORIDA, AMENDING POLICY 1-2.11.4 OF THE CITY'S COMPREHENSIVE PLAN TO RENAME "GRASSY LAKE HOLDINGS COMMERCIAL DEVELOPMENT" AS "GRASSY LAKE HOLDINGS INDUSTRIAL DEVELOPMENT"; AMENDING THE FUTURE LAND USE MAP DESIGNATION FOR APPROXIMATELY 13.32 ACRES GENERALLY LOCATED EAST OF U.S. HIGHWAY 27 AND SOUTH OF CITRUS GROVE ROAD FROM "GRASSY LAKE HOLDINGS COMMERCIAL DEVELOPMENT" TO "GRASSY LAKE HOLDINGS INDUSTRIAL DEVELOPMENT"; PROVIDING FOR FINDINGS; PROVIDING FOR TRANSMITTAL; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Grassy Lake Holdings, LLC (the "Owner"), has requested amendments to the text and Future Land Use Map of the City of Minneola Comprehensive Plan for approximately 13.32 acres of real property located within the City of Minneola (the "City"); and

WHEREAS, the required notice of the proposed comprehensive plan amendment has been properly published as required by Chapter 163, Florida Statutes; and

WHEREAS, the textual amendment relates directly to and is adopted simultaneously with the site-specific small-scale Future Land Use Map amendment in accordance with section 163.3187(1)(b), Florida Statutes; and

WHEREAS, the City Council desires to amend existing Policy 1-2.11.4 and the corresponding Future Land Use Map designation for the Property; and

WHEREAS, the Planning and Zoning Commission and City Council have reviewed the proposed amendment to the Comprehensive Plan and have found that the proposed amendment is consistent with the City's Comprehensive Plan; and

WHEREAS, the City Council finds that the amendments are internally consistent with the Comprehensive Plan and assigns the Property the future land use designation of "Grassy Lake Holdings Industrial Development."

NOW, THEREFORE, be it ordained by the City Council of the City of Minneola, Florida, as follows:

Section 1. City of Minneola Comprehensive Plan Policy 1-2.11.4, entitled "Grassy Lake Holdings Commercial Development," is hereby amended and renamed "Grassy Lake Holdings Industrial Development," as follows:

Policy 1-2.11.4. Grassy Lake Holdings Industrial Development.

This site-specific future land use designation accommodates the approximately 13.32-acre Grassy Lake Holdings project generally located east of U.S. Highway 27 and south of Citrus Grove Road. The Property may be developed with industrial uses and limited accessory commercial uses consistent with the applicable Planned Unit Development-Industrial zoning, the approved Development Agreement, and the City's Land Development Regulations.

Section 2. The property consists of approximately 13.32 acres generally located east of U.S. Highway 27 and south of Citrus Grove Road and is more particularly described in **Exhibit "A**" attached hereto and incorporated herein by reference (the "Property").

The Property is assigned the future land use designation of "Grassy Lake Holdings Industrial Development," as depicted on the Future Land Use Map amendment attached hereto as **Exhibit "B"** and incorporated herein by reference.

Nothing in this Ordinance assigns a future land use designation to the approximately 1.199-acre FDOT parcel addressed in the Development Agreement. That parcel must be annexed and separately approved through the applicable comprehensive plan amendment process before any City future land use designation becomes effective for that parcel.

Section 3. This amendment is adopted as a small-scale development amendment pursuant to section 163.3187, Florida Statutes, and shall be subject to the review, challenge, and effective-date provisions applicable to small-scale development amendments.

Section 4. The City Clerk is directed to transmit this Ordinance and the supporting amendment materials to the state land planning agency and any other governmental agency as required by Chapter 163, Florida Statutes.

Section 5. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portion of this Ordinance.

Section 6. This Ordinance shall become effective 31 days after its adoption by the City Council. If this Ordinance is challenged within 30 days after its adoption, it may not become effective until the state land planning agency or Administrative Commission, respectively, issues a final order determining that this Ordinance is in compliance.

PASSED AND ORDAINED this _____ day of _____, 2026, by the City Council of the City of Minneola, Florida.

CITY OF MINNEOLA

_____
PAM SERVISS, City Mayor

ATTEST:

_____
KRISTINE THOMPSON, City Clerk

Passed First Reading _____

Passed Second Reading _____

Approved as to form:

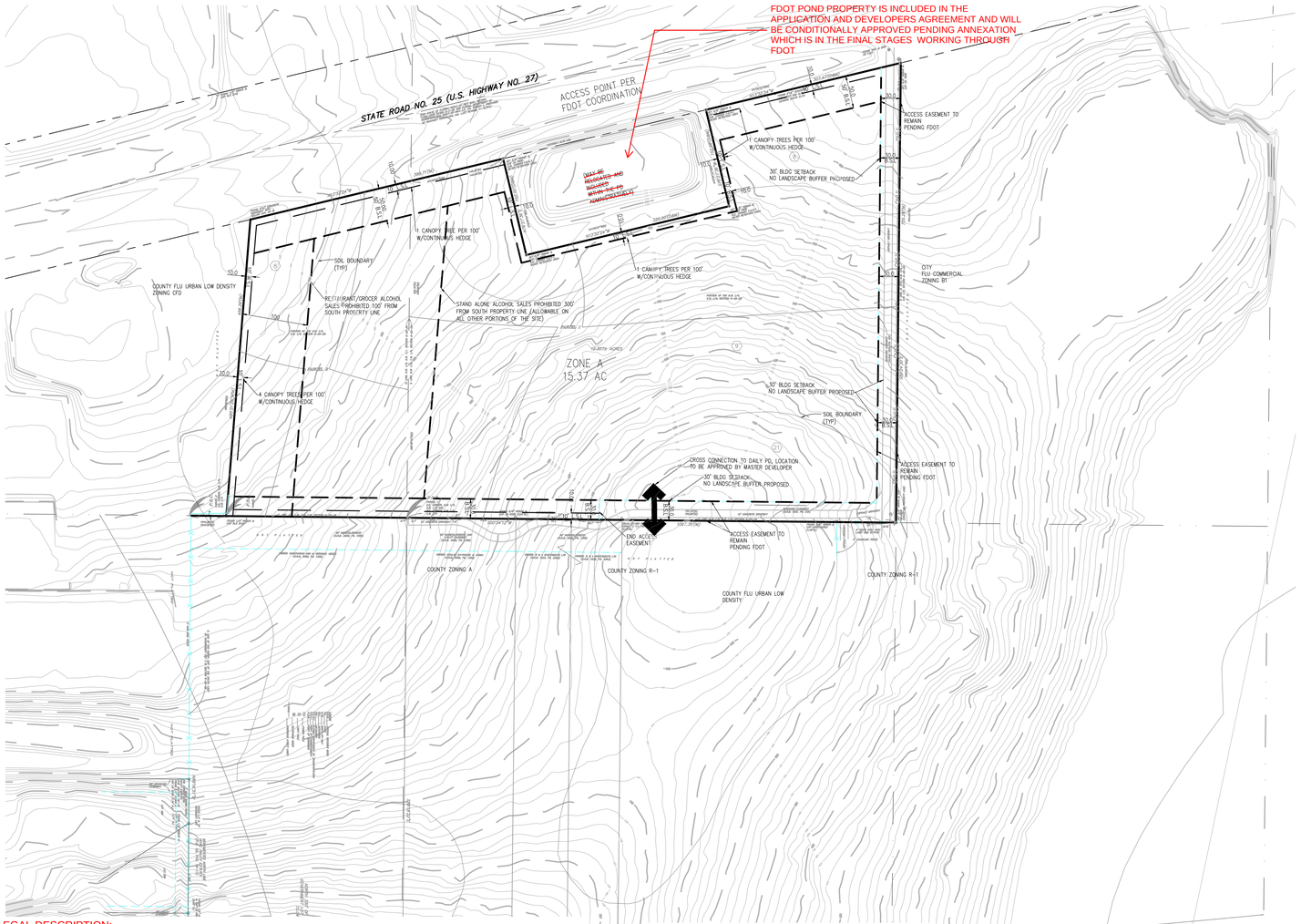
_____
SCOTT A. GERKEN, City Attorney

Exhibit "A"

PARCEL 1:
THAT PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANCE 26 EAST, LAKE COUNTY, FLORIDA LYING EAST OF THE EASTERLY LINE OF THE RICHT— OF— WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY N 0. 27), LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.
THE ABOVE PROPERTY IS ALSO DESCRIBED AS FOLLOWS:
BEGIN AT THE SOUTHEAST CORNER OF THE N W 1/2 OF THE SW 1/4 OF SECTION 6, TOWNSHIP, 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THEN CE N. 00 DEGREES 09' 20" E. ALONG THE EAST BOUNDARY OF THE SAID N W 1/4 OF THE SW 1/4, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NW 1/4 OF THE SW 1/4, THEN CE N. 89 DECREES 50'01" W. ALONG THE SAID SOUTH BOUNDARY, 704.47 FEET TO THE EASTERLY RICHT— OF— WAY LINE OF STATE ROAD N 0. 25 (U.S. HICHWAY N O. 27), THEN CE S. 14 DECREES 00'27" E. ALONG SAID EASTERLY RIGHT— OF—WAY LINE 307.47 FEET TO THE NOR TH Y/ESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THEN CE N. 75 DEGREES 59'33" E. 152 FEET TO THE NORTHEASTERLY CORNER OF SAID RETEN TION AREA, THENCE S. 14 DECREES 00' 27" E. 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 75 DEGREES 59'33" W. 152.00 FEET TO THE AFORESAID EASTERLY RIGHT— OF— WAY LINE OF STATE ROAD NO. 25, THENCE S. 14 DEGREES 00'27" E. ALONG THE SAID RIGHT— 0F— WAY LINE 146.26 FEET TO THE SOUTH BOUNDAR Y OF THE AFORESAID NW 1/4 OF THE SW 1/4 OF SECTION 6, THENCE S. 89 DEGREES, 39'42" E. ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.

PARCEL 2:
BEGINNING 1044.05 FEET N OF THE SE CORNING OF SW 1/4 OF SW 1/4 SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN N 85 DEGREES 58' W TO RIGHT-OF-WAY OF HIGHWAY; THENCE NWLY ALONG SAID RIGHT-OF-WAY TO N LINE OF SAID SW 1/4 OF SW 1/4, THENCE E TO NE CORNER OF SAID SW 1/4 OF SW 1/4, THENCE S TO POINT OF BEGINNING.

Exhibit "B"



LEGAL DESCRIPTION:
PARCEL 1:

THAT PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANCE 26 EAST, LAKE COUNTY, FLORIDA LYING EAST OF THE EASTERLY LINE OF THE RICHT— OF— WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY N 0. 27), LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.
THE ABOVE PROPERTY IS ALSO DESCRIBED AS FOLLOWS:
BEGIN AT THE SOUTHEAST CORNER OF THE N W 1/2 OF THE SW 1/4 OF SECTION 6, TOWNSHIP, 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THEN CE N. 00 DEGREES 09' 20" E. ALONG THE EAST BOUNDARY OF THE SAID N W 1/4 OF THE SW 1/4, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NW 1/4 OF THE SW 1/4, THEN CE N. 89 DECREES 50'01" W. ALONG THE SAID SOUTH BOUNDARY, 704.47 FEET TO THE EASTERLY RICHT— OF— WAY LINE OF STATE ROAD N 0. 25 (U.S. HICHWAY N O. 27), THEN CE S. 14 DECREES 00'27" E. ALONG SAID EASTERLY RIGHT— OF—WAY LINE 307.47 FEET TO THE NOR TH Y/ESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THEN CE N. 75 DEGREES 59'33" E. 152 FEET TO THE NORTHEASTERLY CORNER OF SAID RETEN TION AREA, THENCE S. 14 DECREES 00' 27" E. 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 75 DEGREES 59'33" W. 152.00 FEET TO THE AFORESAID EASTERLY RIGHT— OF— WAY LINE OF STATE ROAD NO. 25, THENCE S. 14 DEGREES 00'27" E. ALONG THE SAID RIGHT— OF— WAY LINE 146.26 FEET TO THE SOUTH BOUNDAR Y OF THE AFORESAID NW 1/4 OF THE SW 1/4 OF SECTION 6, THENCE S. 89 DEGREES, 39'42" E. ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.

THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA WHICH IS NOT INCLUDED HEREIN IS DESCRIBED AS FOLLOWS:

THAT PART OF: THE SOUTH 12.7 ACRES LYING E OF THE COUNTY ROAD, IN THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANCE 26 EAST", LYING IN LAKE COUNTY, FLORIDA LYING WITHIN 220 FEET E OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200; S OF STATION 64+90.00 AND N. OF STATION 61 + 70.00 SAID SURVEY LINE AND SAID STATION S BEING DESCRIBED AND LOCATED AS FOLLOWS: BEGIN ON THE N LINE OF THE NW 1 /4 OF THE SW 1 /4 OF THE SW 1 /4 THENCE RUN S 13 DECREES 58'00" E, A DISTAN CE OF 912.54 FEET TO STATION 6 4+ 90. 00; THENCE CONTINUE S 13 DEGREES 58'00" E, A DISTANCE OF 320 FEET TO STATION 61 +70.00; THENCE CONTINUE S 13 DEGREES 58'00"E, A DISTANCE OF 100 FEET.

CONTAINING 48, 640 SQ. FT. (1.117 ACRES), MORE OR LESS, EXCLUSIVE OF ROAD RIGHT OF WAY.

PARCEL 2:
BEGINNING 1044.05 FEET N OF THE SE CORNING OF SW 1/4 OF SW 1/4 SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN N 85 DEGREES 58' W TO RIGHT-OF-WAY OF HIGHWAY; THENCE NWLY ALONG SAID RIGHT-OF-WAY TO N LINE OF SAID SW 1/4 OF SW 1/4, THENCE E TO NE CORNER OF SAID SW 1/4 OF SW 1/4, THENCE S TO POINT OF BEGINNING.

APPLICANT:
PELICAN INDUSTRIAL
436 E 36TH STREET CHARLOTTE, NC 28205
843-469-2517
DREW THIGPEN

OWNER/DEVELOPER:
GRASSY LAKE HOLDINGS
1521 CHARLOTTE LN ORLANDO FL 32804
407-456-1497
MAJOR STACY,P.E.

ENGINEER:
CLYMER FARNER BARLEY, INC
2221 LEE ROAD SUITE 27 WINTER PARK, FL 32789

SURVEYOR:
ALLEN & COMPANY
16 EAST PLANT STREET WINTER GARDEN, FL 34787
KAYE JAMESON, PSM
407-654-5355

SOIL TYPE	SOIL NAME	HYDROLOGIC GROUP
8	CHANDLER SAND, 0 TO 5% SLOPE	A
9	CHANDLER SAND, 5 TO 12% SLOPE	A
21	LAKE SAND, 0 TO 5% SLOPE	A

100 50 0 100 200 300
SCALE IN FEET
1" = 100'

Oct 03,2018 – 9:37am
P:_PROJECT DRAWINGS\MLS-03\Drawings\CAD Civil3D\Base Files\LAND USE\LAND USE NOTES.dwg

MINNEOLA COMMERCE CENTER LUP (PROPOSED MODIFICATION TO ORB 5198 PG 628-641)

PROJECT DESCRIPTION:

THE PROJECT PROPOSES TO ~~ANNEX INTO THE CITY AND~~ UTILIZE THE PUD OVERLAY TO ESTABLISH THE PROPOSED USES, DESIGN CRITERIA, ETC., AS OUTLINED HEREIN TO BECOME THE GOVERNING DOCUMENT FOR THE SUBSEQUENT FINAL DESIGN, PERMITTING, AND DEVELOPMENT WITHIN THE PUD. THE 1.1.117 AC FDOT POND WILL BE ANNEXED AND ZONED INCLUDED IN A SEPERATE AMMENDMENT

SITE AREA
536,075 SF
12.31 AC

PROPOSED AREA
Surveyed Existing PUD Area - 12.284 AC
EXISTING FDOT POND AREA
Surveyed Pond to be included - 1.117 AC

EXISTING LAND USE
~~URBAN LOW DENSITY (COUNTY)~~ PD - COMMERCIAL

EXISTING ZONING
~~PARCEL 1 = CP (COUNTY)~~ PD - COMMERCIAL
~~PARCEL 2 AG (COUNTY)~~

PROPOSED ZONING
USES: I-1 & B-1 WITH PD (PLANNED DEVELOPMENT) OVERLAY (CITY OF MINNEOLA)

SETBACKS

FRONT	SEE PLAN
SIDE	SEE PLAN
REAR	SEE PLAN

MAXIMUM BUILDING HEIGHT
MAX – 50 FT (OVER 30' REQUIRES FIRE SUPPRESSION)

EXISTING VEGETATION
GRASS, PINE TREES, PALMETTO

ADJACENT LAND USE
NORTH: WOODED (UNDEVELOPED)
EAST: WOODED RESIDENTIAL UNITS
WEST: COMMERCIAL
SOUTH: CHURCH

OPEN SPACE
20%

WATER
CITY OF MINNEOLA

WASTEWATER
CITY OF MINNEOLA

RECLAIM WATER
CITY OF MINNEOLA

STORMWATER
STORMWATER MANAGEMENT SYSTEM SHALL BE DESIGNED TO COMPLY WITH THE CITY OF MINNEOLA REGULATIONS AND WATER MANAGEMENT DISTRICT REGULATIONS & FDOT

PROPOSED MAINTENANCE AND OWNERSHIP OF COMMON SPACE AREAS
PROPERTY OWNERS ASSOCIATION WILL MAINTAIN AND OWN ALL COMMON SPACE AND EASEMENTS (WALL, PARK, TRACTS).

~~PROPOSED DENSITY~~
~~MAX DENSITY (COUNTY): 4 DU/AC~~
~~MAX DENSITY (CITY OF MINNEOLA): 6 DU/AC~~
~~MAX DENSITY (CITY OF MINNEOLA): 12 BEDS/AC~~

FAR
~~FAR (COUNTY): 0.0~~
FAR (CITY OF MINNEOLA): 1.1

ISR
PROPOSED 0.90

SCHOOL AGE CHILDREN
NA

ZONING NOTES:

1. MINIMUM REQUIRED PARKING PROVIDED PER CITY CODE, NO MAXIMUM SHALL APPLY. DEVELOPMENT CRITERIA BASED ON I-1 ~~B-1~~ ZONING AND DEVELOPERS AGREEMENT.
2. ~~15' MAX RETAINING WALL WHICH CAN BE LOCATED IN THE LANDSCAPE BUFFER. NO MAXIMUM GRADING RESTRICTIONS~~
3. PHASING PLAN: THE PHASING WILL BE MARKET DEPENDENT, ALL INFRASTRUCTURE INCLUDING UTILITIES, STORMWATER, DRIVEWAY ACCESS POINTS AND PEDESTRIAN CIRCULATION WILL BE DESIGNED SO THAT THE DEVELOPMENT WILL OVERALL BE CONSISTENT WITH THE PD INCLUDING FRONTAGE & LOT DIMENSIONS. INDIVIDUAL OWNERSHIP WILL NOT BE ANALYZED SEPARATELY.
4. THERE IS NOT A MINIMUM PARCEL SIZE OR BUILDING SEPARATION. NO PROPOSED INTERNAL SETBACKS
5. DURATION OF PUD:
   ONCE APPROVED BY THE CITY, THIS PUD WILL REMAIN VALID WITHOUT THE REQUIREMENT OF ANY RENEWAL (ANNUAL OR LIKEWISE) BY THE CITY. ~~THE PUD MAY BE MODIFIED BY OWNER IN THE FUTURE BY WRITTEN APPROVAL OF THE MAYOR OR CITY COUNCIL OR CITY MANAGER OR CITY PLANNER.~~

NOTES:

1. THE MAXIMUM NUMBER OF UNINTERRUPTED PARKING SPACES BETWEEN LANDSCAPING AREAS IS TWENTY (20). PARKING SHOULD BE CLUSTERED TO ACCOMMODATE ADDITIONAL RECREATION AND OUTDOOR DINING.
2. THE LANDSCAPED PARKING ISLANDS WILL BE A MINIMUM OF 150 SQUARE FEET AND SHALL CONTAIN A MINIMUM OF ONE APPROVED TREE AND GROUND COVER OR GRASS.
3. ~~ONCE APPROVED BY THE CITY, THE FINAL ENGINEERING CONSTRUCTION PLANS WILL ACT AS A TREE REMOVAL PERMIT, NO OTHER TREE REMOVAL PERMIT SHALL BE REQUIRED.~~
4. THE MINIMUM AMOUNT OF REQUIRED TREE REPLACEMENT WILL BE 15 PERCENT OF THE TOTAL DBH OF SPECIMEN TREES OVER 12 INCHES REMOVED PURSUANT TO THE FINAL ENGINEERING PLANS.
5. ~~ARCHITECTURE SHALL REFLECT MEDITERRANEAN / FLORIDA VERNACULAR STYLE AS SHOWN~~
6. CROSS ACCESS EASEMENTS SHALL BE ADDED AS NEEDED WITH ADJACENT PROPERTIES AND CONSIST OF 24' MINIMUM WIDTH, APPROVED BY THE PD MASTER DEVELOPER.
7. STORMWATER MAY BE LOCATED WITHIN THE LANDSCAPE BUFFER
8. WITH A FLAT ROOF WITH PARAPET, A SOLAR HOT WATER HEATER SHOULD BE UTILIZED IF POSSIBLE
9. INTERIOR AND EXTERIOR LIGHTING SHALL BE LED (UNLESS NOT FEASIBLE PER PROPOSED USE)
10. HVAC SYSTEMS TO BE CONTROLLED BY ZONE DIGITALLY FOR BOTH HUMIDITY AND TEMPERATURE
11. R-30 INSULATION TO BE USED IN CEILING WHERE POSSIBLE WITH A REFLECTIVE ROOF COLOR.
12. EFIS WILL BE APPLIED TO INCREASE INSULATION EFFICIENCY WHERE APPLICABLE
13. PLUMBING MUST CONSIST OF LOW FLOW FIXTURES AND FLUSHLESS URINALS
14. ALL EXTERIOR GLASS TO BE LOW E WITH REFLECTIVE TINTWHERE POSSIBLE EXTENDED OVERHANGS WILL BE USED LIGHTING TO COMPLY WITH DARK SKY REGULATIONS
15. WALKABILITY AND PEDESTRIAN ACCESS SHALL BE MAXIMIZED INCLUDING PARKING LAYOUT AND DUMPSTER ENCLOSURES. NO RATIO OF FRONT OR REAR PARKING SHALL APPLY. A CENTRAL EXCEPTIONS TO THE PD THAT ALLOW INNOVATIVE DESIGNS MAY BE GRANTED BY STAFF OR THE DEVELOPER AS LONG AS THE REQUEST MEETS THE INTENT OF THE PD. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO ROUNDABOUTS, WATER FEATURES AND RAIN GARDENS.
16. THE BILLBOARD ~~SHALL BE REMOVED AFTER CONSTRUCTION PLAN APPROVAL OF THE FIRST PHASE~~ CFB BORDER HAS BEEN
17. ~~ADJACENT PROPERTIES IF ACQUIRED BY THE DEVELOPER, AT THE DEVELOPERS REQUEST, SHALL BE INCLUDED WITHIN THE PD~~
18. ~~A CENTRAL RECREATIONAL AMENITY SHOULD BE CONSIDERED WHERE FEASIBLE.~~
19. DENSITIES AND INTENSITIES TO BE APPLIED OVER THE ENTIRE PD.
20. NO OFFSITE IMPROVEMENTS REQUIRED ABOVE THE MINIMUM NECESSARY TO SERVE SUBJECT DEVELOPMENT.
21. OUTDOOR DINING CAN BE K-9 FRIENDLY.

LUP-01

REV.	DATE	DESCRIPTION
3		
2	8/21/18	FINAL
1	08/09/18	REVISED PER CITY OF MINNEOLA COMMENTS
		REVISED PER CITY OF MINNEOLA COMMENTS

LAND USE PLAN

~~GRASSY LAKE~~ MINNEOLA COMMERCE CENTER ~~PUD~~
MINNEOLA, LAKE COUNTY, FLORIDA

LAND USE PLAN

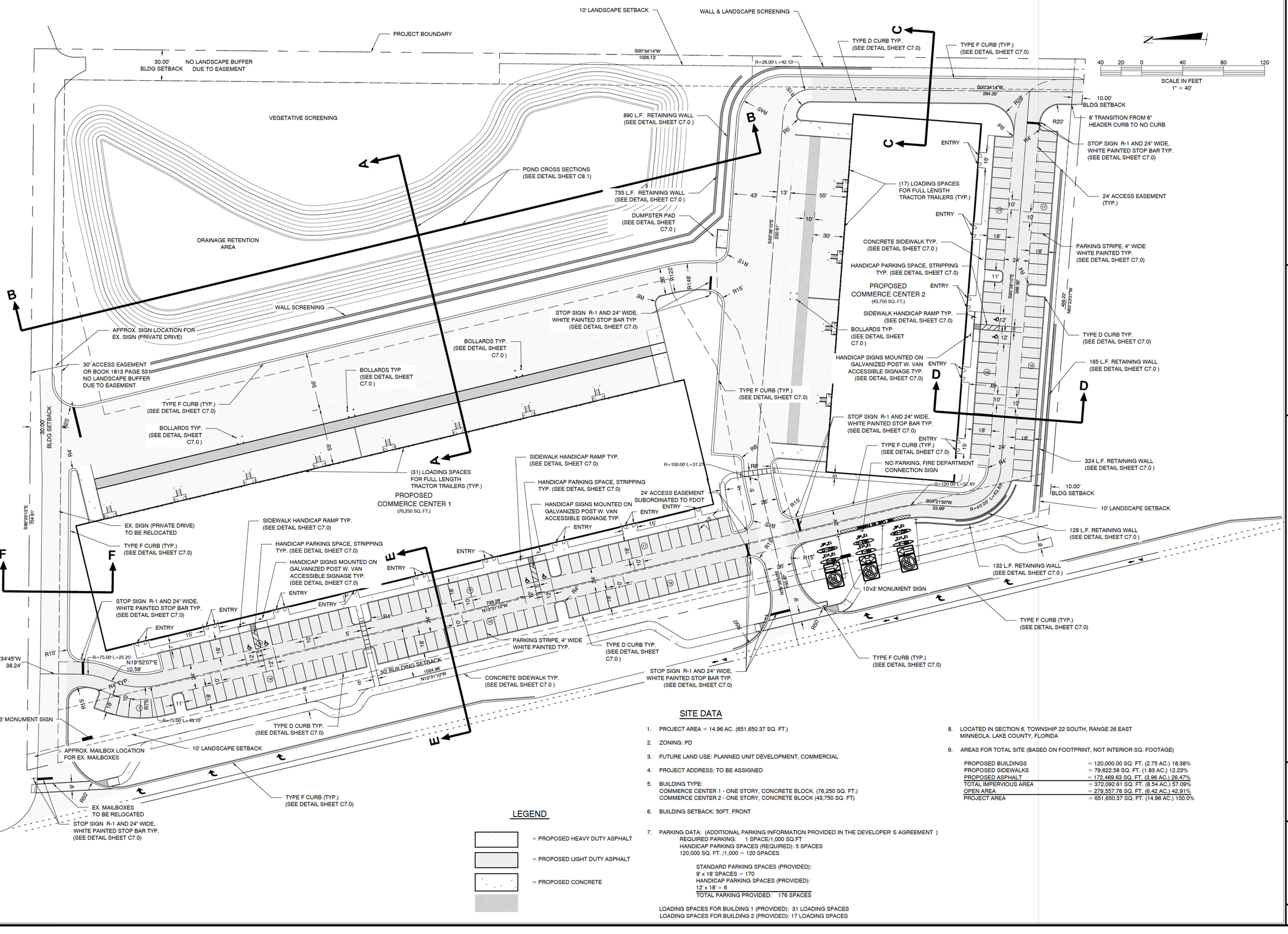
B&S ENGINEERING CONSULTANTS, LLC
2221 Lee Road, Ste. 17
Winter Park, FL 32789
(407) 960-5868
Board of Professional Engineers Certificate No. 28973

JOB No.:	MLS-03
DESIGNED BY:	JDD
APPROVED BY:	MLS
DATE:	Value
SHEET:	~~C-2.0~~

NOT FOR CONSTRUCTION UNLESS SIGNED AND SEALED

MAJOR LEE STACY, P.E.
REGISTRATION No. 70249

DATE: _____



SITE DATA

1. PROJECT AREA = 14.96 AC. (651,650.37 SQ. FT.)
2. ZONING: PD
3. FUTURE LAND USE: PLANNED UNIT DEVELOPMENT, COMMERCIAL
4. PROJECT ADDRESS: TO BE ASSIGNED
5. BUILDING TYPE:
   COMMERCE CENTER 1 - ONE STORY, CONCRETE BLOCK. (76,250 SQ. FT.)
   COMMERCE CENTER 2 - ONE STORY, CONCRETE BLOCK (43,750 SQ. FT)
6. BUILDING SETBACK: 50FT. FRONT
7. PARKING DATA: (ADDITIONAL PARKING INFORMATION PROVIDED IN THE DEVELOPER' S AGREEMENT)
   REQUIRED PARKING: 1 SPACE/1,000 SQ.FT
   HANDICAP PARKING SPACES (REQUIRED): 5 SPACES
   120,000 SQ. FT. /1,000 = 120 SPACES
   STANDARD PARKING SPACES (PROVIDED):
   9' x 18' SPACES = 170
   HANDICAP PARKING SPACES (PROVIDED):
   12' x 18' = 6
   TOTAL PARKING PROVIDED: 176 SPACES
   LOADING SPACES FOR BUILDING 1 (PROVIDED): 31 LOADING SPACES
   LOADING SPACES FOR BUILDING 2 (PROVIDED): 17 LOADING SPACES
8. LOCATED IN SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST MINNEOLA, LAKE COUNTY, FLORIDA
9. AREAS FOR TOTAL SITE (BASED ON FOOTPRINT, NOT INTERIOR SQ. FOOTAGE)

PROPOSED BUILDINGS	= 120,000.00 SQ. FT. (2.75 AC.) 18.38%
PROPOSED SIDEWALKS	= 79,622.58 SQ. FT. (1.83 AC.) 12.23%
PROPOSED ASPHALT	= 172,469.63 SQ. FT. (3.96 AC.) 26.47%
TOTAL IMPERVIOUS AREA	= 372,092.61 SQ. FT. (8.54 AC.) 57.09%
OPEN AREA	= 279,557.76 SQ. FT. (6.42 AC.) 42.91%
PROJECT AREA	= 651,650.37 SQ. FT. (14.96 AC.) 100.0%

LEGEND

= PROPOSED HEAVY DUTY ASPHALT

= PROPOSED LIGHT DUTY ASPHALT

= PROPOSED CONCRETE

BY | REVISIONS | DATE

CFB | CLYMER FARNER BARLEY, Inc.

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

SITE PLAN

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	05- MCC SITE

MAJOR LEE MACK, LICENSED No. 70249 STATE OF FLORIDA PROFESSIONAL ENGINEER

SHEET NUMBER C3.0

(S:\LAKE\NON-VILLAGES PROJECTS\ GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\05- MCC SITE.dwg) PLOT DATE: 7/8/2026 3:36 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS

40 20 0 40 80 120

SCALE IN FEET
1" = 40'

PROPOSED
COMMERCE CENTER 2
(43,750 SQ. FT.)
F.F.E.: 185.00'

PROPOSED
COMMERCE CENTER 1
(76,250 SQ. FT.)
F.F.E.: 180.80'

CONTRACTOR TO REMOVE THE CLAY WITHIN 5 FEET OF THE PROPOSED GRADES AND REPLACE WITH CLEAN SAND

SEE DETAILED WALL GRADING

SEE TURN LANE GRADING

REVISIONS

BY	DATE

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

GRADING PLAN

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	05- MCC GRADING

MAJOR LEE MASCI
LICENSED
No. 70249
STATE OF FLORIDA
PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Major L. Masci, 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.

SHEET NUMBER C5.0

(S:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG.001)\CIVIL\CONSTRUCTION\05- MCC GRADING.dwg) PLOT DATE: 7/8/2026 3:37 PM SAVE DATE: 7/8/2026 3:37 PM SAVED BY: ACAMPOS

Inspire
PLACEMAKING COLLECTIVE

To: Joyce Heffington, AICP, Minneola CRA Administrator

From: Eric Raasch, AICP, Inspire Project Manager

CC: Gabriela Castro, AICP

Date: August 25, 2026

Reference: Minneola Commerce Center Future Land Use Map Amendment, PUD, and DA Amendment

We have conducted a review of the proposed Future Land Use Map (FLUM), Planned Unit Development rezoning and Development Agreement amendments for the above-referenced project. The site, located within the Minneola city boundaries and consisting of two parcels identified by Parcel Nos. 06-22-26-0003-000-06300 and 06-22-26-0003-000-04700, has an approximate area of 12.42 acres according to Lake County Property Appraiser data.

The request considered here is to amend the subject property's FLUM designation from PD-Commercial to PD-Industrial, and to amend the terms of the Development Agreement dated October 18, 2018, including PD standards. The new agreement is a substantive change to the previous development framework. The proposal shifts the project toward a shallow-bay industrial/flex-commercial development, substantially expands the use framework, changes the architectural character, modifies development standards, adds/redefines property, and extends the agreement term from 10 to 30 years. The proposal also incorporates a 1.199-acre FDOT parcel into the defined "Property", while the parcel remains publicly owned and outside the City limits. The applicant has expressed an intent to request annexation of the parcel. However, an annexation application has not been submitted at the time of this staff report.

Planning

General Comments

1. Staff has not received an annexation request for the FDOT pond. *Inspire recommends that any action taken be contingent on annexation of the FDOT pond parcel into the City*.

2. No Environmental Assessment or Traffic Impact Analysis was provided with this request. However, a listed species survey and FDOT driveway connection TIA were submitted with the associated Site Plan. *Please note that these studies will be considered and reviewed as part of the FLUM / PUD rezoning application.*

3. Please reconcile data across all applications or provide clarification, including:

a. The application states that the site size is 14.96 acres, but the Property Appraiser records for the two parcels indicate a combined acreage of 12.42 acres. The survey submitted with the application package does not provide confirmation of the covered acreage.

b. The application indicates the existing FLU designation as being PD-Commercial, which appears to be consistent with the most current version of the Future Land Use Map. However, the Development Agreement dated October 18, 2018, calls the designation of the property "Grassy Lake Holdings Mixed Use Commercial Development." *Please update the DA.*

c. The proposed Development Agreement includes a legal description that encompasses the 1.191-FDOT parcel, but the legal description provided on the topographic survey by Allen & Company dated 3/14/25 does not. *Please reconcile for consistency.*

Development Agreement

1. The recitals refer to approximately 13.32 acres within the city limits, but the first 2018 agreement covered approximately *12.31 acres*, not 13.32. *Please clarify/reconcile the difference*.

2. The DA is silent on the amount of square footage proposed for the project. *Please add the amount of proposed square feet by use.*

3. The new agreement expressly amends certain provisions of the original development agreement "while ratifying and affirming all remaining terms and conditions." However, the Conditions-precedent section has been removed entirely, rather than updated. The new agreement states that the owner has filed applications for annexation, rezoning, and comprehensive plan amendment for an adjoining 1.191-acre FDOT-owned parcel in unincorporated Lake County, and that the owner has "full power and authority to make, deliver, enter into, and perform pursuant to the terms and conditions of the proposed agreement without submitting an annexation application at this time. The applicant has submitted a warranty deed as providing evidence of ownership or authority, but it is unclear whether this includes the 1.191-acre parcel. *Please submit additional documentation or clarify that the proposed agreement establishes only a future development framework without granting any development rights prior to acquisition and completion of the required annexation, comprehensive plan amendment, and rezoning.* [NOTE: This is *not* a legal opinion; Inspire defers to the City Attorney's Office.]

4. The new agreement appears to retain the B-1/PD framework language but makes development subject to a new Land Use Plan and amended use/standards provisions; overall character is described as shallow-bay industrial and flex commercial. The Land Use Plan exhibit was not included as an exhibit to the DA document, but it is part of the overall application package. *We observe that the graphic (which appears to be from the 2018 approval, relabeled as "Minneola Commerce Center" and renumbered as Sheet "LUP-01") is annotated to show the proposed zoning to be "I-1 & B-1 with PD" under the Project Description, but only "I-1" in the Notes section, so please clarify the proposed zoning.*

5. The new agreement includes broad categories covering light industrial, warehousing, logistics, distribution, fulfillment, flex-space, manufacturing, wholesale, construction/contractor, R&D, office, showroom and service-commercial uses, plus specified NAICS sectors. Notably, the amendment permits all uses within Sectors 31–33, including food, beverage, textile, wood, printing, chemical, plastics/rubber, mineral products, fabricated metal, machinery, electronics, transportation equipment, furniture, medical devices and miscellaneous manufacturing. Specifically, the blanket authorization of NAICS Sectors 31–33 appears broader than the stated "shallow-bay industrial and flex commercial" character and includes uses with substantially different potential impacts, while relying primarily on visual screening doesn't address potential noise, odor, truck activity, vibration, or other operational impacts. *Inspire recommends limiting permitted manufacturing to enclosed, low-impact/light manufacturing and establishing performance standards; or shift to conditional review for the higher-intensity / higher-impact manufacturing uses.*

6. The new list of conditional uses focuses on commercial recreation, day care, gun range, kennel/pet care, laboratories/R&D, motor vehicle sales/repair, nurseries/home-building materials, shopping center, veterinary and similar uses. *Please confirm the status of previous commercial uses such as restaurants, hotels, drive-throughs, and residential-care which are no longer expressly identified and may not be covered by the similarity clause.*

7. The new agreement retains 50-ft height and 20% open space but removes the explicit 90% ISR cap. However, the Land Use Plan retains the 90% ISR cap. *Please clarify the proposed ISR.*

8. Section 5(i) of the proposed DA addresses setbacks. The applicant is proposing setbacks of 30' on the north, 30' on the east, 10' on the south and 50' on the west. These setbacks are generally consistent with the setbacks required in the City's most comparable I-1 District. *Informational comment only. No response required.*

9. Section 5(ii) of the proposed DA addresses landscape buffers. Sec. 110-3(b)(Chart A-1) outlines buffer area requirements by use. Per the chart, PUD buffering is to be reviewed individually with each application. The applicant is proposing I-1 uses and the adjacent properties are zoned B-1 (north), B-1 and Lake County A (east), Lake County CFD (south), and B-1, Utilities, Lake County C-2 (west across US 27 ROW). Based on these designations, the site would warrant a Class C buffer (30') on the north, a Class C buffer (30') on the east, a Class D buffer (30') to the south, and a Class C buffer (30') to the west. The applicant is proposing a 0' buffer on the north (due to an access easement), a 10' buffer on the east, a 10' buffer on the south, and a 10' buffer on the west. *Inspire recommends increasing these buffers due to the increased intensity of the proposed uses.*

10. Section 5(iii) of the proposed DA addresses building height. The applicant is proposing a maximum building height of 50', which exceeds the maximum height of 35' feet for I-1 zoned property. While not prohibited, this information will be presented to City Council for review. *Informational comment only. No response required.*

11. **Section 5(v)** of the proposed DA addresses quantity of off-street parking. **LDC Sec. 122-35(b)(4)** outlines the City's minimum parking requirements. The applicant is proposing parking at a ratio of 1 parking space per 1,000 square feet of gross floor area. Due to the number of proposed permitted uses, the extent that this ratio deviates from code is unknown. For example, the City's parking requirement for manufacturing is 1 parking space per 600 SF of floor area dedicated to manufacturing, please the required parking square footage devoted to other uses (i.e. office). The applicant's request also includes all B-1 uses, some of which have significantly higher parking requirements than 1 space per 1,000 SF. For example, restaurants require 1 space per 2 seats, plus one space per 2 employees. *Inspire recommends reducing the amount of requested uses and providing a parking study to justify the requested reduction.*

12. **Section 5(v)** of the proposed DA addresses the maximum number of parking spaces between landscape islands. **LDC Sec. 110-3(a)(1)** states that the maximum number of uninterrupted spaces between landscaping areas is eight. The applicant is proposing 20 spaces between landscape islands. *Inspire recommends revising the agreement to reduce the number of spaces between landscape islands to a maximum of eight.*

13. **Section 5(v)** of the proposed DA addresses parking space sizing. **LDC Sec. 122-39(b)** states the minimum parking space size within the City. Standard parking spaces shall be 20' long. The applicant is proposing a minimum parking space depth of 17', provided an adjacent sidewalk or pedestrian area of sufficient width is provided to accommodate vehicle overhang. *Inspire recommends compliance with the City's standard parking space requirements, and notes that pedestrian areas should remain unobstructed from vehicles.*

14. **Section 6(i)** of the proposed DA includes building materials. The change in architectural character is appropriate to the proposed industrial/flex use; however, the revised standards provide limited direction regarding building massing, façade articulation and architectural quality. Please note that all architectural treatments will need to comply with **LDC Sec. 94-4**. *Informational comment only. No response required.*

15. **Section 6(iii)** of the proposed DA requests the use of a TPO roof for this project. Per the **LDC Sec. 94-4(f)(9)c.4** tile or metal shall be the dominant roof material. This deviation will be presented to City Council. *Informational comment only. No response required.*

16. **Section 16** of the proposed DA requests the ability to permit grading changes of 16' in lieu of 15'. This deviation will be presented to City Council. *Informational comment only. No response required.*

Comprehensive Plan

1. **FLU Policies 1-1.1.3 and 1-1.1.4** include compatibility standards for residential and non-residential development. *Please provide a narrative that addresses how the proposed FLUM is consistent with the City's Comprehensive Plan policies and compatible with the surrounding land uses.*

2. **FLU Policy 1-1.7.1** requires land use activities to occur on soil types capable of supporting the structures and facilities proposed to be placed on them, Table 1-1 stipulates which land uses are deemed suitable or unsuitable for each soil type. *Please provide a soils map with the proposed land uses to demonstrate compliance with FLU Policy 1-1.7.1.*

3. **FLU Policy 1-3.1.2** requires proposed amendments to the comprehensive plan to demonstrate that all facilities and service capacities are currently available or shall be available after the implementation of scheduled capital improvements, to meet general needs of the proposed land use. *Please provide a public facilities analysis.*

4. **CONS Policy 5-1.3.1** provides standards for maximum impervious surface area by use. *Please provide additional detail regarding proposed uses for the project and demonstrate compliance with the maximum ISR consistent with CONS Policy 5-1.3.1.*

Public Works

1. No comments. Defer to Planning Division.

Fire

1. No comments.

Lake County

1. Pending response.

Engineering

1. Pending response.

To: Joyce Heffington, AICP, Minneola CRA Administrator

From: Eric Raasch, AICP, Inspire Project Manager

CC: Gabriela Castro, AICP

Date: September 1, 2026

Reference: Minneola Commerce Center Traffic Study Review

MAPS has conducted a review of the Access Connection Permit Traffic Study Report for Greenberg Gibbons Light Industrial, dated July 2025, and prepared by Luke Transportation Engineering Consultants. The TIA should follow the methodology/guidelines defined in the Lake-Sumter MPO Traffic Impact Study Methodology and Guidelines (2022). Below are the comments regarding the TIA Report.

1. Background traffic from approved developments in the area or based on historical traffic growth should be applied up to the build-out period. The additional background traffic should be incorporated into the future traffic analysis.

2. Summarize planned improvements in the area up to the buildout year. Reference the Lake-Sumter Metropolitan Planning Organization (LSMPO) Transportation Improvement Program (TIP) and the Florida Department of Transportation (FDOT) 5-year Work Program. An improvement should be considered "programmed" for construction if construction funding is identified with the first 3 years of the Work Program/TIP.

3. Assess which roadways within and outside the one-mile radius are impacted by five percent (5%) of the project's peak hour trips compared to the roadway's two-way peak hour generalized service volume based on the adopted LOS and committed number of lanes as listed in the Lake County CMP Database. This analysis will determine the extent of the study area and if any additional intersections should be analyzed.

4. Include the traffic control timing sheets for the intersection of Citrus Grove Rd and US 27 in the Appendix.

To: GGW Flex Holdings, LLC

From: Eric Raasch, AICP, Inspire Project Manager

CC: Joyce Heffington, AICP; Tom Grimms, AICP; Gabriela Castro, AICP

Date: August 26, 2026

Reference: Minneola Commerce Center US N 27 (Inspire Case #240b)

We have conducted a third review of the **Site Plan** for the above-referenced project. This project is located in the PUD-C zoning district and Planned Unit Development Commercial Future Land Use category. The proposed Project ±13.4-acre development site will consist of 120,000 square feet (SF) of light industrial space in two buildings (76,250 SF and 43,750 SF). The applicant is also proposing a Future Land Use Map (FLUM) amendment and rezoning to PUD – Industrial with an associated updated Development Agreement that will determine the standards for review of this SP application. No site visit was conducted. The following review is based on the applicant's letter of response to staff comments, dated July 14, 2026.

Planning

General Comments

1. This application relies on the annexation of the FDOT stormwater pond within the U.S. 27 right-of-way. No application for annexation has been received at this time. *Inspire recommends that any recommendation on this SP application be contingent on the annexation.*

2. A portion of the subject property is owned by FDOT. *Please submit authorization from FDOT for this SP request.*

3. The applicant has submitted a proposed Development Agreement establishing revised land use, development, and site design standards for the property. The Development Agreement is currently under review and has not yet been approved. The Development Agreement and site plan applications may be processed concurrently; however, the current site plan cannot be approved based on standards contained in the proposed Agreement until the Agreement and all applicable associated entitlements become effective. *Inspire recommends that any approval of this Site Plan be contingent on the approval of the Development Agreement containing the standards that support the proposed site design. Any changes to the terms of the DA will require additional revisions and review of this SP.*

4. In response to a previous Inspire comment pointing to the absence of required concurrent applications, the applicant separately submitted a Future Land Use Map amendment and PD modification application. Inspire has reviewed these applications, together with the draft Development Agreement included in the resubmittal. Comments have been provided separately. *The applications may be processed concurrently, but Inspire defers to the City Attorney's Office on application sequencing.*

5. The total number of bays is not listed. It appears that Commerce Center 1 has 17 entryways and Commerce Center 2 has 10 entryways leading to the conclusion that the maximum possible bays is 17. *Please list the total number of bays on Sheet C3. This number will also be used as the maximum number of tenants.*

6. The applicant has acknowledged that a permit from FWC will be required. *Informational comment. No response is necessary.*

7. No sign package was provided with the second resubmittal. Directional and regulatory sign types and locations are noted on Sheet C3 of the first resubmittal. The applicant states that a complete sign package will be submitted with the building permits. However, Sec. 122.42(3)b.9. also requires "photographs or sketches of proposed signage with dimensions and material type" for site development approval. *Please provide the conceptual signage package for this project.*

CHAPTER 94, Development Standards

8. **Section 94-4(f)(6)** requires a minimum of three building design treatments. The applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. The submitted elevations do not appear to include any of the listed building design treatments. *Please refer to the options in this section and list or show the proposed design elements on the architectural plans.*

9. **Section 94-4(f)(7)b.** states that blank wall areas shall not exceed ten feet in the vertical direction, nor 20 feet in the horizontal direction of any primary facade. The applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. *Please provide dimensions for the blank wall area and reduce the area to comply if needed.*

10. **Section 94-4(f)(9)** requires variation in rooflines. **Subsection (9)b** states that at a minimum of two locations, the roof edge and/or parapet shall have a vertical change from the dominant roof condition, a minimum of two feet. At least one such change shall be located on a primary facade adjacent to a collector or arterial right-of-way. In response, the applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the

first resubmittal, not with the draft DA. Additionally, the roofline appears to lack a height variation. *Please review the roof requirements and revise elevation plans to show height variation.*

11. **Section 94-4(f)(9)c** states that parapets shall be used to conceal roof top equipment and flat roofs. The applicant has provided a line-of-sight diagram showing a 2-ft parapet. However, the Architectural Package previously submitted has not been updated to include this diagram. *Please revise the schematic elevations to incorporate the proposed parapet around the roofline and the provided diagram.*

CHAPTER 110, Landscaping and Tree Protection

12. The applicant states that the landscape buffers were approved on the existing PUD. However, the applicant is in the process of amending the existing PUD to add more intense uses, which have historically necessitated larger buffers based on the City's code. *Please review Inspire's comments on the associated DA amendment regarding landscape buffer widths and revise as needed.*

13. **Section 110-7(a)** states that irrigation shall meet or exceed the criteria for the Florida Water Star certification program. The irrigation plan does not include Florida Water Star certification or applicable irrigation zones Sheet IR100 Note #5 states, "All zones to be low volume drip and bubbler zones". *Please provide a statement on the irrigation plan to state that it will comply with the Florida Water Star certification program and please include applicable irrigation zones on this plan.*

CHAPTER 122, Site Development

14. **Section 122-35** lists the required amount of off-street parking per use. Sheet C3 states that parking is provided at a rate of 1 space per 1,000 SF. It is unclear as to which use in the tables listed in this section was used to reach this rate. *Please define the uses being proposed and provide minimum parking spaces required.*

15. **Section 122-39(c)(2)a.** states that a standard parking space is 10' by 20' and Section 122-39(c)(2) states that reduced width and length may be acceptable if increased landscape and grass areas are included. Spaces have been revised to a size of 10' by 18', not 10' by 20' which are required. The applicant has provided 7' sidewalks instead of increased landscape area. *Inspire recommends providing the required 20' depth, as the current code only allows for reductions based on landscape areas, not pedestrian areas.*

Development Agreement

16. **Section 5** states the approved architectural design and colors. This section states that colors shall be earth tones and natural colors. The proposed color scheme is gray. The applicant states that architectural features are part of the building permit submittal and building

elevations are included in the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. *Please note that the proposed DA will need to be approved to support the proposed building colors.*

17. The land use plan exhibit states that mediterranean / Florida vernacular architecture shall be used. *Please note that the proposed DA will need to be approved to support the proposed building colors.*

Public Works

1. Comments pending.

Engineering

1. **Informational Comment, No Response Required.** The applicant is cautioned that the issuance of City approval does not relieve them of their responsibility from obtaining all other required regulatory approvals and permits. Other permits may include but are not limited to the following:

   FDEP NPDES Construction
   St. Johns River Water Management District (SJRWMD) ERP
   USFW Permit
   FDEP Water
   FDEP Sewer
   FDOT Driveway Connection
   FDOT Right of Way Utilization

2. **Comment Resolved.** The Geotech report provided does not appear to provide recovery analysis parameters such as horizontal conductivity (Kh) and vertical infiltration rate (Iv), safety factors, etc. It is unclear where the design values originate in the stormwater report.

   Applicant provided a revised Geotech report which includes the requested recovery analysis parameters.

3. **Deferred to Planning.** Overall zoning and land use requirements, allotted uses, recreational areas, setbacks, open space, densities, pedestrian access and trail requirements, roadway connection requirements, right-of-way dedication requirements, development agreement criteria, and all other overall approval criteria are deferred to Planning and City Attorney as applicable.

4. Parking spaces must be at minimum 10ft wide and 20ft long as described in LDC 122-35, except where two feet of grassed overhang is provided, in which case the length may be reduced to 18ft.

   Applicant has widened parking spaces to 10ft. They responded that "Their lengths are 18' since the adjacent monolithic sidewalks are 7' to account for 2' of overhang." Per LDC 122-39 (c)(2)b,

reduced length is only acceptable if two feet of grassy overhang is provided. The applicant responds that additional landscaping above code minimum has been provided adjacent to the proposed building. It is unclear if variance is requested for the parking space dimensions.

5. Public to private demarcation on the utility plan is recommended. The 12 inch potable water main adjacent to US 27 is understood to be public. The internal water main, fire line, lift station, and 2-inch force main is understood to be privately owned, operated, and maintained.

    a. **Comment Resolved.** *Applicant has added a callout on Detail A, Utility Plan Sheet C4.1, depicting the beginning of privately owned potable and fire lines. Ownership of the 2-inch force main is not identified.*

    Applicant has also added a callout detailing private ownership of force main, and increased the force main size from 2" to 3" on sheet C4.1.

    b. **Comment Resolved.** *It is unclear if the lift station is to be public or private. Additional comment may be generated upon clarification.*

    Applicant has added a callout and note detailing private ownership of lift station on sheet C4.1.

6. **Comment Resolved.** Note #3 on sheet C4.1 references the Gibson Place Utilities Department.
7. **Comment Resolved.** Material of proposed pipes (water, sewer, fire) not shown on utility plan.

    The applicant has identified the 3-inch force main as HDPE on sheet C4.1. The 3-inch force main is identified as privately owned.

8. **Comment Resolved.** Utility calculations (water, sewer) were not provided.

    Applicant has added utility calculations to sheet C4.1. Lift station calculations were provided. However, the standby diesel pump curves were not included. In addition, a standby diesel pump is provided on the City standard detail on C10.0, however, it is not shown in the site specific plan view on C10.0. Clarification on if the lift station is to be public or privately owned, operated, and maintained is required.

    Applicant has responded that because the lift station is privately owned, operated, and maintained, a standby diesel generator is not required.

9. **Defer to Fire Chief.** Fire flow calculations were not provided.

    Applicant has included fire flow calculations, added a hydrant, and moved two hydrants away from loading zones. Defer fire flow approval and fire hydrant spacing to Fire Chief.

10. **Comment Resolved.** Tie in locations for water and sewer should be called out on the utility plan.

    Applicant has added utility tie in callouts to sheet C4.1.

11. Additional north-south and east-west cross sections should be provided to verify site grading, proposed slopes, cut/fill, and other design elements.

    Applicant has added additional north-south and east-west cross sections as requested, however, 3:1 grading is shown. Grading shall not exceed 4:1 per LDC 122-85 (d)(5). ***It is unclear if the project PUD allows for 3:1 grading. Clarification required.***

12. **Comment Resolved.** Child prevention grates required on mitered end sections.

    Applicant has added child prevention grate call out and detail to sheets C6.0 and C8.0.

13. **Comment Resolved.** The 12-inch public potable pipe should be ductile iron under roadway crossings.

    Applicant has responded "Call outs added to Utility Plan; see sheet C4.1.", but Ductile Iron Pipe does not appear to be called out under paved areas.

    Applicant has called out DIP water main underneath the north entrance, and directionally drilled HDPE underneath the south entrance. A directional drill profile has been added on sheet C4.2.

14. **Comment Resolved.** Finished floor elevations of buildings not provided on grading plan.

    Finished floor elevations have been added to sheet C5.0.

15. Gopher tortoise observed on site. Mitigation required before construction on site begins.

    Applicant responded that "mitigation will be coordinated prior to construction." Defer to Planning and Certification of Occupancy (C.O.) process.

16. **Defer to Planning.** 8 parking spaces maximum without island, per LDC 110-3.

    Applicant responded "Please see note 1 on existing PD. It states the maximum number of spaces between islands is 20." Defer to Planning.

17. **Comment Resolved.** Missing a 12x8" reducer on the Potable water line in Detail A of sheet C4.1

    Applicant has added the 12x8" reducer on sheet C4.1.

18. **Defer to Public Works.** The applicant has provided a 15-foot utility easement along US 27. The city typically requests a 20-foot utility easement along US 27. Discussion recommended.

    Applicant has responded "The easement width was discussed with public works and engineering. Due to the property constraints and by purchasing the FDOT pond, which currently cannot be granted an easement, we agreed 15' is sufficient."

19. **Deferred to Traffic Consultant**. Defer traffic study review to Traffic Consultant.

20. New Comment. The applicant proposes a directional drill of the potable water line under the project driveway. Per previous DRC meeting, this was per FDOT requirements. FDOT rationale for the HDD is unclear. The HDD depth is 18'+ deep. The proposed utility easement is 15' wide. It is unclear how the City would access the line in the future if required. Discussion warranted.

Fire

1. Approved.

Lake County

1. Comments pending.

LEGAL DESCRIPTION:

PARCEL 1:

THAT PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA LYING EAST OF THE EASTERLY LINE OF THE RIGHT-OF-WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.

THE ABOVE PROPERTY IS ALSO DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF THE NW 1/2 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THENCE N.00 DEGREES 09'20" E. ALONG THE EAST BOUNDARY OF THE SAID NW 1/4 OF THE SW 1/4, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NW 1/4 OF THE SW 1/4, THENCE N. 89 DEGREES 50'01" W. ALONG THE SAID SOUTH BOUNDARY, 704.47 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), THENCE S. 14 DEGREES 00'27" E. ALONG SAID EASTERLY RIGHT-OF-WAY LINE 307.47 FEET TO THE NORTHWESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THENCE N. 75 DEGREES 59'33" E. 152 FEET TO THE NORTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 14 DEGREES 00'27" E. 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 75 DEGREES 59'33" W. 152.00 FEET TO THE AFORESAID EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25, THENCE S. 14 DEGREES 00'27" E. ALONG THE SAID RIGHT-OF-WAY LINE 146.26 FEET TO THE SOUTH BOUNDARY OF THE AFORESAID NW 1/4 OF THE SW 1/4 OF SECTION 6, THENCE S. 89 DEGREES 39'42" E. ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.

THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA WHICH IS NOT INCLUDED HEREIN IS DESCRIBED AS FOLLOWS:

THAT PART OF: THE SOUTH 12.7 ACRES LYING E OF THE COUNTY ROAD, IN THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST", LYING IN LAKE COUNTY, FLORIDA LYING WITHIN 220 FEET E OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200; S OF STATION 64+90.00 AND N. OF STATION 61+70.00 SAID SURVEY LINE AND SAID STATIONS BEING DESCRIBED AND LOCATED AS FOLLOWS: BEGIN ON THE N LINE OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, T22S, R26E, AT A POINT 405.38 FEET E OF THE NW CORNER OF SAID NW 1/4 OF THE SW 1/4 THENCE RUN S 13 DEGREES 58'00" E, A DISTANCE OF 912.54 FEET TO STATION 64+90.00; THENCE CONTINUE S 13 DEGREES 58'00" E, A DISTANCE OF 320 FEET TO STATION 61+70.00; THENCE CONTINUE S 13 DEGREES 58'00"E, A DISTANCE OF 100 FEET.

CONTAINING 48,640 SQ. FT. (1.199 ACRES), MORE OR LESS, EXCLUSIVE OF ROAD RIGHT OF WAY.

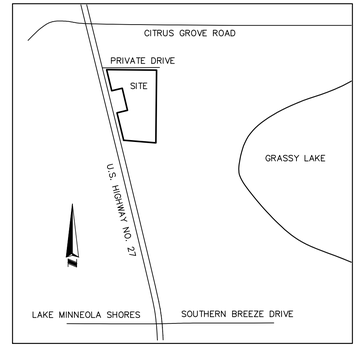
PARCEL 2:

BEGINNING 1044.05 FEET N OF SE CORNER OF SW 1/4 OF SW 1/4, SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN N 85 DEGREES 58' W TO RIGHT-OF-WAY OF HIGHWAY; THENCE NWLY ALONG SAID RIGHT-OF-WAY TO N LINE OF SAID SW 1/4 OF SW 1/4, THENCE E TO NE CORNER OF SAID SW 1/4 OF SW 1/4, THENCE S TO POINT OF BEGINNING.

SURVEYOR'S NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON THE STATE PLANE COORDINATE SYSTEM EAST ZONE NORTH AMERICAN DATUM (NAD) OF 1983 WITH 2011 ADJUSTMENT AND DERIVING A BEARING BASED ON THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST AS BEING S89°12'21"E.
2. THERE MAY BE EASEMENTS AND RESTRICTIONS OF RECORD AND/OR PRIVATE AGREEMENTS NOT FURNISHED TO THIS SURVEYOR OR SHOWN ON THIS BOUNDARY SURVEY THAT MAY AFFECT PROPERTY RIGHTS AND/OR LAND USE RIGHTS OF THE SUBJECT PROPERTY.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A COMMITMENT FOR TITLE INSURANCE.
4. THERE MAY BE ENVIRONMENTAL ISSUES AND/OR OTHER MATTERS REGULATED BY VARIOUS DEPARTMENTS OF FEDERAL, STATE OR LOCAL GOVERNMENTS AFFECTING THE SUBJECT PROPERTY NOT SHOWN ON THIS SURVEY
5. THIS SURVEY WAS PERFORMED FOR THE SOLE AND EXCLUSIVE BENEFIT OF THE ENTITIES LISTED HEREON AND SHALL NOT BE RELIED UPON BY ANY OTHER ENTITY OR INDIVIDUAL WHOMSOEVER.
6. ADJOINING PARCEL OWNER AND RECORDING INFORMATION DELINEATED HEREON WAS OBTAINED FROM THE LAKE COUNTY PROPERTY APPRAISER'S PUBLIC WEBSITE.
7. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER OR AN ELECTRONIC SIGNATURE THAT IS IN COMPLIANCE WITH FLORIDA ADMINISTRATIVE CODE 5J-17.062.
8. UNLESS OTHERWISE NOTED OR SHOWN HEREON, THERE ARE NO APPARENT AND/OR UNOBSTRUCTED, ABOVE GROUND ENCROACHMENTS. THE DISPOSITION OF ANY POTENTIAL ENCROACHING IMPROVEMENTS SHOWN IS BEYOND THE PROFESSIONAL PURVIEW OF THE SURVEYOR AND SUBJECT TO LEGAL INTERPRETATION.
9. SUBJECT PROPERTY SHOWN HEREON IS IN ZONE X, AREA OF MINIMAL FLOOD HAZARD, ACCORDING TO FLOOD INSURANCE RATE MAP PANEL NUMBER 12069C0560E, MAP REVISED 12/18/2021. THE ABOVE STATEMENT IS FOR INFORMATION ONLY AND THIS SURVEYOR ASSUMES NO LIABILITY FOR THE CORRECTNESS OF THE CITED MAP(S). IN ADDITION, THE ABOVE STATEMENT DOES NOT REPRESENT THIS SURVEYOR'S OPINION OF THE PROBABILITY OF FLOODING.
10. ELEVATIONS SHOWN HEREON ARE BASED ON 4"x4" CONCRETE MONUMENT WITH LAKE COUNTY GEODETIC CONTROL CAP, BENCHMARK NUMBER LK 155, ELEVATION BEING 224.784', NORTH AMERICAN VERTICAL DATUM 1988 (NAVD).
11. THE ACCURACY OF THE SURVEY MEASUREMENTS USED FOR THIS SURVEY MEETS OR EXCEEDS THE EXPECTED USE OF THE PROPERTY DESCRIBED HEREON. (COMMERCIAL/HIGH RISK) 1 FOOT IN 10,000 FEET.
12. THE GRAPHICAL REPRESENTATION OF THE UTILITY LINES SHOWN HEREON ARE FOR VISUAL REFERENCE ONLY AND DO NOT REPRESENT ACTUAL PIPE, CONDUIT, OR CABLE DIAMETER DIMENSIONS
13. THIS DRAWING WAS PREPARED IN CONFORMANCE WITH ASCE/UESI/CI 38-22, STANDARD GUIDELINE FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES & ASCE/UESI/CI 75-22, STANDARD GUIDELINE FOR RECORDING AND EXCHANGING UTILITY INFRASTRUCTURE DATA.

VICINITY MAP: NOT TO SCALE



LEGEND OF SYMBOLS AND ABBREVIATIONS:

POC	POINT OF COMMENCEMENT		BENCHMARK LOCATION
POB	POINT OF BEGINNING		FOUND CONCRETE MONUMENT AS NOTED
CMP	CORRUGATED METAL PIPE		FOUND IRON ROD OR PIPE AS NOTED
ID	IDENTIFICATION		FOUND AXLE AS NOTED
(D)	DEED		SET 1/2" IRON ROD OR NAIL & DISK LB#8627
EOP	EDGE OF PAVEMENT	MB	MAILBOX
EL	ELEVATION		SINGLE STAND SIGN
CCR#	CERTIFIED CORNER RECORD NUMBER		BACKFLOW PREVENTER
INV	INVERT		FIRE HYDRANT
MES	MITERED END SECTION		NATURAL GAS MARKER
CLF	CHAIN LINK FENCE		NATURAL GAS VALVE
FND.	FOUND		IRRIGATION VALVE
RCP	REINFORCED CONCRETE PIPE		GATE
PG(S)	PAGE(S)		GUY WIRE
OR	OFFICIAL RECORDS BOOK	TR	TELECOMMUNICATION RISER
LB	LICENSED BUSINESS	FV	FIBER OPTIC VAULT
LS	LICENSED SURVEYOR		FIBER OPTIC MARKER
PSM	PROFESSIONAL SURVEYOR AND MAPPER		WOODEN POWER POLE
RLS	REGISTERED LICENSED SURVEYOR		METAL LIGHT POLE
R/W	RIGHT OF WAY	SD	STORM DRAINAGE MANHOLE
SD SD	STORM LINE		AIR RELEASE VALVE
OHW	OVERHEAD WIRE		ELECTRICAL RISER
	CENTERLINE	WM	WATER METER
X	FENCE LINE	26	CONTOUR
		+24.1	SPOT ELEVATION
		O/A	OVERALL
		(M)	MEASURED

GROUND PENETRATING RADAR (GPR):

1. (GPR) INVESTIGATIONS ARE HIGHLY SITE SPECIFIC AND CAN BE LIMITED BY ATTENUATION OF (GPR) SIGNALS BY SUBSURFACE MATERIALS.
2. (GPR) INVESTIGATIONS ARE LIMITED BY UNEVEN TERRAIN CONDITIONS:HIGH GRASS (OVER 3"), BUSHES, FENCES, TREES, DEBRIS, ETC.
3. ALL VERTICALLY STACKED UTILITIES/OBJECTS MAY NOT BE DETECTED, SINCE GPR SIGNALS ARE REFLECTED BY THE TOP MOST UTILITY/OBJECT.
4. SOME UTILITIES/OBJECTS MAY NOT RETURN A REFLECTED SIGNAL TO THE GPR RECEIVER.
5. (GPR) SCANS CANNOT BE MADE IMMEDIATELY NEXT TO BUILDING/OBJECTS DUE TO EQUIPMENT RESTRICTIONS.
6. PIPE WITH LITTLE OR NO LIQUID CONTENT AT THE TIME OF LOCATE WORK MAY NOT BE DETECTED BY GPR.
7. LOCATIONS OF EXISTING UTILITIES DESIGNATED BY (GPR) ARE TO BE DEEMED APPROXIMATE IN NATURE AND IN NO WAY ARE TO BE CONSTRUED AS EXACT. ALLEN UNDERGROUND, INC. (AUI) WILL NOT BE HELD RESPONSIBLE FOR DAMAGE TO EXISTING UTILITIES LOCATED BY GPR EQUIPMENT.

RADIO FREQUENCY \ ELECTROMAGNETIC LOCATING (RF)/(EM):

1. THE NUMBER OF ACCESS POINTS WITHIN DESIGNATED LOCATE AREA(S) MAY BE LIMITED OR NON-EXISTENT.
2. UTILITY OR PROPERTY OWNER MAY RESTRICT OR DENY THE USE OF UTILITY ACCESS POINTS.
3. FIBER & OTHER NON-METALLIC LINES WITH NO OR NON-WORKING TRACER WIRE ARE UNTONEABLE WITH ELECTROMAGNETIC LOCATE EQUIPMENT (EM).
4. LOCATIONS OF EXISTING UTILITIES DESIGNATED BY ELECTROMAGNETIC EQUIPMENT (EM) ARE TO BE DEEMED APPROXIMATE IN NATURE AND IN NO WAY ARE TO BE CONSTRUED AS EXACT. ALLEN UNDERGROUND, INC. (AUI) WILL NOT BE HELD RESPONSIBLE FOR DAMAGE TO EXISTING UTILITIES LOCATED BY RF/EM EQUIPMENT.

LEGEND:

- BTV(QL-B)— QUALITY B BURIED CABLE TV
- BE(QL-B)— QUALITY B BURIED ELECTRICAL
- BT(QL-B)— QUALITY B BURIED TELECOMMUNICATION
- FM(QL-B)— QUALITY B BURIED FORCE MAIN
- BFO(QL-B)— QUALITY B BURIED FIBER OPTIC CABLE
- BG(QL-B)— QUALITY B BURIED GAS LINE
- BW(QL-B)— QUALITY B BURIED WATER LINE

ALLEN & COMPANY
Founded in 1988
SURVEYING • MAPPING
GEOSPATIAL SERVICES
www.allen-company.com
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355 LB#8627

BOUNDARY SURVEY OF HIGHWAY 27 PARCELS

SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST
LAKE COUNTY, FLORIDA

FOR: GREENBERG GIBBONS PROPERTIES

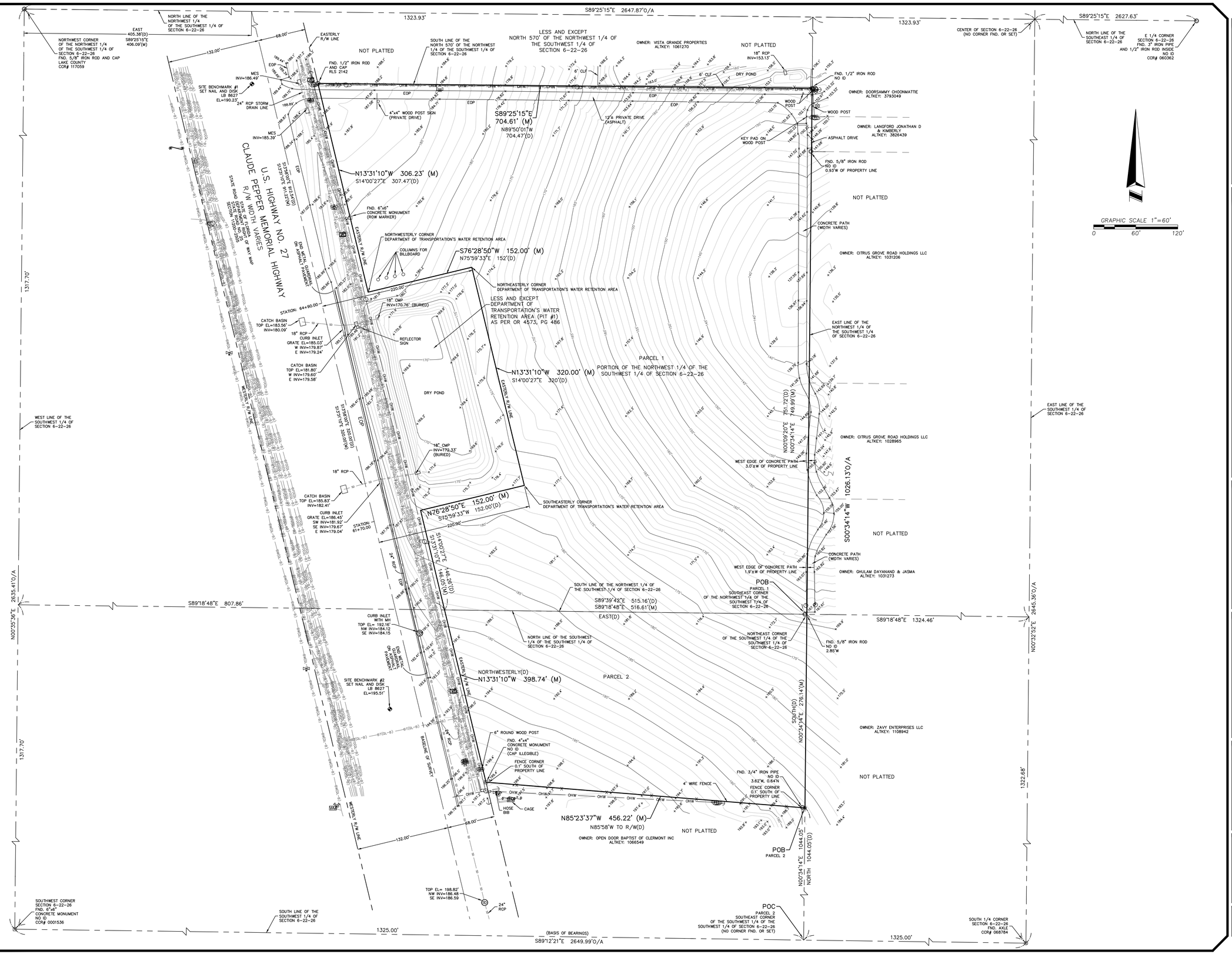
BRICE HELLSTROM, P.S.M. #7296
FOR THE LICENSED BUSINESS #6723 BY:
BRICE HELLSTROM LS7296 STATE OF FLORIDA SURVEYOR & MAPPER
Digitally signed by: Brice Hellstrom
DN: CN = Brice Hellstrom email = brice@allen-company.com C = US O = Allen and Company
Date: 2026.02.04 15:49:21 -05'00'

DATE	REVISIONS

JOB #: 20250038
DATE: 3/14/25
SCALE: N/A
CALC BY: BH
FIELD BY: JS
DRAWN BY: TQ
CHECKED BY: BH

SHEET 1 OF 2

Drawing name: L:\Dwn\2025\06\GMS\20250038 BDY-TSHO Sheet-1



ALLEN & COMPANY
Founded in 1988

SURVEYING • MAPPING
GEOSPATIAL SERVICES
www.allen-company.com
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355 LB#8627

BOUNDARY SURVEY OF HIGHWAY 27 PARCELS

SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST
LAKE COUNTY, FLORIDA

FOR: GREENBERG GIBBONS PROPERTIES

DATE REVISIONS

JOB #:	20250038
DATE:	3/14/25
SCALE:	1" = 60'
CALC BY:	BH
FIELD BY:	JS
DRAWN BY:	TQ
CHECKED BY:	BH

SHEET 2 OF 2

Drawing name: L:\Work\20250038\Dwg\20250038 BH-SHO Sheet-2

LEGAL DESCRIPTION:

PARCEL 1:

THAT PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANCE 26 EAST, LAKE COUNTY, FLORIDA LYING EAST OF THE EASTERLY LINE OF THE RICHT— OF— WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY N 0. 27), LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.

THE ABOVE PROPERTY IS ALSO DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF THE N W 1/2 OF THE SW 1/4 OF SECTION 6, TOWNSHIP, 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THEN CE N. 00 DEGREES 09' 20" E. ALONG THE EAST BOUNDARY OF THE SAID N W 1/4 OF THE SW 1/4, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NW 1/4 OF THE SW 1/4, THEN CE N. 89 DECREES 50'01" W. ALONG THE SAID SOUTH BOUNDARY, 704.47 FEET TO THE EASTERLY RICHT— OF— WAY LINE OF STATE ROAD N 0. 25 (U.S. HICHWAY N O. 27), THEN CE S. 14 DECREES 00'27" E. ALONG SAID EASTERLY RIGHT— OF—WAY LINE 307.47 FEET TO THE NOR TH Y/ESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THEN CE N. 75 DEGREES 59'33" E. 152 FEET TO THE NORTHEASTERLY CORNER OF SAID RETEN TION AREA, THENCE S. 14 DECREES 00' 27" E. 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 75 DEGREES 59'33" W. 152.00 FEET TO THE AFORESAID EASTERLY RIGHT— OF— WAY LINE OF STATE ROAD NO. 25, THENCE S. 14 DEGREES 00'27" E. ALONG THE SAID RIGHT— 0F— WAY LINE 146.26 FEET TO THE SOUTH BOUNDAR Y OF THE AFORESAID NW 1/4 OF THE SW 1/4 OF SECTION 6, THENCE S. 89 DEGREES, 39'42" E. ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.

THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA WHICH IS NOT INCLUDED HEREIN IS DESCRIBED AS FOLLOWS:

THAT PART OF: THE SOUTH 12.7 ACRES LYING E OF THE COUNTY ROAD, IN THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANCE 26 EAST", LYING IN LAKE COUNTY, FLORIDA LYING WITHIN 220 FEET E OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200; S OF STATION 64+90.00 AND N. OF STATION 61 + 70.00 SAID SURVEY LINE AND SAID STATION S BEING DESCRIBED AND LOCATED AS FOLLOWS: BEGIN ON THE N LINE OF THE NW 1 /4 OF THE SW 1 /4 OF THE SW 1 /4 THENCE RUN S 13 DECREES 58'00" E, A DISTAN CE OF 912.54 FEET TO STATION 6 4+ 90. 00; THENCE CONTINUE S 13 DEGREES 58'00" E, A DISTANCE OF 320 FEET TO STATION 61 +70.00; THENCE CONTINUE S 13 DEGREES 58'00"E, A DISTANCE OF 100 FEET.

CONTAINING 48, 640 SQ. FT. (1.199 ACRES), MORE OR LESS, EXCLUSIVE OF ROAD RIGHT OF WAY.

PARCEL 2:

BEGINNING 1044.05 FEET N OF THE SE CORNING OF SW 1/4 OF SW 1/4 SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN N 85 DEGREES 58' W TO RIGHT-OF-WAY OF HIGHWAY; THENCE NWLY ALONG SAID RIGHT-OF-WAY TO N LINE OF SAID SW 1/4 OF SW 1/4, THENCE E TO NE CORNER OF SAID SW 1/4 OF SW 1/4, THENCE S TO POINT OF BEGINNING.

INSTRUMENT#:2015003841 OR BK 4573 PG 486 PAGES: 4 1/13/2015 10:25:16 AM
NEIL KELLY, LAKE COUNTY CLERK OF THE CIRCUIT COURT
REC FEES: $35.50 DEED DOC:$1925.00

FIDELITY NATIONAL TITLE GROUP
200 W FORSYTH STREET
STE 1710
JACKSONVILLE FL 32202

This Instrument Prepared By:
G. Alan Howard, Esq.
Milam Howard Nicandri Dees & Gillam, P.A.
14 East Bay Street
Jacksonville, FL 32202

SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED is made as of the 29th day of December, 2014, by and between **Hanmi Bank, *fka* United Central Bank,** ("Grantor"), and **Grassy Lake Holdings, LLC**, a Florida limited liability company, having a mailing address of 389 Broadway Avenue, Orlando, Florida 32803 ("Grantee").

W I T N E S S E T H:

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

Witnesseth, that Grantor, for and in consideration of the sum TEN AND NO/100 DOLLARS ($10.00) and other good and valuable consideration the receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys, and confirms to the Grantee, that certain real property, situate, lying, and being in **Lake County, Florida,** more particularly described in Exhibit "A" attached hereto and by this reference made a part hereof ("Property"), subject to the matters set forth on Exhibit "B" attached hereto and by this reference made a part hereof.

Together with all the tenements, hereditaments, and appurtenances thereto belonging or in anywise appertaining.

Grantor certifies that the property described herein is not its constitutional homestead.

To Have and to Hold, the same in fee simple forever.

And, except for the matters set forth on Exhibit "B" attached hereto, Grantor hereby covenants with Grantee that the Property is free from encumbrances made by Grantor and that Grantor will defend the same against the lawful claims of all persons claiming by, through, or under Grantor, but against none other.

IN WITNESS WHEREOF, Grantor has hereunto set Grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

WITNESSES:

Print Name: Michael A. Reeves

Print Name: Allen Peckscleaux

HANMI BANK, *fka* UNITED CENTRAL BANK

By: Kay Miller
Kay Miller
Chief Special Assets Officer

STATE OF TEXAS
COUNTY OF DALLAS

The foregoing instrument was acknowledged before me this 29th day of December, 2014 by Kay Miller, as Chief Special Assets Officer of Hanmi Bank, *fka* United Central Bank, who is [✓] personally known to me or [ ] who produced _____ as identification.

[SEAL]

CAROL GILSTRAP
MY COMMISSION EXPIRES
October 20, 2016

Carol Gilstrap-Carol Gilstrap
Print Name: Carol Gilstrap
Notary Public, State of TEXAS
Commission No.:
My Commission Expires: 10-20-2016

EXHIBIT A

LEGAL DESCRIPTION

Parcel 1: That portion of the NW ¼ of the SW ¼ of Section 6, Township 22 South, Range 26 East, Lake County, Florida lying East of the Easterly line of the right-of-way of State Road No. 25 (U.S. Highway No. 27), less and except the North 570 feet thereof and the Department of Transportation's Water Retention Area.

The above property is also described as follows:

Begin at the Southeast corner of the NW ½ of the SW ¼ of Section 6, Township 22 South, Range 26 East, Lake County, Florida, thence N. 00 degrees 09'20" E. along the East boundary of the said NW ¼ of the SW 1/4, a distance of 751.72 feet to the South boundary of the North 570 feet of the said NW ¼ of the SW 1/4 , thence N. 89 degrees 50'01" W. along the said South boundary, 704.47 feet to the Easterly right-of-way line of State Road No. 25 (U.S. Highway No. 27), thence S. 14 degrees 00'27" E. along said Easterly right-of-way line 307.47 feet to the Northwesterly corner of the Department of Transportation's Water Retention Area, thence N. 75 degrees 59'33" E. 152 feet to the Northeasterly corner of said retention area, thence S. 14 degrees 00'27" E. 320 feet to the Southeasterly corner of said retention area, thence S. 75 degrees 59'33" W. 152.00 feet to the aforesaid Easterly right-of-way line of State Road No. 25, thence S. 14 degrees 00'27" E. along the said right-of-way line 146.26 feet to the South boundary of the aforesaid NW ¼ of the SW ¼ of Section 6, thence S. 89 degrees 39'42" E. along the said South boundary, 515.16 feet to the point of beginning.

The Department of Transportation's Water Retention Area which is not included herein is described as follows: That part of: "The South 12.7 acres lying E of the County Road, in the NW ¼ of the SW ¼ of Section 6, Township 22 South, Range 26 East", lying in Lake County, Florida lying within 220 feet E of the Survey line of State Road 25, Section 11200; S of Station 64+90.00 and N. of Station 61+70.00 said survey line and said Stations being described and located as follows: Begin on the N line of the NW ¼ of the SW ¼ of Section 6, T22S, R26E, at a point 405.38 feet E of the NW corner of said NW ¼ of SW ¼ thence run S 13 degrees 58'00" E, a distance of 912.54 feet to Station 64+90.00; thence continue S 13 degrees 58'00" E, a distance of 320 feet to Station 61+70.00; thence continue S 13 degrees 58'00"E, a distance of 100 feet. Containing 48.640 sq. ft. (1.199 acres), more or less, exclusive of road right of way.

Parcel 2: Beginning 1044.05 feet N of SE corner of SW ¼ of SW ¼, Section 6, Township 22 South, Range 26 East, run N 85 degrees 58' W to right-of-way of highway; thence NWly along said right-of-way to N line of said SW ¼ of SW ¼, thence E to NE corner of said SW ¼ of SW ¼, thence S to Point of Beginning.

EXHIBIT B

PERMITTED ENCUMBRANCES

1. The lien of taxes and assessments for the year 2014 and subsequent years.

2. The Easement for ingress and egress reserved in instrument recorded in Official Records Book 1813, page 531 (Parcel 1).

3. The Lease Agreement between J.B.'s of Central Florida, Inc. and POA Acquisition Corporation dated February 11, 1993 and the addendum thereto, as extended on a year-to-year basis.

4. Easements, claims of easements, boundary line disputes, overlaps, encroachments or other matters not shown by the public records which would be disclosed by an accurate survey of the Property.

5. Any claim that any portion of the insured land is sovereign lands of the State of Florida, including submerged, filled or artificially exposed lands accreted to such land.

6. Any lien provided by County Ordinance or by Chapter 159, Florida Statutes, in favor of any city, town, village or port authority for unpaid service charges for service by any water, sewer or gas system supplying the insured land.

7. Rights of tenants occupying all or part of the insured land under unrecorded leases or rental agreements.

CITY OF MINNEOLA
P.O. BOX 678
MINNEOLA, FL 34755
(352) 394-3598

NOTICE OF PUBLIC HEARING

ORDINANCE 2026-21

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MINNEOLA, FLORIDA, PROVIDING FOR A TEXTUAL AMENDMENT TO THE CITY'S COMPREHENSIVE PLAN TO AMEND POLICY 1-2.11.4 ENTITLED "GRASSY LAKE HOLDINGS COMMERCIAL DEVELOPMENT" TO "GRASSY LAKE HOLDINGS INDUSTRIAL DEVELOPMENT" PROVIDING FOR A COMPREHENSIVE PLAN AMENDMENT TO THE CITY'S FUTURE LAND USE MAP OF THE CITY OF MINNEOLA'S COMPREHENSIVE PLAN FROM "GRASSY LAKE HOLDINGS COMMERCIAL DEVELOPMENT" TO "GRASSY LAKE HOLDINGS INDUSTRIAL DEVELOPMENT" FOR APPROXIMATELY 14.52 ACRES OF PROPERTY GENERALY LOCATED EAST OF US HIGHWAY 27 AND SOUTH OF CITRUS GROVE ROAD; PROVIDING FOR CONDITIONS AND CONTINGENCIES; DIRECTING THE CITY CLERK TO TRANSMIT THE AMENDMENT TO THE APPROPRIATE GOVERNMENTAL AGENCIES PURSUANT TO CHAPTER 163, FLORIDA STATUTES; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

The City of Minneola **Planning and Zoning Commission** will make a recommendation to the City of Minneola **City Council** on Monday, September 14, 2026 at 6:30 p.m. at the Minneola City Hall located at 800 North U.S. 27, Minneola, FL.

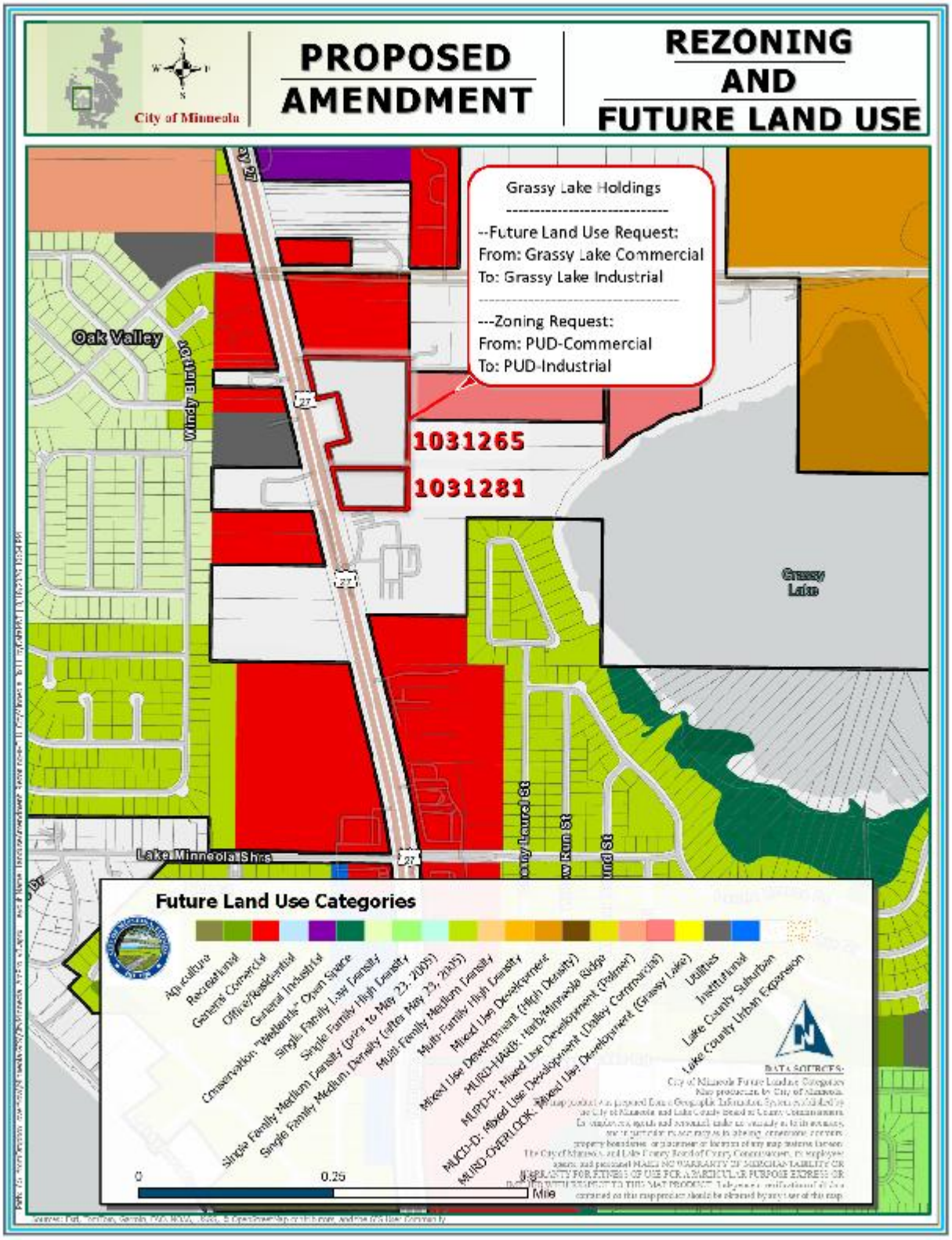
The City of Minneola City Council will hold public hearings on this proposed comprehensive plan amendment on Tuesday September 15, 2026 and Tuesday, October 6, 2026 at 6:30 p.m. at the Minneola City Hall. The request is for a Comprehensive Plan Land Use Designation change for approximately 14.52 acres of property generally located east of US Highway 27 south of Citrus Grove Road from "Grassy Lake Commercial Development" to "Grassy Lake Industrial Development" under the Comprehensive Plan for the City of Minneola.

The staff report on the case shall be sent to the City Council and will be available to the general public at least five (5) days prior to the hearing on the case. The complete legal description for the property described herein by metes and bounds and a copy of the ordinance may be obtained from the City Clerk. Interested parties may appear and be heard with regard to this proposed ordinance.

A person who decides to appeal any decision made by any board, agency, or council with respect to any matter considered at such meeting or hearing, will need a record of the proceedings. For such purposes, any such person may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is based (Florida Statutes, 286.0105).

The City of Minneola Land Development Code and the proposed Ordinance are available for inspection at the City Hall, located at 800 North U.S. 27, Minneola, FL, during normal working hours 8:30 a.m. to 5 p.m.

PERSONS WITH DISABILITIES NEEDING ASSISTANCE TO PARTICIPATE IN ANY OF THESE PROCEEDINGS SHOULD CONTACT KRISTINE THOMPSON, CITY CLERK AT (352) 394-3598 EXT 111 AT LEAST 48 HOURS BEFORE THE DATE OF THE SCHEDULED HEARING.



OwnerNam	OwnerAddr	OwnerCity	OwnerState	OwnerZip
FIELDS EC	PO BOX 11	WINTER H	FL	32882-0113
GRASSY L	5832 WOO	BELL ISLE	FL	32809
OMBS LLC	PO BOX 12	CLERMON	FL	34712-0788
OPEN DOC	17140 US H	CLERMON	FL	34715
ZAVY ENT	23825 INTE	SORRENT	FL	32776
CITRUS GI	15 CREEK	HILLSBOR	CA	94010
GHULAM D	9229 195TI	HOILLIS	NY	11423
DOORSAM	17350 US H	CLERMON	FL	34715-9272
FALZONE	17358 N US	CLERMON	FL	34715
QUINN CE	41634 CR 4	LEESDBUI	FL	34788
VISTA GR/	13940 ASH	MINNEOLA	FL	34715
CLEM CON	10800 CLA	LEESBUR(	FL	34788
CONGREG	12205 CITI	CLERMON	FL	34715
SCHMIDT I	6420 LU EI	GROVELAI	FL	34736-9747
LAKE CO E	315 W MAI	TAVARES	FL	32778
PROFESSI	1200 NETV	EFFINGHA	IL	62401
DE NOYEL	3149 SCRL	OVIEDO	FL	32765
SOUTH LA	17335 US H	CLERMON	FL	34715-9220
DUKE ENE	PO BOX 37	CHARLKIC	NC	28237-7996
CRA CITY	800 N HWY	MINNEOLA	FL	34715

CITY OF MINNEOLA
CITY OF MINNEOLA
CITY OF MINNEOLA

CITY OF MINNEOLA
CITY OF MINNEOLA
CITY OF MINNEOLA

AFFIDAVIT OF PUBLICATION

Clermont Sun

Published Weekly

Clermont, Lake County, Florida

Case No. 2026-21

STATE OF FLORIDA
COUNTY OF LAKE

Before the undersigned authority, Jessica Whaley, personally appeared who on oath says that she is the Classified Advertising Legal Clerk of Clermont Sun, a newspaper published at Clermont in Lake County, Florida; that the attached copy or reprint of the advertisement, to the right, being a Public Notice, was published in said newspaper by print in the issues of or by publication on the newspaper's website, if authorized, on:

September 02, 2026

Affiant further says that the Clermont Sun newspaper complies with all legal requirements for publication in chapter 50, Florida Statutes.

Jessica Whaley

Sworn to and subscribed before me this 2nd day of September 2026 by Jessica Whaley, who is personally

Ashley N. Abear, Clerk, Notary Number: #HH744101
Notary expires: December 27, 2029

00012418 00215706

Joyce Heffington
CITY OF MINNEOLA
P O BOX 678
MINNEOLA, FL 34755

Notary Public State of Florida
Ashley Abear
My Commission HH 744101
Expires 12/27/2029

CITY OF MINNEOLA
P.O. BOX 678
MINNEOLA, FL 34755
(352) 394 3598

NOTICE OF PUBLIC HEARING

ORDINANCE 2026-21

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MINNEOLA, FLORIDA, PROVIDING FOR A TEXTUAL AMENDMENT TO THE CITY'S COMPREHENSIVE PLAN TO AMEND POLICY 1-2.11.4 ENTITLED "GRASSY LAKE HOLDINGS COMMERCIAL DEVELOPMENT" TO "GRASSY LAKE HOLDINGS INDUSTRIAL DEVELOPMENT" PROVIDING FOR A COMPREHENSIVE PLAN AMENDMENT TO THE CITY'S FUTURE LAND USE MAP OF THE CITY OF MINNEOLA'S COMPREHENSIVE PLAN FROM "GRASSY LAKE HOLDINGS COMMERCIAL DEVELOPMENT" TO "GRASSY LAKE HOLDINGS INDUSTRIAL DEVELOPMENT" FOR APPROXIMATELY 14.52 ACRES OF PROPERTY GENERALY LOCATED EAST OF US HIGHWAY 27 AND SOUTH OF CITRUS GROVE ROAD; PROVIDING FOR CONDITIONS AND CONTINGENCIES; DIRECTING THE CITY CLERK TO TRANSMIT THE AMENDMENT TO THE APPROPRIATE GOVERNMENTAL AGENCIES PURSUANT TO CHAPTER 163, FLORIDA STATUTES; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

The City of Minneola **Planning and Zoning Commission** will make a recommendation to the City of Minneola **City Council** on Monday, September 14, 2026 at 6:30 p.m. at the Minneola City Hall located at 800 North U.S. 27, Minneola, FL.

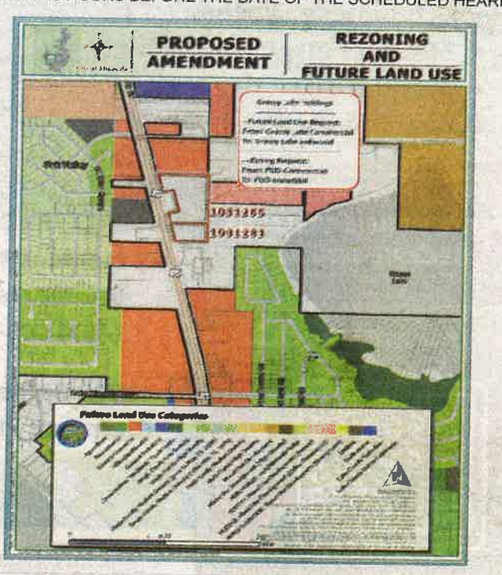
The City of Minneola City Council will hold public hearings on this proposed comprehensive plan ameridment on Tuesday September 15, 2026 and Tuesday, October 6, 2026 at 6:30 p.m. at the Minneola City Hall. The request is for a Comprehensive Plan Land Use Designation change for approximately 14.52 acres of property generally located east of US Highway 27 south of Citrus Grove Road from "Grassy Lake Commercial Development" to "Grassy Lake Industrial Development" under the Comprehensive Plan for the City of Minneola.

The staff report on the case shall be sent to the City Council and will be available to the general public at least five (5) days prior to the hearing on the case. The complete legal description for the property described herein by metes and bounds and a copy of the ordinance may be obtained from the City Clerk. Interested parties may appear and be heard with regard to this proposed ordinance.

A person who decides to appeal any decision made by any board, agency, or council with respect to any matter considered at such meeting or hearing, will need a record of the proceedings. For such purposes, any such person may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is based (Florida Statutes, 286.0105).

The City of Minneola Land Development Code and the proposed Ordinance are available for inspection at the City Hall, located at 800 North U.S. 27, Minneola, FL, during normal working hours 8:30 a.m. to 5 p.m.

PERSONS WITH DISABILITIES NEEDING ASSISTANCE TO PARTICIPATE IN ANY OF THESE PROCEEDINGS SHOULD CONTACT KRISTINE THOMPSON, CITY CLERK AT (352) 394 3598 EXT 111 AT LEAST 48 HOURS BEFORE THE DATE OF THE SCHEDULED HEARING.



AGENDA SUMMARY
Planning & Zoning Commission Meeting
September 14, 2026

Agenda Item: 4.
Subject Title: Resolution 2026-15 Grassy Lake Industrial Developer Agreement

Objective:
A Resolution of the City Council of the City of Minneola, Florida, Approving the Grassy Lake Industrial Planned Unit Development Agreement; Providing for Severability; and Providing for an Effective Date.

Summary:
Grassy Lake Holdings, LLC, Owner, request a Developer Agreement amendment to the Grassy Lake Commercial PUD, changing it to Grassy Lake Industrial PUD and adding a 1.19± acre parcel to the agreement. Current uses allowed in this agreement are strictly commercial. This amendment would allow all commercial and industrial uses.

The new property acreage covered in the development agreement would be 13.4 acres. The property is located east of US Highway 27 and south of Citrus Grove Road.

Exhibits:
1. Planned Development Application
2. Grassy Lake Holdings LLC Developement Agreement Annexation 2018
3. Res 2026-15 Grassy Lake Industrial PUD - Revised 9.2.26
4. City Version Development Agreement - Revised 9.2.26
5. Developer Version Development Agreement
6. Grassy_Lake_Development Agreement Side_by_Side_Comparison_Table
7. 240b Minn Commerce Center US N 27 SP3 v1
8. 277 Minneola Commerce Center TIA v1
9. Minneola Commerce Center FLUM RZ_v1
10. Notice of intent to consider DA
11. ADDRESSES
12. IMG_0815
13. IMG_0816
14. Affidavit DA

Options:
1. Approve the agreement as proposed.
2. Approve the agreement with conditions.

3. Postpone the decision,
4. Deny approval of the agreement.

Fiscal Impact:
Undetermined.

Staff Recommendation:
Staff recommends if approved it be the staff version and that it be on the condition of the FDOT pond being annexed in.

City of Minneola
Planning Department
800 N Highway 27, Minneola, FL 34715

Planned Development Amendment

$1,000.00 non-refundable fee

The following information is required for all Planned Development Amendment Applications:

Rec'd	Requirement
☐	(1) Legal description
☐	(6) 24" x 36" Master Plan signed and sealed by a Professional Engineer
☐	(6) 11" x 17" Master Plan
☐	(1) Copy of Developer's Agreement with Proposed Changes
☐	(1) Signed application form and checklist
☐	(1) Signed and notarized Property Owner's Authorization form
☐	(1) Completed Adjacent Property Owners form
☐	(1) CD or Flash Drive containing all applications and documents in PDF format
☐	$1,000.00 non-refundable fee

Application Review Process

Development Review Process (DRP)

The DRP reviewers shall review every application and make recommendations to the Planning & Zoning Commission (P&Z). The DRP will provide written comments/recommendations to the applicant and the P&Z

Planning and Zoning Commission (P&Z)

A Planning and Zoning review is required by the City Code the Planning Dept. is responsible to ensure the proper legal advertising is done in a timely manner. Applications need to be submitted by the 1st of the month to be considered at the next month's Planning & Zoning Commission meeting. Any and all supporting documents that need to be reviewed by the Commission need to be submitted by the 15th of the same month to be included in the packet for review.

City Council

The City Council must conduct one public hearing regarding the proposed amendment
The City Council may defer consideration of the subject application at any time

Transmit to:

City of Minneola
Planning Department
800 N Highway 27
Minneola, FL 34715

Office Use:

Applicant Name: _____

Application for: _____

Amount: _____ Check #: _____

Rec'd by: _____ Date: _____ Receipt #: _____

City of Minneola
Planned Development Amendment Cont.

Applicant Name: Drew Thigpen/Greenberg Gibbons Properties

Applicant Address: 436 E. 36th St, Charlotte, NC 28205

Applicant Phone #: 843-469-2517 Fax or E-mail: dthigpen@ggcommercial.com

Project Name: Minneola Commerce Center

General Location and/or Street Address: US Highway 27, Minneola, FL 34715

Owner Name: Grassy Lake Holdings, LLC

Owner Address: 5832 WOODBINE DR BELL ISLE, FL 32809

Owner Phone #: _____ Fax or E-mail: _____

Reason for the request: Annexation of the FDOT pond and PD Modification

CERTIFICATION

I, the undersigned, do hereby certify that I have read the application and the relevant guidance material and understand the requirements described therein and that I will fully comply with all City, State and Federal regulations applicable to this project.

I understand that the application fee is non-refundable.

I further understand that I am responsible to reimburse the City for the actual advertising costs AND the actual consultants' review fees, if any. Said fees shall be paid within 30 days of receipt of the City's invoice OR further processing of the application will cease until the invoice is paid in full.

I understand that only application packages that are determined complete by the Department will be scheduled for review.

Applicant Signature _____ Date 7/18/25

City of Minneola
Planned Development Amendment Cont.

Owner's Authorization
(required if the property owner is not the applicant)

STATE OF FLORIDA
COUNTY OF LAKE

Before me, the undersigned authority, personally appeared Drew Thigpen

who is being by me first duly sworn on oath, deposes and says:

1. That he/she is the property owner of the subject parcels in this application.

2. That he/she desires to apply for a Planned Development on land generally located at:
US 27 & Citrus Grove Road 062226000300004700 & 062226000300006300

3. That he/she has appointed Major Stacy to act as agent in his/her behalf to accomplish the above.

Owner's Signature

This is to certify that on July 18th, 20 25 before me, an officer duly authorized to take acknowledgements in the State and County aforesaid, personally appeared Major Stacy he/she is personally know to me or has produced

SEAL

Danielle L. McDougall
Notary Public
State of Florida
Comm# HH592298
Expires 10/4/2028

Danielle L. McDougall

Danielle L. McDougall
Acknowledger Name

HH592298
Serial Number

10-04-2028
My Commission Expires

City of Minneola
Planned Development Amendment Cont.

Adjacent Property Owners

Type a list of owner's names and mailing addresses for all property owners lying within 300 ft of all sides of the property described in the attached application, as recorded in the current County tax rolls, or attach copies of the appropriate property record card.

Alternate Key #	Property Owner	Address, include Zip Code
1028965	CITRUS GROVE ROAD HOLDINGS LLC	15 CREEKWOOD WAY, HILLSBOROUGH, CA 94010
1031206	CITRUS GROVE ROAD HOLDINGS LLC	15 CREEKWOOD WAY, HILLSBOROUGH, CA 94010
1031273	GHULAM DAYANAND & JASMA	9229 195TH PL, HOLLIS, NY 11423
1061270	VISTA GRANDE PROPERTIES	3534 MEDITERRA DR, CLERMONT, FL 34711
1065186	DUKE ENERGY CENTER	PO BOX 37996, CHARLOTTE, NC 28237-7996
1066549	OPEN DOOR BAPTIST OF CLERMONT INC	17140 US HIGHWAY 27, CLERMONT, FL 34715
1070929	VISTA GRANDE PROPERTIES LLC	3534 MEDITERRA DR, CLERMONT, FL 34711
1108942	ZAVY ENTERPRISES LLC	23825 INTEGRITY WAY, SORRENTO, FL 32776
1108951	OMBS LLC	PO BOX 120788, CLERMONT, FL 34712-0788
1108977	FIELDS EQUIPMENT COMPANY INC	PO BOX 113, WINTER HAVEN, FL 32882-0113
1117771	DE NOYELLES JOHN TRUSTEE	3149 SCRUB OAK TRL, OVIEDO, FL 32765
1411777	OMBS LLC	PO BOX 120788, CLERMONT, FL 34712-0788
1509572	SOUTH LAKE COUNTY LODGE #1615	17335 US HIGHWAY 27, CLERMONT, FL 34715-9220
1591881	DE NOYELLES JOHN TRUSTEE	3149 SCRUB OAK TRL, OVIEDO, FL 32765
1591899	LAKE COUNTY BCC	315 W MAIN ST, TAVARES, FL 32778

Use additional pages as necessary.

City of Minneola
Planned Development Amendment Cont.

Adjacent Property Owners

Type a list of owner's names and mailing addresses for all property owners lying within 300 ft of all sides of the property described in the attached application, as recorded in the current County tax rolls, or attach copies of the appropriate property record card.

Alternate Key #	Property Owner	Address, include Zip Code
2831910	QUINN CELESTE M	41634 COUNTY ROAD 452, LEESBURG, FL 34788
3793049	DOORSAMMY CHOONMATTIE	17350 US HIGHWAY 27, CLERMONT, FL 34715-9272
3826439	LANGFORD JONATHAN D & KIMBERLY	17358 US HIGHWAY 27, CLERMONT, FL 34715

Use additional pages as necessary.

INSTRUMENT #2018133298
OR BK 5198 PG 628 - 641 (14 PGS)
DATE: 11/15/2018 9:48:10 AM
GARY J. COONEY, CLERK OF THE CIRCUIT COURT
AND COMPTROLLER, LAKE COUNTY, FLORIDA
RECORDING FEES $120.50

DEVELOPMENT AGREEMENT

This Development Agreement (the "Agreement") is made this 18th day of OCTOBER, 2018, by and between the **CITY OF MINNEOLA, a Florida municipal corporation** ("City"), whose address is 800 N. U.S. Highway 27, Minneola, Florida 34715, and **Grassy Lake Holdings, LLC** ("Owner"), whose address is 339 Broadway Avenue Orlando, Florida 32803.

RECITALS

WHEREAS, Owner desires to annex into the City of Minneola approximately 12.31 acres of property currently located in unincorporated Lake County, Florida, described and depicted in **Exhibit "A"** attached hereto and incorporated herein (hereinafter referred to as the "Property"); and

WHEREAS, the Property is currently zoned Lake County Commercial Planned District "CP" and Lake County Agriculture "A"; and

WHEREAS, the property has a future land use designation on the Lake County Future Land Use Map as "Urban Low Density"; and

WHEREAS, Owner has filed applications for annexation, rezoning, and amendment to the City's Comprehensive Plan, and if such applications are approved, the proposed development shall be consistent with the City's Comprehensive Plan, land development regulations and this Agreement; and

WHEREAS, Owner has the full power and authority to make, deliver, enter into, and perform pursuant to the terms and conditions of this Agreement and has taken all necessary action to authorize the execution, delivery, and performance of the terms and conditions of this Agreement; and

WHEREAS, the City of Minneola has determined that the annexation of the property and its proposal for its development presents, among other things, an opportunity for the City to secure quality planning and growth and a strengthened and revitalized tax base; and

WHEREAS, Owner will fund certain public improvements and infrastructure to facilitate the development of the Property; and

WHEREAS, Owner and City believe that it is in the best interest of each party to enable the Grassy Lake Holdings Property to be developed as further described herein, in accordance with Part II of Chapter 163, Florida Statutes, the "Local Government Comprehensive Planning and Land Development Regulation Act" (the "Act"), other applicable Florida Law and the Charter and Code of Ordinances of the City of Minneola, Florida, and, therefore, Owner and City agree that this Agreement shall constitute an Agreement in accordance with the Florida Local Government Development Agreement Act, Sections 163.3220-163.3243, Florida Statutes.

NOW, THEREFORE, in consideration of mutual covenants and representations set forth herein and other valuable consideration, the receipt of which is acknowledged, the parties agree as follows:

1. **Recitals**. The above recitals are true and correct and are incorporated herein by reference.

2 **Authority** This Agreement is entered into under the authority of the City's Code and under the Florida Local Government Development Agreement Act, Sections 163.3220-163 3243, Florida Statutes This Agreement has been approved at two public hearings as mandated which were held on July 17, 2018 and August 7, 2018

3. **Conditions Precedent.** Owner has filed an Annexation Petition City has initiated the process to approve this Agreement to annex the Property in accordance with the laws of the State of Florida, and to designate future land uses consistent with this Agreement and rezone the Property consistent with this Agreement It is understood and agreed to by the City and the Owner that neither the Annexation Petition nor this Agreement shall be binding or enforceable as to any party unless and until a) the City shall duly adopt the Agreement and, subsequently adopts an ordinance annexing the Property into the corporate limits of the City and b) City's plan amendment implementing or related to the Agreement is found in compliance by the state land planning agency in accordance with the applicable Florida Statutes The parties hereto understand and acknowledge that the City is in no way bound to annex the Property The City shall have the full and complete right to approve or deny the Petition for Voluntary Annexation

4 **Land Use/Development.** Development of the Property shall be substantially consistent with the "Grassy Lake Holdings, LLC –U S 27 Mixed Use PD" Land Use Plans prepared by B & S Engineering Consultants, LLC and attached as **Exhibit "B"** ("the Plan") Except as modified in this Agreement or the Plan, all development shall be consistent with City's Planned Unit Developments zoning district, the B-1 zoning district, and and the City's Grassy Lake Holdings Mixed Use Commercial Development future land use category, subject to City approval after public hearings and Florida Department of Economic Opportunity ("DEO") approval. As set forth further below, all land use issues addressed herein must be adopted by City through its regular procedures and approved by DEO before being effective

Allowed uses·

Appliance/Electronic Repair Shop – A retail establishment offering for compensation the repair services of small appliances and electronic equipment, with such repair generally occurring on the premises

Bank – An establishment where the principal use is receiving or lending money including savings and loan companies This does not include pay day loan establishments

Business Service – An establishment where the performance of duties related to business operations are provided within or outside the confines of such an establishment and may include, but not be limited to, business machine repair, computer service and repair, microfilming, secretarial and typing service, and telephone answering service.

Clinic, Medical, or Dental – An establishment where patients are admitted for examination and treatment on an outpatient basis by one or more physicians or dentists, or any such profession the practice of which is lawful in the state, and where patients are not lodged overnight

Consumer Services and Repair – An establishment engaged in the repair of household appliances, furniture, and similar items, excluding repair of motor vehicles Typical uses include apparel repair and alterations, appliance repair, bicycle repair, clock and watch repair, furniture repair and reupholsters, shoe repair Establishments for the drop off of personal apparel to be cleaned at another location only, diaper service offices only (laundering to be performed at another location,) carpet cleaning services drop off only or rental of equipment for installed carpet

Convenience Store without Fuel Operations – An establishment which offers for sale a limited line of food and household goods and is designed for quick service to customers with small purchases. Such an establishment does not offer the sale of fuel

Financial Service – An establishment engaged in the management of money and credit, and whose services may include, but not be limited to, accounting, bookkeeping, investment securities, money transfer, mortgage

loans, pension plans, stocks and bonds brokerage and tax planning This does not include pay day loan establishments. This term does not include the term "bank "

Health/Exercise Club – An establishment which provides for athletic and physical force training or health and recreational exercise. This term may include, but is not limited to, the terms "aerobics instruction," "dance instruction," "fitness center," "gymnasium (private)," "gymnastics school," "karate," "martial arts," "self-defense instruction," and "weight room "

Medical Office/Clinic – Establishment where the diagnosis and treatment of human patients occurs without the provision of overnight care facilities and may include, but not be limited to, the services of acupuncture, alcoholism counseling, chiropractor, dental office and clinic, family planning, medical doctor office, mental health clinic, occupational therapist, speech and language pathologist, walk-in medical center, and weight control service

Office – An establishment where services are performed involving predominantly administrative, professional, or clerical operations for a business, government, industry, profession or service and are allowed under the B-1 zoning

Office Complex – Any office development containing three or more tenant spaces that are under common land ownership or that share common property frontage and are allowed under the B-1 zoning

Office Supply – An establishment which offers the sale of materials predominantly used by the office community and may include, but not be limited to, the sale of accounting and bookkeeping materials, business forms, systems, and machines, computer equipment and supplies, inserting and mailing machines, office furniture, and typewriters

Personal Service – An establishment which provides for the care of a person or a person's apparel, and may include, but not be limited to, beauty shop/barber shop, nail salon, tanning salon, alterations, and shoe repair. Personal services shall also include drop-off only establishments for laundry and dry cleaning services

Professional Office – An establishment providing executive , management, administrative, or professional services, but not including medical or dental services or the sale of merchandise, except at incidental to a permitted use Typical uses include offices for accountants, economic consultants and stockbrokers, attorneys, engineers, architects, surveyors, draftsmen, industrial designing, model making, planners, sculptors and artists, editorial and general designing, ceramic arts, and photographers; advertising agencies, insurance, real estate and/or escrow or abstract offices, secretarial and telephone answering services, and mortuaries and funeral homes

Restaurant – An establishment where meals are prepared and food, including beverages and confections, is served to customers, with the food and nonalcoholic beverage sales amounting to at least 51 percent of the total sales

Retail, Convenience – An establishment serving a limited market area and engaging in the retail sale or rental, from the premises, of frequently or recurrently needed items for household use Typical uses include, but are not limited to, drugstores, apparel and cosmetic stores, bookstores, newsstands, flower shops, video rental stores.

Retail Sales or Services – An establishment engaged in the selling of products and services to the public for personal or household consumption, including, but not limited to, newsstand/bookstore, xerographic printing, clothing stores, drugstores, home electronic equipment, food/grocery stores, and sporting goods

Allowed uses permitted as conditional use or special exception uses upon approval by the City Council·

Adult/Vocational Education - An establishment for the instruction or guidance in an occupation, profession, civic activity or art form, and may include, but not be limited to, the teaching of a trade apprenticeship, acting-drama, citizenship, cooking, and music and voice Division 12 Sec 102-342 of the Code of Minneola applies

Adult Congregate Living Facilities - A caretaking arrangement, whether operated for profit or not, where care is provided for a part of the 24-hour day to three or more adults that are unrelated by blood or marriage to the owner/operator of the facility This care may include, but is not limited to providing a protective setting, social activities, leisure time activities, self-care training, rest, nutritional services, and speech or physical therapy. Residents shall not be under in-house nursing/medical care Such a facility must be licensed by the state department of health and rehabilitative services, in accordance with F S § 400.55, or as amended

Bar, Lounges, and Nightclubs - An establishment devoted primarily to the selling, dispensing, serving, or providing of alcoholic beverages for consumption on the premises, where dancing or floor shows may be permitted The terms "bars," lounges," and "nightclubs" may include, but not be limited to, the terms "barroom," "cabaret," "cocktail lounge," "discotheque," "pub," "saloon," and "tavern," but shall not include those premises where alcoholic beverages are sold in conjunction with the sale of food for consumption on the premises, and the sale of such beverages comprises less than 49 percent of the gross receipts

Club, Lodge, and Fraternal Organization - A building or facility owned or operated by a corporation or association for a social, educational, civic, or recreational purpose, but which is not primarily for profit, or to render a service that is customarily carried on as a business

College or University - An institution of higher learning, especially one providing a general or liberal arts education rather than technical or professional training

Commercial Recreation Facility - An establishment which provides indoor or outdoor opportunities for casual entertainment by patrons of all ages, and may include, but not be limited to, an amusement park, bingo club, bowling alley, game room, go-cart track, miniature golf, pool hall, skateboard park, skating rink and video games, however if the facility includes a video arcade, it may not constitute more than 40 percent of the included activities.

Convenience Food Store with accessory fuel sales - An establishment which offers for sale a limited line of food and household goods and is designed for quick service to customers with small purchases If such an establishment offers for sale fuel by way of self-service gasoline/diesel pumps or LP gas tanks, a special exception use is required

Day Care Center - An arrangement or establishment which provides child care for more than five children unrelated to the operator, for compensation, and for a period of less than 24 hours Such a facility must be licensed by the State Department of Health and Rehabilitative Services and comply with their requirements, pursuant to F.S § 402 305, or as amended This term may include, but not be limited to, child-care center, day care services, day nurseries, kindergartens, nursery school, playschool and preschool

Drive Through Facilities

Gun Range - A facility, including accessory buildings, for shooting by sportsmen located indoors

Hotel- A building, or part thereof, in which sleeping accommodations are offered to the public, which may or may not offer cooking facilities for use by the occupants, and in which there may be a public dining room for the convenience of the guests

Kennel, Boarding – Premises which provide for the boarding of more than three domesticated animals, whether for profit or personal use and does not include pet day care and boarding facilities, as defined herein.

Kennel, Breeding – Premises which provide for the breeding, buying, raising or selling of more than three domesticated animals, whether for profit or personal use

Laboratory/Research and Development - An establishment engaged in the investigation, testing, and experimentation of the natural, physical, or social sciences, or engaged in engineering and development as an extension of investigation with the objective of creating products This type of facility may include, but not be limited to asphalt and concrete testing, foundation testing, material testing, and soils, geology, and groundwater testing

Learning Center - A learning center is an estagblishment that allows students to engage in activities that enrich their learning Such activities could include but not be limited to reading or math tutoring

Motor Vehicle, Boat Sales - An area used for the display, sale or rental of new or used motor vehicles and boats in operable condition and where no repair work is done. This must follow Chapter 18 of the Land Use Regulations

Motor Vehicle Dealer Sales – An establishment for the sale of new or used vehicles together with on-premises repair facilities, including paint and body shop. This must follow Chapter 18 of the Land Use Regulations

Motor Vehicle Repair Facility – An establishment where major mechanical overhaul and repairs, paint and body work, or rebuilding of vehicle components is done

Nursing Home – An extended or intermediate care facility which provides full time convalescent or chronic care to individuals who, by reason of advanced age, chronic illness or infirmity, are unable to care for themselves This type of facility shall be licensed by the state department of health and rehabilitative services and meet its criteria, pursuant to F S ch. 400, or as amended, and shall provide nursing services as defined in F.S ch 464, or as amended This term may include, but not be limited to , the terms "extended care facility," "intermediate care facility" and "long-term care facility "

Office Condominiums – An Office building where title to individual office units can be purchased, but the property title is held by another party.

Pet Day Care and Boarding Facilities – Personal service use facility where domesticated animals are supervised and cared for during the day, which is operated for the purpose of providing overnight lodging for domesticated animals, and is distinct from kennel, boarding, as defined herein

Research Service – An Establishment engages in research of an industrial or scientific nature, other than medical testing and analysis and routine product testing, which is offered as a service or which is conducted by and for a private, profit oriented firm

Retail Home Building Materials – An establishment which offers for retail sale materials and equipment for home and garden construction and maintenance and may include but not be limited to, aluminum, cabinets, caulking material and equipment, garden supplies, and topsoil Plant materials sold at such an establishment could be grown on premises in a field or greenhouse.

Retail Nurseries and Garden Supplies – An establishment which offers to the public for retail sale plants and/or associated materials and may include, but not limited to, fences, fill material, firewood, gravel, sand, rock products, lawn and garden supplies, and topsoil. Plant material sold at such an establishment could be grown on the premises in a field or greenhouse

Shopping Center – Any commercial building or development housing two or more tenants on a single ownership parcel

Theater – A movie theater establishment that is operated in an enclosed building

Veterinary Clinic – An establishment for the medical and surgical treatment of sick or injured animals where limited overnight facilities are provided in association with such treatment This term may include, but not be limited to, the terms "veterinarian office," "veterinary hospital," and "animal clinic," but shall not include the term "kennel"

Wholesale Sales – An establishment who sells products primarily to consumers, but also to businesses, at discount prices Items include, but are not limited to, food, bottle water, toiletries, prescription and non-prescription drugs, eye glasses, furniture, appliances, and tires

Wireless Antennas, Towers and Equipment (Cell Towers) Chapter 130 Telecommunications in the City Land Use Code applies

Car wash shall be allowed as a conditional use.

5 **Design Standards.** All non-glass or architectural features of the facades will be made of 95% brick, stone, or stucco. There will be no vinyl siding or Hardies Board All architectural elements for the residential portions of the development must be one of the following styles (1) Spanish Mediterranean, stucco facades, arches and wood accents or Florida Vernacular (Cracker) style, which includes metal roofs The colors shall be of an earth tone scheme and are muted in an emulation of natural colors and should be selected from the attached list of pantone shades 3596, 2430, 2437 ,2438, 2439, 2440, 2441, 2442, 7551, 7552, 7553, 139, 140, 1395, 1405, 7572,7573, 7574, 7575, 2021, 154, 160, 161, 7604, 7605, 7608, 7609, 7610, 7611, 7612, 7613, 7614, 7615, 7616, 7617, 483, 181. If this list of pantone shades is not available to Owner/Developer due to brand specific design elements, the City Staff may approve alternate colors within the City's reasonable discretion.

The following conservation methods should be utilized in all structures With a flat roof with a parapet, a solar hot water heater should be utilized unless prohibited by City's code or other valid government restriction HVAC systems are to be controlled by zone digitally for both humidity and temperature A minimum of R-30 insulation is to be used in ceilings, where possible, with a reflective roof color. EFIS will be applied to increase insulation efficiency where applicable Plumbing must consist of low flow fixtures and flushless urinals Interior and Exterior lighting shall be LED (Unless not feasible per proposed use) All exterior Glass to be low E' with reflective tint except where prohibited by City's code or other valid government restriction Extended overhangs will be used Lighting to comply with dark sky regulations.

Walkability and pedestrian access shall be maximized including parking layout and dumpster enclosures Number of parking spaces shall be as required by code, but no ratio of front or rear parking shall apply Innovative designs may be approved by City planning department staff as long as they meet the intent of the code Examples include but are not limited to roundabouts, water features, and rain gardens

6 **Setbacks/Impervious Surface/Design Standards.** The City and Owner/Developer hereby acknowledge that a mix of lot sizes will be provided As set forth the unit mix shall be substantially as follows

Setback Minimums

Front·	As Shown on the LUP
Side	As Shown on the LUP
Rear.	As Shown on the LUP

Maximum height for any unit shall be fifty (50) feet

Minimum Open Space 20%

Impervious Surface Ratio (ISR) The maximum ISR is ninety percent (90%)

Owner shall provide refuse receptacles on the Property in such locations as are approved by City within City's reasonable discretion.

7 **Property Owners' Association (POA).** A property owners association will be required for the Property The POA will have the responsibility for all common area maintenance and facility ownership, including but not limited to maintenance of stormwater management areas and easements, drainage easements, sidewalks, trails within and adjacent to the Property, and the unpaved right-of-way and/or easements, lights, and all internal roads

8. **Lighting.** The Owner/Developer shall install all exterior lighting for the Property All exterior lighting shall comply with dark sky lighting standards and be arranged to reflect light away from residences to the greatest extent possible while providing lighting adequate to ensure safety on road right of way. Lighting will have decorative poles and head and be a maximum of 3K L E D The poles and street lights within the Property shall be installed by Developer/Owner and thereafter maintained by the POA Further, the POA shall be responsible for the payment of all electricity, pole leases, etc charges associated with providing such street lights on the Property

Owner/Developer shall delineate this responsibility within any declaration of restrictive covenants and restrictions in accordance with the LUP Such covenants and restrictions shall be recorded at the time of the final plat and prior to the sale of any lots within the Property.

9 **Right of Way** Owner/Developer shall install and maintain an 8 foot multipurpose trail located along US Highway 27 Owner/Developer shall also install and maintain lighting for such trail and sidewalk, such maintenance to include the cost of the electicity for the lighting This will be maintained by the POA

Cross access easements shall be provided as needed with adjacent properties and consist of a 24' minimum width as City requires within its reasonable discretion Existing and proposed grading will be taken into account when making this determination

10 **Utilities.** Owner and its successors and assigns agree to obtain water, reuse water, irrigation water, and wastewater service (hereafter, "Utilities") exclusively through purchase from City when available Owner covenants and warrants to City that it will not engage in the business of providing such Utilities to the Property or within City's F S Chapter 180 utility district No private wells will be allowed within the Property Developer shall construct, at Developer's expense, all on-site utility facilities (e g lift stations and lines) as well as pay for the extension of facilities from City's current point of connection Owner will be required to extend utilities to the Property and across the entire length of the Property adjacent to US 27. All such improvements must be constructed to City requirements and transferred to City as a contribution in aid of construction In addition, a 20 foot utility easement shall be dedicated to the City along but outside of the future right-of-way of US Highway 27 (as identified by FDOT at the time of execution of this Agreement) and will be graded at a 10 1 slope where feasible as identified during site plan review Owner may place landscaping within such utility easement provided it does not interfere with City's utilities as determined by City in City's sole discretion and Owner is aware than any landscaping that interferes with City's utility maintenance shall be immediately removed at City's request Owner is responsible to replace any landscaping removed for utility maintenance

All lift stations shall be privately owned and maintained by Owner/Developer.

11 **Impact Fees.** Owner agrees to pay all impact fees, including water and wastewater impact fees, fire rescue, police, recreation, and any impact fees adopted after the execution of this Agreement for all units as building permits are issued for such units at the then existing rate Prepayment of utility impact fees and acceptance by City of such fees shall reserve capacity for the prepaid units. No water, wastewater, or any other

utility capacity is reserved until or unless such fees have been paid pursuant to an agreement with City Owner agrees and understands that no capacity has been reserved and that Owner assumes the risk that capacity will be available

12. **Landscaping/Buffers.** Owner/Developer shall install and maintain the buffers shown on the Plan Owner shall use efforts to incorporate drought tolerant plants in all common areas Further, the Owner agrees to make specifications within any declaration of restrictive covenants for the Property that allow for the landscaping installations to include certain drought tolerant plants following the guidelines of "Florida Friendly Landscaping."

All landscaping located within common areas of the Property shall be maintained by the Owner/POA and such maintenance shall include, but is not limited to, the replacement and replanting of any landscaping that dies, becomes unsightly, or are removed for any reason at Owner/POA's sole expense.

13 **Water Conservation.** Owner agrees to encourage the use of indigenous plants for landscaping purposes, to help minimize irrigation requirements, and to encourage the use of other water conservation methods Owner shall install, or cause to be installed, rain sensors on automatic sprinkler systems within the common areas of the Property. Owner will include in its declaration of restrictive covenants for the Property that inclusion of rain sensors is required whenever irrigation is installed

14 **Environmental.** Owner will comply with all local, state, regional, and federal requirements regarding any environmental issues affecting the Property Moreover, Owner agrees to use all reasonable efforts to preserve on site or to relocate any gopher tortoises on the Property and to not seek an incidental take permit without first obtaining the consent of City Owner acknowledges that City has adopted Ordinance 2006-22, which provides for specific requirements and protections relating to listed species, and agrees that it shall comply with such ordinance There shall be no construction in the flood zone

15 **Grading.** Owner shall comply with all City Land Development Regulations regarding grading, including, but not limited to, LDR Sections 122-81 – 122-92 with the exception of grading limitations and maximum height of retaining walls. Grading shall be allowed to a maximum limitation of twenty five feet (25') and retaining walls shall not exceed six feet (6'), unless a variance is approved by the City Retaining walls shall be of uniform color and texture throughout the Property A maximum slope of 3.1 is allowed where necessary

Any grading tracts shall allow lots to be as level as possible while complying with City's grading limitations and accounting for topographic changes within the grading tracts. Any such tracts shall be landscaped and maintained by Owner or the POA in such a manner as to prevent erosion, and such maintenance shall include, but is not limited to, the replacement and replanting of any trees and/or shrubs that die, become unsightly, or are removed for any reason

17 **Stormwater Management.** The Owner agrees to provide at Owner's expense a comprehensive stormwater management system consistent with all regulatory requirements of the City and the St John's River Water Management District. Impacts to flood plains are allowed in accordance with the Water Management District procedures for compensating storage and will be based on the 100-year floodplain established by FEMA.

18 **Other Municipal Facilities/Services** Upon annexation, the City hereby agrees to provide, either directly or through its franchisees or third party providers, police and fire protection, emergency medical services, and solid waste collection, disposal, and recycling services to the Property under the same terms and conditions and in the same manner as are afforded to all other property owners within the City

19 **Concurrency.** Owner shall comply with all applicable concurrency requirements pursuant to the City's Land Development Regulations. A complete concurrency study conforming to the City of Minneola Land

Development Regulations will be required prior to any preliminary plat approvals or construction plan approvals The Owner shall ensure that all traffic concurrency studies conducted reflect all planned and approved development in the area

20 **Signage** Owner shall ensure that any and all signage for the Property is located upon lands owned by either Owner or the POA and complies with Chapter 118 of the City's Code

21 **Compliance with City Laws and Regulations** Except as expressly modified herein, all development of the Property shall be subject to the regulations of county, state, and federal agencies, as well as with the City Land Development Regulations and City Code provisions, as such City Land Development Regulations and City Code provisions exist at the time of the execution of this Agreement The City may apply subsequently-enacted Land Development Regulations and City Code provisions to the Property in accordance with Section 163 3233, Florida Statutes (2017), or as may be otherwise agreed to in writing by Owner

22 **Entire Agreement** This Agreement constitutes the entire agreement between the parties with respect to the transactions contemplated herein, and it supersedes all prior understandings or agreements between the parties relating to this Agreement.

23 **Successors and Assigns**. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns

24 **Waiver, Modification** The failure by any party to insist upon or enforce any of their rights shall not constitute a waiver thereof and nothing shall constitute a waiver of any party's right to insist upon strict compliance with the terms of this Agreement Any party may waive the benefit of any provision or condition for its benefit which is contained herein No oral modification of this Agreement shall be binding upon the parties and any modification must be in writing and signed.

25 **Binding Effect; Assignability.** This Agreement, once effective, shall be binding upon and enforceable by and against the parties hereto and their assigns This Agreement shall be assignable by the Owner to successive owners. Owner shall, however, provide written notice to the City of any and all such assignees The rights and obligations set forth in this Agreement shall run with the land and be binding on all successors and/or assignees. Owner consents to the placement of a claim of lien on the Property upon default of any obligation herein without precluding any other remedies of City The parties hereby covenant that they will enforce this Agreement and that it is a legal, valid, and binding agreement

26 **Development Approvals** This Agreement shall, in no manner, constitute development approval from the City regarding the Property

27. **Governing Law**. This Agreement shall be governed by and construed under the laws of the State of Florida and venue for any dispute arising out of this Agreement is the appropriate court in Lake County, Florida

28 **Notices** Any notices which may be permitted or required hereunder shall be in writing and shall be deemed to have been duly given as of the date and time the same are personally delivered, transmitted by facsimile, or within three (3) days after depositing with the United States Postal Service, postage prepaid by registered or certified mail, return receipt requested, or within one (1) day after depositing with an overnight delivery service from which a receipt must be obtained, and addressed as follows·

TO CITY. Mark Johnson, City Manager
City of Minneola
800 U S Highway 27
Minneola, FL 34715
Telephone (352) 394-3598

With a copy to

Scott A Gerken, Esquire
STONE & GERKEN, P A
4850 N Highway 19A
Mount Dora, FL 32757
Telephone· (352) 357-0330

TO OWNERS·

Major Stacy, PE
Grassy Lake Holdings, LLC
339 Broadway Avenue
Orlando, Florida 32803

Annil C. Sawh
15502 Campden St
Winter Garden, Florida 34787

29. **Attorney's Fees**. In the event of any dispute hereunder for any action to interpret or enforce this Agreement, any provision hereof or any matter arising herefrom, the prevailing party shall be entitled to recover its reasonable costs, fees and expenses, including, but not limited to, witness fees, expert fees, consultant fees, attorney, paralegal and legal assistant fees, costs and expenses and other professional fees, costs, and expenses whether suit be brought or not, and whether in settlement, in any declaratory action, at trial or on appeal.

30. **Term of Agreement** The term of the Agreement shall commence on the date this Agreement is executed by both the City and Owner, or the effective date of the annexation of the Property, whichever occurs later, and shall terminate ten (10) years thereafter, provided, however, that the term of this Agreement may be extended by mutual consent of the City and the Owner, subject to a public hearing in accordance with the requirements of Section 163 3225, Florida Statutes

31 **Exhibits** All exhibits attached hereto are hereby incorporated in and made a part of this Agreement as if set forth in full herein

IN WITNESS WHEREOF, the parties have set their hands and seals this 16th day of October, 2018

CITY OF MINNEOLA, FLORIDA
A Florida Municipal Corporation

By _____

Name Pat Kelley

Its Mayor

Date 10-16-18

Attest

April Sheppard, Assistant City Clerk

Date 10-16-18

Approved as to form

Scott A Gerken, City Attorney

Witness
Printed Name: Kristine Thompson

Major Stacy
Grassy Lake Holdings, LLC

Witness
Printed Name: Joyce Heffington

STATE OF FLORIDA
COUNTY OF Lake

The foregoing instrument was acknowledged before me this 18 day of Oct., 2018, by **MAJOR STACY.** He is personally known to me or has produced FL DL (type of identification) as identification and (did/did not) take an oath

DARLENE MACDONALD
MY COMMISSION #GG147876
EXPIRES MAY 18, 2020
Bonded through 1st State Insurance

Signature of Notary Public

Darlene Macdonald
Type or Print Name
My Commission Expires: 5/18/20
Commission No GG147876

SEAL

EXHIBIT "A"

PARCEL 1

THAT PORTION OF THE NORTHWEST ¼ OF THE SOUTHWEST ¼ OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 25 EAST, LAKE COUNTY, FLORIDA, LYING EAST OF THE EASTERLY RIGHT-OF-WAY OF STATE ROAD NO 25 (U S HIGHWAY NO 27), LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA

THE ABOVE DESCRIBED PROPERTY IS ALSO DESCRIBED AS FOLLOWS

BEGIN AT THE SOUTHEAST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHWEST ¼ OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THENCE NORTH 00°09'20" EAST ALONG THE EAST BOUNDARY OF THE SAID NORTHWEST ¼ OF THE SOUTHWEST ¼, A DISTANCE OF 751 72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NORTHWEST ¼ OF THE SOUTHWEST 1/4, THENCE NORTH 89°50'01" WEST ALONG THE SAID SOUTH BOUNDARY, 704.047 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO 25 (U S HIGHWAY NO 27), THENCE SOUTH 14°00'27" EAST ALONG SAID EASTERLY RIGHT-OF-WAY LINE 307 47 FEET TO THE NORTHWESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THENCE NORTH 75°59'33" EAST, 152 00 FEET TO THE NORTHWESTERLY CORNER OF SAID RETENTION AREA, THENCE SOUTH 14°00'27" EAST 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE SOUTH 75°59'33" WEST, 152 FEET TO THE AFORESAID EASTERLY RIGHT-OF WAY LINE OF STATE ROAD NO 25, THENCE SOUTH 14°00'27" EAST, ALONG THE SAID RIGHT-OF-WAY LINE 146 26 FEET TO THE SOUTH BOUNDARY OF THE AFORESAID NORTHWEST ¼ OF THE SOUTHWEST ¼ OF SECTION 6, THENCE SOUTH 89°39'42" EAST ALONG THE SAID SOUTH BOUNDARY, 515 16 FEET TO THE POINT OF BEGINNING

THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA WHICH IS NOT INCLUDED HEREIN IS DESCRIBED AS FOLLOWS

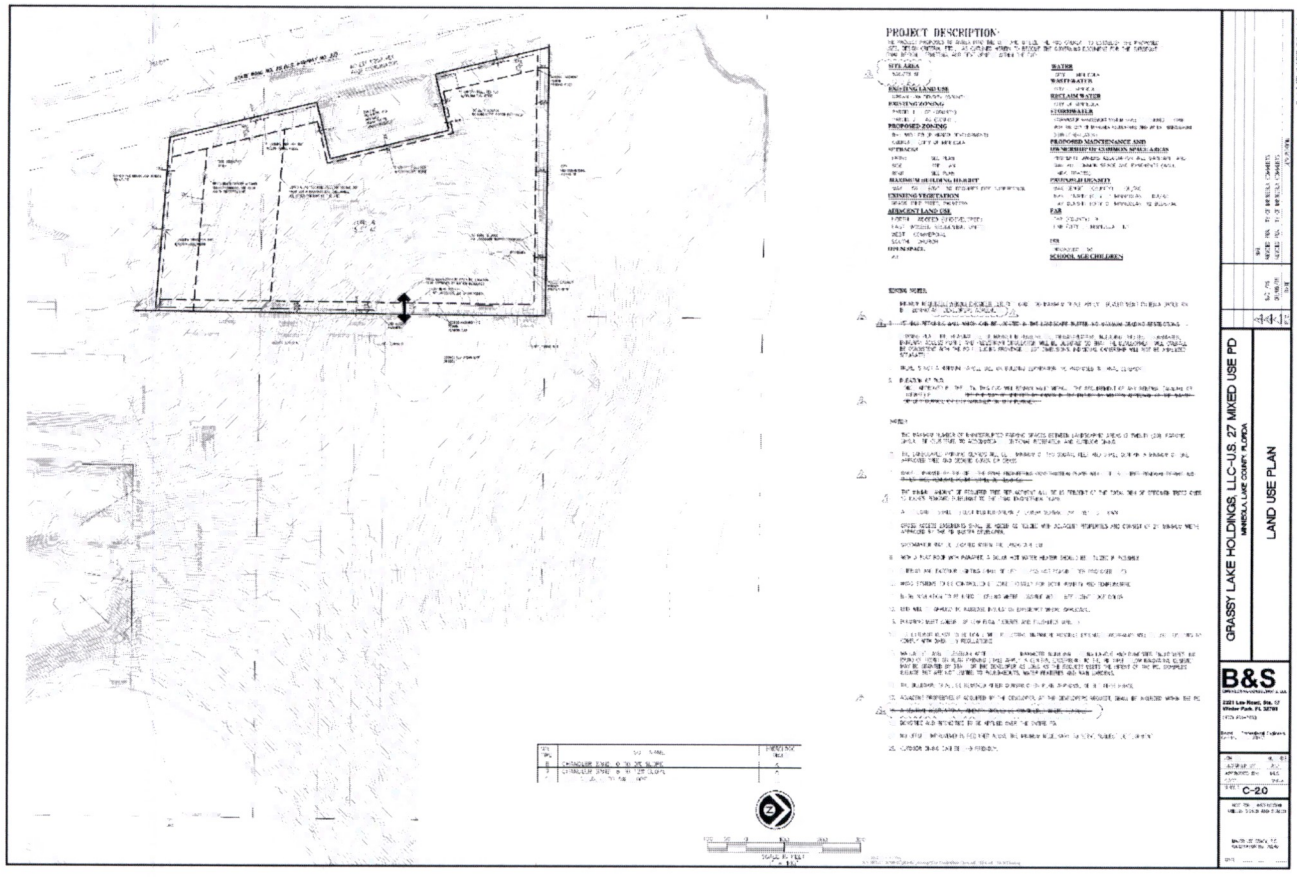
THAT PART OF THE SOUTH 12 7 ACRES LYING EAST OF THE COUNTY ROAD, IN THE NORTHWEST ¼ OF THE SOUTHWEST 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LYING IN LAKE COUNTY, FLORIDA, LYING WITHIN 220 FEET EAST OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200, SOUTH OF STATION 64+90 00 AND NORTH OF STATION 61+70 00 SAID SURVEY LINE AND SAID STATIONS BEING DESCRIBED AND LOCATED AS FOLLOWS

BEGIN ON THE NORTH LINE OF THE NORTWEST ¼ OF THE SOUTHWEST ¼ OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26, EAST, AT A POINT 405 38 FEET EAST OF THE NORTHWEST CORNER OF SAID NORTHWEST ¼ OF SOUTHWEST ¼, THENCE RUN SOUTH 13°58'00" EAST, A DISTANCE OF 912 54 FEET TO STATION 64+90 00, THENCE CONTINUE SOUTH 13°58'00" EAST, A DISTANCE OF 320 FEET TO STATION 61+70 00, THENCE CONTINUE SOUTH 13°58'00" EAST, A DISTANCE OF 100 FEET

PARCEL 2

BEGINNING 1044 05 FEET NORTH OF SOUTHEAST CORNER OF SOUTHWEST ¼ OF THE SOUTHWEST 1/4; SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN NORTH 85 58' WEST TO RIGHT-OF-WAY OF HIGHWAY, THENCE NORTHWESTERLY ALONG SAID RIGHT-OF-WAY TO NORTH LINE OF SAID SOUTHWEST ¼ OF SOUTHWEST ¼, THENCE EAST TO NORTHEAST CORENER OF SAID SOUTHWEST ¼ OF SOUTHWEST 1/4, THENCE SOUTH TO POINT OF BEGINNING

EXHIBIT "B"


PROJECT DESCRIPTION:
LAND USE PLAN
GRASSY LAKE HOLDINGS LLC-U.S. 27 MIXED USE PD
LAND USE PLAN
B&S
C-20

RESOLUTION 2026-15

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MINNEOLA, FLORIDA, APPROVING THE GRASSY LAKE INDUSTRIAL PLANNED UNIT DEVELOPMENT AGREEMENT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Grassy Lake Holdings, LLC has requested approval of a Planned Unit Development Agreement for approximately 14.519 acres generally located east of U.S. Highway 27 and south of Citrus Grove Road, as described in Exhibit "A" (the "Property"), and the rezoning of the Property to Planned Unit Development-Industrial (PUD-I); and

WHEREAS, on October 6, 2026, the City Council of the City of Minneola adopted Ordinances 2026-20 and 2026-21, amending the Future Land Use Map designation for the Property and rezoning the Property from Planned Unit Development-Commercial (PUD-C) to Planned Unit Development- Industrial(PUD-I); and

WHEREAS, the City is authorized to approve planned unit developments and enter into development agreements pursuant to section 166.021 and sections 163.3220 through 163.3243, Florida Statutes, and the City of Minneola Land Development Code; and

WHEREAS, after due public notice, the City has held the requisite public hearings pursuant to section 163.3225, Florida Statutes, and the City of Minneola Land Development Code, to afford an opportunity for public comment concerning the proposed Grassy Lake Industrial Planned Unit Development Agreement; and

WHEREAS, the City finds that the proposed Grassy Lake Industrial Planned Unit Development Agreement approved hereby furthers the purposes of and is consistent with the City of Minneola Comprehensive Plan and the City of Minneola Land Development Code, and is consistent with and compliant with State law, including but not limited to, Chapter 163, Part II, Florida Statutes.

NOW, THEREFORE, be it Resolved by the City Council of the City of Minneola, Florida, as follows:

SECTION 1. The foregoing recitals are true and correct and are hereby ratified, confirmed, and made a part of this Resolution.

SECTION 2. The City hereby approves and adopts the Grassy Lake Industrial Planned Unit Development Agreement attached hereto and incorporated herein as Exhibit "A" and hereby authorizes the Mayor, or in the Mayor's absence, the Vice-Mayor, to execute such Development Agreement. From and after the approval of this Resolution, the Grassy Lake Industrial PUD Property shall be developed in accordance with the Grassy Lake Industrial Planned Unit Development Agreement attached hereto.

SECTION 3. The City Clerk is directed to forward this Resolution to the Clerk of the Circuit Court in and for Lake County, Florida, for recording in accordance with Section 163.3239, Florida Statutes.

SECTION 4. If any provision or portion of this Resolution, including Exhibit "A" attached hereto, is declared by any court of competent jurisdiction to be void, unconstitutional, or unenforceable, then all remaining provisions and portions of this Resolution shall remain in full force and effect.

SECTION 5. All existing resolutions or parts of existing resolutions in conflict herewith are hereby repealed to the extent of such conflict.

SECTION 6. This Resolution shall become effective immediately upon approval by the City Council of the City of Minneola in accordance with law.

PASSED AND ADOPTED this _____ day of October, 2026, by the City Council of the City of Minneola, Florida.

_____
PAM SERVISS, Mayor

ATTEST:

_____
KRISTINE THOMPSON, City Clerk

Approved as to form:

_____
SCOTT A. GERKEN, City Attorney

FIRST AMENDED AND RESTATED DEVELOPMENT AGREEMENT

This First Amended and Restated Development Agreement (this "Agreement") is made this 6th day of October,2026(the "Execution Date"), by and between the CITY OF MINNEOLA, a Florida municipal corporation ("City"), whose address is 800 N. U.S. Highway 27, Minneola, Florida 34715, and Grassy Lake Holdings, LLC, a Florida limited liability company ("Owner"), whose address is 339 Broadway Avenue, Orlando, Florida 32803.

RECITALS

WHEREAS, the City and Owner entered into that certain Development Agreement dated October 18, 2018, and recorded in Official Records Book 5198 Page 628-641 of the Public Records of Lake County, Florida (the "Development Agreement"); and

WHEREAS, the parties desire to amend and restate the Development Agreement in its entirety as set forth herein; and

WHEREAS, the property consists of approximately 1.2 acres located in unincorporated Lake County, Florida (the "FDOT Parcel") and approximately 13.32 acres located within the City (Lake County Parcel ID Numbers 06-22-26-0003-000-04700 and 06-22-26-0003-000-06300, collectively, the "City Parcels"), as more particularly described and depicted in Exhibit "A" attached hereto and incorporated herein by reference (collectively, the "Property"); and

WHEREAS, the City Parcels have a zoning designation on the City Zoning Map of "Planned Development, Commercial" and a future land use designation on the City of Minneola Future Land Use Map of "Planned Development, Commercial"; and

WHEREAS, Owner presently owns the City Parcels but does not ownthe FDOT Parcel, and the provisions of this Agreement applicable to the FDOT Parcel shall not become effective unless and until Owner acquires legal title to the FDOT Parcel by recorded deedand the FDOT Parcel is annexed into the City; and

WHEREAS, Owner has filed applications for annexation, rezoning, and comprehensive plan amendment for the FDOT Parcel, and if such applications are approved, the proposed development shall be consistent with the City's Comprehensive Plan, Land Development Regulations (the "LDRs"), and this Agreement; and

WHEREAS, Owner has the full power and authority to enter into and perform this Agreement with respect to the City Parcels, and Owner's rights and obligations concerning the FDOT Parcel are expressly contingent upon Owner acquiring legal title to the FDOT Parcel by recorded deed and the FDOT Parcel being annexed into the City; and

WHEREAS, the City has determined that the annexation of the FDOT Parcel and the overall development of the Property presents, among other things, an opportunity for the City to secure quality planning and growth and a strengthened and revitalized tax base; and

WHEREAS, Owner will fund certain public improvements and infrastructure to facilitate the development of the Property; and

WHEREAS, Pelican Industrial ("Developer") has been authorized by the Owner to seek the approvals contemplated by this Agreement and to develop the Property in accordance with the terms and conditions set forth herein; and

WHEREAS, Owner and City believe that it is in the best interest of each party to enable the Property to be developed as further described herein, in accordance with Part II of Chapter 163, Florida Statutes, the "Local Government Comprehensive Planning and Land Development Regulation Act" (the "Act"), other applicable Florida Law and the Charter and Code of Ordinances of the City of Minneola, Florida; and,

WHEREAS, Owner and City agree that this Agreement shall constitute an Agreement in accordance with the Florida Local Government Development Agreement Act, Sections 163.3220-163.3243, Florida Statutes.

NOW, THEREFORE, in consideration of mutual covenants and representations set forth herein and other valuable consideration, the receipt of which is acknowledged, the parties agree as follows:

1. **Recitals**. The above recitals are true and correct and are incorporated herein by reference.

2. **Authority**. This Agreement is entered into under the authority of the City's Code and under the Florida Local Government Development Agreement Act, Sections 163.3220-163.3243, Florida Statutes. This Agreement is subject to approval at the two public hearings required by section 163.3225, Florida Statutes, scheduled for September 15, 2026, and October 6, 2026.

3. **Land Use; Development.** Development of the Property shall be substantially consistent with the land use plan prepared by B&S Engineering and Consulting, LLC attached hereto as Exhibit "B" (the "Land Use Plan"). Except as expressly modified by this Agreement or the Land Use Plan, development of the Property shall be consistent with the City's Planned Unit Development-Industrial (PUD-I) zoning district, the City's applicable future land use designation, the City's LDRs, and other applicable law. Any required annexation, comprehensive plan amendment, rezoning, site plan, plat, construction plans, building permit, or other development approval shall be processed through the City's regular procedures. No development rights are granted for the FDOT Parcel unless and until Owner acquires legal title to the FDOT Parcel by recorded deed, the FDOT Parcel is annexed into the City, all applicable comprehensive plan and zoning amendments become effective, and this Agreement is recorded. In the event of a conflict between this Agreement and the Land Use Plan, the text of this Agreement shall control. In the event of a conflict between this Agreement and the City Code or LDRs, this Agreement shall control only to the extent it expressly modifies a specific City requirement; otherwise, the more restrictive applicable requirement shall govern.

4. **Permitted Uses**. The following uses shall be permitted on the Property, subject to applicable site development plan approval, permitting requirements, and any additional conditions set forth herein:

(i) In addition to the uses permitted in the I-1 Industrial District, the following B-1 uses shall be permitted: offices; office supply; business services; maintenance contractors;

convenience stores without fuel operations; adult/vocational education; learning centers; and retail sales and food-services that are accessory or incidental to, or operated in conjunction with, a principal industrial, warehouse, distribution, contractor, office, showroom, or other use permitted by this Agreement.

(ii) Manufacturing, processing, fabrication, assembly, production, finishing, treatment, packaging, repair, and similar activities shall be conducted within enclosed buildings and shall be limited to low-impact operations that do not create objectionable noise, vibration, smoke, dust, odor, glare, heat, or other impacts beyond the Property. Outdoor storage or contractor-yard functions shall be permitted only where specifically shown on an approved site plan and screened in accordance with the City's LDRs.

Notwithstanding anything herein to the contrary, the following shall not be permitted on the Property unless this Agreement is further amended in writing: solid waste landfills, hazardous waste treatment/storage/disposal facilities, junkyards, salvage yards, asphalt plants, concrete batch plants, mining operations, adult entertainment establishments, correctional facilities, truck stops, truck terminals serving as principal uses, airports, rail yards, and other heavy industrial uses materially inconsistent with the Land Use Plan. Notwithstanding anything in this Agreement to the contrary, data centers, data center facilities, large-scale data centers, and large load customer facilities are prohibited on the Property, whether proposed as a principal, accessory, ancillary, incidental, or mixed use. This prohibition applies regardless of whether the use could otherwise be classified as an office, technological, research and development, warehouse, utility, or other use permitted by this Agreement.

5. **Development Standards**.

(i) Building Setback Minimums:

(a) West: 50 feet (50′)

(b) North: 30 feet (30′)

(c) East: 30 feet (30′)

(d) South: 10 feet (10′)

(ii) Landscape Buffers:

(a) West: 10 feet (10′)

(b) North: 0 feet (0′), as a result of the existing access easement.

(c) East: 10 feet (10′), except no landscape buffer shall be required within the existing access easement area.

(d) South: 10 feet (10′)

(iii) Maximum Height: Fifty feet (50′)

(iv) Minimum Open Space: Twenty percent (20%)

(v) Parking shall comply with the City's LDRs unless an alternative parking plan supported by a parking study is approved as part of the site development plan. Parking lot landscape islands shall be provided at intervals of no more than eight (8) consecutive parking spaces. Parking-space dimensions shall comply with the City's LDRs, and vehicle overhang shall not obstruct any sidewalk or pedestrian area.

6. **Design Standards.**

(i) Building Materials. The exterior elevations of all principal buildings visible from a public street or public right-of-way shall consist primarily of painted concrete tilt-wall panels, together with such complementary architectural materials, colors, and finishes as are approved through the applicable site development plan process.

(ii) Color Scheme. Building colors shall consist of a gray-toned color palette and shall be selected from one or more of the following Sherwin-Williams colors: Gray Shingle #7670, March Wind #7668, and Fleur De Sel #7666, as reflected on Owner's and/or Developer's approved finish board. If a listed Sherwin Williams paint color is unavailable, the City may approve alternate colors within the City's reasonable discretion, provided such substitute colors are consistent with the gray-toned color palette established herein.

(iii) Roofing. Thermoplastic polyolefin ("TPO") roofing systems shall be permitted on all principal and accessory structures within the Property. TPO roofing shall be deemed an approved roofing material for all buildings within the Property, provided such roofing is installed in accordance with applicable building codes and manufacturer specifications. Parapets will be installed according to City code so that the roof does not appear flat and all equipment on the roof is hidden from street view.

(iv) Dumpster Enclosures. Owner shall provide refuse receptacles on the Property in such locations as are approved by City within City's reasonable discretion. Refuse receptacles shall be adequately screened from view in a manner approved by the City. Acceptable screening methods include, but are not limited to, painted tilt-wall enclosures with metal gates.

(v) Lift Stations. All lift stations shall be privately owned and maintained by Owner. Lift stations may be constructed of fiberglass or any other material that complies with applicable City standards and specifications. Concrete shall not be required.

7. **Walkability**. Walkability and pedestrian access shall be maximized through the site design, including the layout of buildings, parking areas, sidewalks, and pedestrian connections. Innovative site design features may be approved by the City's Planning Department, provided such features meet the intent of this Agreement and the City's LDRs. Examples include, but are not limited to, roundabouts, water features, rain gardens, and other low-impact development features.

8. **Conservation Methods**. Owner and/or Developer shall incorporate the following conservation measures into the design and development of all climate-controlled spaces within the Property, if applicable:

(i) Solar hot water heating systems for buildings with flat roofs and parapets, where

feasible;

(ii) Digitally controlled HVAC systems utilizing separate temperature and humidity zones;

(iii) Roof insulation within office areas and warehouse areas, with additional insulation as required for future tenant improvements;

(iv) Exterior Insulation and Finish Systems (EIFS), where applicable, to improve insulation efficiency;

(v) Low-flow plumbing fixtures and water-conserving, waterless, or flushless urinals, where appropriate for the proposed use;

(vi) All exterior glazing shall utilize Low-E glass with reflective tint, where practicable; and

(vii) Buildings shall incorporate extended roof overhangs, where practicable, to reduce solar heat gain.

(viii) No permanent irrigation system shall be installed unless approved by the City. Any approved irrigation system shall use reclaimed water when available or another water source authorized by the City. No private well may be installed without the City's prior written approval. All landscaping shall consist of Florida native or Florida-Friendly low-water plantings.

9. **Property Owners' Association (POA).** A property owners association will be required for the Property. The POA will have the responsibility for all common area maintenance and facility ownership, including but not limited to maintenance of stormwater management areas and easements, drainage easements, sidewalks, trails within and adjacent to the Property, unpaved right-of-way and/or easements, lighting, and all internal roads.

10. **Lighting.** Owner shall install all exterior lighting for the Property as necessary to serve the development. Interior and exterior lighting fixtures shall utilize LED technology unless infeasible for the proposed use. All exterior lighting shall comply with dark sky lighting standards and be arranged to reflect light away from residences to the greatest extent possible while providing lighting adequate illumination for safety within the Property and adjacent rights-of-way.

11. **Right of Way**. Owner shall install and maintain an eight-foot (8-foot) multipurpose trail located along US Highway 27. Cross access easements shall be provided with adjacent properties as necessary and consist of a twenty-four foot (24') minimum width as City requires within its reasonable discretion. Owner and Developer shall continue to allow access through the Property from the residential property located at 17140 US Highway 27, Clermont, Florida 34715, more particularly identified as Lake County Parcel Number 06-22-26-0003-000-06600 and Alternate Key 1066549, as a method for ingress and egress, and no barriers shall be erected to impede that residential property owner's access.

12. **Utilities.** Owner and its successors and assigns shall obtain water, reuse water, and wastewater service (collectively, "Utilities") exclusively from the City when available. No private wells

or private water or wastewater treatment facilities are permitted without the City's prior written approval through a separate agreement. At Owner's sole expense, Owner shall construct all on-site utility facilities, pay for extensions from the City's available point of connection, and extend all required utilities through the Property. All improvements shall comply with City requirements and shall be transferred to the City as contributions in aid of construction when accepted by the City. Owner shall dedicate a twenty-foot (20') utility easement to the City along and outside the future right-of-way of U.S. Highway 27, as identified by FDOT, graded at a 10:1 slope. Landscaping within the easement shall not interfere with City utilities, as determined by the City, and shall be removed and replaced at Owner's expense when required for utility installation, operation, or maintenance. Any lift station shall be privately maintained unless and until accepted by the City and shall be sized to serve the entire development. All businesses shall comply with pretreatment and testing requirements established by the City.

13. **Impact Fees; Utility Capacity.** Owner shall pay all applicable impact fees, including water and wastewater, fire rescue, police, recreation, and any impact fees adopted after execution of this Agreement, at the rates in effect when payment is due. Payment or prepayment of impact fees does not reserve water, wastewater, or other utility capacity. Capacity may be reserved only under a separate written capacity-reservation agreement approved by the City. Owner acknowledges that no capacity has been reserved and assumes the risk that capacity may not be available when requested. Owner acknowledges that the City's available wastewater treatment and transmission capacity is limited. Nothing in this Agreement constitutes a representation, warranty, commitment, or reservation by the City that water or wastewater capacity is presently available or will be available when requested. Development shall not proceed beyond the level supportable by capacity actually availableand allocated by the City at the time service is requested. The City shall have no obligation to expand its utility facilities, reserve capacity, or prioritize the Property over other existing or proposed development. Owner shall acquire any required capacity through a separate written agreement approved by the City and shall be responsible for all improvements required to serve the Property. The City may deny or defer any site plan, building permit, certificate of occupancy, or other development approval requiring utility service unless sufficient capacity has been allocated in writing by the City to the applicable phase of development.

14. **Landscaping; Buffers; Irrigation.** Owner shall install and maintain the buffers shown on the Land Use Plan. Additionally, Owner shall install and maintain a thirty-five-foot (35') Class C buffer and tiered walls of no more than six feet (6') in height each in a manner sufficient to substantially screen views of the development from the residences located along the north side of Quail Valley Estates.

Owner shall incorporate drought-tolerant, Florida-Friendly, and Florida native plant materials into all common area landscaping to the greatest extent practicable to minimize irrigation requirements and promote water conservation. Landscaping design shall be substantially consistent with the principles of Florida-Friendly Landscaping, the Florida Native Plant Society's recommendations for native plant usage, the City's New Yard Pattern Book, and other recognized water-conservation and sustainable landscaping practices. Owner shall install, or cause to be installed, rain sensors on automatic irrigation systems within the common areas of the Property. Further, Owner agrees that any declaration of restrictive covenants applicable to the Property shall permit landscaping installations that are in accordance with the requirements of this Section and shall require the installation of rain sensors on all automatic irrigation systems.

All landscaping located within the common areas of the Property shall be maintained by the Owner and/or POA. Such maintenance shall include, without limitation, the replacement and replanting

of any landscaping that dies, becomes unsightly, is damaged, or is removed for any reason, all at the sole expense of the Owner and/or POA.

15. **Environmental.** Owner will comply with all local, state, regional, and federal requirements regarding any environmental issues affecting the Property. Moreover, Owner agrees to use all reasonable efforts to preserve on site or to relocate any gopher tortoises on the Property and to not seek an incidental take permit without first obtaining the consent of City. Owner acknowledges that City has adopted Ordinance 2006-22, which provides for specific requirements and protections relating to listed species, and agrees that it shall comply with such ordinance. No construction or development activity shall occur within a floodplain except as specifically authorized through the applicable City and SJRWMD permitting processes, including any required compensating storage.

16. **Grading**. Except for the specific modifications stated in this Section, all grading and retaining walls shall comply with the City's LDRs. Grading shall be allowed to a maximum of fifteen feet (15'), except that localized cut and fill areas not exceeding sixteen feet (16') shall be permitted without requiring a variance. Retaining walls shall not exceed six feet (6'). Retaining walls shall consist of gray segmental block walls, Big Block gravity walls, or a combination thereof. Any grading tracts shall allow lots to be as level as possible while complying with City's grading limitations and accounting for topographic changes within the grading tracts. Any such tracts shall be landscaped and maintained by Owner or the POA in such a manner as to prevent erosion, and such maintenance shall include, but is not limited to, the replacement and replanting of any trees and/or shrubs that die, become unsightly, or are removed for any reason.

17. **Stormwater Management**. Owner agrees to provide, at Owner's expense, a comprehensive stormwater management system consistent with all regulatory requirements of the City and the St. John's River Water Management District ("SJRWMD"). Impacts to flood plains are allowed in accordance with the SJRWMD procedures for compensating storage and will be based on the 100-year floodplain established by FEMA.

18. **Other Municipal Facilities; Services**. The City hereby agrees to provide, either directly or through its franchisees or third-party providers, police and fire protection, emergency medical services, and solid waste collection, disposal, and recycling services to the Property under the same terms and conditions and in the same manner as are afforded to all other property owners within the City.

19. **Concurrency**. Owner shall comply with all applicable concurrency requirements pursuant to the City's LDRs. A complete concurrency study conforming to the City's LDRs will be required prior to any preliminary plat approvals or construction plan approvals. Owner shall ensure that all traffic concurrency studies conducted reflect all planned and approved development in the area.

20. **Signage.** Owner shall ensure that all signage for the Property is located upon lands owned by either Owner or the POA and complies with the City's Code and LDRs.

21. **Compliance with City Laws and Regulations**. Except as expressly modified herein, all development of the Property shall be subject to the regulations of county, state, and federal agencies, as well as with the City LDRs and City Code provisions, as such City LDRs and City Code provisions exist at the time of the execution of this Agreement. The City may apply subsequently enacted LDRs and City

Code provisions to the Property in accordance with section 163.3233, Florida Statutes, or as may be otherwise agreed to in writing by Owner.

22. **Entire Agreement**. This Agreement constitutes the entire agreement between the parties with respect to the transactions contemplated herein, and it supersedes all prior understandings or agreements between the parties relating to this Agreement.

23. **Successors and Assigns**. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

24. **Waiver; Modification**. The failure by any party to insist upon or enforce any of their rights shall not constitute a waiver thereof and nothing shall constitute a waiver of any party's right to insist upon strict compliance with the terms of this Agreement. Any party may waive in writing the benefit of any provision or condition for its benefit which is contained herein. No oral modification of this Agreement shall be binding upon the parties and any modification must be in writing and signed.

25. **Binding Effect; Assignability.** This Agreement, once effective, shall bind and benefit the parties and their respective successors and permitted assigns and shall run with the land. Owner may assign this Agreement to a successor acquiring all of Owner's interest in the Property only if the successor assumes all obligations under this Agreement in a written instrument recorded in the Public Records of Lake County and delivered to the City. Any partial assignment or assignment not accompanying a conveyance of the applicable portion of the Property requires the City's prior written consent. No assignment releases Owner from obligations arising before the effective date of the assignment.Owner consents to the placement of a claim of lien on the Property upon default without limiting any other City remedy. In addition to all other available remedies, the City may withhold, suspend, or decline to issue development approvals, permits, inspections, or certificates of occupancy for any portion of the Property while a material violation of this Agreement remains uncured. The City may also seek injunctive relief or specific performance.

26. **Development Approvals**. This Agreement shall, in no manner, constitute development approval from the City regarding the Property.

27. **Governing Law**. This Agreement shall be governed by and construed under the laws of the State of Florida and venue for any dispute arising out of this Agreement is the appropriate court in Lake County, Florida.

28. **Notices**. Any notices which may be permitted or required hereunder shall be in writing and shall be deemed to have been duly given as of the date and time the same are personally delivered, transmitted by facsimile, or within three (3) days after depositing with the United States Postal Service, postage prepaid by registered or certified mail, return receipt requested, or within one (1) day after depositing with an overnight delivery service from which a receipt must be obtained, and addressed as follows:

TO CITY: City of Minneola
800 U. S. Highway 27
Minneola, FL 34715
Telephone: (352) 394-3598

	Email: mjohnson@minneola.us
With a copy to:	Stone & Gerken, P.A. 4850 N. Highway 19A Mount Dora, FL 32757 Telephone: (352) 357-0330 Email: scott@stoneandgerken.com
TO OWNER:	Grassy Lake Holdings, LLC 339 Broadway Avenue Orlando, Florida 32803 Email: MStacy@cfb-inc.com
With a copy to:	Annil C. Sawh 15502 Campden St Winter Garden, Florida 34787
TO DEVELOPER:	Pelican Industrial 436 E 36th St Charlotte, NC 28205 Telephone: (843) 469-2517 Email: dthigpen@pelindustrial.com
With a copy to:	Bret Jones, P.A. 700 Almond Street Clermont, FL 34711 Telephone: (352) 394-4025 Email: bjones@bretjonespa.com

29. **Attorney's Fees**. In the event of any dispute hereunder for any action to interpret or enforce this Agreement, any provision hereof or any matter arising herefrom, the prevailing party shall be entitled to recover its reasonable costs, fees and expenses, including, but not limited to, witness fees, expert fees, consultant fees, attorney, paralegal and legal assistant fees, costs and expenses and other professional fees, costs, and expenses whether suit be brought or not, and whether in settlement, in any declaratory action, at trial or on appeal.

30. **Term of Agreement.** The term of this Agreement shall commence on the latest of: (i) execution by the City and Owner; (ii) Owner's acquisition of legal title to the FDOT Parcel by recorded deed; (iii) annexation of the FDOT Parcel into the City; (iv) the effective date of all applicable comprehensive plan and zoning amendments; and (v) recording of this Agreement (the "Commencement Date"). The Agreement shall terminate thirty (30) years after the Commencement Date unless extended by mutual written agreement following the public hearings required by section 163.3225, Florida Statutes. If the Commencement Date has not occurred within two (2) years after the Execution Date, this Agreement shall automatically terminate unless extended by written agreement approved by the City.

31. **Exhibits**. All exhibits attached hereto are hereby incorporated in and made a part of this Agreement as if set forth in full herein.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties have set their hands and seals this _____ day of _____, 2026.

CITY OF MINNEOLA, FLORIDA,
a Florida Municipal Corporation

Attest:

By: _____

Name:_____

_____
Kristine Thompson, City Clerk

Its: _____

Date: _____

Date: _____

Approved as to form:

_____
Scott A. Gerken, City Attorney

Signed, sealed and delivered in our presence:

GRASSY LAKE HOLDINGS, LLC, a Florida limited liability company

_____
Witness: _____
Address: _____
_____

By: Major Stacy Holdings, LLC, a Florida limited liability company, as Authorized Member of Grassy Lake Holdings, LLC

_____
Witness: _____
Address: _____
_____

By: _____
Major Stacy, P.E., Manager of Major Stacy Holdings, LLC

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was acknowledged before me by means of [_] physical presence or [_] online notarization this _____day of _____, 2026, by Major Stacy, P.E., as Manager of Major Stacy Holdings, LLC, as Authorized Member of Grassy Lake Holdings, LLC, who is [_] personally known to me or [_] has produced _____as identification.

(SEAL)

_____
Notary Public, State of _____
Print Name: _____
My Commission Expires: _____

Signed, sealed and delivered in our presence:

GRASSY LAKE HOLDINGS, LLC, a Florida limited liability company

_____
Witness: _____
Address: _____
_____

By: Absolute Property Solutions LLC, a Florida limited liability company, as Authorized Member of Grassy Lake Holdings, LLC

By: _____
Jason Edwards, Manager of Absolute Property Solutions

_____
Witness: _____
LLC Address: _____
_____

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was acknowledged before me by means of [_] physical presence or [_] online notarization this _____ day of _____, 2026, by Jason Edwards, as Manager of Absolute Property Solutions LLC, as Authorized Member of Grassy Lake Holdings, LLC, who is [_] personally known to me or [_] has produced _____as identification.

(SEAL)

_____
Notary Public, State of _____
Print Name: _____
My Commission Expires: _____

EXHIBIT "A"
PROPERTY DESCRIPTION

FDOT PARCEL:

THAT PART OF: THE SOUTH 12.7 ACRES LYING E OF THE COUNTY ROAD, IN THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST", LYING IN LAKE COUNTY, FLORIDA LYING WITHIN 220 FEET E OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200; S OF STATION 64+90.00 AND N. OF STATION 61+70.00 SAID SURVEY LINE AND SAID STATIONS BEING DESCRIBED AND LOCATED AS FOLLOWS: BEGIN ON THE N LINE OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, T22S, R26E, AT A POINT 405.38 FEET E OF THE NW CORNER OF SAID NW 1/4 OF THE SW 1/4 THENCE RUN S 13 DEGREES 58'00" E, A DISTANCE OF 912.54 FEET TO STATION 64+90.00; THENCE CONTINUE S 13 DEGREES 58'00" E, A DISTANCE OF 320 FEET TO STATION 61+70.00; THENCE CONTINUE S 13 DEGREES 58'00"E, A DISTANCE OF 100 FEET.

CONTAINING 48,640 SQ. FT. (1.199 ACRES), MORE OR LESS, EXCLUSIVE OF ROAD RIGHT OF WAY.

CITY PARCELS:

PARCEL 1 (Lake County Alternate Key 1031265):

THAT PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY. FLORIDA LYING EAST OF THE EASTERLY LINE OF THE RIGHT-OF-WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27). LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.

THE ABOVE PROPERTY IS ALSO DESCRIBED AS FOLLOWS:

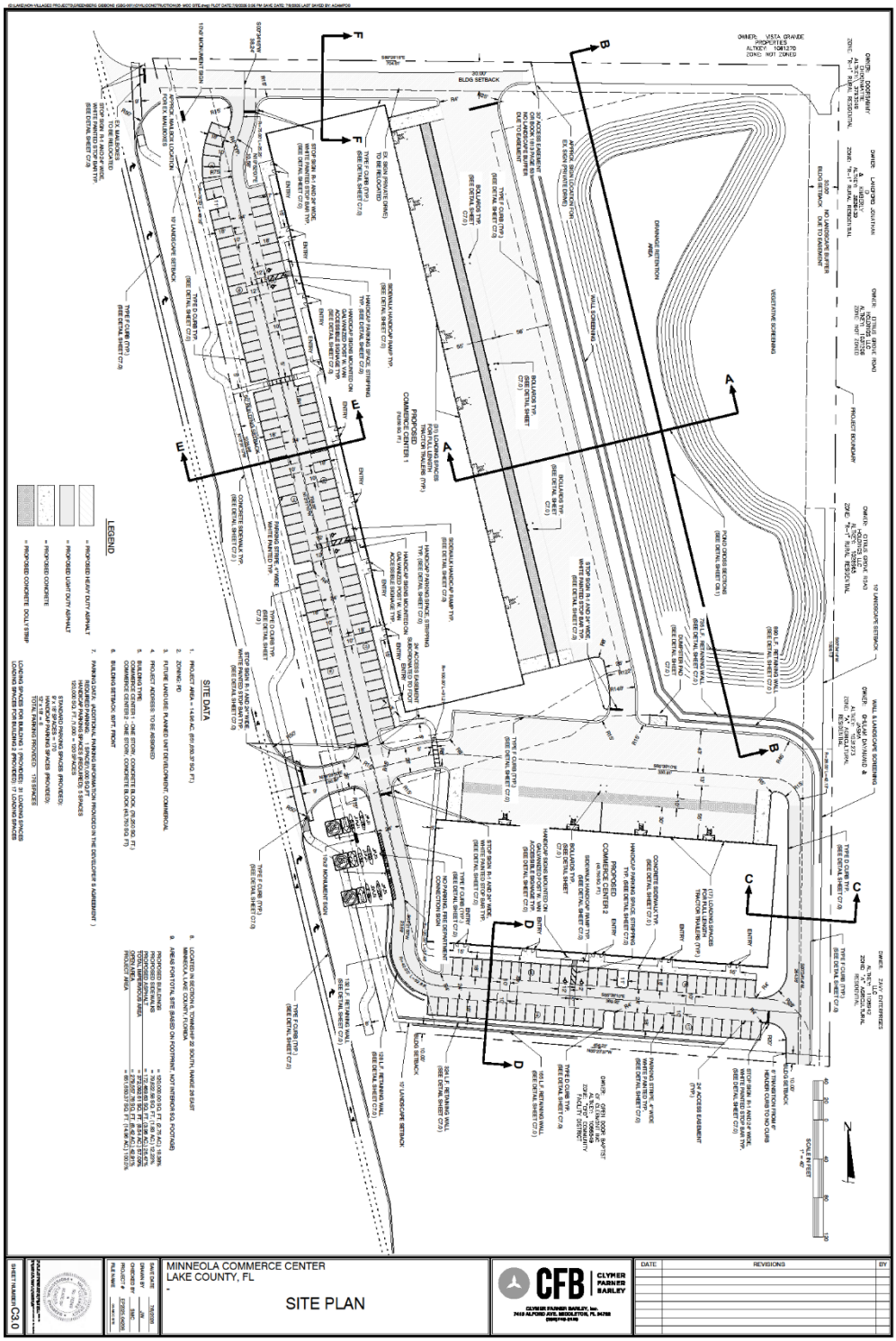
BEGIN AT THE SOUTHEAST CORNER OF THE NW 1/2 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THENCE N.00 DEGREES 09'20" E. ALONG THE EAST BOUNDARY OF THE SAID NW 1/4 OF THE SW 1/4, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NW 1/4 OF THE SW 1/4, THENCE N. 89 DEGREES 50'01" W. ALONG THE SAID SOUTH BOUNDARY, 704.47 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), THENCE S. 14 DEGREES 00'27" E. ALONG SAID EASTERLY RIGHT-OF-WAY LINE 307.47 FEET TO THE NORTHWESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THENCE N. 75 DEGREES 59'33" E. 152 FEET TO THE NORTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 14 DEGREES 00'27" E. 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 75 DEGREES 59'33" W. 152.00 FEET TO THE AFORESAID EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25, THENCE S.

14 DEGREES 00'27" E. ALONG THE SAID RIGHT-OF-WAY LINE 146.26 FEET TO THE SOUTH BOUNDARY OF THE AFORESAID NW 1/4 OF THE SW 1/4 OF SECTION 6, THENCE S. 89 DEGREES 39'42" E. ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.

PARCEL 2 (Lake County Alternate Key 1031281):

BEGINNING 1044.05 FEET N OF SE CORNER OF SW 1/4 OF SW 1/4, SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN N 85 DEGREES 58' W TO RIGHT-OF-WAY OF HIGHWAY; THENCE NWLY ALONG SAID RIGHT-OF-WAY TO N LINE OF SAID SW 1/4 OF SW 1/4, THENCE E TO NE CORNER OF SAID SW 1/4 OF SW 1/4, THENCE S TO POINT OF BEGINNING.

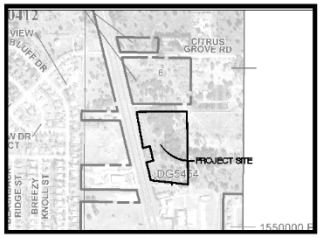
EXHIBIT "B"
LAND USE PLAN



LOCATION MAP

SECTIONS 6 TOWNSHIP 22S RANGE 26E
SCALE: 1" = 1,000'
LATITUDE 28° 32' 04"N
LONGITUDE 81° 38' 07"W

FLOOD MAP



FLOOD MAP – 12069C0385E, DATED 12/18/2012
ZONE X
SCALE: 1" = 1,000'

U.S. 27 MIXED USE PD

LAND USE PLAN

US HWY 27 CLERMONT FL 34715

PARCEL ID # 06222600030000470O,6300

PREPARED FOR

GRASSY LAKE HOLDINGS, LLC

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
C-1.0	COVER SHEET
C-2.0	LAND USE PLAN
C-3.0	ARCHITECTURAL STYLES

LEGAL DESCRIPTION (PROVIDED BY CLIENT IN COMMITMENT FOR TITLE INSURANCE)

PARCEL 1

THAT PORTION OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, LYING EAST OF THE EASTERLY RIGHT-OF-WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), LESS AND EXCEPT THE NORTH 578 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.

THE ABOVE DESCRIBED PROPERTY IS ALSO DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA; THENCE NORTH 00°06'21" EAST ALONG THE EAST BOUNDARY OF THE SAID NORTHWEST 1/4 OF THE SOUTHWEST 1/4, A DISTANCE OF 1320.78 FEET TO THE SOUTH BOUNDARY OF THE NORTH 578 FEET OF THE SAID NORTHWEST 1/4 OF THE SOUTHWEST 1/4; THENCE NORTH 89°59'05" WEST ALONG THE SAID SOUTH BOUNDARY, 1314.84 FEET TO THE EASTERLY RIGHT-OF-WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27); THENCE SOUTH 00°06'21" EAST ALONG SAID EASTERLY RIGHT-OF-WAY LINE 1021.47 FEET TO THE NORTHWESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA; THENCE NORTH 78°06'13" EAST, 153 FEET TO THE NORTHEASTERLY CORNER OF SAID RETENTION AREA; THENCE SOUTH 14°00'12" EAST, 190 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA; THENCE SOUTH 75°59'13" WEST, 152.90 FEET TO THE AFORESAID EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25; THENCE SOUTH 14°00'12" EAST ALONG THE SAID RIGHT-OF-WAY LINE 148.08 FEET TO THE SOUTH BOUNDARY OF THE AFORESAID NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 6; THENCE SOUTH 89°59'10" EAST ALONG THE SAID SOUTH BOUNDARY, 1314.18 FEET TO THE POINT OF BEGINNING.

THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA WHICH IS NOT INCLUDED HEREIN IS DESCRIBED AS FOLLOWS:

THAT PART OF THE SOUTH 18.7 ACRES LYING EAST OF THE COUNTY ROAD, IN THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LYING IN LAKE COUNTY, FLORIDA, LYING WITHIN 330 FEET EAST OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11060, SOUTH OF STATION 644+80.06 AND NORTH OF STATION 674+70.06 SAID SURVEY LINE AND SAID 330 FOOT BEING DESCRIBED AND LOCATED AS FOLLOWS:

BEGIN ON THE NORTH LINE OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26, EAST, AT A POINT 405.38 FEET EAST OF THE NORTHWEST CORNER OF SAID SOUTHWEST 1/4 OF SOUTHWEST 1/4; THENCE RUN SOUTH 13°58'00" EAST, A DISTANCE OF 1148.00 FEET TO A POINT; THENCE CONTINUE SOUTH 13°58'00" EAST, A DISTANCE OF 339 FEET TO STATION 674+70.06; THENCE CONTINUE SOUTH 13°58'00" EAST, A DISTANCE OF 198 FEET.

PARCEL 2:

BEGINNING 1044.55 FEET NORTH OF SOUTHEAST CORNER OF SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST; RUN NORTH ALONG WEST TO POINT OF RIGHT-OF-WAY OF HIGHWAY; THENCE NORTHEASTERLY ALONG SAID RIGHT-OF-WAY TO NORTH LINE OF SAID SOUTHWEST 1/4 OF SOUTHWEST 1/4; THENCE EAST TO NORTHEAST CORNER OF SAID SOUTHWEST 1/4 OF SOUTHWEST 1/4; THENCE SOUTH TO POINT OF BEGINNING.

PROJECT TEAM

OWNER/APPLICANT
GRASSY LAKE HOLDINGS, LLC
JASON EDWARDS
338 BROADWAY AVENUE
ORLANDO,FL 32803
PHONE: 407-960-5868

ENGINEER
B&S ENGINEERING CONSULTANTS, LLC
MAJOR STACY, P.E.
2221 LEE ROAD SUITE 17
WINTER PARK, FLORIDA 32879
PHONE: 407-960-5868

SURVEYOR
PEC SURVEY AND MAPPING,LLC
TRACY W. BIRCH, P.S.M. FL. REG. NO 5578
DAVID A. WHITE, P.S.M. FL. REG. NO 4044
2100 ALAFAYA TRAIL SUITE 203
OVIEDO, FL 32765
PHONE: 407-542-4967

UTILITY SERVICE PROVIDERS

WATER/SEWER/REUSE
CITY OF MINNEOLA UTILITIES DEPT.
18340 SCRUB JAY LANE
CLERMONT, FLORIDA 34755
PHONE: 352-536-4162

TELEPHONE
CENTURY LINK
P.O. BOX 770339
WINTER GARDEN, FL 34777
PHONE: 407-814-5373

NATURAL GAS
LAKE APOPKA NATURAL GAS
615 W. MONTROSE ST.
CLERMONT, FL 34711
PHONE: 352-394-3480

ELECTRIC
DUKE ENERGY
451 E. CROWN POINT RD.
WINTER GARDEN, FL 34787
PHONE: 407-905-3102

CABLE
BRIGHT HOUSE
8441 MAGGIORE ROAD
OCOEE, FL 34761
PHONE: 407-291-2500

Call 48 hours before you dig
It's the Law! 1-800-432-4770
Sunshine State One Call of Florida, Inc.

LAND USE PLAN

NO.	DESCRIPTION	DATE
1	FINAL	

GRASSY LAKE HOLDINGS, LLC-U.S. 27 MIXED USE PD
MINNEOLA LAKE COUNTY, FLORIDA

COVER SHEET

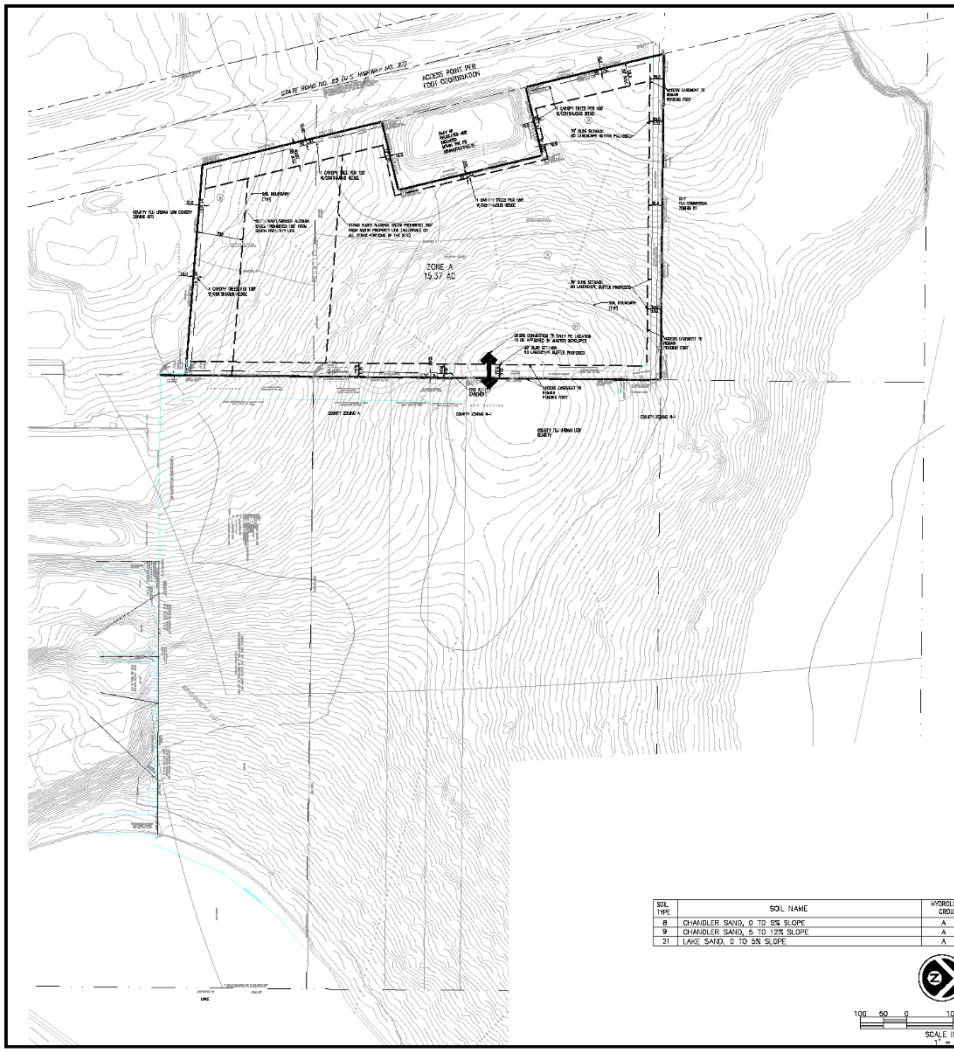
B&S ENGINEERING CONSULTANTS, LLC
2221 Lee Road, Ste. 17
Winter Park, FL 32789
(407) 366-5868
Board of Professional Engineers Certificate No. 28873

JOB No.:	M.S.-33
DESIGNED BY:	JDD
APPROVED BY:	MLS
DATE:	Value
SHEET:	C-1.0

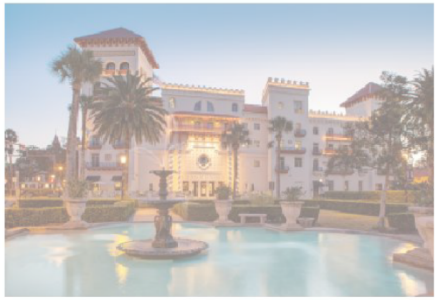
NOT FOR CONSTRUCTION UNLESS SIGNED AND SEALED

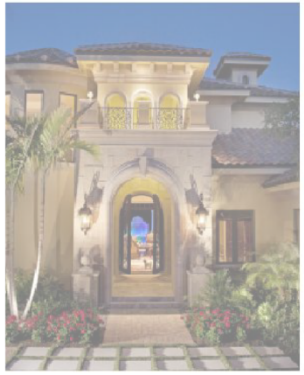
MAJOR LEE STACY, P.E.
REGISTRATION No. 70599

DATE:


ACCESS POINT PER
CDOT COORDINATION
ZONE A
15.37 AC
SOIL BILLBOARD
(TYP)
SOIL BILLBOARD
(TYP)
SOIL BILLBOARD
(TYP)
4' CHAIN LINK FENCE
4' CHAIN LINK FENCE
4' CHAIN LINK FENCE

Mediterranean/Florida Vernacular Style





LAND USE PLAN

REV.	DATE	DESCRIPTION

GRASSY LAKE HOLDINGS, LLC-U.S. 27 MIXED USE PD
MINNEOLA, LAKE COUNTY, FLORIDA

ARCHITECTURAL STYLES

B&S
ENGINEERING CONSULTANTS, LLC
2221 Lee Road, Ste. 17
Winter Park, FL 32789
(407) 540-9900
Board of Professional Engineers
Certificate No. 29670

JOB No:	M.S.-03
DESIGNED BY:	JW
APPROVED BY:	M.S.
DATE:	Value
SHEET:	C-3.0

NOT FOR CONSTRUCTION
UNLESS SIGNED AND SEALED

MAJOR LEE STACY, P.E.
REGISTRATION No. 75529

DATE:

FIRST AMENDMENT TO DEVELOPMENT AGREEMENT

This First Amendment to Development Agreement (this "**Agreement**") is made this ____ day of _____, 20_____ (the "**Effective Date**"), by and between the **CITY OF MINNEOLA, a Florida municipal corporation** ("**City**"), whose address is 800 N. U.S. Highway 27, Minneola, Florida 34715, and **Grassy Lake Holdings, LLC** ("**Owner**"), whose address is 339 Broadway Avenue Orlando, Florida 32803.

RECITALS

WHEREAS, the City and Owner entered into that certain Development Agreement dated October 18, 2018, and recorded in Official Records Book 5198 Page 628-641 of the Public Records of Lake County, Florida (the "**Development Agreement**"); and

WHEREAS, the parties desire to amend certain provisions of the Development Agreement as set forth herein while ratifying and affirming all remaining terms and conditions thereof; and

WHEREAS, the property consists of approximately 1.199 +/- acres located in unincorporated Lake County, Florida (the "**FDOT Parcel**") and 13.32 +-/ acres in the City (Lake County Parcel ID Numbers 06-22-26-0003-000-04700 and 06-22-26-0003-000-06300, collectively, the "**City Parcels**"), as more particularly described and depicted in **Exhibit "A"** attached hereto and incorporated by reference (collectively, the "**Property**"); and

WHEREAS, the City Parcels have a zoning designation on the City Zoning Map of "Planned Development, Commercial" and a future land use designation on the City of Minneola Future Land Use Map of "Planned Development, Commercial"; and

WHEREAS, the FDOT Parcel is currently owned by the Florida Department of Transportation ("**FDOT**"). Owner is in the process of acquiring the FDOT Parcel and seeking its annexation into the City, together with a comprehensive plan amendment and rezoning; and

WHEREAS, Owner has filed applications for annexation, rezoning, and comprehensive plan amendment for the FDOT Parcel, and if such applications are approved, the proposed development shall be consistent with the City's Comprehensive Plan, Land Development Regulations (the "**LDRs**"), and this Agreement; and

WHEREAS, Owner has the full power and authority to make, deliver, enter into, and perform pursuant to the terms and conditions of this Agreement and has taken all necessary action to authorize the execution, delivery, and performance of the terms and conditions of this Agreement; and

WHEREAS, the City has determined that the annexation of the FDOT Parcel and the overall development of the Propery presents, among other things, an opportunity for the City to secure quality planning and growth and a strengthened and revitalized tax base; and

WHEREAS, Owner will fund certain public improvements and infrastructure to facilitate the development of the Property; and

WHEREAS, Pelican Industrial ("**Developer**") has been authorized by the Owner to seek the approvals contemplated by this Agreement and to develop the Property in accordance with the terms and conditions set forth herein; and

WHEREAS, Owner and City believe that it is in the best interest of each party to enable the Property to be developed as further described herein, in accordance with Part II of Chapter 163, Florida Statutes, the "Local Government Comprehensive Planning and Land Development Regulation Act" (the "**Act**"), other applicable Florida Law and the Charter and Code of Ordinances of the City of Minneola, Florida; and,

WHEREAS, Owner and City agree that this Agreement shall constitute an Agreement in accordance with the Florida Local Government Development Agreement Act, Sections 163.3220-163.3243, Florida Statutes.

NOW, THEREFORE, in consideration of mutual covenants and representations set forth herein and other valuable consideration, the receipt of which is acknowledged, the parties agree as follows:

1. **Recitals**. The above recitals are true and correct and are incorporated herein by reference.

2. **Authority**. This Agreement is entered into under the authority of the City's Code and under the Florida Local Government Development Agreement Act, Sections 163.3220-163.3243, Florida Statutes. This Agreement has been approved at two public hearings as mandated which were held on _____ and _____.

3. **Land Use; Development.** Development of the Property shall be substantially consistent with the land use plan prepared by _____, attached hereto as **Exhibit "B"** (the "**Land Use Plan**"). Except as otherwise provided in this Agreement or the Land Use Plan, development of the Property shall be consistent with City's Planned Unit Developments zoning district, the B-1 zoning district, and and the City's Grassy Lake Holdings Mixed Use Commercial Development future land use category, subject to City approval after public hearings and Florida Department of Economic Opportunity ("**DEO**") approval. As set forth further below, all land use issues addressed herein must be adopted by City through its regular procedures and approved by DEO before being effective.

4. **Permitted Uses**. The following uses shall be permitted on the Property, subject to applicable site development plan approval, permitting requirements, and any additional conditions set forth herein:

(i) All uses permitted within the City's B-1 zoning district as of the Effective Date of this Agreement, together with all uses expressly set forth in this Section 4, regardless of whether such uses are later amended, renamed, reclassified, limited, or removed from the B-1 zoning

district, provided such uses otherwise comply with the terms of this Agreement and applicable state and federal law.

(ii) All light industrial, warehouse, logistics, distribution, fulfillment, flex-space, office, showroom, research and development, contractor, trade, repair, assembly, wholesale, business service, commercial service, and accessory retail and food-service uses of every type and nature, whether now existing or developed in the future, as those terms are generally understood in accordance with their ordinary and customary meanings, including, without limitation, the following:

a) Uses involving the manufacturing, processing, fabrication, assembly, production, finishing, treatment, packaging, repackaging, repair, refurbishment, research, testing, storage, handling, or other light industrial or flex industrial use of goods, materials, equipment, products, or components, together with any activities customarily incidental or accessory thereto.

b) Uses involving the receipt, storage, inventory management, handling, packaging, repackaging, fulfillment, pick-and-pack operations, cross-docking, cold storage, staging, or shipment of goods, materials, products, equipment, or merchandise, together with any activities customarily incidental or accessory thereto.

c) Uses involving the receipt, sorting, consolidation, deconsolidation, transfer, dispatch, logistics, transportation coordination, courier activity, fleet support, fulfillment, or distribution of goods, materials, products, equipment, or merchandise by any lawful means, together with any activities customarily incidental or accessory thereto; provided, however, that nothing herein shall be construed to permit an airport, rail yard, seaport, solid-waste landfill, or similar major transportation or heavy-industrial use not otherwise consistent with the Land Use Plan.

d) Uses involving executive, administrative, professional, governmental, financial, medical, scientific, engineering, technological, educational, training, research, design, sales, marketing, customer service, or other business operations, together with any activities customarily incidental or accessory thereto.

e) Uses involving the provision of services to businesses, industries, governmental entities, or the general public, including business, contractor, trade, maintenance, repair, installation, equipment rental, financial, hospitality, food service, personal, and other commercial services, together with any activities customarily incidental or accessory thereto.

f) Without limiting the generality of the foregoing, the industry sectors and representative uses classified under the following North American Industry Classification System ("**NAICS**") sectors and code families, and any successor, replacement, recodified, renumbered, or equivalent classification thereof, shall be permitted uses on the Property:

1) Sector 23 - Construction, including general contractors, building equipment contractors, specialty trade contractors, and related office, storage, showroom, fabrication, assembly, fleet, and contractor-yard functions conducted within enclosed buildings or customary screened outdoor areas;

2) Sectors 31-33 - Manufacturing, including without limitation food manufacturing; beverage manufacturing; apparel and textile product manufacturing; wood product manufacturing; printing and related support activities; chemical and allied product manufacturing to the extent lawful and not constituting a hazardous waste treatment, storage, or disposal facility; plastics and rubber products manufacturing; nonmetallic mineral product manufacturing; fabricated metal product manufacturing; machinery manufacturing; computer and electronic product manufacturing; electrical equipment, appliance, and component manufacturing; transportation equipment manufacturing; furniture and related product manufacturing; medical device manufacturing; and miscellaneous manufacturing;

3) Sector 42 - Wholesale Trade, including merchant wholesalers, durable and nondurable goods distributors, building material distributors, industrial supply distributors, office and business supply distributors, equipment distributors, and showroom / warehouse combinations;

4) Sectors 44-45 - Retail Trade, but only to the extent such use is otherwise consistent with this Agreement, the B-1 uses incorporated herein, and the character of a shallow-bay industrial and flex commercial project, including accessory retail, showroom retail, trade-counter sales, convenience retail, and related sales and service uses;

5) Sectors 48-49 - Transportation and Warehousing, including general warehousing and storage, refrigerated warehousing and storage, other warehousing and storage, fulfillment centers, third-party logistics providers, moving and storage services, local messenger and courier services, and freight, dispatch, and logistics support operations;

6) Sector 53 - Real Estate and Rental and Leasing, including equipment rental, leasing offices, and storage-related leasing activities;

7) Sector 54 - Professional, Scientific, and Technical Services, including engineering services, architectural and design services, surveying and mapping, testing laboratories, product development, research and development, environmental consulting, and technology-oriented office and lab uses;

8) Sector 56 - Administrative and Support and Waste Management and Remediation Services, including business support services, facilities support services, security services, packaging and labeling services, call-support

operations, and non-hazardous waste-related services ancillary to on-site business operations, but excluding any landfill, transfer station, incinerator, or hazardous waste treatment, storage, or disposal facility;

9) Sector 61 - Educational Services, limited to vocational education, training centers, trade schools, learning centers, and other instructional uses otherwise compatible with the Property;

10) Sector 62 - Health Care and Social Assistance, limited to outpatient clinics, therapy offices, diagnostic services, and similar non-residential health care uses otherwise permitted by this Agreement;

11) Sector 72 - Accommodation and Food Services, limited to cafés, coffee shops, catering kitchens, food preparation uses, and only if otherwise expressly allowed herein as permitted or conditional uses; and

12) Sector 81 - Other Services (except Public Administration), including appliance repair, electronic repair, equipment repair, personal services, pet-related services, and similar service-commercial uses otherwise consistent with this Agreement.

(iii) The following additional uses, whether as principal uses, accessory uses, or components of mixed flex-space occupancy, subject to applicable site plan approval and permitting requirements:

a) Appliance/Electronic Repair Shop – A retail establishment offering for compensation the repair services of small appliances and electronic equipment, with such repair generally occurring on the premises.

b) Business Service – An establishment where the performance of duties related to business operations are provided within or outside the confines of such an establishment and may include, but not be limited to, business machine repair, computer service and repair, microfilming, secretarial and typing service, and telephone answering service.

c) Consumer Services and Repair – An establishment engaged in the repair of household appliances, furniture, and similar items, excluding repair of motor vehicles. Typical uses include apparel repair and alterations, appliance repair, bicycle repair, clock and watch repair, furniture repair and reupholsters, shoe repair. Establishments for the drop off of personal apparel to be cleaned at another location only, diaper service offices only (laundering to be performed at another location,) carpet cleaning services drop off only or rental of equipment for installed carpet.

d) Health/Exercise Club – An establishment which provides for athletic and physical force training or health and recreational exercise. This term may include, but is not limited to, the terms "aerobics instruction," "dance instruction," "fitness center," "gymnasium (private)," "gymnastics school," "karate," "martial arts," "self-defense instruction," and "weight room."

e) Medical Office/Clinic – Establishment where the diagnosis and treatment of human patients occurs without the provision of overnight care facilities and may include, but not be limited to, the services of acupuncture, alcoholism counseling, chiropractor, dental office and clinic, family planning, medical doctor office, mental health clinic, occupational therapist, speech and language pathologist, walk-in medical center, and weight control service.

f) Office – An establishment where services are performed involving predominantly administrative, professional, or clerical operations for a business, government, industry, profession or service and are allowed under the B-1 zoning.

g) Office Complex – Any office development containing three or more tenant spaces that are under common land ownership or that share common property frontage and are allowed under the B-1 zoning.

h) Office Supply – An establishment which offers the sale of materials predominantly used by the office community and may include, but not be limited to, the sale of accounting and bookkeeping materials, business forms, systems, and machines, computer equipment and supplies, inserting and mailing machines, office furniture, and typewriters.

i) Personal Service – An establishment which provides for the care of a person or a person's apparel, and may include, but not be limited to, beauty shop/barber shop, nail salon, tanning salon, alterations, and shoe repair. Personal services shall also include drop-off only establishments for laundry and dry cleaning services.

j) Professional Office – An establishment providing executive , management, administrative, or professional services, but not including medical or dental services or the sale of merchandise, except at incidental to a permitted use. Typical uses include offices for accountants, economic consultants and stockbrokers; attorneys; engineers, architects, surveyors, draftsmen, industrial designing, model making, planners, sculptors and artists, editorial and general designing, ceramic arts, and photographers; advertising agencies, insurance, real estate and/or escrow or abstract offices; secretarial and telephone answering services; and mortuaries and funeral homes.

k) Retail, Convenience – An establishment serving a limited market area and engaging in the retail sale or rental, from the premises, of frequently or recurrently needed items for household use. Typical uses include, but are not limited to, drugstores, apparel and cosmetic stores, bookstores, newsstands, flower shops, video rental stores.

l) Retail Sales or Services – An establishment engaged in the selling of products and services to the public for personal or household consumption, including, but not limited to, newsstand/bookstore, xerographic printing, clothing stores, drugstores, home electronic equipment, food/grocery stores, and sporting goods.

m) Adult/Vocational Education – An establishment for the instruction or guidance in an occupation, profession, civic activity or art form, and may include, but not be limited to, the teaching of a trade apprenticeship, acting-drama, citizenship, cooking, and music and voice. Division 12. Sec. 102-342 of the Code of Minneola applies.

The following uses shall be permitted as conditional use or special exception uses upon approval by the City Council, in accordance with otherwise applicable City procedures, except that no separate amendment to this Agreement shall be required solely because a listed use is pursued as a conditional use or special exception:

(i) Commercial Recreation Facility – An establishment which provides indoor or outdoor opportunities for casual entertainment by patrons of all ages, and may include, but not be limited to, an amusement park, bingo club, bowling alley, game room, go-cart track, miniature golf, pool hall, skateboard park, skating rink and video games; however if the facility includes a video arcade, it may not constitute more than 40 percent of the included activities.

(ii) Day Care Center – An arrangement or establishment which provides child care for more than five children unrelated to the operator, for compensation, and for a period of less than 24 hours. Such a facility must be licensed by the State Department of Health and Rehabilitative Services and comply with their requirements, pursuant to F.S. § 402.305, or as amended. This term may include, but not be limited to, child-care center, day care services, day nurseries, kindergartens, nursery school, playschool and preschool.

(iii) Gun Range – A facility, including accessory buildings, for shooting by sportsmen located indoors.

(iv) Kennel, Boarding – Premises which provide for the boarding of more than three domesticated animals, whether for profit or personal use and does not include pet day care and boarding facilities, as defined herein.

(v) Kennel, Breeding – Premises which provide for the breeding, buying, raising or selling of more than three domesticated animals, whether for profit or personal use.

(vi) Laboratory/Research and Development - An establishment engaged in the investigation, testing, and experimentation of the natural, physical, or social sciences, or engaged in engineering and development as an extension of investigation with the objective of creating products. This type of facility may include, but not be limited to asphalt and concrete testing, foundation testing, material testing, and soils, geology, and groundwater testing.

(vii) Learning Center - A learning center is an estagblishment that allows students to engage in activities that enrich their learning. Such activities could include but not be limited to reading or math tutoring.

(viii) Motor Vehicle, Boat Sales - An area used for the display, sale or rental of new or used motor vehicles and boats in operable condition and where no repair work is done. This must follow Chapter 18 of the Land Use Regulations.

(ix) Motor Vehicle Dealer Sales – An establishment for the sale of new or used vehicles together with on-premises repair facilities, including paint and body shop. This must follow Chapter 18 of the Land Use Regulations.

(x) Motor Vehicle Repair Facility – An establishment where major mechanical overhaul and repairs, paint and body work, or rebuilding of vehicle components is done.

(xi) Pet Day Care and Boarding Facilities – Personal service use facility where domesticated animals are supervised and cared for during the day, which is operated for the purpose of providing overnight lodging for domesticated animals, and is distinct from kennel, boarding, as defined herein.

(xii) Research Service – An Establishment engages in research of an industrial or scientific nature, other than medical testing and analysis and routine product testing, which is offered as a service or which is conducted by and for a private, profit oriented firm.

(xiii) Retail Home Building Materials – An establishment which offers for retail sale materials and equipment for home and garden construction and maintenance and may include but not be limited to, aluminum, cabinets, caulking material and equipment, garden supplies, and topsoil. Plant materials sold at such an establishment could be grown on premises in a field or greenhouse.

(xiv) Retail Nurseries and Garden Supplies – An establishment which offers to the public for retail sale plants and/or associated materials and may include, but not limited to, fences, fill material, firewood, gravel, sand, rock products, lawn and garden supplies, and topsoil. Plant material sold at such an establishment could be grown on the premises in a field or greenhouse.

(xv) Shopping Center – Any commercial building or development housing two or more tenants on a single ownership parcel.

(xvi) Veterinary Clinic – An establishment for the medical and surgical treatment of sick or injured animals where limited overnight facilities are provided in association with such treatment. This term may include, but not be limited to, the terms “veterinarian office," "veterinary hospital,” and “animal clinic,” but shall not include the term “kennel”.

(xvii) Wholesale Sales – An establishment who sells products primarily to consumers, but also to businesses, at discount prices. Items include, but are not limited to, food, bottle water, toiletries, prescription and non-prescription drugs, eye glasses, furniture, appliances, and tires.

(xviii) Wireless Antennas, Towers, and Equipment (Cell Towers). Chapter 130 Telecommunications in the City LDRs applies.

For the avoidance of doubt, any lawful use that is functionally consistent with the industrial, warehouse, logistics, distribution, fulfillment, office, showroom, contractor, research and development, wholesale, retail, restaurant, medical office, educational, service-commercial, or other uses described in this Section 4 shall be deemed a permitted use if such use: (A) falls within a NAICS sector, code family, successor code, or equivalent classification expressly identified herein; or (B) is reasonably determined by the City Manager or Planning Director to be substantially similar in character and impact to a use expressly listed herein. In the event of ambiguity, this Agreement shall be interpreted to permit, rather than prohibit, uses that are consistent with the overall character of the Property as a shallow-bay industrial and flex commercial development.

Notwithstanding anything herein to the contrary, the following shall not be permitted on the Property unless this Agreement is further amended in writing: solid waste landfills, hazardous waste treatment/storage/disposal facilities, junkyards, salvage yards, asphalt plants, concrete batch plants, mining operations, adult entertainment establishments, correctional facilities, truck stops, truck terminals serving as principal uses, airports, rail yards, and other heavy industrial uses materially inconsistent with the Land Use Plan.

5. **Development Standards**.

(i) Building Setback Minimums:

(a) West: 50 feet (50′)

(b) North: 30 feet (30′)

(c) East: 30 feet (30′)

(d) South: 10 feet (10′)

(ii) Landscape Buffers:

(a) West: 10 feet (10′)

(b) North: 0 feet (0′), as a result of the existing access easement.

(c) East: 10 feet (10′), except no landscape buffer shall be required within the existing access easement area.

(d) South: 10 feet (10′)

(iii) Maximum Height: Fifty feet (50')

(iv) Minimum Open Space: Twenty percent (20%)

(v) Parking. Parking shall be provided at a minimum ratio of one (1) parking space per 1,000 square feet of gross floor area. Additional parking may be provided in excess of the minimum required ratio, as determined appropriate by the Owner and/or Developer, and such additional parking shall not require a deviation, variance, amendment to this Agreement, or additional approval from the City. Parking lot landscape islands shall be required at intervals of no less than one (1) landscape island for every 20 parking spaces. The minimum parking space depth shall be seventeen feet (17'), provided an adjacent sidewalk or pedestrian area of sufficient width is provided to accommodate vehicle overhang.

6. **Design Standards.**

(i) Building Materials. The exterior elevations of all principal buildings visible from a public street or public right-of-way shall consist primarily of painted concrete tilt-wall panels, together with such complementary architectural materials, colors, and finishes as are approved through the applicable site development plan process. This requirement shall apply only to public street-facing and public right-of-way-facing building elevations and shall not apply to any loading dock walls or service areas, regardless of whether such loading dock walls or service areas are visible from a public street or public right-of-way.

(ii) Color Scheme. Building colors shall consist of a gray-toned color palette and shall be selected from one or more of the following Sherwin-Williams colors: Gray Shingle #7670, March Wind #7668, and Fleur De Sel #7666, as reflected on Owner's and/or Developer's approved finish board. If a listed Sherwin Williams paint color is unavailable, the City may approve alternate colors within the City's reasonable discretion, provided such substitute colors are consistent with the gray-toned color palette established herein.

(iii) Roofing. Thermoplastic polyolefin ("**TPO**") roofing systems shall be permitted on all principal and accessory structures within the Property. TPO roofing shall be deemed an approved roofing material for all buildings within the Property, provided such roofing is installed in accordance with applicable building codes and manufacturer specifications.

(iv) Dumpster Enclosures. Owner shall provide refuse receptacles on the Property in such locations as are approved by City within City's reasonable discretion. Refuse receptacles shall be adequately screened from view in a manner approved by the City. Acceptable screening methods include, but are not limited to, painted tilt-wall enclosures with metal gates. No brick, stone, or other architectural embellishments shall be required.

(v) Lift Stations. All lift stations shall be privately owned and maintained by Owner and/or Developer. Lift stations may be constructed of fiberglass or any other material that complies with applicable City standards and specifications. Concrete shall not be required.

7. **Walkability**. Walkability and pedestrian access shall be maximized through the site design, including the layout of buildings, parking areas, sidewalks, and pedestrian connections. Innovative site design features may be approved by the City's Planning Department, provided such features meet the intent of this Agreement and the City's LDRs. Examples include, but are not limited to, roundabouts, water features, rain gardens, and other low-impact development features.

8. **Conservation Methods**. Owner and/or Developer shall incorporate the following conservation measures into the design and development of all climate-controlled spaces within the Property, if applicable:

(i) Solar hot water heating systems for buildings with flat roofs and parapets, where feasible;

(ii) Digitally controlled HVAC systems utilizing separate temperature and humidity zones;

(iii) R-19 roof insulation within office areas and R-10 roof insulation within warehouse areas, with additional insulation as required for future tenant improvements;

(iv) Exterior Insulation and Finish Systems (EIFS), where applicable, to improve insulation efficiency;

(v) Low-flow plumbing fixtures and water-conserving, waterless, or flushless urinals, where appropriate for the proposed use;

(vi) All exterior glazing shall utilize Low-E glass with reflective tint, where practicable; and

(vii) Buildings shall incorporate extended roof overhangs, where practicable, to reduce solar heat gain.

9. **Property Owners' Association (POA).** A property owners association will be required for the Property. The POA will have the responsibility for all common area maintenance and facility ownership, including but not limited to maintenance of stormwater management areas and easements, drainage easements, sidewalks, trails within and adjacent to the Property, unpaved right-of-way and/or easements, lighting, and all internal roads.

10. **Lighting.** Owner and/or Developer shall install all exterior lighting for the Property as necessary to serve the development. Interior and exterior lighting fixtures shall utilize LED technology unless infeasible for the proposed use. All exterior lighting shall comply with dark sky lighting standards and be arranged to reflect light away from residences to the greatest extent possible while providing lighting adequate illumination for safety within the Property and adjacent rights-of-way.

11. **Right of Way**. Owner and/or Developer shall install and maintain an eight foot (8') multipurpose-trail located along US Highway 27. Cross access easements shall be provided with adjacent properties as necessary and consist of a twenty-four foot (24') minimum width as City requires within

its reasonable discretion. Owner and Developer shall continue to allow access through the Property from the residential property located at 17140 US Highway 27, Clermont, Florida 34715, more particularly identified as Lake County Parcel Number 06-22-26-0003-000-06600 and Alternate Key 1066549, as a method for ingress and egress, and no barriers shall be erected to impede that residential property owner's access.

12. **Utilities.** Owner and its successors and assigns agree to obtain water, reuse water, irrigation water, and wastewater service (hereafter, "**Utilities**") exclusively through purchase from City when available. Owner covenants and warrants to City that it with not engage in the business of providing Utilities to the Property or to any property within the City's utility service area established pursuant to Chapter 180, Florida Statutes. No private wells will be allowed within the Property. Developer shall, at Developer's expense: (i) construct all on-site utility facilities (e.g. lift stations and lines), and pay for the extension of facilities from City's current point of connection; and (ii) connect and run all necessary utilities to the entire Property. Owner will be required to extend utilities to the Property and across the entire length of the Property. All such improvements must be constructed to City requirements and transferred to City as a contribution in aid of construction. In addition, a twenty foot (20') utility easement shall be dedicated to the City along but outside of the future right-of-way of US Highway 27 (as identified by FDOT at the time of execution of this Agreement) and will be graded at a 10:1 slope. Owner may place landscaping within such utility easement, provided, however, that it does not interfere with City's utilities as determined by City in City's sole discretion, and Owner is aware that any landscaping that interferes with City's utility maintenance shall be immediately removed at City's request. Owner is responsible to replace any landscaping removed for utility maintenance.

13. **Impact Fees.** Owner agrees to pay all impact fees, including water and wastewater, fire rescue, police, recreation, and any impact fees adopted after the execution of this Agreement for all units as building permits are issued for such units at the then existing rate. Prepayment of utility impact fees and acceptance by City of such fees shall reserve capacity for the prepaid units. No water, wastewater, or any other utility capacity is reserved unless or until such fees have been paid pursuant to an agreement with City. Owner agrees and understands that no capacity has been reserved and that Owner assumes the risk that capacity will be available.

14. **Landscaping; Buffers; Irrigation**. Owner or Developer shall install and maintain the buffers shown on the Land Use Plan. Additionally, Owner or Developer shall install and maintain a thirty-five-foot (35') Class C buffer and tiered walls of no more than six feet (6') in height each in a manner sufficient to substantially screen views of the development of the Property from the residences located along the north side of Quail Valley Estates. Owner or Developer shall meet or exceed all setback and buffer requirements applicable to the B-1 zoning district, in addition to any other specific buffer requirements set forth herein.

Owner or Developer shall incorporate drought-tolerant, Florida-Friendly, and Florida native plant materials into all common area landscaping to the greatest extent practicable to minimize irrigation requirements and promote water conservation. Landscaping design shall be substantially consistent with the principles of Florida-Friendly Landscaping, the Florida Native Plant Society's recommendations for native plant usage, the City's New Yard Pattern Book, and other recognized water-conservation and sustainable landscaping practices. Owner shall install, or cause to be installed, rain sensors on automatic

irrigation systems within the common areas of the Property. Further, Owner agrees that any declaration of restrictive covenants applicable to the Property shall permit landscaping installations that are in accordance with the requirements of this Section and shall require the installation of rain sensors on all automatic irrigation systems.

All landscaping located within the common areas of the Property shall be maintained by the Owner and/or POA. Such maintenance shall include, without limitation, the replacement and replanting of any landscaping that dies, becomes unsightly, is damaged, or is removed for any reason, all at the sole expense of the Owner and/or POA.

15. **Environmental.** Owner will comply with all local, state, regional, and federal requirements regarding any environmental issues affecting the Property. Moreover, Owner agrees to use all reasonable efforts to preserve on site or to relocate any gopher tortoises on the Property and to not seek an incidental take permit without first obtaining the consent of City. Owner acknowledges that City has adopted Ordinance 2006-22, which provides for specific requirements and protections relating to listed species, and agrees that it shall comply with such ordinance. There shall be no construction in the flood zone.

16. **Grading.** Owner shall comply with all City LDRs regarding grading, including, but not limited to, LDR Sections 122-81 – 122-92 with the exception of grading limitations and maximum height of retaining walls. Grading shall be allowed to a maximum limitation of fifteen feet (15’), except that localized cut and fill areas not exceeding sixteen feet (16') shall be permitted without requiring a variance. Retaining walls shall not exceed six feet (6’), unless a variance is approved by the City. Retaining walls shall consist of gray segmental block walls, Big Block gravity walls, or a combination thereof. Any grading tracts shall allow lots to be as level as possible while complying with City's grading limitations and accounting for topographic changes within the grading tracts. Any such tracts shall be landscaped and maintained by Owner or the POA in such a manner as to prevent erosion, and such maintenance shall include, but is not limited to, the replacement and replanting of any trees and/or shrubs that die, become unsightly, or are removed for any reason.

17. **Stormwater Management**. Owner agrees to provide at Owner’s expense a comprehensive stormwater management system consistent with all regulatory requirements of the City and the St. John's River Water Management District (“**SJRWMD**”). Impacts to flood plains are allowed in accordance with the SJRWMD procedures for compensating storage and will be based on the 100-year floodplain established by FEMA.

18. **Other Municipal Facilities; Services**. **T**he City hereby agrees to provide, either directly or through its franchisees or third party providers, police and fire protection, emergency medical services, and solid waste collection, disposal, and recycling services to the Property under the same terms and conditions and in the same manner as are afforded to all other property owners within the City.

19. **Concurrency**. Owner shall comply with all applicable concurrency requirements pursuant to the City’s LDRs. A complete concurrency study conforming to the City’s LDRs will be

required prior to any preliminary plat approvals or construction plan approvals. Owner shall ensure that all traffic concurrency studies conducted reflect all planned and approved development in the area.

20. **Signage.** Owner shall ensure that any and all signage for the Property is located upon lands owned by either Owner or the POA and complies with Chapter 118 of the City's Code.

21. **Compliance with City Laws and Regulations**. Except as expressly modified herein, all development of the Property shall be subject to the regulations of county, state, and federal agencies, as well as with the City LDRs and City Code provisions, as such City LDRs and City Code provisions exist at the time of the execution of this Agreement. The City may apply subsequently-enacted LDRs and City Code provisions to the Property in accordance with Section 163.3233, Florida Statutes (2017), or as may be otherwise agreed to in writing by Owner.

22. **Entire Agreement**. This Agreement constitutes the entire agreement between the parties with respect to the transactions contemplated herein, and it supersedes all prior understandings or agreements between the parties relating to this Agreement.

23. **Successors and Assigns**. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

24. **Waiver; Modification**. The failure by any party to insist upon or enforce any of their rights shall not constitute a waiver thereof and nothing shall constitute a waiver of any party's right to insist upon strict compliance with the terms of this Agreement. Any party may waive in writing the benefit of any provision or condition for its benefit which is contained herein. No oral modification of this Agreement shall be binding upon the parties and any modification must be in writing and signed.

25. **Binding Effect; Assignability.** This Agreement, once effective, shall be binding upon and enforceable by and against the parties hereto and their assigns. This Agreement shall be assignable by the Owner to successive owners. Owner shall, however, provide written notice to the City of any and all such assignees. The rights and obligations set forth in this Agreement shall run with the land and be binding on all successors and/or assignees. Owner consents to the placement of a claim of lien on the Property upon default of any obligation herein without precluding any other remedies of City. The parties hereby covenant that they will enforce this Agreement and that it is a legal, valid, and binding agreement.

26. **Development Approvals**. This Agreement shall, in no manner, constitute development approval from the City regarding the Property.

27. **Governing Law**. This Agreement shall be governed by and construed under the laws of the State of Florida and venue for any dispute arising out of this Agreement is the appropriate court in Lake County, Florida.

28. **Notices**. Any notices which may be permitted or required hereunder shall be in writing and shall be deemed to have been duly given as of the date and time the same are personally delivered,

transmitted by facsimile, or within three (3) days after depositing with the United States Postal Service, postage prepaid by registered or certified mail, return receipt requested, or within one (1) day after depositing with an overnight delivery service from which a receipt must be obtained, and addressed as follows:

TO CITY:	Mark Johnson, City Manager City of Minneola 800 U. S. Highway 27 Minneola, FL 34715 Telephone: (352) 394-3598 Email: mjohnson@minneola.us
With a copy to:	Scott A. Gerken, Esquire Stone & Gerken, P.A. 4850 N. Highway 19A Mount Dora, FL 32757 Telephone: (352) 357-0330 Email: scott@stoneandgerken.com
TO OWNER:	Major Stacy, PE Grassy Lake Holdings, LLC 339 Broadway Avenue Orlando, Florida 32803 Email: MStacy@cfb-inc.com Annil C. Sawh 15502 Campden St Winter Garden, Florida 34787
TO DEVELOPER:	Drew Thigpen, Vice President of Development Pelican Industrial 436 E 36th St Charlotte, NC 28205 Telephone: (843) 469-2517 Email: dthigpen@pelindustrial.com
With a copy to:	Bret Jones, Esquire Bret Jones, P.A. 700 Almond Street Clermont, FL 34711 Telephone: (352) 394-4025 Email: bjones@bretjonespa.com

29. **Attorney's Fees**. In the event of any dispute hereunder for any action to interpret or enforce this Agreement, any provision hereof or any matter arising herefrom, the prevailing party shall be entitled to recover its reasonable costs, fees and expenses, including, but not limited to, witness fees, expert fees, consultant fees, attorney, paralegal and legal assistant fees, costs and expenses and other professional fees, costs, and expenses whether suit be brought or not, and whether in settlement, in any declaratory action, at trial or on appeal.

30. **Term of Agreement**. The term of the Agreement shall commence on the date this Agreement is executed by both the City and Owner, or the effective date of the annexation of the Property, whichever occurs later, and shall terminate thirty (30) years thereafter; provided, however, that the term of this Agreement may be extended by mutual consent of the City and the Owner, subject to a public hearing in accordance with the requirements of Section 163.3225, Florida Statutes.

31. **Exhibits**. All exhibits attached hereto are hereby incorporated in and made a part of this Agreement as if set forth in full herein.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties have set their hands and seals this _____ day of _____, 20_____.

CITY OF MINNEOLA, FLORIDA,
a Florida Municipal Corporation

Attest:

By: _____

Name:_____

_____
City Clerk

Its: _____

Date: _____

Date: _____

Approved as to form:

_____
Scott A. Gerken, City Attorney

Signed, sealed and delivered in our presence:

GRASSY LAKE HOLDINGS, LLC, a Florida limited liability company

_____
Witness: _____
Address: _____
_____

By: Major Stacy Holdings, LLC, a Florida limited liability company, as Authorized Member of Grassy Lake Holdings, LLC

_____
Witness: _____
Address: _____
_____

By: _____
Major Stacy, P.E., Manager of Major Stacy Holdings, LLC

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was acknowledged before me by means of [_] physical presence or [_] online notarization this _____ day of _____, 20_____, by **Major Stacy, P.E., as Manager of Major Stacy Holdings, LLC, as Authorized Member of Grassy Lake Holdings, LLC**, who is [_] personally known to me or [_] has produced _____ as identification.

(SEAL)

_____
Notary Public, State of _____
Print Name: _____
My Commission Expires: _____

Signed, sealed and delivered in our presence:

GRASSY LAKE HOLDINGS, LLC, a Florida limited liability company

_____
Witness: _____
Address: _____
_____

By: Absolute Property Solutions LLC, a Florida limited liability company, as Authorized Member of Grassy Lake Holdings, LLC

By: _____
Jason Edwards, Manager of Absolute Property Soutions LLC

_____
Witness: _____
Address: _____
_____

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was acknowledged before me by means of [_] physical presence or [_] online notarization this _____ day of _____, 20_____, by **Jason Edwards, as Manager of Absolute Property Solutions LLC, as Authorized Member of Grassy Lake Holdings, LLC**, who is [_] personally known to me or [_] has produced _____ as identification.

(SEAL)

_____
Notary Public, State of _____
Print Name: _____
My Commission Expires: _____

EXHIBIT "A"
PROPERTY DESCRIPTION

FDOT PARCEL:

THAT PART OF: THE SOUTH 12.7 ACRES LYING E OF THE COUNTY ROAD, IN THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST", LYING IN LAKE COUNTY, FLORIDA LYING WITHIN 220 FEET E OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200; S OF STATION 64+90.00 AND N. OF STATION 61+70.00 SAID SURVEY LINE AND SAID STATIONS BEING DESCRIBED AND LOCATED AS FOLLOWS: BEGIN ON THE N LINE OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, T22S, R26E, AT A POINT 405.38 FEET E OF THE NW CORNER OF SAID NW 1/4 OF THE SW 1/4 THENCE RUN S 13 DEGREES 58'00" E, A DISTANCE OF 912.54 FEET TO STATION 64+90.00; THENCE CONTINUE S 13 DEGREES 58'00" E, A DISTANCE OF 320 FEET TO STATION 61+70.00; THENCE CONTINUE S 13 DEGREES 58'00"E, A DISTANCE OF 100 FEET.

CONTAINING 48,640 SQ. FT. (1.199 ACRES), MORE OR LESS, EXCLUSIVE OF ROAD RIGHT OF WAY.

CITY PARCELS:

PARCEL 1 (Lake County Alternate Key 1031265):

THAT PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY. FLORIDA LYING EAST OF THE EASTERLY LINE OF THE RIGHT-OF-WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27). LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.

THE ABOVE PROPERTY IS ALSO DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF THE NW 1/2 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THENCE N.00 DEGREES 09'20" E. ALONG THE EAST BOUNDARY OF THE SAID NW 1/4 OF THE SW 1/4, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NW 1/4 OF THE SW 1/4, THENCE N. 89 DEGREES 50'01" W. ALONG THE SAID SOUTH BOUNDARY, 704.47 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), THENCE S. 14 DEGREES 00'27" E. ALONG SAID EASTERLY RIGHT-OF-WAY LINE 307.47 FEET TO THE NORTHWESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THENCE N. 75 DEGREES 59'33" E. 152 FEET TO THE NORTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 14 DEGREES 00'27" E. 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 75 DEGREES 59'33" W. 152.00 FEET TO THE AFORESAID EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25, THENCE S.

14 DEGREES 00'27" E. ALONG THE SAID RIGHT-OF-WAY LINE 146.26 FEET TO THE SOUTH BOUNDARY OF THE AFORESAID NW 1/4 OF THE SW 1/4 OF SECTION 6, THENCE S. 89 DEGREES 39'42" E. ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.

PARCEL 2 (Lake County Alternate Key 1031281):

BEGINNING 1044.05 FEET N OF SE CORNER OF SW 1/4 OF SW 1/4, SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN N 85 DEGREES 58' W TO RIGHT-OF-WAY OF HIGHWAY; THENCE NWLY ALONG SAID RIGHT-OF-WAY TO N LINE OF SAID SW 1/4 OF SW 1/4, THENCE E TO NE CORNER OF SAID SW 1/4 OF SW 1/4, THENCE S TO POINT OF BEGINNING.

EXHIBIT "B"
LAND USE PLAN

Grassy Lake Holdings Development Agreement
Side-by-Side Comparison

2018 Development Agreement vs. July 10, 2026 Final GGP Development Agreement / First Amendment

Topic	2018 Development Agreement	Proposed First Amendment	Assessment / Significance
Agreement status	Original development agreement for annexation; includes conditions precedent tied to annexation, plan amendment and rezoning.	Expressly amends the 2018 agreement and ratifies the remaining terms. The former conditions-precedent section is removed and the agreement is renumbered.	Appropriate for an amendment to an already-effective agreement.
Property	Approximately 12.31 acres proposed for annexation from unincorporated Lake County.	Approximately 13.32 acres within the City. The amendment also includes an unincorporated 1.199-acre FDOT parcel within the "Property" before it is acquired or annexed.	Material redefinition of the property. The amendment recital totals approximately 14.52 acres, while Exhibit B2 of the original agreement appears to describe a 22.33-acre / 973,695.65-sf project area. This needs to be clarified/reconciled.
Land use framework	Mixed-use PD; development tied to the Grassy Lake Holdings U.S. 27 Mixed Use PD plan, B-1 zoning and Grassy Lake Holdings Mixed Use Commercial Development FLU.	Retains B-1/PD framework language but makes development subject to a new Land Use Plan and amended use/standards provisions; overall character is described as shallow-bay industrial and flex commercial.	Fundamental change in intended character of the project. Land Use Plan exhibit is not included with document.
Permitted uses	Specific permitted uses included bank, medical/dental clinic, financial service, office, restaurant, retail, health/exercise club, convenience store, professional office and other commercial uses.	Adds broad categories covering light industrial, warehousing, logistics, distribution, fulfillment, flex-space, manufacturing, wholesale, construction/contractor, R&D, office, showroom and service-commercial uses, plus specified NAICS sectors.	New list is much broader for industrial/flex uses and appears to be more future-proof because it incorporates NAICS successors/equivalents. Specifically, the blanket authorization of NAICS Sectors 31–33 appears broader than the stated "shallow-bay industrial and flex commercial" character. However, NAICS is an economic classification system, not an indication of land-

Topic	2018 Development Agreement	Proposed First Amendment	Assessment / Significance
		Notably, the amendment permits all uses within Sectors 31–33, including food, beverage, textile, wood, printing, chemical, plastics/rubber, mineral products, fabricated metal, machinery, electronics, transportation equipment, furniture, medical devices and miscellaneous manufacturing.	use intensity, and Sectors 31–33 includes uses with substantially different potential impacts.
Conditional / special uses	Included adult/vocational education, adult congregate living, bars/lounges/nightclubs, college/university, commercial recreation, convenience store with fuel, day care, drive-through facilities, hotel, nursing home, office condominiums, motor vehicle uses, shopping center, theater, veterinary clinic, wholesale sales, etc.	Conditional uses focus more heavily on commercial recreation, day care, gun range, kennel/pet care, laboratories/R&D, motor vehicle sales/repair, nurseries/home-building materials, shopping center, veterinary and similar uses.	Several hospitality/institutional/residential-care and commercial uses appearing in 2018 are no longer expressly identified.
Setbacks / buffers	Front, side and rear setbacks were generally 'as shown on the LUP.'	Fixed building setbacks: west 50 ft, north 30 ft, east 30 ft, south 10 ft. Landscape buffers: west 10 ft, north 0 ft due to existing access easement, east 10 ft with access-easement exception, south 10 ft.	Creates more prescriptive standards; effect should be checked against the actual plan and adjacent properties.
Height / open space / impervious	50-ft maximum height; 20% minimum open space; 90% maximum ISR.	Retains 50-ft height and 20% open space but removes the explicit 90% ISR cap.	Deletion of the ISR cap could materially affect site coverage unless another controlling standard supplies an equivalent limitation.
Parking	Parking required by code, with no front/rear parking ratio.	Minimum 1 parking space per 1,000 sf GFA; additional parking expressly allowed without deviation/variance/amendment; landscape islands at least 1 per 20 spaces; 17-ft stall depth with suitable pedestrian/sidewalk overhang area.	Creates a specific parking standard tailored to the proposed flex/industrial program.

Topic	2018 Development Agreement	Proposed First Amendment	Assessment / Significance
Architecture	95% of non-glass architectural facade features to be brick, stone or stucco; no vinyl siding or Hardie Board; residential portions to use Spanish Mediterranean or Florida Vernacular; earth-tone Pantone palette.	Public-facing principal buildings primarily painted concrete tilt-wall; gray Sherwin-Williams palette; TPO roofing permitted; no brick/stone architectural embellishment required for dumpster enclosures; fiberglass lift stations permitted.	Substantively shifts from mixed-use/residential architectural character to industrial/flex architecture, without providing limited direction regarding building massing, façade articulation and architectural quality
Conservation	Conservation provisions embedded in design standards, including solar hot water, digital HVAC, R-30 insulation where possible, EIFS, low-flow fixtures, LED lighting, Low-E glass and extended overhangs.	Creates separate conservation section; retains solar hot water, digital HVAC, EIFS, low-flow fixtures, Low-E glazing and overhangs, but changes insulation to R-19 office/R-10 warehouse and generally uses 'where feasible/practicable' qualifiers.	Environmental commitments remain but are re-tailored to office/warehouse uses and are generally less prescriptive on insulation.
Walkability / access	8-ft US 27 multipurpose trail, trail/sidewalk lighting, 24-ft cross-access easements.	Retains 8-ft trail and 24-ft cross-access concept and adds continuing obligation to preserve access for residential property at 17140 US 27.	Adds a specific off-site/adjacent-property access protection.
Landscaping / screening	Buffers shown on plan; drought-tolerant landscaping encouraged; Florida-Friendly Landscaping referenced; common-area maintenance by Owner/POA.	Adds 35-ft Class C buffer and tiered walls up to 6 ft to substantially screen views from Quail Valley Estates; requires compliance with B-1 setbacks/buffers and expands native/Florida-Friendly landscaping language.	Strengthens buffering/screening commitments, particularly for the northern residential interface.
Grading	Maximum grading limitation 25 ft; retaining walls 6 ft unless varied; 3:1 maximum slope; uniform retaining-wall color/texture.	Maximum grading limitation reduced to 15 ft, but localized cut/fill areas up to 16 ft are allowed without variance; 6-ft retaining-wall limit retained; gray segmental block/Big Block gravity walls authorized; 3:1 slope provision removed.	Reduces overall grading envelope while adding a specific 16-ft localized exception and changing wall materials.
Utilities / impact fees / stormwater / concurrency	Utility extension, private lift stations, impact fees, stormwater and concurrency obligations established.	Core obligations are substantially retained, with wording updates and the developer identified as responsible for utility construction/extension.	Substantively unchanged in the documents reviewed.

Topic	2018 Development Agreement	Proposed First Amendment	Assessment / Significance
Regulatory compliance	Generally applies City LDRs and Code as of execution, with later regulations potentially applicable under §163.3233 or by agreement.	Same basic framework is retained.	Substantively unchanged in the documents reviewed.
Term	10 years, with extension by mutual consent and public hearing.	30 years, with extension by mutual consent and public hearing.	Major increase in the duration of the City's contractual commitment and the project's development rights/obligations.

EXHIBIT COMPARISON

Document	Exhibit	What it shows
DA Amendment	Exhibit A	Legal Description
	Exhibit B – Land Use Plan	Provided as a separate attachment. 2026 Land Use Plan shows the pond being covered under the agreement and proposed for annexation. Uses have been updated to reflect the additional of I-1 uses. The acreage has been updated to 12.284 acres for the PUD area plus 1.117 acres for the FDOT pond.
Original DA	Exhibit B1 – Cover / location sheet.	Identifies the U.S. 27 Mixed Use PD and project team information.
	Exhibit B2 – Land Use Plan	2018 Land Use Plan shows a site configuration extending south of the area covered in the FLUM and PD amendment application, with Zone A and Zone B areas adding up to approximately 22.33 acres / 973,695.65 sf.
	Exhibit B3 – Architectural style	Photographic examples labeled 'Mediterranean/Florida Vernacular Style.

Source note: This comparison is not a legal opinion.

To: GGW Flex Holdings, LLC

From: Eric Raasch, AICP, Inspire Project Manager

CC: Joyce Heffington, AICP; Tom Grimms, AICP; Gabriela Castro, AICP

Date: August 26, 2026

Reference: Minneola Commerce Center US N 27 (Inspire Case #240b)

We have conducted a third review of the **Site Plan** for the above-referenced project. This project is located in the PUD-C zoning district and Planned Unit Development Commercial Future Land Use category. The proposed Project ±13.4-acre development site will consist of 120,000 square feet (SF) of light industrial space in two buildings (76,250 SF and 43,750 SF). The applicant is also proposing a Future Land Use Map (FLUM) amendment and rezoning to PUD – Industrial with an associated updated Development Agreement that will determine the standards for review of this SP application. No site visit was conducted. The following review is based on the applicant's letter of response to staff comments, dated July 14, 2026.

Planning

General Comments

1. This application relies on the annexation of the FDOT stormwater pond within the U.S. 27 right-of-way. No application for annexation has been received at this time. *Inspire recommends that any recommendation on this SP application be contingent on the annexation.*

2. A portion of the subject property is owned by FDOT. *Please submit authorization from FDOT for this SP request.*

3. The applicant has submitted a proposed Development Agreement establishing revised land use, development, and site design standards for the property. The Development Agreement is currently under review and has not yet been approved. The Development Agreement and site plan applications may be processed concurrently; however, the current site plan cannot be approved based on standards contained in the proposed Agreement until the Agreement and all applicable associated entitlements become effective. *Inspire recommends that any approval of this Site Plan be contingent on the approval of the Development Agreement containing the standards that support the proposed site design. Any changes to the terms of the DA will require additional revisions and review of this SP.*

4. In response to a previous Inspire comment pointing to the absence of required concurrent applications, the applicant separately submitted a Future Land Use Map amendment and PD modification application. Inspire has reviewed these applications, together with the draft Development Agreement included in the resubmittal. Comments have been provided separately. *The applications may be processed concurrently, but Inspire defers to the City Attorney's Office on application sequencing.*

5. The total number of bays is not listed. It appears that Commerce Center 1 has 17 entryways and Commerce Center 2 has 10 entryways leading to the conclusion that the maximum possible bays is 17. *Please list the total number of bays on Sheet C3. This number will also be used as the maximum number of tenants.*

6. The applicant has acknowledged that a permit from FWC will be required. *Informational comment. No response is necessary.*

7. No sign package was provided with the second resubmittal. Directional and regulatory sign types and locations are noted on Sheet C3 of the first resubmittal. The applicant states that a complete sign package will be submitted with the building permits. However, Sec. 122.42(3)b.9. also requires "photographs or sketches of proposed signage with dimensions and material type" for site development approval. *Please provide the conceptual signage package for this project.*

CHAPTER 94, Development Standards

8. **Section 94-4(f)(6)** requires a minimum of three building design treatments. The applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. The submitted elevations do not appear to include any of the listed building design treatments. *Please refer to the options in this section and list or show the proposed design elements on the architectural plans.*

9. **Section 94-4(f)(7)b.** states that blank wall areas shall not exceed ten feet in the vertical direction, nor 20 feet in the horizontal direction of any primary facade. The applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. *Please provide dimensions for the blank wall area and reduce the area to comply if needed.*

10. **Section 94-4(f)(9)** requires variation in rooflines. **Subsection (9)b** states that at a minimum of two locations, the roof edge and/or parapet shall have a vertical change from the dominant roof condition, a minimum of two feet. At least one such change shall be located on a primary facade adjacent to a collector or arterial right-of-way. In response, the applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the

first resubmittal, not with the draft DA. Additionally, the roofline appears to lack a height variation. *Please review the roof requirements and revise elevation plans to show height variation.*

11. **Section 94-4(f)(9)c** states that parapets shall be used to conceal roof top equipment and flat roofs. The applicant has provided a line-of-sight diagram showing a 2-ft parapet. However, the Architectural Package previously submitted has not been updated to include this diagram. *Please revise the schematic elevations to incorporate the proposed parapet around the roofline and the provided diagram.*

CHAPTER 110, Landscaping and Tree Protection

12. The applicant states that the landscape buffers were approved on the existing PUD. However, the applicant is in the process of amending the existing PUD to add more intense uses, which have historically necessitated larger buffers based on the City's code. *Please review Inspire's comments on the associated DA amendment regarding landscape buffer widths and revise as needed.*

13. **Section 110-7(a)** states that irrigation shall meet or exceed the criteria for the Florida Water Star certification program. The irrigation plan does not include Florida Water Star certification or applicable irrigation zones Sheet IR100 Note #5 states, "All zones to be low volume drip and bubbler zones". *Please provide a statement on the irrigation plan to state that it will comply with the Florida Water Star certification program and please include applicable irrigation zones on this plan.*

CHAPTER 122, Site Development

14. **Section 122-35** lists the required amount of off-street parking per use. Sheet C3 states that parking is provided at a rate of 1 space per 1,000 SF. It is unclear as to which use in the tables listed in this section was used to reach this rate. *Please define the uses being proposed and provide minimum parking spaces required.*

15. **Section 122-39(c)(2)a.** states that a standard parking space is 10' by 20' and Section 122-39(c)(2) states that reduced width and length may be acceptable if increased landscape and grass areas are included. Spaces have been revised to a size of 10' by 18', not 10' by 20' which are required. The applicant has provided 7' sidewalks instead of increased landscape area. *Inspire recommends providing the required 20' depth, as the current code only allows for reductions based on landscape areas, not pedestrian areas.*

Development Agreement

16. **Section 5** states the approved architectural design and colors. This section states that colors shall be earth tones and natural colors. The proposed color scheme is gray. The applicant states that architectural features are part of the building permit submittal and building

elevations are included in the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. *Please note that the proposed DA will need to be approved to support the proposed building colors.*

17. The land use plan exhibit states that mediterranean / Florida vernacular architecture shall be used. *Please note that the proposed DA will need to be approved to support the proposed building colors.*

Public Works

1. Comments pending.

Engineering

1. **Informational Comment, No Response Required.** The applicant is cautioned that the issuance of City approval does not relieve them of their responsibility from obtaining all other required regulatory approvals and permits. Other permits may include but are not limited to the following:

   FDEP NPDES Construction
   St. Johns River Water Management District (SJRWMD) ERP
   USFW Permit
   FDEP Water
   FDEP Sewer
   FDOT Driveway Connection
   FDOT Right of Way Utilization

2. **Comment Resolved.** The Geotech report provided does not appear to provide recovery analysis parameters such as horizontal conductivity (Kh) and vertical infiltration rate (Iv), safety factors, etc. It is unclear where the design values originate in the stormwater report.

   Applicant provided a revised Geotech report which includes the requested recovery analysis parameters.

3. **Deferred to Planning.** Overall zoning and land use requirements, allotted uses, recreational areas, setbacks, open space, densities, pedestrian access and trail requirements, roadway connection requirements, right-of-way dedication requirements, development agreement criteria, and all other overall approval criteria are deferred to Planning and City Attorney as applicable.

4. Parking spaces must be at minimum 10ft wide and 20ft long as described in LDC 122-35, except where two feet of grassed overhang is provided, in which case the length may be reduced to 18ft.

   Applicant has widened parking spaces to 10ft. They responded that "Their lengths are 18' since the adjacent monolithic sidewalks are 7' to account for 2' of overhang." Per LDC 122-39 (c)(2)b,

reduced length is only acceptable if two feet of grassy overhang is provided. The applicant responds that additional landscaping above code minimum has been provided adjacent to the proposed building. It is unclear if variance is requested for the parking space dimensions.

5. Public to private demarcation on the utility plan is recommended. The 12 inch potable water main adjacent to US 27 is understood to be public. The internal water main, fire line, lift station, and 2-inch force main is understood to be privately owned, operated, and maintained.

    a. **Comment Resolved.** *Applicant has added a callout on Detail A, Utility Plan Sheet C4.1, depicting the beginning of privately owned potable and fire lines. Ownership of the 2-inch force main is not identified.*

    Applicant has also added a callout detailing private ownership of force main, and increased the force main size from 2" to 3" on sheet C4.1.

    b. **Comment Resolved.** *It is unclear if the lift station is to be public or private. Additional comment may be generated upon clarification.*

    Applicant has added a callout and note detailing private ownership of lift station on sheet C4.1.

6. **Comment Resolved.** Note #3 on sheet C4.1 references the Gibson Place Utilities Department.
7. **Comment Resolved.** Material of proposed pipes (water, sewer, fire) not shown on utility plan.

    The applicant has identified the 3-inch force main as HDPE on sheet C4.1. The 3-inch force main is identified as privately owned.

8. **Comment Resolved.** Utility calculations (water, sewer) were not provided.

    Applicant has added utility calculations to sheet C4.1. Lift station calculations were provided. However, the standby diesel pump curves were not included. In addition, a standby diesel pump is provided on the City standard detail on C10.0, however, it is not shown in the site specific plan view on C10.0. Clarification on if the lift station is to be public or privately owned, operated, and maintained is required.

    Applicant has responded that because the lift station is privately owned, operated, and maintained, a standby diesel generator is not required.

9. **Defer to Fire Chief.** Fire flow calculations were not provided.

    Applicant has included fire flow calculations, added a hydrant, and moved two hydrants away from loading zones. Defer fire flow approval and fire hydrant spacing to Fire Chief.

10. **Comment Resolved.** Tie in locations for water and sewer should be called out on the utility plan.

    Applicant has added utility tie in callouts to sheet C4.1.

11. Additional north-south and east-west cross sections should be provided to verify site grading, proposed slopes, cut/fill, and other design elements.

    Applicant has added additional north-south and east-west cross sections as requested, however, 3:1 grading is shown. Grading shall not exceed 4:1 per LDC 122-85 (d)(5). ***It is unclear if the project PUD allows for 3:1 grading. Clarification required.***

12. **Comment Resolved.** Child prevention grates required on mitered end sections.

    Applicant has added child prevention grate call out and detail to sheets C6.0 and C8.0.

13. **Comment Resolved.** The 12-inch public potable pipe should be ductile iron under roadway crossings.

    Applicant has responded "Call outs added to Utility Plan; see sheet C4.1.", but Ductile Iron Pipe does not appear to be called out under paved areas.

    Applicant has called out DIP water main underneath the north entrance, and directionally drilled HDPE underneath the south entrance. A directional drill profile has been added on sheet C4.2.

14. **Comment Resolved.** Finished floor elevations of buildings not provided on grading plan.

    Finished floor elevations have been added to sheet C5.0.

15. Gopher tortoise observed on site. Mitigation required before construction on site begins.

    Applicant responded that "mitigation will be coordinated prior to construction." Defer to Planning and Certification of Occupancy (C.O.) process.

16. **Defer to Planning.** 8 parking spaces maximum without island, per LDC 110-3.

    Applicant responded "Please see note 1 on existing PD. It states the maximum number of spaces between islands is 20." Defer to Planning.

17. **Comment Resolved.** Missing a 12x8" reducer on the Potable water line in Detail A of sheet C4.1

    Applicant has added the 12x8" reducer on sheet C4.1.

18. **Defer to Public Works.** The applicant has provided a 15-foot utility easement along US 27. The city typically requests a 20-foot utility easement along US 27. Discussion recommended.

    Applicant has responded "The easement width was discussed with public works and engineering. Due to the property constraints and by purchasing the FDOT pond, which currently cannot be granted an easement, we agreed 15' is sufficient."

19. **Deferred to Traffic Consultant**. Defer traffic study review to Traffic Consultant.

20. New Comment. The applicant proposes a directional drill of the potable water line under the project driveway. Per previous DRC meeting, this was per FDOT requirements. FDOT rationale for the HDD is unclear. The HDD depth is 18'+ deep. The proposed utility easement is 15' wide. It is unclear how the City would access the line in the future if required. Discussion warranted.

Fire

1. Approved.

Lake County

1. Comments pending.

To: Joyce Heffington, AICP, Minneola CRA Administrator

From: Eric Raasch, AICP, Inspire Project Manager

CC: Gabriela Castro, AICP

Date: September 1, 2026

Reference: Minneola Commerce Center Traffic Study Review

MAPS has conducted a review of the Access Connection Permit Traffic Study Report for Greenberg Gibbons Light Industrial, dated July 2025, and prepared by Luke Transportation Engineering Consultants. The TIA should follow the methodology/guidelines defined in the Lake-Sumter MPO Traffic Impact Study Methodology and Guidelines (2022). Below are the comments regarding the TIA Report.

1. Background traffic from approved developments in the area or based on historical traffic growth should be applied up to the build-out period. The additional background traffic should be incorporated into the future traffic analysis.

2. Summarize planned improvements in the area up to the buildout year. Reference the Lake-Sumter Metropolitan Planning Organization (LSMPO) Transportation Improvement Program (TIP) and the Florida Department of Transportation (FDOT) 5-year Work Program. An improvement should be considered "programmed" for construction if construction funding is identified with the first 3 years of the Work Program/TIP.

3. Assess which roadways within and outside the one-mile radius are impacted by five percent (5%) of the project's peak hour trips compared to the roadway's two-way peak hour generalized service volume based on the adopted LOS and committed number of lanes as listed in the Lake County CMP Database. This analysis will determine the extent of the study area and if any additional intersections should be analyzed.

4. Include the traffic control timing sheets for the intersection of Citrus Grove Rd and US 27 in the Appendix.

Inspire
PLACEMAKING COLLECTIVE

To: Joyce Heffington, AICP, Minneola CRA Administrator

From: Eric Raasch, AICP, Inspire Project Manager

CC: Gabriela Castro, AICP

Date: August 25, 2026

Reference: Minneola Commerce Center Future Land Use Map Amendment, PUD, and DA Amendment

We have conducted a review of the proposed Future Land Use Map (FLUM), Planned Unit Development rezoning and Development Agreement amendments for the above-referenced project. The site, located within the Minneola city boundaries and consisting of two parcels identified by Parcel Nos. 06-22-26-0003-000-06300 and 06-22-26-0003-000-04700, has an approximate area of 12.42 acres according to Lake County Property Appraiser data.

The request considered here is to amend the subject property's FLUM designation from PD-Commercial to PD-Industrial, and to amend the terms of the Development Agreement dated October 18, 2018, including PD standards. The new agreement is a substantive change to the previous development framework. The proposal shifts the project toward a shallow-bay industrial/flex-commercial development, substantially expands the use framework, changes the architectural character, modifies development standards, adds/redefines property, and extends the agreement term from 10 to 30 years. The proposal also incorporates a 1.199-acre FDOT parcel into the defined "Property", while the parcel remains publicly owned and outside the City limits. The applicant has expressed an intent to request annexation of the parcel. However, an annexation application has not been submitted at the time of this staff report.

Planning

General Comments

1. Staff has not received an annexation request for the FDOT pond. *Inspire recommends that any action taken be contingent on annexation of the FDOT pond parcel into the City*.

2. No Environmental Assessment or Traffic Impact Analysis was provided with this request. However, a listed species survey and FDOT driveway connection TIA were submitted with the associated Site Plan. *Please note that these studies will be considered and reviewed as part of the FLUM / PUD rezoning application.*

3. Please reconcile data across all applications or provide clarification, including:

a. The application states that the site size is 14.96 acres, but the Property Appraiser records for the two parcels indicate a combined acreage of 12.42 acres. The survey submitted with the application package does not provide confirmation of the covered acreage.

b. The application indicates the existing FLU designation as being PD-Commercial, which appears to be consistent with the most current version of the Future Land Use Map. However, the Development Agreement dated October 18, 2018, calls the designation of the property "Grassy Lake Holdings Mixed Use Commercial Development." *Please update the DA.*

c. The proposed Development Agreement includes a legal description that encompasses the 1.191-FDOT parcel, but the legal description provided on the topographic survey by Allen & Company dated 3/14/25 does not. *Please reconcile for consistency.*

Development Agreement

1. The recitals refer to approximately 13.32 acres within the city limits, but the first 2018 agreement covered approximately *12.31 acres*, not 13.32. *Please clarify/reconcile the difference*.

2. The DA is silent on the amount of square footage proposed for the project. *Please add the amount of proposed square feet by use.*

3. The new agreement expressly amends certain provisions of the original development agreement "while ratifying and affirming all remaining terms and conditions." However, the Conditions-precedent section has been removed entirely, rather than updated. The new agreement states that the owner has filed applications for annexation, rezoning, and comprehensive plan amendment for an adjoining 1.191-acre FDOT-owned parcel in unincorporated Lake County, and that the owner has "full power and authority to make, deliver, enter into, and perform pursuant to the terms and conditions of the proposed agreement without submitting an annexation application at this time. The applicant has submitted a warranty deed as providing evidence of ownership or authority, but it is unclear whether this includes the 1.191-acre parcel. *Please submit additional documentation or clarify that the proposed agreement establishes only a future development framework without granting any development rights prior to acquisition and completion of the required annexation, comprehensive plan amendment, and rezoning.* [NOTE: This is *not* a legal opinion; Inspire defers to the City Attorney's Office.]

4. The new agreement appears to retain the B-1/PD framework language but makes development subject to a new Land Use Plan and amended use/standards provisions; overall character is described as shallow-bay industrial and flex commercial. The Land Use Plan exhibit was not included as an exhibit to the DA document, but it is part of the overall application package. *We observe that the graphic (which appears to be from the 2018 approval, relabeled as "Minneola Commerce Center" and renumbered as Sheet "LUP-01") is annotated to show the proposed zoning to be "I-1 & B-1 with PD" under the Project Description, but only "I-1" in the Notes section, so please clarify the proposed zoning.*

5. The new agreement includes broad categories covering light industrial, warehousing, logistics, distribution, fulfillment, flex-space, manufacturing, wholesale, construction/contractor, R&D, office, showroom and service-commercial uses, plus specified NAICS sectors. Notably, the amendment permits all uses within Sectors 31–33, including food, beverage, textile, wood, printing, chemical, plastics/rubber, mineral products, fabricated metal, machinery, electronics, transportation equipment, furniture, medical devices and miscellaneous manufacturing. Specifically, the blanket authorization of NAICS Sectors 31–33 appears broader than the stated "shallow-bay industrial and flex commercial" character and includes uses with substantially different potential impacts, while relying primarily on visual screening doesn't address potential noise, odor, truck activity, vibration, or other operational impacts. *Inspire recommends limiting permitted manufacturing to enclosed, low-impact/light manufacturing and establishing performance standards; or shift to conditional review for the higher-intensity / higher-impact manufacturing uses.*

6. The new list of conditional uses focuses on commercial recreation, day care, gun range, kennel/pet care, laboratories/R&D, motor vehicle sales/repair, nurseries/home-building materials, shopping center, veterinary and similar uses. *Please confirm the status of previous commercial uses such as restaurants, hotels, drive-throughs, and residential-care which are no longer expressly identified and may not be covered by the similarity clause.*

7. The new agreement retains 50-ft height and 20% open space but removes the explicit 90% ISR cap. However, the Land Use Plan retains the 90% ISR cap. *Please clarify the proposed ISR.*

8. Section 5(i) of the proposed DA addresses setbacks. The applicant is proposing setbacks of 30' on the north, 30' on the east, 10' on the south and 50' on the west. These setbacks are generally consistent with the setbacks required in the City's most comparable I-1 District. *Informational comment only. No response required.*

9. Section 5(ii) of the proposed DA addresses landscape buffers. Sec. 110-3(b)(Chart A-1) outlines buffer area requirements by use. Per the chart, PUD buffering is to be reviewed individually with each application. The applicant is proposing I-1 uses and the adjacent properties are zoned B-1 (north), B-1 and Lake County A (east), Lake County CFD (south), and B-1, Utilities, Lake County C-2 (west across US 27 ROW). Based on these designations, the site would warrant a Class C buffer (30') on the north, a Class C buffer (30') on the east, a Class D buffer (30') to the south, and a Class C buffer (30') to the west. The applicant is proposing a 0' buffer on the north (due to an access easement), a 10' buffer on the east, a 10' buffer on the south, and a 10' buffer on the west. *Inspire recommends increasing these buffers due to the increased intensity of the proposed uses.*

10. Section 5(iii) of the proposed DA addresses building height. The applicant is proposing a maximum building height of 50', which exceeds the maximum height of 35' feet for I-1 zoned property. While not prohibited, this information will be presented to City Council for review. *Informational comment only. No response required.*

11. **Section 5(v)** of the proposed DA addresses quantity of off-street parking. **LDC Sec. 122-35(b)(4)** outlines the City's minimum parking requirements. The applicant is proposing parking at a ratio of 1 parking space per 1,000 square feet of gross floor area. Due to the number of proposed permitted uses, the extent that this ratio deviates from code is unknown. For example, the City's parking requirement for manufacturing is 1 parking space per 600 SF of floor area dedicated to manufacturing, please the required parking square footage devoted to other uses (i.e. office). The applicant's request also includes all B-1 uses, some of which have significantly higher parking requirements than 1 space per 1,000 SF. For example, restaurants require 1 space per 2 seats, plus one space per 2 employees. *Inspire recommends reducing the amount of requested uses and providing a parking study to justify the requested reduction.*

12. **Section 5(v)** of the proposed DA addresses the maximum number of parking spaces between landscape islands. **LDC Sec. 110-3(a)(1)** states that the maximum number of uninterrupted spaces between landscaping areas is eight. The applicant is proposing 20 spaces between landscape islands. *Inspire recommends revising the agreement to reduce the number of spaces between landscape islands to a maximum of eight.*

13. **Section 5(v)** of the proposed DA addresses parking space sizing. **LDC Sec. 122-39(b)** states the minimum parking space size within the City. Standard parking spaces shall be 20' long. The applicant is proposing a minimum parking space depth of 17', provided an adjacent sidewalk or pedestrian area of sufficient width is provided to accommodate vehicle overhang. *Inspire recommends compliance with the City's standard parking space requirements, and notes that pedestrian areas should remain unobstructed from vehicles.*

14. **Section 6(i)** of the proposed DA includes building materials. The change in architectural character is appropriate to the proposed industrial/flex use; however, the revised standards provide limited direction regarding building massing, façade articulation and architectural quality. Please note that all architectural treatments will need to comply with **LDC Sec. 94-4**. *Informational comment only. No response required.*

15. **Section 6(iii)** of the proposed DA requests the use of a TPO roof for this project. Per the **LDC Sec. 94-4(f)(9)c.4** tile or metal shall be the dominant roof material. This deviation will be presented to City Council. *Informational comment only. No response required.*

16. **Section 16** of the proposed DA requests the ability to permit grading changes of 16' in lieu of 15'. This deviation will be presented to City Council. *Informational comment only. No response required.*

Comprehensive Plan

1. **FLU Policies 1-1.1.3 and 1-1.1.4** include compatibility standards for residential and non-residential development. *Please provide a narrative that addresses how the proposed FLUM is consistent with the City's Comprehensive Plan policies and compatible with the surrounding land uses.*

2. **FLU Policy 1-1.7.1** requires land use activities to occur on soil types capable of supporting the structures and facilities proposed to be placed on them, Table 1-1 stipulates which land uses are deemed suitable or unsuitable for each soil type. *Please provide a soils map with the proposed land uses to demonstrate compliance with FLU Policy 1-1.7.1.*

3. **FLU Policy 1-3.1.2** requires proposed amendments to the comprehensive plan to demonstrate that all facilities and service capacities are currently available or shall be available after the implementation of scheduled capital improvements, to meet general needs of the proposed land use. *Please provide a public facilities analysis.*

4. **CONS Policy 5-1.3.1** provides standards for maximum impervious surface area by use. *Please provide additional detail regarding proposed uses for the project and demonstrate compliance with the maximum ISR consistent with CONS Policy 5-1.3.1.*

Public Works

1. No comments. Defer to Planning Division.

Fire

1. No comments.

Lake County

1. Pending response.

Engineering

1. Pending response.

CITY OF MINNEOLA
P.O. BOX 678
MINNEOLA, FL 34755
(352) 394-3598

NOTICE OF PUBLIC HEARING

Notice of Intent to Consider Development Agreement

The City of Minneola Planning & Zoning Commission will hold a public hearing on Monday, September 14, 2026, at 6:30 p.m. at Minneola City Hall, 800 North U.S. Highway 27, Minneola, Florida, to consider a Development Agreement concerning approximately 14.519 +/- acres of property known as "Grassy Lake Holdings Industrial," generally located east of U.S. Highway 27 and south of Citrus Grove Road. The City Council will hold public hearings on Tuesday, September 15, 2026, at 6:30 p.m. and Tuesday, October 6, 2026, at 6:30 p.m., at Minneola City Hall, 800 North U.S. Highway 27, Minneola, Florida, to consider the Development Agreement.

The property known as "Grassy Lake Holdings Industrial" has a zoning designation of "PUD - Industrial" (Planned Unit Development - Industrial) for a commercial and industrial planned unit development. The proposed development uses are Industrial, Open Space, and Commercial. No residential development is proposed; the proposed residential population density is zero (0) dwelling units per acre. The minimum open space is 20 percent. The proposed building intensity is 0.19 floor area ratio (FAR), and the proposed maximum building height is 50 feet. A copy of the proposed Development Agreement may be obtained and inspected at the City Clerk's Office, Minneola City Hall, 800 North U.S. Highway 27, Minneola, Florida, during normal business hours, 8:00 a.m. to 5:00 p.m.

A person who decides to appeal any decision made by any board, agency, or council with respect to any matter considered at such meeting or hearing, will need a record of the proceedings. For such purposes, any such person may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is based (Florida Statutes, 286.0105).

The City of Minneola Land Development Code is available for inspection at Minneola City Hall, 800 North U.S. Highway 27, Minneola, Florida, during normal business hours, 8:00 a.m. to 5:00 p.m.

PERSONS WITH DISABILITIES NEEDING ASSISTANCE TO PARTICIPATE IN ANY OF THESE PROCEEDINGS SHOULD CONTACT KRISTINE THOMPSON, CITY CLERK AT (352) 394-3598 AT LEAST 48 HOURS BEFORE THE DATE OF THE SCHEDULED HEARING.

OwnerNam	OwnerAddr	OwnerCity	OwnerState	OwnerZip
FIELDS EC	PO BOX 11	WINTER H	FL	32882-0113
GRASSY L	5832 WOO	BELL ISLE	FL	32809
OMBS LLC	PO BOX 12	CLERMON	FL	34712-0788
OPEN DOC	17140 US H	CLERMON	FL	34715
ZAVY ENT	23825 INTE	SORRENT	FL	32776
CITRUS GI	15 CREEK	HILLSBOR	CA	94010
GHULAM D	9229 195TI	HOILLIS	NY	11423
DOORSAM	17350 US H	CLERMON	FL	34715-9272
FALZONE	17358 N US	CLERMON	FL	34715
QUINN CE	41634 CR 4	LEESDBUI	FL	34788
VISTA GR/	13940 ASH	MINNEOLA	FL	34715
CLEM CON	10800 CLA	LEESBUR(	FL	34788
CONGREG	12205 CITI	CLERMON	FL	34715
SCHMIDT I	6420 LU EI	GROVELAI	FL	34736-9747
LAKE CO E	315 W MAI	TAVARES	FL	32778
PROFESSI	1200 NETV	EFFINGHA	IL	62401
DE NOYEL	3149 SCRU	OVIEDO	FL	32765
SOUTH LA	17335 US H	CLERMON	FL	34715-9220
DUKE ENE	PO BOX 37	CHARLKIC	NC	28237-7996
CRA CITY	800 N HWY	MINNEOLA	FL	34715

CITY OF MINNEOLA
CITY OF MINNEOLA
CITY OF MINNEOLA

CITY OF MINNEOLA
CITY OF MINNEOLA
CITY OF MINNEOLA

AFFIDAVIT OF PUBLICATION

Clermont Sun

Published Weekly

Clermont, Lake County, Florida

Case No. Notice of Inent DA

STATE OF FLORIDA
COUNTY OF LAKE

Before the undersigned authority, Jessica Whaley, personally appeared who on oath says that she is the Classified Advertising Legal Clerk of Clermont Sun, a newspaper published at Clermont in Lake County, Florida; that the attached copy or reprint of the advertisement, to the right, being a Public Notice, was published in said newspaper by print in the issues of or by publication on the newspaper's website, if authorized, on:

September 02, 2026

Affiant further says that the Clermont Sun newspaper complies with all legal requirements for publication in chapter 50. Florida Statutes.

Jessica Whaley

Sworn to and subscribed before me this 2nd day of September 2026 by Jessica Whaley, who is personally

Ashley N. Abear, Clerk, Notary Number: #HH744101
Notary expires: December 27, 2029

00012418 00215760

Joyce Heffington
CITY OF MINNEOLA
P.O BOX 678
MINNEOLA, FL 34755

Notary Public State of Florida
Ashley Abear
My Commission HH 744101
Expires 12/27/2029

CLERMONT SUN -

CITY OF MINNEOLA
P.O. BOX 678
MINNEOLA, FL 34755
(352) 394 3598

NOTICE OF PUBLIC HEARING

Notice of Intent to Consider Development Agreement

The City of Minneola Planning & Zoning Commission will hold a public hearing on Monday, September 14, 2026, at 6:30 p.m. at Minneola City Hall, 800 North U.S. Highway 27, Minneola, Florida, to consider a Development Agreement concerning approximately 14.519 +/- acres of property known as "Grassy Lake Holdings Industrial," generally located east of U.S. Highway 27 and south of Citrus Grove Road. The City Council will hold public hearings on Tuesday, September 15, 2026, at 6:30 p.m. and Tuesday, October 6, 2026, at 6:30 p.m., at Minneola City Hall, 800 North U.S. Highway 27, Minneola, Florida, to consider the Development Agreement.

The property known as "Grassy Lake Holdings Industrial" has a zoning designation of "PUD - Industrial" (Planned Unit Development - Industrial) for a commercial and industrial planned unit development. The proposed development uses are Industrial, Open Space, and Commercial. No residential development is proposed; the proposed residential population density is zero (0) dwelling units per acre. The minimum open space is 20 percent. The proposed building intensity is 0.19 floor area ratio (FAR), and the proposed maximum building height is 50 feet. A copy of the proposed Development Agreement may be obtained and inspected at the City Clerk's Office, Minneola City Hall, 800 North U.S. Highway 27, Minneola, Florida, during normal business hours, 8:00 a.m. to 5:00 p.m.

A person who decides to appeal any decision made by any board, agency, or council with respect to any matter considered at such meeting or hearing, will need a record of the proceedings. For such purposes, any such person may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is based (Florida Statutes, 286.0105).

The City of Minneola Land Development Code is available for inspection at Minneola City Hall, 800 North U.S. Highway 27, Minneola, Florida, during normal business hours, 8:00 a.m. to 5:00 p.m.

PERSONS WITH DISABILITIES NEEDING ASSISTANCE TO PARTICIPATE IN ANY OF THESE PROCEEDINGS SHOULD CONTACT KRISTINE THOMPSON, CITY CLERK AT (352) 394 3598 AT LEAST 48 HOURS BEFORE THE DATE OF THE SCHEDULED HEARING.

AGENDA SUMMARY
Planning & Zoning Commission Meeting
September 14, 2026

Agenda Item: 5.
Subject Title: Site Plan - Grassy Lake Industrial

Objective:
Consider Approval of a Site Plan for 14.52± Acres Generally Located East of US Highway 27 and South of Citrus Grove Road for Commercial and Industrial Use Buildings.

Summary:
Major Stacy, Owner, for Grassy Lake Holdings, has submitted a site plan 14.52 ± acres for property generally located east of US Highway 27 and north of Citrus Grove Road. The plan consists of a 76,250 and a 43,750 square foot Commerce Centers along with parking, drainage and green space.

The property is zoned PUD-Industrial and is under the Grassy Lake Industrial Developer Agreement. The project is being called Minneola Commerce. FDOT has agreed to sell the pond along US Highway 27 to the owner, but the stormwater from the highway is to be retained the the stormwater pond for the development.

Exhibits:
1. Application
2. Civil Construction and Landscape - Irrigation Plans
3. ARCHITECTURAL PACKAGE
4. Photometrics
5. Grading Plan
6. Staff Comments
7. Concurrency Management Application
8. BDY-TOPO SURVEY
9. Cultural Resources Assessment Survey
10. Arbor Report
11. Environment Assessment
12. FDOT Driveway Access TIA
13. Geotechnical Report
14. MONUMENTAL SIGN EXAMPLE
15. LIFT STATION REPORT
16. Listed Species Report

17. LS CALCULATIONS
18. Stormwater Report
19. Supplemental Geotechnical Exploration & Clay Contour Map
20. Tree Clearing Permit
21. WALLED POND HORIZONTAL CONDUCTIVITY
22. Water and Fire Hydraulic Modeling Report
23. WATERCAD REPORT
24. Public Hearing Notice Site Plan
25. ADDRESSES
26. Sign 1
27. Sign 2
28. 277 Minneola Commerce Center TIA v1
29. 240b Minn Commerce Center US N 27 SP3 v1
30. Minneola Commerce Center FLUM RZ_v1

Options:

1. Approve the plan as presented.
2. Approve the plan with conditions.
3. Postpone the decision.
4. Deny approval of the plan.

Fiscal Impact:

Undetermined.

Staff Recommendation:

Staff recommends if approved it be on the condition the FDOT pond is annexed in, all staff comments are addressed, and the utility easement not be subordinated to FDOT.

City of Minneola
Planning Department
800 N Highway 27, Minneola, FL 34715
(352) 394 – 3598

Site Plan Application

Application Review Process

Development Review Process (DRP)

- An application package which has been determined complete by the Planning Department (Dept) will be forwarded to the DRP reviewers
- All applications shall be reviewed monthly by the DRP reviewers and comments shall be discussed at the next meeting if required.
- Formal comments of the DRP reviewers shall be transmitted in writing to the applicant

Planning and Zoning Commission (P&Z)

- A P&Z review is required by the City Code

City Council

- The City Council will hold a public meeting regarding the subject project
- The City Council may (1) defer the project, (2) deny the project, (3) approve the project subject to conditions, or (4) approve the project
- An approved site plan automatically expires if actual construction has not commenced in 365 days of approval
- Major modifications to an approved site plan must follow the same process as the original plan

Reservation of water and sewer capacity may be done only after a Development Order has been issued [subsection 90-5(d)]

For additional information on the site plan process, see Chapter 122, Section 41, Site Development Submittal Requirements, of the City of Minneola Land Development Regulations.

City of Minneola
Site Plan Application Cont.

Site Plan Review Check List and Fees

	Site Plan Review	Minor Amendment	$1,200.00 Application Fee
	Site Plan Review	5 acres or less, or 10 du or more	$2,000.00 Application Fee
13.4 ACRES	Site Plan Review	5-25 acres, or 10-50 du or more	$3,000.00 Application Fee
	Site Plan Review	25 acres or more, or 50 du or more	$4,000.00 Application Fee
	Site Plan Review	PUD or DRI	$4,300.00 Application Fee

The following information is required for all Site Plan applications:

Rec'd	Requirement
☐	Copies of all permits including USFW NPDES SJRWMD
☑	(6) 11" x 17" Boundary Survey signed and sealed by a licensed Florida surveyor
☐	(6) 11" x 17" copy of the recorded lot split/minor subdivision plat, if required
☑	(6) 24" x 36" Site Construction Plan signed and sealed by a design professional and Landscape/Irrigation plans signed and sealed by a landscape architect, reports, color Architectural Renderings signed and sealed by a design professional
☑	(2) 11" x 17" Site Construction, Landscape & Irrigation plans, Architectural Renderings
☑	(1) CD or Flash Drive including all applications and documents in PDF format
☑	(1) list of the completed Adjacent Property Owners with addresses and alternate keys
☑	(1) set of mailing labels for all adjacent property owners
☑	(3) Sets of all reports including Environmental Geotechnical Traffic Study Archaeological
☑	Non-refundable application fee, as indicated above

City of Minneola
Site Plan Application Cont.

1) Site Plan

a) Name of project
b) Vicinity map showing the relationship of the proposed project to adjacent streets and roads at no smaller than one-inch equals 2000-feet (1"=2000')
c) Linear dimensions of the parcel
d) Existing topography at 1-ft. intervals and finished grade elevation
e) Existing and proposed building restriction lines e.g. R/W, setbacks, easements
f) Identification of existing soil classification from the Soil Conservation Service
g) Identification of the 100-year flood elevation, if any
h) Wetlands and other natural features
i) Stormwater management facilities and calculations
j) Landscape plan including irrigation systems, screens, walls and berms
k) Identification of zoning on the subject site and all adjacent parcels
l) Location and calculation of the site's open space areas
m) Location, dimension, and sketch or photograph of all proposed signage

2) Buildings and Structures

a) Existing structure locations with elevations
b) Proposed structure locations with elevations (four sides and colors included)
c) Use of the proposed structure
d) Number of stories and height of each proposed structure
e) Square footage of each story & square footage by major interior uses in all structures
f) Number of dwelling units and density for residential uses
g) Projected number of employees, if applicable
h) Number of seats for eating and/or drinking establishments

3) Streets, Sidewalks, Driveways, Parking Areas & Loading Spaces

a) Engineering plans and specifications for all paved surfaces and sidewalks
b) Delineation and numbering of all parking spaces including location of handicap spaces
c) Delineation of the amount of impervious areas & the impervious surface ratio calculation
d) Delineation of all fire lanes pursuant to Section 14 of the City Code
e) Location of the driveways and median cuts
f) Delineation of the internal traffic control circulation pattern
g) Location and identification of the internal traffic control devices

4) Stormwater Management Facilities

a) Stormwater calculations and facilities
b) Cross section of stormwater facilities
c) Engineering cost estimates delineating improvements proposed for city maintenance

d) Size, material and location of the stormwater facilities
e) Delineation of the 100-year flood elevation, if applicable

5) Potable Water, Wastewater & Solid Waste Facilities

a) Fire flow equipment and calculations
b) Lift station and equipment and location
c) Size, material, specifications, profiles and location of wastewater facilities, incl. septic tanks
d) Size, material, specifications, profiles and location of potable water facilities
e) Size, location and material of grease separation facilities, if applicable
f) Location and access provisions of refuse facilities

6) Other

a) Traffic Analysis, as determined by Dept.
b) Environmental Assessment, as determined by Dept.

The following requirements must be met:

- Landscaping requirements in Section 110 of the City Code
- Architectural and Design Standards described in Section 94-3 or Section 94-4, as applicable
- Sign Standards in Section 118 of the City Code
- Before construction, a tree clearing permit must be obtained as described in Section 98-9 of the City Code
- Relevant requirements of Chapter 134 – Transportation Standards
- Prior to construction, submission of the City impact fee calculation form and payment of the fees
- A copy of the HRS and/or SJRWMD potable water and wastewater permits
- A Concurrency Review Application form must be submitted with the Site Plan Review Application package

City of Minneola
Site Plan Application Cont.

The application material described herein is based on the provisions of Section 122 – 41 Development Standards of the City Code. The Code is available online at www.municode.com. The requirements below are minimums that may be adjusted in the pre-application conference.

Applicant Name: GGW Flex Holdings, LLC

Applicant Address: [redacted]

Applicant Phone #: 843.469.2517 Fax # and/or E-mail: [redacted]

Applicant Is: Owner: ☐ Agent: ■ Purchaser: ☐ Lessee: ☐ (check one)

General Location and/or Street Address: US HIGHWAY 27 MINNEOLA FL, 34715

Alternate Key Number: 1031281 and 1031265

Owner Name: GRASSY LAKE HOLDINGS LLC

Owner Address: [redacted]

Owner Phone #: (407) 456-1497 Fax # and/or E-mail: [redacted]

Subject Site Area (acres or sq. ft.): 13.4 (Includes DOT Pond Area) Zoning Category: PD

Present Use: Vacant Commercial

Proposed Use: Industrial

Source of Potable Water: City of Minneola

Wastewater Disposal Method: City of Minneola

Has any previous application been filed within the last two years in connection with the subject parcel? If Yes, briefly describe the nature of this request, including the approximate date of the request.

Community Meeting 3rd Quarter 2025

City of Minneola
Site Plan Application Cont.

Contact List

Owner Name: GRASSY LAKE HOLDINGS LLC

Owner Address: 5832 Woodbine Dr S, Belle Isle, FL 32809

Owner Ph. #: (407) 456-1497 E-mail Address: mstacy@cfb-inc.com

Project Manager: Major L. Stacy, P.E.

Manager Address: 2221 Lee Road, #27 , Winter Park, FL 32789

Manager Ph. #: (407) 456-1497 E-mail Address: mstacy@cfb-inc.com

Engineer Name: Major L. Stacy, P.E. License #: 70249

Engineer Address: 2221 Lee Road, #27 , Winter Park, FL 32789

Engineer Ph. #: (407) 456-1497 E-mail Address: mstacy@cfb-inc.com

Architect Name: _____ License #: _____

Architect Address: _____

Architect Ph. #: _____ E-mail Address: _____

Landscape Architect Name: _____ License #: _____

L. Architect Address: _____

L. Architect Ph. #: _____ E-mail Address: _____

City of Minneola
Site Plan Application Cont.

Certification

I, the undersigned, do hereby certify that I have read the application and the relevant guidance material and understand the requirements described therein and that I will fully comply with all City, State and Federal regulations applicable to this project.

I further understand that I am responsible to reimburse the City for the actual advertising costs and the actual consultants' review fees, if any. Said fees shall be paid within 30 days of receipt of the City's invoice or further processing of the application will cease until the invoice is paid in full.

I understand that only application packages that are determined complete by the Department will be scheduled for review.

Applicant Signature

2/4/26
Date

Office Use:

Applicant Name: _____

Application For: _____

Amount: _____ Check: _____

Amount: _____ Check: _____

Rec'd by: _____ Date: _____ Receipt #: _____

City of Minneola
Site Plan Application Cont.

Owner's Authorization

(required if the property owner is not the applicant)

STATE OF FLORIDA
COUNTY OF LAKE

Before me, the undersigned authority, personally appeared major Stacy

who is being by me first duly sworn on oath, deposes and says:

1. That he/she is the property owner of the subject parcels in this application.
2. That he/she desires to apply for an annexation of land generally located at:
   Grassy Lake and US 27
3. That he/she has appointed GGW Flex Holdings, LLC to act as agent in his/her behalf to accomplish the above.
4. That he/she agrees to pay any costs associated with the application, review, and hearings for the above.

Owner's Signature

This is to certify that on February 9th, 2026 before me, an officer duly authorized to take acknowledgements in the State and County aforesaid, personally appeared Major L. Stacy he/she is personally know to me or has produced _____ as identification and did (did not) take an oath.

SEAL

Danielle L. McDougall
Notary Public
State of Florida
Comm# HH592298
Expires 10/4/2028

Danielle L. McDougall
Signature of Acknowledger

Danielle L. McDougall
Acknowledger Name

HH592298
Serial Number

10 - 04 - 2028
My Commission Expires

City of Minneola
Site Plan Application Cont.

NPDES Stormwater Certification Statement

Project Name: GREENBERG GIBBONS US 27 COMMERCE CENTER

I hereby certify that proper Erosion and Sediment Control (ESC) procedures will be implemented by the Construction Site Operator from project initiation through project completion.

I further certify that Best Management Practices (BMPS) will be implemented to ensure proper control of waste materials on site and to limit the exposure of general project litter and hazardous materials to stormwater.

Project Owner Information

Project Owner Name: GRASSY LAKE HOLDINGS LLC

Owner Address: 5832 Woodbine Dr S, Belle Isle, FL 32809

Phone #: (407) 456-1497 Fax and/or E-mail: mstacy@cfb-inc.com

Signature

February 9, 2026
Date

Project Contractor Information

Project Contractor Name: TBD

Contractor Address:

Phone #: Fax and/or E-mail:

Signature

Date

AGENCY	PERMIT #	SUBMITTED	STATUS
CITY OF MINNEOLA			
SJRWMD			
FDEP NPDES			
FDEP WATER			
FDEP SEWER			

DATE	REVISIONS	BY
03/19/26	1 CITY OF MINNEOLA COMMENTS	
06/30/26	2 CITY OF MINNEOLA COMMENTS	

MAJOR SITE PLAN
FOR
MINNEOLA COMMERCE CENTER

LEGAL DESCRIPTION

PARCEL 1:

THAT PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6. TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA LYING EAST OF THE EASTERLY LINE OF THE RIGHT-OF-WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.

THE ABOVE PROPERTY IS ALSO DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF THE NW 1/2 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THENCE N.00 DEGREES 09'20" E. ALONG THE EAST BOUNDARY OF THE SAID NW 1/4 OF THE SW 1/4, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NW 1/4 OF THE SW 1/4, THENCE N. 89 DEGREES 50'01" W. ALONG THE SAID SOUTH BOUNDARY, 704.47 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), THENCE S. 14 DEGREES 00'27" E. ALONG SAID EASTERLY RIGHT-OF-WAY LINE 307.47 FEET TO THE NORTHWESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THENCE N. 75 DEGREES 59'33" E. 152 FEET TO THE NORTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 14 DEGREES 00'27" E. 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 75 DEGREES 59'33" W. 152.00 FEET TO THE AFORESAID EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25, THENCE S. 14 DEGREES 00'27" E. ALONG THE SAID RIGHT-OF-WAY LINE 146.26 FEET TO THE SOUTH BOUNDARY OF THE AFORESAID NW 1/4 OF THE SW 1/4 OF SECTION 6, THENCE S. 89 DEGREES 39'42" E. ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.

THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA WHICH IS NOT INCLUDED HEREIN IS DESCRIBED AS FOLLOWS:

THAT PART OF: THE SOUTH 12.7 ACRES LYING E OF THE COUNTY ROAD, IN THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST", LYING IN LAKE COUNTY, FLORIDA LYING WITHIN 220 FEET E OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200; S OF STATION 64+90.00 AND N. OF STATION 61+70.00 SAID SURVEY LINE AND SAID STATIONS BEING DESCRIBED AND LOCATED AS FOLLOWS: BEGIN ON THE N LINE OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, T22S, R26E, AT A POINT 405.38 FEET E OF THE NW CORNER OF SAID NW 1/4 OF THE SW 1/4 THENCE RUN S 13 DEGREES 58'00" E, A DISTANCE OF 912.54 FEET TO STATION 64+90.00; THENCE CONTINUE S 13 DEGREES 58'00" E, A DISTANCE OF 320 FEET TO STATION 61+70.00; THENCE CONTINUE S 13 DEGREES 58'00"E, A DISTANCE OF 100 FEET.

CONTAINING 48,640 SQ. FT. (1.199 ACRES), MORE OR LESS, EXCLUSIVE OF ROAD RIGHT OF WAY.

PARCEL 2:

BEGINNING 1044.05 FEET N OF SE CORNER OF SW 1/4 OF SW 1/4, SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN N 85 DEGREES 58' W TO RIGHT-OF-WAY OF HIGHWAY; THENCE NWLY ALONG SAID RIGHT-OF-WAY TO N LINE OF SAID SW 1/4 OF SW 1/4, THENCE E TO NE CORNER OF SAID SW 1/4 OF SW 1/4, THENCE S TO POINT OF BEGINNING.

NOTE:

THE LEGAL DESCRIPTION PROVIDED HEREON IS FOR PERMITTING AND/OR CONSTRUCTION PURPOSES ONLY AND SHOULD NOT BE USED FOR TRANSFER OF RIGHT, TITLE OR INTEREST.

VICINITY MAP

N
1" = 300'

SECTION 6; TOWNSHIP 22 SOUTH; RANGE 26 EAST
LAKE COUNTY, FLORIDA
VERTICAL DATUM - NAVD 1988

Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER SHEET
C1.0	GENERAL NOTES
C1.1	ABBREVIATIONS & SYMBOLS
C1.2	EXISTING CONDITIONS & DEMOLITION PLAN
C2.0	EROSION CONTROL PLAN
C2.1	EROSION CONTROL DETAILS
C3.0	SITE PLAN
C4.0	UTILITY NOTES
C4.1	UTILITY PLAN
C4.2	DIRECTIONAL DRILL PROFILE
C4.3	AUTO TURN ANALYSIS - FIRE TRUCK
C4.4	AUTO TURN ANALYSIS - SEMI TRUCK
C5.0	GRADING PLAN
C6.0	DRAINAGE PLAN
C7.0	CIVIL DETAILS
C8.0	DRAINAGE DETAILS
C8.1	DRAINAGE DETAILS
C9.0	UTILITY DETAILS
C9.1	UTILITY DETAILS
C9.2	UTILITY DETAILS
C9.3	UTILITY DETAILS
C10.0	LIFT STATION DETAILS
TR/L100	TREE REMOVAL/LANDSCAPE PLAN
L101	LANDSCAPE PLAN
L102	LANDSCAPE PLAN
L200	LANDSCAPE DETAILS AND SPECS
IR100	OVERALL IRRIGATION PLAN
IR101	IRRIGATION PLAN
IR102	IRRIGATION PLAN
IR200	IRRIGATION DETAILS

WATER/SEWER/REUSE UTILITIES
CITY OF MINNEOLA UTILITIES
[redacted]

ELECTRICAL POWER UTILITIES
DUKE ENERGY
[redacted]

CABLE/PHONE UTILITIES
BRIGHT HOUSE
[redacted]

NATURAL GAS UTILITIES
LAKE APOPKA NATURAL GAS
[redacted]

ALL CONSTRUCTION IN THE FDOT R/W SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT STANDARDS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATIONS MANUAL.

APPLICANT
GREENBERG GIBBONS PROPERTIES
[redacted]

OWNER/DEVELOPER
GRASSY LAKE HOLDINGS, LLC
[redacted]

ENGINEER
CLYMER FARNER BARLEY, Inc.
[redacted]
MAJOR STACY, PE
FL. LIC. NO. 69146
[redacted]

SURVEYOR
ALLEN & COMPANY
[redacted]
KAYE JAMESON, PSM
FL. REG. NO. 5912
[redacted]

CALL 48 HOURS BEFORE YOU DIG IN FLORIDA
IT'S THE LAW!
1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

MAJOR LEE STACY
LICENSE
No. 70249
STATE OF FLORIDA
PROFESSIONAL ENGINEER

CFB CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
[redacted]

MINNEOLA COMMERCE CENTER

(S:\LAKE\NON_CIVIL\AGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\01 - MCC COVER.dwg) PLOT DATE: 7/9/2026 4:11 PM SAVE DATE: 7/9/2026 LAST SAVED BY: JWOHLFARTH

GENERAL NOTES

1. UNLESS OTHERWISE SPECIFIED, ALL WORK SHALL BE PERFORMED CONSISTENT WITH THE FOLLOWING SPECIFICATIONS:

- CITY OF MINNEOLA, FLORIDA
- ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
- LAKE COUNTY
- FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
- FLORIDA DEPARTMENT OF TRANSPORTATION

2. THE GEOTECHNICAL REPORT SHALL BE REVIEWED BY THE CONTRACTOR, AND THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE, INCLUDING ALL SURFACE AND SUBSURFACE CONDITIONS, THE WORK REQUIRED, AND ALL OTHER CONDITIONS THAT MAY AFFECT THE SUCCESSFUL COMPLETION OF THE JOB PRIOR TO COMMENCEMENT OF WORK.

3. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND PERMIT CONDITIONS BEARING ON THE CONDUCT OF THE WORK, AS DRAWN AND SPECIFIED. IF THE CONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT VARIANCE THEREWITH, HE SHALL PROMPTLY NOTIFY THE ENGINEER, IN WRITING, AND ANY NECESSARY CHANGES SHALL BE ADJUSTED, AS PROVIDED IN THE AGREEMENT FOR CHANGES IN THE WORK.

4. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER AND THE ENGINEER FOR THE ACTS AND OMISSIONS OF CONTRACTOR'S EMPLOYEES AND ALL HIS SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL NECESSARY ARRANGEMENTS WITH GOVERNMENTAL DEPARTMENTS, PUBLIC UTILITIES, PUBLIC CARRIERS, SERVICE COMPANIES, AND CORPORATIONS OWNING OR CONTROLLING ROADWAYS, RAILWAYS, WATER, SEWER, GAS, ELECTRICAL, TELEPHONE, AND TELEGRAPH FACILITIES SUCH AS PAVEMENTS, TRACKS, PIPING, WIRES, CABLES, CONDUITS, POLES, GUYS, OR OTHER SIMILAR FACILITIES, INCLUDING INCIDENTAL STRUCTURES CONNECTED THEREWITH THAT ARE ENCOUNTERED IN THE WORK IN ORDER THAT SUCH ITEMS MAY BE PROPERLY SUPPORTED, PROTECTED OR LOCATED.

6. UNLESS OTHERWISE SPECIFIED IN THE GENERAL CONDITIONS, ALL CONSTRUCTION IS TO BE GOVERNED BY THE PLANS, APPLICABLE PERMITS, AND SPECIFICATIONS HEREIN, AND ALL APPLICABLE FEDERAL, STATE AND LOCAL BUILDING AND SAFETY CODES, LAWS AND ORDINANCES.

7. PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC OR UTILITY RIGHT-OF-WAY, CONTRACTOR SHALL OBTAIN AUTHORIZATION AND PERMIT FROM JURISDICTION RESPONSIBLE FOR SUCH RIGHT-OF-WAY. IN ADDITION, CONTRACTOR SHALL OBTAIN GAS I.D. NUMBER FROM LOCAL GAS COMPANY AND NOTIFY SUNSHINE STATE ONE-CALL UTILITY NOTIFICATION CENTER AT 1-800-432-4770 AT LEAST 72 HOURS PRIOR TO START OF WORK.

8. PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC RIGHT-OF-WAY, CONTRACTOR SHALL DEVELOP AND IMPLEMENT A TRAFFIC CONTROL PLAN CONSISTENT WITH FDOT STANDARD DESIGN INDEX 600 FOR MOT CONTROL PLAN DEVELOPMENT AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, AND SUBMIT TO THE FDOT PERMIT MANAGER TO BE REVIEWED FOR APPROVAL BEFORE BEING IMPLEMENTED.

9. IN THE EVENT THE CONTRACTOR DISCOVERS ANY ERRORS OR OMISSIONS IN THE PLANS HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND/OR OWNER OR OWNER'S AGENT.

10. CONTRACTOR SHALL PRESERVE AND PROTECT ALL PERMANENT REFERENCE MONUMENTS, PERMANENT CONTROL POINTS, PERMANENT BENCH MARKS AND PROPERTY CORNERS. IN THE EVENT THE MONUMENTS, POINTS OR MARKERS ARE DISTURBED THE CONTRACTOR SHALL EMPLOY A FLORIDA REGISTERED LAND SURVEYOR TO RESET OR REPLACE THEM.

11. THE OWNER, OWNER'S AGENT AND INSPECTORS OF APPLICABLE GOVERNMENT JURISDICTIONS, SHALL AT ALL TIMES HAVE ACCESS TO THE WORK WHEREVER AND WHENEVER IT IS IN PREPARATION OR PROGRESS; AND THE CONTRACTOR SHALL PROVIDE PROPER FACILITIES FOR SUCH ACCESS AND FOR THE INSPECTION.

12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO TAKE ALL REASONABLE AND PRUDENT PRECAUTIONS TO INSURE THAT ALL COMPLETED WORK, MATERIALS AND EQUIPMENT STORED ON SITE ARE SAFE AND SECURED FROM UNAUTHORIZED ACCESS, USE, THEFT, OR VANDALISM. SUCH PRECAUTIONS MAY INCLUDE INSTALLATION OF SIGNS, FENCES, OR POSTING OF SECURITY GUARDS. PLEASE ENSURE ANY SIGNS OR FENCES INSTALLED NOT PART OF THESE PLANS, DO NOT OBSTRUCT MOTORIST SIGHTLINES.

13. CONTRACTOR SHALL, AT ALL TIMES, UTILIZE ALL NORMALLY ACCEPTED AND REASONABLY EXPECTED SAFETY PRACTICES AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND GUIDELINES PERTAINING TO SAFE UTILIZATION OF EQUIPMENT OR MATERIALS AS PUBLISHED BY THEIR MANUFACTURER'S.

14. PRIOR TO INITIATING ANY EXCAVATION (INCLUDING BUT NOT LIMITED TO TUNNELS, DITCHES, STORM WATER PONDS, CANALS, ARTIFICIAL LAKES) CONTRACTOR SHALL INSTALL FENCES AND/OR TAKE ALL OTHER REASONABLE AND PRUDENT STEPS TO INSURE THAT ACCESS TO EXCAVATION BY UNAUTHORIZED PERSONNEL IS PREVENTED.

15. CONTRACTOR SHALL COMPLY IN EVERY RESPECT WITH THE PROVISIONS OF THE FLORIDA STATE TRENCH SAFETY ACT.

16. THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE ALL REASONABLE PROTECTION TO PREVENT DAMAGE, INJURY OR LOSS TO:

    A. ALL EMPLOYEES ON THE WORK AND ALL OTHER PERSONS WHO MAY BE AFFECTED THEREBY;

    B. ALL THE WORK AND ALL MATERIALS AND EQUIPMENT TO BE INCORPORATED THEREIN, WHETHER IN STORAGE ON OR OFF THE SITE, UNDER THE CARE, CUSTODY OR CONTROL OF THE CONTRACTOR OR ANY OF ITS SUBCONTRACTORS;

    C. OTHER PROPERTY AT THE SITE OR ADJACENT THERETO, INCLUDING TREES, SHRUBS, LAWNS, WALKS, PAVEMENTS, ROADWAY, STRUCTURES AND UTILITIES NOT DESIGNATED FOR DEMOLITION IN THE COURSE OF CONSTRUCTION.

17. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC, QUASI PUBLIC OR OTHER AUTHORITY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY OR FOR THEIR PROTECTION AGAINST DAMAGE, INJURY OR LOSS, OR DESIGNED TO PROTECT THE ENVIRONMENT. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY EXISTING CONDITIONS AND PROGRESS OF THE WORK, ALL REASONABLE SAFEGUARDS FOR SAFETY AND PROTECTION, INCLUDING POSTING DANGER SIGNS AND OTHER WARNINGS AGAINST HAZARDS, PROMULGATING SAFETY REGULATIONS AND NOTIFYING OWNERS AND USERS OF ADJACENT UTILITIES OF THE EXISTENCE OF HAZARDS AND OF THE SAFETY REGULATIONS.

18. ALL DAMAGE OR LOSS TO ANY PROPERTY CAUSED IN WHOLE OR IN PART BY THE CONTRACTOR, A SUBCONTRACTOR, OR BY ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, SHALL BE REMEDIED BY THE CONTRACTOR, EXCEPT DAMAGE OR LOSS PROPERLY ATTRIBUTABLE SOLELY TO THE ACTS OR OMISSIONS OF THE OWNER, OR THE ENGINEER OR ANYONE EMPLOYED BY THEM, OR FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, AND NOT PROPERLY ATTRIBUTABLE IN WHOLE OR IN PART, TO THE FAULT OR NEGLIGENCE OF THE CONTRACTOR.

19. THOSE PARTS OF WORK IN PLACE WHICH ARE SUBJECT TO DAMAGE BECAUSE OF OPERATIONS BEING CARRIED ON ADJACENT THERETO SHALL BE COVERED, BOARDED UP OR SUBSTANTIALLY ENCLOSED WITH ADEQUATE PROTECTION BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.

20. UNTIL FINAL ACCEPTANCE OF THE WORK BY OWNER, THE CONTRACTOR SHALL HAVE THE CHARGE AND CARE OF AND SHALL BEAR THE RISK OF INJURY OR DAMAGE, LOSS OR EXPENSE TO ANY PART THEREOF, OR TO ANY MATERIALS STORED ON SITE, BY THE ACTION OF THE ELEMENTS OR FROM ANY OTHER CAUSE WHETHER ARISING FROM THE EXECUTION OR NON-EXECUTION OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD ALL INJURIES OR DAMAGES TO ANY PORTION OF THE WORK OCCASIONED BY ANY OF THE ABOVE CAUSES BEFORE FINAL ACCEPTANCE AND SHALL BEAR THE EXPENSES THEREOF.

21. ADEQUATE TRAFFIC CONTROL, BARRICADES AND FLAGMAN SERVICES SHALL BE FURNISHED AND MAINTAINED BY THE CONTRACTOR AT ALL POINTS WHERE CONVEYING EQUIPMENT ENGAGED ON THE WORK REGULARLY ENTERS ONTO OR CROSSES TRAFFIC-CARRYING ROADS.

22. THE CONTRACTOR SHALL COMPLY IN EVERY RESPECT WITH THE FEDERAL OCCUPATIONAL HEALTH AND SAFETY ACT OF 1970 AND ALL RULES AND REGULATIONS NOW OR HEREAFTER IN EFFECT UNDER SAID ACT, AND THE CONTRACTOR FURTHER AGREES TO COMPLY WITH ANY AND ALL APPLICABLE STATE LAWS AND REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH.

23. CONTRACTOR AND ITS SUBCONTRACTORS SHALL USE, HANDLE, TRANSPORT, AND DISPOSE OF ALL MATERIALS (HAZARDOUS OR OTHERWISE) IN COMPLIANCE WITH ALL PRESENT FEDERAL, STATE AND LOCAL ENVIRONMENTAL, HEALTH OR SAFETY LAW, INCLUDING, BUT NOT LIMITED TO, ALL SUCH STATUTES, REGULATIONS, RULES, ORDINANCES, CODES, AND RULES OF COMMON LAW.

24. CONTRACTOR FURTHER AGREES THAT CONTRACTOR AND ITS SUBCONTRACTORS SHALL NOT CAUSE THE DISCHARGE, RELEASE OR DISPOSAL OF ANY HAZARDOUS MATERIAL CREATED BY ITS WORK ON OR ABOUT THE JOB SITE, IN THE EVENT OF ANY SPILL, RELEASE OR ANY OTHER REPORTABLE OCCURRENCE, CONTRACTOR SHALL NOTIFY THE APPROPRIATE GOVERNMENTAL AGENCY AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE DELETERIOUS EFFECT OF SUCH SPILL ON PERSONS OR PROPERTY.

25. THE CONTRACTOR SHALL PROTECT AND KEEP OWNER (INCLUDING THEIR AGENTS AND EMPLOYEES) FREE AND HARMLESS FROM ANY AND ALL LIABILITY, PUBLIC OR PRIVATE, PENALTIES, CONTRACTUAL OR OTHERWISE, LOSSES, DAMAGES, COSTS, ATTORNEY'S FEES, EXPENSES, CAUSES OF ACTION, CLAIMS OR JUDGMENTS RESULTING FROM THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AS AMENDED OR ANY RULE OR REGULATION PROMULGATED THEREUNDER OR OF ANY STATE LAWS OR REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT, AND CONTRACTOR SHALL INDEMNIFY OWNER FROM ANY SUCH CLAIMS, PENALTIES, SUITS OR ACTIONS, PUBLIC OR PRIVATE, ADMINISTRATIVE OR JUDICIAL, INCLUDING ATTORNEY'S FEES PAID OR INCURRED BY OR ON BEHALF OF OWNER, JOINTLY OR SEVERALLY, AND/OR THEIR AGENTS AND EMPLOYEES. THE CONTRACTOR FURTHER AGREES, IN THE EVENT OF A CLAIMED VIOLATION OF ANY FEDERAL OR STATE SAFETY AND HEALTH LAW OR REGULATION ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT, OWNER MAY IMMEDIATELY TAKE WHATEVER ACTION IS DEEMED NECESSARY BY OWNER TO REMEDY THE CLAIMED VIOLATION. ANY AND ALL COSTS OR EXPENSES PAID OR INCURRED BY OWNER IN TAKING SUCH ACTION SHALL BE BORNE BY CONTRACTOR, AND CONTRACTOR AGREES TO PROTECT, HOLD HARMLESS AND INDEMNIFY OWNER AGAINST ANY AND ALL SUCH COSTS OR EXPENSES.

26. CONTRACTOR AND ITS SUBCONTRACTORS SHALL, UPON COMPLETION OF PERFORMANCE OF ALL DUTIES UNDER THIS CONTRACT, REMOVE ALL SUPPLIES, MATERIALS, AND WASTE CONTAINING AND HAZARDOUS MATERIAL FROM THE JOB SITE. CONTRACTOR SHALL BEAR FULL FINANCIAL RESPONSIBILITY, AS BETWEEN THE PARTIES OF THIS CONTRACT, FOR THE COMPLIANCE OF CONTRACTOR AND ITS SUBCONTRACTORS WITH THE PROVISIONS OF THIS CONTRACT.

27. CONTRACTOR AGREES TO INDEMNIFY, DEFEND, PROTECT AND HOLD THE OWNER HARMLESS FROM AND AGAINST ANY CLAIMS INCLUDING, WITHOUT LIMITATION, ACTUAL ATTORNEY'S FEES AND ANY COSTS OF INVESTIGATION, SOILS TESTING, GOVERNMENTAL APPROVALS, REMEDIATION AND CLEANUP ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE FAILURE OF CONTRACTOR OR ITS SUBCONTRACTORS, OR THEIR AGENTS, EMPLOYEES, OFFICERS, OR REPRESENTATIVES, TO COMPLY WITH THE TERMS OF THESE CONSTRUCTION DOCUMENTS.

28. SHOULD CONTRACTOR OR ITS SUBCONTRACTORS DISCHARGE, RELEASE OR DISPOSE OF ANY HAZARDOUS MATERIAL ON OR ABOUT THE JOB SITE IN VIOLATION OF THESE CONSTRUCTION DOCUMENTS, CONTRACTOR SHALL IMMEDIATELY SO INFORM OWNER & ENGINEER IN WRITING. IN THE EVENT OF ANY SPILL, RELEASE OR ANY OTHER REPORTABLE OCCURRENCE, CONTRACTOR SHALL NOTIFY THE APPROPRIATE GOVERNMENTAL AGENCY, OWNER & ENGINEER AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE DELETERIOUS EFFECT OF SUCH SPILL ON PERSONS OR PROPERTY.

29. IN THE EVENT CONTRACTOR OR ITS SUBCONTRACTORS ENCOUNTER ON THE PREMISES ANY PIPELINE, UNDERGROUND STORAGE TANK OR OTHER CONTAINER, OF ANY KIND, THAT MAY CONTAIN A HAZARDOUS MATERIAL, OR ENCOUNTER MATERIAL REASONABLY BELIEVED TO BE A HAZARDOUS MATERIAL, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO OWNER AND/OR ENGINEER IN WRITING.

30. "HAZARDOUS MATERIAL" MEANS ANY SUBSTANCE: (A) THE PRESENCE OF WHICH REQUIRES INVESTIGATION OR REMEDIATION UNDER ANY PRESENT FEDERAL, STATE OR LOCAL STATUTE, REGULATION, ORDINANCE, RULE, CODE, ORDER, ACTION, POLICY OR COMMON LAW, OR (B) WHICH IS OR BECOMES DEFINED AS A "HAZARDOUS WASTE," "HAZARDOUS SUBSTANCE," POLLUTANT OR CONTAMINANT UNDER ANY PRESENT FEDERAL, STATE OR LOCAL STATUTE, REGULATION, RULE OR ORDINANCE OR AMENDMENTS THERETO INCLUDING, WITHOUT LIMITATION, THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (42 U.S.C. SECTIONS 9601 ET SEQ.) AND/OR THE RESOURCE CONSERVATION AND RECOVERY ACT (42 U.S.C. SECTIONS 6901 ET SEQ.), OR (C) WHICH IS TOXIC, EXPLOSIVE, CORROSIVE, FLAMMABLE, INFECTIOUS, RADIOACTIVE, CARCINOGENIC, MUTAGENIC, OR OTHERWISE HAZARDOUS AND IS REGULATED BY ANY GOVERNMENTAL AUTHORITY, AGENCY, DEPARTMENT, COMMISSION, BOARD, AGENCY OR INSTRUMENTALITY OF THE UNITED STATES, THE STATE IN WHICH THE PREMISES ARE LOCATED OR ANY POLITICAL SUBDIVISION THEREOF, OR (D) THE PRESENCE OF WHICH ON THE PREMISES CAUSES OR THREATENS TO CAUSE A NUISANCE UPON THE PREMISES OR TO ADJACENT PROPERTIES OR POSES OR THREATENS TO POSE A HAZARD TO THE HEALTH OR SAFETY OF PERSONS ON OR ABOUT THE PREMISES, OR (E) WHICH CONTAINS GASOLINE, DIESEL FUEL OR OTHER PETROLEUM HYDROCARBONS, OR (F) WHICH CONTAINS POLYCHLORINATED BIPHENYLS (PCBS), ASBESTOS, LEAD OR UREA FORMALDEHYDE FOAM INSULATION.

31. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES AS TO SIZE, LOCATION, AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AND ALL CONFLICTS, DEVIATIONS OR OMISSIONS TO THESE CONSTRUCTION DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.

32. IF ANY TESTING, INSPECTION OR APPROVAL REVEAL DEFECTIVE WORK, CONTRACTOR SHALL NOT BE ALLOWED TO RECEIVE ANY ASSOCIATED COSTS AND THE OWNER SHALL BE ENTITLED TO DEDUCT FROM THE CONTRACT PRICE, BY ISSUING A CHANGE ORDER, OWNER'S COSTS ARISING OUT OF THE DEFECTIVE WORK, INCLUDING COSTS OF REPEATED PROCEDURES, COMPENSATION FOR ENGINEER'S AND DESIGN ENGINEER'S SERVICES AND ALL OTHER RELATED COSTS.

ADDITIONAL NOTES

1. BEARINGS SHOWN HEREON ARE RELATIVE TO THE WEST LINE OF NORTHWEST 1/4 0F SECTION 28, TOWNSHIP 21 SOUTH, RANGE 26 EAST, HAVING AN ASSUMED BEARING OF NORTH 01°03'10" EAST. ELEVATIONS REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP (FIRM) NO. 12069C0525E, MAP REVISED DECEMBER 18, 2012, EFFECTIVE DATE: SEPTEMBER 25, 2009, THIS PROPERTY LIES IN FLOOD ZONE X, (AREA OF MINIMAL FLOOD HAZARD) AND ZONE A, BASE FLOOD ELEVATIONS NOT DETERMINED. TOWN OF MINNEOLA, COMMUNITY NUMBER 120412.
3. WETLAND LOCATIONS AS SHOWN HEREON WERE PROVIDED BY MARK AUSLEY (DIRECTOR), BIO-TECH CONSULTING, INC. RECEIVED ON SEPTEMBER 11TH, 2023.
4. REFERENCE WAS MADE TO OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY COMMITMENT NUMBER: 1230180 A1, EFFECTIVE DATE: APRIL 26, 2022 AT 11:00 PM, WITHOUT INDEPENDENT INVESTIGATION OF THE TITLE INFORMATION PRESENTED AND SHOWN HEREON.
5. ALL PROPERTY CORNERS ARE SET IRON ROAD & CAP, WOHL LB 8214, UNLESS OTHERWISE NOTED.
6. ALL TRAFFIC CONTROL DEVICES AND SIGNAGE SHALL MEET OR EXCEED CURRENT F.D.O.T. AND MUNICIPALITY SPECIFICATIONS, AND MEET THE REQUIREMENTS OF CHAPTER 316 FLORIDA STATUTES.
7. ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT MUNICIPALITY STANDARDS AND SPECIFICATIONS. IF A CONFLICT OCCURS THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR A DETERMINATION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ANY OTHER CONTRACTORS WHO MAY BE PERFORMING WORK AT THE PROJECT SITE.
9. EXISTING FACILITIES THAT ARE NOT SHOWN TO BE DEMOLISHED AND ARE DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO A CONDITION EQUIVALENT TO THAT WHICH EXISTED PRIOR TO COMMENCEMENT OF CONSTRUCTION. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
10. THE CONTRACTOR SHALL KEEP AND MAINTAIN ON THE JOB SITE AN ACCURATE & UP TO DATE SET OF AS-BUILT DRAWINGS. THESE DRAWINGS SHALL INCLUDE LOCATIONS AND ELEVATIONS OF MAINS, FITTINGS, VALVES, SERVICES, CASINGS, AND OTHER APPURTENANCES AS WELL AS ANY DEVIATIONS FROM THAT WHICH IS SHOWN IN THE PLANS. THESE AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE UPON COMPLETION OF THE WORK FOR HIS REVIEW AND USE.
11. THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL APPLICABLE PERMITS ON-SITE AND SHALL BE RESPONSIBLE TO ADHERE TO ALL PERMIT CONDITIONS DURING CONSTRUCTION.
12. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING & OBTAINING ALL REQUIRED PERMITS AS REQUIRED BY ALL REGULATORY AUTHORITIES.
13. ALL REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED.
14. NO WORK (CONSTRUCTION, PLANT TRIMMING, REMOVAL OR DISTURBANCE, SOIL DISTURBANCE OR FILLING) SHALL OCCUR WITHIN THE ESTABLISHED WETLAND BUFFERS DEPICTED ON THESE PLANS OTHER THAN NECESSARY FOR THE CONSTRUCTION OF PERMITTED OUTFALL STRUCTURES AND ASSOCIATED ENERGY DISSIPATION DEVICES AS PERMITTED BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
15. ALL EARTHWORK SHALL BE SODDED/SEEDED UNLESS OTHERWISE NOTED.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING AND COORDINATING ALL SHOP DRAWINGS APPROVALS WITH ANY AND ALL AUTHORITIES HAVING JURISDICTION.
17. ALL SITE DESIGN COMPLETED BASED ON SURVEY PROVIDED BY WOHLFARTH CONSULTING GROUP LLC.
18. ALL PLAT INFORMATION IS COMPLETED BY PEC SURVEYING AND MAPPING, LLC.

HANDICAP ACCESSIBILITY NOTES:

1. ALL CONSTRUCTION MUST MEET OR EXCEED ALL REQUIREMENTS AS OUTLINED IN THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE FLORIDA ACCESSIBILITY CODE, MOST RECENT EDITIONS. BOTTOM OF CURB RAMP ELEVATION (B.O. RAMP) IS RELATIVE TO EACH CURB RAMP CONDITION. ACTUAL ELEVATIONS SHALL BE BASED ON EXISTING GRADE OF CURB FLOW LINE AT THE B.O. RAMPS.
2. TOP OF CURB ELEVATION ADJACENT TO B.O. RAMP = 0.50 FT. MAX. UNLESS OTHERWISE NOTED.
3. ADA REQUIREMENTS SUPERSEDE SPOT GRADES AT LOT LINES. CONTRACTOR TO CUT BACK SLOPE AT 3:1 OR FLATTER AS NEEDED FOR RAMP AND SIDEWALK CONNECTION.
4. REFER TO PLAN SHEETS AND SECTIONS FOR LOCATIONS AND SIDEWALK WIDTHS.
5. THE DETECTABLE WARNING STRIP SHALL CONSIST OF A 24 INCH WIDE TACTILE PATTERN OF RAISED TRUNCATED DOMES (ALIGNED PATTERN). DOMES SHALL HAVE A DIAMETER OF 0.9 INCH, A HEIGHT OF 0.2 INCH, AND A CENTER TO CENTER SPACING OF 2.35 INCHES. THE RAMP DETECTABLE WARNING STRIP SHALL BE CONTRASTING IN COLOR. THE MATERIAL USED TO PROVIDE CONTRAST SHALL CONTRAST BY AT LEAST 70%.
6. THE CROSS SLOPE OF RAMP SURFACES AND ADJACENT STREET GRADES SHALL BE NO MORE THAN 1:50 OR 2% MAXIMUM.
7. CURB RAMPS CONSTRUCTED BY THE CONTRACTOR SHALL MEET ALL CURRENT APPLICABLE A.D.A. REQUIREMENTS AND SHALL HAVE DETECTABLE WARNING COMPLYING WITH A.D.A. REQUIREMENTS. ACCESSIBILITY ROUTES SHALL MEET ALL APPLICABLE A.D.A. REQUIREMENTS.
8. CONTRACTOR TO REFER TO MUNICIPALITY DETAILS AS NEEDED.
9. DRIVEWAY/ROADWAY CROSS SLOPES AT CROSSWALKS SHALL BE MAXIMUM 2% PER ADA REQUIREMENTS.
10. SIDEWALK CROSS SLOPES SHALL BE MAXIMUM 2% PER ADA REQUIREMENTS.
11. CURB RAMP FLARES & LANDINGS SHALL MEET ADA REQUIREMENTS.
12. ACCESSIBLE ROUTE WITH RUNNING SLOPES GREATER THAN 1:20 IS A RAMP AND SHALL COMPLY WITH ADA RAMP REQUIREMENTS.
13. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO MEET ALL CURRENT ADA STANDARDS. CONTRACTOR SHALL REFER TO FDOT STANDARDS. (INDEX 304, MOST CURRENT EDITION)

RECORD DRAWING AS-BUILT REQUIREMENTS:

AS-BUILT DRAWINGS SHALL BE PREPARED BY AND CERTIFIED (SIGNED AND SEALED) BY A REGISTERED SURVEYOR, AND SHALL BE PROVIDED TO THE ENGINEER OF RECORD UPON COMPLETION OF THE PROJECT SITE IMPROVEMENTS A MINIMUM OF 1 WEEK PRIOR TO CONTRACTORS ATTEMPT FOR FINAL CERTIFICATE OF OCCUPANCY (CO). AS-BUILT DRAWINGS SHALL REFLECT ANY CHANGES TO THE IMPROVEMENTS MADE DURING CONSTRUCTION AND MUST MEET THE MINIMUM REQUIREMENTS OF ALL REGULATORY AGENCIES HAVING JURISDICTION AS WELL AS THE CRITERIA OUTLINED BELOW. BOTH THE ORIGINAL DESIGN AND REVISED AS-BUILT DATA, AS APPLICABLE, MUST BE CLEARLY SHOWN. THE AS-BUILT DRAWINGS MUST BE CLEARLY LABELED AS AS-BUILT OR RECORD DRAWING. THE FOLLOWING INFORMATION, AT A MINIMUM, SHALL BE CERTIFIED ON THE AS-BUILT DRAWINGS:

WATER DISTRIBUTION SYSTEM:

A. LOCATION AND DIMENSIONS OF PIPES, VALVES, FITTINGS, CHANGE OF DIRECTION, AND OTHER ASSOCIATED FACILITIES.

WASTEWATER COLLECTION/TRANSMISSION SYSTEM:

A. LOCATION, DIMENSION, AND INVERT ELEVATIONS OF PIPES, MANHOLES (INCLUDING RIM ELEVATION), LIFTSTATION, FORCEMAIN, FITTINGS, CHANGE IN DIRECTION AND OTHER ASSOCIATED FACILITIES.

B. VIDEO INCLUDING LATERALS.

PAVING AND DRAINAGE SYSTEM:

A. DIMENSIONS AND ELEVATIONS OF ALL DISCHARGE STRUCTURES INCLUDING ALL WEIRS, SLOTS, GATES, PIPES, AND SKIMMERS; LOCATIONS, DIMENSIONS, AND ELEVATIONS OF ALL FILTER, EXFILTRATION, OR UNDERDRAIN SYSTEMS INCLUDING CLEANOUTS, PIPES, CONNECTIONS TO CONTROL STRUCTURES, AND POINTS OF DISCHARGE TO THE RECEIVING WATERS;

C. DIMENSIONS, ELEVATIONS, CONTOURS, OR CROSS-SECTIONS OF ALL STORMWATER TREATMENT POND STORAGE AREAS SUFFICIENT TO DETERMINE STAGE-STORAGE RELATIONSHIPS OF THE STORAGE AREA, AND THE POND DEPTH AND VOLUME BELOW THE CONTROL WATER ELEVATION FOR NORMALLY WET SYSTEMS;

D. DIMENSIONS, ELEVATIONS, CONTOURS, FINAL GRADES, OR CROSS-SECTIONS OF THE DRAINAGE SYSTEM IMPROVEMENTS TO DETERMINE FLOW DIRECTIONS AND CONVEYANCE OF RUNOFF TO THE TREATMENT SYSTEM;

E. DIMENSIONS, ELEVATIONS, CONTOURS, FINAL GRADES, OR CROSS-SECTIONS OF ALL CONVEYANCE SYSTEMS UTILIZED TO CONVEY OFF-SITE RUNOFF AROUND THE SYSTEM;

F. EXISTING WATER ELEVATION OF SURFACE WATERS AND THE DATE DETERMINED;

G. ELEVATION AND LOCATION OF BENCHMARK'S FOR THE SURVEY.

ADA FACILITIES:

A. ELEVATIONS AT THE FOUR CORNERS OF ALL HANDICAP PARKING SPACES AND ADJACENT LOADING AISLES.

B. ELEVATIONS AND LOCATIONS FOR ALL ACCESSIBLE RAMPS WHICH ADEQUATELY REFLECT THE BUILT SLOPES.

C. ELEVATIONS AND LOCATIONS ALONG THE PATHS OF CONVEYANCE FOR PEDESTRIAN TRAFFIC AND ALL ADA ACCESSIBLE ROUTES EVERY 25 FT. WHICH ADEQUATELY REFLECT THE SLOPE AND CROSS SLOPE.

BY	REVISIONS	DATE

CLYMER FARNER BARLEY
CFB
CLYMER FARNER BARLEY, Inc.
CERTIFICATE OF AUTHORIZATION NO. LC 34762
7413 ALFORD COURT, BROOKSVILLE, FL 34602
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

GENERAL NOTES

SAVE DATE	4/17/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	02- MCC GENERAL NOTES

MAJOR LEE MACK
LICENSED
No. 70249
STATE OF FLORIDA
PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Major L. Mack, PE. on the date shown on this item 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.

SHEET NUMBER C1.0

I:\LAVENON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\02- MCC GENERAL NOTES.dwg| PLOT DATE:7/8/2026 3:35 PM SAVE DATE: 4/17/2026 LAST SAVED BY: NDANIEL

ABBREVIATIONS

A

A	AREA
AB	ANCHOR BOLT
ABD	ABANDON(ED)
AC	ACRE(S)
AC-FT	ACRE FOOT/FEET
ACP	ASBESTOS CEMENT PIPE
ADDL	ADDITIONAL
ADT	AVERAGE DAILY TRAFFIC
AL	ALUMINUM
ALT	ALTERNATE
AM	BEFORE NOON
AMP	AMPERE(S)
APPROX	APPROXIMATE
ARV	AIR RELEASE VALVE
ARVV	AIR RELEASE VACUUM VALVE
ASPH	ASPHALT
ASSY	ASSEMBLY
AVE	AVENUE
AVG	AVERAGE
AZ	AZIMUTH

B

BFP	BACKFLOW PREVENTER
BL	BASELINE
BLDG	BUILDING
BLVD	BOULEVARD
BM	BENCH MARK
BND	BOUNDARY
BO	BLOWOFF
BOC	BACK OF CURB
BOT	BOTTOM
BRG	BEARING
BS	BOTTOM OF SLOPE
BV	BUTTERFLY VALVE

C

CAP	CAPACITY
CB	CATCH BASIN
CC	CENTER TO CENTER
CEM	CEMENT
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
C&G	CURB AND GUTTER
CI	CAST IRON
CIP	CAST IRON PIPE
CJ	CONSTRUCTION JOINT
C/L	CENTER LINE
CLP	CONCRETE LIGHT POLE
CLR	CLEAR/CLEARANCE
CLS	CLASS
CM	CONCRETE MONUMENT
CMP	CORRUGATED METAL PIPE
CMPA	CORRUGATED METAL PIPE ARCH
CND	CONDUIT
CO.	COUNTY
CO	CLEANOUT
COL	COLUMN
COMP	COMPLETE
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCT(ION)
CONT	CONTINUOUS
COORD	COORDINATE(S)
COR	CORNER
CPLG	COUPLING
CPP	CONCRETE POWER POLE
CS	CONTROL STRUCTURE
CTG	COATING
CTR	CENTER
CTV	CABLE TELEVISION
CULV	CULVERT
CY	CUBIC YARD
CYL	CYLINDER

D

DBL	DOUBLE
DEG OR °	DEGREE
DEFL	DEFLECT(ION)
DEPT	DEPARTMENT
DET	DETAIL
DHWL	DESIGN HIGH WATER LEVEL
DI	DUCTILE IRON
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DISCH	DISCHARGE
DIST	DISTANCE
DMH	DROP MANHOLE
DN	DOWN
DRN	DRAIN
DWG	DRAWING
DWY	DRIVEWAY

E

E	EAST
EA	EACH
EC	EDGE OF CONCRETE
ED	ENERGY DISSIPATOR
EF	EACH FACE
EFF	EFFLUENT
EG	EXISTING GRADE
E/L	EASEMENT LINE
ELB	ELBOW
ELEC	ELECTRIC
ELEV	ELEVATION
ELLIP	ELLIPSE/ELLIPTICAL
ENC	ENCASEMENT
ENG	ENGINEER(ING)
EOP	EDGE OF PAVEMENT
EQ	EQUAL/EQUATION
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
ESMT	EASEMENT
EST	ESTIMATE
EW	EACH WAY
EWL	ENDWALL
EXC	EXCAVATE/EXCAVATION
EX. OR EXIST	EXISTING
EXP	EXPAND/EXPANSION
EXT	EXTEND/EXTENSION

F

F&C	FRAME AND COVER
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FDN	FOUNDATION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
F&I	FURNISH AND INSTALL
FIG	FIGURE
FIN	FINISHED
FIT	FITTING
FL	FENCE LINE
FLR	FLOOR
FLEX	FLEXIBLE
FLG	FLANGE
FM	FORCE MAIN
FND	FOUND
FPH	FEET PER HOUR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET/FOOT
FTG	FOOTING

G

GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GM	GAS MAIN
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GPS	GALLONS PER SECOND
GR	GUARD RAIL
GRD	GROUND/GRADE
GSP	GALVANIZED STEEL PIPE
GV	GATE VALVE
GV&B	GATE VALVE AND BOX
GW	GUY WIRE
GWT	GROUND WATER TABLE

H

HB	HOSE BIBB
HDW	HARDWARE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HR	HOUR
HT	HEIGHT
HW	HEADWALL
HWL	HIGH WATER LEVEL
HWY	HIGHWAY
HYD	HYDRAULIC

I

I-4	INTERSTATE HIGHWAY
IA	INTERSECTION ANGLE
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCHES
INL	INLET
INS	INSERT
INST	INSTALL
IP	IRON PIPE
IR	IRON ROD
INT	INTERSECT/INTERSECTION
INV	INVERT

J

JB	JUNCTION BOX
JCT	JUNCTION
JST	JOIST
JT	JOINT

L

L	LENGTH
LAT	LATITUDE
LATL	LATERAL
LB	POUND
LF	LINEAR FEET/FOOT
LG	LONG
LIM	LIMIT(S)
LP	LIGHT POLE
LONG	LONG
LT	LEFT
LWL	LOW WATER LEVEL

M

MAINT	MAINTENANCE
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
ME	MITERED END
MFR	MANUFACTURER
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MHC	MANHOLE COVER
MHWL	MEAN HIGH WATER LEVEL
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MLP	METAL LIGHT POLE
MLWL	MEAN LOW WATER LEVEL
MON	MONUMENT
MPH	MILES PER HOUR
MSL	MEAN SEA LEVEL
MTG	MOUNTING

N

N	NORTH
NA	NOT APPLICABLE
N&C	NAIL AND CAP
NE	NORTHEAST
NG	NATURAL GROUND
NIC	NOT IN CONTRACT
NO OR #	NUMBER
NOM	NOMINAL
NTP	NOTICE TO PROCEED
NTS	NOT TO SCALE
NW	NORTHWEST
NWL	NORMAL WATER LEVEL

O

OC	ON CENTER
OD	OUTSIDE DIAMETER
OE	OR EQUAL
OPNG	OPENING
OPP	OPPOSITE
ORCP	OVAL REINFORCED CONCRETE PIPE
OS	OUTFALL STRUCTURE
OVFL	OVERFLOW
OVHD	OVERHEAD

P

PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PEP	POLYETHYLENE PIPE
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
P/L	PROPERTY LINE
POB	POINT OF BEGINNING
POJ	PUSH ON JOINT
POS	POINT OF SERVICE
PP	POWER POLE
PR	PHONE RISER
PRC	POINT OF REVERSE CURVATURE
PRESS	PRESSURE
PROJ	PROJECT
PROP	PROPOSED
PRVC	POINT OF REVERSE VERTICAL CURVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PWR	POWER

Q

Q	FLOW RATE

R

R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RCPA	REINFORCED CONCRETE PIPE ARCH
RD	ROAD
RDY	ROADWAY
RED	REDUCER
REF	REFERENCE
REINF	REINFORCE(D)
REQD	REQUIRED
REV	REVISE/REVISION
RPM	REVOLUTIONS PER MINUTE
RR	RAILROAD
RT	RIGHT
RV	RELIEF VALVE
R/W	RIGHT-OF-WAY
RWM	REUSE WATER MAIN

S

S	SOUTH
SAN	SANITARY SEWER
SB	SPLASH BLOCK
SCH	SCHEDULE
SD	SIDE DRAIN
SDN	SHELF DRAIN
SE	SOUTHEAST
SEC	SECONDS
SECT	SECTION
SH	SHEET
SHGWT	SEASONAL HIGH GROUND WATER TABLE
SIM	SIMILAR
S/L	SETBACK LINE
SL	SLOPE
SM	SHEET METAL
SPEC	SPECIFICATION(S)
SQ	SQUARE
SQ IN	SQUARE INCH(ES)
SQ FT	SQUARE FOOT/FEET
SQ YD	SQUARE YARD(S)
SR	STATE ROAD
SS	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
STR	STRUCTURE
STS	STORM SEWER
SUP	SUPPORT
SUSP	SUSPEND/SUSPENSION
SVC	SERVICE
SW	SOUTHWEST
SWK	SIDEWALK
SYM	SYMBOL(S)
SYMM	SYMMETRICAL
SYS	SYSTEM

T

T	TANGENT
TB	TURFBLOCK
T&B	TOP AND BOTTOM
TBM	TEMPORARY BENCH MARK
TC	TIME OF CONCENTRATION
TD	TRENCH DRAIN
TDH	TOTAL DYNAMIC HEAD
TECH	TECHNICIAN/TECHNICAL
TEMP	TEMPORARY
TL	TERMINAL LAMPHOLE
TOB	TOP OF BANK
TOC	TOP OF CURB
TOS	TOE OF SLOPE
TOT	TOTAL
TS	TOP OF SLOPE
TWP	TOWNSHIP
TYP	TYPICAL

U

UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UTC	UNDERGROUND TELEPHONE CABLE

V

VB	VALVE BOX
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VPC	VERTICAL POINT OF CURVE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY

W

W	WEST
W/	WITH
WM	WATER MAIN
W/O	WITHOUT
WP	WATER/WEATHER PROOF
WPP	WOOD POWER POLE
WS	WATER SURFACE
WSWT	WET SEASON WATER TABLE
WT	WEIGHT
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH

Y

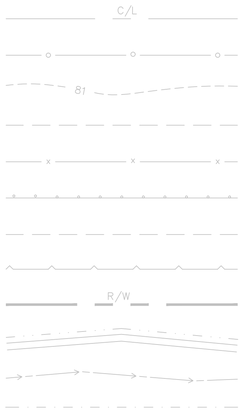
YD	YARD
YR	YEAR

MISC

&	AND
@	AT
△	DELTA

EXISTING SYMBOLS

LINES

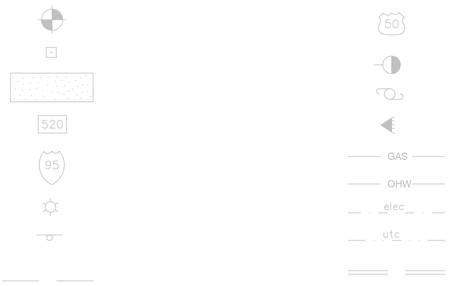


SANITARY SEWER

POTABLE WATER

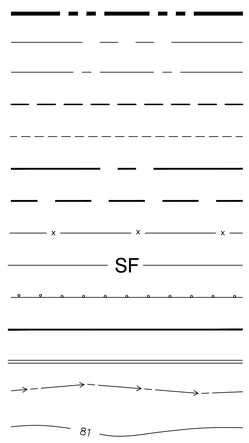
STORM DRAIN

HIGHWAY & UTILITIES

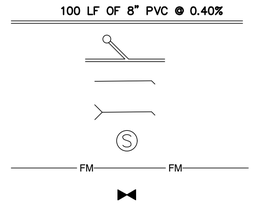


PROPOSED SYMBOLS

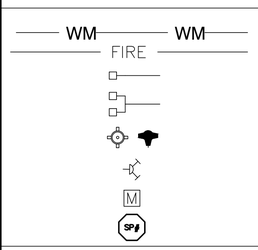
LINES



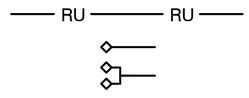
SANITARY SEWER



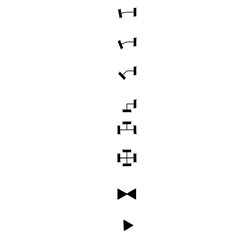
POTABLE WATER



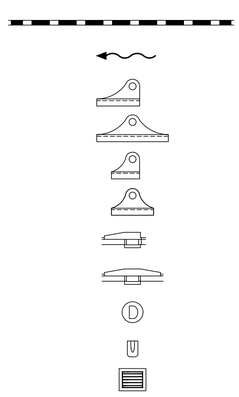
RECLAIMED WATER



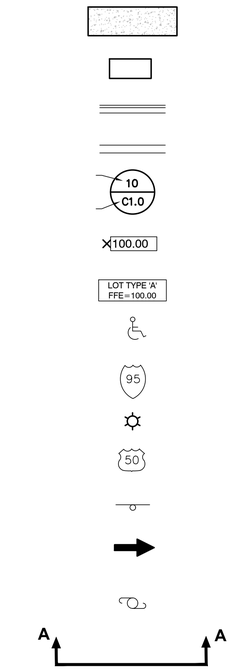
GENERIC UTILITIES



STORM



ROADWAY & GRADING



CLYMER FARNER BARLEY, Inc.
7413 ALLONDRA BLVD, NEW PORT RICHEY, FL. 34762
(352)748-3126

REVISIONS	DATE	BY

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL

ABBREVIATIONS & SYMBOLS

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	C1.1 MCC ABBREVIATIONS & SYMBOLS

MAJOR LEE WACHTEL LICENSE No. 70249 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Major L. Wachtel, PE. on the date shown on this item using a digital signature.
Printed copies of this document are not considered signed and sealed and the signature must not be verified on any electronic media.

SHEET NUMBER C1.1

I:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\03- MCC ABBREVIATIONS & SYMBOLS.dwg PLOT DATE: 7/8/2026 3:36 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS

S00°34'14"W | 1026.13'O/A

N00°34'14"E 276.14'(M)

N00°34'14"E 1044.05'

N85°23'37"W 456.22' (M)

S89°18'48"E 516.61'(M)

S89°25'15"E 704.61' (M)

N13°31'10"W 320.00' (M)

S76°28'50"W 152.00' (M)

N76°28'50"E 152.69' (M)

S13°31'10"E 146.05'(M)

N13°31'10"W 398.74' (M)

N13°31'10"W

50 25 0 50 100 150

SCALE IN FEET
1" = 50'

P-01
EX. GRADE = 144±
ENC. GWT = NOT ENC
SHGWT = 134±
AQUIFER = 132±
KH = 40 FT/DAY
KV = 27 FT/DAY

P-02
EX. GRADE = 149±
EX. GWT = NOT ENC
SHGWT = 139±
AQUIFER = 137.5±
KH = 40 FT/DAY
KV = 27 FT/DAY

DEMO EXISTING ASPHALT

EX. DRAINAGE RETENTION AREA
TO BE RELOCATED (SEE SHEET C5.0)

EX. BILLBOARD POST AND SIGN
TO BE REMOVED

EX. SIGN (PRIVATE DRIVE)
TO BE RELOCATED (SEE SHEET C3.0)

EX. MAILBOXES
TO BE RELOCATED (SEE SHEET C3.0)

EX. PIPE AND MITERED END SECTION
TO BE REMOVED (SEE SHEET C6.0)

END OF ± 209 L.F. OF EXISTING
TYPE F CURB TO BE DEMOLISHED

END OF ± 572 L.F. OF
EXISTING GUARDRAIL AND ASPHALT
BEHIND CURB TO BE DEMOLISHED

SAW CUT EXISTING CURB

EX-INLET 5
SWAP INLET TOP WITH TOP SLAB
WITH MANHOLE RING AND COVER
(SEE SHEET C6.0)

EXISTING PIPE TO BE DEMOLISHED

EXISTING STRUCTURE TO BE DEMOLISHED

EXISTING PIPE TO BE DEMOLISHED

EX. MITERED END
TO BE DEMOLISHED

EXISTING ± 572 L.F. OF GUARDRAIL AND ASPHALT
BEHIND CURB TO BE DEMOLISHED

BEGINNING OF ± 209 L.F. OF
EXISTING TYPE F CURB TO BE
DEMOLISHED

END OF ± 551 L.F. OF EXISTING
TYPE F CURB TO BE DEMOLISHED

SAW CUT EXISTING CURB

EXISTING
PIPE EAST OF PROPOSED
MANHOLE TO BE DEMOLISHED

SAW CUT EXISTING PIPE FOR CONNECTION
TO PROPOSED MANHOLE

EX-INLET 2
SWAP INLET TOP WITH TOP SLAB
WITH MANHOLE RING AND COVER
(SEE SHEET C6.0)

BEGINNING OF ± 572 L.F.
OF EXISTING GUARDRAIL AND ASPHALT
BEHIND CURB TO BE DEMOLISHED

SAW CUT EXISTING CURB

BEGINNING OF ± 551 L.F.. OF
EXISTING TYPE F CURB TO BE
DEMOLISHED

EX-INLET 1
SWAP INLET TOP WITH TOP SLAB
WITH MANHOLE RING AND COVER
(SEE SHEET C6.0)

U.S. HIGHWAY NO. 27
CLAUDE PEPPER MEMORIAL HIGHWAY
R/W WIDTH VARIES

BY	DATE	REVISIONS

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALFORD AVE. LADY LAKE, FL. 34762
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL

EXISTING CONDITIONS & DEMOLITION PLAN

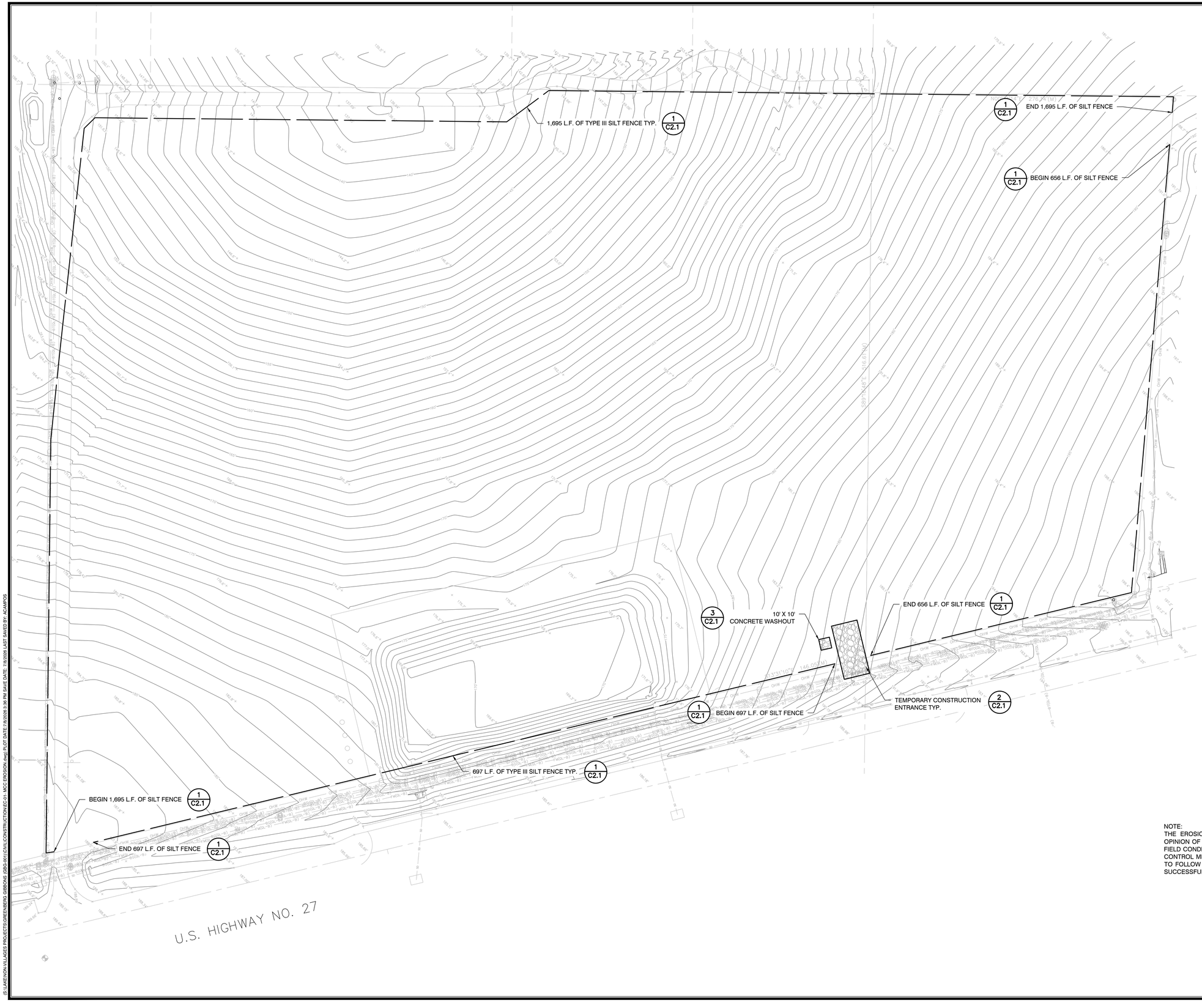
SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	04- MCC EXISTING CONDITIONS

MAJOR LUCAS STOCK
LICENSED
No. 70249
STATE OF FLORIDA
PROFESSIONAL ENGINEER

SHEET NUMBER C1.2

Not to be used for construction unless sealed and signed by Major L. Stock, PE.
Electronic seals and signatures must comply with Florida Statute 668.003(14).
The seal appearing on this document was authorized by the signing
engineer listed in the certificate of the electronic seals.

(S:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\24- MCC EXISTING CONDITIONS.dwg) PLOT DATE: 7/8/2026 3:39 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS



NOTE:
THE EROSION CONTROL MEASURES SHOWN ON THIS PLAN ARE, IN THE OPINION OF THE ENGINEER, THE MINIMUM THAT MAY BE REQUIRED. ACTUAL FIELD CONDITIONS MAY REQUIRE EITHER ADDITIONAL OR REDUCED EROSION CONTROL MEASURES TO BE IMPLEMENTED. THE CONTRACTOR IS DIRECTED TO FOLLOW STANDARD BEST MANAGEMENT PRACTICES IN IMPLEMENTING A SUCCESSFUL EROSION CONTROL PLAN.

REVISIONS	BY	DATE

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALFORD AVE. FORT MYERS, FL. 33907
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

EROSION CONTROL PLAN

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	EC-01- MCC EROSION

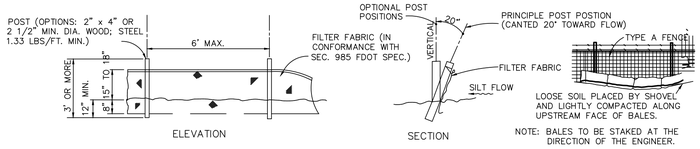
This item has been electronically signed and sealed by Major L. Wood, PE on the date shown on this item using a digital signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

SHEET NUMBER C2.0

I:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\EC-01- MCC EROSION.mwp| PLOT DATE:7/8/2026 3:36 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS

NOTES:

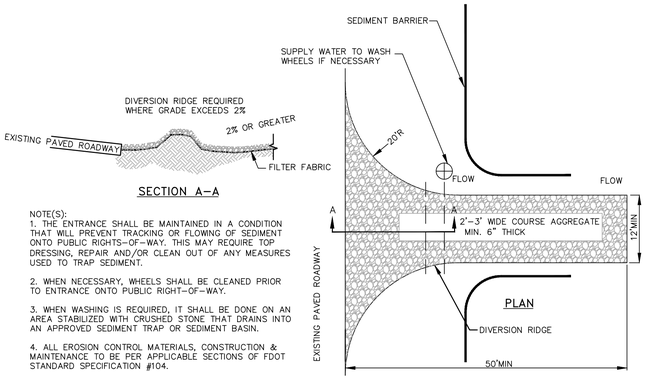
1. THE FOLLOWING LIST REPRESENTS A BASIC EROSION AND SEDIMENT CONTROL PROGRAM WHICH IS TO BE IMPLEMENTED TO HELP PREVENT OFF SITE SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROJECT.
2. TEMPORARY EROSION CONTROL TO BE UTILIZED DURING CONSTRUCTION AT AREAS DESIGNATED BY THE ENGINEER OR AREAS ON SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD, OR COMPACTED AS DETERMINED BY THE OWNER.
3. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PRACTICAL TIME CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. ONE OF THE FIRST CONSTRUCTION ACTIVITIES SHOULD BE THE PLACEMENT OF PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AROUND THE PERIMETER OF THE PROJECT OR THE INITIAL WORK AREA TO PROTECT THE PROJECT, ADJACENT PROPERTIES AND WATER RESOURCES.
4. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL THROUGHOUT THE CONSTRUCTION PHASE. TEMPORARY MEASURES SHALL NOT BE CONSTRUCTED FOR EXPEDIENCY IN LIEU OF PERMANENT MEASURES.
5. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THEIR INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT.
6. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.
7. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
8. MATERIAL FROM SEDIMENT TRAPS SHALL NOT BE STOCKPILED OR DISPOSED OF IN A MANNER WHICH MAKES THEM READILY SUSCEPTIBLE TO BEING WASHED INTO ANY WATERCOURSE BY RUNOFF OR HIGH WATER.
9. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIERS ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
10. SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).
11. SILT FENCE TO REMAIN IN PLACE UNTIL FINISH GRADING FOR THE LANDSCAPING IS UNDER WAY.
12. PROTECT ALL CURB INLETS & GRATE INLETS AS SHOWN IN DETAILS.
13. TEMPORARY EROSION CONTROL STRUCTURE TO BE UTILIZED DURING CONSTRUCTION AT AREAS DESIGNATED BY ENGINEER OR AREAS ON-SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL STRUCTURE MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD, OR COMPACTED AS DETERMINED BY CONTRACTOR.
14. ALTERNATE EROSION CONTROL STRUCTURE: WOVEN FILTER FABRIC SILT FENCE IN ACCORDANCE WITH THE FLORIDA EROSION AND SEDIMENT CONTROL MANUAL. FILTER FABRIC IN ACCORDANCE WITH SECTION 985 OF THE FDOT STANDARD SPECIFICATIONS.



NOTE

SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF)

1 TYPE III SILT FENCE DETAIL
N.T.S.



NOTE(S):
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.

2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY.

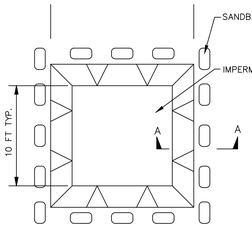
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

4. ALL EROSION CONTROL MATERIALS, CONSTRUCTION & MAINTENANCE TO BE PER APPLICABLE SECTIONS OF FDOT STANDARD SPECIFICATION #104.

5. USE SANDBAGS OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN REQUIRED.

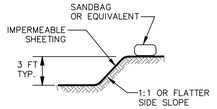
6. COURSE AGGREGATE & FILTER FABRIC TO BE PER SECTIONS OF FDOT STANDARD SPECIFICATION #901 & #985 RESPECTIVELY.

2 TEMPORARY CONSTRUCTION ENTRANCE DETAIL
N.T.S.



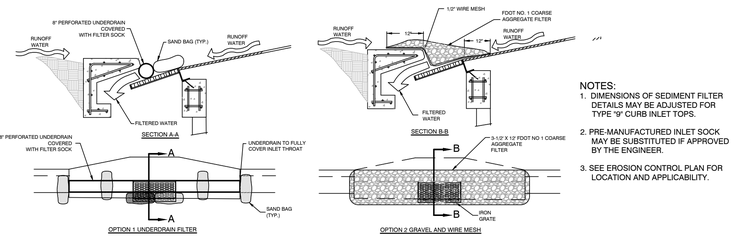
NOTES:

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET–VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.



EXCAVATED WASHOUT STRUCTURE

3 CONCRETE WASH OUT
N.T.S.



NOTES:
1. DIMENSIONS OF SEDIMENT FILTER DETAILS MAY BE ADJUSTED FOR TYPE "9" CURB INLET TOPS.
2. PRE-MANUFACTURED INLET SOCK MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.
3. SEE EROSION CONTROL PLAN FOR LOCATION AND APPLICABILITY.

4 CURB INLET SEDIMENT FILTER DETAIL
NOT TO SCALE

BY	DATE
REVISIONS	

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALLONDRA AVE. ORLANDO, FL. 34762
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

EROSION CONTROL DETAILS

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	EC-01- MCC EROSION

MAJOR LEE PRACTO LICENSED No. 70249 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Major L. Practo, PE. on the date shown on this item 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.

SHEET NUMBER C2.1

(S:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\EC-01- MCC EROSION.dwg) PLOT DATE: 7/8/2026 3:36 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS

OWNER: DOORSAMMY CHOONMATTIE
ALTKEY: 3793049
ZONE: "R-1" RURAL RESIDENTIAL

OWNER: LANGFORD JONATHAN D & KIMBERLY
ALTKEY: 3826439
ZONE: "R-1" RURAL RESIDENTIAL

OWNER: CITRUS GROVE ROAD HOLDINGS LLC
ALTKEY: 1031206
ZONE: NOT ZONED

OWNER: CITRUS GROVE ROAD HOLDINGS LLC
ALTKEY: 1028965
ZONE: "R-1" RURAL RESIDENTIAL

OWNER: GHULAM DAYANAND & JASMA
ALTKEY: 1031273
ZONE: "A" AGRICULTURAL RESIDENTIAL

OWNER: ZAVY ENTERPRISES LLC
ALTKEY: 1108942
ZONE: "A" AGRICULTURAL RESIDENTIAL

OWNER: VISTA GRANDE PROPERTIES
ALTKEY: 1061270
ZONE: NOT ZONED

OWNER: OPEN DOOR BAPTIST OF CLERMONT INC
ALTKEY: 1066549
ZONE: "CFD" COMMUNITY FACILITY DISTRICT

PROJECT BOUNDARY
10' LANDSCAPE SETBACK
WALL & LANDSCAPE SCREENING
30.00' BLDG SETBACK
NO LANDSCAPE BUFFER DUE TO EASEMENT
S00°34'14"W 1026.13'
R=28.00' L=42.13'
S00°34'14"W 264.35'
VEGETATIVE SCREENING
890 L.F. RETAINING WALL (SEE DETAIL SHEET C7.0)
POND CROSS SECTIONS (SEE DETAIL SHEET C8.1)
735 L.F. RETAINING WALL (SEE DETAIL SHEET C7.0)
DUMPSTER PAD (SEE DETAIL SHEET C7.0)
DRAINAGE RETENTION AREA
WALL SCREENING
APPROX. SIGN LOCATION FOR EX. SIGN (PRIVATE DRIVE)
30' ACCESS EASEMENT OR BOOK 1813 PAGE 531 NO LANDSCAPE BUFFER DUE TO EASEMENT
BOLLARDS TYP. (SEE DETAIL SHEET C7.0)
TYPE F CURB (TYP.) (SEE DETAIL SHEET C7.0)
30.00' BLDG SETBACK
S89°25'15"E 704.61'
EX. SIGN (PRIVATE DRIVE) TO BE RELOCATED
TYPE F CURB (TYP.) (SEE DETAIL SHEET C7.0)
PROPOSED COMMERCE CENTER 1 (76,250 SQ. FT.)
(31) LOADING SPACES FOR FULL LENGTH TRACTOR TRAILERS (TYP.)
SIDEWALK HANDICAP RAMP TYP. (SEE DETAIL SHEET C7.0)
HANDICAP PARKING SPACE, STRIPPING TYP. (SEE DETAIL SHEET C7.0)
HANDICAP SIGNS MOUNTED ON GALVANIZED POST W. VAN ACCESSIBLE SIGNAGE TYP. (SEE DETAIL SHEET C7.0)
STOP SIGN R-1 AND 24" WIDE, WHITE PAINTED STOP BAR TYP. (SEE DETAIL SHEET C7.0)
S00°34'45"W 38.24'
R=75.00' L=25.25'
N19°52'07"E 10.58'
10'x3' MONUMENT SIGN
APPROX. MAILBOX LOCATION FOR EX. MAILBOXES
10' LANDSCAPE SETBACK
EX. MAILBOXES TO BE RELOCATED
STOP SIGN R-1 AND 24" WIDE, WHITE PAINTED STOP BAR TYP. (SEE DETAIL SHEET C7.0)
TYPE F CURB (TYP.) (SEE DETAIL SHEET C7.0)
TYPE D CURB TYP. (SEE DETAIL SHEET C7.0)
R=75.00' L=48.70'
PARKING STRIPE, 4" WIDE WHITE PAINTED TYP.
50' BUILDING SETBACK
102.96'
N13°31'10"W
738.26'
CONCRETE SIDEWALK TYP. (SEE DETAIL SHEET C7.0)
TYPE D CURB TYP. (SEE DETAIL SHEET C7.0)
R=100.00' L=31.21'
24' ACCESS EASEMENT SUBORDINATED TO FDOT
R=120.00' L=37.45'
S04°21'50"W 23.69'
R=40.00' L=62.83'
10.00' BLDG SETBACK
10' LANDSCAPE SETBACK
128 L.F. RETAINING WALL (SEE DETAIL SHEET C7.0)
132 L.F. RETAINING WALL (SEE DETAIL SHEET C7.0)
10'x3' MONUMENT SIGN
TYPE F CURB (TYP.) (SEE DETAIL SHEET C7.0)
STOP SIGN R-1 AND 24" WIDE, WHITE PAINTED STOP BAR TYP. (SEE DETAIL SHEET C7.0)
TYPE D CURB TYP. (SEE DETAIL SHEET C7.0)
TYPE F CURB (TYP.) (SEE DETAIL SHEET C7.0)
PROPOSED COMMERCE CENTER 2 (43,750 SQ. FT.)
(17) LOADING SPACES FOR FULL LENGTH TRACTOR TRAILERS (TYP.)
CONCRETE SIDEWALK TYP. (SEE DETAIL SHEET C7.0)
HANDICAP PARKING SPACE, STRIPPING TYP. (SEE DETAIL SHEET C7.0)
SIDEWALK HANDICAP RAMP TYP. (SEE DETAIL SHEET C7.0)
BOLLARDS TYP. (SEE DETAIL SHEET C7.0)
HANDICAP SIGNS MOUNTED ON GALVANIZED POST W. VAN ACCESSIBLE SIGNAGE TYP. (SEE DETAIL SHEET C7.0)
TYPE F CURB (TYP.) (SEE DETAIL SHEET C7.0)
NO PARKING, FIRE DEPARTMENT CONNECTION SIGN
S85°38'10"E 330.81'
S85°38'10"E 369.82'
N85°23'37"W 456.22'
6' TRANSITION FROM 6" HEADER CURB TO NO CURB
PARKING STRIPE, 4" WIDE WHITE PAINTED TYP. (SEE DETAIL SHEET C7.0)
165 L.F. RETAINING WALL (SEE DETAIL SHEET C7.0)
324 L.F. RETAINING WALL (SEE DETAIL SHEET C7.0)
TYPE D CURB TYP. (SEE DETAIL SHEET C7.0)
24' ACCESS EASEMENT (TYP.)
ENTRY

SCALE IN FEET
1" = 40'

SITE DATA

1. PROJECT AREA = 14.96 AC. (651,650.37 SQ. FT.)
2. ZONING: PD
3. FUTURE LAND USE: PLANNED UNIT DEVELOPMENT, COMMERCIAL
4. PROJECT ADDRESS: TO BE ASSIGNED
5. BUILDING TYPE:
   COMMERCE CENTER 1 - ONE STORY, CONCRETE BLOCK. (76,250 SQ. FT.)
   COMMERCE CENTER 2 - ONE STORY, CONCRETE BLOCK (43,750 SQ. FT)
6. BUILDING SETBACK: 50FT. FRONT
7. PARKING DATA: (ADDITIONAL PARKING INFORMATION PROVIDED IN THE DEVELOPER' S AGREEMENT)
   REQUIRED PARKING: 1 SPACE/1,000 SQ.FT
   HANDICAP PARKING SPACES (REQUIRED): 5 SPACES
   120,000 SQ. FT. /1,000 = 120 SPACES
   STANDARD PARKING SPACES (PROVIDED):
   9' x 18' SPACES = 170
   HANDICAP PARKING SPACES (PROVIDED):
   12' x 18' = 6
   TOTAL PARKING PROVIDED: 176 SPACES
   LOADING SPACES FOR BUILDING 1 (PROVIDED): 31 LOADING SPACES
   LOADING SPACES FOR BUILDING 2 (PROVIDED): 17 LOADING SPACES
8. LOCATED IN SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST MINNEOLA, LAKE COUNTY, FLORIDA
9. AREAS FOR TOTAL SITE (BASED ON FOOTPRINT, NOT INTERIOR SQ. FOOTAGE)

PROPOSED BUILDINGS	= 120,000.00 SQ. FT. (2.75 AC.) 18.38%
PROPOSED SIDEWALKS	= 79,622.58 SQ. FT. (1.83 AC.) 12.23%
PROPOSED ASPHALT	= 172,469.63 SQ. FT. (3.96 AC.) 26.47%
TOTAL IMPERVIOUS AREA	= 372,092.61 SQ. FT. (8.54 AC.) 57.09%
OPEN AREA	= 279,557.76 SQ. FT. (6.42 AC.) 42.91%
PROJECT AREA	= 651,650.37 SQ. FT. (14.96 AC.) 100.0%

LEGEND

= PROPOSED HEAVY DUTY ASPHALT
= PROPOSED LIGHT DUTY ASPHALT
= PROPOSED CONCRETE
= PROPOSED CONCRETE DOLLY STRIP

REVISIONS | BY | DATE

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALONDRA BLVD. PAOLI, FL. 34762
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

SITE PLAN

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	05- MCC SITE

MAJOR LEE PACE IV LICENSED No. 70249 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Major L. Pace IV, PE on the date shown on this item 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.

SHEET NUMBER C3.0

(S:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\05- MCC SITE.dwg) PLOT DATE:7/8/2026 3:36 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS

GENERAL UTILITY NOTES:

1. BACTERIOLOGICAL TESTS WITH CHLORINE RESIDUALS INDICATED (TAKEN ON TWO CONSECUTIVE DAYS) SHALL BE CONDUCTED AT EACH POTABLE WATER METER FOR EVERY BUILDING, AT EVERY WET-TAP CONNECTION AND EVERY LOCATION INDICATED WITHIN THESE PLANS. RESULTS OF THE BACTERIOLOGICAL TESTS SHALL BE PROVIDED TO THE ENGINEER OF RECORD IMMEDIATELY UPON COMPLETION. BACTERIOLOGICAL TEST RESULTS SHALL BE CONSIDERED UNACCEPTABLE IF THE TESTS WERE COMPLETED MORE THAN 30 DAYS BEFORE THE ENGINEER RECEIVED THE RESULTS.
2. ALL WATERMAINS SHALL BE INSTALLED A MINIMUM OF 36" BELOW FINISHED GRADE.
3. ALL WATERMAINS AND FIRELINES PIPES SHALL BE RESTRAINED VIA MECHANICAL JOINTS.
4. WATER MAIN PVC PIPES LESS THAN 4 INCHES MUST CONFORM TO THE SPECIFICATIONS OF ASTM 1785 (SCHEDULE 40, 80, 120) OR ASTM 2241 SDR21 AND MUST BEAR THE NSF LOGO ON EACH INSTALLED LENGTH.
5. UNDERGROUND MARKING TAPE FOR ALL SANITARY FORCEMAINS SHALL BE INSTALLED 4 TO 8 INCHES BELOW THE FINISHED GRADE SURFACE DIRECTLY OVER THE PIPELINE. MARKER TAPE SHALL BE MADE OF AN INERT POLYETHYLENE MATERIAL HAVING A MINIMUM THICKNESS OF 4 MILS AND BE COLOR CODED "SAFETY GREEN".
6. CONTRACTOR SHALL CONDUCT AND PROVIDE RESULTS IMMEDIATELY TO THE ENGINEER OF RECORD FOR PRESSURE AND LEAKAGE TESTS ON THE FORCE MAIN TRUNK LINE ONCE THE PRESSURE SEWER HAS BEEN INSTALLED AND PARTLY BACKFILLED. FINAL BACKFILL AND COMPACTION SHALL NOT COMMENCE UNTIL APPROVAL OF THE PRESSURE AND LEAKAGE TESTS HAS BEEN PROVIDED BY THE ENGINEER OF RECORD.
7. FOLLOWING SATISFACTORY PRESSURE TEST RESULTS, THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM, AND RECEIVE APPROVAL THEREOF FROM APPROPRIATE AGENCIES PRIOR TO PLACING THE SYSTEM INTO SERVICE.
8. FIRE HYDRANTS SHALL BE PLACED A MINIMUM OF 3 FT. AND A MAXIMUM OF 5 FT. FROM THE CURB OR PAVED ROAD SURFACE UNLESS OTHERWISE APPROVED. NO FENCE, TREE, POST, SHRUB, OR OTHER OBJECT WHICH COULD BLOCK THE HYDRANT FROM NORMAL VIEW OR OBSTRUCT THE HYDRANT'S USE SHALL BE LOCATED WITHIN FOUR (4) FEET OF THE HYDRANT. THE FOUR-AND-ONE-HALF INCH (4-1/2") LARGE VOLUME CONNECTION SHALL FACE THE NEAREST ROADWAY. THE CENTER OF THE STEAMER PORT SHALL BE 18 INCHES MINIMUM AND 24 INCHES MAXIMUM ABOVE FINISHED GRADE.
9. ALL FIRE HYDRANT LEADS SHALL HAVE AN INSIDE DIAMETER OF AT LEAST SIX INCHES AND INCLUDE AUXILARY VALVES.
10. WHEN NECESSARY, DEWATERING SHALL BE PROVIDED TO KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW MAIN BEING LAID.
11. ALL UTILITIES SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
12. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO CITY OF MINNEOLA WITH A MINIMUM COMPACTION OF 98% IN PAVED AREAS AND 95% IN UNPAVED AREAS IN ACCORDANCE WITH AASHTO T-180 MODIFIED PROCTOR TEST.
13. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 12 INCHES ABOVE THE PIPE AND AT 12 INCHES VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET.
14. ALL WATER SERVICE ENDINGS SHALL BE MARKED WITH A 2" X 4" LUMBER (PRESSURE TREATED) EXTENDING 4 FEET ABOVE GRADE, WITH WATER SERVICES SECURED 12" MAXIMUM ABOVE THE GROUND.
15. ALL WATER VALVES, INCLUDING CONCRETE COLLAR (WITH DEBRIS CAP), SHALL BE ADJUSTED TO FINISHED GRADE AND THE VALVE BOX LID, PAINTED BLUE TO MAKE THEM PLAINLY VISIBLE.
16. UPON FINAL ACCEPTANCE OF NEW WATER SYSTEMS, WATER VALVES SHALL BE COMPLETELY OPENED BY PUBLIC UTILITIES PERSONNEL. AT NO TIME SHALL CONTRACTOR OPERATE ANY EXISTING VALVES WITHOUT CITY OF MINNEOLA INSPECTOR PRESENT.
17. ALL WATER MAINS SHALL BE NSF-APPROVED FOR POTABLE WATER USE.
18. PIPE USED IN WATER DISTRIBUTION SYSTEMS SHALL BE EITHER POLYVINYL CHLORIDE (PVC), OR DUCTILE IRON PIPE (DIP).

    (a) ALL PVC PIPE OF NOMINAL DIAMETER FOUR (4) INCHES THROUGH TWELVE (12) INCHES SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900, LATEST EDITION. THE PVC PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 150PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 18.
    (b) ALL DUCTILE IRON PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA A21.51/C151 AND HAVE A MINIMUM 350 PRESSURE CLASS RATING
19. PIPE USED IN GRAVITY SEWER CONSTRUCTION SHALL BE POLYVINYL CHLORIDE (PVC) OR DUCTILE IRON PIPE (DIP). WHERE REFERENCE IS MADE TO AN ASTM, ANSI, OR AASHTO DESIGNATION, IT SHALL BE THE LATEST REVISION.

    (a) PVC GRAVITY SEWER PIPE (4 INCH – 15 INCH), ASTM D3034, SDR 35 – UNIFORM MINIMUM "PIPE STIFFNESS" AT FIVE (5) PERCENT DEFLECTION SHALL BE 46PSI. THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477. APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD IS UNI-B-4. ALL PVC PIPE SHALL BEAR THE NSF-DW SEAL AND BE GREEN IN OVERALL COLOR. THE MINIMUM STANDARD LENGTH OF PIPE SHALL BE THIRTEEN (13) FEET.
    (b) DUCTILE IRON PIPE SHALL CONFORM TO ANSI/AWWA A21.51/C151, CLASS THICKNESS DESIGNED PER ANSI/AWWA A21.50/C150, WITH MECHANICAL OR PUSH ON JOINTS. AN INTERIOR PROTECTIVE LINING OF COAL TAR EPOXY SHALL BE PROVIDED WITH A MINIMUM DRY THICKNESS OF 30 MILS. DUCTILE IRON GRAVITY SEWERS, WHERE REQUIRED BY CITY OF MINNEOLA BASED ON GEOTECHNICAL INVESTIGATIONS, SHALL BE WRAPPED WITH POLYETHYLENE FILM, AWWA C105. SEE APPENDIX C. THE MINIMUM STANDARD LENGTH OF PIPE SHALL BE EIGHTEEN (18) FEET.
20. ALL SEWER AND RECLAIMED WATER SERVICES MUST MAINTAIN REQUIRED HORIZONTAL AND VERTICAL SEPARATION PER CITY OF MINNEOLA AND FDEP STANDARDS AND SPECIFICATIONS."
21. HDPE FORCE MAIN MUST MEET AWWA C901/C906 STANDARDS AND HAVE A MINIMUM RATING OF DR 11 (200 PSI), PIPE MUST BE GREEN IN COLOR OR HAVE INTEGRAL GREEN IDENTIFICATION STRIPES TO SIGNIFY SEWER / FORCE MAIN USE.

WATER SYSTEM TESTING REQUIREMENTS:

1. THE CONTRACTOR SHALL PERFORM HYDROSTATIC TESTING OF ALL WATER DISTRIBUTION SYSTEMS, AS SET FORTH IN THE FOLLOWING AND SHALL CONDUCT SAID TESTS IN THE PRESENCE OF REPRESENTATIVES FROM CITY OF MINNEOLA AND/OR OTHER AUTHORIZED AGENCIES. THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCED NOTICE PRIOR TO TESTING OF THE WATER DISTRIBUTION SYSTEM.
2. ALL TESTING REQUIRED BY CITY OF MINNEOLA SHALL BE PAID FOR BY THE DEVELOPER / CONTRACTOR.
3. ALL PROPOSED WATER MAINS SHALL BE TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.
4. PRIOR TO HYDROSTATIC TESTING A PRELIMINARY FLUSHING SHALL BE REQUIRED THROUGH FULL DIAMETER FLUSHING OR SWABBING. PRELIMINARY FLUSHING/SWABBING SHALL BE PERFORMED PER AWWA C651 STANDARD – "DISINFECTING WATER MAINS". ALL PIPING SHALL BE THOROUGHLY CLEANED AND FLUSHED PRIOR TO TESTING TO CLEAR THE LINES OF ALL FOREIGN MATTER. WHILE THE PIPING IS BEING FILLED WITH WATER, CARE SHALL BE EXERCISED TO PERMIT THE ESCAPE OF AIR FROM EXTREMITIES ALONG THE TEST SECTION.
5. HYDROSTATIC TESTING SHALL CONSIST OF PRESSURE TEST AND LEAKAGE TEST. PIPING AND APPURTENANCES TO BE TESTED SHALL BE WITHIN SECTIONS BETWEEN VALVES, NOT EXCEEDING 2,000 FEET, UNLESS ALTERNATE METHODS HAVE RECEIVED PRIOR APPROVAL FROM CITY OF MINNEOLA. TESTING SHALL NOT PROCEED UNTIL CONCRETE THRUST BLOCKS ARE IN PLACE AND CURED, OR OTHER RESTRAINING DEVICES INSTALLED.
6. HYDROSTATIC TESTING SHALL BE PERFORMED AT 150 POUNDS PER SQUARE INCH PRESSURE, UNLESS OTHERWISE APPROVED BY CITY OF MINNEOLA, FOR A PERIOD OF NOT LESS THAN TWO (2) HOURS.
7. THE ALLOWABLE RATE OF LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{SD*\sqrt{P}}{148{,}000}$$

WHERE:
L = ALLOWABLE LEAKAGE, IN GALLONS PER HOUR
S = LENGTH OF PIPE TESTED, IN FEET
D = NOMINAL DIAMETER OF PIPE, IN INCHES
P = AVERAGE TEST PRESSURE DURING THE LEAKAGE TEST, IN POUNDS PER SQUARE INCH (GAUGE)

8. SHOULD THE TEST FAIL, NECESSARY REPAIRS SHALL BE ACCOMPLISHED BY THE CONTRACTOR AND THE TEST REPEATED UNTIL WITHIN PASSING LIMITS. THE CONTRACTOR SHALL FURNISH ALL THE NECESSARY LABOR, PUMPS, GAUGES AND ALL OTHER ITEMS NECESSARY TO CONDUCT THE REQUIRED WATER DISTRIBUTION SYSTEM TESTING AND PERFORM NECESSARY REPAIRS.

SEWER SYSTEM TESTING REQUIREMENTS:

1. THE CONTRACTOR SHALL PERFORM TESTING OF ALL SANITARY SEWAGE GRAVITY COLLECTION SYSTEMS, AS SET FORTH IN THE FOLLOWING AND SHALL CONDUCT SAID TESTS IN THE PRESENCE OF REPRESENTATIVES FROM CITY OF MINNEOLA AND/OR OTHER AUTHORIZED AGENCIES. THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCED NOTICE PRIOR TO TESTING OF THE WASTEWATER DISTRIBUTION SYSTEM.
2. ALL TESTING REQUIRED BY CITY OF MINNEOLA SHALL BE PAID FOR BY THE DEVELOPER / CONTRACTOR.
3. GRAVITY MAINS SHALL BE INSPECTED WITH CCTV FOR ALIGNMENT, GRADE VARIATIONS, SEPARATED PIPES, LEAKS, DEFLECTION, CRACKED, BROKEN OR OTHERWISE DEFECTIVE PIPE TO ENSURE OVERALL PIPE INTEGRITY. THE APPROVED CCTV INSPECTION CONTRACTOR SHALL SUBMIT THE REPORT TO THE UTILITIES DEPARTMENT AS REQUIRED.
4. LEAKAGE TESTING FOR GRAVITY MAINS SHALL BE BY LOW-PRESSURE AIR TEST. LEAKAGE TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROCEDURE FOR "RECOMMENDED PRACTICE FOR LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE" AS ESTABLISHED BY THE UNI-BELL PVC PIPE ASSOCIATION.
5. EACH GRAVITY MAIN LEAKAGE TEST SECTION SHALL NOT EXCEED 400 FEET IN LENGTH AND SHALL BE TESTED BETWEEN ADJACENT MANHOLES.

LOCATION OF PUBLIC WATER SYSYEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)	Water Main 3 ft. minimum	Water Main 12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 3 ft. minimum Water Main
Vacuum Sanitary Sewer	Water Main 10 ft. preferred 3 ft. minimum	Water Main 12 inches preferred 6 inches minimum	Alternate 3 ft. minimum Water Main
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)	Water Main 10 ft. preferred 6 ft. minimum (3)	Water Main 12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 6 ft. minimum Water Main
On-Site Sewage Treatment & Disposal System	10 ft. minimum	---	---

(1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.
(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.
(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.
(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

Disclaimer – This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

FDEP UTILITY CONSTRUCTION NOTES:

1. NOTE TO THE UTILITY: PURSUANT TO 62-555.345; DO NOT PROVIDE WATER SERVICE TO THIS PROJECT (OTHER THAN FLUSHING/TESTING) UNTIL THE DEPARTMENT OF ENVIRONMENTAL PROTECTION HAS ISSUED A LETTER OF CLEARANCE OR THE UTILITY SHALL BE SUBJECT TO ENFORCEMENT ACTION.
2. THE PERMITTEE WILL PROMPTLY NOTIFY THE DEPARTMENT UPON SALE OR LEGAL TRANSFER OF THE PERMITTED FACILITY
3. ALL WATER MAINS AND APPURTENANCES SHALL BE DISINFECTED AND BACTERIOLOGICALLY EVALUATED IN ACCORDANCE WITH RULE 62-555.340, F.A.C.
4. ALL WATER MAIN PIPE, INCLUDING FITTINGS SHALL BE COLOR CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE, SHALL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.

FDEP UTILITY SEPARATION REQUIREMENTS

(62-555.314, F.A.C. LOCATION OF PUBLIC WATER SYSTEM MAINS)

FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS; AND SERVICE LINES THAT ARE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER.

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

- (a) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THEOUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- (b) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
- (c) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
- (d) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

- (a) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- (b) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- (c) AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

(3) SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES.

- (a) NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
- (b) EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE.

(4) SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

DATE	REVISIONS	BY

CLYMER FARNER BARLEY
CFB
CLYMER FARNER BARLEY Inc.
CERTIFICATE OF AUTHORIZATION No. LC-34762
7413 ALFORD COURT, BROOKSVILLE, FL 34613
(352)749-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL

UTILITY NOTES

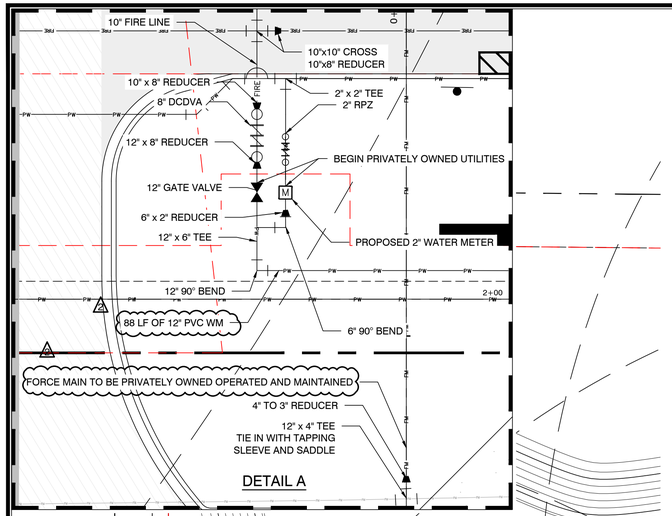
SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	08- MCC UTILITY

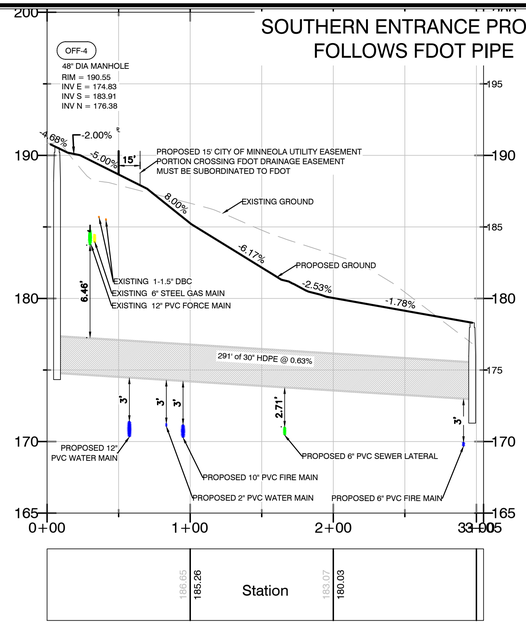
MARK LEE BARLEY LICENSE No. 70249 STATE OF FLORIDA PROFESSIONAL ENGINEER

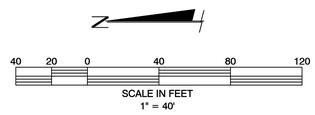
Not valid without the signature and original seal of a Florida licensed engineer.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

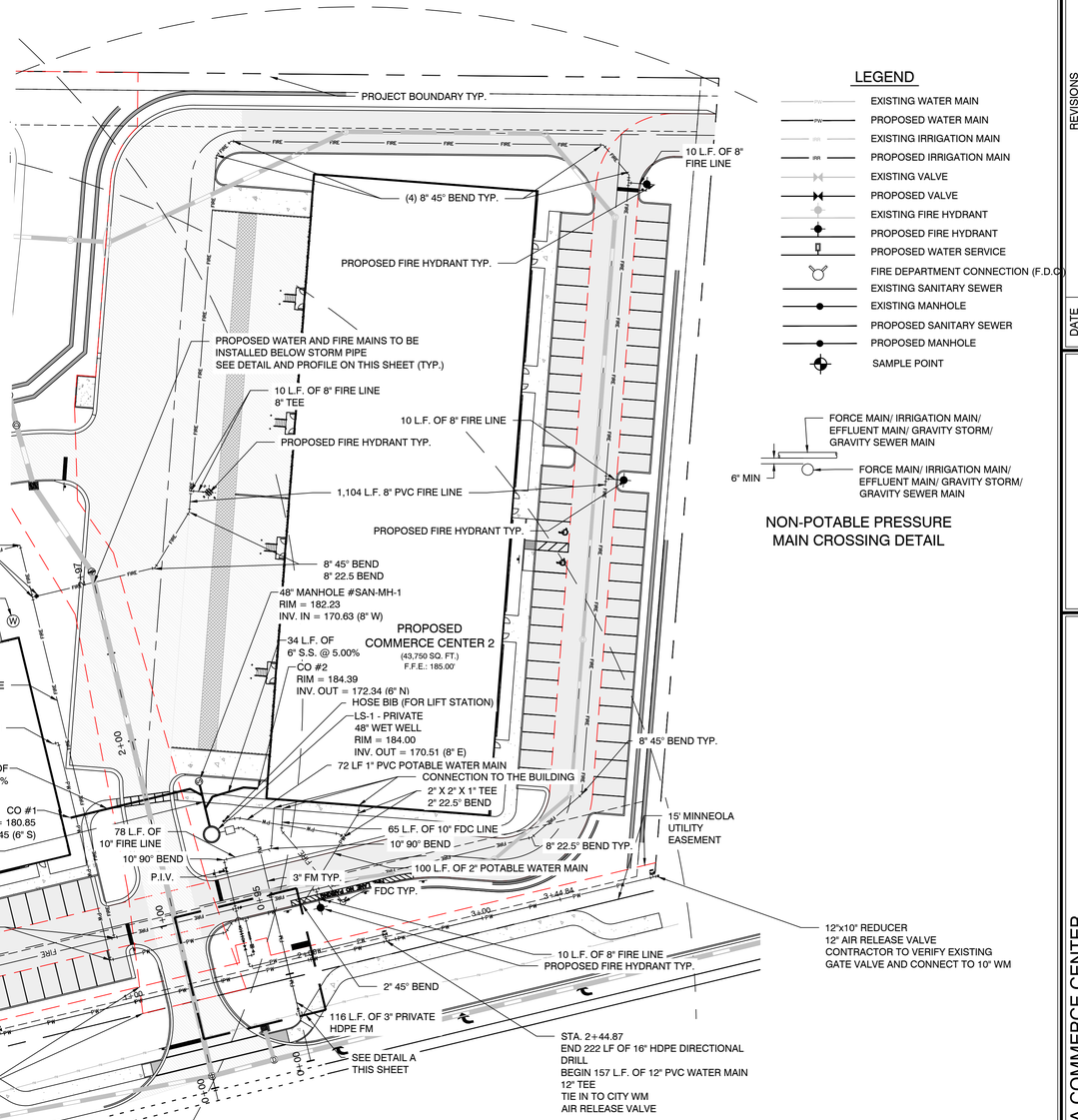
SHEET NUMBER C4.0

(S:\LAKE\NON-VIL\LAGES PROJECTS\ORENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\08- MCC UTILITY.dwg) PLOT DATE: 7/8/2026 3:36 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS









LEGEND

- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- EXISTING IRRIGATION MAIN
- PROPOSED IRRIGATION MAIN
- EXISTING VALVE
- PROPOSED VALVE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- PROPOSED WATER SERVICE
- FIRE DEPARTMENT CONNECTION (F.D.C.)
- EXISTING SANITARY SEWER
- EXISTING MANHOLE
- PROPOSED SANITARY SEWER
- PROPOSED MANHOLE
- SAMPLE POINT

NON-POTABLE PRESSURE
MAIN CROSSING DETAIL

CLEARANCE REQUIREMENTS FOR POTABLE WATER/ SANITARY, STORM SEWER, RECLAIMED WATER, AND NON-POTABLE IRRIGATION PIPING

THE MINIMUM VERTICAL AND HORIZONTAL SEPARATION BETWEEN POTABLE WATER AND SANITARY SEWER MAINS TO COMPLY WITH RULES 62-604.400(2)(G) - (I), F.A.C. AND 62-604.400 (3), F.A.C. ARE AS NOTED BELOW.

1. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE; HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE; HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

2. AT THE UTILITY CROSSINGS DESCRIBED ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY-OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

NOTES:

1. IT IS THE RESPONSIBILITY OF THE SITE CONTRACTOR TO CONSTRUCT ALL WATER SERVICES, WATER AND FIRE MAINS, AND SANITARY SEWER TRUNKS AND LATERAL SERVICES AS SHOWN ON THESE PLANS TO WITHIN 5 FT OF THE EXTERIOR WALL OF THE BUILDING.
2. ALL ON-SITE UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED.
3. CONTRACTOR SHALL COORDINATE ALL UTILITY INSTALLATIONS WITH THE CITY OF MINNEOLA UTILITIES DEPARTMENT.
4. CONTRACTOR SHALL USE PIPE DEFLECTION AND/OR FITTINGS TO ENSURE CLEARANCE REQUIREMENTS
5. UNDERGROUND MAINS SHALL BE INSTALLED AND TESTED PER NFPA 24 @ 200 PSI. OR 50 PSI ABOVE THE WORKING PRESSURE, WHICHEVER IS GREATER.
6. ALL PRIVATE WATERMAINS 4" THROUGH 12" SHALL BE PVC ANSI/AWWA CLASS C900, (DR-18)
7. ALL PRIVATE FIRE MAINS SHALL BE DR-14 FIRE LINE.
8. ALL UTILITIES WITH CROSSINGS WITHIN FDOT PIPE EASEMENT MUST BE BELOW THE FDOT PIPE WITH PROPER FDEP SEPARATION.
9. LIFT STATION AND FORCE MAIN TO BE PRIVATE AND MAINTAINED BY OWNER

BY	DATE	REVISIONS
	06/30/26	CITY OF MINNEOLA COMMENTS
	03/19/26	CITY OF MINNEOLA COMMENTS

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
CERTIFICATE OF AUTHORIZATION NO. LC 34762
7413 ALFORD AVE, ORLANDO, FL
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

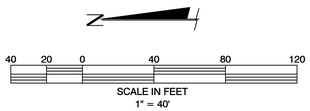
UTILITY PLAN

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	08- MCC UTILITY

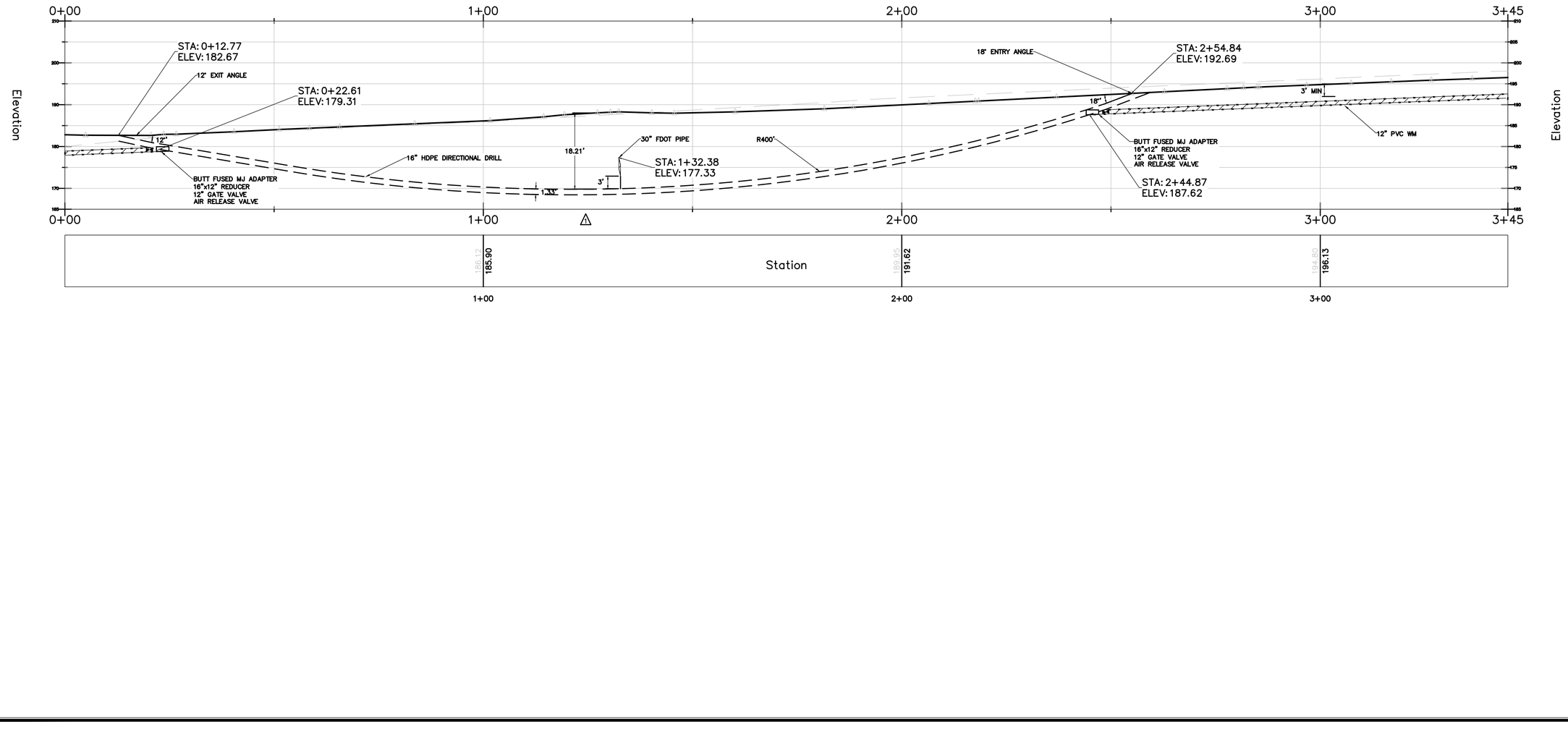
This item has been electronically signed and sealed by Major L. Black, PE. on the date shown on this item using a digital signature.
Printed copies of this document are not considered signed and sealed and the signature must not be verified on any electronic copies.

SHEET NUMBER C4.1

I:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\06- MCC UTILITY.dwg| PLOT DATE:7/8/2026 3:36 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS



DIRECTIONAL DRILL PROFILE



BY	DATE	REVISIONS
	03/19/26	PROJECT MANAGER ERIC RASCH COMMENTS

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALFORD AVE, SUITE 1, PORT CHARLOTTE, FL. 34762
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

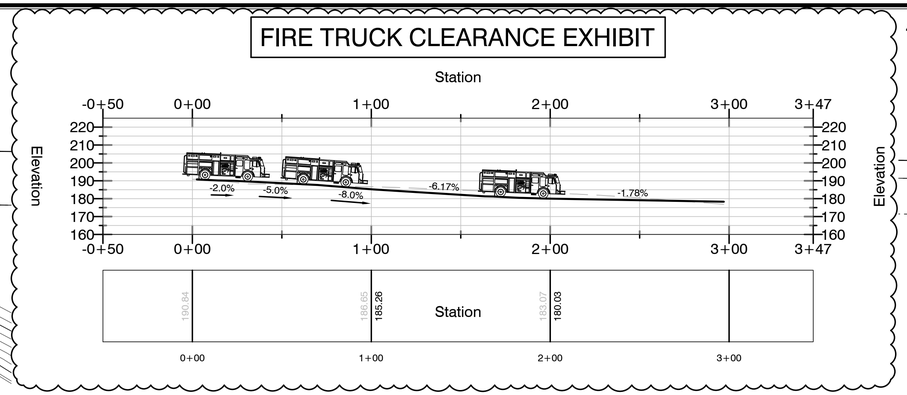
DIRECTIONAL DRILL PROFILE

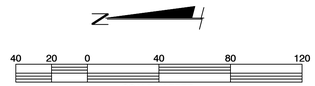
SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	MCC DIRECTIONAL DRILL PROFILE

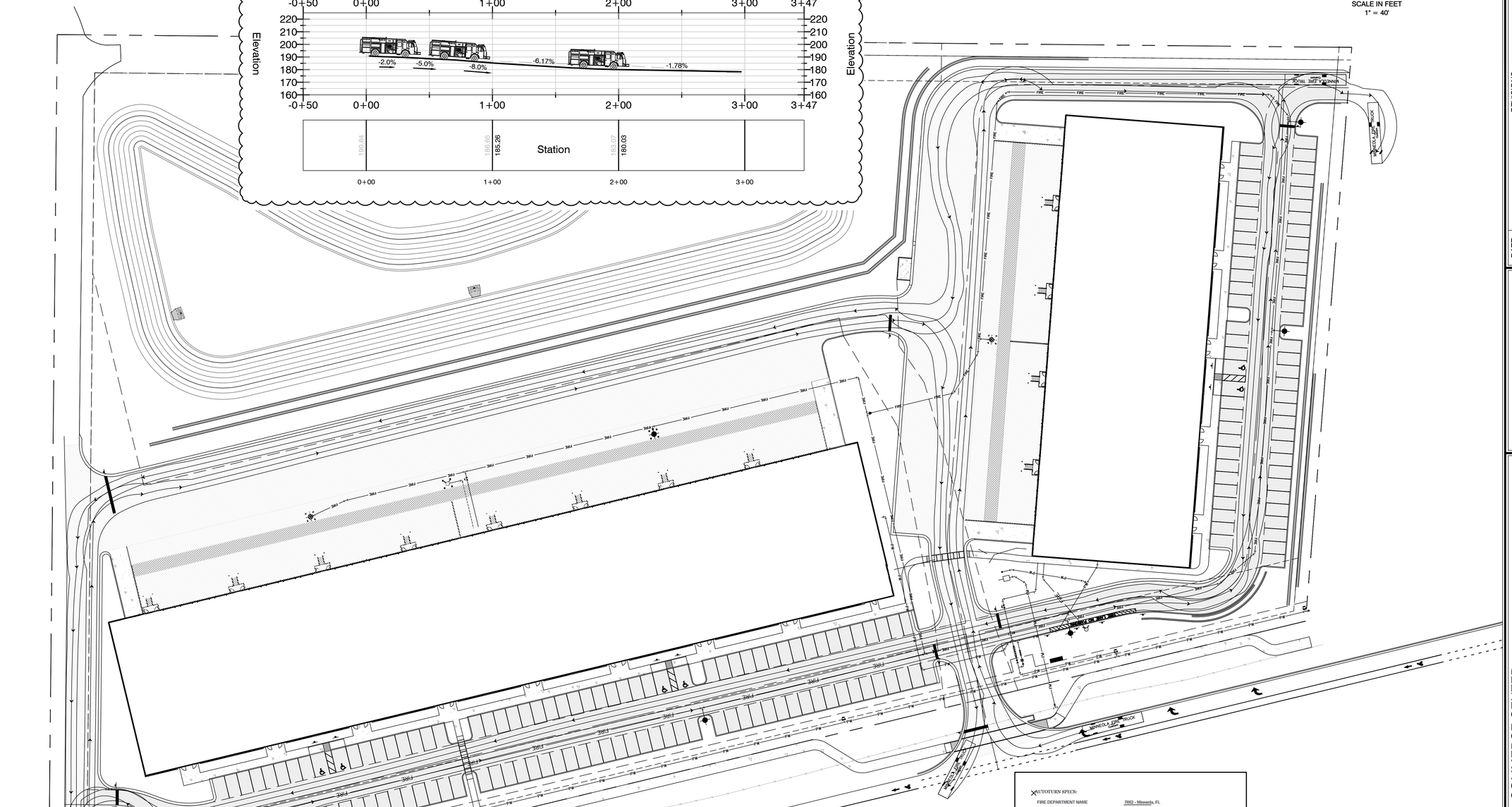
This item has been electronically signed and sealed by Major L. Rash, PE on the date shown on the item either using a digital signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

SHEET NUMBER C4.2

I:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\14- MCC DIRECTIONAL DRILL PROFILE.dwg|| PLOT DATE:7/8/2026 3:36 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS







GBG-001 Minneola Commerce Center

Fire Flow Calculations

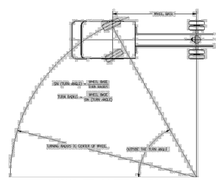
City of Minneola Fire Code								
Building	Max Fire Flow Area (Sq-Ft)	Bldg Type	No. of Floors	Minimum Required Fire Flow (GPM)	Sprinklered	Fire Flow Reduction Per City of Minneola	NFF (GPM)	Flow Duration (hours)
Warehouse Building I	76,250	II(000)	1	4,000	Yes	75%	1,500	4
Warehouse Building II	43,750	II(000)	1	3,000	Yes	75%	1,500	3

AUTOTURN SPECS:

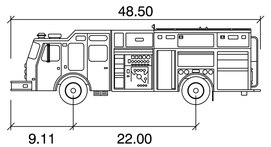
FIRE DEPARTMENT NAME: 7002 - Minneola, FL

Wheel Base:	264
Tire Size:	425
Bumper Extension or Aerial Device:	39
OUTSIDE CURB TO CURB TURNING RADIUS	
Input wheelbase?	264
Input front wheel INSIDE turn angle?	46
Input offset from kingpin to outside of wheel	16
Turn radius is	39.39 ft.
WALL TO WALL TURNING RADIUS	
Input wheelbase?	264
Input length of extension?	39
Input width of extension?	101
Input front wheel INSIDE turn angle?	46
Input radius at front corner?	12
Turn radius is	43.08 ft.

Total Length: 48.5 ft.
Width: 8.42 Ft. (101")
Front- 9.11 Ft. (109.25")
Wheelbase- 22 Ft. (264")
Back-16.55 Ft. (195.5")
Lock-to-Lock time- 6 Sec.
Max wheel turn angle: 46



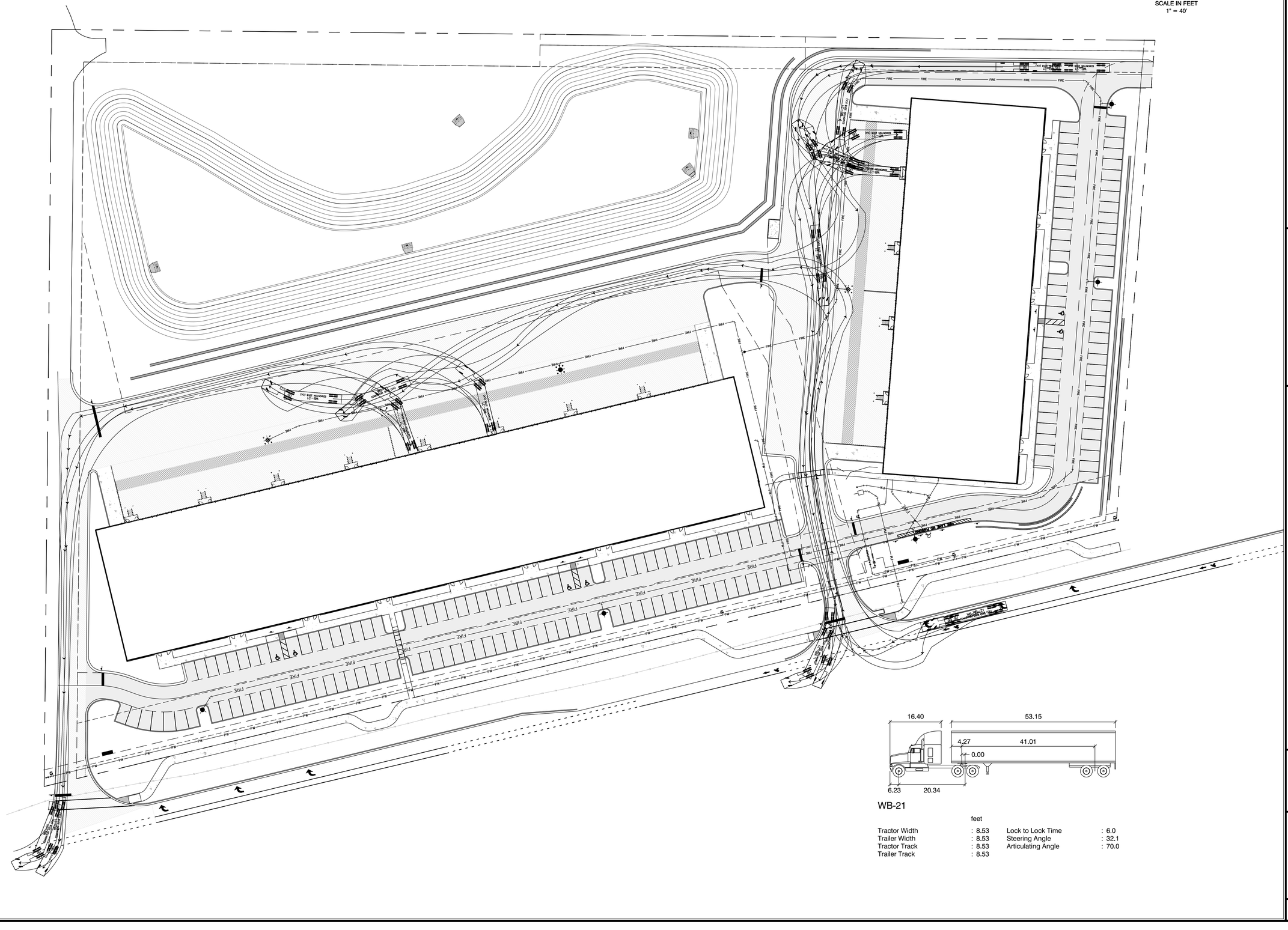
806 N. Hwy 27, Minneola, FL. 34715
(352) 394-3598 Ext. 202



MINNEOLA FIRE TRUCK feet

Width	: 8.42
Track	: 8.53
Lock to Lock Time	: 6.0
Steering Angle	: 46.0

BY	DATE	REVISIONS



WB-21

feet

Tractor Width	: 8.53	Lock to Lock Time	: 6.0
Trailer Width	: 8.53	Steering Angle	: 32.1
Tractor Track	: 8.53	Articulating Angle	: 70.0
Trailer Track	: 8.53		

BY	DATE	REVISIONS

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALFORD AVE, SUITE 1 ORLANDO, FL. 32762
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL

AUTO TURN ANALYSIS - SEMI TRUCK

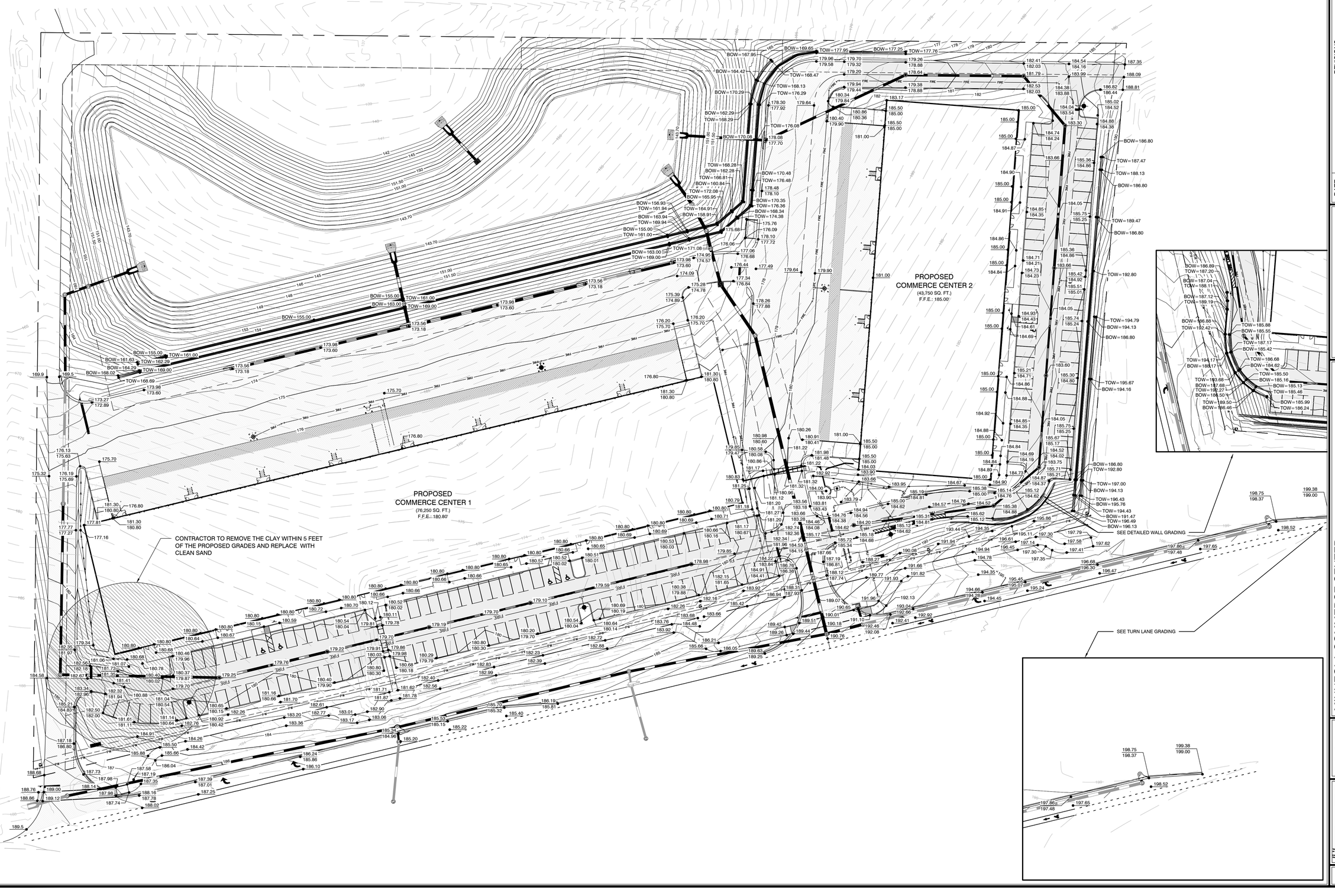
SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	FH-01- MCC SEMI TRUCK

MARK LEE STACY
LICENSED
No. 70249
STATE OF FLORIDA
PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Mark L. Stacy, PE on the date shown on the item 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.

SHEET NUMBER C4.4

I:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG)-001\CIVIL\CONSTRUCTION\FH-01- MCC SEMI TRUCK.dwg| PLOT DATE:7/8/2026 3:37 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS



N

40 20 0 40 80 120

SCALE IN FEET
1" = 40'

BY	REVISIONS	DATE

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
CERTIFICATE OF AUTH. NO. LC 34762
7413 ALFORD COURT, BRYON, FL 34762
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

GRADING PLAN

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	05- MCC GRADING

MAJOR LEE STACY
LICENSE
No. 70249
STATE OF FLORIDA
PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Major L. Stacy, 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.

SHEET NUMBER C5.0

(S:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\05- MCC GRADING.dwg) PLOT DATE:7/8/2026 8:37 PM SAVE DATE:7/8/2026 LAST SAVED BY: ACAMPOS

N

40 20 0 40 80 120

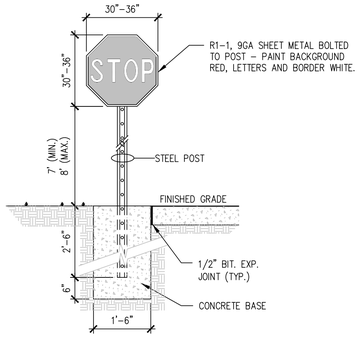
SCALE IN FEET
1" = 40'

22 L.F OF 24" HP STORM @ 1.50%
A-10
48" DIA MANHOLE
RIM = 160.74
INV. IN = 157.01 (24" S)
INV. OUT = 146.80 (24" N)
62 L.F OF 24" HP STORM @ 5.00%
A-8
TYPE C INLET
RIM = 178.64
INV. IN = 173.57 (24" S)
INV. OUT = 173.57 (24" NW)
FDOT DRAINAGE EASEMENT
112 L.F OF 24" HP STORM @ 2.82%
67 L.F OF 24" HP STORM @ 0.67%
146 L.F OF 24" HP STORM @ 0.64%
ENERGY DISSIPATER (TYP.)
SEE DETAIL ON SHEET C8.0
D-2
24" MES
INV. = 142.00 (24" SW)
SEE SHEET C8.0 FOR
CONTROL STRUCTURE DETAIL
45 L.F OF 24" HP STORM @ 5.00%
D-1
TYPE E INLET
RIM = 150.30
INV. OUT = 144.27 (24" NE)
A-11
24" MES
INV. = 143.70 (24" S)
OFF-10
36" MES
INV. = 143.70 (30" SW)
32 L.F OF 30" HP STORM @ 5.00%
OFF-9
48" DIA MANHOLE
RIM = 151.27
INV. IN = 147.50 (30" SW)
INV. OUT = 145.32 (30" NE)
A-9
TYPE 6 INLET
EOP = 177.70
INV. IN = 172.63 (24" SE)
INV. OUT = 157.34 (24" N)
A-7
TYPE C INLET
RIM = 181.79
INV. IN = 176.71 (24" SW)
INV. OUT = 176.71 (24" N)
A-6
TYPE C INLET
RIM = 183.30
INV. IN = 177.24 (24" W)
INV. OUT = 177.24 (24" NE)
135 L.F OF 24" HP STORM @ 0.25%
28 L.F OF 30" HP STORM @ 0.60%
FDOT DRAINAGE EASEMENT
17 L.F OF 30" HP STORM @ 0.50%
OFF-8
60" DIA MANHOLE
RIM = 164.62
INV. IN = 160.39 (30" W)
INV. OUT = 147.67 (30" NE)
OFF-7
60" DIA MANHOLE
RIM = 174.06
INV. IN = 167.75 (30" W)
INV. OUT = 160.48 (30" E)
B-9
48" DIA MANHOLE
RIM = 156.27
INV. IN = 152.06 (24" N)
INV. OUT = 146.16 (24" S)
49 L.F OF 24" HP STORM @ 5.00%
B-10
24" MES
INV. = 143.70 (24" N)
24 L.F OF 24" HP STORM @ 1.52%
CHILD PROTECTIVE
BARS (TYP.)
(SEE DETAIL SHEET C8.0)
C-5
36" MES
INV. = 143.70 (30" W)
40 L.F OF 24" HP STORM @ 0.20%
C-1A
TYPE 5L INLET
EOP = 173.40
INV. IN = 167.52 (24" S)
INV. OUT = 167.52 (24" N)
C-4
60" DIA MANHOLE
RIM = 162.00
INV. IN = 156.69 (30" W)
INV. OUT = 146.19 (30" E)
50 L.F OF 30" HP STORM @ 5.00%
45 L.F. OF 24" HDPE @ 0.20%
C-1
TYPE 5L INLET
EOP = 173.60
INV. OUT = 167.60 (24" N)
46.70'
35 L.F OF 30" HP STORM @ 0.50%
58 L.F OF 30" HP STORM @ 0.50%
33.82'
OFF-5
48" DIA MANHOLE
RIM = 178.30
INV. IN = 173.00 (30" W)
INV. OUT = 171.79 (30" NE)
29.95'
A-5
TYPE C INLET
RIM = 183.66
INV. IN = 178.08 (18" W)
INV. OUT = 177.58 (24" E)
A-4
TYPE C INLET
RIM = 183.60
INV. IN = 178.76 (18" W)
INV. OUT = 178.76 (18" E)
102 L.F OF 18" HP STORM @ 0.25%
87 L.F OF 18" HP STORM @ 0.25%
22 L.F OF 30" HP STORM @ 1.05%
172 L.F OF 30" HP STORM @ 0.20%
172 L.F OF 24" HP STORM @ 0.20%
C-2
TYPE 6 INLET
EOP = 173.17
INV. IN = 167.43 (24" S)
INV. OUT = 166.93 (30" N)
OFF-6
TYPE E INLET
RIM = 175.66
INV. IN = 171.50 (30" SW)
INV. OUT = 167.93 (30" E)
78 L.F OF 24" HP STORM @ 1.53%
B-8
60" DIA MANHOLE
RIM = 162.70
INV. IN = 158.20 (24" W)
INV. OUT = 152.42 (24" S)
B-7
TYPE 3R INLET
RIM = 169.77
INV. IN = 161.22 (24" W)
INV. OUT = 159.39 (24" E)
12.00'
12.00'
C-6
TYPE 6 INLET
EOP = 173.17
INV. OUT = 167.15 (24" S)
C-3
TYPE 6 INLET
EOP = 173.17
INV. IN = 166.81 (24" N)
INV. IN = 166.59 (30" S)
INV. OUT = 156.92 (30" E)
FDOT DRAINAGE EASEMENT
56 L.F OF 18" HP STORM @ 0.25%
290 L.F OF 30" HP STORM @ 0.69%
A-1
TYPE C INLET
RIM = 184.20
INV. OUT = 179.45 (18" S)
A-3
TYPE E INLET
RIM = 183.75
INV. IN = 178.98 (18" NW)
INV. OUT = 178.98 (18" E)
44.01'
133 L.F OF 18" HP STORM @ 0.25%
A-2
TYPE C INLET
RIM = 184.52
INV. IN = 179.12 (18" N)
INV. OUT = 179.12 (18" SE)
OFF-12
TYPE 3R INLET
RIM = 198.65
INV. OUT = 187.02 (18" W)
9 L.F OF 18" HP STORM @ 0.50%
120 L.F OF 24" HDPE @ 2.02%
B-6A
48" DIA MANHOLE
RIM = 176.74
INV. IN = 170.62 (24" W)
INV. OUT = 163.64 (24" E)
B-2
TYPE C INLET
RIM = 179.10
INV. IN = 173.80 (18" N)
INV. OUT = 173.80 (18" S)
B-1
TYPE C INLET
RIM = 178.98
INV. IN = 174.27 (18" N)
B-3
TYPE C INLET
RIM = 179.19
INV. IN = 173.50 (18" N)
INV. OUT = 173.50 (18" S)
OFF-11
TYPE C INLET
RIM = 190.12
INV. OUT = 184.21 (18" W)
15' CITY OF MINNEOLA UTILITY
EASEMENT SUBORDINATED TO FDOT
59.43'
18 L.F OF 18" HP STORM @ 0.50%
395 L.F OF 24" HP STORM @ 0.59%
EX-INLET 1
SWAP INLET TOP WITH TOP SLAB
WITH MANHOLE RING AND COVER
RIM = 198.34
INV. IN = 186.98 (18" E)
INV. OUT = 186.48 (24" N)
B-4
TYPE C INLET
RIM = 179.22
INV. IN = 172.70 (24" N)
INV. OUT = 173.20 (18" S)
157 L.F OF 18" HP STORM @ 0.30%
B-5
TYPE E INLET
RIM = 179.25
INV. OUT = 172.38 (24" S)
INV. OUT = 172.38 (24" N)
98 L.F OF 18" HP STORM @ 0.30%
99 L.F OF 18" HP STORM @ 0.30%
182 L.F OF 24" HP STORM @ 0.61%
150 L.F OF 24" HP STORM @ 0.30%
105 L.F OF 24" HP STORM @ 0.30%
190 L.F OF 24" HP STORM @ 0.50%
EX-INLET 2
SWAP INLET TOP WITH TOP SLAB
WITH MANHOLE RING AND COVER
RIM = 191.39
INV. IN = 184.15 (24" S)
INV. IN = 184.12 (18" E)
INV. OUT = 184.12 (24" N)
36 L.F OF 24" HP STORM @ 0.59%
OFF-4
48" DIA MANHOLE
RIM = 190.55
INV. IN = 183.91 (24" S)
INV. IN = 176.38 (24" N)
INV. OUT = 174.83 (30" E)
B-6
60" DIA MANHOLE
RIM = 183.79
INV. IN = 171.93 (24" S)
INV. OUT = 171.93 (24" E)
OFF-2
TYPE 4 INLET
RIM = 185.33
INV. IN = 179.48 (18" W)
INV. IN = 179.58 (24" N)
INV. OUT = 179.48 (24" S)
20.00'
225 L.F OF 24" HP STORM @ 0.95%
OFF-3
60" DIA MANHOLE
RIM = 185.41
INV. IN = 177.33 (24" N)
INV. IN = 177.33 (18" W)
INV. OUT = 177.33 (24" S)
14 L.F OF 18" HP STORM @ 12.35%
52 L.F OF 18" HP STORM @ 0.95%
EX-INLET 3
TYPE 5L INLET
EOP = 186.64
INV. IN = 181.92 (18" W)
INV. OUT = 179.04 (18" E)
39 L.F OF 24" HP STORM @ 2.19%
319 L.F OF 24" HP STORM @ 0.76%
14 L.F OF 18" HP STORM @ 2.80%
EX-INLET 5
SWAP INLET TOP WITH TOP SLAB
WITH MANHOLE RING AND COVER
RIM = 185.21
INV. IN = 179.87 (18" W)
INV. OUT = 179.87 (18" E)
57 L.F OF 18" HP STORM @ 0.39%
EX-INLET 4
TYPE E INLET
RIM = 185.83
INV. OUT = 182.41 (18" E)
OFF-1
48" DIA MANHOLE
RIM = 188.70
INV. IN = 185.65 (24" N)
INV. OUT = 182.00 (24" S)
EX-MES
24" MES
INV. = 186.49 (24" S)
EX-INLET 6
TYPE E INLET
RIM = 183.56
INV. OUT = 180.09 (18" E)

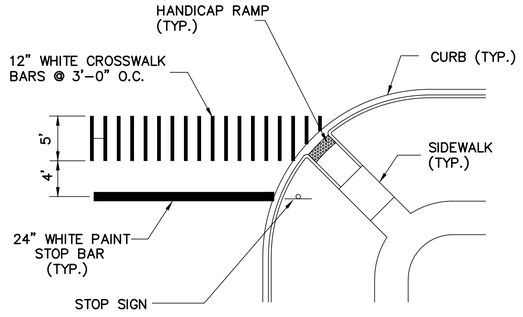
NOTES:

1. PER AGREEMENT THE FDOT CAN ACCESS ALL PAVED AREAS WITHIN PROPERTY BOUNDARY
2. OWNER IS RESPONSIBLE FOR ALL MAINTENANCE OF ALL PIPE AND STRUCTURES WITHIN PROPERTY BOUNDARY

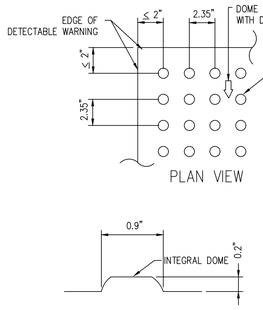
BY	DATE	REVISIONS



1 STOP SIGN
N.T.S.



2 INTERSECTION CROSSWALK/ STOP BAR DETAIL
N.T.S.



3 DETECTABLE WARNING
N.T.S.

NOTE:

1. CURB RAMP RUNNING SLOPES SHALL NOT BE STEEPER THAN 1:12 AND CROSS SLOPE SHALL BE 0.02 OR FLATTER.

2. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED BY TEXTURING OR APPLYING A TRUNCATED DOME MATERIAL IN CONFORMANCE WITH THE U.S. DEPARTMENT OF JUSTICE A.D.A. STANDARDS FOR ACCESSIBLE DESIGN, A.D.A. ACCESSIBILITY GUIDELINES, SECTION 4.29.2. TRANSITION SLOPES ARE NOT TO HAVE DETECTABLE WARNINGS.

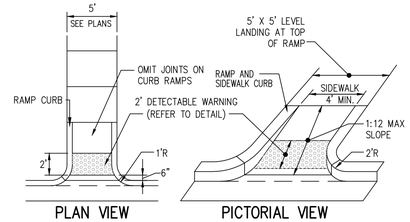
3. WHERE A CURB RAMP IS CONSTRUCTED WITHIN AN EXISTING CURB, CURB AND GUTTER AND/OR SIDEWALK, THE EXISTING CURB OR CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE CURB TRANSITIONS OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB AND GUTTER IS LESS THAN 5' LONG. THE EXISTING SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE WALK AROUND OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5'.

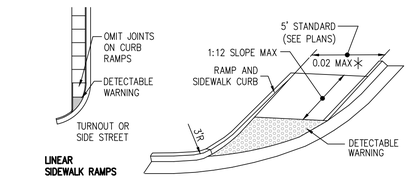
4. WHERE ADJACENT WALKING SURFACES ARE COLORED OR ARE CONSTRUCTED WITH MATERIALS OTHER THAN STANDARD CLASS I PORTLAND CEMENT CONCRETE IN ACCORDANCE WITH SECTION 522 OF THE SPECIFICATIONS, THE PLAN MUST PROVIDE FOR DETECTABLE WARNING SURFACE COLORS OR MATERIALS THAT PROVIDE THE NECESSARY CONTRAST, EITHER DARK–ON–LIGHT OR LIGHT–ON–DARK. (SAFETY YELLOW OR BRICK RED)

5. RECOMMENDED MANUFACTURER: ENGINEERED PLASTICS, INC. (ARMOR TILE) OLYMPIC TOWERS, 300 PEARL STREET, SUITE 200, BUFFALO, NY 14202. PHONE: (800) 682–2525

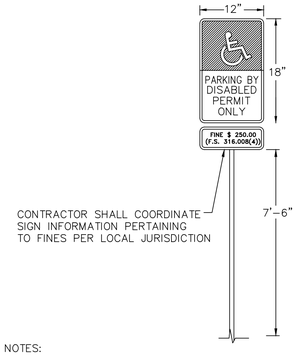
NOTE 1:
REFERENCE FDOT INDEX 304, PAGE 1, GENERAL AND DESIGN NOTES FOR RAMPS IN R.O.W.

NOTE 2:
CONSTRUCT RAMP TO LEAST POSSIBLE SLOPE (MAX = 1:12). CROSS SLOPE OF RAMP AND LANDING SHALL NOT EXCEED 1:50.



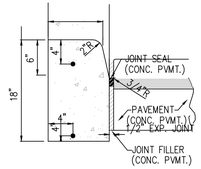


4 HANDICAP END RAMP
3000 PSI (MIN.) CONCRETE N.T.S.



NOTES:
1. ALL LETTERS ARE 1" SERIES "C", PER MUTCD.
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
4. ONE (1) SIGN IS REQUIRED FOR EACH PARKING SPACE.
5. HEIGHT OF SIGN SHALL 7'–6" FROM FINISHED GROUND TO BOTTOM OF SIGN.

5 HANDICAP SIGN
N.T.S.



NOTES:

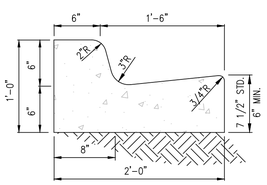
COST OF 2–#4 BARS (CONT.) SHALL BE INCLUDED.

PROVIDE 2–#6 SMOOTH BARS W/ EXPANSION CAPS AT EACH EXPANSION JOINT, 20'–0" O.C. MAX.

CONTRACTION JOINTS – CONTRACTION JOINTS SHALL BE PLACED AT EQUAL SPACES (10' MAX.) BETWEEN NORMAL EXPANSION JOINTS. CONTRACTION JOINTS SHALL BE SAW CUT IN THE UPPER 1/3 OF CURB AND GUTTER WITHIN 24 HOURS OF PLACEMENT.

ENDS OF VERTICAL CURB SHALL TRANSITION FROM FULL TO ZERO HEIGHTS IN 3 FEET.

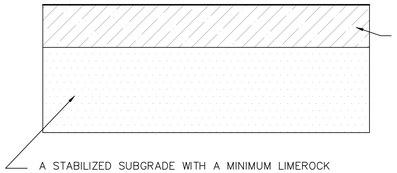
6 TYPE 'D' CURB
(3,500 PSI (MIN)) N.T.S.



PLAN SYMBOL

NOTE:
WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

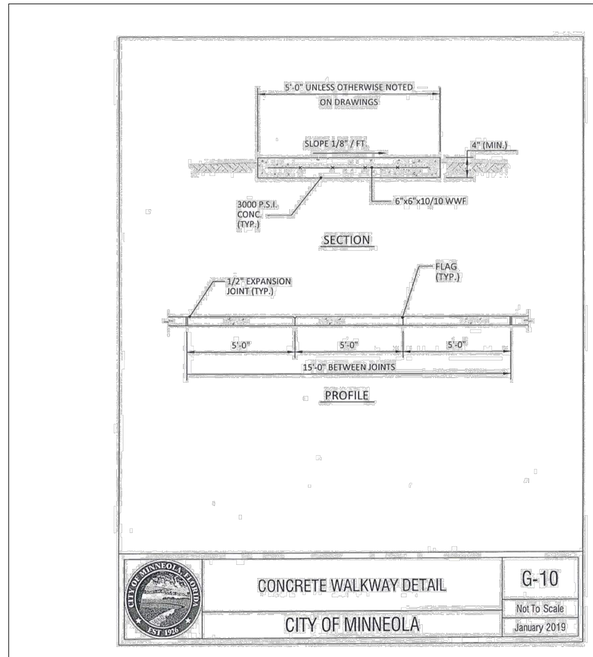
7 TYPE "F" CURB AND GUTTER
N.T.S.



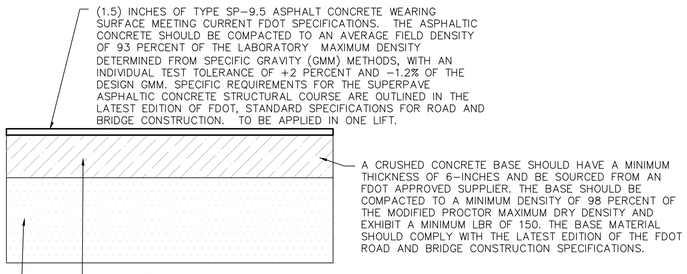
7" CONCRETE WITH A MINIMUM 28–DAY COMPRESSIVE STRENGTH OF AT LEAST 4,000 POUNDS PER SQUARE INCH. LAYOUT OF THE SAW CUT CONTROL JOINTS SHOULD FORM SQUARE PANELS, AND THE DEPTH OF SAW CUT JOINTS SHOULD BE ¼ OF THE CONCRETE SLAB THICKNESS. WE RECOMMEND ALLOWING UES TO REVIEW AND COMMENT ON THE FINAL CONCRETE PAVEMENT DESIGN, INCLUDING SECTION AND JOINT DETAILS (TYPE OF JOINTS, JOINT SPACING, ETC.), PRIOR TO THE START OF CONSTRUCTION.

A STABILIZED SUBGRADE WITH A MINIMUM LIMEROCK BEARING RATIO (LBR) OF 40 AS SPECIFIED BY FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT). THE STABILIZED SUBGRADE SHOULD BE COMPACTED TO AT LEAST 98 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) VALUE. A THICKNESS OF 12 INCHES IS REQUIRED. SUB–BASE SHOULD BE COMPACTED TO AT LEAST 98% OF THE AASHTO T–180 MAXIMUM DENSITY.

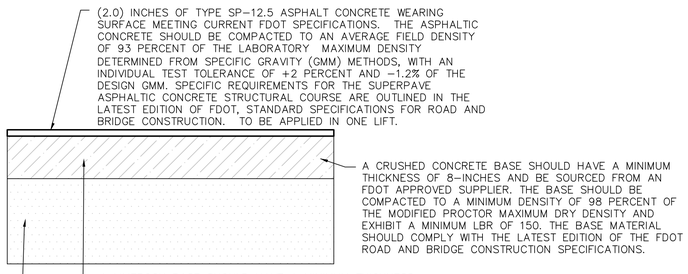
8 10' DOLLY STRIPS
N.T.S.



11 TYPICAL SIDEWALK DETAIL
N.T.S.



9 TYPICAL LIGHT DUTY PAVEMENT SECTION (LIMEROCK OR CRUSHED CONCRETE)
N.T.S.



10 TYPICAL HEAVY DUTY PAVEMENT SECTION (LIMEROCK OR CRUSHED CONCRETE)
N.T.S.

BY	DATE	REVISIONS

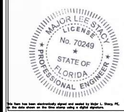
CFB | CLYMER FARNER BARLEY

CLYMER FARNER BARLEY, Inc.
CERTIFICATE OF AUTHORIZATION #: 30702
7413 ALDORA AVENUE, ORLANDO, FL 32762
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL

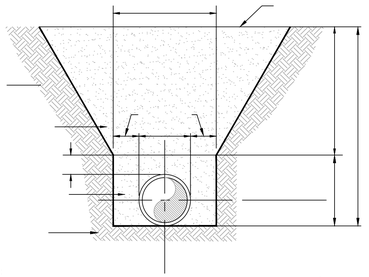
CIVIL DETAILS

SAVE DATE 7/8/2026
DRAWN BY JW
CHECKED BY SMC
PROJECT # EP2025.04206
FILE NAME 10– MCC CIVIL DETAILS



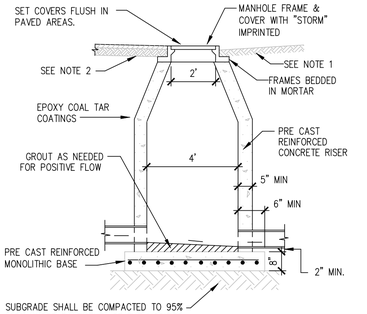
SHEET NUMBER C7.0

(S:\LAKE\VON–VILLAGES PROJECTS\GRENBERG GIBBONS (GBG–001)\CIVIL\CONSTRUCTION\10– MCC CIVIL DETAILS.dwg) PLOT DATE: 7/8/2026 3:37 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS



NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING SHALL BE COMPACTED TO 95% (MIN) OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. BEDDING ROCK CAN BE USED FOR BEDDING IF SUBGRADE SOILS ARE TOO WET TO COMPACT, OR AS DIRECTED BY THE ENGINEER.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES.

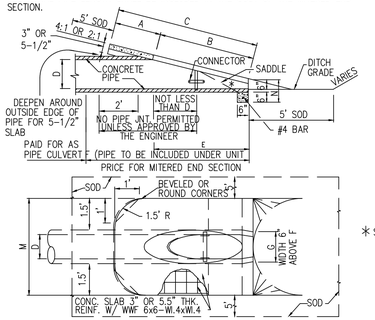
1 TRENCH DETAIL



NOTE:
1. IN UNPAVED AREAS TOP OF FRAME SHALL BE 2" ABOVE FINISHED GRADE
2. ALL INPAVEMENT STRUCTURES MUST CONFORM TO H20 LOADING STANDARDS
3. 12 INCHES OF STONE BEDDING (FDOT #57 STONE, NON-CALCAREOUS) CAN BE USED FOR BEDDING IF SUBGRADE SOILS ARE TOO WET TO COMPACT.

2 MANHOLE

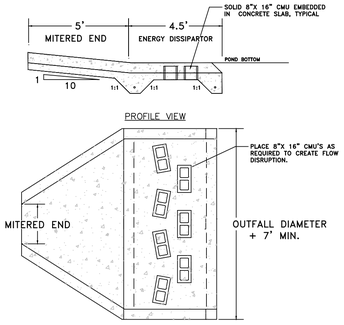
STORM SEWER PIPE LENGTHS NOTED IN THE DRAWINGS REFLECT ONLY THE PIPE ITSELF. WHERE A MITERED END SECTION IS INSTALLED ON SAID PIPE, ITS ADDITIONAL PIPE LENGTH SHALL BE INCLUDED IN THE COST OF THE MITERED END SECTION.



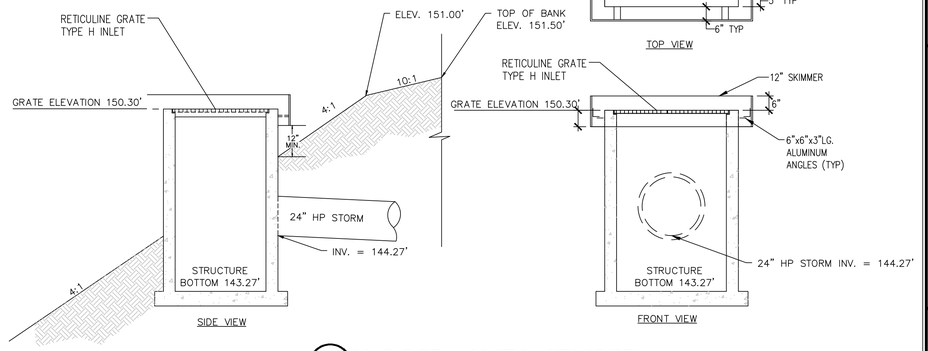
* SLOPE- 4:1 MITER – TO C PIPE FOR PIPES 18" AND SMALLER
2:1 FOR PIPES 24" AND LARGER
2:1 MITER – TO C PIPE FOR PIPES 18" AND SMALLER
1:1 FOR PIPES 24" AND LARGER

DIMENSIONS AND QUANTITIES											
								M			
	D	A	B	C	E	F	G	SINGLE PIPE	DOUBLE PIPE	TRIPLE PIPE	QUAD. PIPE
2:1 SLOPE	15"	1.92'	2.18'	4.10'	2.06'	5'	1.22'	4.63'	7.21'	9.79'	12.37'
	18"	1.97'	2.74'	4.71'	2.56'	6'	1.41'	4.92'	7.75'	10.58'	13.42'
	24"	2.06'	3.85'	5.91'	3.56'	7'	1.73'	5.50'	8.92'	12.33'	15.75'
	30"	2.15'	4.95'	7.10'	4.56'	8'	2.00'	6.08'	10.33'	14.58'	18.83'
	36"	2.25'	6.08'	8.33'	5.56'	9'	2.24'	6.67'	11.75'	16.83'	21.92'
	42"	2.34'	7.21'	9.55'	6.56'	10'	2.45'	7.25'	13.25'	19.25'	25.25'
	48"	2.43'	8.33'	10.76'	7.56'	11'	2.65'	7.83'	14.58'	21.33'	28.08'
	54"	2.52'	9.44'	11.96'	8.56'	12'	2.83'	8.42'	16.08'	23.75'	31.42'
	60"	2.62'	10.56'	13.18'	9.56'	14'	3.00'	9.00'	17.50'	26.00'	34.50'
	66"	2.71'	11.68'	14.39'	10.56'	15'	3.18'	9.58'	18.75'	27.92'	37.08'
	72"	2.80'	12.80'	15.60'	11.56'	16'	3.30'	10.16'	20.16'	30.16'	40.16'
4:1 SLOPE	15"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.63'	7.21'	9.79'	12.37'
	18"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.92'	7.75'	10.58'	13.42'
	24"	2.53'	7.18'	9.71'	7.03'	11'	1.73'	5.50'	8.92'	12.33'	15.75'
	30"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	6.08'	10.33'	14.58'	18.83'
	36"	2.87'	11.31'	14.18'	11.03'	15'	2.24'	6.67'	11.75'	16.83'	21.92'
	42"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	7.25'	13.25'	19.25'	25.25'
	48"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	7.83'	14.58'	21.33'	28.08'
	54"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	8.42'	16.08'	23.75'	31.42'
	60"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	9.00'	17.50'	26.00'	34.50'
	66"	3.73'	21.62'	25.35'	21.03'	25'	3.18'	9.58'	18.75'	27.92'	37.08'
	72"	3.91'	22.68'	26.59'	23.03'	27'	3.30'	10.16'	20.16'	30.16'	40.16'

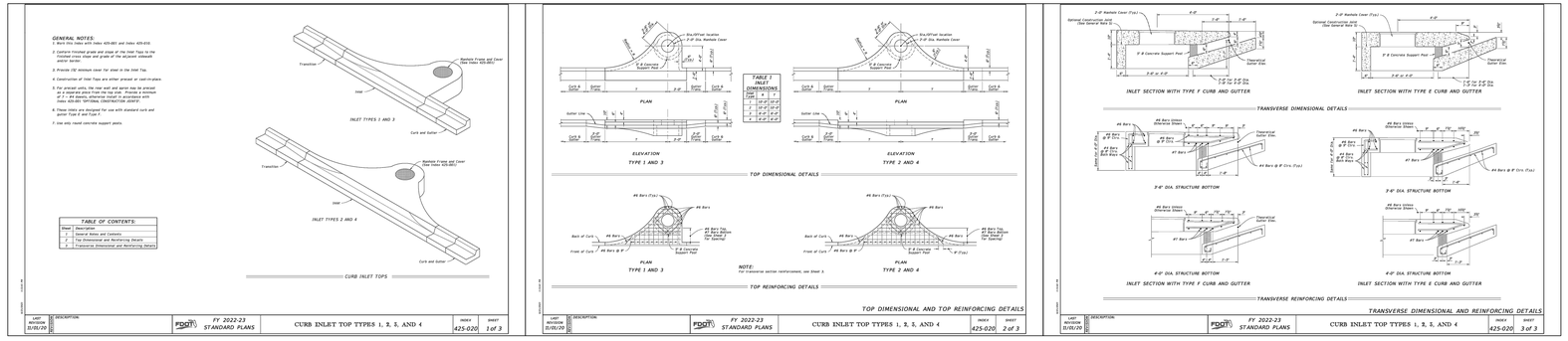
3 MITERED END SECTION (RCP)



4 ENERGY DISSIPATION DEVICE DETAIL

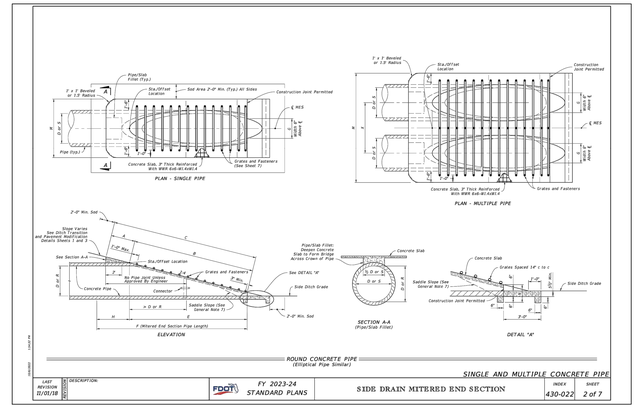


5 DS-3 TYPE H CONTROL STRUCTURE*



6 TYPE 1, 2, 3, AND 4 INLETS

7 TYPE C, E, AND H INLETS



8 SIDE DRAIN MITERED END SECTION & DETAILS

(S:\LAKENOX-VILLAGES PROJECTS\GREENBERG GIBBONS (GBS)-2011\CIVIL\CONSTRUCTION\11- MCC DRAINAGE DETAILS.dwg) PLOT DATE: 7/8/2026 3:36 PM SAVED DATE: 7/8/2026 3:36 PM SAVED BY: ACAMPOS

BY	DATE
REVISIONS	

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
P.O. BOX 491357 LEESBURG, FL 34749-1357
7413 ALFORD AVE LEESBURG, FL 34748
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL

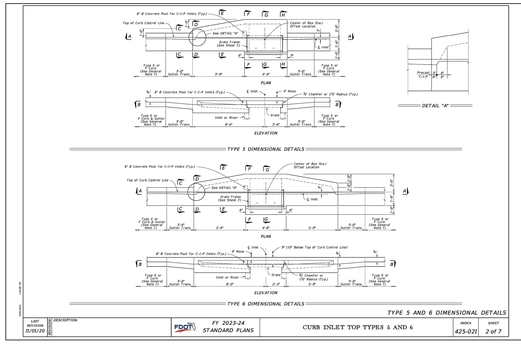
DRAINAGE DETAILS

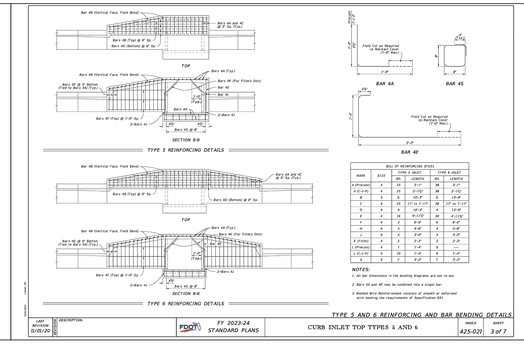
SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	11- MCC DRAINAGE DETAILS

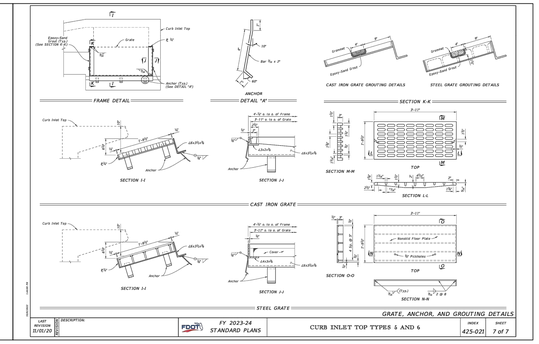
This item has been electronically signed and sealed by Scott L. Sharp, PE. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Drawings and Specifications as instruments of service are and shall remain the property of the Engineer whether the project for which they are made is executed or not. The reproduction or unauthorized use of these documents without the consent of the Engineer is prohibited and illegal.

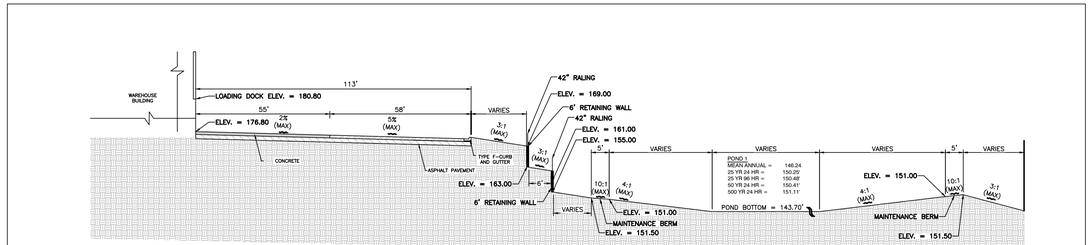
SHEET NUMBER C8.0



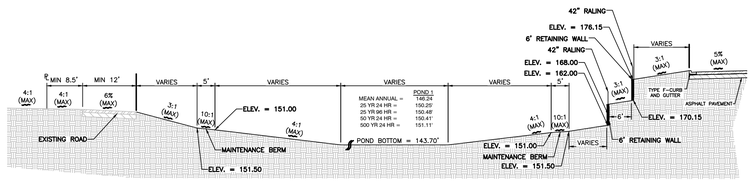




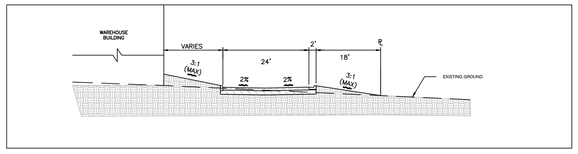
1 TYPE 5 AND 6 INLETS



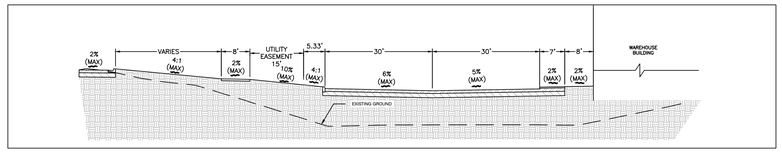
POND SECTION A-A
N.T.S.



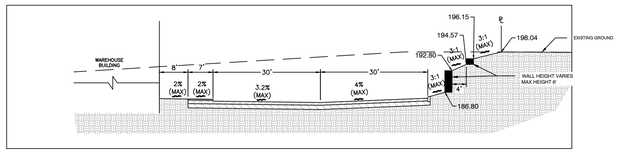
POND SECTION B-B
N.T.S.



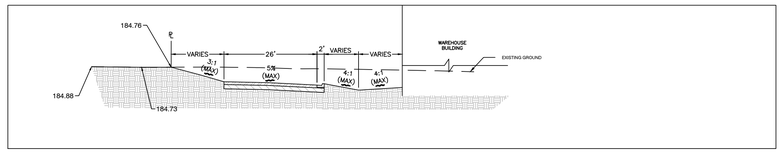
SECTION C-C
N.T.S.



SECTION E-E
N.T.S.



SECTION D-D
N.T.S.



SECTION F-F
N.T.S.

REVISIONS

BY	DATE

CFB | CLYMER FARNER BARLEY

CLYMER FARNER BARLEY, Inc.
7413 ALLONDRA AVE, PORT RICHEY, FL. 34762
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

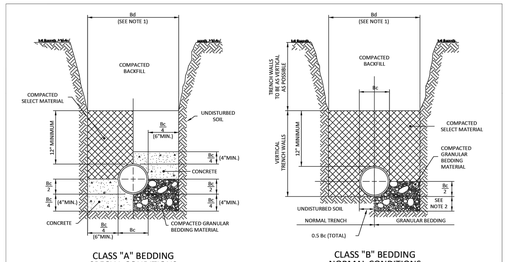
DRAINAGE DETAILS

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	11- MCC DRAINAGE DETAILS

MAJOR L. STACY LICENSED No. 70249 STATE OF FLORIDA PROFESSIONAL ENGINEER

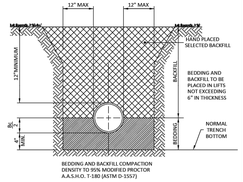
SHEET NUMBER C8.1

(S:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\11- MCC DRAINAGE DETAILS.dwg) PLOT DATE: 7/8/2026 3:38 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS



CLASS "A" BEDDING
SPECIAL CONDITIONS

CLASS "B" BEDDING
NORMAL CONDITIONS

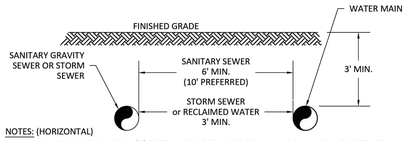


SANITARY SEWER
PIPE BEDDING

NOTES: FOR BEDDING AND TRENCHING

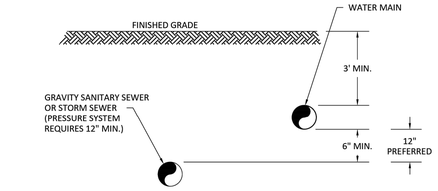
1. Dimension Bc = Pipe O.D.
   Dimension Bd = Trench Width at Top of Pipe
   Maximum Bd = Bc + 30"
   Minimum Bd = Maximum Dimension of Bell + 8" (Unsheeted Trench)
2. Depth for removal for unsuitable material shall be as required to reach suitable foundation. For rock or other non-cushioning material, depth shall be 6" below bottom of utility.
3. All backfill and select material under all roadways, drives (including dirt drives), and parking areas shall be compacted to 98% of the modified proctor maximum dry density. (AASHTO T-180). Backfill and select material under all other areas shall be compacted as follows: From bottom of trench to 12" above top of pipe - 95% of modified proctor maximum dry density (AASHTO T-180). From 12" above top of pipe to top of backfill - 90% of modified proctor maximum dry density (AASHTO T-180)

BEDDING DETAILS	G-3
CITY OF MINNEOLA	Not To Scale
	November 2017



NOTES: (HORIZONTAL)

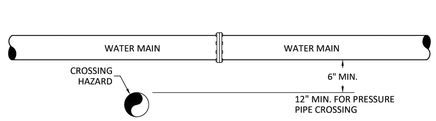
1. A MINIMUM SEPARATION OF SIX (6) FEET, OUTSIDE TO OUTSIDE, SHALL BE MAINTAINED BETWEEN WATER MAINS AND SANITARY GRAVITY SEWER LINES.
2. A MINIMUM HORIZONTAL SEPARATION OF THREE (3) FEET, OUTSIDE TO OUTSIDE, SHALL BE MAINTAINED BETWEEN WATER MAINS AND RECLAIMED WATER LINES CARRYING UNRESTRICTED PUBLIC ACCESS REUSE WATER, AND STORM SEWER LINES.



3. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND SANITARY GRAVITY SEWERS SHALL BE REDUCED TO THREE FEET (3') WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES (6") ABOVE THE TOP OF THE SEWER (62-555.314(C)).

PIPING CLEARANCES	G-4.1
CITY OF MINNEOLA	Not To Scale
	November 2017

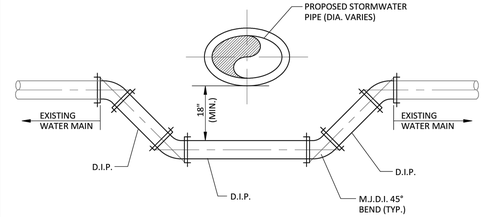
4. THERE SHALL BE AT LEAST A SIX FOOT (6') FOOT SEPARATION BETWEEN WATER MAINS AND SANITARY FORCE MAINS WITHOUT EXCEPTION. FIELD PROBLEMS SHALL BE REPORTED TO THE CITY ENGINEER. SPECIFIC SOLUTIONS MUST BE ACCEPTED BY F.D.E.P. PRIOR TO IMPLEMENTATION.
5. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE OR STORM SEWER STRUCTURE.



NOTES: (VERTICAL)

1. A MINIMUM OF VERTICAL SEPARATION OF AT LEAST SIX INCHES (6"), AND PREFERABLY TWELVE INCHES (12") ABOVE, OR AT LEAST TWELVE INCHES (12") BELOW, OUTSIDE TO OUTSIDE OF PIPE BARREL, SHALL BE MAINTAINED BETWEEN WATER MAIN, SANITARY GRAVITY SEWER, OR STORM SEWER. MINIMUM VERTICAL SEPARATION OF 12" OUTSIDE TO OUTSIDE SHALL BE MAINTAINED FOR CROSSING PRESSURE PIPES (RECLAIMED WATER, STORM FORCEMAIN, OR SANITARY FORCEMAIN).
2. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE CROSSING HAZARD.
3. WHERE IT IS NOT POSSIBLE TO MAINTAIN THE REQUIRED SEPARATION, IT SHALL BE REPORTED TO THE CITY ENGINEER. DEVIATIONS AND OTHER ALTERNATIVES SHALL BE CONSIDERED ON A CASE-BY-CASE BASIS AND MUST RECEIVE SPECIFIC APPROVAL BY F.D.E.P., IN ACCORDANCE WITH FLORIDA STATUTE 62-555.314(5), PRIOR TO IMPLEMENTATION.

PIPING CLEARANCES	G-4.2
CITY OF MINNEOLA	Not To Scale
	November 2017



NOTES:

1. ALL PROPOSED JOINTS SHALL BE RESTRAINED.
2. ALL EXISTING JOINTS WITHIN 12' SHALL BE RESTRAINED.

WATER LINE CROSSING	G-5
CITY OF MINNEOLA	Not To Scale
	November 2017

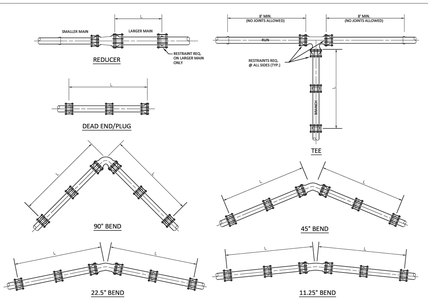


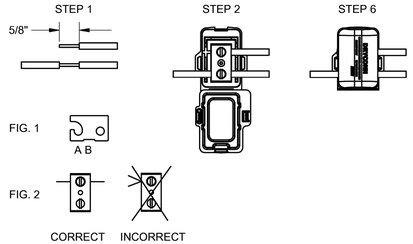
TABLE OF THRUST RESTRAINT LENGTHS

PIPE SIZE (inches)	90° BEND		45° BEND		22.50° BEND		11.25° BEND		TEES		DEADEND & PLUG		REDUCER	
	PVC (L)	DUCTILE IRON (L)	PVC (L)	DUCTILE IRON (L)	PVC (L)	DUCTILE IRON (L)	PVC (L)	DUCTILE IRON (L)	PVC (L)	DUCTILE IRON (L)	PVC (L)	DUCTILE IRON (L)	PIPE SIZES	DUCTILE IRON (L)
4	20'	16'	8'	7'	4'	3'	2'	2'	15'	10'	45'	29'	6"x4"	33'	21'
6	28'	22'	12'	9'	6'	4'	3'	2'	33'	21'	63'	40'	8"x6"	34'	22'
8	36'	29'	15'	12'	7'	6'	4'	3'	52'	33'	82'	52'	10"x8"	33'	21'
10	43'	34'	18'	14'	9'	7'	4'	3'	68'	43'	98'	63'	12"x10"	34'	22'
12	50'	40'	21'	17'	10'	8'	5'	4'	84'	54'	116'	74'	16"x12"	63'	40'
16	63'	51'	26'	21'	13'	10'	6'	5'	116'	74'	148'	94'	18"x16"	33'	21'
18	70,	56'	29'	23'	14'	11'	7'	6'	131'	83'	163'	103'	20"x18"	33'	21'
20	75'	61'	31'	25'	15'	12'	7'	6'	145'	92'	178'	113'	20"x20"	62'	39'
24	86'	70'	36'	29'	17'	14'	9'	7'	172'	110'	207'	132'			

THRUST RESTRAINT DESIGN NOTES

1. RESTRAINT JOINTS, FITTINGS, & VALVE REQUIREMENTS CALCULATED BY THE THRUST RESTRAINT DESIGN PROGRAM PROVIDED BY UNI-FLANGE, THE FORD METER BOX COMPANY, INC.
2. DATA BASED ON MAX. PRESSURE OF 150 p.s.i., THE UNIFIED SOILS CLASSIFICATION SYSTEM (SOIL TYPE SP). THE PIPE BEDDED IN NATIVE SOIL w/ A MINIMUM OF 2.5' COMPACTED FILL OVER THE PIPE, AND USING A SAFETY FACTOR OF 1.5 FOR THE DATA.
3. ALL FITTINGS & VALVES SHALL HAVE RESTRAINED JOINTS PER SPECIFICATIONS & ALL BELL & SPIGOT JOINTS TO BE RESTRAINED WITH A RESTRAINING HARNESS WITHIN THE REQUIRED LENGTH OF RESTRAINED PIPE (L).
4. THRUST BLOCKS SHALL BE USED ONLY AS SPECIFIED BY PROJECT ENGINEER.

THRUST RESTRAINT DETAILS	G-6
CITY OF MINNEOLA	Not To Scale
	November 2017



KING INNOVATION DRYCONN DIRECT BURY LUG - AQUA®

IMPORTANT: TURN OFF POWER BEFORE INSTALLING OR REMOVING CONNECTORS. PRODUCT TO BE USED IN ACCORDANCE WITH LOCAL AND NATIONAL CODES.

INSTRUCTIONS: FOR LOW VOLTAGE APPLICATIONS - 50 VOLTS MAX.

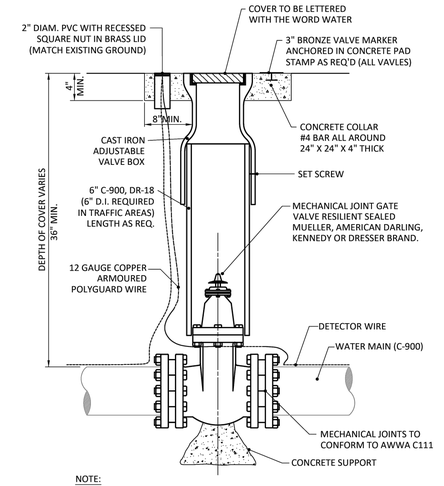
1. STRIP MAIN AND TAP CONDUCTOR(S) TO 5/8" (WIDTH OF LUG).
2. PLACE STRIPPED CONDUCTOR(S) INTO SIDE A OR B.**
3. TORQUE TO 35 LB-IN. (SOLID AND STANDED CONDUCTORS)
   ALTERNATE TORQUE METHOD FOR USE ON SOLID WIRE: USING A SCREWDRIVER, TIGHTEN SET SCREW UNTIL IT COMES INTO CONTACT WITH THE SOLID CONDUCTOR. NOTE LOCATION OF SCREWDRIVER SLOT AND CONTINUE TIGHTENING THE SET SCREW AS INDICATED BELOW:
   3/4 TURN #10 - 14 SOLID COPPER
   1/4 TURN #10 - 14 STEEL CORE TRACER
4. REPEAT STEPS 1 THROUGH 3 FOR ADJACENT SIDE.
5. REMOVE SEALANT COVER AND DISCARD.
6. CLOSE HOUSING, ALIGNING CONDUCTORS UNTIL HOUSING LID IS FULLY LATCHED.
7. DO NOT REUSE.

**USE SIDE A FOR UNCUT MAIN OR TAP CONDUCTORS (FIGURE 1). WHEN SPLICING MULTIPLE TAP CONDUCTORS ON SIDE A OR B USE ONLY LIKE GAUGE AND TYPE (SOLID/STRANDED). DO NOT INSTALL MULTIPLE CONDUCTORS INTO THE SAME LUG OPENING (FIGURE 2).

SILICONE SEALANT TEMPERATURE RATING: -45°F TO 400°F

WIRE RANGE: #10-14 SOLID AND STRANDED COPPER; #10 - 14 STEEL CORE TRACER

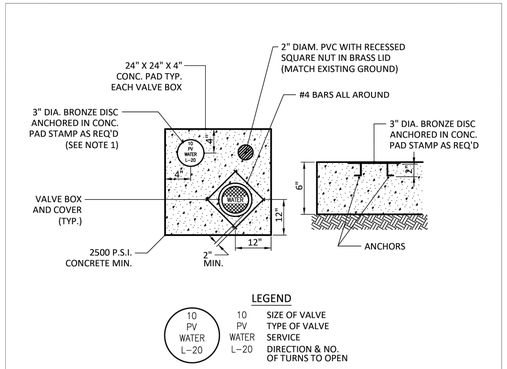
LOCATING WIRE SPLICING	G-8
CITY OF MINNEOLA	Not To Scale
	November 2017



NOTE:

1. EXTENSION STEM WITH 2" SQ. WRENCH NUT AND UPPER GUIDE IS REQUIRED FOR MORE THAN 4' DEPTH. BOX SHALL NOT REST ON PIPE.

GATE VALVE & BOX	W-3
CITY OF MINNEOLA	Not To Scale
	November 2017



LEGEND

10	10	SIZE OF VALVE
PV	PV	TYPE OF VALVE
WATER	WATER	SERVICE
L-20	L-20	DIRECTION & NO. OF TURNS TO OPEN

BRONZE DISC

NOTE:

1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES.

VALVE COLLAR	W-5
CITY OF MINNEOLA	Not To Scale
	November 2017

REVISIONS

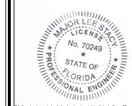
BY	DATE

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALL ONE AVE, ORLANDO, FL. 34762
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

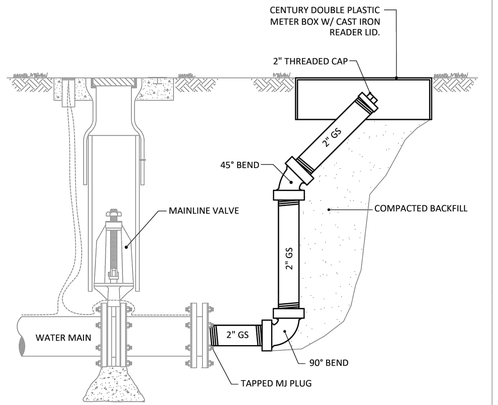
UTILITY DETAILS

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	12- MCC UTILITY DETAILS

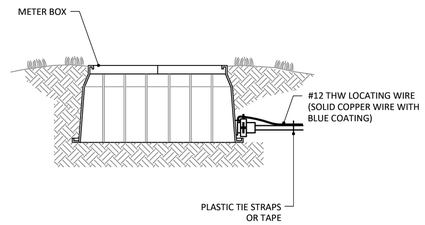


SHEET NUMBER C9.0

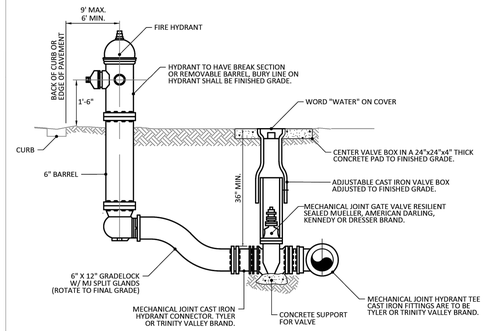
(S:\LAKE\NON-CVILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\12- MCC UTILITY DETAILS.dwg) PLOT DATE / TIME: 7/8/2026 3:38 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS



BLOW OFF DETAIL	W-6
CITY OF MINNEOLA	Not To Scale
	November 2017



SERVICE AND METER	W-11
CITY OF MINNEOLA	Not To Scale
	November 2017



(STANDARD FIRE HYDRANT ASSEMBLY)

NOTES

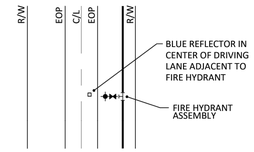
1. HYDRANTS SHALL BE PLACED WITH PUMPER NOZZLES FACING STREET.
2. HYDRANTS SHALL BE FLOW TESTED BY CONTRACTOR. COORDINATE WITH CITY ENGINEER FOR TESTING PROCEDURES.
3. ALL HYDRANTS SHALL BE EQUIPED WITH GRADE-LOK FITTINGS TO ALLOW FOR ELEVATION ADJUSTMENTS.
4. APPLY TWO COATS OF SHERMAN WILLIAMS OSHA SAFETY INDUSTRIAL YELLOW PAINT TO HYDRANT BARREL.
5. APPLY TWO COATS OF SHERMAN WILLIAMS OSHA SAFETY INDUSTRIAL ENAMEL PAINT TO THE BONNET AND NOZZLE CAPS. THE UTILITY DEPARTMENT INSPECTOR WILL DETERMINE THECOLOR TO PAINT THE HYDRANT BONNET AND NOZZLE CAPS BY FLOW TESTING HYDRANT.

BLUE 1500 GPM OR MORE (SHERWIN WILLIAMS #SW4086)
GREEN 1000 GPM TO 1499 GPM (SHERWIN WILLIAMS #B54614)
ORANGE 500 GPM TO 999 GPM (SHERWIN WILLIAMS #B54E39)
RED 499 GPM OR LESS (SHERWIN WILLIAMS #B54R38)
YELLOW HYDRANT BARREL (SHERWIN WILLIAMS #B54Y37)

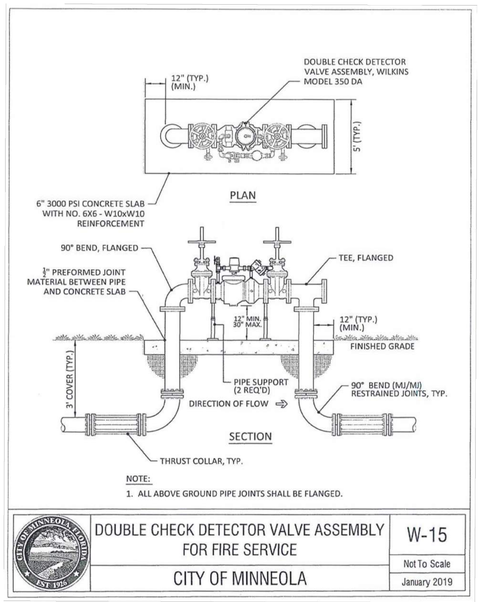
HYDRANT SPECIFICATIONS

1. AWWA SPECIFICATIONS C-502
2. TWO 2-1/2" HOSE NOZZLE DISCHARGE
3. ONE 4-1/2" PUMPER NOZZLE DISCHARGE
4. ONE 1-1/2" OPERATING NUT, LEFT

FIRE HYDRANT ASSEMBLY	W-12
CITY OF MINNEOLA	Not To Scale
	November 2017



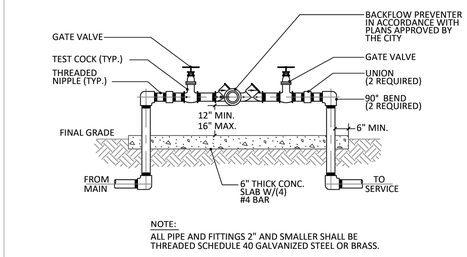
FIRE HYDRANT REFLECTOR DETAIL	W-13
CITY OF MINNEOLA	Not To Scale
	November 2017



NOTE:

1. ALL ABOVE GROUND PIPE JOINTS SHALL BE FLANGED.

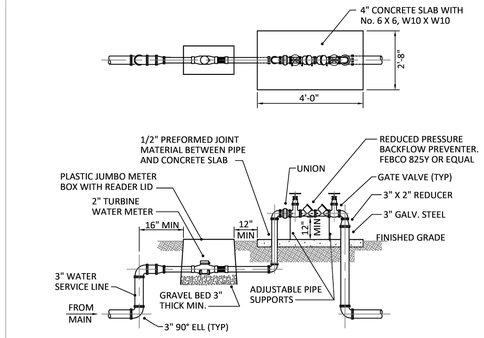
DOUBLE CHECK DETECTOR VALVE ASSEMBLY FOR FIRE SERVICE	W-15
CITY OF MINNEOLA	Not To Scale
	January 2019



NOTE:

ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL OR BRASS.

REDUCED PRESSURE BACKFLOW PREVENTER	W-18
CITY OF MINNEOLA	Not To Scale
	November 2017



WATER METER/BACKFLOW PREVENTER ASSEMBLY	W-19
CITY OF MINNEOLA	Not To Scale
	November 2017

REVISIONS | BY | DATE

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
P.O. BOX 770429 CLERMONT, FL. 34762
7413 ALLOCO AVE.
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

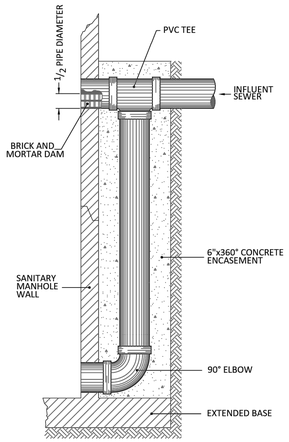
UTILITY DETAILS

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	12- MCC UTILITY DETAILS

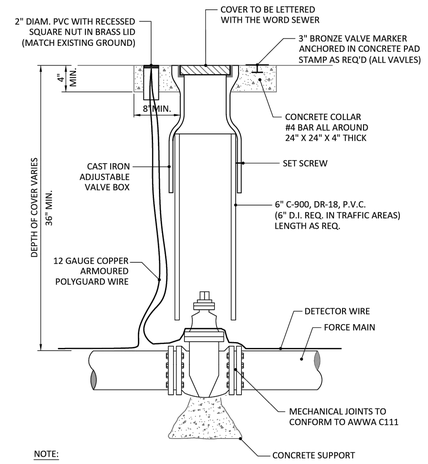
MAJOR LEE PACE IV LICENSED No. 70249 STATE OF FLORIDA PROFESSIONAL ENGINEER

SHEET NUMBER C9.1

(S:\LAKENON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\12- MCC UTILITY DETAILS.dwg) PLOT DATE: 7/8/2026 3:38 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS



STANDARD DROP MANHOLE CONNECTION	S-4
CITY OF MINNEOLA	Not To Scale
	November 2017

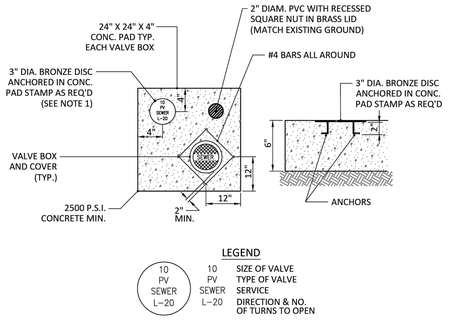


NOTE:

1. EXTENSION STEM WITH 2" SQ. WRENCH NUT AND UPPER GUIDE IS REQUIRED FOR MORE THAN 4' DEPTH. BOX SHALL NOT REST ON PIPE.

PLUG VALVE & BOX
NOT TO SCALE

PLUG VALVE & BOX	S-11
CITY OF MINNEOLA	Not To Scale
	November 2017



NOTE:

1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES.

VALVE COLLAR
NOT TO SCALE

VALVE COLLAR	S-13
CITY OF MINNEOLA	Not To Scale
	November 2017

1. THE CITY'S PUBLIC SERVICES DEPARTMENT SHALL BE NOTIFIED 48 HOURS PRIOR TO BEGINNING ANY WATER SYSTEM'S CONSTRUCTION.
2. PRIOR TO TAKING ANY WATER LINES OUT OF SERVICE, THE CONTRACTOR SHALL NOTIFY THE CITY AND AFFECTED CUSTOMERS, IN WRITING, 48-HOURS PRIOR TO SHUTDOWN.
3. WATER MAINS SHALL BE PVC AWWA CLASS C-900, MINIMUM CL-150 (DR-18) DUCTILE IRON PIPE PRESSURE RATING FOR PIPE SIZES 4"-12". PVC PIPES 14" OR LARGER SHALL BE AWWA CLASS C-905 (DR-21). ALL COUPLINGS, COMPOUNDS, SOLVENTS, LUBRICANTS AND PIPE PREPARATION FOR LAYING SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURER'S LATEST RECOMMENDATIONS.
4. ALL WATER AMINS SHALL BE NSF APPROVED AND BEAR THE "NSF" SEAL FOR POTABLE WATER USE, AND HAVE A MINIMUM OF 36 INCHES OF COVER (MAXIMUM COVER OF 60 INCHES). IN SPECIAL CASES WHERE IT IS IMPOSSIBLE TO PROVIDE ADEQUATE COVER, DUCTILE IRON PIPE OR ENCASEMENT MAT BE USED AS APPROVED BY THE CITY AND FDEP.
5. DE-WATERING SHALL BE PROVIDED TO KEEP GROUND WATER ELEVATION A MINIMUM OF 6 INCHES BELOW PROPOSED WATER MAIN.
6. ALL WATER MAINS SHALL BE INSTALLED ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
7. TRENCHES SHALL BE BACK FILLED WITH MATERIAL ACCEPTABLE TO THE CITY, WITH A MINIMUM COMPACTION OF 98% (AASHTO T-180) IN PAVED AREAS AND 95% (AASHTO T-180) IN UNPAVED AREAS.
8. IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 2 FEET VERTICAL INTERVALS TO FINISH GRADE AT A MINIMUM SPACING OF EVERY 300 FEET. RESULTS OF TESTING MUST BE PROVIDED TO THE CITY.
9. AS STANDARD PRACTICE, WATER MAINS SHALL BE INSTALLED 5 FEET OFF THE BACK OF THE CURB ON THE OPPOSITE SIDE OF THE RECLAIMED WATER LINES OR AS APPROVED BY THE CITY.
10. ALL WATER MAINS UNDER PAVEMENT SHALL BE DUCTILE IRON AND SHALL EXTEND 5 FEET OFF THE BACK OF CURB.
11. ALL SLEEVES UNDER PAVEMENT SHALL EXTEND 5 FEET BEYOND THE BACK OF CURB.
12. PIPE WARNING TAPE SHALL BE LOCATED 18 INCHES BELOW FINISH GRADE FOR ALL PIPES. PIPE IDENTIFICATION TAPE SHALL BE PROVIDED ON ALL PIPES.
13. WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACING OF 1,000 FEET FOR RESIDENTIAL SERVICE (500' FOR COMMERCIAL, MULTIFAMILY AND INDUSTRIAL). AT ALL WATER TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL BRANCHES.

GENERAL WATER NOTES	W-1.1
CITY OF MINNEOLA	Not To Scale
	November 2017

14. APPROVED WATER VALVE TYPES ARE THE FOLLOWING:
    A. BRASS BALL-TYPE VALVE FOR VALVES LESS THAT 2" DIAMETER.
    B. STANDARD GATE VALVES 2" AND LARGER DIAMETER, RESILIENT WEDGE GATES VALVES(AWWA C-509)
    C. TAPPING VALVES WITH MECHANICAL TAPPING SLEEVE FOR SIZE ON SIZE STAINLESS STEEL OR EPOXY COATED SLEEVE WITH STAINLESS STEEL BOLTS AND NUTS FOR OTHERS.
15. ALL POTABLE WATER VALVE BOXES SHALL ADJUSTED TO FINISH GRADE AND THE CAPS SHALL BE PAINTED BLUE TO MAKE THEM PLAINLY VISIBLE. VALVES NOT IN PAVEMENT MUST HAVE 24"x24"x4" CONCRETE COLLAR.
16. WATER VALVES SHALL BE COMPLETELY OPENED BY THE CITY WATER/WASTEWATER DIVISION, IN THE PRESENCE OF THE CONTRACTOR, PRIOR TO FINAL ACCEPTANCE OF ANY NEW WATER SYSTEM.
17. MEGALUGS, SPLIT-RESTRAINED BOLTLESS RESTRAINED JOINTS, OR GRIPPER GASKETS MAY BE USED ON ALL PIPES NOT MEETING REQUIRED COVER REQUIREMENTS SHALL FOLLOW THE MOST RECENT DIPRA THRUST RESTRAINT DESIGN GUIDELINES.
18. ALL WATER SERVICES SHALL BE MARKED ALONG THE OUTSIDE EDGE OF CURB WITH UPSIDE-DOWN "W" OR BY METAL TABS SET INTO PAVEMENT. VALVES FOR WATER SHALL BE MARKED BY A "V" OR METAL TABS SET INTO THE PAVEMENT. BLOW-OFFS SHALL BE MARKED WITH A "B".
19. ALL SINGLE RESIDENTIAL WATER SERVICES SHALL BE MINIMUM 1" AND DOUBLE RESIDENTIAL SERVICES SHALL BE MINIMUM 1-1/2" BLACK OR BLUE POLYETHYLENE TUBING. POLYBUTYLENE SHALL NOT BE USED.
20. WATER SERVICES SHOULD BE DOUBLE 1-1/2" SERVICES LOCATED AT SIDE LOT LINES, ALTERNATING WITH RECLAIMED WATER SERVICE LOCATIONS. IN INSTANCES WHERE WATER SERVICES NEED TO BE OFFSET, 1" SERVICES SHALL BE SPECIFIED. THESE SERVICES MAY BE OFFSET FROM THE LOT LINE A MAXIMUM DISTANCE OF 5.0 FEET.
21. ALL WATER SERVICE ENDINGS SHALL BE MARKED BY 2"x4" LUMBER (PRESSURE TREATED). ALL SERVICE SHALL EXTEND 6 INCHES ABOVE GRADE, SECURED TO THE BASE OF THE LUMBER. ALL SERVICES MUST BE ADJUSTED TO FINAL METER BOX LOCATION BY OWNER PRIOR TO INITIAL METER INSTALLATION.
22. WATER DISTRIBUTION SYSTEM SHALL BE DESIGNED TO COMPLY WITH THE CITY'S FIRE (WATER) FLOW CODE.
23. HYDRANT LOCATION AND SPACING SHALL BE AS PER THE CITY'S LAND DEVELOPMENT CODE.
24. BLUE REFLECTORS SHALL BE SECURELY AFFIXED TO ROADWAY (CENTER LINE OF ROAD) ADJACENT TO HYDRANT LOCATION.

GENERAL WATER NOTES	W-1.2
CITY OF MINNEOLA	Not To Scale
	November 2017

25. ALL FIRE HYDRANTS SHALL BE CONSTRUCTED TO MAKE THEM EASILY ACCESSIBLE TO FIRE PERSONNEL IN CASE OF FIRE. THE MAIN NOZZLE SHOULD ALWAYS FACE THE STREET AND BE 18"-22" ABOVE GRADE.
26. OUT-OF-SERVICE FIRE HYDRANTS MUST BE CLEARLY MARKED (RED RING ON NOZZLE, LABELED DISK ON NOZZLE) FACING ROADWAY.
27. WATER SYSTEMS WILL BE PRESSURE TESTED AT 150 PSI STATIC PRESSURE FOR A PERIOD OF 2 HOURS PER AWWA STANDARDS.
28. ALL WATER MAINS TO BE CLEARED FOR SERVICE SHALL BE FLUSHED, DISINFECTED, PRESSURE TESTED, AND BACTERIOLOGICALLY CLEANSED FOR SERVICE, IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND CHAPTER 62-555 FLORIDA ADMINISTRATIVE CODE.
29. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO INSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION OR THE CITY PUBLIC SERVICES AND "AS-BUILTS" ARE PROVIDED TO THE CITY ENGINEER, PRIOR TO ANY USE OF THIS SYSTEM.

GENERAL WATER NOTES	W-1.3
CITY OF MINNEOLA	Not To Scale
	November 2017

1. ALL REUSE AND EFFLUENT REUSE PIPING TO BE OWNED AND MAINTAINED BY THE CITY OF MINNEOLA SHALL BE A SOLID PURPLE COLOR.
2. REUSE AND EFFLUENT REUSE MAINS SHALL BE PVC CONFORMING TO AWWA C-900, DR-18 FOR PIPE SIZES 4"-12". PIPES 14" & LARGER SHALL BE AWWA C-905, DR 25. ALL COUPLINGS, CLEANING COMPOUNDS, SOLVENTS, LUBRICANTS, AND PIPE PREPARATION, FOR LAYING, SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURERS LATEST RECOMMENDATIONS.
3. DEPTH OF REUSE AND EFFLUENT REUSE LINES TO BE 36" BELOW FINISHED GRADE.
4. REUSE AND EFFLUENT REUSE MAINS TO BE LOCATED 5' FROM BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. WHERE REUSE, EFFLUENT REUSE AND SEWER MAINS OR POTABLE WATER MAINS CROSS WITH LESS THAN 18" VERTICAL CLEARANCE, THE SEWER OR WATER MAIN WILL BE 20' OF DUCTILE IRON PIPE, CENTERED ON THE POINT OF CROSSING. WHEN A REUSE MAIN PARALLELS A SEWER OR WATER MAIN A SEPARATION OF AT LEAST 5' (CENTER TO CENTER), OR 3' (OUTSIDE TO OUTSIDE) SHOULD BE MAINTAINED. IF SEPARATION CANNOT BE MAINTAINED, THE REUSE MAIN AND SEWER MAIN OR WATER MAIN SHALL BE DUCTILE IRON PIPE FOR THE PORTION OF THE REUSE MAIN LESS THAN THE REQUIRED SEPARATION FROM THE SEWER MAIN OR WATER MAIN, OR INSTALLATION OF THE REUSE MAIN IN A SEPARATE TRENCH, OR ON AN UNDISTURBED EARTH SHELF, AT LEAST 18" ABOVE THE CROWN OF THE SEWER MAIN OR WATER MAIN.
6. ALL REUSE AND EFFLUENT REUSE MAINS UNDER PAVEMENT SHALL BE DUCTILE IRON PIPE AND SHALL EXTEND 5' BEYOND THE EDGE OF PAVEMENT OR BACK OF CURB.
7. ALL IRRIGATION SLEEVING UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE EDGE OF PAVEMENT OR BACK OF CURB.

GENERAL REUSE AND EFFLUENT REUSE NOTES	R-1
CITY OF MINNEOLA	Not To Scale
	November 2017

BY	DATE	REVISIONS

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
CA #30000 | LC #26000 | EB #7918
7413 ALL CONDO DR. | ORLANDO, FL. 32762
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL

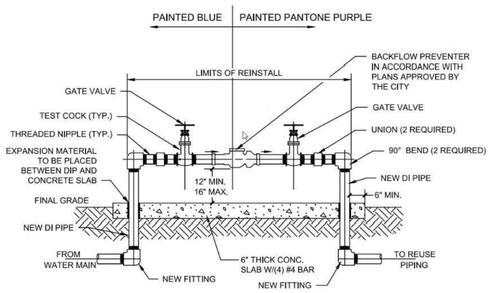
UTILITY DETAILS

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	12- MCC UTILITY DETAILS

This item has been electronically signed and sealed by Major L. Mack, PE. on the date shown on the item using a digital signature. Printed copies of this item should not be considered signed and sealed and the signature must be verified on any electronic copies.

SHEET NUMBER C9.2

J:\LAKENON-VILLAGES PROJECTS\GRENEBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\12- MCC UTILITY DETAILS.dwg| PLOT DATE: 7/8/2026 3:38 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS



RECLAIM WATER BACKFLOW PREVENTOR

REVISIONS

BY	DATE

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALFORD AVE. MELBOURNE, FL. 32762
(352)748-3126

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

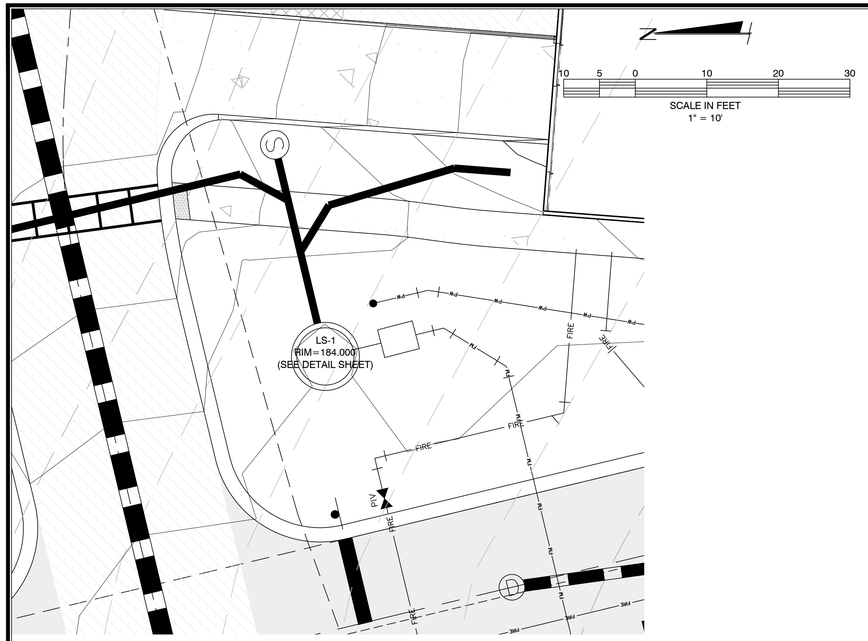
UTILITY DETAILS

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	12- MCC UTILITY DETAILS

This item has been electronically signed and sealed by Maurice L. Stacy, 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.

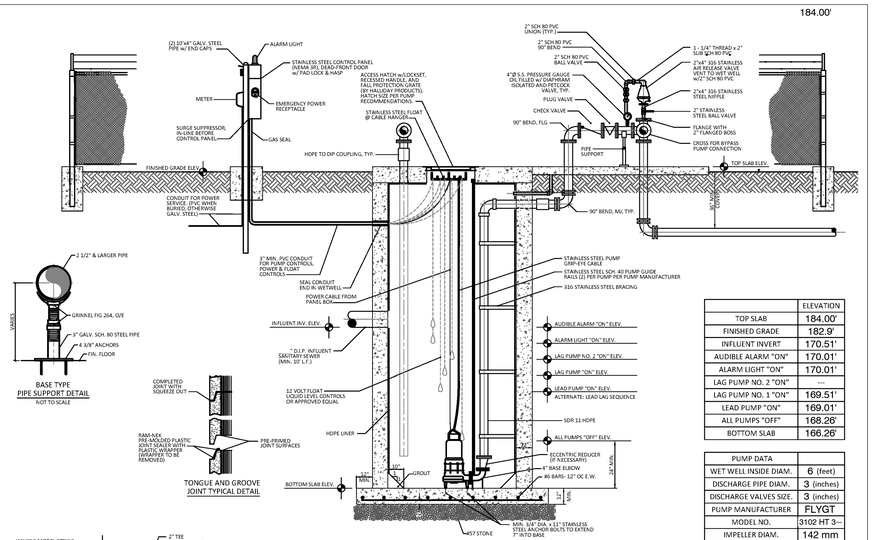
SHEET NUMBER C9.3

(S:\LAKE\NOVI-VILLAGES PROJECTS\GREENBERG GIBBONS (GBS-001)\CIVIL\CONSTRUCTION\12- MCC UTILITY DETAILS.dwg) PLOT DATE: 7/8/2026 3:38 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS



NOTES:

1. PUMPS: SHALL BE FLYGT SUBMERSIBLE PUMPS. PUMPS SHALL HAVE TWO (2) 2" STAINLESS STEEL GUIDE RAILS PER PUMP.
2. LEVEL CONTROLS: SHALL BE MODEL 3900 MERCURY SWITCH LIQUID LEVEL REGULATORS EACH PROVIDED WITH 50' CONTINUOUS ELECTRIC CABLE AND WEIGHTS.
3. WET WELL ACCESS COVER: SHALL HAVE CLEAR OPENING OF 36"x84" AS MANUFACTURED BY HALLIDAY PRODUCTS OR APPROVED EQUAL. ACCESS FRAME AND COVER SHALL HAVE A 1/4" THICK ONE-PIECE, MILL FINISH, EXTRUDED ALUMINUM FRAME, INCORPORATING A CONTINUOUS CONCRETE ANCHOR. DOOR PANEL(S) SHALL BE 1/4" ALUMINUM DIAMOND PLATE, REINFORCED TO WITHSTAND A LIVE LOAD OF 300 psf. DOOR(S) SHALL OPEN 70-90° AND AUTOMATICALLY LOCK WITH STAINLESS STEEL HOLD-OPEN ARMS WITH ALUMINUM RELEASE HANDLES. DOOR(S) SHALL CLOSE FLUSH WITH THE FRAME. UNIT SHALL LOCK WITH A NONCORROSIVE LOCKING BAR. FRAME SHALL SUPPORT GUIDE RAILS AND CABLE HOLDER FOR ELECTRICAL WIRING. ALL ACCESS FRAME, COVER, AND HARDWARE SHALL BE CONSTRUCTED OF STAINLESS STEEL. ALL SURFACES IN CONTACT WITH CONCRETE SHALL HAVE A SHOP COAT OF ZINC CHROMATIC PRIMER APPROVED ALKALI RESISTANT PAINT OR APPROVED PROTECTIVE COATING. DOUBLE DOOR ACCESS COVERS SHALL HAVE REMOVABLE CENTER BAR SUPPORT. COVER MUST BE COMPATIBLE WITH PUMP. COVERS SHALL BE EQUIPPED WITH FALL PROTECTION GRATING.
4. ELECTRICAL SERVICE ENTRANCE: PROVIDE METER SOCKET AND MAIN DISCONNECT MEETING APPLICABLE ELECTRIC CODES AND REQUIREMENTS OF POWER COMPANY. LIGHTING AND VOLTAGE SURGE PROTECTION TO BE PROVIDED. **COST FOR THE ELECTRICAL SERVICE AND COORDINATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. CONTROL PANEL: PUMP MANUFACTURER SHALL SUPPLY THE CONTROL PANEL. PANEL SHALL BE EQUIPPED WITH INDIVIDUAL DISCONNECTS, LIGHTNING ARRESTORS, SURGE AND THREE PHASE OVERLOAD PROTECTION, ELECTRICAL ALTERNATOR WITH TEST SWITCH. CONTROL RELAYS & FUSES AUTOMATIC TRANSFER TO NON-OPERATING PUMP, OVERLOAD RESETS, H.O.A. PUMP OPERATING SELECTOR SWITCH, ELAPSED TIME METERS FOR EACH PUMP. TERMINAL BOARD WITH CONNECTORS FOR HIGH LEVEL ALARMS, AMP METERS FOR EACH PUMP, FLASHING ALARM LIGHT, ALARM HORN, SEAL FAILURE INDICATORS, THERMAL SHUT DOWN, PHASE MONITOR, AND GROUND FAULT INTERRUPT WITH CIRCUIT BREAKER. ALL COMPONENTS SHALL BE HOUSED IN A NEMA 3R STAINLESS STEEL ENCLOSURE WITH ALUMINUM DEAD FRONT PANEL DOOR DESIGN. PROVISIONS FOR PADLOCKING PANEL SHALL BE PROVIDED. HEIGHT TO BE DETERMINED BY THE CITY OF MINNEOLA UTILITY DEPARTMENT STARTERS SHALL BE AS MANUFACTURED BY WESTINGHOUSE.
6. PUMP BASE ELLS, PUMP ANCHOR BOLTS, UPPER AND INTERMEDIATE GUIDE RAIL BRACKETS, GUIDE RAILS, CABLE HANGER, PUMP LIFTING CABLES, CONTROL PANEL AND FLOAT SWITCHES SHALL BE PROVIDED BY PUMP SUPPLIER.
7. INSTALL PUMP BASE ELLS, GUIDE RAILS, AND DISCHARGE PIPING PLUMB, LEVEL AND SQUARE.
8. ALL LOCATIONS WHERE PIPES ENTER OR EXIT THE WET WELL SHALL BE MADE WATERTIGHT WITH LINK SEAL CLOSURES SELECTED FOR THE PROPER SEALING RANGE.
9. DUCTILE IRON PIPE SHALL COMPLY WITH AWWA C115 AND SHALL HAVE A PROTECTO 401 INTERIOR LINING. DUCTILE IRON FITTINGS SHALL COMPLY WITH AWWA C110 OR C153 AND SHALL HAVE A PROTECTO 401 INTERIOR LINING.
10. ALL ABOVE GRADE PIPING SHALL BE DUCTILE IRON CLASS 50 (FLANGED JOINT FOR EXPOSED PIPE & MECHANICAL JOINT FOR BURIED PIPE). PIPING IN WET WELL SHALL BE DR 11 HDPE.
11. DIMENSIONS BETWEEN CENTERLINE OF PIPES SHALL BE PER PUMP MANUFACTURER'S RECOMMENDATIONS.
12. ALL FASTENERS ON FLANGES AND ETC. INSIDE WET WELL WILL BE 316 STAINLESS STEEL.
13. CHECK VALVES SHALL BE MUELLER, AMERICAN-DARLING, OR CLOW WITH OUTSIDE LEVER AND WEIGHT.
14. PLUG VALVES SHALL BE SERIES 100, AS MANUFACTURED BY DEZURIK CORP., AND CLOW OR APPROVED EQUAL. VALVES SHALL BE CONSTRUCTED WITH RESILIENT FACED PLUGS. VALVES INSTALLED BELOW GRADE SHALL BE EQUIPPED WITH A CAST IRON VALVE BOX AND EXTENSION. VALVES SHALL HAVE A 2" OPERATION NUT. ONE(1) 5' LONG VALVE WRENCH SHALL BE PROVIDED TO THE CITY OF MINNEOLA PER LIFT STATION.
15. PRESSURE GAUGES SHALL BE STAINLESS STEEL WITH STAINLESS STEEL DIAPHRAGM, LIQUID FILLED, 4" DIAMETER DIAL WITH 0-100 psi RANGE. GAUGES SHALL BE AS MANUFACTURED BY WIKA, LOWER MOUNT, TYPE 233.30 AND DIAPHRAGMS SHALL BE AS MANUFACTURED BY HYETT, MODEL 43MCR-01 OR APPROVED EQUALS.
16. PADLOCKS FOR ACCESS COVERS AND CONTROL PANEL SHALL BE SUPPLIED TO THE CITY AND AND SHALL BE KEYED ALIKE. FURNISH TWO(2) KEYS PER LOCK. BOLTS IN LOCKING DEVICE SHALL BE STAINLESS STEEL.
17. STEEL PLACED IN BOTTOM SLAB IS TO BE IDENTICAL TO THE TOP SLAB EXCEPT THAT DIAGONAL BARS AND OPENINGS ARE ELIMINATED. STEEL IS CONTINUOUS AND SLAB IS SOLID.
18. ALL EXPOSED AND EMBEDDED CONDUITS TO BE SCHEDULE 80 PVC.
19. ALL ABOVE GRADE METAL SHALL BE PAINTED WITH TWO (2) COATS OF EXTERIOR ENAMEL PAINT. COLOR SHALL BE DETERMINED BY THE CITY'S UTILITY DEPARTMENT.
20. WET WELL TO BE H.D.P.E. LINED WITH AN AGRU SURE GRIP LINER OR APPROVED EQUAL. WITH A MINIMUM THICKNESS OF 2 MM, MECHANICALLY ANCHORED TO THE CONCRETE ALL JOINTS SHALL BE EXTRUSION WELDED BY CERTIFIED WELDERS.
21. CONTRACTOR TO CONFIRM SERVICE ARRANGEMENTS WITH POWER COMPANY BEFORE COMMENCING WORK. CONTRACTOR TO RUN UNDERGROUND WIRING TO NEAREST TRANSFORMER OR HAND HOLE.
22. ALL DIMENSIONS AND LOCATIONS OF UTILITIES TO BE FIELD VERIFIED BY CONTRACTOR.
23. SHOP DRAWINGS OF ENTIRE INSTALLATION MUST BE APPROVED BY ENGINEER PRIOR TO PLACEMENT OF ORDER.
24. SOD ALL AREAS DISTURBED BY CONSTRUCTION.

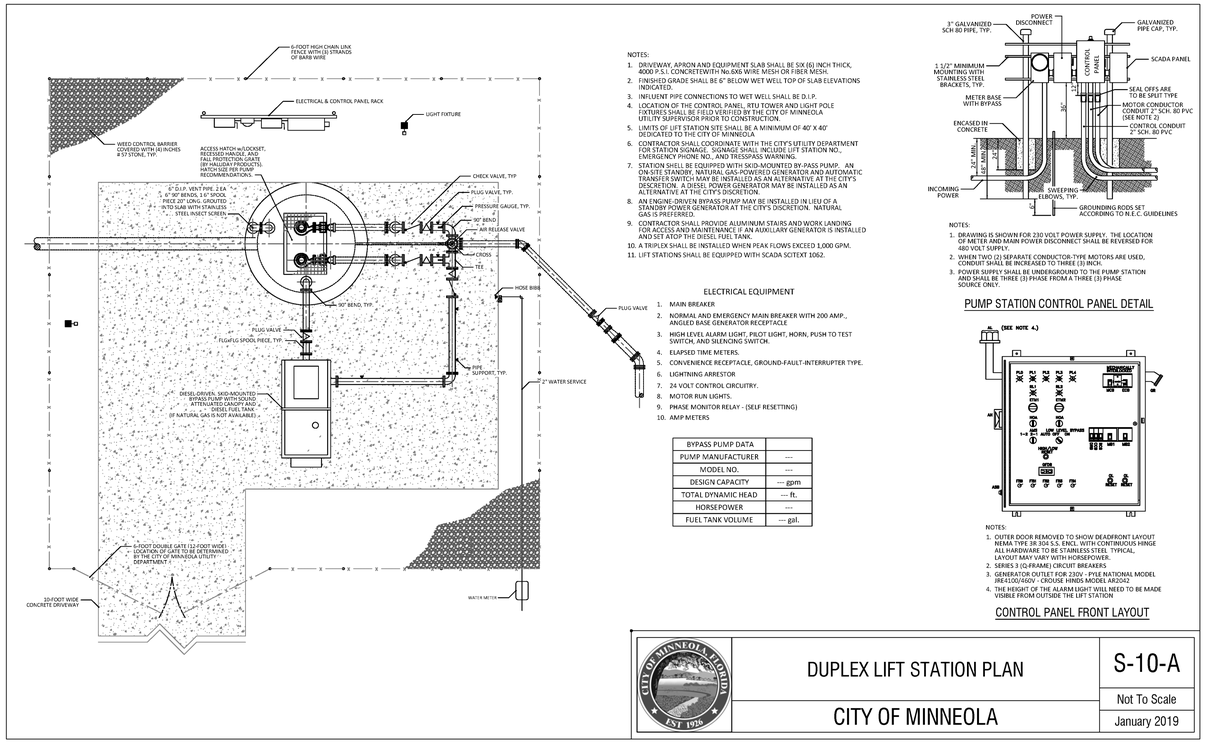


	ELEVATION
TOP SLAB	184.00'
FINISHED GRADE	182.9'
INFLUENT INVERT	170.51'
AUDIBLE ALARM "ON"	170.01'
ALARM LIGHT "ON"	170.01'
LAG PUMP NO. 2 "ON"	
LAG PUMP NO. 1 "ON"	169.51'
LEAD PUMP "ON"	169.01'
ALL PUMPS "OFF"	168.26'
BOTTOM SLAB	166.26'

PUMP DATA	
WET WELL INSIDE DIAM.	6 (feet)
DISCHARGE PIPE DIAM.	3 (inches)
DISCHARGE VALVES SIZE.	3 (inches)
PUMP MANUFACTURER	FLYGT
MODEL NO.	3102 HT 3--
IMPELLER DIAM.	142 mm
DESIGN CAPACITY	23.1 gpm
TOTAL DYNAMIC HEAD	114 (feet)
HORSEPOWER	6 HP
SPEED	3515 rpm
VOLTAGE	460 V
PHASE	3

NOTE: ELECTRICAL REQUIREMENT TO BE VERIFIED BY CONTRACTOR.

LIFT STATION SECTION	S-10-C
CITY OF MINNEOLA	Not To Scale
	January 2017



NOTES:

1. DRIVEWAY, APRON AND EQUIPMENT SLAB SHALL BE SIX (6) INCH THICK, 4000 P.S.I. CONCRETEWITH No.6X6 WIRE MESH OR FIBER MESH.
2. FINISHED GRADE SHALL BE 6" BELOW WET WELL TOP OF SLAB ELEVATIONS INDICATED.
3. INFLUENT PIPE CONNECTIONS TO WET WELL SHALL BE D.I.P.
4. LOCATION OF THE CONTROL PANEL, RTU TOWER AND LIGHT POLE FIXTURES SHALL BE FIELD VERIFIED BY THE CITY OF MINNEOLA UTILITY SUPERVISOR PRIOR TO CONSTRUCTION.
5. LIMITS OF LIFT STATION SITE SHALL BE A MINIMUM OF 40' X 40' DEDICATED TO THE CITY OF MINNEOLA
6. CONTRACTOR SHALL COORDINATE WITH THE CITY'S UTILITY DEPARTMENT FOR STATION SIGNAGE. SIGNAGE SHALL INCLUDE LIFT STATION NO., EMERGENCY PHONE NO., AND TRESSPASS WARNING.
7. STATION SHELL BE EQUIPPED WITH SKID-MOUNTED BY-PASS PUMP. AN ON-SITE STANDBY, NATURAL GAS-POWERED GENERATOR AND AUTOMATIC TRANSFER SWITCH MAY BE INSTALLED AS AN ALTERNATIVE AT THE CITY'S DISCRETION. A DIESEL POWER GENERATOR MAY BE INSTALLED AS AN ALTERNATIVE AT THE CITY'S DISCRETION.
8. AN ENGINE-DRIVEN BYPASS PUMP MAY BE INSTALLED IN LIEU OF A STANDBY POWER GENERATOR AT THE CITY'S DISCRETION. NATURAL GAS IS PREFERRED.
9. CONTRACTOR SHALL PROVIDE ALUMINUM STAIRS AND WORK LANDING FOR ACCESS AND MAINTENANCE IF AN AUXILLARY GENERATOR IS INSTALLED AND SET ATOP THE DIESEL FUEL TANK.
10. A TRIPLEX SHALL BE INSTALLED WHEN PEAK FLOWS EXCEED 1,000 GPM.
11. LIFT STATIONS SHALL BE EQUIPPED WITH SCADA SCITEXT 1062.

ELECTRICAL EQUIPMENT

1. MAIN BREAKER
2. NORMAL AND EMERGENCY MAIN BREAKER WITH 200 AMP., ANGLED BASE GENERATOR RECEPTACLE
3. HIGH LEVEL ALARM LIGHT, PILOT LIGHT, HORN, PUSH TO TEST SWITCH, AND SILENCING SWITCH.
4. ELAPSED TIME METERS.
5. CONVENIENCE RECEPTACLE, GROUND-FAULT-INTERRUPTER TYPE.
6. LIGHTNING ARRESTOR
7. 24 VOLT CONTROL CIRCUITRY.
8. MOTOR RUN LIGHTS.
9. PHASE MONITOR RELAY - (SELF RESETTING)
10. AMP.METERS

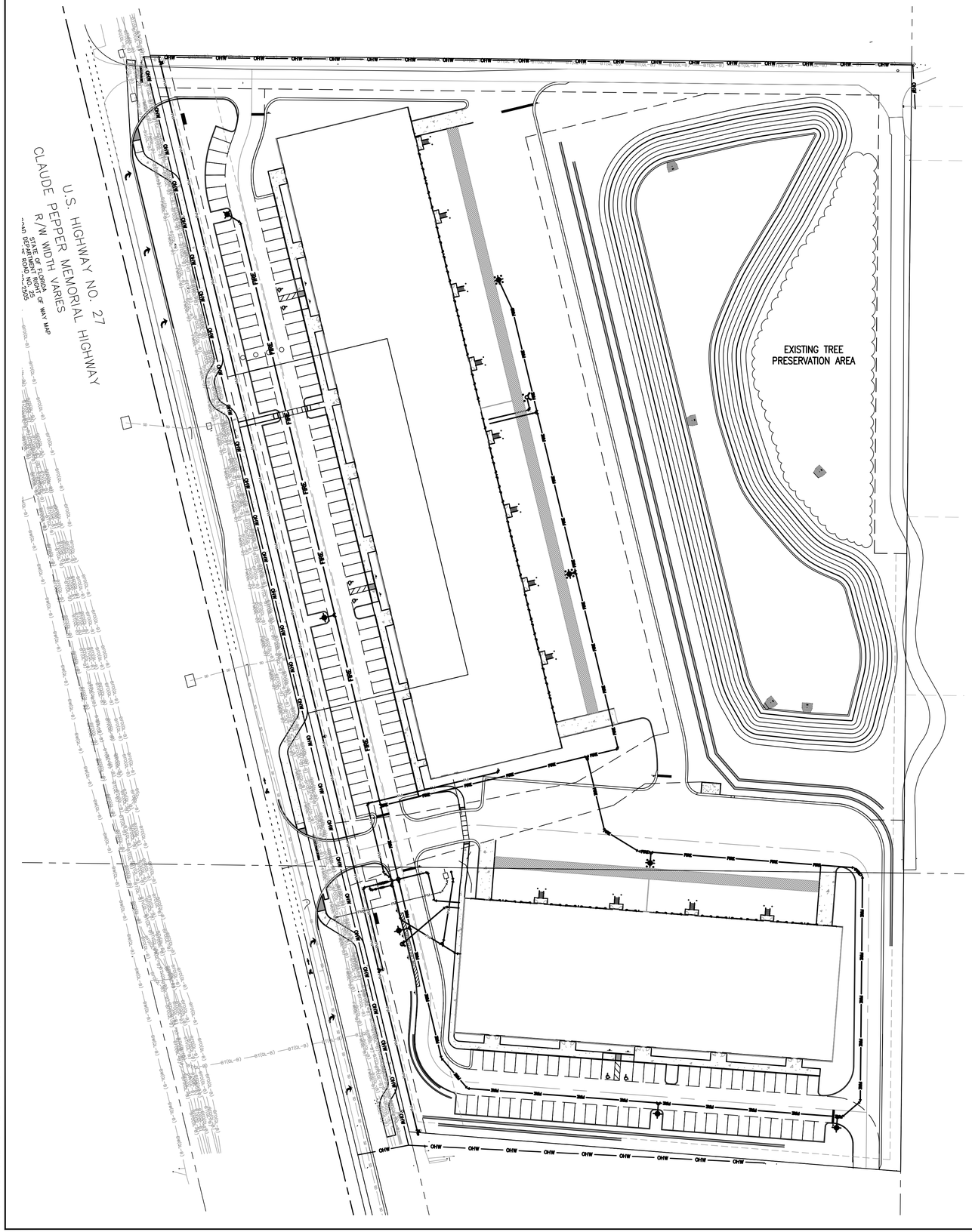
BYPASS PUMP DATA	
PUMP MANUFACTURER	---
MODEL NO.	---
DESIGN CAPACITY	--- gpm
TOTAL DYNAMIC HEAD	--- ft.
HORSEPOWER	---
FUEL TANK VOLUME	--- gal.

NOTES:

1. DRAWING IS SHOWN FOR 230 VOLT POWER SUPPLY. THE LOCATION OF METER AND MAIN POWER DISCONNECT SHALL BE REVERSED FOR 480 VOLT SUPPLY.
2. WHEN TWO (2) SEPARATE CONDUCTOR-TYPE MOTORS ARE USED, CONDUIT SHALL BE INCREASED TO THREE (3) INCH.
3. POWER SUPPLY SHALL BE UNDERGROUND TO THE PUMP STATION AND SHALL BE THREE (3) PHASE FROM A THREE (3) PHASE SOURCE ONLY.

PUMP STATION CONTROL PANEL DETAIL

(SEE NOTE 4.)
SPARE
SPARE
SPARE



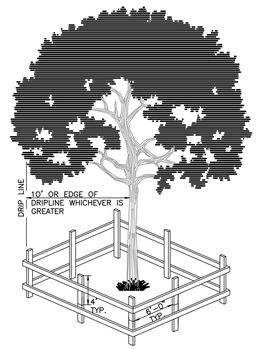
MINNEOLA COMM (#1)			
TREES TO BE REMOVED LAUREL OAKS			
TYPE	COUNT	SIZE	INCHES
LAUREL OAK	8	12	96
LAUREL OAK	6	13	78
LAUREL OAK	6	14	84
LAUREL OAK	4	15	60
LAUREL OAK	4	16	64
LAUREL OAK	5	17	85
LAUREL OAK	3	18	54
LAUREL OAK	1	20	20
LAUREL OAK	1	23	23
LAUREL OAK	2	24	48
LAUREL OAK	1	25	25
LAUREL OAK	3	26	78
LAUREL OAK	1	27	27
LAUREL OAK	1	30	30
LAUREL OAK	3	32	96
LAUREL OAK	1	33	33
LAUREL OAK	1	34	34
TOTAL			
	51		935

MINNEOLA COMM (#1)			
TREES TO BE REMOVED LIVE OAKS			
TYPE	COUNT	SIZE	INCHES
LIVE OAK	7	12	84
LIVE OAK	4	13	52
LIVE OAK	2	14	28
LIVE OAK	3	15	45
LIVE OAK	3	16	48
LIVE OAK	1	17	17
LIVE OAK	3	18	54
LIVE OAK	2	19	38
LIVE OAK	1	21	21
LIVE OAK	2	22	44
LIVE OAK	2	24	48
LIVE OAK	1	25	25
LIVE OAK	2	27	54
LIVE OAK	2	28	56
LIVE OAK	1	29	29
LIVE OAK	1	35	35
LIVE OAK	1	36	36
LIVE OAK	1	42	42
LIVE OAK	1	57	57
TOTAL			
	40		813

MINNEOLA COMM (#1)				
TREES TO BE REMOVED DISEASED OR DAMAGED				
TYPE	NUMBER	SIZE	DESCRIPTION	
LAUREL OAK	#34	25	3 CO-DOMINANT STEMS WITH VERTICAL CRACK	
CAMPHOR	#55	22	INVASIVE EXOTIC	
LIVE OAK	#60	57	STEM FAILURE, SLOUGHING BARK	
LIVE OAK	#77	22	RETRENCHING, SLOUGHING BARK	
LIVE OAK	#78	24	RETRENCHING, SLOUGHING BARK	
CHINABERRY	#117	16	INVASIVE, EXOTIC	
EARPOD	#120	13	INVASIVE, EXOTIC	
LAUREL OAK	#129	12	CO-DOMINANT STEMS, VERTICAL CRACK	
LAUREL OAK	#130	14	CO-DOMINANT STEMS, VERTICAL CRACK	

MINNEOLA COMM (#1)			
TREES TO BE REMOVED SAND LAUREL OAKS			
TYPE	COUNT	SIZE	INCHES
SAND LAUREL	3	12	36
SAND LAUREL	4	14	56
SAND LAUREL	3	15	45
SAND LAUREL	3	16	48
SAND LAUREL	1	18	18
SAND LAUREL	1	20	20
SAND LAUREL	1	22	22
SAND LAUREL	2	23	46
SAND LAUREL	1	25	25
SAND LAUREL	1	28	28
SAND LAUREL	1	30	30
SAND LAUREL	1	32	32
SAND LAUREL	3	33	99
SAND LAUREL	1	45	45
TOTAL			
	26		550

MINNEOLA COMM (#1)			
TREES TO BE REMOVED SAND LIVE OAKS			
TYPE	COUNT	SIZE	INCHES
SAND LIVE	1	13	13
SAND LIVE	3	14	42
SAND LIVE	1	15	15
SAND LIVE	3	16	48
SAND LIVE	1	17	17
SAND LIVE	1	18	18
SAND LIVE	1	20	20
SAND LIVE	1	21	21
SAND LIVE	1	42	42
TOTAL			
	13		236



1 TM100 TYPICAL TREE PROTECTION DETAIL
SCALE= N.T.S.

NOTE:
Posts shall be used as protective barriers to the roots and trunk of every tree on the parcel being developed. The posts shall be placed at points not closer than three-quarters (3/4) the radius of the drip-line of the protected tree, unless the structure has been permitted by Planning, Zoning & Development Department to be erected within the drip-line of a tree with a wide canopy. Each section of the barrier shall be clearly visible (flagged with brightly colored plastic tape or other markers). No attachments or wires other than those with protective or non-damaging nature shall be attached to any tree.

TREE REMOVAL NOTES:

1) SITE IS GENERALLY GOING TO REQUIRE A "CLEAR CUT" FOR TREE REMOVAL DUE TO TOPO-GRAPHIC IMPACTS.

2) ONE +/- 0.5 ACRE TREE SAVE AREA IS SHOWN EAST SIDE ON PAGE TR/L100. ADDITIONAL IDENTIFICATION OF TREE LOCATIONS WILL BE REQUIRED.

3) TREE DATA TABLES SHOW IDENTIFICATION OF PROPOSE TREES TO BE CALCULATED FOR REPLACEMENT 12" DBH OR GREATER PER APPROVED PD

4) TREE IDENTIFICATION, CONDITION AND NUMERICAL RECORD IS SHOWN IN THE ATTACHED ARBOR REPORT BY RAY JARRET ISA5343A IN FIELD DATA TABLES ON PAGES 7 THROUGH 11 (FEB 22, 2026)

5) TREE LOCATION MAPPING "AVENZA MAPS" MALFUNCTIONED AND TREE LOCATIONS WERE LOST DURING SITE DATA COLLECTION, THEREFORE, THE ARBOR REPORT PROVIDES ALL THE RELEVANT TREE INFORMATION.

N
GRAPHIC SCALE
1 inch = 50 ft.

IF LESS THAN 24"x36" SHEET HAS BEEN REDUCED, ADJUST THE SCALE TO THE DRAWING ACCORDINGLY:

LANDSCAPE ARCHITECT:
Robert R. Buchanan LA0000932
Landscape Dynamics Construction Co. INC. hereby reserves its common law copyright and other property rights in these plans, ideas, and designs. These ideas, designs, and plans are not to be reproduced, changed, or copied in any form or manner whatsoever, nor are they to be assigned to any third party, without first obtaining the express written permission from Landscape Dynamics Construction Co. INC.

48 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770 or 811
IT'S THE LAW IN FLORIDA
FLORIDA LAW REQUIRES EXCAVATORS TO NOTIFY OWNERS OF UNDERGROUND FACILITIES BEFORE YOU DIG TWO (2) DAYS PRIOR TO EXCAVATION

CONTRACTOR MUST REVIEW ALL GENERAL LANDSCAPE NOTES PRIOR TO BIDDING AND CONSTRUCTION

GGW Flex Holdings LLC

LANDSCAPE Dynamics
LANDSCAPE ARCHITECTS AND PLANNERS, LLC

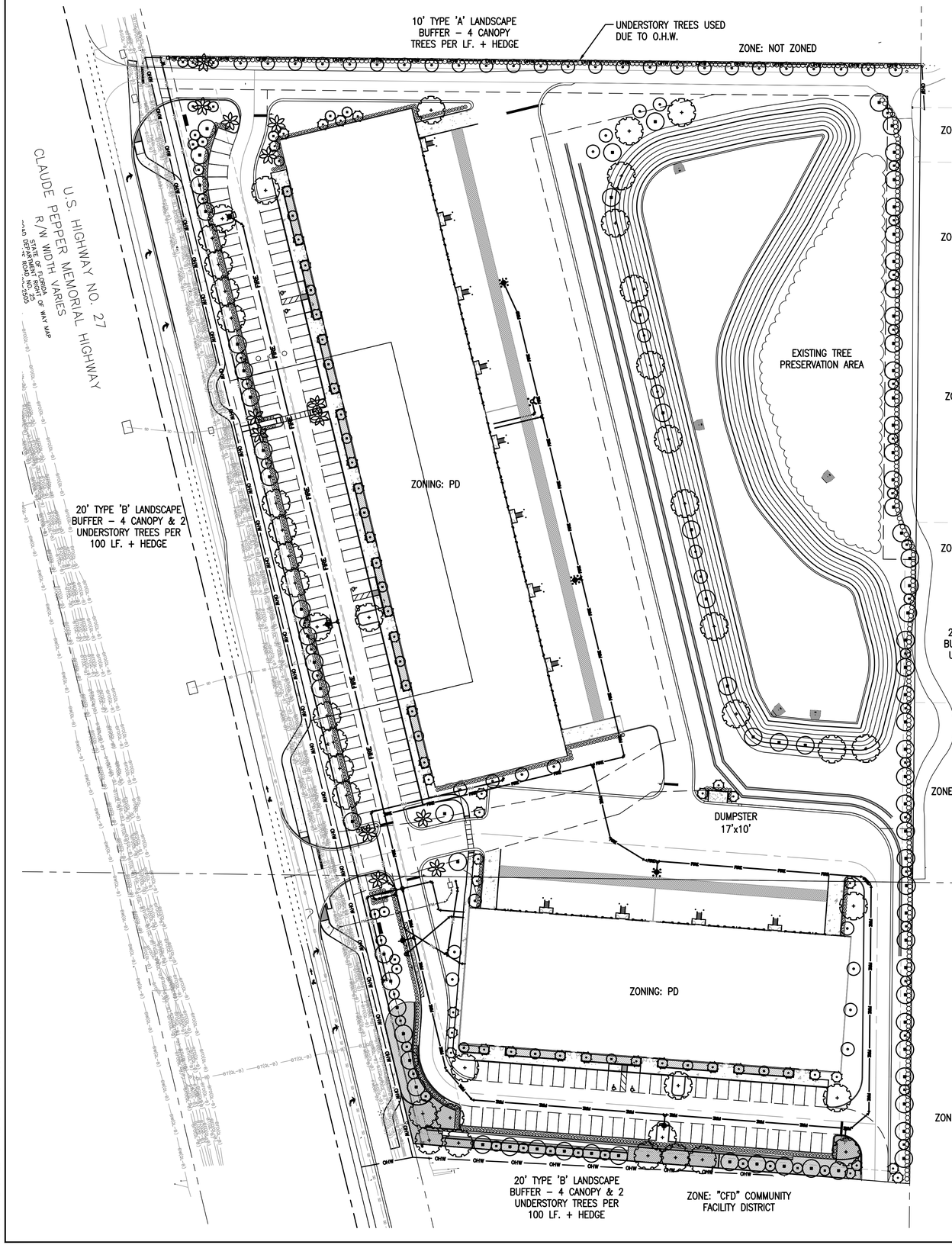
P.O. BOX 2852 - Winter Park, Florida 32790-2852 - Phone 407-579-181 - Email randylandscapedynamics.com

Tree Mitigation Plan
Minneola Commerce Center
City of Minneola, Florida

REVISIONS
1) 4/17/26 Comments
2) 6/30/26 Comments
3)
4)
5)
6)
7)
8)

DATE: 2-10-26
JOB # 2026-006
PERMIT #
DRAWN BY: BRB
FILE NAME: Tree Mitigation
SCALE: 1-50

TM100



Plant List – Minneola Commerce Center

CNT	SYM	BOTANICAL	COMMON	SPECIFICATIONS	W/U
Trees					
72	LI	Lagerstroemia indica	Crape Myrtle	8' ht. min., 2" cal., std.	L,M
48	TF	Trachycarpus fortunei	Windmill Palm	8–12' c.t.	L,M
13	PS	Phoenix sylvestris	Wild Date Palm	12' c.t. specimen	L
44	IC	Ilex cassine	Dahoon Holly	8' ht. min., 2" cal.	L,M
84	MGD	Magnolia grandiflora	DD Blanchard Magnolia	8' ht. min., 3" cal.	L,M
42	QV	Quercus virginiana	Live Oak	8' ht. min., 3" cal.	L,M
Shrubs & Groundcover					
421	MF	Myrcianthes fragrans	Simpson's Stopper	30" ht. x 24" spr., 4' o.c.	L
633	VOW	Viburnum obovatum 'Mrs. Schiller's Delight'	Walter's Viburnum	30" ht. x 20" spr., 36" o.c.	L,M,H
702	RIA	Rhaphiolepis indica 'Alba'	Dwarf Indian Hawthorn	1 gal., 30" o.c.	L,M
525	MC	Muhlenbergia capillaris	Muhly Grass	1 gal., 36" o.c.	L,M
186	JSP	Juniperus squamata "Parsonii"	Parson's Juniper	1 gal., 48" o.c.	L,M
Sod & Mulch					
	MULCH		Mini Pine Bark	3" Depth	
	SOD	Paspalum notatum	Bahia Sod	solid sod, weed free, count by contractor	

LANDSCAPE & IRRIGATION NOTES:

1) Irrigation system to be a permanent system.

2) The irrigation plan shall be designed and installed to conform to this Code.

3) All plant material shall be FL. Grade #1 and "Florida Friendly".

4) Irrigation shall meet or exceed the criteria for the Florida Water Star certification program.

PLANT SYMBOLS

- CRAPE MYRTLE
- WINDMILL PALM
- DAHOON HOLLY
- WILD DATE PALM
- MAGNOLIA
- LIVE OAK
- SIMPSON'S STOPPER
- VIBURNUM
- HAWTHORN
- MUHLY GRASS
- PARSON'S JUNIPER

N

GRAPHIC SCALE

1 inch = 50 ft.

IF LESS THAN 24"x36" SHEET HAS BEEN REDUCED, ADJUST THE SCALE TO THE DRAWING ACCORDINGLY.

LANDSCAPE ARCHITECT:
Robert R. Buchanan LA0000932

Landscape Dynamics Construction Co. INC. hereby reserves its common law copyright and other property rights in these plans, ideas, and designs. These Ideas, designs, and plans are not to be reproduced, changed, or copied in any form or manner whatsoever, nor are they to be assigned to any third party, without first obtaining the express written permission from Landscape Dynamics Construction Co. INC.

48 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770 or 811
IT'S THE LAW IN FLORIDA
FLORIDA LAW REQUIRES EXCAVATORS TO NOTIFY OWNERS OF UNDERGROUND FACILITIES BEFORE YOU DIG (2) DAYS PRIOR TO EXCAVATION

CONTRACTOR MUST REVIEW ALL GENERAL LANDSCAPE NOTES PRIOR TO BIDDING AND CONSTRUCTION

GGW Flex Holdings LLC

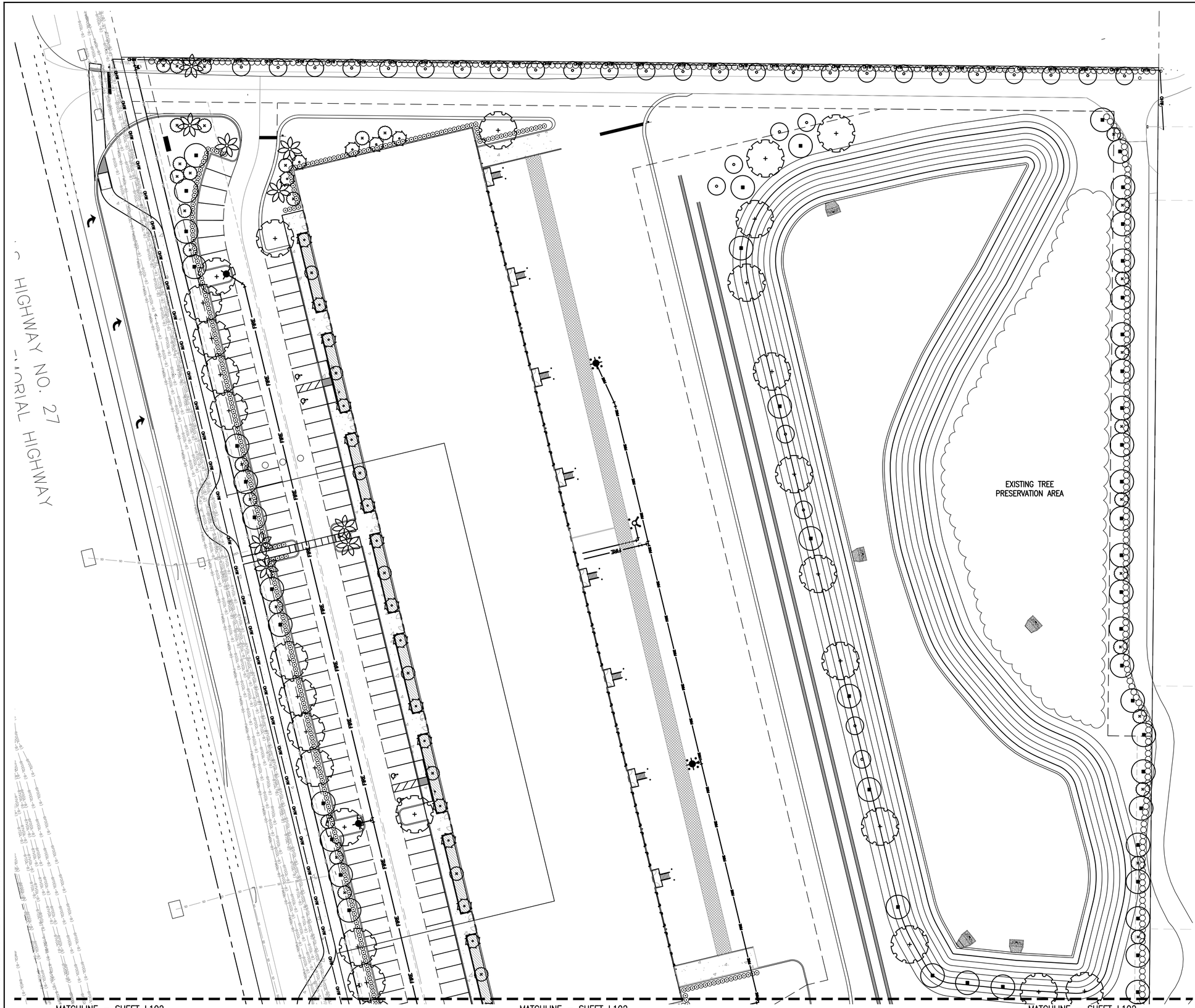
LANDSCAPE Dynamics
LANDSCAPE ARCHITECTS AND PLANNERS, LLC
P.O. BOX 2852 - Winter Park, Florida 32790-2852 - Phone 407-579-1811 - Email randylandscapedynamics.com

Overall Landscape Plan
Minneola Commerce Center
City of Minneola, Florida

REVISIONS
1) 4/17/26 Comments
2) 6/30/26 Comments
3)
4)
5)
6)
7)
8)

DATE: 2-10-26
JOB # 2026-006
PERMIT #
DRAWN BY: BRB
FILE NAME: LANDSCAPE
SCALE: 1-50

L100



PLANT SYMBOLS

- CRAPE MYRTLE
- WINDMILL PALM
- DAHOON HOLLY
- WILD DATE PALM
- MAGNOLIA
- LIVE OAK
- SIMPSON'S STOPPER
- VIBURNUM
- HAWTHORN
- MUHLY GRASS
- PARSON'S JUNIPER

N

GRAPHIC SCALE

1 inch = 30 ft.

IF LESS THAN 24"x36" SHEET HAS BEEN REDUCED, ADJUST THE SCALE TO THE DRAWING ACCORDINGLY.

LANDSCAPE ARCHITECT:
Robert R. Buchanan LA0000932

Landscape Dynamics Construction Co. INC. hereby reserves its common law copyright and other property rights in these plans, ideas, and designs. These ideas, designs, and plans are not to be reproduced, changed, or copied in any form or manner whatsoever, nor are they to be assigned to any third party, without first obtaining the express written permission from Landscape Dynamics Construction Co. Inc.

48 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770 or 811
IT'S THE LAW IN FLORIDA
FLORIDA LAW REQUIRES EXCAVATORS TO NOTIFY OWNERS OF UNDERGROUND FACILITIES OF INTENT TO DIG (2) DAYS PRIOR TO EXCAVATION

CONTRACTOR MUST REVIEW ALL GENERAL LANDSCAPE NOTES PRIOR TO BIDDING AND CONSTRUCTION

GGW Flex Holdings LLC

LANDSCAPE Dynamics
LANDSCAPE ARCHITECTS AND PLANNERS, LLC

P.O. BOX 2852 - Winter Park, Florida 32790-2852 - Phone 407-579-1811 - Email randy@landscapedynamics.com

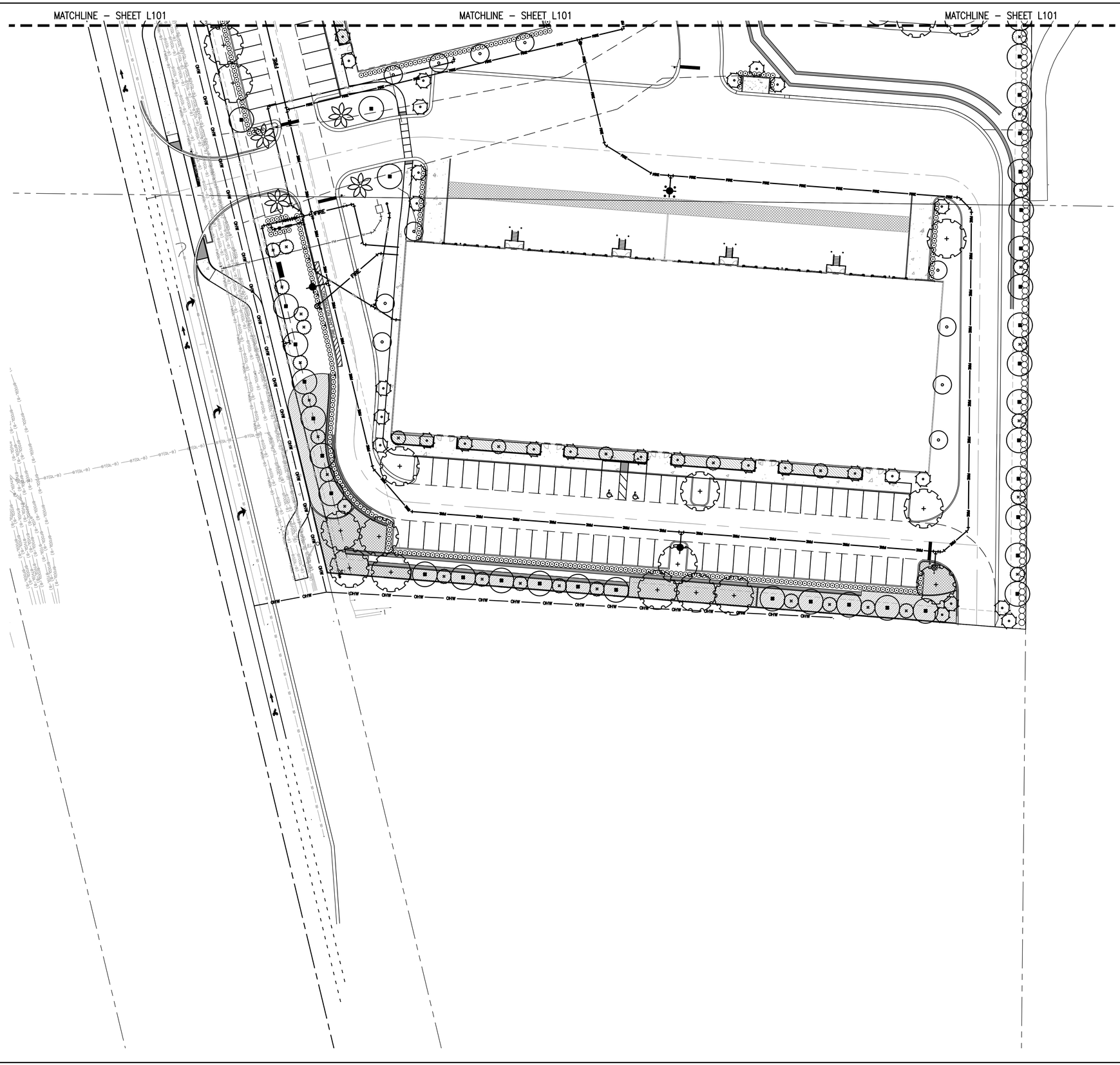
REVISIONS
1) 4/7/26 Comments
2) 6/30/26 Comments
3)
4)
5)
6)
7)
8)

Landscape Plan

Minneola Commerce Center
City of Minneola, Florida

DATE: 2-10-26
JOB # 2026-006
PERMIT #
DRAWN BY: BRB
FILE NAME: LANDSCAPE
SCALE: 1:30

L101



IF LESS THAN 24"x36" SHEET HAS BEEN REDUCED.
ADJUST THE SCALE TO THE DRAWING ACCORDINGLY.

LANDSCAPE ARCHITECT:
Robert R. Buchanan LA0000932

Landscape Dynamics Construction Co. INC. hereby reserves its common law copyright and other property rights in these plans, ideas, and designs. These ideas, designs, and plans are not to be reproduced, changed, or copied in any form or manner whatsoever, nor are they to be assigned to any third party, without first obtaining the express written permission from Landscape Dynamics Construction Co. INC.

48 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770 or 811
IT'S THE LAW IN FLORIDA
FLORIDA LAW REQUIRES EXCAVATORS TO NOTIFY OWNERS OF UNDERGROUND FACILITIES BEFORE YOU DIG
(2) DAYS PRIOR TO EXCAVATION

CONTRACTOR MUST REVIEW ALL GENERAL LANDSCAPE NOTES PRIOR TO BIDDING AND CONSTRUCTION

GGW Flex Holdings LLC

LANDSCAPE
Dynamics
LANDSCAPE ARCHITECTS AND PLANNERS, LLC

P.O. BOX 2852 - Winter Park, Florida 32790-2852 - Phone: 407-579-1811 - Email: randy@landscapedynamics.com

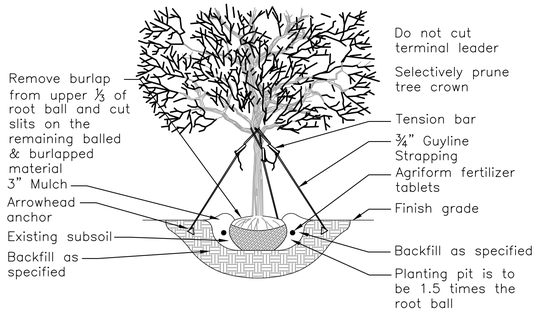
REVISIONS
1) 4/7/26 Comments
2) 6/30/26 Comments
3)
4)
5)
6)
7)
8)

Landscape Plan

Minneola Commerce Center
City of Minneola, Florida

DATE: 2-10-26
JOB # 2026-006
PERMIT #
DRAWN BY: BRB
FILE NAME: LANDSCAPE
SCALE: 1:30

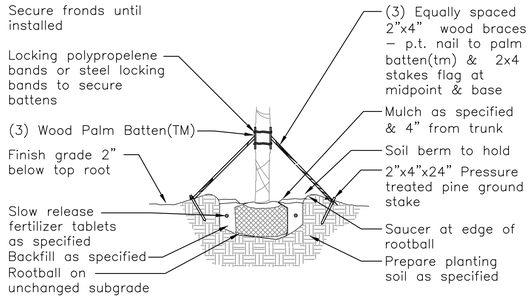
L102



PRO20:
For up to 2" Caliper Trees
(3) ARBORGUY™ Guylines 3/4" x 12' = 600 lb test Black or Green, UV resistant, polypropylene strapping
(3) "Tool–Free" Tension Bars™
(3) Arrowhead *Anchors (4" x 3–3/4")

PRO40:
For up to 4" Caliper Trees
(3) ARBORGUY™ Guylines 1"x12'= 600 lb test, Black or Green, UV resistant polypropylene strapping
(3) "Tool–Free" Tension Bars™
(3) Arrowhead Anchors (4–3/4"x3–3/4")

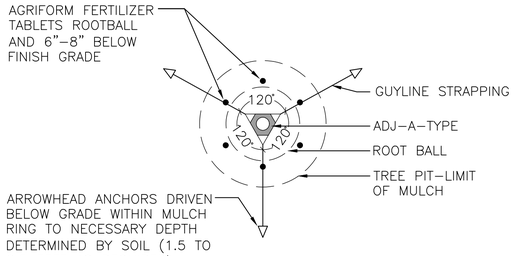
1 L200 ARBORGUY PRO20/PRO40 STAKING AND PLANTING DETAIL
SCALE= N.T.S.



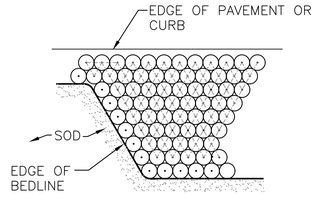
PBKM(Metal Bands)
(3) 1 1/2"x3 1/2"x12" (2x4 wood) battens with 5 layers of burlap backing and (4) staple guides for banding, pre–notched (to accept 2"x4"x8' support braces)
(2) 44" plated carbon steel bands with tensioning and locking screw / clamp

PBKC (Polypropelene Bands)
(3) 1 1/2"x3 1/2"x12" (2x4 wood) battens with 5 layers of burlap backing and (4) staple guides for banding, pre–notched (to accept 2"x4"x8' support braces)
(2) 8'x1", 600 lb test webbing bands with metal spring locking clamps

2 L200 ARBORGUY PALM BATTEN DETAIL
SCALE= N.T.S.

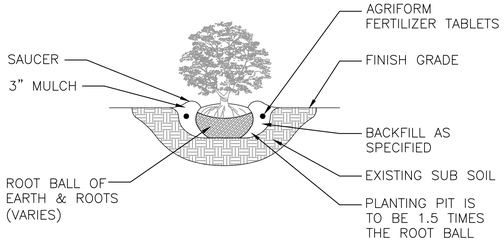


3 L200 TREE STAKING DETAIL
SCALE= N.T.S.

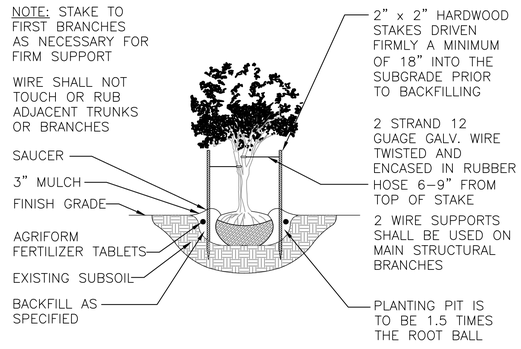


NOTE: FORM EDGE OF BED, THEN FILL IN BED AT TRIANGULAR SPACING AS SPECIFIED ON PLANT LIST.

4 L200 TYPICAL SPACING DETAIL
SCALE= N.T.S.



5 L200 TYPICAL SHRUB/GROUNDCOVER PLANTING DETAIL
SCALE= N.T.S.

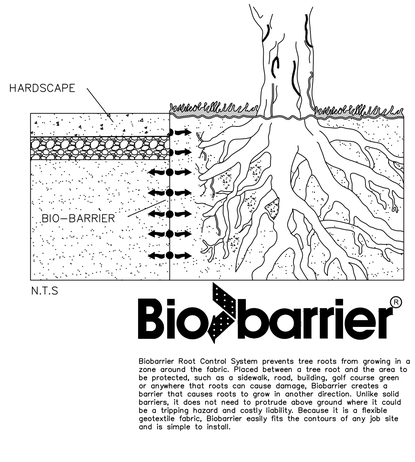


6 L200 MULTI–TRUNK STAKING DETAIL
SCALE= N.T.S.

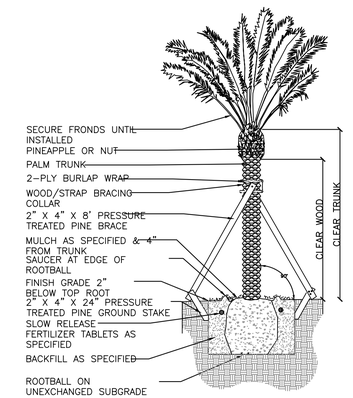
GENERAL LANDSCAPE NOTES:

Failure to notify Landscape Architect of plan, detail, or specification discrepancies prior to construction, makes contractor responsible for all costs incurred for construction charges, not the owner or his representative (Landscape Dynamics) The Owner must maintain the height of all plants within the "Line–Of–Site" triangle area to a height of no greater than 24" above grade for shrubs and groundcover, and tree branching no lower than 72" above finish grade, to ensure clear site line views toward traffic at road and driveway intersections. Landscape Dynamics is not responsible for continued maintenance of such plant material. The owner, leasing company and/or the landscape maintenance company accepts full responsibility for these maintenance requirements.

–Landscape contractor (LC) shall be responsible for all materials and work called for on the landscape plans and in the landscape notes and legend. Plant specifications are minimum acceptable sizes. Plans shall rule if there are any quantity discrepancies between the legend and plans. Final quantity takeoffs are the responsibility of the LC. Notify the Landscape Architect of any discrepancies.
–LC shall comply with all local codes and ordinances and obtain all permits and bonds necessary to construct the project.
–LC shall coordinate their work with other contractors to assure efficient and timely completion of the work.
–LC shall be responsible for supplying all materials, labor, and equipment for the performance of their portion of the work.
–LC to verify all existing grades, dimensions, adequate drainage, suitable planting soil and field conditions and notify owner of discrepancies before proceeding with work. Per FL Statutes, LC to call Sunshine State One (811) 72 hours prior to digging to have all utilities located.
–LC to protect existing utilities, structures, surfaces, and vegetation noted to be saved and be responsible for repair/replacement.
–Protect trees to be saved per detail. Vehicle parking, material storage, or soil removal/addition is not permitted within driplines.
–Round–Up shall be applied twice at ten day intervals onto all existing vegetation, sod, and groundcover areas that are to be replanted. Extreme care shall be taken to prevent overspray and/or drift onto existing plant material to be saved. Mfr's recommendations shall be followed. Remaining weeds and their roots shall be removed by hand prior to installation of plants. Resprouting weeds and plants are the responsibility of the LC through the one year warranty period.
–All plant materials shall be graded Florida No. 1 or better as outlined under current Grades and Standards for Nursery Plants, Division of Plant Industry, State of Florida, unless otherwise noted. All plants not listed shall conform to a Florida No. 1 or better as to: (1) health and vitality, (2) condition of foliage, (3) root system, (4) freedom from pest or mechanical damage, (5) heavily branched and densely foliated according to the accepted normal shape of the species. LC to obtain written certification from nurseries that plant materials are Florida No. 1 or better. Trees up to 4" caliper measured at 6" above soil line and over 4" caliper at 12" above soil line unless otherwise noted. All specifications to be met or exceeded unless otherwise noted. All rootballs and containers to be free of weeds and their roots.
–Planting soil of Fla. peat mixed 1/2 with clean topsoil for the backfilling of plant pits and beds shall be required only if existing soil is unsuitable for planting and/or contains lime rock or construction debris (to be removed).
–Trees and palms shall be installed so their top main root at the trunk is visible and 2" above finished grade. If root is buried, remove soil from the top of the rootball prior to installation. Do not apply the 1 ½" of mulch to the top of the rootball until after inspection of each tree or palm.
–Landscape Architect is not responsible for adverse soil or drainage conditions, determining sub–surface soil conditions, underground objects/utilities or the accuracy of property lines or information portrayed on surveys or on documents or plans provided by others. Owner or their agent is solely responsible for future maintenance of all plantings to maintain safe visibility within all visibility sight triangles and vehicular use and pedestrian areas within and immediately adjacent to the site.
–Finished grade prior to mulching or sodding to be 3" below top of adjacent surfaces such as walks, curbs and driveways extending perpendicularly from the surface edge for a minimum distance of 18". See detail.
–All palms, trees, shrubs, and groundcovers shall be fertilized with Agriform 20–10–5 or SierraTabs 16–8–12 planting tablets. One tablet/ 1 gal, 2 tablets/ 3 gal, 3 tablets/ 5 or 7 gal, 4 tablets/ 10 gal and one tablet/ each 1/2" of tree trunk diameter. Application shall be as per the details and mfr's recommendation.
–All planting beds (except for annuals) and trees to receive med. pine bark mulch. Due to environmental concerns, cypress mulch shall NOT be used. All tree rootballs (which require 4 foot wide mulch rings in turf areas) shall be mulched to a maximum 1 ½" depth (to aid water penetration) following inspection. All other planting beds to receive a 3" depth. Mulch shall not touch trunks or stems or be applied within the crowns of groundcovers or over their branches or foliage. Mulch is to be applied by hand and shall not be "blown in".
–LC to maintain all plant material in a plumb, upright and stable condition. All trees/palms to be guyed/staked as per details.
–LC to remove all bags (unless biodegradable), tags, ties, wires, ropes, stakes and nursery attachments from all plant material.
–LC shall be responsible to keep plant material in a healthy, hand watered, insect/pest free condition until owner's final acceptance.
–LC to provide a one–year warranty for trees/palms, shrubs, groundcovers, and vines and thirty days for sod. Warranty period shall start with final acceptance by owner. All plant material shall be alive and in satisfactory growth at the end of the warranty period. Replacement plant material shall be warranted for ninety days (sod for thirty days) from replacement date.
Warranty shall apply only to material that dies due to poor quality, improper handling, or installation practices. Generally, material transplanted on–site shall not be warranted. Adverse weather conditions shall not apply. Proper watering and maintenance are the owner's responsibility during the warranty period.
–Provide 100% coverage of all landscape areas using automatic underground irrigation system with rain sensor.



7 L200 BIO–BARRIER DETAIL
SCALE= N.T.S.



8 L200 FEATURE PALM DETAIL
SCALE= N.T.S.

IF LESS THAN 24"X36" SHEET HAS BEEN REDUCED, ADJUST THE SCALE TO THE DRAWING ACCORDINGLY.

LANDSCAPE ARCHITECT:
Robert R. Buchanan LA0000932
Landscape Dynamics Construction Co. INC. hereby reserves its common law copyright and other property rights in these plans, ideas, and designs. These ideas, designs, and plans are not to be reproduced, changed, or copied in any form or manner whatsoever, nor are they to be assigned to any third party, without first obtaining the express written permission from Landscape Dynamics Construction Co. INC.

48 HOURS BEFORE YOU DIG CALL SUNSHINE 1-800-432-4770 or 811
IT'S THE LAW IN FLORIDA
FLORIDA LAW REQUIRES EXCAVATORS TO NOTIFY OWNERS OF UNDERGROUND UTILITY FACILITIES AT LEAST TWO (2) DAYS PRIOR TO EXCAVATION

CONTRACTOR MUST REVIEW ALL GENERAL LANDSCAPE NOTES PRIOR TO BIDDING AND CONSTRUCTION

GGW Flex Holdings LLC

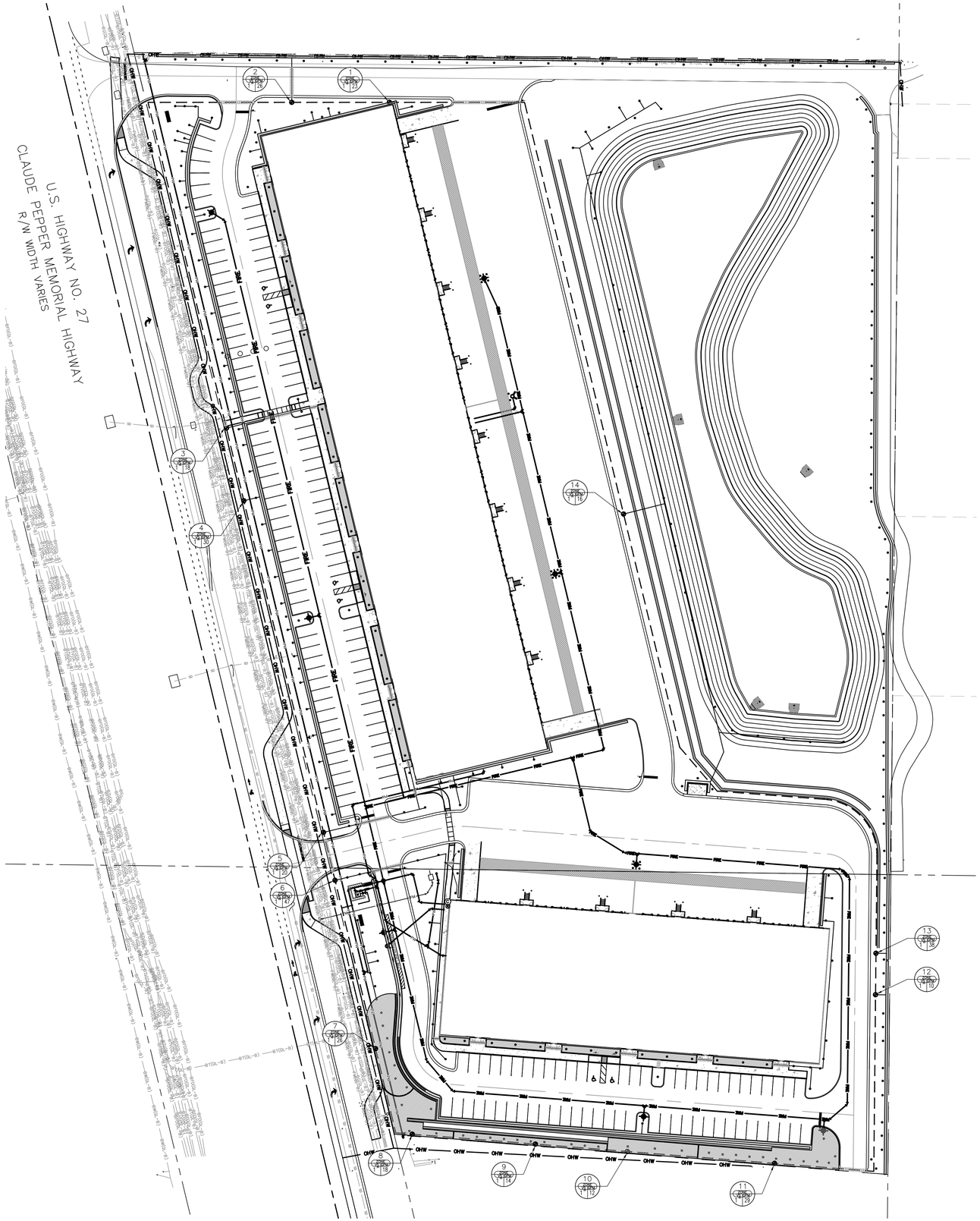
LANDSCAPE Dynamics
LANDSCAPE ARCHITECTS AND PLANNERS, LLC
P.O. BOX 2852 - Winter Park, Florida 32790-2852 - Phone 407-579-1811 - Email randy@landscapedynamics.com

Landscape Details and Specs.
Minneola Commerce Center
City of Minneola, Florida

REVISIONS
1) 4/17/26 Comments
2) 6/30/26 Comments
3)
4)
5)
6)
7)
8)

DATE: 2-10-26
JOB # 2026-006
PERMIT #
DRAWN BY: BRB
FILE NAME: LANDSCAPE
SCALE: N.T.S.

L200



IF LESS THAN 24"x36" SHEET HAS BEEN REDUCED. ADJUST THE SCALE TO THE DRAWING ACCORDINGLY.

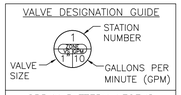
IRRIGATION SYMBOLS:

- RAINBIRD 1804–SAM–PRS (4" SPRAY) **(PURPLE)**
- RAINBIRD 1806–SAM–PRS (6" SPRAY) **(PURPLE)**
- RAINBIRD 1812–SAM–PRS (12" SPRAY) **(PURPLE)**
- RAINBIRD 1812–SAM–PRS (12" SPRAY ON RISER) **(PURPLE)**
- (2) XERI–BUBBLER ON 1/4" TUBING **(PURPLE)**
- (2) XERI–BUG EMITTER ON 1/4" TUBING **(PURPLE)** (2 PER SHRUB – NOT SHOWN)
- RAINBIRD 3500 SERIES (ROTOR) **(PURPLE)**
- RAINBIRD 5500 SERIES (ROTOR) **(PURPLE)**
- PEB SERIES ELECTRIC REMOTE–CONTROL VALVE **(PURPLE)**
- CONTROL ZONE KIT WITH PRESSURE REGULATING BACKFLUSH FILTER **(PURPLE)**
- RAINBIRD ESP–MC PLASTIC WALL–MOUNT (CONTROLLER) **(PURPLE)**
- RAINBIRD RSD–CEx ROOF CONDUIT (RAIN SENSOR) **(PURPLE)**
- BACKFLOW PREVENTER
- 1.5" WATER METER **(PURPLE)**
- CLASS 200 PVC LATERAL LINE **(PURPLE)**
- CLASS 200 PVC LATERAL ROTOR LINE **(PURPLE)**
- POLYETHYLENE TUBING BUBBLER LINE **(PURPLE)**
- LANDSCAPE DRIPLINE TUBING **(PURPLE)**
- LANDSCAPE DRIP AREA **(PURPLE)** (TUBING AND EMITTERS 12" O.C.)
- 1½" PVC LATERAL MAINLINE **(PURPLE)**

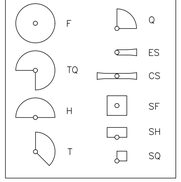
NOTE: (PIPE TO BE SIZED NOT TO EXCEED A VELOCITY OF 5 FPS / MAX. PSI LOSS IN ZONE LINES NOT TO EXCEED 10% OF OPERATING PSI) MINIMUM PIPE SIZE TO BE ¾"

- PVC SCH 40 SOLVENT WELD SLEEVE PIPE (SL) – SIZE TO BE DOUBLE THAT OF THE LATERAL LINE **(PURPLE)**
- POINT OF CONNECTION – PVC TO DRIP TUBING

VALVE DESIGNATION GUIDE



SPRAY PATTERN LEGEND



GENERAL IRRIGATION NOTES:

1) REFER TO THE LANDSCAPE PLANS WHEN TRENCHING TO AVOID TREES AND SHRUBS. HAND DIG AROUND ANY EXISTING TREES. DO NOT CUT ANY ROOTS OVER 2" IN DIAMETER.
2) ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER. ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 12" OF COVER.
3) ALL POP–UP ROTORS AND SPRAYS SHALL BE INSTALLED USING A PVC SWING PIPE CONNECTION. DO NOT USE POLYETHLENE PIPE.
4) ADJUST ALL NOZZLES TO REDUCE WATER WASTE ON HARD SURFACES & BLDG. WALLS. THROTTLE ALL VALVES ON SHRUB LINES AS REQUIRED TO PREVENT FOGGING. USE ADJUSTABLE NOZZLES WHERE REQUIRED TO AVOID ANY WATER ON BUILDING WINDOWS.
5) ALL CONTROL WIRE SPLICES SHALL BE MADE IN VALVE BOXES USING KING "ONE STEP" CONNECTORS AND SEALANT WITH WIRE NUTS.
6) THE CONTRACTOR SHALL PREPARE AN AS–BUILT DRAWING SHOWING ALL IRRIGATION INSTALLATION. THE CONTRACTOR SHALL NEATLY MARK IN RED INK ON A WHITE BOND PAPER COPY OF THE IRRIGATION PLAN ANY INSTALLATION THAT DEVIATES FROM THE PLAN. THE AS–BUILT DRAWING SHALL ALSO LOCATE ALL MAINLINE AND VALVES BY SHOWING EXACT MEASUREMENTS FROM HARD SURFACES. MEASUREMENTS SHALL BE MARKED ON THE PLAN EVEN WHEN THE EQUIPMENT IS INSTALLED IN THE EXACT LOCATION AS THE PLAN.
7) ALL VALVES, GATE VALVES AND QUICK COUPLERS SHALL BE INSTALLED IN VALVE BOXES. THE VALVE BOXES SHALL BE PURPLE WHEN USING REUSE WATER.
8) ANY PIPING SHOWN OUTSIDE THE PROPERTY LINE OR RUNNING OUTSIDE A LANDSCAPE AREA IS SHOWN THERE FOR CLARITY ONLY. ALL LINES SHALL BE INSTALLED ON THE PROPERTY AND INSIDE THE LANDSCAPE AREAS OR INSIDE A SCH. 40 SLEEVE.
9) THE EXACT HEIGHT OF ANY 12" POP–UP THAT IS SHOWN IN A SHRUB BED SHALL BE DETERMINED BY THE OWNER'S REPRESENTATIVE IN THE FIELD.
10) THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO DAMAGE ANY EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIRS AND COST OF ANY DAMAGE CAUSED BY THEIR WORK.
11) ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST ALL DEFECTS IN EQUIPMENT AND WORKMANSHIP. (OR AS OUTLINED IN THE WRITTEN SPECIFICATIONS)
12) ELECTRICAL SERVICE TO LOCATION OF THE CONTROLLER, WELL OR PUMP SHALL BE PROVIDED TO A JUNCTION BOX OR DISCONNECT AT THE EQUIPMENT LOCATION BY THE ELECTRICAL CONTRACTOR OR BY OWNER WHEN IT IS NOT PART OF THE BID PACKAGE.
13) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCALE THE PLAN AND CHECK NOZZLE TYPES TO DETERMINE THE CORRECT SPACING OF THE HEADS. THE CONTRACTOR SHALL NOT SPACE THE HEADS FURTHER APART OR USE LESS HEADS THAN SHOWN ON THE PLAN. ANY CHANGES TO THE HEAD SPACING OR LAYOUT, WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT OR OWNER, SHALL HOLD THE IRRIGATION CONTRACTOR RESPONSIBLE FOR WARRANTY OF THE PLANTS AND OR SOD IN THESE AREAS.
14) IRRIGATION SYSTEM DESIGN REQUIREMENTS: 60 GPM @ A MINIMUM OF 60 PSI AT EACH POINT OF CONNECTION. THE IRRIGATION CONTRACTOR SHALL VERIFY THE AVAILABLE GPM AND PSI PRIOR TO INSTALLATION OF THE SYSTEM.
15) 48 HOURS BEFORE DIGGING, CALL 1–800–432–4770 (SUNSHINE STATE ONE CALL CENTER)

NOTES:

1) Irrigation system to be a permanent system.

2) The irrigation plan shall be designed and installed to conform to this Code.

3) All plant material shall be FL. Grade #1 and "Florida Friendly".

4) Irrigation shall meet or exceed the criteria for the Florida Water Star certification program.

5) All zones to be low water use drip and blubbler zones.

N

GRAPHIC SCALE

50' 0' 50' 100'

1 inch = 50 ft.

LANDSCAPE ARCHITECT:
Robert R. Buchanan LA0000932

Landscape Dynamics Construction Co. INC. hereby reserves its common law copyright and other property rights in these plans, ideas, and designs. These Ideas, designs, and plans are not to be reproduced, changed, or copied in any form or manner whatsoever, nor are they to be assigned to any third party, without first obtaining the express written permission from Landscape Dynamics Construction Co. Inc.

48 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770 or 811
IT'S THE LAW IN FLORIDA
FLORIDA LAW REQUIRES EXCAVATORS TO NOTIFY OWNERS OF UNDERGROUND UTILITIES OF INTENT TO DIG (2) DAYS PRIOR TO EXCAVATION

CONTRACTOR MUST REVIEW ALL GENERAL LANDSCAPE NOTES PRIOR TO BIDDING AND CONSTRUCTION

GGW Flex Holdings LLC

LANDSCAPE Dynamics
LANDSCAPE ARCHITECTS AND PLANNERS, LLC

P.O. BOX 2852 - Winter Park, Florida 32790-2852 - Phone 407-579-1811 - Email randylandscapedynamics.com

REVISIONS
1) 4/7/26 Comments
2) 6/30/26 Comments
3)
4)
5)
6)
7)
8)

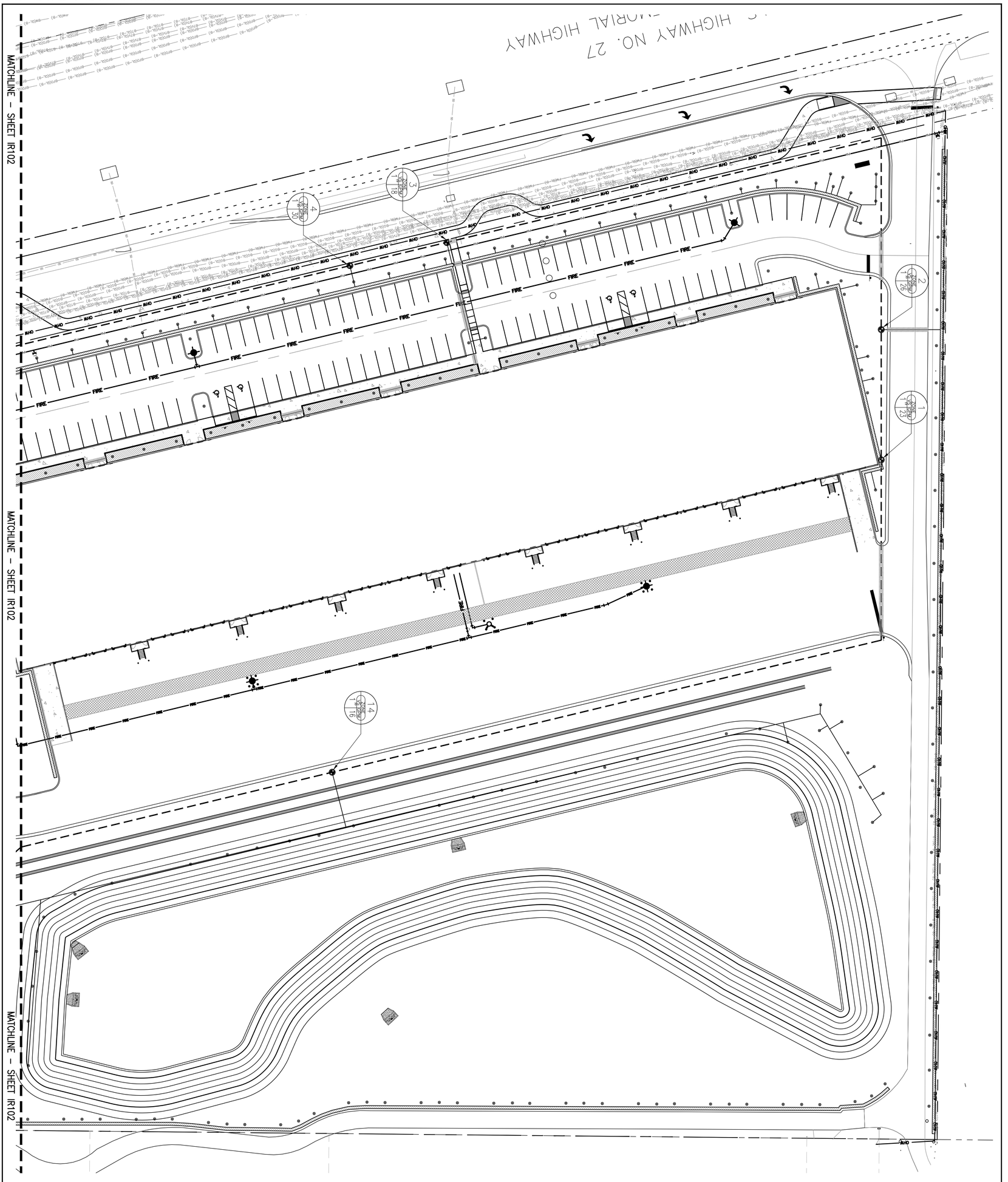
Overall Irrigation Plan

Minneola Commerce Center
City of Minneola, Florida

DATE: 2-10-26
JOB # 2026-006
PERMIT #
DRAWN BY: BRB
FILE NAME: IRRIGATION
SCALE: 1-50

IR100

IF LESS THAN 24"x36" SHEET HAS BEEN REDUCED.
ADJUST THE SCALE TO THE DRAWING ACCORDINGLY.



IR101

DATE: 2-10-26
JOB # 2026-006
PERMIT #
DRAWN BY: BRB
FILE NAME: IRRIGATION
SCALE: 1 : 30

P.O. BOX 2852 - Winter Park, Florida 32790-2852 - Phone: 407-579-1811 - Email: randy@landscapedynamics.com

REVISIONS
1) 4/17/26 Comments
2) 6/30/26 Comments
3)
4)
5)
6)
7)
8)

Irrigation Plan

Minneola Commerce Center
City of Minneola, Florida

LANDSCAPE Dynamics
LANDSCAPE ARCHITECTS AND PLANNERS, LLC

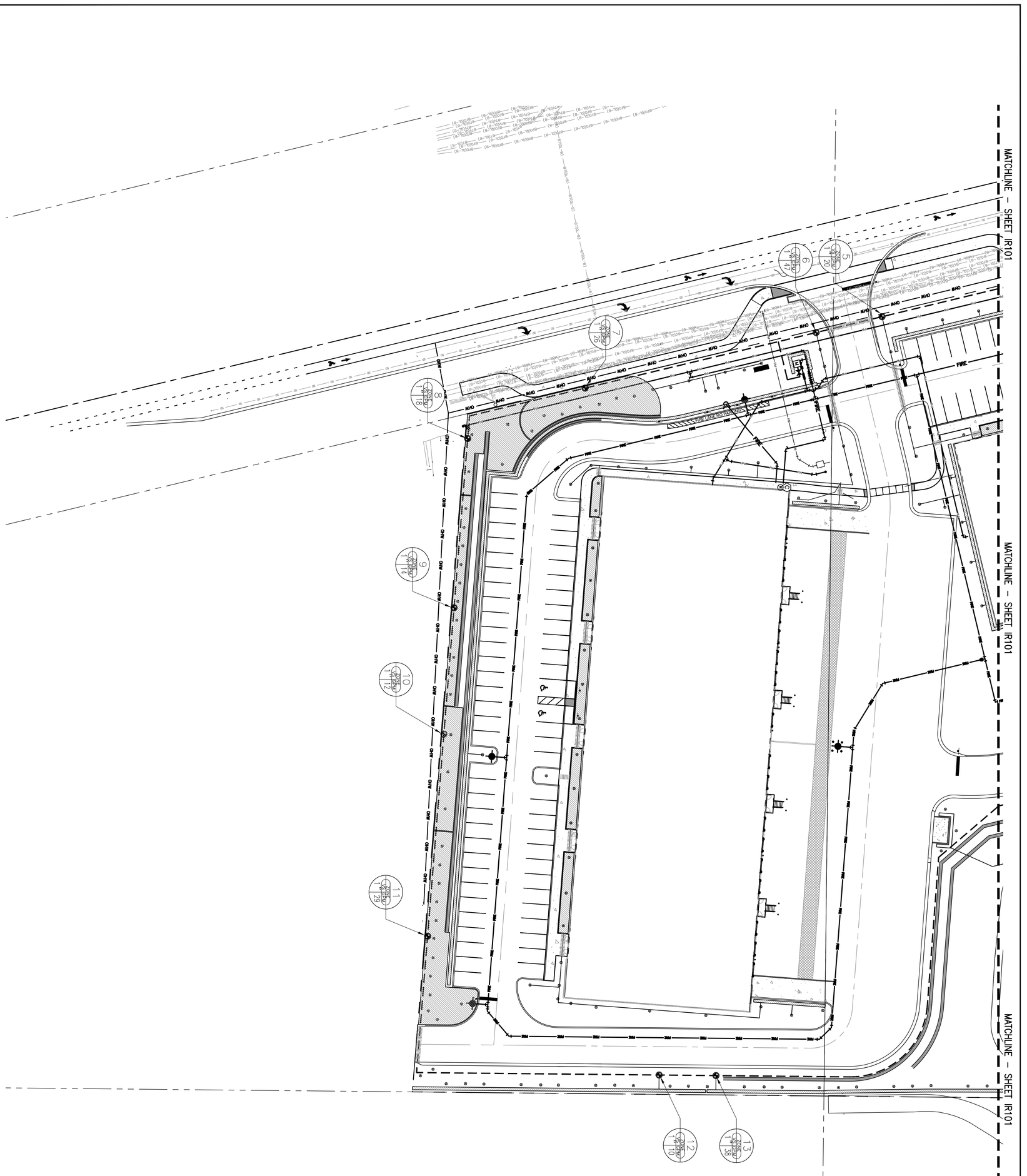
GGW Flex Holdings LLC

CONTRACTOR MUST REVIEW ALL GENERAL LANDSCAPE NOTES PRIOR TO CONSTRUCTION

811 48 HOURS BEFORE YOU DIG

LANDSCAPE ARCHITECT:
Robert Brian Beaudoin
License # 6667004
Landscape Architecture Construction Co., Inc. hereby agrees that these plans, and specifications, and all ideas, designs, and arrangements represented thereon, are and shall remain the property of Landscape Architecture Construction Co., Inc. and shall not be used in whole or in part, for any other project, without the written authorization of Landscape Architecture Construction Co., Inc.

IF LESS THAN 24"x36" SHEET HAS BEEN REDUCED.
ADJUST THE SCALE TO THE DRAWING ACCORDINGLY.



1 inch = 30 ft.
GRAPHIC SCALE
N

IR102

DATE: 2-10-26
JOB # 2026-006
PERMIT #
DRAWN BY: BRB
FILE NAME: IRRIGATION
SCALE: 1 : 30

P.O. BOX 2852 - Winter Park, Florida 32790-2852 - Phone: 407-579-1811 - Email: randy@landscapedynamics.com

REVISIONS
1) 4/17/26 Comments
2) 6/30/26 Comments
3)
4)
5)
6)
7)
8)

Irrigation Plan

Minneola Commerce Center
City of Minneola, Florida

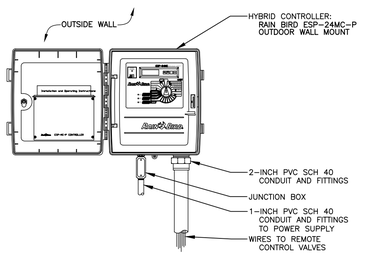
LANDSCAPE Dynamics
LANDSCAPE ARCHITECTS AND PLANNERS, LLC

GGW Flex Holdings LLC

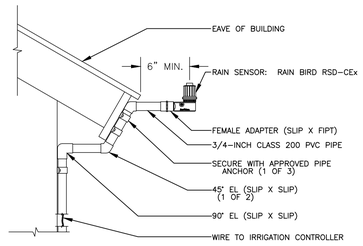
CONTRACTOR MUST REVIEW ALL GENERAL LANDSCAPE NOTES PRIOR TO ANY CONSTRUCTION

811 48 HOURS BEFORE YOU DIG CALL SUNSHINE 811 OR 1-800-432-4770 IT'S FREE AND IT'S THE LAW!

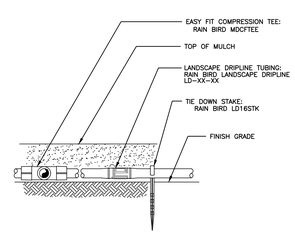
LANDSCAPE ARCHITECT:
Robert Randolph Brooks II, RLA, ISA
License # 6666668
Landscape Architecture Construction Co., Inc. hereby reserves its common law copyright and other property rights in these plans, specifications, ideas, designs and arrangements indicated or represented by these drawings. These plans, specifications, ideas, designs and arrangements shall not be used by any person, firm or corporation for any purpose whatsoever without the written permission of Landscape Architecture Construction Co., Inc.



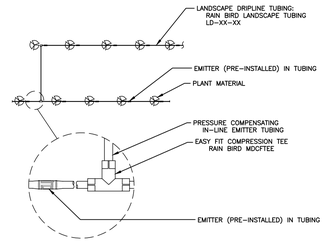
1 FOUR PROGRAM HYBRID CONTROLLER
ESP-MC PLASTIC WALL-MOUNT N.T.S.



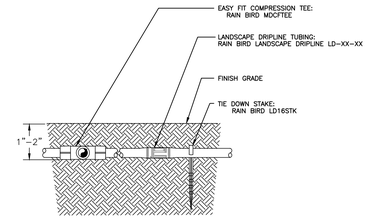
2 RAIN SENSOR
RSD-CEx ROOF CONDUIT N.T.S.



3 LANDSCAPE DRIPLINE ON GRADE
NON-POTABLE SYSTEM N.T.S.

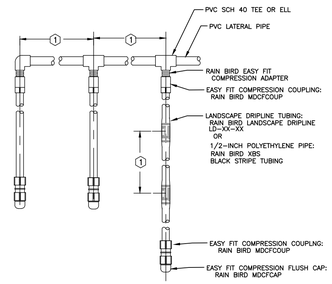


4 LANDSCAPE DRIPLINE CONNECTIONS
NON-POTABLE SYSTEM N.T.S.



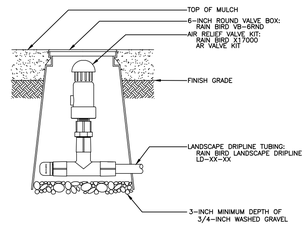
NOTE(S):
1. IF PUTTING LANDSCAPE DRIPLINE UNDER SOIL, DO NOT BURY MORE THAN 2" BELOW GRADE AND INCLUDE AIR RELIEF VALVE (SEE DRAWING-"AIR RELIEF VALVE KIT-AR VALVE KIT").

5 LANDSCAPE DRIPLINE 2" BELOW GRADE
WITH EASY FIT TEE – POTABLE SYSTEM N.T.S.

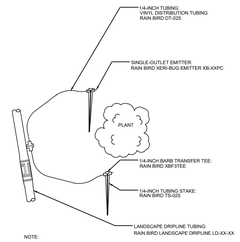


NOTES:
1. LATERAL AND EMITTER SPACING DEPENDS ON SOIL TYPE.

6 LANDSCAPE DRIPLINE LATERALS
NON-POTABLE SYSTEM N.T.S.

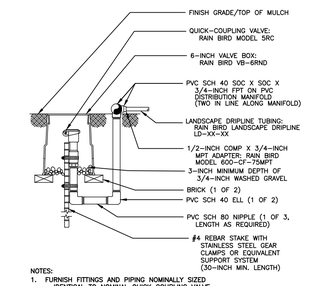


7 AIR RELIEF VALVE IN KIT
N.T.S.



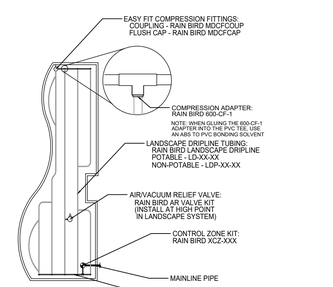
NOTE:
USE XERIMAN TOOL XM-TOOL TO INSERT CONNECTOR DIRECTLY INTO LANDSCAPE DRIPLINE.

8 LANDSCAPE DRIPLINE
WITH SUPPLEMENTAL EMITTERS N.T.S.

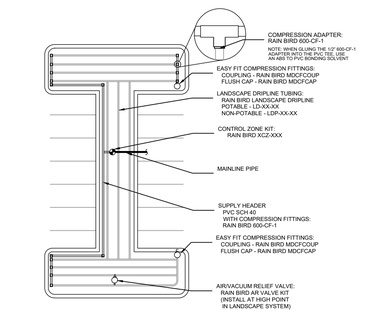


NOTES:
1. FURNISH FITTINGS AND PIPING NOMINALLY SIZED IDENTICAL TO NOMINAL QUICK COUPLING VALVE INLET SIZE.
2. IF POLYETHYLENE IS USED FOR DISTRIBUTION MANIFOLD, SUBSTITUTE INSERT X INSERT X 3/4-INCH FPT INSERT TEE FOR SCH 40 TEE.

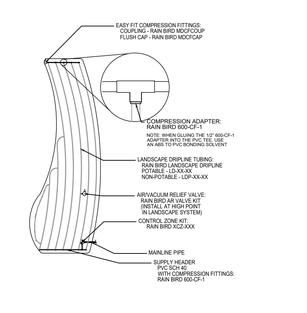
9 LANDSCAPE DRIPLINE FLUSH POINT
NON-POTABLE SYSTEM N.T.S.



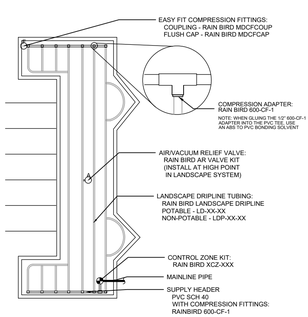
10 LANDSCAPE PLANTER – ODD SHAPED
N.T.S.



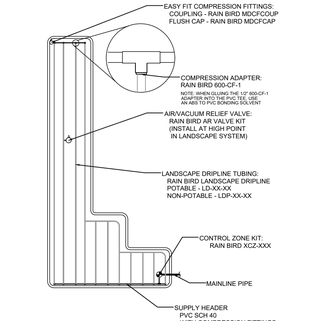
11 PARKING LOT – DOGBONE SHAPED
N.T.S.



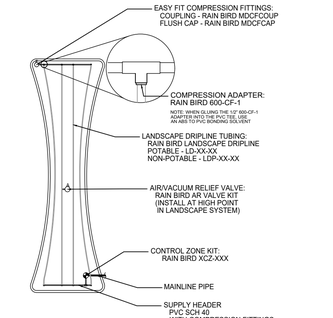
12 LANDSCAPE PLANTER – CURVED POLYGON SHAPED
N.T.S.



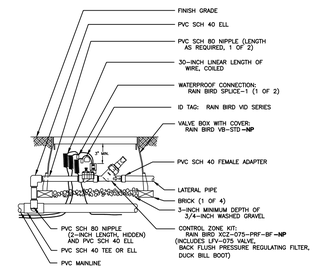
13 PARKING LOT – C SHAPED
N.T.S.



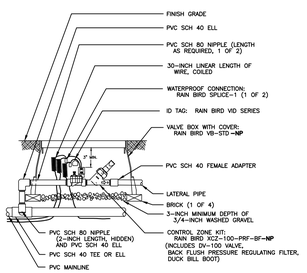
14 LANDSCAPE PLANTER – CORNER SHAPED
N.T.S.



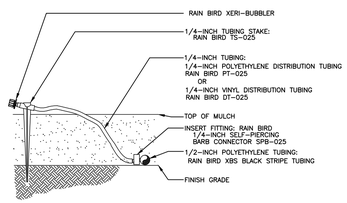
15 LANDSCAPE PLANTER – HOURGLASS SHAPED
N.T.S.



16 ¾" CONTROL ZONE KIT WITH PRESSURE REGULATING BACKFLUSH FILTER
XCZ-075-PRF-BF N.T.S.

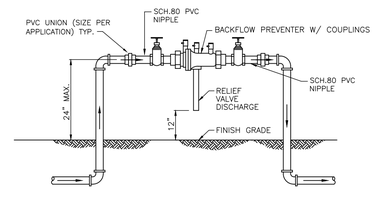


17 1" CONTROL ZONE KIT WITH PRESSURE REGULATING BACKFLUSH FILTER
XCZ-100-PRF-BF N.T.S.



NOTE:
USE XERIMAN TOOL XM-TOOL TO INSERT CONNECTOR DIRECTLY INTO 1/2-INCH POLYETHYLENE TUBING.

18 XERI-BUBBLER ON ¼" TUBING
N.T.S.



REDUCED PRESSURE ZONE
BACKFLOW PREVENTER DETAIL
2" DIAMETER AND SMALLER

19 RPZ BACKFLOW PREVENTER DETAIL
N.T.S.

IF LESS THAN 24"x36" SHEET HAS BEEN REDUCED. ADJUST THE SCALE TO THE DRAWING ACCORDINGLY.

LANDSCAPE ARCHITECT:
Robert R. Buchanan LA0000932
Landscape Dynamics Construction Co. INC. hereby reserves its common law copyright and other property rights in these plans, ideas, and designs. These ideas, designs, and plans are not to be reproduced, changed, or copied in any form or manner whatsoever, nor are they to be assigned to any third party, without first obtaining the express written permission from Landscape Dynamics Construction Co. INC.

48 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770 or 811
IT'S THE LAW IN FLORIDA
FLORIDA LAW REQUIRES EXCAVATORS TO NOTIFY OWNERS OF UNDERGROUND FACILITIES BEFORE DIGGING TWO (2) DAYS PRIOR TO EXCAVATION

811

CONTRACTOR MUST REVIEW ALL GENERAL LANDSCAPE NOTES PRIOR TO BIDDING AND CONSTRUCTION

GGW Flex Holdings LLC

LANDSCAPE ARCHITECTS AND PLANNERS, LLC

P.O. BOX 2852 - Winter Park, Florida 32790-2852 - Phone: 407-579-1811 - Email randy@landscapedynamics.com

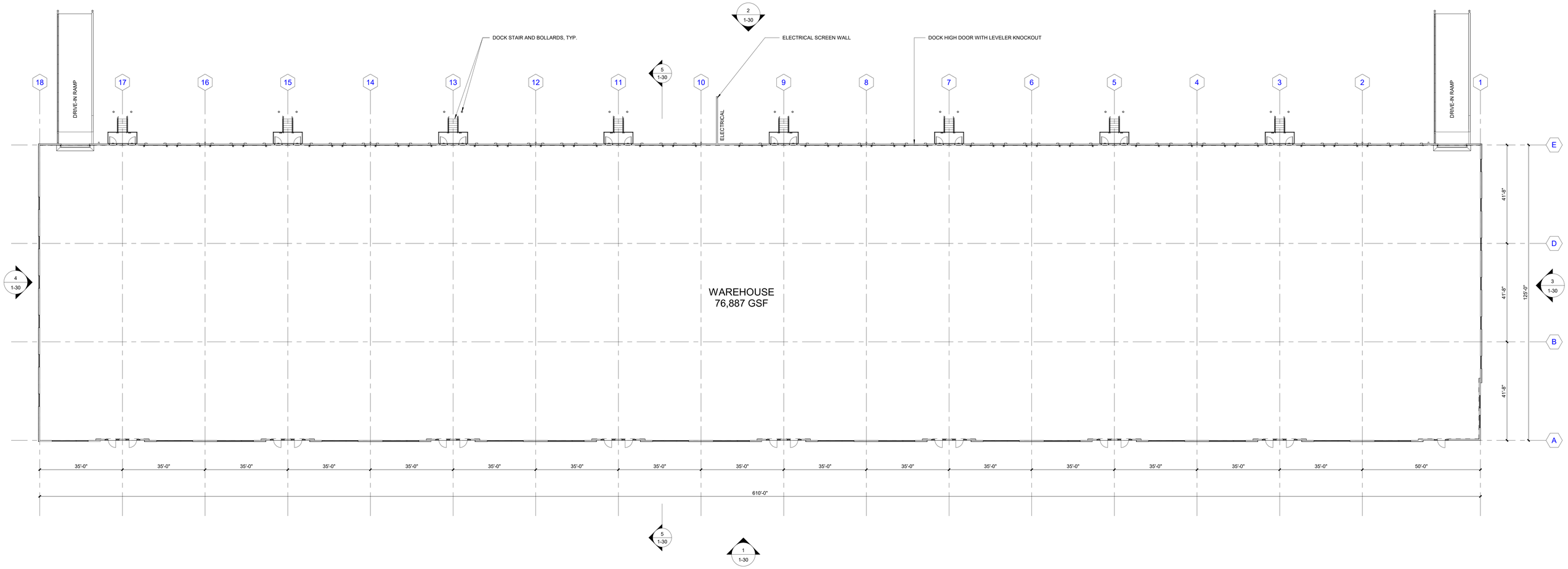
Irrigation Details

Minneola Commerce Center
City of Minneola, Florida

REVISIONS
1) 4/17/26 Comments
2) 6/30/26 Comments
3)
4)
5)
6)
7)
8)

DATE: 2-10-26
JOB # 2026-006
PERMIT #
DRAWN BY: BRB
FILE NAME: IRRIGATION
SCALE N.T.S.

IR200



1 / 1-20 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

ISSUE DATE: 04/09/26

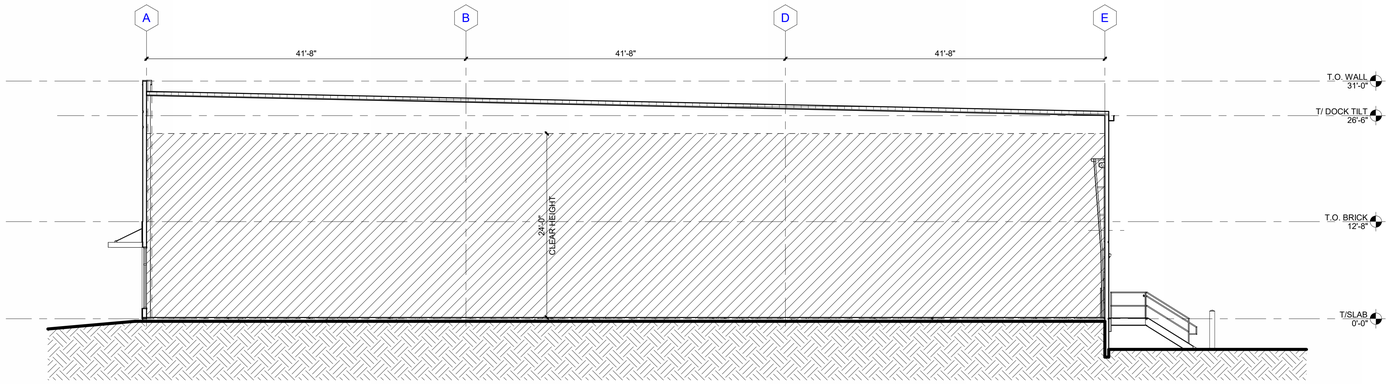
ONE FOUR TWO ARCHITECTURE | ARCO DESIGN/BUILD

MINNEOLA COMMERCE CENTER
BUILDING A

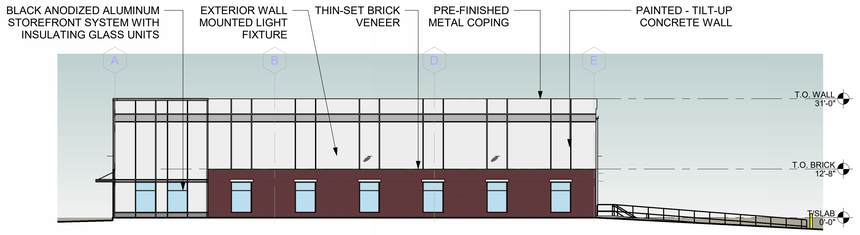
Minneola, FL

GREENBERG GIBBONS PROPERTIES

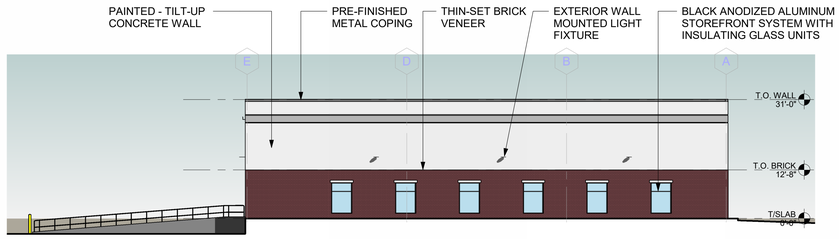
SCHEMATIC
FLOOR PLAN
1-20



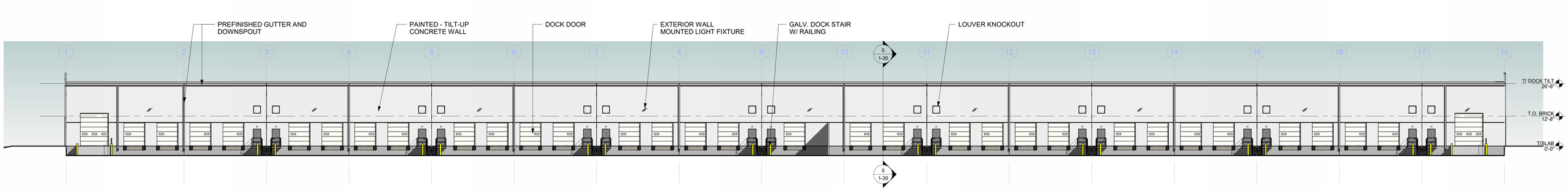
5 1-30 BUILDING SECTION
SCALE: 1/8" = 1'-0"



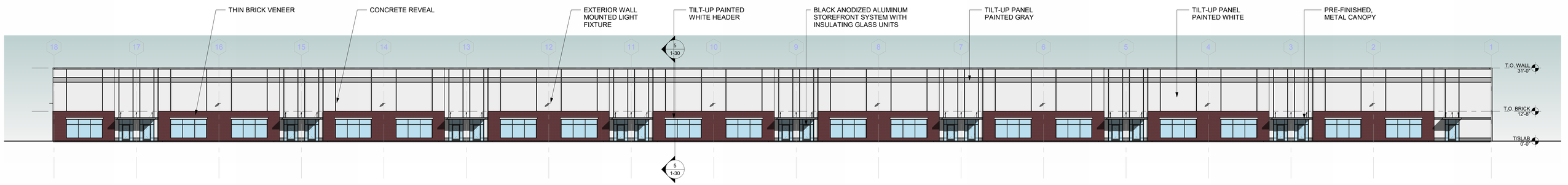
3 1-30 ELEVATION - SIDE A
SCALE: 1/16" = 1'-0"



4 1-30 ELEVATION - SIDE B
SCALE: 1/16" = 1'-0"



2 1-30 ELEVATION - BACK
SCALE: 1/16" = 1'-0"



1 1-30 ELEVATION - FRONT
SCALE: 1/16" = 1'-0"

ISSUE DATE: 04/09/26

ONE FOUR TWO ARCHITECTURE

ARCO DESIGN/BUILD

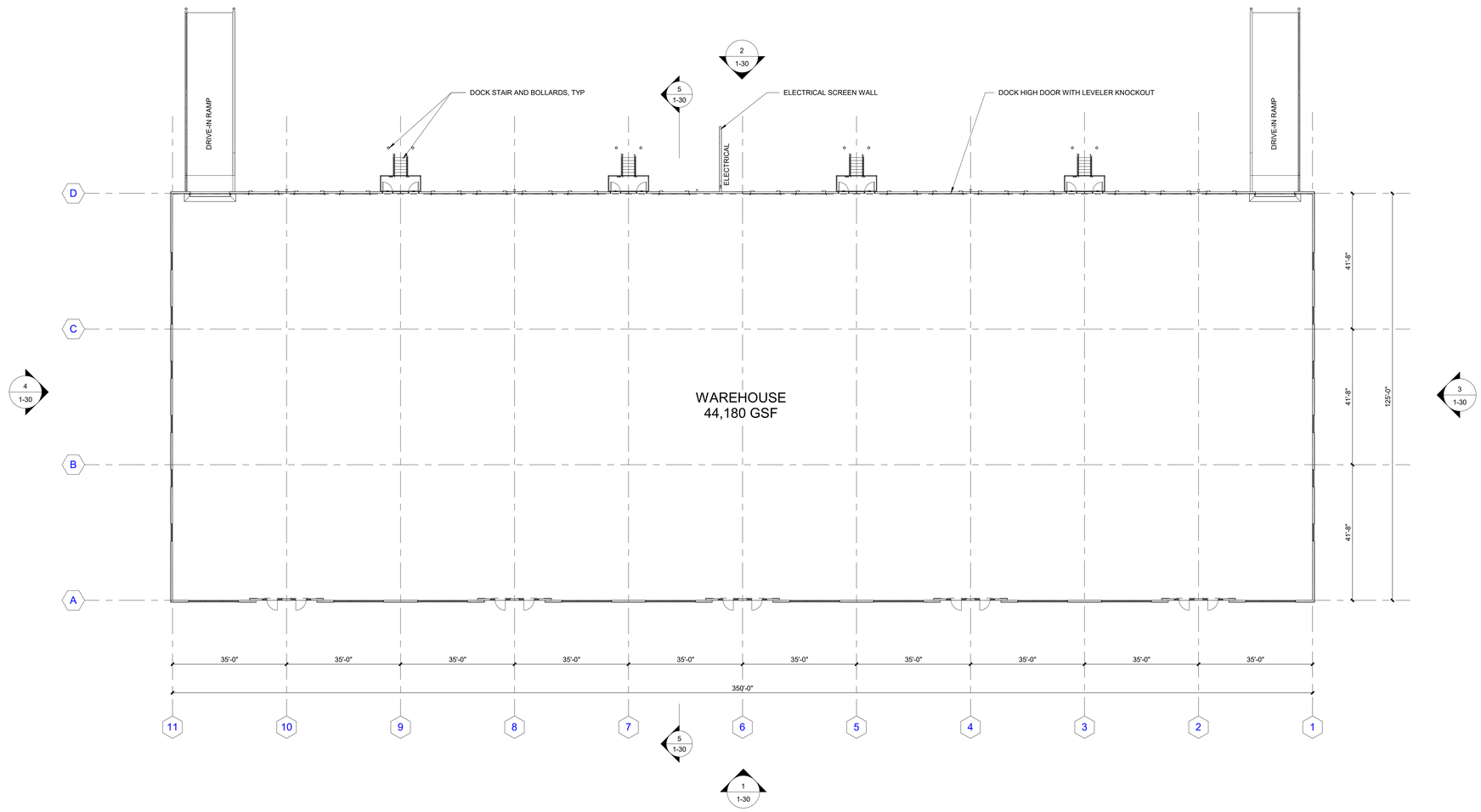
MINNEOLA COMMERCE CENTER BUILDING A

Minneola, FL

GREENBERG GIBBONS PROPERTIES

SCHEMATIC ELEVATIONS

1-30



1 / 1-20 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

ISSUE DATE: 04/09/26

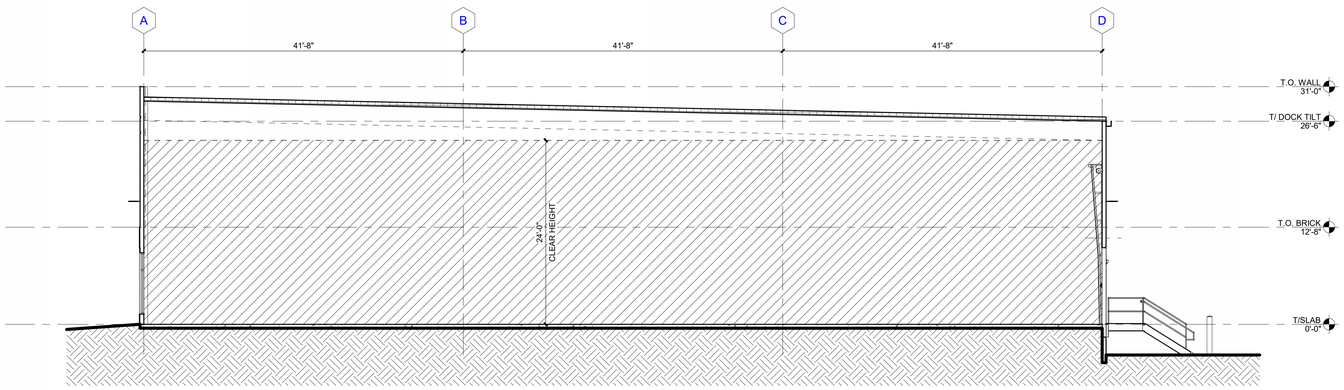
ONE FOUR TWO ARCHITECTURE | ARCO DESIGN/BUILD

MINNEOLA COMMERCE CENTER
BUILDING B

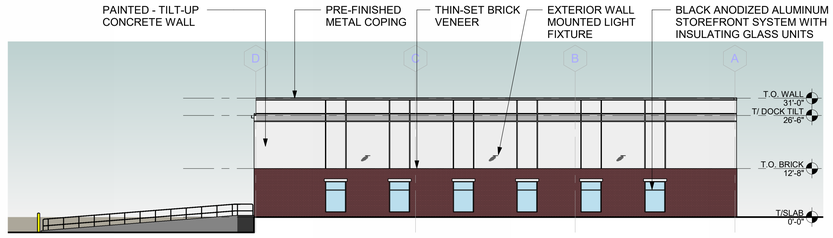
Minneola, FL

GREENBERG GIBBONS PROPERTIES

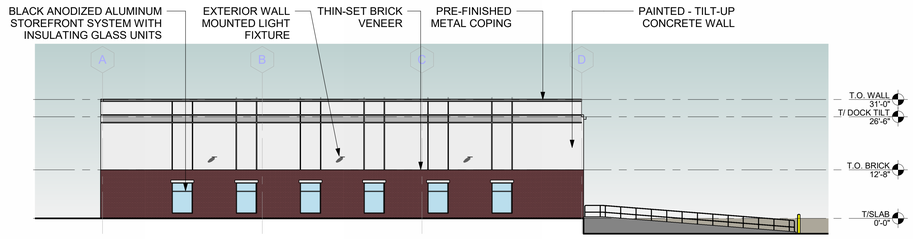
SCHEMATIC
FLOOR PLAN
1-20



5 / 1-30 BUILDING SECTION
SCALE: 1/8" = 1'-0"

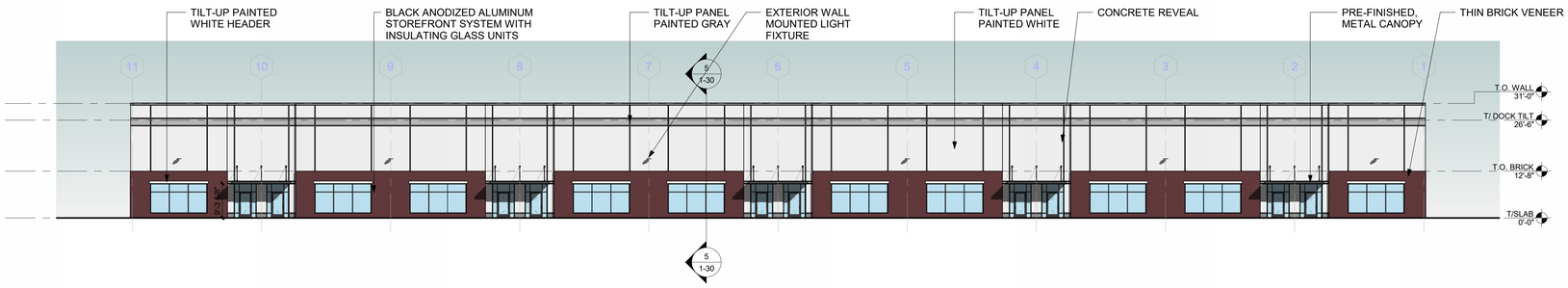


4 / 1-30 WEST ELEVATION
SCALE: 1/16" = 1'-0"



3 / 1-30 EAST ELEVATION
SCALE: 1/16" = 1'-0"

2 / 1-30 NORTH ELEVATION
SCALE: 1/16" = 1'-0"



1 / 1-30 SOUTH ELEVATION
SCALE: 1/16" = 1'-0"

ISSUE DATE: 04/09/26

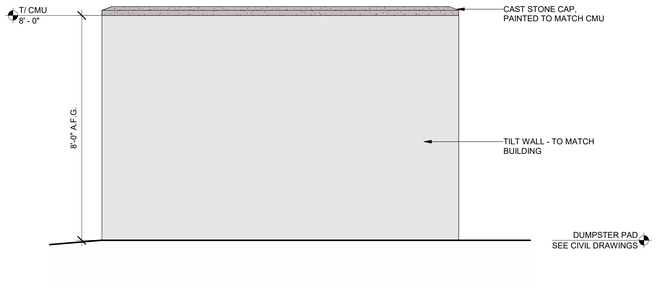
ONE FOUR TWO ARCHITECTURE | ARCO DESIGN/BUILD

MINNEOLA COMMERCE CENTER
BUILDING B

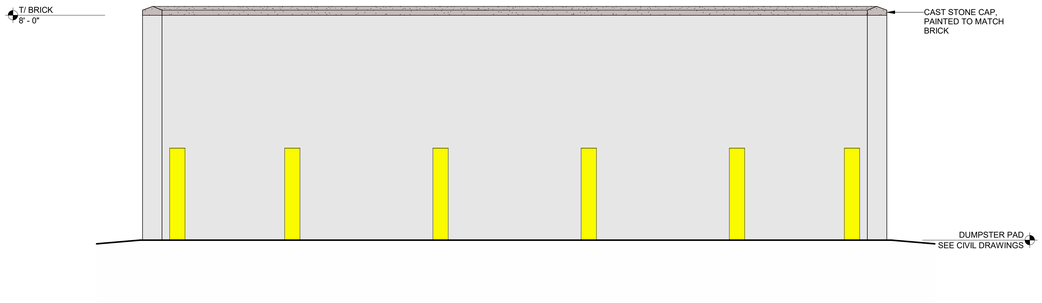
Minneola, FL

GREENBERG GIBBONS PROPERTIES

SCHEMATIC ELEVATIONS
1-30

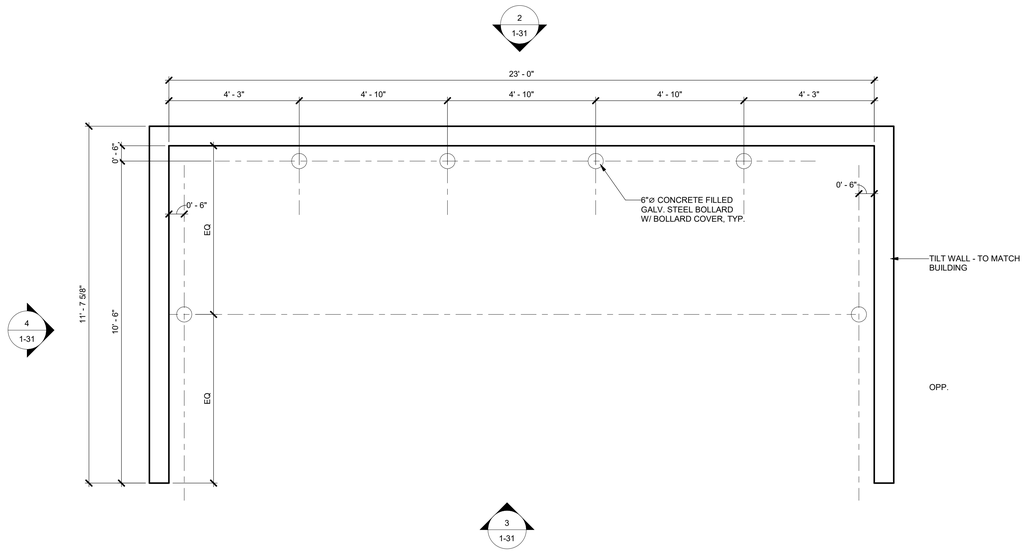


4 / 1-31 DUMPSTER ELEVATION - SIDE
SCALE: 1/2" = 1'-0"



3 / 1-31 DUMPSTER ELEVATION - FRONT
SCALE: 1/2" = 1'-0"

2 / 1-31 DUMPSTER ELEVATION - BACK
SCALE: 1/2" = 1'-0"



1 / 1-31 DUMPSTER PLAN
SCALE: 1/2" = 1'-0"

ISSUE DATE: 04/09/26

ONE FOUR TWO ARCHITECTURE | ARCO DESIGN/BUILD

MINNEOLA COMMERCE CENTER BUILDING B

Minneola, FL

GREENBERG GIBBONS PROPERTIES

DUMPSTER ELEVATIONS

1-31

PAINTED TILT PANEL - DARK GRAY

MANUFACTURER: SHERWIN WILLIAMS

COLOR/TEXTURE: GRAY SHINGLE - 7670

PAINTED TILT PANEL - LIGHT GRAY

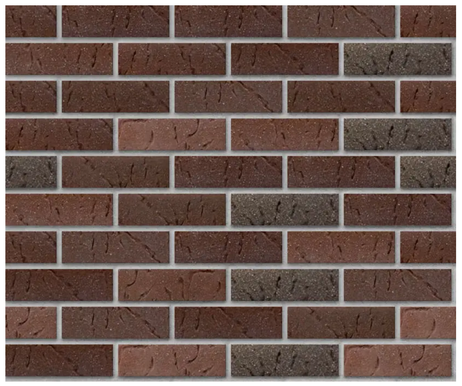
MANUFACTURER: SHERWIN WILLIAMS

COLOR/TEXTURE: MARCH WIND - 7668

PAINTED TILT PANEL - WHITE

MANUFACTURER: SHERWIN WILLIAMS

COLOR/TEXTURE: FLEUR DE SEL - #7666



THIN-SET BRICK VENEER

MANUFACTURER: ENDICOTT

PRODUCT: THIN BRICK

COLOR: AUTUMN SANDS

ANODIZED ALUMINUM STOREFRONT

MANUFACTURER: KAWNEER (ANODIZED FINISH)

PRODUCT: TRIFAB

COLOR: BLACK - ANODIZED

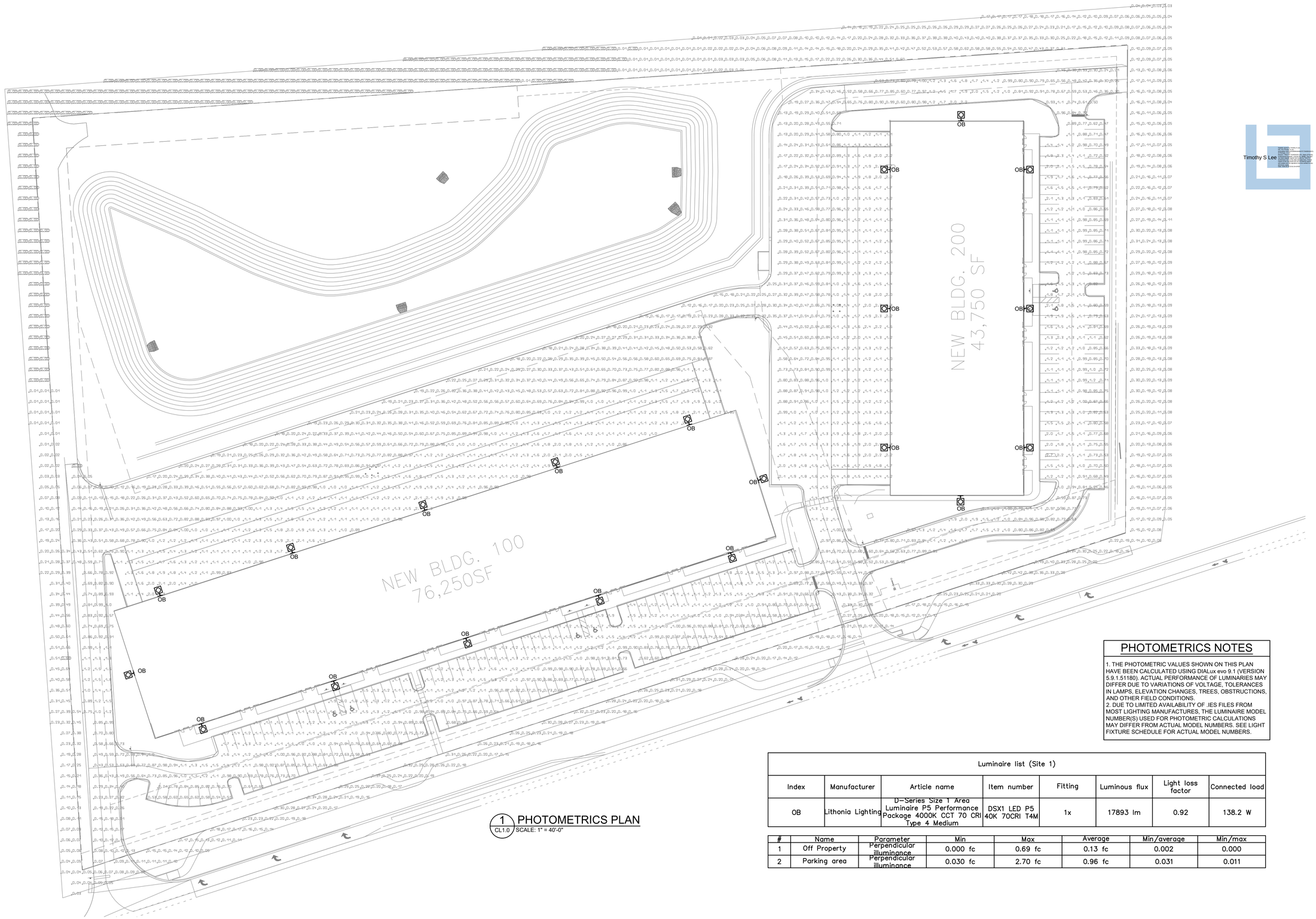
ALUMINUM COPING

MANUFACTURER: PAINTED ALUMINUM COPING

PRODUCT: PAINTED ALUMINUM COPING

COLOR: BLACK

ISSUE DATE: 04/09/26



1 PHOTOMETRICS PLAN
CL1.0 SCALE: 1" = 40'-0"

PHOTOMETRICS NOTES

1. THE PHOTOMETRIC VALUES SHOWN ON THIS PLAN HAVE BEEN CALCULATED USING DIALux evo 9.1 (VERSION 5.9.1.51180). ACTUAL PERFORMANCE OF LUMINARIES MAY DIFFER DUE TO VARIATIONS OF VOLTAGE, TOLERANCES IN LAMPS, ELEVATION CHANGES, TREES, OBSTRUCTIONS, AND OTHER FIELD CONDITIONS.
2. DUE TO LIMITED AVAILABILITY OF .IES FILES FROM MOST LIGHTING MANUFACTURES, THE LUMINAIRE MODEL NUMBER(S) USED FOR PHOTOMETRIC CALCULATIONS MAY DIFFER FROM ACTUAL MODEL NUMBERS. SEE LIGHT FIXTURE SCHEDULE FOR ACTUAL MODEL NUMBERS.

Luminaire list (Site 1)

Index	Manufacturer	Article name	Item number	Fitting	Luminous flux	Light loss factor	Connected load
OB	Lithonia Lighting	D-Series Size 1 Area Luminaire P5 Performance Package 4000K CCT 70 CRI Type 4 Medium	DSX1 LED P5 40K 70CRI T4M	1x	17893 lm	0.92	138.2 W

#	Name	Parameter	Min	Max	Average	Min/average	Min/max
1	Off Property	Perpendicular illuminance	0.000 fc	0.69 fc	0.13 fc	0.002	0.000
2	Parking area	Perpendicular illuminance	0.030 fc	2.70 fc	0.96 fc	0.031	0.011

TIMOTHY SUNGSOO LEE, P.E.

506 Vaux Dr.
Johns Creek, GA 30097
Ph. 678-439-8664
tim.lee@lengineer.com
FLORIDA #89080
JOB #TL26197

Timothy S Lee

TIMOTHY SUNGSOO LEE LICENSE No. 89080 STATE OF FLORIDA PROFESSIONAL ENGINEER
04-09-26

ISSUE / REVISION:

04-09-26 - ISSUED FOR PERMIT

PROJECT NAME:

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL

FOR:
ARCO DESIGN/BUILD
CHARLOTTE, NC

SHEET TITLE:

PHOTOMETRICS PLAN

SHEET NUMBER:

CL1.0

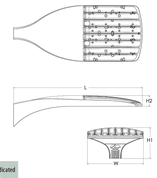
OF 2 SHEETS.
SHEET SIZE: 24x36

D-Series Size 1
LED Area Luminaire

d-series

Specifications

EPA:	0.69 ft² (0.06 m²)
Length:	32.71" (83.1 cm)
Width:	14.26" (36.2 cm)
Height H1:	7.88" (20.0 cm)
Height H2:	2.73" (6.9 cm)
Weight:	34 lbs (15.4 kg)



Design Select options indicated by this color background.

Catalog Number: DSX1 LED P5 40K 70CRI T4M

Notes

Type: OB

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature[1]	Color Rendering Index[1]	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics** P1 P6 P2 P7 P3 P8 P4 P9 P5 **Rotated optics** P10[2] P12[2] P11[2] P13[2]	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare[3] T4M Type IV medium T4LG Type IV low glare[3] TFTM Forward throw medium T5M Type V medium T5LG Type V low glare T5W Type V wide BLC3 Type III backlight control[3] BLC4 Type IV backlight control[3] LCCO Left corner cutoff[3] RCCO Right corner cutoff[3]	MVOLT (120V-277V)[4] HVOLT (347V-480V)[5,6] XVOLT (277V - 480V)[5,6] 120[5,26] 208[5,26] 240[5,26] 277[5,26] 347[5,26] 480[5,26]	**Shipped included** SPA Square pole mounting (#8 drilling) RPA Round pole mounting (#8 drilling) SPAS Square pole mounting #5 drilling[7] RPA5 Round pole mounting #5 drilling[7] SPABN Square narrow pole mounting #8 drilling WBA Wall bracket[8] MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

Control options		Other options		Finish (required)	
Shipped installed		**Shipped installed**		DDBXD	Dark Bronze
NLTAIR2 PIRHN	nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc[9,10,21]	SPD20KV	20kV surge protection	DBLXD	Black
PIR	High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc[9,10,21]	HS	Houseside shield (black finish standard)[22]	DNAXD	Natural Aluminum
PER	NEMA twist-lock receptacle only (controls ordered separately)[11]	L90	Left rotated optics[1]	DWHXD	White
PERS	Five-pin receptacle only (controls ordered separately)[9,21]	R90	Right rotated optics[1]	DDBTXD	Textured dark bronze
PER7	Seven-pin receptacle only (controls ordered separately)[9,21]	CCE	Coastal Construction[23]	DBLBXD	Textured black
FAO	Field adjustable output[12,13]	HA	50°C ambient operation[24]	DNATXD	Textured natural aluminum
BL30	Bi-level switched dimming, 30%[9,21]	BAA	Buy American Act and/or Build America Buy America Qualified	DWHGXD	Textured white
BL50	Bi-level switched dimming, 50%[9,21]	SF	Single fuse (120, 277, 347V)[26]		
DMG	0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]	DF	Double fuse (208, 240, 480V)[26]		
DS	Dual switching[9,10,21]	**Shipped separately**			
		EGSR	External Glare Shield (reversible, field install required, matches housing finish)		
		BSDB	Bird Spikes (field install required)		

© 2011-2025 Acuity Brands Lighting, Inc. All rights reserved.

Ordering Information

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V)[18]
DLL347F 1.5 CEL JU	Photocell - SSL twist-lock (347V)[18]
DLL480F 1.5 CEL JU	Photocell - SSL twist-lock (480V)[18]
DSHORT SBK	Shorting cap[18]
DSX1HS P#	House-side shield (enter package number 1-13 in place of #)
DSXRPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXSPA5 (FINISH)	Square pole adapter #5 drilling (specify finish)
DSXRPA5 (FINISH)	Round pole adapter #5 drilling (specify finish)
DSXEGSR (FINISH)	External glare shield (specify finish)
DSXBSDB (FINISH)	Bird spike deterrent bracket (specify finish)

NOTES

1 Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
2 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
3 T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6 HVOLT not available with package P1 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
7 XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
8 XVOLT not available in packages P1 or P10. XVOLT not available with P1, P2, P5, P7, P9, P10, P11 and P13 when combined with option NLTAIR2 PIRHN or PIR. XVOLT not available with fusing (SF or DF).
9 SPAS, RPA5, WBA, MA not available with DDBTXD finish (for use with #8 drilling).
10 WBA cannot be combined with Type 5 (wide) distribution plus photocell (PER).
11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link.
12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PERS, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P1 and P10 using HVOLT.
13 PIR not available with NLTAIR2 PIRHN, PER, PERS, PER7, FAO, BL30, BL50, DMG and DS.
14 PER/PERS/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15 FAO not available with other dimming control options, NLTAIR2 PIRHN, PIR, PERS, PER7, BL30, BL50, DMG and DS.
16 BL30 and BL50 are not available with DMG, NLTAIR2 PIRHN, PIR, PER, PERS, PER7, FAO, DMG and DS. BL30 or BL50 must specify 120 or 277V.
17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PERS, PER7, BL30, BL50, FAO and DS.
18 DS not available with NLTAIR2 PIRHN, PIR, PER, PERS, PER7, BL30, BL50, FAO and DMG.
19 DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads using (2) drivers. DS only available with packages P8, P9, P10, P11, P12 and P13.
20 Reference Motion Sensor Default Settings table on page 4 to see functionality.
21 Reference Controls Options table on page 4.
22 HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
23 CCE option not available with option BS and EGSR. Contact Technical Support for availability.
24 Option HA not available with performance packages P4, P5, P7, P8, P9 and P13.
25 Requires luminaire to be specified with PER, PERS or PER7 option. See Controls Table on page 4.
26 Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).

Shield Accessories

External Glare Shield (EGSR)

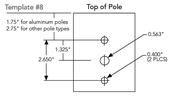
House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION

Template #8

Top of Pole



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS5-190	AS5-280	AS5-290	AS5-390	AS5-320	AS5-490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
Minimum Acceptable Outside Pole Dimension							
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPAS	#5	3"	3"	3"	3"		3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPABN	#8	3"	3"	3"	3"		3"

DSX1 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX1 with SPA	0.69	1.38	1.23	1.54	---	1.58
DSX1 with SPAS, SPABN	0.70	1.40	1.30	1.66	---	1.68
DSX1 with RPA, RPA5	0.70	1.40	1.30	1.66	1.60	1.66
DSX1 with MA	0.83	1.66	1.50	2.09	2.09	2.09

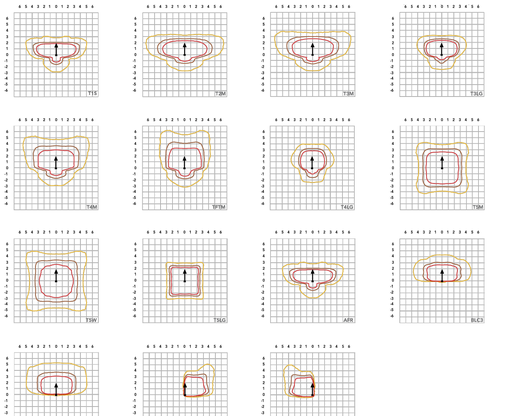
© 2011-2025 Acuity Brands Lighting, Inc. All rights reserved.

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's homepage.

Isofootcandle plots for the DSX1 LED P9 40K 70CRI. Distances are in units of mounting height (25').

LEGEND: 0.1 fc, 0.5 fc, 1.0 fc



© 2011-2025 Acuity Brands Lighting, Inc. All rights reserved.

Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	**77°C**	**1.00**
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.95
50,000	0.90
100,000	0.81

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use maximum published values by package listed on specification sheet (input watts and lumens by optic type).

Electrical Load

	Performance Package	LED Count	Drive Current (mA)	Wattage	Current (A) 120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P2	30	700	68	0.56	0.33	0.28	0.24	0.20	0.14
	P3	30	1050	104	0.85	0.49	0.43	0.37	0.29	0.21
	P4	30	1250	125	1.03	0.60	0.52	0.45	0.36	0.26
	P5	30	1400	142	1.15	0.66	0.58	0.50	0.40	0.29
	P6	40	1250	167	1.38	0.79	0.69	0.60	0.48	0.34
	P7	40	1400	188	1.54	0.89	0.77	0.67	0.53	0.38
	P8	60	1100	216	1.80	1.04	0.90	0.78	0.62	0.45
	P9	60	1400	279	2.31	1.33	1.15	1.00	0.80	0.58
Rotated Optics (Requires L90 or R90)	P10	60	530	101	0.84	0.49	0.42	0.37	0.29	0.21
	P11	60	700	135	1.12	0.65	0.56	0.49	0.39	0.28
	P12	60	1050	206	1.72	0.99	0.86	0.74	0.59	0.43
	P13	60	1400	279	2.30	1.33	1.15	1.00	0.79	0.57

LED Color Temperature / Color Rendering Multipliers

	70 CRI		80CRI		90CRI	
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)

Note: Some LED types are available as per special request. Contact Technical Support for more information.

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Photocell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads.
DS (not available on DSXD)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PERS or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as RSNM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CLAIRITY Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V

© 2011-2025 Acuity Brands Lighting, Inc. All rights reserved.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI) Lumens	B	U	G	LPW	40K (4000K, 70 CRI) Lumens	B	U	G	LPW	50K (5000K, 70 CRI) Lumens	B	U	G	LPW
P1	51W	30	530	T1S	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162
				T2M	7,203	1	0	3	142	7,507	2	0	3	147	7,653	2	0	3	150
				T3M	7,287	1	0	3	143	7,594	1	0	3	149	7,742	1	0	3	152
				T3LG	6,509	1	0	1	128	6,783	1	0	1	133	6,916	1	0	1	136
				T4M	7,395	1	0	3	145	7,707	1	0	3	151	7,857	1	0	3	154
				T4LG	6,726	1	0	1	132	7,010	1	0	1	138	7,146	1	0	1	140
				TFTM	7,446	1	0	3	146	7,760	1	0	3	152	7,912	1	0	3	155
				T5M	7,689	3	0	2	149	7,930	3	0	2	156	8,084	3	0	2	159
				T5W	7,732	3	0	2	152	8,068	4	0	2	158	8,215	4	0	2	161
				T5LG	7,621	3	0	2	150	7,953	3	0	1	156	8,108	3	0	1	159
				BLC3	5,300	0	0	2	104	5,524	0	0	2	109	5,631	0	0	2	111
				BLC4	5,474	0	0	3	108	5,705	0	0	3	112	5,816	0	0	3	114
				RCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112
				LCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112
				AFR	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162
P2	68W	30	700	T1S	9,997	1	0	2	147	10,418	1	0	2	154	10,621	1	0	2	157
				T2M	9,260	2	0	1	137	9,651	2	0	1	142	9,839	2	0	1	145
				T3M	9,368	2	0	3	138	9,763	2	0	3	144	9,953	2	0	3	147
				T3LG	8,368	1	0	2	123	8,721	1	0	2	129	8,891	1	0	2	131
				T4M	9,507	2	0	3	140	9,909	2	0	3	146	10,102	2	0	3	149
				T4LG	8,647	1	0	2	128	9,012	1	0	2	133	9,187	1	0	2	136
				TFTM	9,573	2	0	3	141	9,977	2	0	3	147	10,172	2	0	3	150
				T5M	9,782	3	0	2	144	10,195	4	0	2	150	10,393	4	0	2	153
				T5W	9,940	4	0	2	147	10,360	4	0	2	153	10,562	4	0	2	156
				T5LG	9,810	3	0	1	145	10,224	3	0	1	151	10,423	3	0	1	154
				BLC3	6,814	0	0	2	101	7,101	0	0	2	105	7,240	0	0	2	107
				BLC4	7,038	0	0	3	104	7,334	0	0	3	108	7,477	0	0	3	110
				RCCO	6,875	1	0	2	101	7,165	1	0	2	106	7,305	1	0	2	108
				LCCO	6,875	1	0	2	101	7,165	1	0	2	106	7,305	1	0	2	108
				AFR	9,997	1	0	2	147	10,418	1	0	2	154	10,621	1	0	2	157
P3	102W	30	1050	T1S	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147
				T2M	13,055	2	0	3	128	13,605	2	0	3	133	13,871	2	0	3	136
				T3M	13,206	2	0	4	129	13,763	2	0	4	135	14,031	2	0	4	137
				T3LG	11,797	2	0	2	115	12,294	2	0	2	120	12,534	2	0	2	123
				T4M	13,403	2	0	4	131	13,968	2	0	4	137	14,241	2	0	4	139
				T4LG	12,190	2	0	2	119	12,704	2	0	2	124	12,952	2	0	2	127
				TFTM	13,496	2	0	4	132	14,065	2	0	4	138	14,339	2	0	4	140
				T5M	13,790	4	0	2	135	14,373	4	0	2	141	14,652	4	0	2	143
				T5W	14,013	4	0	3	137	14,605	4	0	3	143	14,889	4	0	3	146
				T5LG	13,830	3	0	2	135	14,413	3	0	2	141	14,694	3	0	2	144
				BLC3	9,606	0	0	2	94	10,011	0	0	2	98	10,206	0	0	2	100
				BLC4	9,921	0	0	3	97	10,340	0	0	3	101	10,541	0	0	3	103
				RCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101
				LCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101
				AFR	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147

© 2011-2025 Acuity Brands Lighting, Inc. All rights reserved.

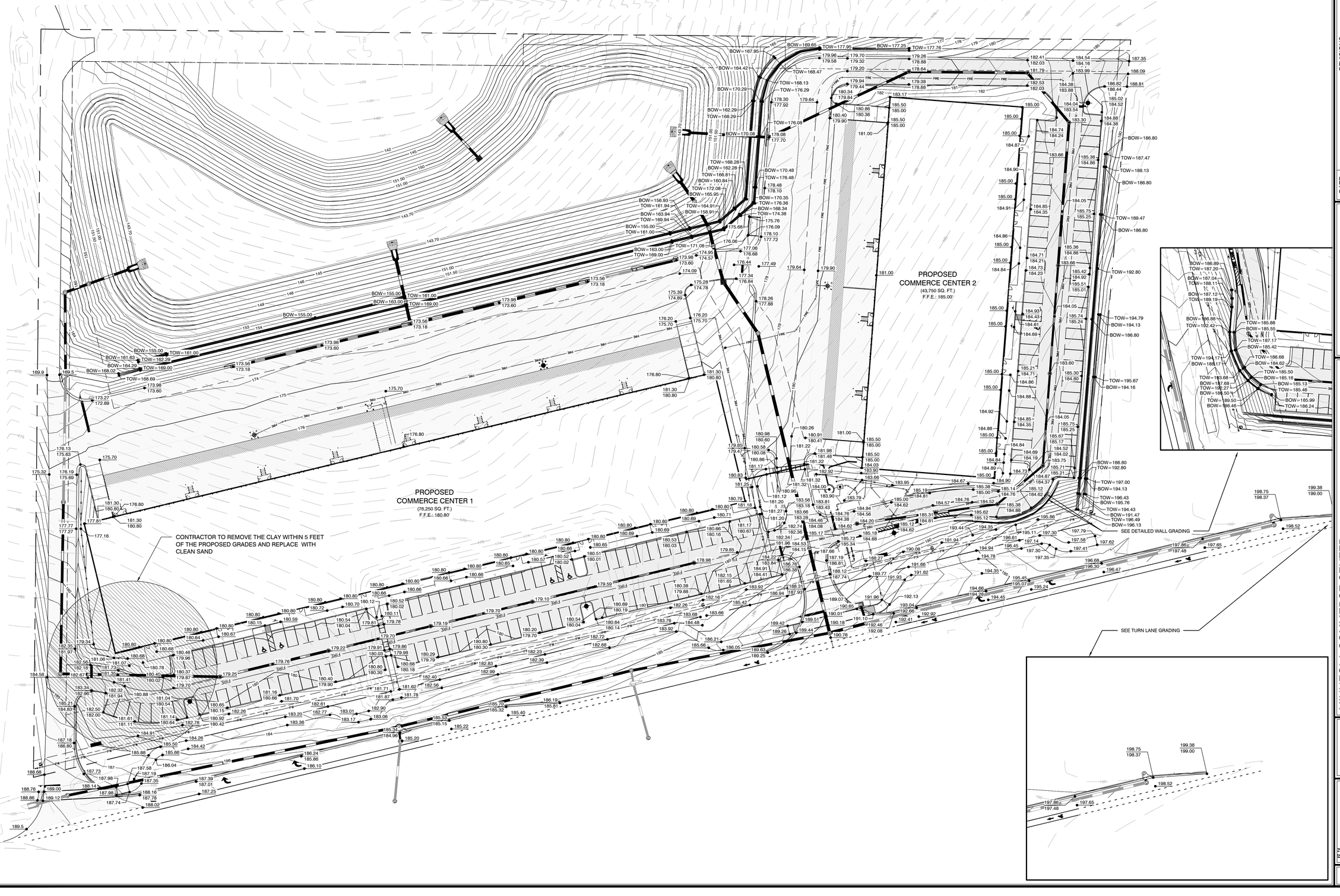
Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI) Lumens	B	U	G	LPW	40K (4000K, 70 CRI) Lumens	B	U	G	LPW	50K (5000K, 70 CRI) Lumens	B	U	G	LPW
P4	124W	30	1250	T1S	16,416	2	0	3	132	17,309	2	0	3	138	17,442	2	0	3	141
				T2M	15,207	3	0	4	123	15,849	3	0	4	128	16,158	3	0	4	130
				T3M	15,383	2	0	4	124	16,032	2	0	4	129	16,345	2	0	4	132
				T3LG	13,742	2	0	2	111	14,321	2	0	2	116	14,600	2	0	2	118
				T4M	15,613	2	0	4	126	16,272	2	0	4	131	16,589	2	0	4	134
				T4LG	14,200	2	0	2	115	14,799	2	0	2	119	15,087	2	0	2	122
				TFTM	15,721	2	0	4	127	16,384	2	0	4	132	16,703	2	0	4	135
				T5M	16,063	4	0	2	130	16,741	4	0	2	135	17,067	4	0	2	138
				T5W	16,324	5	0	3	132	17,013	5	0	3	137	17,344	5	0	3	140
				T5LG	16,110	4	0	2	130	16,790	4	0	2	135	17,117	4	0	2	138
				BLC3	11,190	0	0	3	90	11,662	0	0	3	94	11,889	0	0	3	96
				BLC4	11,557	0	0	3	93	12,044	0	0	3	97	12,279	0	0	4	99
				RCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97
				LCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97
				AFR	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141
P5	138W	30	1400	T1S	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139
				T2M	16,723	3	0	4	121	17,428	3	0	4	126	17,768	3	0	4	129
				T3M	16,917	3	0	4	122	17,630	3	0	4	128	17,974	3	0	4	130
				T3LG	15,111	2	0	2	109	15,749	2	0	2	114	16,055	2	0	2	116
				T4M	17,169	3	0	5	124	17,893	3	0	5	130	18,242	3	0	5	132
				T4LG	15,615	2	0	2	113	16,274	2	0	2	118	16,591	2	0	2	120
				TFTM	17,288	2	0	4	125	18,017	2	0	5	130	18,368	3	0	5	133
				T5M	17,664	5	0	3	128	18,410	5	0	3	133	18,768	5	0	3	136
				T5W	17,951	5	0	3	130	18,708	5	0	3	135	19,073	5	0	3	138
				T5LG	17,716	4	0	2	128	18,463	4	0	2	134	18,823	4	0	2	136
				BLC3	12,305	0	0	3	89	12,824	0	0	3	93	13,074	0	0	3	95
				BLC4	12,709	0	0	4	92	13,245	0	0	4	96	13,503	0	0	4	98
				RCCO	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95
				LCCO	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95
				AFR	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139
P6	165W	40	1250	T1S	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135
				T2M	19,482	3	0	4	118	20,303	3	0	4	123	20,699	3	0	4	125
				T3M	19,708	3	0	5	119	20,539	3	0	5	124	20,939	3	0	5	127
				T3LG	17,604	2	0	2	107	18,347	2	0	2	111	18,704	2	0



N

40 20 0 40 80 120

SCALE IN FEET
1" = 40'

BY	REVISIONS	DATE

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
CERTIFICATE OF AUTH. NO. LC 34762
7413 ALFORD COURT, BRYON, FL 34762
(352)748-3126

GRADING PLAN

MINNEOLA COMMERCE CENTER
LAKE COUNTY, FL
-

SAVE DATE	7/8/2026
DRAWN BY	JW
CHECKED BY	SMC
PROJECT #	EP2025.04206
FILE NAME	05- MCC GRADING

MAJOR LEE STACY
LICENSE
No. 70249
STATE OF FLORIDA
PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Major L. Stacy, 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.

SHEET NUMBER C5.0

(S:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\05- MCC GRADING.dwg) PLOT DATE:7/8/2026 8:37 PM SAVE DATE: 7/8/2026 LAST SAVED BY: ACAMPOS

To: GGW Flex Holdings, LLC

From: Eric Raasch, AICP, Inspire Project Manager

CC: Joyce Heffington, AICP; Tom Grimms, AICP; Gabriela Castro, AICP

Date: August 26, 2026

Reference: Minneola Commerce Center US N 27 (Inspire Case #240b)

We have conducted a third review of the **Site Plan** for the above-referenced project. This project is located in the PUD-C zoning district and Planned Unit Development Commercial Future Land Use category. The proposed Project ±13.4-acre development site will consist of 120,000 square feet (SF) of light industrial space in two buildings (76,250 SF and 43,750 SF). The applicant is also proposing a Future Land Use Map (FLUM) amendment and rezoning to PUD – Industrial with an associated updated Development Agreement that will determine the standards for review of this SP application. No site visit was conducted. The following review is based on the applicant's letter of response to staff comments, dated July 14, 2026.

Planning

General Comments

1. This application relies on the annexation of the FDOT stormwater pond within the U.S. 27 right-of-way. No application for annexation has been received at this time. *Inspire recommends that any recommendation on this SP application be contingent on the annexation.*

2. A portion of the subject property is owned by FDOT. *Please submit authorization from FDOT for this SP request.*

3. The applicant has submitted a proposed Development Agreement establishing revised land use, development, and site design standards for the property. The Development Agreement is currently under review and has not yet been approved. The Development Agreement and site plan applications may be processed concurrently; however, the current site plan cannot be approved based on standards contained in the proposed Agreement until the Agreement and all applicable associated entitlements become effective. *Inspire recommends that any approval of this Site Plan be contingent on the approval of the Development Agreement containing the standards that support the proposed site design. Any changes to the terms of the DA will require additional revisions and review of this SP.*

4. In response to a previous Inspire comment pointing to the absence of required concurrent applications, the applicant separately submitted a Future Land Use Map amendment and PD modification application. Inspire has reviewed these applications, together with the draft Development Agreement included in the resubmittal. Comments have been provided separately. *The applications may be processed concurrently, but Inspire defers to the City Attorney's Office on application sequencing.*

5. The total number of bays is not listed. It appears that Commerce Center 1 has 17 entryways and Commerce Center 2 has 10 entryways leading to the conclusion that the maximum possible bays is 17. *Please list the total number of bays on Sheet C3. This number will also be used as the maximum number of tenants.*

6. The applicant has acknowledged that a permit from FWC will be required. *Informational comment. No response is necessary.*

7. No sign package was provided with the second resubmittal. Directional and regulatory sign types and locations are noted on Sheet C3 of the first resubmittal. The applicant states that a complete sign package will be submitted with the building permits. However, Sec. 122.42(3)b.9. also requires "photographs or sketches of proposed signage with dimensions and material type" for site development approval. *Please provide the conceptual signage package for this project.*

CHAPTER 94, Development Standards

8. **Section 94-4(f)(6)** requires a minimum of three building design treatments. The applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. The submitted elevations do not appear to include any of the listed building design treatments. *Please refer to the options in this section and list or show the proposed design elements on the architectural plans.*

9. **Section 94-4(f)(7)b.** states that blank wall areas shall not exceed ten feet in the vertical direction, nor 20 feet in the horizontal direction of any primary facade. The applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. *Please provide dimensions for the blank wall area and reduce the area to comply if needed.*

10. **Section 94-4(f)(9)** requires variation in rooflines. **Subsection (9)b** states that at a minimum of two locations, the roof edge and/or parapet shall have a vertical change from the dominant roof condition, a minimum of two feet. At least one such change shall be located on a primary facade adjacent to a collector or arterial right-of-way. In response, the applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the

first resubmittal, not with the draft DA. Additionally, the roofline appears to lack a height variation. *Please review the roof requirements and revise elevation plans to show height variation.*

11. **Section 94-4(f)(9)c** states that parapets shall be used to conceal roof top equipment and flat roofs. The applicant has provided a line-of-sight diagram showing a 2-ft parapet. However, the Architectural Package previously submitted has not been updated to include this diagram. *Please revise the schematic elevations to incorporate the proposed parapet around the roofline and the provided diagram.*

CHAPTER 110, Landscaping and Tree Protection

12. The applicant states that the landscape buffers were approved on the existing PUD. However, the applicant is in the process of amending the existing PUD to add more intense uses, which have historically necessitated larger buffers based on the City's code. *Please review Inspire's comments on the associated DA amendment regarding landscape buffer widths and revise as needed.*

13. **Section 110-7(a)** states that irrigation shall meet or exceed the criteria for the Florida Water Star certification program. The irrigation plan does not include Florida Water Star certification or applicable irrigation zones Sheet IR100 Note #5 states, "All zones to be low volume drip and bubbler zones". *Please provide a statement on the irrigation plan to state that it will comply with the Florida Water Star certification program and please include applicable irrigation zones on this plan.*

CHAPTER 122, Site Development

14. **Section 122-35** lists the required amount of off-street parking per use. Sheet C3 states that parking is provided at a rate of 1 space per 1,000 SF. It is unclear as to which use in the tables listed in this section was used to reach this rate. *Please define the uses being proposed and provide minimum parking spaces required.*

15. **Section 122-39(c)(2)a.** states that a standard parking space is 10' by 20' and Section 122-39(c)(2) states that reduced width and length may be acceptable if increased landscape and grass areas are included. Spaces have been revised to a size of 10' by 18', not 10' by 20' which are required. The applicant has provided 7' sidewalks instead of increased landscape area. *Inspire recommends providing the required 20' depth, as the current code only allows for reductions based on landscape areas, not pedestrian areas.*

Development Agreement

16. **Section 5** states the approved architectural design and colors. This section states that colors shall be earth tones and natural colors. The proposed color scheme is gray. The applicant states that architectural features are part of the building permit submittal and building

elevations are included in the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. *Please note that the proposed DA will need to be approved to support the proposed building colors.*

17. The land use plan exhibit states that mediterranean / Florida vernacular architecture shall be used. *Please note that the proposed DA will need to be approved to support the proposed building colors.*

Public Works

1. Comments pending.

Engineering

1. **Informational Comment, No Response Required.** The applicant is cautioned that the issuance of City approval does not relieve them of their responsibility from obtaining all other required regulatory approvals and permits. Other permits may include but are not limited to the following:

   FDEP NPDES Construction
   St. Johns River Water Management District (SJRWMD) ERP
   USFW Permit
   FDEP Water
   FDEP Sewer
   FDOT Driveway Connection
   FDOT Right of Way Utilization

2. **Comment Resolved.** The Geotech report provided does not appear to provide recovery analysis parameters such as horizontal conductivity (Kh) and vertical infiltration rate (Iv), safety factors, etc. It is unclear where the design values originate in the stormwater report.

   Applicant provided a revised Geotech report which includes the requested recovery analysis parameters.

3. **Deferred to Planning.** Overall zoning and land use requirements, allotted uses, recreational areas, setbacks, open space, densities, pedestrian access and trail requirements, roadway connection requirements, right-of-way dedication requirements, development agreement criteria, and all other overall approval criteria are deferred to Planning and City Attorney as applicable.

4. Parking spaces must be at minimum 10ft wide and 20ft long as described in LDC 122-35, except where two feet of grassed overhang is provided, in which case the length may be reduced to 18ft.

   Applicant has widened parking spaces to 10ft. They responded that "Their lengths are 18' since the adjacent monolithic sidewalks are 7' to account for 2' of overhang." Per LDC 122-39 (c)(2)b,

reduced length is only acceptable if two feet of grassy overhang is provided. The applicant responds that additional landscaping above code minimum has been provided adjacent to the proposed building. It is unclear if variance is requested for the parking space dimensions.

5. Public to private demarcation on the utility plan is recommended. The 12 inch potable water main adjacent to US 27 is understood to be public. The internal water main, fire line, lift station, and 2-inch force main is understood to be privately owned, operated, and maintained.

    a. **Comment Resolved.** *Applicant has added a callout on Detail A, Utility Plan Sheet C4.1, depicting the beginning of privately owned potable and fire lines. Ownership of the 2-inch force main is not identified.*

    Applicant has also added a callout detailing private ownership of force main, and increased the force main size from 2" to 3" on sheet C4.1.

    b. **Comment Resolved.** *It is unclear if the lift station is to be public or private. Additional comment may be generated upon clarification.*

    Applicant has added a callout and note detailing private ownership of lift station on sheet C4.1.

6. **Comment Resolved.** Note #3 on sheet C4.1 references the Gibson Place Utilities Department.
7. **Comment Resolved.** Material of proposed pipes (water, sewer, fire) not shown on utility plan.

    The applicant has identified the 3-inch force main as HDPE on sheet C4.1. The 3-inch force main is identified as privately owned.

8. **Comment Resolved.** Utility calculations (water, sewer) were not provided.

    Applicant has added utility calculations to sheet C4.1. Lift station calculations were provided. However, the standby diesel pump curves were not included. In addition, a standby diesel pump is provided on the City standard detail on C10.0, however, it is not shown in the site specific plan view on C10.0. Clarification on if the lift station is to be public or privately owned, operated, and maintained is required.

    Applicant has responded that because the lift station is privately owned, operated, and maintained, a standby diesel generator is not required.

9. **Defer to Fire Chief.** Fire flow calculations were not provided.

    Applicant has included fire flow calculations, added a hydrant, and moved two hydrants away from loading zones. Defer fire flow approval and fire hydrant spacing to Fire Chief.

10. **Comment Resolved.** Tie in locations for water and sewer should be called out on the utility plan.

    Applicant has added utility tie in callouts to sheet C4.1.

11. Additional north-south and east-west cross sections should be provided to verify site grading, proposed slopes, cut/fill, and other design elements.

    Applicant has added additional north-south and east-west cross sections as requested, however, 3:1 grading is shown. Grading shall not exceed 4:1 per LDC 122-85 (d)(5). ***It is unclear if the project PUD allows for 3:1 grading. Clarification required.***

12. **Comment Resolved.** Child prevention grates required on mitered end sections.

    Applicant has added child prevention grate call out and detail to sheets C6.0 and C8.0.

13. **Comment Resolved.** The 12-inch public potable pipe should be ductile iron under roadway crossings.

    Applicant has responded "Call outs added to Utility Plan; see sheet C4.1.", but Ductile Iron Pipe does not appear to be called out under paved areas.

    Applicant has called out DIP water main underneath the north entrance, and directionally drilled HDPE underneath the south entrance. A directional drill profile has been added on sheet C4.2.

14. **Comment Resolved.** Finished floor elevations of buildings not provided on grading plan.

    Finished floor elevations have been added to sheet C5.0.

15. Gopher tortoise observed on site. Mitigation required before construction on site begins.

    Applicant responded that "mitigation will be coordinated prior to construction." Defer to Planning and Certification of Occupancy (C.O.) process.

16. **Defer to Planning.** 8 parking spaces maximum without island, per LDC 110-3.

    Applicant responded "Please see note 1 on existing PD. It states the maximum number of spaces between islands is 20." Defer to Planning.

17. **Comment Resolved.** Missing a 12x8" reducer on the Potable water line in Detail A of sheet C4.1

    Applicant has added the 12x8" reducer on sheet C4.1.

18. **Defer to Public Works.** The applicant has provided a 15-foot utility easement along US 27. The city typically requests a 20-foot utility easement along US 27. Discussion recommended.

    Applicant has responded "The easement width was discussed with public works and engineering. Due to the property constraints and by purchasing the FDOT pond, which currently cannot be granted an easement, we agreed 15' is sufficient."

19. **Deferred to Traffic Consultant**. Defer traffic study review to Traffic Consultant.

20. New Comment. The applicant proposes a directional drill of the potable water line under the project driveway. Per previous DRC meeting, this was per FDOT requirements. FDOT rationale for the HDD is unclear. The HDD depth is 18'+ deep. The proposed utility easement is 15' wide. It is unclear how the City would access the line in the future if required. Discussion warranted.

Fire

1. Approved.

Lake County

1. Comments pending.

City of Minneola
Planning Department
800 N Highway 27, Minneola, FL 34715
(352) 394 – 3598

Concurrency Management Application

This checklist is based on the relevant provisions of Chapter 90-5 of the Minneola Code of Ordinances. The Code is available online at www.municode.com. The requirements described below are minimums that may be adjusted in the pre-application conference.

State law requires the City to determine that the available capacity of the necessary public facilities, such as: roads, potable water, sanitary sewer, parks & recreations, stormwater management and solid waste, are available to serve the proposed project at the time its off-site impacts actually occur. This determination is done by comparing the impacts of the proposed project with the Level-of-Science (LOS) standards established in the City's Comprehensive Plan and the currently available capacities in these systems.

There are three types of concurrency certificates (letters): Conceptual, Preliminary, and Final. They are described as follows:

Conceptual	Optional at the zoning stage Valid only for letter date	Valuable as an early assessment of available public facility capacities which will be available at the time of the project's final development order application.
Preliminary	Optional at the site plan or preliminary S/D plat stage Valid only for letter date	Valuable as an early assessment of available public facility capacities which will be available at the time of the projects final development order application
Final	**Prior to issuing a Final Development Order** Valid for a specified time	If public facilities capacities are found to be available at adopted levels of service at the time of final development approval, a certificate of concurrency will be issued and vice-versa.

Applicant Name: Drew Thigpen/Greenberg Gibbons Properties

Applicant Address: 436 E. 36th St, Charlotte, NC 28205

Applicant Phone: 843-469-2517 Fax or E-mail Address: dthigpen@ggcommercial.com

Project Name: Minneola Commerce Center

General Location: US Highway 27

Alternate Key Number(s): Altkey: 1031265 and 1031281

Parcel number: 062226000300004700 and 062226000300006300

City of Minneola
Concurrency Management Application Cont.

Minimum Submission Requirements

One copy each of the completed and signed Checklist and Application forms

A non-refundable application fee of $350.00

One copy of the legal description. This can be shown on either the Boundary Survey (11x17) or the Warranty Deed

Concurrency Reviews, Development Orders, & Capacity Reservations

1. All concurrency determinations are made at staff level, no other review is required.
2. A concurrency determination must be provided to the application with 30 days after receipt of a complete application package.
3. The pre-application meeting will identify whether a traffic study will be required pursuant to Chapter 134-3 of the City's Code.
4. Conceptual and/or Preliminary Concurrency determinations are advisory only and are valid only for the date of the Concurrency Certificate. A Final Concurrency determination is applicable for the duration identified in the Final Concurrency letter.
5. The Final Concurrency Certificate shall include:
    a. The estimated impact on each of the public facilities identified in the application.
    b. The ability of each of the public facilities to accommodate the proposed project at the established LOS standards.
    c. An identification of public facility deficiencies that must be corrected prior to completion of the project.
    d. An identification of any improvements or additions that are needed for a public facility in order to meet the applicable LOS standards and the entities responsible for the improvements or additions.
    e. The date on which the improvements must be completed to maintain, or exceed, the established applicable LOS standards.
6. The concurrency determination may require one or more mitigation measures to be completed, particularly for roads and/or schools, through a variety enforceable agreements.
7. Should the City Council determine that the City and/or the developer not reach an agreement on how to ensure the necessary public facilities will be available to correct the identified deficiencies, the project shall be denied. [Sec. 90-5(h)]
8. A concurrency statement is not a capacity reservation.
9. A capacity reservation is valid only for the specific land used, densities, intensities, and construction schedules contained in the development order or development agreement.

City of Minneola
Concurrency Management Application Cont.

10. Payment of the water and sewer connection fees are optional, but may be required to reserve capacity in these systems and should be done as soon as possible in the review process.
11. No clearance or construction activity may be initiated until a Development Order (DO) is issued. The City may issue a DO only after approval of the conceptual or preliminary development plans according to the relevant permit process required in this Code. [Sec. 98-1(a)]
12. A development order allows land clearing, site preparation, utility construction, road construction, building construction, or rezoning of the subject parcel to PUD only. [Sec. 98-1(a)]
13. No Final Development Order shall be issued until a Concurrency Certificate is issued by the City [Sec. 90-5(b)(1)]
14. The applicant is responsible to require a Final Development Order from the City.
15. Both the City and the County collect various impact fees. For City fees, contact the Planning & Zoning Department at the address below. For County fees, contact Lake County Public Works at (352) 483-9000.

Certification:

I, the undersigned, do hereby certify that I have read this checklist and understand the requirements described herein. I further understand that only application packages that have been determined complete by the Planning Department, prior to the City Council agenda deadline, will be scheduled for processing.

Owner/Authorized Signature

7/18/25

Date

Danielle L. McDougall
Notary Public
State of Florida
Comm# HH592298
Expires 10/4/2028

10/4/2028

Danielle L. McDougall
X Personally Known

Transmit To:

City of Minneola
Planning & Zoning Department
800 N Highway 27
Minneola, FL 34715
(352) 394-3598

Please note: Fax or e-mail submissions are not accepted.

City of Minneola
Planning Department
800 N Highway 27, Minneola, FL 34715

Concurrency Determination Application

Applicant Name: Drew Thigpen/Greenberg Gibbons Properties

Applicant Address: [redacted]

Applicant Ph. Number: 843-469-2517 E-mail Address: [redacted]

Owner Name: Grassy Lake Holdings LLC

Owner Address: [redacted]

Owner Ph. Number: 407-456-1497 E-mail Address: [redacted]

Subject Parcel General Location and/or Street Address: US Highway 27

Alternate Key Number(s): Altkey: 1031265 and 1031281

Parcel number: 0622260003000047000 and 0622260003000063000

Non-Residential:

Land Use Designation: PUD-C Current Zoning: B-1 with PD Proposed Zoning: B-1 with PD

Specific Proposed Use: Light Industrial Number of Structures: 2

List Square Footage of Each Structure: 75,600 and 38,500

Total Square Footage: 114,100SF

Residential Units:

Single Family Detached: _____ Single Family Attached: _____

Multi-Family (three or more dwelling units): _____

Type of Concurrency Review Requested:

X Conceptual, valid only for date of letter (optional)

_____ Preliminary, valid only for date of letter (optional)

_____ Final, required prior to issuing of Final Development Order [Sec. 90-5(1)(c)]

School Capacity. Please contact the Lake County School Board in regards to School Concurrency at (352) 394-6694.

City of Minneola
Concurrency Determination Application Cont.

CERTIFICATION

I, the undersigned, do hereby certify that I have read the application and the relevant guidance material and understand the requirements described therein and that I will fully comply with all City, State, and Federal regulations applicable to this project.

I understand that the application fee is non-refundable.

I further understand that I am responsible to reimburse the City for the actual advertising costs and the actual consultants' review fee, if any. Said fees shall be paid within 30 days of receipt of the City's invoice or further processing of the application will cease until the invoice is paid in full.

I understand that only application packages that are determined complete by the Planning Department will be scheduled for review.

_____
Applicant Signature

_____
Date

Office Use Only:

Project Name: _____

Application Fee: $350.00

Received By: _____ Receipt #: _____

Transmit To:

City of Minneola
Planning & Zoning Department
800 N Highway 27
Minneola, FL 34715
(352) 394-3598 x171 or x172

LEGAL DESCRIPTION:

PARCEL 1:

THAT PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA LYING EAST OF THE EASTERLY LINE OF THE RIGHT-OF-WAY OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), LESS AND EXCEPT THE NORTH 570 FEET THEREOF AND THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA.

THE ABOVE PROPERTY IS ALSO DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF THE NW 1/2 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, THENCE N.00 DEGREES 09'20" E. ALONG THE EAST BOUNDARY OF THE SAID NW 1/4 OF THE SW 1/4, A DISTANCE OF 751.72 FEET TO THE SOUTH BOUNDARY OF THE NORTH 570 FEET OF THE SAID NW 1/4 OF THE SW 1/4, THENCE N. 89 DEGREES 50'01" W. ALONG THE SAID SOUTH BOUNDARY, 704.47 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25 (U.S. HIGHWAY NO. 27), THENCE S. 14 DEGREES 00'27" E. ALONG SAID EASTERLY RIGHT-OF-WAY LINE 307.47 FEET TO THE NORTHWESTERLY CORNER OF THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THENCE N. 75 DEGREES 59'33" E. 152 FEET TO THE NORTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 14 DEGREES 00'27" E. 320 FEET TO THE SOUTHEASTERLY CORNER OF SAID RETENTION AREA, THENCE S. 75 DEGREES 59'33" W. 152.00 FEET TO THE AFORESAID EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 25, THENCE S. 14 DEGREES 00'27" E. ALONG THE SAID RIGHT-OF-WAY LINE 146.26 FEET TO THE SOUTH BOUNDARY OF THE AFORESAID NW 1/4 OF THE SW 1/4 OF SECTION 6, THENCE S. 89 DEGREES 39'42" E. ALONG THE SAID SOUTH BOUNDARY, 515.16 FEET TO THE POINT OF BEGINNING.

THE DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA WHICH IS NOT INCLUDED HEREIN IS DESCRIBED AS FOLLOWS:

THAT PART OF: THE SOUTH 12.7 ACRES LYING E OF THE COUNTY ROAD, IN THE NW 1/4 OF THE SW 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST", LYING IN LAKE COUNTY, FLORIDA LYING WITHIN 220 FEET E OF THE SURVEY LINE OF STATE ROAD 25, SECTION 11200; S OF STATION 64+90.00 AND N. OF STATION 61+70.00 SAID SURVEY LINE AND SAID STATIONS BEING DESCRIBED AND LOCATED AS FOLLOWS: BEGIN ON THE N LINE OF THE NW 1/4 OF THE SW 1/4 OF SECTION 6, T22S, R26E, AT A POINT 405.38 FEET E OF THE NW CORNER OF SAID NW 1/4 OF THE SW 1/4 THENCE RUN S 13 DEGREES 58'00" E, A DISTANCE OF 912.54 FEET TO STATION 64+90.00; THENCE CONTINUE S 13 DEGREES 58'00" E, A DISTANCE OF 320 FEET TO STATION 61+70.00; THENCE CONTINUE S 13 DEGREES 58'00"E, A DISTANCE OF 100 FEET.

CONTAINING 48,640 SQ. FT. (1.199 ACRES), MORE OR LESS, EXCLUSIVE OF ROAD RIGHT OF WAY.

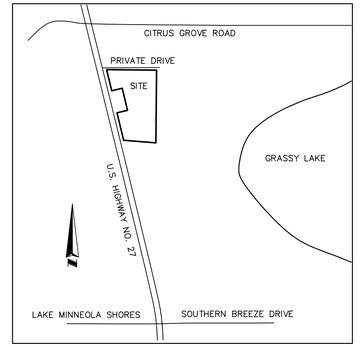
PARCEL 2:

BEGINNING 1044.05 FEET N OF SE CORNER OF SW 1/4 OF SW 1/4, SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, RUN N 85 DEGREES 58' W TO RIGHT-OF-WAY OF HIGHWAY; THENCE NWLY ALONG SAID RIGHT-OF-WAY TO N LINE OF SAID SW 1/4 OF SW 1/4, THENCE E TO NE CORNER OF SAID SW 1/4 OF SW 1/4, THENCE S TO POINT OF BEGINNING.

SURVEYOR'S NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON THE STATE PLANE COORDINATE SYSTEM EAST ZONE NORTH AMERICAN DATUM (NAD) OF 1983 WITH 2011 ADJUSTMENT AND DERIVING A BEARING BASED ON THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST AS BEING S89°12'21"E.
2. THERE MAY BE EASEMENTS AND RESTRICTIONS OF RECORD AND/OR PRIVATE AGREEMENTS NOT FURNISHED TO THIS SURVEYOR OR SHOWN ON THIS BOUNDARY SURVEY THAT MAY AFFECT PROPERTY RIGHTS AND/OR LAND USE RIGHTS OF THE SUBJECT PROPERTY.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A COMMITMENT FOR TITLE INSURANCE.
4. THERE MAY BE ENVIRONMENTAL ISSUES AND/OR OTHER MATTERS REGULATED BY VARIOUS DEPARTMENTS OF FEDERAL, STATE OR LOCAL GOVERNMENTS AFFECTING THE SUBJECT PROPERTY NOT SHOWN ON THIS SURVEY
5. THIS SURVEY WAS PERFORMED FOR THE SOLE AND EXCLUSIVE BENEFIT OF THE ENTITIES LISTED HEREON AND SHALL NOT BE RELIED UPON BY ANY OTHER ENTITY OR INDIVIDUAL WHOMSOEVER.
6. ADJOINING PARCEL OWNER AND RECORDING INFORMATION DELINEATED HEREON WAS OBTAINED FROM THE LAKE COUNTY PROPERTY APPRAISER'S PUBLIC WEBSITE.
7. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER OR AN ELECTRONIC SIGNATURE THAT IS IN COMPLIANCE WITH FLORIDA ADMINISTRATIVE CODE 5J-17.062.
8. UNLESS OTHERWISE NOTED OR SHOWN HEREON, THERE ARE NO APPARENT AND/OR UNOBSTRUCTED, ABOVE GROUND ENCROACHMENTS. THE DISPOSITION OF ANY POTENTIAL ENCROACHING IMPROVEMENTS SHOWN IS BEYOND THE PROFESSIONAL PURVIEW OF THE SURVEYOR AND SUBJECT TO LEGAL INTERPRETATION.
9. SUBJECT PROPERTY SHOWN HEREON IS IN ZONE X, AREA OF MINIMAL FLOOD HAZARD, ACCORDING TO FLOOD INSURANCE RATE MAP PANEL NUMBER 12069C0560E, MAP REVISED 12/18/2021. THE ABOVE STATEMENT IS FOR INFORMATION ONLY AND THIS SURVEYOR ASSUMES NO LIABILITY FOR THE CORRECTNESS OF THE CITED MAP(S). IN ADDITION, THE ABOVE STATEMENT DOES NOT REPRESENT THIS SURVEYOR'S OPINION OF THE PROBABILITY OF FLOODING.
10. ELEVATIONS SHOWN HEREON ARE BASED ON 4"x4" CONCRETE MONUMENT WITH LAKE COUNTY GEODETIC CONTROL CAP, BENCHMARK NUMBER LK 155, ELEVATION BEING 224.784', NORTH AMERICAN VERTICAL DATUM 1988 (NAVD).
11. THE ACCURACY OF THE SURVEY MEASUREMENTS USED FOR THIS SURVEY MEETS OR EXCEEDS THE EXPECTED USE OF THE PROPERTY DESCRIBED HEREON. (COMMERCIAL/HIGH RISK) 1 FOOT IN 10,000 FEET.
12. THE GRAPHICAL REPRESENTATION OF THE UTILITY LINES SHOWN HEREON ARE FOR VISUAL REFERENCE ONLY AND DO NOT REPRESENT ACTUAL PIPE, CONDUIT, OR CABLE DIAMETER DIMENSIONS
13. THIS DRAWING WAS PREPARED IN CONFORMANCE WITH ASCE/UESI/CI 38-22, STANDARD GUIDELINE FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES & ASCE/UESI/CI 75-22, STANDARD GUIDELINE FOR RECORDING AND EXCHANGING UTILITY INFRASTRUCTURE DATA.

VICINITY MAP: NOT TO SCALE



LEGEND OF SYMBOLS AND ABBREVIATIONS:

POC	POINT OF COMMENCEMENT		BENCHMARK LOCATION
POB	POINT OF BEGINNING		FOUND CONCRETE MONUMENT AS NOTED
CMP	CORRUGATED METAL PIPE		FOUND IRON ROD OR PIPE AS NOTED
ID	IDENTIFICATION		FOUND AXLE AS NOTED
(D)	DEED		SET 1/2" IRON ROD OR NAIL & DISK LB#8627
EOP	EDGE OF PAVEMENT		MAILBOX
EL	ELEVATION		SINGLE STAND SIGN
CCR#	CERTIFIED CORNER RECORD NUMBER		BACKFLOW PREVENTER
INV	INVERT		FIRE HYDRANT
MES	MITERED END SECTION		NATURAL GAS MARKER
CLF	CHAIN LINK FENCE		NATURAL GAS VALVE
FND.	FOUND		IRRIGATION VALVE
RCP	REINFORCED CONCRETE PIPE		GATE
PG(S)	PAGE(S)		GUY WIRE
OR	OFFICIAL RECORDS BOOK		TELECOMMUNICATION RISER
LB	LICENSED BUSINESS		FIBER OPTIC VAULT
LS	LICENSED SURVEYOR		FIBER OPTIC MARKER
PSM	PROFESSIONAL SURVEYOR AND MAPPER		WOODEN POWER POLE
RLS	REGISTERED LICENSED SURVEYOR		METAL LIGHT POLE
R/W	RIGHT OF WAY		STORM DRAINAGE MANHOLE
SD SD	STORM LINE		AIR RELEASE VALVE
OHW	OVERHEAD WIRE		ELECTRICAL RISER
— —	CENTERLINE		WATER METER
X	FENCE LINE	26	CONTOUR
		+24.1	SPOT ELEVATION
		O/A	OVERALL
		(M)	MEASURED

GROUND PENETRATING RADAR (GPR):

1. (GPR) INVESTIGATIONS ARE HIGHLY SITE SPECIFIC AND CAN BE LIMITED BY ATTENUATION OF (GPR) SIGNALS BY SUBSURFACE MATERIALS.
2. (GPR) INVESTIGATIONS ARE LIMITED BY UNEVEN TERRAIN CONDITIONS: HIGH GRASS (OVER 3"), BUSHES, FENCES, TREES, DEBRIS, ETC.
3. ALL VERTICALLY STACKED UTILITIES/OBJECTS MAY NOT BE DETECTED, SINCE GPR SIGNALS ARE REFLECTED BY THE TOP MOST UTILITY/OBJECT.
4. SOME UTILITIES/OBJECTS MAY NOT RETURN A REFLECTED SIGNAL TO THE GPR RECEIVER.
5. (GPR) SCANS CANNOT BE MADE IMMEDIATELY NEXT TO BUILDING/OBJECTS DUE TO EQUIPMENT RESTRICTIONS.
6. PIPE WITH LITTLE OR NO LIQUID CONTENT AT THE TIME OF LOCATE WORK MAY NOT BE DETECTED BY GPR.
7. LOCATIONS OF EXISTING UTILITIES DESIGNATED BY (GPR) ARE TO BE DEEMED APPROXIMATE IN NATURE AND IN NO WAY ARE TO BE CONSTRUED AS EXACT. ALLEN UNDERGROUND, INC. (AUI) WILL NOT BE HELD RESPONSIBLE FOR DAMAGE TO EXISTING UTILITIES LOCATED BY GPR EQUIPMENT.

RADIO FREQUENCY \ ELECTROMAGNETIC LOCATING (RF)/(EM):

1. THE NUMBER OF ACCESS POINTS WITHIN DESIGNATED LOCATE AREA(S) MAY BE LIMITED OR NON-EXISTENT.
2. UTILITY OR PROPERTY OWNER MAY RESTRICT OR DENY THE USE OF UTILITY ACCESS POINTS.
3. FIBER & OTHER NON-METALLIC LINES WITH NO OR NON-WORKING TRACER WIRE ARE UNTONEABLE WITH ELECTROMAGNETIC LOCATE EQUIPMENT (EM).
4. LOCATIONS OF EXISTING UTILITIES DESIGNATED BY ELECTROMAGNETIC EQUIPMENT (EM) ARE TO BE DEEMED APPROXIMATE IN NATURE AND IN NO WAY ARE TO BE CONSTRUED AS EXACT. ALLEN UNDERGROUND, INC. (AUI) WILL NOT BE HELD RESPONSIBLE FOR DAMAGE TO EXISTING UTILITIES LOCATED BY RF/EM EQUIPMENT.

LEGEND:

— BTV(QL-B)— QUALITY B BURIED CABLE TV
— BE(QL-B)— QUALITY B BURIED ELECTRICAL
— BT(QL-B)— QUALITY B BURIED TELECOMMUNICATION
— FM(QL-B)— QUALITY B BURIED FORCE MAIN
— BFO(QL-B)— QUALITY B BURIED FIBER OPTIC CABLE
— BG(QL-B)— QUALITY B BURIED GAS LINE
— BW(QL-B)— QUALITY B BURIED WATER LINE

ALLEN & COMPANY
Founded in 1988
SURVEYING • MAPPING
GEOSPATIAL SERVICES
www.allen-company.com
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355 LB#8627

BOUNDARY SURVEY OF HIGHWAY 27 PARCELS

SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST
LAKE COUNTY, FLORIDA

FOR: GREENBERG GIBBONS PROPERTIES

BRICE HELLSTROM, P.S.M. #7296
FOR THE LICENSED BUSINESS #6723 BY:

BRICE HELLSTROM LS7296 STATE OF FLORIDA

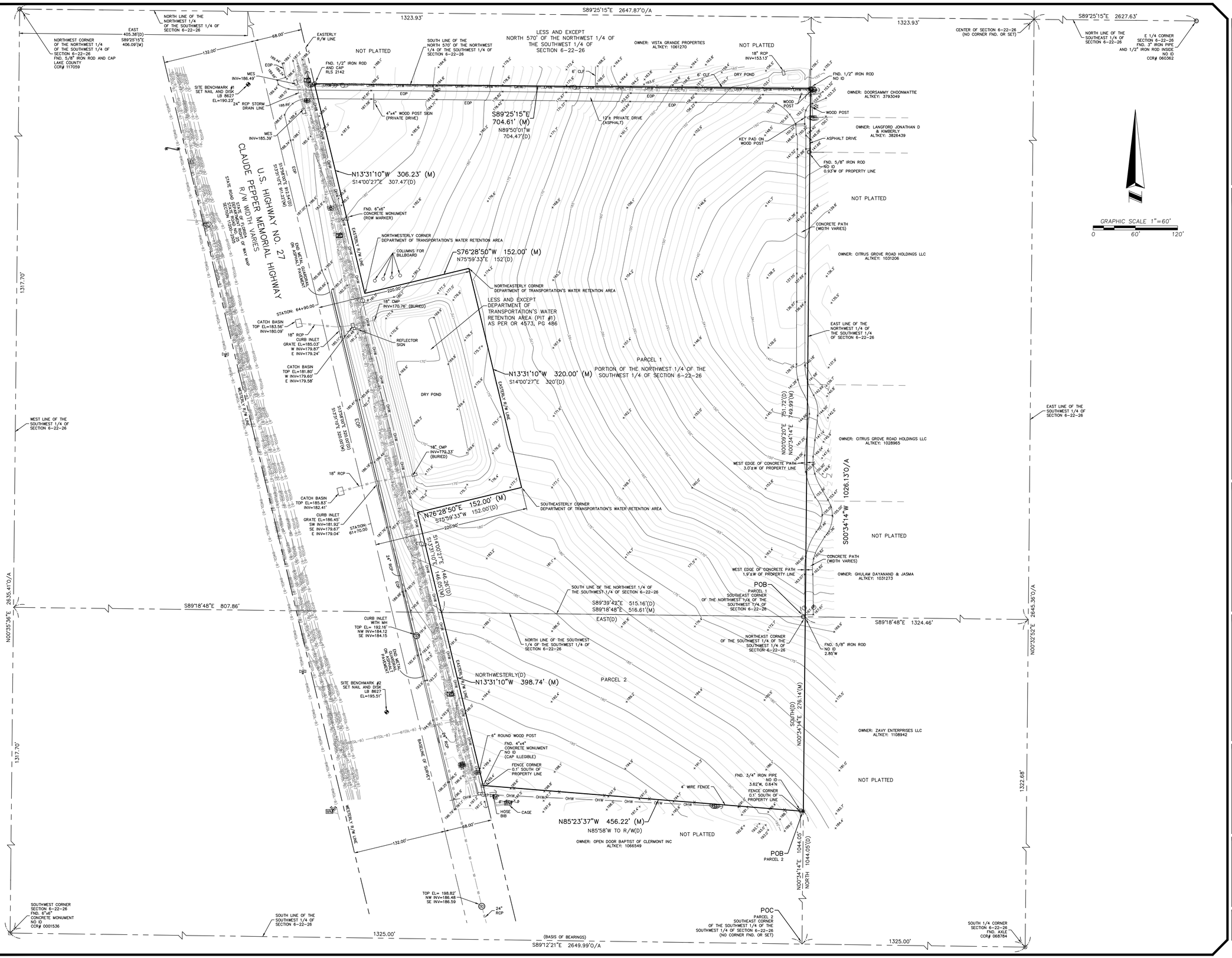
Digitally signed by: Brice Hellstrom
DN: CN = Brice Hellstrom email = brice@allen-company.com C = US O = Allen and Company
Date: 2026.02.04 15:49:21 -05'00'

DATE	REVISIONS

JOB #:	20250038
DATE:	3/14/25
SCALE:	N/A
CALC BY:	BH
FIELD BY:	JS
DRAWN BY:	TQ
CHECKED BY:	BH

SHEET 1 OF 2

Drawing name: L:\Data\20250038\SHEETS\20250038 BDY-TOPO Sheet=1



ALLEN & COMPANY
Founded in 1988
SURVEYING • MAPPING
GEOSPATIAL SERVICES
www.allen-company.com
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355 LB#8627

BOUNDARY SURVEY OF HIGHWAY 27 PARCELS

SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST
LAKE COUNTY, FLORIDA

FOR: GREENBERG GIBBONS PROPERTIES

DATE REVISIONS

JOB #:	20250038
DATE:	3/14/25
SCALE:	1" = 60'
CALC BY:	BH
FIELD BY:	JS
DRAWN BY:	TQ
CHECKED BY:	BH

SHEET 2 OF 2

Drawing name: L:\Work\20250038\Dwg\20250038 BH~SHD Sheet-2

CULTURAL RESOURCE ASSESSMENT SURVEY OF THE MINNEOLA HWY 27 PROPERTY, LAKE COUNTY, FLORIDA

Performed for:

Greenberg Gibbons Properties
706 Giddings Avenue
Annapolis, Maryland 21401

Prepared by:

Florida's First Choice in Cultural Resource Management

Archaeological Consultants, Inc.
[redacted]

March 2025

CULTURAL RESOURCE ASSESSMENT SURVEY OF THE MINNEOLA HWY 27 PROPERTY, LAKE COUNTY, FLORIDA

Prepared for:

Greenberg Gibbons Properties

[redacted]

Prepared by:

Archaeological Consultants, Inc.

[redacted]

Maranda Kles – Project Manager
Elizabeth A. Horvath - Project Archaeologist
David Rodriguez - Archaeologist

March 2025

EXECUTIVE SUMMARY

Archaeological Consultants, Inc. (ACI) conducted a Cultural Resource Assessment Survey (CRAS) of the ±15.4-acre Minneola Hwy 27 property in Lake County for Greenberg Gibbons Properties. The project will involve the construction of a commercial development with parking and stormwater facilities. The Area of Potential Effects (APE) is located on the east side of US 27, south of Citrus Grove Road. The archaeological and historical field surveys, completed in March 2025, were conducted as due diligence in anticipation of permitting requirements.

The purpose of this investigation was to locate and identify any cultural resources within the APE and to assess their significance in terms of eligibility for listing in the National Register of Historic Places (NRHP). As defined in *36 Code of Federal Regulations (CFR) Part § 800.16(d),* the APE is the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." Based on the scale and nature of the activities, the project has a limited potential for any direct (physical, visual, or audible) or indirect/cumulative effects outside the immediate footprint of construction. Therefore, because of the project type and location of the proposed work, the archaeological and historical APE are limited to the boundaries of the project. All work was conducted in accordance with Section 106 of the *National Historic Preservation Act* (*NHPA*) of 1966 (*Public Law* 89-655, as amended), as implemented by *36 CFR 800* (*Protection of Historic Properties*, effective August 2004), as well as Chapters 267 and 373, *Florida Statutes (FS)*, Chapter 1A-46, *Florida Administrative Code (FAC),* and Florida's *Coastal Management Program*. All work was performed in accordance with the standards and guidelines contained in the Florida Division of Historical Resources' (FDHR) *Cultural Resource Management Standards and Operational Manual*: *Module 3* (FDHR 2003). The Principal Investigators meet the *Secretary of the Interior's Professional Qualification Standards* (*48 Federal Register 44716*) for archaeology, history, architecture, architectural history, or historic architecture.

Background research, including a review of the Florida Master Site File (FMSF) and the NRHP, indicated that no archaeological sites have been recorded within the APE; three have been recorded within one mile. There is moderate to low potential for Indigenous archaeological sites within the APE based on the environmental setting. Although the Candler soils have a positive correlation with sites, the nearest water is over 350 meters (m) to the east. There is a low probability for historic archaeological sites although evidence of the early 20th century naval stores, lumber, and citrus industries may be uncovered. The archaeological investigations, which included the excavation of 22 shovel tests, resulted in no archaeological sites being identified.

Historic background research, including a review of the FMSF and the NRHP, indicated that no historic resources were previously recorded within the APE. A review of relevant historic United States Geological Survey (USGS) quadrangle maps, U.S. Department of Agriculture (USDA) historic aerial photographs, and the Lake County property appraiser's data revealed no potential for historic resources 50 years of age or older (constructed in 1975 or earlier) within the APE (Combee 2025; USDA 1941, 1947, 1958, 1974; USGS 1969). The absence of historic resources was confirmed by field investigations.

The background research and field investigations, which included the excavation of 22 shovel tests, discovered no archaeological sites within the APE. The historical/architectural survey identified no historic resources in the APE. As such, there are no cultural resources listed, determined eligible, or that appear potentially eligible for listing in the NRHP within the APE. Therefore, it is the professional opinion of ACI that the proposed undertaking (commercial development with parking and stormwater facilities) will result in no historic properties being affected, and no further work is recommended.

TABLE OF CONTENTS

1.0 INTRODUCTION 1-1

2.0 ENVIRONMENTAL SETTING 2-1

2.1 Location and Setting 2-1

2.2 Geology and Geomorphology 2-1

2.3 Soils and Vegetation 2-1

2.4 Paleoenvironmental Considerations 2-4

3.0 CULTURE HISTORY 3-1

3.1 Paleoindian 3-2

3.2 Archaic 3-3

3.3 Formative (Woodland) 3-5

3.4 Mississippian 3-6

3.5 Colonialism 3-7

3.6 Territorial and Statehood 3-8

3.7 Civil War and Aftermath 3-11

3.8 Twentieth Century 3-12

3.9 APE Specifics 3-15

4.0 RESEARCH CONSIDERATIONS AND METHODOLOGIES 4-1

4.1 Archaeological Considerations 4-1

4.2 Historical Considerations 4-5

4.3 Field Methodology 4-5

4.4 Procedures to Manage Unexpected Discoveries 4-6

4.5 Laboratory Methods and Curation 4-7

5.0 RESULTS AND CONCLUSIONS 5-1

5.1 Archaeological 5-1

5.2 Historic/Architectural 5-3

5.3 Conclusions 5-3

6.0 REFERENCES CITED 6-1

APPENDIX

Survey Log

LIST OF FIGURES, TABLES, AND PHOTOS

Page

Figure

Figure 1.1. Location of the Minneola Hwy 27 APE, Lake County. 1-2
Figure 2.1. Environmental setting of the APE. 2-2
Figure 2.2. Soil type distribution across the APE. 2-3
Figure 3.1. Florida Archaeological Regions (after Milanich 1994: xix). 3-1
Figure 3.2. 1839 map showing the approximate location of the APE (Mackay and Blake 1839). 3-9
Figure 3.3. 1855 plat showing the APE (Tracy et al. 1855). 3-10
Figure 3.4. 1928 soil survey showing the APE (Taylor et al. 1928, south). 3-14
Figure 3.5. Clermont West quadrangle map showing the APE (USGS 1969). 3-15
Figure 3.6. 1941 and 1974 aerial photos showing the APE (USDA 1941, 1974). 3-16
Figure 4.1. Location of the previously recorded cultural resources near the APE. 4-2
Figure 5.1. Location of the shovel tests within the APE. 5-2

Table

Table 4.1. Site distribution by water source and distance. 4-1
Table 4.2. Site distribution by drainage and soil type. 4-3

Photo

Photo 2.1. Northern APE, facing north. 2-1
Photo 2.2. Central APE, facing north. 2-3
Photo 5.1. Stratigraphy of ST 105, northern APE. 5-1
Photo 5.2. Stratigraphy of ST 6, central APE. 5-1

1.0 INTRODUCTION

Archaeological Consultants, Inc. (ACI) conducted a Cultural Resource Assessment Survey (CRAS) of the ±15.4-acre Minneola Hwy 27 property in Lake County for Greenberg Gibbons Properties. The project will involve the construction of a commercial development with parking and stormwater facilities. The Area of Potential Effects (APE) is located on the east side of US 27, south of Citrus Grove Road (**Figure 1.1**). The archaeological and historical field surveys, completed in March 2025, were conducted as due diligence in anticipation of permitting requirements.

The purpose of this investigation was to locate and identify any cultural resources within the APE and to assess their significance in terms of eligibility for listing in the National Register of Historic Places (NRHP). As defined in *36 Code of Federal Regulations (CFR) Part § 800.16(d),* the APE is the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." Based on the scale and nature of the activities, the project has a limited potential for any direct (physical, visual, or audible) or indirect/cumulative effects outside the immediate footprint of construction. Therefore, because of the project type and location of the proposed work, the archaeological and historical APE are limited to the boundaries of the project. All work was conducted in accordance with Section 106 of the *National Historic Preservation Act* (*NHPA*) of 1966 (*Public Law* 89-655, as amended), as implemented by *36 CFR 800* (*Protection of Historic Properties*, effective August 2004), as well as Chapters 267 and 373, *Florida Statutes (FS)*, Chapter 1A-46, *Florida Administrative Code (FAC),* and Florida's *Coastal Management Program*. All work was performed in accordance with the standards and guidelines contained in the Florida Division of Historical Resources' (FDHR) *Cultural Resource Management Standards and Operational Manual*: *Module 3* (FDHR 2003). The Principal Investigators meet the *Secretary of the Interior's Professional Qualification Standards* (*48 Federal Register 44716*) for archaeology, history, architecture, architectural history, or historic architecture.

The field survey was preceded by background research, which served to provide an informed set of expectations concerning the kinds of cultural resources that might be anticipated within the APE, as well as a basis for evaluating any new sites discovered.

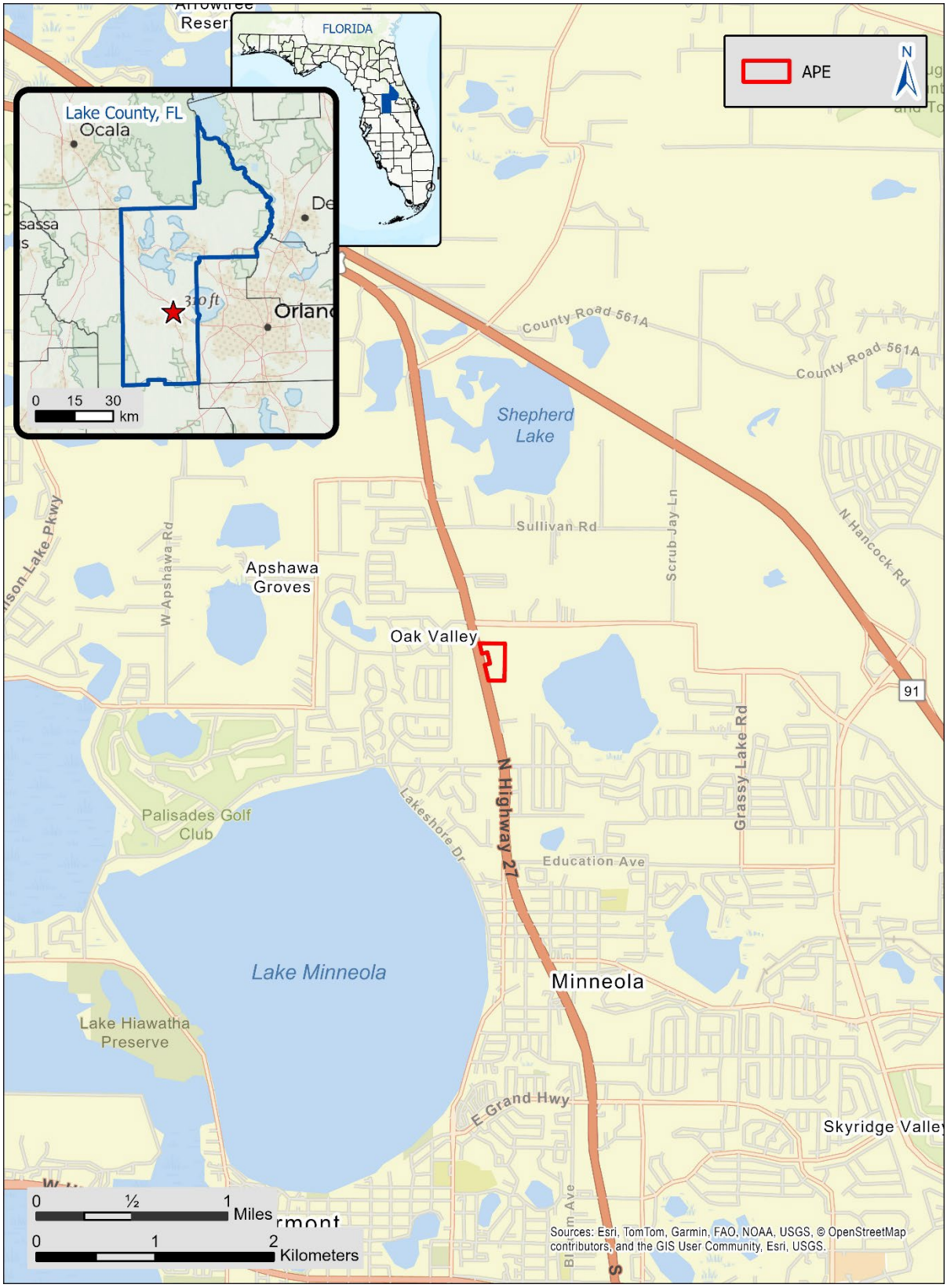


Figure 1.1. Location of the Minneola Hwy 27 APE, Lake County.

2.0 ENVIRONMENTAL SETTING

It has long been realized that archaeological sites are not randomly distributed across the landscape. Rather, many environmental factors directly influenced site location selection. Among these variables are soil drainage, distance to water, relative topography, and proximity to food and other resources. To develop an archaeological site location predictive model, an understanding of the prominent physiographic features and other environmental features must be obtained.

2.1 Location and Setting

The ±15.4-acre APE is in Section 6 of Township 22 South, Range 26 East (United States Geological Survey [USGS] Clermont West 2013). The APE is located on the east side of Radio Road, north of Sea Fern Drive (**Figure 2.1**). The APE is wooded (**Photos 2.1-2.2**); it had been in citrus until around 1995 (Google Earth 2025). Grassy Lake is over 350 meters (m) east of the APE.

Photo 2.1. Northern APE, facing north.

2.2 Geology and Geomorphology

The APE is characterized by sloping terrain with an elevation of 140-205 feet (ft) above mean sea level (amsl). It lies within the Lake Upland physiographic region (White 1970). The area is underlain by the Cypresshead formation that is surficially evidenced by clayey sand (Scott 1978, 2001; Scott et al. 2001).

2.3 Soils and Vegetation

According to the U.S. Department of Agriculture (USDA), the APE is within the Astatula-Apopka soil association, which is characterized as nearly level to strongly sloping, excessively and well drained sandy soils on broad ridges interspersed with large lakes, ponds, and wet depressions. The uplands are covered with scrub oak, saw-palmetto, and other shrubs and grasses. Water grasses occur in the depressions and shallow ponds (Furman et al. 1975).

Figure 2.1. Environmental setting of the APE.

Photo 2.2. Central APE, facing north.

The APE is underlain by the excessively drained Candler sand, 0-5% and 5-12% slopes and the excessively drained Lake sand, 0-5% slopes; their locations are depicted on **Figure 2.2** (USDA 2021).

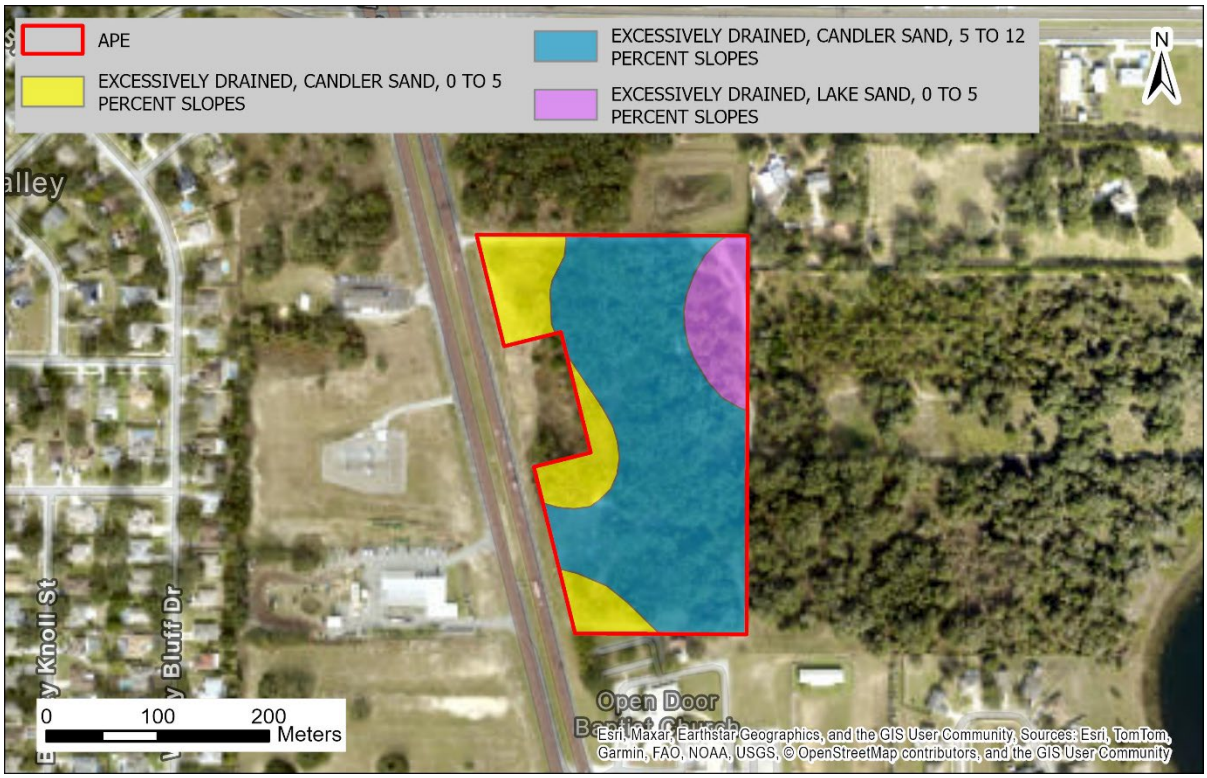


Figure 2.2. Soil type distribution across the APE.

The soils support different vegetative regimes, which in turn provide habitats for the local animal population, thus providing essential food resources. The Florida vegetation map depicted this area as longleaf pine and xerophytic oak (Davis 1980). The soils have variable suitability for openland, woodland, and wetland habitats. The habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. The wildlife attracted to these areas includes bobwhite quail, dove, sparrow hawk, meadowlark, field sparrow, cottontail, and cattle egret. Woodland wildlife habitat includes areas of deciduous plants and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include turkey, towhee, owls, woodpeckers, squirrels, gray fox, racoon, and deer. The habitat for wetland wildlife includes areas of open, marshy, or swampy, shallow water areas. Wildlife in these areas includes ducks, egrets, heron, kingfishers, alligators, and otters (USDA 1975: Table F). The soils are poorly suited to openlands and woodlands and very poor for wetlands.

2.4 Paleoenvironmental Considerations

The early environment of the region was different from that seen today. Sea levels were lower, the climate was arid, and fresh water was scarce. An understanding of human ecology during the earliest periods of human occupation in Florida cannot be based on observations of the modern environment because of changes in water availability, botanical communities, and faunal resources. Indigenous inhabitants would have developed cultural adaptations in response to the environmental changes taking place, which were then reflected in settlement patterns, site types, artifact forms, and subsistence economies.

Due to the arid conditions between 16,500 and 12,500 years ago, the perched water aquifer and potable water supplies were absent. Palynological studies conducted in Florida and Georgia suggest that between 13,000 and 5000 years ago, this area was covered with an upland vegetation community of scrub oak and prairie (Watts 1969, 1971, 1975). However, the environment was not static. Evidence recovered from the inundated Page-Ladson Site in north Florida has clearly demonstrated that there were two periods of low water tables and dry climatic conditions and two episodes of elevated water tables and wet conditions (Dunbar 2006c). The rise of sea level reduced xeric habitats over the next several millennia. The rise of sea level reduced xeric habitats over the next several millennia. Rapid sea level rise took place from roughly 10,000-6000 years ago, at which time the rate significantly decreased (Donoghue 2006).

By 5000 years ago, a climatic event marking a brief return to Pleistocene climatic conditions induced a change toward more open vegetation. Southern pine forests replaced the oak savannas. Extensive marshes and swamps developed along the coasts and subtropical hardwood forests became established along the southern tip of Florida (Delcourt and Delcourt 1981). Northern Florida saw an increase in oak species, grasses, and sedges (Carbone 1983). At Lake Annie, in south central Florida, waxmyrtle and pine dominated pollen cores. The assemblage suggests that by this time, a forest dominated by longleaf pine along with cypress swamps and bayheads existed in the area (Watts 1971, 1975). Surface water was plentiful in karst terrains and the level of the Floridan aquifer rose to five feet above present levels. With the establishment of warmer winters and cooler summers than in the preceding early Holocene, the fire-adapted pine communities prevailed. These depend on the high summer precipitation caused by the thunderstorms and the accompanying lightning strikes to spark the fires (Watts et al. 1996; Watts and Hansen 1994). The increased precipitation also resulted in the formation of the large swamp systems such as the Okefenokee and Everglades (Gleason and Stone 1994). After this time, modern floral, climatic, and environmental conditions began to be established.

3.0 CULTURE HISTORY

A discussion of the regional culture history is included to provide a framework within which to examine the local archaeological and historical record. Archaeological and historic sites are not individual entities but were once part of a dynamic cultural system. Thus, individual sites cannot be adequately examined or interpreted without reference to other sites and resources in the area. The culture history of an area (i.e., the archaeological region) outlines the sequence of archaeological and historical cultures through time. These are defined largely in geographical terms but also reflect shared environmental and cultural traits. The APE is within the East and Central archaeological region (Milanich 1994) (**Figure 3.1**). The Paleoindian, Archaic, Formative (Woodland), and Mississippian stages have been defined based on material culture traits such as stone tool forms and pottery, as well as subsistence, settlement, and burial patterns.

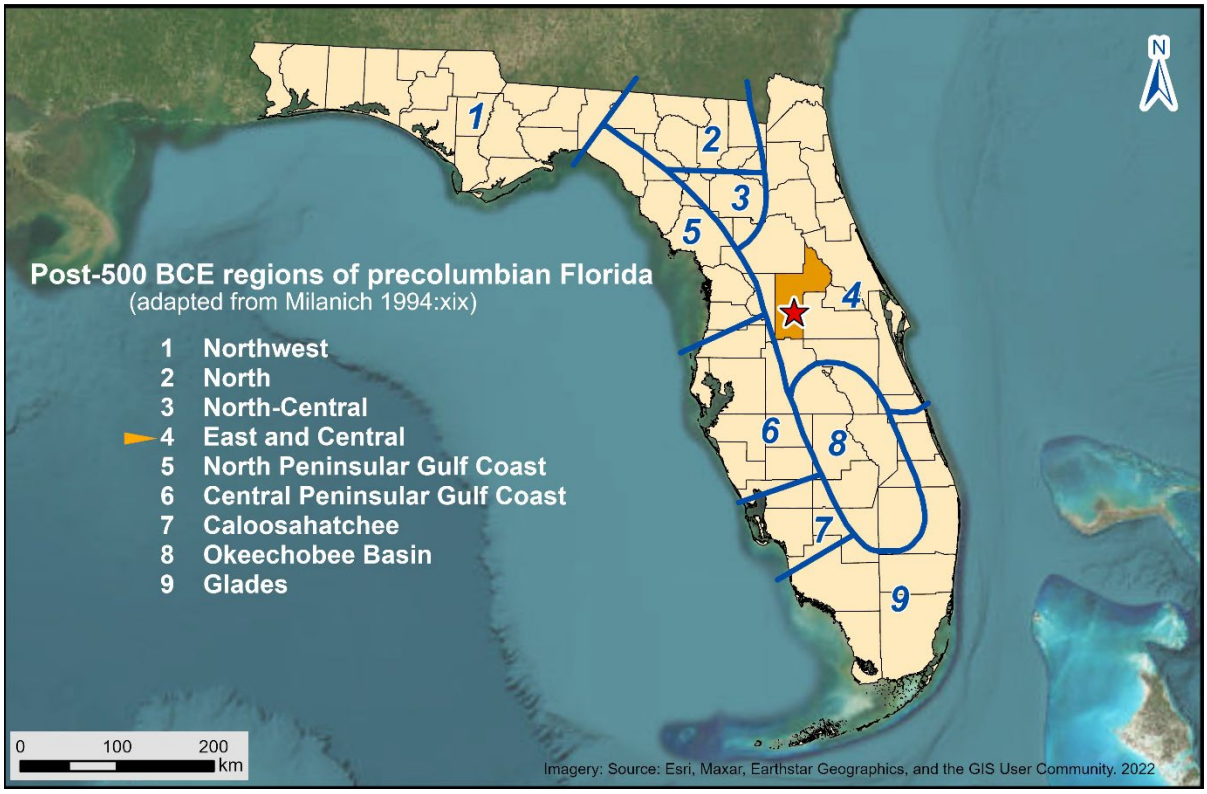


Figure 3.1. Florida Archaeological Regions (after Milanich 1994: xix).

The local history of the region is divided into four broad periods based initially upon the major governmental powers. The first period, Colonialism, occurred during the exploration and control of Florida by the Spanish and British from around 1513 until 1821. At that time, Florida became a territory of the U.S. and 21 years later became a State (Territorial and Statehood). The Civil War and Aftermath (1861-1899) period deals with the Civil War, the period of Reconstruction following the war, and the late 1800s, when the transportation systems were dramatically increased and development throughout the state expanded. The Twentieth Century period includes sub-periods defined by important historic events such as the World Wars, the Boom of the 1920s, and the Depression. Each of these periods evidenced differential development and utilization of the region, thus affecting historic site distribution.

3.1 Paleoindian

The Paleoindian stage is the earliest known cultural manifestation in Florida, dating from circa. (ca.) 14,300-9750 BCE (Anderson et al. 2019:258). Archaeological evidence for Paleoindians consists primarily of scattered finds of diagnostic lanceolate-shaped projectile points. The Florida peninsula at that time was quite different than today. The climate was cooler and drier with vegetation typified by xerophytic species with scrub oak, pine, open grassy prairies, and savannas (Milanich 1994:40). When human populations arrived in Florida, the sea levels were still as much as 130-200 ft below present levels and coastal regions of Florida extended miles beyond present-day shorelines (Faught 2004). Many sites have been inundated (Dunbar and Thulman 2019; Faught and Donoghue 1997).

The Paleoindian period has been sub-divided into three horizons based upon characteristic tool forms (Anderson et al. 2019). Traditionally, it is believed that the Clovis Horizon (ca. 11,300-10,900 BCE) represents the initial occupation of Florida and is defined based upon the presence of the fluted Clovis points. These are somewhat more common in north Florida. Research suggests that Suwannee and Simpson points may be contemporary with or predate Clovis (Dunbar 2006a, 2016; Stanford et al. 2005). Research at the Page-Ladson site, in the Aucilla River, has provided evidence of a pre-Clovis occupation as early as 14,300 BCE, with the latest dated level from 2150 to 1450 BCE (Halligan et al. 2016; Webb and Dunbar 2006). Pre-Clovis materials were also reported from the Sloth Hole site, also within the Aucilla River (Hemmings 1999). The Suwannee Horizon (ca. 10,550-10,150 BCE) is the best known of the three Paleoindian horizons. The lanceolate-shaped, unfluted Simpson and Suwannee points are diagnostic of this time (Bullen 1975; Daniel and Wisenbaker 1987; Purdy 1981). The Suwannee tool kit included scrapers, adzes, spokeshaves, unifacially retouched flakes, and blade-like flakes as well as bone and ivory foreshafts, pins, awls, daggers, anvils, and abraders (Austin 2001:23).

Following the Suwannee Horizon is the Late Paleoindian Horizon (ca. 10,150-9750 BCE). The smaller Tallahassee, Santa Fe, and Beaver Lake projectile points have traditionally been attributed to this horizon (Milanich 1994). However, many of these points have been recovered stratigraphically from Late Archaic and Early Woodland period components and thus, may not date to this period at all (Austin 2001; Farr 2006). Florida notched or pseudo-notched points, including the Union, Greenbriar, and Hardaway-like points may represent late Paleoindian types, but these types have not been recovered from datable contexts and their temporal placement remains uncertain, although Anderson and colleagues place them in the Late Paleoindian period (Anderson et al. 2019; Dunbar 2006a).

It is hypothesized that Paleoindians lived in migratory bands and subsisted by gathering and hunting, including the now-extinct Pleistocene megafauna (Marrinan and Peres 2019). In addition, they likely trapped smaller animals such as mink, muskrat, and rabbit for their fur and medium sized mammal such as deer for food as well as raw materials for bone tools (Dunbar 2016; Dunbar and Vojnovski 2007). It is likely that these nomadic hunters traveled between permanent and semi-permanent sources of water, such as artesian springs, exploiting the available resources. These watering holes would have attracted the animals, thus providing food and drink. In addition to being tied to water sources, most of the Paleoindian sites are close to excellent quality lithic resources. The settlement pattern consisted of the establishment of semi-permanent habitation areas and the movement of the resources from their sources of procurement to the residential locale by specialized task groups (Austin 2001:25).

Although the Paleoindian period is generally considered to have been cooler and drier, there were major variations in the inland water tables resulting from large-scale environmental fluctuations. There are two major theories as to why most Paleoindian materials have been recovered from inundated sites. The Oasis theory posits that due to low water tables and scarcity of potable water, the Paleoindians, and the game animals upon which they depended clustered around the few available water

holes that were associated with sinkholes (Neill 1964). Whereas others believe that the Paleoindians gathered around river-crossings to ambush the large Pleistocene animals as they crossed the rivers (Waller 1970). This implies periods of elevated water levels. Based on the research along the Aucilla and Wacissa Rivers, it appears that both theories are correct, depending upon what the local environmental conditions were at that time (Dunbar 2006b). During the wetter periods, populations became more dispersed because the water resources were abundant and the animals that they relied on could roam over a wider range.

Some of the information about this period has been derived from the underwater excavations at two inland spring sites in Sarasota County: Little Salt Spring and Warm Mineral Springs (Clausen et al. 1979). Excavation at the Harney Flats Site in Hillsborough County has provided a rich body of data concerning Paleoindian life ways. Analysis indicates that this site was used as a quarry-related base camp with special use activity areas (Daniel and Wisenbaker 1987). It has been suggested that Paleoindian settlement may not have been related as much to seasonal changes as generally postulated for the succeeding Archaic period, but instead movement was perhaps related to the scheduling of tool-kit replacement, social needs, and the availability of water, among other factors (Daniel and Wisenbaker 1987:175). Investigations along the Aucilla and Wacissa Rivers, as well as other sites within the north Florida rivers, have provided important information on the Paleoindian period and how the Indigenous people adapted to their environmental setting (Webb 2006). Studies of the Pleistocene faunal remains from these sites clearly demonstrate the importance of these animals not for food alone, but as the raw material for their bone tool industry (Dunbar and Webb 1996).

3.2 Archaic

Climatic changes occurred, resulting in the disappearance of the Pleistocene megafauna and the demise of the Paleoindian culture. The disappearance of the mammoths and mastodons resulted in a reduction of open grazing lands, and thus, the subsequent disappearance of grazers such as horse, bison, and camels. With the reduction of open habitat, the more solitary, woodland browser, white-tailed deer replaced the herd animals (Dunbar 2006a:426). The intertwined data of megafauna's extinction and cultural change suggests a rapid and significant disruption in both the fauna and flora assemblages. The Bolen people represent the first culture adapted to the Holocene environment (Carter and Dunbar 2006). Theirs included a more specialized toolkit and the introduction of chipped-stone woodworking implements.

Due to a lack of controlled excavations and the poor preservation of organic materials in the upland sites, our knowledge of the Early Archaic artifact assemblage is limited (Carter and Dunbar 2006; Milanich 1994). Discoveries at several sites indicate that bone and wood tools were used (Clausen et al. 1979; Doran 2002; Webb 2006). The archaeological record suggests a diffuse, yet well-scheduled, pattern of exploiting both coastal and interior resources. Since water sources were more numerous and larger than previously, the Early Archaic peoples sustained larger populations, occupied sites for longer periods, and performed activities requiring longer occupation at a specific locale (Milanich 1994:67).

During the Middle Archaic, wetter conditions prevailed, sea levels began to rise, and pine forests and swamps began to emerge (Watts et al. 1996). The climate was changed to one of more pronounced seasonality with warmer summers and colder winters and by 4000 BCE the climate became essentially the same as that of today (Watts et al. 1996:29). Miller (1998:68) suggests that when sea levels reached their current positions, the St. Johns River changed its riverine characteristics to become like a lake in the upper reaches and estuarine in the lower reaches. This allowed for the development of a wide resource base. Settlement became focused within coastal and riverine locales (Milanich 1994:64). The Mount Taylor period has been identified for the period 5000-2000 BCE (Milanich 1994).

Subsistence was based on hunting, fishing, shellfish collecting, and plant gathering. Sites are generally located along the Atlantic coast, the upper reaches of the St. Johns River, and the Ocklawaha and Wekiva Rivers (Ste. Claire 1990; Weisman 1993; Wheeler et al. 2000). The theory that Archaic populations practiced a seasonal migration pattern between the interior and the coast has been called into question as investigations have confirmed year-round occupation of some sites (Russo 1992, 1996b; Russo et al. 1993; Russo and Ste. Claire 1992; Ste. Claire 1990).

The archaeobotanical research at the Groves' Orange Midden and the Lake Monroe Outlet Midden confirms an environment like today (ACI/Janus Research 2001; Newsom 1994; Purdy 1994b). Most of the botanical remains were from wetland species common along the lake's margin, river swamp, and backwaters. Upland species were also utilized. Middens of mystery snail, apple snail, and mussel provide evidence of occupation and resource exploitation along the rivers of east and central Florida (Cumbaa 1976; Ellis et al. 1994; Fryman et al. 1978).

Mount Taylor sites include large base camps, smaller special-use campsites, burial areas, and extensive shell middens. The artifact inventory of the Mt. Taylor people includes stone projectile points, tools, and microliths, as well as tools and decorative items of shell, bone, and wood (ACI/Janus Research 2001; Purdy 1994a; Wheeler and McGee 1994a, 1994b). The large, stemmed projectile points, especially the Newnan type, are diagnostic of this time. Other common point types include Hillsborough, Levy, Putnam, Alachua, and Marion (Bullen 1975). Silicified coral was more prevalent as a raw material (Milanich 1994) and thermal alteration of the stone became common (Ste. Claire 1987). Numerous shell and bone items indicate contact with coast.

One of the most interesting aspects of the Mount Taylor culture is evidence for mass burial interments in specially prepared areas within shell middens (Milanich and Fairbanks 1980). Such burials were found at Tick Island along the St. Johns River (Aten 1999; Bullen 1962; Jahn and Bullen 1978). Milanich (1994:81) suggests that Early and Middle Archaic peoples used aquatic environments for burial. The Early Archaic Windover Site contained primary and flexed burials within a peat pond. These were held in place with wooden stakes and the interments included grave goods such as textiles and worked bone, shell, and wood (Doran 2002). The Gauthier cemetery, situated on a palm island within a slough between a pond and Lake Poinsett, contained primary and flexed burials (Carr and Jones 1981; Sigler-Eisenberg 1984b).

Interior sites include the smaller lithic and pottery scatter campsites that were most likely used for hunting or served as special use extractive sites for such activities as gathering nuts or other botanical materials (Ste. Claire 1989, 1990). The Tomoka Site is a complex of nine mounds and a surrounding village midden located near the confluence of the Tomoka and Halifax River. Occupants utilized estuarine and coastal resources as evidenced by the midden of coquina and oysters. No pottery has been recovered from this site complex (Douglass 1882; Piatek 1992, 1994). The burial mound at Tomoka is one of the earliest in Florida (Piatek 1994). Russo suggests that Florida's Archaic burial mounds were not the precursors to the extensive burial mound use seen in the more recent past, rather, they were short-lived, dead-end traditions (1996a:284).

Evidence from the Groves' Orange Midden indicates contact, either physically or through trade, with the Tampa Bay and possibly the Suwannee River valley areas (Purdy 1994a). The occupants of the Lake Monroe Outlet Midden obtained most of their chert from Ocala limestone (ACI/Janus Research 2001). More specifically, the materials were attributed to the Gainesville, Ocala, Lake Panasoffkee East, and Lake Panasoffkee West quarry clusters (Endonino 2007). Other evidence of trade is seen in the use of soapstone, which was imported from Georgia, South Carolina, and Virginia (Yates 2000). Soapstone transportation most likely occurred via canoe, and evidence for canoe usage is well-documented (Newsom and Purdy 1990; Purdy 1988; Wheeler et al. 2003).

By about 2000 BCE, fired clay pottery was introduced in Florida. The first pottery types, tempered with fiber (Spanish moss or palmetto), are referred to as the Orange series. It was originally believed that the pottery lacked decoration until about 1650 BCE when they were decorated with geometric designs and punctations. Recent research, however, has called the entire Orange chronology into question (Sassaman 2003). Based on a series of AMS dates on soot from Orange Incised sherds from the middle St. Johns Valley and from radiocarbon dates on oyster and charcoal in association with Orange pottery near the mouth of the river, all the various Orange pottery types occur within the time span of roughly 2150-1650 BCE. Incising is also a function of site type as well as time as it occurs more frequently at shell ring sites that were used for feasting (Saunders and Wrenn 2014). In addition, research by Cordell has documented the presence of sponge spicules in the Orange pottery paste (the diagnostic trait of St. Johns wares) which suggest that the St. Johns pottery tradition extends back to the beginning of pottery use in the region (Cordell 2004; Sassaman 2003:11). The projectile point assemblage included the addition of the Clay, Culbreath, and Lafayette types (Bullen 1975).

There is slight difference between Middle/Late Archaic and Orange populations except that there are more Orange sites, and the density of sites is higher. Orange settlements were primarily located near wetland locales. The abundance of resources located in and near the wetlands permitted larger settlements. The adaptation to this environment allowed for a wider variety of resources to be exploited and greater variability in settlement patterns. Shellfish, fish, and other food sources were now available from coastal and freshwater wetlands resulting in an increase in population size.

Bridging the end of the Archaic and the beginning of the Formative stage is the Transitional period (1200-500 BCE), which was characterized by increased regionalism, population growth, and socio-cultural complexity (Bullen 1959, 1970). The diffusion of culture traits, resulting from the movements of small groups of people, led to the spread of several pottery and tool traditions (Bullen 1959). The major changes in post-Transitional cultures cannot be attributed to environmental changes but rather the result of social, political, religious, and technological innovations introduced from elsewhere in the eastern U.S. (Miller 1998:76).

3.3 Formative (Woodland)

The period from about 500 BCE until 750 CE in this area is referred to as St. Johns I, which has been divided into three sub-periods: St. Johns I (ca. 500 BCE-100 CE), St. Johns Ia (ca. 100-500 CE), and St. Johns Ib (ca. 500-750 CE) based on characteristic pottery types (Milanich 1994:247). There are two regional variants of this tradition: St. Marys to the north and Indian River to the south. The St. Marys Region is located at the mouth of the St. Johns and extends northward into Georgia (Russo 1992). Sites in this area contain a mixture of Georgia pottery as well as St. Johns pottery. At the southern end is the Indian River Region which was first defined by Rouse (1951). There is a higher prevalence of sand-tempered wares in this region. Malabar I is coeval with St. Johns I. Malabar II is similar to St. Johns II, although has a later start date at 950/1000 BCE (Penders 2023).

Settlement patterns during this time were virtually the same as those seen in the earlier periods, i.e., along the coastal estuaries and larger rivers. The Twin Mounds Site faunal analysis suggests that there was a slight decrease in the dependence on freshwater shellfish during the St. Johns periods as opposed to the preceding Orange period (Weisman 1993). Based on that analysis, there was an increase in the use of reptilian resources. There was also a tremendous increase in the number of archaeological sites during this time. An apparent trend from St. Johns I through Ib times was a population shift into the northern part of the St. Johns River valley, possibly due to the need for more arable land (Milanich and Fairbanks 1980:158).

Village wares were almost all St. Johns Plain throughout this period. St. Johns Incised is associated with the early St. Johns I period. Deptford and Swift Creek pottery or copies are occasionally present in St. Johns I and Ia period sites. St. Johns Cordmarked pottery are associated with the St. Johns Ia period while Dunns Creek Red is associated with the St. Johns Ia and Ib periods. In her analysis of the pottery from Edgewater Landing, Cordell (Russo et al. 1989:68) notes that through time, St. Johns Plain pottery became sandier due to increased use of quartz sand as an aplastic agent.

Evidence of the continuous use of burial mounds begins at that time. Many of the burials were found in large central pits, probably the result of secondary interments. Some changes in the burial practices include the possible use of log tombs during the St. Johns Ia period as well as inclusion of Hopewellian-Yent complex exotic trade items (Milanich 1994:261). Much of the information on St. Johns I period burial practices have been obtained from the Ross Hammock Site in Volusia County (Bullen et al. 1967). This site complex consists of two large burial mounds and an extensive village midden located on the west shore of Mosquito Lagoon (Bullen et al. 1967:16). The Benton Mound dates to the St. Johns Ia period (Miller 1994). Other ceremonial activities associated with these sites include the "killing" of pots.

Year-round occupation of the coast and along the rivers occurred with special use-activity sites located in other locales, including short-term coastal campsites. Excavations at the Sligh and Lake Jessup South sites suggest that they served as villages or long-term encampments (Dickinson and Wayne 1996; Wayne and Dickinson 1993). The wide variety of tools and abundance of pottery suggests a relatively sedentary group. Hunting, food preparation, and tool making were common site activities. The site pattern consists of small, probably individual household midden deposits with structural evidence limited to arcs of shallow post holes, often shell-filled, and fire pits (Dickinson and Wayne 1996:108). Hontoon Island has provided a wealth of data due to the preservation of many classes of artifacts within the inundated midden deposits. Evidence of an extensive wood-working tradition is noted by the numerous carved items recovered from the river as well as the debitage remaining from the carving activities (Purdy 1987). The faunal and botanical analyses suggested that the site was occupied on a year-round basis and that most of the resources were collected within three to six miles of the site (Newsom 1987; Wing and McKean 1987).

The survey of the Edgewater Landing tract recorded several shell middens that date to this period (Johnson and Ste. Claire 1988). Excavations conducted at two of the sites indicated occupation during the St. Johns Ia and St. Johns Ib periods. Both sites were characterized as short-term camps established to harvest oysters and hardshell clams. The sites were occupied irregularly throughout the year but contained evidence indicating that the sites were utilized during all seasons of the year (Russo et al. 1989). The Seminole Rest site is a large quahog clam-processing center located along Mosquito Lagoon (Horvath 1995). The faunal analysis indicated that the site was used throughout the year but did not appear to be occupied on a year-round basis (Quitmyer 1995). Although located along the lagoon's shore, fish made up only a small portion of the diet, less than 15%, and mammals even less (Kozuch 1995).

3.4 Mississippian

The St. Johns II period has been divided into three sub-periods: St. Johns IIa (ca. 750-1050 CE), St. Johns IIb (ca. 1050-1513 CE), and St. Johns IIc (ca. 1513-1565 CE). St. Johns II carries on the tradition and is marked only by the introduction of check-stamped pottery (Goggin 1952:70). Occupation of riverine and coastal shell middens continued, although there is a relative increase in the number of non-riverine and non-coastal sites, perhaps due to locating sites in more agriculturally suited locales (Miller 1998:80).

Hunting and gathering remained important but the dependence upon cultivated crops such as maize, squash, and gourds increased in some areas. The use of gourds as domesticates is still being studied as there is no evidence for cultivation even though gourds and squashes have been around for thousands of years prior to this period (Newsom et al. 1993). In the upper St. Johns basin, the practice of horticulture was not adopted because the wetland ecology and subsistence strategies were different (Russo 1984; Sigler-Eisenberg 1984a; Sigler-Eisenberg et al. 1985). At the Gauthier site, fish and aquatic turtles were the primary subsistence items, with relatively little reliance upon terrestrial game or freshwater shellfish (Sigler-Eisenberg 1984b).

There was an increase in the number and size of villages during the St. Johns IIa period suggesting population expansion. A ranked society may have evolved as evidenced by the differential burial customs. No longer were all people interred in burial mounds. Deagan (1978:109) noted that a population shift from the more southern and southwestern areas into the northern area occurred around 1000 CE. This was evidenced by changes in frequencies of burial mounds in the areas over time. Excavations of several burial mounds revealed a new pattern in that the burials were placed on their backs with their heads or feet pointing toward the mound center (Jennings et al. 1957; Willey 1954).

The St. Johns IIb period (ca. 900-1250/1300 CE) is characterized by the adoption of some Mississippian traits into the ceremonial system as well as the presence of St. Johns Simple Stamped pottery. The Mississippian lifestyle, however, never became dominant, possibly because the soils were not suitable for full agricultural pursuits. The presence of platform mounds at the ceremonial centers suggests a more complex socio-political organization. These include the Mill Cove Complex near the mouth of the St. Johns River and Mt. Royal just north of Lake George (Ashley 2012). Copper beads and ornaments, as well as greenstone celts, have been recovered from several sites, indicating contact with the Mississippian world. Mt. Royal has been considered a center of dispersal in the marine shell trade due to the tremendous quality of unmodified whelk shells recovered from the mound (Ashley 2005). By around 1300 CE, influence from the Mississippian world waned, probably due to the fall and abandonment of the Macon Plateau to the north and the disruption of the existing interaction networks. At that time, the major sites were apparently abandoned, and the St. Johns II people moved further south, up the St. Johns River. However, within two centuries, the introduction of corn farming and the shift from long-distance trading to territorial raiding created the volatile landscape that was encountered by the Europeans when they first arrived (Ashley 2012:125).

The St. Johns IIc period is marked by the introduction of European artifacts. Three Native American ethnic groups were known to inhabit east central Florida at the time of Spanish contact: the Ais, the Mayaca, and the Jororo. The Ais lived along the Atlantic Coast and were integrally involved with the Spanish. They inhabited the coastal strand and Indian River areas. They apparently mixed indigenous hunting/gathering/fishing economy with the salvaging of Spanish shipwrecks (Milanich 1995:64-65). The Mayaca occupied eastern Lake, western Volusia, and Seminole counties. The Jororo occupied the area of Orange and Seminole Counties, extending southward into Polk and Highlands Counties (Milanich 1995). They pursued a hunting-gathering-fishing economy (Newsom 1987). Although these Indians apparently continued the St. Johns tradition, they did not share the same Timucuan language as the St. Johns people further north (Milanich 1995).

3.5 Colonialism

The cultural traditions of the native Floridians ended with the advent of European expeditions to America. The initial events, authorized by the Spanish crown in the 1500s, ushered in devastating European contact. The first European to have contact with the west coast of Florida was Ponce de León. Arriving in St. Augustine in 1513, his journals record his exploration of the Gulf Coast of Florida from

Charlotte Harbor to Apalachee Bay. Next, Pánfilo de Narváez arrived in the Tampa Bay area in 1528. His party explored northward from Tampa Bay eventually crossing the Withlacoochee River near present day Dunnellon and investigating the mouth of the river in search of the Gulf of Mexico. Finally, Hernando de Soto landed in the Tampa Bay area in 1539; he sought the allegedly rich Indian village of Cale. By the early 1700s, the native populations were nearly extinct, ravaged by conquest and disease, the typical effects of European contact.

In 1757, Francisco Maria Celi traveled up the Hillsborough River to a point located in what is now probably Hillsborough River State Park (Arnade 1968). During the same century, Bernard Romans conducted another exploration of the Hillsborough River area (Romans 1961). Romans, commissioned by the British authorities to map and survey the southern district of North America, named the Hillsborough River in honor of Lord Hillsborough, England's Secretary of State for the Colonies.

The area that now constitutes the State of Florida was ceded to Britain in 1763 after two centuries of Spanish possession. The British governed Florida until 1783, when the Treaty of Paris returned Florida to Spain. Spanish influence was nominal during this second period of ownership. Prior to the American colonial settlement of Florida, portions of the Creek Nation and remnants of other indigenous groups from Alabama, Georgia, and South Carolina moved into Florida and repopulated the vacuum created by the decimation of the Indigenous inhabitants. The Seminoles, as these migrating groups of Indians became known, formed at various times loose confederacies for mutual protection against the new American Nation to the north (Tebeau 1980).

3.6 Territorial and Statehood

The bloody conflict between the Americans and the Seminoles over Florida first came to a head in 1818 and was subsequently known as the First Seminole War. With the signing of the Adams-Onis Treaty between the U.S. and Spain in 1819, Florida became a U.S. Territory in 1821. Andrew Jackson, named provisional governor, divided the territory into St. Johns and Escambia Counties. At that time, St. Johns County encompassed all of Florida lying east of the Suwannee River including present-day Lake County, and Escambia County included the land lying to the west. In the first territorial census in 1825, some 5077 persons reportedly lived east of the Suwannee River; by 1830 that number had risen to 8956 (Tebeau 1980:134).

Even though the First Seminole War was fought in north Florida, the Treaty of Moultrie Creek in 1823, at the end of the War, was to affect the settlement of South Florida. The Seminoles relinquished their claim to the whole peninsula in return for an approximately four-million-acre reservation south of Ocala and north of Charlotte Harbor (Mahon 1985). The treaty never satisfied the Indians or the Anglo-Americans. The inadequacy of the reservation and desperate situation of the Seminoles living there, plus the mounting demand of the whites for their removal, soon produced another conflict.

In 1824, Colonel George Mercer Brooke established Cantonment (later Fort) Brooke on the south side of the mouth of the Hillsborough River to oversee the angered Seminoles. Frontier families followed the soldiers and initiated the settlement of the Tampa Bay area. This caused problems for the military as civilian settlements were not in accord with the Treaty of Moultrie Creek (Guthrie 1974). By 1830, the War Department established a military reserve around Fort Brooke with boundaries extending 16 miles to the north, west, and east. The military reservation contained a guardhouse, barracks, storehouse, powder magazine, and stables. Two years before, William G. Saunders of Mobile, Alabama opened a general store (Tebeau 1980:146). In 1825, a military road, called Fort King Road, was cleared between Fort Brooke and Fort King (now Ocala) (Horgan et al. 1992).

On December 28, 1835, Major Francis Langhorne Dade was leading a company of soldiers from Fort Brooke to Fort King along the Fort King Road. Only three of the 108 men under Dade's command survived the Seminole attack led by Chief Jumper. The attack served as a trigger for the Second Seminole War and as a battle cry for the removal of the Seminoles. In 1837, General Thomas Jessup was traveling from Fort King to Fort Brooke when he realized the need for a supply depot between the two forts. To commemorate the slain company and their leader, General Jessup established Fort Dade in 1837 near the original battle site. It operated for only a few months (Horgan et al. 1992).

In 1837, Fort Brooke became the headquarters for the Army of the South and the main garrison for the Seminole wars. The fort also served as a haven for settlers who had to leave their farms and seek protection from the warring Seminoles (Janus Research 1992). The Second Seminole War lasted until 1842 when the federal government decided to end the conflict by withdrawing troops from Florida. The 1839 *Map of the Seat of War in Florida* shows the APE south of Fort Mason between Forts Armstrong and Maitland (**Figure 3.2**) (Mackay and Blake 1839). Some of the battle-weary Seminoles were persuaded to migrate west where the federal government had set aside land for Native American occupation. By 1843, 3824 Seminoles were shipped west. However, those who were adamant about remaining could do so, but were pushed further south into the Everglades and Big Cypress Swamp. This area became the last stronghold for the Seminoles (Mahon 1985:321). The surveys, military trails, and forts resulting from the war provided invaluable assistance in the settlement of Florida.

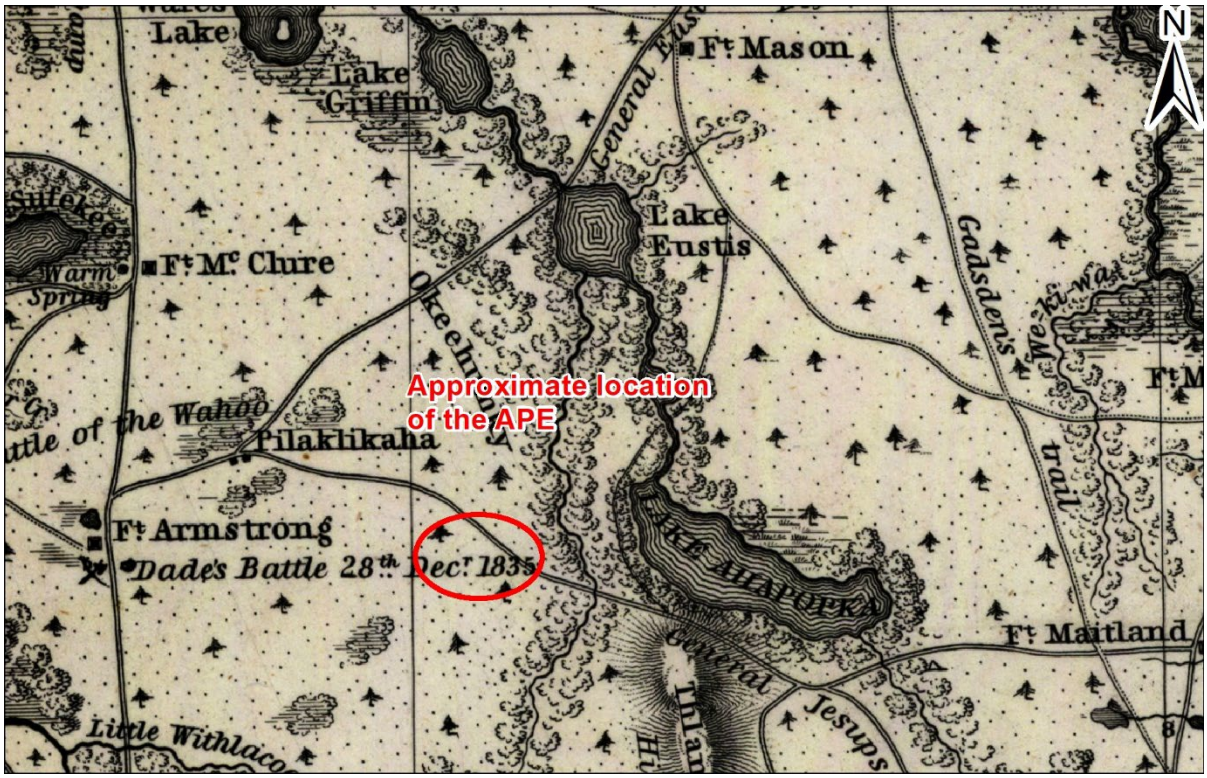


Figure 3.2. 1839 map showing the approximate location of the APE (Mackay and Blake 1839).

Encouraged by the passage of the Armed Occupation Act in 1842, which was designed to promote settlement and protect the Florida frontier, Anglo-American pioneers and their families moved south through Florida. The Act made available 200,000 acres outside the already developed regions south of Gainesville to the Peace River, barring coastal lands and those within a two-mile radius of a fort. It stipulated that any family or single man over 18 years of age able to bear arms could earn title to 160 acres by erecting a habitable dwelling, cultivating at least five acres of land, and living on it for

five years. During the nine-month period the law was in effect, 1184 permits were issued totaling some 189,639 acres (Covington 1961:48).

In 1845, the Union admitted the State of Florida, with Tallahassee as the state capital. The poorly conceived name of Mosquito County was changed to Orange County. New boundaries were established to encompass present-day Seminole and Volusia Counties and parts of Brevard, Flagler, and Lake Counties (Fernald and Purdum 1996). During this period, the federal government began surveys near the APE. Between 1843 and 1855, Charles C. Tracy, George Watson, Henry Washington, and William S. Harris surveyed Township 22 South, Range 26 East (Harris 1855; Tracy 1846; Washington 1843; Watson 1849). No historic resources were noted within or near the APE on the plat (Tracy et al. 1855) (**Figure 3.3**). The section lines closest to the APE were described as 3rd and 2nd rate pine and low scrub with marsh; 3rd rate open line and low scrub; rolling 3rd rate pine; and hilly pine land (Harris 1855:53; Tracy 1846:191, 247; Watson 1849:324).

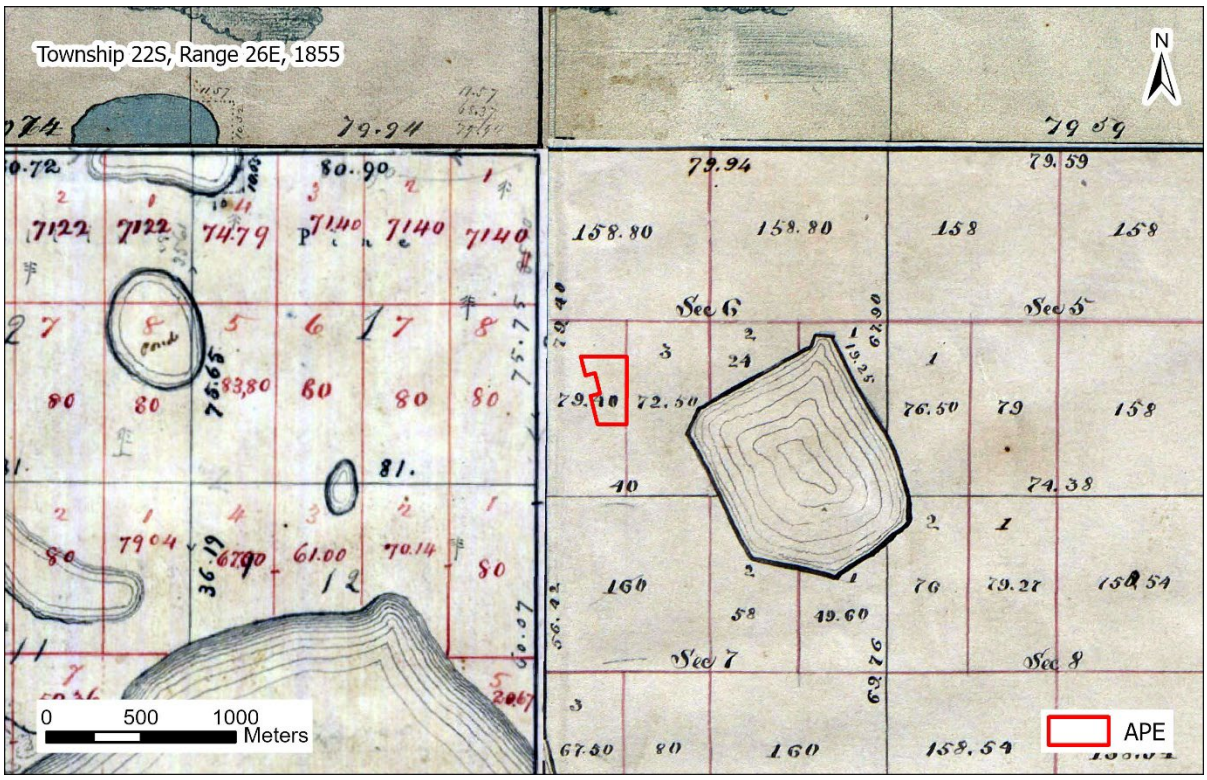


Figure 3.3. 1855 plat showing the APE (Tracy et al. 1855).

In December of 1855, the Third Seminole War, or the Billy Bowlegs War (1855-1858), started because of pressure placed on Native Americans remaining in Florida to emigrate to the west. The war started in what is now Collier County when Seminole Chief Holatter-Micco, Billy Bowlegs, and 30 warriors attacked an army camp killing four soldiers and wounding four others. The attack was in retaliation for damage done by several artillerymen to banana plants belonging to Billy Bowlegs. This hostile action renewed state and federal interest in the final elimination of the Seminoles from Florida (Covington 1982).

Military action was not decisive in this Third Seminole War; therefore, in 1858 the U.S. Government resorted to monetary persuasion to induce the remaining of Seminoles to migrate west. Chief Billy Bowlegs accepted $5000 for himself and $2500 for his lost cattle. Each warrior received $500, and $100 was given to each woman and child. On May 4, 1858, the ship *Grey Cloud* set sail from

Fort Myers with 123 Seminoles. In Egmont Key, 41 captives and a Seminole woman guide were added to the group. On May 8, 1858, the Third Seminole War was officially declared over (Covington 1982:78-80).

3.7 Civil War and Aftermath

With the beginning of the Civil War, cattle were needed to help feed the Confederate Army. Herds from as far south as central Florida were driven to railheads near the Georgia border. However, cattle ranchers discovered they could sell their herds in Cuba for a greater profit and began dealing with blockade-runners. The Union attempted to stop all shipping from Florida ports, but blockade-runners were too abundant. Cattle ranchers from all over Florida drove their cattle to Punta Rassa to be shipped to Cuba for payment in Spanish gold. Jacob Summerlin, a successful cattle rancher from Fort Meade, gave up his contract with the Confederate government to supply cattle and in 1863 teamed up with James McKay from the Tampa area. McKay, a successful and daring blockade-runner, supplied the schooners and Summerlin the cattle. It is not known how many cattle were shipped from the port during the Civil War. However, after the war as cattle continued to be shipped, it is reported that in the decade between 1870 and 1879, more than 165,000 head were shipped (Grismer 1949).

Immediately following the war, the South underwent a period of "Reconstruction" to prepare the Confederate States for readmission to the Union. The U.S. Congress administered the program, and on July 25, 1868, Florida officially returned to the Union (Tebeau 1980:251). The Homestead Acts of 1866 and 1876 provided additional incentive for settlers to come to the area. The Act of 1866 gave Union-loyal African Americans and southerners the opportunity to receive 80-acre tracts in Florida and the other four public land states. Former Confederates, however, were ineligible to receive homesteads until the Act of 1876 (Tebeau 1980:266, 294).

The end of the Civil War stimulated growth in the area. Southerners sought new homes to escape the unrest in the neighboring ex-Confederate states, and the war brought prosperity to many Northerners who sought vacation homes in warmer climates. After the war, most of the plantations in the area converted from cultivating sugar cane and cotton to growing citrus. The first groves in the region were established near Orange Lake, north of Ocala, and around Lake Weir, immediately north of the boundary between Sumter, Marion, and Lake Counties. The region was well known for producing two varieties of oranges: the "Parson Brown" and the "Pineapple." Reverend Nathan Brown, a retired Methodist circuit rider, arrived in the Lake Weir area in 1847. He planted several seedlings that he had grown from fruit brought from Savannah, which developed into the "Parson Brown" variety. By the late 1870s and the early 1880s, Lake Weir was ringed with orange and lemon trees. Although citrus developed into the principal crop of the area, lumber, cotton, cattle, and truck farming also played an important role in the local economy (FPS 1986:31-33).

In the 1880s, interest in the resources of Florida increased due in large part to people like Hamilton Disston and Henry B. Plant. By 1881, the State of Florida faced a fiscal crisis involving a title to public lands. On the eve of the Civil War, the Internal Improvement Fund had pledged land to underwrite railroad bonds. After the War, when the railroads failed, the land reverted to the State. Almost $1 million was needed by the state to pay off the principal and accumulated interest on the debt, thereby giving clear title. Hamilton Disston, son of a wealthy Philadelphia industrialist, contracted with the State of Florida in two large land deals: the Disston Drainage Contract and the Disston Land Purchase. The Drainage Contract was an agreement between Disston and the State in which Disston and his associates agreed to drain and reclaim all overflow lands south of present-day Orlando and east of the Peace River in exchange for one-half the acreage that could be reclaimed and made fit for cultivation. They agreed to purchase Internal Improvement Fund Lands at $0.25 an acre to satisfy the

indebtedness of the fund. A contract was signed on June 1, 1881, for the sale of four million acres for the sum of $1 million, the estimated debt owed by the Improvement Fund. Sir Edward James Reid obtained title to half of the lands in the Disston purchase (Tischendorf 1954). The APE was deeded to James E Ingreham in 1883 (State of Florida n.d.:256).

Disston changed Florida from a wilderness of swamps, heat, and mosquitoes into an area ripe for investment. This enabled Henry B. Plant to move forward with his plans to open the west coast of Florida with a railroad-steamship operation called the Jacksonville, Tampa & Key West Railway. Through the Plant Investment Company, he bought defunct rail lines such as the Silver Springs, Ocala & Gulf Railroad, Florida Transit and Peninsular Railroad, South Florida Railroad, and Florida Southern Railroad to establish his operation (Harner 1973:18-23; Mann 1983:68). In 1887, Lake County was formed from parts of Orange and Sumter counties (Fernald and Purdum 1996). Many Florida residents, however, were not happy with the Disston Drainage Contract. They resented the $0.25 per acre price Disston paid under the land contract, as they were required to pay $1.25 per acre under the terms of the Homestead Act of 1876. Claims also were made that Disston was receiving title to lands that were not swamplands or wetlands (Tebeau 1980:278). Many residents bought up the higher, better-drained parcels of land for speculation, knowing that the surrounding wetlands and flatwoods would be deeded to Disston under the Land Purchase contract. Many hoped that their more desirable land purchases would increase in value.

3.8 Twentieth Century

At the turn-of-the-century, Florida's history was marked by the outbreak of the Spanish-American War in 1898. As Florida is the closest state to Cuba, American troops were stationed and deployed from the state's coastal cities. Harbors in Tampa, Pensacola, and Key West were improved as more ships were launched with troops and supplies. "The Splendid Little War" was short in duration, but evidence of the conflict remained in the form of improved harbors, expanded railroads, and military installations (George 1990). In 1902, Henry Plant sold all his Florida holdings to the Atlantic Coast Line (ACL), which would become the backbone of the southeast (Mann 1983:68).

In 1904, Governor Napoleon Bonaparte Broward initiated significant reforms in Florida's politics. Several of Broward's key issues included the Everglades drainage project, railroad regulation, and the construction of roads. During this time, railroads were constructed throughout the state and automobile use became more prevalent. Improved transportation in the state opened the lines to export Florida's agricultural and industrial products (George 1990). As various products such as fruits and vegetables were leaving the state, people were arriving in Florida. Rapid and widespread growth was the theme of this period in Florida history. While agriculture, especially the citrus industry, had become the backbone of Florida's economy, manufacturing and industry began growing during the beginning of the century. Fertilizer production, boat building, and lumber and timber products were strong secondary industries (Weaver et al. 1996:3).

The U.S. entry into World War I in 1917 resulted in the development of several training facilities in the state, and protecting the coastlines was a priority. Although the conflict only lasted until November 1918, the economy was boosted greatly by the war. For example, the war brought industrialization to port cities such as Tampa and Jacksonville, where shipbuilding accelerated. These cities also functioned as supply depots and embarkation points. An indirect economic benefit of the war was an increase in agricultural production for central Florida since beef, vegetables, and cotton were in great demand (George 1990).

While Florida industrialization and agriculture flourished, immigration and housing development slowed during the war. Tourism increased because of the war in Europe, which forced Americans to vacation domestically. Tycoons such as Henry Flagler and Henry Plant were building hotels and railroads for people desiring winter vacations in sunny Florida. These magnates took an interest in the improvements and promotion of Florida to bring in more tourist dollars, however the small rural communities felt negligible effect from increased tourism.

After World War I, Florida experienced unprecedented growth. Many people relocated to Florida during the war. Many came to work in wartime industries while others were stationed in the state as soldiers. Bank deposits increased, real estate companies opened in many cities, and state and county road systems expanded. Earlier land reclamation projects created thousands of new acres of land to be developed. Real estate activity increased steadily after the war's end and drove up property values. Prices on lots were inflated to appear more enticing to out-of-state buyers. Every city and town in Florida had new subdivisions platted and lots were selling and reselling for quick profits. Southeast Florida experienced the most activity, although the boom affected most communities in central and southern Florida (Weaver et al. 1996:3).

Road building became a statewide concern as it shifted from a local to a state function. A state highway association, established in Orlando in 1917, sponsored the development of an improved highway system. These roads made even remote areas of the state accessible and allowed the boom to spread. Each day, up to 20,000 people arrived in the state. Besides the inexpensive property, Florida's legislative prohibition on income and inheritance taxes encouraged more people to move into the state.

The Boom Period had begun to decline in the mid-1920s, when the Florida East Coast Railway placed an embargo on freight shipments to South Florida. Ports and rail terminals were overflowing with unused building materials. In addition, northern newspapers published reports of fraudulent land deals in Florida. In 1926 and 1928, two hurricanes hit southeastern Florida, killing hundreds of people, and destroying thousands of buildings (Blake et al. 2011). The collapse of the real estate market and the subsequent hurricane damage effectively ended the boom. The 1929 Mediterranean fruit fly infestation that devastated citrus groves throughout the state only worsened the recession (FDACS 2013; Weaver et al. 1996:4).

By the time the stock market collapsed in 1929, Floridians were already accustomed to economic depression. Construction activity had halted, and industry dramatically declined. Subdivisions platted several years earlier remained empty and buildings stood on lots partially finished and vacant (Weaver et al. 1996). However, the relatively small amount of real estate activity in rural citrus and vegetable-growing towns in the central part of the state somewhat mitigated the effects of the real estate market collapse (Shofner 1982; Tebeau 1980). The 1928 Lake County soil survey shows US 27 west of the APE, and no historic resources within the APE; the community of Minneola is to the south (**Figure 3.4**) (Taylor et al. 1928).

During the Great Depression, Florida suffered significantly. Between 1929 and 1933, 148 State and National banks collapsed, more than half of the State's teachers were owed back pay, and a quarter of the residents were receiving public relief (George 1990). Beef and citrus production declined, manufacturing slowed, and development projects were stopped. Even the railroad industry felt the pressures of the 1930s and had to reduce service and release some personnel. In addition, the increasing use of the automobile lessened the demand for travel by rail. Despite the Depression, tourism remained an integral part of the Florida economy during this period. New highways made automobile travel to Florida easy and affordable and more middle-class families were able to vacation in the "Sunshine State" (George 1990).

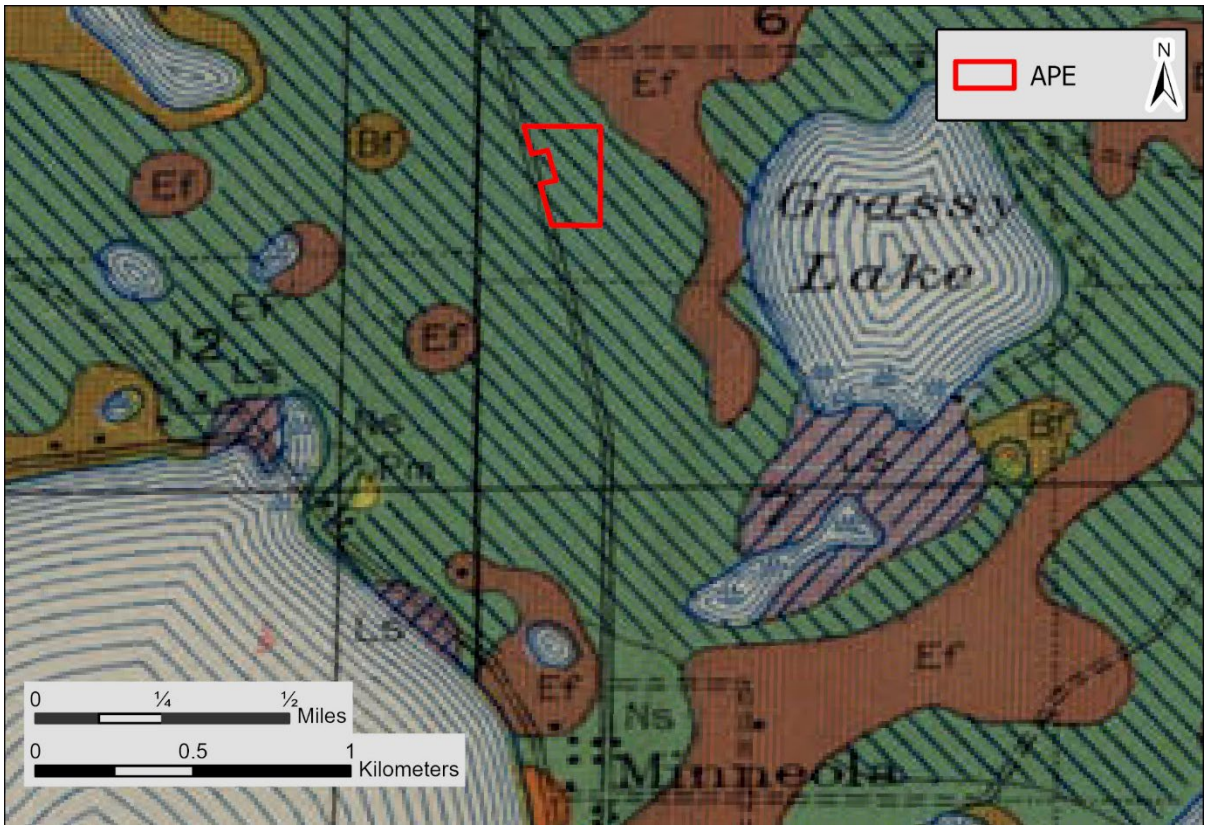


Figure 3.4. 1928 soil survey showing the APE (Taylor et al. 1928, south).

President Franklin D. Roosevelt initiated several national relief programs because of the challenging economic times. The New Deal programs in Florida included the Works Progress Administration (WPA) and the Civilian Conservation Corps (CCC). The CCC improved and preserved forests, parks, and agricultural lands (Shofner 1987). The WPA provided jobs for professional workers and laborers, who constructed or improved many roads, public buildings, parks, and airports. Other projects were developed for writers and researchers, which included the production of *Florida: A Guide to the Southernmost State* and the Veteran' Grave and Registration project (FWP 1939; WPA 1941). The latter listed no graves or cemeteries within Section 5 (WPA 1941: Volume 6).

World War II resulted in Florida becoming one of the nation's major military training grounds. Prior to this time, tourism had been the state's major industry; it was brought to a halt as tourist and civilian facilities, such as hotels and private homes, were placed into wartime service. The influx of thousands of service personnel and their families increased industrial and agricultural production in Florida and introduced these new residents to the warm weather and tropical beauty of Florida. Railroads once again profited, since service personnel, military goods, and materials needed to be transported. However, airplanes were now becoming the new form of transportation, and Florida became a major airline destination. The highway system was also being expanded, with the State Road Department constructing 1560 miles of roads (George 1990).

After World War II, Florida's economy was almost fully recovered. Tourism had rebounded and became a major source of the state's economy. Additionally, former military personnel found the local climate amenable and remained in Florida permanently. These new residents greatly increased the population in the 1940s (George 1990). The 1956 Highway Act initiated a plan for 41,500 miles of interstate highway throughout the country. Despite the arrival of the Florida Turnpike, Interstate 4 (I-

4), and I-75, completed through in the 1950s through 1970s, much of the region remained rural. The 1969 USGS Clermont West quadrangle map shows the APE as being citrus grove (USGS 1969) (**Figure 3.5**). The number of people in Lake County has continued to increase; in 1980 the population was 104,879 and by 2020 it had almost tripled to 297,052. The U.S. Census Bureau (USCB) estimates that the population of Lake County in 2024 is 444,204, which is a 15.7% increase from 2020 (USCB 2025). Ten percent of the county (162,773 acres) is used for agriculture, which is an 8% decrease from 2017 (USDA 2017, 2024). The county ranks second in Florida to produce sheep, goats, wool, mohair, and milk and 5th for horses, ponies, mules, burros, and donkeys. It is ranked third for cultivated Christmas trees and short duration woody crops and fifth for nursery, greenhouse, floriculture, and sod (USDA 2024). In terms of industries, 20.3% are associated with professional and business services; 17.7% are associated with trade, transportation, and utilities; 13.6% are associated with education and health services; and 13.4% are associated with construction (Florida Legislature 2024).

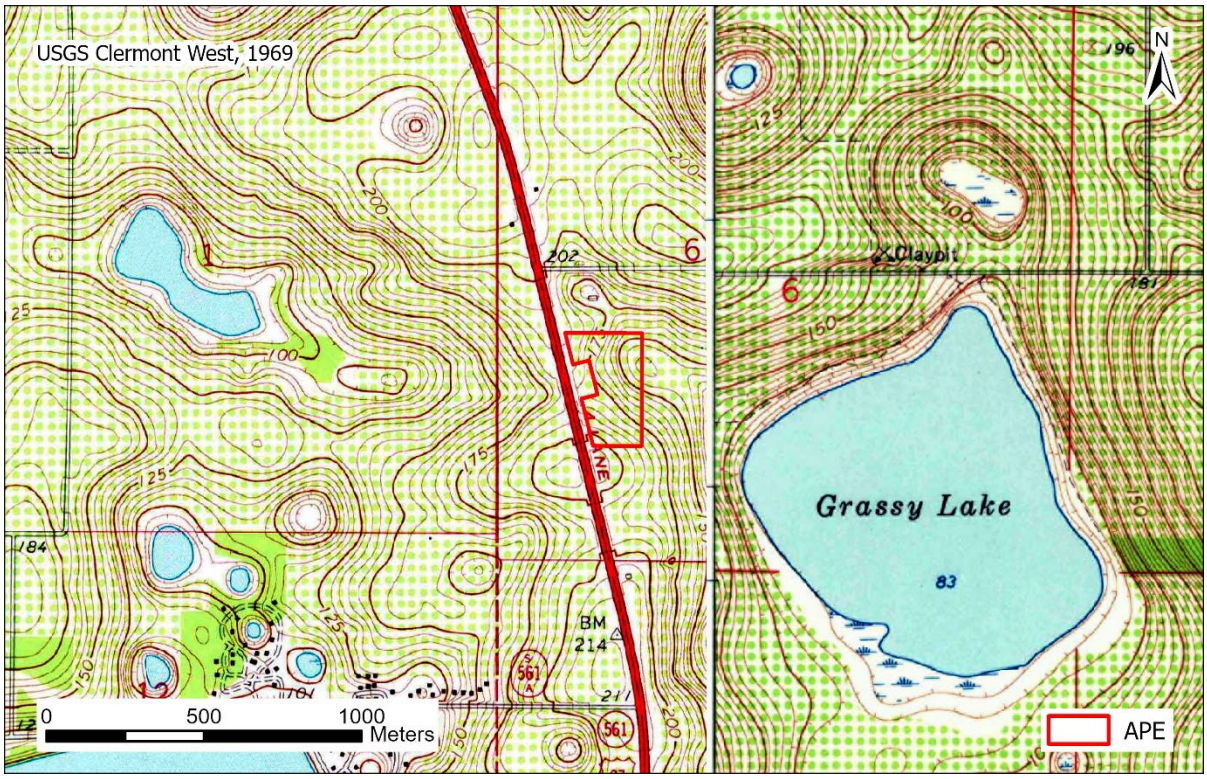


Figure 3.5. Clermont West quadrangle map showing the APE (USGS 1969).

3.9 APE Specifics

A review of the aerial photos from the Publication of Archival and Museum Materials (PALMM) revealed that the APE had been planted in citrus and remained that way until the 1990s, when the citrus was dying off and the property became revegetated with oaks, pines, etc. (Google Earth 2025; USDA 1941, 1947, 1958, 1974) (**Figure 3.6**).

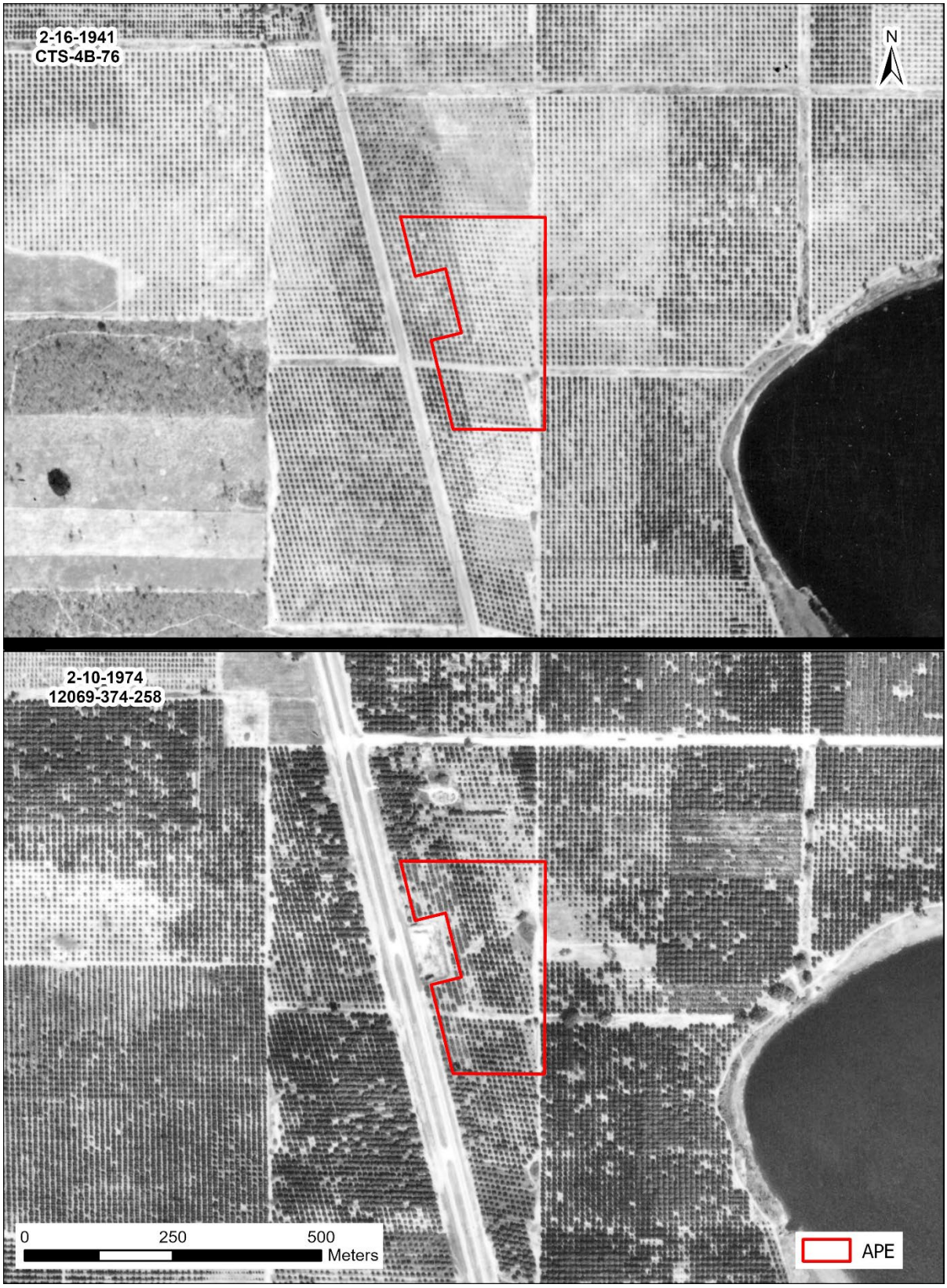


Figure 3.6. 1941 and 1974 aerial photos showing the APE (USDA 1941, 1974).

4.0 RESEARCH CONSIDERATIONS AND METHODOLOGIES

A review of archaeological and historical literature, records, and other documents and data pertaining to the APE was conducted. The focus of this research was to ascertain the types of cultural resources known in the APE and vicinity, their temporal/cultural affiliations, site location information, and other relevant data. This included a review of sites listed in the NRHP, the Florida Master Site File (FMSF), cultural resource survey reports, published articles, and unpublished manuscripts and maps. The FMSF January 2025 data were examined, but may not reflect all resources recorded, as there is some delay in input of newly received site file forms and survey reports and the GIS data are updated quarterly.

4.1 Archaeological Considerations

The archaeological background research indicated that three archaeological sites have been recorded within one mile of the APE; none are within the APE (**Figure 4.1**). 8LA02221 (Two-Mine) is a temporally indeterminate lithic scatter that was recorded during the CRAS for US 27 (Janus Research 1998). It has been determined to be ineligible for listing in the NRHP by the State Historic Preservation Officer (SHPO). 8LA02610 (Grassy Lake Caroe) was recorded during the Florida Bureau of Archaeological Research's Canoe and Log Boat recording project in 1990. It dates from 720 ± 55 BC and has not been evaluated by the SHPO (FMSF). 8LA02875 (Willet-in-the-Rain) is an Orange period artifact scatter that produced lithic debitage and Orange Plain pottery. It was recorded during the CRAS of the Founders Ridge property (Waters et al. 2004). The SHPO has determined that the site is ineligible for listing in the NRHP. Only three other CRAS projects have been conducted within one mile of the APE. They were for deadhead logging (Morris 2011), a cell tower (Janssen 2018), and the Minneola Sullivan Road project (Lanning and Lane 2023).

Based on these data and other regional site location predictive models, informed expectations concerning the types of sites likely to occur within the APE, as well as their probable environmental settings, were generated. As archaeologists have long realized, Indigenous populations did not select their habitation sites and activity areas in a random fashion. Rather, many environmental factors had a direct influence upon site location selection including soil drainage, distance to freshwater, relative topography, and proximity to food and other resources. It has been repeatedly demonstrated that archaeological sites are most often located near a source of potable water.

Analysis of the July 2023 data for the 272 Indigenous archaeological sites with known locations in the Lake Upland physiographic region in Lake County was conducted; the four submerged canoe sites and any historic sites were deleted from this analysis. The analysis revealed that over 88% of the sites are located within 100 m of a water source and another 7% are within 200 m of water (**Table 4.1**). One of the sites is located at the bottom of a pond and there are two greater than 400 m and one greater than 500 m away from an identifiable water source. As can be seen, most of the sites are associated with wetlands or swamps. Roughly one-third of the sites are located proximate to a pond or lake. Seven of the sites were located along the Palatlakaha River, which forms the headwater of the Ocklawaha River.

Table 4.1. Site distribution by water source and distance.

Type	≤100 m		≤200 m		>200 m		total	
Creek/river	5	1.8%	1	0.4%	1	0.4%	7	2.6%
Pond/lake	81	29.8%	7	2.6%	4	1.5%	92	33.8%
Wetland/swamp	155	57.0%	12	4.4%	6	2.2%	173	63.6%
Total	**241**	**88.6%**	**20**	**7.4%**	**11**	**4.0%**	**272**	**100.0%**

Figure 4.1. Location of the previously recorded cultural resources near the APE.

Soil types and their drainage characteristics can also be used to assess the likelihood for Indigenous site occurrence (Almy 1978). There are 45 soil types within the Lake Upland of Lake County, of which 34 have recorded archaeological sites (**Table 4.2**). Those soils within the APE are shaded in orange on the table. Many of the sites occurred on more than one soil type. This analysis only included the four types covering the greatest acreage for each site, which totaled 455 soil type occurrences. Column "1" indicates that this soil type had the greatest area of the site, and so on down the line, so that column "4" had the smallest site acreage.

Table 4.2. Site distribution by drainage and soil type.

DRAINAGE/Soil Type, % slopes	% of area	1	2	3	4	total	% of sites	difference
EXCESSIVELY DRAINED								
Astatula sand, 0-5%	0.1%	2				2	0.4%	0.3%
Candler sand, 0-5%	12.8%	54	26	5	1	86	18.9%	**6.1%**
Candler sand, 5-12%	6.5%	26	14	4	1	45	9.9%	**3.4%**
Candler sand, 12-40%	0.6%	2				2	0.4%	-0.1%
Lake sand, 0-5%	0.9%	3	2			5	1.1%	0.2%
Lake sand, 5-12%	0.6%	3				3	0.7%	0.1%
Lake sand, 12-22%	0.1%					0	0.0%	-0.1%
Paola sand, 0-5%	0.1%	4				4	0.9%	0.8%
St. Lucie sand, 0-5%	0.0%					0	0.0%	0.0%
Total	**21.8%**	**94**	**42**	**9**	**2**	**147**	**32.3%**	**10.5%**
MODERATELY WELL DRAINED								
Orsino sand	0.2%	2				2	0.4%	0.2%
Pomello sand, 0-5%	0.2%	2		1		3	0.7%	0.4%
Tavares sand, 0-5%	5.3%	33	13	6	2	54	11.9%	**6.6%**
Total	**5.8%**	**37**	**13**	**7**	**2**	**59**	**13.0%**	**7.2%**
POORLY DRAINED								
Ellzey sand	0.7%	3	1			4	0.9%	0.2%
Emeralda fine sand	0.0%		1			1	0.2%	0.2%
Eureka loamy fine sand, 0-2%	0.0%					0	0.0%	0.0%
Felda fine sand	0.2%					0	0.0%	-0.2%
Fellowship fine sandy loam, depressional (depr)	0.0%					0	0.0%	0.0%
Immokalee sand	0.8%	5	5			10	2.2%	1.4%
Myakka-Myakka, wet, sands, 0-2%	11.6%	14	13	6		33	7.3%	**-4.4%**
Ona-Ona, wet, fine sand, 0-2%	0.3%	1		1		2	0.4%	0.1%
Pompano sand	2.0%	6	2	1		9	2.0%	0.0%
Wabasso sand	0.3%					0	0.0%	-0.3%
Wauchula sand	2.9%	6	5	1		12	2.6%	-0.3%
Total	**18.8%**	**35**	**27**	**9**	**0**	**71**	**15.6%**	**-3.2%**
SOMEWHAT POORLY DRAINED								
Cassia sand	0.2%					0	0.0%	-0.2%
Lochloosa sand	0.9%	7	1			8	1.8%	0.9%
Seffner sand	0.8%	3	1	1		5	1.1%	0.3%
Sparr sand, 0-5%	2.3%	20	9	2		31	6.8%	**4.5%**
Sparr sand, 5-12%	0.0%					0	0.0%	0.0%
Total	**4.1%**	**30**	**11**	**3**	**0**	**44**	**9.7%**	**5.6%**
VERY POORLY DRAINED								
Anclote and Myakka soils	5.0%	1	1			2	0.4%	**-4.6%**
Anclote fine sand	0.1%					0	0.0%	-0.1%
Brighton muck, depr	0.6%					0	0.0%	-0.6%
Ocoee mucky peat	2.6%		1			1	0.2%	**-2.4%**

DRAINAGE/Soil Type, % slopes	% of area	1	2	3	4	total	% of sites	difference
Oklawaha muck	3.5%	2		1		3	0.7%	-2.9%
Placid and Myakka sands, depr	6.6%	6	6	1	5	18	4.0%	-2.6%
Placid sand, frequently ponded, 0-2%	2.3%	1	3	1	1	6	1.3%	-1.0%
Swamp	9.0%	1	1		1	3	0.7%	-8.3%
Total	**29.6%**	**11**	**12**	**3**	**7**	**33**	**7.3%**	-22.4%
WELL DRAINED								
Apopka sand, 0-5%	3.7%	33	14	2	1	50	11.0%	7.3%
Apopka sand, 5-12%	2.4%	17	7	2		26	5.7%	3.3%
Kendrick sand, 0-5%	0.6%	3				3	0.7%	0.1%
Kendrick sand, 5-8%	0.2%	3				3	0.7%	0.5%
Kendrick sand, thin subsurface	0.4%	2	1	2		5	1.1%	0.7%
Orlando fine sand, 0-5%	0.0%	1	1			2	0.4%	0.4%
Total	**7.3%**	**59**	**23**	**6**	**1**	**89**	**19.6%**	12.3%
OTHER								
Arents	1.7%	5	5	1		11	2.4%	0.7%
Borrow pits	0.4%					0	0.0%	-0.4%
Water	10.5%	1				1	0.2%	-10.2%
Total	**12.6%**	**6**	**5**	**1**	**0**	**12**	**2.6%**	-9.9%
Grand Total	***100.0%***	***272***	***133***	***38***	***12***	***455***	***100.0%***	***0.0%***

*Soils within the APE are shaded in Orange

The Lake Uplands is underlain by 29.6% very poorly drained soils, which account for only 7.2% of the known sites. The excessively drained soils cover 21.8% of the region and contain 32.7% of the sites. The poorly drained soils cover 18.8% of the area and have 15.5% of the sites. The well drained soils account for 19.1% of the sites, but only 7.3% of the area. The moderately well drained soils also have a higher number of sites relative to area, with 12.8% of the sites in only 5.8% of the area. The somewhat poorly drained soils cover 4.1% of the area and have 9.9% of the sites. The remaining 12.6% of the area is covered with arents, borrow pits, or water (10.5%). One site is underwater and 11 were in areas of disturbed soils where the original soil type could not be discerned from the nearby soil types. It should be remembered though that although we know what types of soil the sites are associated with, we do not know the actual amount of the soil types surveyed for archaeological sites. In general, the less well drained soils are generally surveyed less intensively.

The soils that have a higher percentage of sites as compared to area (2% or greater) are marked in red on the table, while those that seem less likely to be used (-2% or less) are marked in blue. As might be expected, there is a preference for the better drained soils, as the excessively, moderately well, somewhat poorly, and well drained soils in general have a positive correlation with sites. However, not all the soils in these categories have a correlation with sites. Those with a strong correlation are as follows in order of apparent preference: Apopka sand, 0-5% slopes (7.3%); Tavares sand 0-5% slopes (6.6%); Candler sand, 0-5% slopes (6.1%); Sparr sand, 0-5% slopes (4.5%); Apopka sand, 5-12% slopes (3.4%); and Candler sand, 5-12% slopes (3.3%). Conversely, there are several soils that have a noticeable negative correlation with sites. These include Swamp (-8.3%); Anclote and Myakka sands (-4.6%); Myakka-Myakka wet, 0-2% slopes (-4.4%); Ocklawaha muck (-2.9%); Placid and Myakka sands, depressional (-2.6%); and Ocoee mucky peat (-2.4%).

Based on the above analysis, the APE has moderate to low potential for Indigenous archaeological sites. The Candler sands have a moderate positive correlation with sites; however, the nearest water is over 350 m away. There is a low probability for historic archaeological sites, although evidence of early 20th century naval stores, timber, and citrus industries may be uncovered.

Citrus groves in Florida are typically planted in rows that are 18-22 ft apart, and due to their sensitivity to moisture they are typically planted on double-row raised beds that are 3-4 ft above the furrow (Vincent et al. 2024). Canals and drainage systems are often dug to help prevent excessive moisture from damaging or killing the trees. Citrus trees typically develop a large taproot, and then a lateral root spread sometimes up to 40 ft wide, but usually it stays within the dripline of the tree; the roots have the capacity to go through around 2 ft of soil (Albrecht 2022; University of California Master Garndeners of Orange County 2024; Ziton 2023). When citrus trees must be removed, methods include "pushing", which is the complete removal of the tree and root system through burning and/or "bulldozing" the trees, or "clipping" which is cutting the tree just above the soil line and leaving the roots intact and planting the new tree around two feet away (Futch 2024). Thus, the planting and removal of citrus groves can be very disruptive to the soil and can have impacts up to 2 ft below surface.

4.2 Historical Considerations

A review of the FMSF and NRHP revealed that no historic resources have been previously recorded within or proximate the APE (**Figure 4.1**). A review of relevant historic USGS quadrangle maps, USDA historic aerial photographs, and the Lake County property appraiser's website revealed no potential for historic resources 50 years of age or older (constructed in 1975 or earlier) within the APE (Combee 2025; USDA 1941, 1947, 1958, 1974; USGS 1969). Additionally, a review of the Veteran's Grave Registration compiled in 1940-1941, did not record any graves or cemeteries in the section where the APE is located (WPA 1941: Volume 6).

4.3 Field Methodology

The FDHR's Module Three, *Guidelines for Use by Historic Professionals*, indicates that the first stage of archaeological field survey is a reconnaissance of the project area to "ground truth," or ascertain the validity of the predictive model (FDHR 2003). During this part of the survey, the researcher assesses whether the initial predictive model needs adjustment based on disturbance or conditions such as constructed features (i.e., parking lots, buildings, etc.), underground utilities, landscape alterations (i.e., ditches and swales, mined land, dredged and filled land, agricultural fields), or other constraints that may affect the archaeological potential. Additionally, these guidelines indicate that non-systematic "judgmental" testing may be appropriate in urbanized environments where pavement, utilities, and constructed features make systematic testing unfeasible; in geographically restricted areas such as proposed pond sites; or within project areas that have limited high and moderate probability zones, but where a larger subsurface testing sample may be desired. While predictive models are useful in determining preliminary testing strategies in a broad context, it is understood that testing intervals may be altered due to conditions encountered by the field crew at the time of survey. As per the Advisory Council on Historic Preservation (ACHP), a reasonable and good faith effort was made to identify the historic properties within the project APE (ACHP n.d.).

The archaeological field methodology consisted of surface reconnaissance combined with systematic subsurface shovel testing. Shovel tests were placed at 50 m off-set intervals along transects spaced 50 m apart. Shovel tests were circular and measured approximately 50 centimeters (cm) in diameter one meter in depth. The soil removed from the shovel tests was screened through 0.64 cm mesh hardware cloth to assure the recovery of any artifacts. The location of all tests was recorded using the data collection application by ESRI, *Collector*, with a Trimble R2, with sub-meter module GNSS receiver. Following the recording of relevant data such as environmental setting, stratigraphic profile, and artifact finds, all shovel tests were backfilled.

During the archaeological survey ACI often follows a best practices or ideal circumstances pre-plotted testing strategy. ACI employs cellular triangulation and a Trimble Global Navigation Satellite Systems (GNSS) receiver for data collection accuracy while using the Field Maps application by ESRI. Research has documented that these systems have an inherent margin of error that is the result of varying distances from cellular towers as well as canopy coverage, but overall data collection falls within 3-5 m of accuracy (Kerski 2013; Yang et al. 2022). When greater accuracy is needed, such as in closer interval testing (<12.5 m), smaller testing areas, or other requirements, ACI utilizes a GNSS receiver which can provide up to 7 cm accuracy using location correction protocols. Due to this variation in accuracy field archaeologists also pace to "double-check" distances while conducting the field survey. In addition, archaeologists may shift tests a couple meters from their planned location due to field conditions; significant shifts are noted in the field notes. These factors combined with the scaling of the symbols in the figures needed to show the shovel tests yield results figures that are an accurate representation of the results, but not an exact representation of size/distance/etm.

Historical/architectural field methodology consisted of a field survey to determine if any historic resources (i.e., buildings, bridges, roads, cemeteries) that are 50 years of age or older (constructed in or prior to 1975) were present within the APE. The field survey focused on the assessment of existing conditions and the presence of potential historic resources within the APE. If such resources were identified, then photographs would be taken, and an assessment would be done to establish if any such resources could be determined eligible for listing in the NRHP. Enough information needed for the completion of FMSF forms would be gathered. Also, informant interviews would have been conducted, if possible, with knowledgeable persons to obtain site-specific building construction dates and/or possible associations with individuals or events significant to local or regional history.

4.4 Procedures to Manage Unexpected Discoveries

Occasionally, archaeological deposits, subsurface features or unmarked human remains are encountered during development, even though the project area may have previously received a thorough and professionally adequate cultural resources assessment. Such events are rare, but they do occur. In the event pre-Contact or historic period artifacts, such as pottery or ceramics, projectile points, shell or bone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered or observed during development activities at any time within the project site, the permitted project shall cease all activities involving subsurface disturbance in the immediate vicinity of the discovery and a professional archaeologist will be contacted to evaluate the importance of the discovery. The area will be examined by the archaeologist, who, in consultation with the staff of the Florida SHPO, will determine if the discovery is significant or potentially significant.

In the event the discovery is found to be not significant, the work may immediately resume. If, on the other hand, the discovery is found to be significant or potentially significant, then development activities in the immediate vicinity of the discovery will continue to be suspended until a mitigation plan, acceptable to the SHPO, is developed and implemented. Development activities may then resume within the discovery area, but only when conducted in accordance with the guidelines and conditions of the approved mitigation plan. If human remains are encountered during development, the procedures outlined in Chapter 872.05 *FS* must be followed, all activities in the vicinity of the discovery must cease and the local Medical Examiner and State Archaeologist should be notified.

4.5 Laboratory Methods and Curation

No artifacts were recovered; thus, no laboratory methods were used. The field notes, maps, digital data, photos, and other project documentation will be housed at ACI in Sarasota (P25041) unless the client requests otherwise.

5.0 RESULTS AND CONCLUSIONS

5.1 Archaeological

Archaeological field survey entailed surface reconnaissance combined with systematic subsurface testing. Shovel tests were placed at 50 m off-set intervals along transects spaced 50 m apart (**Figure 5.1**). There were 22 shovel tests excavated, none of which produced cultural materials, and no artifacts were discovered on the surface. No archaeological sites were identified within the APE. As per *36 CFR 800.4(b)(1)*, a reasonable and good faith effort was made to identify the historic properties within the APE (cf., ACHP n.d.). The Survey Log is in the **Appendix**.

The stratigraphy included:

- 0-30 cm light gray sand, 30-100 cm light brown sand (**Photo 5.1**).
- 0-40 cm light gray sand, 40-100 cm light brown sand (**Photo 5.2**)

Photo 5.1. Stratigraphy of ST 105, northern APE.

Photo 5.2. Stratigraphy of ST 6, central APE.

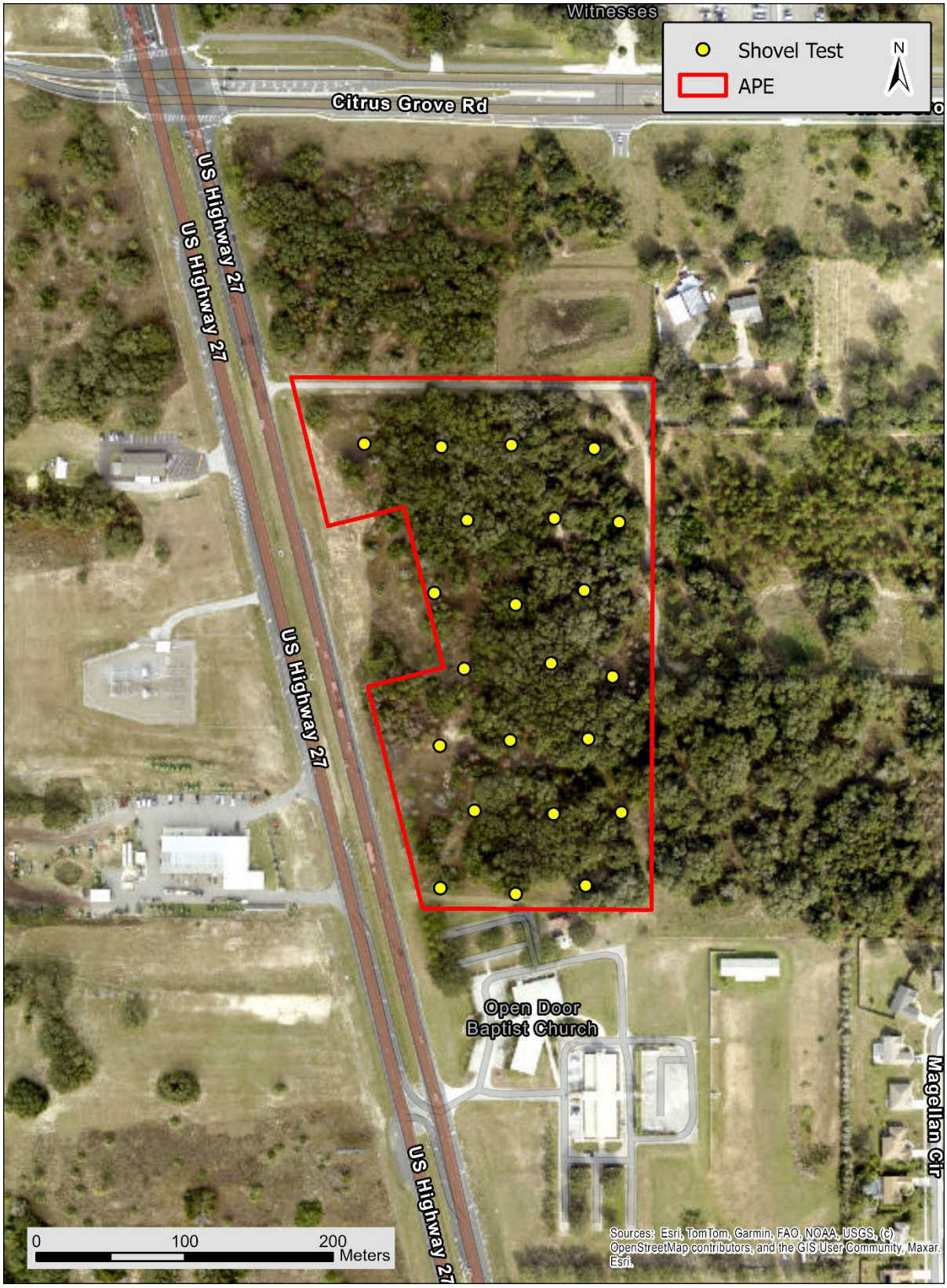


Figure 5.1. Location of the shovel tests within the APE.

5.2 Historic/Architectural

A review of the FMSF and NRHP revealed that no historic resources have been previously recorded within the APE. A review of relevant historic USGS quadrangle maps, USDA historic aerial photographs, and the Lake County property appraiser's website revealed no potential for historic resources 50 years of age or older (constructed in 1975 or earlier) within the APE. The absence of historic resources was confirmed by the field investigations.

5.3 Conclusions

The purpose of this investigation was to locate and identify any cultural resources within the APE and to assess their significance in terms of eligibility for listing in the NRHP. The proposed project will involve commercial development with parking and stormwater facilities. Based on the scale and nature of the activities, the project has a limited potential for any direct (physical, visual, or audible) or indirect effects outside the immediate footprint of construction; therefore, the archaeological and historical APE are limited to the boundaries of the property. This CRAS was conducted in March 2025 in accordance with Section 106 of the *NHPA* (*36 CFR Part 800*) and a reasonable and good faith effort was made to identify all historic properties within the APE (cf., ACHP n.d.). This survey and report conform to the standards contained in the FDHR's *Cultural Resource Management Standards and Operational Manual* (FDHR 2003), meet the specifications set forth in Chapter 1A-46, *FAC* and comply with Chapters 267 and 373, *FS*.

The background research and field investigations, which included the excavation 22 shovel tests, resulted in the identification of no archaeological sites. Furthermore, no historic resources were identified within the APE during the historic/architectural field survey. As such, there are no cultural resources listed, determined eligible, or that appear potentially eligible for listing in the NRHP within the APE. Therefore, it is the professional opinion of ACI that the proposed undertaking (commercial development with parking and stormwater facilities) will result in no historic properties affected. No further work is recommended.

6.0 REFERENCES CITED

ACHP (Advisory Council on Historic Preservation)

n.d. *Meeting the "Reasonable and Good Faith" Identification Standard in Section 106 Review*. Advisory Council on Historic Preservation, Washington, D.C. https://www.achp.gov/digital-library-section-106-landing/meeting-reasonable-and-good-faith-identification-standard

ACI/Janus Research

2001 Phase III Mitigative Excavation at the Lake Monroe Outlet Midden (8VO53), Volusia County, Florida. ACI, Sarasota and Janus Research, Tampa.

Albrecht, Ute

2022 Citrus Root Structures: Lessons From Below. *Citrus Industry*. July 2. Accessed September 9, 2024. https://citrusindustry.net/2022/07/25/citrus-root-structures-lessons-from-below/.

Almy, Marion M.

1978 The Archaeological Potential of Soil Survey Reports. *The Florida Anthropologist* 31(3):75-91.

Anderson, David G., David Echeverry, D. Shane Miller, Andrew A. White, Stephen J. Yerka, Eric Kansa, Sarah Whitcher Kansa, Christopher R. Moore, Kelsey Noak Myers, Joshua J. Well, Thaddeus G. Bissett, and Ashley M. Smallwood

2019 Paleoindian Settlement in the Southeastern United States: The Role of Large Databases. In *New Directions in the Search for the First Floridians*. Edited by David K. Thulman and Ervan G. Garrison, pp. 241-275. University of Florida Press, Gainesville.

Arnade, Charles W.

1968 Celi's Expedition to Tampa Bay: A Historical Analysis. *Florida Historical Quarterly* 47(1):1-7.

Ashley, Keith H.

2005 Archaeological Overview of Mt. Royal. *The Florida Anthropologist* 58(3-4):265-286.

2012 Early St. Johns II Interaction, Exchange, and Politics: A View from Northeastern Florida. In *Late Prehistoric Florida: Archaeology at the Edge of the Mississippian World*. Edited by Keith Ashley and Nancy Marie White, pp. 100-125. University Press of Florida, Gainesville.

Aten, Lawrence E.

1999 Middle Archaic Ceremonialism at Tick Island, Florida: Ripley P. Bullen's 1961 Excavation at the Harris Creek Site. *The Florida Anthropologist* 52(3):131-200.

Austin, Robert J.

2001 Paleoindian and Archaic Archaeology in the Middle Hillsborough River Basin: A Synthetic Overview. SEARCH, Jonesville. MS# 6661.

Blake, Eric S., Christopher W. Landsea, and Ethan Gibney
2011 The Deadliest, Costliest, and Most Intense United States Tropical Cyclones from 1851 to 2010 (And Other Frequently Requested Hurricane Facts). *NOAA Technical Memorandum* NWS NHC-6. National Weather Service, National Hurricane Center, Miami https://www.nhc.noaa.gov/pdf/nws-nhc-6.pdf.

Bullen, Ripley P.
1959 The Transitional Period of Florida. *Southeastern Archaeological Conference Newsletter* 6(1):43-53.
1962 Indian Burials at Tick Island. *Year Book of the American Philosophical Society* 1961:477-480.
1970 The Transitional Period of Southern Southeastern United States as Viewed from Florida, or the Roots of the Gulf Tradition. *Southeastern Archaeological Conference Bulletin* 13:63-70.
1975 *A Guide to the Identification of Florida Projectile Points*. Kendall Books, Gainesville.

Bullen, Ripley P., Adelaide K. Bullen, and William J. Bryant
1967 Archaeological Investigations at Ross Hammock Site, Florida. *American Studies Report* 7. The William L. Bryant Foundation, Orlando.

Carbone, Victor
1983 Late Quaternary Environment in Florida and the Southeast. *The Florida Anthropologist* 36(1-2):3-17.

Carr, Robert S. and B. Calvin Jones
1981 *Florida Anthropologist* Interview with Calvin Jones, Part II -- Excavations of an Archaic Cemetery. *The Florida Anthropologist* 34(2):81-89.

Carter, Brinnen C. and James S. Dunbar
2006 Early Archaic Archaeology. In *First Floridians and Last Mastodons: The Page-Ladson Site in the Aucilla River*. Edited by S. David Webb, pp. 493-517. Springer, The Netherlands.

Clausen, Carl J., A. D. Cohen, Cesare Emiliani, J. A. Holman, and J. J. Stipp
1979 Little Salt Spring, Florida: A Unique Underwater Site. *Science* 203(4381):609-614.

Combee, Neil
2025 *Records Search*. Polk County Property Appraiser, Lakeland. www.polkpa.org

Cordell, Ann S.
2004 Paste Variability and Possible Manufacturing Origins of Late Archaic Fiber-Tempered Pottery from Selected Sites in Peninsular Florida. In *Early Pottery: Technology, Function, Style, and Interaction in the Lower Southeast*. Edited by Rebecca Saunders and Christopher T. Hays, pp. 63-104. University of Alabama Press, Tuscaloosa.

Covington, James W.
1961 The Armed Occupation Act of 1842. *Florida Historical Quarterly* 40(1):41-53.
1982 *The Billy Bowlegs War 1855-1858: The Final Stand of the Seminoles Against the Whites*. The Mickler House Publishers, Chuluota.

Cumbaa, Stephen L.
1976 A Reconsideration of Freshwater Shellfish Exploitation in the Florida Archaic. *The Florida Anthropologist* 29(2, Part 1):49-59.

Daniel, I. Randolph and Michael Wisenbaker
1987 *Harney Flats: A Florida Paleo-Indian Site*. Baywood Publishing Co., Inc., Farmingdale.

Davis, John H.
1980 General Map of Natural Vegetation of Florida. *Circular* S-178. Agriculture Experiment Station, University of Florida, Gainesville.

Deagan, Kathleen A.
1978 Cultures in Transition: Assimilation and Fusion among the Eastern Timucua. In *Tacachale: Essays on the Indians of Florida and Southeastern Georgia During the Historic Period*. Edited by Jerald T. Milanich and Samuel Proctor, pp. 89-119. University Press of Florida, Gainesville.

Delcourt, Paul A. and Hazel R. Delcourt
1981 Vegetation Maps for Eastern North America: 40,000 yr B.P. to the Present. In *Geobotony II*. Edited by R. C. Romans, pp. 123-165. Plenum Publishing Corp., New York.

Dickinson, Martin F. and Lucy B. Wayne
1996 The Sligh Site (8Se1332): Data Recovery Excavations on Lake Jessup, Winter Springs, Seminole County, Florida. SouthArc, Inc., Gainesville. MS# 5107.

Donoghue, Joseph F.
2006 Geography and Geomorphology of the Aucilla River Region. In *First Floridians and Last Mastodons: The Page-Ladson Site in the Aucilla River*. Edited by S. David Webb, pp. 31-48. Springer, The Netherlands.

Doran, Glen H., Ed.
2002 *Windover: Multidisciplinary Investigations of an Early Archaic Florida Cemetery*. University Press of Florida, Gainesville.

Douglass, Andrew E.
1882 A Find of Ceremonial Axes in a Florida Mound. *American Antiquarian and Oriental Journal* 4:100-109.

Dunbar, James S.
2006a Paleoindian Archaeology. In *First Floridians and Last Mastodons: The Page-Ladson Site in the Aucilla River*. Edited by S. David Webb, pp. 403-435. Springer, The Netherlands.
2006b Paleoindian Land Use. In *First Floridians and Last Mastodons: The Page-Ladson Site in the Aucilla River*. Edited by S. David Webb, pp. 525-544. Springer, The Netherlands.
2006c Pleistocene-Early Holocene Climate Change: Chronostratigraphy and Geoclimate of the Southeast US. In *First Floridians and Last Mastodons: The Page-Ladson Site in the Aucilla River*. Edited by S. David Webb, pp. 103-155. Springer, The Netherlands.
2016 *Paleoindian Societies of the Coastal Southeast*. University Press of Florida, Gainesville.

Dunbar, James S. and David K. Thulman
2019 Early Paleoindian Potentials on the Continental Shelf in the Southeastern United States. In *New Directions in the Search for the First Floridians*. Edited by David K. Thulman and Ervan G. Garrison, pp. 101-121. University of Florida Press, Gainesville.

Dunbar, James S. and Pamela K. Vojnovski
2007 Early Floridians and Late Mega-Mammals: Some Technological and Dietary Evidence from Four North Florida Paleoindian Sites. In *Foragers of the Terminal Pleistocene in North America*. Edited by R. B. Walker and B. N Driskell, pp. 167-202. University of Nebraska Press, Lincoln, NE.

Dunbar, James S. and S. David Webb
1996 Bone and Ivory Tools from Submerged Paleoindian Sites in Florida. In *The Paleoindian and Early Archaic Southeast*. Edited by David G. Anderson and Kenneth E. Sassaman, pp. 331-353. University of Alabama Press, Tuscaloosa.

Ellis, Gary D., Russell A. Dorsey, and Robin Denson
1994 Cultural Resources Study of Seminole County, Florida: Archaeology. Gulf Archaeological Research Institute, Lecanto. MS# 3770.

Endonino, Jon C.
2007 A Reevaluation of the Gainesville, Ocala, and Lake Panasoffkee Quarry Clusters. *The Florida Anthropologist* 60(2-3):77-96.

Farr, Grayal Earle
2006 *A Reevaluation of Bullen's Typology for Preceramic Projectile Points*. Master of Arts, Department of Anthropology, Florida State University, Tallahassee.

Faught, Michael K.
2004 The Underwater Archaeology of Paleolandscapes, Apalachee Bay, Florida. *American Antiquity* 69(2):275-289.

Faught, Michael K. and Joseph F. Donoghue
1997 Marine Inundated Archaeological Sites and Paleofluvial Systems: Examples from a Karst-controlled Continental Shelf Setting in Apalachee Bay, Northeastern Gulf of Mexico. *Geoarchaeology* 12:417-458.

FDACS (Florida Division of Agriculture and Consumer Services)
2013 *The Saga of the Mediterranean Fruit Fly, Part I: 1929-1950*. Florida Division of Agriculture and Consumer Services, Tallahassee. https://fdacsdpi.wordpress.com/2013/03/19/the-saga-of-the-mediterranean-fruit-fly-part-i-1928-1930/#:~:text=Medfly%20first%20detected%20in%201929&text=The%20first%20Medfly%20eradication%20effort,the%20presence%20of%20many%20larvae.

FDHR (Florida Division of Historical Resources)
2003 *Cultural Resource Management Standards and Operational Manual*. Florida Division of Historical Resources, Tallahassee.

Fernald, Edward A. and Elizabeth D. Purdum, Eds.
1996 *Atlas of Florida*. University Press of Florida, Gainesville.

Florida Legislature
2024 *Lake County*. Florida Legislature, Office of Economic and Demographic Research, Tallahassee. http://edr.state.fl.us/content/area-profiles/county/lake.pdf

FMSF (Florida Master Site File)
Various site file forms. On file, FDHR, Tallahassee.

FPS (Florida Perservation Services)
1986 Marion County Historic and Architectural Survey. Florida Preservation Services. On file, FDHR, Tallahassee. MS# 1371.

Fryman, Mildred, John W. Griffin, and James Miller
1978 Cultural Resource Assessment of the Seminole Electric Property, Putnam County, Florida. On file, FDHR, Tallahassee. MS# 105.

Furman, Albert L., Horace O. White, E. Cruz, Walter E. Russell, and Buster P. Thomas
1975 *Soil Survey of the Lake County Area, Florida*. USDA, Soil Conservation Service.

FWP (Federal Writers' Project)
1939 *Florida: A Guide to the Southernmost State*. Federal Writers' Project. Oxford University Press, New York.

Futch, Stephen H
2024 Citrus Reset Management. UF/IFAS Extension. March 25. Accessed September 9, 2024. https://edis.ifas.ufl.edu/publication/CH025.

George, Paul
1990 Historical/Architectural Contexts. *Draft: State of Florida Comprehensive Historic Preservation Plan* FDHR, Tallahassee.

Gleason, Patrick J. and P. Stone
1994 Age, Origin and Landscape Evolution of the Everglades Peatland. In *Everglades: The Ecosystem and Its Restoration*. Edited by S. M. Davis and J. C. Ogden, pp. 149-197. St. Lucie Press, Delray Beach.

Goggin, John M.
1952 Space and Time Perspective in Northern St. Johns Archaeology, Florida. *Yale University Publications in Anthropology* 1998 Reprint, University Press of Florida, Gainesville.

Google Earth
2025 Google Earth Imagery.

Grismer, Karl H.
1949 *The Story of Fort Myers*. Southwest Florida Historical Society. Island Press Publishing, Ft. Myers.

Guthrie, Sarah M. W.
1974 *Land of Promise, Land of Change: An Examination of the Population of Hillsborough County, Florida*. Emory University, Atlanta.

Halligan, Jessi J., Michael R. Waters, Angelina Perrotti, Irvy J. Owens, Joshua M. Feinburg, Mark D. Bounre, Brendan Fenerty, Barbara Winsborough, David Carlson, Daniel C. Fisher, Thomas W. Stafford, and James S. Dunbar
2016 Pre-Clovis Occupation 14,550 Years Ago at the Page-Ladson Site, Florida, and the Peopling of the Americas. *Science Advances* 2(5) https://advances.sciencemag.org/content/2/5/e1600375

Harner, Charles E.
1973 *Florida's Promoters*. Trend House, Tampa.

Harris, William S.
1855 *Field Notes.* Volume 203. On file, FDEP, Tallahassee.

Hemmings, C. Andrew
1999 *The Paleoindian and Early Archaic Tools of Sloth Hole (8Je121): An Inundated Site in the Lower Aucilla River, Jefferson County, Florida*. Department of Anthropology, University of Florida, Gainesville.

Horgan, James J., Alice F. Hall, and Edward J. Herrmann
1992 *The Historic Places of Pasco County*. Pasco County Historical Preservation Committee, Dade City.

Horvath, Elizabeth A.
1995 Conclusions. In *Final Report on the Archaeological Investigations at the Seminole Rest Site (CANA-063 / 8VO124), Canaveral National Seashore, Volusia County, Florida*. Edited by Elizabeth A. Horvath, pp. 133-144. Southeast Archeological Center, National Park Service, Tallahassee.

Jahn, Otto L. and Ripley P. Bullen
1978 The Tick Island Site, St. Johns River, Florida. *Florida Anthropological Society Publications* 10

Janssen, Virginia M.
2018 Section 106 Review, Form 620, Proposed 180' Monopole Tower (190' with Appurtenances) 409 N US Highway 27, Minneola, Lake County, FL. US-FL5226 Minneola D5. Dynamic Environmental Associates, Inc., Macon, GA. MS# 25640.

Janus Research
1992 A Cultural Resource Assessment Survey of the Interstate 4 Improvements Project Right-of-Way from 50th Street to the Hillsborough/Polk County Line, Hillsborough County, Florida. Janus Research, Inc., Tampa. MS# 3243.
1998 Cultural Resource Assessment Survey for the State Road 25 (US Highway 27) Project Development and Environmental (PD&E) Study from US 192 to SR 91 (Florida's Turnpike), Lake County, Florida. Janus Research, Inc., Tampa. MS# 5847.

Jennings, Jesse D., Gordon R. Willey, and Marshall T. Newman
1957 The Ormond Beach Mound, East Central Florida. *Bureau of American Ethnology Bulletin* 164:1-28.

Johnson, Robert E. and Dana Ste. Claire
1988 Edgewater Landing - Archaeological Investigations Along the Indian River North, Volusia County, Florida. Florida Archaeological Services, Inc., Jacksonville. MS# 2278.

Kerski, Joseph
2013 *Comparing the Spatial Accuracy of Field Data Collected with Smartphones and GPS Receivers*. https://community.esri.com/t5/education-blog/comparing-the-spatial-accuracy-of-field-data/ba-p/892553

Kozuch, Laura
1995 Shellfish Gatherers of Florida's East Coast. In *Final Report on the Archaeological Investigations at the Seminole Rest Site (CANA-063 / 8VO124), Canaveral National Seashore, Volusia County, Florida*. Edited by Elizabeth A. Horvath, pp. 59-91. Southeast Archeological Center, National Park Service, Tallahassee.

Lanning, Bradley and Gina Lane
2023 Phase I Cultural Resource Assessment Survey, Minneola Sullivan Road, Lake County, Florida. *Chronicle Heritage Technical Report* 23-561. Chronicle Heritage, Tallahassee. MS# 29147.

Mackay, John and J. E. Blake
1839 *Map of the Seat of War in Florida*.https://digital.lib.usf.edu/?u15.246

Mahon, John K.
1985 *History of the Second Seminole War 1835-1842*. University Press of Florida, Gainesville. Revised edition.

Mann, Robert W.
1983 *Rails 'Neath the Palms*. Darwin Publications, Burbank.

Marrinan, Rochelle A. and Tanya M. Peres
2019 Paleoindian Zooarchaeology in Florida. In *New Directions in the Search for the First Floridians*. Edited by David K. Thulman and Ervan G. Garrison, pp. 160-171. University of Florida Press, Gainesville.

Milanich, Jerald T.
1994 *Archaeology of Precolumbian Florida*. University Press of Florida, Gainesville.
1995 *Florida Indians and the Invasion from Europe*. University Press of Florida, Gainesville.

Milanich, Jerald T. and Charles H. Fairbanks
1980 *Florida Archaeology*. Academic Press, New York.

Miller, James J.
1994 The Benton Mound: Evidence of Burial Ceremonialism in the St. Johns I Period. *The Florida Anthropologist* 47(2):207-222.
1998 *An Environmental History of Northeast Florida*. University Press of Florida, Gainesville.

Morris, John W., III
2011 Blackwater Heartwood Salvage Deadhead Logging Survey. Southeastern Archaeological Services, Inc., Jacksonville Beach. MS# 19930.

Neill, Wilfred T.
1964 The Association of Suwannee Points and Extinct Animals in Florida. *The Florida Anthropologist* 17(3-4):17-32.

Newsom, Lee A.
1987 Analysis of Botanical Remains from Hontoon Island (8VO202), Florida: 1980-1985 Excavations. *The Florida Anthropologist* 40(1):47-84.
1994 Archaeobotanical Data from Groves' Orange Midden (8VO2601), Volusia County, Florida. *The Florida Anthropologist* 47(4):404-417.

Newsom, Lee A. and Barbara A. Purdy
1990 Florida Canoes: A Maritime Heritage from the Past. *The Florida Anthropologist* 43(3):164-180.

Newsom, Lee A., S. David Webb, and James S. Dunbar
1993 History and Geographical Distribution of *Curcubita pepo* Gourds in Florida. *Journal of Ethnobiology* 13(1):75-98.

Penders, Thomas E.
2023 Malabar II. Personal communication to Gifford Waters, November 20.

Piatek, Bruce J.
1992 Tomoka State Park Survey and Preliminary Test Excavation Results. *The Florida Anthropologist* 45(4):326-335.
1994 The Tomoka Mound Complex in Northeast Florida. *Southeastern Archaeology* 13(2):109-118.

Purdy, Barbara A.
1981 *Florida's Prehistoric Stone Tool Technology*. University Press of Florida, Gainesville.
1987 Investigations at Hontoon Island (8-VO-202), An Archaeological Wetsite in Volusia County, Florida: An Overview and Chronology. *The Florida Anthropologist* 40(1):4-12.
1988 *Wet Site Archaeology*. Telford Press, Caldwell, NJ.
1994a The Chipped Stone Tool Industry at Grove's Orange Midden (8VO2601), Volusia County, Florida. *The Florida Anthropologist* 47(4):390-392.
1994b Excavations in Water-Saturated Deposits at Lake Monroe, Volusia County, Florida. *The Florida Anthropologist* 47(4):326-332.

Quitmyer, Irvy R.
1995 *Mercenaria* Season of Harvest and Age Structure. In *Final Report on the Archaeological Investigations at the Seminole Rest Site (CANA-063 / 8VO124), Canaveral National Seashore, Volusia County, Florida*. Edited by Elizabeth A. Horvath, pp. 92-132. Southeast Archeological Center, National Park Service, Tallahassee.

Romans, Bernard
1961 *A Concise Natural History of East and West Florida*. Published 1775, Reprinted by Pelican Publishing Company, New Orleans.

Rouse, Irving
1951 A Survey of Indian River Archaeology, Florida. *Yale University Publications in Anthropology* 44. 1981 Reprint, AMS Press, Inc., New York.

Russo, Michael
1984 *The Evolution of Subsistence Strategies of Faunal Resources at the Gauthier Site*. Paper presented at the 41st Southeastern Archaeological Conference, Pensacola.
1992 Chronologies and Cultures of the St. Marys Region of Northeast Florida and Southeast Georgia. *The Florida Anthropologist* 45(2):107-138.
1996a Southeastern Archaic Mounds. In *Archaeology of the Mid-Holocene Southeast*. Edited by Kenneth E. Sassaman and David G. Anderson, pp. 259-287. University Press of Florida, Gainesville.
1996b Southeastern Mid-Holocene Coastal Settlements. In *Archaeology of the Mid-Holocene Southeast*. Edited by Kenneth E. Sassaman and David G. Anderson, pp. 177-199. University Press of Florida, Gainesville.

Russo, Michael, Ann S. Cordell, Lee A. Newsom, and Robert J. Austin
1989 Phase III Archaeological Excavations at Edgewater Landing, Volusia County, Florida. Janus Research, Inc., Tampa. MS# 2012.

Russo, Michael, Ann S. Cordell, and Donna L. Ruhl
1993 The Timucuan Ecological and Historic Preserve, Phase III Final Report. Southeast Archeological Center, National Park Service, Tallahassee. MS# 3648.

Russo, Michael and Dana Ste. Claire
1992 Tomoka Stone: Archaeological Evidence for Early Coastal Adaptations. *The Florida Anthropologist* 45(4):336-346.

Sassaman, Kenneth E.
2003 New AMS Dates on Orange Fiber-Tempered Pottery from the Middle St. Johns Valley and Their Implications for Culture History in Northeast Florida. *The Florida Anthropologist* 56(1):5-13.

Saunders, Rebecca and Margaret K. Wrenn
2014 Crafting Orange Pottery in Early Florida. In *New Histories of Pre-Columbian Florida*. Edited by Neill Wallis and Asa R. Randall, pp. 183-202. University Press of Florida, Gainesville.

Scott, Thomas M.
1978 Environmental Geology Series: Orlando Sheet. *Map Series* 85. Florida Department of Natural Resources, Bureau of Geology, Tallahassee.
2001 Text to Accompany the Geologic Map of Florida. *Open File Report* 80. Florida Geological Survey, Tallahassee.

Scott, Thomas M., Kenneth M. Campbell, Frank R. Rupert, Jonathan D. Arthur, Thomas M. Missimer, Jacqueline M. Lloyd, J. William Yon, and Joel G. Duncan
2001 Geologic Map of the State of Florida. *Map Series* 146. Florida Geological Survey, Tallahassee.

Shofner, Jerrell H.
1982 *History of Apopka and Northwest Orange County, Florida*. Rose Printing Company, Tallahassee.
1987 Roosevelt's "Tree Army" The Civilian Conservation Corps in Florida. *Florida Historical Quarterly* 65(4):433-456.

Sigler-Eisenberg, Brenda
1984a *Foraging Strategies in a Malabar I Period Household*. Paper presented at the 41st Annual Southeastern Archaeological Conference, Pensacola.
1984b *The Gauthier Site: A Microcosm of Biocultural Adaptation in the Upper St. Johns River Basin*. Paper presented at the 41st Southeastern Archaeological Conference, Pensacola.

Sigler-Eisenberg, Brenda, Ann S. Cordell, Richard W. Estabrook, Elizabeth A. Horvath, Lee A. Newsom, and Michael Russo
1985 Archaeological Site Types, Distribution, and Preservation within the Upper St. Johns River Basin. *Miscellaneous Project and Report Series* 27. Department of Anthropology, Florida Museum of Natural History, Gainesville. MS# 1852.

Stanford, Dennis J., Robson Bonnichsen, Betty Meggars, and Gentry Steele
2005 Paleoamerican Origins: Models, Evidence, and Future Directions. In *Paleoamerican Origins: Beyond Clovis*. Edited by R. Bonnichsen, B. T. Lepper, D. Stanford and M. R. Waters, pp. 313-353. Center for the Study of the First Americans, College Station, TX.

State of Florida
n.d. *Tract Book.* Volume 22. On file, FDEP, Tallahassee.

Ste. Claire, Dana
1987 The Development of Thermal Alteration Technologies in Florida: Implications for the Study of Prehistoric Adaptation. *The Florida Anthropologist* 40(3):203-208.
1989 Archaeological Investigations at the McDonald Farm Site, Volusia County, Florida. Museum of Arts and Sciences, Daytona Beach.
1990 The Archaic in East Florida: Archaeological Evidence for Early Coastal Adaptations. *The Florida Anthropologist* 43(3):188-197.

Taylor, Arthur E., E. W. Knobel, S. W. Phillips, E. H. Bailey, and H. M. Smith
1928 *Soil Survey Lake County, Florida*. USDA, Bureau of Chemistry and Soils, Washington D. C.

Tebeau, Charlton W.
1980 *A History of Florida*. University of Miami Press, Coral Gables. Revised Edition.

Tischendorf, A. P.
1954 Florida and the British Investor: 1880-1914. *Florida Historical Quarterly* 33(2):120-129.

Tracy, Charles C.
1846 *Field Notes.* Volume 97. On file, FDEP, Tallahassee.

Tracy, Charles C., George Watson, Henry Washington, and William S. Harris
1855 *Plat. Township 22 South, Range 26 East*. On file, FDEP, Tallahassee.

USCB (United States Census Bureau)
2025 *Florida Quick Facts*. U.S. Census Bureau, https://www.census.gov/quickfacts/fact/table/FL,US

USDA (United States Department of Agriculture)
1941 Aerial Photograph: 2-16-41, CTS-4B-76. On file, PALMM, Gainesville.
1947 Aerial Photograph: FEB 23 1947, CTS-5D-58. On file, PALMM, Gainesville.

USDA
1958 Aerial Photograph: 1-11-58, CTS-2V-90. On file, PALMM, Gainesville.
1974 Aerial Photograph: 2-10-74, 12069-374-258. On file, PALMM, Gainesville.
1975 *Soil Survey Report Maps and Interpretations Lake County, Florida*. USDA, Soil Conservation Service.
2017 2017 Census of Agriculture: Lake County, Florida. USDA.
2021 Soil Survey Geographic (SSURGO) Database for Florida - October 2021. USDA, NRCS, Fort Worth, TX.
2024 2022 Census of Agriculture: Lake County, Florida. USDA.

USGS (United States Geological Survey)
1969 *Clermont West, Fla.*
2013 *Clermont West, Fla.* USA_Topo_Maps.

University of California Master Gardeners of Orange County
2024 Edible Plants: Citrus, Growing. Master Gardeners of Orange County. Accessed September 9, 2024. https://mgorange.ucanr.edu/Edible_Plants/?uid=58&ds=530.

Vincent, Christopher, Tripti Vashisth, Mongi Zekri, and Ute Albrecht
2024 2024-2025 Florida Citrus Production Guide: Grove Planning and Establishment. UF/IFAS Extension August 21. Accessed September 9, 2024. https://edis.ifas.ufl.edu/publication/hs1302.

Waller, Ben I.
1970 Some Occurrences of Paleo-Indian Projectile Points in Florida Waters. *The Florida Anthropologist* 23(4):129-134.

Washington, Henry
1843 *Field Notes.* Volume 92. On file, FDEP, Tallahassee.

Waters, Jamie Anderson, Martin F. Dickinson, and Lucy B. Wayne
2004 Cultural Resource Assessment Founder's Ridge, Lake County, Florida. SouthArc, Inc., Gainesville. MS# 11033.

Watson, George
1849 *Field Notes.* Volume 114. On file, FDEP, Tallahassee.

Watts, William A.
1969 A Pollen Diagram from Mud Lake, Marion County, North-Central Florida. *Geological Society of America Bulletin* 80(4):631-642.
1971 Post Glacial and Interglacial Vegetational History of Southern Georgia and Central Florida. *Ecology* 51:676-690.
1975 A Late Quaternary Record of Vegetation from Lake Annie, South-Central Florida. *Geology* 3(6):344-346.

Watts, William A., Eric C. Grimm, and T. C. Hussey
1996 Mid-Holocene Forest History of Florida and the Coastal Plain of Georgia and South Carolina. In *Archaeology of the Mid-Holocene Southeast*. Edited by Kenneth E. Sassaman and David G. Anderson, pp. 28-38. University Press of Florida, Gainesville.

Watts, William A. and Barbara C. S. Hansen
1994 Pre-Holocene and Holocene Pollen Records of Vegetation History for the Florida Peninsula and their Climatic Implications. *Palaeogeography, Palaeoclimatology, Palaeoecology* 109:163-176.

Wayne, Lucy B. and Martin F. Dickinson
1993 Archaeological Excavations, Lake Jessup South Site (8SE580), Seminole County, Florida. SouthArc, Inc., Gainesville.

Weaver, Paul L., III, Historic Property Associates, and Pappas Associates Inc.
1996 Model Guidelines for Design Review: A Guide for Developing Standards for Historic Rehabilitation on Florida Communities. FDHR, Tallahassee.

Webb, S. David, Ed.
2006 *First Floridians and Last Mastodons: The Page-Ladson Site in the Aucilla River*. Springer, The Netherlands.

Webb, S. David and James S. Dunbar
2006 Carbon Dates. In *First Floridians and Last Mastodons: The Page-Ladson Site in the Aucilla River*. Edited by S. David Webb, pp. 83-102. Springer, The Netherlands.

Weisman, Brent R.
1993 An Overview of the Prehistory of the Wekiva River Basin. *The Florida Anthropologist* 46(1):20-36.

Wheeler, Ryan J. and Ray M. McGee
1994a Technology of Mount Taylor Period Occupation, Groves' Orange Midden (8VO2601), Volusia County, Florida. *The Florida Anthropologist* 47(4):350-379.
1994b Wooden Artifacts from Groves' Orange Midden. *The Florida Anthropologist* 47(4):380-389.

Wheeler, Ryan J., James J. Miller, Ray M. McGee, Donna L. Ruhl, Brenda Swann, and Melissa Memory
2003 Archaic Period Canoes from Newnan's Lake, Florida. *American Antiquity* 68(3):533-551.

Wheeler, Ryan J., Christine Newman, and Ray M. McGee
2000 A New Look at the Mount Taylor and Bluffton Sites, Volusia County, with an Outline of the Mount Taylor Culture. *The Florida Anthropologist* 52(2-3):132-157.

White, William A.
1970 Geomorphology of the Florida Peninsula. *Geological Bulletin* 51. Florida Department of Natural Resources, Bureau of Geology, Tallahassee.

Willey, Gordon R.
1954 Burial Patterns in the Burns and Fuller Mounds, Cape Canaveral Florida. *The Florida Anthropologist* 7(3):79-90.

Wing, Elizabeth S. and Laurie McKean
1987 Preliminary Study of the Animal Remains Excavated from the Hontoon Island Site. *The Florida Anthropologist* 40(1):40-46.

WPA (Works Progress Administration)
1941 WPA Veteran's Grave Registration 1940-41. *Special Archives Publication* 37. State Arsenal, St. Augustine.

Yang, Jie, Alexander Varshavsky, Hongbo Liu, Yingying Chen, and Marco Gruteser
2022 Accuracy Characterization of Cell Tower Localization. Department of Electrical and Computer Engineering, Stevens Institute of Technology. https://www.researchgate.net/publication/221568410_Accuracy_Characterization_of_Cell_Tower_Localization, Hoboken, NJ.

Yates, William Brian
2000 *Implications to Late Archaic Exchange Networks in the Southeast as Indicated by the Archaeological Evidence of Prehistoric Soapstone Vessels Throughout Florida.* Department of Anthropology, Florida State University, Tallahassee.

Ziton, Tyler
2023 Do Citrus Trees Have Invasive Roots? Couch to Homestead, Austin, TX. Accessed June 27, 2023. https://couchtohomestead.com/do-citrus-trees-have-invasive-roots/

Appendix

Survey Log

Ent D (FMSF only) _____

Survey Log Sheet

Florida Master Site File
Version 5.0 3/19

Survey # (FMSF only) _____

Consult *Guide to the Survey Log Sheet* for detailed instructions.

Manuscript Information

Survey Project (name and project phase)
CRAS Minneola Hwy 27, LA Co. - Phase I

Report Title (exactly as on title page)
Cultural Resource Assessment Survey of the Minneola Hwy 27 Property, Lake County, Florida

Report Authors (as on title page) 1. ACI 3. _____
2. _____ 4. _____

Publication Year 2025 **Number of Pages in Report** (do not include site forms) 48

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)
Cultural Resource Assessment Survey of the Minneola Hwy 27 Property, Lake County, Florida. Conducted for ARCO Design/Build, Charlotte, NC, by ACI, Sarasota. P25041

Supervisors of Fieldwork (even if same as author) Names Horvath, Elizabeth A.

Affiliation of Fieldworkers: Organization Archaeological Consultants Inc City Sarasota

Key Words/Phrases (Don't use county name, or common words like *archaeology*, *structure*, *survey, architecture, etc.*)
1. _____ 3. _____ 5. _____ 7. _____
2. _____ 4. _____ 6. _____ 8. _____

Survey Sponsors (corporation, government unit, organization, or person funding fieldwork)
Name Greenberg Gibbons Properties Organization _____
Address/Phone/E-mail 706 Giddings Avenue, Annapolis, Maryland 21401

Recorder of Log Sheet Horvath, Elizabeth A Date Log Sheet Completed _____

Is this survey or project a continuation of a previous project? ☒No ☐Yes: **Previous survey #s (FMSF only)** _____

Project Area Mapping

Counties (select every county in which field survey was done; attach additional sheet if necessary)
1. Lake 3. _____ 5. _____
2. _____ 4. _____ 6. _____

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)
1. Name CLERMONT WEST Year 2013 4. Name _____ Year _____
2. Name _____ Year _____ 5. Name _____ Year _____
3. Name _____ Year _____ 6. Name _____ Year _____

Field Dates and Project Area Description

Fieldwork Dates: Start 3-17-2025 End 3-17-2025 **Total Area Surveyed** (fill in one) _____hectares 15.40 acres
Number of Distinct Tracts or Areas Surveyed 1
If Corridor (fill in one for each) **Width:** _____meters _____feet **Length:** _____kilometers _____miles

Survey Log Sheet

Survey #_____

Research and Field Methods

Types of Survey (select all that apply): ☒archaeological ☒architectural ☒historical/archival ☐underwater
☐damage assessment ☐monitoring report ☐other(describe): _____

Scope/Intensity/Procedures

background research, surface reconnaissance, systematic subsurface testing (50 m intervals) N=22, all negative, 1 m deep, 50 cm diameter, 1/4" screen, historic resources reconnaissance

Preliminary Methods (select as many as apply to the project as a whole)

☐Florida Archives (Gray Building)	☐library research- *local public*	☐local property or tax records	☒other historic maps	☐LIDAR
☐Florida Photo Archives (Gray Building)	☐library-special collection	☐newspaper files	☒soils maps or data	☐other remote sensing
☒Site File property search	☒Public Lands Survey (maps at DEP)	☒literature search	☒windshield survey	
☒Site File survey search	☐local informant(s)	☐Sanborn Insurance maps	☒aerial photography	

☐other (describe): _____

Archaeological Methods (select as many as apply to the project as a whole)

☐Check here if **NO** archaeological methods were used.

☐surface collection, controlled	☐shovel test-other screen size	☐block excavation (at least 2x2 m)	☐metal detector
☒surface collection, uncontrolled	☐water screen	☐soil resistivity	☐other remote sensing
☒shovel test-1/4"screen	☐posthole tests	☐magnetometer	☒pedestrian survey
☐shovel test-1/8" screen	☐auger tests	☐side scan sonar	☐unknown
☐shovel test 1/16"screen	☐coring	☐ground penetrating radar (GPR)	
☐shovel test-unscreened	☐test excavation (at least 1x2 m)	☐LIDAR	

☐other (describe): _____

Historical/Architectural Methods (select as many as apply to the project as a whole)

☐Check here if **NO** historical/architectural methods were used.

☐building permits	☐demolition permits	☐neighbor interview	☐subdivision maps
☐commercial permits	☒windshield survey	☐occupant interview	☒tax records
☐interior documentation	☒local property records	☐occupation permits	☐unknown

☐other (describe): _____

Survey Results

Resource Significance Evaluated? ☒Yes ☐No

Count of Previously Recorded Resources 0 **Count of Newly Recorded Resources** 0

List Previously Recorded Site ID#s with Site File Forms Completed (attach additional pages if necessary)

NA

List Newly Recorded Site ID#s (attach additional pages if necessary)

Site Forms Used: ☐Site File Paper Forms ☐Site File PDF Forms

REQUIRED: Attach Map of Survey or Project Area Boundary

SHPO USE ONLY **SHPO USE ONLY** **SHPO USE ONLY**

Origin of Report: ☐872 ☐Public Lands ☐UW ☐1A32 #_____ ☐Academic ☐Contract ☐Avocational
☐Grant Project #_____ ☐Compliance Review: CRAT #_____

Type of Document: ☐Archaeological Survey ☐Historical/Architectural Survey ☐Marine Survey ☐Cell Tower CRAS ☐Monitoring Report
☐Overview ☐Excavation Report ☐Multi-Site Excavation Report ☐Structure Detailed Report ☐Library, Hist. or Archival Doc
☐Desktop Analysis ☐MPS ☐MRA ☐TG ☐Other: _____

Document Destination: Plottable Projects Plotability: _____

Florida Master Site File / Div. of Historical Resources / R.A. Gray Bldg / 500 S Bronough St., Tallahassee, Florida 32399-0250
Phone 850.245.6440, Fax 850.245.6439, Email: SiteFile@dos.myflorida.com

Minneola Hwy 27 Property

Township 22 South, Range 26 East, Section 06

USGS Clermont West

Lake County, Florida

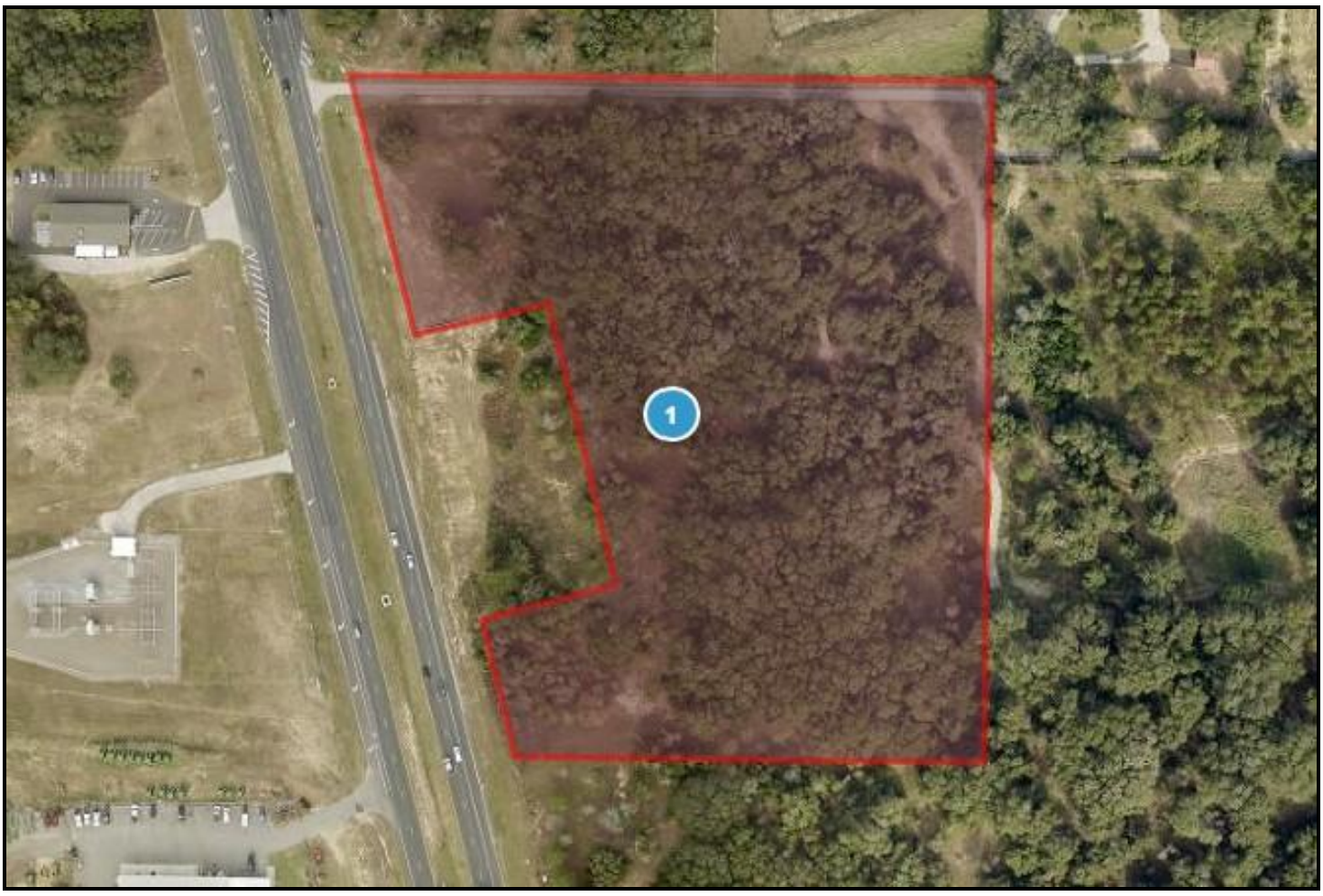
Arbor Report
February 22, 2026

Randy Buchanan, RLA
Landscape Dynamics
Landscape Architects and Planners, LLC
[redacted]

Re: US27 Mixed Use PD - Tree census / survey.

Scope:
Services were retained to conduct a tree census / survey to locate and identify all trees greater than 12" in Diameter at Breast Height (DBH) for an undeveloped parcel # 06-22-26-0003-000-04700. This parcel is located on US Highway 27, Minneola, Florida, south of Citrus Grove Road.

Perform a Level II Tree Risk Assessment for these trees and summarize in a report.



Aerial View of Project Site.

Methods:
Each tree was measured for Diameter at Breast Height (DBH) using a standard forestry DBH tape or field caliper. Each tree was visually inspected using a **Level 2, Tree Risk Assessment** as defined by the **International Society of Arboriculture (ISA)**. This level of inspection includes a 360-degree

visual evaluation of the tree from top to bottom including a review of the crown, trunk, root flare, and above-ground roots for evidence of decay, storm damage, disease, and insect activity.
All trees recorded were marked with **blue spray paint**, numbered, and **flagged in blue.** Their location was recorded using **Avenza Maps** mobile app to record their approximate GPS location. Invasive, exotic trees and trees that are retrenching and / or have structural defects and likely to fail within t 2-year period were **flagged in red** and their calculations omitted from the totals below.

Risk and liability determinations include location to potential targets such as building structures, automobiles, streets, sidewalks, and nearby utilities. The **Level 2 Inspection** is used to help determine three main categories of risk: **Likelihood of Failure** (Imminent, Probable, Possible, and Improbable), **Likelihood of Impact** (High, Medium, Low, Very Low), and **Consequences of Failure** (Severe, Significant, Minor, Negligible). Together, these three risk categories can be used to help the property owners in making decisions for pruning and / or removal.

These ratings are based on available targets in which the tree could impact if it were to fail. Currently, there are no targets on site, and the **Likelihood of Failure** rating is the only risk category rated in this report. The Likelihood of Failure rating in this report is for a 2-year time frame from the date of inspection.

***Matrix 1*. Likelihood Matrix.**

Likelihood of Failure	Likelihood of Impact			
	Very Low	Low	Medium	High
Imminent	Unlikely	Somewhat Likely	Likely	Very Likely
Probable	Unlikely	Unlikely	Somewhat Likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat Likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

***Matrix 2*. Risk Rating Matrix.**

Likelihood of Failure & Impact	Consequences of Failure			
	Negligible	Minor	Significant	Severe
Very Likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat Likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Likelihood of Failure	Likelihood of Impact	Consequences of Failure
Imminent: Failure has started or is most likely to occur in the near future, even if there is no significant wind or increased load.	**High:** The failed tree or tree part is likely to impact the target.	**Severe:** Serious personal injury or death, high-value property damage, or major disruption of important activities.
Probable: Failure may be expected under normal weather conditions.	**Medium:** The failed tree or tree part could impact the target but is not expected to do so.	**Significant:** Substantial personal injury, moderate to high-value property damage, or considerable disruption of activities.
Possible: Failure may be expected in extreme weather conditions, but it is unlikely during normal weather	**Low:** There is a slight chance that the failed tree or tree part will impact the target.	**Minor:** Minor personal injury, low to moderate - value property damage, or small disruption of activities.
Improbable: The tree or tree part is not likely to fail during normal weather conditions and may not fail in extreme weather conditions.	**Very Low:** The chance of the failed tree or tree part impacting the specified target is remote.	**Negligible:** No personal injury, low - value property damage, or disruptions that can be replaced or repaired.

Observations / Discussion:

The field work for this review was conducted on February 22, 2026.

The historical plant community type is upland sandhill with a canopy of longleaf pine (*Pinus palustris*) with an understory of sand laurel oak (*Querucs hemisphaerica*), live oak (*Quercus virginiana*), and bluejack oak (*Quercus incana*). This site was part of a citrus grove operation in the 1990's based on historical imagery. The citrus grove went away in the late 1990's and a new canopy regenerated. Most of the current tree canopy is dominated by sand laurel oak, laurel oak and live oaks.

Aerial imagery 1994.

There were six (6) trees recorded that are alive but are retrenching, have vertical separation cracks, sloughing bark and likely to fail with a 2-year period and their calculations are omitted from the data below.

Cracks in tree trunks are a separation of wood fibers and can be one of the major indicators of an unstable tree or limb and can be either **vertical** or **horizontal**. Most cracks are caused by improper closure of wounds, bark inclusions, hard freezes, water inundation or from stem and branch splitting along weak unions. **Horizontal cracks** run across the grain of the wood and develop just before the tree fails, making them very difficult to detect. **Vertical cracks** run with the wood grain along the length of the tree or form from co-dominant unions where included bark has formed. **Ribbed cracks** are created over wounds. Some of these cracks put a tree at high risk of failure and are especially dangerous when combined with other defects or with advanced decay. **Shear cracks** can run completely through the stem and divide the tree into two halves.

Retrenchment is the process of natural canopy height reduction of older trees that are beginning to decline due to old age or environmental stress. As trees start to deteriorate with age, they cannot support a full canopy, and a new canopy is flushed at a lower height allowing the tree to sustain itself for a while longer. Retrenchment is also a pruning strategy that reduces and removes the dying canopy in older trees and encourages new, lower canopy growth. This pruning strategy allows the tree to sustain itself longer and make it safer in urban areas.

Sloughing bark that separates from the main stem and cambium layer is usually an indication of environmental stress (freeze or wind damage), mechanical injury, senescence, or disease (decay). Trees can sometimes recover and compartmentalize the exposed wood if the affected area is small. If the bark separation encompasses most of the stem or branch, it is likely to lead to failure. These open wounds often make the tree vulnerable to pests and diseases, and it is weakened structurally.

Three (3) invasive trees were recorded that included camphor tree, Chinaberry tree and Earpod tree. Their locations were recorded and their calculations were omitted from the data below.

Chinaberry tree (*Melia azedarach*) is an invasive, exotic tree that was introduced from Asia, https://edis.ifas.ufl.edu/publication/ST406. This tree is listed as a **Category I** invasive species by **The Florida Invasive Species Council** (FISP), https://floridainvasivespecies.org/plantlist.cfm. Category I invasives are plants that are known to alter native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives.

Camphor tree (*Camphora officinarum*), is an invasive, exotic tree that was introduced from Asia, https://plants.ifas.ufl.edu/plant-directory/cinnamomum-camphora/. This tree is listed as a **Category I** invasive species by **The Florida Invasive Species Council** (FISP), https://floridainvasivespecies.org/plantlist.cfm. Category I invasives are plants that are known to alter native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives.

Earpod tree (*Enterolobium contortisiliquum)*, also known as Devil's Ear, is a non-native tree that is naturally native to South America. This tree is fast growing and can be propagated easily from branch cuttings and is considered by some to be an invasive species. It is currently not listed or regulated by the **Florida Noxious Weed Rule**, https://www.flrules.org/gateway/RuleNo.asp?id=5B-57.007 or by **The Florida Invasive Species Council** (FISP), https://floridainvasivespecies.org/plantlist.cfm.

Conclusion:

There are one hundred thirty-five (135) trees, with a DBH of 12" or greater, recorded with a total DBH of 2,583 inches.

SINCERELY,

Ray Jarrett
Biologist / Arborist
ISA Certified Arborist FL-5343A
ISA Tree Risk Assessment Qualified (TRAQ)

ASSUMPTIONS, LIMITING CONDITIONS and DISCLAIMER

My inspection was a ground based visual inspection that sometimes includes a sounding test with a mallet to detect decay. The inspection was limited to defects that can be seen while standing on the ground. There may be defects below ground or in the canopy that were not visible from this perspective. These hidden defects may result in the failure of branches, trunks, or roots. No other trees on this property were inspected other than those specifically addressed in this report. Trees and plants are living things and are subject to an array of potential health problems, abiotic factors and unpredictable weather that can cause healthy trees and plants to fail. Information provided in this report is for consideration; and is based on my professional experience, formal education, and methodologies of the International Society of Arboriculture, ISA. Ultimately the client must use their own judgment and decisions but may consider these recommendations.

Technical Literature References

American National Standard Institute (ANSI) A300 (Part 9) 2017. ***Tree Risk Assessment***, **Tree Care Industry Association, Inc.** (TCIA), Manchester, NH.

American National Standard Institute (ANSI) A300 (Part 8) 2020. ***Tree, Shrub, and Woody Plant Management – Standard Practices (Root Management)***, **Tree Care Industry Association, Inc.** (TCIA), Manchester, NH.

Black, Robert J. and Kathleen C. Ruppert. 1995. ***Your Florida Landscape; A Complete Guide to Planting and Maintenance***. University of Florida.

Council of Tree and Landscape Appraisers.2000. ***Guide for Plant Appraisal, 9th Edition***. International Society of Arboriculture, Champaign, Illinois.

Costello, L.R. and K.S. Jones. 2003. ***Reducing Infrastructure Damage by Tree Roots: A Compendium of Strategies***. Western Chapter of the International Society of Arboriculture) WCISA). Porterville, CA.

Dunster, Julian A. ***Tree Risk Assessment Manual, Second Edition***. 2017. International Society of Arboriculture, Champaign, Illinois.

Fite, Kelby and E. Thomas Smiley. 2016. Best Management Practices, ***Managing Trees During Construction***. International Society of Arboriculture, Champaign, Illinois.

Fishel, Frederick M., Susan W. Williams and O. Norman Nesheim. 2013. ***Ornamental and Turfgrass Management***. University of Florida.

Gilman, Ed. 2012. ***An Illustrated Guide to Pruning***, 3rd Ed. Delmar, Cengage Learning. Clifton Park, NY.

Hodel, Donald R. 2012. ***The Biology and Management of Landscape Palms***. University of California Cooperative Extension. 176pp.

Matheny, N. (2000). ***Trees and development: A technical guide to preservation of trees during land development.*** International Society of Arboriculture.

Matheny, Nelda P. and James R. Clark. ***Evaluation of Hazard Trees in Urban Areas***. 1994. International Society of Arboriculture. Champaign, Illinois.

Merullo, Victor D and Michael J. Valentine. ***Arboriculture & The Law***. 1992. International Society of Arboriculture, Champaign, Illinois.

Smiley, E. Thomas, Nelda Matheny and Sharon Lil. 2017. Best Management Practices, ***Tree Risk Assessment***. International Society of Arboriculture, Champaign, Illinois.

Watson, Gary. 2014. Best Management Practices, ***Tree Planting***. International Society of Arboriculture, Champaign, Illinois.

Field Data Table:

#	Tree Species	DBH	Notes
1	Sand laurel (*Q. hemisphaerica*)	15	
2	Sand laurel (*Q. hemisphaerica*)	15	
3	Sand laurel (*Q. hemisphaerica*)	25	
4	Sand laurel (*Q. hemisphaerica*)	33	
5	Cherry (*Prunus caroliniana*)	12	
6	Sand laurel (*Q. hemisphaerica*)	16	
7	Sand laurel (*Q. hemisphaerica*)	16	
8	Sand laurel (*Q. hemisphaerica*)	14	
9	Sand live oak (*Q. geminata*)	16	
10	Sand live oak (*Q. geminata*)	42	
11	Sand live oak (*Q. geminata*)	16	
12	Cherry (Prunus caroliniana)	17	
13	Sand live oak (*Q. geminata*)	16	
14	Sand live oak (*Q. geminata*)	14	
15	Laurel oak (*Q. laurifolia*)	24	
16	Laurel oak (*Q. laurifolia*)	32	
17	Laurel oak (*Q. laurifolia*)	32	
18	Sand laurel (*Q. hemisphaerica*)	15	
19	Sand laurel (*Q. hemisphaerica*)	18	
20	Sand laurel (*Q. hemisphaerica*)	23	
21	Sand laurel (*Q. hemisphaerica*)	23	
22	Sand laurel (*Q. hemisphaerica*)	12	
23	Laurel oak (*Q. laurifolia*)	17	
24	Live oak (*Q. virginiana*)	42	
25	Laurel oak (*Q. laurifolia*)	20	
26	Sand laurel (*Q. hemisphaerica*)	14	
27	Sand laurel (*Q. hemisphaerica*)	14	

28	Sand laurel (*Q. hemisphaerica*)	20	
29	Laurel oak (*Q. laurifolia*)	17	
30	Laurel oak (*Q. laurifolia*)	18	
31	Cherry (Prunus caroliniana)	12	
32	Live oak (*Q. virginiana*)	24	
33	Live oak (*Q. virginiana*)	36	
34	Laurel oak (*Q. laurifolia*)	25	3 co-dominant stems with vertical crack
35	Laurel oak (*Q. laurifolia*)	27	
36	Laurel oak (*Q. laurifolia*)	26	
37	Live oak (*Q. virginiana*)	18	
38	Laurel oak (*Q. laurifolia*)	13	
39	Live oak (*Q. virginiana*)	15	
40	Live oak (*Q. virginiana*)	13	
41	Live oak (*Q. virginiana*)	13	
42	Laurel oak (*Q. laurifolia*)	17	
43	Laurel oak (*Q. laurifolia*)	13	
44	Laurel oak (*Q. laurifolia*)	15	
45	Live oak (*Q. virginiana*)	16	
46	Laurel oak (*Q. laurifolia*)	16	
47	Live oak (*Q. virginiana*)	19	
48	Sand live oak (*Q. geminata*)	17	
49	Sand live oak (*Q. geminata*)	20	
50	Sand live oak (*Q. geminata*)	21	
51	Sand live oak (*Q. geminata*)	15	
52	Sand live oak (*Q. geminata*)	18	
53	Sand live oak (*Q. geminata*)	14	
54	Sand live oak (*Q. geminata*)	14	
55	Camphor (Camphora officinarum)	22	Invasive, exotic
56	Live oak (*Q. virginiana*)	12	
57	Live oak (*Q. virginiana*)	12	

58	Live oak (*Q. virginiana*)	17	
59	Cherry (Prunus caroliniana)	15	
60	Live oak (*Q. virginiana*)	57	Stem failure, vertical crack
61	Live oak (*Q. virginiana*)	12	
62	Live oak (*Q. virginiana*)	14	
63	Live oak (*Q. virginiana*)	12	
64	Laurel oak (*Q. laurifolia*)	12	
65	Sand laurel (*Q. hemisphaerica*)	14	
66	Laurel oak (*Q. laurifolia*)	30	
67	Laurel oak (*Q. laurifolia*)	32	
68	Live oak (*Q. virginiana*)	16	
69	Laurel oak (*Q. laurifolia*)	26	
70	Live oak (*Q. virginiana*)	13	
71	Live oak (*Q. virginiana*)	15	
72	Cherry (Prunus caroliniana)	16	
73	Live oak (*Q. virginiana*)	16	
74	Live oak (*Q. virginiana*)	12	
75	Live oak (*Q. virginiana*)	12	
76	Laurel oak (*Q. laurifolia*)	26	
77	Live oak (*Q. virginiana*)	22	Retrenching, sloughing bark
78	Live oak (*Q. virginiana*)	24	Retrenching, sloughing bark
79	Live oak (*Q. virginiana*)	14	
80	Live oak (*Q. virginiana*)	22	
81	Live oak (*Q. virginiana*)	15	
82	Live oak (*Q. virginiana*)	21	
83	Laurel oak (*Q. laurifolia*)	15	
84	Laurel oak (*Q. laurifolia*)	13	
85	Sand live oak (*Q. geminata*)	13	
86	Sand laurel (*Q. hemisphaerica*)	30	
87	Live oak (*Q. virginiana*)	29	

88	Cherry (Prunus caroliniana)	13	
89	Live oak (*Q. virginiana*)	18	
90	Laurel oak (*Q. laurifolia*)	12	
91	Live oak (*Q. virginiana*)	24	
92	Live oak (*Q. virginiana*)	13	
93	Laurel oak (*Q. laurifolia*)	12	
94	Laurel oak (*Q. laurifolia*)	18	
95	Laurel oak (*Q. laurifolia*)	34	
96	Live oak (*Q. virginiana*)	25	
97	Live oak (*Q. virginiana*)	27	
98	Live oak (*Q. virginiana*)	19	
99	Sand laurel (*Q. hemisphaerica*)	45	
100	Sand laurel (*Q. hemisphaerica*)	12	
101	Sand laurel (*Q. hemisphaerica*)	16	
102	Sand laurel (*Q. hemisphaerica*)	12	
103	Laurel oak (*Q. laurifolia*)	15	
104	Live oak (*Q. virginiana*)	27	
105	Live oak (*Q. virginiana*)	28	
106	Sand laurel (*Q. hemisphaerica*)	32	
107	Sand laurel (*Q. hemisphaerica*)	22	
108	Sand laurel (*Q. hemisphaerica*)	28	
109	Sand laurel (*Q. hemisphaerica*)	33	
110	Laurel oak (*Q. laurifolia*)	33	
111	Laurel oak (*Q. laurifolia*)	14	
112	Cherry (*Prunus caroliniana*)	14	
113	Cherry (*Prunus caroliniana*)	18	
114	Laurel oak (*Q. laurifolia*)	23	
115	Laurel oak (*Q. laurifolia*)	16	
116	Sand laurel (*Q. hemisphaerica*)	27	
117	Chinaberry (*Melia azederac*h)	16	Invasive, exotic

118	Laurel oak (*Q. laurifolia*)	22	
119	Laurel oak (*Q. laurifolia*)	13	
120	Earpod tree (*Enterolobium cyclocarpum)*	13	Invasive, exotic
121	Laurel oak (*Q. laurifolia*)	14	
122	Laurel oak (*Q. laurifolia*)	14	
123	Laurel oak (*Q. laurifolia*)	15	
124	Laurel oak (*Q. laurifolia*)	12	
125	Laurel oak (*Q. laurifolia*)	12	
126	Sand laurel (*Q. hemisphaerica*)	13	
127	Live oak (*Q. virginiana*)	28	
128	Laurel oak (*Q. laurifolia*)	24	
129	Laurel oak (*Q. laurifolia*)	12	co-dominant stems, vertical crack
130	Laurel oak (*Q. laurifolia*)	14	co-dominant stems, vertical crack
131	Live oak (*Q. virginiana*)	35	
132	Laurel oak (*Q. laurifolia*)	16	
133	Laurel oak (*Q. laurifolia*)	13	
134	Laurel oak (*Q. laurifolia*)	16	
135	Sand laurel (*Q. hemisphaerica*)	18	
136	Cherry (Prunus caroliniana)	14	
137	Laurel oak (*Q. laurifolia*)	12	
138	Laurel oak (*Q. laurifolia*)	12	
139	Laurel oak (*Q. laurifolia*)	14	
140	Laurel oak (*Q. laurifolia*)	13	
141	Laurel oak (*Q. laurifolia*)	17	
142	Laurel oak (*Q. laurifolia*)	18	
143	Laurel oak (*Q. laurifolia*)	13	
144	Laurel oak (*Q. laurifolia*)	17	
145	Laurel oak (*Q. laurifolia*)	14	
146	Live oak (*Q. virginiana*)	18	

BLANK

MINNEOLA HWY 27
LAKE COUNTY, FLORIDA

PHASE I ENVIRONMENTAL SITE ASSESMENT

Prepared For:

Tilghman Herring
Greenberg Gibbons Commercial

[redacted]

Prepared By:

ECS
ECOLOGICAL CONSULTING SOLUTIONS INC.

[redacted]

April 2025

TABLE OF CONTENTS

1 SUMMARY

2 INTRODUCTION

- 2.1 Purpose and Scope
- 2.2 Special Terms and Conditions
- 2.3 Limitations and Exceptions of Assessment
- 2.4 Limiting Conditions and Methodology Used

3 SITE DESCRIPTION

- 3.1 Location and Legal Description
  - 3.1.1 Location
  - 3.1.2 Legal Description
- 3.2 Site and Vicinity Characteristics
  - 3.2.1 Topography
  - 3.2.2 Stormwater Drainage
  - 3.2.3 Vegetation
- 3.3 Description of Site Improvements
- 3.4 Environmental Liens
- 3.5 Current Uses of the Property
- 3.6 Past Uses of the Property
- 3.7 Current and Past Uses of Adjoining Property
  - 3.7.1 North
  - 3.7.2 South
  - 3.7.3 East
  - 3.7.4 West

4 RECORDS REVIEW

- 4.1 Standard Environmental Records
  - 4.1.1 U.S. Environmental Protection Agency (EPA)
    - 4.1.1.1 Superfund Enterprise Management System (SEMS)
    - 4.1.1.2 Facility Registry Service/Facility Index (FINDS/FRS)
    - 4.1.1.3 National Priorities List (NPL)
    - 4.1.1.4 Integrated Compliance Information System (formerly DOCKETS)
    - 4.1.1.5 Resource Conservation and Recovery Act Index System (RCRIS)
    - 4.1.1.6 Federal Engineering Institutional Control Sites (EC)
    - 4.1.1.7 Toxic Release Inventory (TRI)
    - 4.1.1.8 Emergency Response Notification System (ERNS)
    - 4.1.1.9 National Pollution Discharge Elimination System (NPDES)
    - 4.1.2 Enforcement and Compliance History Information (ECHO04)

4.1.2.1 Comprehensive Environmental Response, Compensation and Liability Information System (CERCILS)
4.1.2.2 Alternative Fueling Stations (ALT FUELS)
4.1.2.3 Integrated Compliance Information System (ICIS)
4.1.2.4 Formerly Used Defense Sites (FUDS)
4.1.2.5 Mineral Resource Data System (MRDS)
4.1.2.6 PFAS Industry Sectors (PFAS)

4.2.1 Florida-Department of Environmental Protection (FDEP)
4.2.1.1 Solid Waste Facilities and Landfills (SWF/LF)
4.2.1.2 Underground/Aboveground Storage Tanks (U/AST)
4.2.1.3 Leaking Underground Storage Tanks (LST)
4.2.1.4 Oil and Hazardous Materials Incidents (SPILLS)
4.2.1.5 Ground Water Contamination Areas (GWCA)
4.2.1.6 Cattle Dipping Vats (CDV)
4.2.1.7 Florida Department of Environmental Protection Cleanup Sites (CLEANUP DEP)
4.2.1.8 State Hazardous Waste Sites (SHWS)
4.2.1.9 Brownfields Management System (BF)
4.2.1.10 Storage Tank/Contaminated Facility Search (STCS)
4.2.1.11 Priority Ranking List (PRIORITY CLEAN)
4.2.1.12 Waste Cleanup Responsible Party Sites (WCRPS)
4.2.1.13 ERIC Waste Cleanup (ERIC)
4.2.1.14 Contaminated Sites (DWM CONTAM)
4.2.1.15 Delisted Waste Cleanup Sites (DELISTED WCP)
4.2.1.16 Tier 2 Report (TIER2)
4.2.1.17 Well Surveillance (WELL SURVEILLANCE)

5 INFORMATION FROM SITE RECONNAISSANCE AND INTERVIEWS

5.1 Hazardous Substance in Connection with Identified Uses
5.2 Hazardous and Unidentified Substance Containers
5.3 Storage Tanks
5.4 Indication of PCBs
5.5 Indication of Solid Waste Disposal
5.6 Indication of ACMs
5.7 Indication of Lead Paint
5.8 Physical Setting Analysis
5.8.1 Stormwater Drainage
5.8.2 Groundwater
5.9 Any Other Conditions of Concern

6 FINDINGS AND CONCLUSIONS

7 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

8 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

FIGURES

Figure 1: Location Map
Figure 2: FLUCFCS Map

APPENDICES

Appendix A: Legal Descriptions of the Property

Appendix B: Regulatory Database Environmental Report

Appendix C: Photographs of Subject Site and Adjacent Properties

Appendix D: Historical Aerial Imagery

SECTION 1

SUMMARY

On March 19th and April 4th, 2025, a Phase I Environmental Site Assessment was conducted on the Minneola HWY 27 project site. The proposed project site is located immediately east of N Highway 27, south of Citrus Grove Road, and north of Open-Door Baptist Church in Minneola, Florida. More specifically, the proposed project site is located within Section 6, Township 22 South and Range 26 East of Lake County, Florida.

The subject property is a forested upland habitat that has a paved road along the northern and eastern boundary. Understory is moderately vegetated and contains remnants of abandoned homeless encampments and previous site work. A former stormwater pond that has regrown naturally with upland vegetation is located onsite. No wetlands are present onsite.

This report has been prepared in accordance with the specific requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-21. The purpose of this assessment was to evaluate the potential for obvious environmental concerns from activities that may have occurred on the subject site, or on surrounding properties, which potentially contaminate the subject site. Regulatory records review, soil and topographic maps review, historical information interpretation, site and reconnaissance were conducted with the support of our professional staff at ECS to determine the most accurate environmental conditions within/on the project site.

SECTION 2

INTRODUCTION

2.1 PURPOSE AND SCOPE

The purpose of this Phase I Environmental Site Assessment is to identify the *recognized environmental conditions* of the subject property as defined by ASTM E 1527-21 Standard Practices. The term *recognized environmental conditions* is defined as the presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release or a material threat of a release of these substances into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products conditional to compliance of laws and is not intended to include the minimal conditions that generally would not be the subject of an enforcement action if brought to the attention of appropriate agencies.

To achieve the stated purpose, the following scope of services was initiated by ECS for this project.

* Conduct site reconnaissance to visually and physically observe, photograph and document the conditions and current uses of the subject site and surrounding properties.

* Perform interview(s) with the owner, site manager and local government officials as deemed necessary to obtain information indicating recognized environmental conditions in connection with the subject site and surrounding properties.

* Review and document available records about the physical setting, conditions of the subject site and surrounding properties including, but not limited to, topographic, drainage, geologic and hydrogeologic characteristics of the site.

* Review and document historical use information to develop a history of the previous uses or occupancies of the property and surrounding properties.

* Review and document standard environmental records including federal and state regulatory agency information within a one-mile radius of the site to evaluate the impact of hazardous substances and/or petroleum products to the subject site; and

* Prepare a written report presenting the findings of our study and addressing any recognized environmental conditions or activities at the subject site.

This Phase I Environmental Site Assessment is strictly limited to the scope and services listed above. There may be additional environmental issues or conditions at the property that the parties may wish to assess in connection with commercial real estate that are outside the scope of this Assessment.

2.2 SPECIAL TERMS AND CONDITIONS

There were no special terms or conditions concerning the property during this Phase I Environmental Site Assessment.

2.3 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

The observations and opinions stated in this report reflect the conditions identified on the subject property at the time of this Assessment. There are no representations made concerning property owners' and/or lessees' compliance with federal, state, regional and/or local regulations. Likewise, ECS makes no representation to the property owners' and/or lessees' ability to comply with federal, state regional and/or local regulations.

The information gathered for this Assessment consists of personal observations of the conditions of the subject site on the date of the site reconnaissance and recorded information obtained from the state and local regulatory agencies. Identified conditions were used to evaluate the relative probability of occurrence of significant groundwater or soil contamination at the subject site. ECS does not maintain that the results of this Phase I Environmental Site Assessment will represent the entire range of environmental hazards present at the subject site; however, the findings and recommendations presented in this report are consistent with the facts and observations as stated.

No environmental site assessment can truly eliminate the uncertainty regarding the potential for recognized environmental conditions in connection with the subject site. As with any site, unknown or hidden sources of contamination may be present, and no level of inquiry can ensure that a site is completely free from environmental hazards. ECS is not liable for any hidden or unknown sources of contamination. This report is not intended to address, assess, or otherwise determine whether soil or groundwater contamination, waste emplacement, existing or threatened mold/fungus growth, asbestos containing building materials, and/or lead based paint exists at the subject property. Such determination would require comprehensive subsurface exploration and/or other sampling activities, which were beyond the scope of service for this assessment.

Physical review of the site represents the direct limits of inquiry conducted by ECS. This Assessment was intended to reduce the uncertainty regarding the recognized environmental conditions associated with the subject site. The level of inquiry was guided by the type of property, the expertise and risk tolerance of the user, and the information developed during this assessment. During the conduction of this Assessment reasonable cost limits and time were considered.

2.4 LIMITING CONDITIONS AND METHODOLOGY USED

The subject site is accessible by both foot and vehicle. The field investigators' movements were not restricted by the existing site conditions. During the site visit, the investigators walked through the subject property, recorded field observations, and photographed the subject site and surrounding properties.

SECTION 3

SITE DESCRIPTION

3.1 LOCATION AND LEGAL DESCRIPTION

3.1.1 Location

The ± 13.54-acre subject property which is located immediately east of N Highway 27, south of Citrus Grove Road, and north of Open-Door Baptist Church in Minneola, Florida. More specifically, the proposed project site is located within Section 6, Township 22 South and Range 26 East of Lake County, Florida.

3.1.2 Legal Description

ECS obtained the parcel identification number and corresponding legal description from the Lake County Property Appraisers website. The legal description of the parcel is included in this report (Appendix A).

3.2 SITE AND VICINITY CHARACTERISTICS

3.2.1 Topography

According to the U.S.G.S. 7.5 Minute Topographic Map, the subject property has elevations from 200 to 140 feet above sea level is depicted. With elevations decreasing towards the eastern portion of the property.

3.2.2 Storm Water Drainage

There is a previously constructed stormwater pond on site. The vegetation within the pond has grown naturally with large hardwood canopy species and shows no signs of holding water. There was no evidence of water pooling within the uplands or flow patterns within the property boundaries.

3.2.3 Vegetation

Pedestrian surveys of the project site were conducted to qualitatively document the existing vegetation and to assess the present land use patterns according to the Florida Land Use, Cover and Forms Classification System, Department of Transportation (FLUCFCS; DOT 1999).

Upland Hardwood Forests (420) and Other Open Lands (194) are the two habitat types within the project limits.

3.3 DESCRIPTION OF SITE IMPROVEMENTS

As shown in aerial photography, and as revealed by the on-site inspection on March 19th and April 4th, 2025, the property consists of forested upland habitat with a paved access road.

3.4 ENVIRONMENTAL LIENS

An environmental lien is defined as a charge, security, or encumbrance upon a title to a property to secure the payment of a cost, damage, debt obligation or duty arising out of response actions, clean-up or other remediation of hazardous substances or petroleum products upon a property.

A 50-year chain-of-title search was not performed by ECS. Results of a chain-of-title search would indicate if there were environmental liens or judgments of environmental matter affecting the subject site.

3.5 CURRENT USES OF THE PROPERTY

The property currently is a vacant upland habitat.

3.6 PAST USES OF THE PROPERTY

The 1941 historical aerial imagery depicts the property as an active citrus grove. 1947, 1952, 1958, 1966, & 1974 historical aerial imagery reveals the property is unchanged. The 1983 historical aerial imagery depicts the property that has become fallow, and portions have been cleared. The 1985 historical aerial imagery depicts the property that has begun to regrow naturally with native canopy species. The 1994, 1999, and 2005 historical aerial imagery depicts the property slowly becoming more densely vegetated with the property with predominately canopy cover. The property remains unchanged in 2006, 2007, 2010, 2013, 2015, 2017, 2019, 2021, and 2023 historical aerial imageries.

3.7 CURRENT AND PAST USES OF ADJOINING PROPERTY

The boundaries of the project site are defined by roads, single family homes, undeveloped uplands, and religious facility. A brief description of our findings, including visual observations of the surrounding properties during March 19th, and April 4th, 2025, site reconnaissance is presented below:

3.7.1 North

The property to the north consists of a undeveloped uplands and a stormwater pond.

3.7.2 South

Open Door Baptist church forms the southern property boundary.

3.7.3 East

Undeveloped uplands are on the east side of the property.

3.7.4 West

The property to the west is defined by Highway 27.

SECTION 4

RECORDS REVIEW

4.1 STANDARD ENVIRONMENTAL RECORDS

The potential for contamination of the subject site resulting from on-site activities and from activities on surrounding properties was investigated by searching the files and databases of federal and state regulatory agencies. Hazardous substance and petroleum product contamination sites are listed by the U.S. Environmental Protection Agency (EPA) and the State of Florida; generators, managers and transporters of hazardous waste are regulated by the EPA. Data from both sources was reviewed to identify potential sources of contamination on the subject site and surrounding properties, and to evaluate the potential of hazardous substances or petroleum products arriving at the subject site.

A search of available State and Federal databases was provided in an ERIS Report performed in accordance with the specific requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-21. The search area for this Assessment was a one-mile radius using a polygon defined by the perimeter property lines of the project site as the center of the search area. The ERIS Report is presented as Appendix B. A summary of the listings in the report is provided below.

4.1.1 U.S. Environmental Protection Agency (EPA)

Several EPA databases were searched by ERIS. The data in each database is the most current information available. Each database and the results of the search are listed in the following sections. There were two (02) locations found within the search area for any Federal databases. There were twenty (20) locations identified in the State and local database summary. There were no (0) unplottable locations identified. Please see the *ERIS Database Summary* in Appendix B.

4.1.1.1 Superfund Enterprise Management System (SEMS)

The U.S. Environmental Protections Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

There was no (0) SEMS site found within the 1.0-mile search area around the project site (Appendix B).

There were no (0) SEMS ARCHIVE sites within the non-geo-coded area.

4.1.1.2 Facility Registry Service/Facility Index (FINDS/FRS)

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

There were no (0) FINDS/FRS sites in the search radius.

4.1.1.3 National Priorities List (NPL)

The NPL lists facilities and/or locations with confirmed environmental contamination. The sites are administered under CERCLA, or SARA and the list includes both active and inactive sites.

There were no (0) NPL sites within the 1.0-mile search area. There were no NPL (0) sites within the non-geo-coded radius area.

4.1.1.4 Integrated Compliance Information System (formerly DOCKETS)

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act – Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

There were no (0) DOCKETS sites within the search area.

4.1.1.5 Resource Conservation and Recovery Act Index System (RCRIS)

The RCRIS lists facilities and/or locations that are handling, storing, or transporting hazardous waste. The facilities listed in RCRIS are potential sources of contamination, but no release has necessarily been reported at those sites. Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring and Enforcement List).

There were no (0) RCRIS sites detected within the 1.00-mile search area. There were no (0) RCRIS sites detected within the non-geo-coded search area.

There were no (0) RCRAGN sites found within the 1.00-mile search area.

There were no (0) RCRAGNR04 site found within the 1.00-mile search area.

There were no (0) RCRANLR sites within the 1.00-mile search area. There were no (0) RCRANLR sites in the non-geo-coded search area.

There were no (0) RCRACOR sites within the 0.25-mile search area. There are no (0) RCRACOR sites located within the non-geo-coded search area.

There were no (0) RCRA TSD sites within the 1.00-mile search area. There are no (0) RCRA TSD sites in the non-geo-coded area.

There was one (01) RCRA SQG sites within the 1.00-mile search area.

The RCRA SQG is located at Fields Equipment Co INC located at 17628 US Highway 27 Clermont FL 34715-9537, with EPA handler ID: FLD984232165. A violation was reported during a compliance evaluation inspection regarding used oil generators. The return to compliance date listed is 08/16/2013.

There was one (01) RCRA VSQG sites within the 1.00-mile search area.

The RCRA VSQG located is Mike Langley Citrus, INC located at 17628 US Highway 27 Clermont FL 34715-9537, with EPA handler ID: FLT950050500. NO RECORDS: As of Oct 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

There were no (0) RCRA NON GEN sites within the 1.00-mile search area.

There were no (0) RCRA CORRACTS sites found within the 1.00-mile search area.

4.1.1.6 Federal Engineering Institutional Control Sites (EC)

This database includes site locations where Engineering and/or Institutional Controls have been identified as part of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, which help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

There were no (0) EC sites within the search area (Appendix B).

4.1.1.7 Toxic Release Inventory (TRI)

The TRI is a The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities.

This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

There were no (0) TRI sites within the search area.

4.1.1.8 Emergency Response Notification System (ERNS)

The ERNS lists information on releases of petroleum products and hazardous substances. It should be noted that the database is extremely limited in the location information provided.

There were no (0) ERNS sites within the 1.00-mile search area. There were no ERNS sites found within the non-geo-coded search area.

4.1.1.9 National Pollution Discharge Elimination System (NPDES)

This is the EPA's database of all permitted facilities receiving and discharging effluents. In 2006, the Integrated Compliance Information System (ICIS) - National Pollutant Discharge Elimination System (NPDES) became the NPDES national system of record for select states, tribes, and territories. ICIS-NPDES is an information management system maintained by the United States Environmental Protection Agency's Office of Compliance to track permit compliance and enforcement status of facilities regulated by the NPDES under the Clean Water Act. ICIS-NPDES is designed to support the NPDES program at the state, regional, and national levels.

There were no (0) NPDES sites within the .25-mile search radius of the property.

4.1.2 Enforcement and Compliance History Information (ECHO04)

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide.

This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act

hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

There were no (0) ECO04 located within 1.00-miles search area.

4.1.2.1 Comprehensive Environmental Response, Compensation and Liability Information System (CERCILS)

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites in which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

There were no (0) CERCILS site located within the search area.

There were no (0) CERCILS NFRAP sites located within the search area.

4.1.2.2 Alternative Fueling Stations (ALT FUELS)

There were no (0) ALT FUELS located within the 0.25-mile search radius.

4.1.2.3 Integrated Compliance Information System (ICIS)

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online system incorporates data from the Integrated Compliance Information System - National Pollutant Discharge Elimination System (ICIS-NPDES). ICIS-NPDES is an information management system maintained by the Office of Compliance to track permit compliance and enforcement status of facilities regulated by the NPDES under the Clean Water Act. This data includes permit, inspection, violation, and enforcement action information for applicable ICIS records.

There were no (0) ICIS sites located within the 1.0-mile search radius.

4.1.2.4 Formerly Used Defense Sites (FUDS)

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DOD) is responsible for an environmental restoration.

The FUDS Annual Report to Congress (ARC) is published by the U.S. Army Corps of Engineers (USACE). This data is compiled from the USACE's Geospatial FUDS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) FUDS dataset.

There were no (0) FUDS sites within the 1.0- mile search radius.

There were no (0) FUDS MRS sites within the 1.0-mile search radius.

4.1.2.5 Mineral Resource Data System (MRDS)

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

There were no (0) MRDS sites within the 1.0-mile search radius.

4.1.2.6 PFAS Industry Sectors (PFAS)

This Per- and Poly-Fluoroalkyl Substances (PFAS) Industry Sectors dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools.
The EPA developed the dataset from various sources that show which industries may be handling PFAS including EPA's Enforcement and Compliance History Online (ECHO) records restricted to potential PFAS-handling industry sectors; ECHO records for Fire Training Sites identified where fire-fighting foam may have been used in training exercises; and 14 CFR Part 139 Airports compiled from historic and current records from the FAA Airport Data and Information Portal. Since July 2006, all certificated Part 139 Airports are required to have fire-fighting foam onsite that meets certain military specifications, which to date have been fluorinated (Aqueous Film Forming Foam). Limitations: Inclusion in this dataset does not indicate that PFAS are being manufactured, processed, used, or released by the facility. Listed facilities potentially handle PFAS based on their industrial profile but are unconfirmed by the EPA. Keyword searches in ECHO for Fire Training sites may misidentify some facilities and should not be considered to be an exhaustive list of fire training facilities in the U.S.

There were no (0) PFAS located within the 0.50-mile search radius.

4.1.2.7 Registered Pesticide Establishments (SSTS)

This national list of active EPA-registered foreign and domestic pesticide and/or device-producing establishments is based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that each producing establishment must place its EPA establishment number on the label or immediate container of each pesticide, active ingredient or device produced. An EPA establishment number on a pesticide product label identifies the EPA registered location where the product was produced. The list of establishments is made available by the U.S. Environmental Protection Agency (EPA).

There were no (0) SSTS located within the 0.25-mile search radius.

4.2.1 State of Florida-Department of Environmental Protection

Several State of Florida databases were searched by ERIS. Each database that was searched for and a summary of the results are listed in the following sections.

4.2.1.1 Solid Waste Facilities and Landfills (SWF/LF)

The SWF List (SWF/LF) includes facilities and/or locations identified with the handling or disposal of solid waste.

Inclusion of a site on the SWF list does not indicate that contamination has been reported, but rather there is the potential for contamination.

There were no (0) SWF/LF sites located within the 0.5-mile search area (Appendix B).

4.2.1.2 Registered Storage Tanks (U/AST)

The Storage Tank Regulation Section is part of the Bureau of Petroleum Storage Systems in the Florida Department of Environmental Protection's (FDEP) Division of Waste Management. This Section maintains all data for storage tank facilities registered with the Department and tracked for storage tanks, storage tank history, or petroleum cleanup activity.

There were two (02) AST sites detected within the 0.25-mile search area (Appendix B).

The first AST is Fields Equipment Co Inc at 17215 US HWY 27 Clermont FL 34711, with facility ID: 8945306 and listed as closed. There were two 1,500-gallon unleaded gasoline tanks removed from the site on 08/01/1995.

The second AST is City of Minneola Oak Valley Water Treatment Plant at 1200 Oak Valley Blvd Minneola FL 34715, with facility ID: 9809848 and listed as open. There is a 1,000-gallon emergency generator diesel tank in service onsite since 12/01/2001.

There were no (0) UST site detected within the 0.25-mile search area (Appendix B).

4.2.1.3 Leaking Underground Storage Tanks (LST)

The LST list, specifically, includes those sites that have reported possible releases of petroleum product contamination. Not all states maintain these records, and the information stored varies by state. The standard search area for LST sites is a 0.5-mile radius around the target property.

There were three (03) LST sites detected within the 0.5-mile search area.

The first LST located is Langley Fruit Co. at US HWY 27 Minneola FL 34711, with facility ID: 8509992 and listed as closed. The discharge occurred on 03/31/1991 and cleanup was not required. This cleanup was a part of the abandoned tank restoration program and listed as cleanup complete on 04/23/2001.

The second LST located is FINA #7038 at N US 27 & SR 561 Minneola FL 32755, with facility ID: 8510019 and listed as closed. The discharge occurred on 06/05/1987 and cleanup was required. Leaded and unleaded gasoline of an unknown amount contaminated monitoring wells. The site cleanup was listed as NFA Complete as of 06/08/2001.

The third LST located is Circle K #2722114 at 810 N US 27 Minneola FL 34715, with facility ID: 9700727 and listed as open. The discharge occurred on 06/21/2007 and cleanup was required. No contamination records are listed. The site cleanup was listed as SRCR Complete as of 12/30/2010.

There are two (02) DELISTED LST sites located within the 0.5-mile search radius.

Both DELISTED LST sites are the Circle K #2722114 at 810 N US 27 Minneola FL 34715, with facility ID: 8513378 and listed as open. The cleanup status is listed as ongoing as of 02/08/2022.

4.2.1.4 Oil and Hazardous Materials Incidents (SPILLS)

Three FDEP databases are included under the Florida SITES list heading, including: facilities that the FDEP has recognized with potential or existing environmental contamination (this database has not been updated since 1989); the

Florida "Superfund" sites (this database corresponds to the US EPA NPL database; and Florida funded action sites (this database provides site prioritization of the State for clean-up).

There were no State Sites identified within the 1.0-mile search area. There were no State Sites identified outside of the non-geo-coded area.

There were no (0) SPILLS sites found within 1.0 miles of the project site.

4.2.1.5 Ground Water Contamination Areas (GW CONTAM)

This Ground Water Contamination Areas database is provided by the Florida Department of Environmental Protection, showing the boundaries of delineated areas of known groundwater contamination pursuant to Chapter 62-524, F.A.C., New Potable Water Well Permitting in Delineated Areas. 38 Florida counties have been delineated primarily for the agricultural pesticide ethylene dibromide (EDB), and to a much lesser extent, volatile organic and petroleum contaminants. This data is intended to be used by regulatory agencies issuing potable water well construction permits in areas of ground water contamination to protect public health and the ground water resource. This dataset only indicates the presence or absence of specific groundwater contaminants and does not represent all known sources of groundwater contamination in the state of Florida.

There was one (01) ground water contamination areas found within 1.0 mile of the project site.

The GW CONTAM has a zone ID: 35263691 with USGS quad 3714-3715. The contaminant is listed as Ethylene Dibromide. The GW CONTAM is listed under SJRWMD.

Ethylene dibromide (EDB) is a colorless, heavy organic liquid. Farmers used it to kill nematodes (worms) in soil around citrus trees. EDB in agriculture applications were discontinued in 1984.

The Florida Department of Environmental Protection's drinking water standard for EDB is 0.02 micrograms per liter (0.02 ug/L). Levels of EDB less than the drinking water standard of 0.02 ug/L are not likely to cause illness. Drinking water with levels slightly above the standard for a short time does not significantly increase the risk of illness. However, because health risks increase as the levels of a chemical (or how long a person drinks it) increases, it is best to drink water that meets standards. There is no required sampling of private drinking water wells.

Per the Florida Department of Health, Bureau of Environmental Health Finding, EDB in private drinking water wells remains rare, but when it happens, it is mostly only at low levels. In almost all cases in Florida, the concentrations found in the groundwater were too low to result in short-term exposures. In fact, even at

the highest EDB concentrations in Florida groundwater, a few months or a few years exposure would result in a minimal health risk.

Further, if a private well is tested and found to contain EDB at a concentration greater than the standard, the well water can safely be used for drinking, bathing, and cooking, for the short period of time until a filter can be installed, or the home is connected to a public water supply.

The primary method used to avoid EDB is through the use of potable water. The use of potable water reduces the probability of contact with EDB and is therefore considered a minimal risk.

4.2.1.6 Cattle Dip Vats (CDV)

This list of located Cattle Dipping Vats is provided by the Florida Department of Environmental Protection (FDEP), Bureau of Waste Cleanup. According to the FDEP, from the 1910's through the 1950's, these vats were filled with an arsenic solution for the control and eradication of cattle fever tick. Other pesticides such as DDT where also widely used. By State law, all cattle, horses, mules, goats, and other susceptible animals were required to be dipped every 14 days. Under certain circumstances, the arsenic and other pesticides remaining at the site may present an environmental or public health hazard. Some of the sites have been located and are currently under investigation. However, most of the listings are from old records of the State Livestock Board, which listed each vat as it was put into operation. In addition, some privately operated vats may have existed which were not listed by the Livestock Board. Some county boundaries may have changed since the vats were first listed.

There were no (0) cattle vat sites found within 1.0 mile of the project site.

4.2.1.7 Florida Department of Environmental Protection Cleanup Sites (CLEANUP DEP)

The Cleanup Sites layer feeds the FDEP's Contamination Locator Map (CLM). It provides locations and document links for sites currently in the cleanup process and sites awaiting cleanup funding. Cleanup programs include Brownfields, Petroleum, EPA Superfund (CERCLA), Dry cleaning, Responsible Party Cleanup, State Funded Cleanup, State Owned Lands Cleanup and Hazardous Waste Cleanup.

There were no (0) CLEANUP DEP sites detected within the 1.00-mile search radius.

4.2.1.8 Superfund Waste Cleanup & State-Funded Action Sites (SHWS)

The Florida Department of Environmental Protection (FDEP), Division of Waste Management, Bureau of Waste Cleanup provides this listing of National Priorities List and State Funded Waste Cleanup Sites.

The State- Funded cleanup program is designed to address sites where there are no viable responsible parties; the site poses an imminent hazard; and the site does not qualify for Superfund or is a low priority for EPA. Remediation efforts are triggered when a FDEP District Office requests adoption of a site for state-funded cleanup. Funding for these remedial efforts comes from the Water Quality Assurance Trust Fund. Remedial activity may include contamination assessments, risk assessments, feasibility studies, design and construction of treatment systems, operation and maintenance of the installed treatment systems, and removal of contaminated media when necessary.

There were no (0) SHWS found within the 0.5mi radius search.

4.2.1.9 Brownfield Areas (BROWNFIELD AREA)

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

There were no (0) BROWNFIELD AREA located within the 0.5mi radius search.

4.2.10 Storage Tank/Contaminated Facility Search (STCS)

List of facilities and tanks in the Florida Department of Environmental Protection (FDEP) Bureau of Petroleum Storage Systems Storage Tank/Contaminated Facility Search which do not currently have active, regulated underground or aboveground storage tanks (USTs or ASTs) containing petroleum. Note that tank details do not appear for facilities for which all tanks have been removed, Government Publication Date: Feb 8, 2022.

There were seven (07) STCS sites found within the 0.5mi search area.

Of the seven STCS sites located five of them were discussed in the LST and AST sections of this report. The remaining other STCS site is summarized below.

The first STCS located is Seco Properties Co located at N Grassy Lake Rd Minneola FL 34715 with facility ID: 9201049 and is listed as closed. Three tanks were previously onsite, all have been removed. No violations are reported.

The second STCS located is Handy Way Food Store #5114 located at 810 N US 27 Minneola FL 34744 with facility ID: 9700763 and is listed as deleted. No other information was given, No violations are reported.

4.2.11 Priority Ranking List (PRIORITY CLEAN)

The Florida Legislature has established a state-funded program to cleanup properties that are contaminated as a result of the operations of a dry-cleaning facility or wholesale supply facility (Chapter 376, Florida Statutes). The program is administered by the Florida Department of Environmental Protection (FDEP). The statute was sponsored by the dry-cleaning industry to address environmental, economic, and liability issues resulting from dry-cleaning solvent contamination.

The program provides limited liability protection to the owner, operator and real property owner of dry-cleaning or wholesale supply facilities for cleanup of dry-cleaning solvent contamination if the parties meet the eligibility conditions stated in the law.

There were no (0) PRIORITY CLEAN located within the search area.

4.2.12 Waste Cleanup Responsible Party Sites (WCRPS)

List of Open, Closed, and Inactive Waste Cleanup Responsible Party sites made available by the Florida Department of Environmental Protection.

There were no (0) WCRPS located within the search area.

4.2.13 ERIC Waste Cleanup (ERIC)

Environmental Restoration Integrated Cleanup (ERIC) is a single database for tracking contaminated site cleanup activities in the Florida Department of Environmental Protection (DEP)'s Division of Waste Management (DWM). Includes records from 11 different DEP data systems, allowing tracking of a contaminated site throughout the course of cleanup regardless of which program area took the lead.

There were no (0) ERIC sites located within the 1.00-mile search radius.

4.2.14 Contaminated Sites (DWM CONTAM)

Florida Department of Environmental Protection (FDEP) Division of Waste Management (DWM) listing of active or known sites that include sites requiring

cleanup but are not actively being worked on due to the agency's lack of funding (primarily petroleum and dry cleaning).

There were three (03) DWM CONTAM located within the search area.

The first DWM CONTAM listed is FINA #7038 at N US 27 & SR 561 Minneola FL 32755, with facility ID: 8510019 and listed as closed.

The second DWM CONTAM listed is Handy Way Food Store #5114 located at 810 N US 27 Minneola FL 34744 with facility ID: 9700763 and is listed as waiting.

The third DWM CONTAM listed is Circle K #2722114 at 810 N US 27 Minneola FL 34715, with facility ID: 8513378 and listed as open.

There was one DEL CONTAM SITE located within the 0.5-mile search radius.

The DEL CONTAM SITE is Handy Way Food Store #5114 located at 810 N US 27 Minneola FL 34744 with facility ID: 9700763 and is listed as waiting.

4.2.15 Delisted Waste Cleanup Sites (DELISTED WCP)

List of sites which were once included on the Florida Department of Environmental Protection (FDEP) Division of Waste Management (DWM)'s Contaminated Sites list. As sites on the Contaminated Sites (CS) list are cleaned up or closed under risk based corrective action, they are removed from the CS lists.

There were no (0) DELISTED WCP located within the 1.00-mile search area.

4.2.16 Tier 2 Report (TIER2)

This is a list of Tier 2 facilities in the state of Florida. The list tracks the inventory of chemicals within a particular facility. This list is provided by the Florida Division of Emergency Management, Government Publication Date: Jul 9, 2021.

There was one (01) Tier 2 site found within the search area.

Tier 2 is located at Minneola Substation at 17225 US Highway 27 Minneola, FL 34755. Liquid and mixture contaminants are present on site. No violations or compliance violations are listed.

4.2.17 Well Surveillance (WELL SURVEILLANCE)

List of facilities made available by the Florida Health Well Surveillance group. The Well Surveillance group manages several programs to identify and monitor areas in Florida where contaminated drinking water is suspected and may pose a

threat to public health. The section coordinates with the County Health Departments (CHDs) to locate potable wells and conduct water sampling for contaminants of concern. The Well Surveillance Section is composed of the State Underground Petroleum Environmental Response Act (SUPER Act), Drinking Water Toxics Program (Toxics), Drycleaner Solvent Cleanup Program (DSCP). Includes locations of known cattle dipping vats**.**

There were no (0) WELL SURVEILLANCE sites located within the search area.

4.2 ADDITIONAL RECORD SOURCES

There were no additional record sources to those previously mentioned that were considered in this Assessment.

For additional information concerning contact names, addresses and phone numbers of the databases used, the following list was compiled.

National Database Search

NPL, CERCLIS, RCRIS, FINDS AND TRIS
The U.S. Department of Commerce - Technology Administration
National Technical Information Service (NTIS)
Springfield, Virginia 22161
Phone: (703) 487-4650

CERCLIS
Office of Solid Waste and Emergency Response.
Office of Emergency and Remedial Response (Superfund)
Mr. Mike Cullen
Phone: (703) 603-8904 or Phone: (800) 775-5037 for automated phone request

RCRIS
Office of Solid waste and Emergency Response.
Office of Solid Waste
Mr. Kevin Phelps
Phone: (202) 260-4697 Fax: (202) 260-0284

FINDS
Office of Information Resources Management
Mr. Dan Parker
Phone: (703) 557-3186 Fax: (703) 557-3186

NWI
NWI Home Page
http://www.nwi.fws.gov/

FEMA MSC
MSC Home Page

SECTION 5

INFORMATION FROM SITE RECONNAISSANCE AND INTERVIEWS

A team of environmental professionals from Ecological Consulting Solutions Inc. visited the project site on March 19th and April 4th, 2025, to perform the tasks listed below:

1. Visually and physically observe the property and accessible site improvements.
2. Document observed conditions and uses of the project site and surrounding properties.
3. Obtain and interpret available documents pertaining to the project site and its surrounding properties.
4. The observed site conditions and current uses during the site reconnaissance were documented and photographed.

5.1 HAZARDOUS SUBSTANCE(S) IN CONNECTION WITH IDENTIFIED USES

There were no visible hazardous substances in connection with identified uses identified at the site at the time of the site reconnaissance.

5.2 HAZARDOUS AND UNIDENTIFIED SUBSTANCE CONTAINERS

There were not potentially hazardous or unidentified substance containers identified at the site at the time of the site reconnaissance.

5.3 STORAGE TANKS

There was no storage tanks identified at the site at the time of the site reconnaissance.

5.4 INDICATION OF PCBs

Older transformers and other electrical equipment can contain (PCBs) at a level that subjects them to regulation by the U.S. EPA.

There were no pole-mounted transformers observed on the property. There are transformers adjacent to the project site. There was no evidence of leaks, spills, or fires around the perimeter of the property.

5.5 INDICATION OF SOLID WASTE DISPOSAL

There were areas that had discarded rip rap and plastic tarps along with other pieces of trash or discarded debris throughout the site.

5.6 INDICATION OF ASBESTOS-CONTAINING MATERIALS (ACMs)

ACMs, or artifacts likely to be capable of containing ACMs, were not found on the subject site at the time of the site reconnaissance.

The definition of suspect ACM and presumed asbestos containing material is taken from 29 CRF Parts 1910, et al. Occupational Exposure to Asbestos; Final Rule.

According to the Occupational Safety and Health Administration (OSHA), the installation of friable surfacing material and thermal system insulation after December 31, 1980, is unlikely.

No structures were present onsite.

5.7 INDICATION OF LEAD PAINT

There was no visual evidence of lead paint on the subject site at the time of the reconnaissance. No structures were present onsite.

5.8 PHYSICAL SETTING ANALYSIS

5.8.1 Stormwater Drainage

The stormwater pond within the subject property appears to rarely receive rainwater, no stain lines, adventitious rooting, or wetland vegetation is present, rainwater will flow into the stormwater pond and collect runoff.

5.8.2 Groundwater

The probability of site contamination from the result of groundwater contamination has been determined to be low. To reduce the risk of groundwater contaminants, the use of potable water is recommended.

5.9 ANY OTHER CONDITIONS OF CONCERN

The ERIS report did not contain any other reported hazards within the project boundaries.

SECTION 6

FINDINGS AND CONCLUSIONS

The Minneola HWY 27 project site is located immediately east of N Highway 27, south of Citrus Grove Road, and north of Open-Door Baptist Church in Minneola, Florida. More specifically, the proposed project site is located within Section 6, Township 22 South and Range 26 East of Lake County, Florida.

The subject property is a forested upland habitat that has a paved road along the northern and eastern boundary. Understory is moderately vegetated and contains remnants of abandoned homeless encampments and previous site work. No wetlands are present onsite.

Several EPA databases were searched by ERIS. The data in each database is the most current information available. Each database and the results of the search were reviewed by ECS and summarized in this document. There were two (02) locations found within the search area for any Federal databases. There were twenty (20) locations identified in the State and local database summary. There were no (0) unplottable locations identified. Please see the *ERIS Database Summary* in Appendix B.

There were no indications of recognized negative environmental conditions at the subject site. Further testing is not recommended for this site.

I declare that to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in 40 CFR part 312.

I have the specific qualifications of education, training, and experience to assess the property of the nature, history and setting of the subject property.

I have developed and performed all appropriate inquiries in conformance with the standard and practices set forth in 40 CFR part 312.

SECTION 7

SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Please refer to the cover letter

SECTION 8

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

(Follows)

April 4th, 2025

Tilghman Herring
Head of Acquisitions
Greenberg Gibbons Commercial
706 Giddings Ave Annapolis, MD 21401

Re: Minneola HWY 27
Lake County, FL
Environmental Services
ECS Project No. 1247.01.25

Dear Mr. Herring:

Ecological Consulting Solutions, Inc (ECS) is pleased to submit the enclosed Phase I Environmental Site Assessment report for the above-mentioned project site. This assessment was performed in accordance with ECS's proposal dated January 16th, 2025.

The results of the Phase I Environmental Site Assessment are detailed within this report.

Ecological Consulting Solutions, Inc. appreciates the opportunity to provide you with our services. Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

ECOLOGICAL CONSULTING SOLUTIONS, INC.

Chris Krack

attachments

Longwood Office:
410 North Street, Unit 130
Longwood, FL 32750
(407) 869-9434

Tampa Office:
419 W. Platt Street, Suite 103
Tampa, FL 33606
(813) 254-5959

CHRIS KRACK, B. S.

Education

- Eastern Kentucky University, Bachelor of Science, Wildlife Biology, 2013
- Eastern Kentucky University, Bachelor of Arts, General Studies, 2010
- Authorized Gopher Tortoise Agent GTA-17-00079C

Professional Experience

- Mr. Krack has over six years of practical experience as a Biologist. His experience includes environmental resource permitting, uniform mitigation assessment methodology (UMAM), Phase I environmental site assessments, wetland delineation and jurisdictional determinations, listed species surveys, permitting and management plans, mitigation design and monitoring, and water quality sampling and analysis. Mr. Krack has over six years of gopher tortoise relocation experience.

Representative Projects

- *Serenby RFP Project, Lake County, Florida.* Performed a Phase I Environmental Site Assessment on a 129.19-acre property that was previously a nursery as well as citrus groves. Report completed in *July of 2018*.

- *Windsong Phase II project, Lake County, Florida. Performed a Phase I Environmental Site Assessment on a 38.62-acre property that was previously undeveloped. Report completed in July of 2019.*

- *Calhoun Project, Lake County, Florida. Performed a Phase I Environmental Site Assessment on a 331.09-acre property that was an active cattle farm as well as runway. Report completed in July of 2019.*

- *Charlie Johnson Project, Lake County, Florida*. Performed a Phase I Environmental Site Assessment on a 34.8-acre property that was previously citrus groves and pastureland. Report was completed in November of 2019.

- *Thompson Road Project, Orange County, Florida*. Performed a Phase I Environmental Site Assessment on a 15.53-acre property that was previously undeveloped land. Report was completed in October of 2020.

- *Sadler Road Project, Orange County, Florida.* Performed a Phase I Environmental Site Assessment on a 239.42-acre property that was previously agriculture land. Report was completed in *March of 2020.*

- *Douglas TH Project, Polk County, Florida.* Performed a Phase I Environmental Site Assessment on a 18.46-acre property that was previously pastureland. Report was completed in *March of 2020.*

- *Highfield at Twisted Oaks Project, Sumter County, Florida.* Performed a Phase I Environmental Site Assessment on a 104-acre property that was previously pastureland. The report was completed in *December of 2021 and updated in May of 2023.*

- *Reserve at Hammock Oaks (O'Dell Property) Project, Lake County, Florida.* Performed a Phase I Environmental Site Assessment on a 166.46-acre property that was previously pastureland. The report was completed in *April of 2022.*

- *Beck Hammock Project, Seminole County, Florida.* Performed a Phase I Environmental Site Assessment on a 19.05-acre property that was previously agriculture land. The report was completed in *July of 2021.*

- *2900 W. 1st Street-Sanford (Wayne Dencsch) Project, Seminole County, Florida.* Performed a Phase I Environmental Site Assessment on a 9.78-acre property that is an active Wayne Densch distribution center. The report was completed in *May of 2023.*

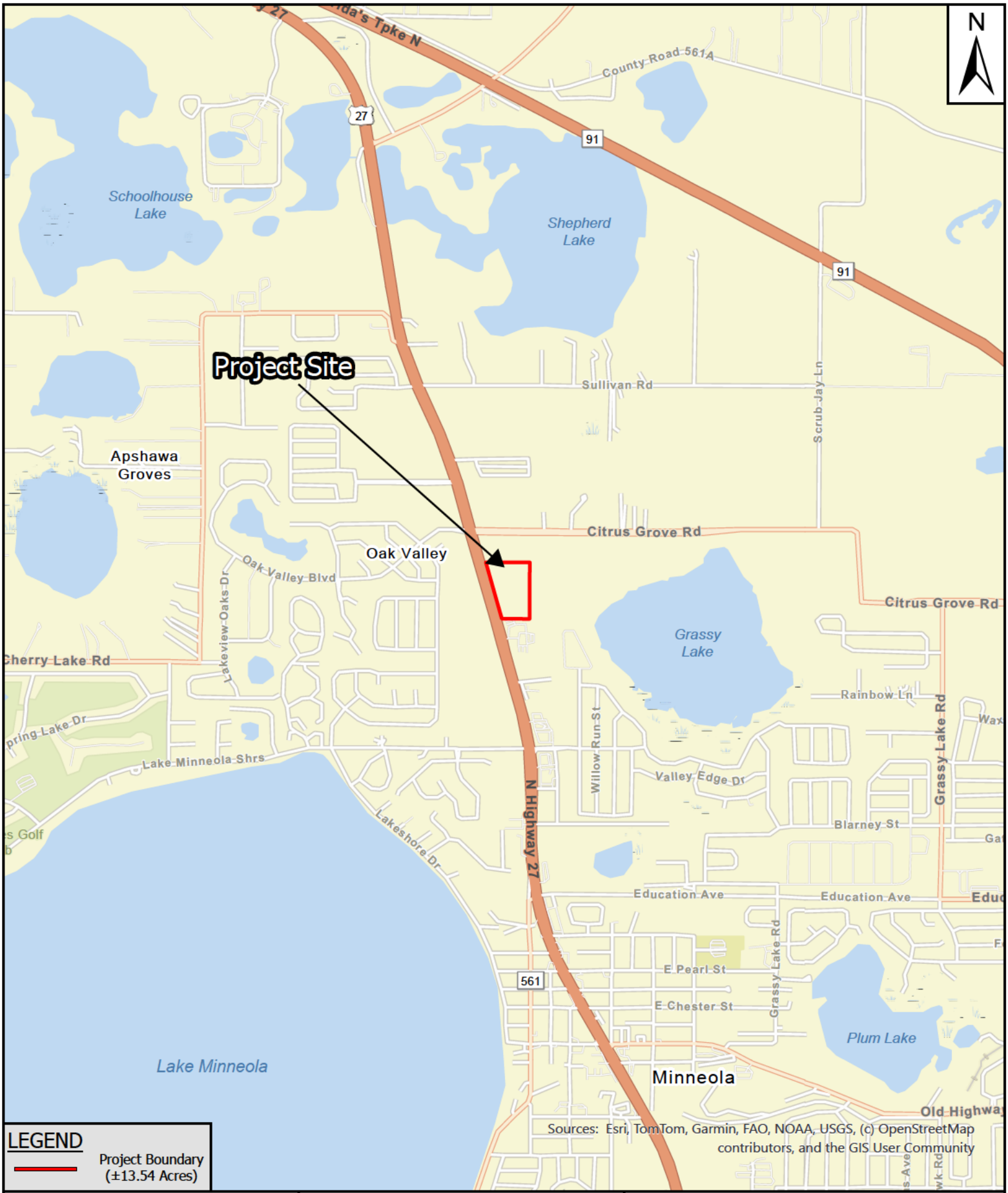
- *Mount Dora Borrow Pit Project, Lake County, Florida.* Performed a Phase I Environmental Site Assessment on a 157.16-acre property that is an active land mine as well as a previous borrow area. The report was completed in *June of 2023.*

- *The Rookery Phase I Project, Clay County, Florida.* Performed a Phase I Environmental Site Assessment on a 76.21-acre property that was previously Gustafsons Dairy Farm. The report was completed in *May of 2023.*

- *Banning Ranch Project, Lake County, Florida.* Performed a Phase I Environmental Site Assessment on a 182.75-acre property that is active pastureland. The report was completed in *December of 2021.*

- *Battaglia Project, Lake County, Florida.* Performed a Phase I Environmental Site Assessment on a 280.42-acre property that is active pastureland. The report was completed in *March of 2022.*

FIGURES



LEGEND

Project Boundary (±13.54 Acres)

ECS ECOLOGICAL CONSULTING SOLUTIONS INC.

MINNEOLA HWY 27
LAKE COUNTY, FLORIDA
PROJECT SITE LOCATION MAP

Project #: 1247.01.25 DATE: 03/21/25 FIGURE: 1

0 3,000 6,000 Feet

Created by: CSK

410 North Street, Suite 130
Longwood, FL 32750
Phone: (407) 869-9434
www.ecologicalconsulting.com

ECS
ECOLOGICAL CONSULTING SOLUTIONS INC.

MINNEOLA HWY 27
LAKE COUNTY, FLORIDA
FLUCFCS MAP

Project #: 1247.01.25 DATE: 03/21/25 FIGURE: 2

0 165 330 Feet

Created by: CSK

410 North Street, Suite 130
Longwood, FL 32750
Phone: (407) 869-9434
www.ecologicalconsulting.com

APPENDIX A

PROPERTY RECORD CARD

General Information

Name:	GRASSY LAKE HOLDINGS LLC	**Alternate Key:**	1031265
Mailing Address:	5832 WOODBINE DR BELL ISLE, FL 32809 *Update Mailing Address*	**Parcel Number:**	06-22-26-0003-000-04700
		Millage Group and City:	00MI Minneola
		2024 Total Certified Millage Rate:	17.7864
		Trash/Recycling/Water/Info:	*My Public Services Map*
Property Location:	US HIGHWAY 27 MINNEOLA FL, 34715	**Property Name:**	-- *Submit Property Name*
		School Information:	*School Locator & Bus Stop Map* *School Boundary Maps*
Property Description:	BEG AT SE COR OF NW 1/4 OF SW 1/4, RUN N 00DEG 09MIN 20SEC E 751.72 FT TO S LINE OF N 570 FT OF SAID NW 1/4 OF SW 1/4, N 89DEG 50MIN 01SEC W 704.47 FT TO E'LY R/W LINE OF SR 25, S 14DEG 00MIN 27SEC E ALONG SAID E'LY R/W LINE 307.47 FT TO NW'LY COR OF DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THENCE N 75DEG 59MIN 33SEC E 152 FT TO NE'LY COR OF SAID RETENTION AREA, S 14DEG 00MIN 27SEC E 320 FT TO SE'LY COR OF SAID RETENTION AREA, S 75DEG 59MIN 00SEC W 152 FT TO E'LY R/W LINE OF SR 25, S 14DEG 00MIN 27SEC E ALONG SAID E'LY R/W LINE 146.26 FT TO S LINE OF NW 1/4 OF SW 1/4, S 89DEG 39MIN 42SEC E 515.16 FT TO POB ORB 4573 PG 486		

NOTE: This property description is a condensed/abbreviated version of the original description as recorded on deeds or other legal instruments in the public records of the Lake County Clerk of Court. It may not include the Public Land Survey System's Section, Township, Range information or the county in which the property is located. It is intended to represent the land boundary only and does not include easements or other interests of record. This description should not be used for purposes of conveying property title. The Property Appraiser assumes no responsibility for the consequences of inappropriate uses or interpretations of the property description.

Land Data

Line	Land Use	Frontage	Depth	Notes	No. Units	Type	Class Value	Land Value
1	VACANT COMMERCIAL (1000)	0	0		9.320	Acre	$563,860.00	$563,860.00
2	BILLBOARD SITE (1020)	0	0		1.000	Lot	$20,000.00	$20,000.00

Click here for Zoning Info Map **FEMA Flood**

Miscellaneous Improvements

There is no improvement information to display.

Sales History

NOTE: This section is not intended to be a complete chain of title. Additional official book/page numbers may be listed in the property description above and/or recorded and indexed with the Clerk of Court. Follow this link to search all documents by owner's name.

Book/Page	Sale Date	Instrument	Qualified/Unqualified	Vacant/Improved	Sale Price
4573 / 486	12/29/2014	Warranty Deed	Unqualified	Vacant	$275,000.00
4188 / 480	07/05/2012	Certificate of Title	Unqualified	Vacant	$100.00
1813 / 531	11/30/1999	Trustees Deed	Unqualified	Vacant	$275,000.00

1813 / 529	11/30/1999	Trustees Deed	Unqualified	Vacant	$1.00
1186 / 644	06/01/1992	Warranty Deed	Unqualified	Vacant	$3,400.00
1072 / 274	08/01/1990	Warranty Deed	Unqualified	Vacant	$1.00
937 / 1699	10/01/1987	Warranty Deed	Unqualified	Vacant	$1.00
867 / 48	02/01/1986	Warranty Deed	Unqualified	Vacant	$1.00
716 / 1113	12/01/1980	Warranty Deed	Unqualified	Vacant	$2.00

Click here to search for mortgages, liens, and other legal documents.

Values and Estimated Ad Valorem Taxes

Values shown below are 2025 WORKING VALUES which are subject to change until certified. The Market Value listed below is not intended to represent the anticipated selling price of the property and should not be relied upon by any individual or entity as a determination of current market value.

Tax Authority	Market Value	Assessed Value	Taxable Value	Millage	Estimated Taxes
LAKE COUNTY BCC GENERAL FUND	$583,860	$499,430	$499,430	5.0364	$2,515.33
SCHOOL BOARD STATE	$583,860	$583,860	$583,860	3.1240	$1,823.98
SCHOOL BOARD LOCAL	$583,860	$583,860	$583,860	2.9980	$1,750.41
LAKE COUNTY WATER AUTHORITY	$583,860	$499,430	$499,430	0.2940	$146.83
ST JOHNS RIVER FL WATER MGMT DIST	$583,860	$499,430	$499,430	0.1793	$89.55
CITY OF MINNEOLA	$583,860	$499,430	$499,430	5.6000	$2,796.81
LAKE COUNTY MSTU AMBULANCE	$583,860	$499,430	$499,430	0.4629	$231.19
LAKE COUNTY VOTED DEBT SERVICE	$583,860	$499,430	$499,430	0.0918	$45.85
				Total: 17.7864	**Total:** $9,399.95

Exemptions Information

This property is benefitting from the following exemptions with a checkmark ✓

Homestead Exemption (first exemption up to $25,000)	*Learn More* *View the Law*
Additional Homestead Exemption (up to an additional $25,000)	*Learn More* *View the Law*
Limited Income Senior Exemption (applied to county millage - up to $50,000)	*Learn More* *View the Law*
Limited Income Senior Exemption (applied to city millage - up to $25,000)	*Learn More* *View the Law*
Limited Income Senior 25 Year Residency (county millage only-exemption amount varies)	*Learn More* *View the Law*
Widow / Widower Exemption (up to $5,000)	*Learn More* *View the Law*
Blind Exemption (up to $500)	*Learn More* *View the Law*
Disability Exemption (up to $5,000)	*Learn More* *View the Law*
Total and Permanent Disability Exemption (amount varies)	*Learn More* *View the Law*
Veteran's Disability Exemption ($5,000)	*Learn More* *View the Law*
Veteran's Total and Permanent Disability Exemption (amount varies)	*Learn More* *View the Law*
Veteran's Combat Related Disability Exemption (amount varies)	*Learn More* *View the Law*
Deployed Servicemember Exemption (amount varies)	*Learn More* *View the Law*
First Responder Total and Permanent Disability Exemption (amount varies)	*Learn More* *View the Law*
Surviving Spouse of First Responder Exemption (amount varies)	*Learn More* *View the Law*
Conservation Exemption (amount varies)	*Learn More* *View the Law*

Tangible Personal Property Exemption (up to $25,000)	*Learn More*	*View the Law*
Religious, Charitable, Institutional, and Organizational Exemptions (amount varies)	*Learn More*	*View the Law*
Economic Development Exemption	*Learn More*	*View the Law*
Government Exemption (amount varies)	*Learn More*	*View the Law*

NOTE: Information on this Property Record Card is compiled and used by the Lake County Property Appraiser for the sole purpose of ad valorem property tax assessment administration in accordance with the Florida Constitution, Statutes, and Administrative Code. The Lake County Property Appraiser makes no representations or warranties regarding the completeness and accuracy of the data herein, its use or interpretation, the fee or beneficial/equitable title ownership or encumbrances of the property, and assumes no liability associated with its use or misuse. See the posted Site Notice.

Copyright © 2014 Lake County Property Appraiser. All rights reserved.
Property data updated nightly.
Site Notice

PROPERTY RECORD CARD

General Information

Name:	GRASSY LAKE HOLDINGS LLC	**Alternate Key:**	1031265
Mailing Address:	5832 WOODBINE DR BELL ISLE, FL 32809 *Update Mailing Address*	**Parcel Number:**	06-22-26-0003-000-04700
		Millage Group and City:	00MI Minneola
		2024 Total Certified Millage Rate:	17.7864
		Trash/Recycling/Water/Info:	*My Public Services Map*
Property Location:	US HIGHWAY 27 MINNEOLA FL, 34715	**Property Name:**	-- *Submit Property Name*
		School Information:	*School Locator & Bus Stop Map* *School Boundary Maps*
Property Description:	BEG AT SE COR OF NW 1/4 OF SW 1/4, RUN N 00DEG 09MIN 20SEC E 751.72 FT TO S LINE OF N 570 FT OF SAID NW 1/4 OF SW 1/4, N 89DEG 50MIN 01SEC W 704.47 FT TO E'LY R/W LINE OF SR 25, S 14DEG 00MIN 27SEC E ALONG SAID E'LY R/W LINE 307.47 FT TO NW'LY COR OF DEPARTMENT OF TRANSPORTATION'S WATER RETENTION AREA, THENCE N 75DEG 59MIN 33SEC E 152 FT TO NE'LY COR OF SAID RETENTION AREA, S 14DEG 00MIN 27SEC E 320 FT TO SE'LY COR OF SAID RETENTION AREA, S 75DEG 59MIN 00SEC W 152 FT TO E'LY R/W LINE OF SR 25, S 14DEG 00MIN 27SEC E ALONG SAID E'LY R/W LINE 146.26 FT TO S LINE OF NW 1/4 OF SW 1/4, S 89DEG 39MIN 42SEC E 515.16 FT TO POB ORB 4573 PG 486		

NOTE: This property description is a condensed/abbreviated version of the original description as recorded on deeds or other legal instruments in the public records of the Lake County Clerk of Court. It may not include the Public Land Survey System's Section, Township, Range information or the county in which the property is located. It is intended to represent the land boundary only and does not include easements or other interests of record. This description should not be used for purposes of conveying property title. The Property Appraiser assumes no responsibility for the consequences of inappropriate uses or interpretations of the property description.

Land Data

Line	Land Use	Frontage	Depth	Notes	No. Units	Type	Class Value	Land Value
1	VACANT COMMERCIAL (1000)	0	0		9.320	Acre	$563,860.00	$563,860.00
2	BILLBOARD SITE (1020)	0	0		1.000	Lot	$20,000.00	$20,000.00

Click here for Zoning Info Map **FEMA Flood**

Miscellaneous Improvements

There is no improvement information to display.

Sales History

NOTE: This section is not intended to be a complete chain of title. Additional official book/page numbers may be listed in the property description above and/or recorded and indexed with the Clerk of Court. Follow this link to search all documents by owner's name.

Book/Page	Sale Date	Instrument	Qualified/Unqualified	Vacant/Improved	Sale Price
4573 / 486	12/29/2014	Warranty Deed	Unqualified	Vacant	$275,000.00
4188 / 480	07/05/2012	Certificate of Title	Unqualified	Vacant	$100.00
1813 / 531	11/30/1999	Trustees Deed	Unqualified	Vacant	$275,000.00

1813 / 529	11/30/1999	Trustees Deed	Unqualified	Vacant	$1.00
1186 / 644	06/01/1992	Warranty Deed	Unqualified	Vacant	$3,400.00
1072 / 274	08/01/1990	Warranty Deed	Unqualified	Vacant	$1.00
937 / 1699	10/01/1987	Warranty Deed	Unqualified	Vacant	$1.00
867 / 48	02/01/1986	Warranty Deed	Unqualified	Vacant	$1.00
716 / 1113	12/01/1980	Warranty Deed	Unqualified	Vacant	$2.00

Click here to search for mortgages, liens, and other legal documents.

Values and Estimated Ad Valorem Taxes

Values shown below are 2025 WORKING VALUES which are subject to change until certified. The Market Value listed below is not intended to represent the anticipated selling price of the property and should not be relied upon by any individual or entity as a determination of current market value.

Tax Authority	Market Value	Assessed Value	Taxable Value	Millage	Estimated Taxes
LAKE COUNTY BCC GENERAL FUND	$583,860	$499,430	$499,430	5.0364	$2,515.33
SCHOOL BOARD STATE	$583,860	$583,860	$583,860	3.1240	$1,823.98
SCHOOL BOARD LOCAL	$583,860	$583,860	$583,860	2.9980	$1,750.41
LAKE COUNTY WATER AUTHORITY	$583,860	$499,430	$499,430	0.2940	$146.83
ST JOHNS RIVER FL WATER MGMT DIST	$583,860	$499,430	$499,430	0.1793	$89.55
CITY OF MINNEOLA	$583,860	$499,430	$499,430	5.6000	$2,796.81
LAKE COUNTY MSTU AMBULANCE	$583,860	$499,430	$499,430	0.4629	$231.19
LAKE COUNTY VOTED DEBT SERVICE	$583,860	$499,430	$499,430	0.0918	$45.85
				Total: 17.7864	**Total:** $9,399.95

Exemptions Information

This property is benefitting from the following exemptions with a checkmark ✓

Homestead Exemption (first exemption up to $25,000)	*Learn More* *View the Law*
Additional Homestead Exemption (up to an additional $25,000)	*Learn More* *View the Law*
Limited Income Senior Exemption (applied to county millage - up to $50,000)	*Learn More* *View the Law*
Limited Income Senior Exemption (applied to city millage - up to $25,000)	*Learn More* *View the Law*
Limited Income Senior 25 Year Residency (county millage only-exemption amount varies)	*Learn More* *View the Law*
Widow / Widower Exemption (up to $5,000)	*Learn More* *View the Law*
Blind Exemption (up to $500)	*Learn More* *View the Law*
Disability Exemption (up to $5,000)	*Learn More* *View the Law*
Total and Permanent Disability Exemption (amount varies)	*Learn More* *View the Law*
Veteran's Disability Exemption ($5,000)	*Learn More* *View the Law*
Veteran's Total and Permanent Disability Exemption (amount varies)	*Learn More* *View the Law*
Veteran's Combat Related Disability Exemption (amount varies)	*Learn More* *View the Law*
Deployed Servicemember Exemption (amount varies)	*Learn More* *View the Law*
First Responder Total and Permanent Disability Exemption (amount varies)	*Learn More* *View the Law*
Surviving Spouse of First Responder Exemption (amount varies)	*Learn More* *View the Law*
Conservation Exemption (amount varies)	*Learn More* *View the Law*

Tangible Personal Property Exemption (up to $25,000)	*Learn More*	*View the Law*
Religious, Charitable, Institutional, and Organizational Exemptions (amount varies)	*Learn More*	*View the Law*
Economic Development Exemption	*Learn More*	*View the Law*
Government Exemption (amount varies)	*Learn More*	*View the Law*

NOTE: Information on this Property Record Card is compiled and used by the Lake County Property Appraiser for the sole purpose of ad valorem property tax assessment administration in accordance with the Florida Constitution, Statutes, and Administrative Code. The Lake County Property Appraiser makes no representations or warranties regarding the completeness and accuracy of the data herein, its use or interpretation, the fee or beneficial/equitable title ownership or encumbrances of the property, and assumes no liability associated with its use or misuse. See the posted Site Notice.

Copyright © 2014 Lake County Property Appraiser. All rights reserved.
Property data updated nightly.
Site Notice

APPENDIX B

DATABASE REPORT

Project Property:	*Minneola HWY 27* *Minneola HWY 27* *Clermont FL*
Project No:	*1247.01.25*
Report Type:	*Database Report*
Order No:	*25030401068*
Requested by:	*Ecological Consulting Solutions, Inc.*
Date Completed:	*March 6, 2025*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Table of Contents

Table of Contents.....2
Executive Summary.....3
Executive Summary: Report Summary.....4
Executive Summary: Site Report Summary - Project Property.....8
Executive Summary: Site Report Summary - Surrounding Properties.....9
Executive Summary: Summary by Data Source.....11
Map.....15
Aerial.....18
Topographic Map.....19
Detail Report.....20
Unplottable Summary.....54
Unplottable Report.....55
Appendix: Database Descriptions.....56
Definitions.....72

Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY

Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as database review of environmental records.

License for use of information in Report: No page of this report can be used without this cover page, this notice and the project property identifier. The information in Report(s) may not be modified or re-sold.

Your Liability for misuse: Using this Service and/or its reports in a manner contrary to this Notice or your agreement will be in breach of copyright and contract and ERIS may obtain damages for such mis-use, including damages caused to third parties, and gives ERIS the right to terminate your account, rescind your license to any previous reports and to bar you from future use of the Service.

No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Inc. ("ERIS") using various sources of information, including information provided by Federal and State government departments. The report applies only to the address and up to the date specified on the cover of this report, and any alterations or deviation from this description will require a new report. This report and the data contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein and does not constitute a legal opinion nor medical advice. Although ERIS has endeavored to present you with information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

Trademark and Copyright: You may not use the ERIS trademarks or attribute any work to ERIS other than as outlined above. This Service and Report (s) are protected by copyright owned by ERIS Information Inc. Copyright in data used in the Service or Report(s) (the "Data") is owned by ERIS or its licensors. The Service, Report(s) and Data may not be copied or reproduced in whole or in any substantial part without prior written consent of ERIS.

Executive Summary

Property Information:

Project Property:		*Minneola HWY 27* *Minneola HWY 27 Clermont FL*
Project No:		*1247.01.25*
Coordinates:		
	Latitude:	*28.59837579*
	Longitude:	*-81.75286338*
	UTM Northing:	*3,163,721.93*
	UTM Easting:	*426,388.34*
	UTM Zone:	*17R*
Elevation:		*164 FT*

Order Information:

Order No:	*25030401068*
Date Requested:	*March 4, 2025*
Requested by:	*Ecological Consulting Solutions, Inc.*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*Historical Aerials (with Project Boundaries)*
ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	0	-	0
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	***1***	0	-	-	***1***
RCRA VSQG	Y	0.25	0	0	***1***	-	-	***1***
RCRA NON GEN	Y	0.25	0	0	0	-	-	0
RCRA CONTROLS	Y	0.5	0	0	0	0	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
NPL IC	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
FRP	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DELISTED FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
State								
SHWS	Y	1	0	0	0	0	0	0
DELISTED SHWS	Y	1	0	0	0	0	0	0
ERIC	Y	1	0	0	0	0	0	0
CLEANUP DEP	Y	1	0	0	0	0	0	0
WCRPS	Y	1	0	0	0	0	0	0
DELISTED WCP	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
LST	Y	0.5	0	**1**	0	**2**	-	**3**
DELISTED LST	Y	0.5	0	0	0	**2**	-	**2**
UST	Y	0.25	0	0	0	-	-	0
AST	Y	0.25	0	**1**	**1**	-	-	**2**
TANK	Y	0.25	0	0	0	-	-	0
DEL UST AST TANK	Y	0.25	0	0	0	-	-	0
DEL STORAGE TANK	Y	0.25	0	0	0	-	-	0
FF TANKS	Y	0.25	0	0	0	-	-	0
STCS	Y	0.5	0	**2**	**1**	**4**	-	**7**
INST	Y	0.5	0	0	0	0	-	0
ENG	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	0	-	0
BROWNFIELDS	Y	0.5	0	0	0	0	-	0
BROWNFIELD AREA	Y	0.5	0	0	0	0	-	0
HAZ WASTE FAC	Y	0.5	0	0	0	0	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED INDIAN LST	Y	0.5	0	0	0	0	-	0
DELISTED INDIAN UST	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
County	***No County databases were selected to be included in the search.***							
Additional Environmental Records								
Federal								
PFAS GHG	Y	0.5	0	0	0	0	-	0
OSC RESPONSE	Y	0.125	0	0	-	-	-	0
FINDS/FRS	Y	PO	0	-	-	-	-	0
TRIS	Y	PO	0	-	-	-	-	0
PFAS NPL	Y	0.5	0	0	0	0	-	0
PFAS FED SITES	Y	0.5	0	0	0	0	-	0
PFAS SSEHRI	Y	0.5	0	0	0	0	-	0
PFAS ERNS	Y	0.5	0	0	0	0	-	0
PFAS NPDES	Y	0.5	0	0	0	0	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
PFAS TSCA	Y	0.5	0	0	0	0	-	0
PFAS E-MANIFEST	Y	0.5	0	0	0	0	-	0
PFAS IND	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
FUDS MRS	Y	1	0	0	0	0	0	0
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	0	0	0	0	0
LM SITES	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
CONSENT DECREES	Y	0.25	0	0	0	-	-	0
AFS	Y	PO	0	-	-	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCBT	Y	0.5	0	0	0	0	-	0
PCB	Y	0.5	0	0	0	0	-	0
POWER PLANTS	Y	0.125	0	0	-	-	-	0
State								
HIST RISK	Y	0.125	0	0	-	-	-	0
PRIORITYCLEAN	Y	0.5	0	0	0	0	-	0
DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
HISTORICAL DRYC	Y	0.25	0	0	0	-	-	0
SPILLS	Y	0.125	0	0	-	-	-	0
DWM CONTAM	Y	0.5	0	0	0	**3**	-	**3**
DEL CONTAM SITE	Y	0.5	0	0	0	**1**	-	**1**
PFAS AFFF	Y	0.5	0	0	0	0	-	0
PFAS	Y	0.5	0	0	0	0	-	0
GW CONTAM	Y	0.125	**1**	0	-	-	-	**1**
UIC	Y	PO	0	-	-	-	-	0
WELL SURVEILLANCE	Y	0.25	0	0	0	-	-	0
CDV SOUTHEAST	Y	0.5	0	0	0	0	-	0
TIER 2	Y	0.125	0	**1**	-	-	-	**1**
DELISTED COUNTY	Y	0.25	0	0	0	-	-	0
Tribal	***No Tribal additional environmental record sources available for this State.***							
County	***No County additional environmental databases were selected to be included in the search.***							
Total:			***1***	***6***	***3***	***12***	*0*	***22***

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	GW CONTAM		FL	ESE	0.00 / 0.00	-6	20

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
2	TIER 2	Minneola Substation	17225 US Highway 27 Minneola FL 34755	WNW	0.03 / 145.97	22	20
3	RCRA SQG	FIELDS EQUIPMENT CO INC	17215 US HIGHWAY 27 CLERMONT FL 34715-9273	SW	0.06 / 314.98	31	22
			EPA Handler ID: FLD984232165				
3	AST	FIELDS EQUIPMENT CO INC	17215 US HWY 27 CLERMONT FL 34711	SW	0.06 / 314.98	31	25
			***Facility ID	Facility Status:*** 8945306	CLOSED ***Tank Status	Status Date:*** B - REMOVED FROM SITE	01-AUG-1995, B - REMOVED FROM SITE	01-AUG-1995			
3	STCS	FIELDS EQUIPMENT CO INC	17215 US HWY 27 CLERMONT FL 34711	SW	0.06 / 314.98	31	26
			***Facility ID	Fac Stat (OD):*** 8945306	CLOSED						
4	LST	LANGLEY FRUIT CO	US HWY 27 MINNEOLA FL 34711	NNW	0.08 / 418.25	25	27
			***Facility ID	Facility Status:*** 8509992	CLOSED ***Cleanup Required:*** N - NO CLEANUP REQUIRED						
4	STCS	LANGLEY FRUIT CO	US HWY 27 MINNEOLA FL 34711	NNW	0.08 / 418.25	25	29
			***Facility ID	Fac Stat (OD):*** 8509992	CLOSED						
5	AST	CITY OF MINNEOLA OAK VALLEY WATER TREATMENT PLANT	1200 OAK VALLEY BLVD MINNEOLA FL 34715	NW	0.19 / 984.81	38	32
			***Facility ID	Facility Status:*** 9809848	OPEN ***Tank Status	Status Date:*** U - IN SERVICE	01-DEC-2001				
5	STCS	CITY OF MINNEOLA OAK VALLEY WATER TREATMENT PLANT	1200 OAK VALLEY BLVD MINNEOLA FL 34715	NW	0.19 / 984.81	38	33
			***Facility ID	Fac Stat (OD):*** 9809848	OPEN						
6	RCRA VSQG	MIKE LANGLEY CITRUS, INC	17628 US HIGHWAY 27 CLERMONT FL 34715-9537	NNW	0.25 / 1,308.49	44	35
			***EPA Handler ID	Recycler Activity?:*** FLT950050500	NO						
7	STCS	SECO PROPERTIES	N GRASSY LAKE RD MINNEOLA FL 34715	ENE	0.41 / 2,185.70	28	36
			***Facility ID	Fac Stat (OD):*** 9201049	CLOSED						
8	LST	FINA #7038	N US 27 & SR 561 MINNEOLA FL 32755	S	0.45 / 2,353.90	46	38
			***Facility ID	Facility Status:*** 8510019	CLOSED ***Cleanup Required:*** R - CLEANUP REQUIRED						
8	STCS	FINA #7038	N US 27 & SR 561 MINNEOLA FL 32755	S	0.45 / 2,353.90	46	41

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			***Facility ID	Fac Stat (OD):*** 8510019 | CLOSED			
8	DWM CONTAM	FINA #7038	N US 27 & SR 561 MINNEOLA FL 32755 ***Facility ID:*** 8510019	S	0.45 / 2,353.90	46	44
9	DELISTED LST	CIRCLE K #2722114	810 N US 27 KISSIMMEE FL 34744	S	0.48 / 2,546.41	44	44
9	LST	CIRCLE K #2722114	810 N US 27 MINNEOLA FL 34715 ***Facility ID	Facility Status:*** 9700727 | OPEN ***Cleanup Required:*** R - CLEANUP REQUIRED	S	0.48 / 2,546.41	44	45
9	DEL CONTAM SITE	HANDY WAY FOOD STORE #2114	810 N US 27 MINNEOLA FL 34744	S	0.48 / 2,546.41	44	47
9	DWM CONTAM	HANDY WAY FOOD STORE #2114	810 N US 27 MINNEOLA FL 34744 ***Facility ID:*** 9700727 ***Facility Status:*** WAITING	S	0.48 / 2,546.41	44	48
9	STCS	CIRCLE K #2722114	810 N US 27 KISSIMMEE FL 34744 ***Facility ID	Fac Stat (OD):*** 9700727 | OPEN	S	0.48 / 2,546.41	44	48
9	STCS	HANDY WAY FOOD STORE #5114	810 N US 27 MINNEOLA FL 34744 ***Facility ID	Fac Stat (OD):*** 9700763 | DELETED	S	0.48 / 2,546.41	44	51
9	DELISTED LST	CIRCLE K #2722114	810 N US 27 KISSIMMEE FL 34744 ***Facility ID	Fac Stat (Open Data):*** 8513378 | OPEN	S	0.48 / 2,546.41	44	52
9	DWM CONTAM	CIRCLE K #2722114	810 N US 27 KISSIMMEE FL 34744 ***Facility ID:*** 9700727	S	0.48 / 2,546.41	44	52

Executive Summary: Summary by Data Source

Standard

Federal

RCRA SQG - RCRA Small Quantity Generators List

A search of the RCRA SQG database, dated Oct 21, 2024 has found that there are 1 RCRA SQG site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
FIELDS EQUIPMENT CO INC	17215 US HIGHWAY 27 CLERMONT FL 34715-9273	SW	0.06 / 314.98	3
	***EPA Handler ID**: FLD984232165*			

RCRA VSQG - RCRA Very Small Quantity Generators List

A search of the RCRA VSQG database, dated Oct 21, 2024 has found that there are 1 RCRA VSQG site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
MIKE LANGLEY CITRUS, INC	17628 US HIGHWAY 27 CLERMONT FL 34715-9537	NNW	0.25 / 1,308.49	6
	***EPA Handler ID**	**Recycler Activity?**: FLT950050500 | NO*		

State

LST - Leaking Tanks

A search of the LST database, dated Feb 6, 2025 has found that there are 3 LST site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
LANGLEY FRUIT CO	US HWY 27 MINNEOLA FL 34711	NNW	0.08 / 418.25	4
	***Facility ID**	**Facility Status**: 8509992 | CLOSED* ***Cleanup Required**: N - NO CLEANUP REQUIRED*		
FINA #7038	N US 27 & SR 561 MINNEOLA FL 32755	S	0.45 / 2,353.90	8
	***Facility ID**	**Facility Status**: 8510019 | CLOSED* ***Cleanup Required**: R - CLEANUP REQUIRED*		
CIRCLE K #2722114	810 N US 27 MINNEOLA FL 34715	S	0.48 / 2,546.41	9
	***Facility ID**	**Facility Status**: 9700727 | OPEN* ***Cleanup Required**: R - CLEANUP REQUIRED*		

DELISTED LST - Delisted Leaking Tanks

A search of the DELISTED LST database, dated Feb 6, 2025 has found that there are 2 DELISTED LST site(s) within approximately

0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
CIRCLE K #2722114	810 N US 27 KISSIMMEE FL 34744	S	0.48 / 2,546.41	9
CIRCLE K #2722114	810 N US 27 KISSIMMEE FL 34744	S	0.48 / 2,546.41	9
	***Facility ID | Fac Stat (Open Data)**: 8513378 | OPEN*			

AST - Aboveground Storage Tanks

A search of the AST database, dated Jan 2, 2025 has found that there are 2 AST site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
FIELDS EQUIPMENT CO INC	17215 US HWY 27 CLERMONT FL 34711	SW	0.06 / 314.98	3
	***Facility ID | Facility Status**: 8945306 | CLOSED* ***Tank Status | Status Date**: B - REMOVED FROM SITE | 01-AUG-1995, B - REMOVED FROM SITE | 01-AUG-1995*			
CITY OF MINNEOLA OAK VALLEY WATER TREATMENT PLANT	1200 OAK VALLEY BLVD MINNEOLA FL 34715	NW	0.19 / 984.81	5
	***Facility ID | Facility Status**: 9809848 | OPEN* ***Tank Status | Status Date**: U - IN SERVICE | 01-DEC-2001*			

STCS - Storage Tank/Contaminated Facility Search

A search of the STCS database, dated Jan 6, 2025 has found that there are 7 STCS site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
FIELDS EQUIPMENT CO INC	17215 US HWY 27 CLERMONT FL 34711	SW	0.06 / 314.98	3
	***Facility ID | Fac Stat (OD)**: 8945306 | CLOSED*			
LANGLEY FRUIT CO	US HWY 27 MINNEOLA FL 34711	NNW	0.08 / 418.25	4
	***Facility ID | Fac Stat (OD)**: 8509992 | CLOSED*			
CITY OF MINNEOLA OAK VALLEY WATER TREATMENT PLANT	1200 OAK VALLEY BLVD MINNEOLA FL 34715	NW	0.19 / 984.81	5
	***Facility ID | Fac Stat (OD)**: 9809848 | OPEN*			
SECO PROPERTIES	N GRASSY LAKE RD MINNEOLA FL 34715	ENE	0.41 / 2,185.70	7
	***Facility ID | Fac Stat (OD)**: 9201049 | CLOSED*			
FINA #7038	N US 27 & SR 561 MINNEOLA FL 32755	S	0.45 / 2,353.90	8

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	***Facility ID | Fac Stat (OD)**: 8510019 | CLOSED*			
HANDY WAY FOOD STORE #5114	810 N US 27 MINNEOLA FL 34744	S	0.48 / 2,546.41	9
	***Facility ID | Fac Stat (OD)**: 9700763 | DELETED*			
CIRCLE K #2722114	810 N US 27 KISSIMMEE FL 34744	S	0.48 / 2,546.41	9
	***Facility ID | Fac Stat (OD)**: 9700727 | OPEN*			

Non Standard

State

DWM CONTAM - Contaminated Sites

A search of the DWM CONTAM database, dated Jul 14, 2023 has found that there are 3 DWM CONTAM site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
FINA #7038	N US 27 & SR 561 MINNEOLA FL 32755	S	0.45 / 2,353.90	8
	***Facility ID**: 8510019*			
HANDY WAY FOOD STORE #2114	810 N US 27 MINNEOLA FL 34744	S	0.48 / 2,546.41	9
	***Facility ID**: 9700727* ***Facility Status**: WAITING*			
CIRCLE K #2722114	810 N US 27 KISSIMMEE FL 34744	S	0.48 / 2,546.41	9
	***Facility ID**: 9700727*			

DEL CONTAM SITE - Delisted Contaminated Sites

A search of the DEL CONTAM SITE database, dated Sep 30, 2015 has found that there are 1 DEL CONTAM SITE site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
HANDY WAY FOOD STORE #2114	810 N US 27 MINNEOLA FL 34744	S	0.48 / 2,546.41	9

GW CONTAM - Ground Water Contamination Areas

A search of the GW CONTAM database, dated Jul 12, 2023 has found that there are 1 GW CONTAM site(s) within approximately 0.12 miles of the project property.

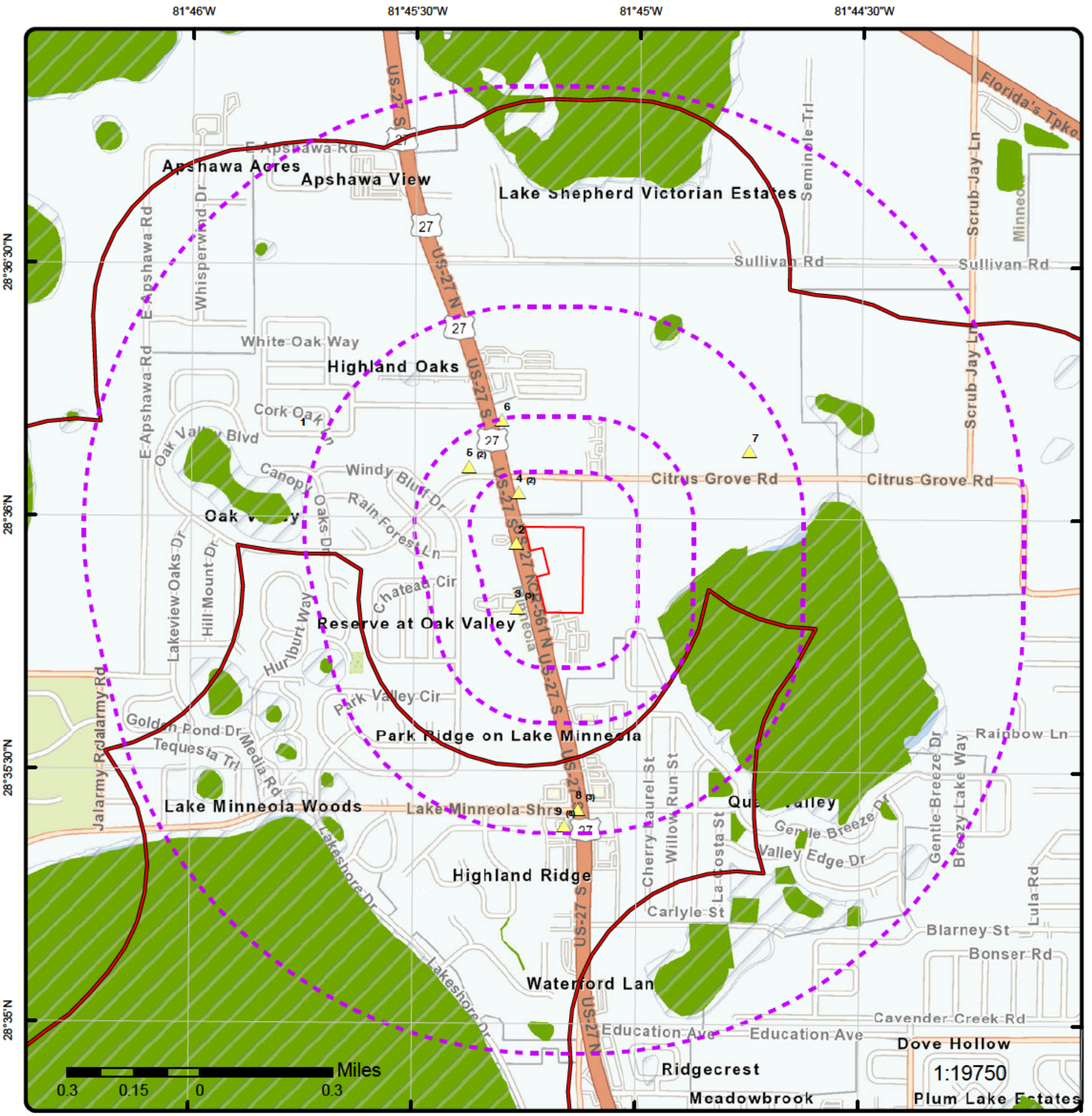
Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
	FL	ESE	0.00 / 0.00	1

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key

TIER 2 - Tier 2 Report

A search of the TIER 2 database, dated Apr 2, 2024 has found that there are 1 TIER 2 site(s) within approximately 0.12miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Minneola Substation	17225 US Highway 27 Minneola FL 34755	WNW	0.03 / 145.97	2



Map: 1.0 Mile Radius

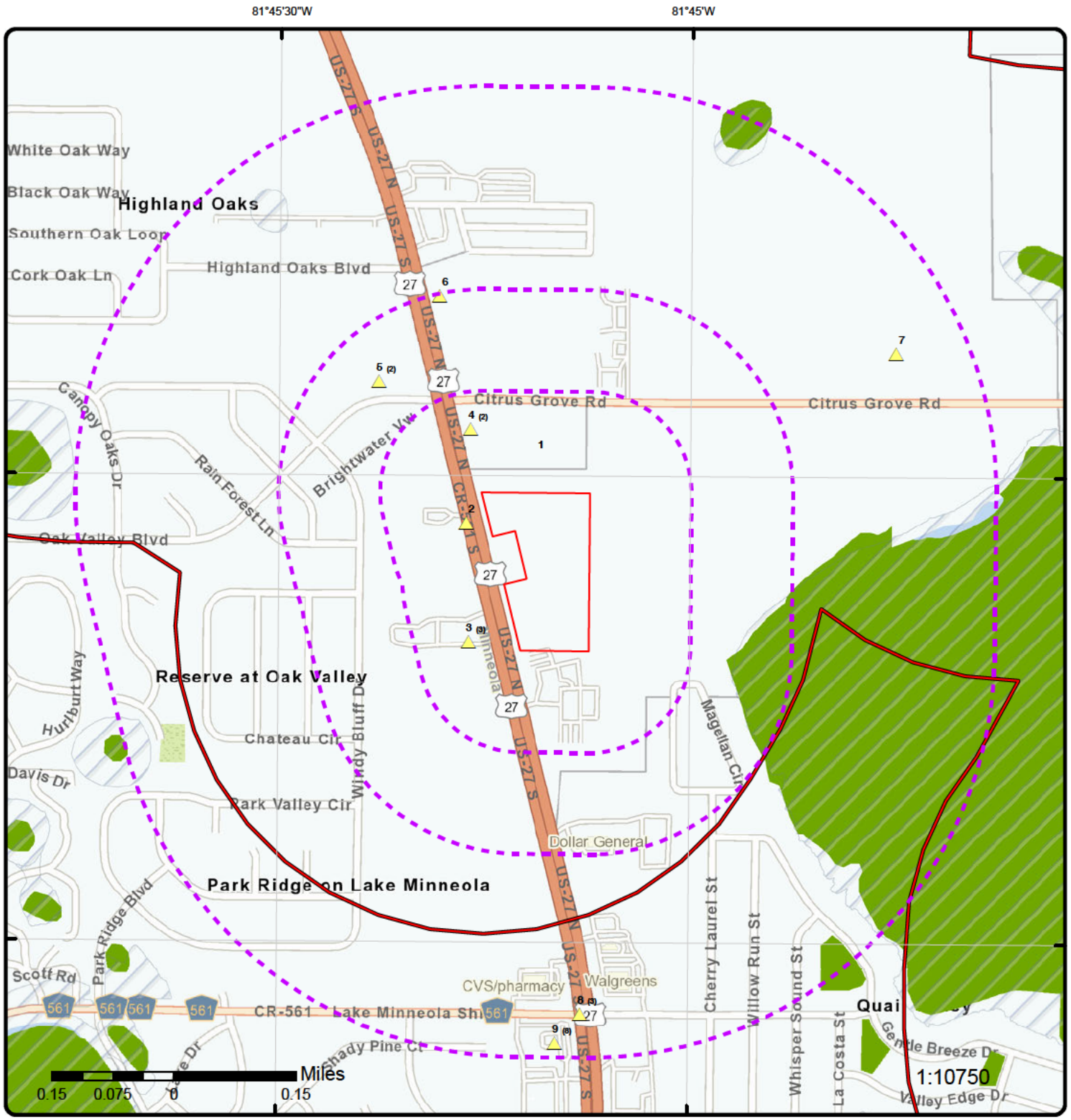
Order Number: 25030401068

Address: Minneola HWY 27, Clermont, FL

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

© ERIS Information Inc.



Map: 0.5 Mile Radius

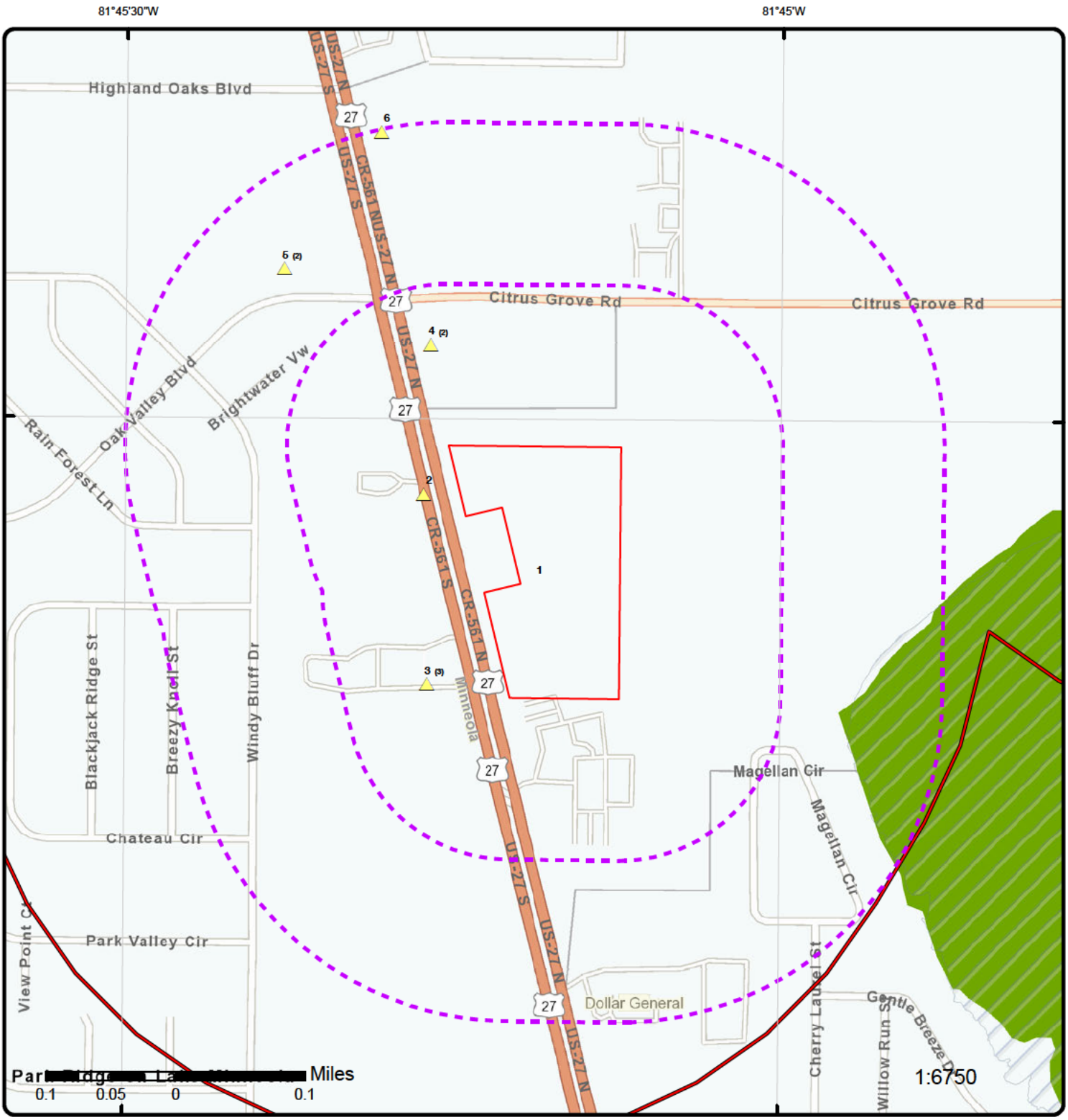
Order Number: 25030401068

Address: Minneola HWY 27, Clermont, FL

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

© ERIS Information Inc.



Map: 0.25 Mile Radius

Order Number: 25030401068

Address: Minneola HWY 27, Clermont, FL

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

© ERIS Information Inc.

Aerial Year: 2023

Address: Minneola HWY 27, Clermont, FL

Source: ESRI World Imagery

Order Number: 25030401068

© ERIS Information Inc.

Topographic Map

Year: 2021

Order Number: 25030401068

Address: Minneola HWY 27, FL

Quadrangle(s): Clermont East FL, Howey-in-the-Hills FL, Astatula FL, Clermont West FL

Source: USGS Topographic Map

© ERIS Information Inc.

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of 1	ESE	0.00 / 0.00	158.55 / -6	FL	GW CONTAM

Zone ID: 35263691
Florida WMDS: SJRWMD
County Name: LAKE
USGS Quads: 3714 3715
Contaminant Name: 26 - Ethylene Dibromide

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
2	1 of1	WNW	0.03 / 145.97	186.07 / 22	Minneola Substation 17225 US Highway 27 Minneola FL 34755	TIER 2

2018 Data

Facility ID: 6103146
Filing Year: 2017(Tier2)
CAS No:
Solid: False
Liquid: True
Gas: False
Pure: False
Mixture: True
First Submit Date: 2018-02-21(Tier2)
NAICS Code: 221121
Dun Bradstreet Code: 00-692-3700
Chemical Name: HYVOLT II
Hazard Not Otherwise Classifi: False
Contact Name: _ Duke Energy Florida, LLC
Contact Type: Owner / Operator
Contact Email: Jen.McDaniel@duke-energy.com
Contact Work Phone:
Contact 24 Hour Phone: 800-777-9898
Contact Mobile Phone:

Explosive: False
Filing Type: 312
Max Daily Qty: 52938
Avg Daily Qty: 26469
EHS:
Below Thresholds:
Trade Secret:

2019 Data

Facility ID: 6400878
Filing Year: 2018(Tier2)
CAS No:
Solid: False
Liquid: True
Gas: False
Pure: False
Mixture: True
First Submit Date: 2019-02-21(Tier2)
NAICS Code: 221121
Dun Bradstreet Code: 00-692-3700
Chemical Name: HYVOLT II
Hazard Not Otherwise Classifi: False
Contact Name: _ Duke Energy Florida, LLC
Contact Type: Owner / Operator
Contact Email: Jen.McDaniel@duke-energy.com
Contact Work Phone:

Explosive: False
Filing Type: 312
Max Daily Qty: 52938
Avg Daily Qty: 26469
EHS:
Below Thresholds:
Trade Secret:

Contact 24 Hour Phone: 800-777-9898
Contact Mobile Phone:

2020 Data (Filed)

Facility ID: 6681902
Filing Year: 2019(Tier2)
CAS No:
Solid: False
Liquid: True
Gas: False
Pure: False
Mixture: True
First Submit Date: 2020-02-26(Tier2)
NAICS Code: 221121
Dun Bradstreet Code: 00-692-3700
Chemical Name: HYVOLT II
Hazard Not Otherwise Classifi: False
Contact Name: _ Duke Energy Florida, LLC
Contact Type: Owner / Operator
Contact Email: Jen.McDaniel@duke-energy.com
Contact Work Phone:
Contact 24 Hour Phone: 800-777-9898
Contact Mobile Phone:
Explosive: False
Filing Type: 312
Max Daily Qty: 52,938
Avg Daily Qty: 26,469
EHS:
Below Thresholds:
Trade Secret:

2021 Data

Facility ID: 6818638
Filing Year: 2020(Tier2)
CAS No:
Solid: False
Liquid: True
Gas: False
Pure: False
Mixture: True
First Submit Date: 2021-02-09(Tier2)
NAICS Code: 221121
Dun Bradstreet Code: 00-692-3700
Chemical Name: HYVOLT II ERGON MTL
Hazard Not Otherwise Classifi: False
Contact Name: _ Duke Energy Florida, LLC
Contact Type: Owner / Operator
Contact Email: Patrica.West@Duke-Energy.com
Contact Work Phone: 727-480-7325
Contact 24 Hour Phone: 800-777-9898
Contact Mobile Phone:
Explosive: False
Filing Type: 312
Max Daily Qty: 74,999
Avg Daily Qty: 49,999
EHS:
Below Thresholds:
Trade Secret:

2022 Data

Facility ID: 7103664
Filing Year: 2021(Tier2)
CAS No:
Solid: False
Liquid: True
Gas: False
Pure: False
Mixture: True
First Submit Date: 2022-02-11(Tier2)
NAICS Code: 221121
Dun Bradstreet Code: 00-692-3700
Chemical Name: HYVOLT II ERGON MTL
Hazard Not Otherwise Classifi: False
Contact Name: _ Duke Energy Florida, LLC
Contact Type: Owner / Operator
Contact Email: Patrica.West@Duke-Energy.com
Explosive: False
Filing Type:
Max Daily Qty: 52,938
Avg Daily Qty: 26,469
EHS:
Below Thresholds:
Trade Secret:

Contact Work Phone: 727-480-7325
Contact 24 Hour Phone: 800-777-9898
Contact Mobile Phone:

2023 Data

Facility ID: 7286747
Filing Year: 2022(Tier2)
CAS No:
Solid: False
Liquid: True
Gas: False
Pure: False
Mixture: True
First Submit Date: 2023-02-15(Tier2)
NAICS Code: 221121
Dun Bradstreet Code: 00-692-3700
Chemical Name: HYVOLT II ERGON MTL
Hazard Not Otherwise Classifi: False
Contact Name: _ Duke Energy Florida, LLC
Contact Type: Owner / Operator
Contact Email: Patrica.West@Duke-Energy.com
Contact Work Phone: 727-480-7325
Contact 24 Hour Phone: 800-777-9898
Contact Mobile Phone:
Explosive: False
Filing Type: 312
Max Daily Qty: 52,938
Avg Daily Qty: 26,469
EHS:
Below Thresholds:
Trade Secret:
Max Amt in Lrg Cntr:

2024 Data

Facility ID: 7425610
Filing Year: 2023(Tier2)
CAS No:
Solid: False
Liquid: True
Gas: False
Pure: False
Mixture: True
Self Heating: False
Organic Peroxide: False
Corrosive to Metal: False
First Submit Date: 2024-02-19(Tier2)
NAICS Code: 221121
Dun Bradstreet Code: 00-692-3700
Chemical Name: HYVOLT II ERGON MTL
Hazard Not Otherwise Classifi: False
Contact Name: _ Duke Energy Florida, LLC
Contact Type: Owner / Operator
Contact Email: Patrica.West@Duke-Energy.com
Contact Work Phone: 727-480-7325
Contact 24 Hour Phone: 800-777-9898
Contact Mobile Phone:
Explosive: False
Filing Type: 312
Max Daily Qty: 52,938
Avg Daily Qty: 26,469
EHS:
Below Thresholds:
Trade Secret:
Max Amt in Lrg Cntr:

3	1 of3	SW	0.06 / 314.98	195.22 / 31	FIELDS EQUIPMENT CO INC 17215 US HIGHWAY 27 CLERMONT FL 34715-9273	RCRA SQG

EPA Handler ID: FLD984232165
Gen Status Universe: Small Quantity Generator
Contact Name: TIM CROUCH
Contact Address: PO BOX 121179 , , CLERMONT , FL, 34712-1179 , US
Contact Phone No and Ext: 904-394-7181
Contact Email:
Contact Country: US
County Name: LAKE
EPA Region: 04
Land Type: Private
Receive Date: 20130815

Location Latitude: 28.597158
Location Longitude: -81.754782
Recycler Activity(YES/NO)?: NO
Recycler Activity Note: This facility has no indication of Recycling Activity.

Violation/Evaluation Summary

Note: VIOLATION or UNDETERMINED: There are VIOLATION or UNDETERMINED details or records associated with this facility (EPA ID) in the Compliance Monitoring and Enforcement table dated Oct, 2024.

Violation Details

Found Violation: Yes
Citation: 279.22(c)(1), 62-710.401(6)
Violation Short Description: Used Oil - Generators
Violation Type: 279.C
Violation Determined Date: 20130613
Scheduled Compliance Date:
Return to Compliance: Unverifiable
Actual Return to Compl: 20130816
Violation Responsible Agency: State

Enforcement Details

Enforcement Type: 105
Enforcement Type Description:
Enforcement Action Date: 20130910
Enf Disposition Status:
Disposition Status Date:
Enforcement Lead Agency: State
Proposed Penalty Amount:
Final Amount:
Paid Amount:

Evaluation Details

Evaluation Start Date: 20130613
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION
Violation Short Description: Used Oil - Generators
Return to Compliance Date: 20130816
Evaluation Agency: State

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No
Recycler Activity: No
Recycler Activity W.O. Stor: No

Hazardous Waste Handler Details

Sequence No: 199508
Receive Date: 19950828
Handler Name: FIELDS EQUIPMENT CO INC
Federal Waste Generator Code: 2
Generator Code Description: Small Quantity Generator
Source Type: Notification

Waste Code Details

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Handler Details

Sequence No: 201306
Receive Date: 20130613
Handler Name: FIELDS EQUIPMENT CO INC
Federal Waste Generator Code: 2
Generator Code Description: Small Quantity Generator
Source Type: Implementer

Waste Code Details

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Handler Details

Sequence No: 201308
Receive Date: 20130815
Handler Name: FIELDS EQUIPMENT CO INC
Federal Waste Generator Code: 2
Generator Code Description: Small Quantity Generator
Source Type: Implementer

Waste Code Details

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Private
Name: CROUCH TIM
Date Became Current: 19991110
Date Ended Current:
Phone:
Source Type: Notification
Street No:
Street 1: PO BOX 121179
Street 2:
City: CLERMONT
State: FL
Country: US
Zip Code: 34712-1179

Owner/Operator Ind: Current Owner
Type: Private
Name: TIM CROUCH
Date Became Current: 19991110
Date Ended Current:
Phone:
Source Type: Notification
Street No:
Street 1: PO BOX 121179
Street 2:
City: CLERMONT
State: FL
Country: US
Zip Code: 34712-1179

Owner/Operator Ind: Current Owner
Type: Private
Street No:
Street 1: PO BOX 121179

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Name:	TIM CROUCH	**Street 2:**	
Date Became Current:	19991110	**City:**	CLERMONT
Date Ended Current:		**State:**	FL
Phone:		**Country:**	US
Source Type:	Implementer	**Zip Code:**	34712-1179

Historical Handler Details

Receive Dt:	20130613
Generator Code Description:	Small Quantity Generator
Handler Name:	FIELDS EQUIPMENT CO INC

Receive Dt:	19950828
Generator Code Description:	Small Quantity Generator
Handler Name:	FIELDS EQUIPMENT CO INC

3	2 of3	SW	0.06 / 314.98	195.22 / 31	**FIELDS EQUIPMENT CO INC** **17215 US HWY 27** **CLERMONT FL 34711**	AST

County Name:		**Facility ID:**	8945306
County Name:	LAKE	**Facility Status:**	CLOSED
Lat/Long Method:		**Facility Type:**	C
Lat DD:	28	**Type Desc:**	Fuel user/Non-retail
Lat MM:	35	**Facility Phone:**	9043947181
Lat SS:	20	**Dep Co:**	P
Long DD:	81	**Owner ID:**	7050
Long MM:	45	**Owner Phone:**	9043947181
Long SS:	8		

Owner:	FIELDS EQUIPMENT CO INC
Owner Address1:	PO BOX 121179
Owner Address2:	
Owner City:	CLERMONT
Owner State:	FL
Owner Zip 5:	34712
Contact:	BUDDY HARRIS
Oculus Docs Inventory URL:	https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=8945306&CAT=11
Information Portal Fac URL:	http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=8945306
Information Portal Doc URL:	http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8945306/facility!search

Tanks

Tank ID: 2

Tank Details

Tank Status:	B - REMOVED FROM SITE	**Tank Vessel Indic:**	TANK
Status Date:	01-AUG-1995	**Capacity:**	1500
Install:	01-MAR-1986	**Place:**	ABOVEGROUND
Tank Det Desc:		**Content:**	B
Tank Determin:		**Contdesc:**	Unleaded Gas

Tanks

Tank ID: 1

Tank Details

Tank Status:	B - REMOVED FROM SITE	**Tank Vessel Indic:**	TANK
Status Date:	01-AUG-1995	**Capacity:**	1500
Install:	01-MAR-1986	**Place:**	ABOVEGROUND
Tank Det Desc:		**Content:**	B

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Tank Determin:				**Contdesc:**	Unleaded Gas	

3	3 of3	SW	0.06 / 314.98	195.22 / 31	**FIELDS EQUIPMENT CO INC** **17215 US HWY 27** **CLERMONT FL 34711**	STCS

Facility ID:	8945306	**Clnup Cd (OD):**	
Type:	C - Fuel User/Non-Retail	**Fac Clnup Stat (OD):**	
Status:	Closed	**Clnup Dt (OD):**	
Status (OD):	REVIEWED	**Status (Map):**	REVIEWED
Fac Stat (OD):	CLOSED	**Contam (Map):**	
Fac Code (OD):	C	**Fac Type (Map):**	Fuel user/Non-retail
Facility 1:	Fuel user/Non-retail	**Fac Stat (Map):**	CLOSED
Fac Name (OD):	FIELDS EQUIPMENT CO INC		
Address (OD):	17215 US HWY 27		
City (OD):	CLERMONT		
County (OD):	LAKE		
Zip5 (OD):	34711		
Name (Map):	FIELDS EQUIPMENT CO INC		
Address (Map):	17215 US HWY 27		
City (Map):	CLERMONT		
County (Map):	35		
Zip4 (Map):	1197		
Zip5 (Map):	34711		
Address Line 1:	17215 Us Hwy 27		
Address Line 2:			
City:	Clermont		
County:	LAKE		
State:	FL		
Zip:	34711- 1197		
Report Source:	FDEP Geospatial Open Data - Registered Tanks from Storage Tank Contamination Monitoring (STCM) (OD); FDEP Geospatial Open Data - Storage Tank Contamination Monitoring (STCM) (Map); Storage Tank Contaminated Facility Name and Address Search		

FDEP Storage Tank Monitoring Open Data Details

Object ID:	32947	**Map Src:**	1999 doqs
X:	-81.75486261	**Map Scale:**	5000
Y:	28.59724003	**Elevation:**	
Regulated:	NO	**El Datum:**	
Col Meth:	DPHO	**El Resolut:**	
Col Name:	SNYDER_W	**El Units:**	
Col Date:	13-Jul-2004	**ALB East:**	619146.67
Col Prog:	TANKS-PETROLEUM CONTAMINATION	**ALB North:**	512118.36
Ver Meth:	DPHO	**Loc ID:**	13643
Ver Name:	SNYDER_W	**Lat DD:**	28
Ver Prog:	TANKS-PETROLEUM CONTAMINATION	**Lat MM:**	35
Ver Date:	13-Jul-2004	**Lat SS:**	
OOIC:	FACILITY	**Long DD:**	81
Rel Feat:	CENTR	**Long MM:**	45
Datum:	HARN	**Long SS:**	
Coord Acc:	3		
Col Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Direct:			
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8945306/gis-facility!search		

FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	13643	**Rel Feat:**	CENTR
Site Type:	Fuel user/Non-retail	**El Datum:**	
Contam Ind:		**El Resolut:**	
Phone:	9043947181	**El Units:**	
Operator:	JIM REYNOLDS	**Map Src:**	1999 doqs
Next action:	INVOICE 21-JUN-96	**Map Scale:**	5000
Fin Respon:		**Coord Acc:**	3

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Office:	CD	**Alb East:**	619146.67
OOIC:	FACILITY	**Alb North:**	512118.36
Col Meth:	DPHO	**Datum:**	HARN
Col Name:	SNYDER_W	**Elevation:**	
Col Date:	7/13/2004	**Lat DD:**	28
Col Prog:	TANKS-PETROLEUM CONTAMINATION	**Lat MM:**	35
Ver Meth:	DPHO	**Lat SS:**	
Ver Name:	SNYDER_W	**Long DD:**	81
Ver Prog:	TANKS-PETROLEUM CONTAMINATION	**Long MM:**	45
Ver Date:	7/13/2004	**Long SS:**	
Object ID:	13643		
Col Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8945306/gis-facility!search		

Storage Tank Contaminated Facility Name & Address Search Details

Name:	Fields Equipment Co Inc 17215 Us Hwy 27 Clermont, FL 34711- 1197
LL Method:	DPHO - Unverified
Account Owner:	Fields Equipment Co Inc
Contact:	Jim Reynolds
Phone:	904-394-7181
District:	CD
County 1:	35 - Lake
Latitude:	28:35:50.0641
Longitude:	81:45:17.5054

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	1
Size:	1500
Content:	Unleaded Gas
Installed:	03/01/1986
Placement:	ABOVE
Status:	Removed from Site
Construction:	
Piping:	
Monitoring:	

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	2
Size:	1500
Content:	Unleaded Gas
Installed:	03/01/1986
Placement:	ABOVE
Status:	Removed from Site
Construction:	
Piping:	
Monitoring:	

4	***1 of2***	***NNW***	***0.08 / 418.25***	***189.47 / 25***	***LANGLEY FRUIT CO US HWY 27 MINNEOLA FL 34711***	***LST***

Facility ID:	8509992	**Facility Status:**	CLOSED
Facility Name:	LANGLEY FRUIT CO	**Facility ID (Map):**	8509992
Facility Address:	US HWY 27	**Fac Name (Map):**	LANGLEY FRUIT CO
Facility Address2:		**Fac Address (Map):**	US HWY 27
Facility City:	MINNEOLA	**City (Map):**	MINNEOLA
County:	LAKE	**County (Map):**	LAKE
Facility State:	FL	**Fac Zip (Map):**	34711
Facility Zip:	34711	**Latitude (Map):**	28.6008333333361

Facility Type: C - Fuel user/Non-retail
Longitude (Map): -81.7544444444459
Oculus Docs Inventory: https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=8509992&CAT=11
Information Portal Fac URL: http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=8509992
Information Portal Doc URL: http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8509992/facility!search
Data Source: STCM Database Reports -Historical Contaminated Facilities List; FDEP-Geospatial Open Data - Petroleum Contamination Monitoring (PCTS) Discharges (Map); STCM Database Queries - Petroleum Cleanup Funding CAP To Date Report; STCM Public Reports-Tank Facility - Discharge Information

Discharge Cleanup Summary

Discharge Date: 3/31/1991
Cleanup Required: N - NO CLEANUP REQUIRED
Dschrg Clnup Status: NREQ - CLEANUP NOT REQUIRED
Dschrg Clnup Stat Dt: 4/23/2001
Cleanup Work Stat: COMPLETED
Tank Office: -
Information Source: A - ABANDONED TANK RESTORATION
Eligib Indicator: I - INELIGIBLE
Site Manager:
Site Manager End Dt:

Petroleum Cleanup Program Eligibility

Cleanup Program: A - ABANDONED TANK RESTORATION PROGRAM
Eligibility Status: INELIGIBLE
Rank:
Cap Amount: $0.00

Task Info

SA Task ID:
SA Cleanup Resp: -
SA Actual Cost:
SA Complete Date:
SA Payment Date:
SR Task ID:
SR Cleanup Resp: -
SR Actual Cost:
SR Complete Date:
SR Payment Date:
SR Oral Date:
SR Written Date:
SR Soil Removal:
SR Free Prod Rmvl:
SR Soil Ton Remove:
SR Fund Elig Type: -
SA Fund Elig Type: -
RAP Fund Elig Type: -
RA Fund Elig Type: -
SR Alternate Procedure Status:
SR Alt Procedure Status Dt:
SR Alt Procedure Comment:
SRC Action Type: -
SRC Submit Date:
SRC Review Date:
SRC Complete Status: -
SRC Comp Status Dt:
SRC Issue Date:
SRC Comments:
SR Soil Treatment:
SR Other Treatment:
SR Alt Proc Rec:
RAP Task ID:
RAP Clean Resp ID: -
RAP Actual Cost:
RAP Complete Date:
RAP Payment Date:
RAP Last Ord Appr:
RA Task ID:
RA Cleanup Resp: -
RA Yrs to Complete:
RA Actual Cost:
Tank Office: -

Petroleum Cleanup PCT Facility Score

Related Party ID: 12524
RP Contact: A E LANGLEY
Facility Cleanup Status: NREQ - NOT REQUIRED
Bad Address Indicator: N
Rank:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Discharge Info (Map)

Discharge:	7152	***Facility Status:***	CLOSED
Discharge 1:	31-Mar-1991	***Staff Assi:***	
Discharge 2:		***Eligibility:***	INELIGIBLE
Discharge 3:	NREQ	***Eligibility 1:***	
Disch Clea:	23-Apr-2001	***Rel Feat:***	APPRX
General Cl:	NO CLEANUP REQUIRED	***Collection:***	UNVR
Lat Dd:	28	***Collector :***	INITIAL LOAD
Lat Mm:	36	***Collecti 1:***	30-Nov-1899
Lat Ss:		***Report Pha:***	COMPLETED
Long Dd:	81	***Report Sub:***	COMPLETED
Long Mm:	45	***Report S 1:***	23-Apr-2001
Long Ss:			
Tank Offic:			
Document Link:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8509992/facility!search		

AST UST Discharges

Dep Co:	P	***Long MM:***	45
CU Req:	N	***Long SS:***	16
Score:		***Stat Desc:***	CLEANUP NOT REQUIRED
Descrip:	NO CLEANUP REQUIRED	***Fac Name:***	LANGLEY FRUIT CO
Discharge Date:	31-Mar-91	***Fac Type:***	C
Score Date:		***Type Desc:***	Fuel user/Non-retail
Stat Date:	23-Apr-01	***Fac Addr:***	US HWY 27
LL Meth:	UNVR	***Fac City:***	MINNEOLA
Lat DD:	28	***Fac Zip:***	34711
Lat MM:	36	***County:***	35
Lat SS:	3	***Fac State:***	CLOSED
Long DD:	81	***Fac Phone:***	9043942171
Prg Desc:			

Historical Contaminated Facilities List

Facility ID:	8509992	***Score:***	
Facility Status:	CLOSED	***Score Effective Dt:***	
Facility Type:	C - Fuel user/Non-retail	***Score When Ranked:***	
Facility Name:	LANGLEY FRUIT CO	***Rank:***	
Address1:	US HWY 27	***Operator:***	LANGLEY, MIKE
Address2:		***Phone:***	(904)394-2171
City:	MINNEOLA	***Section:***	
County Name:	LAKE	***Township:***	
County:	35	***Range :***	
District:	CD	***Pri Related Party ID:***	12524
State :	FL	***Primary Rp Role:***	ACCOUNT OWNER
Zip5:	34711	***Rp Begin Date:***	7/1/1985
Zip4:	9530	***Rp Name:***	LANGLEY FRUIT CO
Name Changed:		***Rp Address1:***	6088 MASTERS BLVD
Addr Changed:		***Rp Address2:***	
Lat Dd:	28	***Rp City:***	ORLANDO
Lat Mm:	36	***Rp State:***	FL
Lat Ss:	3	***Rp Zip5:***	32819
Long Dd:	81	***Rp Zip4:***	4304
Long Mm:	45	***Contact:***	A E LANGLEY
Long Ss:	16	***Rp Phone:***	(407)656-1122
Feature:		***Rp Phone Extension:***	
Method:	UNVR	***Rp Bad Addr Ind:***	No
Datum:	0		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	2 of2	NNW	0.08 / 418.25	189.47 / 25	LANGLEY FRUIT CO US HWY 27 MINNEOLA FL 34711	STCS

Facility ID:	8509992	***Clnup Cd (OD):***	NREQ

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Type:	C - Fuel User/Non-Retail	**Fac Clnup Stat (OD):**	NOT REQUIRED
Status:	Closed	**Clnup Dt (OD):**	03-Feb-2002
Status (OD):	REVIEWED	**Status (Map):**	REVIEWED
Fac Stat (OD):	CLOSED	**Contam (Map):**	
Fac Code (OD):	C	**Fac Type (Map):**	Fuel user/Non-retail
Facility 1:	Fuel user/Non-retail	**Fac Stat (Map):**	CLOSED
Fac Name (OD):	LANGLEY FRUIT CO		
Address (OD):	US HWY 27		
City (OD):	MINNEOLA		
County (OD):	LAKE		
Zip5 (OD):	34711		
Name (Map):	LANGLEY FRUIT CO		
Address (Map):	US HWY 27		
City (Map):	MINNEOLA		
County (Map):	35		
Zip4 (Map):	9530		
Zip5 (Map):	34711		
Address Line 1:	Us Hwy 27		
Address Line 2:			
City:	Minneola		
County:	LAKE		
State:	FL		
Zip:	34711- 9530		
Report Source:	FDEP Geospatial Open Data - Registered Tanks from Storage Tank Contamination Monitoring (STCM) (OD); FDEP Geospatial Open Data - Storage Tank Contamination Monitoring (STCM) (Map); Storage Tank Contaminated Facility Name and Address Search		

FDEP Storage Tank Monitoring Open Data Details

Object ID:	4966	**Map Src:**	
X:	-81.75444444	**Map Scale:**	
Y:	28.60083333	**Elevation:**	
Regulated:	NO	**El Datum:**	
Col Meth:	UNVR	**El Resolut:**	
Col Name:	INITIAL LOAD	**El Units:**	
Col Date:		**ALB East:**	
Col Prog:	TANKS-PETROLEUM CONTAMINATION	**ALB North:**	
Ver Meth:	DPHO	**Loc ID:**	14151
Ver Name:	WOEBER_A	**Lat DD:**	28
Ver Prog:	TANKS-PETROLEUM CONTAMINATION	**Lat MM:**	36
Ver Date:	22-Mar-2006	**Lat SS:**	
OOIC:	FACILITY	**Long DD:**	81
Rel Feat:	APPRX	**Long MM:**	45
Datum:		**Long SS:**	
Coord Acc:			
Col Aff:			
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PR		
Direct:			
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8509992/gis-facility!search		

FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	14151	**Rel Feat:**	APPRX
Site Type:	Fuel user/Non-retail	**El Datum:**	
Contam Ind:		**El Resolut:**	
Phone:	9043942171	**El Units:**	
Operator:	LANGLEY, MIKE	**Map Src:**	
Next action:		**Map Scale:**	
Fin Respon:		**Coord Acc:**	
Office:	CD	**Alb East:**	
OOIC:	FACILITY	**Alb North:**	
Col Meth:	UNVR	**Datum:**	
Col Name:	INITIAL LOAD	**Elevation:**	
Col Date:		**Lat DD:**	28
Col Prog:	TANKS-PETROLEUM CONTAMINATION	**Lat MM:**	36
Ver Meth:	DPHO	**Lat SS:**	
Ver Name:	WOEBER_A	**Long DD:**	81

Ver Prog:	TANKS-PETROLEUM CONTAMINATION	**Long MM:**	45
Ver Date:	3/22/2006	**Long SS:**	
Object ID:	14151		
Col Aff:			
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PR		
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8509992/gis-facility!search		

Storage Tank Contaminated Facility Name & Address Search Details

Name:	Langley Fruit Co Us Hwy 27 Minneola, FL 34711- 9530
LL Method:	UNVR - Unverified
Account Owner:	Langley Fruit Co
Contact:	Langley, Mike
Phone:	904-394-2171
District:	CD
County 1:	35 - Lake
Latitude:	28:36:03.0000
Longitude:	81:45:16.0000

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	6
Size:	2000
Content:	Leaded Gas
Installed:	
Placement:	UNDER
Status:	Closed In Place
Construction:	
Piping:	
Monitoring:	

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	2
Size:	6000
Content:	Vehicular Diesel
Installed:	
Placement:	ABOVE
Status:	Removed from Site
Construction:	
Piping:	
Monitoring:	

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	1
Size:	20000
Content:	Vehicular Diesel
Installed:	
Placement:	ABOVE
Status:	Removed from Site
Construction:	
Piping:	
Monitoring:	

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	3
Size:	8000
Content:	Vehicular Diesel
Installed:	

Placement: ABOVE
Status: Closed In Place
Construction:
Piping:
Monitoring:

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 4
Size: 7500
Content: Vehicular Diesel
Installed:
Placement: ABOVE
Status: Removed from Site
Construction:
Piping:
Monitoring:

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 5
Size: 7000
Content: Unleaded Gas
Installed:
Placement: UNDER
Status: Closed In Place
Construction:
Piping:
Monitoring:

---

5 | ***1 of2*** | ***NW*** | ***0.19 / 984.81*** | ***202.64 / 38*** | ***CITY OF MINNEOLA OAK VALLEY WATER TREATMENT PLANT 1200 OAK VALLEY BLVD MINNEOLA FL 34715*** | ***AST***

County Name:
County Name: LAKE
Lat/Long Method:
Lat DD:
Lat MM:
Lat SS:
Long DD:
Long MM:
Long SS:
Facility ID: 9809848
Facility Status: OPEN
Facility Type: H
Type Desc: Local Government
Facility Phone: 3523945330
Dep Co: P
Owner ID: 62035
Owner Phone: 3523943598
Owner: CITY OF MINNEOLA
Owner Address1: PO DRAWER 678
Owner Address2:
Owner City: MINNEOLA
Owner State: FL
Owner Zip 5: 34755
Contact: FRED MILLER / ROBERT S HOLLAND 352-394-3598 X 302
Oculus Docs Inventory URL: https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=9809848&CAT=11
Information Portal Fac URL: http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=9809848
Information Portal Doc URL: http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9809848/facility!search

Tanks

Tank ID: 1

Tank Details

Tank Status: U - IN SERVICE
Status Date: 01-DEC-2001
Tank Vessel Indic: TANK
Capacity: 1000

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Install:	01-DEC-2001	**Place:**	ABOVEGROUND
Tank Det Desc:		**Content:**	G
Tank Determin:		**Contdesc:**	Emerg Generator Diesel

Piping

Piping Description:	F-Double wall
Piping Description:	B-Steel/galvanized metal
Piping Description:	A-Abv, no soil contact
Piping Description:	Y-Unknown

Monitoring

Monitoring Desc:	F-Monitor dbl wall tank space
Monitoring Desc:	5-Electronic monitor dispenser liners
Monitoring Desc:	1-Continuous electronic sensing
Monitoring Desc:	Q-Visual inspection of ASTs

Tank Construction

Constr Desc:	Double wall
Constr Desc:	Spill containment bucket
Constr Desc:	Level gauges/alarms
Constr Desc:	Steel

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
5	2 of2	NW	0.19 / 984.81	202.64 / 38	CITY OF MINNEOLA OAK VALLEY WATER TREATMENT PLANT 1200 OAK VALLEY BLVD MINNEOLA FL 34715	STCS

Facility ID:	9809848	**Clnup Cd (OD):**	
Type:	H - Local Government	**Fac Clnup Stat (OD):**	
Status:	Open	**Clnup Dt (OD):**	
Status (OD):	REVIEWED	**Status (Map):**	REVIEWED
Fac Stat (OD):	OPEN	**Contam (Map):**	
Fac Code (OD):	H	**Fac Type (Map):**	Local Government
Facility 1:	Local Government	**Fac Stat (Map):**	OPEN

Fac Name (OD):	CITY OF MINNEOLA OAK VALLEY WATER TREATMENT PLANT
Address (OD):	1200 OAK VALLEY BLVD
City (OD):	MINNEOLA
County (OD):	LAKE
Zip5 (OD):	34715
Name (Map):	CITY OF MINNEOLA OAK VALLEY WATER TREATMENT PLANT
Address (Map):	1200 OAK VALLEY BLVD
City (Map):	MINNEOLA
County (Map):	35
Zip4 (Map):	
Zip5 (Map):	34715
Address Line 1:	1200 Oak Valley Blvd
Address Line 2:	
City:	Minneola
County:	LAKE
State:	FL
Zip:	34715
Report Source:	FDEP Geospatial Open Data - Registered Tanks from Storage Tank Contamination Monitoring (STCM) (OD); FDEP Geospatial Open Data - Storage Tank Contamination Monitoring (STCM) (Map); Storage Tank

Contaminated Facility Name and Address Search

FDEP Storage Tank Monitoring Open Data Details

Object ID:	63217	***Map Src:***	2004 DOQQs
X:	-81.76036031	***Map Scale:***	4080
Y:	28.59915022	***Elevation:***	
Regulated:	YES	***El Datum:***	
Col Meth:	DPHO	***El Resolut:***	
Col Name:	ZIMMERMAN_RA	***El Units:***	
Col Date:	22-Jul-2009	***ALB East:***	618606.58
Col Prog:	TANKS-PETROLEUM CONTAMINATION	***ALB North:***	512320.34
Ver Meth:	DPHO	***Loc ID:***	63264
Ver Name:	ZIMMERMAN_RA	***Lat DD:***	28
Ver Prog:	TANKS-PETROLEUM CONTAMINATION	***Lat MM:***	35
Ver Date:	22-Jul-2009	***Lat SS:***	
OOIC:	FACILITY	***Long DD:***	81
Rel Feat:	APPRX	***Long MM:***	45
Datum:	HARN	***Long SS:***	
Coord Acc:	4		
Col Aff:	LAKE COUNTY WATER RESOURCE MANAGEMENT		
Ver Aff:	LAKE COUNTY WATER RESOURCE MANAGEMENT		
Direct:			
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9809848/gis-facility!search		

FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	63264	***Rel Feat:***	APPRX
Site Type:	Local Government	***El Datum:***	
Contam Ind:		***El Resolut:***	
Phone:	3523945330	***El Units:***	
Operator:	FRED MILLER	***Map Src:***	2004 DOQQs
Next action:	PLACARD 26-JUN-2024	***Map Scale:***	4080
Fin Respon:		***Coord Acc:***	4
Office:	CD	***Alb East:***	618606.58
OOIC:	FACILITY	***Alb North:***	512320.34
Col Meth:	DPHO	***Datum:***	HARN
Col Name:	ZIMMERMAN_RA	***Elevation:***	
Col Date:	7/22/2009	***Lat DD:***	28
Col Prog:	TANKS-PETROLEUM CONTAMINATION	***Lat MM:***	35
Ver Meth:	DPHO	***Lat SS:***	
Ver Name:	ZIMMERMAN_RA	***Long DD:***	81
Ver Prog:	TANKS-PETROLEUM CONTAMINATION	***Long MM:***	45
Ver Date:	7/22/2009	***Long SS:***	
Object ID:	63264		
Col Aff:	LAKE COUNTY WATER RESOURCE MANAGEMENT		
Ver Aff:	LAKE COUNTY WATER RESOURCE MANAGEMENT		
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9809848/gis-facility!search		

Storage Tank Contaminated Facility Name & Address Search Details

Name:	City Of Minneola Oak Valley Water Treatment Plant 1200 Oak Valley Blvd Minneola, FL 34715
LL Method:	DPHO
Account Owner:	City Of Minneola
Contact:	Fred Miller
Phone:	352-394-5330
District:	CD
County 1:	35 - Lake
Latitude:	28:35:56.9408
Longitude:	81:45:37.2971

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Tank No: 1
Size: 1000
Content: Emerg Generator Diesel
Installed: 12/01/2001
Placement: ABOVE
Status: In Service
Construction: C - Steel
I - Double Wall
M - Spill Containment Bucket
P - Level Gauges/Alarms
Piping: A - Abv, No Soil Contact
B - Steel/Galvanized Metal
F - Double Wall
Y - Unknown
Monitoring: 1 - Continuous Electronic Sensing
5 - Electronic Monitor Dispenser Liners
F - Monitor Dbl Wall Tank Space
Q - Visual Inspection Of Asts

6	1 of1	NNW	0.25 / 1,308.49	208.70 / 44	MIKE LANGLEY CITRUS, INC 17628 US HIGHWAY 27 CLERMONT FL 34715-9537	RCRA VSQG

EPA Handler ID: FLT950050500
Gen Status Universe: VSG
Contact Name:
Contact Address: US
Contact Phone No and Ext:
Contact Email:
Contact Country: US
County Name: LAKE
EPA Region: 04
Land Type: Other
Receive Date: 19950208
Location Latitude: 28.593591
Location Longitude: -81.75272
Recycler Activity?: NO
Recycler Activity Note: This facility has no indication of Recycling Activity.

Violation/Evaluation Summary

Note: NO RECORDS: As of Oct 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No
Recycler Activity: No
Recycler Act W.O. Storage: No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Hazardous Waste Handler Details

Sequence No:	199502
Receive Date:	19950208
Handler Name:	MIKE LANGLEY CITRUS, INC
Federal Waste Generator Code:	3
Generator Code Description:	Very Small Quantity Generator
Source Type:	Emergency

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	19950404
Handler Name:	MIKE LANGELY CITRUS
Federal Waste Generator Code:	1
Generator Code Description:	Large Quantity Generator
Source Type:	Annual/Biennial Report

Historical Handler Details

Receive Dt:	19950404
Generator Code Description:	Large Quantity Generator
Handler Name:	MIKE LANGELY CITRUS

7	*1 of1*	*ENE*	*0.41 / 2,185.70*	*192.66 / 28*	***SECO PROPERTIES*** ***N GRASSY LAKE RD*** ***MINNEOLA FL 34715***	***STCS***

Facility ID:	9201049	***Clnup Cd (OD):***	
Type:	C - Fuel User/Non-Retail	***Fac Clnup Stat (OD):***	
Status:	Closed	***Clnup Dt (OD):***	
Status (OD):	REVIEWED	***Status (Map):***	REVIEWED
Fac Stat (OD):	CLOSED	***Contam (Map):***	
Fac Code (OD):	C	***Fac Type (Map):***	Fuel user/Non-retail
Facility 1:	Fuel user/Non-retail	***Fac Stat (Map):***	CLOSED
Fac Name (OD):	SECO PROPERTIES		
Address (OD):	N GRASSY LAKE RD		
City (OD):	MINNEOLA		
County (OD):	LAKE		
Zip5 (OD):	34715		
Name (Map):	SECO PROPERTIES		
Address (Map):	N GRASSY LAKE RD		
City (Map):	MINNEOLA		
County (Map):	35		
Zip4 (Map):			
Zip5 (Map):	34715		
Address Line 1:	N Grassy Lake Rd		
Address Line 2:			
City:	Minneola		
County:	LAKE		
State:	FL		
Zip:	34715		
Report Source:	FDEP Geospatial Open Data - Registered Tanks from Storage Tank Contamination Monitoring (STCM) (OD); FDEP Geospatial Open Data - Storage Tank Contamination Monitoring (STCM) (Map); Storage Tank Contaminated Facility Name and Address Search		

FDEP Storage Tank Monitoring Open Data Details

Object ID:	41356	***Map Src:***	2004 doqqs
X:	-81.74583475	***Map Scale:***	5000
Y:	28.60221969	***Elevation:***	
Regulated:	NO	***El Datum:***	
Col Meth:	UNVR	***El Resolut:***	
Col Name:	INITIAL LOAD	***El Units:***	

Col Date:		**ALB East:**	620018.13
Col Prog:	TANKS-PETROLEUM CONTAMINATION	**ALB North:**	512687.28
Ver Meth:	DPHO	**Loc ID:**	13512
Ver Name:	WOEBER_A	**Lat DD:**	28
Ver Prog:	TANKS-PETROLEUM CONTAMINATION	**Lat MM:**	36
Ver Date:	23-Jan-2007	**Lat SS:**	
OOIC:	FACILITY	**Long DD:**	81
Rel Feat:	VICIN	**Long MM:**	44
Datum:		**Long SS:**	
Coord Acc:	4		
Col Aff:			
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Direct:			
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9201049/gis-facility!search		

FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	13512	**Rel Feat:**	VICIN
Site Type:	Fuel user/Non-retail	**El Datum:**	
Contam Ind:		**El Resolut:**	
Phone:	9043941519	**El Units:**	
Operator:	MONTROSS, KEN	**Map Src:**	2004 doqqs
Next action:		**Map Scale:**	5000
Fin Respon:		**Coord Acc:**	4
Office:	CD	**Alb East:**	620018.13
OOIC:	FACILITY	**Alb North:**	512687.28
Col Meth:	UNVR	**Datum:**	
Col Name:	INITIAL LOAD	**Elevation:**	
Col Date:		**Lat DD:**	28
Col Prog:	TANKS-PETROLEUM CONTAMINATION	**Lat MM:**	36
Ver Meth:	DPHO	**Lat SS:**	
Ver Name:	WOEBER_A	**Long DD:**	81
Ver Prog:	TANKS-PETROLEUM CONTAMINATION	**Long MM:**	44
Ver Date:	1/23/2007	**Long SS:**	
Object ID:	13512		
Col Aff:			
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9201049/gis-facility!search		

Storage Tank Contaminated Facility Name & Address Search Details

Name:	Seco Properties N Grassy Lake Rd Minneola, FL 34715
LL Method:	UNVR - Unverified
Account Owner:	Montross, Ken
Contact:	Montross, Ken
Phone:	904-394-1519
District:	CD
County 1:	35 - Lake
Latitude:	28:36:07.9909
Longitude:	81:44:45.0051

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	1
Size:	888
Content:	Unknown/Not Reported
Installed:	
Placement:	UNDER
Status:	Removed from Site
Construction:	
Piping:	
Monitoring:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 2
Size: 888
Content: Unknown/Not Reported
Installed:
Placement: ABOVE
Status: Removed from Site
Construction:
Piping:
Monitoring:

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 3
Size: 2000
Content: Vehicular Diesel
Installed:
Placement: UNDER
Status: Removed from Site
Construction:
Piping:
Monitoring:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	1 of3	S	0.45 / 2,353.90	210.22 / 46	FINA #7038 N US 27 & SR 561 MINNEOLA FL 32755	LST

Facility ID: 8510019
Facility Name: FINA #7038
Facility Address: N US 27 & SR 561
Facility Address2:
Facility City: MINNEOLA
County: LAKE
Facility State: FL
Facility Zip: 32755
Facility Type: A - Retail Station
Facility Status: CLOSED
Facility ID (Map): 8510019
Fac Name (Map): FINA #7038
Fac Address (Map): N US 27 & SR 561
City (Map): MINNEOLA
County (Map): LAKE
Fac Zip (Map): 32755
Latitude (Map): 28.5816005285741
Longitude (Map): -81.7517341388912
Oculus Docs Inventory: https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=8510019&CAT=11
Information Portal Fac URL: http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=8510019
Information Portal Doc URL: http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8510019/facility!search
Data Source: STCM Database Reports -Historical Contaminated Facilities List; FDEP-Geospatial Open Data - Petroleum Contamination Monitoring (PCTS) Discharges (Map); STCM Public Reports-Tank Facility - Discharge Information; Commonly Requested Reports - All Eligible Discharges.

Discharge Cleanup Summary

Discharge Date: 6/5/1987
Cleanup Required: R - CLEANUP REQUIRED
Dschrg Clnup Status: NFA - NFA COMPLETE
Dschrg Clnup Stat Dt: 6/8/2001
Cleanup Work Stat: COMPLETED
Tank Office: PCTM5 - PETROLEUM CLEANUP TEAM 5
Information Source: E - EDI
Eligib Indicator: E - ELIGIBLE
Site Manager: EXNER_B
Site Manager End Dt: 6/8/2001

Contaminated Media

Contaminated Drinking Wells: 0
Contaminated Mntring Wells: YES
Contaminated Soil: NO
Contaminated Surface Water: NO
Contaminated Ground Water: NO
Pollutant: A - Leaded Gas
Other Description:
Gallons Discharged:

Contaminated Media

Contaminated Drinking Wells:	0
Contaminated Mntring Wells:	YES
Contaminated Soil:	NO
Contaminated Surface Water:	NO
Contaminated Ground Water:	NO
Pollutant:	B - Unleaded Gas
Other Description:	
Gallons Discharged:	

Petroleum Cleanup Program Eligibility

Cleanup Program:	E - EARLY DETECTION INCENTIVE
Eligibility Status:	ELIGIBLE
Rank:	
Cap Amount:	$0.00

Task Info

SA Task ID:	17910	***SR Soil Treatment:***	
SA Cleanup Resp:	RP - RESPONSIBLE PARTY	***SR Other Treatment:***	
SA Actual Cost:		***SR Alt Proc Rec:***	
SA Complete Date:		***RAP Task ID:***	17911
SA Payment Date:		***RAP Clean Resp ID:***	RP - RESPONSIBLE PARTY
SR Task ID:	17909	***RAP Actual Cost:***	
SR Cleanup Resp:	RP - RESPONSIBLE PARTY	***RAP Complete Date:***	
SR Actual Cost:		***RAP Payment Date:***	
SR Complete Date:		***RAP Last Ord Appr:***	
SR Payment Date:		***RA Task ID:***	17912
SR Oral Date:		***RA Cleanup Resp:***	RP - RESPONSIBLE PARTY
SR Written Date:		***RA Yrs to Complete:***	
SR Soil Removal:		***RA Actual Cost:***	
SR Free Prod Rmvl:		***Tank Office:***	PCTM5 - Team 5
SR Soil Ton Remove:			

SR Fund Elig Type:	-
SA Fund Elig Type:	-
RAP Fund Elig Type:	-
RA Fund Elig Type:	-
SR Alternate Procedure Status:	
SR Alt Procedure Status Dt:	
SR Alt Procedure Comment:	
SRC Action Type:	NFA - NO FURTHER ACTION
SRC Submit Date:	6/4/2001
SRC Review Date:	06-08-2001
SRC Complete Status:	A - APPROVED
SRC Comp Status Dt:	06-08-2001
SRC Issue Date:	06-08-2001
SRC Comments:	

Petroleum Cleanup Funding Cap Encumbrance to Date

FCFS:	$995.00
LPSPASM:	$0.00
SPASM:	$0.00
NPDES:	$0.00
Utility 1 Time Payments:	$0.00
All Wo Ta Co Pos Encumbered:	$43,130.65
Wo Ta Co Pos Exclu from Cap:	$0.00
Ttl Amnt Encumbered to Date:	$44,125.65
Ttl Amnt Encumbered Towar:	$44,125.65

Discharge Info (Map)

Discharge:	7344	**Facility Status:**	CLOSED
Discharge 1:	05-Jun-1987	**Staff Assi:**	
Discharge 2:	55	**Eligibility:**	ELIGIBLE
Discharge 3:	NFA	**Eligibility 1:**	EDI
Disch Clea:	08-Jun-2001	**Rel Feat:**	CENTR
General Cl:	CLOSURE	**Collection:**	DGPS
Lat Dd:	28	**Collector :**	SNYDER_W
Lat Mm:	34	**Collecti 1:**	13-Jul-2004
Lat Ss:		**Report Pha:**	COMPLETED
Long Dd:	81	**Report Sub:**	COMPLETED
Long Mm:	45	**Report S 1:**	08-Jun-2001
Long Ss:			
Tank Offic:	PETROLEUM CLEANUP TEAM 5		
Document Link:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8510019/facility!search		

AST UST Discharges

Dep Co:	P	**Long MM:**	45
CU Req:	R	**Long SS:**	37
Score:	55	**Stat Desc:**	NFA COMPLETE
Descrip:	CLEANUP REQUIRED	**Fac Name:**	FINA #7038
Discharge Date:	05-Jun-87	**Fac Type:**	A
Score Date:	11-Aug-99	**Type Desc:**	Retail Station
Stat Date:	08-Jun-01	**Fac Addr:**	N US 27 & SR 561
LL Meth:	UNVR	**Fac City:**	MINNEOLA
Lat DD:	28	**Fac Zip:**	32755
Lat MM:	37	**County:**	35
Lat SS:	18	**Fac State:**	CLOSED
Long DD:	81	**Fac Phone:**	9046729135
Prg Desc:	EARLY DETECTION INCENTIVE		

Eligible Discharges

Program:	EDI
Current Status:	CLOSED
Discharge Date:	6/5/1987
Score:	55
Facility:	FINA #7038
Address:	N US 27 & SR 561
City:	MINNEOLA
Zip:	32755
County:	LAKE
Owner:	
Owner Address:	
Owner City:	
Owner State:	
Owner Zip:	
Owner Phone:	
Owner Email:	

Historical Contaminated Facilities List

Facility ID:	8510019	**Score:**	55
Facility Status:	CLOSED	**Score Effective Dt:**	8/11/1999
Facility Type:	A - Retail Station	**Score When Ranked:**	
Facility Name:	FINA #7038	**Rank:**	
Address1:	N US 27 & SR 561	**Operator:**	FINA STATION
Address2:		**Phone:**	(904)672-9135
City:	MINNEOLA	**Section:**	
County Name:	LAKE	**Township:**	
County:	35	**Range :**	
District:	CD	**Pri Related Party ID:**	726
State :	FL	**Primary Rp Role:**	CU RESPONSIBLE PARTY
Zip5:	32755	**Rp Begin Date:**	3/14/2001

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Zip4:		**Rp Name:**	ATOFINA PETROCHEMICALS INC
Name Changed:		**Rp Address1:**	PO BOX 674411
Addr Changed:	5/10/1995	**Rp Address2:**	
Lat Dd:	28	**Rp City:**	HOUSTON
Lat Mm:	34	**Rp State:**	TX
Lat Ss:	53.7619	**Rp Zip5:**	77267
Long Dd:	81	**Rp Zip4:**	4411
Long Mm:	45	**Contact:**	GREG NOSKE
Long Ss:	6.2429	**Rp Phone:**	(281)227-5340
Feature:		**Rp Phone Extension:**	
Method:	UNVR	**Rp Bad Addr Ind:**	No
Datum:	0		

8	2 of3	S	0.45 / 2,353.90	210.22 / 46	**FINA #7038** **N US 27 & SR 561** **MINNEOLA FL 32755**	STCS

Facility ID:	8510019	**Clnup Cd (OD):**	CMPL
Type:	A - Retail Station	**Fac Clnup Stat (OD):**	COMPLETED
Status:	Closed	**Clnup Dt (OD):**	03-Feb-2002
Status (OD):	REVIEWED	**Status (Map):**	REVIEWED
Fac Stat (OD):	CLOSED	**Contam (Map):**	
Fac Code (OD):	A	**Fac Type (Map):**	Retail Station
Facility 1:	Retail Station	**Fac Stat (Map):**	CLOSED
Fac Name (OD):	FINA #7038		
Address (OD):	N US 27 & SR 561		
City (OD):	MINNEOLA		
County (OD):	LAKE		
Zip5 (OD):	32755		
Name (Map):	FINA #7038		
Address (Map):	N US 27 & SR 561		
City (Map):	MINNEOLA		
County (Map):	35		
Zip4 (Map):			
Zip5 (Map):	32755		
Address Line 1:	N Us 27 & Sr 561		
Address Line 2:			
City:	Minneola		
County:	LAKE		
State:	FL		
Zip:	32755		
Report Source:	FDEP Geospatial Open Data - Registered Tanks from Storage Tank Contamination Monitoring (STCM) (OD); FDEP Geospatial Open Data - Storage Tank Contamination Monitoring (STCM) (Map); Storage Tank Contaminated Facility Name and Address Search		

FDEP Storage Tank Monitoring Open Data Details

Object ID:	5024	**Map Src:**	1999 doqs
X:	-81.75173414	**Map Scale:**	5000
Y:	28.58160053	**Elevation:**	
Regulated:	NO	**El Datum:**	
Col Meth:	DGPS	**El Resolut:**	
Col Name:	SNYDER_W	**El Units:**	
Col Date:	13-Jul-2004	**ALB East:**	619484.25
Col Prog:	TANKS-PETROLEUM CONTAMINATION	**ALB North:**	510386.78
Ver Meth:	DPHO	**Loc ID:**	14136
Ver Name:	SNYDER_W	**Lat DD:**	28
Ver Prog:	TANKS-PETROLEUM CONTAMINATION	**Lat MM:**	34
Ver Date:	13-Jul-2004	**Lat SS:**	
OOIC:	FACILITY	**Long DD:**	81
Rel Feat:	CENTR	**Long MM:**	45
Datum:	WGS84	**Long SS:**	
Coord Acc:	3		
Col Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Direct:			
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8510019/gis-facility!search		

FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	14136	***Rel Feat:***	CENTR
Site Type:	Retail Station	***El Datum:***	
Contam Ind:		***El Resolut:***	
Phone:	9046729135	***El Units:***	
Operator:	FINA STATION	***Map Src:***	1999 doqs
Next action:		***Map Scale:***	5000
Fin Respon:		***Coord Acc:***	3
Office:	CD	***Alb East:***	619484.25
OOIC:	FACILITY	***Alb North:***	510386.78
Col Meth:	DGPS	***Datum:***	WGS84
Col Name:	SNYDER_W	***Elevation:***	
Col Date:	7/13/2004	***Lat DD:***	28
Col Prog:	TANKS-PETROLEUM CONTAMINATION	***Lat MM:***	34
Ver Meth:	DPHO	***Lat SS:***	
Ver Name:	SNYDER_W	***Long DD:***	81
Ver Prog:	TANKS-PETROLEUM CONTAMINATION	***Long MM:***	45
Ver Date:	7/13/2004	***Long SS:***	
Object ID:	14136		
Col Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Ver Aff:	DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8510019/gis-facility!search		

Storage Tank Contaminated Facility Name & Address Search Details

Name:	Fina #7038 N Us 27 & Sr 561 Minneola, FL 32755
LL Method:	DGPS - Unverified
Account Owner:	
Contact:	Fina Station
Phone:	904-672-9135
District:	CD
County 1:	35 - Lake
Latitude:	28:34:53.7619
Longitude:	81:45:06.2429

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	6
Size:	6000
Content:	Vehicular Diesel
Installed:	03/01/1978
Placement:	UNDER
Status:	Removed from Site
Construction:	
Piping:	
Monitoring:	

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No:	7
Size:	550
Content:	Other Non Regulated
Installed:	06/01/1957
Placement:	UNDER
Status:	Removed from Site
Construction:	
Piping:	
Monitoring:	

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 8
Size: 550
Content: Other Non Regulated
Installed: 06/01/1957
Placement: UNDER
Status: Removed from Site
Construction:
Piping:
Monitoring:

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 2
Size: 3000
Content: Leaded Gas
Installed: 06/01/1957
Placement: UNDER
Status: Removed from Site
Construction:
Piping:
Monitoring:

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 5
Size: 4000
Content: Vehicular Diesel
Installed: 06/01/1957
Placement: UNDER
Status: Removed from Site
Construction:
Piping:
Monitoring:

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 3
Size: 3000
Content: Unleaded Gas
Installed: 06/01/1957
Placement: UNDER
Status: Removed from Site
Construction:
Piping:
Monitoring:

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 4
Size: 4000
Content: Unleaded Gas
Installed: 06/01/1957
Placement: UNDER
Status: Removed from Site
Construction:
Piping:
Monitoring:

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 1

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Size: 3000
Content: Leaded Gas
Installed: 06/01/1957
Placement: UNDER
Status: Removed from Site
Construction:
Piping:
Monitoring:

---

8 | **3 of3** | **S** | **0.45 / 2,353.90** | **210.22 / 46** | **FINA #7038**
N US 27 & SR 561
MINNEOLA FL 32755 | **DWM CONTAM**

Facility ID: 8510019
Site ID: 8510019
Program Area:
Facility Type:
Fac Type:
County ID: 35
Ftc1 Fac Type ID: A
Stcm Facility Type: A
District: CD
Site Status:
Section:
Township:
County: Lake
Range:
Rank:
Operator:
Name Changed:
Addr Changed:
Facility Name: FINA #7038
Description: Retail Station

Contact:
Phone:
Method:
Datum:
Related Party ID:
Primary RP Role:
RP Begin Date:
RP Address1:
RP Address2:
RP City:
RP State:
RP Zip5:
RP Zip4:
RP Phone:
RP Extension:
RP Bad Addr Ind:
RP Name:

Program Details

Facility Status:
Offsite Contam:
Priority Score: 55
Project Coordinato:
Program Eligible:
Ineligible:
Program Area: PETROLEUM
Site Manager:
Discharge Date: 6/5/1987
Discharge Eligibil: E
Eligibility Progrm: EDI
Cleanup Status: CLOSED-STCM
Closure Type: NFA
Closure Date: 6/8/2001

Staff Assigned:
Priority:
Score Effective Dt:
Score When Ranked:
District:
Datum: 0
Method: UNVR
Lat DD: 28
Lat MM: 37
Lat SS: 18
Long DD: 81
Long MM: 45
Long SS: 37

---

9 | **1 of8** | **S** | **0.48 / 2,546.41** | **208.51 / 44** | **CIRCLE K #2722114**
810 N US 27
KISSIMMEE FL 34744 | **DELISTED LST**

Delisted Leaking Tanks

Facility ID: 8513378
Facility Status: OPEN
Facility Type: A - Retail Station
Score: 10
Score Eff Date: 09/21/2012
Score when Ranked: 26
Rank: 6627

Facility N (Map): CIRCLE K #2722114
Address (Map): 810 N US 27
City (Map): KISSIMMEE
Zip5 (Map): 34744
Facility T (Map): Retail Station
Facility S (Map): OPEN
Lat DD: 28

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Operator:	ANDREW BURRESS	**Lat MM:**	26
Prim Related Party:	4045	**Lat SS:**	58.6697
Primary RP Role:	ACCOUNT OWNER	**Long DD:**	81
RP Begin Date:	08/24/2012	**Long MM:**	28
RP Address1:	1100 Situs Ct	**Long SS:**	19.5177
RP Address2:	ATTN: STORAGE TANK REGIS Ste 100	**Feature:**	
RP City:	Raleigh	**Method:**	AGPS
RP State:	NC	**Datum:**	0
RP Zip5:	27606	**RP Name:**	CIRCLE K STORES INC
RP Zip4:	4295	**Lat DD (Map):**	28
RP Phone:	(984)389-1258	**Lat MM (Map):**	26
RP Phone Ext.:		**Lat SS (Map):**	
RP Bad Addr Ind:	No	**Long DD (Map):**	81
Contact:	ANDREW BURRESS	**Long MM (Map):**	28
Phone:	(352)242-6717	**Long SS (Map):**	
Name Changed:	01/11/2022	**Datum (Map):**	HARN
Address Changed:	01/11/2022	**Geometry (Map):**	
Section:	036	**Rel Feat (Map):**	EXACT
Township:	23S	**Collection (Map):**	DPHO
Range:	28E	**Collector (Map):**	BECKER_G48
District:	CD	**Collecti 1 (Map):**	28-Oct-2003
County:	ORANGE	**County (Map):**	ORANGE
County No:	48		

Document L (Map): https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8513378/facility!search
Oculus Docs Inventory: https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=8513378&CAT=11
Original Source: LST
Record Date: 14-MAR-2022
Phrase: DEP; Storage Tanks & Contamination Monitoring, Discharge Info.; FDEP Open Data, Petroleum Contamination Monitoring (PCTS) Discharges (Map)
Facility ID (Map):
Info Portal Facility URL:

http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=8513378

Information Portal Doc URL:

http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8513378/facility!search

---

9	2 of8	S	0.48 / 2,546.41	208.51 / 44	**CIRCLE K #2722114** **810 N US 27** **MINNEOLA FL 34715**	LST

Facility ID:	9700727	**Facility Status:**	OPEN
Facility Name:	CIRCLE K #2722114	**Facility ID (Map):**	9700727
Facility Address:	810 N US 27	**Fac Name (Map):**	CIRCLE K #2722114
Facility Address2:		**Fac Address (Map):**	810 N US 27
Facility City:	MINNEOLA	**City (Map):**	KISSIMMEE
County:	LAKE	**County (Map):**	LAKE
Facility State:	FL	**Fac Zip (Map):**	34744
Facility Zip:	34715	**Latitude (Map):**	28.5901580555589
Facility Type:	A - Retail Station	**Longitude (Map):**	-81.7525879444463

Oculus Docs Inventory: https://erisservice7.ecologeris.com/ErisExt/flo/ocure.ashx?ID=9700727&CAT=11
Information Portal Fac URL: http://prodenv.dep.state.fl.us/DepNexus/public/facilitysearch?pagination=true&facility.id=9700727
Information Portal Doc URL: http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9700727/facility!search
Data Source: STCM Database Reports -Historical Contaminated Facilities List; FDEP-Geospatial Open Data - Petroleum Contamination Monitoring (PCTS) Discharges (Map); STCM Database Queries - Petroleum Cleanup Funding CAP To Date Report; Commonly Requested Reports - All Ineligible Discharges.; STCM Public Reports-Tank Facility - Discharge Information

Discharge Cleanup Summary

Discharge Date:	6/21/2007	**Information Source:**	D - DISCHARGE NOTIFICATION
Cleanup Required:	R - CLEANUP REQUIRED	**Eligib Indicator:**	I - INELIGIBLE
Dschrg Clnup Status:	SRCR - SRCR COMPLETE	**Site Manager:**	
Dschrg Clnup Stat Dt:	12/30/2010	**Site Manager End Dt:**	
Cleanup Work Stat:	COMPLETED		
Tank Office:	-		

Task Info

SA Task ID:		***SR Soil Treatment:***	
SA Cleanup Resp:	-	***SR Other Treatment:***	
SA Actual Cost:		***SR Alt Proc Rec:***	
SA Complete Date:		***RAP Task ID:***	
SA Payment Date:		***RAP Clean Resp ID:***	-
SR Task ID:		***RAP Actual Cost:***	
SR Cleanup Resp:	-	***RAP Complete Date:***	
SR Actual Cost:		***RAP Payment Date:***	
SR Complete Date:		***RAP Last Ord Appr:***	
SR Payment Date:		***RA Task ID:***	87172
SR Oral Date:		***RA Cleanup Resp:***	-
SR Written Date:		***RA Yrs to Complete:***	0
SR Soil Removal:		***RA Actual Cost:***	
SR Free Prod Rmvl:		***Tank Office:***	-
SR Soil Ton Remove:			

SR Fund Elig Type:	-
SA Fund Elig Type:	-
RAP Fund Elig Type:	-
RA Fund Elig Type:	-
SR Alternate Procedure Status:	
SR Alt Procedure Status Dt:	
SR Alt Procedure Comment:	
SRC Action Type:	SRCR - SITE REHABILITATION COMPLETION REPORT
SRC Submit Date:	10/12/2010
SRC Review Date:	11-01-2010
SRC Complete Status:	A - APPROVED
SRC Comp Status Dt:	12-30-2010
SRC Issue Date:	12-30-2010
SRC Comments:	

Petroleum Cleanup PCT Facility Score

Related Party ID:	4045
RP Contact:	IRA LEWIS
Facility Cleanup Status:	CMPL - COMPLETED
Bad Address Indicator:	N
Rank:	

Discharge Info (Map)

Discharge:	58054	***Facility Status:***	OPEN
Discharge 1:	21-Jun-2007	***Staff Assi:***	
Discharge 2:	10	***Eligibility:***	INELIGIBLE
Discharge 3:	SRCR	***Eligibility 1:***	
Disch Clea:	30-Dec-2010	***Rel Feat:***	EXACT
General Cl:	CLOSURE	***Collection:***	DPHO
Lat Dd:	28	***Collector :***	WILLIAMS_CA
Lat Mm:	35	***Collecti 1:***	18-Sep-2023
Lat Ss:		***Report Pha:***	COMPLETED
Long Dd:	81	***Report Sub:***	COMPLETED
Long Mm:	45	***Report S 1:***	30-Dec-2010
Long Ss:			
Tank Offic:			
Document Link:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9700727/facility!search		

AST UST Discharges

Dep Co:	P	***Long MM:***	45
CU Req:	R	***Long SS:***	10
Score:	10	***Stat Desc:***	SRCR COMPLETE
Descrip:	CLEANUP REQUIRED	***Fac Name:***	CIRCLE K #2722114

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Discharge Date:	21-Jun-07	**Fac Type:**	A
Score Date:	16-Feb-09	**Type Desc:**	Retail Station
Stat Date:	30-Dec-10	**Fac Addr:**	810 N US 27
LL Meth:	AGPS	**Fac City:**	MINNEOLA
Lat DD:	28	**Fac Zip:**	34715
Lat MM:	35	**County:**	35
Lat SS:	24	**Fac State:**	OPEN
Long DD:	81	**Fac Phone:**	9843891300
Prg Desc:			

Ineligible Discharges

Discharge Date:	6/21/2007
Score:	10
Current Status:	CLOSED
Facility:	CIRCLE K #2722114
Address:	810 N US 27
City:	MINNEOLA
Zip:	34715
County:	LAKE
Owner:	CIRCLE K STORES INC
Owner Address:	1100 Situs Ct
Ownercity:	Raleigh
Owner State:	NC
Owner Zip:	27606
Owner Phone:	(984)389-1300
Owner Email:	ILEWIS@CIRCLEK.COM

Historical Contaminated Facilities List

Facility ID:	9700727	**Score:**	10
Facility Status:	OPEN	**Score Effective Dt:**	2/16/2009
Facility Type:	A - Retail Station	**Score When Ranked:**	
Facility Name:	CIRCLE K #2722114	**Rank:**	
Address1:	810 N US 27	**Operator:**	IRA LEWIS
Address2:		**Phone:**	(984)389-1300
City:	MINNEOLA	**Section:**	
County Name:	LAKE	**Township:**	
County:	35	**Range :**	
District:	CD	**Pri Related Party ID:**	4045
State :	FL	**Primary Rp Role:**	ACCOUNT OWNER
Zip5:	34715	**Rp Begin Date:**	1/8/2016
Zip4:		**Rp Name:**	CIRCLE K STORES INC
Name Changed:	1/7/2016	**Rp Address1:**	1100 Situs Ct
Addr Changed:	12/16/2024	**Rp Address2:**	Attn: Ess Storage Tank Regis Ste 100
Lat Dd:	28	**Rp City:**	Raleigh
Lat Mm:	35	**Rp State:**	NC
Lat Ss:	24.569	**Rp Zip5:**	27606
Long Dd:	81	**Rp Zip4:**	5446
Long Mm:	45	**Contact:**	IRA LEWIS
Long Ss:	9.3166	**Rp Phone:**	(984)389-1300
Feature:		**Rp Phone Extension:**	
Method:	AGPS	**Rp Bad Addr Ind:**	No
Datum:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
9	3 of8	S	0.48 / 2,546.41	208.51 / 44	HANDY WAY FOOD STORE #2114 810 N US 27 MINNEOLA FL 34744	DEL CONTAM SITE

Prgm Site ID:	9700727	**Record Date:**	
Remedi Status:	WAITING	**County:**	LAKE
Priority Score:	10	**Method:**	DPHO
Program Area:	Petroleum	**Datum:**	HARN
Program Eligible:		**Lat DD:**	28
Ineligible:	Y	**Lat MM:**	35
Offsite Contam:	U	**Lat SS:**	24.3751

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Dt Known Offsite:		**Long DD:**	81
Proj Manager:		**Long MM:**	45
Office District:	PCLP35	**Long SS:**	9.75
Original Source:	CS		
Record Date:	31-MAR-2015		

---

9 | **4 of8** | **S** | **0.48 / 2,546.41** | **208.51 / 44**

HANDY WAY FOOD STORE #2114
810 N US 27
MINNEOLA FL 34744

DWM CONTAM

Facility ID:	9700727	**Contact:**	
Site ID:		**Phone:**	
Program Area:	Petroleum	**Method:**	
Facility Type:		**Datum:**	
Fac Type:		**Related Party ID:**	
County ID:		**Primary RP Role:**	
Ftc1 Fac Type ID:		**RP Begin Date:**	
Stcm Facility Type:		**RP Address1:**	
District:		**RP Address2:**	
Site Status:		**RP City:**	
Section:		**RP State:**	
Township:		**RP Zip5:**	
County:	LAKE	**RP Zip4:**	
Range:		**RP Phone:**	
Rank:		**RP Extension:**	
Operator:		**RP Bad Addr Ind:**	
Name Changed:		**RP Name:**	
Addr Changed:			
Facility Name:			
Description:			

Program Details

Facility Status:	WAITING	**Staff Assigned:**	
Offsite Contam:	U	**Priority:**	
Priority Score:	10	**Score Effective Dt:**	
Project Coordinato:		**Score When Ranked:**	
Program Eligible:		**District:**	PCLP35
Ineligible:	Y	**Datum:**	HARN
Program Area:		**Method:**	DPHO
Site Manager:		**Lat DD:**	28
Discharge Date:		**Lat MM:**	35
Discharge Eligibil:		**Lat SS:**	24.3751
Eligibility Progrm:		**Long DD:**	81
Cleanup Status:		**Long MM:**	45
Closure Type:		**Long SS:**	9.75
Closure Date:			

---

9 | **5 of8** | **S** | **0.48 / 2,546.41** | **208.51 / 44**

CIRCLE K #2722114
810 N US 27
KISSIMMEE FL 34744

STCS

Facility ID:	9700727	**Clnup Cd (OD):**	CMPL
Type:	A - Retail Station	**Fac Clnup Stat (OD):**	COMPLETED
Status:	Open	**Clnup Dt (OD):**	29-Dec-2010
Status (OD):	REVIEWED	**Status (Map):**	REVIEWED
Fac Stat (OD):	OPEN	**Contam (Map):**	
Fac Code (OD):	A	**Fac Type (Map):**	Retail Station
Facility 1:	Retail Station	**Fac Stat (Map):**	OPEN
Fac Name (OD):	CIRCLE K #2722114		
Address (OD):	810 N US 27		
City (OD):	KISSIMMEE		
County (OD):	LAKE		
Zip5 (OD):	34744		
Name (Map):	CIRCLE K #2722114		

Address (Map):	810 N US 27
City (Map):	MINNEOLA
County (Map):	35
Zip4 (Map):	
Zip5 (Map):	34715
Address Line 1:	810 N Us 27
Address Line 2:	
City:	Minneola
County:	LAKE
State:	FL
Zip:	34715
Report Source:	FDEP Geospatial Open Data - Registered Tanks from Storage Tank Contamination Monitoring (STCM) (OD); FDEP Geospatial Open Data - Storage Tank Contamination Monitoring (STCM) (Map); Storage Tank Contaminated Facility Name and Address Search

FDEP Storage Tank Monitoring Open Data Details

Object ID:	52137	**Map Src:**	imagerywithroads
X:	-81.75258794	**Map Scale:**	282
Y:	28.59015806	**Elevation:**	
Regulated:	YES	**El Datum:**	
Col Meth:	DPHO	**El Resolut:**	
Col Name:	WILLIAMS_CA	**El Units:**	
Col Date:	18-Sep-2023	**ALB East:**	619383.34
Col Prog:	TANKS-PETROLEUM CONTAMINATION	**ALB North:**	511335.68
Ver Meth:	DPHO	**Loc ID:**	52592
Ver Name:	WILLIAMS_CA	**Lat DD:**	28
Ver Prog:	TANKS-PETROLEUM CONTAMINATION	**Lat MM:**	35
Ver Date:	18-Sep-2023	**Lat SS:**	
OOIC:	FACILITY	**Long DD:**	81
Rel Feat:	EXACT	**Long MM:**	45
Datum:	NAD83	**Long SS:**	
Coord Acc:	4		
Col Aff:	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Ver Aff:	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Direct:			
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9700727/gis-facility!search		

FDEP Open Data - Storage Tank Contamination Monitoring (STCM)

Loc ID:	52592	**Rel Feat:**	EXACT
Site Type:	Retail Station	**El Datum:**	
Contam Ind:		**El Resolut:**	
Phone:	9843891300	**El Units:**	
Operator:	IRA LEWIS	**Map Src:**	imagerywithroads
Next action:	PLACARD 29-JUN-2024	**Map Scale:**	282
Fin Respon:		**Coord Acc:**	4
Office:	CD	**Alb East:**	619383.34
OOIC:	FACILITY	**Alb North:**	511335.68
Col Meth:	DPHO	**Datum:**	NAD83
Col Name:	WILLIAMS_CA	**Elevation:**	
Col Date:	9/18/2023	**Lat DD:**	28
Col Prog:	TANKS-PETROLEUM CONTAMINATION	**Lat MM:**	35
Ver Meth:	DPHO	**Lat SS:**	
Ver Name:	WILLIAMS_CA	**Long DD:**	81
Ver Prog:	TANKS-PETROLEUM CONTAMINATION	**Long MM:**	45
Ver Date:	9/18/2023	**Long SS:**	
Object ID:	52592		
Col Aff:	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Ver Aff:	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION		
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9700727/gis-facility!search		

Storage Tank Contaminated Facility Name & Address Search Details

Name:	Circle K #2722114 810 N Us 27

Minneola, FL 34715
LL Method: DPHO - Autonomous GPS
Account Owner: Circle K Stores Inc
Contact: Ira Lewis
Phone: 984-389-1300
District: CD
County 1: 35 - Lake
Latitude: 28:35:24.5690
Longitude: 81:45:09.3166

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 2
Size: 10000
Content: Unleaded Gas
Installed: 06/01/1997
Placement: UNDER
Status: In Service
Construction: E - Fiberglass
I - Double Wall
M - Spill Containment Bucket
N - Flow Shut-Off
O - Tight Fill
Piping: C - Fiberglass
F - Double Wall
J - Pressurized Piping System
K - Dispenser Liners
Monitoring: 2 - Visual Inspect Pipe Sumps
4 - Visual Inspect Dispenser Liners
F - Monitor Dbl Wall Tank Space
H - Mechanical Line Leak Detector
K - Monitor Dbl Wall Pipe Space

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 1
Size: 12000
Content: Unleaded Gas
Installed: 06/01/1997
Placement: UNDER
Status: In Service
Construction: E - Fiberglass
I - Double Wall
M - Spill Containment Bucket
N - Flow Shut-Off
O - Tight Fill
Piping: C - Fiberglass
F - Double Wall
J - Pressurized Piping System
K - Dispenser Liners
Monitoring: 2 - Visual Inspect Pipe Sumps
4 - Visual Inspect Dispenser Liners
F - Monitor Dbl Wall Tank Space
H - Mechanical Line Leak Detector
K - Monitor Dbl Wall Pipe Space

FDEP - Registered Tanks from Storage Tank Contamination Monitoring (STCM) Details

Tank No: 3
Size: 6000
Content: Vehicular Diesel
Installed: 06/01/1997
Placement: UNDER
Status: In Service
Construction: E - Fiberglass
I - Double Wall

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

M - Spill Containment Bucket
N - Flow Shut-Off
O - Tight Fill

Piping:
C - Fiberglass
F - Double Wall
J - Pressurized Piping System
K - Dispenser Liners

Monitoring:
2 - Visual Inspect Pipe Sumps
4 - Visual Inspect Dispenser Liners
F - Monitor Dbl Wall Tank Space
H - Mechanical Line Leak Detector
K - Monitor Dbl Wall Pipe Space

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
9	6 of8	S	0.48 / 2,546.41	208.51 / 44	HANDY WAY FOOD STORE #5114 810 N US 27 MINNEOLA FL 34744	STCS

Facility ID: 9700763
Type: A - Retail Station
Status: Deleted
Status (OD):
Fac Stat (OD): DELETED
Fac Code (OD): A
Facility 1: Retail Station
Fac Name (OD): HANDY WAY FOOD STORE #5114
Address (OD): 810 N US 27
City (OD): MINNEOLA
County (OD): LAKE
Zip5 (OD): 34744
Name (Map):
Address (Map):
City (Map):
County (Map):
Zip4 (Map):
Zip5 (Map):
Address Line 1: 810 N Us 27
Address Line 2:
City: Minneola
County: LAKE
State: FL
Zip: 34744
Report Source: FDEP Geospatial Open Data - Registered Tanks from Storage Tank Contamination Monitoring (STCM) (OD); Storage Tank Contaminated Facility Name and Address Search

Clnup Cd (OD):
Fac Clnup Stat (OD):
Clnup Dt (OD):
Status (Map):
Contam (Map):
Fac Type (Map):
Fac Stat (Map):

FDEP Storage Tank Monitoring Open Data Details

Object ID: 51324
X: -87.92980447
Y: 23.94244763
Regulated: NO
Col Meth:
Col Name:
Col Date:
Col Prog:
Ver Meth:
Ver Name:
Ver Prog:
Ver Date:
OOIC:
Rel Feat:
Datum:
Coord Acc:
Col Aff:
Ver Aff:
Direct:
Documents: https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9700763/gis-facility!search

Map Src:
Map Scale:
Elevation:
El Datum:
El Resolut:
El Units:
ALB East:
ALB North:
Loc ID:
Lat DD:
Lat MM:
Lat SS:
Long DD:
Long MM:
Long SS:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Storage Tank Contaminated Facility Name & Address Search Details

Name:	Handy Way Food Store #5114 810 N Us 27 Minneola, FL 34744
LL Method:	UNVR
Account Owner:	Miller Enterprises Inc
Contact:	
Phone:	
District:	CD
County 1:	35 - Lake
Latitude:	27:14:35.0000
Longitude:	84:48:34.0000

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
9	7 of8	S	0.48 / 2,546.41	208.51 / 44	CIRCLE K #2722114 810 N US 27 KISSIMMEE FL 34744	DELISTED LST

Delisted Storage Tank/Contaminated Facility

Facility ID:	8513378	***Fac Stat (Map):***	OPEN
Type :	A - Retail Station	***Name (Map):***	CIRCLE K #2722114
Facility Type Code:	A	***Address (Map):***	810 N US 27
Facility Type:	Retail Station	***City (Map):***	KISSIMMEE
Status:	Open	***County (Map):***	48
Status (Open Data):	REVIEWED	***Zip5 (Map):***	34744
Fac Stat (Open Data):	OPEN	***Zip4 (Map):***	0
Fac Clnup Status:	ONGO	***Fac Name(OpenData):***	CIRCLE K #2722114
Fac Cleanup Status:	ONGOING	***Address (Open Data):***	810 N US 27
Cleanup Stat Eff Date:	2004/03/09 18:33:12+00	***City (Open Data):***	KISSIMMEE
Status (Map):	REVIEWED	***Zip5 (Open Data):***	34744
Contam (Map):	YES	***County (Open Data):***	ORANGE
Fac Type (Map):	Retail Station	***County:***	ORANGE
Original Source:	STCS		
Record Date:	08-FEB-2022		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
9	8 of8	S	0.48 / 2,546.41	208.51 / 44	CIRCLE K #2722114 810 N US 27 KISSIMMEE FL 34744	DWM CONTAM

Facility ID:	9700727	***Contact:***	
Site ID:	9700727	***Phone:***	
Program Area:		***Method:***	
Facility Type:		***Datum:***	
Fac Type:		***Related Party ID:***	
County ID:	35	***Primary RP Role:***	
Ftc1 Fac Type ID:	A	***RP Begin Date:***	
Stcm Facility Type:	A	***RP Address1:***	
District:	CD	***RP Address2:***	
Site Status:		***RP City:***	
Section:		***RP State:***	
Township:		***RP Zip5:***	
County:	Lake	***RP Zip4:***	
Range:		***RP Phone:***	
Rank:		***RP Extension:***	
Operator:		***RP Bad Addr Ind:***	
Name Changed:		***RP Name:***	
Addr Changed:			
Facility Name:	CIRCLE K #2722114		
Description:	Retail Station		

Program Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility Status:		***Staff Assigned:***	
Offsite Contam:		***Priority:***	
Priority Score:	10	***Score Effective Dt:***	
Project Coordinato:		***Score When Ranked:***	
Program Eligible:		***District:***	
Ineligible:		***Datum:***	
Program Area:	PETROLEUM	***Method:***	AGPS
Site Manager:		***Lat DD:***	28
Discharge Date:	6/21/2007	***Lat MM:***	35
Discharge Eligibil:	I	***Lat SS:***	24
Eligibility Progrm:		***Long DD:***	81
Cleanup Status:	CLOSED-STCM	***Long MM:***	45
Closure Type:	SRCR	***Long SS:***	10
Closure Date:	12/30/2010		

Unplottable Summary

Total: 1 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID
MRDS	CLERMONT MINE	LAKE COUNTY ***Dep ID:*** 10305391	CLERMONT FL	34711	888444417

Unplottable Report

Site: ***CLERMONT MINE***
LAKE COUNTY CLERMONT FL 34711

MRDS

Dep ID:	10305391	***I1:***	22
Dev Status:	PRODUCER	***Latitude:***	28.543884
Code List:	SDG	***Longitude:***	-81.666992
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10305391		

Commodity

I1:	47	***Line:***	1
Code:	SDG	***Inserted By:***	MAS migration
Commodity:	Sand and Gravel, Cons	***Insert Date:***	29-OCT-02
Commodity Type:	Non-metallic	***Updated By:***	USGS
Commodity Group:	Sand and Gravel	***Update Date:***	29-OCT-02
Importance:	Primary		

Names

I1:	35	***Inserted By:***	MAS migration
Status:	Current	***Insert Date:***	29-OCT-02
Site Name:	Clermont Mine	***Updated By:***	USGS
Line:	1	***Update Date:***	29-OCT-02

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13 and E1527-21, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

National Priority List: NPL

The U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL) includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program, based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action. This data includes NPL sites represented as polygons, where available, that can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. As site investigation and remediation progress, OUs may be added, modified or refined. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Sep 25, 2024

National Priority List - Proposed: PROPOSED NPL

Sites proposed by the U.S. Environmental Protection Agency (EPA), the state agency, or concerned citizens for addition to the National Priorities List (NPL) due to contamination by hazardous waste and identified by the EPA as a candidate for cleanup because it poses a risk to human health and/or the environment. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Sep 25, 2024

Deleted NPL: DELETED NPL

Sites deleted from the U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL). The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Sep 25, 2024

SEMS List 8R Active Site Inventory: SEMS

The U.S. Environmental Protection Agency's (EPA) Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted. This data includes SEMS sites from the List 8R Active file as well as applicable sites from the EPA's Facility Registry Service map tool.

Government Publication Date: Oct 24, 2024

SEMS List 8R Archive Sites: SEMS ARCHIVE

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. This data includes sites from the List 8R Archived site file.

Government Publication Date: Oct 24, 2024

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA). This database was provided by the United States Environmental Protection Agency (EPA). Refer to SEMS LIEN as the current data source for Superfund Liens.

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Oct 21, 2024

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites that have indicated engagement in the treatment, storage, or disposal of hazardous waste which requires a RCRA hazardous waste permit.

Government Publication Date: Oct 21, 2024

RCRA Generator List: RCRA LQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Oct 21, 2024

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Oct 21, 2024

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Oct 21, 2024

RCRA Non-Generators: RCRA NON GEN

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Oct 21, 2024

RCRA Sites with Controls: RCRA CONTROLS

List of Resource Conservation and Recovery Act (RCRA) facilities with institutional controls in place. RCRA gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Government Publication Date: Oct 21, 2024

Federal Engineering Controls-ECs: FED ENG

List of Engineering controls (ECs) made availabe by the United States Environmental Protection Agency (EPA). ECs encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. The EC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Jan 29, 2025

Federal Institutional Controls- ICs: FED INST

List of Institutional controls (ICs) made available by the United States Environmental Protection Agency (EPA). ICs are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site. The IC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Jan 29, 2025

Land Use Control Information System: LUCIS

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

Government Publication Date: Sep 1, 2006

Institutional Control Boundaries at NPL sites: NPL IC

These boundaries of Institutional Control areas at sites on the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL), or as Proposed or Deleted, are sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). The EPA's NPL includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes.

Government Publication Date: Sep 25, 2024

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Dec 31, 2024

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This data is provided by the United States Environmental Protection Agency (EPA) and includes Brownfield sites from the Cleanups in My Community (CIMC) web application.

Government Publication Date: Feb 7, 2024

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

This listing contains facilities that have submitted Facility Response Plans (FRPs) to the U.S. Environmental Protection Agency (EPA). Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit FRPs. Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments. This listing includes FRP facilities from an applicable EPA FOIA file and Homeland Infrastructure Foundation-Level Data (HIFLD) data file.

Government Publication Date: Jan 9, 2024

Delisted Facility Response Plans: DELISTED FRP

Facilities that once appeared in - and have since been removed from - the list of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Jan 9, 2024

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

This list of petroleum refineries is sourced from the U.S. Energy Information Administration (EIA), Refinery Capacity Report. The listing includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year. The geographic area the report covers is the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, and other U.S. possessions. Per the EIA, the facility location data represents the approximate location based on research of publicly available information from sources such as Federal agencies, company websites, and satellite images on public websites.

Government Publication Date: Oct 31, 2024

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

A list of petroleum product and crude oil rail terminals from the U.S. Energy Information Administration (EIA), as well as petroleum terminals sourced from Oak Ridge National Laboratory hosted by the Homeland Infrastructure Foundation-Level Database. Data includes operable bulk petroleum product terminals with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil with activity between 2017 and 2018. EIA petroleum product terminal data comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings.

Government Publication Date: Oct 31, 2024

LIEN on Property: SEMS LIEN

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) provides Lien details on applicable properties, such as the Superfund lien on property activity, the lien property information, and the parties associated with the lien.

Government Publication Date: Oct 24, 2024

Superfund Decision Documents: SUPERFUND ROD

This database contains a list of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include completed Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD) for active and archived sites stored in the Superfund Enterprise Management System (SEMS), along with other associated memos and files. This information is maintained and made available by the U.S. Environmental Protection Agency.

Government Publication Date: Oct 24, 2024

State

Superfund Waste Cleanup & State-Funded Action Sites: SHWS

List of hazardous waste cleanup sites participating in various federal and state funded cleanup programs. Florida's State-Funded Action Sites and Superfund Waste Cleanup Sites lists are maintained and made available by the Florida Department of Environmental Protection (FDEP). This database serves a purpose similar to that of the federal Superfund Enterprise Management System (SEMS), functioning as a state-level counterpart for tracking potential hazardous substance release sites.

Government Publication Date: Jan 2, 2025

Delisted State-Funded Action Sites: DELISTED SHWS

This database contains a list of closed hazardous waste sites of various federal and state funded cleanup programs that were removed from the Florida Department of Environmental Protection (FDEP).

Government Publication Date: Jan 2, 2025

ERIC Waste Cleanup: ERIC

Environmental Restoration Integrated Cleanup (ERIC) is a single database for tracking contaminated site cleanup activities in the Florida Department of Environmental Protection (DEP)'s Division of Waste Management (DWM). Includes records from 11 different DEP data systems, allowing tracking of a contaminated site throughout the course of cleanup regardless of which program area took the lead.

Government Publication Date: Feb 7, 2025

Florida Department of Environmental Protection Cleanup Sites: CLEANUP DEP

This Cleanup Sites dataset is provided by the Florida Department of Environmental Protection (FDEP), and the layer is included on the FDEP's Contamination Locator Map (CLM) tool. The data provides locations and document links for sites currently in the cleanup process and sites awaiting cleanup funding. Cleanup programs include Brownfields, Petroleum, EPA Superfund (CERCLA), Drycleaning, Responsible Party Cleanup, State Funded Cleanup, State Owned Lands Cleanup and Hazardous Waste Cleanup.

Government Publication Date: Jan 16, 2025

Waste Cleanup Responsible Party Sites: WCRPS

List of Open, Closed, and Inactive Waste Cleanup Responsible Party sites made available by the Florida Department of Environmental Protection.

Government Publication Date: Apr 11, 2021

Delisted Waste Cleanup Sites: DELISTED WCP

List of sites which once appeared on - and have since been removed from - the list of Waste Cleanup Sites made available by the Florida Department of Environmental Protection.

Government Publication Date: Feb 7, 2025

Solid Waste Facilities and Landfills: SWF/LF

The Solid Waste Facility Inventory Report made available by the Florida Department of Environmental Protection (FDEP) includes all types of authorized and unauthorized facilities: municipal solid waste, landfills, dumps, construction and demolition disposal, recycling facilities, and more.

Government Publication Date: Dec 6, 2024

Leaking Tanks: LST

This list of leaking storage tanks is sourced from the Florida Department of Environmental Protection (FDEP). The Storage Tank and Petroleum Contamination/Cleanup Monitoring (STCM) section is part of the Petroleum Restoration Program (PRP) in the FDEP's Division of Waste Management. The PRP encompasses the technical oversight, management, and administrative activities necessary to prioritize, assess and clean-up sites contaminated by discharges of petroleum and petroleum products from stationary petroleum storage systems. Over 28,000 facilities have reported discharges of petroleum products from storage tank systems. STCM database reports do not include discharges that are not required for Rule 62-780 as well as discharges that have already been cleaned up. Rule 62-780 applies to site rehabilitation conducted at sites contaminated with pollutants, hazardous substances, drycleaning solvents, petroleum and petroleum products. Florida relies on groundwater for about 92 percent of its drinking water needs and has some of the most stringent rules in the country.

Government Publication Date: Feb 6, 2025

Delisted Leaking Tanks: DELISTED LST

Whereas Leaking Tanks (LST) includes only facilities which currently have contamination as recorded by the Florida Department of Environmental Protection, this list contains facilities which were once included in LST data but no longer appear on the list made available by FDEP. Facilities may be removed from the current LST list because the discharge has been cleaned up, or the discharge is not required for 62-770.

Government Publication Date: Feb 6, 2025

Underground Storage Tanks: UST

List of Underground Storage Tank facilities made available by the Florida Department of Environmental Protection (FL DEP). Includes facilities tracked for active storage tanks, storage tank history, or petroleum cleanup activity. In an effort to minimize the occurrence and environmental risks of releases and discharges, FDEP administers standards pertaining to the construction, installation, operation, maintenance, repair, closure, and disposal of underground storage tank systems that store regulated substances.

Government Publication Date: Jan 2, 2025

Aboveground Storage Tanks: AST

List of Aboveground Storage Tank facilities made available by the Florida Department of Environmental Protection (FL DEP). Includes facilities tracked for active storage tanks, storage tank history, or petroleum cleanup activity.The Florida Department of Environmental Protection (FDEP) provides standards for aboveground storage tanks (ASTs) that have individual storage tank capacities greater than 550 gallons. The state also regulates the registration, construction, installation, operation, maintenance, repair, closure, and disposal of storage tank systems that store regulated substances.
Government Publication Date: Jan 2, 2025

Storage Tank Facilities: TANK

List of storage tank facilities made available by the Florida Department of Environmental Protection (FL DEP) for which tank information is not available. In the case of closed facilities - where all tanks have been removed or closed, and there is also no petroleum discharge or on-going cleanup activity - the owner data may not be current, but rather would represent the most recent information made available to FL DEP.
Government Publication Date: Jan 2, 2025

Delisted AST UST Storage Tanks: DEL UST AST TANK

This database contains a list of closed UST and AST storage tank sites that were removed from the Florida Department of Environmental Protection (FDEP) storage tank database.
Government Publication Date: Jul 2, 2015

Delisted Storage Tanks: DEL STORAGE TANK

List of sites that once appeared on - and have since been removed from - the list of UST and AST storage tank facilities made available by the Florida Department of Environmental Protection.
Government Publication Date: Jan 28, 2025

Federal Facilities Listing: FF TANKS

The Florida Department of Environmental Protection (FDEP) Storage Tank Program registers facilities and storage tanks where aboveground or underground storage tanks store pollutants, hazardous substances, and/or mineral acid substances regulated by Chapter 62-761, Florida Administrative Code, or when aboveground storage tanks or compression vessels store a hazardous substance which requires registration according to Chapter 376, Florida Statutes.
Government Publication Date: Dec 23, 2024

Storage Tank/Contaminated Facility Search: STCS

List of facilities and tanks in the Florida Department of Environmental Protection (FDEP) Bureau of Petroleum Storage Systems Storage Tank/Contaminated Facility Search. Note that tank details do not appear for facilities for which all tanks have been removed.
Government Publication Date: Jan 6, 2025

Institutional Controls Registry: INST

The Institutional Controls registry is maintained by the Florida Department of Environmental Protection (FDEP). The registry aims to help preserve adequate protection of contaminated soil regions and help to minimize any chances of exposure.
Government Publication Date: Jan 30, 2025

Engineering Controls: ENG

A listing of all engineering controls that are in place to eliminate or reduce the potential for contaminant migration and exposure to contaminants. These controls may include caps, barriers, guards or fences. The list is maintained by the Florida Department of Environmental Protection (FDEP).
Government Publication Date: Jan 30, 2025

Voluntary Cleanup Sites: VCP

A listing of active and closed voluntary cleanup sites registered by the Florida Department of Environmental Protection (FDEP).
Government Publication Date: Aug 30, 2024

Brownfield Sites: BROWNFIELDS

Brownfields are defined by the Florida Department of Environmental Protection (FDEP) as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination. This is a list of sites within designated Brownfield Areas within Florida where Brownfield Site Rehabilitation Agreement (BSRA)s have been executed between FDEP and a responsible party.
Government Publication Date: Nov 22, 2024

Brownfield Areas: BROWNFIELD AREA

Brownfields are defined by the Florida Department of Environmental Protection (FDEP) as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination. This is a list of Brownfield Areas, defined by the FDEP as contiguous areas of one or more brownfield sites, some of which may not be contaminated, that have been designated as such by a local government resolution. Such areas may include all or portions of community redevelopment areas, enterprise zones, empowerment zones, other such designated economically deprived communities and areas, and Environmental Protection Agency (EPA) designated brownfield pilot projects. Because a variety of sources and methods were used to derive information for this data, locations are approximate.
Government Publication Date: Nov 22, 2024

Hazardous Waste Facility List: HAZ WASTE FAC
List of Hazardous Waste Financial Assurance Facilities made available by the Division of Waste Management of the Florida Department of Environmental Protection (FDEP). The FDEP's Hazardous waste financial responsibility requirements exist to ensure that certain hazardous waste facilities and transporters have the financial resources available to provide for closure, postclosure and corrective action requirements and/or pay for bodily injury or property damage that might result from accidents, spills or other unexpected events, known as liabilities. These closure, postclosure, corrective action and liability requirements are called financial assurance.
Government Publication Date: Jan 3, 2025

Tribal

Leaking Underground Storage Tanks on Tribal/Indian Lands: INDIAN LUST
This list of leaking underground storage tanks (LUSTs) on Tribal/Indian Lands in Region 4, which includes Florida, is made available by the United States Environmental Protection Agency (EPA).
Government Publication Date: Nov 18, 2024

Underground Storage Tanks on Tribal/Indian Lands: INDIAN UST
This list of underground storage tanks (USTs) on Tribal/Indian Lands in Region 4, which includes Florida, is made available by the United States Environmental Protection Agency (EPA).
Government Publication Date: Nov 18, 2024

Delisted Tribal Leaking Storage Tanks: DELISTED INDIAN LST
Leaking Underground Storage Tank (LUST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian LUST lists made available by the United States Environmental Protection Agency (EPA).
Government Publication Date: Oct 15, 2024

Delisted Tribal Underground Storage Tanks: DELISTED INDIAN UST
Underground Storage Tank (UST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian UST lists made available by the United States Environmental Protection Agency (EPA).
Government Publication Date: Oct 15, 2024

County

No County databases were selected to be included in the search.

Additional Environmental Record Sources

Federal

PFAS Greenhouse Gas Emissions Data: PFAS GHG
The U.S. Environmental Protection Agency's Greenhouse Gas Reporting Program (GHGRP) collects Greenhouse Gas (GHG) data from large emitting facilities (25,000 metric tons of carbon dioxide equivalent (CO2e) per year), and suppliers of fossil fuels and industrial gases that results in GHG emissions when used. Includes GHG emissions data for facilities that emit or have emitted since 2010 chemicals identified in EPA's CompTox Chemicals Dashboard list of PFAS without explicit structures and list of PFAS structures by DSSTox. PFAS emissions data has been identified for facilities engaged in the following industrial processes: Aluminum Production (GHGRP Subpart F), HCFC-22 Production and HFC-23 Destruction (Subpart O), Electronics Manufacturing (Subpart I), Fluorinated Gas Production (Subpart L), Magnesium Production (Subpart T), Electrical Transmission and Distribution Equipment Use (Subpart DD), and Manufacture of Electric Transmission and Distribution Equipment (Subpart SS). Over time, other industrial processes with required GHGRP reporting may include PFAS emissions data and the list of reportable gases may change over time.
Government Publication Date: Aug 5, 2024

On-Scene Coordinator Response Sites: OSC RESPONSE

This list of On-Scene Coordinator (OSC) Response Sites is provided by the U.S. Environmental Protection Agency (EPA). OSCs are the federal officials responsible for monitoring or directing responses to all oil spills and hazardous substance releases reported to the federal government. OSCs coordinate all federal efforts with, and provide support and information to local, state, and regional response communities. An OSC is an agent of either EPA or the U.S. Coast Guard (USCG), depending on where the incident occurs. EPA's OSCs have primary responsibility for spills and releases to inland areas and waters. USCG OSCs have responsibility for coastal waters and the Great Lakes. In general, an OSC has the following key responsibilities during and after a response: Assessment, Monitoring, Response Assistance, and Evaluation.

Government Publication Date: Apr 4, 2024

Facility Registry Service/Facility Index: FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the U.S. Environmental Protection Agency (EPA).

Government Publication Date: Aug 1, 2024

Toxics Release Inventory (TRI) Program: TRIS

The U.S. Environmental Protection Agency's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of toxic chemicals from U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. There are currently 770 individually listed chemicals and 33 chemical categories covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual reporting forms for each chemical. Note that the TRI chemical list does not include all toxic chemicals used in the U.S. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment. This database includes TRI Reporting Data for calendar years 1987 through 2021 and Preliminary Data for 2022.

Government Publication Date: Sep 20, 2023

PFOA/PFOS Contaminated Sites: PFAS NPL

This list of Superfund Sites with Per- and Polyfluoroalkyl Substances (PFAS) detections is made available by the U.S. Environmental Protection Agency (EPA) in their PFAS Analytic Tools data, previously the list was obtained by EPA FOIA requests. EPA's Office of Land and Emergency Management and EPA Regional Offices maintain what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment. Limitations: Detections of PFAS at National Priorities List (NPL) sites do not mean that people are at risk from PFAS, are exposed to PFAS, or that the site is the source of the PFAS. The information in the Superfund NPL and Superfund Alternative Agreement (SAA) PFAS detection site list is years old and may not be accurate today. Site information such as site name, site ID, and location has been confirmed for accuracy; however, PFAS-related information such as media sampled, drinking water being above the health advisory, or mitigation efforts has not been verified. For Federal Facilities data, the other Federal agencies (OFA) are the lead agency for their data and provided them to EPA.

Government Publication Date: Dec 17, 2024

Federal Agency Locations with Known or Suspected PFAS Detections: PFAS FED SITES

This list of federal agency locations with known or suspected detections of Per- and Polyfluoroalkyl Substances (PFAS) is made available by the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools data. The EPA outlines that these data are gathered from several federal entities, such as the federal Superfund program, Department of Defense (DOD), National Aeronautics and Space Administration (NASA), Department of Transportation (DOT), and Department of Energy (DOE). The dates this data was extracted for the PFAS Analytic Tools range from 2022 to 2024. Sites on this list do not necessarily reflect the source/s of PFAS contamination and detections do not indicate level of risk or human exposure at the site. Agricultural notifications in this data are limited to DOD sites only. At this time, the EPA is aware that this list is not comprehensive of all Federal agencies.

Government Publication Date: Oct 24, 2024

SSEHRI PFAS Contamination Sites: PFAS SSEHRI

This PFAS Contamination Site Tracker database is compiled by the PFAS Project Lab, part of the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents. Locations for the Known PFAS Contamination Sites are sourced from the PFAS Sites and Community Resources Map by the PFAS-REACH team, credited to PFAS Project Lab, Silent Spring Institute, and PFAS Exchange. Disclaimer: The source conveys the data undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Access the following source link for the most current information: https://pfasproject.com/pfas-sites-and-community-resources/

Government Publication Date: Jun 27, 2024

National Response Center PFAS Spills: PFAS ERNS

This Per- and Poly-Fluoroalkyl Substances (PFAS) Spills dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The National Response Center (NRC), operated by the U.S. Coast Guard, is the designated federal point of contact for reporting all oil, chemical, and other discharges into the environment, for the United States and its territories. This dataset contains NRC spill information from 1990 to the present that is restricted to records associated with PFAS and PFAS-containing materials. Incidents are filtered to include only records with a "Material Involved" or "Incident Description" related to Aqueous Film Forming Foam (AFFF). The keywords used to filter the data included "AFFF," "Fire Fighting Foam," "Aqueous Film Forming Foam," "Fire Suppressant Foam, "PFAS," "PERFL," "PFOA," "PFOS," and "Genx." Limitations: The data from the NRC website contains initial incident data that has not been validated or investigated by a federal/state response agency. Keyword searches may misidentify some incident reports that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS spills/release incidents.

Government Publication Date: Dec 9, 2024

PFAS NPDES Discharge Monitoring: PFAS NPDES

This list of National Pollutant Discharge Elimination System (NPDES) permitted facilities with required monitoring for Per- and Polyfluoroalkyl (PFAS) Substances is made available via the U.S. Environmental Protection Agency (EPA)'s PFAS Analytic Tools. Any point-source wastewater discharger to waters of the United States must have a NPDES permit, which defines a set of parameters for pollutants and monitoring to ensure that the discharge does not degrade water quality or impair human health. This list includes NPDES permitted facilities associated with permits that monitor for Per- and Polyfluoroalkyl Substances (PFAS), limited to the years 2007 - present. EPA further advises the following regarding these data: currently, fewer than half of states have required PFAS monitoring for at least one of their permittees, and fewer states have established PFAS effluent limits for permittees. For states that may have required monitoring, some reporting and data transfer issues may exist on a state-by-state basis.

Government Publication Date: Dec 16, 2024

Perfluorinated Alkyl Substances (PFAS) from Toxic Release Inventory: PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a per- or polyfluoroalkyl (PFAS) substance included in the U.S. Environmental Protection Agency's (EPA) consolidated PFAS Master List of PFAS Substances. Encompasses Toxics Release Inventory records included in the EPA PFAS Analytic Tools. The EPA's TRI database currently tracks information on disposal or releases of 770 individually listed toxic chemicals and 33 chemical categories from thousands of U.S. facilities and details about how facilities manage those chemicals through recycling, energy recovery, and treatment. This listing includes TRI Reporting Data for calendar years 1987 through 2021 and Preliminary Data for 2022.

Government Publication Date: Sep 20, 2023

PFAS Water Quality Portal Sampling Data: PFAS WATER

This Per- and Poly-Fluoroalkyl Substances (PFAS) Environmental Media Sampling Data is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The Water Quality Portal (WQP), as a cooperative service sponsored by the United States Geological Survey, the EPA, and the National Water Quality Monitoring Council, is part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations, and individuals submit project details and sampling results to this public repository. Limitations: EPA did not carry out the sampling or testing of a majority of the data in the WQP PFAS dataset. EPA can only speak to the accuracy and completeness of the data from projects like the National Aquatic Resource Surveys for which EPA is the data owner/organization. Data may exist within the file on Quality Assurance Project Plans (QAPPs) and the approving agency of the QAPP, if a QAPP is entered.

Government Publication Date: Jul 22, 2024

PFAS TSCA Manufacture and Import Facilities: PFAS TSCA

The U.S. Environmental Protection Agency (EPA) issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. This list is specific only to TSCA Manufacture and Import Facilities with reported per- and poly-fluoroalkyl (PFAS) substances. Data file is sourced from EPA's PFAS Analytic Tools TSCA dataset which includes CDR/Inventory Update Reporting data from 1998 up to 2020. Disclaimer: This data file includes production and importation data for chemicals identified in EPA's CompTox Chemicals Dashboard list of PFAS without explicit structures and list of PFAS structures in DSSTox. Note that some regulations have specific chemical structure requirements that define PFAS differently than the lists in EPA's CompTox Chemicals Dashboard. Reporting information on manufactured or imported chemical substance amounts should not be compared between facilities, as some companies claim Chemical Data Reporting Rule data fields for PFAS information as Confidential Business Information.

Government Publication Date: Jan 5, 2023

PFAS Waste Transfers from RCRA e-Manifest : PFAS E-MANIFEST

This Per- and Poly-Fluoroalkyl Substances (PFAS) Waste Transfers dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. Every shipment of hazardous waste in the U.S. must be accompanied by a shipment manifest, which is a critical component of the cradle-to-grave tracking of wastes mandated by the Resource Conservation and Recovery Act (RCRA). According to the EPA, currently no Federal Waste Code exists for any PFAS compounds. To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: • PFAS • PFOA • PFOS • PERFL • AFFF • GENX • GEN-X (plus the Vermont state-specific waste codes). Limitations: Amount or concentration of PFAS being transferred cannot be determined from the manifest information. Keyword searches may misidentify some manifest records that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS waste transfers.

Government Publication Date: Dec 15, 2024

PFAS Industry Sectors: PFAS IND

This Per- and Poly-Fluoroalkyl Substances (PFAS) Industry Sectors dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The EPA developed the dataset from various sources that show which industries may be handling PFAS including: EPA's Enforcement and Compliance History Online (ECHO) records restricted to potential PFAS-handling industry sectors; ECHO records for Fire Training Sites identified where fire-fighting foam may have been used in training exercises; and 14 CFR Part 139 Airports compiled from historic and current records from the FAA Airport Data and Information Portal. Since July 2006, all certificated Part 139 Airports are required to have fire-fighting foam onsite that meet certain military specifications, which to date have been fluorinated (Aqueous Film Forming Foam). Limitations: Inclusion in this dataset does not indicate that PFAS are being manufactured, processed, used, or released by the facility. Listed facilities potentially handle PFAS based on their industrial profile, but are unconfirmed by the EPA. Keyword searches in ECHO for Fire Training sites may misidentify some facilities and should not be considered to be an exhaustive list of fire training facilities in the U.S.

Government Publication Date: Dec 16, 2024

Hazardous Materials Information Reporting System: HMIRS

The Hazardous Materials Incident Reporting System (HMIRS) database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.

Government Publication Date: May 29, 2024

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department"), Drug Enforcement Administration (DEA), provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Nov 30, 2023

Toxic Substances Control Act: TSCA

The U.S. Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule. The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI). EPA CDR collections occur approximately every four years and reporting requirements change per collection.

Government Publication Date: May 12, 2022

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP

Early in the site cleanup process, the U.S. Environmental Protection Agency (EPA) conducts a search to find the Potentially Responsible Parties (PRPs). The EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site. This listing contains PRPs, Noticed Parties, at sites in the EPA's Superfund Enterprise Management System (SEMS).

Government Publication Date: Nov 20, 2024

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin. Since 2017, the SCRD no longer maintains this data, refer to applicable state source data where available.

Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS

The Integrated Compliance Information System (ICIS) database contains integrated enforcement and compliance information across most of U.S. Environmental Protection Agency's (EPA) programs. The vision for ICIS is to replace EPA's independent databases that contain enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions and a subset of the Permit Compliance System (PCS), which supports the National Pollutant Discharge Elimination System (NPDES). This information is maintained by the EPA Headquarters and at the Regional offices. A future release of ICIS will completely replace PCS and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities that support compliance and enforcement programs, including incident tracking, compliance assistance, and compliance monitoring.

Government Publication Date: Apr 13, 2024

Drycleaner Facilities: FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) data as made available by the U.S. Environmental Protection Agency (EPA), sourced from the ECHO Exporter file. The EPA tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: May 5, 2024

Delisted Drycleaner Facilities: DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

Government Publication Date: May 5, 2024

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DOD) is responsible for an environmental restoration. The FUDS Annual Report to Congress (ARC) is published by the U.S. Army Corps of Engineers (USACE). This data is compiled from the USACE's Geospatial FUDS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) FUDS dataset which applies to the Fiscal Year 2021 FUDS Inventory.

Government Publication Date: May 15, 2023

FUDS Munitions Response Sites: FUDS MRS

Boundaries of Munitions Response Sites (MRS), published with the Formerly Used Defense Sites (FUDS) Annual Report to Congress (ARC) by the U.S. Army Corps of Engineers (USACE). An MRS is a discrete location within a Munitions response area (MRA) that is known to require a munitions response. An MRA means any area on a defense site that is known or suspected to contain unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC). This data is compiled from the USACE's Geospatial MRS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) MRS dataset.

Government Publication Date: May 15, 2023

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 2, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT

This list of flagged pipeline incidents is made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types. Accidents reported on hazardous liquid gravity lines (§195.13) and reporting-regulated-only hazardous liquid gathering lines (§195.15) and incidents reported on Type R gas gathering (§192.8(c)) are not included in the flagged incident file data.

Government Publication Date: May 6, 2024

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) is provided by the United States Department of Labor, Mine Safety and Health Administration (MSHA). This file, which was originally created in the 1970's, contained many Mine-IDs that were invalid. MSHA removes invalid IDs from the MIF upon discovery. MSHA applicable data includes the following: all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970; mine addresses for all mines in the database except for Abandoned mines prior to 1998 from MSHA's legacy system (addresses may or may not correspond with the physical location of the mine itself); violations that have been assessed penalties as a result of MSHA inspections beginning on 1/1/2000; and violations issued as a result of MSHA inspections conducted beginning on 1/1/2000.

Government Publication Date: Feb 5, 2024

Surface Mining Control and Reclamation Act Sites: SMCRA

This inventory of land and water impacted by past mining (primarily legacy coal mining operations) is maintained by the U.S. Department of the Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE), as it provides information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). This inventory contains information on the type and extent of Abandoned Mine Land (AML) Problems, as well as information on the cost associated with the reclamation of those problems. The data is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed. Disclaimer: Per the OSMRE, States and tribes who enter their data into e-AMLIS (AML Inventory System) may truncate their latitude and longitude so the precise location of usually dangerous AMLs is not revealed in an effort to protect the public from searching for these AMLs, most of which are on private property. If more precise location information is needed, please contact the applicable state/tribe of interest.

Government Publication Date: May 20, 2024

Mineral Resource Data System: MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2016

DOE Legacy Management Sites: LM SITES

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) currently manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The LM manages sites with diverse regulatory drivers (statutes or programs that direct cleanup and management requirements at DOE sites) or as part of internal DOE or congressionally-recognized programs, such as but not limited to: Formerly Utilized Sites Remedial Action Program (FUSRAP), Uranium Mill Tailings Radiation Control Act (UMTRCA Title I, Tile II), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Decontamination and Decommissioning (D&D), Nuclear Waste Policy Act (NWPA). This site listing includes data exported from the DOE Office of LM's Geospatial Environmental Mapping System (GEMS). GEMS Data disclaimer: The DOE Office of LM makes no representation or warranty, expressed or implied, regarding the use, accuracy, availability, or completeness of the data presented herein.

Government Publication Date: Dec 12, 2023

Alternative Fueling Stations: ALT FUELS

This list of alternative fueling stations is sourced from the Alternative Fuels Data Center (AFDC). The U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy launched the AFDC in 1991 as a repository for alternative fuel vehicle performance data, which provides a wealth of information and data on alternative and renewable fuels, advanced vehicles, fuel-saving strategies, and emerging transportation technologies. The data includes Biodiesel (B20 and above), Compressed Natural Gas (CNG), Electric, Ethanol (E85), Hydrogen, Liquefied Natural Gas (LNG), Propane (LPG), and Renewable Diesel (R20 and above) fuel type locations.

Government Publication Date: Aug 29, 2024

Superfunds Consent Decrees: CONSENT DECREES

This list of Superfund consent decrees is provided by the Department of Justice, Environment & Natural Resources Division (ENRD) through a Freedom of Information Act (FOIA) applicable file. This listing includes Cases filed since 2010 limited to the following: Consent Decrees for CERCLA or Superfund Sites filed and/or as proposed within the ENRD's Case Management System (CMS); and applicable ENRD's Environmental Defense Section (EDS) CERCLA Cases with "Consent" in History Note. CMS may not reflect the latest developments in a case, nor can the agency guarantee the accuracy of the data. ENRD Disclaimer: Congress excluded three discrete categories of law enforcement and national security records from the requirements of the FOIA; response is limited to those records that are subject to the requirements of the FOIA; however, this should not be taken as an indication that excluded records do, or do not, exist.

Government Publication Date: Jun 26, 2024

Air Facility System: AFS

This EPA retired Air Facility System (AFS) dataset contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners. AFS does not contain data on facilities that are solely asbestos demolition and/or renovation contractors, or landfills. ECHO Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014; the EPA retired this system for Clean Air Act stationary sources and transitioned to ICIS-Air.

Government Publication Date: Oct 17, 2014

Registered Pesticide Establishments: SSTS

This national list of active EPA-registered foreign and domestic pesticide and/or device-producing establishments is based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that each producing establishment must place its EPA establishment number on the label or immediate container of each pesticide, active ingredient or device produced. An EPA establishment number on a pesticide product label identifies the EPA registered location where the product was produced. The list of establishments is made available by the U.S. Environmental Protection Agency (EPA).

Government Publication Date: Feb 29, 2024

Polychlorinated Biphenyl (PCB) Transformers: PCBT

Locations of Transformers Containing Polychlorinated Biphenyls (PCBs) registered with the United States Environmental Protection Agency. PCB transformer owners must register their transformer(s) with EPA. Although not required, PCB transformer owners who have removed and properly disposed of a registered PCB transformer may notify EPA to have their PCB transformer de-registered. Data made available by EPA.

Government Publication Date: Oct 15, 2019

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: May 23, 2024

Power Plants: POWER PLANTS

This list of power plants is provided by the U.S. Energy Information Administration (EIA). The listing includes operable electric generating plants in the United States by energy source, originating from the EIA-860, Annual Electric Generator Report; EIA-860M, Monthly Update to the Annual Electric Generator Report; and EIA-923, Power Plant Operations Report. It includes all operable plants by energy source with a combined nameplate capacity of 1 megawatt or more that are operating, are on standby, or out of service for short- or long-term.

Government Publication Date: Apr 15, 2024

State

Historic Potential Business Activity Risk: HIST RISK

Proprietary list of sites identified as potentially having engaged in business activity that poses a higher-than-normal risk of contamination. Records originate from historical city directories, and are included in this list based on broad business categories Potentially Hazardous Chemical Users and Fuel and Automotive, including but not limited to Dry Cleaners and Fuel Stations, Garages, etc. Inclusion in this listing does not indicate that there is or ever has been contamination; rather, sites are included in this list due to their potential for having engaged in a business activity presenting an elevated risk of contamination. The list was compiled from various city directories including Polks, Millers, Mullin Kille, Interstate Directory, and State Directory Co; spanning roughly 1920s through 1960 depending on information available by city.

Government Publication Date: Jan 1, 1960

Priority Ranking List: PRIORITYCLEAN

The Florida Legislature has established a state-funded program to cleanup properties that are contaminated as a result of the operations of a drycleaning facility or wholesale supply facility (Chapter 376, Florida Statutes). The program is administered by the Florida Department of Environmental Protection (FDEP). The statute was sponsored by the drycleaning industry to address environmental, economic, and liability issues resulting from drycleaning solvent contamination. The program provides limited liability protection to the owner, operator and real property owner of drycleaning or wholesale supply facilities for cleanup of drycleaning solvent contamination if the parties meet the eligibility conditions stated in the law.

Government Publication Date: Jan 16, 2025

Dry Cleaning Facilities: DRYCLEANERS

A listing of dry cleaning facilities registered with the Florida Department of Environmental Protection (FDEP). The information contains facility identification number, site location information, related party (owner) information, and facility type and status. Data is taken from the Storage Tank & Contamination Monitoring database, the registration repository of dry cleaner facility data.

Government Publication Date: Dec 16, 2024

Delisted Dry Cleaning Facilities: DELISTED DRYCLEANERS

List of sites removed from the drycleaners database made available by the Florida Department of Environmental Conservation (DEC).

Government Publication Date: Dec 16, 2024

Historical Dry Cleaners: HISTORICAL DRYC

The Florida Department of Environmental Protection (FDEP) provided this historical database of regulated and non-regulated dry cleaning facilities. These facilities were at one time tracked and registered by the FDEP OCULUS Electronic Document Management System as "drums" in the underground storage tank database.

Government Publication Date: Aug 2, 2013

Oil and Hazardous Materials Incidents: SPILLS

Statewide listing of oil and hazardous materials spills and incidents recorded by the Florida Department of Environmental Protection (FDEP).

Government Publication Date: Dec 6, 2024

Contaminated Sites: DWM CONTAM

Florida Department of Environmental Protection (FDEP) Division of Waste Management (DWM) listing of active or known sites that include sites requiring cleanup but are not actively being worked on due to the agency's lack of funding (primarily petroleum and drycleaning).

Government Publication Date: Jul 14, 2023

Delisted Contaminated Sites: DEL CONTAM SITE

List of sites which were once included on the Florida Department of Environmental Protection (FDEP) Division of Waste Management (DWM)'s Contaminated Sites list. As sites on the Contaminated Sites (CS) list are cleaned up or closed under risk based corrective action, they are removed from the CS list.

Government Publication Date: Sep 30, 2015

Aqueous Film Forming Foam (AFFF): PFAS AFFF

A list of fire fighter training facilities that use or possibly used Aqueous Film Forming Foam (AFFF). This list is made available by the Florida Department of Environmental Protection (DEP).

Government Publication Date: Aug 29, 2024

PFAS Investigation at Federal Facilities: PFAS

List of sites - including Federal Facilities - in Florida at which either a) there has been confirmed or suspected usage of Aqueous Film Forming Foam (AFFF), or b) the Division of Waste Management has identified as a potential source or environmental impact related to per- and polyfluoroalkyl substances (PFAS). The Florida Department of Environmental Protection (DEP) is committed to the protection of the groundwater resources of the state and the public health and safety of residents. The DEP will continue its efforts to investigate and understand PFAS in the environment and the ecological and human health risks associated with PFAS contamination. Listings made available by the Florida Department of Environmental Protection (DEP).

Government Publication Date: Jan 30, 2025

Ground Water Contamination Areas: GW CONTAM

List of areas of known groundwater contamination made available by the Florida Department of Environmental Protection (DEP). 38 counties have been delineated primarily for the agricultural pesticide ethylene dibromide (EDB), and to a much lesser extent, volatile organic and petroleum contaminants. Permitted water wells in these areas must meet specific well construction criteria and water testing prior to well use. This dataset only indicates the presence or absence of specific groundwater contaminants and does not represent all known sources of groundwater contamination in the state of Florida.

Government Publication Date: Jul 12, 2023

Underground Injection Control Wells: UIC

Class I Underground Injection Control (UIC) wells that are currently or were previously active, as well as proposed sites, regulated by the Florida Department of Environmental Protection (FDEP). Class I UIC wells are used to inject nonhazardous waste, hazardous waste (new hazardous waste wells were banned in 1983), or municipal waste below the lowermost underground source of drinking water.

Government Publication Date: Jan 31, 2025

Well Surveillance Program Facilities: WELL SURVEILLANCE

List of facilities made available by the Florida Health Well Surveillance group. The Well Surveillance group manages several programs to identify and monitor areas in Florida where contaminated drinking water is suspected and may pose a threat to public health. The section coordinates with the County Health Departments (CHDs) to locate potable wells and conduct water sampling for contaminants of concern. The Well Surveillance Section is composed of the State Underground Petroleum Environmental Response Act (SUPER Act), Drinking Water Toxics Program (Toxics), Drycleaner Solvent Cleanup Program (DSCP). Includes locations of known cattle dipping vats.

Government Publication Date: Jan 28, 2025

Cattle Dip Vats: CDV SOUTHEAST

A list of Cattle Dip Vats in Southeast Florida made available by the Florida Department of Environmental Protection.

Government Publication Date: Jan 19, 2017

Tier 2 Report: TIER 2

A list of Tier 2 facilities in the state of Florida. The list tracks the inventory of chemicals within a particular facility. This list is provided by the Florida Division of Emergency Management.

Government Publication Date: Apr 2, 2024

Delisted County Records: DELISTED COUNTY

Records removed from county databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: Aug 27, 2024

Tribal

No Tribal additional environmental record sources available for this State.

County

No County additional environmental databases were selected to be included in the search.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

APPENDIX C

Appendix C

Photo 1

Roadside swales and culvert adjacent to the western boundary of the property.

Photo 2

Gas line adjacent to the western boundary of the property.

Photo 3

Buried cable lines adjacent to the western boundary of the property.

Photo 4

Upland habitat is located onsite.

Photo 5

Rip rap discarded on site, found mostly in this location.

Photo 6

Plastic tarps are discarded within the project limits.

Photo 7

Trash and debris from a homeless encampment on the southern side of the property.

Photo 8

Pallets and other materials discarded within the project limits.

Photo 9

Paved road along the eastern boundary of the project site.

Photo 10

Upland habitat within the project limits.

Photo 11

Stormwater pond is located along the western boundary of the project site.

Photo 12

Concrete structure located within the stormwater pond.

APPENDIX D

HISTORICAL AERIALS

Project Property: Minneola HWY 27
Minneola HWY 27
Clermont FL

Project No: 1247.01.25

Requested By: Ecological Consulting Solutions, Inc.

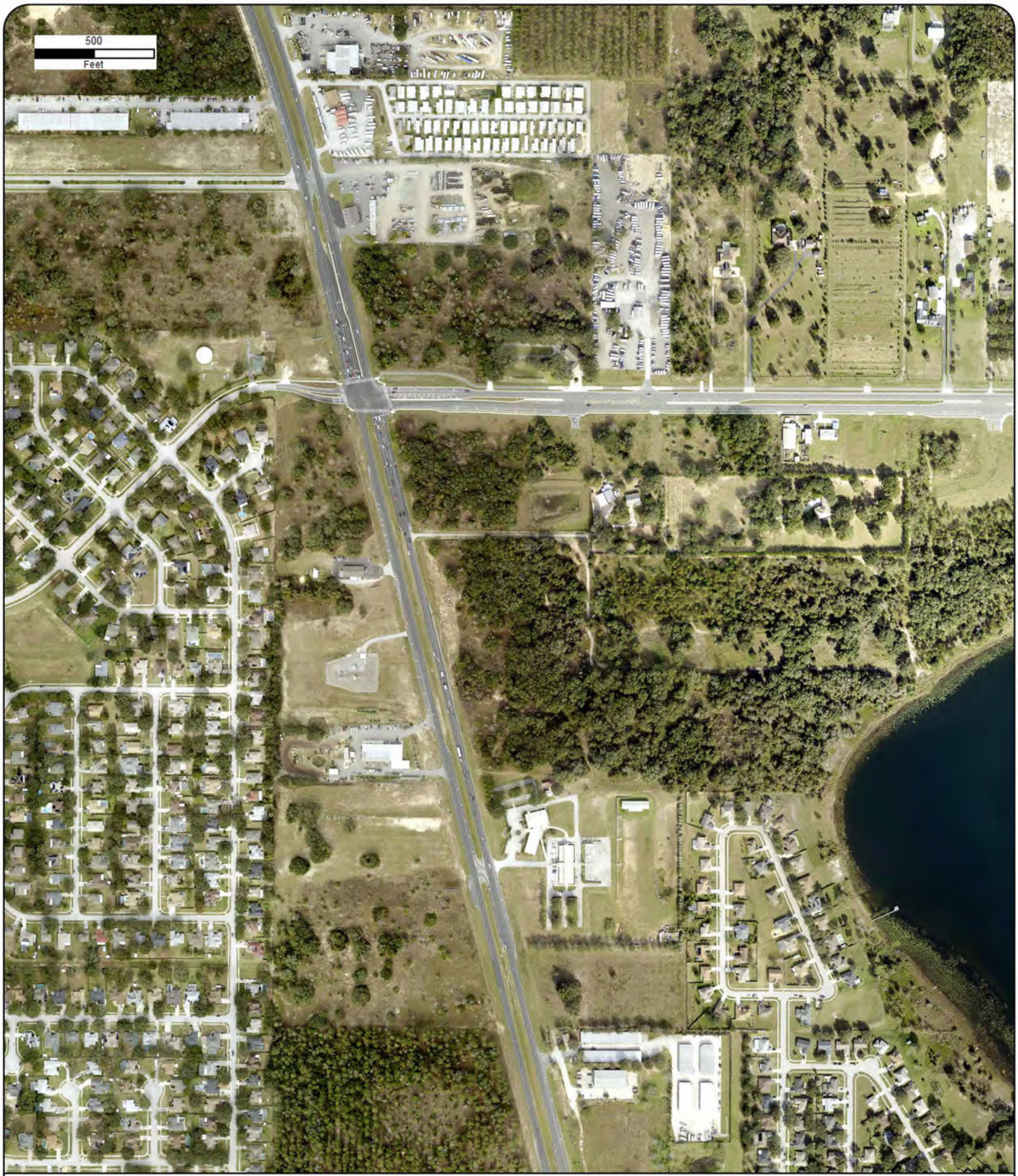
Order No: 25030401068

Date Completed: March 07,2025

Aerial Maps included in this report are produced by the sources listed above and are to be used for research purposes including a phase I report. Maps are not to be resold as commercial property. ERIS provides no warranty of accuracy or liability. The information contained in this report has been produced using aerial photos listed in above sources by ERIS Information Inc. (in the US) and ERIS Information Limited Partnership (in Canada), both doing business as 'ERIS'. The maps contained in this report do not purport to be and do not constitute a guarantee of the accuracy of the information contained herein. Although ERIS has endeavored to present information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

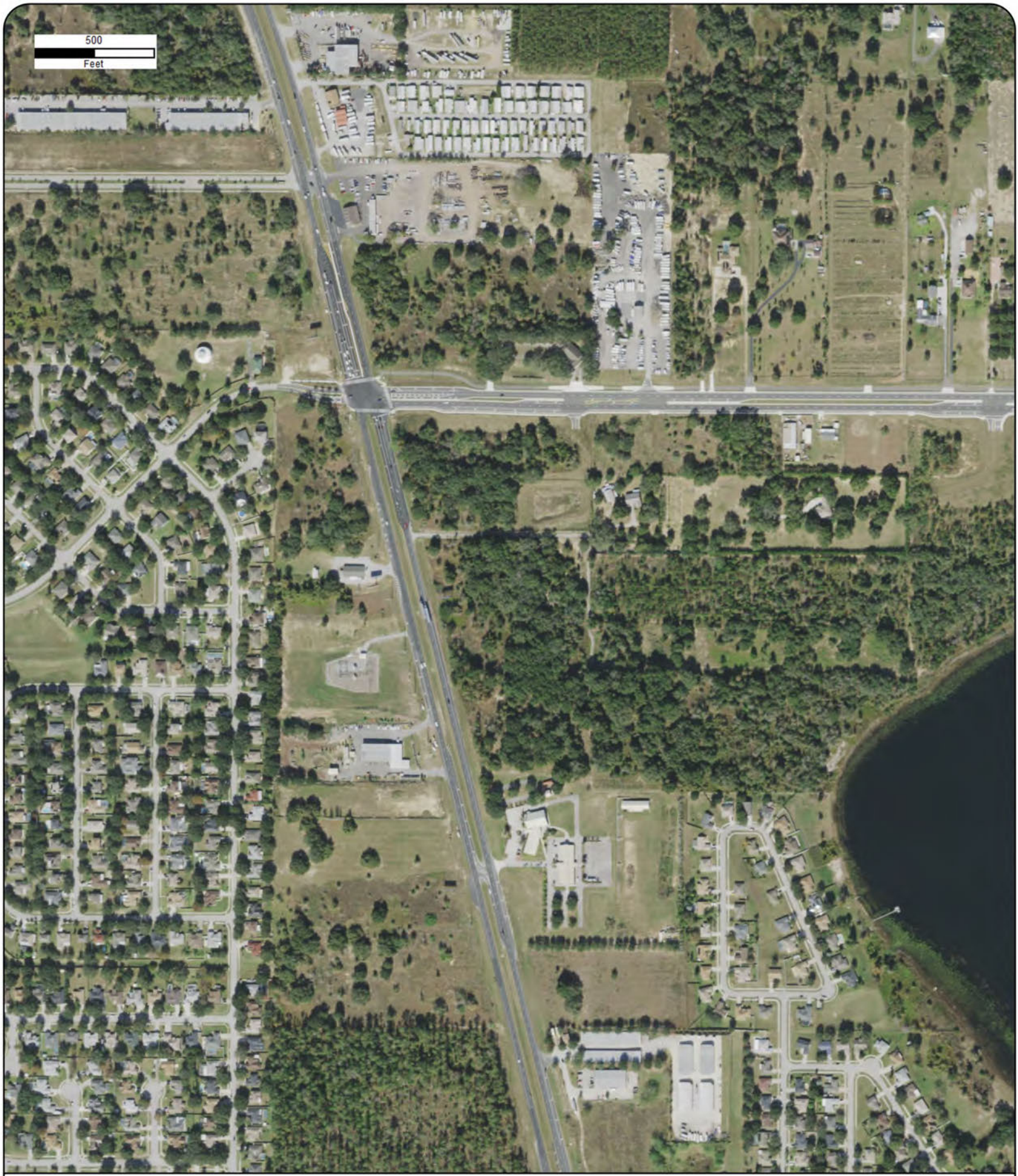
Date	Source	Scale	Comments
2023	Maxar Technologies	1" = 500'	
2021	United States Department of Agriculture	1" = 500'	
2019	United States Department of Agriculture	1" = 500'	
2017	United States Department of Agriculture	1" = 500'	
2015	United States Department of Agriculture	1" = 500'	
2013	United States Department of Agriculture	1" = 500'	
2010	United States Department of Agriculture	1" = 500'	
2007	United States Department of Agriculture	1" = 500'	
2006	United States Department of Agriculture	1" = 500'	
2005	United States Department of Agriculture	1" = 500'	
1999	United States Geological Survey	1" = 500'	
1994	United States Geological Survey	1" = 500'	
1985	Florida Department of Transportation	1" = 500'	
1983	Florida Department of Transportation	1" = 500'	
1974	Agricultural Stabilization & Conserv. Service	1" = 500'	
1966	United States Geological Survey	1" = 500'	
1958	Agricultural Stabilization & Conserv. Service	1" = 500'	
1952	United States Geological Survey	1" = 500'	
1947	Agricultural Stabilization & Conserv. Service	1" = 500'	
1941	Agricultural Stabilization & Conserv. Service	1" = 500'	



Year: 2023
Source: MAXAR
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068



Year: 2021
Source: USDA
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

Year: 2019
Source: USDA
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

Year: 2017
Source: USDA
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

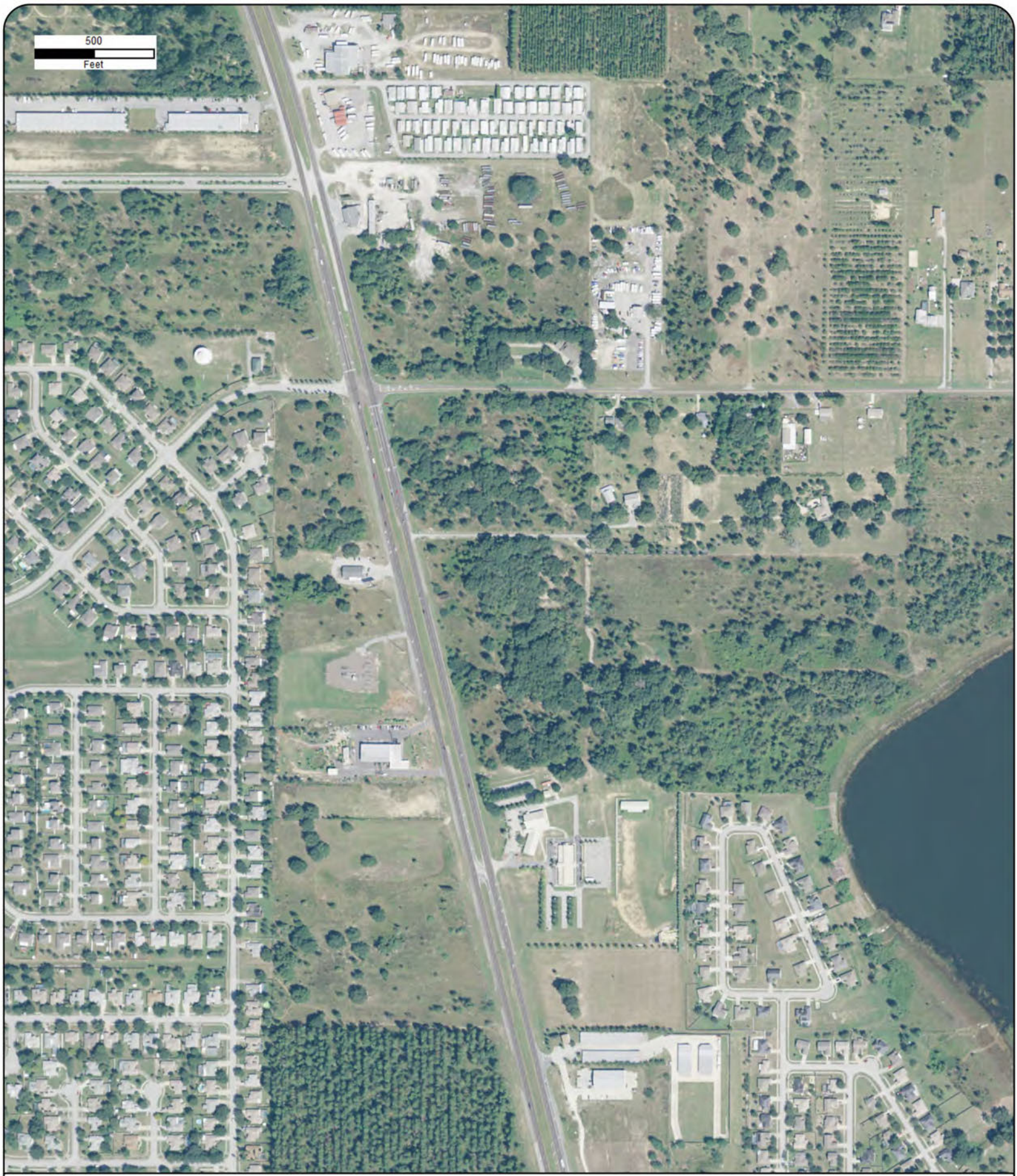
Order No: 25030401068

ERIS

Year: 2015
Source: USDA
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

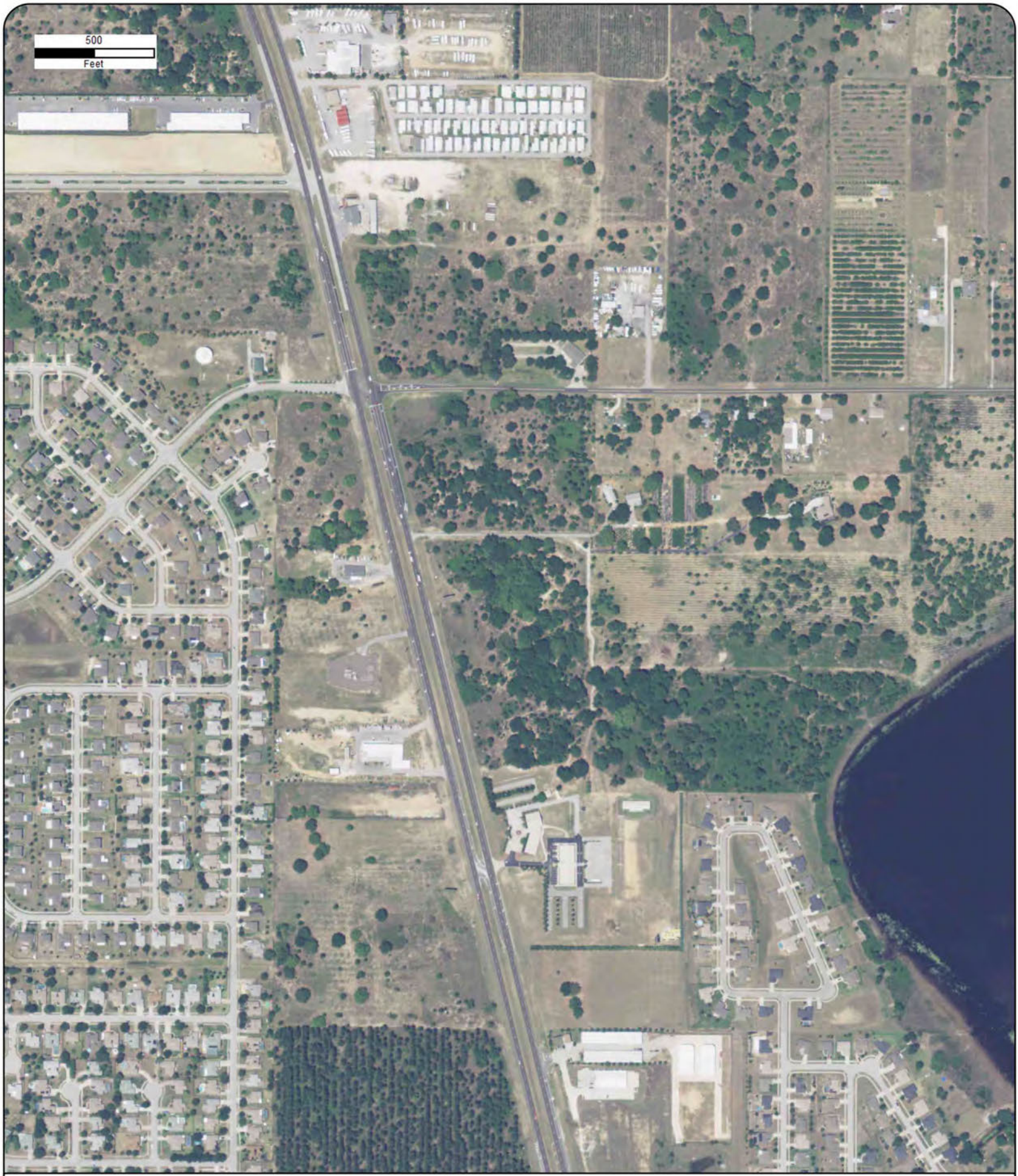


Year: 2013
Source: USDA
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

ERIS

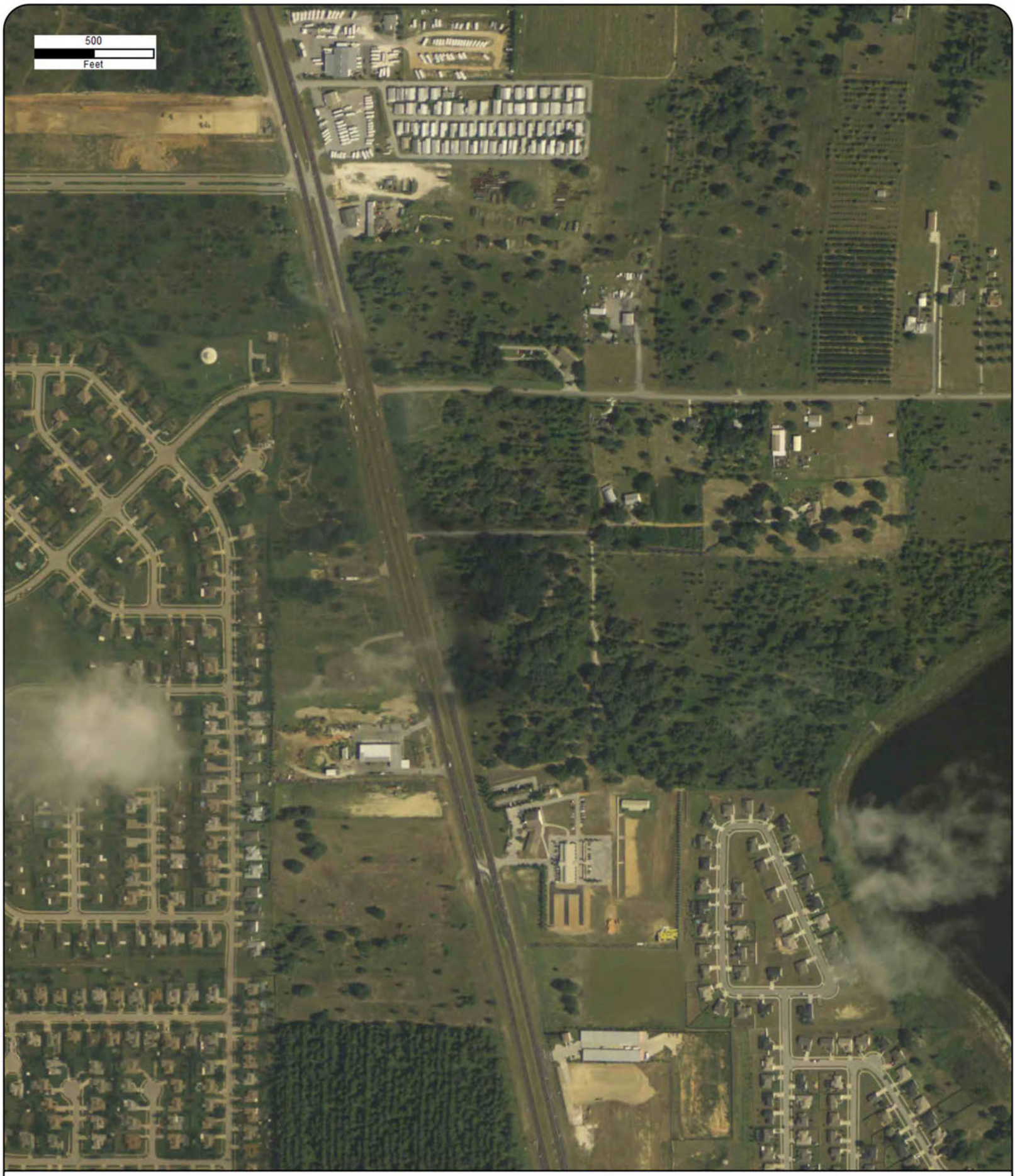


Year: 2010
Source: USDA
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

ERIS



Year: 2007
Source: USDA
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

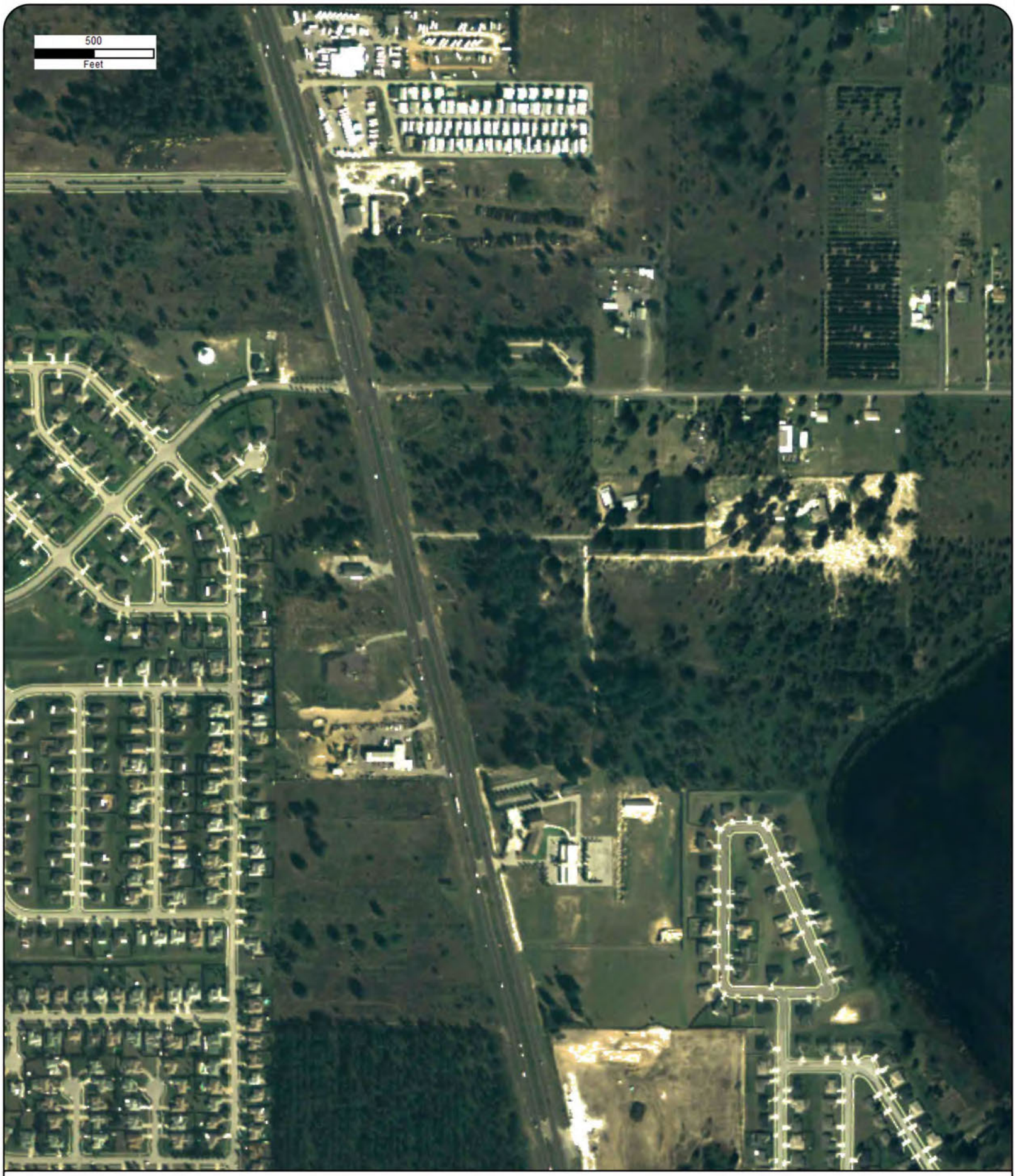
Order No: 25030401068

ERIS

Year: 2006
Source: USDA
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068



Year: 2005
Source: USDA
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

ERIS

Year: 1999
Source: USGS
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

Year: 1994
Source: USGS
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

ERIS

Year: 1985
Source: FDOT
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

Year: 1983
Source: FDOT
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

Year: 1974
Source: ASCS
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

Year: 1966
Source: USGS
Scale: 1" = 500'
Comment:

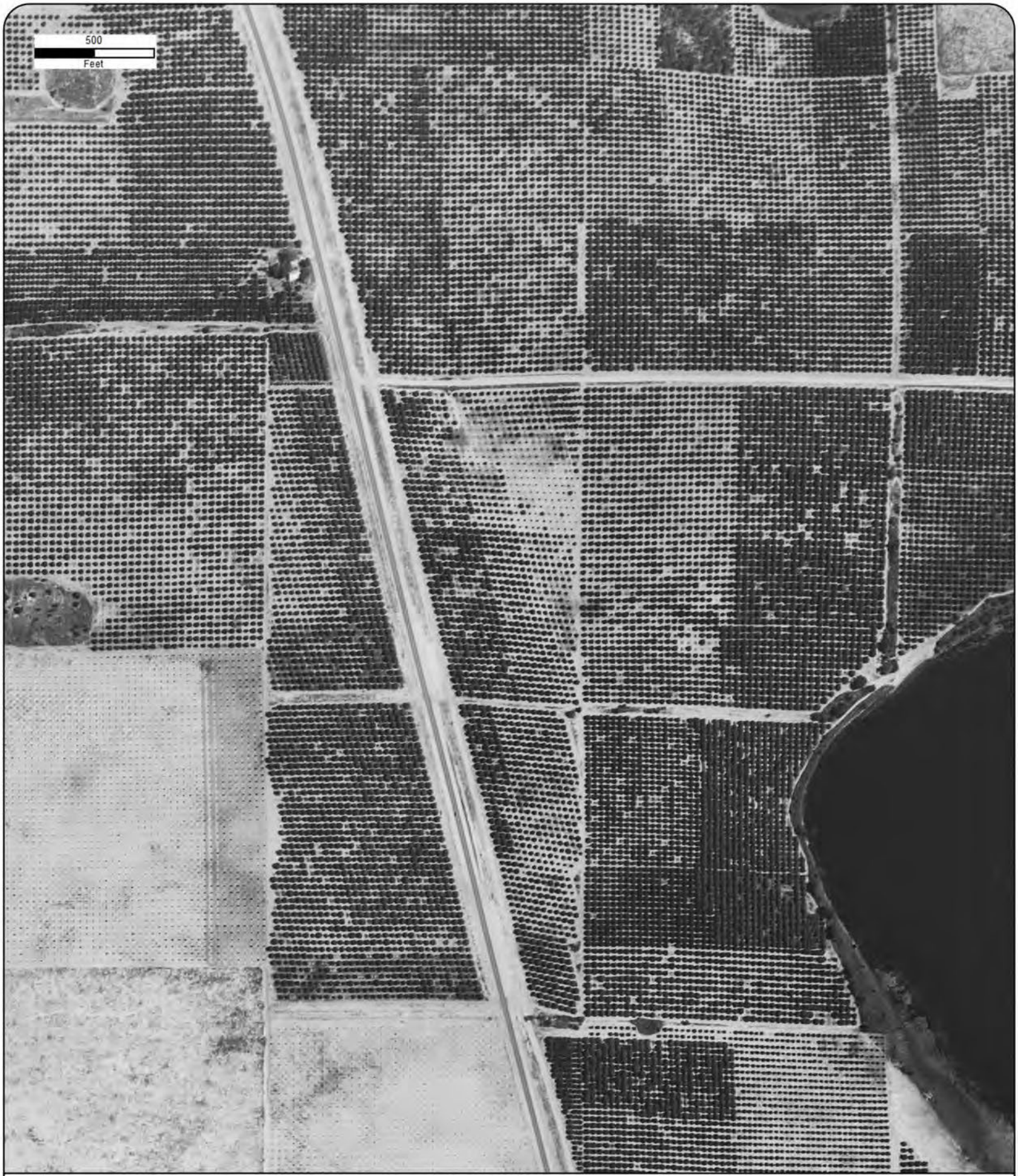
Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

Year: 1958
Source: ASCS
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068



Year: 1952
Source: USGS
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

Year: 1947
Source: ASCS
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

ERIS

Year: 1941
Source: ASCS
Scale: 1" = 500'
Comment:

Address: Minneola HWY 27, Clermont, FL
Approx Center: -81.75286338,28.59837579

Order No: 25030401068

ERIS

July 2025

GREENBURG GIBBONS LIGHT INDUSTRIAL

Section 11200000 at Mile Post 18.365

MINNEOLA, FLORIDA

Florida Department of Transportation

Access Connection Permit Traffic Study

luke transportation engineering consultants

LTEC # 25-0501

GREENBURG GIBBONS LIGHT INDUSTRIAL

Section 11200000 at Mile Post 18.365

T MINNEOLA, FLORIDA

Florida Department of Transportation

Access Connection Permit Traffic Study

Prepared for:

Greenberg Gibbons Properties
706 Giddings Avenue
Annapolis, MD 21401

Prepared by:

LUKE TRANSPORTATION ENGINEERING CONSULTANTS, INC.
P. O. Box 941556
Maitland, Florida 32794-1556
407-423-8055
www.Ltec-FL.com

July 2025

PROFESSIONAL ENGINEERING CERTIFICATE

I hereby certify that I am a registered professional engineer in the State of Florida practicing with Luke Transportation Engineering Consultants, a corporation authorized to operate as an engineering business (#EB-0007429), by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluation, findings, opinions, conclusions, or technical advice hereby reported for

PROJECT: Greenberg Gibbons Light Industrial

LOCATION: US 27/SR 25, Minneola, Florida

CLIENT: Greenberg Gibbons Properties

I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

NAME: J. Anthony Luke, P.E.

P.E. NO.: 42642

DATE: July 24, 2025

SIGNATURE:

JOHN ANTHONY LUKE LICENSE No 42642 STATE OF FLORIDA PROFESSIONAL ENGINEER

TABLE OF CONTENTS

INTRODUCTION 1

Purpose 1
Project Description 1
Study Documentation 1

EXISTING ROADWAYS AND TRAFFIC CONDITIONS 4

Programmed/Planned Roadway Improvements 4
Multimodal Analysis 4

PROPOSED DEVELOPMENT 7

Trip Generation 7
Trip Distribution 7
Roadway Access Classification 11
Florida DOT Connection Category 11

PROJECTED TRAFFIC TRANSPORTATION ASSESSMENT 12

Intersection Analysis 12
Project Access Auxiliary Turn Lanes 12

STUDY CONCLUSIONS 16

APPENDIX 17

Appendix A – Existing Traffic Data 18
Appendix B – Existing Synchro Worksheets 24
Appendix C – Lake County CMP Database Worksheet 35
Appendix D – 2027 Traffic Volumes Projection Worksheets 37
Appendix E – 2027 Synchro 12 Worksheets 42
Appendix F – Auxiliary Turn Lane Worksheets 55

FIGURES

Figure 1 - Site Location 2
Figure 2 - Conceptual Site Plan 3
Figure 3 - Existing 2025 A.M./P.M. Peak Hour Traffic Volumes 5
Figure 4 – CFRPM V7 Model 2030 Project Trip Distribution.....8
Figure 5 – Study Intersections Directional Project Trip Distribution.....9
Figure 6 - A.M. and P.M. Project Trips 10
Figure 7 – Projected 2027 A.M. Peak Hour Traffic Volumes.....13
Figure 8 – Projected 2027 P.M. Peak Hour Traffic Volumes.....14

TABLES

Table 1 – Study Intersection Existing (2025) LOS.....6
Table 2 - Estimated Trip Generation.....7
Table 3 - Study Intersections Projected (2027) Build-out LOS 15

INTRODUCTION

Purpose

The traffic study was undertaken to provide the required traffic data pursuant to the Florida Department of Transportation (FDOT) Rule Chapter 14-97: State Highway Connection Permits for the property located in the southeast quadrant of US 27/SR 25 Cindy's Showroom Drive (Intersection #2). **Figure 1** shows the location of the Greenberg Gibbons Light Industrial development site. Adjacent to the project, US 27/SR 25 is a four-lane divided north-south roadway adjacent to the west side of the proposed development site.

The proposed Greenberg Gibbons Light Industrial Site will have a proposed access connection on US 27/SR 25 on Section 11200000 at Mile Post 18.365. The build-out of the development is expected to occur by the end of 2027.

Project Description

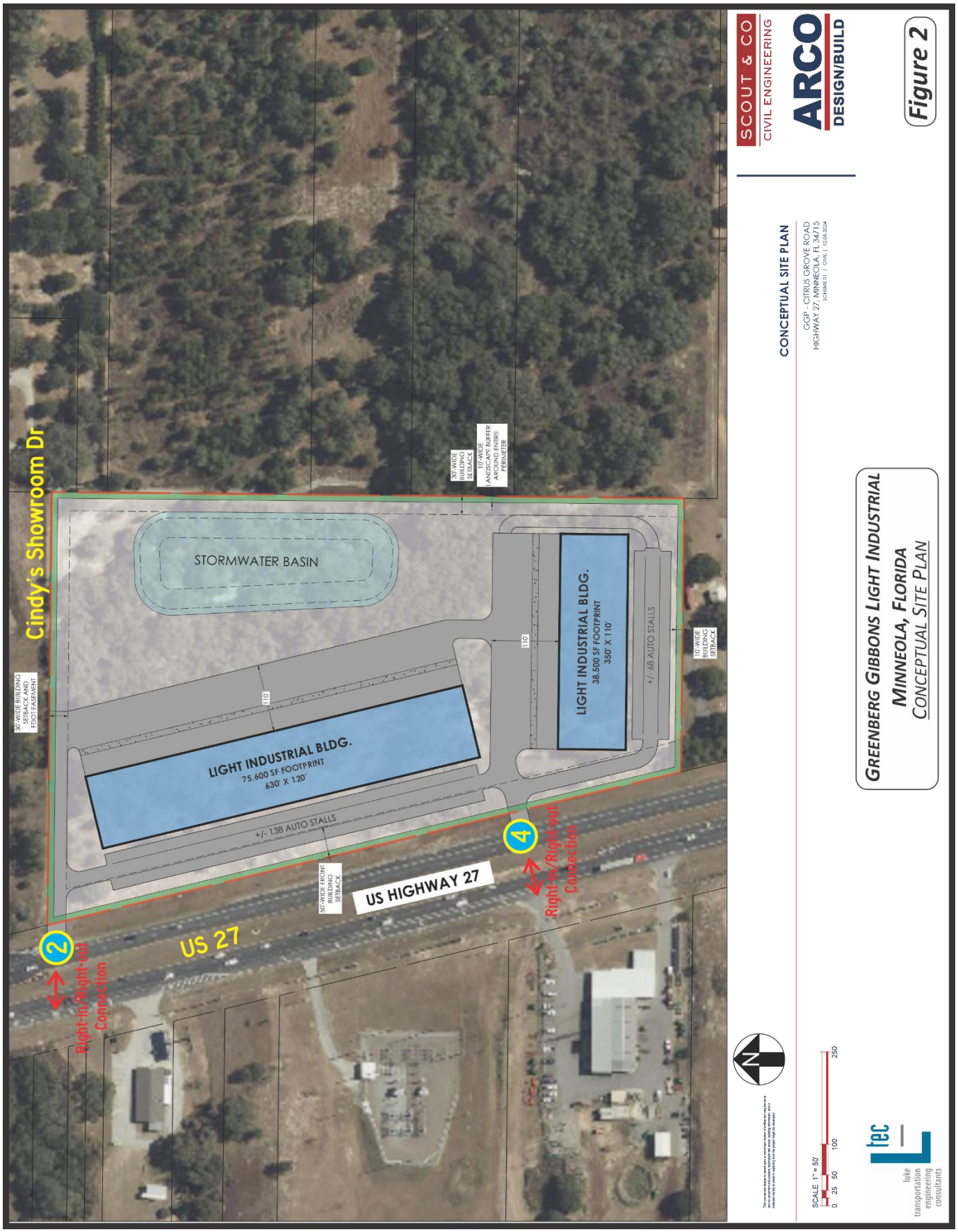
The proposed Project ±13.4-acre development site will consist of 114,100 square feet (SF) of light industrial space in two buildings (75,600 SF and 38,500 SF). The development site will be located on the east side of US 27/SR 25 in Minneola, Florida. **Figure 2** shows a conceptual site plan layout. One Project access connection driveway onto US 27/SR 25 is proposed. It will be a right-in/right-out access connection.

Study Documentation

This report provides the necessary traffic data and analysis consistent with FDOT's Rule 14-94.003(1)(i) for the Connection Permit Application to support the proposed access plan. The methodology used for this study is consistent with the FDOT driveway access analysis requirements and standards. The study included the following components:

- Data Collection (June 17, 2025)
  - US 27/SR 25 and Oak Valley Boulevard/Citrus Grove Drive (Intersection #1),
  - US 27/SR 25 and Cindy's Showroom Drive (Intersection #2),
  - US 27/SR 25 and Open Baptist Church (Intersection #3), and
  - US 27/SR 25 and Project Entrance (Intersection #4).
- Analysis of Intersection Operations, and
- FDOT Access Connection Permit Analysis.

Oak Valley Blvd
Citrus Grove Rd
Legend:
1 Study Intersections
Cindy's Showroom Dr
US-27/SR 25
Site
Open Door Baptist Church
GREENBERG GIBBONS LIGHT INDUSTRIAL
MINNEOLA, FLORIDA
SITE LOCATION
Figure 1


Cindy's Showroom Dr
STORMWATER BASIN
LIGHT INDUSTRIAL BLDG.
75,600 SF FOOTPRINT
630' X 120'
LIGHT INDUSTRIAL BLDG.
38,500 SF FOOTPRINT
350' X 110'
+/- 138 AUTO STALLS
+/- 68 AUTO STALLS
US HIGHWAY 27
US 27
Right-in/Right-out Connection
Right-in/Right-out Connection
50'-WIDE FRONT BUILDING SETBACK
30'-WIDE BUILDING SETBACK AND FDOT EASEMENT
30'-WIDE BUILDING SETBACK
10'-WIDE LANDSCAPE BUFFER AROUND ENTIRE PERIMETER
10'-WIDE BUILDING SETBACK
110'
110'
SCOUT & CO
CIVIL ENGINEERING
ARCO
DESIGN/BUILD
Figure 2
CONCEPTUAL SITE PLAN
GGP - CITRUS GROVE ROAD
HIGHWAY 27, MINNEOLA, FL 34715
SCHEME 01 | CIVIL | 12.06.2024
GREENBERG GIBBONS LIGHT INDUSTRIAL
MINNEOLA, FLORIDA
CONCEPTUAL SITE PLAN
N
SCALE 1" = 50'
0 25 50 100 250
ltec
luke transportation engineering consultants

EXISTING ROADWAYS AND TRAFFIC CONDITIONS

The following section documents the existing traffic operation in the vicinity of the proposed Greenberg Gibbons Light Industrial property located in the southeast quadrant of US 27/SR 25 and Cindy's Showroom Drive. The study intersections adjacent to the site, existing traffic, and the relationship of the site to the access driveway is discussed below. The purpose of this survey was to obtain information on the physical and traffic characteristics of these facilities.

Existing traffic volume data at the study intersections is based on turning movement counts collected on Tuesday, June 17, 2025. See **Appendix A** for all the turning movement count summaries with the seasonally adjusted FDOT Lake County peak season factor. **Figure 3** shows the seasonally adjusted existing A.M. and P.M. peak hour traffic volumes at the study intersections.

The study intersections were analyzed under existing conditions using the procedures of the ***Highway Capacity Manual, 7th Edition*** for signalized and unsignalized intersections. This analysis used existing traffic volumes and existing geometric conditions. **Table 1** includes the summary results of the intersection analysis. The analysis worksheets are included in **Appendix B**. As can be seen, all of the existing study intersections currently operate at satisfactory levels of service.

Programmed/Planned Roadway Improvements

A review of the FDOT five-year work plan did not show any programmed roadway improvement for US 27/SR 25 in the vicinity of the proposed development.

Multimodal Analysis

US 27/SR 25 currently has existing bicycle lanes on both sides of the roadway. No sidewalks currently exist on either side of US 27/SR 25 between the Oak Valley Boulevard/Citrus Grove Road intersection on the north to Lake Minneola Shores/Southern Breeze Drive intersection on the south.

Pedestrian crosswalks and pedestrian signals are provided on all four approaches to the study intersection of US 27/SR 25 and Oak Valley Boulevard/Citrus Grove Drive (Intersection #1). All four of the crosswalks are school crosswalks (i.e., ladder).

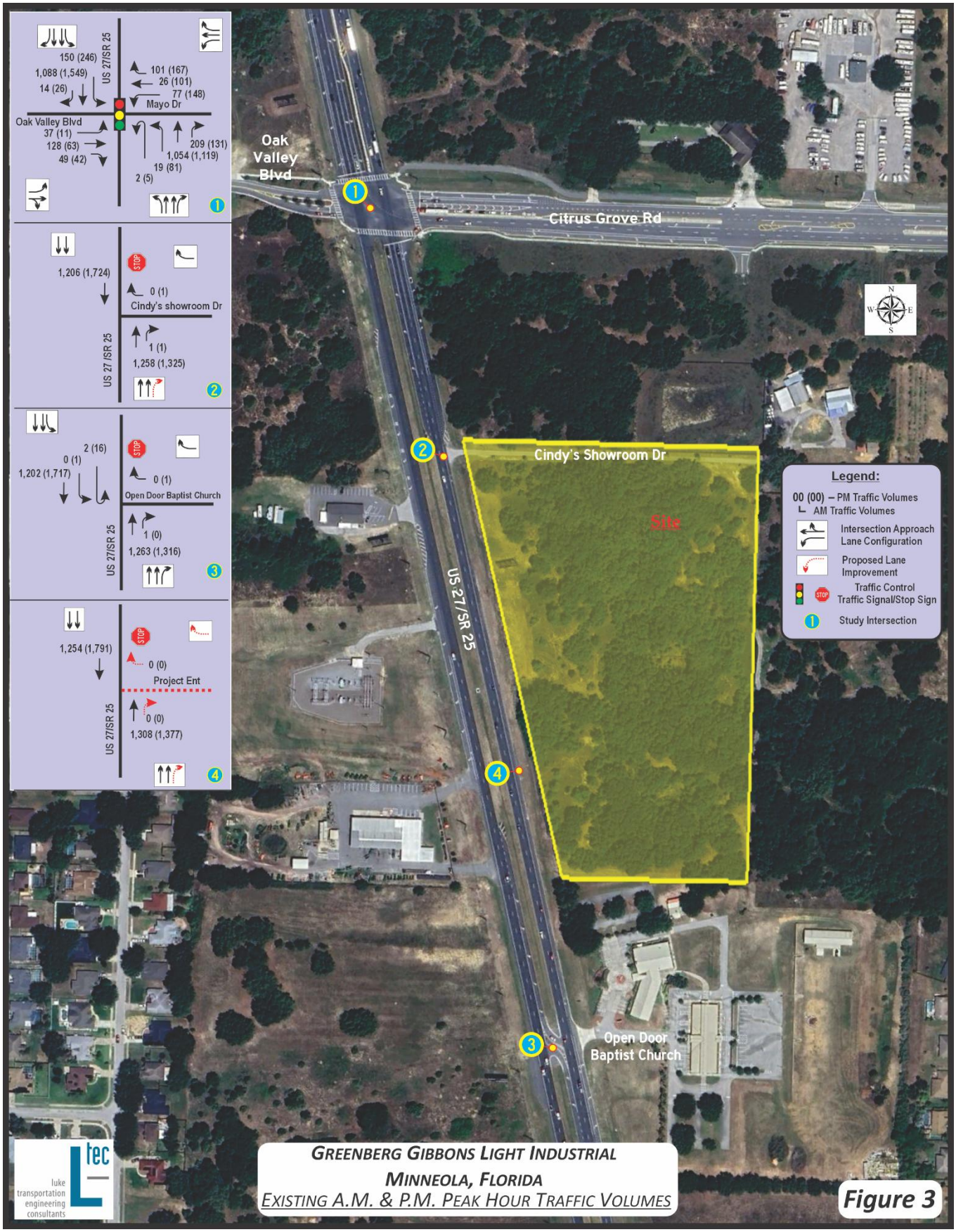

150 (246)
1,088 (1,549)
14 (26)
US 27/SR 25
101 (167)
26 (101)
77 (148)
Mayo Dr
Oak Valley Blvd
37 (11)
128 (63)
49 (42)
209 (131)
1,054 (1,119)
19 (81)
2 (5)
1
1,206 (1,724)
0 (1)
Cindy's showroom Dr
1 (1)
1,258 (1,325)
US 27 /SR 25
2
2 (16)
0 (1)
1,202 (1,717)
0 (1)
Open Door Baptist Church
1 (0)
1,263 (1,316)
US 27/SR 25
3
1,254 (1,791)
0 (0)
Project Ent
0 (0)
1,308 (1,377)
US 27/SR 25
4
Oak Valley Blvd
Citrus Grove Rd
Cindy's Showroom Dr
Site
US 27/SR 25
Open Door Baptist Church
Legend:
00 (00) – PM Traffic Volumes
AM Traffic Volumes
Intersection Approach Lane Configuration
Proposed Lane Improvement
Traffic Control Traffic Signal/Stop Sign
Study Intersection
luke transportation engineering consultants
GREENBERG GIBBONS LIGHT INDUSTRIAL
MINNEOLA, FLORIDA
EXISTING A.M. & P.M. PEAK HOUR TRAFFIC VOLUMES
Figure 3

TABLE 1

Study Intersections Existing (2025) Level of Service

Approach / Movement		Lanes	Turn Lane Length	Traffic Control	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGrp LOS	95th %ile Queue (Feet)	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGrp LOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
1 - US 27 (NB/SB) and Oak Valley Boulevard (EB)/Citrus Grove Road (WB)												
EB	Left	1	75		39.4	0.14	D	49	45.3	0.06	D	21
	Thru	1			54.1	0.83	D		54.9	0.70	D	
	Thru	>										
WB	Left	1	350		40.3	0.44	D	89	43.7	0.60	D	150
	Thru	1			40.9	0.11	D		42.8	0.36	D	
	Right	1	355		44.6	0.48	D	11	51.0	0.71	D	63
NB	Left	1	490		64.3	0.56	E	45	121.3	0.93	F	178
	Thru	2			22.8	0.65	C		26.1	0.71	C	
	Right	1	490		17.5	0.29	B	45	17.6	0.19	B	19
SB	Left	2	575		54.1	0.72	D	98	59.9	0.80	E	146
	Thru	2			19.4	0.62	B		32.0	0.89	C	
	Right	1	565		12.1	0.02	B	0	13.8	0.03	B	0
Intersection Delay & LOS					26.5		C		35.9		D	
Approach / Movement		Lanes	Turn Lane Length	Traffic Control	Control Delay (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)	Control Delay (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
2 - US 27/SR25 (NB/SB) and Cindy's Showroom Drive (WB)												
WB	Right	1		STOP	0.0	0.000	A	0	14.3	0.003	B	0
NB	Thru	2		Free Flow								
	Right	>										
SB	Thru	2		Free Flow								
3 - US 27/SR 25 (NB/SB)) and Open Baptist Church (WB)												
WB	Right	1		STOP	0.0	0.000	A	0	14.2	0.003	B	0
NB	Thru	2		Free Flow								
	Right	1	380									
SB	Left	1	545	Free Flow	12.3	0.00	B	0	12.5	0.04	B	3
	Thru	2										
	Right	1										

Luke Transportation Engineering Consultants, Inc., 2025

PROPOSED DEVELOPMENT

The proposed Project ±13.4-acre development site will consist of 114,100 square feet (SF) of light industrial space in two buildings (75,600 SF and 38,500 SF). To determine the traffic impact of this development, an analysis of its trip generation characteristics was made. This included the determination of the increase in trips to be generated by the proposed development.

Trip Generation

The *11th Edition of the ITE Trip Generation Report* was used for the trip generation of proposed development land uses. The trip generation calculation for the proposed Build-out land use scenario is summarized in **Table 2**. No adjustments have been taken for internal capture or pass-by capture. The proposed development site will generate 556 daily trips, 84 New A.M. peak hour trips and 74 New P.M. peak hour trips. The proposed light industrial site will also generate 29 daily truck trips, which are included in the 556 daily trips.

TABLE 2
Estimated Trip Generation (1)

Land Use	Size	ITE Code (2)	Trip Generation Rates							Traffic Volumes						
				A.M. Peak Hour			P.M. Peak Hour				A.M. Peak Hour			P.M. Peak Hour		
			Daily	Total	Enter	Exit	Total	Enter	Exit	Daily	Total	Enter	Exit	Total	Enter	Exit
General Light Industrial	114,100 SF	110 / R	4.87	0.74	0.65	0.09	0.65	0.09	0.56	556	84	74	10	74	10	64

Estimated Trip Generation - Trucks (1)

Land Use	Size	ITE Code (2)	Trip Generation Rates							Traffic Volumes						
				A.M. Peak Hour			P.M. Peak Hour				A.M. Peak Hour			P.M. Peak Hour		
			Daily	Total	Enter	Exit	Total	Enter	Exit	Daily	Total	Enter	Exit	Total	Enter	Exit
General Light Industrial	114,100 SF	110 / R	0.25	0.01	0.01	0.00	0.01	0.01	0.00	29	1	1	0	1	1	0
Truck Percentage of Total Vehicles										**5.2%**	**1.2%**	**1.4%**	**0.0%**	**1.4%**	**10.0%**	**0.0%**

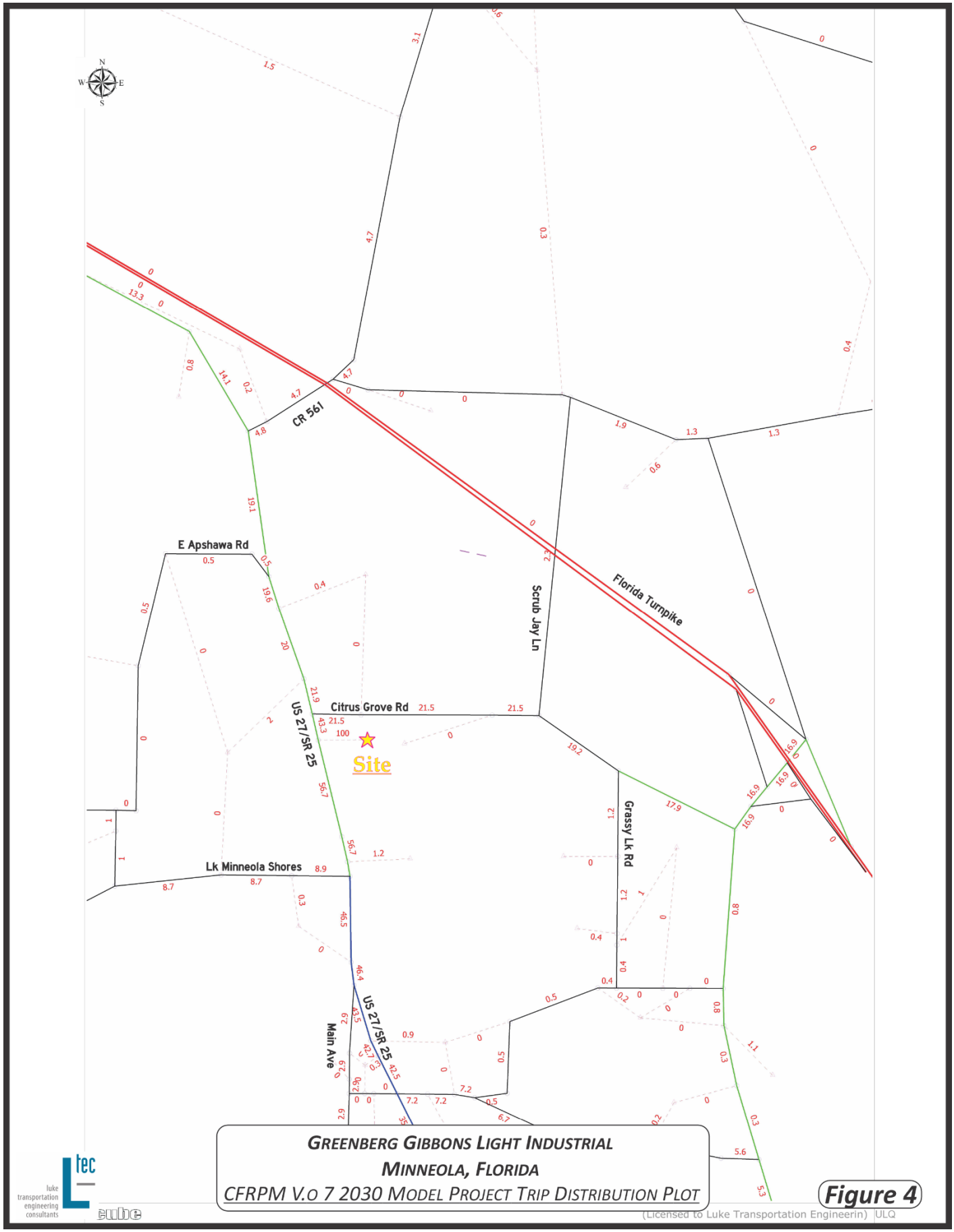
(1) Trip generation calculations from 11th Edition of ITE Trip Generation Report., 2021
(2) ITE Land Use Code Number / E = Fitted Curve Equation ($R^2 \geq 0.75$) or R = Average Trip Rate.

ITE Land Use Code 110 - Vehicles		*ITE Land Use Code 110 - Trucks*	
*Daily - T = 4.87 * (X), Enter 50%/Exit 50% (R^2 = 0.61)*	*X = KSF*	*Daily - T = .25 * (X), Enter 50%/Exit 50% (R^2 = ***)*	*X = KSF*
*A.M. Peak Hour - T = 0.74 * (X), Enter 88%/Exit 12% (R^2 = 0.68)*		*A.M. Peak Hour - T = 0.01 * (X), Enter 60%/Exit 40% (R^2 = ***)*	
*P.M. Peak Hour - T = 0.65 * (X), Enter 14%/Exit 86% (R^2 = 0.55)*		*P.M. Peak Hour - T = 0.01 * (X), Enter 50%/Exit 50% (R^2 = ***)*	

Luke Transportation Engineering Consultants, Inc., 2025

Trip Distribution

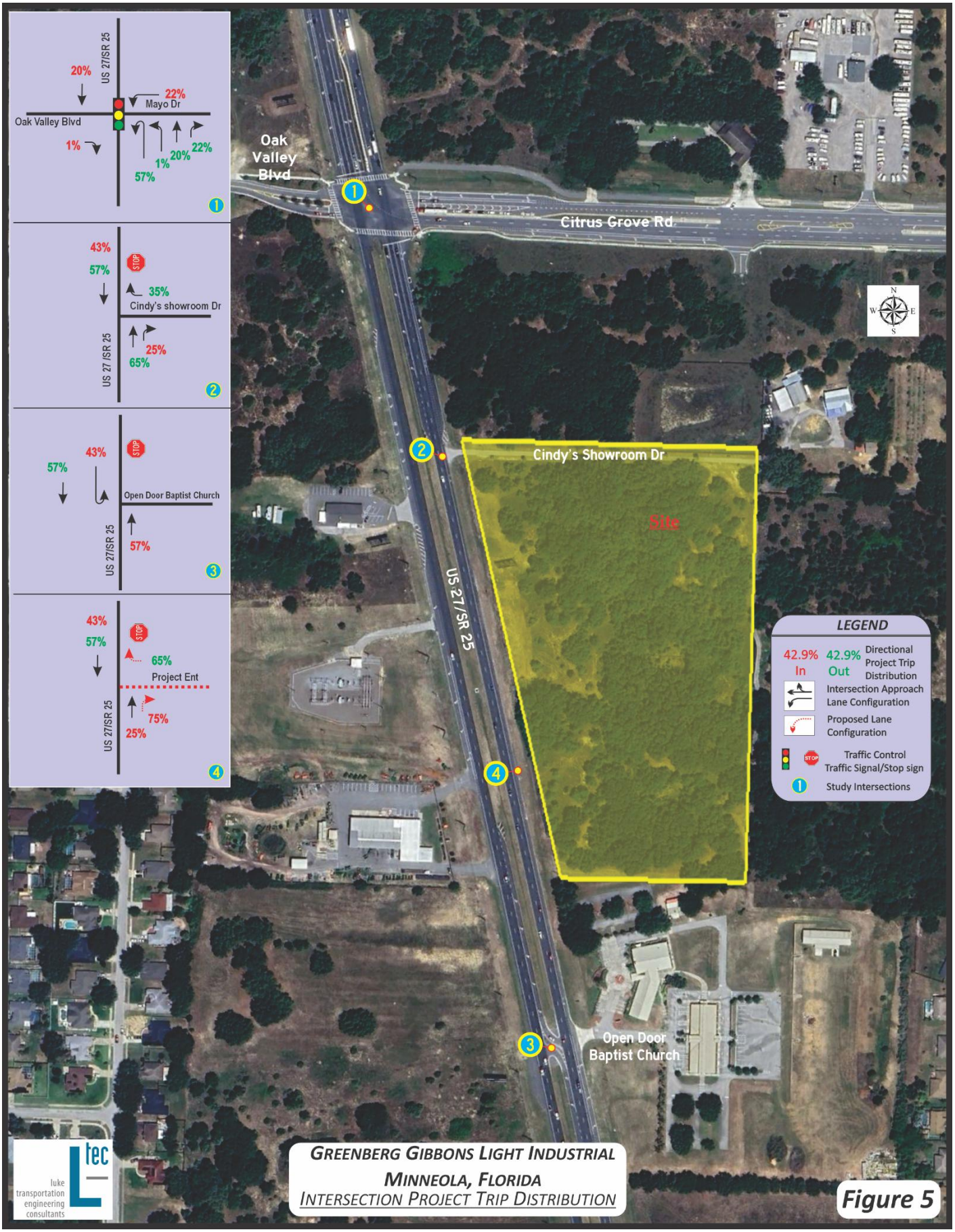
Project trip distribution and assignment of Greenberg Gibbons Light Industrial development traffic to the study roadways and study intersections was based upon an FSUTMS CFRPM 7.0 Model 2030 assignment. The model network included all planned and programmed roadways and improvements within the impact area. The socioeconomic data was updated to reflect the proposed development in a separate traffic zone. Subsequently, a selected zone assignment was performed to determine distribution of site trips in the impact area to the area roadways. **Figure 4** shows the model Project trip distribution on the model roadway segments. Using the model Project trip distribution and a review of existing travel patterns, the Project study intersections directional Project trip distribution was developed. **Figure 5** presents the Project trip distribution to the study intersections utilized in the analysis. The A.M. and P.M. Project trip assignments for the study intersections are shown in **Figure 6**.

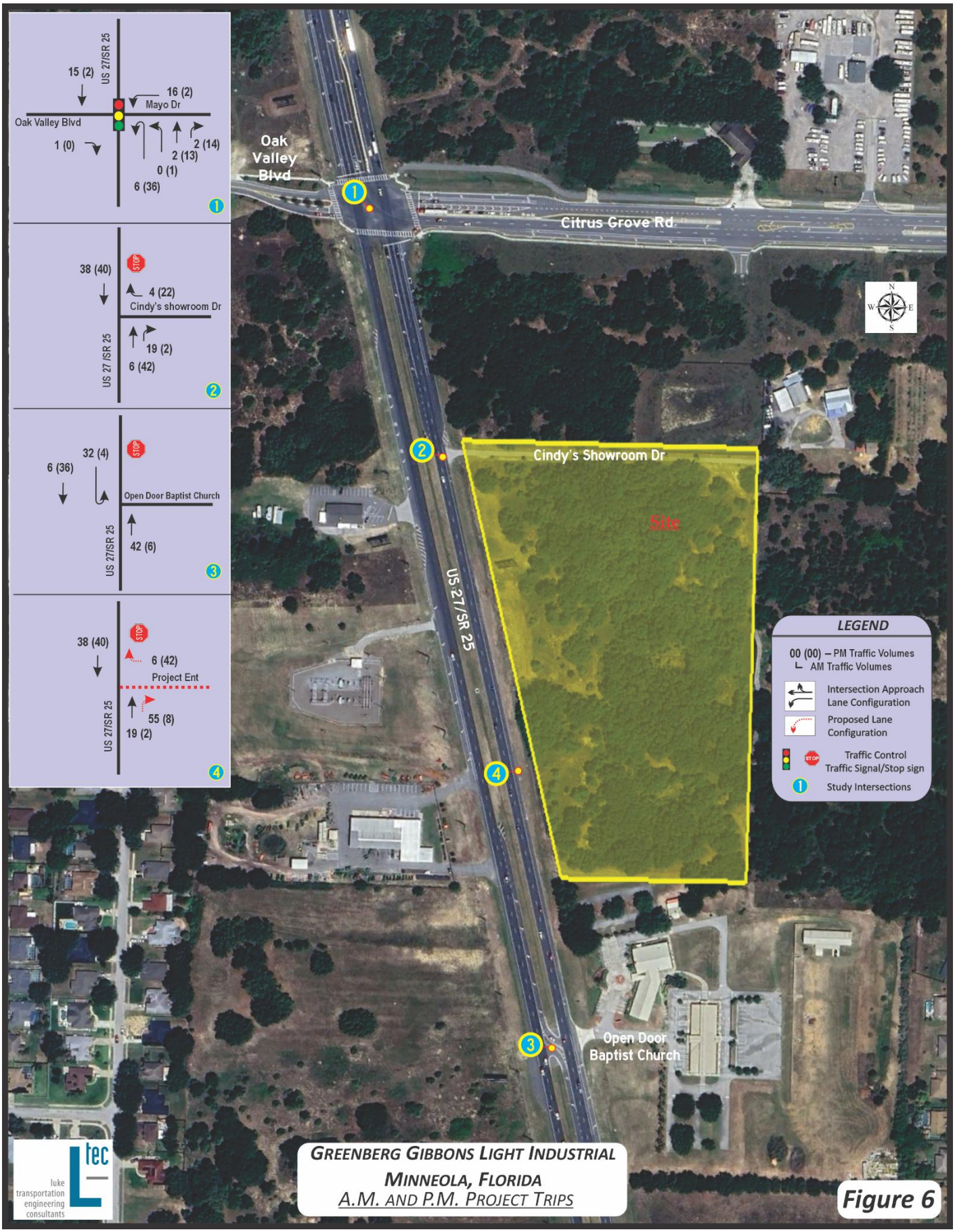


GREENBERG GIBBONS LIGHT INDUSTRIAL
MINNEOLA, FLORIDA
CFRPM V.0 7 2030 MODEL PROJECT TRIP DISTRIBUTION PLOT

Figure 4

(Licensed to Luke Transportation Engineerin) ULQ


US 27/SR 25
20%
22%
Mayo Dr
Oak Valley Blvd
1%
1%
20%
22%
57%
1
43%
57%
STOP
35%
Cindy's showroom Dr
US 27 /SR 25
25%
65%
2
43%
57%
STOP
Open Door Baptist Church
US 27/SR 25
57%
3
43%
57%
STOP
65%
Project Ent
US 27/SR 25
75%
25%
4
Oak Valley Blvd
Citrus Grove Rd
Cindy's Showroom Dr
Site
US 27/SR 25
Open Door Baptist Church
LEGEND
42.9% In
42.9% Out
Directional Project Trip Distribution
Intersection Approach Lane Configuration
Proposed Lane Configuration
Traffic Control Traffic Signal/Stop sign
Study Intersections
luke transportation engineering consultants
GREENBERG GIBBONS LIGHT INDUSTRIAL
MINNEOLA, FLORIDA
INTERSECTION PROJECT TRIP DISTRIBUTION
Figure 5


15 (2)
US 27/SR 25
16 (2)
Mayo Dr
Oak Valley Blvd
1 (0)
2 (14)
2 (13)
0 (1)
6 (36)
1
38 (40)
STOP
4 (22)
Cindy's showroom Dr
US 27 /SR 25
19 (2)
6 (42)
2
32 (4)
6 (36)
Open Door Baptist Church
US 27/SR 25
42 (6)
3
38 (40)
6 (42)
Project Ent
US 27/SR 25
55 (8)
19 (2)
4
Oak Valley Blvd
Citrus Grove Rd
Cindy's Showroom Dr
Site
US 27/SR 25
Open Door Baptist Church
LEGEND
00 (00) – PM Traffic Volumes
AM Traffic Volumes
Intersection Approach Lane Configuration
Proposed Lane Configuration
Traffic Control
Traffic Signal/Stop sign
Study Intersections
luke transportation engineering consultants
GREENBERG GIBBONS LIGHT INDUSTRIAL
MINNEOLA, FLORIDA
A.M. AND P.M. PROJECT TRIPS
Figure 6

Roadway Access Classification

The FDOT Access Management Classification categorizes this section of US 27/SR 25 on Section 11200000 at Mile Post 18.365 as Access Class 3 with standard minimum driveway connection spacing of 660-feet (posted speed limit 55 mph). The proposed Project right-in/right-out access connection (Intersection #4) on US 27/SR 25 will be located approximately ±755 feet south of the US 27/SR 25 and Cindy's Showroom Drive (Intersection #2) and approximately ±660 feet north of the US 27/SR 25 and Open Baptist Church driveway (Intersection #3) intersection.

Florida DOT Connection Category

Based upon the project's total trip generation calculation as documented herein (556 daily trips), the connection category for the proposed development would be **Category B** (21 to 600 Vehicle Trips Per Day).

The Project trips generated by the proposed development were combined with background traffic and assigned to the study intersection. Background traffic volumes were developed using the Lake County CMP database 3% annual growth rate on US 27/SR 25 in the vicinity of the study site (see **Appendix C** for Lake County CMP Database worksheet).

This analysis used existing traffic volumes plus growth traffic volumes and Project traffic volumes. **Appendix D** has the intersection future traffic calculations by intersection movement. These worksheets include the background traffic and Project trips by movement. **Figure 7** shows the projected 2027 build-out A.M. peak hour traffic volumes and **Figure 8** shows the projected 2027 build-out P.M. peak hour traffic volumes for the Project study intersections with the existing/proposed geometric conditions.

Intersection Analysis

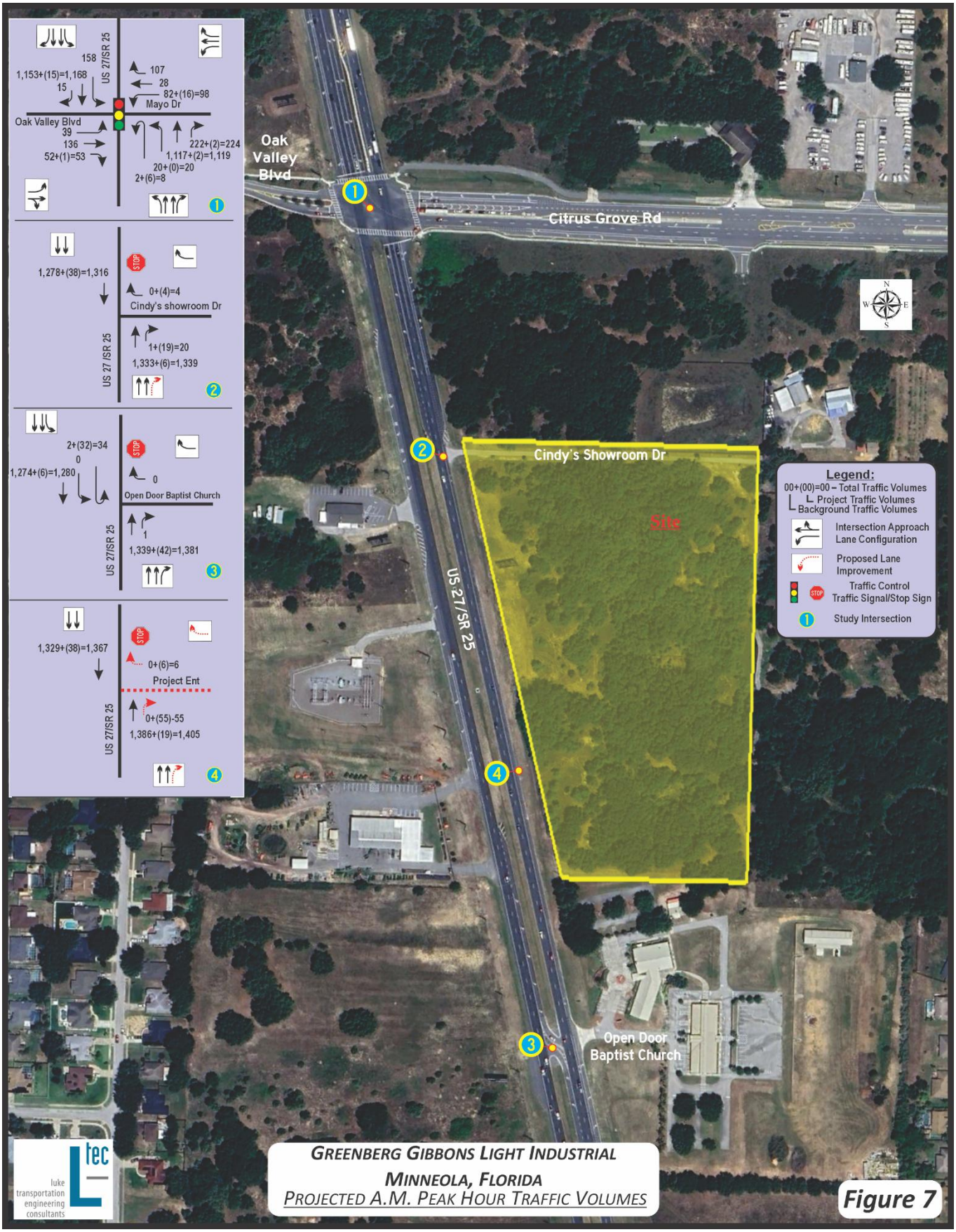
To determine the projected Level of Service provided by the Project access intersections for the proposed development, a capacity analysis was conducted utilizing the procedures of the *Highway Capacity Manual, 7th Edition* for the signalized and unsignalized intersections. Printouts of the intersection analyses may be found in **Appendix E**. The projected intersection delay and level of service, for each study intersection, are shown in **Table 3** for the total traffic (Background plus Project) conditions.

As can be seen, based on Total Traffic conditions (**Table 3**), all the study intersections will continue to operate at an acceptable level of service.

Project Access Auxiliary Turn Lanes

An evaluation was conducted to determine if projected traffic volumes at the Greenberg Gibbons Light Industrial Development Project entrance (Intersection #4) on US 27/SR 25 would meet the minimum requirements for an auxiliary northbound right-turn lane and if the projected traffic volumes at the Cindy's Showroom Drive intersection (Intersection #2) would meet the minimum requirements for an auxiliary right-turn lane. Procedures documented in the *National Cooperative Highway Research Program (NCHRP) Report 457* were used to evaluate the need for the auxiliary turn lanes at the two study intersections.

As documented in this report, the projected A.M. peak hour access driveways traffic volumes **do** meet the recommended minimum threshold traffic volume for an auxiliary northbound right-turn lane at both the Cindy's Showroom Drive (intersection #2) and the Project Entrance (Intersection #4). See **Appendix F** for the auxiliary turn lane worksheets. Note: All deceleration and taper lengths need to be reviewed and confirmed by the site civil engineer for actual design of any auxiliary northbound right-turn lanes.


158
1,153+(15)=1,168
15
US 27/SR 25
107
28
82+(16)=98
Mayo Dr
Oak Valley Blvd
39
136
52+(1)=53
222+(2)=224
1,117+(2)=1,119
20+(0)=20
2+(6)=8
1
1,278+(38)=1,316
0+(4)=4
Cindy's showroom Dr
1+(19)=20
1,333+(6)=1,339
US 27 /SR 25
2
2+(32)=34
0
1,274+(6)=1,280
0
Open Door Baptist Church
1
1,339+(42)=1,381
US 27/SR 25
3
1,329+(38)=1,367
0+(6)=6
Project Ent
0+(55)-55
1,386+(19)=1,405
US 27/SR 25
4
Oak Valley Blvd
Citrus Grove Rd
Cindy's Showroom Dr
Site
US 27/SR 25
Open Door Baptist Church
Legend:
00+(00)=00 – Total Traffic Volumes
Project Traffic Volumes
Background Traffic Volumes
Intersection Approach Lane Configuration
Proposed Lane Improvement
Traffic Control Traffic Signal/Stop Sign
Study Intersection
luke transportation engineering consultants
GREENBERG GIBBONS LIGHT INDUSTRIAL
MINNEOLA, FLORIDA
PROJECTED A.M. PEAK HOUR TRAFFIC VOLUMES
Figure 7

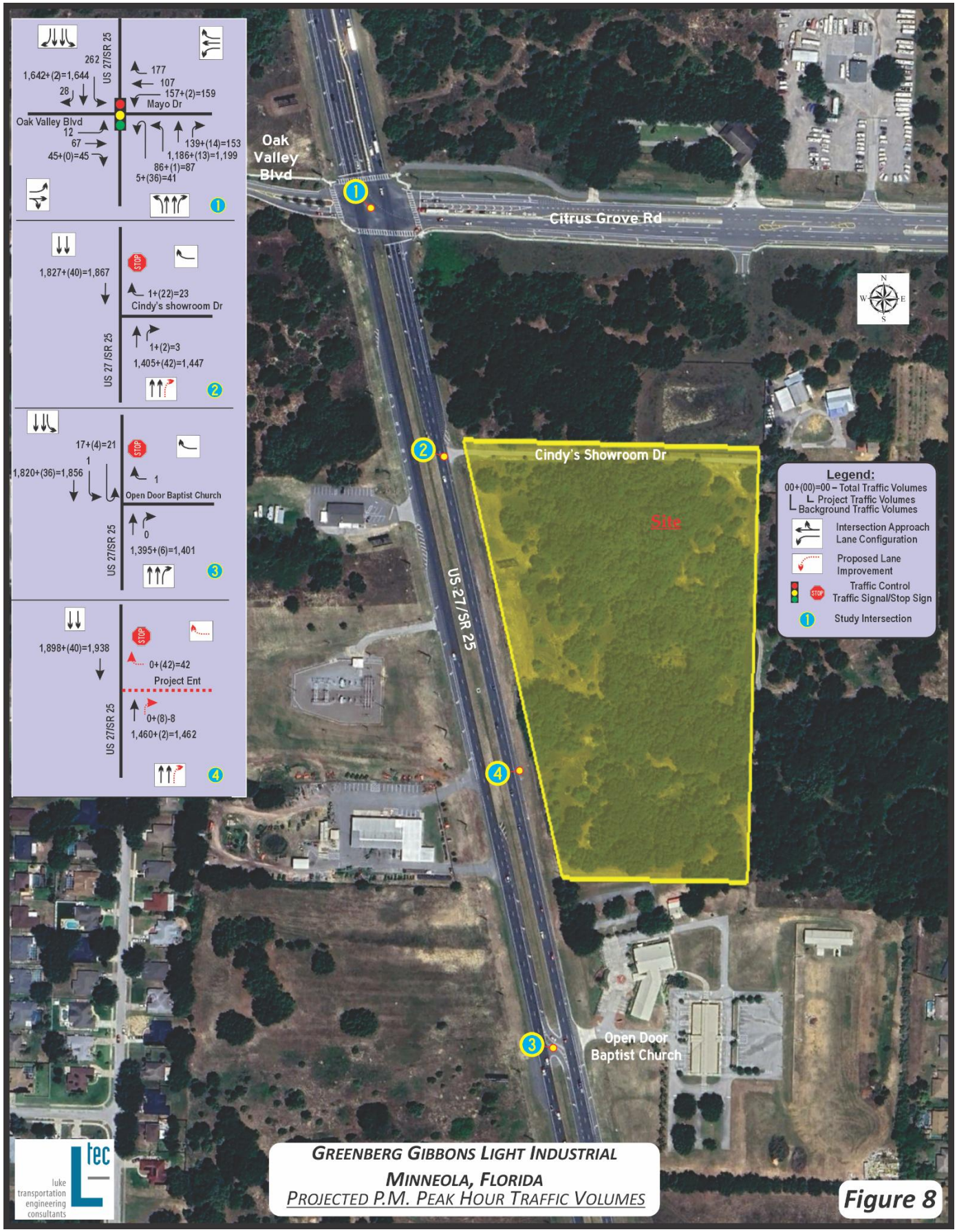

262
1,642+(2)=1,644
28
US 27/SR 25
177
107
157+(2)=159
Mayo Dr
Oak Valley Blvd
12
67
45+(0)=45
139+(14)=153
1,186+(13)=1,199
86+(1)=87
5+(36)=41
1
1,827+(40)=1,867
1+(22)=23
Cindy's showroom Dr
1+(2)=3
1,405+(42)=1,447
US 27 /SR 25
2
17+(4)=21
1
1,820+(36)=1,856
1
Open Door Baptist Church
0
1,395+(6)=1,401
US 27/SR 25
3
1,898+(40)=1,938
0+(42)=42
Project Ent
0+(8)-8
1,460+(2)=1,462
US 27/SR 25
4
Oak Valley Blvd
Citrus Grove Rd
Cindy's Showroom Dr
Site
US 27/SR 25
Open Door Baptist Church
Legend:
00+(00)=00 – Total Traffic Volumes
Project Traffic Volumes
Background Traffic Volumes
Intersection Approach Lane Configuration
Proposed Lane Improvement
Traffic Control
Traffic Signal/Stop Sign
Study Intersection
luke transportation engineering consultants
GREENBERG GIBBONS LIGHT INDUSTRIAL
MINNEOLA, FLORIDA
PROJECTED P.M. PEAK HOUR TRAFFIC VOLUMES
Figure 8

TABLE 3
Study Intersections Projected (2027) Level of Service

Approach / Movement		Lanes	Turn Lane Length	Traffic Control	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGrp LOS	95th %ile Queue (Feet)	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGrp LOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
1 - US 27 (NB/SB) and Oak Valley Boulevard (EB)/Citrus Grove Road (WB)												
EB	Left	1	75		39.5	0.14	D	51	45.2	0.06	D	23
	Thru	1			57.0	0.84	E		56.4	0.75	E	
	Thru	>										
WB	Left	1	350		42.7	0.55	D	108	46.5	0.66	D	161
	Thru	1			40.8	0.11	D		43.2	0.39	D	
	Right	1	355		44.7	0.49	D	17	54.0	0.76	D	63
NB	Left	1	490		65.6	0.62	E	56	273.1	1.37	F	267
	Thru	2			24.9	0.70	C		28.3	0.77	C	
	Right	1	490		18.6	0.31	B	46	18.3	0.22	B	32
SB	Left	2	575		55.7	0.73	E	103	61.2	0.82	E	165
	Thru	2			21.5	0.68	C		38.1	0.96	D	
	Right	1	565		12.8	0.02	B	0	13.8	0.04	B	0
Intersection Delay & LOS					28.5		C		45.0		D	
Approach / Movement		Lanes	Turn Lane Length	Traffic Control	Control Delay (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)	Control Delay (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
2 - US 27/SR25 (NB/SB) and Cindy's Showroom Drive (WB)												
WB	Right	1		STOP	14.7	0.011	B	0	16.0	0.068	C	5
NB	Thru	2		Free								
	Right	1	405	Flow								
SB	Thru	2		Free Flow								
3 - US 27/SR 25 (NB/SB)) and Open Baptist Church (WB)												
WB	Right	1		STOP	0.0	0.000	A	0	14.9	0.003	B	0
NB	Thru	2		Free								
	Right	1	380	Flow								
SB	Left	1	545	Free Flow	13.8	0.08	B	8	13.3	0.05	B	5
	Thru	2										
	Right	1										
4 - US 27/SR 25 (NB/SB)) and Project Entrance (WB)												
WB	Right	1		STOP	15.3	0.018	C	3	16.8	0.126	C	10
NB	Thru	2		Free								
	Right	1	405	Flow								
SB	Thru	2		Free Flow								

Recommended northbound right-turn lane.

Luke Transportation Engineering Consultants, Inc., 2025

STUDY CONCLUSIONS

This study was conducted to evaluate existing and future traffic conditions in the vicinity of the Greenberg Gibbons Light Industrial development site on US 27/SR 25 in Minneola, Florida. The build-out of the development is expected to occur by the end of 2027.

The proposed Project ±13.4-acre development site will consist of 114,100 square feet (SF) of light industrial space in two buildings (75,600 SF and 38,500 SF).

The development site will be located in the southeast quadrant of the US 27/SR 25 and Cindy's Showroom Drive intersection (Intersection #2). One right-in/right-out Project access connection driveway onto US 27/SR 25 is proposed.

The results of the study as documented herein are summarized below:

- The new trips to be generated by the proposed development were estimated to be 556 daily vehicle trips, 84 A.M peak hour vehicle trips and 74 P.M. peak hour vehicle trips.
- The total daily trip site generation would represent Florida DOT Category B.
- The FDOT Access Management Classification categorizes the section of US 27/SR 25 on Section 11200000 at Mile Post 18.365 as Access Class 3 with standard minimum driveway connection spacing of 660-feet (posted speed limit 55 mph). The proposed Project right-in/right-out access connection (Intersection #4) on US 27/SR 25 will be located approximately ±755 feet south of the US 27/SR 25 and Cindy's Showroom Drive (Intersection #2) and approximately ±660 feet north of the US 27/SR 25 and Open Baptist Church driveway (Intersection #3) intersection.
- As documented in this report, the projected A.M. and P.M. peak hour access driveways traffic volumes **do** meet the recommended minimum threshold traffic volume for an auxiliary northbound right-turn lane at both the Cindy's Showroom Drive (Intersection #2) and the Project Entrance (Intersection #4) study intersection.
- Based upon this analysis, using the projected A.M. and P.M. peak hour traffic volumes, all the study intersections will operate at acceptable levels of service.
- The proposed access driveway should be designed to meet the applicable FDOT roadway design standards.

APPENDIX

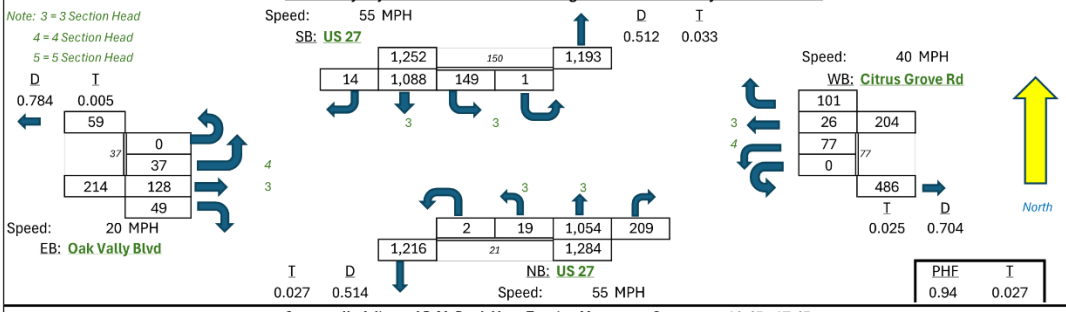
Appendix A – Existing Traffic Data

Summary of Vehicle Movements

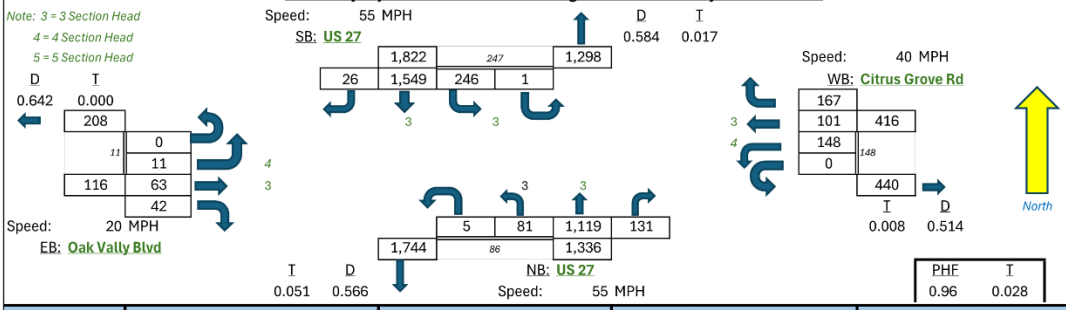
Luke Transportation Engineering Consultants

Project:	**Greenberg Gibbons Light Industrial Development**		**LTEC LTEC**		
N/S Road:	**US 27**	**Observer:**	LTEC		
E/W Road:	**Citrus Grove Rd**	**Weather:**	Clear		
Date:	Tuesday, June 17, 2025	**Rd Condition:**	Ok		
City:	Sebring	**Signal:**	Yes	**Latitude:**	28°36'4.48"N
County:	Highlands	**Major St Movement:**	-	**Longitude:**	81°45'17.79"W
FDOT SF:	1.04 (Note: If SF<1,default to 1.0)	**PM Pk Hr Factor:**	0.96	**Station #:**	1

Seasonally Adjusted A.M. Peak Hour Turning Movement Summary - 07:15 - 08:15



Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 16:45 - 17:45



Peak Hour Time Interval		US 27 Northbound				US 27 Southbound				Oak Vally Blvd Eastbound				Citrus Grove Rd Westbound			
		Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes		1		2	1	2		2	1	1		1	>	1		1	1
Length		490			490	575			565	75				350			355
7:00	7:15	2	5	254	57	0	29	221	1	0	4	32	10	0	13	7	20
7:15	7:30	0	4	274	58	1	39	246	2	0	16	31	10	0	7	6	16
7:30	7:45	2	6	270	35	0	36	292	1	0	11	34	13	0	19	9	29
7:45	8:00	0	2	228	49	0	33	265	8	0	4	28	12	0	17	6	28
Hourly Sum		4	17	1,026	199	1	137	1,024	12	0	35	125	45	0	56	28	93
8:00	8:15	0	6	241	59	0	35	243	2	0	5	30	12	0	31	4	24
8:15	8:30	2	2	225	64	1	34	257	5	0	7	23	13	0	12	5	24
8:30	8:45	0	3	222	37	0	36	310	2	0	1	23	14	0	20	6	16
8:45	9:00	2	7	192	41	0	21	266	2	0	3	11	10	0	23	4	15
Hourly Sum		4	18	880	201	1	126	1,076	11	0	16	87	49	0	86	19	79
16:00	16:15	2	8	268	34	0	67	360	8	0	0	12	5	0	23	18	39
16:15	16:30	1	16	306	26	1	66	307	6	0	1	18	14	1	29	24	29
16:30	16:45	0	21	288	21	0	67	326	8	0	8	17	11	0	34	17	40
16:45	17:00	1	23	242	24	0	70	373	7	0	3	8	8	0	33	19	40
Hourly Sum		4	68	1,104	105	1	270	1,366	29	0	12	55	38	1	119	78	148
17:00	17:15	1	18	275	39	0	67	398	1	0	1	17	12	0	28	33	36
17:15	17:30	3	24	296	35	0	51	361	4	0	1	20	9	0	37	22	46
17:30	17:45	0	13	263	28	1	49	357	13	0	6	16	11	0	44	23	39
17:45	18:00	2	19	245	31	0	29	311	8	0	1	7	9	0	27	41	35
Hourly Sum		6	74	1,079	133	1	196	1,427	26	0	9	60	41	0	136	119	156
A.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
7:15	**8:15**	2	19	1,054	209	1	149	1,088	14	0	37	128	49	0	77	26	101
% Turns		0.2%	1.5%	82.1%	16.3%	0.1%	11.9%	86.9%	1.1%	0	17.3%	59.8%	22.9%	0	37.7%	12.7%	49.5%
P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
16:45	**17:45**	5	81	1,119	131	1	246	1,549	26	0	11	63	42	0	148	101	167
% Turns		0.4%	6.1%	83.8%	9.8%	0.1%	13.5%	85.0%	1.4%	0	9.5%	54.3%	36.2%	0	35.6%	24.3%	40.1%

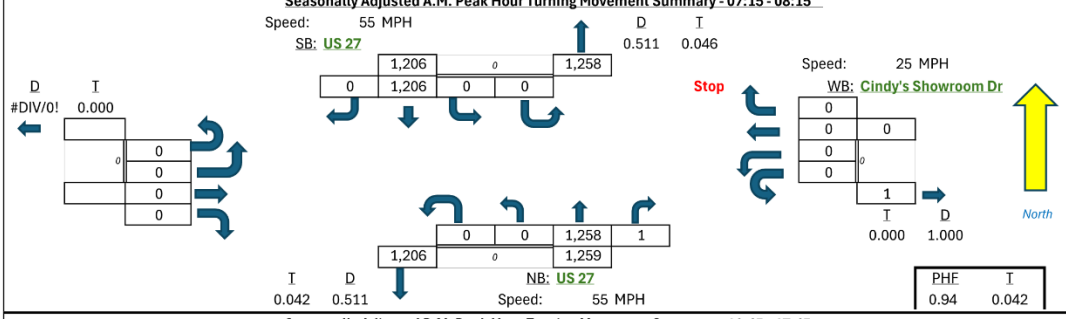
Luke Transportation Engineering Consultants, 2025

Summary of Vehicle Movements

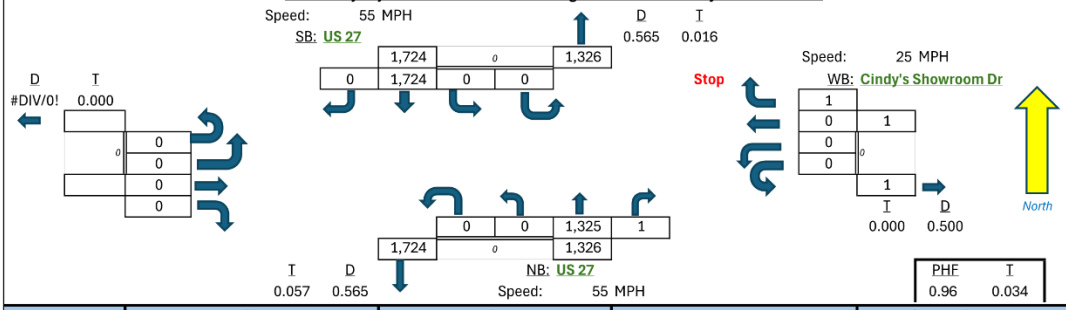
Luke Transportation Engineering Consultants

Project:	Greenberg Gibbons Light Industrial Development		LTEC LTEC		
N/S Road:	US 27	**Observer:**	LTEC		
E/W Road:	Cindy's Showroom Dr	**Weather:**	Clear		
Date:	Tuesday, June 17, 2025	**Rd Condition:**	Ok		
City:	Sebring	**Signal:**	No	**Latitude:**	28°35'58.77"N
County:	Highlands	**Major St Movement:**	North/South	**Longitude:**	81°45'15.79"W
FDOT SF:	1.04	**PM Pk Hr Factor:**	0.96	**Station #:**	2

Seasonally Adjusted A.M. Peak Hour Turning Movement Summary - 07:15 - 08:15



Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 16:45 - 17:45



Peak Hour Time Interval	US 27 Northbound				US 27 Southbound				Eastbound				Cindy's Showroom Dr Westbound			
	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes			2	>			2									1
Length																
7:00 7:15	0	0	307	0	0	0	243	0	0	0	0	0	0	0	0	0
7:15 7:30	0	0	329	1	0	0	260	0	0	0	0	0	0	0	0	0
7:30 7:45	0	0	306	0	0	0	325	0	0	0	0	0	0	0	0	0
7:45 8:00	0	0	277	0	0	0	293	0	0	0	0	0	0	0	0	0
Hourly Sum	0	0	1,219	1	0	0	1,121	0	0	0	0	0	0	0	0	0
8:00 8:15	0	0	298	0	0	0	282	0	0	0	0	0	0	0	0	0
8:15 8:30	0	0	289	0	0	0	280	0	0	0	0	0	0	0	0	1
8:30 8:45	0	0	257	0	0	0	343	0	0	0	0	0	0	0	0	0
8:45 9:00	0	0	240	0	0	0	296	0	0	0	0	0	0	0	0	0
Hourly Sum	0	0	1,084	0	0	0	1,201	0	0	0	0	0	0	0	0	1
16:00 16:15	0	0	309	0	0	0	386	0	0	0	0	0	0	0	0	0
16:15 16:30	0	0	347	0	0	0	347	0	0	0	0	0	0	0	0	0
16:30 16:45	0	0	331	0	0	0	370	0	0	0	0	0	0	0	0	1
16:45 17:00	0	0	287	0	0	0	406	0	0	0	0	0	0	0	0	0
Hourly Sum	0	0	1,274	0	0	0	1,509	0	0	0	0	0	0	0	0	1
17:00 17:15	0	0	329	0	0	0	437	0	0	0	0	0	0	0	0	0
17:15 17:30	0	0	347	0	0	0	403	0	0	0	0	0	0	0	0	0
17:30 17:45	0	0	311	1	0	0	412	0	0	0	0	0	0	0	0	1
17:45 18:00	0	0	295	0	0	0	345	0	0	0	0	0	0	0	0	0
Hourly Sum	0	0	1,282	1	0	0	1,597	0	0	0	0	0	0	0	0	1
A.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																
7:15 8:15	0	0	1,258	1	0	0	1,206	0	0	0	0	0	0	0	0	0
% Turns	0		99.9%	0.1%	0		100.0%		0				0			
P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																
16:45 17:45	0	0	1,325	1	0	0	1,724	0	0	0	0	0	0	0	0	1
% Turns	0		99.9%	0.1%	0		100.0%		0				0			100.0%

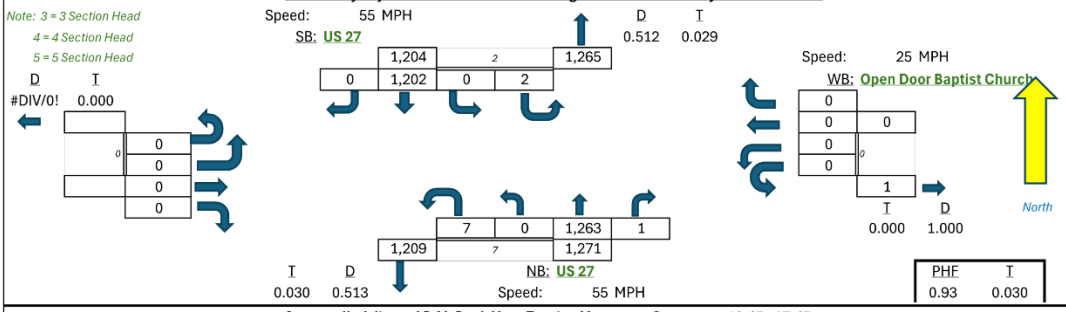
Luke Transportation Engineering Consultants, 2025

Summary of Vehicle Movements

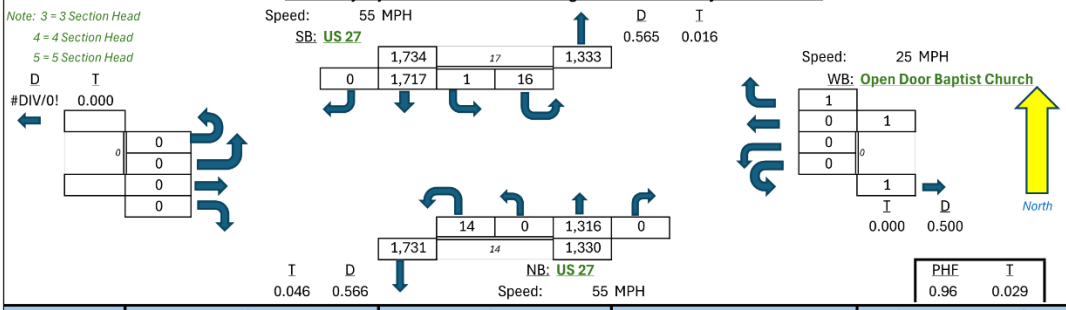
Luke Transportation Engineering Consultants

Project:	**Greenberg Gibbons Light Industrial Development**		**LTEC LTEC**		
N/S Road:	**US 27**	**Observer:**	LTEC		
E/W Road:	**Open Door Baptist Church**	**Weather:**	Clear		
Date:	Tuesday, June 17, 2025	**Rd Condition:**	Ok		
City:	Orlando	**Signal:**	Yes	**Latitude:**	28°35'44.89"N
County:	Orange	**Major St Movement:**	-	**Longitude:**	81°45'12.44"W
FDOT SF:	1.04	**PM Pk Hr Factor:**	0.96	**Station #:**	3

Seasonally Adjusted A.M. Peak Hour Turning Movement Summary - 07:15 - 08:15



Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 16:45 - 17:45



Peak Hour Time Interval	US 27 Northbound Uturn	Lt	Thru	Rt	US 27 Southbound Uturn	Lt	Thru	Rt	Eastbound Uturn	Lt	Thru	Rt	Open Door Baptist Church Westbound Uturn	Lt	Thru	Rt
# Lanes			2	1	1		2									1
Length				380	545											
7:00 7:15	2	0	310	0	1	0	244	0	0	0	0	0	0	0	0	0
7:15 7:30	1	0	330	0	1	0	261	0	0	0	0	0	0	0	0	0
7:30 7:45	1	0	314	0	1	0	325	0	0	0	0	0	0	0	0	0
7:45 8:00	2	0	271	0	0	0	287	0	0	0	0	0	0	0	0	0
Hourly Sum	6	0	1,225	0	3	0	1,117	0	0	0	0	0	0	0	0	0
8:00 8:15	3	0	299	1	0	0	283	0	0	0	0	0	0	0	0	0
8:15 8:30	2	0	288	0	2	0	280	0	0	0	0	0	0	0	0	0
8:30 8:45	4	0	258	0	0	0	350	0	0	0	0	0	0	0	0	0
8:45 9:00	4	0	241	1	1	1	297	0	0	0	0	0	0	0	0	0
Hourly Sum	13	0	1,086	2	3	1	1,210	0	0	0	0	0	0	0	0	0
16:00 16:15	3	0	305	0	6	0	382	0	0	0	0	0	0	0	0	0
16:15 16:30	3	0	336	0	2	0	341	0	0	0	0	0	0	0	0	0
16:30 16:45	5	0	334	0	4	1	372	0	0	0	0	0	0	0	0	0
16:45 17:00	3	0	278	0	2	0	406	0	0	0	0	0	0	0	0	0
Hourly Sum	14	0	1,253	0	14	1	1,501	0	0	0	0	0	0	0	0	0
17:00 17:15	5	0	325	0	11	1	423	0	0	0	0	0	0	0	0	1
17:15 17:30	2	0	353	0	2	0	404	0	0	0	0	0	0	0	0	0
17:30 17:45	3	0	309	0	0	0	418	0	0	0	0	0	0	0	0	0
17:45 18:00	6	0	306	0	2	0	346	0	0	0	0	0	0	0	0	0
Hourly Sum	16	0	1,293	0	15	1	1,591	0	0	0	0	0	0	0	0	1
A.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																
7:15 8:15	7	0	1,263	1	2	0	1,202	0	0	0	0	0	0	0	0	0
% Turns	0.6%		99.4%	0.1%	0.2%		99.8%		0				0			
P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																
16:45 17:45	14	0	1,316	0	16	1	1,717	0	0	0	0	0	0	0	0	1
% Turns	1.1%		98.9%		0.9%	0.1%	99.0%		0				0			100.0%

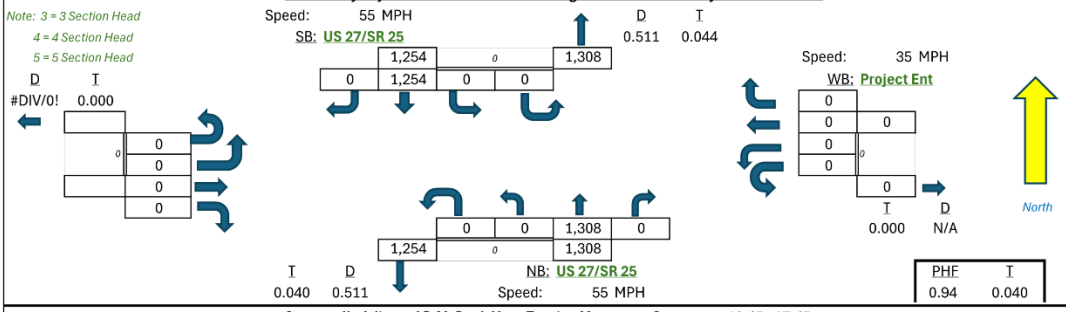
Luke Transportation Engineering Consultants, 2025

Summary of Vehicle Movements

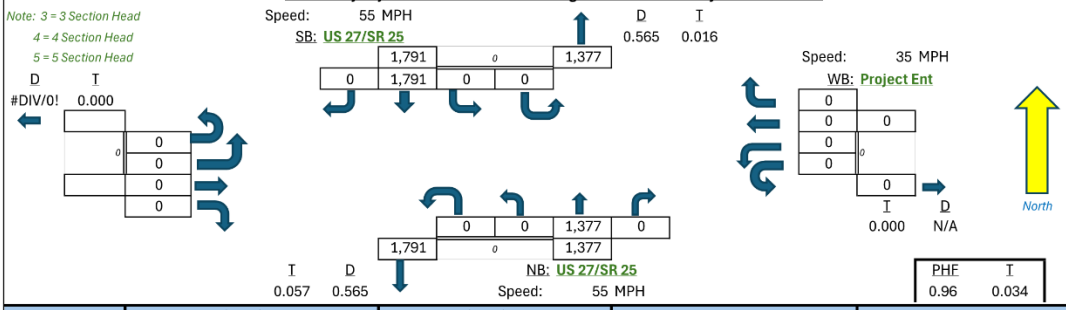
Luke Transportation Engineering Consultants

Project:	Greenberg Gibbons Light Industrial Development		LTEC LTEC		
N/S Road:	US 27/SR 25	**Observer:**	LTEC		
E/W Road:	Project Ent	**Weather:**	Clear		
Date:	Tuesday, June 17, 2025	**Rd Condition:**	Ok		
City:	Orlando	**Signal:**	Yes	**Latitude:**	28°35'51.46"N
County:	Orange	**Major St Movement:**	-	**Longitude:**	81°45'13.67"W
FDOT SF:	1.08	**PM Pk Hr Factor:**	0.96	**Station #:**	4

Seasonally Adjusted A.M. Peak Hour Turning Movement Summary - 07:15 - 08:15



Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 16:45 - 17:45



Peak Hour Time Interval		US 27/SR 25 Northbound				US 27/SR 25 Southbound				Eastbound				Project Ent Westbound			
		Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes				2	>			2									1
Length																	
7:00	7:15	0	0	307	0	0	0	243	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	330	0	0	0	261	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	306	0	0	0	325	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	277	0	0	0	293	0	0	0	0	0	0	0	0	0
Hourly Sum		0	0	1,220	0	0	0	1,122	0	0	0	0	0	0	0	0	0
8:00	8:15	0	0	298	0	0	0	282	0	0	0	0	0	0	0	0	0
8:15	8:30	0	0	289	0	0	0	280	0	0	0	0	0	0	0	0	0
8:30	8:45	0	0	257	0	0	0	343	0	0	0	0	0	0	0	0	0
8:45	9:00	0	0	240	0	0	0	296	0	0	0	0	0	0	0	0	0
Hourly Sum		0	0	1,084	0	0	0	1,201	0	0	0	0	0	0	0	0	0
16:00	16:15	0	0	309	0	0	0	386	0	0	0	0	0	0	0	0	0
16:15	16:30	0	0	347	0	0	0	347	0	0	0	0	0	0	0	0	0
16:30	16:45	0	0	331	0	0	0	370	0	0	0	0	0	0	0	0	0
16:45	17:00	0	0	287	0	0	0	406	0	0	0	0	0	0	0	0	0
Hourly Sum		0	0	1,274	0	0	0	1,509	0	0	0	0	0	0	0	0	0
17:00	17:15	0	0	329	0	0	0	437	0	0	0	0	0	0	0	0	0
17:15	17:30	0	0	347	0	0	0	403	0	0	0	0	0	0	0	0	0
17:30	17:45	0	0	312	0	0	0	412	0	0	0	0	0	0	0	0	0
17:45	18:00	0	0	295	0	0	0	345	0	0	0	0	0	0	0	0	0
Hourly Sum		0	0	1,283	0	0	0	1,597	0	0	0	0	0	0	0	0	0
A.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
7:15	**8:15**	0	0	1,308	0	0	0	1,254	0	0	0	0	0	0	0	0	0
% Turns		0		100.0%		0		100.0%		0				0			
P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
16:45	**17:45**	0	0	1,377	0	0	0	1,791	0	0	0	0	0	0	0	0	0
% Turns		0		100.0%		0		100.0%		0				0			

Luke Transportation Engineering Consultants, 2025

2024 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 1100 LAKE COUNTYWIDE

MOCF: 0.95

WEEK	DATES	SF	PSCF
1	01/01/2024 - 01/06/2024	1.02	1.07
2	01/07/2024 - 01/13/2024	1.04	1.09
3	01/14/2024 - 01/20/2024	1.05	1.11
4	01/21/2024 - 01/27/2024	1.03	1.08
5	01/28/2024 - 02/03/2024	1.01	1.06
6	02/04/2024 - 02/10/2024	0.99	1.04
* 7	02/11/2024 - 02/17/2024	0.97	1.02
* 8	02/18/2024 - 02/24/2024	0.96	1.01
* 9	02/25/2024 - 03/02/2024	0.96	1.01
*10	03/03/2024 - 03/09/2024	0.95	1.00
*11	03/10/2024 - 03/16/2024	0.94	0.99
*12	03/17/2024 - 03/23/2024	0.94	0.99
*13	03/24/2024 - 03/30/2024	0.94	0.99
*14	03/31/2024 - 04/06/2024	0.94	0.99
*15	04/07/2024 - 04/13/2024	0.94	0.99
*16	04/14/2024 - 04/20/2024	0.94	0.99
*17	04/21/2024 - 04/27/2024	0.95	1.00
*18	04/28/2024 - 05/04/2024	0.96	1.01
*19	05/05/2024 - 05/11/2024	0.98	1.03
20	05/12/2024 - 05/18/2024	0.99	1.04
21	05/19/2024 - 05/25/2024	1.00	1.05
22	05/26/2024 - 06/01/2024	1.01	1.06
23	06/02/2024 - 06/08/2024	1.02	1.07
24	06/09/2024 - 06/15/2024	1.03	1.08
25	06/16/2024 - 06/22/2024	1.04	1.09
26	06/23/2024 - 06/29/2024	1.05	1.11
27	06/30/2024 - 07/06/2024	1.06	1.12
28	07/07/2024 - 07/13/2024	1.06	1.12
29	07/14/2024 - 07/20/2024	1.07	1.13
30	07/21/2024 - 07/27/2024	1.06	1.12
31	07/28/2024 - 08/03/2024	1.05	1.11
32	08/04/2024 - 08/10/2024	1.04	1.09
33	08/11/2024 - 08/17/2024	1.03	1.08
34	08/18/2024 - 08/24/2024	1.03	1.08
35	08/25/2024 - 08/31/2024	1.03	1.08
36	09/01/2024 - 09/07/2024	1.03	1.08
37	09/08/2024 - 09/14/2024	1.04	1.09
38	09/15/2024 - 09/21/2024	1.04	1.09
39	09/22/2024 - 09/28/2024	1.02	1.07
40	09/29/2024 - 10/05/2024	1.01	1.06
41	10/06/2024 - 10/12/2024	0.99	1.04
42	10/13/2024 - 10/19/2024	0.97	1.02
43	10/20/2024 - 10/26/2024	0.98	1.03
44	10/27/2024 - 11/02/2024	0.99	1.04
45	11/03/2024 - 11/09/2024	0.99	1.04
46	11/10/2024 - 11/16/2024	1.00	1.05
47	11/17/2024 - 11/23/2024	1.00	1.05
48	11/24/2024 - 11/30/2024	1.01	1.06
49	12/01/2024 - 12/07/2024	1.01	1.06
50	12/08/2024 - 12/14/2024	1.02	1.07
51	12/15/2024 - 12/21/2024	1.02	1.07
52	12/22/2024 - 12/28/2024	1.04	1.09
53	12/29/2024 - 12/31/2024	1.05	1.11

* PEAK SEASON

04-MAR-2025 16:32:53 830UPD 5_1100_PKSEASON.TXT

Appendix B – Existing Synchro Worksheets

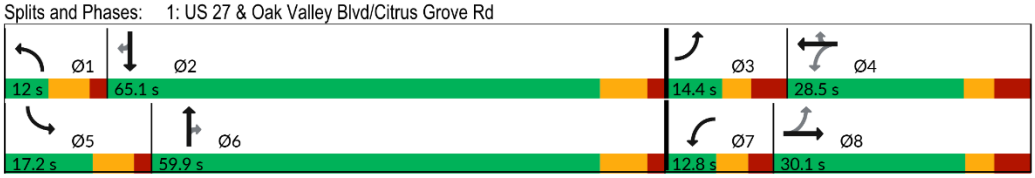
Timings
1: US 27 & Oak Valley Blvd/Citrus Grove Rd

Existing
AM

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	37	128	77	26	101	21	1054	209	150	1088	14
Future Volume (vph)	37	128	77	26	101	21	1054	209	150	1088	14
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4			6			2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.4	25.6	11.6	28.5	28.5	12.0	31.5	31.5	11.8	33.5	33.5
Total Split (s)	14.4	30.1	12.8	28.5	28.5	12.0	59.9	59.9	17.2	65.1	65.1
Total Split (%)	12.0%	25.1%	10.7%	23.8%	23.8%	10.0%	49.9%	49.9%	14.3%	54.3%	54.3%
Yellow Time (s)	3.4	3.4	3.7	3.7	3.7	4.8	5.5	5.5	4.8	5.5	5.5
All-Red Time (s)	4.2	4.2	2.9	4.2	4.2	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.6	7.6	6.6	7.9	7.9	6.8	7.5	7.5	6.8	7.5	7.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effct Green (s)	21.3	16.1	22.3	17.5	17.5	5.2	52.9	52.9	9.5	64.8	64.8
Actuated g/C Ratio	0.19	0.15	0.20	0.16	0.16	0.05	0.48	0.48	0.09	0.59	0.59
v/c Ratio	0.14	0.69	0.36	0.10	0.28	0.27	0.67	0.26	0.55	0.56	0.02
Control Delay (s/veh)	32.9	55.7	37.3	42.9	3.1	62.5	26.1	3.4	57.4	18.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.9	55.7	37.3	42.9	3.1	62.5	26.1	3.4	57.4	18.1	0.0
LOS	C	E	D	D	A	E	C	A	E	B	A
Approach Delay (s/veh)		51.8		21.3			23.0			22.6	
Approach LOS		D		C			C			C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 110.5		
Natural Cycle: 90		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.69		
Intersection Signal Delay (s/veh): 24.8	Intersection LOS: C	
Intersection Capacity Utilization 72.0%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 1: US 27 & Oak Valley Blvd/Citrus Grove Rd



Queues — Existing
1: US 27 & Oak Valley Blvd/Citrus Grove Rd — AM

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	39	188	84	28	107	22	1121	222	160	1157	15
v/c Ratio	0.14	0.69	0.36	0.10	0.28	0.27	0.67	0.26	0.55	0.56	0.02
Control Delay (s/veh)	32.9	55.7	37.3	42.9	3.1	62.5	26.1	3.4	57.4	18.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.9	55.7	37.3	42.9	3.1	62.5	26.1	3.4	57.4	18.1	0.0
Queue Length 50th (ft)	22	123	48	19	0	16	333	0	58	241	0
Queue Length 95th (ft)	49	201	89	46	11	45	454	45	98	435	0
Internal Link Dist (ft)		623		927			511			827	
Turn Bay Length (ft)	75		350		355	490		490	575		565
Base Capacity (vph)	289	378	231	365	441	83	1677	865	322	2055	988
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.50	0.36	0.08	0.24	0.27	0.67	0.26	0.50	0.56	0.02

Intersection Summary

HCM 7th Signalized Intersection Summary — Existing
1: US 27 & Oak Valley Blvd/Citrus Grove Rd — AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	128	49	77	26	101	21	1054	209	150	1088	14
Future Volume (veh/h)	37	128	49	77	26	101	21	1054	209	150	1088	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	39	136	52	84	28	107	22	1121	222	160	1157	15
Peak Hour Factor	0.94	0.94	0.94	0.92	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	283	164	63	192	262	222	39	1720	767	223	1870	834
Arrive On Green	0.03	0.13	0.13	0.05	0.14	0.14	0.02	0.49	0.49	0.06	0.53	0.53
Sat Flow, veh/h	1781	1289	493	1767	1856	1572	1767	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	39	0	188	84	28	107	22	1121	222	160	1157	15
Grp Sat Flow(s),veh/h/ln	1781	0	1782	1767	1856	1572	1767	1763	1572	1714	1763	1572
Q Serve(g_s), s	2.0	0.0	11.2	4.4	1.4	6.8	1.3	25.9	9.1	5.0	24.9	0.5
Cycle Q Clear(g_c), s	2.0	0.0	11.2	4.4	1.4	6.8	1.3	25.9	9.1	5.0	24.9	0.5
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	283	0	227	192	262	222	39	1720	767	223	1870	834
V/C Ratio(X)	0.14	0.00	0.83	0.44	0.11	0.48	0.56	0.65	0.29	0.72	0.62	0.02
Avail Cap(c_a), veh/h	338	0	369	196	352	298	85	1720	767	328	1870	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	0.0	46.2	38.8	40.7	43.0	52.6	20.9	16.6	49.8	17.8	12.1
Incr Delay (d2), s/veh	0.2	0.0	7.9	1.6	0.2	1.6	11.7	1.9	1.0	4.3	1.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	5.5	2.0	0.7	2.8	0.7	9.9	3.5	2.2	9.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.4	0.0	54.1	40.3	40.9	44.6	64.3	22.8	17.5	54.1	19.4	12.1
LnGrp LOS	D		D	D	D	D	E	C	B	D	B	B
Approach Vol, veh/h		227			219			1365			1332	
Approach Delay, s/veh		51.6			42.5			22.6			23.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	65.1	11.1	23.2	13.8	60.5	12.5	21.8
Change Period (Y+Rc), s	6.8	7.5	7.6	7.9	6.8	7.5	6.6	* 7.9
Max Green Setting (Gmax), s	5.2	57.6	6.8	20.6	10.4	52.4	6.2	* 23
Max Q Clear Time (g_c+I1), s	3.3	26.9	4.0	8.8	7.0	27.9	6.4	13.2
Green Ext Time (p_c), s	0.0	8.6	0.0	0.3	0.1	8.5	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	26.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1258	1	0	1206
Future Vol, veh/h	0	0	1258	1	0	1206
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	4	4	5	5
Mvmt Flow	0	0	1338	1	0	1283

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	670	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	400	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	400	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1263	1	2	1202
Future Vol, veh/h	0	0	1263	1	2	1202
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	380	545	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	0	0	1358	1	2	1292

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	679	0	0	1359	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.16	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.23	-
Pot Cap-1 Maneuver	0	394	-	-	497	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	394	-	-	497	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	0.02
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	497	-
HCM Lane V/C Ratio	-	-	-	0.004	-
HCM Ctrl Dly (s/v)	-	-	0	12.3	-
HCM Lane LOS	-	-	A	B	-
HCM 95th %tile Q(veh)	-	-	-	0	-

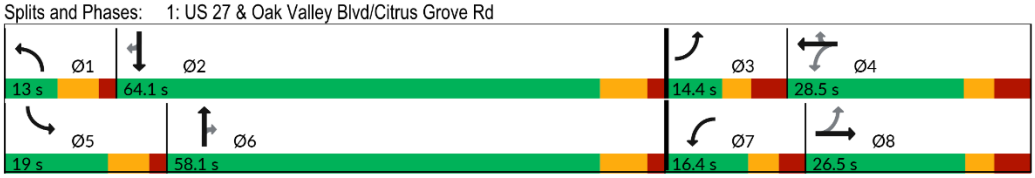
Timings
1: US 27 & Oak Valley Blvd/Citrus Grove Rd

Existing
PM

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	11	63	148	101	167	86	1119	131	247	1549	26
Future Volume (vph)	11	63	148	101	167	86	1119	131	247	1549	26
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4			6			2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.4	25.6	11.6	28.5	28.5	12.0	31.5	31.5	11.8	33.5	33.5
Total Split (s)	14.4	26.5	16.4	28.5	28.5	13.0	58.1	58.1	19.0	64.1	64.1
Total Split (%)	12.0%	22.1%	13.7%	23.8%	23.8%	10.8%	48.4%	48.4%	15.8%	53.4%	53.4%
Yellow Time (s)	3.4	3.4	3.7	3.7	3.7	4.8	5.5	5.5	4.8	5.5	5.5
All-Red Time (s)	4.2	4.2	2.9	4.2	4.2	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.6	7.6	6.6	7.9	7.9	6.8	7.5	7.5	6.8	7.5	7.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effct Green (s)	18.0	11.9	28.4	25.2	25.2	6.2	51.1	51.1	11.8	56.6	56.6
Actuated g/C Ratio	0.16	0.11	0.25	0.22	0.22	0.05	0.45	0.45	0.10	0.50	0.50
v/c Ratio	0.05	0.53	0.51	0.26	0.36	0.96	0.75	0.17	0.72	0.91	0.03
Control Delay (s/veh)	32.5	47.0	40.8	39.8	8.4	136.4	29.9	1.7	61.4	35.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.5	47.0	40.8	39.8	8.4	136.4	29.9	1.7	61.4	35.2	0.1
LOS	C	D	D	D	A	F	C	A	E	D	A
Approach Delay (s/veh)		45.7		27.6			34.1			38.2	
Approach LOS		D		C			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 113	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay (s/veh): 35.8	Intersection LOS: D
Intersection Capacity Utilization 80.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: US 27 & Oak Valley Blvd/Citrus Grove Rd



Queues
1: US 27 & Oak Valley Blvd/Citrus Grove Rd

Existing
PM

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	11	110	154	105	174	90	1166	136	257	1614	27
v/c Ratio	0.05	0.53	0.51	0.26	0.36	0.96	0.75	0.17	0.72	0.91	0.03
Control Delay (s/veh)	32.5	47.0	40.8	39.8	8.4	136.4	29.9	1.7	61.4	35.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.5	47.0	40.8	39.8	8.4	136.4	29.9	1.7	61.4	35.2	0.1
Queue Length 50th (ft)	6	60	91	61	0	66	357	0	93	535	0
Queue Length 95th (ft)	21	118	150	128	63	#178	479	19	#146	#766	0
Internal Link Dist (ft)		623		927			511			827	
Turn Bay Length (ft)	75		350		355	490		490	575		565
Base Capacity (vph)	241	312	303	420	491	94	1553	790	370	1773	880
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.35	0.51	0.25	0.35	0.96	0.75	0.17	0.69	0.91	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary — Existing
1: US 27 & Oak Valley Blvd/Citrus Grove Rd — PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	63	42	148	101	167	86	1119	131	247	1549	26
Future Volume (veh/h)	11	63	42	148	101	167	86	1119	131	247	1549	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	11	66	44	154	105	174	90	1166	136	257	1614	27
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	186	94	63	256	289	245	97	1635	729	319	1806	805
Arrive On Green	0.01	0.09	0.09	0.09	0.16	0.16	0.06	0.47	0.47	0.09	0.51	0.51
Sat Flow, veh/h	1781	1047	698	1767	1856	1572	1739	3469	1547	3456	3554	1585
Grp Volume(v), veh/h	11	0	110	154	105	174	90	1166	136	257	1614	27
Grp Sat Flow(s),veh/h/ln	1781	0	1745	1767	1856	1572	1739	1735	1547	1728	1777	1585
Q Serve(g_s), s	0.6	0.0	6.8	8.6	5.6	11.7	5.7	29.8	5.7	8.1	45.6	0.9
Cycle Q Clear(g_c), s	0.6	0.0	6.8	8.6	5.6	11.7	5.7	29.8	5.7	8.1	45.6	0.9
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	0	157	256	289	245	97	1635	729	319	1806	805
V/C Ratio(X)	0.06	0.00	0.70	0.60	0.36	0.71	0.93	0.71	0.19	0.80	0.89	0.03
Avail Cap(c_a), veh/h	272	0	296	256	343	291	97	1635	729	378	1806	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	0.0	49.3	39.9	42.1	44.6	52.4	23.4	17.1	49.6	24.7	13.7
Incr Delay (d2), s/veh	0.1	0.0	5.6	3.9	0.8	6.4	68.9	2.7	0.6	10.3	7.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	3.2	3.9	2.6	5.0	4.2	11.5	2.2	3.8	18.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.3	0.0	54.9	43.7	42.8	51.0	121.3	26.1	17.6	59.9	32.0	13.8
LnGrp LOS	D		D	D	D	D	F	C	B	E	C	B
Approach Vol, veh/h		121			433			1392			1898	
Approach Delay, s/veh		54.0			46.4			31.5			35.5	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	64.1	9.0	25.3	17.1	60.0	16.4	17.9
Change Period (Y+Rc), s	6.8	7.5	7.6	7.9	6.8	7.5	6.6	* 7.9
Max Green Setting (Gmax), s	6.2	56.6	6.8	20.6	12.2	50.6	9.8	* 19
Max Q Clear Time (g_c+I1), s	7.7	47.6	2.6	13.7	10.1	31.8	10.6	8.8
Green Ext Time (p_c), s	0.0	6.3	0.0	0.6	0.2	7.7	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	35.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

PM Existing 4:53 pm 07/21/2025 PM Peak Hour — Synchro 12 Report
JTR — Page 3

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	1325	1	0	1724
Future Vol, veh/h	0	1	1325	1	0	1724
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	6	6	2	2
Mvmt Flow	0	1	1380	1	0	1796

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	691	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	387	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	387	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	14.32	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	387	-
HCM Lane V/C Ratio	-	-	0.003	-
HCM Ctrl Dly (s/v)	-	-	14.3	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	1316	0	17	1717
Future Vol, veh/h	0	1	1316	0	17	1717
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	380	545	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	0	1	1371	0	18	1789

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	685	0	0	1371	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	390	-	-	497	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	390	-	-	497	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	14.25	0	0.12
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	390	497	-
HCM Lane V/C Ratio	-	-	0.003	0.036	-
HCM Ctrl Dly (s/v)	-	-	14.2	12.5	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0	0.1	-

Appendix C – Lake County CMP Database Worksheet

SEGMENT ID	COUNTY STATION	FDOT STATION	DATA SOURCE	SPEED LIMIT	SEGMENT LENGTH (MI)	ROAD NAME	FROM	TO	LANES (2023)	LANES (2028)	URBAN / RURAL	DIVIDED / UNDIVIDED	CONTEXT CLASSIFICATION	MAINTAINING AGENCY	JURISDICTION	ADOPTED LOS STANDARD	DAILY SERVICE VOLUME	2023 AADT	2023 DAILY V/C	2023 DAILY LOS	PEAK HOUR DIRECTIONAL SERVICE VOLUME	2023 PEAK HOUR NBEB VOLUME	2023 PEAK HOUR SBWB VOLUME	2023 PEAK HOUR V/C	2023 PEAK HOUR LOS	GROWTH RATE
3840	110468	110468	State	55	2.14	US 27/SR 25	CR 561	CR 561A	4	4	URBAN	DIVIDED	C3C	STATE	CITY OF MINNEOLA	D	38,400	34,400	0.90	D	1,901	1,690	1,411	0.89	D	3.00%
3850	110163	110163	State	50	0.38	US 27/SR 25	CR 561A	CR 561	6	6	URBAN	DIVIDED	C2	STATE	CITY OF MINNEOLA	D	63,700	38,000	0.45	B	4,370	1,712	1,468	0.39	B	1.03%

Appendix D – 2027 Traffic Volumes Projection Worksheets

Summary of Vehicle Movements

Luke Transportation Engineering Consultants

Summary of Future Growth Vehicle Movements - Intersection #1

Project:	Greenberg Gibbons Light Industrial Development										LTEC		LTEC				
N/S Road:	US 27								Observer:	LTEC							
E/W Road:	Citrus Grove Rd								Weather:	Clear							
Date:	Tuesday, June 17, 2025				Base	Build-out			Rd Condition:	Ok							
Approach:	NB	SB	EB	WB	Year	Year			Signal:	Yes							Intersection
Annual Growth %	3.0%	3.0%	3.0%	3.0%	2025	2027			FDOT - Seasonal Adj Factor:	1.04							1
A.M. Peak Hour	US 27 Northbound				US 27 Southbound				Citrus Grove Rd Eastbound				Citrus Grove Rd Westbound				
	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	
# Lanes	1		2	1	2		2	1	1		1	>	1		1	1	
Length	490			490	575			565	75				350			355	
Existing	2	19	1,054	209	1	149	1,088	14	0	37	128	49	0	77	26	101	
Growth Factor	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	
Growth	2	20	1,117	222	1	158	1,153	15	0	39	136	52	0	82	28	107	
Vested	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Projected Back	2	20	1,117	222	1	158	1,153	15	0	39	136	52	0	82	28	107	
External A.M. Project Trips		Enter:	74	Exit:	10												
Pass-by Trips In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pass-by Trips Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Pass Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Project In	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	22.0%	0.0%	0.0%	
% Project Out	57.0%	1.0%	20.0%	22.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Project Trips In	0	0	0	0	0	0	15	0	0	0	0	1	0	16	0	0	
Project Trips Out	6	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project	6	0	2	2	0	0	15	0	0	0	0	1	0	16	0	0	
Total Trips	8	20	1,119	224	1	158	1,168	15	0	39	136	53	0	98	28	107	
P.M. Peak Hour	US 27 Northbound				US 27 Southbound				Citrus Grove Rd Eastbound				Citrus Grove Rd Westbound				
	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	
Existing	5	81	1,119	131	1	246	1,549	26	0	11	63	42	0	148	101	167	
Growth Factor	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	
Growth	5	86	1,186	139	1	261	1,642	28	0	12	67	45	0	157	107	177	
Vested	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Projected Back	5	86	1,186	139	1	261	1,642	28	0	12	67	45	0	157	107	177	
External P.M. Project Trips		Enter:	10	Exit:	64												
Pass-by Trips In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pass-by Trips Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Pass Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Project In	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	22.0%	0.0%	0.0%	
% Project Out	57.0%	1.0%	20.0%	22.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Project Trips In	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	
Project Trips Out	36	1	13	14	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project	36	1	13	14	0	0	2	0	0	0	0	0	0	2	0	0	
Total Trips	41	87	1,199	153	1	261	1,644	28	0	12	67	45	0	159	107	177	

Luke Transportation Engineering Consultants, 2025

Summary of Vehicle Movements

Luke Transportation Engineering Consultants

Summary of Future Growth Vehicle Movements - Intersection #2

Project:	Greenberg Gibbons Light Industrial Development										LTEC		LTEC			
N/S Road:	US 27								Observer:		LTEC					
E/W Road:	Cindy's Showroom Dr								Weather:		Clear					
Date:	Tuesday, June 17, 2025				Base Year	Build-out Year			Rd Condition:		Ok					
Approach:	NB	SB	EB	WB					Signal:		No					
Annual Growth %	3.0%	3.0%	3.0%	3.0%	2025	2027			FDOT - Seasonal Adj Factor:		1.04					
															Intersection	
															2	
A.M. Peak Hour	US 27 Northbound				US 27 Southbound				Cindy's Showroom Dr Eastbound				Cindy's Showroom Dr Westbound			
	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes			2	>			2									1
Length																
Existing	0	0	1,258	1	0	0	1,206	0	0	0	0	0	0	0	0	0
Growth Factor	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%
Growth	0	0	1,333	1	0	0	1,278	0	0	0	0	0	0	0	0	0
Vested	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Projected Back	**0**	**0**	**1,333**	**1**	**0**	**0**	**1,278**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
External A.M. Project Trips		Enter:	74	Exit:	10											
Pass-by Trips In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Pass Trips	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
% Project In	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	43.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Project Out	0.0%	0.0%	65.0%	0.0%	0.0%	0.0%	57.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	35.0%
Project Trips In	0	0	0	19	0	0	32	0	0	0	0	0	0	0	0	0
Project Trips Out	0	0	6	0	0	0	6	0	0	0	0	0	0	0	0	4
Total Project	**0**	**0**	**6**	**19**	**0**	**0**	**38**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
Total Trips	**0**	**0**	**1,339**	**20**	**0**	**0**	**1,316**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
P.M. Peak Hour	US 27 Northbound				US 27 Southbound				Cindy's Showroom Dr Eastbound				Cindy's Showroom Dr Westbound			
	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
Existing	0	0	1,325	1	0	0	1,724	0	0	0	0	0	0	0	0	1
Growth Factor	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%
Growth	0	0	1,405	1	0	0	1,827	0	0	0	0	0	0	0	0	1
Vested	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Projected Back	**0**	**0**	**1,405**	**1**	**0**	**0**	**1,827**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
External P.M. Project Trips		Enter:	10	Exit:	64											
Pass-by Trips In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Pass Trips	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
% Project In	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	43.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Project Out	0.0%	0.0%	65.0%	0.0%	0.0%	0.0%	57.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	35.0%
Project Trips In	0	0	0	2	0	0	4	0	0	0	0	0	0	0	0	0
Project Trips Out	0	0	42	0	0	0	36	0	0	0	0	0	0	0	0	22
Total Project	**0**	**0**	**42**	**2**	**0**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22**
Total Trips	**0**	**0**	**1,447**	**3**	**0**	**0**	**1,867**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**

Luke Transportation Engineering Consultants, 2025

Summary of Vehicle Movements

Luke Transportation Engineering Consultants

Summary of Future Growth Vehicle Movements - Intersection #3

Project:	Greenberg Gibbons Light Industrial Development										LTEC		LTEC			
N/S Road:	US 27								Observer:		LTEC					
E/W Road:	Open Door Baptist Church								Weather:		Clear					
Date:	Tuesday, June 17, 2025				Base Year	Build-out Year			Rd Condition:		Ok					
Approach:	NB	SB	EB	WB					Signal:		Yes					
Annual Growth %	3.0%	3.0%	3.0%	3.0%	2025	2027			FDOT - Seasonal Adj Factor:		1.04					
															Intersection	
															3	
A.M. Peak Hour	US 27 Northbound				US 27 Southbound				Open Door Baptist Church Eastbound				Open Door Baptist Church Westbound			
	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes			2	1	1		2									1
Length				380	545											
Existing	7	0	1,263	1	2	0	1,202	0	0	0	0	0	0	0	0	0
Growth Factor	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%
Growth	7	0	1,339	1	2	0	1,274	0	0	0	0	0	0	0	0	0
Vested	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Projected Back	**7**	**0**	**1,339**	**1**	**2**	**0**	**1,274**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
External A.M. Project Trips		Enter:	74	Exit:	10											
Pass-by Trips In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Pass Trips	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
% Project In	0.0%	0.0%	57.0%	0.0%	43.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Project Out	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	57.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Project Trips In	0	0	42	0	32	0	0	0	0	0	0	0	0	0	0	0
Project Trips Out	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
Total Project	**0**	**0**	**42**	**0**	**32**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total Trips	**7**	**0**	**1,381**	**1**	**34**	**0**	**1,280**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
P.M. Peak Hour	US 27 Northbound				US 27 Southbound				Open Door Baptist Church Eastbound				Open Door Baptist Church Westbound			
	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
Existing	14	0	1,316	0	16	1	1,717	0	0	0	0	0	0	0	0	1
Growth Factor	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%
Growth	15	0	1,395	0	17	1	1,820	0	0	0	0	0	0	0	0	1
Vested	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Projected Back	**15**	**0**	**1,395**	**0**	**17**	**1**	**1,820**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
External P.M. Project Trips		Enter:	10	Exit:	64											
Pass-by Trips In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Pass Trips	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
% Project In	0.0%	0.0%	57.0%	0.0%	43.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Project Out	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	57.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Project Trips In	0	0	6	0	4	0	0	0	0	0	0	0	0	0	0	0
Project Trips Out	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0
Total Project	**0**	**0**	**6**	**0**	**4**	**0**	**36**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total Trips	**15**	**0**	**1,401**	**0**	**21**	**1**	**1,856**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

Luke Transportation Engineering Consultants, 2025

Summary of Vehicle Movements

Luke Transportation Engineering Consultants

Summary of Future Growth Vehicle Movements - Intersection #4

Project:	Greenberg Gibbons Light Industrial Development										LTEC		LTEC			
N/S Road:	US 27/SR 25									Observer:	LTEC					
E/W Road:	Project Ent									Weather:	Clear					
Date:	Tuesday, June 17, 2025				Base Year	Build-out Year				Rd Condition:	Ok					
Approach:	NB	SB	EB	WB	2025	2027				Signal:	Yes					Intersection
Annual Growth %	3.0%	3.0%	3.0%	3.0%						FDOT - Seasonal Adj Factor:	1.08					4
A.M. Peak Hour	US 27/SR 25 Northbound				US 27/SR 25 Southbound				Project Ent Eastbound				Project Ent Westbound			
	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes			2	>			2									1
Length																
Existing	0	0	1,308	0	0	0	1,254	0	0	0	0	0	0	0	0	0
Growth Factor	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%
Growth	0	0	1,386	0	0	0	1,329	0	0	0	0	0	0	0	0	0
Vested	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Projected Back	**0**	**0**	**1,386**	**0**	**0**	**0**	**1,329**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
External A.M. Project Trips		Enter:	74	Exit:	10											
Pass-by Trips In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Pass Trips	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
% Project In	0.0%	0.0%	25.0%	75.0%	0.0%	0.0%	43.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Project Out	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	57.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	65.0%
Project Trips In	0	0	19	55	0	0	32	0	0	0	0	0	0	0	0	0
Project Trips Out	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
Total Project	0	0	19	55	0	0	38	0	0	0	0	0	0	0	0	6
Total Trips	**0**	**0**	**1,405**	**55**	**0**	**0**	**1,367**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
P.M. Peak Hour	US 27/SR 25 Northbound				US 27/SR 25 Southbound				Project Ent Eastbound				Project Ent Westbound			
	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
Existing	0	0	1,377	0	0	0	1,791	0	0	0	0	0	0	0	0	0
Growth Factor	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%	106%
Growth	0	0	1,460	0	0	0	1,898	0	0	0	0	0	0	0	0	0
Vested	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Projected Back	**0**	**0**	**1,460**	**0**	**0**	**0**	**1,898**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
External P.M. Project Trips		Enter:	10	Exit:	64											
Pass-by Trips In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Pass Trips	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
% Project In	0.0%	0.0%	25.0%	75.0%	0.0%	0.0%	43.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Project Out	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	57.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	65.0%
Project Trips In	0	0	2	8	0	0	4	0	0	0	0	0	0	0	0	0
Project Trips Out	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	42
Total Project	0	0	2	8	0	0	40	0	0	0	0	0	0	0	0	42
Total Trips	**0**	**0**	**1,462**	**8**	**0**	**0**	**1,938**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**42**

Luke Transportation Engineering Consultants, 2025

Appendix E – 2027 Synchro 12 Worksheets

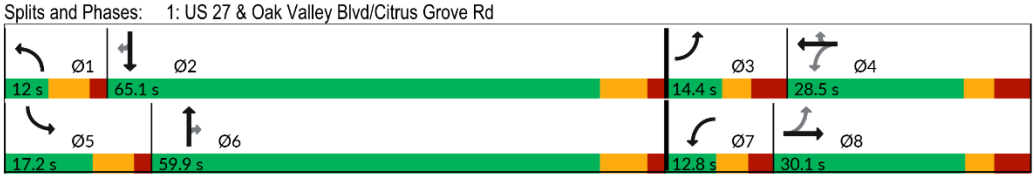
Timings
1: US 27 & Oak Valley Blvd/Citrus Grove Rd

Build-out
AM 2027

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	39	136	98	28	107	28	1119	224	159	1168	15
Future Volume (vph)	39	136	98	28	107	28	1119	224	159	1168	15
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4			6			2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.4	25.6	11.6	28.5	28.5	12.0	31.5	31.5	11.8	33.5	33.5
Total Split (s)	14.4	30.1	12.8	28.5	28.5	12.0	59.9	59.9	17.2	65.1	65.1
Total Split (%)	12.0%	25.1%	10.7%	23.8%	23.8%	10.0%	49.9%	49.9%	14.3%	54.3%	54.3%
Yellow Time (s)	3.4	3.4	3.7	3.7	3.7	4.8	5.5	5.5	4.8	5.5	5.5
All-Red Time (s)	4.2	4.2	2.9	4.2	4.2	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.6	7.6	6.6	7.9	7.9	6.8	7.5	7.5	6.8	7.5	7.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effct Green (s)	23.3	16.8	25.9	21.0	21.0	5.2	52.5	52.5	9.7	62.1	62.1
Actuated g/C Ratio	0.20	0.15	0.23	0.18	0.18	0.05	0.46	0.46	0.09	0.55	0.55
v/c Ratio	0.13	0.73	0.45	0.09	0.27	0.38	0.74	0.28	0.58	0.65	0.02
Control Delay (s/veh)	32.7	58.8	40.0	42.6	3.5	68.4	29.2	3.4	59.5	22.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.7	58.8	40.0	42.6	3.5	68.4	29.2	3.4	59.5	22.1	0.1
LOS	C	E	D	D	A	E	C	A	E	C	A
Approach Delay (s/veh)		54.4		23.8			25.8			26.3	
Approach LOS		D		C			C			C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 113.8		
Natural Cycle: 90		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.74		
Intersection Signal Delay (s/veh): 27.9	Intersection LOS: C	
Intersection Capacity Utilization 76.0%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 1: US 27 & Oak Valley Blvd/Citrus Grove Rd



Queues
1: US 27 & Oak Valley Blvd/Citrus Grove Rd

Build-out
AM 2027

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	41	201	107	30	114	30	1190	238	169	1243	16
v/c Ratio	0.13	0.73	0.45	0.09	0.27	0.38	0.74	0.28	0.58	0.65	0.02
Control Delay (s/veh)	32.7	58.8	40.0	42.6	3.5	68.4	29.2	3.4	59.5	22.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.7	58.8	40.0	42.6	3.5	68.4	29.2	3.4	59.5	22.1	0.1
Queue Length 50th (ft)	23	133	62	20	0	22	371	0	62	360	0
Queue Length 95th (ft)	51	214	108	48	17	56	495	46	103	484	0
Internal Link Dist (ft)		623		927			511			827	
Turn Bay Length (ft)	75		350		355	490		490	575		565
Base Capacity (vph)	309	365	238	363	440	80	1616	851	311	1911	930
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.55	0.45	0.08	0.26	0.38	0.74	0.28	0.54	0.65	0.02

Intersection Summary

HCM 7th Signalized Intersection Summary
1: US 27 & Oak Valley Blvd/Citrus Grove Rd

Build-out
AM 2027

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	136	53	98	28	107	28	1119	224	159	1168	15
Future Volume (veh/h)	39	136	53	98	28	107	28	1119	224	159	1168	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	41	145	56	107	30	114	30	1190	238	169	1243	16
Peak Hour Factor	0.94	0.94	0.94	0.92	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	290	173	67	193	277	234	48	1697	757	231	1839	820
Arrive On Green	0.03	0.13	0.13	0.06	0.15	0.15	0.03	0.48	0.48	0.07	0.52	0.52
Sat Flow, veh/h	1781	1285	496	1767	1856	1572	1767	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	41	0	201	107	30	114	30	1190	238	169	1243	16
Grp Sat Flow(s),veh/h/ln	1781	0	1781	1767	1856	1572	1767	1763	1572	1714	1763	1572
Q Serve(g_s), s	2.2	0.0	12.2	5.8	1.5	7.3	1.9	29.2	10.2	5.3	28.8	0.5
Cycle Q Clear(g_c), s	2.2	0.0	12.2	5.8	1.5	7.3	1.9	29.2	10.2	5.3	28.8	0.5
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	0	239	193	277	234	48	1697	757	231	1839	820
V/C Ratio(X)	0.14	0.00	0.84	0.55	0.11	0.49	0.62	0.70	0.31	0.73	0.68	0.02
Avail Cap(c_a), veh/h	342	0	363	193	346	293	83	1697	757	323	1839	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	0.0	46.6	39.3	40.6	43.1	53.2	22.4	17.5	50.5	19.5	12.8
Incr Delay (d2), s/veh	0.2	0.0	10.4	3.5	0.2	1.6	12.5	2.4	1.1	5.2	2.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	6.1	2.6	0.7	3.0	1.0	11.3	3.9	2.4	10.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.5	0.0	57.0	42.7	40.8	44.7	65.6	24.9	18.6	55.7	21.5	12.8
LnGrp LOS	D		E	D	D	D	E	C	B	E	C	B
Approach Vol, veh/h		242			251			1458			1428	
Approach Delay, s/veh		54.0			43.4			24.7			25.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	65.1	11.2	24.4	14.2	60.7	12.8	22.7
Change Period (Y+Rc), s	6.8	7.5	7.6	7.9	6.8	7.5	6.6	* 7.9
Max Green Setting (Gmax), s	5.2	57.6	6.8	20.6	10.4	52.4	6.2	* 23
Max Q Clear Time (g_c+I1), s	3.9	30.8	4.2	9.3	7.3	31.2	7.8	14.2
Green Ext Time (p_c), s	0.0	9.1	0.0	0.3	0.1	8.7	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	28.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	1339	20	0	1316
Future Vol, veh/h	0	4	1339	20	0	1316
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	405	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	4	4	5	5
Mvmt Flow	0	4	1424	21	0	1400

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	712	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	375	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	375	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	14.72	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	375	-
HCM Lane V/C Ratio	-	-	0.011	-
HCM Ctrl Dly (s/v)	-	-	14.7	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1381	1	34	1280
Future Vol, veh/h	0	0	1381	1	34	1280
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	380	545	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	0	0	1485	1	37	1376

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	742	0	0	1486	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.16	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.23	-
Pot Cap-1 Maneuver	0	358	-	-	444	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	358	-	-	444	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	0.36
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	444	-
HCM Lane V/C Ratio	-	-	-	0.082	-
HCM Ctrl Dly (s/v)	-	-	0	13.8	-
HCM Lane LOS	-	-	A	B	-
HCM 95th %tile Q(veh)	-	-	-	0.3	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	1405	55	0	1367
Future Vol, veh/h	0	6	1405	55	0	1367
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	405	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	4	4	4	4
Mvmt Flow	0	6	1495	59	0	1454

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	747	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	355	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	355	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.32	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	355	-
HCM Lane V/C Ratio	-	-	0.018	-
HCM Ctrl Dly (s/v)	-	-	15.3	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

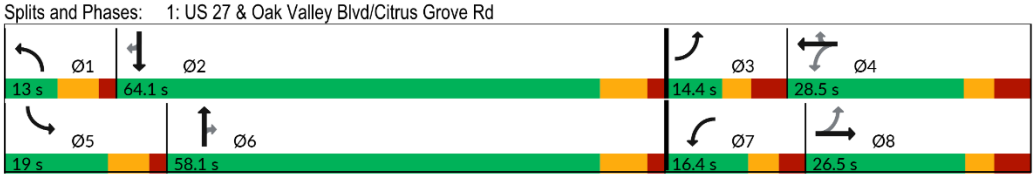
Timings
1: US 27 & Oak Valley Blvd/Citrus Grove Rd

Build-out
PM 2027

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	12	67	159	107	177	128	1199	153	262	1644	28
Future Volume (vph)	12	67	159	107	177	128	1199	153	262	1644	28
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4			6			2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.4	25.6	11.6	28.5	28.5	12.0	31.5	31.5	11.8	33.5	33.5
Total Split (s)	14.4	26.5	16.4	28.5	28.5	13.0	58.1	58.1	19.0	64.1	64.1
Total Split (%)	12.0%	22.1%	13.7%	23.8%	23.8%	10.8%	48.4%	48.4%	15.8%	53.4%	53.4%
Yellow Time (s)	3.4	3.4	3.7	3.7	3.7	4.8	5.5	5.5	4.8	5.5	5.5
All-Red Time (s)	4.2	4.2	2.9	4.2	4.2	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.6	7.6	6.6	7.9	7.9	6.8	7.5	7.5	6.8	7.5	7.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effct Green (s)	18.4	12.2	27.9	22.8	22.8	6.2	50.9	50.9	11.9	56.6	56.6
Actuated g/C Ratio	0.16	0.11	0.25	0.20	0.20	0.05	0.45	0.45	0.10	0.50	0.50
v/c Ratio	0.06	0.56	0.56	0.30	0.40	1.43	0.81	0.20	0.76	0.97	0.03
Control Delay (s/veh)	32.4	48.3	42.6	43.5	9.2	281.1	32.6	2.9	64.0	43.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.4	48.3	42.6	43.5	9.2	281.1	32.6	2.9	64.0	43.6	0.1
LOS	C	D	D	D	A	F	C	A	E	D	A
Approach Delay (s/veh)		46.8		29.5			51.0			45.8	
Approach LOS		D		C			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 113.4	
Natural Cycle: 130	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.43	
Intersection Signal Delay (s/veh): 45.9	Intersection LOS: D
Intersection Capacity Utilization 86.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: US 27 & Oak Valley Blvd/Citrus Grove Rd



Queues
1: US 27 & Oak Valley Blvd/Citrus Grove Rd

Build-out
PM 2027

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	13	117	166	111	184	133	1249	159	273	1713	29
v/c Ratio	0.06	0.56	0.56	0.30	0.40	1.43	0.81	0.20	0.76	0.97	0.03
Control Delay (s/veh)	32.4	48.3	42.6	43.5	9.2	281.1	32.6	2.9	64.0	43.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.4	48.3	42.6	43.5	9.2	281.1	32.6	2.9	64.0	43.6	0.1
Queue Length 50th (ft)	7	65	99	65	0	~129	400	0	100	605	0
Queue Length 95th (ft)	23	125	161	134	63	#267	536	32	#165	#856	0
Internal Link Dist (ft)		623		927			511			827	
Turn Bay Length (ft)	75		350		355	490		490	575		565
Base Capacity (vph)	244	311	297	394	479	93	1544	787	369	1767	878
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.38	0.56	0.28	0.38	1.43	0.81	0.20	0.74	0.97	0.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary
1: US 27 & Oak Valley Blvd/Citrus Grove Rd

Build-out
PM 2027

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	67	45	159	107	177	128	1199	153	262	1644	28
Future Volume (veh/h)	12	67	45	159	107	177	128	1199	153	262	1644	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	12	70	47	166	111	184	133	1249	159	273	1713	29
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	187	94	63	251	287	243	97	1620	723	334	1806	805
Arrive On Green	0.01	0.09	0.09	0.09	0.15	0.15	0.06	0.47	0.47	0.10	0.51	0.51
Sat Flow, veh/h	1781	1044	701	1767	1856	1572	1739	3469	1547	3456	3554	1585
Grp Volume(v), veh/h	12	0	117	166	111	184	133	1249	159	273	1713	29
Grp Sat Flow(s),veh/h/ln	1781	0	1744	1767	1856	1572	1739	1735	1547	1728	1777	1585
Q Serve(g_s), s	0.7	0.0	7.3	9.3	6.0	12.5	6.2	33.4	6.8	8.6	51.0	1.0
Cycle Q Clear(g_c), s	0.7	0.0	7.3	9.3	6.0	12.5	6.2	33.4	6.8	8.6	51.0	1.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	0	157	251	287	243	97	1620	723	334	1806	805
V/C Ratio(X)	0.06	0.00	0.75	0.66	0.39	0.76	1.37	0.77	0.22	0.82	0.95	0.04
Avail Cap(c_a), veh/h	271	0	296	251	343	291	97	1620	723	378	1806	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	0.0	49.5	40.2	42.3	45.1	52.6	24.7	17.6	49.3	26.0	13.7
Incr Delay (d2), s/veh	0.1	0.0	6.9	6.3	0.8	9.0	220.5	3.6	0.7	11.8	12.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	3.5	4.4	2.8	5.5	8.5	13.0	2.6	4.1	21.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.2	0.0	56.4	46.5	43.2	54.0	273.1	28.3	18.3	61.2	38.1	13.8
LnGrp LOS	D		E	D	D	D	F	C	B	E	D	B
Approach Vol, veh/h		129			461			1541			2015	
Approach Delay, s/veh		55.3			48.7			48.4			40.9	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	64.1	9.2	25.1	17.6	59.5	16.4	17.9
Change Period (Y+Rc), s	6.8	7.5	7.6	7.9	6.8	7.5	6.6	* 7.9
Max Green Setting (Gmax), s	6.2	56.6	6.8	20.6	12.2	50.6	9.8	* 19
Max Q Clear Time (g_c+I1), s	8.2	53.0	2.7	14.5	10.6	35.4	11.3	9.3
Green Ext Time (p_c), s	0.0	2.9	0.0	0.6	0.1	7.5	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	45.0
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	23	1447	3	0	1867
Future Vol, veh/h	0	23	1447	3	0	1867
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	405	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	6	10	2	2
Mvmt Flow	0	24	1507	3	0	1945

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	754	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	352	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	352	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.98	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	352	-
HCM Lane V/C Ratio	-	-	0.068	-
HCM Ctrl Dly (s/v)	-	-	16	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	1401	0	22	1856
Future Vol, veh/h	0	1	1401	0	22	1856
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	380	545	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	0	1	1459	0	23	1933

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	730	0	0	1459	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	365	-	-	459	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	365	-	-	459	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	14.89	0	0.16
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	365	459	-
HCM Lane V/C Ratio	-	-	0.003	0.05	-
HCM Ctrl Dly (s/v)	-	-	14.9	13.3	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0	0.2	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	42	1462	8	0	1938
Future Vol, veh/h	0	42	1462	8	0	1938
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	405	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	6	10	2	2
Mvmt Flow	0	44	1523	8	0	2019

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	761	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	348	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	348	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.84	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	348	-
HCM Lane V/C Ratio	-	-	0.126	-
HCM Ctrl Dly (s/v)	-	-	16.8	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.4	-

Appendix F – Auxiliary Turn Lane Worksheets

Build-out – Northbound Right-Turn Lane Analysis

Cindy's Showroom Drive (Intersection #2)

A.M. Peak Hour

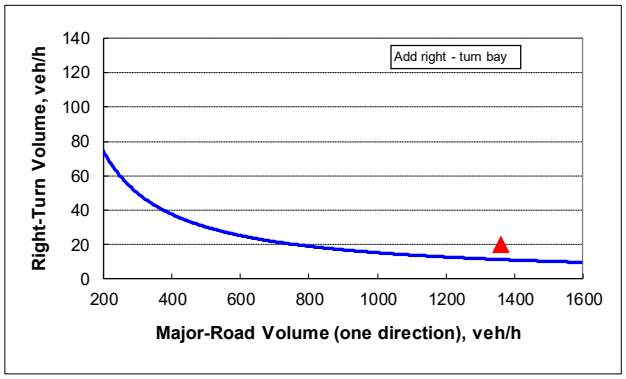
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	55
Major-road volume (one direction), veh/h:	1359
Right-turn volume, veh/h:	20

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	11
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Add right-turn bay.	



Build-out – Northbound Right-Turn Lane Analysis

Cindy's Showroom Drive (Intersection #2)

A.M. Peak Hour

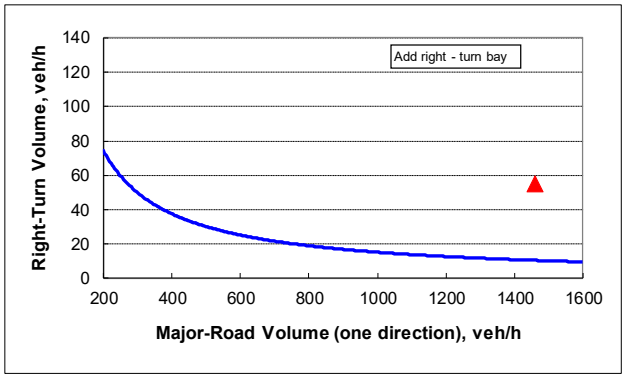
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

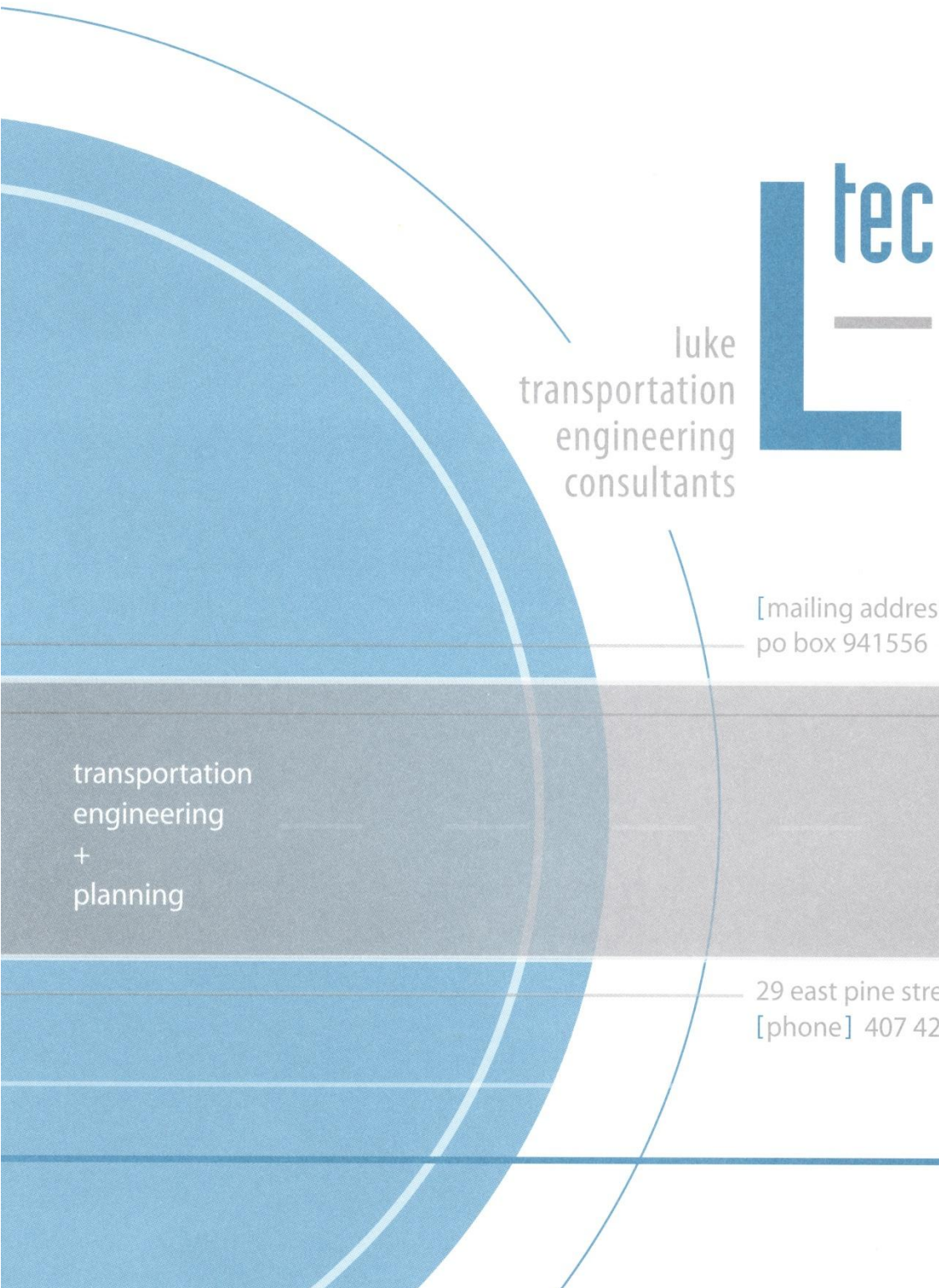
INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	55
Major-road volume (one direction), veh/h:	1460
Right-turn volume, veh/h:	55

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	11
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Add right-turn bay.	





luke
transportation
engineering
consultants

tec

[mailing address]
po box 941556 maitland florida 32794-1556

transportation
engineering
+
planning

29 east pine street orlando florida 32801
[phone] 407 423 8055 [fax] 407 423 8022

GEOTECHNICAL EXPLORATION

US 27 Mixed Used PD
SWQ of US Highway 27 & Citrus Grove Road
Minneola, Lake County, Florida

UES Project No.
0130.2500063.0000 UES Report No.
2141921.v2

Prepared For:

Greenberg Gibbons Properties
706 Giddings Avenue
Annapolis, Maryland 21401

Attention: Mr. Tilghman Herring, Head of Acquisition

Prepared By:

UES Professional Solutions, LLC
3532 Maggie Boulevard
Orlando, Florida 32811
(407) 423-0504

May 1, 2025

April 16, 2025
REVISED: May 1, 2025

Greenberg Gibbons Properties
706 Giddings Avenue
Annapolis, Maryland 21401
P: 410-562-7733

Attention: Mr. Tilghman Herring, Head of Acquisition
therring@ggcommercial.com

Reference: **Geotechnical Exploration**
US 27 Mixed Used PD
SWQ of US Highway 27 & Citrus Grove Road
Minneola, Lake County, Florida
UES Project No. 0130.2500063.0000
UES Report No. 2141921.v2

Dear Mr. Herring:

UES Professional Solutions, LLC d/b/a UES has completed the Geotechnical Exploration at the above referenced site in Minneola, Florida. The scope of our exploration was planned in conjunction with and authorized by you. This exploration was performed in general accordance with UES Proposal No. 2127881.v2 dated January 28, 2025, and generally accepted soil and foundation engineering practices. No other warranty, express or implied, is made.

The following report presents the results of our field exploration with a geotechnical engineering interpretation of those results with respect to the project characteristics as provided to us. We have included our estimates of the seasonal high groundwater level at the boring locations and geotechnical recommendations for foundation design, pavement design, site preparation and stormwater design parameters. *Generally, the site was found to be suitable for the proposed development following the typical site preparation procedures presented in this report.*

We appreciate the opportunity to have worked with you on this project and look forward to a continued association. Please do not hesitate to contact us if you should have any questions, or if we may further assist you as your plans proceed.

Respectfully Submitted,
UES PROFESSIONAL SOLUTIONS, LLC
Florida Engineering Business Registry No. 549

Ricardo C. Kiriakidis L., Ph.D., P.E.
Geotechnical Department Manager

JUSTIN D. BERNABAS LICENSE No 100872 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by JUSTIN D BERNABAS
DN: c=US, o=UES PROFESSIONAL SOLUTIONS LLC, dnQualifier=A01410D0000001968221229700028137, cn=JUSTIN D BERNABAS
Date: 2025.05.01 16:30:40 -04'00'

This item has been digitally signed and sealed by Justin D. Bernabas 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

Justin D. Bernabas, P.E.
Date: 5/1/2025
Geotechnical Project Manager
Florida Registration No. 100872

TABLE OF CONTENTS

1.0 PROJECT DESCRIPTION 1

2.0 PURPOSE 1

3.0 SITE DESCRIPTION 1

3.1 Soil Survey 2
3.2 Topography 3

4.0 SCOPE OF SERVICES 3

5.0 FIELD EXPLORATION 4

5.1 Standard Penetration Test (SPT) Borings 4
5.2 Confirmatory Hand Auger Borings 4

6.0 LABORATORY TESTING 4

7.0 SUBSURFACE CONDITIONS 5

7.1 Generalized Soil Profile 5
7.2 Notable Findings 5
7.2.1 Very Loose Soils 5
7.2.2 Hydraulically Restrictive Soils 6
7.2.3 Transient Perched Seasonal High Groundwater (SHGWT) Conditions 6

8.0 GROUNDWATER CONDITIONS 6

8.1 Existing Groundwater Level 6
8.3 Seasonal High Groundwater Level 6

9.0 FOUNDATION DESIGN RECOMMENDATIONS 7

9.1 Structural and Grading Information 7
9.2 Analysis 7
9.3 Bearing Pressure 8
9.4 Foundation Size 8
9.5 Bearing Depth 8
9.6 Bearing Material 8
9.7 Settlement Estimates 8
9.8 Floor Slabs 9

10.0 PAVEMENT RECOMMENDATIONS 9

10.1 General 9
10.2 Asphaltic Pavements 9
10.2.1 Layer Components 9
10.2.2 Subgrade 10
10.2.3 Base Course 10
10.2.4 Surface Course 11

10.2.5 Effects of Groundwater 11
10.2.6 Landscape Areas 12
10.3 CONCRETE "RIGID" PAVEMENTS 12
11.0 SITE PREPARATION 13
12.0 STORMWATER POND DESIGN CONSIDERATIONS 14
13.0 SUITABILITY OF EXCAVATED SOIL FOR USE AS FILL 15
13.1 ADDITIONAL STEPS FOR USE OF GROUP "C" AND "D" SOILS 16
14.0 DEWATERING AND EXCAVATION CONSIDERATIONS 17
15.0 CONSTRUCTION RELATED SERVICES 17
16.0 LIMITATIONS 18

LIST OF TABLES

Table I: Summary of Published Soil Data 3
Table II: Laboratory Methodologies 5
Table III: Generalized Soil Profile 5
Table IV: Minimum Asphaltic Pavement Component Thicknesses 10
Table V: Minimum Concrete Pavement Thicknesses 13
Table VI: Stormwater Management Design Parameters 15
Table VII: Suitability of Excavated Material for Use as Fill 15

LIST OF FIGURES

Figure I: Web Soil Survey 2

APPENDICES

APPENDIX A
USGS Location Map A-1

APPENDIX B
Boring Location Plan B-1
Boring Logs B-2
Key to Boring Logs Sheet B-3

APPENDIX C
GBC Document C-1
Constraints and Restrictions C-2

1.0 PROJECT DESCRIPTION

UES understands that Greenberg Gibbons Properties is in the design process for a new commercial development located in Lake County, Florida. The site is located at the southwest quadrant (SWQ) of US Highway 27 and Citrus Grove Road intersection in Minneola, Florida. The subject property consists of one (1) parcel identified with AltKey 1031265 by the Lake County Property Appraiser totaling approximately 9.37 acre. UES was provided with conceptual site plan depicting the proposed development, proposed boring locations, proposed cut and fill depth as well as the existing site topographic survey. The proposed development will consist of two (2) commercial buildings, paved parking and driveway areas, and one (1) stormwater pond.

UES was provided with the anticipated maximum structural loads; the maximum loads for isolated columns will be on the order of *150 kips* and the maximum loads for wall foundations will be on the order of *10 kips per lineal feet*, or less. Based on the proposed grading site plan, fills in the order of 16 feet and cut in the order of 12 feet or less will be necessary to achieve finished grades in the proposed building, stormwater pond, and pavement areas.

Should any of the above information or assumptions made by UES be inconsistent with the planned development and construction, we request that you contact us immediately to allow us the opportunity to review the new information in conjunction with our report and revise or modify our engineering recommendations accordingly, as needed.

No site or project facilities/improvements, other than those described herein, should be designed using the soil information presented in this report. Moreover, UES will not be responsible for the performance of any site improvement so designed and constructed.

2.0 PURPOSE

The purposes of this exploration were:

- to explore and evaluate the subsurface conditions at the site with special attention to potential problems that may impact the proposed development,
- to provide our estimates of the seasonal high groundwater level at the boring locations and
- to provide geotechnical engineering recommendations for foundation design, pavement design, site preparation, and stormwater pond design parameters.

This report presents an evaluation of site conditions on the basis of geotechnical procedures for site characterization. The recovered samples were not examined, either visually or analytically, for chemical composition or environmental hazards. We would be glad to provide you with a proposal for these services at your request.

3.0 SITE DESCRIPTION

The subject site is located within Section 06, Township 22 South, Range 26 East in Lake County, Florida. More specifically, the site is located at the SWQ of US Highway 27 & Citrus Grove Road intersection in Minneola, Florida as shown on the attached Appendix. At the time of our field exploration, the site consisted of a vacant parcel generally wooded with some sparsely vegetated areas.

3.1 Soil Survey

There are three (3) native soil types mapped within the general vicinity of the site according to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey of Lake County. A brief summary of the mapped surficial soil types is presented in Table I. *Please note the native soil type and its associated engineering properties might have been altered during previous and current land use*.

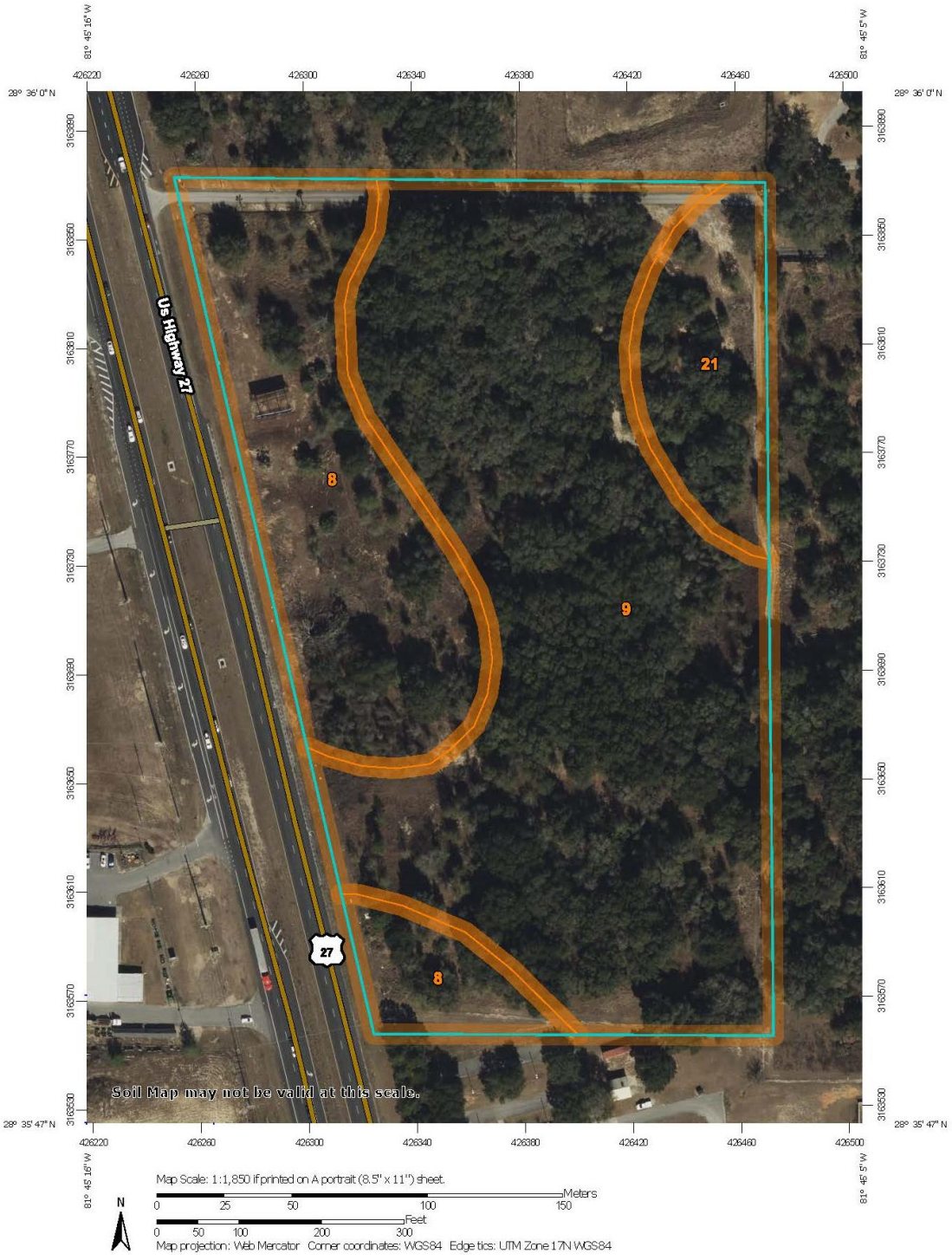


Figure I: Web Soil Survey
(Image obtained from the USDA NRCS Web Soil Survey online webpage, accessed on 4/10/2025)

TABLE I
SUMMARY OF PUBLISHED SOIL DATA [1]

Soil Symbol	Soil Type	Hydrologic Group	Drainage Characteristics	Depth to Published Seasonal High GWT (feet)
8	Candler sand, 0 to 5 percent slopes	A	Excessively drained	>6½
9	Candler sand, 5 to 12 percent slopes	A	Excessively drained	>6½
21	Lake sand, 0 to 5 percent slopes	A	Excessively drained	>6½

[1] Data obtained from the NRCS online webpage, accessed on 4/10/2025
GWT = Groundwater table
N/A = Parameter is not applicable

3.2 TOPOGRAPHY

According to information obtained from the United States Geologic Survey (USGS) "Clermont West, Florida" quadrangle map, the pre-development ground surface elevation across the site area is approximately ranging from +140 to +205 feet National Geodetic Vertical Datum (NGVD). According to the USGS, Grassy Lake is located east of the site, with a normal water level of approximately +83 feet NGVD. A copy of a portion of the USGS Map is included in Appendix A.

4.0 SCOPE OF SERVICES

The services conducted by UES during our geotechnical explorations were as follows:

- Nine (9) Standard Penetration Test (SPT) borings to depths of 25 feet below existing land surface (bls) and one (1) SPT boring to a depth of 35 feet bls (within the anticipated cut of 10 feet bls) within the proposed building footprints.
- Two (2) SPT borings to a depth of 30 feet bls within the proposed stormwater pond area.
- Eight (8) SPT borings to depths of 10 feet bls, one (1) SPT boring to a depth of 15 feet bls (within the anticipated cut of 6 feet bls), and one (1) SPT boring to a depth of 20 feet bls (within the anticipated cut of 10 feet bls) within the proposed pavement areas.
- Two (2) confirmatory hand auger borings to depths of 10 feet bls at the requested locations within the proposed stormwater pond footprint.
- Secured samples of representative soils encountered in the soil borings for review, laboratory analysis and classification by a Geotechnical Engineer.
- Measured the existing site groundwater levels and provided an estimate of the seasonal high groundwater level at the boring locations.
- Conducted laboratory testing on selected soil samples obtained in the field to determine their engineering properties.
- Assessed the existing soil conditions with respect to the proposed construction.
- Prepared a report which documents the results of our exploration and analysis with geotechnical engineering recommendations.

5.0 FIELD EXPLORATION

5.1 STANDARD PENETRATION TEST (SPT) BORINGS

The SPT borings were performed with an ATV mounted drilling rig. Horizontal and vertical survey control was not provided for the test locations prior to our field exploration program. UES located the test borings by using the provided site plan, measuring from existing on-site landmarks shown on an aerial photograph, and by using handheld GPS devices. The indicated test locations should be considered accurate to the degree of the methodologies used. The approximate boring locations are shown in Appendix B.

The SPT borings, designated B-01 through B-10, P-01, P-02, and R-01 through R-10, as shown on the attached Boring Location Plan in Appendix B-1, were performed in general accordance with the procedures of ASTM D 1586 "Standard Method for Penetration Test and Split-Barrel Sampling of Soils". SPT sampling was performed continuously to 10 feet to detect variations in the near surface soil profile and on approximate 5 feet centers thereafter. The soil samples recovered from the test borings were returned to our laboratory and visually classified in general accordance with ASTM D 2487 "Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System – USCS).

5.2 CONFIRMATORY HAND AUGER BORINGS

UES performed two (2) hand auger borings, designated HA-01 and HA-02, at the requested locations within the proposed stormwater pond footprint. The approximate boring locations are shown in the Appendix B. The hand auger borings were performed in general accordance with the latest revision of ASTM D 1452, "Standard Practice for Soil Investigation and Sampling by Auger Borings". In this procedure, the borings were advanced by rotating a hand-held bucket type auger until the receiving end of the auger filled with soil.

Once the bucket was filled, the auger assembly was removed from the borehole and the sample was retrieved from the bucket, placed in labeled plastic containers, and sealed. After completing the auger borings, the samples obtained from each boring were transported to our laboratory where they were examined by a member of our geotechnical staff.

Ground surface elevations at the boring locations would be beneficial to help us to identify any anomalies in our measured and estimated seasonal high groundwater levels, as well as improve the usefulness the groundwater information during the civil engineering design of the site.

6.0 LABORATORY TESTING

The soil samples recovered from the test borings were returned to our laboratory and visually classified in general accordance with ASTM D 2487 "Standard Classification of Soils for Engineering Purposes" (Unified Soil Classification System). We selected representative soil samples from the borings for laboratory testing to aid in classifying the soils and to help to evaluate the general engineering characteristics of the soils. The results of these tests are shown on the logs in Appendix B. A summary of the tests performed is shown in Table II.

TABLE II
LABORATORY METHODOLOGIES

Test Performed	Number Performed	Reference
Grain Size Analysis (#200 wash only)	8	ASTM D 1140 "Amount of Material in Soils Finer than the No. 200 (75 - µm) sieve"
Soil Sieve Analysis	2	ASTM D 6913 "Standard Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis"
Moisture Content	10	ASTM D 2216 "Laboratory Determination of Water (Moisture) Content of Soil by Mass"

7.0 SUBSURFACE CONDITIONS

7.1 GENERALIZED SOIL PROFILE

The results of our field exploration and laboratory analysis, together with pertinent information obtained from the SPT and hand auger borings, such as soil profiles, penetration resistance and groundwater levels are shown on the boring logs included in Appendix B. The Key to Boring Logs, Soil Classification Chart is also included in Appendix B. The soil profiles were prepared from field logs after the recovered soil samples were examined by a Geotechnical Engineer.

The stratification lines shown on the boring logs represent the approximate boundaries between soil types and may not depict exact subsurface soil conditions. The actual soil boundaries may be more transitional than depicted. A generalized profile of the soils encountered at our boring locations, excluding the hand auger boring, is presented in Table III. For detailed soil profiles, please refer to the attached boring logs.

TABLE III
GENERALIZED SOIL PROFILE

Average Typical Depth (feet, bls)		Soil Description	Range of SPT "N" Values (blows/ft)
From	To		
0	8	Very loose to loose fine SAND [SP]	2 to 10
8	35*	Loose to dense fine SAND with clay [SP-SC] or clayey fine SAND [SC]	4 to 44

* Denotes maximum termination depth of boring

7.2 NOTABLE FINDINGS

7.2.1 Very Loose Soils

Very loose soil was observed within the upper 10 feet bls at all boring locations. These soils exhibited "N" blow count values of 2 blow to 3 blows per foot. It has been our experience that very loose soils with SPT "N" blow counts less than approximately 5 blow count per foot may not provide adequate support for the proposed structures without standard compaction effort. The use of conventional shallow footing foundations is viable, in our opinion, provided that the loose soils below any foundations are properly densified.

7.2.2 Hydraulically Restrictive Soils

UES also encountered clayey sand [SC] at several boring locations. The significance of these materials is that, if cuts are made and the clean sand cover above these hydraulically restrictive soils is reduced, they may act as aquicludes, which should be accounted for the site grading to prevent wet or perched water conditions. If these soils are to be used as fill, special consideration and additional steps should be taken as discussed on Section 13.1. These soils profile should also be considered as the base of aquifer for the stormwater design considerations.

7.2.3 Transient Perched Seasonal High Groundwater (SHGWT) Conditions

Due to the presence of hydraulically restrictive soils, as discussed in Section 7.2.2, cutting into this stratum may result in transient perched groundwater or surficial water conditions. These perched conditions can lead to soggy ground, and depending on the final grades, a landscape underdrain system may be necessary to manage surface and near-surface water.

Additionally, underdrain systems should be implemented if the minimum separation between the estimated seasonal high groundwater table (SHGWT) and the bottom elevation of the base materials, as required by the municipality, cannot be maintained.

8.0 GROUNDWATER CONDITIONS

8.1 EXISTING GROUNDWATER LEVEL

We measured the water levels in the boreholes in March and April 2025 during our drilling operations field exploration. **No groundwater** was encountered at the time of our explorations prior to the introduction of drilling mud beyond 10 feet below existing grade. Please refer to the attached boring logs in Appendix B for boring location specific groundwater levels. Fluctuations in groundwater levels should be anticipated throughout the year, primarily due to seasonal variations in rainfall, surface runoff, and other factors that may vary from the time the borings were conducted.

8.3 SEASONAL HIGH GROUNDWATER LEVEL

Based on historical data, the rainy season in Central Florida is between June and October of the year. In order to estimate the seasonal high water level at the boring locations, many factors are examined, including the following:

- Measured groundwater level
- Drainage characteristics of existing soil types
- Current & historical rainfall data
- Natural relief points (such as lakes, rivers, wetlands, etc.)
- Man-made drainage systems (ditches, canals, retention basins, etc.)
- On-site types of vegetation
- Review of available data (soil surveys, USGS maps, etc.)
- Redoximorphic features (mottling, stripping, etc.)

Based on the results of our field exploration and the factors listed above, we estimate that the seasonal high groundwater level at the boring locations will generally form as **transient perched condition at depth ranging from 4 feet bls to 9 feet bls** depending on the boring locations. We also estimate that groundwater will occur at depths **greater than 10 feet bls** at some boring locations, with hydraulically restrictive soils encountered at even greater depths. Site grading operations may influence the groundwater levels. The estimated seasonal high

groundwater levels at the boring locations are shown on the individual boring logs as attached in Appendix B.

We note that site grading operations may influence the groundwater levels. Excavations conducted during rainy/wet season at deep excavation may require some level of dewatering. The actual method(s) of controlling the water should be determined by the contractor.

It should be noted that the estimated seasonal high water levels provided should be considered accurate to approximately ±½ foot and do not provide any assurance that groundwater levels will not exceed these estimated levels during any given year in the future. Should the impediments to surface water drainage be present, or should rainfall intensity and duration, or total rainfall quantities, exceed the normally anticipated rainfall quantities, groundwater levels might exceed our seasonal high estimates. Further, it should be understood that changes in the surface hydrology and subsurface drainage from on-site and/or off-site improvements could have significant effects on the normal and seasonal high groundwater levels.

9.0 FOUNDATION DESIGN RECOMMENDATIONS

The following recommendations are made based upon a review of the attached soil test data, our understanding of the proposed construction, and experience with similar projects and subsurface conditions. The applicability of geotechnical recommendations is very dependent upon project characteristics such as improvement locations, and grade alterations.

UES must review the final site and grading plans to validate all recommendations rendered herein. Additionally, if subsurface conditions are encountered during construction, which were not encountered in the borings, report those conditions immediately to us for observation and recommendations.

9.1 Structural and Grading Information

It is our understanding that the project will include the construction of two (2) light industrial buildings. Based on the provided structural loadings, we performed our analysis based on the maximum loadings of 150 kips per column and 10 kips per linear foot for structural walls. We also understand that the maximum fills will be in the order of 16 feet and cut will be in the order of 12 feet respectively above and below the existing grade.

Prior to finalizing any design, the structural/grading information outlined above should be confirmed by the project structural/civil engineer. This is crucial to our evaluation and estimates of settlements. If any of this information is incorrect or if you anticipate any changes, please inform UES immediately so that we may review and modify our recommendations as appropriate.

9.2 Analysis

Based on the results of the soil borings, the near surface soils within the proposed building area appear to be very loose to dense sands with varying amounts of clays to a maximum boring termination depth of 35 feet bls. It is our opinion that the proposed structures can be supported on properly designed and constructed shallow foundation systems. Provided that the site preparation recommendations outlined in this report are followed, the parameters outlined below may be used for foundation design.

9.3 Bearing Pressure

Provided our suggested site preparation procedures are followed, we recommend designing shallow footing foundations for a **maximum allowable net soil bearing pressure of 3,000 pounds per square foot (psf)**. The allowable net bearing pressure is that pressure that may be transmitted to the soil in excess of the minimum surrounding overburden pressure. The allowable bearing pressure should include dead load plus sustained live load. Per the Florida Building Code (FLBC), the foundations should be designed for the most unfavorable effects due to the combinations of loads specified in the FLBC.

9.4 Foundation Size

The minimum width recommended for an isolated column footing is 24 inches. For continuous wall or slab on grade foundations, the minimum footing width should comply with the current FLBC, but under no circumstances should be less than 12 inches. Even though the maximum allowable soil bearing pressure may not be achieved, these width recommendations should control the size of the foundations.

9.5 Bearing Depth

The base of all footings should be at least 12 inches below finished grade elevation in accordance with the FLBC. We recommend stormwater and surface water be diverted away from the building exterior, both during and after construction, to reduce the possibility of erosion beneath the exterior footings.

9.6 Bearing Material

The foundations may bear on either the compacted suitable native soils or compacted structural backfill. The bearing level soils should exhibit a density of at least 95 percent of the maximum dry density as determined by ASTM D 1557 (Modified Proctor) **to a depth of at least 2 feet below foundation level**. In addition to compaction, the bearing soils must exhibit stability and be free of "pumping" conditions.

9.7 Settlement Estimates

Post-construction settlement of the structure will be influenced by several interrelated factors, such as (1) subsurface stratification and strength/compressibility characteristics of the bearing soils to a depth of approximately twice the width of the footing; (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 offsite 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 adherence to our recommended site preparation procedures presented in this report. Any deviation from these recommendations could result in an increase in the estimated post-construction settlement of the structures. Furthermore, should building loads change from those assumed by us, greater settlements may be expected.

Due to the sandy nature of the surficial soils, following adequate the compaction operations (improving the upper 10 feet) we expect the majority of settlement to be elastic in nature and occur relatively quickly, on application of the loads, during and immediately following

construction. Using the recommended maximum allowable 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 post-construction vertical settlement of the proposed structure to be on the order of 1 inch or less.**

Differential settlement results from differences in applied bearing pressures and the variations in the compressibility characteristics of the subsurface soils. Assuming our site preparation recommendations are followed, **we anticipate post-construction differential settlement of less than ½ inch.**

9.8 Floor Slabs

Conventional floor slabs may be supported upon the compacted fill and should be structurally isolated from other foundation elements or adequately reinforced to prevent distress due to differential movements. For the slab design, we recommend using a subgrade modulus (k) of 100 pounds per cubic inch, which can be achieved by compacting the subgrade soils as recommended in this report.

We recommend using a sheet vapor barrier (in accordance with Florida Building Code requirements) beneath the building slab-on-grade to help control moisture migration through the slab.

10.0 PAVEMENT RECOMMENDATIONS

10.1 General

We assume that the proposed parking and drive areas will consist of a combination of flexible asphaltic and rigid concrete pavement sections with typical light and some heavy duty traffic. Our recommendations for both pavement types are listed in the following sections. The following recommendations are based on the pavements being prepared as recommended in this report.

10.2 Asphaltic Pavements

10.2.1 Layer Components

At the time of this exploration, specific traffic loading information was not provided to us. We have assumed the following conditions for our recommended minimum pavement design.

- the subgrade soils are prepared as described in the site preparation section of this report
- a twenty (20) year design life
- terminal serviceability index (P_t) of 2.5
- reliability of 90 percent
- total equivalent 18-kip single axle loads (E_{18}SAL) up to 35,000 for light duty pavements - car and pickup truck traffic
- total equivalent 18-kip single axle loads (E_{18}SAL) up to either 275,000 or 350,000 (depending on the final design loads) for heavy duty pavements – occasional heavy truck traffic (delivery, trash collection, service lanes, etc.)

We recommend using a three-layer pavement section for the proposed asphaltic parking/drive areas consisting of stabilized subgrade, base course, and surface course. Based on the results of our soil borings, the assumed traffic loading information and review of

the 2024 FDOT Flexible Pavement Design Manual, our minimum recommended pavement component thicknesses are presented in Table IV. Where applicable, the local municipality minimum standards should be followed when more stringent than the recommendations herein.

TABLE IV
MINIMUM ASPHALTIC PAVEMENT COMPONENT THICKNESSES

Service Level	Layer Component		
	Surface Course (inches)	Base Course (inches)	Stabilized Subgrade (inches)
Light Duty	1½	6	12
Heavy Duty (E_{18}SAL up to 275,000)	2	8	12
Heavy Duty (E_{18}SAL up to 350,000)	2½	8	12

10.2.2 Subgrade

We recommend that the stabilized subgrade materials immediately beneath the base course exhibit a minimum Limerock Bearing Ratio (LBR) of 40 as specified by Florida Department of Transportation (FDOT). The stabilized subgrade should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D 1557) value.

Stabilized subgrade can be imported materials or a blend of on-site and imported materials. If a blend is proposed, we recommend that the contractor perform a mix design to find the optimum mix proportions.

Compaction testing of the subgrade should be performed to full depth at a frequency of at least one (1) test per 10,000 square feet.

10.2.3 Base Course

Based on the results of our exploration and our experience in the project area, limerock, soil-cement and recycled crushed concrete are suitable base course materials for this project. However, local municipality standards may govern the use of recycled crushed concrete use as an alternative base course material. We recommend the civil engineer consult with the local municipalities prior to selecting the base course material for this project.

For a limerock base, the base course should be compacted to a minimum density of 98 percent of the Modified Proctor maximum dry density and exhibit a minimum LBR of 100. The limerock material should comply with the latest edition of the Florida Department of Transportation (FDOT) Road and Bridge Construction specifications.

For a soil-cement base, we recommend the contractor perform a soil-cement design with a minimum seven (7)-day strength of 300 pounds per square inch (psi) on the materials he intends to use. Place soil-cement in maximum 6-inch lifts uniform and compact in place to a minimum density of 95 percent of the maximum dry density according to specifications in ASTM D-558, "Moisture Density Relations of Soil Cement Mixtures".

Place and finish the soil-cement according to Portland Cement Association requirements. Final review of the soil-cement base course should include manual "chaining" and/or "soundings" seven days after placement. Shrinkage cracks will form in the soil-cement mixture and you should expect reflection cracking on the surface course.

Recycled Concrete Aggregate (RCA) may provide a cost-effective alternative material in lieu of limerock or soil cement base courses. Local availability, along with municipality standards, typically governs the use of crushed concrete use as an alternative base course material. The advantages of using crushed concrete as a pavement base course include its high strength (stronger than limerock), resistance to groundwater related distress, and lack of reflection cracking caused by thermal expansion and contraction.

If RCA base is used, the base course material should be sourced from an FDOT approved supplier. The base should be compacted to a minimum density of 98 percent of the Modified Proctor maximum dry density and exhibit a minimum LBR of 150. The base material should comply with the latest edition of the FDOT Road and Bridge Construction Specifications.

Compaction testing of the base course should be performed to full depth at a frequency of at least one (1) test per 10,000 square feet.

10.2.4 Surface Course

For the pavements, we recommend that the surfacing consist of FDOT SuperPave (SP) asphaltic concrete. The surface course should consist of FDOT SP-9.5 fine mix for light-duty areas and FDOT SP-12.5 for heavy duty areas (optionally topped with SP-9.5 fine mix). The asphalt concrete should be placed within the allowable lift thicknesses for fine Type SP mixes per the latest edition of FDOT, Standard Specifications for Road and Bridge Construction.

The asphaltic concrete should be compacted to an average field density of 93 percent of the laboratory maximum density determined from specific gravity (G_{mm}) methods, with an individual test tolerance of **+2 percent and -1.2% of the design G_{mm}**. Specific requirements for the SuperPave asphaltic concrete structural course are outlined in the latest edition of FDOT, Standard Specifications for Road and Bridge Construction.

Note: If the Designer (or Contract Documents) limits compaction to the static mode only or lifts are placed one-inch thick, then the average field density should be 92 percent, with an individual test tolerance of + 3 percent, and -1.2% of the design G_{mm}.

After placement and field compaction, the wearing surface should be cored to evaluate material thickness and density. Cores should be obtained at frequencies of at least one (1) core per 10,000 square feet of placed pavement, or a minimum of two (2) cores per day's production.

10.2.5 Effects of Groundwater

One of the most critical influences on the pavement performance in Central Florida is the relationship between the pavement base course and the seasonal high groundwater level. Sufficient separation will need to be maintained between the bottom of stabilized subgrade and the anticipated seasonal high groundwater level.

We recommend that the seasonal high groundwater and the bottom of the base course be separated by at least 12 inches for soil-cement or crushed concrete base course, and at least 18 inches for a limerock base course.

The separation should be confirmed by reviewing the final site grading and paving plan. If the separation is not provided by grading, the installation of underdrains will be required.

10.2.6 Landscape Areas

In the event that landscape areas adjacent to the pavements include large mounds (>1 foot) of poorly draining organic topsoils or silty/clayey sands, we recommend that landscape drains be provided to protect the roadway against adverse effects from over-irrigation or excess rainfall. Poorly draining silty and clayey material causes the irrigation and rainwater to perch and migrate laterally into the pavement components, which eventually compromises the integrity of the pavement section.

10.3 Concrete "Rigid" Pavements

Concrete pavement is a rigid pavement that transfers much lighter wheel loads to the subgrade soils than a flexible asphalt pavement; therefore, requiring less subgrade preparation. Concrete pavement is recommended in truck court areas, under the dumpster areas, and 10 feet in front of the trash enclosures, at a minimum.

We recommend using the existing surficial sands or approved structural fill densified to at least 98 percent of Modified Proctor test maximum dry density (ASTM D 1557) without additional stabilization under concrete pavement, with the following stipulation:

1. Prior to placement of concrete, the subgrade soils should be prepared as recommended in the Site Preparation section of this report.
2. The surface of the subgrade soils must be smooth, and any disturbances or wheel rutting corrected prior to placement of concrete.
3. The subgrade soil must be moistened prior to placement of concrete.
4. Concrete pavement thickness should be uniform throughout, with exception to the thickened edges (curb or footing).
5. The bottom of the pavement should be separated from the seasonal high groundwater level by at least 12 inches.

Based on the results of the soil borings and review of the FDOT Rigid Pavement Design Manual, we recommend using the minimum design shown in Table V for concrete pavements.

TABLE V
MINIMUM CONCRETE PAVEMENT THICKNESSES

Service Level	Minimum Pavement Thickness	Maximum Control Joint Spacing	Recommended Saw Cut Depth
Light Duty	6 inches	12 feet x 12 feet	2 inches
Heavy Duty	7 inches	14 feet x 14 feet	2⅓ inches

We recommend using concrete with a minimum 28-day compressive strength of at least 4,000 pounds per square inch. Layout of the Saw cut control joints should form square panels, and the depth of Saw cut joints should be ⅓ of the concrete slab thickness. We recommend allowing UES to review and comment on the final concrete pavement design, including section and joint details (type of joints, joint spacing, etc.), prior to the start of construction.

For further details on concrete pavement construction, please reference the "Guide to Jointing of Non-Reinforced Concrete Pavements" published by the Florida Concrete and Products Association, Inc., and "Building Quality Concrete Parking Areas", published by the

Portland Cement Association. Specimens to verify the compressive strength of the pavement concrete should be obtained for at least every 50 cubic yards, or at least once for each day's placement, whichever is greater.

11.0 SITE PREPARATION

We recommend normal, good practice site preparation procedures for the new construction areas. These procedures include: stripping/clearing of the site to remove existing vegetation, roots, organic topsoils, debris, etc. Following stripping, the exposed subgrade soils should be proof-rolled, and all subgrade and subsequent fill/backfill soils should be properly densified. A more detailed description of this work is presented in this section.

1. Prior to construction, existing underground utility lines within the construction areas should be located. It should be noted that if underground pipes are not properly removed or plugged, they may serve as conduits for subsurface erosion which may lead to excessive settlement of overlying structures.

2. Perform any necessary remedial dewatering prior to any earthwork operations. Dewatering should be performed to a depth of at least **2 feet below the bottom of any excavations or compacted surface**.

3. Strip the proposed construction limits of existing vegetation, topsoil, roots, organic soils, debris and other deleterious materials within and 5 feet beyond the perimeter of the new construction areas. Expect clearing and grubbing to depths of 6 to 12 inches. We strongly recommend that the stripped/excavated surfaces be observed and probed by representatives of UES.

4. Proof-roll the exposed subsurface soils under the observation of UES, to locate any soft areas of unsuitable soils, and to increase the density of the shallow loose fine sand soils. If deemed necessary by UES, in areas that continue to "yield", remove any deleterious materials and replace them with a clean, compacted sand backfill.

5. After approval of the stripped surface, within the building areas, compact the upper **2 feet of the exposed subgrade soils** (including the 5 feet margin) to at least 95 percent of the Modified Proctor test maximum dry density (ASTM D 1557).

6. Place fill/backfill as necessary. All fill should consist of clean sand with less than 10 percent soil fines and be free of organics, debris and other deleterious materials. Fill soils containing between 5 and 10 percent fines may require strict moisture control. Place fill in maximum 12-inch loose, uniform lifts and compact each lift at least 95 percent of the Modified Proctor maximum dry density.

7. Within the pavement areas, the upper 12 inches of subgrade beneath the base course or concrete slabs (sub-base) should be stabilized and compacted to at least 98 percent of the Modified Proctor maximum dry density.

8. Test the subgrade and each lift of fill for compaction at a frequency of not less than one test per 2,500 square feet in the building areas and 5,000 square feet of roadway, with a minimum of 4 tests in each area.

9. Prior to the placement of reinforcing steel and concrete, verify compaction within the footing trenches to a depth of 2 feet. We recommend testing every column footing

and at least one test every 100 feet of wall footing, with a minimum of 4 tests per building. Re-compaction of the foundation excavation bearing level soils, if loosened by the excavation process, can typically be achieved by making several passes with a walk-behind vibratory sled or jumping jack.

Stability of the compacted soils is essential and independent of compaction and density control. If the near surface soils or the structural fill experience "pumping" conditions, terminate all earthwork activities in that area. Pumping conditions occur when there is too much water present in the soil-water matrix. Earthwork activities are actually attempting to compact the water and not the soil. The disturbed soils should be dried in place by scarification and aeration prior to any additional earthwork activities.

Vibrations produced during vibratory compaction operations at the site may be significantly noticeable within 100 feet and may cause distress to adjacent structures if not properly regulated. Provisions should be made to monitor these vibrations so that any necessary modifications in the compaction operations can be made in the field before potential damage occurs. UES can provide vibration monitoring services to help document and evaluate the effects of the surface compaction operation on existing structures. It is recommended that large vibratory rollers remain a minimum of 50 feet from existing structures. Within this zone, the use of a static roller or small hand guided plate compactors is recommended.

12.0 STORMWATER POND DESIGN CONSIDERATIONS

We understand that the project will include one (1) stormwater management system. Two (2) SPT borings, designated with P-01 and P-02, and two (2) hand auger borings, designated with HA-01 and HA-02, were completed within the proposed system. Based on the estimated seasonal high at these boring locations, "dry" stormwater management system is more suitable for the proposed development. However, "wet" stormwater system with adequate lines berm and pond bottom is also feasible. Our recommended stormwater design parameters for the pond are shown below in Table VI.

Please note that survey control was not provided at our borings at the time of this report. The estimated depths in Table VI are referenced to the existing ground surface at the time of our exploration. Appropriate factors of safety should be incorporated into the design process. The stormwater pond bottom, and side slopes should be stabilized according to applicable Water Management District and local municipality guidelines.

TABLE VI
STORMWATER MANAGMENT DESIGN PARAMETERS

Design Parameter	Recommended Values	
Relevant Boring Logs	**P-01**	**P-02**
Depth to Base of Surficial Aquifer bls (ft)	12**	11½**
Horizontal Saturated Hydraulic Conductivity, K_h (ft/day)*	40	40
Vertical Unsaturated Hydraulic Conductivity, K_v (ft/day)*	27	27
Fillable Porosity (%)	25	25
Estimated Seasonal High Groundwater Level bls (ft)	>10	>10

** Unfactored*
***Depth of hydraulically restrictive soil*

13.0 SUITABILITY OF EXCAVATED SOIL FOR USE AS FILL

The soils excavated from stormwater management areas are usually re-used as structural fill throughout the development. Table VII below lists the suitability of materials for use as structural fill based on percent fines content.

TABLE VII
SUITABILITY OF EXCAVATED MATERIAL FOR USE AS FILL

Designation	USCS Soil Classification	% Fines Passing No. 200 Sieve	Suitability for Use as Structural Fill
Group A	SP	0-5	Favorable, freely draining, "clean" sands
Group B	SP-SC, SP-SM	5-12	Suitable, will require aeration and moisture control, **may require underdrains**
Group C	SM, SC, SC-SM	12-20	Poor, impedes infiltration, limit overall use, extremely sensitive to water, do not use in pavement or pond areas, **will require underdrains if used.**
Group D	SM, SC, SC-SM, CH, MH	>20	Very Poor, not recommended for structural fill, may be used as stabilizing material in pavement subgrade
Group E	PT, OL, SM-OL	Organic	Unsuitable, must be completely removed and replaced with Group A or B soils

Based on the results of our soil borings and laboratory testing program, the soils encountered within the stormwater ponds (P-01 and P-02) generally consist of "Group A", "Group B", and "Group D" soils within approximately 30 feet of the existing ground surface, as shown on the boring logs in Appendix B.

Clean sandy soils (Group A) with less than 5 percent soil fines are best suited for fill usage, since they are typically free-draining and require minimal moisture control during placement and compaction. The sands with silt and clay (Group B), with contents of 6 to 12 percent soil fines, will require some extra care during placement and compaction. These soils are less freely-draining and might require aeration and drying prior to usage, during use in the rainy season and when placed near the groundwater table. We recommend that imported fill material meet the Group A and Group B qualifications.

Soils classified as silty or clayey, Group C (greater than 12 percent fines, but less than or equal to 20 percent fines), may impede infiltration and cause a perched water condition, especially when compacted. Although not preferable, these soils may be used by contractors experienced with using these materials as fill. These materials require stringent moisture control during stockpiling, placement and compaction. They will also be problematic during compaction. These soils dry very slowly and will have to be compacted with no vibration (a sheep foot roller, for example) in smaller, 6 inch compacted lifts. A more common use for these materials is in construction of stabilized subgrade.

Soils classified as silty or clayey, Group D (greater than 20 percent fines), will impede infiltration and cause a perched water condition. We do not recommend using these soils as structural fill material as they will require stringent moisture control during stockpiling, placement and compaction. They will also be problematic during compaction. Group D soils also dry very slowly and will have to be compacted with no vibration (a sheep foot roller, for example) in smaller, 6 inch compacted lifts.

Soils containing organic materials, Group E, may not be used as structural fill. These materials may only be used in non-structural areas such as green areas or landscaping. We do not recommend that these materials are placed directly beneath sodded areas if they contain significant amounts of organic materials. Highly organic soils are typically poor drainage materials, and may cause ponding or wetness for some time following rain events if placed directly beneath sod.

13.1 Additional Steps for use of Group "C" and "D" Soils

Generally, UES does not typically recommend the use of soils with more than 12 to 25 percent passing the No. 200 sieve, however, we understand that the economics of the site development may force contractors and developers to use soils with higher fines content such as Group "C" and some Group "D" soils for fill material. Please note that the use of these soils for fill will require the use of underdrains in order to protect roadways and control moisture along yards and/or common areas. In consideration of this we offer the following discussion.

It is possible to use Groups "C" and "D" soils (up to 25% fines) as fill material. However, due to the frequent rains during the wet season, the high moisture content of these soils when excavated from below the water table, as these will be, contractors unfamiliar with working with these soils, and the time constraints placed on most construction projects, it is sometimes more practical to over-excavate borrow areas where more suitable, free-draining granular soils are encountered, or use more suitable imported fill material. In order to successfully use Group "D" and some Group "C" a prospective contractor should be prepared to incorporate the following steps:

1. If required, dewater the borrow area, prior to excavation of the soils so they may be excavated in a dry manner.

2. If required, aerate the soils until they are at optimum moisture content (at optimum moisture content to 2% below optimum moisture content), prior to placement and compaction. It should be noted that these soils will require spreading in relatively thin lifts to dry.

3. Place and compact Group "C" and "D" (up to 25% fines) soils in 6- to 8-inch thick lifts using only static compaction. A sheepsfoot roller or a raised pad roller can be useful for this purpose.

4. Work in small areas that are graded to shed water and avoid ponding. Positive drainage must be maintained both during and after construction in order to get rainwater off the compacted fill area as quickly as possible.

5. Disc and aerate areas that are subjected to rainfall or otherwise become overly wet. Do not leave these soils exposed to the elements for long periods of time as soils that have already been compacted may become wet and unstable. Protect the fill soil each night and before rain by mounding the soil and smooth-rolling the surface to allow water to shed off to reduce the amount of water infiltration.

6. Do not place lifts of Group "C" and "D" soils **within a minimum depth of 4 feet below final grade**. This will prevent pumping and premature damage to exposed pavement subgrades. In order to prevent a "perched" groundwater table from occurring, positive drainage must be established to divert storm water away from the excessively silty and clayey soils. This will provide a medium for a "perched" groundwater table to occur, which may result in pavement base course deterioration and/or yard saturation. If necessary, place Group "C" and "D" soils up to final grade with a minimum surface slope of 2%. This will minimize the potential for a temporary artificially induced "perched" groundwater table condition. Underdrains/landscape drains will be needed to protect pavements and yards from perch conditions

7. Some Group "D" soils have the potential for shrinking and swelling. We recommend limiting the Plasticity Index (P.I.) to 20 percent and the Liquid Limit (L.L.) to 40 percent to avoid potential shrink/swell problems.

It is our experience that following these steps, which we believe are imperative to successfully placing these soils, can become difficult and expensive for site work contractors if they are not considered during the bidding process. When using these types of soils, it is important to employ a contractor familiar with working with moisture sensitive silty and clayey fills. Consequently, we recommend that the construction documents include information advising prospective site work contractors of the soils present on the site.

Finally, please note that soils which are excessively organic or contain other debris are not suitable for use as fill material. We did not encounter any excessively organic soils within the boring exploratory depths.

14.0 DEWATERING AND EXCAVATION CONSIDERATIONS

Based on the anticipated groundwater level conditions, dewatering **may** be required for this project. Where excavations will extend only a few feet below the groundwater table, a sump pump may be sufficient to control the groundwater table. Deeper excavations may require well points and/or sock drains to control the groundwater table.

Regardless of any method(s) used, we recommend drawing down the water level at least 2 feet below the bottom of the excavation. The actual method(s) of dewatering should be determined by the contractor. The design and discharge of the dewatering system must be performed in accordance with applicable regulatory criteria (i.e., water management district, etc.) and compliance with such criteria is the sole responsibility of the contractor.

Excavations should be sloped as necessary to prevent slope failure and to allow backfilling. As a minimum, temporary excavations below 4-foot depth should be sloped in accordance with OSHA regulations. Where lateral confinement will not permit slopes to be laid back, the excavation should be shored in accordance with OSHA requirements. During excavation, excavated material should not be stockpiled at the top of the slope within a horizontal distance equal to the excavation depth. Provisions for maintaining workman safety within excavations is the sole responsibility of the contractor.

15.0 CONSTRUCTION RELATED SERVICES

We recommend the owner retain UES to provide inspection services during the site preparation procedures for confirmation of the adequacy of the earthwork operations. Field tests and observations include verification of foundation and pavement subgrades by

monitoring earthwork operations and performing quality assurance tests of the placement of compacted structural fill courses.

The geotechnical engineering design does not end with the advertisement of the construction documents. The design is an on-going process throughout construction. Because of our familiarity with the site conditions and the intent of the engineering design, we are most qualified to address site problems or construction changes, which may arise during construction, in a timely and cost-effective manner.

16.0 LIMITATIONS

This report has been prepared for the exclusive use of ***Greenberg Gibbons Properties*** and other designated members of their design/construction team associated with the proposed construction for the specific project discussed in this report. No other site or project facilities should be designed using the soil information contained in this report. As such, UES will not be responsible for the performance of any other site improvement designed using the data in this report.

This report should not be relied upon for final design recommendations or professional opinions by unauthorized third parties without the expressed written consent of UES. Unauthorized third parties that rely upon the information contained herein without the expressed written consent of UES assume all risk and liability for such reliance.

The recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated on the Boring Location Plan and from other information as referenced. This report does not reflect any variations which may occur between the boring locations. The nature and extent of such variations may not become evident until the course of construction. If variations become evident, it will then be necessary for a re-evaluation of the recommendations of this report after performing on-site observations during the construction period and noting the characteristics of the variations.

Borings for a typical geotechnical report are widely spaced and generally not sufficient for reliably detecting the presence of isolated, anomalous surface or subsurface conditions, or reliably estimating unsuitable or suitable material quantities. Accordingly, UES does not recommend relying on our boring information for estimation of material quantities unless our contracted services ***specifically*** include sufficient exploration for such purpose(s) and within the report we so state that the level of exploration provided should be sufficient to detect anomalous conditions or estimate such quantities. Therefore, UES will not be responsible for any extrapolation or use of our data by others beyond the purpose(s) for which it is applicable or intended.

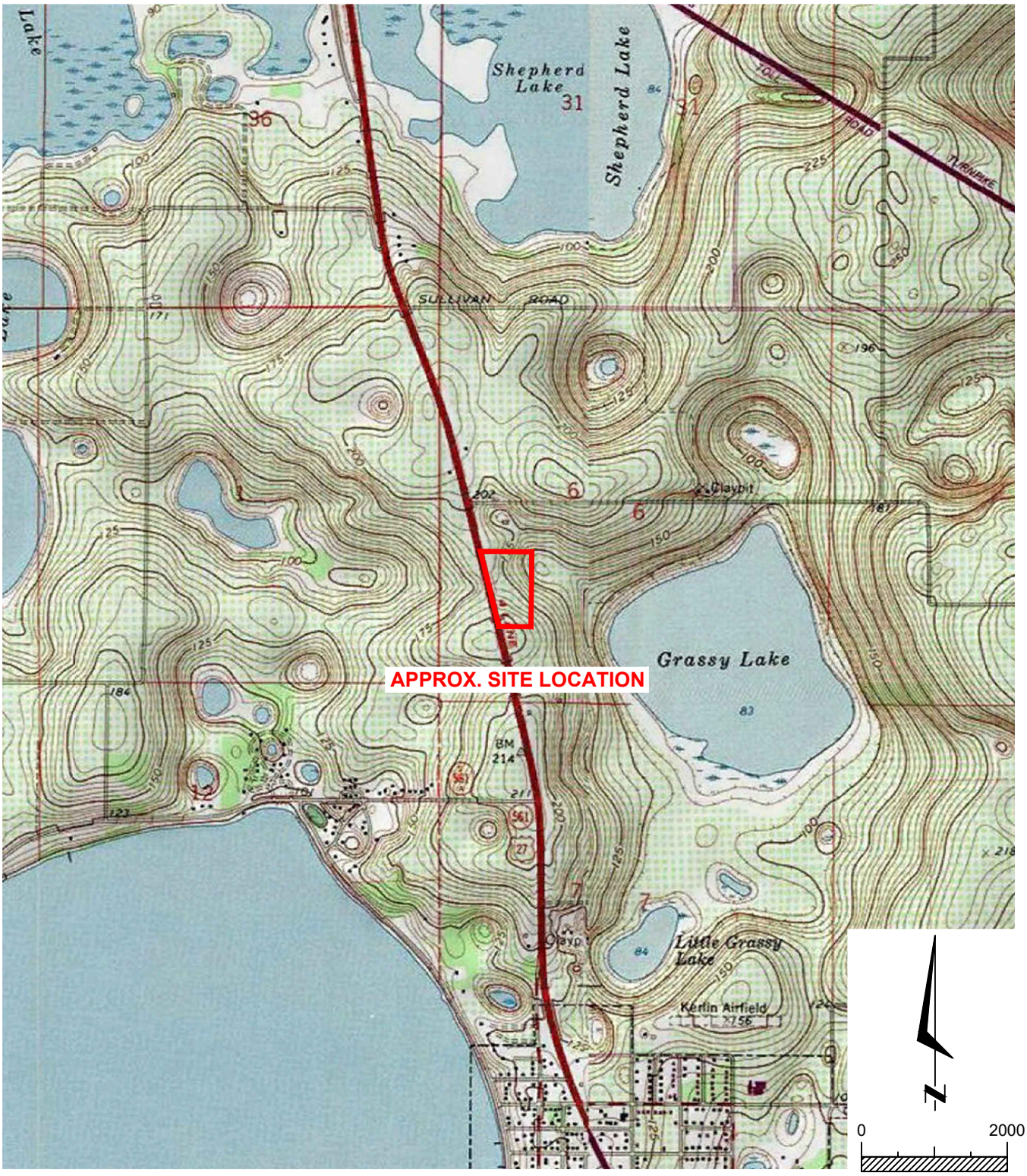
All users of this report are cautioned that there was no requirement for UES to attempt to locate any man-made buried objects or identify any other potentially hazardous conditions that may exist at the site during the course of this exploration. Therefore, no attempt was made by UES to locate or identify such concerns. UES cannot be responsible for any buried man-made objects or environmental hazards which may be subsequently encountered during construction that are not discussed within the text of this report. We can provide this service if requested.

During the early stages of most construction projects, geotechnical issues not addressed in this report may arise. Because of the natural limitations inherent in working with the subsurface, it is not possible for a geotechnical engineer to predict and address all possible

problems. A Geotechnical Business Council (GBC) publication, "Important Information About This Geotechnical Engineering Report" appears in Appendix C, and will help explain the nature of geotechnical issues. Further, we present documents in Appendix C: Constraints and Restrictions, to bring to your attention the potential concerns and the basic limitations of a typical geotechnical report.

* * * * * * * *

APPENDIX A



SOURCE: USGS QUADRANGLE MAP OF "CLERMONT WEST, FLORIDA".

UES

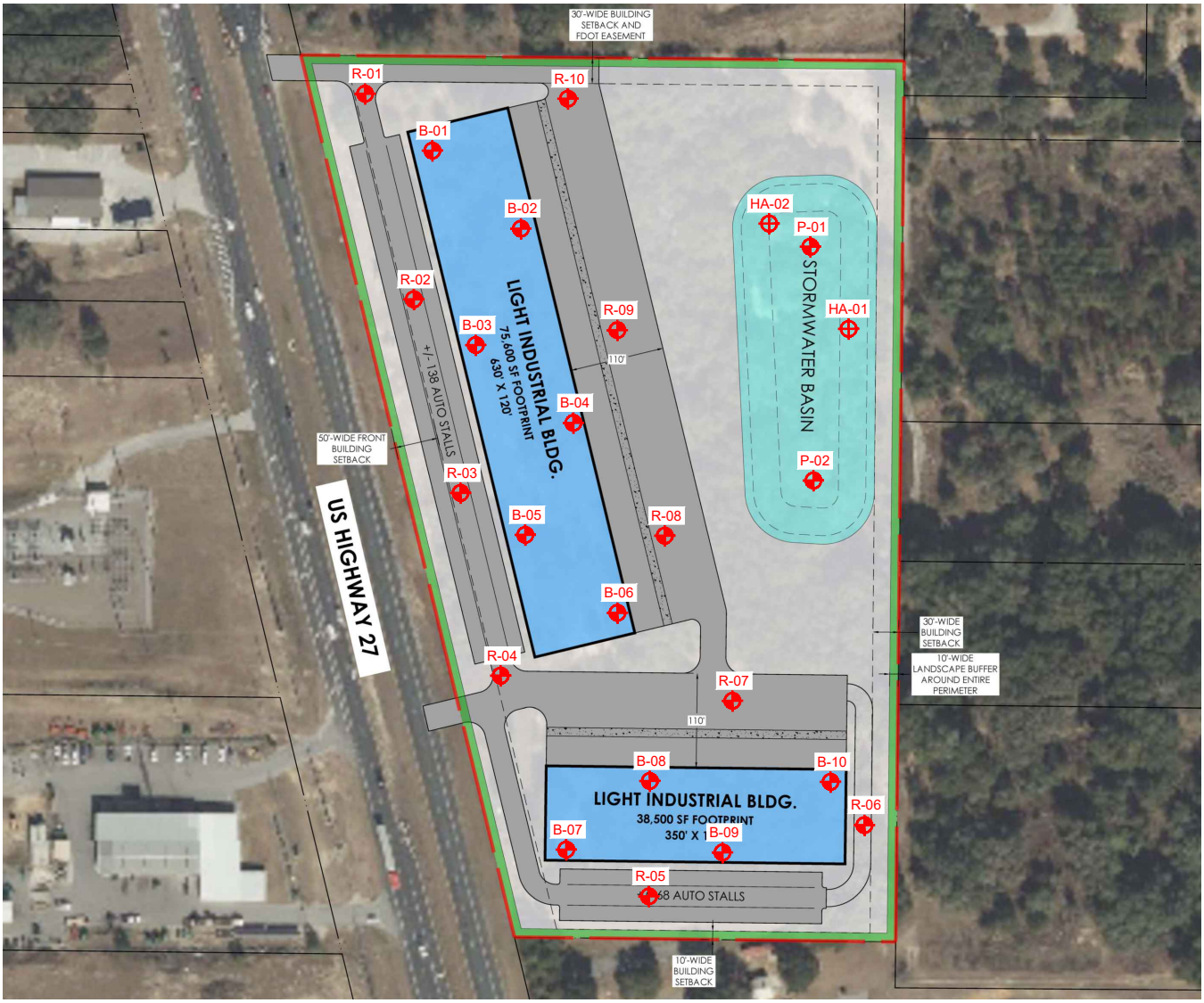
GEOTECHNICAL EXPLORATION
US 27 MIXED-USE PD
MINNEOLA, LAKE COUNTY, FLORIDA

SITE LOCATION MAP

DRAWN BY:	N.F.	DATE:	4 - 10 - 2025	CHECKED BY:	J.B.	DATE:	4 - 10 - 2025
SCALE:	AS SHOWN	PROJECT NO:	0130.2500063.0000	REPORT NO:	2141921	PAGE NO:	A-1

25-0177-01

APPENDIX B



LEGEND

- APPROX. STANDARD PENETRATION TEST BORING LOCATION (SPT) PERFORMED 3/25/2025 - 3/29/2025
- APPROX. HAND AUGER BORING LOCATION PERFORMED 4/15/2025

0 200
SCALE (FT.)

N

THIS DRAWING CREATED USING PLAN PROVIDED BY CLIENT.

UES

GEOTECHNICAL EXPLORATION
US 27 MIXED-USE PD
MINNEOLA, LAKE COUNTY, FLORIDA

BORING LOCATION PLAN

DRAWN BY:	N.F.	**DATE:**	4 - 10 - 2025	**CHECKED BY:**	J.B.	**DATE:**	4 - 10 - 2025
SCALE:	AS SHOWN	**PROJECT NO:**	0130.2500063.0000	**REPORT NO:**	2141921	**PAGE NO:**	B-1

25-0177-01

SOIL BORING NUMBER: B-01

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/29/2025 - 03/29/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 6.5' *
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose light brown fine SAND [SP]						
		1-1-2	3									
		2-2-2	4			Loose						
5		1-1-1	2			Very loose						
		1-2-3	5	▽		Loose						
						7.0						
		5-8-10	18			Medium dense red Clayey SAND [SC]						
		9-9-9	18									
10												
		7-9-7	16			Red orange						
15												
						18.5						
		8-7-6	13			Medium dense orange fine SAND [SP]						
20												
						23.5						
		7-9-8	17			Medium dense red Clayey fine SAND [SC]						
25						25.0						
						End of boring at 25'						
30												
35												

SOIL BORING NUMBER: B - 02

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/29/2025 - 03/29/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 7.5' *
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose light brown fine SAND, with roots [SP]						
		1-1-1	2									
		1-1-1	2									
5		1-1-1	2									
		1-2-2	4			Loose, no roots						
		2-4-6	10	▽		8.0						
		10-12-15	27			Loose red Clayey fine SAND [SC] Medium dense						
10												
15		6-8-8	16									
						18.5						
		7-9-7	16			Medium dense red fine SAND [SP]						
20												
						23.5						
		8-10-8	18			Medium dense red fine SAND with Clay [SP-SC]						
25						25.0						
						End of boring at 25'						
30												
35												

SOIL BORING NUMBER: B - 03

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/28/2025 - 03/28/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER >10'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose brown fine SAND [SP]						
		1-1-1	2									
		1-1-1	2			Light brown						
5		1-1-1	2									
		1-1-2	3									
		1-2-2	4			Loose						
		2-4-4	8	▽								
10						12.0						
						Loose light brown Clayey fine SAND [SC]						
		8-9-12	21			Medium dense, red orange						
15												
		5-7-6	13									
20												
						23.5						
		9-9-10	19			Medium dense red orange fine SAND with Clay [SP-SC]						
25						25.0						
						End of boring at 25'						
30												
35												

SOIL BORING NUMBER: B - 04

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/28/2025 - 03/28/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER >10'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose brown fine SAND [SP]						
		1-2-2	4									
		1-1-1	2			Very loose, light brown						
5		1-1-1	2			with roots						
		1-2-3	5			Loose, no roots						
		2-3-3	6									
		2-3-7	10	▽								
10						11.5						
						Loose light brown Clayey fine SAND [SC]						
		9-11-13	24			Medium dense, tan red						
15												
		4-6-8	14									
20												
		11-10-11	21			25.0						
25						End of boring at 25'						
30												
35												

SOIL BORING NUMBER: B - 05

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/28/2025 - 03/28/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER >10'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose light brown fine SAND [SP]						
		1-2-2	4									
		2-2-2	4									
5		1-1-1	2			Very loose						
		1-1-2	3									
		2-2-2	4			Loose						
		2-3-4	7	▽								
10												
						13.5						
		7-7-9	16			Medium dense red Clayey fine SAND [SC]						
15												
20		8-9-8	17			Orange						
		8-9-10	19			Red						
25						25.0						
						End of boring at 25'						
30												
35												

SOIL BORING NUMBER: B - 06

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/27/2025 - 03/27/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 8.5'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose light brown fine SAND, with roots [SP]						
		1-1-1	2									
		1-1-1	2									
5		1-1-1	2									
		1-1-2	3									
		3-3-4	7	▽		Loose, no roots						
		6-8-13	21			9.0						
10						Medium dense tan red Clayey fine SAND [SC]						
15		8-11-13	24									
20		7-8-11	19									
25		6-6-8	14			25.0						
						End of boring at 25'						
30												
35												

SOIL BORING NUMBER: B - 07

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/25/2025 - 03/25/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 7.5'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose light brown fine SAND [SP]						
		2-2-3	5									
		2-2-2	4									
5		1-2-1	3			Very loose						
		2-2-3	5			Loose						
		3-4-6	10	▽		8.0						
		8-10-13	23			Loose red orange Clayey fine SAND [SC] Medium dense						
10												
15		13-16-23	39			Dense						
20		10-12-14	26			Medium dense, orange						
25		5-7-7	14			28.5						
30		10-11-13	24			Medium dense orange fine SAND with Clay [SP-SC]						
						33.5						
35		9-12-15	27			Medium dense red tan Clayey fine SAND [SC]						
						35.0						
						End of boring at 35'						

SOIL BORING NUMBER: B - 08

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/26/2025 - 03/26/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 6' *
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose light brown fine SAND, with roots [SP]						
		1-1-1	2									
		1-1-1	2									
		1-2-2	4			Loose						
5		1-5-11	16	▽		Medium dense 6.5						
		10-13-17	30			Medium dense red Clayey fine SAND [SC]	28	12				
		13-17-20	37			Dense						
10												
		11-15-18	33			Orange						
15												
		6-8-9	17			Medium dense						
20												
		7-8-7	15			25.0						
25						End of boring at 25'						
30												
35												

SOIL BORING NUMBER: B - 09

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/26/2025 - 03/26/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 4'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose light brown fine SAND, with roots [SP]						
		1-1-2	3									
		2-2-2	4	▽		Loose						
						4.5						
5		2-8-12	20			Medium dense orange Clayey fine SAND [SC]	33	14				
		13-18-23	41			Dense						
		12-16-22	38									
		14-19-25	44									
10												
		12-17-21	38			no roots						
15												
		7-8-8	16			Medium dense						
20												
						23.5						
		6-7-9	16			Medium dense orange fine SAND [SP]						
25						25.0						
						End of boring at 25'						
30												
35												

SOIL BORING NUMBER: B - 10

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/26/2025 - 03/26/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 9'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
		1-1-1	2			Very loose dark grey fine SAND [SP]						
		1-1-1	2			Light brown						
5		1-1-1	2			with roots						
		1-1-1	2									
		1-1-1	2			no roots						
		1-6-12	18	▽		Medium dense 9.5						
10						Medium dense orange Clayey fine SAND [SC]						
15		13-17-20	37			Dense						
20		7-11-18	29			Medium dense						
25		8-9-8	17			25.0						
						End of boring at 25'						
30												
35												

SOIL BORING NUMBER: HA-01

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 04/15/2025 - 04/15/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - JB
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER >10'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
0						Light grey brown fine SAND [SP]						
10				▽		10.0 End of boring at 10'						

SOIL BORING NUMBER: HA-02

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 04/15/2025 - 04/15/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - JB
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER >10'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
0						Light brown fine SAND [SP]						
10				▽		10.0						
						End of boring at 10'						

SOIL BORING NUMBER: P-01

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/27/2025 - 03/27/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER >10'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose light brown fine SAND, *Group A* [SP]						
		1-2-2	4									
		2-2-3	5									
5		2-2-3	5									
		2-3-4	7									
		2-3-3	6				3	2				40
		3-3-4	7	▽								
10						12.0						
						Loose tan red Clayey fine SAND with Clay, *Group A* [SC]						
		8-8-9	17				42	8				
15												
						Red						
20		7-9-11	20									
						23.5						
		9-10-9	19			Medium dense tan fine SAND with Clay, *Group B* [SP-SC]	8	19				
25						28.5						
		8-11-10	21			Medium dense light grey fine SAND, *Group A* [SP] 30.0						
30						End of boring at 30'						
35												

SOIL BORING NUMBER: P - 02

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/27/2025 - 03/27/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER >10'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
		1-1-1	2			Very loose dark grey fine SAND, *Group A* [SP]						
		1-1-1	2			Light brown						
5		1-1-2	3			with roots						
		2-2-3	5			Loose, no roots						
		3-3-3	6				3	2				40
		3-4-4	8	▽								
10						11.5						
						Medium dense red grey Clayey fine SAND, *Group D* [SC]						
		7-10-11	21				47	19				
15						18.5						
		6-8-12	20			Medium dense orange grey fine SAND with Clay, *Group B* [SP-SC]						
20						23.5						
		8-9-8	17			Medium dense red tan fine SAND, *Group A* [SP]						
25												
		7-10-10	20			Tan grey	5	12				
30						30.0						
						End of boring at 30'						
35												

SOIL BORING NUMBER: R-01

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/29/2025 - 03/29/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 6'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose light brown fine SAND [SP]						
		2-2-2	4									
		2-2-2	4									
5		1-1-1	2			Very loose						
		1-2-3	5	▽		Loose 6.5						
		3-4-5	9			Loose red Clayey fine SAND [SC]	28	14				
		4-5-6	11			Medium dense 10.0						
10						End of boring at 10'						
15												
20												
25												
30												
35												

SOIL BORING NUMBER: R-02

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/28/2025 - 03/28/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER >10'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose light brown fine SAND [SP]						
		2-3-5	8									
		3-5-5	10									
5		2-2-2	4									
		2-2-3	5			with roots						
		2-2-2	4			no roots						
		2-3-3	6	▽		Tan 10.0						
10						End of boring at 10'						
15												
20												
25												
30												
35												

SOIL BORING NUMBER: R-03

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/28/2025 - 03/28/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER >10'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose light brown fine SAND [SP]						
		1-2-2	4									
		2-3-3	6									
5		2-2-2	4									
		2-2-4	6									
		2-2-3	5									
		2-3-4	7	▽		10.0						
10						End of boring at 10'						
15												
20												
25												
30												
35												

SOIL BORING NUMBER: R-04

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/26/2025 - 03/26/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 9'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose light brown fine SAND [SP]						
		2-2-2	4									
		2-2-1	3			Very loose						
		1-2-1	3			with roots						
5		1-2-2	4			Loose						
		2-2-3	5									
		2-3-4	7	▽		9.5						
10						Loose orange Clayey fine SAND [SC]						
		4-6-7	13			Medium dense, tan 15.0						
15						End of boring at 15'						
20												
25												
30												
35												

SOIL BORING NUMBER: R-05

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/25/2025 - 03/25/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 6'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
		2-2-3	5			Loose dark grey fine SAND [SP]						
		2-2-2	4			Light brown						
5		1-1-1	2			Very loose						
		1-2-5	7	▽		Loose 6.5						
		7-8-11	19			Loose orange Clayey fine SAND [SC] Medium dense, tan red	31	14				
10		10-13-15	28									
15		12-14-19	33			Dense, red orange						
20		11-13-16	29			Medium dense, red grey 20.0						
						End of boring at 20'						
25												
30												
35												

SOIL BORING NUMBER: R-06

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/26/2025 - 03/26/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 9'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose light brown fine SAND [SP]						
		1-1-1	2									
		1-1-2	3									
5		1-1-2	3									
		1-2-2	4			Loose						
		1-2-2	4									
		3-7-8	15	▽		Medium dense 9.5						
10						Medium dense orange Clayey SAND [SC] 10.0						
						End of boring at 10'						
15												
20												
25												
30												
35												

SOIL BORING NUMBER: R-07

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/26/2025 - 03/26/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 7.5'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose light brown fine SAND [SP]						
		2-2-2	4									
		2-2-1	3			Very loose						
5		1-1-1	2									
		1-1-2	3									
		1-2-7	9	▽		Loose 8.0						
		9-12-13	25			Loose orange Clayey fine SAND [SC] Medium dense, tan red grey 10.0						
10						End of boring at 10'						
15												
20												
25												
30												
35												

SOIL BORING NUMBER: R-08

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/28/2025 - 03/28/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 7.5'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose light brown fine SAND, with roots [SP]						
		1-1-1	2									
		1-1-1	2									
5		1-1-1	2			no roots						
		1-1-2	3									
		1-3-8	11	▽		Medium dense 8.0						
		10-13-18	31			Medium dense red tan Clayey fine SAND [SC] Dense 10.0						
10						End of boring at 10'						
15												
20												
25												
30												
35												

SOIL BORING NUMBER: R-09

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/28/2025 - 03/28/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER >10'
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose light brown fine SAND, with roots [SP]						
		1-1-1	2									
		1-1-1	2									
5		1-1-1	2									
		1-2-2	4			Loose, no roots						
		2-2-4	6									
		3-4-6	10	▽		10.0						
10						End of boring at 10'						
15												
20												
25												
30												
35												

SOIL BORING NUMBER: R - 10

PROJECT US 27 MIXED-USE PD
START AND COMPLETE DATE 03/29/2025 - 03/29/2025
PROJECT CITY, COUNTY, STATE Clermont, LAKE, Florida
DRILLER ORL - CM/CA
CLIENT NAME GREENBERG GIBBONS PROPERTIES
ENCOUNTERED GROUNDWATER N.E. @10'
LOCATION SEE BORING LOCATION PLAN
EST. SEASONAL HIGH GROUNDWATER 5.5' *
PROJECT NO. 0130.2500063.0(**REPORT NO.** 2141921
SURFACE ELEVATION N/A

COMMENTS * TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose light brown fine SAND [SP]						
		1-1-1	2									
		1-1-1	2									
5		1-1-2	3	▽		6.0						
		2-8-10	18			Medium dense grey tan Clayey SAND, red [SC]						
		11-12-16	28									
		13-15-17	32			Dense, tan red 10.0						
10						End of boring at 10'						
15												
20												
25												
30												
35												

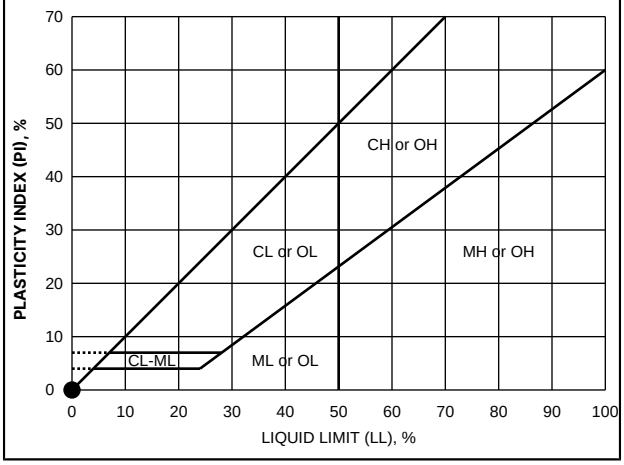
SOIL CLASSIFICATION CHART PER ASTM D 2488

PRIMARY DIVISIONS			SECONDARY DIVISIONS		
				GROUP SYMBOL	GROUP NAME
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVEL more than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVEL less than 5% fines		GW	well-graded GRAVEL
				GP	poorly-graded GRAVEL
		GRAVEL with DUAL CLASSIFICATIONS 5% to 12% fines		GW-GM	well-graded GRAVEL with silt
				GP-GM	poorly-graded GRAVEL with silt
				GW-GC	well-graded GRAVEL with clay
				GP-GC	poorly-graded GRAVEL with clay
		GRAVEL with FINES more than 12% fines		GM	silty GRAVEL
				GC	clayey GRAVEL
				GC-GM	silty, clayey GRAVEL
	SAND 50% or more of coarse fraction retained on No. 4 sieve	CLEAN SAND less than 5% fines		SW	well-graded SAND
				SP	poorly-graded SAND
		SAND with DUAL CLASSIFICATIONS 5% to 12% fines		SW-SM	well-graded SAND with silt
				SP-SM	poorly-graded SAND with silt
				SW-SC	well-graded SAND with clay
				SP-SC	poorly-graded SAND with clay
		SAND with FINES more than 12% fines		SM	silty SAND
				SC	clayey SAND
				SC-SM	silty, clayey SAND
FINE-GRAINED SOILS 50% or more passes No. 200 sieve	SILT and CLAY liquid limit less than 50%	INORGANIC		CL	lean CLAY
				ML	SILT
				CL-ML	silty CLAY
		ORGANIC		OL (PI > 4)	organic CLAY
				OL (PI < 4)	organic CLAY
	SILT and CLAY liquid limit 50% or more	INORGANIC		CH	fat CLAY
				MH	elastic SILT
		ORGANIC		OH (plots on or above 'A'-line)	organic CLAY
				OH (plots below 'A'-line)	organic SILT
	Highly Organic Soils			PT	Peat

GRAIN SIZE

DESCRIPTION		SIEVE SIZE	GRAIN SIZE	APPROXIMATE SIZE
Boulders		> 12"	> 12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	Coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	Fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	Coarse	#10 - #4	0.079 - 0.19"	Rock-salt-sized to pea-sized
	Medium	#40 - #10	0.017 - 0.079"	Sugar-sized to rock-salt-sized
	Fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized
Fines		Passing #200	< 0.0029"	Flour-sized and smaller

PLASTICITY CHART



APPARENT DENSITY - COARSE-GRAINED SOIL

APPARENT DENSITY	SPOOLING CABLE OR CATHEAD		AUTOMATIC TRIP HAMMER	
	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)
Very Loose	≤ 4	≤ 8	≤ 3	≤ 5
Loose	5 - 10	9 - 21	4 - 7	6 - 14
Medium Dense	11 - 30	22 - 63	8 - 20	15 - 42
Dense	31 - 50	64 - 105	21 - 33	43 - 70
Very Dense	> 50	> 105	> 33	> 70

CONSISTENCY - FINE-GRAINED SOIL

CONSISTENCY	SPOOLING CABLE OR CATHEAD		AUTOMATIC TRIP HAMMER	
	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)
Very Soft	< 2	< 3	< 1	< 2
Soft	2 - 4	3 - 5	1 - 3	2 - 3
Firm	5 - 8	6 - 10	4 - 5	4 - 6
Stiff	9 - 15	11 - 20	6 - 10	7 - 13
Very Stiff	16 - 30	21 - 39	11 - 20	14 - 26
Hard	> 30	> 39	> 20	> 26

APPENDIX C

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a civil engineer may not fulfill the needs of a constructor — a construction contractor — or even another civil engineer. Because each geotechnical- engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. No one except you should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you* — should apply this report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical-engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

Geotechnical engineers consider many unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk-management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical-engineering report that was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical-engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical-engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical-engineering report whose adequacy may have been affected by*: the passage of time; man-made events, such as construction on or adjacent to the site; or natural events, such as floods, droughts, earthquakes, or groundwater fluctuations. *Contact the geotechnical engineer before applying this report to determine if it is still reliable.* A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ — sometimes significantly — from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide geotechnical-construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmation-dependent recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly

problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical-engineering report. Confront that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical-engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical-engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time* to perform additional study. Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and constructors fail to recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Environmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold-prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold- prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical- engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

Rely, on Your GBC-Member Geotechnical Engineer for Additional Assistance

Membership in the Geotechnical Business Council of the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you GBC-Member geotechnical engineer for more information.

GEOTECHNICAL BUSINESS COUNCIL
of the Geoprofessional Business Association

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@geoprofessional.org www.geoprofessional.org

Copyright 2015 by Geoprofessional Business Association (GBA). Duplication, reproduction, or copying of this document, or its contents, in whole or in part, by any means whatsoever, is strictly prohibited, except with GBA's specific written permission. Excerpting, quoting, or otherwise extracting wording from this document is permitted only with the express written permission of GBA, and only for purposes of scholarly research or book review. Only members of GBA may use this document as a complement to or as an element of a geotechnical-engineering report. Any other firm, individual, or other entity that so uses this document without being a GBA member could be commiting negligent or intentional (fraudulent) misrepresentation.

CONSTRAINTS & RESTRICTIONS

The intent of this document is to bring to your attention the potential concerns and the basic limitations of a typical geotechnical report.

WARRANTY

UES Professional Solutions, LLC d/b/a UES has prepared this report for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

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 the Boring Location Plan. This report does not reflect any variations which 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.

CHANGED CONDITIONS

We recommend that the specifications for the project require that the contractor immediately notify UES, as well as the owner, when subsurface conditions are encountered that are different from those present in this report.

No claim by the contractor for any conditions differing from those anticipated in the plans, specifications, and those found in this report, should be allowed unless the contractor notifies the owner and UES of such changed conditions. Further, we recommend that all foundation work and site improvements be observed by a representative of UES to monitor field conditions and changes, to verify design assumptions and to evaluate and recommend any appropriate modifications to this report.

MISINTERPRETATION OF SOIL ENGINEERING REPORT

UES 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 the conclusions or recommendations based upon the data presented are made by others, those conclusions or recommendations are not the responsibility of UES.

CHANGED STRUCTURE OR LOCATION

This report was prepared in order to aid in the evaluation of this project and to assist the architect or engineer in the design of this project. If any changes in the design or location of the structure as outlined in this report are planned, or if any structures are included or added that are not discussed in the report, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions modified or approved by UES.

USE OF REPORT BY BIDDERS

Bidders who are examining the report prior to submission of a bid are cautioned that this report was prepared as an aid to the designers of the project and it may affect actual construction operations.

Bidders are urged to make their own soil borings, test pits, test caissons or other investigations to determine those conditions that may affect construction operations. UES cannot be responsible for any interpretations made from this report or the attached boring logs with regard to their adequacy in reflecting subsurface conditions which will affect construction operations.

STRATA CHANGES

Strata changes are indicated by a definite line on the boring logs which accompany this report. However, the actual change in the ground may be more gradual. Where changes occur between soil samples, the location of the change must necessarily be estimated using all available information and may not be shown at the exact depth.

OBSERVATIONS DURING DRILLING

Attempts are made to detect and/or identify occurrences during drilling and sampling, such as: water level, boulders, zones of lost circulation, relative ease or resistance to drilling progress, unusual sample recovery, variation of driving resistance, obstructions, etc.; however, lack of mention does not preclude their presence.

WATER LEVELS

Water level readings have been made in the drill holes during drilling and they indicate normally occurring conditions. Water levels may not have been stabilized at the last reading. This data has been reviewed and interpretations made in this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, tides, and other factors not evident at the time measurements were made and reported. Since the probability of such variations is anticipated, design drawings and specifications should accommodate such possibilities and construction planning should be based upon such assumptions of variations.

LOCATION OF BURIED OBJECTS

All users of this report are cautioned that there was no requirement for UES to attempt to locate any man-made buried objects during the course of this exploration and that no attempt was made by UES to locate any such buried objects. UES cannot be responsible for any buried man-made objects which are subsequently encountered during construction that are not discussed within the text of this report.

TIME

This report reflects the soil conditions at the time of exploration. If the report is not used in a reasonable amount of time, significant changes to the site may occur and additional reviews may be required.

Reverse View:

S1 PANTONE 287 C

S2 PANTONE COOL GRAY 2 C

S3 WHITE

ONE (1) DOUBLE SIDED, NON ILLUMINATED MONUMENT SIGN, CONSTRUCTED OF ALUMINUM AND FINISHED AS SHOWN. CABINETS TO BE MOUNTED TO BRICK MONUMENT. COPY ON MAIN CABINET TO BE 3/8" ACRYLIC COPY, MOUNTED FLUSH TO FACES.

SQUARE FOOTAGE: 45.47 SQ.FT.

I-77 Commerce Center

Project Location:
9905 Statesville Rd.
Charlotte , NC

Project No.: **240049-11**

Matt Elkin

Designer: **Eric Hellstrand**

Date: 2/5/2024

Scale: **1:30**

Revision:
- x/x/23 - EWH - xxx

SIGN CONNECTION

1660 Pacolet Court
Gastonia, NC 28052

Tel: (704) 868-4500
Toll-Free: 1-800-922-2447

signcon.com info@signcon.com

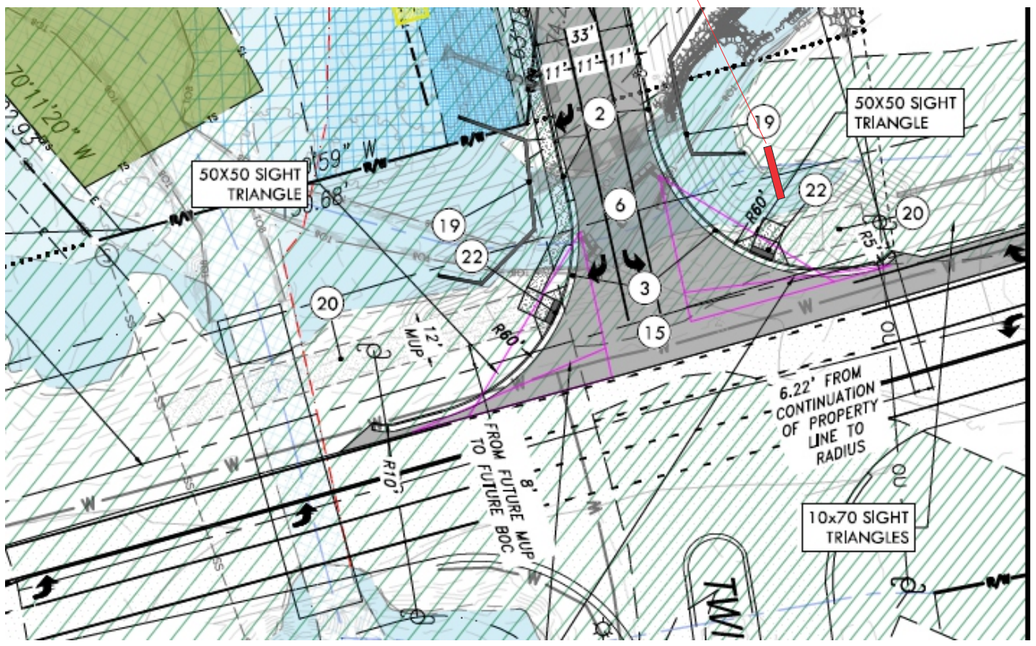
ORIGINAL CONCEPT
This design is the exclusive property of Sign Connection and cannot be reproduced in whole or part without their prior written consent.

Sheet No.: **1** /8

EXISTING CONDITIONS

PROPOSED - NOT SHOWN TO EXACT SCALE

LOCATION SHOWN HERE IS APPROXIMATION ONLY; SITE MEETING NEEDED TO DETERMINE EXACT LOCATION



I-77 Commerce Center

Project Location:
9905 Statesville Rd.
Charlotte , NC

Project No.: **240049-11**

Matt Elkin

Designer: **Eric Hellstrand**

Date: 2/5/2024

Scale:

Revision:
- x/x/23 - EWH - xxx

SIGN CONNECTION

1660 Pacolet Court
Gastonia, NC 28052

Tel: (704) 868-4500
Toll-Free: 1-800-922-2447

signcon.com info@signcon.com

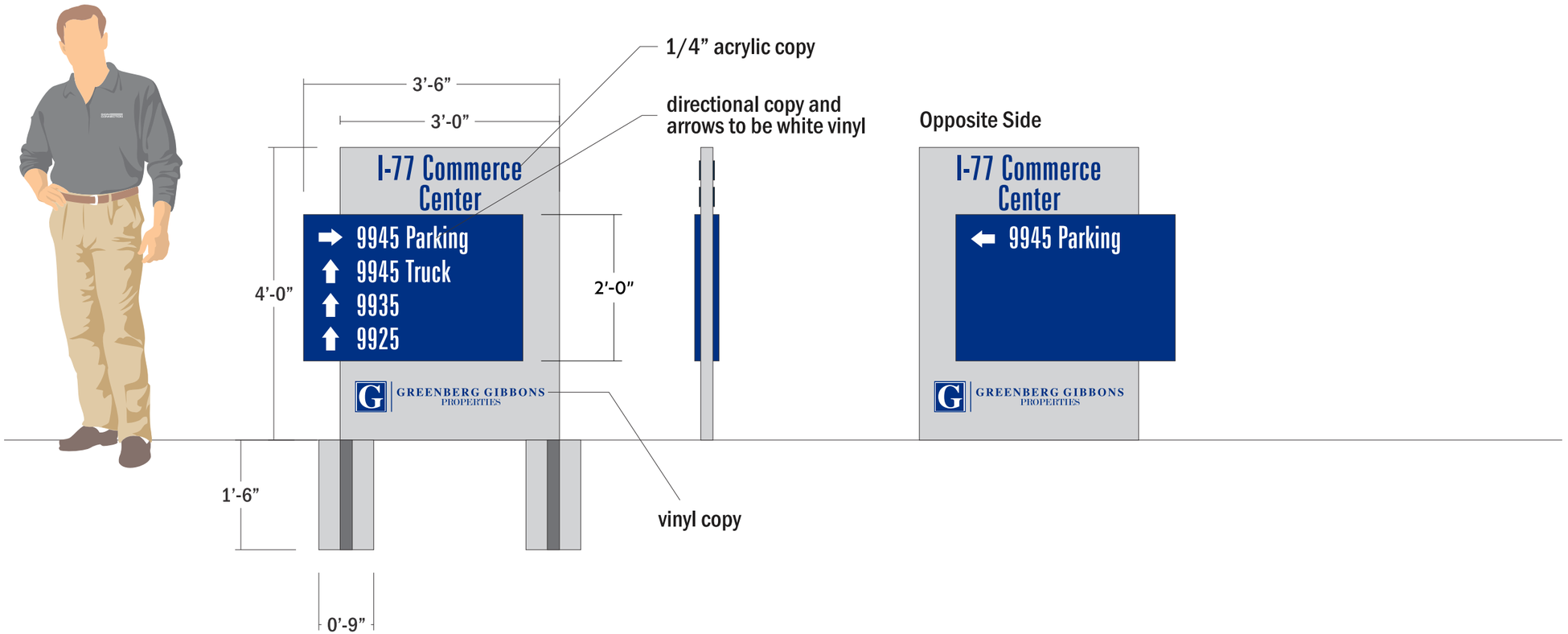
ORIGINAL CONCEPT
This design is the exclusive property of Sign Connection and cannot be reproduced in whole or part without their prior written consent.

Color Schedule:

- Pantone 287C
- Pantone Cool Grey 2C
- White

Square Footage: 14 sq.ft.

E03A - ONE (1) DOUBLE SIDED, NON-ILLUMINATED SIGN CABINET, CONSTRUCTED OF ALUMINUM AND FINISHED AS SHOWN.
"I-77 Commerce Center" TO BE 1/4" PAINTED ACRYLIC, MOUNTED FLUSH TO FACE.
DIRECTIONAL COPY AND DETAIL TO BE WHITE VINYL.



I-77 Commerce Center

Project Location:
9905 Statesville Rd.
Charlotte , NC

Project No.: **240049-11**

Salesperson: Matt Elkin

Designer: **Eric Hellstrand**

Date: 2/5/2024

Scale: **1:20**

Revision:
x/x/23 - EWH - xxx

SIGN CONNECTION

1660 Pacolet Court
Gastonia, NC 28052

Tel: (704) 868-4500
Toll-Free: 1-800-922-2447

signcon.com info@signcon.com

ORIGINAL CONCEPT

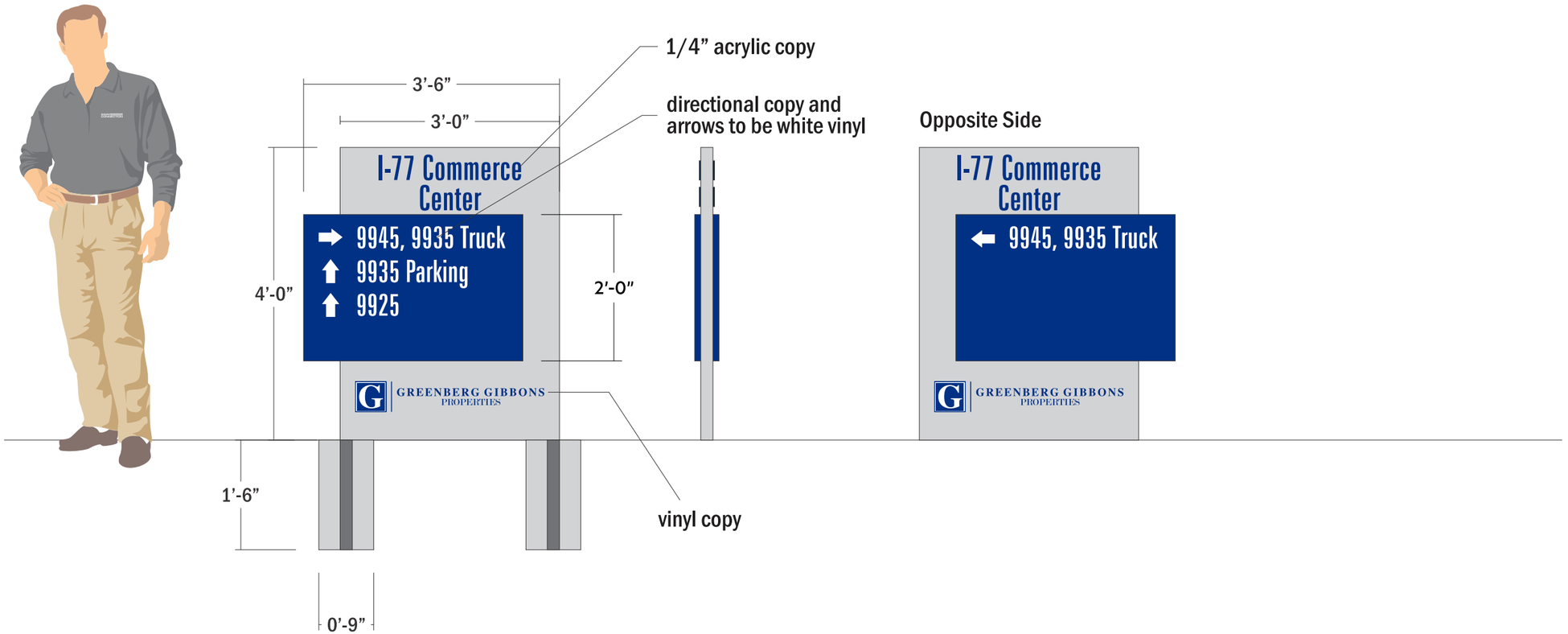
This design is the exclusive property of Sign Connection and cannot be reproduced in whole or part without their prior written consent.

Color Schedule:

- Pantone 287C
- Pantone Cool Grey 2C
- White

Square Footage: 14 sq.ft.

E03B - ONE (1) DOUBLE SIDED, NON-ILLUMINATED SIGN CABINET, CONSTRUCTED OF ALUMINUM AND FINISHED AS SHOWN.
"I-77 Commerce Center" TO BE 1/4" PAINTED ACRYLIC, MOUNTED FLUSH TO FACE.
DIRECTIONAL COPY AND DETAIL TO BE WHITE VINYL.



I-77 Commerce Center

Project Location:
9905 Statesville Rd.
Charlotte , NC

Project No.: **240049-11**

Salesperson: Matt Elkin

Designer: **Eric Hellstrand**

Date: 2/5/2024

Scale: **1:20**

Revision:
x/x/23 - EWH - xxx

SIGN CONNECTION

1660 Pacolet Court
Gastonia, NC 28052

Tel: (704) 868-4500
Toll-Free: 1-800-922-2447

signcon.com info@signcon.com

ORIGINAL CONCEPT

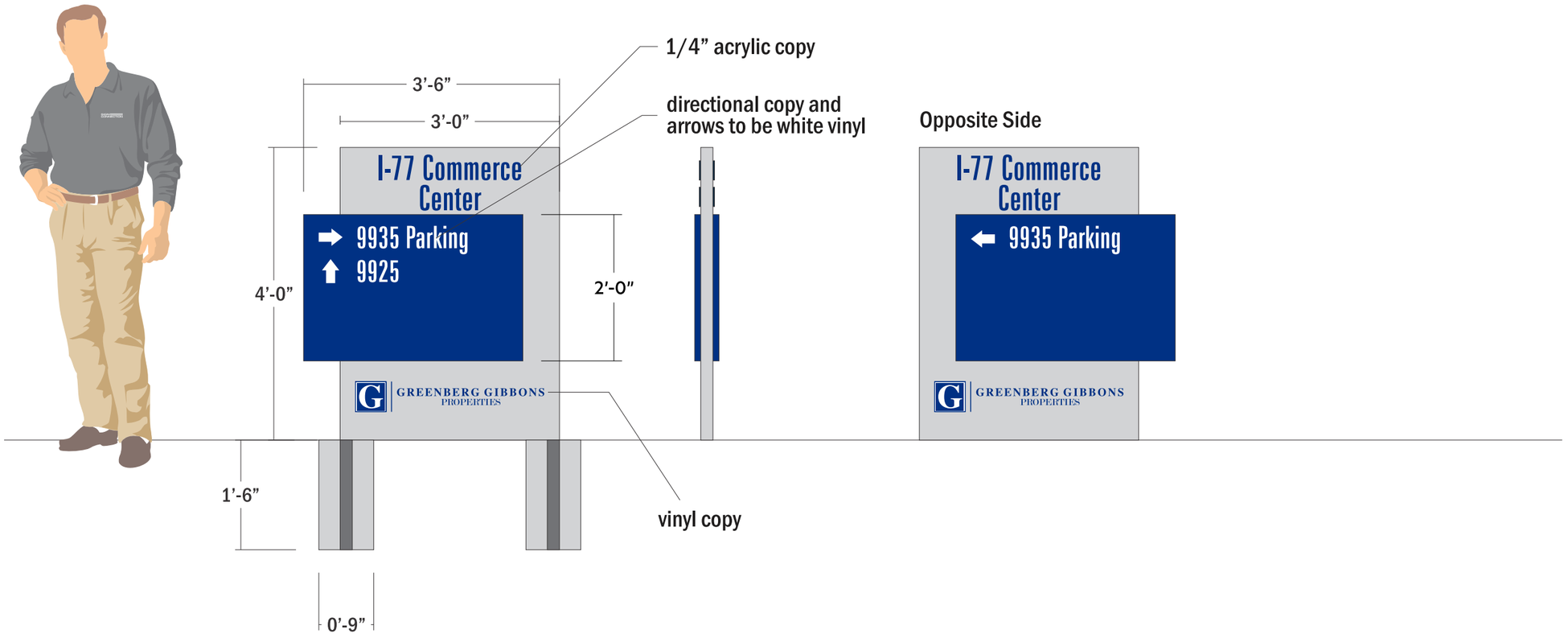
This design is the exclusive property of Sign Connection and cannot be reproduced in whole or part without their prior written consent.

Color Schedule:

- Pantone 287C
- Pantone Cool Grey 2C
- White

Square Footage: 14 sq.ft.

E03C - ONE (1) DOUBLE SIDED, NON-ILLUMINATED SIGN CABINET, CONSTRUCTED OF ALUMINUM AND FINISHED AS SHOWN.
"I-77 Commerce Center" TO BE 1/4" PAINTED ACRYLIC, MOUNTED FLUSH TO FACE.
DIRECTIONAL COPY AND DETAIL TO BE WHITE VINYL.



I-77 Commerce Center

Project Location:
9905 Statesville Rd.
Charlotte , NC

Project No.: **240049-11**

Salesperson: Matt Elkin

Designer: **Eric Hellstrand**

Date: 2/5/2024

Scale: **1:20**

Revision:
x/x/23 - EWH - xxx

SIGN CONNECTION

1660 Pacolet Court
Gastonia, NC 28052

Tel: (704) 868-4500
Toll-Free: 1-800-922-2447

signcon.com info@signcon.com

ORIGINAL CONCEPT

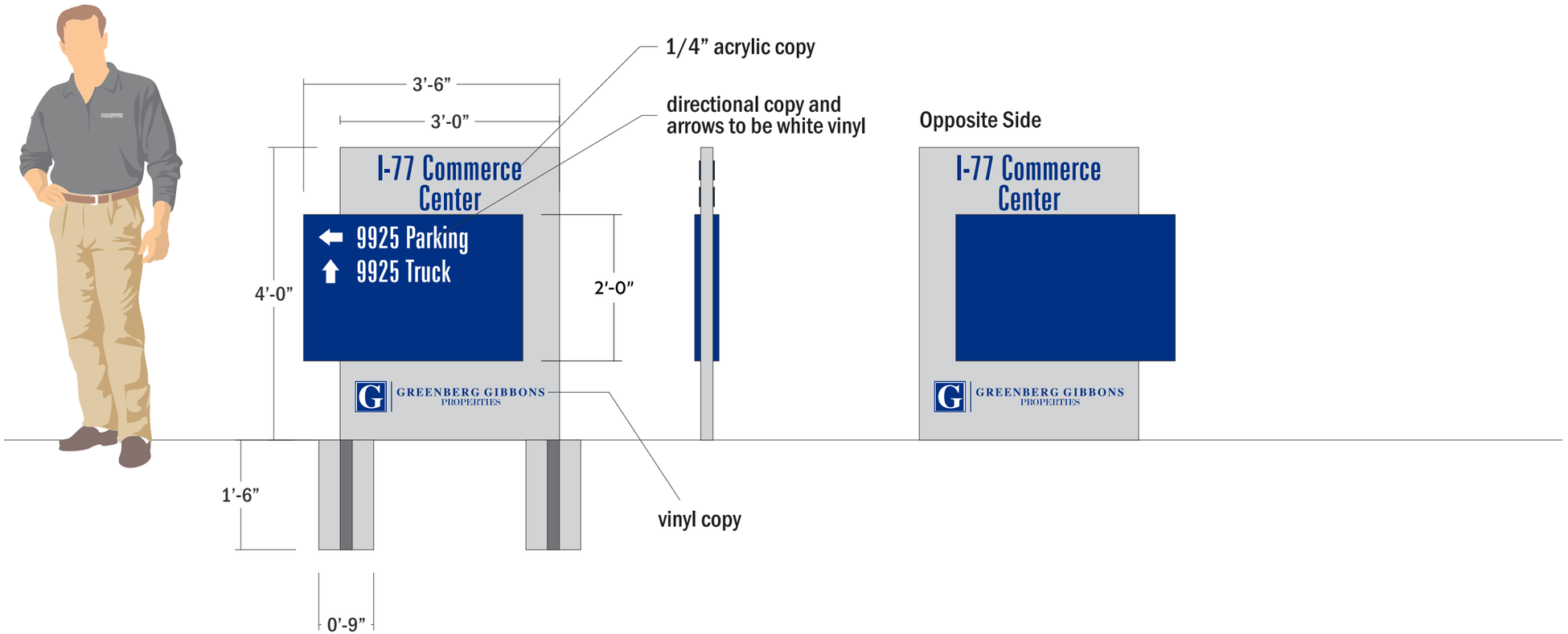
This design is the exclusive property of Sign Connection and cannot be reproduced in whole or part without their prior written consent.

Color Schedule:

- Pantone 287C
- Pantone Cool Grey 2C
- White

Square Footage: 14 sq.ft.

E03D - ONE (1) DOUBLE SIDED, NON-ILLUMINATED SIGN CABINET, CONSTRUCTED OF ALUMINUM AND FINISHED AS SHOWN.
"I-77 Commerce Center" TO BE 1/4" PAINTED ACRYLIC, MOUNTED FLUSH TO FACE.
DIRECTIONAL COPY AND DETAIL TO BE WHITE VINYL.



I-77 Commerce Center

Project Location:
9905 Statesville Rd.
Charlotte , NC

Project No.: **240049-11**

Salesperson: Matt Elkin

Designer: **Eric Hellstrand**

Date: 2/5/2024

Scale: **1:20**

Revision:
x/x/23 - EWH - xxx

SIGN CONNECTION

1660 Pacolet Court
Gastonia, NC 28052

Tel: (704) 868-4500
Toll-Free: 1-800-922-2447

signcon.com info@signcon.com

ORIGINAL CONCEPT

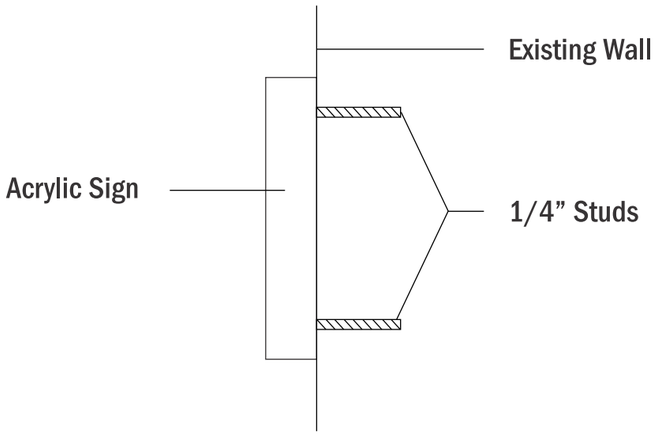
This design is the exclusive property of Sign Connection and cannot be reproduced in whole or part without their prior written consent.

Color Schedule:

Black

Square Footage: 5 sq.ft.

Mounting Detail:



E04A

9925

1’-6”

E04B

9935

1’-6”

E04C

9945

1’-6”

E04A, B & C - FABRICATE AND INSTALL THREE (3) SETS OF 3/8” ACRYLIC COPY, TO BE MOUNTED FLUSH TO BUILDING SURFACE.

I-77 Commerce Center

Project Location:
9905 Statesville Rd.
Charlotte , NC

Project No.: **240049-11**

Salesperson: Matt Elkin

Designer: **Eric Hellstrand**

Date: 2/5/2024

Scale: **1:20**

Revision:

x/x/23 - EWH - xxx

SIGN CONNECTION

1660 Pacolet Court
Gastonia, NC 28052

Tel: (704) 868-4500
Toll-Free: 1-800-922-2447

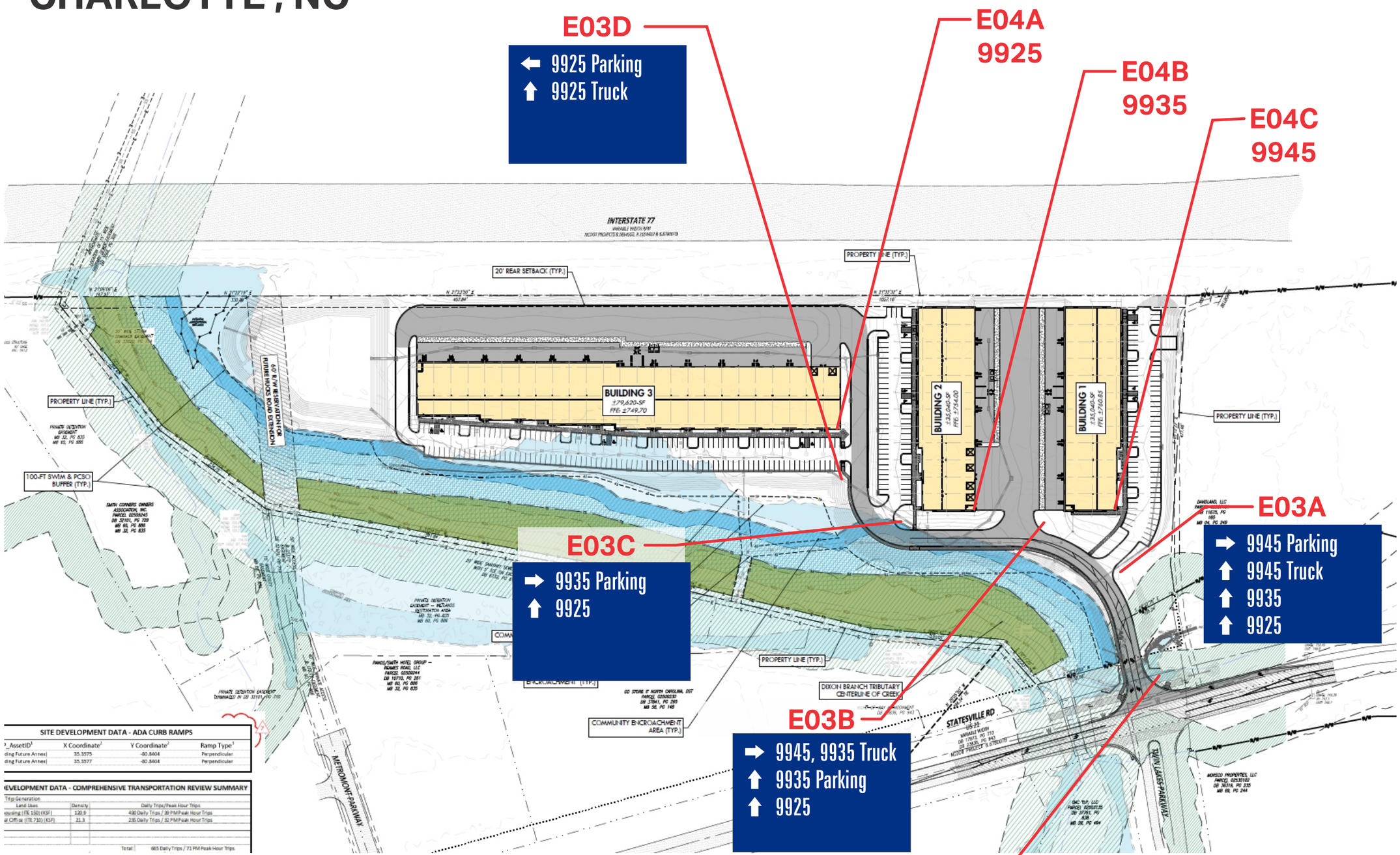
signcon.com info@signcon.com

ORIGINAL CONCEPT

This design is the exclusive property of Sign Connection and cannot be reproduced in whole or part without their prior written consent.

Sheet No.: **7** /8

SITE PLAN FOR 9905 STATESVILLE RD.
CHARLOTTE , NC



SITE DEVELOPMENT DATA - ADA CURB RAMPS

_AssetID[3]	X Coordinate[2]	Y Coordinate[2]	Ramp Type[3]
ding Future Annex)	35.3575	-80.8404	Perpendicular
ding Future Annex)	35.3577	-80.8404	Perpendicular

EVELOPMENT DATA - COMPREHENSIVE TRANSPORTATION REVIEW SUMMARY

Trip Generation

Land Uses	Density	Daily Trips/Peak Hour Trips
ousing (ITE 150) (KSF)	120.9	430 Daily Trips / 39 PM Peak Hour Trips
al Office (ITE 710) (KSF)	21.3	235 Daily Trips / 32 PM Peak Hour Trips
Total:		665 Daily Trips / 71 PM Peak Hour Trips

I-77 Commerce Center

Project Location:
9905 Statesville Rd.
Charlotte , NC

Project No.: **240049-11**

Salesperson: Matt Elkin

Designer: **Eric Hellstrand**

Date: 2/5/2024

Scale: **NA**

Revision:
- x/x/23 - EWH - xxx

SIGN CONNECTION

1660 Pacolet Court
Gastonia, NC 28052

Tel: (704) 868-4500
Toll-Free: 1-800-922-2447

signcon.com info@signcon.com

ORIGINAL CONCEPT

This design is the exclusive property of Sign Connection and cannot be reproduced in whole or part without their prior written consent.

Minneola Commerce Center

Sanitary Lift Station Calculations

July 2026

CFB-Inc.com

Minneola Commerce Center

SUMMARY

The Minneola Commerce Center is a major site plan in City of Minneola and is located approximately 1,000 ft south of the intersection of US 27 & Citrus Grove Road. The proposed lift station provides wastewater services for the 2 industrial warehouses with their bathrooms and loading bays resulting in a peak flow of 14.44 GPM. The report provides detailed calculations on the entire design of the Minneola Commerce Center lift station.

GBG-001 - Minneola Commerce Center

Wastewater Collection - ADF Calculations

Proposed Wastwater Collection Demands

	Bldg Type	# of Bays	Building Area (SF)	ERU Factor	Total ERC's/ Bldg.	ERU ADF Factor (gpd)	ADF (gpd)	ADF (gpm)	MDF (gpd)	MDF (gpm)	PHF (gpd)	PHF (gpm)
Industrial Building 1 (per gross floor area)	II-B		76,250	0.001	76.25	10	762.50	0.53	1,525.00	1.06	3,050.00	2.12
Industrial Building 1 (per number of truck bays)	II-B	25	-	1.00	25.00	100	2,500.00	1.74	5,000.00	3.47	10,000.00	6.94
Industrial Building 2 (per gross floor area)	II-B		43,750	0.001	43.75	10	437.50	0.30	875.00	0.61	1,750.00	1.22
Industrial Building 2 (per number of truck bays)	II-B	15	-	1.00	15.00	100	1,500.00	1.04	3,000.00	2.08	6,000.00	4.17
Total							5,200.00	3.61	10,400.00	7.22	20,800.00	14.44

*ERC ADF Factor determined using Chapter 102, Article X, Sec 102-460b of the City of Sanford Code of Ordinances.
**An assumed Commercial Building size and demand is provided for Master Planning purposes and sizing. A formal hydraulic analysis shall be required and submitted with each individual commerical development.

GBG-001 - Minneola Commerce Center

Wastewater Collection Calculations - High Head Condition

ESTIMATED SEWAGE FLOWS: **ERU =** **10 gal/day per SF** **or** **100 Gal/day per bay**

Unit Type	Units	ERU Factor	Total ERU's / Unit Type	ADF (gpd)
Building 1 Floor Area	76,250	0.0010	**76.25**	**762.50**
Building 1 Truck Bays	25	1.0000	**25**	**2,500.00**
Building 2 Floor Area	43,750	0.0010	**43.75**	**437.50**
Building 2 Truck Bays	15	1.0000	**15**	**1,500.00**
			TOTAL =	**5,200**

Average Daily Flow:

GPD	Hours of Operating	ADF	ADF
5,200.00	24	3.61 GPM	5,200.00 GPD

Maximum Daily Flow:

ADF	Peaking Factor	MDF	MDF
3.61 GPM	2.0	7.22 GPM	10,400.00 GPD

Peak Hourly Flow:

ADF	Peaking Factor	PHF	PHF
3.61 GPM	4.0	14.44 GPM	866.67 GPH

Station Design:

Centerline of Roadway	182.87	NAVD
Wet-well Rim Elevation	184.00	NAVD
Rim Elev. above Roadway	1.13	NAVD
Discharge Elevation	180.40	NAVD
Influent Elevation	170.51	NAVD
Alarm Elevation	170.01	NAVD
Lag Pump On Elevation	169.51	NAVD
Lead Pump On Elevation	169.01	NAVD
Pump Off Elevation	168.26	NAVD
Wet-well Bottom Invert	166.26	NAVD
Inside Diameter of Wet-Well	4.00	ft
Wet-Well Wall Thickness (concrete)	8.00	in
Top Slab Thickness (concrete)	8.00	in
Bottom Slab Thickness (concrete)	12.00	in

Pumps:

Model	MF 3102 HT 3 ~
(XYLEM)	267
HP (hp)	6
Inlet Diameter (in)	1.57
Voltage (V)	460
Phase	3
RPM	3515

Force Main Design:

Diameter of Onsite Force Main	3.00	in.
Length of Onsite Force Main	125	ft

Dynamic Head Conditions:

Receiving Force Main - psi to feet conversion: 34.0 psi 78.54

Static Lift — Pump Off Elev. 168.26 NAVD — Force Main Elev. (At the connection per existing force main's construction plans) 190.00 NAVD 21.74

Total Static Head 100.28

Friction Loss: (Lift Station)

Pipe Size	Gate	Check	45 Degree	90 Degree	Tee	Reducer	Gate Valve
3 in	2.5	30	4.5	9	17	2.5	5
4 in	3	34	5	10	20	3	6
6 in	4	51	8	15	30	4	9
8 in	5	33	11	20	40	6	12
10 in	7	42	13	25	50	7	15
12 in	8	50	16	30	60	9	18
14 in	9	55	18	33	66	10	21
16 in	10	63	20	38	75	12	24

22.00	L.F. of 3" HDPE at Lift Station	22.00 L.F.
3.00	EA. 3" 90-Degree Elbows	27.00 L.F.
6.00	EA. 3" 45-Degree Elbows	27.00 L.F.
1.00	EA. 3" Check Valve	26.00 L.F.
1.00	EA. 3" Tee	15.00 L.F.
1.00	EA. 3" Gate Valve	3.00 L.F.
		120.00 L.F.

Total Equivalent Feet of 3" Pipe

Friction Loss Formula: **H = 10.44L(Q^ 1.85)/(C^ 1.85D^ 4.8655)**

Proposed Force Main PVC Pipe Friction Factor - C = 130

3-IN PVC PIPE										
H =	10.44	Length	Q^ 1.86		C^ 1.85	D^ 4.8655		Loss	GPM	FPS
1	10.44	125.00	0.00	0.00	8143.20	209.62	1706980.92	**0.00**	**0.0**	**0.00**
2	10.44	125.00	580.32	757323.30	8143.20	209.62	1706980.92	**0.44**	**31.2**	**1.42**
3	10.44	125.00	1450.51	1892918.88	8143.20	209.62	1706980.92	**1.11**	**51.2**	**2.32**
4	10.44	125.00	2879.92	3758296.34	8143.20	209.62	1706980.92	**2.20**	**74.1**	**3.36**
5	10.44	125.00	4092.97	5341328.58	8143.20	209.62	1706980.92	**3.13**	**89.6**	**4.07**
6	10.44	125.00	4446.94	5803255.18	8143.20	209.62	1706980.92	**3.40**	**93.7**	**4.25**
7	10.44	125.00	4861.79	6344632.24	8143.20	209.62	1706980.92	**3.72**	**98.4**	**4.46**

Total Dynamic Head:

Flow GPM	Maximum Velocity ft/sec	Friction ft	Static Head ft	TDH
0	0.00	0.00	100.28	100.28
31.18	1.42	0.44	100.28	100.72
51.16	2.32	1.11	100.28	101.39
74.12	3.36	2.20	100.28	102.48
89.63	4.07	3.13	100.28	103.41
93.74	4.25	3.40	100.28	103.68
98.37	4.46	3.72	100.28	104.00

Flow (gpm)	System Head Curve	Pump Curve
0.0	100.3	121.6
31.2	100.7	111.7
51.2	101.4	102.4
74.1	102.5	85.6
89.6	103.4	68.1
93.7	103.7	56.6
98.4	104.0	4.7

Drawdown Volume	9.42	ft^3
Drawdown Volume	70.50	gal
Qi (ADF)	3.61	gpm
Qip (PHF)	14.44	gpm
Qd (Pump Discharge)	52.20	gpm

	Average		Peak	
	Θ =(V/(Qd-Qi))+(V/Qi)		Θ = (V/Qd)+(V/Qip)	
	Θ =	**21**	Θ =	**6.2**
	Cycles/Hour	**2.9**	Cycles/Hour	**9.7**
	10<Θ<30	YES	5</=Θ	YES

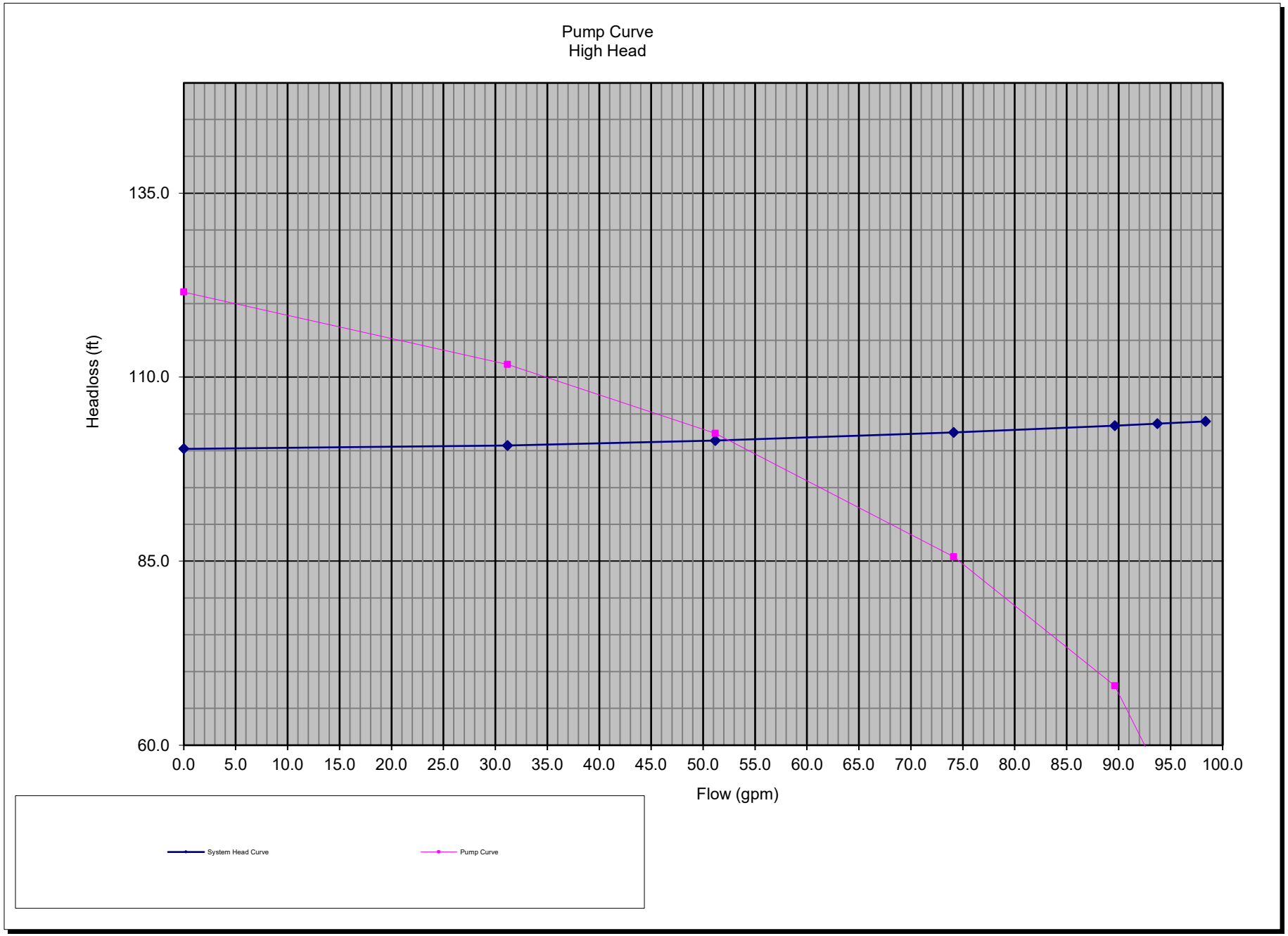
Pump Manf/Model (XYLEM)	MF 3102 HT 3 ~ 267
Impeller (mm)	142
Speed	3515
HP	6
Discharge (in)	1.50 in

Scouring Velocity @ Design Pump Rate

Peak Flow Rate	52.20 GPM	
Velocity	2.37 FPS	3-IN PVC PIPE
Velocity	2.37 FPS	3-IN PVC PIPE

PUMP CYCLING:

Wet Well Diam.	4.00	ft
Sewer Invert	170.51	ft
High Level Alarm	170.01	ft
Lag Pump "on"	169.51	ft
Lead Pump "on"	169.01	ft
Both Pumps Off	168.26	ft
Bottom of Wetwell	166.26	ft


Pump Curve
High Head
Headloss (ft)
135.0
110.0
85.0
60.0
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0
50.0
55.0
60.0
65.0
70.0
75.0
80.0
85.0
90.0
95.0
100.0
Flow (gpm)
System Head Curve
Pump Curve

ESTIMATED SEWAGE FLOWS: **ERU =** **10 gal/day per SF** **or** **100 Gal/day per bay**

Unit Type	Units	ERU Factor	Total ERU's / Unit Type	ADF (gpd)
Building 1 Floor Area	76,250	0.0010	**76.25**	**762.50**
Building 1 Truck Bays	25	1.0000	**25**	**2,500.00**
Building 2 Floor Area	43,750	0.0010	**43.75**	**437.50**
Building 2 Truck Bays	15	1.0000	**15**	**1,500.00**
			TOTAL =	**5,200**

Average Daily Flow:

GPD	Hours of Operating	ADF	ADF
5,200.00	24	3.61 GPM	0.00 GPD

Maximum Daily Flow:

ADF	Peaking Factor	MDF	MDF
3.61 GPM	2.0	7.22 GPM	10,400.00 GPD

Peak Hourly Flow:

ADF	Peaking Factor	PHF	PHF
3.61 GPM	4.0	14.44 GPM	866.67 GPH

Station Design:

Centerline of Roadway	182.87	NAVD
Wet-well Rim Elevation	184.00	NAVD
Rim Elev. above Roadway	1.13	NAVD
Discharge Elevation	180.40	NAVD
Influent Elevation	170.51	NAVD
Alarm Elevation	170.01	NAVD
Lag Pump On Elevation	169.51	NAVD
Lead Pump On Elevation	169.01	NAVD
Pump Off Elevation	168.26	NAVD
Wet-well bottom	166.26	NAVD
Inside Diameter of Wet-Well	4.00	ft
Wet-Well Wall Thickness	8.00	in
Top Slab Thickness	8.00	in
Bottom Slab Thickness	12.00	in

Pumps:

Model	MF 3102 HT 3 ~
(XYLEM)	267
HP	6
Inlet	1.57
Voltage	460
Phase	3
RPM	3515

Force Main Design:

Diameter of Onsite Force Main	3.00	in.
Length of Onsite Force Main	125.00	ft

Dynamic Head Conditions:

Recieving Force Main - psi to feet conversion: 28.00 psi 64.68

Static Lift — All Pump On Elev. 169.51 NAVD — Force Main Elev. 190.00 NAVD (At the connection per existing force main's construction plans) 20.49

Total Static Head 85.17

Friction Loss: (Lift Station)

Pipe Size	Gate	Check	45 Degree	90 Degree	Tee	Reducer	Gate Valve
3 in	3 in	30	5	9	17	3	5
4 in	3	34	5	10	20	3	6
6 in	4	51	8	15	30	4	9
8 in	5	33	11	20	40	6	12
10 in	7	42	13	25	50	7	15
12 in	8	50	16	30	60	9	18
14 in	9	55	18	33	66	10	21
16 in	10	63	20	38	75	12	24

22.00	L.F. of 3" HDPE at Lift Station	22.00	L.F.
3.00	EA. 3" 90-Degree Elbows	27.00	L.F.
6.00	EA. 3" 45-Degree Elbows	27.00	L.F.
1.00	EA. 3" Check Valve	26.00	L.F.
1.00	EA. 3" Tee	15.00	L.F.
1.00	EA. 3" Gate Valve	3.00	L.F.
		120.00	**L.F.**

Total Equivalent Feet of 3" Pipe

Force Main Friction Loss Formula: **H = 10.44L(Q^ 1.85)/(C^ 1.85D^ 4.8655)**

Proposed Forcemain PVC Pipe Friction Factor - C = 130

3-IN PVC PIPE										
H =	10.44	Length	Q^ 1.86		C^ 1.85	D^ 4.8655		Loss	GPM	FPS
1	10.44	125.00	0.00	0.00	8143.20	209.62	1706980.92	**0.00**	**0**	**0.00**
2	10.44	125.00	580.32	757323.30	8143.20	209.62	1706980.92	**0.44**	**31.18**	**1.42**
3	10.44	125.00	1450.51	1892918.88	8143.20	209.62	1706980.92	**1.11**	**51.16**	**2.32**
4	10.44	125.00	2879.92	3758296.34	8143.20	209.62	1706980.92	**2.20**	**74.12**	**3.36**
5	10.44	125.00	4092.97	5341328.58	8143.20	209.62	1706980.92	**3.13**	**89.63**	**4.07**
6	10.44	125.00	4446.94	5803255.18	8143.20	209.62	1706980.92	**3.40**	**93.74**	**4.25**
7	10.44	125.00	4861.79	6344632.24	8143.20	209.62	1706980.92	**3.72**	**98.37**	**4.46**

Total Dynamic Head:

Flow GPM	Maximum Velocity ft/sec	Friction ft	Static Head ft	TDH
0	0.00	0.00	85.17	85.17
31.18	1.42	0.44	85.17	85.61
51.16	2.32	1.11	85.17	86.28
74.12	3.36	2.20	85.17	87.37
89.63	4.07	3.13	85.17	88.30
93.74	4.25	3.40	85.17	88.57
98.37	4.46	3.72	85.17	88.89

Flow (gpm)	System Head Curve	Pump Curve
0	85.2	121.6
31.18	85.6	111.7
51.16	86.3	102.4
74.12	87.4	85.6
89.63	88.3	68.1
93.74	88.6	56.6
98.37	88.9	4.7

Pump Manf/Model (XYLEM)	MF 3102 HT 3 ~ 267
Impeller (mm)	142
Speed	3515
HP	6
Discharge (in)	1.50 in

PUMP CYCLING:

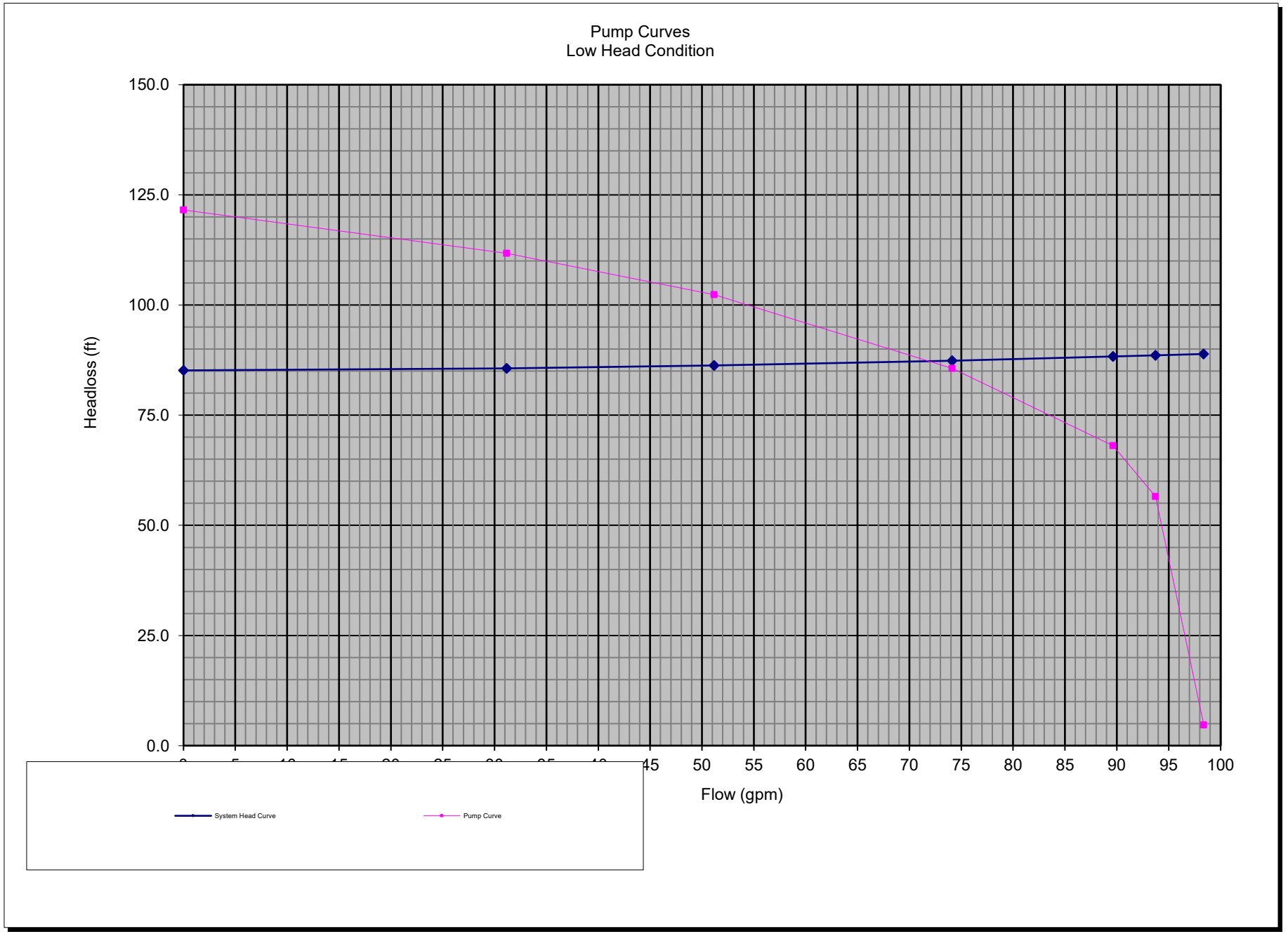
Wet Well Diam.	4.00	ft
Sewer Invert	170.51	ft
High Level Alarm	170.01	ft
Lag Pump "on"	169.51	ft
Lead Pump "on"	169.01	ft
Both Pumps Off	168.26	ft
Bottom of Wetwell	166.26	ft

Drawdown Volume	9.42	ft^3
Drawdown Volume	70.50	gal
Qi (ADF)	3.61	gpm
Qip (PHF)	14.44	gpm
Qd (Pump Discharge)	71.90	gpm

Average		**Peak**	
Θ =(V/(Qd-Qi))+(V/Qi)		Θ = (V/Qd)+(V/Qip)	
Θ =	**20.6**	Θ =	**5.9**
Cycles/Hour	**2.9**	Cycles/Hour	**10.2**
10<Θ<30	YES	5</=Θ	YES

Scouring Velocity @ Design Pump Rate

Peak Flow Rate	71.90 GPM	
Velocity	3.27 FPS	3-IN PVC PIPE
Velocity	3.27 FPS	3-IN PVC PIPE


Pump Curves
Low Head Condition
Headloss (ft)
150.0
125.0
100.0
75.0
50.0
25.0
0.0
45
50
55
60
65
70
75
80
85
90
95
100
Flow (gpm)
System Head Curve
Pump Curve

Lift Station Buoyancy Calculations

Wet Well Inside Dimensions	4.00	ft
Wet Well Top Slab Elevation	184.00	ft
Wet Well Bottom Invert Elevation	166.26	ft
Seasonal High Water Elev.	184.00	ft
Lip Width of Wet Well Base	1.00	ft
Area of Hatch	16.00	ft^2
Thickness Of Top Slab	0.67	ft
Extended Base Slab Thickness	1.00	ft
Wet Well Wall Thickness	0.67	ft
Wet Well Outside Dimensions	**5.33**	ft
Extended Base Slab Diameter	**7.33**	ft^2
Area of Top Slab	**22.34**	ft^2
Area of Inner Wet Well	**12.57**	ft^2
Area of Outer Wet Well	**22.34**	ft^2
Area of Extended Base	**42.24**	ft^2

Calculate Total Volume of Wet Well Structure

Volume of Wet Well Top Slab	**14.89**	ft^3
Volume of Wet Well Riser Sections	**381.44**	ft^3
Volume of Wet Well Extended Base	**42.24**	ft^3
Total Volume of Wet Well Structure	**438.57**	ft^3
Volume of Wet Well Above SHWE	**0.00**	ft^3
Volume of Wet well below SHWE	**438.57**	ft^3

Calculate Total Volume of Water Displaced

H20 Displaced = (Volume of Wet well Structure) * (62.4 lbs/ft^3)		
H20 Displaced	**27,367**	lbs

Calculate Weight of Wet well Components

Section	Weight @ 150 lbs/ft^3	
Top Slab Weight Less Hatch Opening	**634**	lbs
Riser - Total Vertical Ft.	**25,032**	lbs
Extended Base	**6,336**	lbs
Total	**32,002**	lbs

Calculate Weight of Soil Above Extended Base/Footing

Volume of Soil Above Extended Base	**352.99**	ft^3
Weight of Soil Above Extended Base	**110**	lbs/ft^3
Total Weight of Soil Above Extended Base	**38,829**	lbs

Flotation Protection Required?

Weight of Conc and Weight of Soil Above Base:	**70,831**	lbs
Weight of Conc and Soil with FOS of 1.5 :	**47,220**	lbs
Weight of Water Displaced By Wet Well:	**27,367**	lbs
Flotation Protection Required?	**NO**	

April 4th, 2025

Tilghman Herring
Head of Acquisitions
Greenberg Gibbons Commercial
706 Giddings Ave Annapolis, MD 21401

RE: Minneola HWY 27
Lake County, Florida
Environmental Assessment
ECS Project No. 1247.01.24

Dear Tilghman:

On March 19th and April 4th, 2025, a listed species survey was conducted on the Minneola HWY 27 project site. The proposed project site is located immediately east of N Highway 27, south of Citrus Grove Road, and north of Open-Door Baptist Church in Minneola, Florida. More specifically, the proposed project site is located within Section 6, Township 22 South and Range 26 East of Lake County, Florida (Figure 1).

The subject property is a forested upland habitat that has a paved road along the northern and eastern boundary. Understory is moderately vegetated and contains remnants of abandoned homeless encampments and previous site work. No wetlands are present onsite.

A survey of the project boundaries was conducted to assess the potential occurrence of flora and fauna listed as threatened or endangered by the United States Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FWC), and the Florida Department of Agriculture (FDA). Tables 1 and 2 provide a listing of the species known to occur within Lake County and their expected occurrence of the project site. The findings and conclusions of the survey are reported in this letter.

The survey was conducted by Ecological Consulting Solutions Inc (ECS) for the purpose of evaluating the site for the presence or absence of wetland habitat and protected flora and fauna or their habitat.

The following resources were used for supporting information during the site assessment and letter preparation:

- Color aerial photographs (1" = 300), 2024, Google Earth, Lake County, Florida.
- National Wetlands Inventory Mapping, U.S. Fish and Wildlife Service.
- United States Geological Survey (USGS) 7.5-minute quadrangle map, Lake County, Florida, (ArcGIS).
- Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida (USFWS and FWC).

Pedestrian surveys of the project site were conducted in order to qualitatively document the existing vegetation and to assess the present land use patterns according to the Florida Land Use, Cover and Forms Classification System, Department of Transportation (FLUCFCS; DOT 1999). Two (02) land-use types were determined for the project site (Figure 1). A brief description of each FLUCFCS community is provided below.

194 – Other Open Lands

There is a previously constructed stormwater pond along the western boundary. The pond contains a concrete structure that is connected underneath the adjacent road. It's unclear if this pond was ever completed. The habitat has naturally regrown with canopy cover consisting of mimosa tree (*Albizia julibrissin*), laurel oak (*Quercus laurifolia)*, cabbage palms (*Sabal palmetto*), slash pine (*Pinus elliottii*), and blue-jack oak (*Quercus incana*). The groundcover was densely vegetated with wiregrass (*Aristida beyrichiana*), natal grass (*Rhynchelytrum repens*), silk-grass (*Pityopsis graminifolia*), goldenrod (*Solidago odora*), prickly pear cactus (*Opuntia humifusa*), and dogfennel (*Eupatorium capillifolium*). The dense groundcover and height of the canopy species suggests that this area rarely if ever holds stormwater runoff.

420 – Upland Hardwood Forests

The only habitat type is located within the project limits. The canopy contains longleaf pine (*Pinus palustris*), sand live oak (*Quercus geminata*), blue-jack oak and laurel oak. Herbaceous vegetation is sparse under canopy cover. Where canopy is lacking species observed consist of wiregrass, little bluestem (*Schizachyrium scoparium*), split beard bluestem (*Andropogon ternaries*), chalky bluestem (*Andropogon virginicus*), natal grass, silk-grass, goldenrod, prickly pear cactus, shiny blueberry (*Vaccinium myrsinites*), dogfennel, meadow beauty (*Rhexia spp*.), showy goldenrod (*Solidago fistulosa*), false goldenrod (*Euthamia caroliniana*), and scattered saw palmetto (*Serenoa repens)*.

Listed Species Survey Results

A survey was conducted using pedestrian transects throughout the site to assess the occurrence, or potential for occurrence, of flora and fauna listed as threatened, endangered, or as species of special concern (SSC) by the Florida Fish and Wildlife Conservation Commission (FWC), United States Fish and Wildlife Service (USFWS), and Florida Department of Agriculture (FDA).

ECS biologists searched the USFWS database at http://endangered.fws.gov for the presence of critical habitats within the proposed project site. There are no critical habitats within the project boundaries.

ECS will determine the potential effect of listed species utilizing the Consultation Key direct project proponents through a series of couplets that will provide a conclusion or determination for potential effects to Florida listed species. Below is the list of determinations and there descriptions.

- **No effect** - The proposed site activity will not affect a listed species or its habitat. No follow-up surveys for these species are recommended as necessary.

- **May affect, not likely to adversely affect (MANLAA)** - The proposed action effects on listed species are expected to be discountable, insignificant, or completely beneficial. A pre-construction survey may be required to document species absence, to ensure minimization efforts are implemented (if present), or to permit the relocation of gopher tortoises through the FWC.

- **May affect** – If the potential site activity may have an effect on listed species or their habitat. Coordination with the state or federal agency may be required to mitigate the project's effect on a listed species.

- **Jeopardy** - The appropriate conclusion when a proposed action would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

Birds

Approximately 35 species (and sub-species) of birds found in Florida are protected by the FWC and/or the USFWS. For Lake County, the USFWS federally lists four (4) bird species. Only a few are expected to occur in central Florida. No listed birds were observed at this site. (Table 1).

Florida scrub jays (*Aphelocoma c. coerulescens)* were not observed on the project site. This species is listed as threatened at the state and federal levels. The property does not contain scrub habitat. The survey guidelines outlined in the *Ecology & Development-Related Habitat Requirements of the Florida Scrub Jay (April 1991)* were reviewed prior to the site visit.

No scrub jays were observed, or vocalizations heard. The surrounding areas to the north, south, east, and west do not contain scrub habitat. ECS has determined that there will be **"No effect"** on Florida scrub jays or their habitat.

Red-cockaded woodpeckers (*Picoides borealis*) are endangered (USFWS) and endangered (FWC). No red-cockaded woodpeckers were observed, and the upland habitat type is not suitable. There were no open pine flatwoods with old-growth pines that characterize RCW nesting and foraging habitat. ECS has determined that there will be **"No effect"** on Red-cockaded woodpeckers or their habitat.

Listed wading birds such as limpkin (*Aramus guarauna),* little blue heron (*Egretta caerulea),* snowy egret (*Egretta thula),* tricolored heron (*Egretta tricolor),* white ibis (*Eudocimus albus)* and wood stork *(Mycteria americana)* were not observed.

There is no wading bird habitat present onsite. No listed wading birds were observed within the project boundaries. ECS has determined that there will be **"No effect"** on wading birds or their habitat.

Bald eagles (*Haliaeetus leucocephalus*) or their nests were not observed on the site. Bald eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The USFWS has established a 660-foot protection zone around a bald eagle nest.

ECS searched the FWC as well as Audubon society eagle watch websites to determine if any documented bald eagle nests are within 660 feet of the site. No known eagle nest are in close proximity of the project site. Therefore, the project site is well outside of the 660-foot eagle nest protection zone and the development will not affect any bald eagle nests. ECS has determined that there will be **"No effect"** on bald eagles or their habitat.

No other listed raptors such as Southeastern American kestrels (*Falco sparverius paulus*), Florida Burrowing Owls (*Athene cunicularia floridana*), or Arctic peregrine falcons (*Falco peregrinus tundrius*) were observed on or around the sites. There is limited quality habitat on site for the southeastern American kestrel, Florida burrowing owl, or artic peregrine falcon. ECS has determined that there will be **"No effect"** on listed raptors or their habitat.

Amphibians and Reptiles

About thirty (30) species of Florida's amphibians and reptiles are protected. For Lake County, the USFWS federally lists three (3) reptile species. Only a few could occur on this site.

Sand Skink

The sand skink (*Neoseps reynoldsi*) is listed as threatened by both FWS and FWC. The sand skink is primarily found in rosemary scrub, sand pine and oak scrub. Sand skinks require loose sand with a large area of no groundcover or canopy cover.

On April 4, 2011, the U.S. Fish and Wildlife Service published a revised sand and bluetail mole skink survey protocol, which impacts owners of properties in interior Central Florida. The known range of the sand skink now includes Highlands, **Lake**, Marion, Orange, Osceola, Polk, and Putnam Counties with principal populations along the Lake Wales Ridge, the Winter Haven Ridge, and the Mount Dora Ridge. The habitat of the sand skink and bluetail mole skinks is affected by the conversion of citrus groves to pasture lands as well as to residential land uses.

Coverboard surveys will determine the actual area of occupation. Only the area where sand skinks are found will be considered occupied and only that area will require mitigation.

According to the revised protocol, if a property lies within the sand skink consultation area, has suitable habitat, has an elevation of 80 feet above sea level and contains sandy soils, then sand skink surveys are required. The burden is on the property owner to document the absence of sand skinks. Mitigation costs for sand skinks approach $60,000.00 to $70,000.00 per impacted acre.

The property is within the sand skink consultation area; and does meet the elevation and soils requirements to constitute sand skink habitat.

Taking that into account as well as the dense herbaceous groundcover and lack of loose swimmable soils, it is our professional opinion that sand skink surveys will not be required on this project site.

Furthermore, a sand skink coverboard survey was conducted on the property by ECS in May 2018. No skinks or their tracks were observed during the coverboard survey in 2018. Site conditions have deteriorated since the previous survey. Little to no loose sandy soils are present within the project site. ECS believes that no coverboard survey is necessary. Consultation with USFW to confirm our findings will need to take place prior to construction.

Gopher Tortoise

A 100% survey of the property was conducted for gopher tortoises (*Gopherus polyphemus)*, a species listed by the FWC as a Threatened. Six (06) active gopher tortoise burrows were observed during the 100% survey.

Currently, there are four suitable options to conduct activities that may adversely impact tortoises. The options are to:

1. Avoid developing the area occupied by the tortoises.

2. Avoid individual burrow entrances to ensure the protection of the entire burrow, usually a distance of 25 feet. A FWC permit is not required if development activity on a project site avoids impacts to tortoise burrows by 25 feet in all directions from the mouth of all burrows. Development activity must not harm gopher tortoises nor violate rules protecting them. Leaving a 50-foot diameter (25-foot radius) circle of habitat around each burrow (e.g., undisturbed "islands" or "crop circles") and developing the rest of a project site does not qualify and requires a permit to ensure that gopher tortoises are not harmed.

3 Capture and relocate the tortoises to a separate onsite location. The herbaceous vegetation must be maintained (mowing, burning, etc.), and pesticides/herbicides should not be used in the recipient area during and following site development. The on-site recipient area should be a minimum of 750 square feet (e.g., 25ft x 30ft), with a minimum width of no less than 10 feet wide. At least half of the on-site recipient area must be located at a minimum of 25 feet away from the edge of clearing /grading, construction activities, and/or vehicular traffic.

4. Capture and relocate the tortoises to an offsite FWC-approved recipient site.

For gopher tortoise conservation permits, tortoises may be relocated to an on-site preserve at a density of up to two tortoises per acre of suitable upland habitat. For 10 of fewer burrows permits, up to five tortoises can be relocated into the onsite recipient area. Onsite recipient sites must be suitable set-aside areas that are not disturbed by construction activities, that provide a safe environment, and that exclude (through temporary fencing or other means) tortoises from development areas until such development activities have been completed.

Gopher tortoises need access to the following: 1) sufficient areas of forage (herbaceous and low-growing plants including native broadleaf grasses, legumes [bean/pea family], asters, blackberries and other fruits, prickly pear cactus, and a variety of other non-native grasses, except cogon grass); 2) sandy, well-drained, open (uncanopied), sunny sites for burrows and basking; 3) protection from dogs, cats, other predators, human harassment, roads and canals;4) ability to roam freely, without barriers such as permanent 120 fencing that precludes access to suitable forage or burrowing habitat. Such general conditions must remain after development, outside the built footprint on the site.

Small sites typically have gopher tortoises that normally "roam" between adjoining neighboring parcels to forage or burrow, so this should be considered as well. The herbaceous vegetation must be maintained (mowing, burning, etc.), and pesticides/herbicides should not be used in the recipient area.

For onsite relocation of gopher tortoise conservation permits, a permanent FWC-approved easement is recommended to be placed over the onsite recipient area to be maintained in perpetuity. If the client elects not to put the land under easement, they will incur a significantly higher mitigation contribution fee in order to receive their permit.

If the project site does not have a dedicated onsite preserve for tortoises, then offsite relocation will be necessary. In this event, tortoises can be relocated by biologists to an FWC approved recipient site.

ECS biologists are authorized by the FWC to relocate gopher tortoises by various means including backhoe extraction. ECS also manages five (5) gopher tortoise recipient sites which are long-term protected sites.

The tasks associated with conducting an offsite relocation of tortoises would include reserving a yet to be determined number of acres at the recipient site, submitting an application to the FWC for the relocation, removing the tortoises from the donor site to the recipient site and reporting the results of the relocation to the FWC. It typically takes 30 days to obtain the permit to relocate the onsite gopher tortoise population to an approved recipient site. Once the relocation permit is received, ECS can complete the relocation using either the backhoe or bucket trapping extraction methods.

Several commensal species associated with gopher tortoise burrows, including the gopher frog (*Rana areolata aesopus)* and eastern indigo snake (*Drymarchon corais couperi)* also receive protection, but were not observed.

Eastern Indigo Snake

Concerning the eastern indigo snake, ECS conducted survey transects to identify potential aboveground and underground refugia, which eastern indigo snakes may inhabit. Underground refugia includes active or inactive gopher tortoise burrows, mammal burrows, hollows at the base of trees and other similar formations. Above ground refugia includes thick shrub formations, stumps, the base of thick palmetto, ground litter, brush piles, trash piles, and abandoned structures, and crevices of rock-lined ditch walls and other similar refugia.

Surveys for eastern indigo snakes are recommended by the USFWS during the time of October 1st through April 30th. There was little suitable refugia for the eastern indigo snake onsite. No eastern indigo snakes were observed. ECS has determined that there will be **"No effect"** on Eastern indigo snakes or their habitat.

The USFWS has established programmatic effect determination key (Key) as part of the eastern indigo snake management. The Key allows the USFWS to require mitigation for eastern indigo snake habitat if 25 or more acres of suitable habitat will be impacted for development.

- **A1** - The project is not located in open water or salt marsh.
- **B1** - Permit will be conditioned for use of the Service's Standard Protection Measures for the Eastern Indigo Snake during site preparation and protection construction.
- **C1** – There are gopher tortoise burrows, holes, cavities, or other refugia where a snake could be buried or trapped and injured during project activities.
- **D1** - The project will impact less than 25 acres of xeric habitat (scrub, sandhill, or scrubby flatwoods) or less than 25 active and inactive gopher tortoise burrows.
- **E1** - Any permit will be conditioned such that all gopher tortoise burrows, active or inactive, will be evacuated prior to site manipulation in the vicinity of the burrow. If an indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity.

Any permit will also be conditioned such that holes, cavities, and snake refugia other than Gopher tortoise burrows will be inspected each morning before planned site manipulation of a particular area, and, if occupied by an indigo snake, no work will commence until the snake has vacated the vicinity of the proposed work.

To determine if the site has an eastern indigo snake habitat will be up to the USFWS reviewer assigned to the project.

The USFWS requires the developer to notify the local field office via email at least **30 days prior** to any clearing/land alteration activities.

The notification has to include an eastern indigo snake protection/education plan. This notification can occur via email with the protection/education plan attached.

As long as the signatory of the e-mail certifies compliance with the protection/education plan (including use of the USFWS informational poster and brochure), no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project.

Mammals

Thirty-three (33) mammals are currently protected in Florida. For Lake County, the USFWS federally lists eight (8) mammal species. About four could occur in the region of this project site. None were observed on this site.

We focused our search on Southern fox squirrels (*Sciurus niger niger*) and the Florida mouse (*Podomys floridanus)* and their possible den or nest sites. Gopher tortoise burrows are present which increases the likelihood of the presence of the Florida mouse. Listed mammals or their potential den sites were not observed.

Listed Plants

There were no protected plant species found on the project sites (Table 2). Protected plants are not expected to occur on the project site since the area has been previously cleared and used as a landscape nursery. Currently, there are no technical reports available by the state or federal agencies mentioned in this letter report for the survey of the nearly 400 protected plant species. None of the agencies require relocation or mitigation for protected plant species.

The Department of Agriculture and Consumer Services (DACS) designates and regulates plants listed as "endangered", "commercially exploited" and "threatened". There is no statutory prohibition against a landowner from harvesting an endangered or threatened plant from his property. However, it is unlawful for an individual to harvest an endangered or threatened species from the private land of another or any public land without first obtaining written permission of that landowner and a permit from DACS. Additionally, harvesting three or more commercially exploited plants from the private land of another or any public land will also require a DACS permit.

Summary

In summary, one listed species, the gopher tortoise, was observed on site. There are no wetlands present on site.

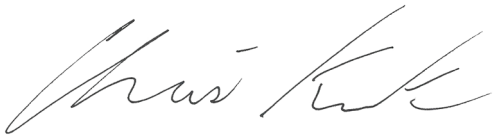
ECS can prepare and submit the permit to relocate the onsite gopher tortoise population to an offsite long-term protected gopher tortoise recipient site. The permit can be obtained within 30 days for the Florida Fish and Wildlife Conservation Commission.

ECS can contact USFWS about whether a sand skink coverboard survey is necessary for the project site. Since no skinks were observed on portions of the project or during previous surveys of the site along with poor quality habitat ECS believe that if a coverboard survey is requested by USFWS it will be on a small portion of the project site.

Ecological Consulting Solutions Inc. appreciates the opportunity to provide you with our services. Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

ECOLOGICAL CONSULTING SOLUTIONS INC



Chris Krack

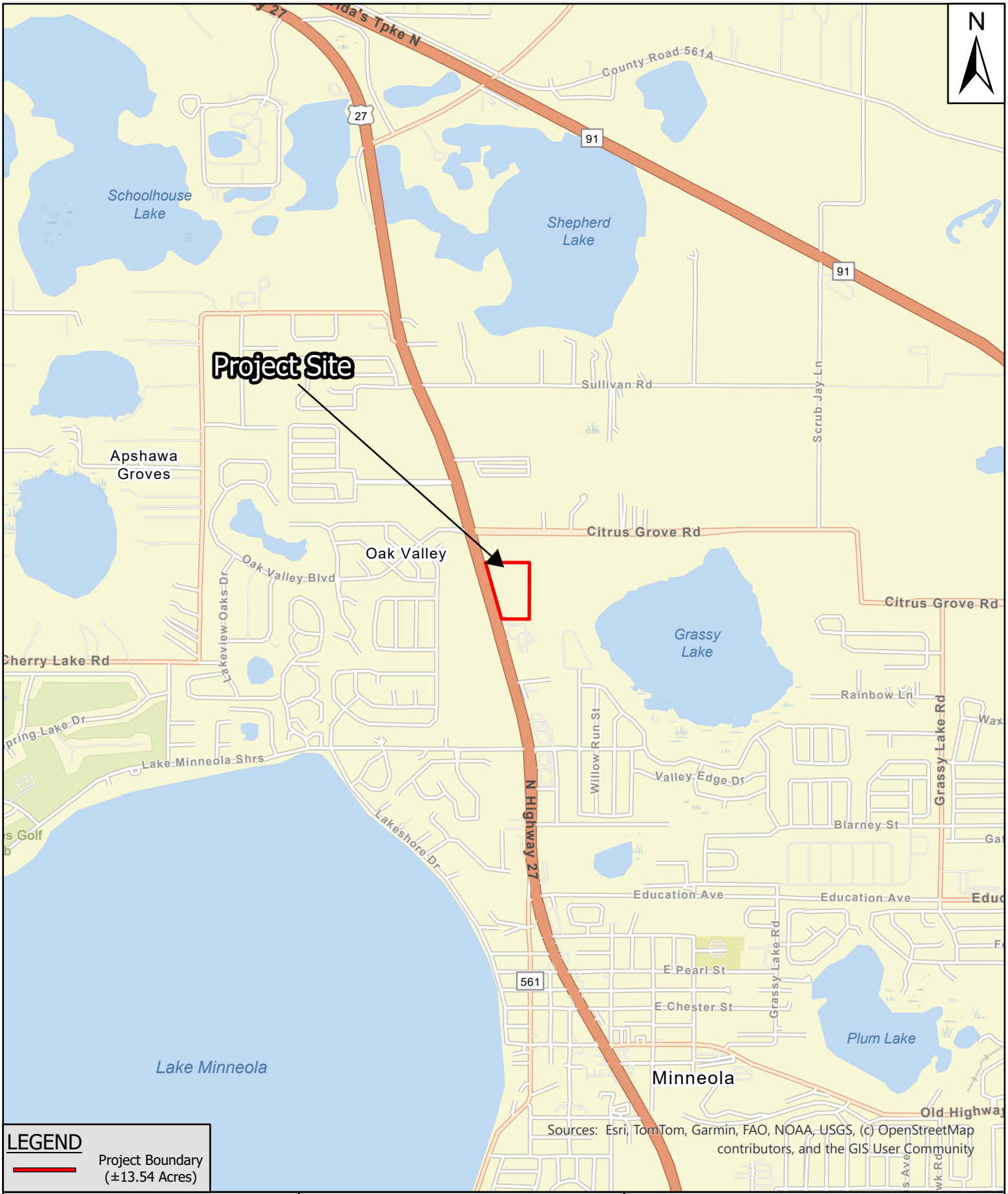
Attachments

PHOTOGRAPHS OF THE SUBJECT PROPERTY

Typical Upland Habitat

Other Open Lands Habitat

FIGURES



ECS ECOLOGICAL CONSULTING SOLUTIONS INC.

MINNEOLA HWY 27
LAKE COUNTY, FLORIDA
PROJECT SITE LOCATION MAP

Project #: 1247.01.25 DATE: 03/21/25 FIGURE: 1

0 3,000 6,000 Feet

Created by: CSK

410 North Street, Suite 130
Longwood, FL 32750
Phone: (407) 869-9434
www.ecologicalconsulting.com

ECS ECOLOGICAL CONSULTING SOLUTIONS INC.

MINNEOLA HWY 27
LAKE COUNTY, FLORIDA
FLUCFCS MAP

Project #: 1247.01.25 DATE: 03/21/25 FIGURE: 2

0 165 330 Feet

Created by: CSK

410 North Street, Suite 130
Longwood, FL 32750
Phone: (407) 869-9434
www.ecologicalconsulting.com

ECS
ECOLOGICAL CONSULTING SOLUTIONS INC.

MINNEOLA HWY 27
LAKE COUNTY, FLORIDA
GOPHER TORTOISE BURROW MAP

Project #: 1247.01.25 DATE: 03/21/25 FIGURE: 3

0 165 330 Feet

Created by: CSK

410 North Street, Suite 130
Longwood, FL 32750
Phone: (407) 869-9434
www.ecologicalconsulting.com

FNAI TABLES

Birds						
Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**	**Tracked?**
Antigone canadensis pratensis	Florida Sandhill Crane	G5T2	S2		ST	Y
Aphelocoma coerulescens	Florida Scrub-Jay	G1G2	S1S2	T	FT	Y
Aramus guarauna	Limpkin	G5	S3		N	Y
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3		ST	Y
Dryobates borealis	Red-cockaded Woodpecker	G3	S2	E, PT	FE	Y
Dryobates villosus	Hairy Woodpecker	G5	S3		N	Y
Egretta caerulea	Little Blue Heron	G5	S4		ST	Y
Egretta thula	Snowy Egret	G5	S3		N	Y
Egretta tricolor	Tricolored Heron	G5	S4		ST	Y
Eudocimus albus	White Ibis	G5	S4		N	Y
Grus americana	Whooping Crane	G1	S1	XN	FXN	Y
Haliaeetus leucocephalus	Bald Eagle	G5	S3		N	Y
Mycteria americana	Wood Stork	G4	S2	DL	FT	Y
Pandion haliaetus	Osprey	G5	S3S4		N	Y
Peucaea aestivalis	Bachman's Sparrow	G3	S3		N	Y
Plegadis falcinellus	Glossy Ibis	G5	S3		N	Y

Mammals						
Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**	**Tracked?**
Myotis austroriparius	Southeastern Myotis	G4	S3		N	Y
Neofiber alleni	Round-tailed Muskrat	G2	S2		N	Y
Podomys floridanus	Florida Mouse	G3	S3		N	Y
Sciurus niger niger	Southeastern Fox Squirrel	G5T5	S3S4		N	Y
Trichechus manatus latirostris	Florida Manatee	G2G3T2	S2S3	T	N	Y
Ursus americanus floridanus	Florida Black Bear	G5T4	S4		N	Y

Amphibia						
Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**	**Tracked?**
Lithobates capito	Gopher Frog	G2G3	S3	UR	N	Y
Notophthalmus perstriatus	Striped Newt	G2G3	S2		ST	Y

Reptiles						
Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**	**Tracked?**
Alligator mississippiensis	American Alligator	G5	S4	SAT	FT(S/A)	Y
Clemmys guttata	Spotted Turtle	G5	S2S3	UR	N	Y
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G3	S3	UR	N	Y
Drymarchon couperi	Eastern Indigo Snake	G3	S2?	T	FT	Y
Gopherus polyphemus	Gopher Tortoise	G3	S3		ST	Y
Heterodon simus	Southern Hognose Snake	G2	S2S3		N	Y
Lampropeltis extenuata	Short-tailed Snake	G3	S3	PT	ST	Y
Lampropeltis floridana	Florida Kingsnake	G2	S2		N	Y
Pituophis melanoleucus	Pine Snake	G4	S3		ST	Y
Plestiodon reynoldsi	Sand Skink	G3	S3	T	FT	Y
Sceloporus woodi	Florida Scrub Lizard	G2G3	S2S3	UR	N	Y

Fishes						
Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**	**Tracked?**
Ameiurus brunneus	Snail Bullhead	G4	S4?		N	Y
Cyprinodon variegatus hubbsi	Lake Eustis Pupfish	G5T2Q	S2		N	Y
Enneacanthus chaetodon	Blackbanded Sunfish	G3G4	S1S3		N	Y
Pteronotropis welaka	Bluenose Shiner	G3G4	S3S4		ST	Y

Plants & Lichens						
Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**	**Tracked?**
Astragalus obcordatus	Florida milkvetch	G3G4	S2S3		N	Y
Bonamia grandiflora	Florida bonamia	G3	S3	T	E	Y
Carex chapmanii	Chapman's sedge	G3	S3		T	Y
Centrosema arenicola	sand butterfly pea	G2Q	S2		E	Y
Chionanthus pygmaeus	pygmy fringe tree	G2G3	S2S3	E	E	Y
Clitoria fragrans	scrub pigeon-wing	G2G3	S2S3	T	E	Y
Coleataenia abscissa	cutthroatgrass	G3	S3		E	Y
Cucurbita okeechobeensis	Okeechobee gourd	G1	S1	E	E	Y
Digitaria gracillima	longleaf fingergrass	G1	S2		N	Y
Digitaria leucocoma	Lake Ella crabgrass	GNR	S1S2		N	Y
Eriogonum floridanum	scrub buckwheat	G4T2?	S2	T	E	Y
Gymnopogon chapmanianus	Chapman's skeletongrass	G3	S3		N	Y
Hartwrightia floridana	hartwrightia	G2	S2S3	UR	T	Y
Hasteola robertiorum	Florida hasteola	G1	S1		E	Y
Hypoxis sessilis	glossyseed yellow stargrass	G3	S2S3		N	Y
Illicium parviflorum	star anise	G2	S2		E	Y
Justicia cooleyi	Cooley's water-willow	G2Q	S2	E	E	Y
Lechea cernua	nodding pinweed	G3	S3		T	Y
Matelea floridana	Florida spiny-pod	G2	S2		E	Y
Mnesithea tuberculosa	Piedmont jointgrass	G3	S3		T	Y
Monotropa hypopithys	pinesap	G5	S1		E	Y
Najas filifolia	Narrowleaf Naiad	G3	S2	UR	T	Y
Nemastylis floridana	celestial lily	G3	S3		E	Y
Nolina brittoniana	Britton's beargrass	G3	S3	E	E	Y
Paronychia chartacea	paper nailwort	G3	S3	T	E	Y
Pecluma dispersa	widespread polypody	G5	S2		E	Y
Pecluma plumula	plume polypody	G5	S2		E	Y
Pecluma ptilodon var. bourgeauana	comb polypody	G5?TNR	S2		E	Y
Polygala lewtonii	Lewton's polygala	G2	S2	E	E	Y

Plants & Lichens (Continued)						
Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**	**Tracked?**
Polygonella myriophylla	Small's jointweed	G3	S3	E	E	Y
Prunus geniculata	scrub plum	G3	S3	E	E	Y
Salix floridana	Florida willow	G2G3	S2S3	UR	E	Y
Sideroxylon alachuense	silver buckthorn	G1	S1		E	Y
Sideroxylon lycioides	buckthorn	G5	S2		E	Y
Stylisma abdita	scrub stylisma	G3	S3		E	Y
Vicia ocalensis	Ocala vetch	G2	S2		E	Y
Warea amplexifolia	clasping warea	G1	S1	E	E	Y
Warea carteri	Carter's warea	G1	S1	E	E	Y

Minneola Commerce Center

Sanitary Lift Station Calculations

April 2026

MAJOR LEE STACY
LICENSE
No. 70249
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Major L Stacy
Location: 2221 Lee Road Suite 27 Winter Park, Fl 32789
Reason: I am approving this document
Contact Info: mstacy@cfb-inc.com.com
Date: 2026.04.20 15:48:06-04'00'

CLYMER FARNER BARLEY, INC.

Major Stacy, P.E.
Director of Engineering - Orlando

CFB-Inc.com

Minneola Commerce Center

SUMMARY

The Minneola Commerce Center is a major site plan in City of Minneola and is located approximately 1,000 ft south of the intersection of US 27 & Citrus Grove Road. The proposed lift station provides wastewater services for the 2 industrial warehouses with their bathrooms and loading bays resulting in a peak flow of 14.44 GPM. The report provides detailed calculations on the entire design of the Minneola Commerce Center lift station.

GBG-001 - Minneola Commerce Center

Wastewater Collection - ADF Calculations

Proposed Wastwater Collection Demands

	Bldg Type	# of Bays	Building Area (SF)	ERU Factor	Total ERC's/ Bldg.	ERU ADF Factor (gpd)	ADF (gpd)	ADF (gpm)	MDF (gpd)	MDF (gpm)	PHF (gpd)	PHF (gpm)
Industrial Building 1 (per gross floor area)	II-B		76,250	0.001	76.25	10	762.50	0.53	1,525.00	1.06	3,050.00	2.12
Industrial Building 1 (per number of truck bays)	II-B	25	-	1.00	25.00	100	2,500.00	1.74	5,000.00	3.47	10,000.00	6.94
Industrial Building 2 (per gross floor area)	II-B		43,750	0.001	43.75	10	437.50	0.30	875.00	0.61	1,750.00	1.22
Industrial Building 2 (per number of truck bays)	II-B	15	-	1.00	15.00	100	1,500.00	1.04	3,000.00	2.08	6,000.00	4.17
Total							5,200.00	3.61	10,400.00	7.22	20,800.00	14.44

*ERC ADF Factor determined using Chapter 102, Article X, Sec 102-460b of the City of Sanford Code of Ordinances.
**An assumed Commercial Building size and demand is provided for Master Planning purposes and sizing. A formal hydraulic analysis shall be required and submitted with each individual commerical development.

GBG-001 - Minneola Commerce Center

Wastewater Collection Calculations - High Head Condition

ESTIMATED SEWAGE FLOWS: **ERU =** **10 gal/day per SF** **or** **100 Gal/day per bay**

Unit Type	Units	ERU Factor	Total ERU's / Unit Type	ADF (gpd)
Building 1 Floor Area	76,250	0.0010	**76.25**	**762.50**
Building 1 Truck Bays	25	1.0000	**25**	**2,500.00**
Building 2 Floor Area	43,750	0.0010	**43.75**	**437.50**
Building 2 Truck Bays	15	1.0000	**15**	**1,500.00**
			TOTAL =	**5,200**

Average Daily Flow:

GPD	Hours of Operating	ADF	ADF
5,200.00	24	3.61 GPM	5,200.00 GPD

Maximum Daily Flow:

ADF	Peaking Factor	MDF	MDF
3.61 GPM	2.0	7.22 GPM	10,400.00 GPD

Peak Hourly Flow:

ADF	Peaking Factor	PHF	PHF
3.61 GPM	4.0	14.44 GPM	866.67 GPH

Station Design:

Centerline of Roadway	182.87	NAVD
Wet-well Rim Elevation	184.00	NAVD
Rim Elev. above Roadway	1.13	NAVD
Discharge Elevation	180.40	NAVD
Influent Elevation	170.51	NAVD
Alarm Elevation	170.01	NAVD
Lag Pump On Elevation	169.51	NAVD
Lead Pump On Elevation	169.01	NAVD
Pump Off Elevation	168.61	NAVD
Wet-well Bottom Invert	166.61	NAVD
Inside Diameter of Wet-Well	6.00	ft
Wet-Well Wall Thickness (concrete)	8.00	in
Top Slab Thickness (concrete)	8.00	in
Bottom Slab Thickness (concrete)	12.00	in

Pumps:

Model	MF 3102 HT 3 ~
(XYLEM)	267
HP (hp)	6
Inlet Diameter (in)	1.57
Voltage (V)	460
Phase	3
RPM	3515

Force Main Design:

Diameter of Onsite Force Main	2.00	in.
Length of Onsite Force Main	125	ft

Dynamic Head Conditions:

Receiving Force Main - psi to feet conversion: 34.0 psi 78.54

Static Lift — Pump Off Elev. 168.61 NAVD — Force Main Elev. (At the connection per existing force main's construction plans) 190.00 NAVD 21.39

Total Static Head 99.93

Friction Loss: (Lift Station)

Pipe Size	Gate	Check	45 Degree	90 Degree	Tee	Reducer	Gate Valve
2 in	2	26	4	8	15	2	3
4 in	3	34	5	10	20	3	6
6 in	4	51	8	15	30	4	9
8 in	5	33	11	20	40	6	12
10 in	7	42	13	25	50	7	15
12 in	8	50	16	30	60	9	18
14 in	9	55	18	33	66	10	21
16 in	10	63	20	38	75	12	24

22.00 L.F. of 2" HDPE at Lift Station	22.00 L.F.	
3.00 EA. 2" 90-Degree Elbows	24.00 L.F.	
6.00 EA. 2" 45-Degree Elbows	24.00 L.F.	
1.00 EA. 2" Check Valve	26.00 L.F.	
1.00 EA. 2" Tee	15.00 L.F.	
1.00 EA. 2" Gate Valve	3.00 L.F.	
	114.00 L.F.	**Total Equivalent Feet of 2" Pipe**

Friction Loss Formula: **H = 10.44L(Q^ 1.85)/(C^ 1.85D^ 4.8655)**

Proposed Force Main PVC Pipe Friction Factor - C = 130

2-IN PVC PIPE										
H =	10.44	Length	Q^ 1.86		C^ 1.85	D^ 4.8655		Loss	GPM	FPS
1	10.44	125.00	0.00	0.00	8143.20	29.15	237386.84	**0.00**	**0.0**	**0.00**
2	10.44	125.00	580.32	757323.30	8143.20	29.15	237386.84	**3.19**	**31.2**	**3.18**
3	10.44	125.00	1450.51	1892918.88	8143.20	29.15	237386.84	**7.97**	**51.2**	**5.22**
4	10.44	125.00	2879.92	3758296.34	8143.20	29.15	237386.84	**15.83**	**74.1**	**7.57**
5	10.44	125.00	4092.97	5341328.58	8143.20	29.15	237386.84	**22.50**	**89.6**	**9.15**
6	10.44	125.00	4446.94	5803255.18	8143.20	29.15	237386.84	**24.45**	**93.7**	**9.57**
7	10.44	125.00	4861.79	6344632.24	8143.20	29.15	237386.84	**26.73**	**98.4**	**10.05**

Total Dynamic Head:

Flow GPM	Maximum Velocity ft/sec	Friction ft	Static Head ft	TDH
0	0.00	0.00	99.93	99.93
31.18	3.18	3.19	99.93	103.12
51.16	5.22	7.97	99.93	107.90
74.12	7.57	15.83	99.93	115.76
89.63	9.15	22.50	99.93	122.43
93.74	9.57	24.45	99.93	124.38
98.37	10.05	26.73	99.93	126.66

Flow (gpm)	System Head Curve	Pump Curve
0.0	99.9	121.6
31.2	103.1	111.7
51.2	107.9	102.4
74.1	115.8	85.6
89.6	122.4	68.1
93.7	124.4	56.6
98.4	126.7	4.7

Pump Manf/Model (XYLEM)	MF 3102 HT 3 ~ 267
Impeller (mm)	142
Speed	3515
HP	6
Discharge (in)	1.50 in

PUMP CYCLING:

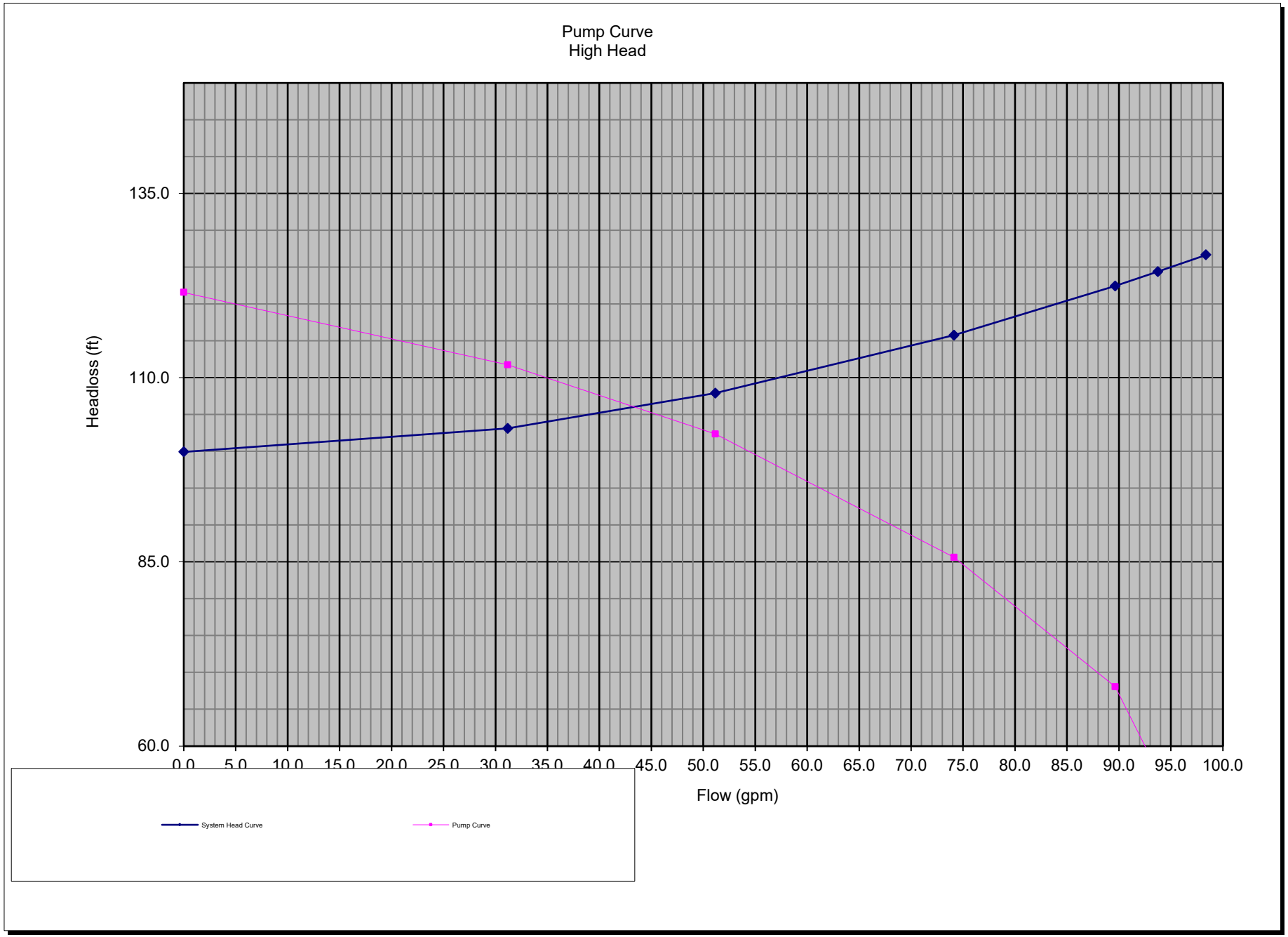
Wet Well Diam.	6.00	ft
Sewer Invert	170.51	ft
High Level Alarm	170.01	ft
Lag Pump "on"	169.51	ft
Lead Pump "on"	169.01	ft
Both Pumps Off	168.61	ft
Bottom of Wetwell	166.61	ft

Drawdown Volume	11.31	ft^3
Drawdown Volume	84.60	gal
Qi (ADF)	3.61	gpm
Qip (PHF)	14.44	gpm
Qd (Pump Discharge)	43.40	gpm

Average		**Peak**	
Θ =(V/(Qd-Qi))+(V/Qi)		Θ = (V/Qd)+(V/Qip)	
Θ =	**25.6**	Θ =	**7.8**
Cycles/Hour	**2.3**	Cycles/Hour	**7.7**
10<Θ<30	YES	5</=Θ	YES

Scouring Velocity @ Design Pump Rate

Peak Flow Rate	43.40 GPM	
Velocity	4.43 FPS	2-IN PVC PIPE
Velocity	4.43 FPS	2-IN PVC PIPE


Pump Curve
High Head
Headloss (ft)
135.0
110.0
85.0
60.0
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0
50.0
55.0
60.0
65.0
70.0
75.0
80.0
85.0
90.0
95.0
100.0
Flow (gpm)
System Head Curve
Pump Curve

ESTIMATED SEWAGE FLOWS: **ERU =** **10 gal/day per SF** **or** **100 Gal/day per bay**

Unit Type	Units	ERU Factor	Total ERU's / Unit Type	ADF (gpd)
Building 1 Floor Area	76,250	0.0010	**76.25**	**762.50**
Building 1 Truck Bays	25	1.0000	**25**	**2,500.00**
Building 2 Floor Area	43,750	0.0010	**43.75**	**437.50**
Building 2 Truck Bays	15	1.0000	**15**	**1,500.00**
			TOTAL =	**5,200**

Average Daily Flow:

GPD	Hours of Operating	ADF	ADF
5,200.00	24	3.61 GPM	0.00 GPD

Maximum Daily Flow:

ADF	Peaking Factor	MDF	MDF
3.61 GPM	2.0	7.22 GPM	10,400.00 GPD

Peak Hourly Flow:

ADF	Peaking Factor	PHF	PHF
3.61 GPM	4.0	14.44 GPM	866.67 GPH

Station Design:

Centerline of Roadway	182.87	NAVD
Wet-well Rim Elevation	184.00	NAVD
Rim Elev. above Roadway	1.13	NAVD
Discharge Elevation	180.40	NAVD
Influent Elevation	170.51	NAVD
Alarm Elevation	170.01	NAVD
Lag Pump On Elevation	169.51	NAVD
Lead Pump On Elevation	169.01	NAVD
Pump Off Elevation	168.61	NAVD
Wet-well bottom	166.61	NAVD
Inside Diameter of Wet-Well	6.00	ft
Wet-Well Wall Thickness	8.00	in
Top Slab Thickness	8.00	in
Bottom Slab Thickness	12.00	in

Pumps:

Model	MF 3102 HT 3 ~
(XYLEM)	267
HP	6
Inlet	1.57
Voltage	460
Phase	3
RPM	3515

Force Main Design:

Diameter of Onsite Force Main	2.00	in.
Length of Onsite Force Main	125.00	ft

Dynamic Head Conditions:

Recieving Force Main - psi to feet conversion: 28.00 psi 64.68

Static Lift — All Pump On Elev. 169.51 NAVD — Force Main Elev. 190.00 NAVD (At the connection per existing force main's construction plans) 20.49

Total Static Head 85.17

Friction Loss: (Lift Station)

Pipe Size	Gate	Check	45 Degree	90 Degree	Tee	Reducer	Gate Valve
2 in	2	26	4	8	15	2	3
4 in	3	34	5	10	20	3	6
6 in	4	51	8	15	30	4	9
8 in	5	33	11	20	40	6	12
10 in	7	42	13	25	50	7	15
12 in	8	50	16	30	60	9	18
14 in	9	55	18	33	66	10	21
16 in	10	63	20	38	75	12	24

22.00	L.F. of 2" HDPE at Lift Station	22.00 L.F.
3.00	EA. 2" 90-Degree Elbows	24.00 L.F.
6.00	EA. 2" 45-Degree Elbows	24.00 L.F.
1.00	EA. 2" Check Valve	26.00 L.F.
1.00	EA. 2" Tee	15.00 L.F.
1.00	EA. 2" Gate Valve	3.00 L.F.
		114.00 L.F.

Total Equivalent Feet of 2" Pipe

Force Main Friction Loss Formula: **H = 10.44L(Q^ 1.85)/(C^ 1.85D^ 4.8655)**

Proposed Forcemain PVC Pipe Friction Factor - C = 130

2-IN PVC PIPE										
H =	10.44	Length	Q^ 1.86		C^ 1.85	D^ 4.8655		Loss	GPM	FPS
1	10.44	125.00	0.00	0.00	8143.20	29.15	237386.84	**0.00**	**0**	**0.00**
2	10.44	125.00	580.32	757323.30	8143.20	29.15	237386.84	**3.19**	**31.18**	**3.18**
3	10.44	125.00	1450.51	1892918.88	8143.20	29.15	237386.84	**7.97**	**51.16**	**5.22**
4	10.44	125.00	2879.92	3758296.34	8143.20	29.15	237386.84	**15.83**	**74.12**	**7.57**
5	10.44	125.00	4092.97	5341328.58	8143.20	29.15	237386.84	**22.50**	**89.63**	**9.15**
6	10.44	125.00	4446.94	5803255.18	8143.20	29.15	237386.84	**24.45**	**93.74**	**9.57**
7	10.44	125.00	4861.79	6344632.24	8143.20	29.15	237386.84	**26.73**	**98.37**	**10.05**

Total Dynamic Head:

Flow GPM	Maximum Velocity ft/sec	Friction ft	Static Head ft	TDH
0	0.00	0.00	85.17	85.17
31.18	3.18	3.19	85.17	88.36
51.16	5.22	7.97	85.17	93.14
74.12	7.57	15.83	85.17	101.00
89.63	9.15	22.50	85.17	107.67
93.74	9.57	24.45	85.17	109.62
98.37	10.05	26.73	85.17	111.90

Flow (gpm)	System Head Curve	Pump Curve
0	85.2	121.6
31.18	88.4	111.7
51.16	93.1	102.4
74.12	101.0	85.6
89.63	107.7	68.1
93.74	109.6	56.6
98.37	111.9	4.7

Pump Manf/Model (XYLEM)	MF 3102 HT 3 ~ 267
Impeller (mm)	142
Speed	3515
HP	6
Discharge (in)	1.50 in

PUMP CYCLING:

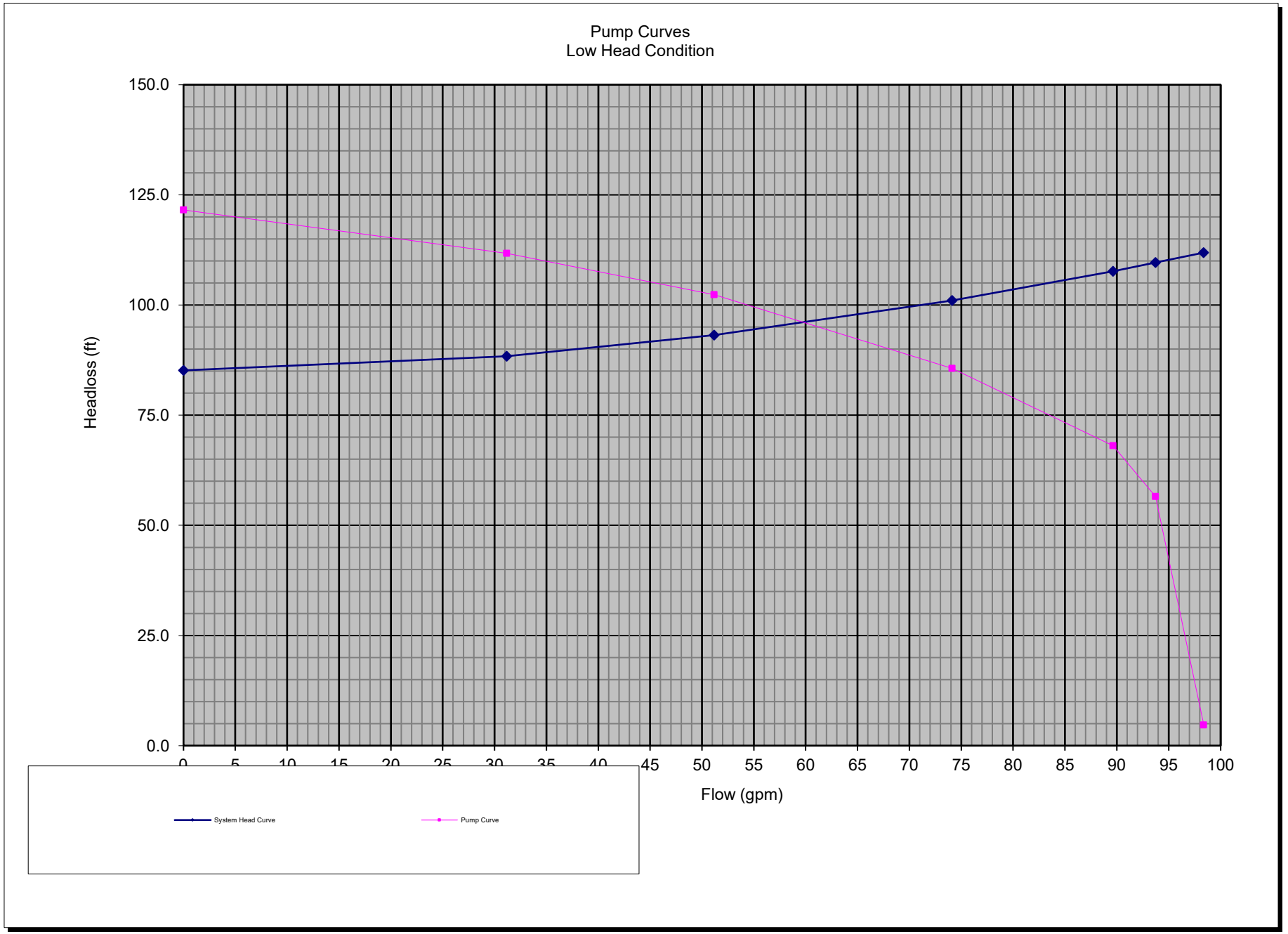
Wet Well Diam.	6.00	ft
Sewer Invert	170.51	ft
High Level Alarm	170.01	ft
Lag Pump "on"	169.51	ft
Lead Pump "on"	169.01	ft
Both Pumps Off	168.61	ft
Bottom of Wetwell	166.61	ft

Drawdown Volume	11.31	ft^3
Drawdown Volume	84.60	gal
Qi (ADF)	3.61	gpm
Qip (PHF)	14.44	gpm
Qd (Pump Discharge)	59.50	gpm

Average		Peak	
Θ =(V/(Qd-Qi))+(V/Qi)		Θ = (V/Qd)+(V/Qip)	
Θ =	**24.9**	Θ =	**7.3**
Cycles/Hour	**2.4**	Cycles/Hour	**8.2**
10<Θ<30	YES	5</=Θ	YES

Scouring Velocity @ Design Pump Rate

Peak Flow Rate	59.50 GPM	
Velocity	6.08 FPS	2-IN PVC PIPE
Velocity	6.08 FPS	2-IN PVC PIPE


Pump Curves
Low Head Condition
Headloss (ft)
150.0
125.0
100.0
75.0
50.0
25.0
0.0
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100
Flow (gpm)
System Head Curve
Pump Curve

Lift Station Buoyancy Calculations

Wet Well Inside Dimensions	6.00	ft
Wet Well Top Slab Elevation	184.00	ft
Wet Well Bottom Invert Elevation	166.61	ft
Seasonal High Water Elev.	184.00	ft
Lip Width of Wet Well Base	1.00	ft
Area of Hatch	16.00	ft²
Thickness Of Top Slab	0.67	ft
Extended Base Slab Thickness	1.00	ft
Wet Well Wall Thickness	0.67	ft
Wet Well Outside Dimensions	**7.33**	ft
Extended Base Slab Diameter	**9.33**	ft²
Area of Top Slab	**42.24**	ft²
Area of Inner Wet Well	**28.27**	ft²
Area of Outer Wet Well	**42.24**	ft²
Area of Extended Base	**68.42**	ft²

Calculate Total Volume of Wet Well Structure

Volume of Wet Well Top Slab	**28.16**	ft³
Volume of Wet Well Riser Sections	**706.39**	ft³
Volume of Wet Well Extended Base	**68.42**	ft³
Total Volume of Wet Well Structure	**802.96**	ft³
Volume of Wet Well Above SHWE	**0.00**	ft³
Volume of Wet well below SHWE	**802.96**	ft³

Calculate Total Volume of Water Displaced

H20 Displaced = (Volume of Wet well Structure) * (62.4 lbs/ft³)		
H20 Displaced	**50,105**	lbs

Calculate Weight of Wet well Components

Section	Weight @ 150 lbs/ft³	
Top Slab Weight Less Hatch Opening	**2,624**	lbs
Riser - Total Vertical Ft.	**35,027**	lbs
Extended Base	**10,263**	lbs
Total	**47,914**	lbs

Calculate Weight of Soil Above Extended Base/Footing

Volume of Soil Above Extended Base	**455.30**	ft³
Weight of Soil Above Extended Base	**110**	lbs/ft³
Total Weight of Soil Above Extended Base	**50,082**	lbs

Flotation Protection Required?

Weight of Conc and Weight of Soil Above Base:	**97,996**	lbs
Weight of Conc and Soil with FOS of 1.5 :	**65,331**	lbs
Weight of Water Displaced By Wet Well:	**50,105**	lbs
Flotation Protection Required?	**NO**	

GBG-001
Minneola Commerce Center

Stormwater Management Report

07 January 2026

PREPARED FOR:

City of Minneola
800 N. US Hwy 27
Minneola, FL 34715
(407) 659-4800

St. Johns River Water Management District
2501 S. Binion Road
Apopka, FL 32703
(407) 659-4800

Florida Department of Transportation – District 5
719 S. Woodland Blvd. – MS 555
DeLand, FL. 32720
386-943-5507

PREPARED BY:
John Wohlfarth, P.E.
Clymer Farner Barley, Inc
2221 Lee Road, Suite 27
Winter Park, FL 32789
(407) 960 5868

CFB-Inc.com

TABLE OF CONTENTS

1.0 Project Narrative & Location

2.0 Environmental – Soils – Floodplain Management

3.0 Drainage Conditions

4.0 Stormwater Management Design Criteria

5.0 Pre Development Curve Number Calculations

6.0 Pre & Post Development Time of Concentration Calculations

7.0 Post Development Curve Number Calculations

8.0 Post Development Stage Storage and Treatment Volume Calculations

9.0 StormWise Pre Development Routing Analysis

10.0 StormWise Post Development Routing Analysis

11.0 PONDS Recovery Analysis

- 11.1 Peak Stage Recovery Analysis
- 11.2 Treatment Volume Recovery Analysis

12.0 Pre Development Onsite Basin Map

13.0 Pre Development Offsite Basin Map

14.0 Post Development Onsite Basin Map

15.0 Post Development Offsite Secondary Analysis

- 15.1 Offsite Secondary Basin Map
- 15.2 Offsite Secondary Analysis

ATTACHMENTS

Attachment A Location Map
Attachment B Aerial Map
Attachment C Flood Map
Attachment D Soils Map
Attachment E USGS Map

1.0 Project Narrative & Location

The purpose of this report is to show that the proposed project meets or exceeds all of the City of Minneola, FDOT and St Johns River Water Management District Stormwater requirements.

The project area of the Minneola Commerce Center is +/- 15.00 Acres and is generally located on the East Side of US 27 approximately 1,000 feet south of the intersection of US 27 & Citrus Grove Road. The existing site consists of mostly woods with an access road on the north side of the site, a small FDOT pond and a billboard. A copy of the location map is attached as Attachment A of this report.

The project consists of filling in an existing FDOT pond, constructing 2 warehouse buildings, a dry retention pond to treat and attenuate the onsite and offsite runoff, a parking field with drive isles and the associated infrastructure.

Lake County Parcel ID

06-22-26-0003-000-04700
06-22-26-0003-000-06300

Owner Grassy Lake Holdings, LLC

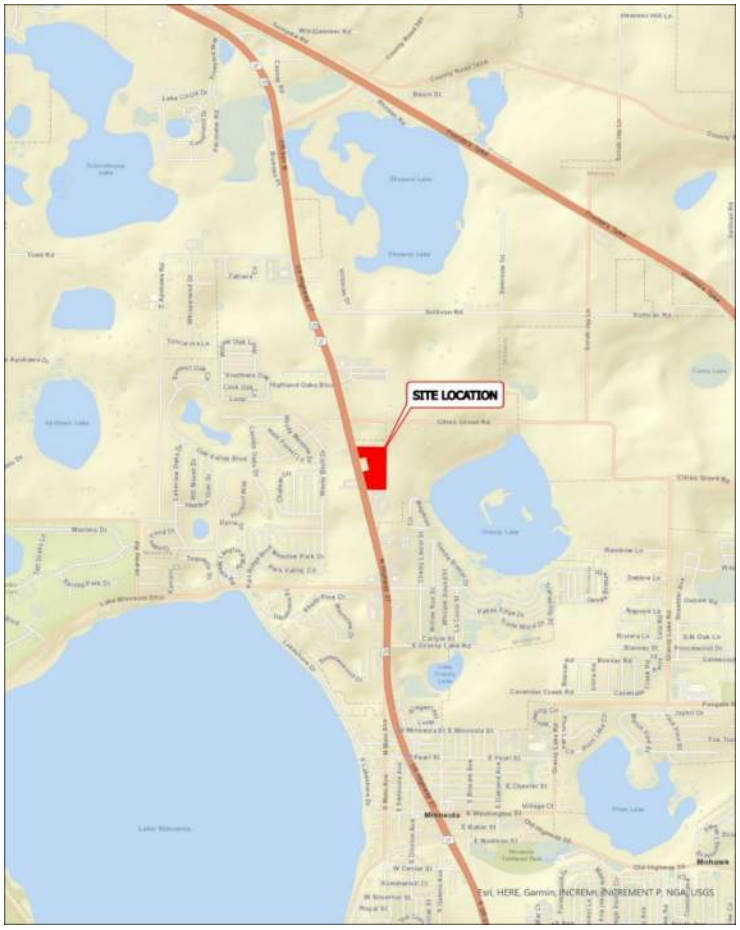


Figure 1 Location Map

2.0 Environnemental – Soils – Flood plain Management

ENVIRONMENTAL

In April 2025, Ecological Consulting Solutions, Inc. (ECS) conducted an environmental assessment of the Minneola Commerce Center Site.

Refer to the environmental assessment prepared by Ecological Consulting Solutions, for further information.

FEMA – FLOODPLAIN MANAGEMENT

According to the FEMA Flood Insurance Rate Map for Lake County, FL, Panel No. 112069-C-0560-W, dated December 18, 2012, the proposed project is located within Zone X (areas determined to be outside the 100-year floodplain).

Please refer to Attachment C of this report for FEMA Flood Map.

SOILS

According to the Soil Survey of Orange County, Florida, prepared by the U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS), three (3) soil types occur within the site boundaries. Below are the two (3) soil types.

- Candler fine sand, 0 to 5 percent slopes (#8)
- Candler fine sand, 5 to 12 percent slopes (#9)
- Lake sand, 0 to 5 percent slopes (#21)

Please refer to Attachment D of this report for SOILS MAP.

3.0 Drainage Conditions

PRE-DEVELOPMENT

In the Pre-Development condition, the subject property is divided into one (1) on-site basin and four (4) off-site basins. The basins are identified by their ultimate outfall as follows:

Basin #1 - Discharges to an existing offsite depression which outfalls to Grassy Lake
Basin #2 - Discharges to Basin 1 which discharges to the offsite depression
Basin #3 - Discharges to Basin 1 which discharges to the offsite depression
Basin #4 - Discharges to an existing offsite depression which outfalls to Grassy Lake
FDOT Basin - Discharges to the existing FDOT pond which discharges to Basin 1

Refer to Section 12 & 13 of this report for the Pre-Development Basin Maps.

POST-DEVELOPMENT

In the Post-Development condition, the site is divided into two (2) on-site basins and four (4) off-site basins. The basins are identified by their ultimate outfall as follows:

Basin #1 - Discharges to POND 1 which outfalls to Basin 4
Basin #2 - Discharges to Basin 1
Basin #3 - Discharges to Basin 1
Basin #4 - Discharges to an existing offsite depression which outfalls to Grassy Lake
Basin #5 - Discharges to an existing offsite depression which outfalls to Grassy Lake
FDOT BASIN - Discharges to Basin 1

Refer to Section 14 & 15 of this report for the Post-Development Basin Maps.

4.0 Stormwater Management Design Criteria

PROPOSED CONDITIONS

Per coordination with St. Johns River Water Management District staff and FDOT staff, the volumetric difference for the 25-year, 96-hour storm from pre to post-development must be retained on site. Below is a table comparing the pre vs post-development volumetric difference. The Site is Landlocked and discharges less in the post development condition than the pre developed site.

Storm Event	Outfall	Pre Runoff Volume Ac-Ft	Post Runoff Volume Ac-Ft
25YR-96HR	Grassy Lake	3.32	3.13

In terms of the rate of stormwater runoff, below is a table comparing the mean annual, 25-year, 24-hour and 50-year 24-hour storm events for the pre and post-development conditions based on StormWise results.

Node	Mean Annual Ft^3/Sec		25 YR 24 HR Ft^3/Sec		50 YR 24 HR Ft^3/Sec	
	Pre	Post	Pre	Post	Pre	Post
Existing Depression	1.07	0.56	21.11	13.73	24.94	16.06
Grassy Lake	0.00	0.00	0.00	0.00	0.00	0.00

below is a table of the peak stage for the proposed Pond 1 for the mean annual, 25-year 24-hour, 50-year 24-hour, 25-year 96-hour and 500-Year 24-Hour storm events for Post-development conditions based on StormWise.

Node	Storm	Peak Stage
Pond 1	Mean Annual	146.24’
	25YR-24HR	150.25’
	25YR-96HR	150.48’
	50YR-24HR	150.41’
	500YR-24 HR	151.11’

Please see sections 9.0 & 10.0 of this report for the StormWise modeling results Analysis.

COMPUTER MODELING

The enclosed stormwater pond routing calculations for post-development conditions were accomplished using a computer program entitled StormWise (Version 4.08.03)" developed by Streamline Technologies, Inc. The hydrograph generation module within this program utilized the SCS Unit Hydrograph Method with the 323 shape peaking factor model to compute the runoff hydrographs. The Ponds Recovery Analysis was done utilizing PONDS (Version 3.3) developed by Devo Engineering, Inc.

TREATMENT VOLUME ANALYSES

Below is a summary of the two different treatment volume calculations required for this site, of which the largest is the required treatment volume for the basin area of the development.

- 0.5" times the basin area in addition to the larger of the two calculations below:
  - 1.25" times the impervious area
  - 0.5" times the basin area of the development

The pond is required to retain the larger of the treatment volume and recover within 72 hours. The dry pond recovered the required Treatment volume within 72 hours.

The table below is the pond treatment volume summary:

Pond	Treatment Volume	
	1.25" x Impervious Area	**0.5" x Basin Area**
1	1.14 Ac-ft	0.91 Ac-ft
	with additional 0.5" X Basin Area = 2.05 Ac-ft	

Details of the Stage Storage & treatment volume calculations are shown in Section **8.0** of this stormwater report and the Ponds recovery analysis can be found in Section **11.0** of this stormwater management report.

DESIGN STORMS

The designed storms used in the analysis include the following:

Storm Event	Rainfall Amount (Inches)
Mean Annual	4.2
10YR-24HR	6.6
25YR-24HR	8.5
25YR-96HR	11.5
50YR-24HR	9.0
500YR-24 HR	14.5

EROSION CONTROL

A silt fence, existing inlet protection, a temporary construction entrance with a diversion ridge, and a concrete washout will be used as required to control erosion (refer to the construction plan set for the Erosion Control Plan). In addition, the contractor will be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) and submit a NOI (Notice of Intent) to the FDEP (Florida Department of Environmental Protection) for their National Pollutant Elimination System (NPDES) permit.

STORMWATER MANAGEMENT SYSTEM MAINTENANCE

The onsite stormwater management facilities will be privately owned and maintained.

5.0 Pre-Development Curve Number Calculations:

BASIN ANALYSIS & CURVE NUMBER DETERMINATION

Total Property Area		12.28	acres
Total On-Site Basin Area		12.28	acres
Total Off-Site Basin Area		25.15	acres
Total Basin Area		37.43	
Rainfall Depth	=	11.50	inches, (25 year/96 hour)
		9.00	inches, (50 year / 24 hour)
		8.50	inches, (25 year / 24 hour)
		4.20	inches, (Mean Annual)

BASIN 1

BASIN 1

Cover Type	Hydrologic Soil	CN	Acres	Product
Woods (Fair Cond.)	A	36	11.96	430.71
Impervious Area	N/A	98	0.32	31.44
		SUB-TOTAL	12.28	462.15

Weighted CN = (Product Sum) / (Total Area) = 462.15 / 12.28 ≈ 38

RUNOFF CALCULATION

Determine Soil Storage: S = 1000 / CN - 10 = 16.58 inches

Determine Runoff Depth: R = (P-0.2S)^2 / (P+0.8S) = 2.70 inches (25 Year 96 HR)

Determine Runoff Volume:V = R X Area / 12 = 2.77 ac-ft (25 YEAR/96 HOUR)

BASIN 2

BASIN 2

Cover Type	Hydrologic Soil	CN	Acres	Product
Open Space (Good Cond.)	A	39	1.10	43.04
Impervious Area	N/A	98	0.68	66.54
		SUB-TOTAL	1.78	109.59

Weighted CN = (Product Sum) / (Total Area) = 109.59 / 1.78 ≈ 61

RUNOFF CALCULATION

Determine Soil Storage: S = 1000 / CN - 10 = 6.27 inches

Determine Runoff Depth: R = (P-0.2S)^2 / (P+0.8S) = 6.36 inches (25 Year 96 HR)

Determine Runoff Volume:V = R X Area / 12 = 0.94 ac-ft (25 YEAR/96 HOUR)

BASIN 3

BASIN 3

Cover Type	Hydrologic Soil	CN	Acres	Product
Woods (Fair Cond.)	A	36	2.40	86.48
		SUB-TOTAL	2.40	86.48

Weighted CN = (Product Sum) / (Total Area) = 86.48 / 2.40 ≈ 36

RUNOFF CALCULATION

Determine Soil Storage: S = 1000 / CN - 10 = 17.78 inches

Determine Runoff Depth: R = (P-0.2S)^2 / (P+0.8S) = 2.45 inches (25 Year 96 HR)

Determine Runoff Volume:V = R X Area / 12 = 0.49 ac-ft (25 YEAR/96 HOUR)

BASIN 4

BASIN 4

Cover Type	Hydrologic Soil	CN	Acres	Product
Open Space (Fair Cond.)	A	49	7.87	385.48
Woods (Fair Cond.)	A	36	5.89	212.09
Impervious Area	N/A	98	0.43	42.49
		SUB-TOTAL	14.19	640.06

Weighted CN = (Product Sum) / (Total Area) = 640.06 / 14.19 ≈ 45

BASIN 3 RUNOFF CALCULATION

Determine Soil Storage: S = 1000/CN - 10 = 12.17 inches

Determine Runoff Depth: R = (P-0.2S)^2 / (P+0.8S) = 3.87 inches (25 Year 96 HR)

Determine Runoff Volume:V = R X Area / 12 = 4.58 ac-ft (25 YEAR/96 HOUR)

FDOT BASIN

FDOT BASIN

Cover Type	Hydrologic Soil	CN	Acres	Product
Open Space (Fair Cond.)	A	49	4.61	225.89
Impervious Area	N/A	98	2.16	211.68
		SUB-TOTAL	6.77	437.57

Weighted CN = (Product Sum) / (Total Area) = 437.57 / 6.77 ≈ 65

BASIN 4 RUNOFF CALCULATION

Determine Soil Storage: S = 1000/CN - 10 = 5.47 inches

Determine Runoff Depth: R = (P-0.2S)^2 / (P+0.8S) = 6.82 inches (25 Year 96 HR)

Determine Runoff Volume:V = R X Area / 12 = 3.85 ac-ft (25 YEAR/96 HOUR)

6.0 Pre & Post Development Time of Concentration Calculations:

GBG-001 MINNEOLA COMMERCE CENTER				
BASIN DESIGNATION: PRE DEVELOPMENT BASIN 1				
SCS TIME OF CONCENTRATION				
Sheet Flow:				
1. Surface Description (table 3-1)	WOODS			
2. Manning's Roughness coeff., n	0.4	(see Table 3-1 of TR-55)		
3. Flow Length, L (must be < 300 ft)	300	ft		
4. High Elevation	199.23	ft		
5. Low Elevation	182.09	ft		
6. Two-yr, 24-hr rainfall, P_2	4.2	inches		
7. Land Slope, s	0.057	ft/ft		
8. $Tt = 0.007 * (n*L)^{0.8} / (P_2^{0.5} * s^{0.4})$	0.49	hr =	29.7	min
Shallow Concentrated Flow:				
9. Surface Description (Enter 1 = paved / 2 = unpaved)	2			
10. Flow Length, L	591.829	ft		
11. High Elevation	182.09			
12. Low Elevation	136.00			
13. Watercourse slope, s	0.078	ft/ft		
14. Average Velocity, V (figure 3-1)	4.50	ft/s		
15. $Tt = L / (3600 * V)$	0.04	hr =	2.2	min
Channel Flow:				
16. Cross Sectional Flow Area, a	0	sq ft		
17. Wetted Perimeter, P_w	0	ft		
18. Hydraulic radius, $r = a/P_w$	0	ft		
19. Channel Slope, s	0	ft/ft		
20. Manning's Roughness coeff., n	0			
21. $V = 1.49 * r^{2/3} * s^{1/2} / n$	0.00	ft/s		
22. Flow Length, L	0	ft		
23. $Tt = L / (3600 * V)$	0.00	ft/s	0.0	
24. Total Watershed or subarea T_c	0.53	hr =	31.9	min

GBG-001 MINNEOLA COMMERCE CENTER
BASIN DESIGNATION: PRE & POST DEVELOPMENT BASIN 2

SCS TIME OF CONCENTRATION

Sheet Flow:			
1. Surface Description (table 3-1)	Asphalt / Grass / Woods		
2. Manning's Roughness coeff., n	0.2	(see Table 3-1 of TR-55)	
3. Flow Length, L (must be < 300 ft)	300	ft	
4. High Elevation	201.70	ft	
5. Low Elevation	190.93	ft	
6. Two-yr, 24-hr rainfall, P_2	4.2	inches	
7. Land Slope, s	0.036	ft/ft	
8. $Tt = 0.007 * (n*L)^{0.8} / (P_2^{0.5} * s^{0.4})$	0.34	hr =	20.5 min
Shallow Concentrated Flow:			
9. Surface Description (Enter 1 = paved / 2 = unpaved)	2		
10. Flow Length, L	702.2	ft	
11. High Elevation	190.93		
12. Low Elevation	136.00		
13. Watercourse slope, s	0.078	ft/ft	
14. Average Velocity, V (figure 3-1)	4.51	ft/s	
15. $Tt = L / (3600 * V)$	0.04	hr =	2.6 min
Channel Flow:			
16. Cross Sectional Flow Area, a	0	sq ft	
17. Wetted Perimeter, P_w	0	ft	
18. Hydraulic radius, $r = a/P_w$	0	ft	
19. Channel Slope, s	0	ft/ft	
20. Manning's Roughness coeff., n	0		
21. $V = 1.49 * r^{2/3} * s^{1/2} / n$	0.00	ft/s	
22. Flow Length, L	0	ft	
23. $Tt = L / (3600 * V)$	0.00	ft/s	0.0
24. Total Watershed or subarea T_c	0.39	hr =	23.1 min

GBG-001 MINNEOLA COMMERCE CENTER
BASIN DESIGNATION: PRE & POST DEVELOPMENT BASIN 3

SCS TIME OF CONCENTRATION

Sheet Flow:				
1. Surface Description (table 3-1)	Woods			
2. Manning's Roughness coeff., n	0.4	(see Table 3-1 of TR-55)		
3. Flow Length, L (must be < 300 ft)	300	ft		
4. High Elevation	188.08	ft		
5. Low Elevation	177.08	ft		
6. Two-yr, 24-hr rainfall, P_2	4.2	inches		
7. Land Slope, s	0.037	ft/ft		
8. $Tt = 0.007 * (n*L)^{0.8} / (P_2^{0.5} * s^{0.4})$	0.59	hr =	35.4	min
Shallow Concentrated Flow:				
9. Surface Description (Enter 1 = paved / 2 = unpaved)	2			
10. Flow Length, L	624.63	ft		
11. High Elevation	177.08			
12. Low Elevation	136.00			
13. Watercourse slope, s	0.066	ft/ft		
14. Average Velocity, V (figure 3-1)	4.14	ft/s		
15. $Tt = L / (3600 * V)$	0.04	hr =	2.5	min
Channel Flow:				
16. Cross Sectional Flow Area, a	0	sq ft		
17. Wetted Perimeter, P_w	0	ft		
18. Hydraulic radius, $r = a/P_w$	0	ft		
19. Channel Slope, s	0	ft/ft		
20. Manning's Roughness coeff., n	0			
21. $V = 1.49 * r^{2/3} * s^{1/2} / n$	0.00	ft/s		
22. Flow Length, L	0	ft		
23. $Tt = L / (3600 * V)$	0.00	ft/s	0.0	
24. Total Watershed or subarea T_c	0.63	hr =	37.9	min

GBG-001 MINNEOLA COMMERCE CENTER
BASIN DESIGNATION: PRE DEVELOPMENT BASIN 4 & POST DEVELOPMENT BASIN 5

SCS TIME OF CONCENTRATION

Sheet Flow:				
1. Surface Description (table 3-1)	Woods			
2. Manning's Roughness coeff., n	0.4	(see Table 3-1 of TR-55)		
3. Flow Length, L (must be < 300 ft)	300	ft		
4. High Elevation	217.01	ft		
5. Low Elevation	188.15	ft		
6. Two-yr, 24-hr rainfall, P_2	4.2	inches		
7. Land Slope, s	0.096	ft/ft		
8. $Tt = 0.007 * (n*L)^{0.8} / (P_2^{0.5} * s^{0.4})$	0.40	hr =	24.1	min
Shallow Concentrated Flow:				
9. Surface Description (Enter 1 = paved / 2 = unpaved)	2			
10. Flow Length, L	722.83	ft		
11. High Elevation	188.15			
12. Low Elevation	136.00			
13. Watercourse slope, s	0.072	ft/ft		
14. Average Velocity, V (figure 3-1)	4.33	ft/s		
15. $Tt = L / (3600 * V)$	0.05	hr =	2.8	min
Channel Flow:				
16. Cross Sectional Flow Area, a	0	sq ft		
17. Wetted Perimeter, P_w	0	ft		
18. Hydraulic radius, $r = a/P_w$	0	ft		
19. Channel Slope, s	0	ft/ft		
20. Manning's Roughness coeff., n	0			
21. $V = 1.49 * r^{2/3} * s^{1/2} / n$	0.00	ft/s		
22. Flow Length, L	0	ft		
23. $Tt = L / (3600 * V)$	0.00	ft/s	0.0	
24. Total Watershed or subarea T_c	0.45	hr =	26.9	min

GBG-001 MINNEOLA COMMERCE CENTER
BASIN DESIGNATION: POST DEVELOPMENT BASIN 4

SCS TIME OF CONCENTRATION

Sheet Flow:				
1. Surface Description (table 3-1)	Woods / Grass			
2. Manning's Roughness coeff., n	0.3	(see Table 3-1 of TR-55)		
3. Flow Length, L (must be < 300 ft)	199	ft		
4. High Elevation	150.10	ft		
5. Low Elevation	136.00	ft		
6. Two-yr, 24-hr rainfall, P_2	4.2	inches		
7. Land Slope, s	0.071	ft/ft		
8. $Tt = 0.007 * (n*L)^{0.8} / (P_2^{0.5} * s^{0.4})$	0.26	hr =	15.6	min
Shallow Concentrated Flow:				
9. Surface Description (Enter 1 = paved / 2 = unpaved)	2			
10. Flow Length, L	0	ft		
11. High Elevation	0.00			
12. Low Elevation	0.00			
13. Watercourse slope, s	0.000	ft/ft		
14. Average Velocity, V (figure 3-1)	0.00	ft/s		
15. $Tt = L / (3600 * V)$	0.00	hr =	0.0	min
Channel Flow:				
16. Cross Sectional Flow Area, a	0	sq ft		
17. Wetted Perimeter, P_w	0	ft		
18. Hydraulic radius, $r = a/P_w$	0	ft		
19. Channel Slope, s	0	ft/ft		
20. Manning's Roughness coeff., n	0			
21. $V = 1.49 * r^{2/3} * s^{1/2} / n$	0.00	ft/s		
22. Flow Length, L	0	ft		
23. $Tt = L / (3600 * V)$	0.00	ft/s	0.0	
24. Total Watershed or subarea T_c	0.26	hr =	15.6	min

7.0 POST DEVELOPMENT CURVE NUMBER CALCULATIONS:

BASIN ANALYSIS & CURVE NUMBER DETERMINATION

Total Property Area	13.40 acres
Total On-Site Basin Area	13.40 acres
Total Off-Site Basin Area	24.03 acres
Total Basin Area	37.43 acres

Rainfall Depth	=	11.50 inches, (25 year/96 hour)
		9.00 inches, (50 year / 24 hour)
		8.50 inches, (25 year / 24 hour)
		4.20 inches, (Mean Annual)

BASIN 1

BASIN 1

Cover Type	Hydrologic Soil	CN	Acres	Product
Impervious Area	N/A	98	7.64	748.78
Open Space (Good Cond.)	A	39	4.45	173.64
		SUB-TOTAL	12.09	922.43

Weighted CN = (Product Sum) / (Total Area) = 922.43 / 12.09 ≈ 76

Assumed Onsite Basin Impervious Area

	Area/Unit (SF)	Area SF	Area (Ac.)
Building Pads		120,000.00 ft²	2.75 Ac
Sidewalks		9,920.87 ft²	0.23 Ac
Roadway		198,750.56 ft²	4.56 Ac
Walls		4,155.64 ft²	0.10 Ac
Total Impervious			**7.64** Ac

25 YR 96 HR RUNOFF CALCULATION

Determine Soil Storage: S	=	1000 / CN	=	10	=	3.11 inches	
Determine Runoff Depth: R	=	(P-0.2S)^2 / (P+0.8S)	=	8.46 inches		(25 Year 96 HR)	
Determine Runoff Volume:V	=	R X Area / 12	=	8.53 ac-ft			(25 YEAR/96 HOUR)

BASIN 2

BASIN 2

Cover Type	Hydrologic Soil	CN	Acres	Product
Open Space (Good Cond.)	A	39	1.10	43.04
Impervious Area	N/A	98	0.68	66.54
		SUB-TOTAL	1.78	109.59

Weighted CN = (Product Sum) / (Total Area) = 109.59 / 1.78 ≈ 61

RUNOFF CALCULATION

Determine Soil Storage: S = 1000 / CN - 10 = 6.27 inches

Determine Runoff Depth: R = (P-0.2S)^2 / (P+0.8S) = 6.36 inches (25 Year 96 HR)

Determine Runoff Volume:V = R X Area / 12 = 0.94 ac-ft (25 YEAR/96 HOUR)

BASIN 3

BASIN 3

Cover Type	Hydrologic Soil	CN	Acres	Product
Woods (Fair Cond.)	A	36	2.40	86.48
		SUB-TOTAL	2.40	86.48

Weighted CN = (Product Sum) / (Total Area) = 86.48 / 2.40 ≈ 36

RUNOFF CALCULATION

Determine Soil Storage: S = 1000 / CN - 10 = 17.78 inches

Determine Runoff Depth: R = (P-0.2S)^2 / (P+0.8S) = 2.45 inches (25 Year 96 HR)

Determine Runoff Volume:V = R X Area / 12 = 0.49 ac-ft (25 YEAR/96 HOUR)

BASIN 4

BASIN 4

Cover Type	Hydrologic Soil	CN	Acres	Product
Open Space (Good Cond.)	A	39	1.16	45.05
Impervious Area	N/A	98	0.15	14.90
		SUB-TOTAL	1.31	59.95

Weighted CN = (Product Sum) / (Total Area) = 59.95 / 1.31 ≈ 46

25 YR 96 HR RUNOFF CALCULATION

Determine Soil Storage: S = 1000 / CN = 10 = 11.80 inches

Determine Runoff Depth: R = (P-0.2S)^2 / (P+0.8S) = 3.99 inches (25 Year 96 HR)

Determine Runoff Volume:V = R X Area / 12 = 0.43 ac-ft (25 YEAR/96 HOUR)

BASIN 5

BASIN 5

Cover Type	Hydrologic Soil	CN	Acres	Product
Open Space (Fair Cond.)	A	49	7.87	385.48
Woods (Fair Cond.)	A	36	5.89	212.09
Impervious Area	N/A	98	0.43	42.49
		SUB-TOTAL	14.19	640.06

Weighted CN = (Product Sum) / (Total Area) = 640.06 / 14.19 ≈ 45

BASIN 3 RUNOFF CALCULATION

Determine Soil Storage: S = 1000 / CN - 10 = 12.17 inches

Determine Runoff Depth: R = (P-0.2S)^2 / (P+0.8S) = 3.87 inches (25 Year 96 HR)

Determine Runoff Volume:V = R X Area / 12 = 4.58 ac-ft (25 YEAR/96 HOUR)

FDOT BASIN

FDOT BASIN

Cover Type	Hydrologic Soil	CN	Acres	Product
Existing Impervious Area	N/A	98	2.16	211.68
Propopsed Impervious Area	N/A	98	0.45	44.19
Open Space (Good Cond.)	A	39	3.49	136.24
		SUB-TOTAL	5.65	392.11

Weighted CN = (Product Sum) / (Total Area) = 392.11 / 5.65 ≈ 69

25 YR 96 HR RUNOFF CALCULATION

Determine Soil Storage: S = 1000 / CN = 10 = 4.42 inches

Determine Runoff Depth: R = (P-0.2S)^2 / (P+0.8S) = 7.50 inches (25 Year 96 HR)

Determine Runoff Volume:V = R X Area / 12 = 3.53 ac-ft (25 YEAR/96 HOUR)

8.0 Pre & Post Development Stage Storage and Treatment Volume Calculations:

POST Development - Dry Pond at 4:1

POND 1

Elevation	Area	Area	Avg. Area	Δ	Volume	∑ Volume	
(ft)	(sf)	(ac)	(ac)	(ft)	(ac-ft)	(ac-ft)	(cu.ft)
143.70	39,282.94	0.90	0.90	0.00	0.00	0.00	0.00
144.00	40,922.75	0.94	0.92	0.30	0.28	0.28	12030.85
145.00	46,457.66	1.07	1.00	1.00	1.00	1.28	55721.06
146.00	52,094.13	1.20	1.13	1.00	1.13	2.41	104996.95
147.00	57,832.23	1.33	1.26	1.00	1.26	3.67	159960.13
148.00	63,670.31	1.46	1.39	1.00	1.39	5.07	220711.40
149.00	69,608.90	1.60	1.53	1.00	1.53	6.60	287351.01
150.00	75,648.02	1.74	1.67	1.00	1.67	8.26	359979.47
151.00	81,787.67	1.88	1.81	1.00	1.81	10.07	438697.31
151.50	89,603.59	2.06	1.97	0.50	0.98	11.05	481545.13

Basin Area	=	21.93 Ac
Impervious Area	=	10.93 Ac

Treatment Volume SJRWMD (Dry Detention)

1)	1.25" X Impervious Area	=	49,597.61 ft³	or	1.14 ac-ft
2)	0.5" X Basin Area	=	39,805.42 ft³	or	0.91 ac-ft
3)	Additional 0.5" X Basin Area To the Larger Value From 1 or 2	=	89,403.03 ft³	or	2.05 ac-ft
	Total Required Treatment Volume	=	89,403.03 ft³	or	2.05 ac-ft

Minimum Required Weir Elevation	=	145.68 ft
Provided Weir Elevation	=	150.30 ft
Retention Volume	=	8.81 AC-FT

EXISTING FDOT POND

Elevation	Area	Area	Avg. Area	Δ	Volume	∑ Volume	
(ft)	(sf)	(ac)	(ac)	(ft)	(ac-ft)	(ac-ft)	(cu.ft)
170.00	8276.40	0.19	0.190	0.00	0.000	0.000	0.00
171.00	16988.40	0.39	0.290	1.00	0.290	0.290	12,632.40
172.00	20473.20	0.47	0.430	1.00	0.430	0.720	31,363.20
173.00	21925.19	0.50	0.487	1.00	0.487	1.207	52,562.39
174.00	23376.91	0.54	0.520	1.00	0.520	1.727	75,213.44
175.00	24829.20	0.57	0.553	1.00	0.553	2.280	99,316.50
176.00	32670.00	0.75	0.660	1.00	0.660	2.940	128,066.10

WEIR ELEVATION = 175.92

STORAGE AT WEIR = 2.89 AC-FT

EXISTING DEPRESSION

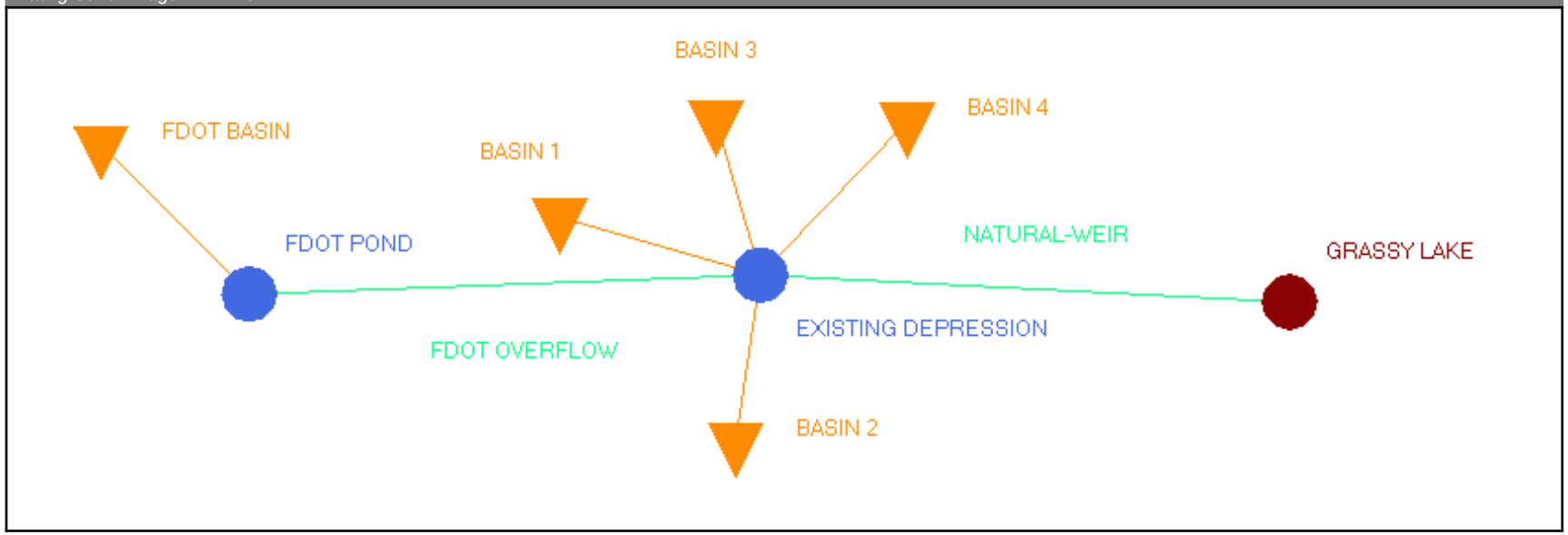
Elevation	Area	Area	Avg. Area	Δ	Volume	∑ Volume	
(ft)	(sf)	(ac)	(ac)	(ft)	(ac-ft)	(ac-ft)	(cu.ft)
137.00	16616.75	0.38	0.381	0.00	0.000	0.000	0.00
138.00	30915.53	0.71	0.546	1.00	0.546	0.546	23,766.14
139.00	45741.05	1.05	0.880	1.00	0.880	1.425	62,094.43
140.00	62238.13	1.43	1.239	1.00	1.239	2.665	116,084.02
141.00	81362.53	1.87	1.648	1.00	1.648	4.313	187,884.36
142.00	104198.32	2.39	2.130	1.00	2.130	6.443	280,664.78
143.00	127615.14	2.93	2.661	1.00	2.661	9.104	396,571.51

WEIR ELEVATION = 142.00

STORAGE AT WEIR = 6.44 AC-FT

9.0 StormWise Pre Development Routing Analysis:

Background Image: PRE NODE MAP



Node Max Conditions : Multi Item | (sim, name) [Scenario1]

Sim Name	Node Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
25 YEAR 24 HOUR SJRWMD	EXISTING DEPRESSION	142.00	0.00	141.08	0.0010	21.11	0.00	83303
25 YEAR 24 HOUR SJRWMD	FDOT POND	175.00	0.00	175.26	0.0010	17.25	0.00	26854
25 YEAR 24 HOUR SJRWMD	GRASSY LAKE	0.00	0.00	85.40	0.0000	0.00	0.00	0
25 YEAR 96 HOUR SJRWMD	EXISTING DEPRESSION	142.00	0.00	142.11	0.0010	43.08	2.27	106606
25 YEAR 96 HOUR SJRWMD	FDOT POND	175.00	0.00	175.98	0.0010	23.43	0.85	32535
25 YEAR 96 HOUR SJRWMD	GRASSY LAKE	0.00	0.00	85.40	0.0000	2.27	0.00	0
50 YEAR 24 HOUR	EXISTING DEPRESSION	142.00	0.00	141.41	0.0010	24.94	0.00	90775
50 YEAR 24 HOUR	FDOT POND	175.00	0.00	175.62	0.0010	18.96	0.00	29690
50 YEAR 24 HOUR	GRASSY LAKE	0.00	0.00	85.40	0.0000	0.00	0.00	0
MEAN ANNUAL SJRWMD	EXISTING DEPRESSION	142.00	0.00	137.87	0.0007	1.07	0.00	29034
MEAN ANNUAL SJRWMD	FDOT POND	175.00	0.00	171.85	0.0010	4.06	0.00	19935
MEAN ANNUAL SJRWMD	GRASSY LAKE	0.00	0.00	85.40	0.0000	0.00	0.00	0

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]
25 YEAR 96 HOUR SJRWMD	GRASSY LAKE	102.0064	85.40	3.32

Simple Basin: BASIN 1

Scenario:	Scenario1
Node:	EXISTING DEPRESSION
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	31.9000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	12.2800 ac
Curve Number:	38.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: BASIN 2

Scenario:	Scenario1
Node:	EXISTING DEPRESSION
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	23.1000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	1.7800 ac
Curve Number:	61.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: BASIN 3

Scenario:	Scenario1
Node:	EXISTING DEPRESSION
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number

Time of Concentration:	37.9000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	2.4000 ac
Curve Number:	36.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: BASIN 4

Scenario:	Scenario1
Node:	EXISTING DEPRESSION
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	26.9000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	14.1900 ac
Curve Number:	45.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: FDOT BASIN

Scenario:	Scenario1
Node:	FDOT POND
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0

Area:	6.7700 ac
Curve Number:	65.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: EXISTING DEPRESSION

Scenario:	Scenario1
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	137.00 ft
Warning Stage:	142.00 ft
Alert Stage:	0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
137.00	0.3800	16553
138.00	0.7100	30928
139.00	1.0500	45738
140.00	1.4300	62291
141.00	1.8700	81457
142.00	2.3900	104108
143.00	2.9300	127631

Comment:

Node: FDOT POND

Scenario:	Scenario1
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	170.00 ft
Warning Stage:	175.00 ft
Alert Stage:	0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
170.00	0.1900	8276
171.00	0.3900	16988
172.00	0.4700	20473
173.00	0.5000	21780
174.00	0.5400	23522
175.00	0.5700	24829
176.00	0.7500	32670

Comment:

Node: GRASSY LAKE

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 85.40 ft
Warning Stage: 0.00 ft
Alert Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	85.40
0	0	0	999.0000	85.40

Comment: FEMA FLOOD ELEVATION

Weir Link: FDOT OVERFLOW

Scenario: Scenario1
From Node: FDOT POND
To Node: EXISTING DEPRESSION
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Weir Type: Broad Crested Vertical
Geometry Type: Irregular
Invert: 175.92 ft
Control Elevation: 175.92 ft
Cross Section: FDOT OVERFLOW

Bottom Clip

Default: 0.00 ft
Op Table:
Ref Node:

Top Clip

Default: 0.00 ft
Op Table:
Ref Node:

Discharge Coefficients

Weir Default: 2.600
Weir Table:
Orifice Default: 0.600
Orifice Table:

Comment:

Weir Link: NATURAL-WEIR

Scenario: Scenario1
From Node: EXISTING DEPRESSION
To Node: GRASSY LAKE
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Weir Type: Broad Crested Vertical

Bottom Clip

Default: 0.00 ft
Op Table:
Ref Node:

Top Clip

Default: 0.00 ft
Op Table:

Geometry Type: Irregular
Invert: 142.00 ft
Control Elevation: 142.00 ft
Cross Section: NATURAL-WEIR

Ref Node:

Discharge Coefficients

Weir Default: 2.600
Weir Table:
Orifice Default: 0.600
Orifice Table:

Comment:

Simulation: 25 YEAR 24 HOUR SJRWMD

Scenario: Scenario1
Run Date/Time: 1/22/2026 8:50:05 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

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

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

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

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

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	OF Region Rain Opt:	Global
		Rainfall Name:	~FLMOD
Edge Length Option:	Automatic	Rainfall Amount:	8.50 in
		Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 25 YEAR 96 HOUR SJRWMD

Scenario:	Scenario1
Run Date/Time:	1/22/2026 8:50:09 AM
Program Version:	StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	102.0000

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

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global

Link Optimizer Tol:	0.0001 ft	OF Region Rain Opt:	Global
		Rainfall Name:	~SJRWMD-96
Edge Length Option:	Automatic	Rainfall Amount:	11.50 in
		Storm Duration:	96.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 50 YEAR 24 HOUR

Scenario: Scenario1
Run Date/Time: 1/22/2026 8:50:22 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

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

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

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:	
Reference ET Folder:	
Unit Hydrograph Folder:	

Lookup Tables

Boundary Stage Set:	
Extern Hydrograph Set:	
Curve Number Set:	
Green-Ampt Set:	
Vertical Layers Set:	
Impervious Set:	
Roughness Set:	
Crop Coef Set:	
Fillable Porosity Set:	
Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	OF Region Rain Opt:	Global
		Rainfall Name:	~FLMOD
Edge Length Option:	Automatic	Rainfall Amount:	9.00 in
		Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: MEAN ANNUAL SJRWMD

Scenario:	Scenario1
Run Date/Time:	1/22/2026 8:50:26 AM
Program Version:	StormWise 4.08.03

General

Run Mode: Normal

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

End Time:	0	0	0	30.0000

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

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		

Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	OF Region Rain Opt:	Global
		Rainfall Name:	~FLMOD
Edge Length Option:	Automatic	Rainfall Amount:	4.20 in
		Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

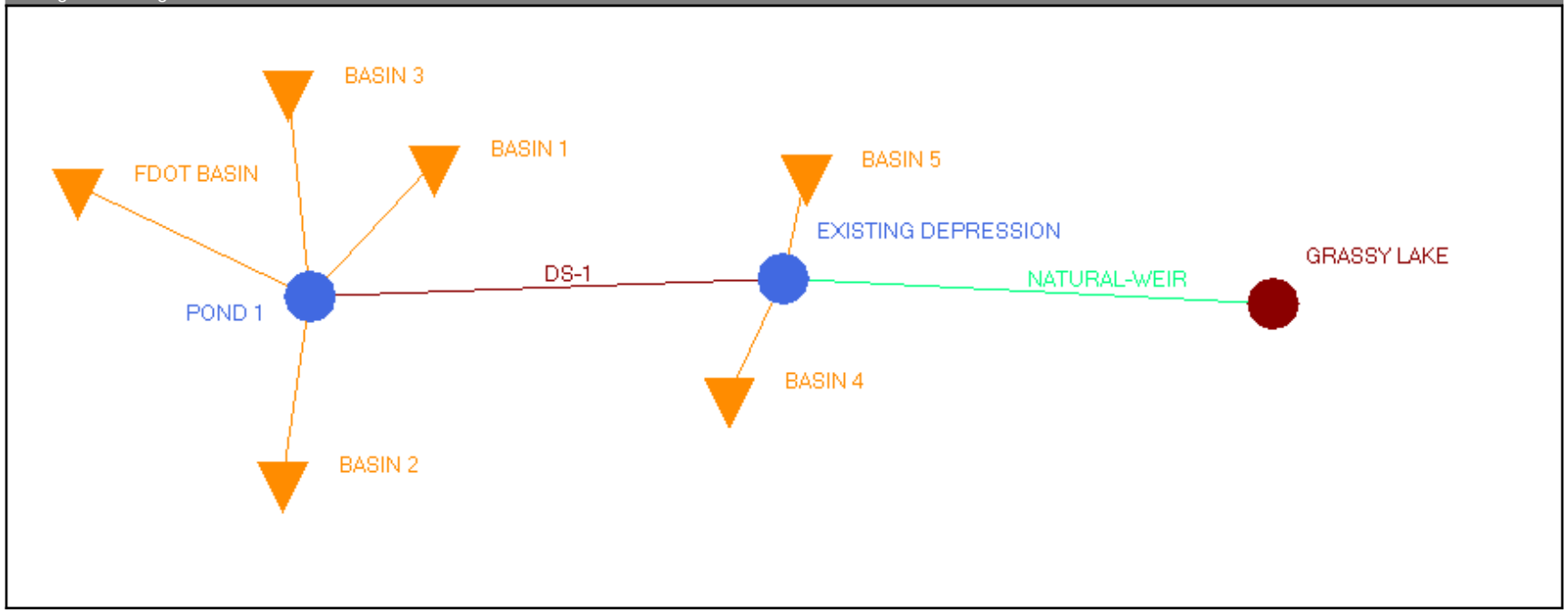
Comment:

Simple Basin : Multi Item | (sim, name) : Runoff Summary [Scenario1]

Sim Name	Basin Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]
25 YEAR 24 HOUR SJRWMD	BASIN 1	5.10	12.4833	8.50	1.28	12.2800
25 YEAR 24 HOUR SJRWMD	BASIN 2	3.72	12.2000	8.50	3.84	1.7800
25 YEAR 24 HOUR SJRWMD	BASIN 3	0.70	12.5833	8.50	1.08	2.4000
25 YEAR 24 HOUR SJRWMD	BASIN 4	12.32	12.3333	8.50	2.01	14.1900
25 YEAR 24 HOUR SJRWMD	FDOT BASIN	17.25	12.1500	8.50	4.31	6.7700
25 YEAR 96 HOUR SJRWMD	BASIN 1	12.64	60.2333	11.50	2.77	12.2800
25 YEAR 96 HOUR SJRWMD	BASIN 2	5.32	60.1333	11.50	6.30	1.7800
25 YEAR 96 HOUR SJRWMD	BASIN 3	1.90	60.3167	11.50	2.46	2.4000
25 YEAR 96 HOUR SJRWMD	BASIN 4	23.83	60.1833	11.50	3.86	14.1900
25 YEAR 96 HOUR SJRWMD	FDOT BASIN	23.43	60.1000	11.50	6.89	6.7700
50 YEAR 24 HOUR	BASIN 1	6.29	12.4500	9.00	1.50	12.2800
50 YEAR 24 HOUR	BASIN 2	4.12	12.1833	9.00	4.23	1.7800
50 YEAR 24 HOUR	BASIN 3	0.89	12.5667	9.00	1.28	2.4000
50 YEAR 24 HOUR	BASIN 4	14.42	12.3167	9.00	2.29	14.1900
50 YEAR 24 HOUR	FDOT BASIN	18.96	12.1500	9.00	4.73	6.7700
MEAN ANNUAL SJRWMD	BASIN 1	0.07	19.7333	4.20	0.05	12.2800
MEAN ANNUAL SJRWMD	BASIN 2	0.74	12.2833	4.20	0.92	1.7800
MEAN ANNUAL SJRWMD	BASIN 3	0.01	22.7333	4.20	0.02	2.4000
MEAN ANNUAL SJRWMD	BASIN 4	0.49	12.7333	4.20	0.22	14.1900
MEAN ANNUAL SJRWMD	FDOT BASIN	4.06	12.1833	4.20	1.15	6.7700

10.0 StormWise Post Development Routing Analysis:

Background Image: POST NODE MAP



Node Max Conditions : Multi Item | (sim, name) [Scenario1]

Sim Name	Node Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
25 YEAR 24 HOUR SJRWMD	EXISTING DEPRESSION	142.00	0.00	139.96	0.0009	13.73	0.00	61646
25 YEAR 24 HOUR SJRWMD	GRASSY LAKE	0.00	0.00	85.40	0.0000	0.00	0.00	0
25 YEAR 24 HOUR SJRWMD	POND 1	150.50	0.00	150.25	0.0010	70.26	0.00	77300
25 YEAR 96 HOUR SJRWMD	EXISTING DEPRESSION	142.00	0.00	142.09	0.0010	26.41	1.51	106111
25 YEAR 96 HOUR SJRWMD	GRASSY LAKE	0.00	0.00	85.40	0.0000	1.51	0.00	0
25 YEAR 96 HOUR SJRWMD	POND 1	150.50	0.00	150.48	0.0010	88.07	4.55	78751
50 YEAR 24 HOUR	EXISTING DEPRESSION	142.00	0.00	140.62	0.0010	16.06	0.00	74157
50 YEAR 24 HOUR	GRASSY LAKE	0.00	0.00	85.40	0.0000	0.00	0.00	0
50 YEAR 24 HOUR	POND 1	150.50	0.00	150.41	0.0010	76.22	2.10	78296
500 YEAR 24 HOUR	EXISTING DEPRESSION	142.00	0.00	142.40	0.0010	69.28	28.17	113619
500 YEAR 24 HOUR	GRASSY LAKE	0.00	0.00	85.40	0.0000	28.17	0.00	0
500 YEAR 24 HOUR	POND 1	150.50	0.00	151.11	0.0010	143.48	35.57	83548
MEAN ANNUAL SJRWMD	EXISTING DEPRESSION	142.00	0.00	137.60	0.0005	0.56	0.00	25217
MEAN ANNUAL SJRWMD	GRASSY LAKE	0.00	0.00	85.40	0.0000	0.00	0.00	0
MEAN ANNUAL SJRWMD	POND 1	150.50	0.00	146.24	0.0010	22.03	0.00	53652

Sim	Node Name	Relative Time [hrs]	Total Inflow Volume [ac_ft]
25 YEAR 96 HOUR SJRWMD	GRASSY LAKE	102.0026	3.13

Simple Basin: BASIN 1

Scenario:	Scenario1
Node:	POND 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	12.0900 ac
Curve Number:	76.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: BASIN 2

Scenario:	Scenario1
Node:	POND 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	23.1000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	1.7800 ac
Curve Number:	61.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: BASIN 3

Scenario:	Scenario1
Node:	POND 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number

Time of Concentration:	37.9000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	2.4000 ac
Curve Number:	36.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: BASIN 4

Scenario:	Scenario1
Node:	EXISTING DEPRESSION
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.6000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	1.3100 ac
Curve Number:	46.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: BASIN 5

Scenario:	Scenario1
Node:	EXISTING DEPRESSION
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	26.9000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0

Area:	14.1900 ac
Curve Number:	45.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: FDOT BASIN

Scenario:	Scenario1
Node:	POND 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	5.6500 ac
Curve Number:	69.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: EXISTING DEPRESSION

Scenario:	Scenario1
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	137.00 ft
Warning Stage:	142.00 ft
Alert Stage:	0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
137.00	0.3800	16553
138.00	0.7100	30928
139.00	1.0500	45738
140.00	1.4300	62291
141.00	1.8700	81457
142.00	2.3900	104108

Stage [ft]	Area [ac]	Area [ft2]
143.00	2.9300	127631

Comment:

Node: GRASSY LAKE

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 85.40 ft
Warning Stage: 0.00 ft
Alert Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	85.40
0	0	0	999.0000	85.40

Comment: FEMA FLOOD ELEVATION

Node: POND 1

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 143.70 ft
Warning Stage: 150.50 ft
Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
143.70	0.9000	39204
144.00	0.9400	40946
145.00	1.0700	46609
146.00	1.2000	52272
147.00	1.3300	57935
148.00	1.4600	63598
149.00	1.6000	69696
150.00	1.7400	75794
151.00	1.8800	81893
151.50	2.0600	89734

Comment:

Drop Structure Link: DS-1		Upstream Pipe		Downstream Pipe	
Scenario:	Scenario1	Invert:	144.27 ft	Invert:	142.00 ft
From Node:	POND 1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	EXISTING DEPRESSION	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Pipe Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	46.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	150.30 ft	Ref Node:	
Control Elevation:	150.30 ft	Discharge Coefficients	
Max Depth:	6.03 ft	Weir Default:	3.200
Max Width:	2.92 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Weir Link: NATURAL-WEIR		Bottom Clip	
Scenario:	Scenario1	Default:	0.00 ft
From Node:	EXISTING DEPRESSION	Op Table:	
To Node:	GRASSY LAKE	Ref Node:	
Link Count:	1	Top Clip	
Flow Direction:	Both	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:	
Weir Type:	Broad Crested Vertical	Ref Node:	
Geometry Type:	Irregular	Discharge Coefficients	
Invert:	142.00 ft		

Control Elevation: 142.00 ft
Cross Section: NATURAL-WEIR

Weir Default: 2.600
Weir Table:
Orifice Default: 0.600
Orifice Table:

Comment:

Simulation: 25 YEAR 24 HOUR SJRWMD

Scenario: Scenario1
Run Date/Time: 1/22/2026 8:35:03 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

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

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

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Lookup Tables

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

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	OF Region Rain Opt:	Global
		Rainfall Name:	~FLMOD
Edge Length Option:	Automatic	Rainfall Amount:	8.50 in
		Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 25 YEAR 96 HOUR SJRWMD

Scenario:	Scenario1
Run Date/Time:	1/22/2026 8:35:08 AM
Program Version:	StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	102.0000

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

Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	OF Region Rain Opt:	Global
		Rainfall Name:	~SJRWMD-96

Edge Length Option:	Automatic	Rainfall Amount:	11.50 in
		Storm Duration:	96.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 50 YEAR 24 HOUR

Scenario: Scenario1
Run Date/Time: 1/22/2026 8:35:24 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

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

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

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

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

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	OF Region Rain Opt:	Global
		Rainfall Name:	~FLMOD
Edge Length Option:	Automatic	Rainfall Amount:	9.00 in
		Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 500 YEAR 24 HOUR

Scenario:	Scenario1
Run Date/Time:	1/22/2026 8:35:28 AM
Program Version:	StormWise 4.08.03

General

Run Mode: Normal

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

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

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global

Link Optimizer Tol:	0.0001 ft	OF Region Rain Opt:	Global
		Rainfall Name:	~FLMOD
Edge Length Option:	Automatic	Rainfall Amount:	14.50 in
		Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: MEAN ANNUAL SJRWMD

Scenario: Scenario1
Run Date/Time: 1/22/2026 8:35:31 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

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

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

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:	
Reference ET Folder:	
Unit Hydrograph Folder:	

Lookup Tables

Boundary Stage Set:	
Extern Hydrograph Set:	
Curve Number Set:	
Green-Ampt Set:	
Vertical Layers Set:	
Impervious Set:	
Roughness Set:	
Crop Coef Set:	
Fillable Porosity Set:	
Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	OF Region Rain Opt:	Global
		Rainfall Name:	~FLMOD
Edge Length Option:	Automatic	Rainfall Amount:	4.20 in
		Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simple Basin : Multi Item | (sim, name) : Runoff Summary [Scenario1]

Sim Name	Basin Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]
25 YEAR 24 HOUR SJRWMD	BASIN 1	52.52	12.0333	8.50	5.63	12.0900
25 YEAR 24 HOUR SJRWMD	BASIN 2	3.72	12.2000	8.50	3.84	1.7800
25 YEAR 24 HOUR SJRWMD	BASIN 3	0.70	12.5833	8.50	1.08	2.4000
25 YEAR 24 HOUR SJRWMD	BASIN 4	1.58	12.1167	8.50	2.12	1.3100
25 YEAR 24 HOUR SJRWMD	BASIN 5	12.32	12.3333	8.50	2.01	14.1900
25 YEAR 24 HOUR SJRWMD	FDOT BASIN	16.08	12.1500	8.50	4.79	5.6500
25 YEAR 96 HOUR SJRWMD	BASIN 1	61.86	60.0167	11.50	8.44	12.0900
25 YEAR 96 HOUR SJRWMD	BASIN 2	5.32	60.1333	11.50	6.30	1.7800
25 YEAR 96 HOUR SJRWMD	BASIN 3	1.90	60.3167	11.50	2.46	2.4000
25 YEAR 96 HOUR SJRWMD	BASIN 4	2.98	60.0667	11.50	4.02	1.3100
25 YEAR 96 HOUR SJRWMD	BASIN 5	23.83	60.1833	11.50	3.86	14.1900
25 YEAR 96 HOUR SJRWMD	FDOT BASIN	20.94	60.1000	11.50	7.46	5.6500
50 YEAR 24 HOUR	BASIN 1	56.70	12.0333	9.00	6.09	12.0900
50 YEAR 24 HOUR	BASIN 2	4.12	12.1833	9.00	4.23	1.7800
50 YEAR 24 HOUR	BASIN 3	0.89	12.5667	9.00	1.28	2.4000
50 YEAR 24 HOUR	BASIN 4	1.85	12.1167	9.00	2.41	1.3100
50 YEAR 24 HOUR	BASIN 5	14.42	12.3167	9.00	2.29	14.1900
50 YEAR 24 HOUR	FDOT BASIN	17.55	12.1500	9.00	5.22	5.6500
500 YEAR 24 HOUR	BASIN 1	102.71	12.0333	14.50	11.32	12.0900
500 YEAR 24 HOUR	BASIN 2	8.84	12.1833	14.50	8.93	1.7800
500 YEAR 24 HOUR	BASIN 3	3.86	12.4500	14.50	4.18	2.4000
500 YEAR 24 HOUR	BASIN 4	5.26	12.1000	14.50	6.19	1.3100
500 YEAR 24 HOUR	BASIN 5	42.46	12.2500	14.50	6.00	14.1900
500 YEAR 24	FDOT BASIN	34.21	12.1333	14.50	10.25	5.6500

Sim Name	Basin Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]
HOUR						
MEAN ANNUAL SJRWMD	BASIN 1	17.79	12.0500	4.20	1.90	12.0900
MEAN ANNUAL SJRWMD	BASIN 2	0.74	12.2833	4.20	0.92	1.7800
MEAN ANNUAL SJRWMD	BASIN 3	0.01	22.7333	4.20	0.02	2.4000
MEAN ANNUAL SJRWMD	BASIN 4	0.07	12.4167	4.20	0.25	1.3100
MEAN ANNUAL SJRWMD	BASIN 5	0.49	12.7333	4.20	0.22	14.1900
MEAN ANNUAL SJRWMD	FDOT BASIN	4.38	12.1667	4.20	1.40	5.6500

11.0 PONDS Recovery Analysis:

11.1 Peak Stage Recovery Analysis:

PONDS Version 3.3.0315
Retention Pond Recovery - Refined Method
Copyright 2012
Devo Seereeram, Ph.D., P.E.

Project Data

Project Name:	MINNEOLA COMMERCE CENTER
Simulation Description:	PEAK STAGE RECOVERY ANALYSIS
Project Number:	GBG-001
Engineer :	JMW
Supervising Engineer:	
Date:	01-21-2026

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum):	135.50
Water Table Elevation, [WT] (ft datum):	136.50
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day):	11.90
Fillable Porosity, [n] (%):	25.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day):	13.5
Maximum Area For Unsaturated Infiltration, [Av] (ft^2):	77479.4

Geometry Data

Equivalent Pond Length, [L] (ft):	679.4
Equivalent Pond Width, [W] (ft):	85.6

Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft^2)
143.70	39282.9
144.00	40922.8
145.00	46457.7
146.00	52094.1
147.00	57832.2
148.00	63670.3
149.00	69608.9
150.00	75648.0
151.00	81787.7
151.50	89603.6

Scenario Input Data

Scenario 1 :: 383594.82 ft³ slug load

Hydrograph Type: Slug Load
Modflow Routing: Routed with infiltration

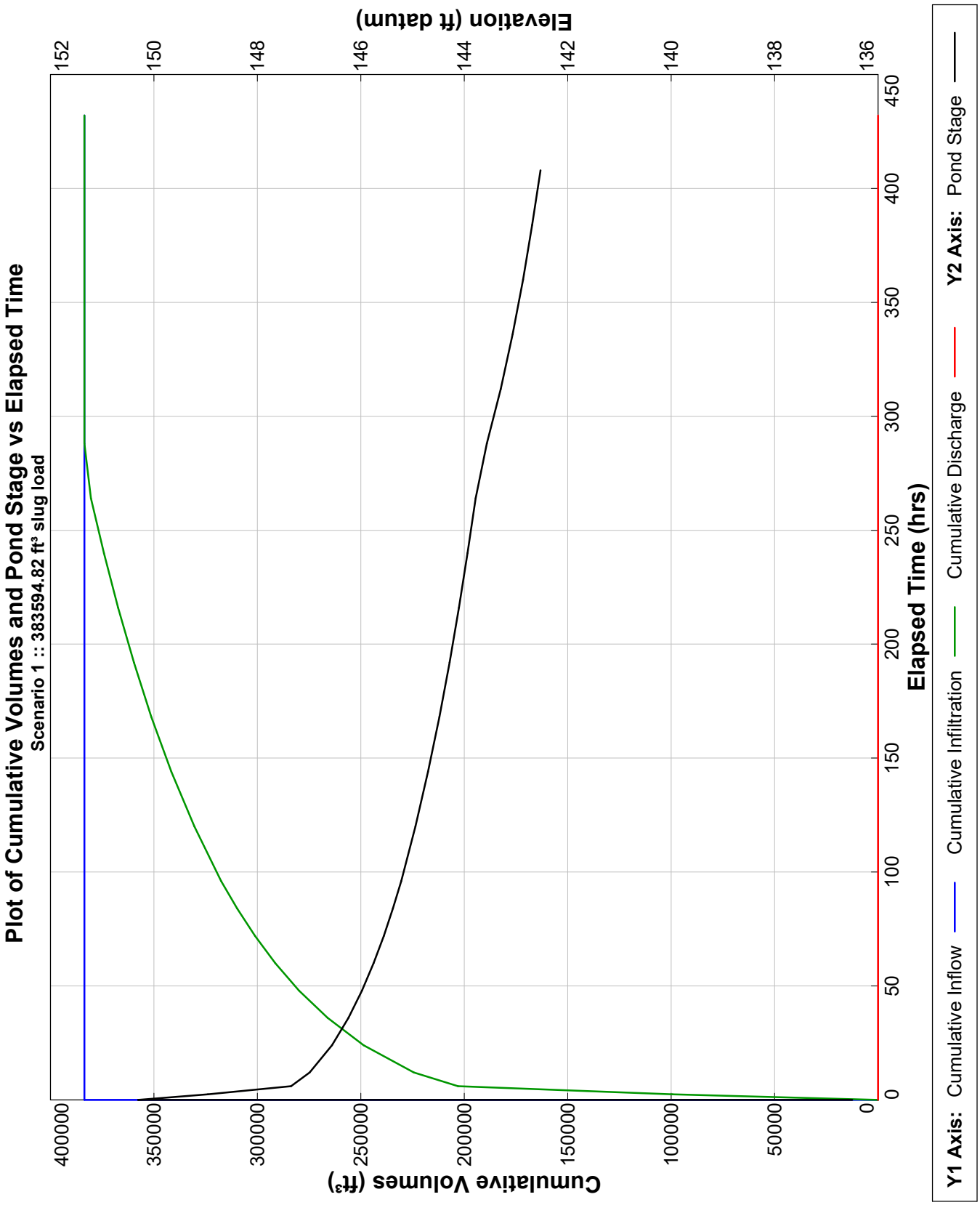
Treatment Volume (ft³) 383594.8

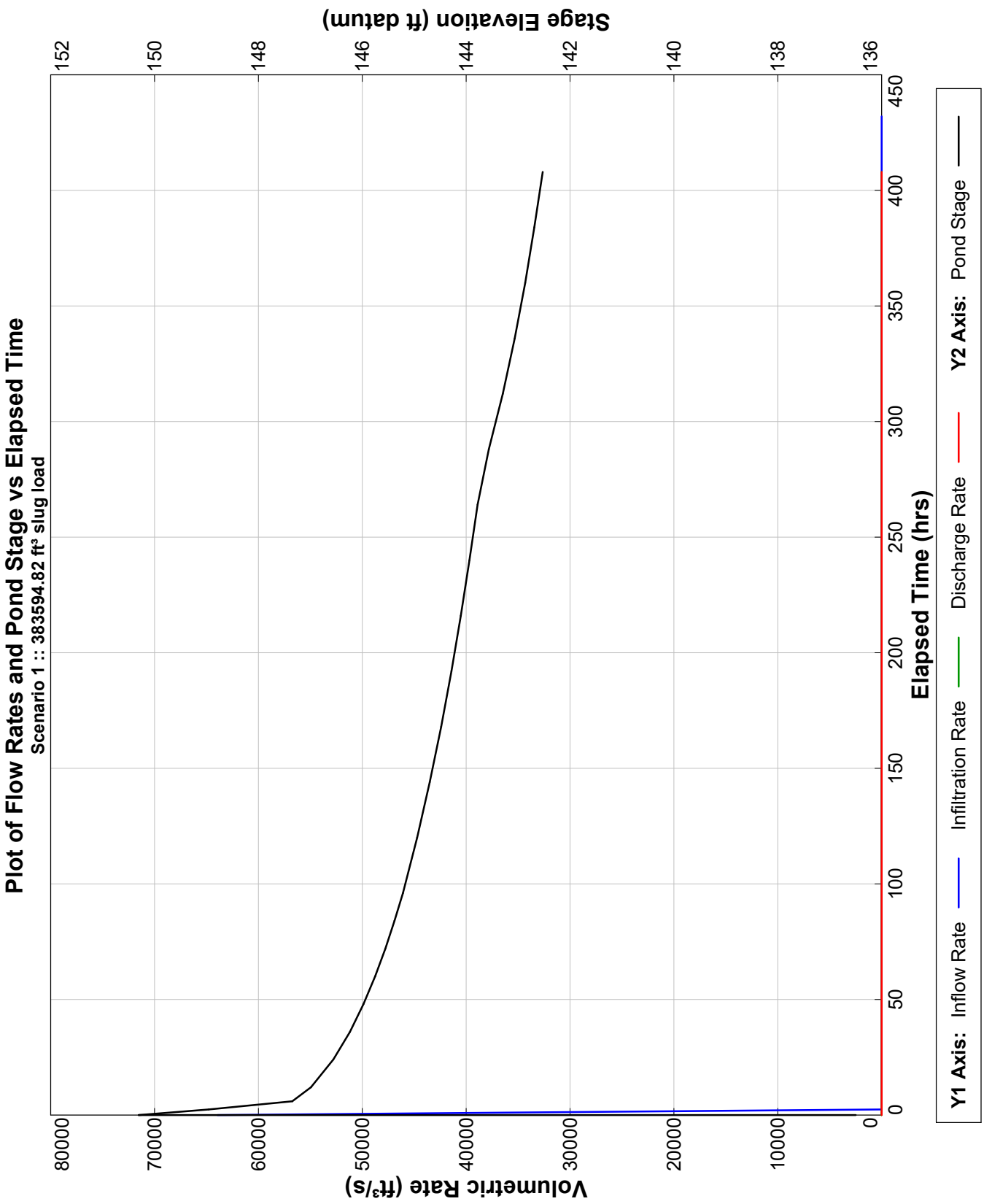
Initial ground water level (ft datum) 136.50 (default)

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)
0.100	2.000	5.000	10.000	15.000
0.250	2.500	6.000	11.000	16.000
0.500	3.000	7.000	12.000	17.000
1.000	3.500	8.000	13.000	18.000
1.500	4.000	9.000	14.000	

Detailed Results :: *Scenario 1 :: 383594.82 ft³ slug load*

Elapsed Time (hours)	Instantaneous Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Combined Instantaneous Discharge Rate (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Combined Cumulative Discharge (ft³)	Flow Type
0.000	63932.4700	0.00000	136.50000	0.00000	0	0.000	0.0	0	N.A.
0.002	63932.4700	0.00000	150.30740	12.10573	0	383594.800	72.6	0	U/P
2.400	0.0000	0.00000	148.95520	10.10167	0	383594.800	99355.1	0	U/P
6.000	0.0000	0.00000	147.34910	5.37178	0	383594.800	203089.6	0	U/S
12.000	0.0000	0.00000	146.98760	0.84399	0	383594.800	224352.5	0	S
24.000	0.0000	0.00000	146.55720	0.48334	0	383594.800	248681.7	0	S
36.000	0.0000	0.00000	146.23660	0.36103	0	383594.800	266113.4	0	S
48.000	0.0000	0.00000	145.97550	0.29182	0	383594.800	279874.7	0	S
60.000	0.0000	0.00000	145.75230	0.24651	0	383594.800	291326.6	0	S
72.000	0.0000	0.00000	145.55600	0.21414	0	383594.800	301173.2	0	S
84.000	0.0000	0.00000	145.37970	0.18963	0	383594.800	309828.1	0	S
96.000	0.0000	0.00000	145.21910	0.16912	0	383594.800	317557.3	0	S
120.000	0.0000	0.00000	144.94380	0.13877	0	383594.800	330476.0	0	S
144.000	0.0000	0.00000	144.70050	0.11982	0	383594.800	341537.3	0	S
168.000	0.0000	0.00000	144.48230	0.10515	0	383594.800	351181.5	0	S
192.000	0.0000	0.00000	144.28430	0.09344	0	383594.800	359707.6	0	S
216.000	0.0000	0.00000	144.10280	0.08387	0	383594.800	367328.4	0	S
240.000	0.0000	0.00000	143.93530	0.07591	0	383594.800	374201.1	0	S
264.000	0.0000	0.00000	143.77970	0.05436	0	383594.800	380445.3	0	S
288.000	0.0000	0.00000	143.56290	0.01823	0	383594.800	383594.8	0	S
312.000	0.0000	0.00000	143.29330	0.00000	0	383594.800	383594.8	0	S
336.000	0.0000	0.00000	143.06490	0.00000	0	383594.800	383594.8	0	S
360.000	0.0000	0.00000	142.86510	0.00000	0	383594.800	383594.8	0	S
384.000	0.0000	0.00000	142.68690	0.00000	0	383594.800	383594.8	0	S
408.000	0.0000	0.00000	142.52620	0.00000	0	383594.800	383594.8	0	S
432.000	0.0000	0.00000	142.37970	----	----	383594.800	383594.8	0	N.A.


Plot of Cumulative Volumes and Pond Stage vs Elapsed Time
Scenario 1 :: 383594.82 ft³ slug load
Cumulative Volumes (ft³)
Elevation (ft datum)
Elapsed Time (hrs)
0
50000
100000
150000
200000
250000
300000
350000
400000
136
138
140
142
144
146
148
150
152
0
50
100
150
200
250
300
350
400
450
Y1 Axis: Cumulative Inflow
Cumulative Infiltration
Cumulative Discharge
Y2 Axis: Pond Stage


Plot of Flow Rates and Pond Stage vs Elapsed Time
Scenario 1 :: 383594.82 ft³ slug load
Volumetric Rate (ft³/s)
Stage Elevation (ft datum)
Elapsed Time (hrs)
Y1 Axis: Inflow Rate
Infiltration Rate
Discharge Rate
Y2 Axis: Pond Stage
0
10000
20000
30000
40000
50000
60000
70000
80000
136
138
140
142
144
146
148
150
152
0
50
100
150
200
250
300
350
400
450

11.2 Treatment Volume Recovery Analysis:

PONDS Version 3.3.0315
Retention Pond Recovery - Refined Method
Copyright 2012
Devo Seereeram, Ph.D., P.E.

Project Data

Project Name:	MINNEOLA COMMERCE CENTER
Simulation Description:	TREATMENT VOLUME RECOVERY ANALYSIS
Project Number:	GBG-001
Engineer :	JMW
Supervising Engineer:	
Date:	01-21-2026

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum):	135.50
Water Table Elevation, [WT] (ft datum):	136.50
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day):	11.90
Fillable Porosity, [n] (%):	25.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day):	13.5
Maximum Area For Unsaturated Infiltration, [Av] (ft^2):	77479.4

Geometry Data

Equivalent Pond Length, [L] (ft):	679.4
Equivalent Pond Width, [W] (ft):	85.6

Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft^2)
143.70	39282.9
144.00	40922.8
145.00	46457.7
146.00	52094.1
147.00	57832.2
148.00	63670.3
149.00	69608.9
150.00	75648.0
151.00	81787.7
151.50	89603.6

Scenario Input Data

Scenario 1 :: 89403.028 ft³ slug load

Hydrograph Type: Slug Load
Modflow Routing: Routed with infiltration

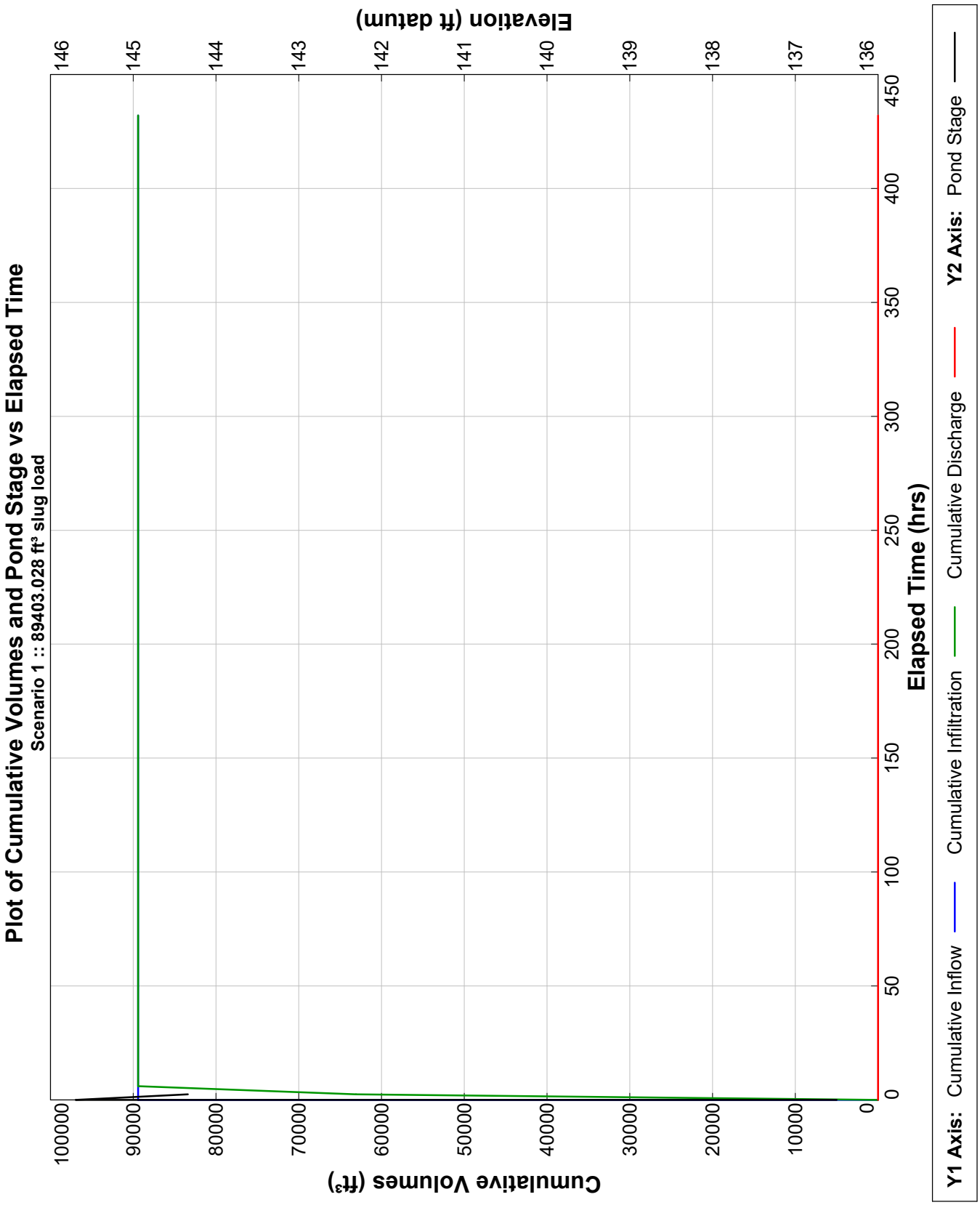
Treatment Volume (ft³) 89403.03

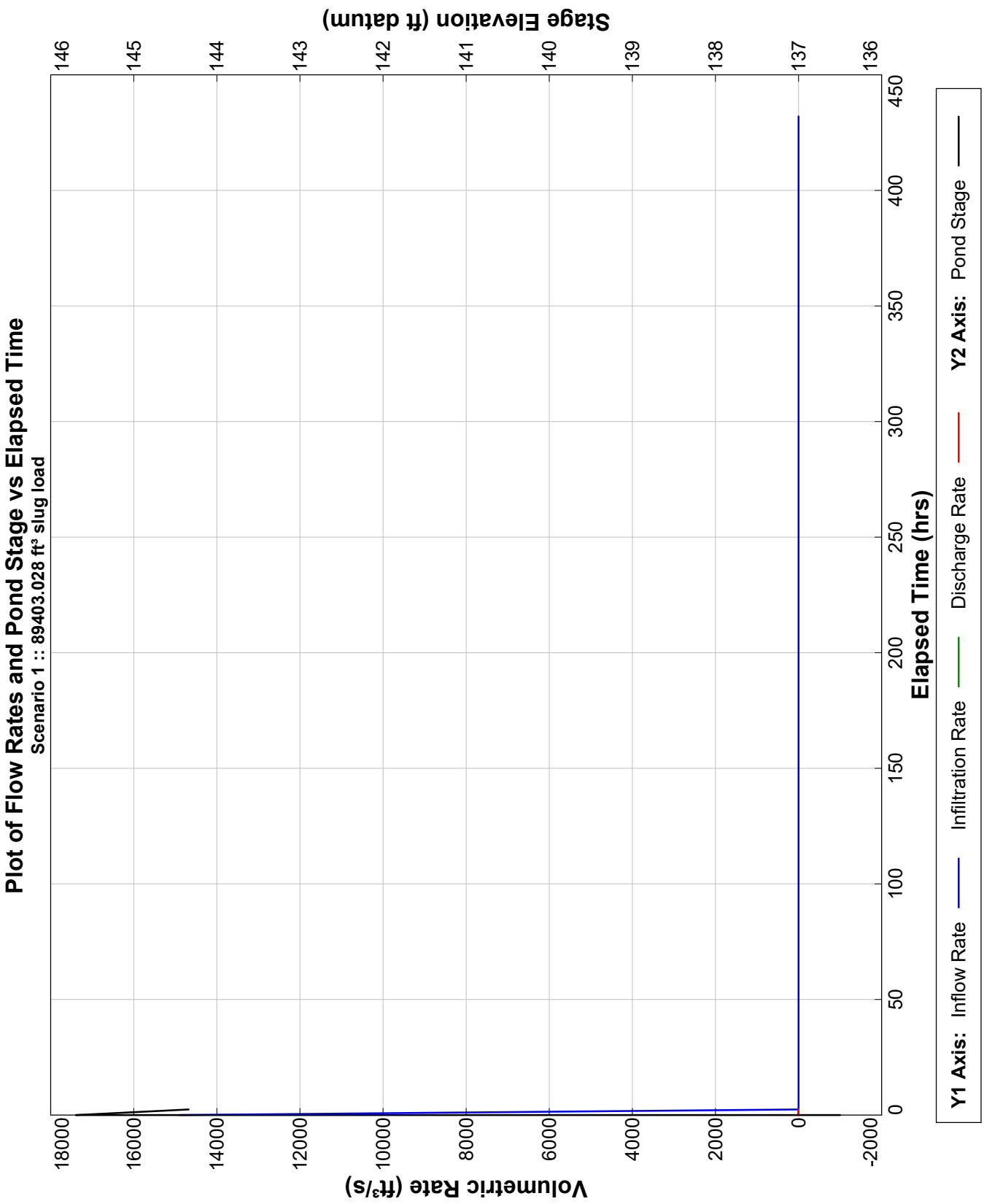
Initial ground water level (ft datum) 136.50 (default)

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)
0.100	2.000	5.000	10.000	15.000
0.250	2.500	6.000	11.000	16.000
0.500	3.000	7.000	12.000	17.000
1.000	3.500	8.000	13.000	18.000
1.500	4.000	9.000	14.000	

Detailed Results *:: Scenario 1 :: 89403.028 ft³ slug load*

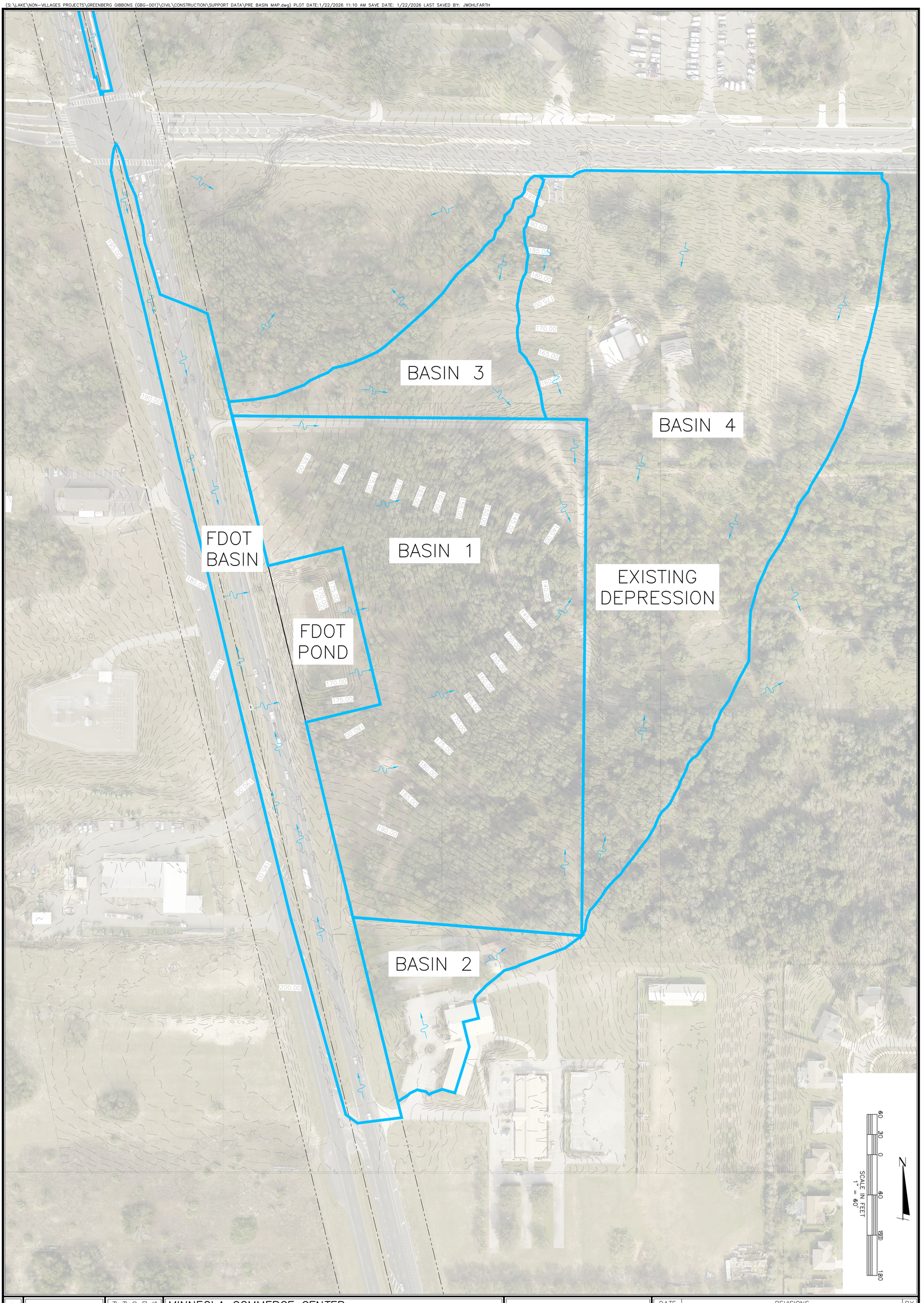
Elapsed Time (hours)	Instantaneous Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Combined Instantaneous Discharge Rate (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Combined Cumulative Discharge (ft³)	Flow Type
0.000	14900.5000	0.00000	136.50000	0.00000	0	0.000	0.0	0	N.A.
0.002	14900.5000	0.00000	145.69470	7.87127	0	89403.030	47.2	0	U/P
2.400	0.0000	0.00000	144.34110	4.38241	0	89403.030	63092.5	0	U/P
6.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
12.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
24.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
36.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
48.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
60.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
72.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
84.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
96.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
120.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
144.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
168.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
192.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
216.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
240.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
264.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
288.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
312.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
336.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
360.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
384.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
408.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry
432.000	0.0000	0.00000	----	----	----	89403.030	89403.0	0	dry


Plot of Cumulative Volumes and Pond Stage vs Elapsed Time
Scenario 1 :: 89403.028 ft³ slug load
Cumulative Volumes (ft³)
Elevation (ft datum)
Elapsed Time (hrs)
0
10000
20000
30000
40000
50000
60000
70000
80000
90000
100000
136
137
138
139
140
141
142
143
144
145
146
0
50
100
150
200
250
300
350
400
450
Y1 Axis: Cumulative Inflow
Cumulative Infiltration
Cumulative Discharge
Y2 Axis: Pond Stage


Plot of Flow Rates and Pond Stage vs Elapsed Time
Scenario 1 :: 89403.028 ft³ slug load
Volumetric Rate (ft³/s)
Stage Elevation (ft datum)
Elapsed Time (hrs)
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
-2000
146
145
144
143
142
141
140
139
138
137
136
450
400
350
300
250
200
150
100
50
0
Y1 Axis: Inflow Rate
Infiltration Rate
Discharge Rate
Y2 Axis: Pond Stage

12.0 Pre Development Onsite Basin Map:

(S:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\SUPPORT DATA\PRE BASIN MAP.dwg) PLOT DATE:1/22/2026 11:10 AM SAVE DATE: 1/22/2026 LAST SAVED BY: JWOHLFARTH



SHEET NUMBER PRE

FILE NAME PRE BASIN MAP
PROJECT # GBG-001
CHECKED BY MLS
DRAWN BY JWW
SAVE DATE 1/22/2026

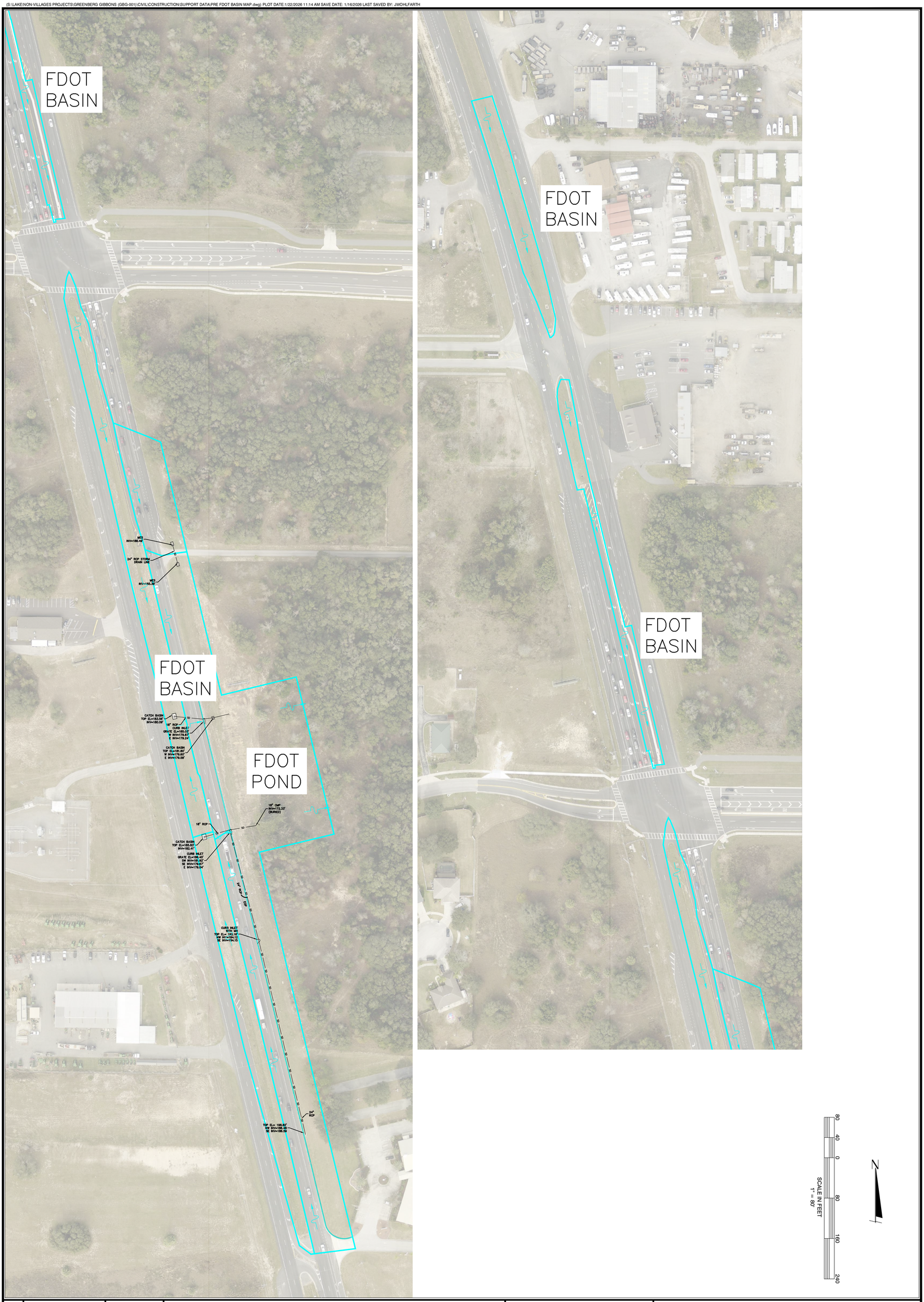
MINNEOLA COMMERCE CENTER
MINNEOLA, FLORIDA

PRE DEVELOPMENT BASIN MAP

CFB CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALFORD AVE, MIDDLETON, FL 34762
(352)748-3126

DATE	REVISIONS	BY

13.0 Pre Development Offsite Basin Map:



SHEET NUMBER FDOT		FILE NAME PRE FDOT BASIN MAP	PROJECT # GBG-001	CHECKED BY MLS	DRAWN BY JWV	SAVE DATE 1/16/2026

MINNEOLA COMMERCE CENTER
MINNEOLA, FLORIDA

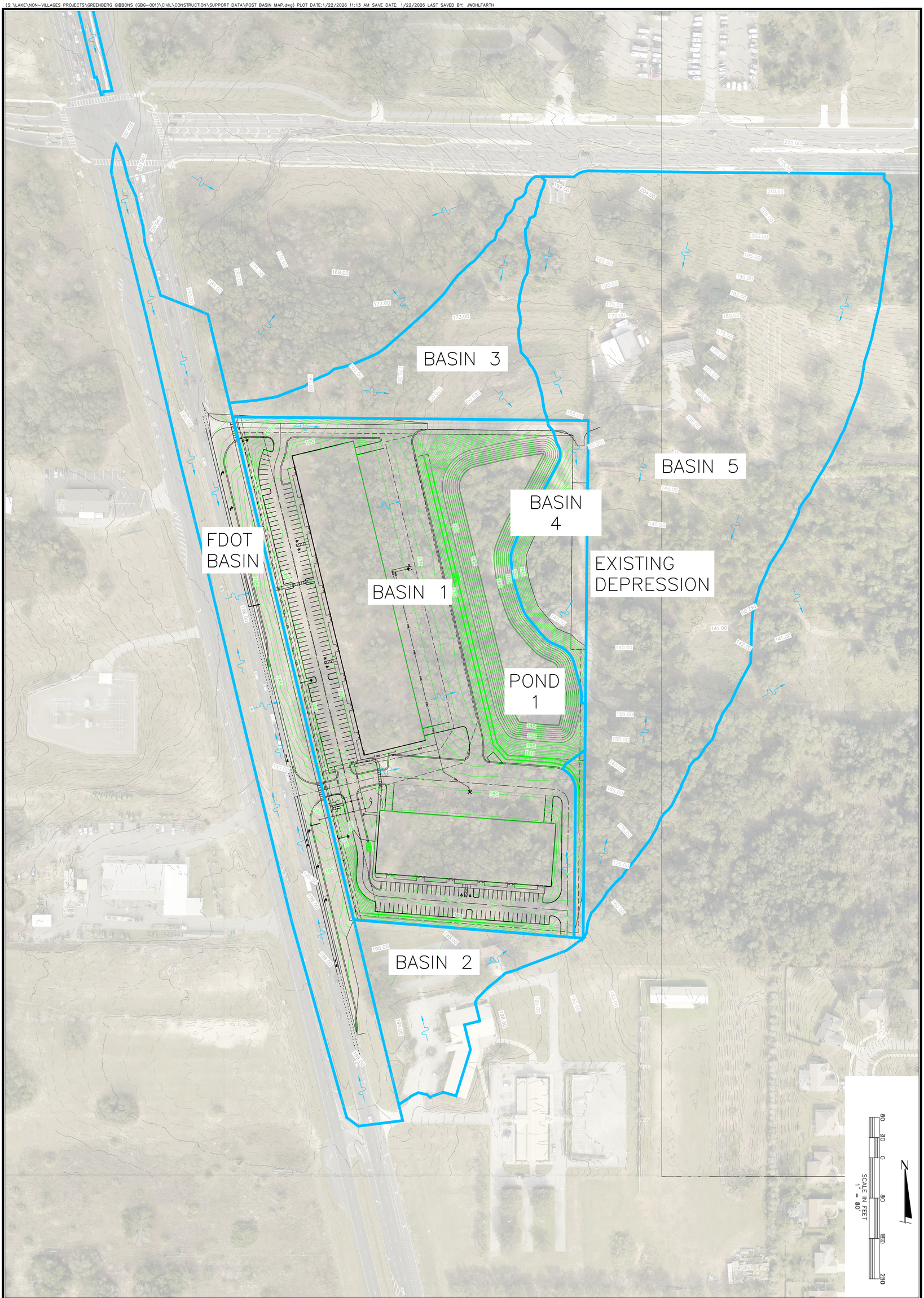
PRE DEVELOPMENT OFFSITE BASIN MAP

CFB CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALFORD AVE, MIDDLETON, FL 34762
(352)748-3126

DATE	REVISIONS	BY

14.0 Post Development Onsite Basin Map:

(S:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\SUPPORT DATA\POST BASIN MAP.dwg) PLOT DATE:1/22/2026 11:13 AM SAVE DATE: 1/22/2026 LAST SAVED BY: JWOHLFARTH



SHEET NUMBER POST

FILE NAME	POST BASIN MAP
PROJECT #	GBG-001
CHECKED BY	MLS
DRAWN BY	JWW
SAVE DATE	1/22/2026

MINNEOLA COMMERCE CENTER
MINNEOLA, FLORIDA

POST DEVELOPMENT BASIN MAP

CFB CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALFORD AVE, MIDDLETON, FL 34762
(352)748-3126

DATE	REVISIONS	BY

15.0 Post Development Offsite Secondary Analysis:

15.1 Offsite Secondary Basin Map:

BY	REVISIONS	DATE

CFB | CLYMER FARNER BARLEY
CLYMER FARNER BARLEY, Inc.
7413 ALFORD AVE. | FORT PIERCE, FL. 34762
(352)748-3126

MINNEOLA COMMERCE CENTER
MINNEOLA, FLORIDA

POST DEVELOPMENT
OFFSITE SECONDARY BASIN MAP

SAVE DATE	1/22/2026
DRAWN BY	JMW
CHECKED BY	MLS
PROJECT #	GBG-001
FILE NAME	POST FDOT SEC

SHEET NUMBER FDOT

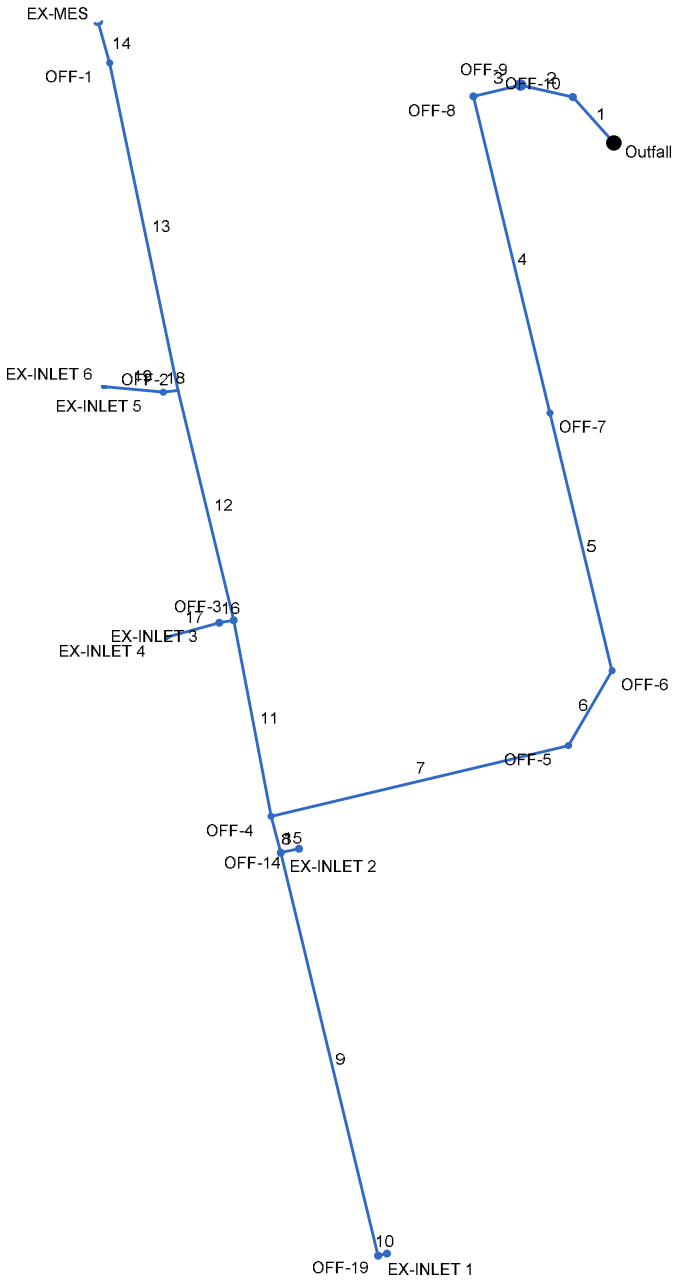
(S:\LAKE\NON-VILLAGES PROJECTS\GREENBERG GIBBONS (GBG-001)\CIVIL\CONSTRUCTION\SUPPORT DATA\POST FDOT SEC.dwg) PLOT DATE: 1/22/2026 11:17 AM SAVE DATE: 1/22/2026 LAST SAVED BY: JWOHLFARTH

15.2 Offsite Secondary Analysis:

GBG-001 MINNEOLA COMMERCE CENTER OFFSITE SECONDARY

SUB-BASIN I.D.	AREA			RATIONAL C	TC	i	Q*	OUTFALL
	IMPERVIOUS	PERVIOUS	TOTAL					
FDOT - SUB -1	0.00 Ac	0.43 Ac	0.43 Ac	0.20	10.00 min	8.26 min	0.70 cfs	EX-INLET 6
FDOT - SUB -2	0.30 Ac	0.12 Ac	0.43 Ac	0.70	10.00 min	8.26 min	2.46 cfs	
FDOT - SUB -3	0.13 Ac	0.85 Ac	0.99 Ac	0.30	10.00 min	8.26 min	2.41 cfs	
	0.44 Ac	1.40 Ac	1.84 Ac	0.37	10.00 min	8.26 min	5.57 cfs	
FDOT - SUB -4	0.26 Ac	0.20 Ac	0.46 Ac	0.59	10.00 min	8.26 min	2.25 cfs	EX-MES
FDOT - SUB -5	0.47 Ac	0.00 Ac	0.47 Ac	0.90	10.00 min	8.26 min	3.49 cfs	OFF-2
FDOT - SUB -6	0.11 Ac	0.62 Ac	0.73 Ac	0.31	10.00 min	8.26 min	1.83 cfs	EX-INLET 4
FDOT - SUB -7	0.11 Ac	0.00 Ac	0.11 Ac	0.90	10.00 min	8.26 min	0.78 cfs	EX-INLET 3
FDOT - SUB -8	0.42 Ac	0.21 Ac	0.63 Ac	0.66	10.00 min	8.26 min	3.44 cfs	OFF-14
FDOT - SUB -9	0.22 Ac	0.22 Ac	0.44 Ac	0.55	10.00 min	8.26 min	1.97 cfs	OFF-19
SUB TOTAL	**2.01 Ac**	**2.65 Ac**	**4.66 Ac**				19.35 cfs	

GBG-001 MINNEOLA COMMERCE OFF



Project File: FDOT OFFSITE.stm	Number of lines: 19	Date: 1/15/2026

FL-DOT Report

Line No	To Line	Type of struc	n - Value	Len	Drainage Area			Time of conc	Time of Flow in sect	Inten (I)	Total CA	Add Q / Total Flow	Inlet elev	Elev of HGL / Elev of Crown / Elev of Invert			Rise / Span	HGL / Pipe	ADD / Full Flow		Date: 1/15/2026 / Frequency: 25 yrs / Proj: FDOT OFFSITE.stm
					C1 = 0.2 C2 = 0.5 C3 = 0.9																
					Increment (ac)	Sub-Total (ac)	Sum CA					Q		Up	Down	Fall	Size	Slope	Vel	Cap	
				(ft)				(min)	(min)	(in/hr)		(cfs)	(ft)	(ft)	(ft)	(ft)	(in)	(%)	(ft/s)	(cfs)	Line description
1	End	MH	0.012	58.625	0.00 0.00 0.00	2.65 0.00 2.03	0.53 0.00 1.83	10.00	0.00	8.26	2.36	0.00 19.52	161.99	151.61 150.89 148.39	151.50 146.20 143.70	0.11 4.69	30 30 Cir	0.19 8.00	3.98 25.60	19.52 125.7	Pipe - (98) (1)
2	1	MH	0.012	50.850	0.00 0.00 0.00	2.65 0.00 2.03	0.53 0.00 1.83	10.00	0.00	8.26	2.36	0.00 19.52	169.90	163.96 164.96 162.46	159.06 160.89 158.39	4.90 4.07	30 30 Cir	9.64 8.00	12.47 25.61	19.52 125.7	Pipe - (98)
3	2	MH	0.012	46.000	0.00 0.00 0.00	2.65 0.00 2.03	0.53 0.00 1.83	10.00	0.00	8.26	2.36	0.00 19.52	174.33	167.59 168.59 166.09	164.54 166.29 163.79	3.05 2.30	30 30 Cir	6.62 5.00	11.04 20.24	19.52 99.35	Pipe - (97) (1)
4	3	MH	0.012	310.303	0.00 0.00 0.00	2.65 0.00 2.03	0.53 0.00 1.83	10.00	0.00	8.26	2.36	0.00 19.52	174.46	170.14 171.14 168.64	168.52 169.59 167.09	1.62 1.55	30 30 Cir	0.52 0.50	6.55 6.40	19.52 31.40	Pipe - (144)
5	4	MH	0.012	252.358	0.00 0.00 0.00	2.65 0.00 2.03	0.53 0.00 1.83	10.00	0.00	8.26	2.36	0.00 19.52	174.65	171.40 172.40 169.90	170.14 171.14 168.64	1.26 1.26	30 30 Cir	0.50 0.50	6.36 6.40	19.52 31.39	Pipe - (145)
6	5	MH	0.012	82.497	0.00 0.00 0.00	2.65 0.00 2.03	0.53 0.00 1.83	10.00	0.00	8.26	2.36	0.00 19.52	178.30	175.00 176.00 173.50	171.40 172.40 169.90	3.60 3.60	30 30 Cir	4.36 4.36	6.36 18.91	19.52 92.81	Pipe - (146)
7	6	MH	0.012	290.075	0.00 0.00 0.00	2.65 0.00 2.03	0.53 0.00 1.83	10.00	0.00	8.26	2.36	0.00 19.52	190.54	177.88 178.88 176.38	175.00 176.00 173.50	2.88 2.88	30 30 Cir	0.99 0.99	6.36 9.02	19.52 44.27	Pipe - (147)
8	7	MH	0.013	35.809	0.00 0.00 0.00	0.43 0.00 0.64	0.09 0.00 0.58	10.00	0.00	8.26	0.66	0.00 5.43	191.32	184.94 186.12 184.12	183.98 185.42 183.42	0.96 0.70	24 24 Cir	2.68 1.95	6.00 10.07	5.43 31.62	Pipe - (129)
9	8	MH	0.013	394.872	0.00 0.00 0.00	0.22 0.00 0.22	0.04 0.00 0.20	10.00	0.00	8.26	0.24	0.00 2.00	198.34	186.97 188.48 186.48	184.94 186.15 184.15	2.03 2.33	24 24 Cir	0.51 0.59	2.54 5.53	2.00 17.37	Pipe - (130)
10	9	Curb	0.013	8.614	0.22 0.00 0.22	0.22 0.00 0.22	0.04 0.00 0.20	10.00	0.00	8.26	0.24	0.00 2.00	198.78	187.56 188.52 187.02	187.52 188.48 186.98	0.04 0.04	18 18 Cir	0.48 0.46	3.46 4.05	2.00 7.16	Pipe - (132)

NOTES: Intensity = 12.9221 + -1.1108(X) + -0.5502(X)^2 + 0.0667(X)^3 -- X = Ln(Tc)(min) (in/hr) ; Time of flow in section is based on full flow.

GBG-001 MINNEOLA COMMERCE OFF

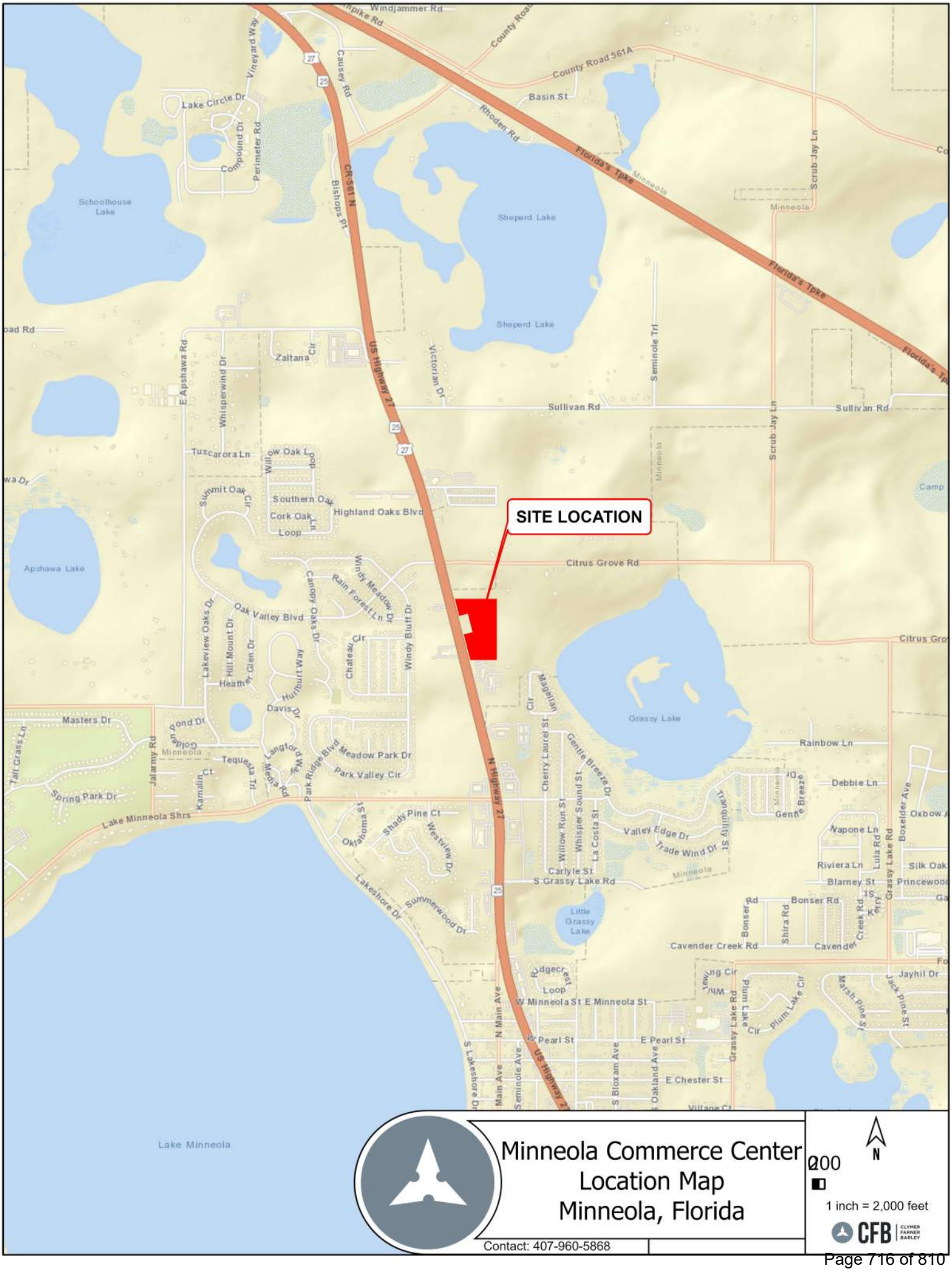
FL-DOT Report

Line No	To Line	Type of struc	n - Value	Len	Drainage Area			Time of conc	Time of Flow in sect	Inten (I)	Total CA	Add Q	Inlet elev	Elev of HGL			Rise	HGL	ADD		Date: 1/15/2026
					C1 = 0.2 C2 = 0.5 C3 = 0.9							Total Flow		Elev of Crown			Span	Pipe	Full Flow		Frequency: 25 yrs
														Elev of Invert							Proj: FDOT OFFSITE.stm
					Increment (ac)	Sub-Total (ac)	Sum CA					Q		Up	Down	Fall	Size	Slope	Vel	Cap	
				(ft)				(min)	(min)	(in/hr)		(cfs)	(ft)	(ft)	(ft)	(ft)	(in)	(%)	(ft/s)	(cfs)	Line description
11	7	MH	0.012	190.070	0.00	2.22	0.44	10.00	0.00	8.26	1.71	0.00	185.43	178.68	177.88	0.80	24	0.42	5.91	14.09	Pipe - (148)
					0.00	0.00	0.00					14.09		179.33	178.38		24	0.50	5.51	17.32	
					0.00	1.39	1.25							177.33	176.38	0.95	Cir				
12	11	Curb	0.012	225.259	0.00	1.60	0.32	10.00	0.00	8.26	1.38	0.00	184.98	180.69	178.68	2.01	24	0.89	5.39	11.40	Pipe - (95)
					0.00	0.00	0.00					11.40		181.48	179.33		24	0.95	7.62	23.94	
					0.47	1.17	1.05							179.48	177.33	2.15	Cir				
13	12	MH	0.012	318.613	0.00	0.20	0.04	10.00	0.00	8.26	0.28	0.00	188.49	182.52	180.69	1.83	24	0.58	2.37	2.28	Pipe - (99)
					0.00	0.00	0.00					2.28		184.00	181.58		24	0.76	6.80	21.35	
					0.00	0.26	0.23							182.00	179.58	2.42	Cir				
14	13	Hdwl	0.013	38.510	0.20	0.20	0.04	10.00	0.00	8.26	0.28	0.00	188.82	187.01	186.00	1.01	24	2.62	4.77	2.28	Pipe - (143)
					0.00	0.00	0.00					2.28		188.49	187.65		24	2.18	10.63	33.40	
					0.26	0.26	0.23							186.49	185.65	0.84	Cir				
15	8	Curb	0.013	17.825	0.21	0.21	0.04	10.00	0.00	8.26	0.42	0.00	190.29	184.96	184.94	0.02	18	0.11	3.67	3.43	Pipe - (133)
					0.00	0.00	0.00					3.43		185.71	185.62		18	0.50	4.22	7.46	
					0.42	0.42	0.38							184.21	184.12	0.09	Cir				
16	11	Curb	0.012	13.844	0.00	0.62	0.12	10.00	0.00	8.26	0.33	0.00	186.64	179.66	178.68	0.98	18	7.09	2.74	2.69	Pipe - (124)
					0.00	0.00	0.00					2.69		180.54	178.83		18	12.35	22.63	39.98	
					0.11	0.22	0.20							179.04	177.33	1.71	Cir				
17	16	Grate	0.013	51.605	0.62	0.62	0.12	10.00	0.00	8.26	0.23	0.00	185.83	182.92	182.35	0.57	18	1.10	3.94	1.87	Pipe - (128)
					0.00	0.00	0.00					1.87		183.91	183.42		18	0.95	5.79	10.23	
					0.11	0.11	0.10							182.41	181.92	0.49	Cir				
18	12	MH	0.012	14.000	0.00	1.40	0.28	10.00	0.00	8.26	0.68	0.00	185.21	180.78	180.69	0.09	18	0.67	4.33	5.62	Pipe - (126)
					0.00	0.00	0.00					5.62		181.37	180.98		18	2.79	10.74	18.99	
					0.00	0.44	0.40							179.87	179.48	0.39	Cir				
19	18	Grate	0.013	56.589	1.40	1.40	0.28	10.00	0.00	8.26	0.68	0.00	183.56	181.16	180.94	0.22	18	0.39	4.17	5.62	Pipe - (127)
					0.00	0.00	0.00					5.62		181.59	181.37		18	0.39	3.71	6.55	
					0.44	0.44	0.40							180.09	179.87	0.22	Cir				

NOTES: Intensity = 12.9221 + -1.1108(X) + -0.5502(X)^2 + 0.0667(X)^3 -- X = Ln(Tc)(min) (in/hr) ; Time of flow in section is based on full flow. **GBG-001 MINNEOLA COMMERCE OFF**

ATTACHMENTS

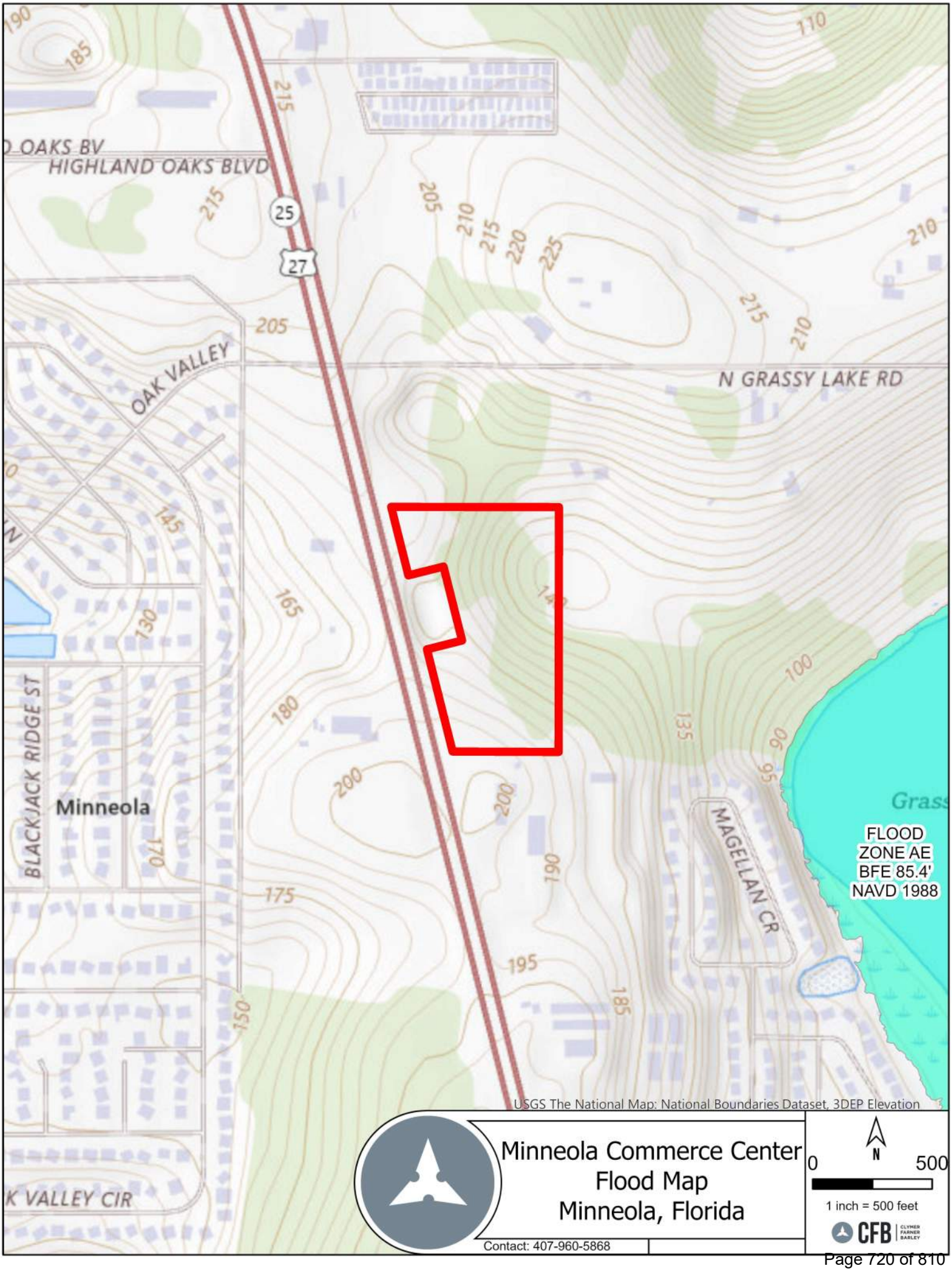
ATTACHMENT A:


SITE LOCATION
Windjammer Rd
Vineyard Way
Lake Circle Dr
Compound Dr
Perimeter Rd
Causey Rd
CR-561 N
Bishops Pt
County Road 561A
Basin St
Rhoden Rd
Florida's Tpke
Minneola
Scrub Jay Ln
Schoolhouse Lake
Sheperd Lake
Seminole Trl
Victorian Dr
US Highway 27
Zaitana Cir
E Apshawa Rd
Whisperwind Dr
Sullivan Rd
Tuscarora Ln
Willow Oak Loop
Summit Oak Cir
Southern Oak
Cork Oak Ln
Loop
Highland Oaks Blvd
Apshawa Lake
Citrus Grove Rd
Windy Meadow Dr
Rain Forest Ln
Canopy Oaks Dr
Oak Valley Blvd
Lakeview Oaks Dr
Hill Mount Dr
Heather Glen Dr
Chateau Cir
Windy Bluff Dr
Hurlburt Way
Davis Dr
Masters Dr
Golden Pond Dr
Tall Grass Ln
Jalarmy Rd
Tequesta Trl
Langford Way
Media Rd
Park Ridge Blvd
Meadow Park Dr
Park Valley Cir
Spring Park Dr
Kamalin Ct
Lake Minneola Shrs
Oklahoma St
Shady Pine Ct
Westview Dr
Lakeshore Dr
Summerwood Dr
Lake Minneola
Grassy Lake
Magellan Cir
Cherry Laurel St
Gentle Breeze Dr
Willow Run St
Whisper Sound St
La Costa St
Carlyle St
S Grassy Lake Rd
Rainbow Ln
Debbie Ln
Valley Edge Dr
Trade Wind Dr
Trade Wind Trl
Napone Ln
Riviera Ln
Blarney St
Lula Rd
Grassy Lake Rd
Boxelder Ave
Princewood
Silk Oak
Oxbow
Little Grassy Lake
Bonser Rd
Shira Rd
Cavender Creek Rd
Cavender
Jayhil Dr
Marsh Pine St
Jack Pine St
Plum Lake Cir
Plum Lake Rd
Ridgecrest Loop
W Minneola St
E Minneola St
N Main Ave
W Pearl St
E Pearl St
S Lakeshore Dr
Main Ave
Seminole Ave
S Bloxam Ave
S Oakland Ave
E Chester St
Village Ct
N Highway 27
W US Highway 27
Minneola Commerce Center
Location Map
Minneola, Florida
Contact: 407-960-5868
N
0
2000
1 inch = 2,000 feet
CFB
CLYMER FARNER BARLEY

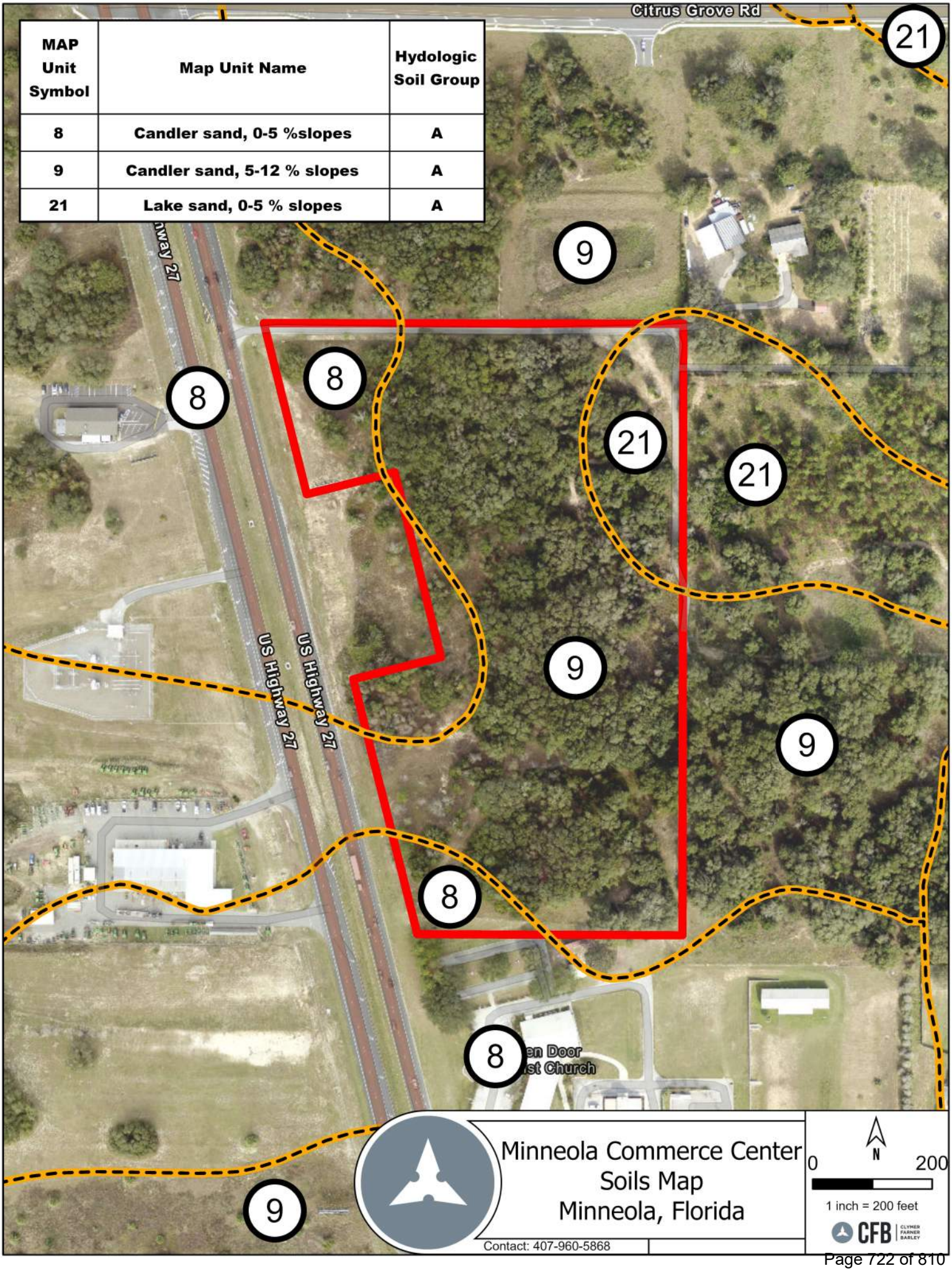
ATTACHMENT B:

Citrus Grove Rd
US Highway 27
US Highway 27
US Highway 27
US Highway 27
Open Door
Baptist Church
Minneola Commerce Center
Aerial Map
Minneola, Florida
Contact: 407-960-5868
N
0
200
1 inch = 200 feet
CFB
CLYMER FARNER BARLEY

ATTACHMENT C:

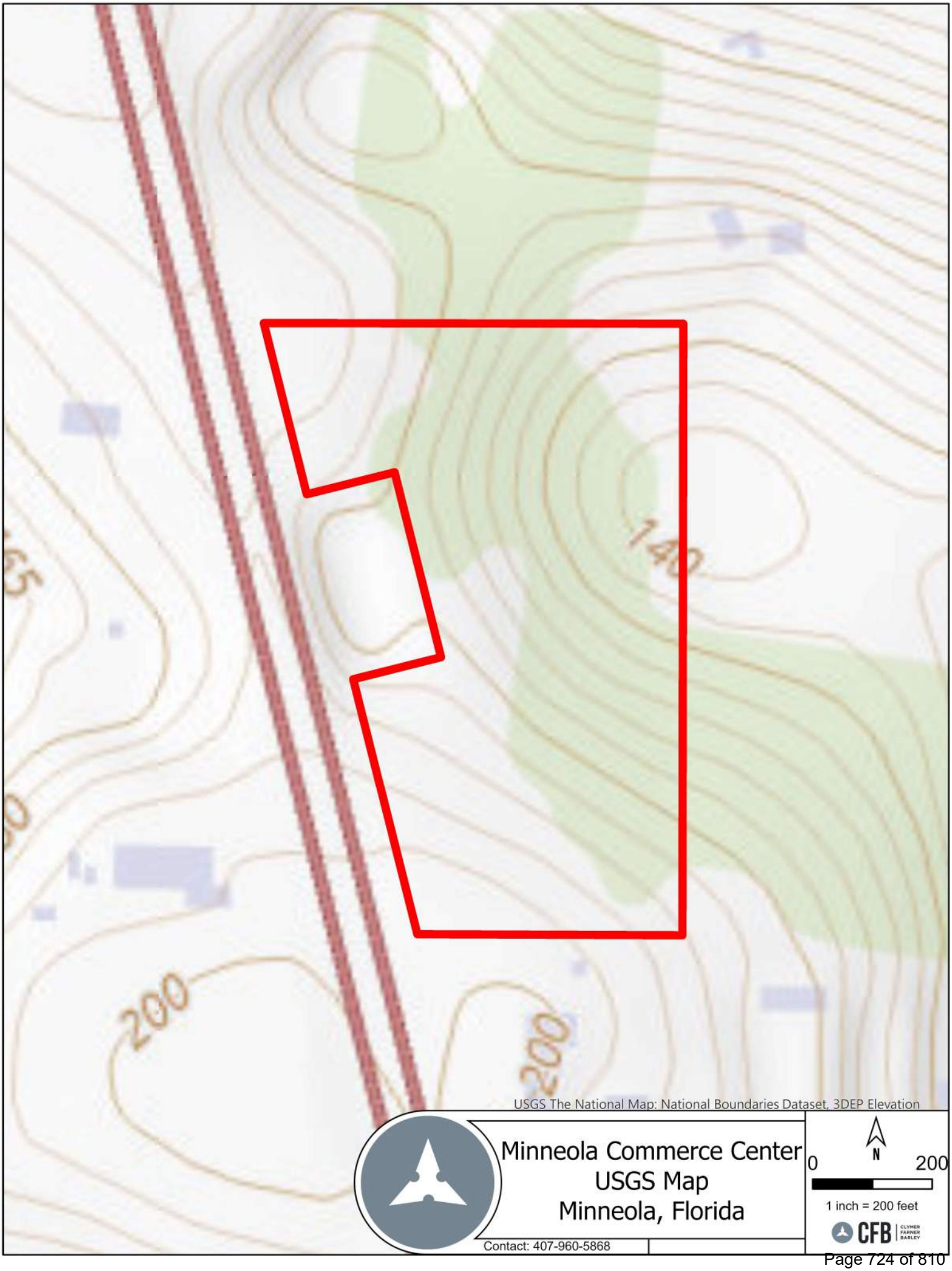

HIGHLAND OAKS BLVD
25
27
OAK VALLEY
N GRASSY LAKE RD
BLACKJACK RIDGE ST
Minneola
MAGELLAN CR
FLOOD
ZONE AE
BFE 85.4'
NAVD 1988
USGS The National Map: National Boundaries Dataset, 3DEP Elevation
Minneola Commerce Center
Flood Map
Minneola, Florida
Contact: 407-960-5868
N
0
500
1 inch = 500 feet
CFB
CLYMER FARNER BARLEY

ATTACHMENT D:



MAP Unit Symbol	Map Unit Name	Hydologic Soil Group
8	Candler sand, 0-5 %slopes	A
9	Candler sand, 5-12 % slopes	A
21	Lake sand, 0-5 % slopes	A

ATTACHMENT E:



Minneola Commerce Center
USGS Map
Minneola, Florida

Contact: 407-960-5868

N

0 200

1 inch = 200 feet

CFB CLYMER FARNER BARLEY

November 11, 2025

Greenberg Gibbons Properties
706 Giddings Avenue
Annapolis, Maryland 21401
P: 410-562-7733

Attention: Mr. Tilghman Herring, Head of Acquisition
therring@ggcommercial.com

Reference: **Supplemental Geotechnical Exploration**
Minneola Commerce Center FKA US 27 Mixed Used PD
SWQ of US Highway 27 & Citrus Grove Road
Minneola, Lake County, Florida
UES Project No. A25139.01071.001
UES Report No. 2158343

Dear Mr. Herring:

UES Professional Solutions, LLC d/b/a UES has completed the Supplemental Geotechnical Exploration at the above referenced site in Minneola, Florida. The scope of our exploration was planned in conjunction with and authorized by you. This exploration was performed in general accordance with UES Proposal No. 2154241.v2 dated August 26, 2025, and generally accepted soil and foundation engineering practices. No other warranty, express or implied, is made.

The following report presents the results of our field exploration with a geotechnical engineering interpretation of those results with respect to the project characteristics as provided to us. We have included the depth of clayey soil encountered at our boring locations.

We appreciate the opportunity to have worked with you on this project and look forward to a continued association. Please do not hesitate to contact us if you should have any questions, or if we may further assist you as your plans proceed.

1.0 PROJECT DESCRIPTION

UES understands that Greenberg Gibbons Properties is in the design process for a new commercial development located in Lake County, Florida. The site is located at the southwest quadrant (SWQ) of US Highway 27 and Citrus Grove Road intersection in Minneola, Florida. The subject property consists of one (1) parcel identified with AltKey 1031265 by the Lake County Property Appraiser totaling approximately 9.37 acre. UES previously performed a Geotechnical Exploration (UES Report No. 2141921 dated May 1, 2025) within the proposed development area. Following this, UES was requested to perform additional borings to support the development of existing top of clay contour map.

Should any of the information described or assumptions made by UES be inconsistent with the planned development and construction, we request that you contact us immediately to allow us the opportunity to review the new information in conjunction with our report and revise or modify our engineering recommendations accordingly, as needed.

No site or project facilities/improvements, other than those described herein, should be designed using the soil information presented in this report. Moreover, UES will not be responsible for the performance of any site improvement so designed and constructed.

2.0 FIELD EXPLORATION

The SPT boring was performed with an ATV mounted drilling rig. Horizontal and vertical survey control was not provided for the test location prior to our field exploration program. UES located the test boring by using the provided site plan, measuring from existing on-site landmarks shown on an aerial photograph, and by using handheld GPS devices. The indicated test location should be considered accurate to the degree of the methodologies used; the actual boring location may differ than the depicted due to the accessibility of the original locations. The approximate boring location is shown in Appendix B.

The SPT boring, designated AB-01 through AB-08, as shown on the attached Boring Location Plan in Appendix B-1, was performed in general accordance with the procedures of ASTM D 1586 "Standard Method for Penetration Test and Split-Barrel Sampling of Soils". SPT sampling was performed continuously to 10 feet to detect variations in the near surface soil profile and on approximate 5 feet centers thereafter. The soil samples recovered from the test borings were returned to our laboratory and visually classified in general accordance with ASTM D 2487 "Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System – USCS).

3.0 LABORATORY TESTING

The soil samples recovered from the test borings were returned to our laboratory and visually classified in general accordance with ASTM D 2487 "Standard Classification of Soils for Engineering Purposes" (Unified Soil Classification System). We selected representative soil samples from the borings for laboratory testing to aid in classifying the soils and to help to evaluate the general engineering characteristics of the soils. The results of these tests are shown on the logs in Appendix B. A summary of the tests performed is shown in Table I.

TABLE I
LABORATORY METHODOLOGIES

Test Performed	Number Performed	Reference
Grain Size Analysis (#200 wash only)	10	ASTM D 1140 "Amount of Material in Soils Finer than the No. 200 (75 - µm) sieve"
Moisture Content	10	ASTM D 2216 "Laboratory Determination of Water (Moisture) Content of Soil by Mass"

4.0 GROUNDWATER CONDITIONS

We measured the water levels in the boreholes in September 2025 during our drilling operation. **No groundwater was encountered within the upper 10 feet at all boring locations.** We estimated that the seasonal high groundwater level will form at depth of **greater than 10 feet and as a transient perched condition at depth of 8 feet bls at boring location AB-06**. Fluctuations in groundwater levels should be anticipated throughout the year, primarily due to seasonal variations in rainfall, surface runoff, and other factors that may vary from the time the borings were conducted.

Site grading operations may influence the groundwater levels. The estimated seasonal high groundwater level at the boring location is shown on the boring log in Appendix B. We note that site grading operations may influence the groundwater levels. Excavations conducted during rainy/wet season at deep excavation may require some level of dewatering. The actual method(s) of controlling the water should be determined by the contractor.

It should be noted that the estimated seasonal high water levels provided should be considered accurate to approximately ±½ foot and do not provide any assurance that groundwater levels will not exceed these estimated levels during any given year in the future. Should the impediments to surface water drainage be present, or should rainfall intensity and duration, or total rainfall quantities, exceed the normally anticipated rainfall quantities, groundwater levels might exceed our seasonal high estimates. Further, it should be understood that changes in the surface hydrology and subsurface drainage from on-site and/or off-site improvements could have significant effects on the normal and seasonal high groundwater levels.

5.0 GENERALIZED SOIL PROFILE

The results of our field exploration and laboratory analysis, together with pertinent information obtained from the SPT and hand auger borings, such as soil profiles, penetration resistance and groundwater levels are shown on the boring logs included in Appendix B. The Key to Boring Logs, Soil Classification Chart is also included in Appendix B. The soil profiles were prepared from field logs after the recovered soil samples were examined by a Geotechnical Engineer.

The stratification lines shown on the boring logs represent the approximate boundaries between soil types and may not depict exact subsurface soil conditions. The actual soil boundaries may be more transitional than depicted. A generalized profile of the soils encountered at our boring locations, excluding the hand auger boring, is presented in Table III. For detailed soil profiles, please refer to the attached boring logs.

The summary of the encountered clayey soils (depth below existing grade and relative elevation) at our boring locations are presented in Appendix B-3. We note that the existing grade elevations at our boring locations are provided to UES based on the existing topographic plan. The top of clay contour maps are presented in Appendix B of this report. The Computer-Aided Design (CAD) file of the contour map is provided via an electronic submittal.

6.0 CONSTRUCTION RELATED SERVICES

We recommend the owner retain UES to provide inspection services during the site preparation procedures for confirmation of the adequacy of the earthwork operations. Field tests and observations include verification of foundation and pavement subgrades by monitoring earthwork operations and performing quality assurance tests of the placement of compacted structural fill courses.

The geotechnical engineering design does not end with the advertisement of the construction documents. The design is an on-going process throughout construction. Because of our familiarity with the site conditions and the intent of the engineering design, we are most qualified to address site problems or construction changes, which may arise during construction, in a timely and cost-effective manner.

7.0 LIMITATIONS

This report has been prepared for the exclusive use of ***Greenberg Gibbons Properties*** and other designated members of their design/construction team associated with the proposed construction for the specific project discussed in this report. No other site or project facilities should be designed using the soil information contained in this report. As such, UES will not be responsible for the performance of any other site improvement designed using the data in this report.

This report should not be relied upon for final design recommendations or professional opinions by unauthorized third parties without the expressed written consent of UES. Unauthorized third parties that rely upon the information contained herein without the expressed written consent of UES assume all risk and liability for such reliance.

The recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated on the Boring Location Plan and from other information as referenced. This report does not reflect any variations which may occur between the boring locations. The nature and extent of such variations may not become evident until the course of construction. If variations become evident, it will then be necessary for a re-evaluation of the recommendations of this report after performing on-site observations during the construction period and noting the characteristics of the variations.

Borings for a typical geotechnical report are widely spaced and generally not sufficient for reliably detecting the presence of isolated, anomalous surface or subsurface conditions, or reliably estimating unsuitable or suitable material quantities. Accordingly, UES does not recommend relying on our boring information for estimation of material quantities unless our contracted services ***specifically*** include sufficient exploration for such purpose(s) and within the report we so state that the level of exploration provided should be sufficient to detect anomalous conditions or estimate such quantities. Therefore, UES will not be responsible for any extrapolation or use of our data by others beyond the purpose(s) for which it is applicable or intended.

All users of this report are cautioned that there was no requirement for UES to attempt to locate any man-made buried objects or identify any other potentially hazardous conditions that may exist at the site during the course of this exploration. Therefore, no attempt was made by UES to locate or identify such concerns. UES cannot be responsible for any buried man-made objects or environmental hazards which may be subsequently encountered during construction that are not discussed within the text of this report. We can provide this service if requested.

During the early stages of most construction projects, geotechnical issues not addressed in this report may arise. Because of the natural limitations inherent in working with the subsurface, it is not possible for a geotechnical engineer to predict and address all possible problems. A Geotechnical Business Council (GBC) publication, "Important Information About This Geotechnical Engineering Report" appears in Appendix C, and will help explain the nature of geotechnical issues. Further, we present documents in Appendix C: Constraints and Restrictions, to bring to your attention the potential concerns and the basic limitations of a typical geotechnical report.

8.0 CLOSURE

We appreciate the opportunity to be working with you on this project and look forward to a continued association. Please do not hesitate to contact us if you should have any questions, or if we may further assist you as your plans proceed.

Respectfully Submitted,
UES PROFESSIONAL SOLUTIONS, LLC
Florida Engineering Business Registry No. 549

Ricardo C. Kiriakidis L., Ph.D., P.E.
Geotechnical Department Manager

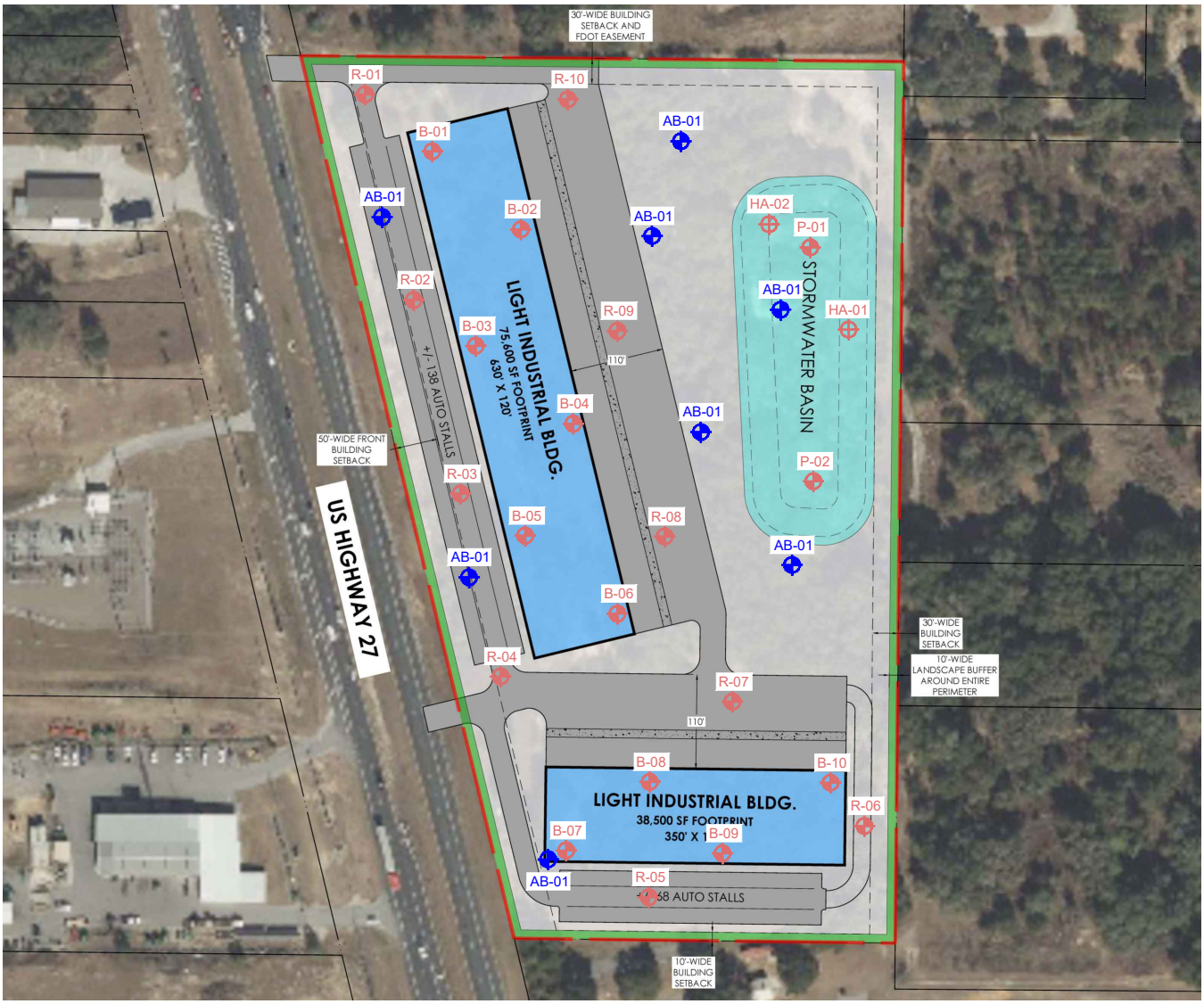
JUSTIN D. BERNABAS LICENSE No 100872 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by JUSTIN D BERNABAS
DN: c=US, o=UES PROFESSIONAL SOLUTIONS LLC, dnQualifier=A01410D00000196822122970002813 7, cn=JUSTIN D BERNABAS
Date: 2025.11.11 15:17:40 -05'00'

This item has been digitally signed and sealed by Justin D. Bernabas 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

Justin D. Bernabas, P.E.
Date: 11/11/2025
Geotechnical Project Manager
Florida Registration No. 100872

APPENDIX A



LEGEND

- APPROX. STANDARD PENETRATION TEST BORING LOCATION (SPT) PERFORMED 9/10/2025 - 9/11/2025
- PREVIOUS STANDARD PENETRATION TEST BORING LOCATION (SPT) PERFORMED 3/25/2025 - 3/29/2025
- PREVIOUS HAND AUGER BORING LOCATION PERFORMED 4/15/2025

0 200
SCALE (FT.)

N

THIS DRAWING CREATED USING PLAN PROVIDED BY CLIENT.

UES

SUPPLEMENTAL GEOTECHNICAL EXPLORATION
MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD
MINNEOLA, LAKE COUNTY, FLORIDA

BORING LOCATION PLAN

DRAWN BY:	N.F.	DATE:	9 - 30 - 2025	CHECKED BY:	J.B.	DATE:	10 - 9 - 2025
SCALE:	AS SHOWN	PROJECT NO:	A25139.01071.001	REPORT NO:	2158343	PAGE NO:	A-1

25-0177-02

BORING NO: AB-01

PROJECT MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

PROJECT ADDRESS HIGHWAY 27, MINNEOLA, LAKE COUNTY, FL

CLIENT NAME GREENBURG GIBBONS PROPERTIES **PROJECT NO** A25139.01071.001 **REPORT NO.** 2158343

LOCATION SEE BORING LOCATION PLAN **DATE STARTED** 09/10/2025 **DATE COMPLETED** 09/10/2025

SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** ORL - AI/MW/JP / JB

WATER TABLE (FT.) NE **DATE** 09/10/2025 **EST. S.H.G.W.T (FT.)** >10'

COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose light brown fine **SAND** [**SP**]						
		1-1-1	2									
		1-1-1	2									
5		1-1-1	2									
		1-1-1	2									
		2-2-2	4			Loose						
		2-2-3	5	▽								
10						Brown						
						13.5						
		5-6-6	12			Medium dense red orange Clayey fine **SAND** [**SC**]	37	17				
15						15.0						
						End of boring at 15'						
20												

REMARKS

FIGURE NUMBER: B-2

PROJECT: MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

BORING NO: AB-02

PROJECT MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

PROJECT ADDRESS HIGHWAY 27, MINNEOLA, LAKE COUNTY, FL

CLIENT NAME GREENBURG GIBBONS PROPERTIES **PROJECT NO** A25139.01071.001 **REPORT NO.** 2158343

LOCATION SEE BORING LOCATION PLAN **DATE STARTED** 09/11/2025 **DATE COMPLETED** 09/11/2025

SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** ORL - AI/MW/JP / JB

WATER TABLE (FT.) NE **DATE** 09/11/2025 **EST. S.H.G.W.T (FT.)** >10'

COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose brown fine **SAND** [**SP**]						
		1-1-2	3									
		2-1-1	2									
5		1-2-1	3									
		1-1-2	3									
		2-2-2	4			Loose						
		2-3-3	6	▽								
10						Light brown						
						13.5						
		8-10-10	20			Medium dense red orange Clayey fine **SAND** [**SC**]	35	17				
15						15.0						
						End of boring at 15'						
20												

REMARKS

FIGURE NUMBER: B-2

PROJECT: MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

BORING NO: AB-03

PROJECT MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

PROJECT ADDRESS HIGHWAY 27, MINNEOLA, LAKE COUNTY, FL

CLIENT NAME GREENBURG GIBBONS PROPERTIES **PROJECT NO** A25139.01071.001 **REPORT NO.** 2158343

LOCATION SEE BORING LOCATION PLAN **DATE STARTED** 09/10/2025 **DATE COMPLETED** 09/10/2025

SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** ORL - AI/MW/JP / JB

WATER TABLE (FT.) NE **DATE** 09/10/2025 **EST. S.H.G.W.T (FT.)** >10'

COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose brown fine **SAND** [**SP**]						
		2-3-2	5									
		2-2-1	3			Very loose						
5		1-1-1	2									
		1-2-2	4			Loose						
		1-2-2	4									
		2-2-3	5	▽								
10												
		3-4-3	7			Light brown 15.0	3	7				
15						End of boring at 15'						
20												

REMARKS

FIGURE NUMBER: B-2

PROJECT: MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

BORING NO: AB-04

PROJECT MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

PROJECT ADDRESS HIGHWAY 27, MINNEOLA, LAKE COUNTY, FL

CLIENT NAME GREENBURG GIBBONS PROPERTIES **PROJECT NO** A25139.01071.001 **REPORT NO.** 2158343

LOCATION SEE BORING LOCATION PLAN **DATE STARTED** 09/10/2025 **DATE COMPLETED** 09/10/2025

SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** ORL - AI/MW/JP / JB

WATER TABLE (FT.) No free water **DATE** 09/10/2025 **EST. S.H.G.W.T (FT.)** >10'

COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose dark brown fine **SAND** [**SP**]						
		2-2-2	4									
		1-1-1	2			Very loose, brown						
5		1-2-1	3									
		1-1-2	3									
		1-1-2	3									
		2-2-2	4	▽		Loose						
10												
		3-3-3	6			Light brown 15.0	4	4				
15						End of boring at 15'						
20												

REMARKS

FIGURE NUMBER: B-2

PROJECT: MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

BORING NO: AB-05

PROJECT MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

PROJECT ADDRESS HIGHWAY 27, MINNEOLA, LAKE COUNTY, FL

CLIENT NAME GREENBURG GIBBONS PROPERTIES **PROJECT NO** A25139.01071.001 **REPORT NO.** 2158343

LOCATION SEE BORING LOCATION PLAN **DATE STARTED** 09/10/2025 **DATE COMPLETED** 09/10/2025

SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** ORL - AI/MW/JP / JB

WATER TABLE (FT.) NE **DATE** 09/10/2025 **EST. S.H.G.W.T (FT.)** >10'

COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose light brown fine **SAND** [**SP**]						
		2-2-2	4									
		2-2-2	4									
		2-1-1	2			Very loose						
5		1-2-1	3									
		2-2-1	3			Loose						
		2-2-3	5	▽								
10						Brown						
						13.5						
		3-3-5	8			Loose orange fine **SAND** with clay [**SP-SC**]	10	9				
15						15.0						
						End of boring at 15'						
20												

REMARKS

FIGURE NUMBER: B-2

PROJECT: MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

BORING NO: AB-06

PROJECT MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

PROJECT ADDRESS HIGHWAY 27, MINNEOLA, LAKE COUNTY, FL

CLIENT NAME GREENBURG GIBBONS PROPERTIES **PROJECT NO** A25139.01071.001 **REPORT NO.** 2158343

LOCATION SEE BORING LOCATION PLAN **DATE STARTED** 09/10/2025 **DATE COMPLETED** 09/10/2025

SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** ORL - AI/MW/JP / JB

WATER TABLE (FT.) NE **DATE** 09/10/2025 **EST. S.H.G.W.T (FT.)** 8' *

COMMENTS NE = NOT ENCOUNTERED, * = TRANSIENT PERCHED CONDITION

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose brown fine **SAND** [**SP**]						
		2-2-1	3									
		1-1-1	2									
5		1-1-1	2									
		2-1-2	3									
		2-2-3	5	▽		Loose, light brown						
						8.5						
		3-3-4	7			Loose red orange Clayey fine **SAND** [**SC**]	29	14				
10												
						Dense						
15		12-18-21	39									
						Very dense						
		29-36-40	76									
20						20.0						
						End of boring at 20'						

REMARKS

FIGURE NUMBER: B-2

PROJECT: MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

BORING NO: AB-07

PROJECT MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

PROJECT ADDRESS HIGHWAY 27, MINNEOLA, LAKE COUNTY, FL

CLIENT NAME GREENBURG GIBBONS PROPERTIES **PROJECT NO** A25139.01071.001 **REPORT NO.** 2158343

LOCATION SEE BORING LOCATION PLAN **DATE STARTED** 09/10/2025 **DATE COMPLETED** 09/10/2025

SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** ORL - AI/MW/JP / JB

WATER TABLE (FT.) NE **DATE** 09/10/2025 **EST. S.H.G.W.T (FT.)** >10'

COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
		3-3-3	6			Loose brown fine **SAND** [**SP**]						
		3-3-2	5									
5		2-1-2	3			Very loose						
		2-1-2	3									
		2-2-2	4			Loose, light brown						
						8.5						
		2-3-3	6	▽		Loose orange fine **SAND** with clay [**SP-SC**]	8	8				
10												
						13.5						
		7-10-13	23			Medium dense orange Clayey fine **SAND** [**SC**]	13	8				
15						15.0						
						End of boring at 15'						
20												

REMARKS

FIGURE NUMBER: B-2

PROJECT: MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

BORING NO: AB-08

PROJECT MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

PROJECT ADDRESS HIGHWAY 27, MINNEOLA, LAKE COUNTY, FL

CLIENT NAME GREENBURG GIBBONS PROPERTIES **PROJECT NO** A25139.01071.001 **REPORT NO.** 2158343

LOCATION SEE BORING LOCATION PLAN **DATE STARTED** 09/10/2025 **DATE COMPLETED** 09/10/2025

SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** ORL - AI/MW/JP / JB

WATER TABLE (FT.) NE **DATE** 09/10/2025 **EST. S.H.G.W.T (FT.)** >10'

COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose brown fine **SAND** [**SP**]						
		3-2-2	4									
		2-1-2	3			Very loose						
5		2-1-1	2									
		2-1-3	4			Loose						
		2-2-3	5			Light brown						
						8.5						
		2-3-3	6	▽		Loose orange fine **SAND** with clay [**SP-SC**]	7	8				
10						13.5						
		3-4-4	8			Loose red orange Clayey fine **SAND** [**SC**]	32	18				
						15.0						
15						End of boring at 15'						
20												

REMARKS

FIGURE NUMBER: B-2

PROJECT: MINNEOLA COMMERCE CENTER FKA - US 27 MIXED-USE PD

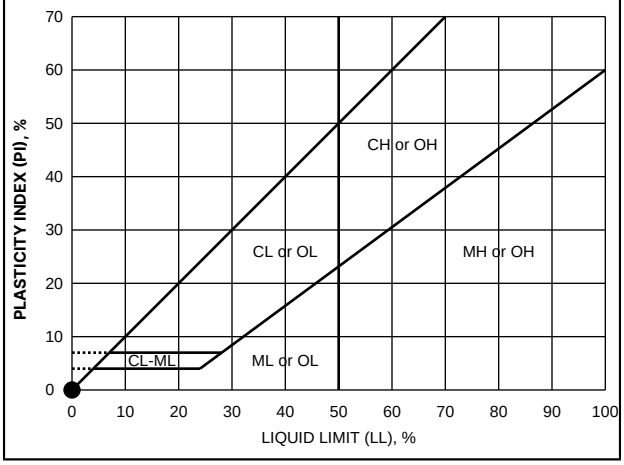
SOIL CLASSIFICATION CHART PER ASTM D 2488

PRIMARY DIVISIONS			SECONDARY DIVISIONS		
				GROUP SYMBOL	GROUP NAME
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVEL more than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVEL less than 5% fines		GW	well-graded GRAVEL
				GP	poorly-graded GRAVEL
		GRAVEL with DUAL CLASSIFICATIONS 5% to 12% fines		GW-GM	well-graded GRAVEL with silt
				GP-GM	poorly-graded GRAVEL with silt
				GW-GC	well-graded GRAVEL with clay
				GP-GC	poorly-graded GRAVEL with clay
		GRAVEL with FINES more than 12% fines		GM	silty GRAVEL
				GC	clayey GRAVEL
				GC-GM	silty, clayey GRAVEL
	SAND 50% or more of coarse fraction retained on No. 4 sieve	CLEAN SAND less than 5% fines		SW	well-graded SAND
				SP	poorly-graded SAND
		SAND with DUAL CLASSIFICATIONS 5% to 12% fines		SW-SM	well-graded SAND with silt
				SP-SM	poorly-graded SAND with silt
				SW-SC	well-graded SAND with clay
				SP-SC	poorly-graded SAND with clay
		SAND with FINES more than 12% fines		SM	silty SAND
				SC	clayey SAND
				SC-SM	silty, clayey SAND
FINE-GRAINED SOILS 50% or more passes No. 200 sieve	SILT and CLAY liquid limit less than 50%	INORGANIC		CL	lean CLAY
				ML	SILT
				CL-ML	silty CLAY
		ORGANIC		OL (PI > 4)	organic CLAY
				OL (PI < 4)	organic CLAY
	SILT and CLAY liquid limit 50% or more	INORGANIC		CH	fat CLAY
				MH	elastic SILT
		ORGANIC		OH (plots on or above 'A'-line)	organic CLAY
				OH (plots below 'A'-line)	organic SILT
	Highly Organic Soils			PT	Peat

GRAIN SIZE

DESCRIPTION		SIEVE SIZE	GRAIN SIZE	APPROXIMATE SIZE
Boulders		> 12"	> 12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	Coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	Fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	Coarse	#10 - #4	0.079 - 0.19"	Rock-salt-sized to pea-sized
	Medium	#40 - #10	0.017 - 0.079"	Sugar-sized to rock-salt-sized
	Fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized
Fines		Passing #200	< 0.0029"	Flour-sized and smaller

PLASTICITY CHART



APPARENT DENSITY - COARSE-GRAINED SOIL

APPARENT DENSITY	SPOOLING CABLE OR CATHEAD		AUTOMATIC TRIP HAMMER	
	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)
Very Loose	≤ 4	≤ 8	≤ 3	≤ 5
Loose	5 - 10	9 - 21	4 - 7	6 - 14
Medium Dense	11 - 30	22 - 63	8 - 20	15 - 42
Dense	31 - 50	64 - 105	21 - 33	43 - 70
Very Dense	> 50	> 105	> 33	> 70

CONSISTENCY - FINE-GRAINED SOIL

CONSISTENCY	SPOOLING CABLE OR CATHEAD		AUTOMATIC TRIP HAMMER	
	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)	SPT (blows/foot)	MODIFIED SPLIT BARREL (blows/foot)
Very Soft	< 2	< 3	< 1	< 2
Soft	2 - 4	3 - 5	1 - 3	2 - 3
Firm	5 - 8	6 - 10	4 - 5	4 - 6
Stiff	9 - 15	11 - 20	6 - 10	7 - 13
Very Stiff	16 - 30	21 - 39	11 - 20	14 - 26
Hard	> 30	> 39	> 20	> 26

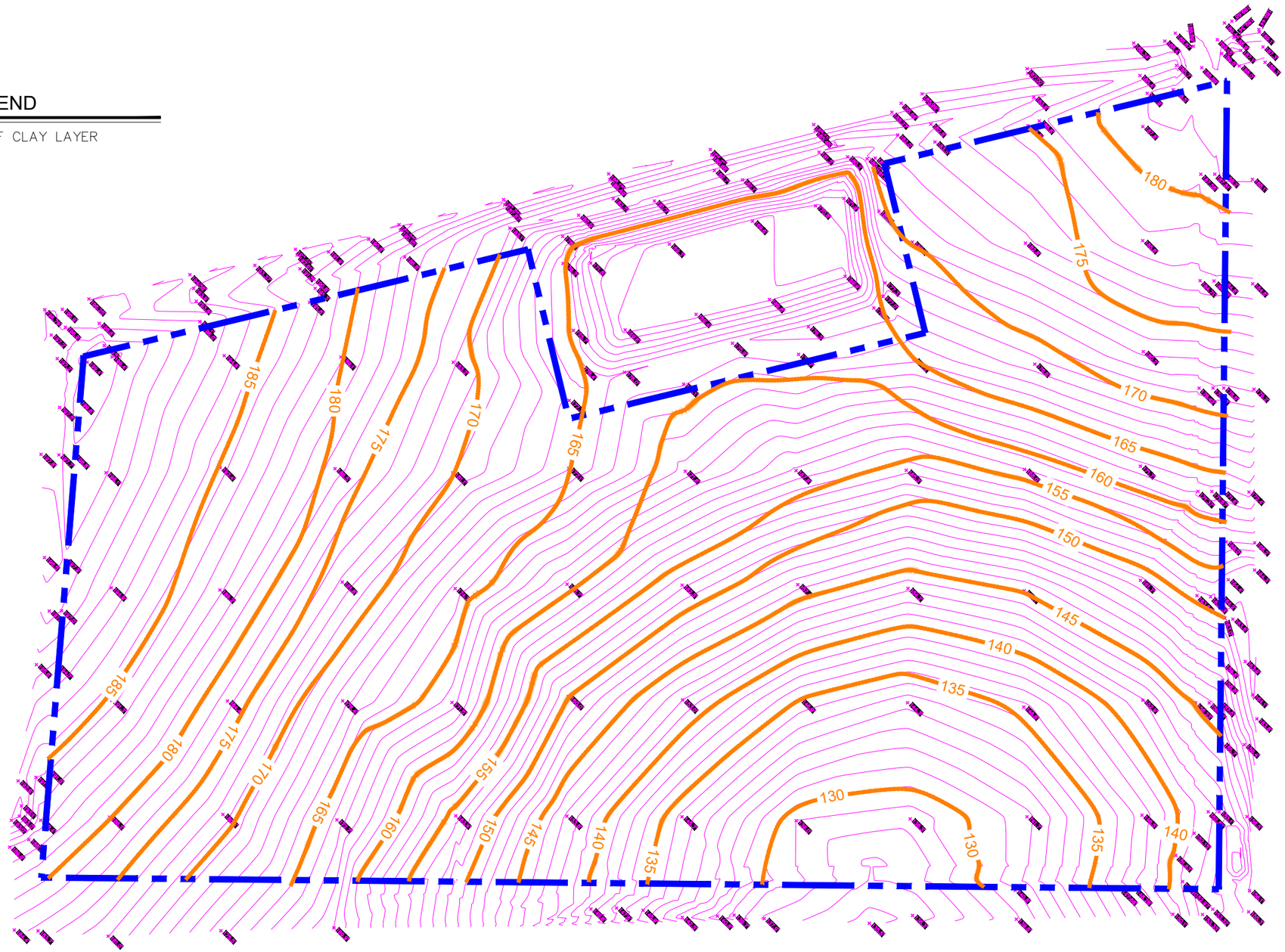
APPENDIX B

0 100

SCALE, FEET

LEGEND

ESTIMATED TOP OF CLAY LAYER



THIS PLAN BASED ON DRAWINGS PREPARED BY APIAN ENGINEERING

FOR: GREENBURG GIBBONS PROPERTIES

DRAWN BY:	J.B.	DATE:	11 - 11 - 2025
CHECKED BY:	R.K.	DATE:	11 - 11 - 2025
REPORT NO:	2158343	SCALE:	AS SHOWN
PROJECT NO:	A25139.01071.001		

SUPPLEMENTAL GEOTECHNICAL EXPLORATION
MINNEOLA COMMERCE CENTER FKA
US 27 MIXED-USE PD
MINNEOLA, LAKE COUNTY, FLORIDA

TOP OF CLAY CONTOUR MAP ON EXISTING TOPO. PLAN

UES

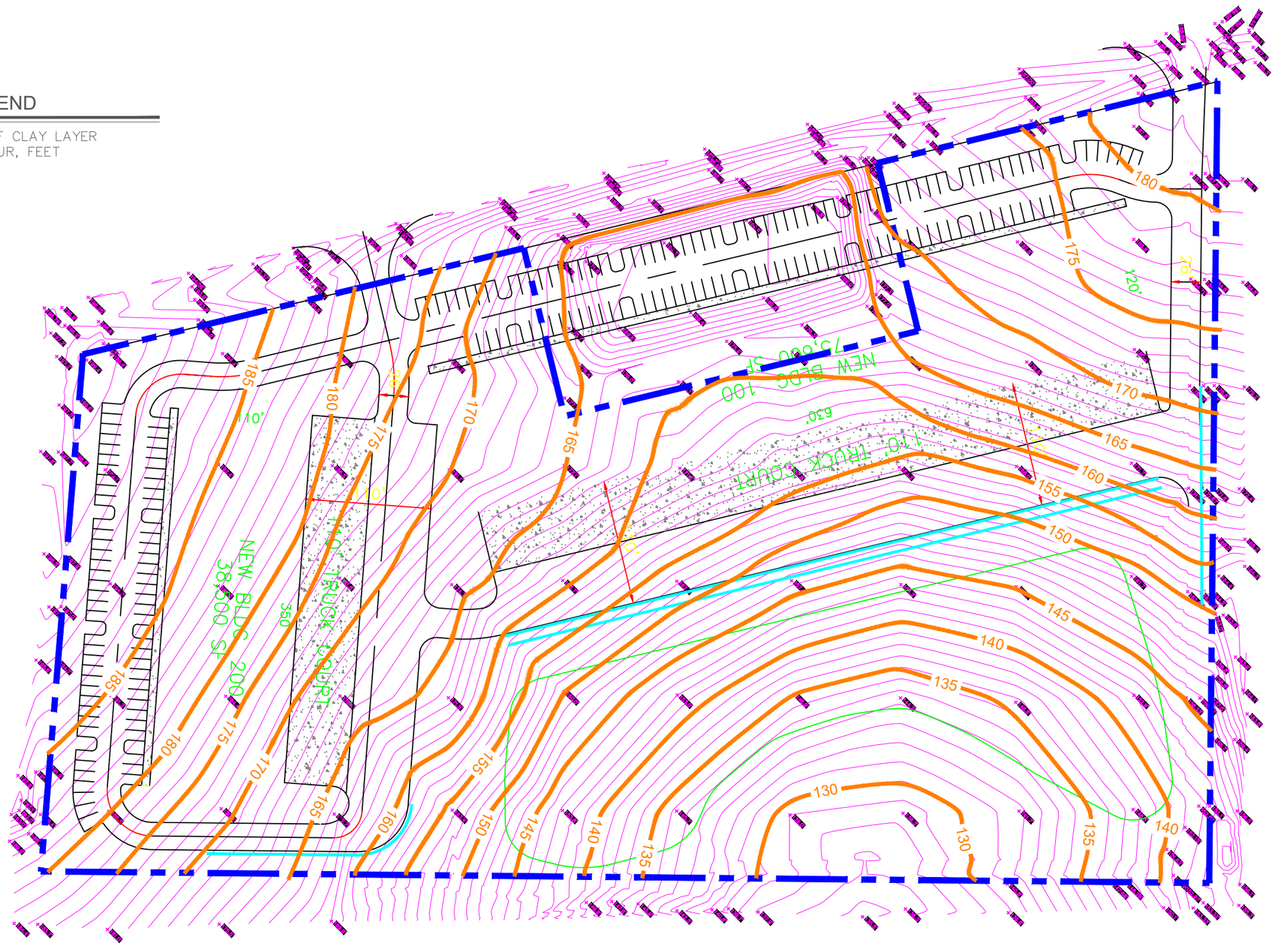
PAGE NO: B-1

0 100

SCALE, FEET

LEGEND

ESTIMATED TOP OF CLAY LAYER ELEVATION CONTOUR, FEET



THIS PLAN BASED ON DRAWINGS PREPARED BY APIAN ENGINEERING

FOR: GREENBURG GIBBONS PROPERTIES

DRAWN BY:	J.B.	DATE:	11 - 11 - 2025
CHECKED BY:	R.K.	DATE:	11 - 11 - 2025
REPORT NO:	2158343	SCALE:	AS SHOWN
PROJECT NO:	A25139.01071.001		

SUPPLEMENTAL GEOTECHNICAL EXPLORATION
MINNEOLA COMMERCE CENTER FKA
US 27 MIXED-USE PD
MINNEOLA, LAKE COUNTY, FLORIDA

TOP OF CLAY CONTOUR MAP

UES

PAGE NO: B-2

SUMMARY OF TOP OF CLAYEY SOIL DEPTHS

Minneola Commerce Center FKA US 27 Mixed Used PD

SWQ of US Highway 27 & Citrus Grove Road, Minneola, Lake County, Florida UES Project No. A25139.01071.001
UES Report No. 2158343

Boring ID	Longitude (°)	Latitude (°)	Maximum Boring Termination Depth (ft, bls)	Approximate Existing Grade Elevation (ft, datum)*	Depth of Top of Clayey Soil (ft, bls)	Approximate Top of Clayey Soil Elevation (ft, datum)
B-01	-81.753736	28.599411	25	185.0	7	178.0
B-02	-81.753411	28.599161	25	176.5	8	168.5
B-03	-81.753577	28.598783	25	177.0	12	165.0
B-04	-81.753217	28.598531	25	170.0	11½	158.5
B-05	-81.753394	28.598171	25	176.0	13½	162.5
B-06	-81.753054	28.597917	25	177.0	9	168.0
B-07	-81.753240	28.597153	35	194.0	8	186.0
B-08	-81.752934	28.597374	25	187.0	6½	180.5
B-09	-81.752666	28.597145	25	189.0	4½	184.5
B-10	-81.752272	28.597372	25	177.0	9½	167.5
HA-01	-81.752200	28.598829	10	139.5	>10	129.5
HA-02	-81.752497	28.599154	10	148.0	>10	138.0
P-01	-81.752346	28.599102	30	144.0	12	132.0
P-02	-81.752333	28.598345	30	149.0	11½	137.5
R-01	-81.753983	28.599593	10	188.0	6½	181.5
R-02	-81.753801	28.598932	10	181.0	>10	171.0
R-03	-81.753631	28.598307	10	169.5	>10	161.5
R-04	-81.753482	28.597715	15	184.0	9½	174.5
R-05	-81.752939	28.597006	20	195.0	6½	188.5
R-06	-81.752146	28.597235	10	179.5	9½	170.0
R-07	-81.752632	28.597635	10	175.5	8	167.5
R-08	-81.752880	28.598167	10	168.0	8	160.0
R-09	-81.753054	28.598832	10	163.0	>10	153.0
R-10	-81.753235	28.599579	10	176.0	6	170.0
AB-01	-81.752872	28.599410	15	161.0	13½	147.5
AB-02	-81.752978	28.599110	15	161.0	13½	147.5
AB-03	-81.752513	28.598875	15	145.0	>15	130.0
AB-04	-81.752802	28.598485	15	160.0	>15	145.0
AB-05	-81.752473	28.598063	15	162.0	>10	152.0
AB-06	-81.753354	28.597128	20	197.0	8½	188.5
AB-07	-81.753640	28.598023	15	179.0	13½	165.5
AB-08	-81.753954	28.599169	15	183.0	13½	169.5

Note:

* *Elevation was provided by ARCO Design/Build or estimated based on the provided existing topographic plan*

Maximum boring termination depth & elevation

APPENDIX C

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a civil engineer may not fulfill the needs of a constructor — a construction contractor — or even another civil engineer. Because each geotechnical- engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. No one except you should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you* — should apply this report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical-engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

Geotechnical engineers consider many unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk-management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical-engineering report that was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical-engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical-engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical-engineering report whose adequacy may have been affected by*: the passage of time; man-made events, such as construction on or adjacent to the site; or natural events, such as floods, droughts, earthquakes, or groundwater fluctuations. *Contact the geotechnical engineer before applying this report to determine if it is still reliable.* A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ — sometimes significantly — from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide geotechnical-construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmation-dependent recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly

problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical-engineering report. Confront that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical-engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical-engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time* to perform additional study. Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and constructors fail to recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Environmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold-prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold- prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical- engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

Rely, on Your GBC-Member Geotechnical Engineer for Additional Assistance

Membership in the Geotechnical Business Council of the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you GBC-Member geotechnical engineer for more information.

GEOTECHNICAL BUSINESS COUNCIL
of the Geoprofessional Business Association

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@geoprofessional.org www.geoprofessional.org

Copyright 2015 by Geoprofessional Business Association (GBA). Duplication, reproduction, or copying of this document, or its contents, in whole or in part, by any means whatsoever, is strictly prohibited, except with GBA's specific written permission. Excerpting, quoting, or otherwise extracting wording from this document is permitted only with the express written permission of GBA, and only for purposes of scholarly research or book review. Only members of GBA may use this document as a complement to or as an element of a geotechnical-engineering report. Any other firm, individual, or other entity that so uses this document without being a GBA member could be commiting negligent or intentional (fraudulent) misrepresentation.

CONSTRAINTS & RESTRICTIONS

The intent of this document is to bring to your attention the potential concerns and the basic limitations of a typical geotechnical report.

WARRANTY

UES Professional Solutions, LLC d/b/a UES has prepared this report for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

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 the Boring Location Plan. This report does not reflect any variations which 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.

CHANGED CONDITIONS

We recommend that the specifications for the project require that the contractor immediately notify UES, as well as the owner, when subsurface conditions are encountered that are different from those present in this report.

No claim by the contractor for any conditions differing from those anticipated in the plans, specifications, and those found in this report, should be allowed unless the contractor notifies the owner and UES of such changed conditions. Further, we recommend that all foundation work and site improvements be observed by a representative of UES to monitor field conditions and changes, to verify design assumptions and to evaluate and recommend any appropriate modifications to this report.

MISINTERPRETATION OF SOIL ENGINEERING REPORT

UES 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 the conclusions or recommendations based upon the data presented are made by others, those conclusions or recommendations are not the responsibility of UES.

CHANGED STRUCTURE OR LOCATION

This report was prepared in order to aid in the evaluation of this project and to assist the architect or engineer in the design of this project. If any changes in the design or location of the structure as outlined in this report are planned, or if any structures are included or added that are not discussed in the report, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions modified or approved by UES.

USE OF REPORT BY BIDDERS

Bidders who are examining the report prior to submission of a bid are cautioned that this report was prepared as an aid to the designers of the project and it may affect actual construction operations.

Bidders are urged to make their own soil borings, test pits, test caissons or other investigations to determine those conditions that may affect construction operations. UES cannot be responsible for any interpretations made from this report or the attached boring logs with regard to their adequacy in reflecting subsurface conditions which will affect construction operations.

STRATA CHANGES

Strata changes are indicated by a definite line on the boring logs which accompany this report. However, the actual change in the ground may be more gradual. Where changes occur between soil samples, the location of the change must necessarily be estimated using all available information and may not be shown at the exact depth.

OBSERVATIONS DURING DRILLING

Attempts are made to detect and/or identify occurrences during drilling and sampling, such as: water level, boulders, zones of lost circulation, relative ease or resistance to drilling progress, unusual sample recovery, variation of driving resistance, obstructions, etc.; however, lack of mention does not preclude their presence.

WATER LEVELS

Water level readings have been made in the drill holes during drilling and they indicate normally occurring conditions. Water levels may not have been stabilized at the last reading. This data has been reviewed and interpretations made in this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, tides, and other factors not evident at the time measurements were made and reported. Since the probability of such variations is anticipated, design drawings and specifications should accommodate such possibilities and construction planning should be based upon such assumptions of variations.

LOCATION OF BURIED OBJECTS

All users of this report are cautioned that there was no requirement for UES to attempt to locate any man-made buried objects during the course of this exploration and that no attempt was made by UES to locate any such buried objects. UES cannot be responsible for any buried man-made objects which are subsequently encountered during construction that are not discussed within the text of this report.

TIME

This report reflects the soil conditions at the time of exploration. If the report is not used in a reasonable amount of time, significant changes to the site may occur and additional reviews may be required.

City of Minneola
Planning Department
800 N Highway 27, Minneola, FL 34715
(352) 394 – 3598 x172

Tree Clearing/Removal Permit Application

A clearing/tree removal permit must be obtained prior to any land clearing or the removal of protected trees for all land uses (such as subdividing land, site plans, etc.). A clearing/tree removal permit shall be submitted at the time of preliminary subdivision plan or site plan submittal.

Application

Application shall be made to the Planning Department. The Planning Department shall determine if the application is complete. Applicable fees shall be paid upon application submittal. Fee is $10.00 per tree or $50.00 whichever is less. Fee of $250.00 is applied for an "after the fact" permit.

Applications need to be submitted by the 1st of the month to be considered at the next Planning & Zoning Commission meeting. Any and all supporting documents that need to be reviewed by the Commission need to be submitted by the 15th of the same month to be included in the packet for review.

Staff Review

The Development Review Process shall review the application and plans for compliance with the Land Development Regulations.

Issuance

The Planning Department shall issue the clearing/tree removal permit which authorizes the removal of trees and vegetation.

Final Inspection

After all proposed clearing/tree removal has been completed, and all required tree and soil preservation measures have been implemented, an authorized agent of the City shall make a final inspection to verify the work has been completed in compliance with the permit and Code requirements. Upon approval, a building permit may be issued.

For additional information, see Chapter 98, Section 9, Clearing and Tree Removal Permit, of the City's Land Development Regulations at www.municode.com.

City of Minneola
Tree Clearing/Removal Permit Application Cont.

Checklist

Project Name: Minneola Commerce Center

Project Address: US Hwy 27, Minneola, FL 34715

Rec'd	Requirement
X	Attach aerial photograph outlining the property boundaries, proposed improvements, inventory of individual trees, other than non-preferred trees, which are 6 inches DBH or greater, including DBH of each tree, and its common name.
X	Attach a survey indicating trees which are 24 inches DBH or greater and have been horizontally located by a surveyor.
X	Attach landscape and replacement plans pursuant to the Landscape and Tree Protection chapter.
	Attach construction and/or erosion control plans which will describe the method(s) to be used in controlling erosion which may be expected to occur as a result of the proposed clearing or grubbing.
	Attach a copy of all jurisdictional agency permits, if applicable.
	Attach approval of subdivision/site development plan approval.

NOTE - Project is approved in the PD. Please see tree replacement plan & specifications in the LUP/DA

See Landscape Plan #4 - "The minimum amount of requires tree replacement will be 15 percent of the total TBH of specimen trees over 12 inches removed pursuant to the final engineering plans"

City of Minneola

Tree Clearing/Removal Permit Application Cont.

Note: In accordance with the fee schedule of the City of Minneola additional fees may be charged for advertising and/or actual costs of engineering application review. The fees must be paid within 30 calendar days of receipt of the City invoice.

Applicant GGW Flex Holdings, LLC

Address 3904 Boston St, Suite 402, Baltimore, MD 21224

Telephone (843) 469-2517 E-Mail address: DThigpen@GGCommercial.com

Applicant is: ☐ Owner ☐ Agent ■ Purchaser

Owner Grassy Lake Holdings, LLC

Address 5832 Woodbine Drive S., Belle Isle, FL 32809

Telephone (407)456-1497 E-Mail address: MStacy@CFB-INC.com

Contractor _____

Address _____

Telephone _____ E-Mail address: _____

License Number _____

Land Clearing Operator _____

Address _____

Telephone _____ E-Mail address: _____

Date the clearing/tree removal is proposed to begin _____

Date the clearing/tree removal is proposed to be completed _____

Surveyor _____

Address _____

Telephone _____ E-Mail address: _____

Date of Approved Landscape Plans, if applicable: _____

Date of Approved Subdivision/Site Plans, if applicable: _____

Reason(s) for clearing/tree removal:

- [x] The land clearing or tree removal is necessary in order to make site improvements authorized by an approved development plan and the area to be cleared and the number of trees to be removed is the minimum necessary for such work.
- [ ] The tree is located where it creates or will create a safety or health hazard, or a nuisance with respect to existing or proposed structures or vehicle or pedestrian routes, and relocation of the tree on the site is not a feasible alternative.
- [x] The tree is diseased or injured.
- [ ] Other

Applicant Signature: _____ Date: 04/21/2026

City of Minneola Approval: _____ Date: _____

Office Use:

Applicant Name: _____

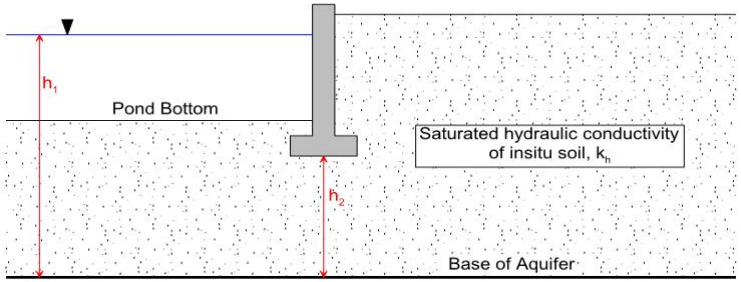
Application For: _____

Amount: _____ Check: _____

Amount: _____ Check: _____

Rec'd by: _____ Date: _____ Receipt #: _____

Effective pond Perimeter
1532.40 ft
Length of Wall
1076.41 ft
Treatment Volume Elevation
150.40 ft
Base of Aquifer
135.50 ft
Bottom Elevation of Wall
135.50 ft
Horizontal Hydraulic
40.00 ft/day



$$k_{avg} = \left(\frac{L_{unwalled}}{L_{total}} \times k_h\right) + \left(\frac{L_{walled}}{L_{total}} \times \frac{h_2}{h_1} \times k_h\right)$$

http://www.devoeng.com/memos/retaining_walls_around_ponds.pdf

Kavg =11.90ft/day

L_{walled}	$L_{unwalled}$	K_h	H_2	H_1
1076.41 ft	455.99	40.00 ft/day	0.0	14.90

Minneola Commerce Center

Water and Fire Hydraulic Modeling Report

July 2026

CFB-Inc.com

CFB | CLYMER FARNER BARLEY

July 10, 2026

City of Minneola – Planning Department
800 N. Highway 27
Minneola, FL 34715

RE: Minneola Commerce Center US N 27 – Hydraulic Modeling Report (CFB # EP2025.04206)

Introduction:

The project area of the Minneola Commerce Center is +/- 15.00 Acres and is generally located on the East Side of US 27 approximately 1,000 feet south of the intersection of US 27 & Citrus Grove Road. The existing site consists of mostly woods with an access road on the north side of the site, a small FDOT pond and a billboard.

Proposed System Improvements:

On-Site: Improvements will consist primarily of a proposed water distribution system that will run from a connection to the city water system on the southwestern point of the property boundary that will connect to the proposed buildings. Additionally, there will be a 10-inch fire line from the proposed double check detector valve assembly to the building connections. Please refer to construction plans for the proposed Utility Improvements.

Off-Site: The only offsite improvements being made will be the connection to the existing 10-inch City of Minneola owned water main and upsizing to a 12” diameter pipe and extending the watermain to the northern property line. The connection will be made just outside of our southwestern property boundary, in order to allow for ease of access to the proposed water meter for the City. Please refer to the construction plans for the existing utilities and the proposed Utility improvements.

Required Fire Protection:
A copy of NFPA 1 – Fire Code 2018 Edition - Table 18.4.5.2.1 is provided within Appendix D of this report.

Building	*Fire Flow Area (Sq-Ft)*	*No. of Floors*	*Minimum Required Fire Flow (GPM) (Table 18.4.5.2.1)*	*Sprinklered*	*Fire Flow Reduction (NFPA 18.4.5.3.2)*	*NFF (GPM)**	*Flow Duration (hours)*
Warehouse 1	76,250	1	4,000	Yes	75%	1,500	4
Warehouse 2	43,750	1	3,000	Yes	75%	1,500	3

**City of Minneola Fire Code requires 1,500 GPM minimum for fire flows*

Development Daily Demand:
The Average Daily Demand (ADD), Maximum Daily Demand (MDD), and Peak Hour Flow (PHF), were determined using typical water demands for similar building types. An ERC capacity factor of 0.05 gpd/ square foot of warehouse was used.

The proposed demands have been summarized below and are included in Appendix A of this report.

The total ADD for the proposed Warehouse Building 1 is calculated to be 3,812.50 gpd or 2.65 gpm
The total MDD for the proposed Warehouse Building 1 is calculated to be 7,625.00 gpd or 5.30 gpm
The total PHF for the proposed Warehouse Building 1 is calculated to be 15,250.00 gpd or 10.59 gpm

The total ADD for the proposed Warehouse Building 2 is calculated to be 2,187.50 gpd or 1.52 gpm
The total MDD for the proposed Warehouse Building 2 is calculated to be 5,468.75 gpd or 3.80 gpm
The total PHF for the proposed Warehouse Building 2 is calculated to be 8,750.00 gpd or 6.08 gpm

Please refer to Appendix A for tabulated Average Daily Demand Calculations, Fire Flow Calculations, and Service Bay Calculations.

Computer Modeling:

The enclosed model results were accomplished using a computer program entitled “WaterCAD 2024” developed by Bentley Systems, Inc.

The design friction losses through the mains were designed using the Hazen-Williams formula, utilizing a “C” value for friction loss of 120 for Ductile Iron pipe and 130 for PVC pipe. Minor losses at all hydrant locations were considered for the system however other minor losses were excluded.

The pressures used for the model were obtained from a utility availability map completed for this project by City of Minneola. A copy of the pressure results has been included in Appendix D of this report.

A connection pressure of 68 psi was used for the connection to the 10” water main on U.S. Highway 27 per pressure results from the above-mentioned utility availability map.

The modeled results of this analysis for the water distribution system with needed fire flow (NFF) and the peak hourly flow are included within Appendices B of this report. Pipe & Node Exhibits referencing the Water CAD model layouts are provided in Appendix C of this report.

As shown, all residual pressures for the proposed system are in excess of 20 psi per typical Fire Code standards.

Appendices

Appendix A: Potable Water and Fire Demands

Appendix B: WaterCAD Flow Tables

Appendix C: WaterCAD Nodal Diagrams

Appendix D: Pressures From City of Minneola

We appreciate the opportunity to provide this hydraulic report. Should you have any questions regarding its contents or if we can be of further assistance in any way, please do not hesitate to contact us at your convenience.

Sincerely,
CLYMER FARNER BARLEY, INC

Major Stacy, P.E.
Director of Engineering – Orlando

Appendix A: Potable Water and Fire Demands

CLYMER FARNER BARLEY INC.
2221 Lee Road Suite 27, Winter Park, FL 32789
P: 407.960.5868 F: 866.571.8179

GBG-001 Minneola Commerce Center
ADD Calculations

Proposed Potable Water Demands

	Bldg Type	Units	ERC Factor	Total ERC's	ERC ADD Factor (gpd)*	ADD (gpd)	ADD (gpm)	MDD (gpd)	MDD (gpm)	PHF (gpd)	PHF (gpm)
Warehouse Building I	II(000)	76,250 SF	1.00	76250.00	0.05	3,812.50	2.65	7,625.00	5.30	15,250.00	10.59
Warehouse Building II	II(000)	43,750 SF	1.00	43750.00	0.05	2,187.50	1.52	5,468.75	3.80	8,750.00	6.08
Totals							**4.17**		**9.09**		**16.67**

**Demands are calculated by a 0.02-0.05 GPD per sq. ft.

CLYMER FARNER BARLEY INC.

2221 Lee Road Suite 27, Winter Park, FL 32789

(407) 960-5868

GBG-001 Minneola Commerce Center

Fire Flow Calculations

City of Minneola Fire Code								
Building	**Max Fire Flow Area (Sq-Ft)**	**Bldg Type**	**No. of Floors**	**Minimum Required Fire Flow (GPM)**	**Sprinklered**	**Fire Flow Reduction Per Ciy of Minneola**	**NFF (GPM)**	**Flow Duration (hours)**
Warehouse Building I	76,250	II(000)	1	4,000	Yes	75%	1,500	4
Warehouse Building II	43,750	II(000)	1	3,000	Yes	75%	1,500	3

Appendix B: WaterCAD Flow Tables

MINNEOLA COMMERCE CENTER
AVERAGE DAILY DEMAND
GPV Table - Time: 0.00 hours

Label	Elevation (ft)	Diameter (Valve) (in)	General Purpose Valve Headloss Curve	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)	Headloss (ft)
DCDVA	184.16	8.0	8 INCH DCDVA	0	352.08	342.84	9.24
RPZ	184.41	2.0	2 INCH RPZ	4	352.08	328.26	23.82

Hydrant Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
H-1	181.46	0	342.84	70
H-2	177.02	0	342.84	72
H-3	172.80	0	342.84	74
H-4	181.10	0	342.84	70
H-5	176.93	0	342.84	72
H-6	183.22	0	342.84	69
H-7	181.55	0	342.84	70
H-8	172.92	0	342.84	74

Junction Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	194.16	0	352.08	68
J-5	176.34	0	342.84	72
10" BLDG 2	180.89	0	342.84	70
2" BLDG 1	176.90	3	328.21	65
J-8	183.21	0	328.25	63
2" BLDG 2	181.37	2	328.24	64
J-10	185.18	0	352.08	72
J-12	187.20	0	352.08	71
J-14	176.78	0	342.84	72
J-15	183.36	0	342.84	69
J-16	181.46	0	342.84	70
J-17	181.00	0	342.84	70
J-18	179.60	0	342.84	71
J-19	167.00	0	342.84	76
J-20	180.90	0	342.84	70
J-21	172.80	0	342.84	74
10" BLDG 1	173.60	0	342.84	73
J-30	174.34	0	342.84	73
HOSE BIB	180.50	0	328.24	64
J-33	181.74	0	328.24	63
J-37	172.91	0	342.84	74

Pipe Table - Time: 0.00 hours

MINNEOLA COMMERCE CENTER
AVERAGE DAILY DEMAND
Pipe Table - Time: 0.00 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-6	77	J-8	J-33	2.0	PVC	150.0	2	0.16
P-7	19	J-33	2" BLDG 2	2.0	PVC	150.0	2	0.16
P-8	206	J-8	2" BLDG 1	2.0	PVC	150.0	3	0.27
P-9	37	R-1	J-1	12.0	PVC	150.0	4	0.01
P-10	7	J-10	DCDVA	8.0	PVC	150.0	0	0.00
P-11	20	DCDVA	J-15	8.0	PVC	150.0	0	0.00
P-15	16	RPZ	J-8	2.0	PVC	150.0	4	0.43
P-16	119	J-1	J-12	12.0	PVC	150.0	4	0.01
P-17	70	J-15	J-18	10.0	PVC	150.0	0	0.00
P-18	196	J-18	J-5	10.0	PVC	150.0	0	0.00
P-19	198	J-5	J-30	10.0	PVC	150.0	0	0.00
P-20	152	J-30	J-21	10.0	PVC	150.0	0	0.00
P-21	182	J-18	J-19	10.0	PVC	150.0	0	0.00
P-23	10	H-5	J-19	8.0	PVC	150.0	0	0.00
P-24	11	J-16	H-6	8.0	PVC	150.0	0	0.00
P-25	47	J-15	J-16	8.0	PVC	150.0	0	0.00
P-26	338	J-16	J-17	8.0	PVC	150.0	0	0.00
P-27	166	J-17	J-20	8.0	PVC	150.0	0	0.00
P-28	434	J-20	J-14	8.0	PVC	150.0	0	0.00
P-29	10	J-20	H-7	8.0	PVC	150.0	0	0.00
P-30	10	J-17	H-1	8.0	PVC	150.0	0	0.00
P-31	78	J-15	10" BLDG 2	10.0	PVC	150.0	0	0.00
P-32	39	10" BLDG 1	J-37	10.0	PVC	150.0	0	0.00
P-33	6	J-37	J-21	10.0	PVC	150.0	0	0.00
P-39	128	H-3	J-21	10.0	PVC	150.0	0	0.00
P-40	6	J-30	H-8	8.0	PVC	150.0	0	0.00
P-41	10	J-14	H-2	8.0	PVC	150.0	0	0.00
P-42	119	J-14	J-5	8.0	PVC	150.0	0	0.00
P-43	388	J-19	H-4	10.0	PVC	150.0	0	0.00
P-44	69	HOSE BIB	J-33	1.0	PVC	150.0	0	0.00
P-47	9	J-10	RPZ	6.0	PVC	150.0	4	0.05
P-48	88	J-10	J-12	12.0	PVC	150.0	-4	0.01

Reservoir Table - Time: 0.00 hours

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
R-1	352.08	4	352.08

MINNEOLA COMMERCE CENTER
MAX DAILY DEMAND + FIRE FLOW (H2 + H3)
GPV Table - Time: 0.00 hours

Label	Elevation (ft)	Diameter (Valve) (in)	General Purpose Valve Headloss Curve	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)	Headloss (ft)
DCDVA	184.16	8.0	8 INCH DCDVA	1,500	350.86	339.32	11.54
RPZ	184.41	2.0	2 INCH RPZ	9	351.06	326.38	24.68

Hydrant Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
H-1	181.46	0	338.03	68
H-2	177.02	500	336.92	69
H-3	172.80	1,000	334.76	70
H-4	181.10	0	338.27	68
H-5	176.93	0	338.27	70
H-6	183.22	0	338.63	67
H-7	181.55	0	337.73	68
H-8	172.92	0	336.09	71

Junction Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	194.16	0	351.93	68
J-5	176.34	0	337.02	70
10" BLDG 2	180.89	0	338.71	68
2" BLDG 1	176.90	5	326.20	65
J-8	183.21	0	326.35	62
2" BLDG 2	181.37	4	326.31	63
J-10	185.18	0	351.06	72
J-12	187.20	0	351.43	71
J-14	176.78	0	336.96	69
J-15	183.36	0	338.71	67
J-16	181.46	0	338.63	68
J-17	181.00	0	338.03	68
J-18	179.60	0	338.27	69
J-19	167.00	0	338.27	74
J-20	180.90	0	337.73	68
J-21	172.80	0	335.37	70
10" BLDG 1	173.60	0	335.37	70
J-30	174.34	0	336.09	70
HOSE BIB	180.50	0	326.32	63
J-33	181.74	0	326.32	63
J-37	172.91	0	335.37	70

Pipe Table - Time: 0.00 hours

MINNEOLA COMMERCE CENTER
MAX DAILY DEMAND + FIRE FLOW (H2 + H3)
Pipe Table - Time: 0.00 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-6	77	J-8	J-33	2.0	PVC	150.0	4	0.39
P-7	19	J-33	2" BLDG 2	2.0	PVC	150.0	4	0.39
P-8	206	J-8	2" BLDG 1	2.0	PVC	150.0	5	0.54
P-9	37	R-1	J-1	12.0	PVC	150.0	1,509	4.28
P-10	7	J-10	DCDVA	8.0	PVC	150.0	1,500	9.57
P-11	20	DCDVA	J-15	8.0	PVC	150.0	1,500	9.57
P-15	16	RPZ	J-8	2.0	PVC	150.0	9	0.93
P-16	119	J-1	J-12	12.0	PVC	150.0	1,509	4.28
P-17	70	J-15	J-18	10.0	PVC	150.0	1,172	4.79
P-18	196	J-18	J-5	10.0	PVC	150.0	1,172	4.79
P-19	198	J-5	J-30	10.0	PVC	150.0	1,000	4.08
P-20	152	J-30	J-21	10.0	PVC	150.0	1,000	4.08
P-21	182	J-18	J-19	10.0	PVC	150.0	0	0.00
P-23	10	H-5	J-19	8.0	PVC	150.0	0	0.00
P-24	11	J-16	H-6	8.0	PVC	150.0	0	0.00
P-25	47	J-15	J-16	8.0	PVC	150.0	328	2.09
P-26	338	J-16	J-17	8.0	PVC	150.0	328	2.09
P-27	166	J-17	J-20	8.0	PVC	150.0	328	2.09
P-28	434	J-20	J-14	8.0	PVC	150.0	328	2.09
P-29	10	J-20	H-7	8.0	PVC	150.0	0	0.00
P-30	10	J-17	H-1	8.0	PVC	150.0	0	0.00
P-31	78	J-15	10" BLDG 2	10.0	PVC	150.0	0	0.00
P-32	39	10" BLDG 1	J-37	10.0	PVC	150.0	0	0.00
P-33	6	J-37	J-21	10.0	PVC	150.0	0	0.00
P-39	128	H-3	J-21	10.0	PVC	150.0	-1,000	4.08
P-40	6	J-30	H-8	8.0	PVC	150.0	0	0.00
P-41	10	J-14	H-2	8.0	PVC	150.0	500	3.19
P-42	119	J-14	J-5	8.0	PVC	150.0	-172	1.10
P-43	388	J-19	H-4	10.0	PVC	150.0	0	0.00
P-44	69	HOSE BIB	J-33	1.0	PVC	150.0	0	0.00
P-47	9	J-10	RPZ	6.0	PVC	150.0	9	0.10
P-48	88	J-10	J-12	12.0	PVC	150.0	-1,509	4.28

Reservoir Table - Time: 0.00 hours

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
R-1	352.08	1,509	352.08

MINNEOLA COMMERCE CENTER
MAX DAILY DEMAND + FIRE FLOW (H3 + H4)
GPV Table - Time: 0.00 hours

Label	Elevation (ft)	Diameter (Valve) (in)	General Purpose Valve Headloss Curve	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)	Headloss (ft)
DCDVA	184.16	8.0	8 INCH DCDVA	1,500	350.86	342.77	8.09
RPZ	184.41	2.0	2 INCH RPZ	9	351.06	326.38	24.68

Hydrant Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
H-1	181.46	0	341.79	69
H-2	177.02	0	341.21	71
H-3	172.80	1,000	338.83	72
H-4	181.10	500	340.91	69
H-5	176.93	0	341.41	71
H-6	183.22	0	342.12	69
H-7	181.55	0	341.63	69
H-8	172.92	0	340.15	72

Junction Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	194.16	0	351.93	68
J-5	176.34	0	341.09	71
10" BLDG 2	180.89	0	342.16	70
2" BLDG 1	176.90	5	326.20	65
J-8	183.21	0	326.35	62
2" BLDG 2	181.37	4	326.31	63
J-10	185.18	0	351.06	72
J-12	187.20	0	351.43	71
J-14	176.78	0	341.21	71
J-15	183.36	0	342.16	69
J-16	181.46	0	342.12	70
J-17	181.00	0	341.79	70
J-18	179.60	0	341.65	70
J-19	167.00	0	341.41	75
J-20	180.90	0	341.63	70
J-21	172.80	0	339.43	72
10" BLDG 1	173.60	0	339.43	72
J-30	174.34	0	340.15	72
HOSE BIB	180.50	0	326.32	63
J-33	181.74	0	326.32	63
J-37	172.91	0	339.43	72

Pipe Table - Time: 0.00 hours

MINNEOLA COMMERCE CENTER
MAX DAILY DEMAND + FIRE FLOW (H3 + H4)
Pipe Table - Time: 0.00 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-6	77	J-8	J-33	2.0	PVC	150.0	4	0.39
P-7	19	J-33	2" BLDG 2	2.0	PVC	150.0	4	0.39
P-8	206	J-8	2" BLDG 1	2.0	PVC	150.0	5	0.54
P-9	37	R-1	J-1	12.0	PVC	150.0	1,509	4.28
P-10	7	J-10	DCDVA	8.0	PVC	150.0	1,500	9.57
P-11	20	DCDVA	J-15	8.0	PVC	150.0	1,500	9.57
P-15	16	RPZ	J-8	2.0	PVC	150.0	9	0.93
P-16	119	J-1	J-12	12.0	PVC	150.0	1,509	4.28
P-17	70	J-15	J-18	10.0	PVC	150.0	1,264	5.16
P-18	196	J-18	J-5	10.0	PVC	150.0	764	3.12
P-19	198	J-5	J-30	10.0	PVC	150.0	1,000	4.08
P-20	152	J-30	J-21	10.0	PVC	150.0	1,000	4.08
P-21	182	J-18	J-19	10.0	PVC	150.0	500	2.04
P-23	10	H-5	J-19	8.0	PVC	150.0	0	0.00
P-24	11	J-16	H-6	8.0	PVC	150.0	0	0.00
P-25	47	J-15	J-16	8.0	PVC	150.0	236	1.51
P-26	338	J-16	J-17	8.0	PVC	150.0	236	1.51
P-27	166	J-17	J-20	8.0	PVC	150.0	236	1.51
P-28	434	J-20	J-14	8.0	PVC	150.0	236	1.51
P-29	10	J-20	H-7	8.0	PVC	150.0	0	0.00
P-30	10	J-17	H-1	8.0	PVC	150.0	0	0.00
P-31	78	J-15	10" BLDG 2	10.0	PVC	150.0	0	0.00
P-32	39	10" BLDG 1	J-37	10.0	PVC	150.0	0	0.00
P-33	6	J-37	J-21	10.0	PVC	150.0	0	0.00
P-39	128	H-3	J-21	10.0	PVC	150.0	-1,000	4.08
P-40	6	J-30	H-8	8.0	PVC	150.0	0	0.00
P-41	10	J-14	H-2	8.0	PVC	150.0	0	0.00
P-42	119	J-14	J-5	8.0	PVC	150.0	236	1.51
P-43	388	J-19	H-4	10.0	PVC	150.0	500	2.04
P-44	69	HOSE BIB	J-33	1.0	PVC	150.0	0	0.00
P-47	9	J-10	RPZ	6.0	PVC	150.0	9	0.10
P-48	88	J-10	J-12	12.0	PVC	150.0	-1,509	4.28

Reservoir Table - Time: 0.00 hours

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
R-1	352.08	1,509	352.08

MINNEOLA COMMERCE CENTER
MAX DAILY DEMAND + FIRE FLOW (H2 + H7)
GPV Table - Time: 0.00 hours

Label	Elevation (ft)	Diameter (Valve) (in)	General Purpose Valve Headloss Curve	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)	Headloss (ft)
DCDVA	184.16	8.0	8 INCH DCDVA	1,500	350.86	342.77	8.09
RPZ	184.41	2.0	2 INCH RPZ	9	351.06	326.38	24.68

Hydrant Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
H-1	181.46	0	340.34	69
H-2	177.02	1,000	339.38	70
H-3	172.80	0	341.03	73
H-4	181.10	0	341.86	70
H-5	176.93	0	341.86	71
H-6	183.22	0	341.94	69
H-7	181.55	500	339.52	68
H-8	172.92	0	341.03	73

Junction Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	194.16	0	351.93	68
J-5	176.34	0	341.03	71
10" BLDG 2	180.89	0	342.16	70
2" BLDG 1	176.90	5	326.20	65
J-8	183.21	0	326.35	62
2" BLDG 2	181.37	4	326.31	63
J-10	185.18	0	351.06	72
J-12	187.20	0	351.43	71
J-14	176.78	0	339.53	70
J-15	183.36	0	342.16	69
J-16	181.46	0	341.94	69
J-17	181.00	0	340.34	69
J-18	179.60	0	341.86	70
J-19	167.00	0	341.86	76
J-20	180.90	0	339.56	69
J-21	172.80	0	341.03	73
10" BLDG 1	173.60	0	341.03	72
J-30	174.34	0	341.03	72
HOSE BIB	180.50	0	326.32	63
J-33	181.74	0	326.32	63
J-37	172.91	0	341.03	73

Pipe Table - Time: 0.00 hours

MINNEOLA COMMERCE CENTER
MAX DAILY DEMAND + FIRE FLOW (H2 + H7)
Pipe Table - Time: 0.00 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-6	77	J-8	J-33	2.0	PVC	150.0	4	0.39
P-7	19	J-33	2" BLDG 2	2.0	PVC	150.0	4	0.39
P-8	206	J-8	2" BLDG 1	2.0	PVC	150.0	5	0.54
P-9	37	R-1	J-1	12.0	PVC	150.0	1,509	4.28
P-10	7	J-10	DCDVA	8.0	PVC	150.0	1,500	9.57
P-11	20	DCDVA	J-15	8.0	PVC	150.0	1,500	9.57
P-15	16	RPZ	J-8	2.0	PVC	150.0	9	0.93
P-16	119	J-1	J-12	12.0	PVC	150.0	1,509	4.28
P-17	70	J-15	J-18	10.0	PVC	150.0	944	3.86
P-18	196	J-18	J-5	10.0	PVC	150.0	944	3.86
P-19	198	J-5	J-30	10.0	PVC	150.0	0	0.00
P-20	152	J-30	J-21	10.0	PVC	150.0	0	0.00
P-21	182	J-18	J-19	10.0	PVC	150.0	0	0.00
P-23	10	H-5	J-19	8.0	PVC	150.0	0	0.00
P-24	11	J-16	H-6	8.0	PVC	150.0	0	0.00
P-25	47	J-15	J-16	8.0	PVC	150.0	556	3.55
P-26	338	J-16	J-17	8.0	PVC	150.0	556	3.55
P-27	166	J-17	J-20	8.0	PVC	150.0	556	3.55
P-28	434	J-20	J-14	8.0	PVC	150.0	56	0.36
P-29	10	J-20	H-7	8.0	PVC	150.0	500	3.19
P-30	10	J-17	H-1	8.0	PVC	150.0	0	0.00
P-31	78	J-15	10" BLDG 2	10.0	PVC	150.0	0	0.00
P-32	39	10" BLDG 1	J-37	10.0	PVC	150.0	0	0.00
P-33	6	J-37	J-21	10.0	PVC	150.0	0	0.00
P-39	128	H-3	J-21	10.0	PVC	150.0	0	0.00
P-40	6	J-30	H-8	8.0	PVC	150.0	0	0.00
P-41	10	J-14	H-2	8.0	PVC	150.0	1,000	6.38
P-42	119	J-14	J-5	8.0	PVC	150.0	-944	6.03
P-43	388	J-19	H-4	10.0	PVC	150.0	0	0.00
P-44	69	HOSE BIB	J-33	1.0	PVC	150.0	0	0.00
P-47	9	J-10	RPZ	6.0	PVC	150.0	9	0.10
P-48	88	J-10	J-12	12.0	PVC	150.0	-1,509	4.28

Reservoir Table - Time: 0.00 hours

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
R-1	352.08	1,509	352.08

MINNEOLA COMMERCE CENTER

PEAK HOUR FLOW

GPV Table - Time: 0.00 hours

Label	Elevation (ft)	Diameter (Valve) (in)	General Purpose Valve Headloss Curve	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)	Headloss (ft)
DCDVA	184.16	8.0	8 INCH DCDVA	0	352.08	342.84	9.24
RPZ	184.41	2.0	2 INCH RPZ	17	352.08	326.09	25.99

Hydrant Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
H-1	181.46	0	342.84	70
H-2	177.02	0	342.84	72
H-3	172.80	0	342.84	74
H-4	181.10	0	342.84	70
H-5	176.93	0	342.84	72
H-6	183.22	0	342.84	69
H-7	181.55	0	342.84	70
H-8	172.92	0	342.84	74

Junction Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	194.16	0	352.08	68
J-5	176.34	0	342.84	72
10" BLDG 2	180.89	0	342.84	70
2" BLDG 1	176.90	11	325.45	64
J-8	183.21	0	325.99	62
2" BLDG 2	181.37	6	325.90	63
J-10	185.18	0	352.08	72
J-12	187.20	0	352.08	71
J-14	176.78	0	342.84	72
J-15	183.36	0	342.84	69
J-16	181.46	0	342.84	70
J-17	181.00	0	342.84	70
J-18	179.60	0	342.84	71
J-19	167.00	0	342.84	76
J-20	180.90	0	342.84	70
J-21	172.80	0	342.84	74
10" BLDG 1	173.60	0	342.84	73
J-30	174.34	0	342.84	73
HOSE BIB	180.50	0	325.92	63
J-33	181.74	0	325.92	62
J-37	172.91	0	342.84	74

Pipe Table - Time: 0.00 hours

MINNEOLA COMMERCE CENTER

PEAK HOUR FLOW

Pipe Table - Time: 0.00 hours

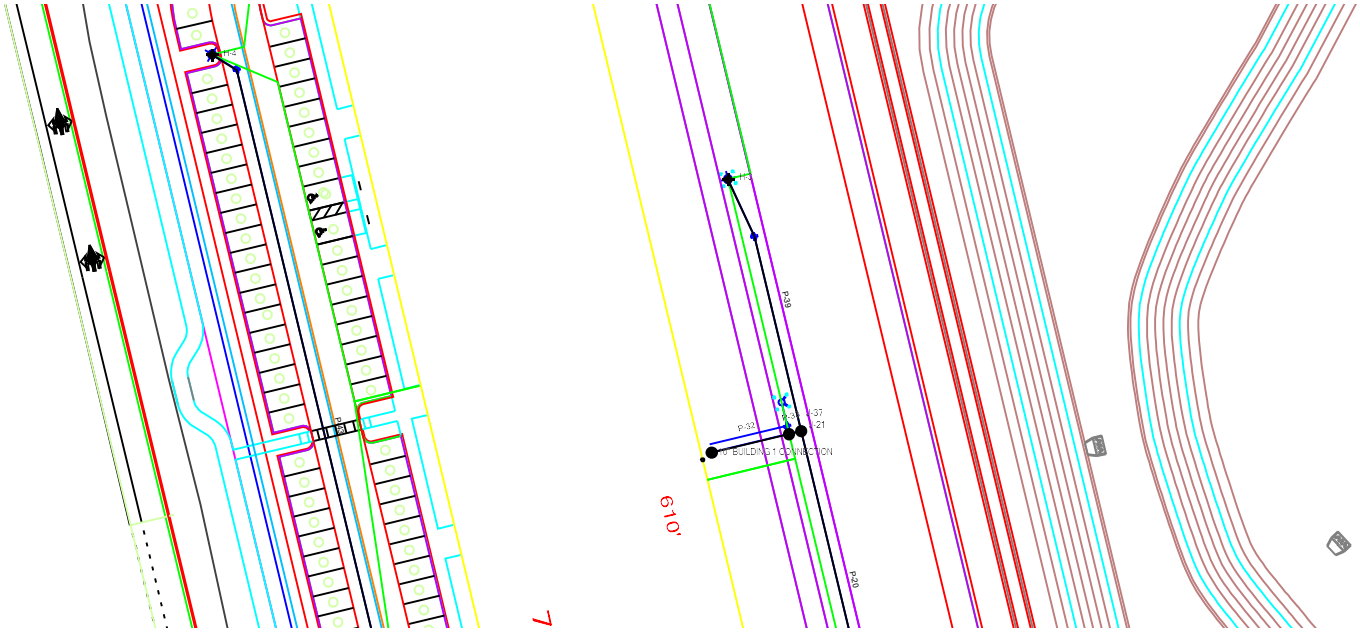
Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-6	77	J-8	J-33	2.0	PVC	150.0	6	0.62
P-7	19	J-33	2" BLDG 2	2.0	PVC	150.0	6	0.62
P-8	206	J-8	2" BLDG 1	2.0	PVC	150.0	11	1.08
P-9	37	R-1	J-1	12.0	PVC	150.0	17	0.05
P-10	7	J-10	DCDVA	8.0	PVC	150.0	0	0.00
P-11	20	DCDVA	J-15	8.0	PVC	150.0	0	0.00
P-15	16	RPZ	J-8	2.0	PVC	150.0	17	1.70
P-16	119	J-1	J-12	12.0	PVC	150.0	17	0.05
P-17	70	J-15	J-18	10.0	PVC	150.0	0	0.00
P-18	196	J-18	J-5	10.0	PVC	150.0	0	0.00
P-19	198	J-5	J-30	10.0	PVC	150.0	0	0.00
P-20	152	J-30	J-21	10.0	PVC	150.0	0	0.00
P-21	182	J-18	J-19	10.0	PVC	150.0	0	0.00
P-23	10	H-5	J-19	8.0	PVC	150.0	0	0.00
P-24	11	J-16	H-6	8.0	PVC	150.0	0	0.00
P-25	47	J-15	J-16	8.0	PVC	150.0	0	0.00
P-26	338	J-16	J-17	8.0	PVC	150.0	0	0.00
P-27	166	J-17	J-20	8.0	PVC	150.0	0	0.00
P-28	434	J-20	J-14	8.0	PVC	150.0	0	0.00
P-29	10	J-20	H-7	8.0	PVC	150.0	0	0.00
P-30	10	J-17	H-1	8.0	PVC	150.0	0	0.00
P-31	78	J-15	10" BLDG 2	10.0	PVC	150.0	0	0.00
P-32	39	10" BLDG 1	J-37	10.0	PVC	150.0	0	0.00
P-33	6	J-37	J-21	10.0	PVC	150.0	0	0.00
P-39	128	H-3	J-21	10.0	PVC	150.0	0	0.00
P-40	6	J-30	H-8	8.0	PVC	150.0	0	0.00
P-41	10	J-14	H-2	8.0	PVC	150.0	0	0.00
P-42	119	J-14	J-5	8.0	PVC	150.0	0	0.00
P-43	388	J-19	H-4	10.0	PVC	150.0	0	0.00
P-44	69	HOSE BIB	J-33	1.0	PVC	150.0	0	0.00
P-47	9	J-10	RPZ	6.0	PVC	150.0	17	0.19
P-48	88	J-10	J-12	12.0	PVC	150.0	-17	0.05

Reservoir Table - Time: 0.00 hours

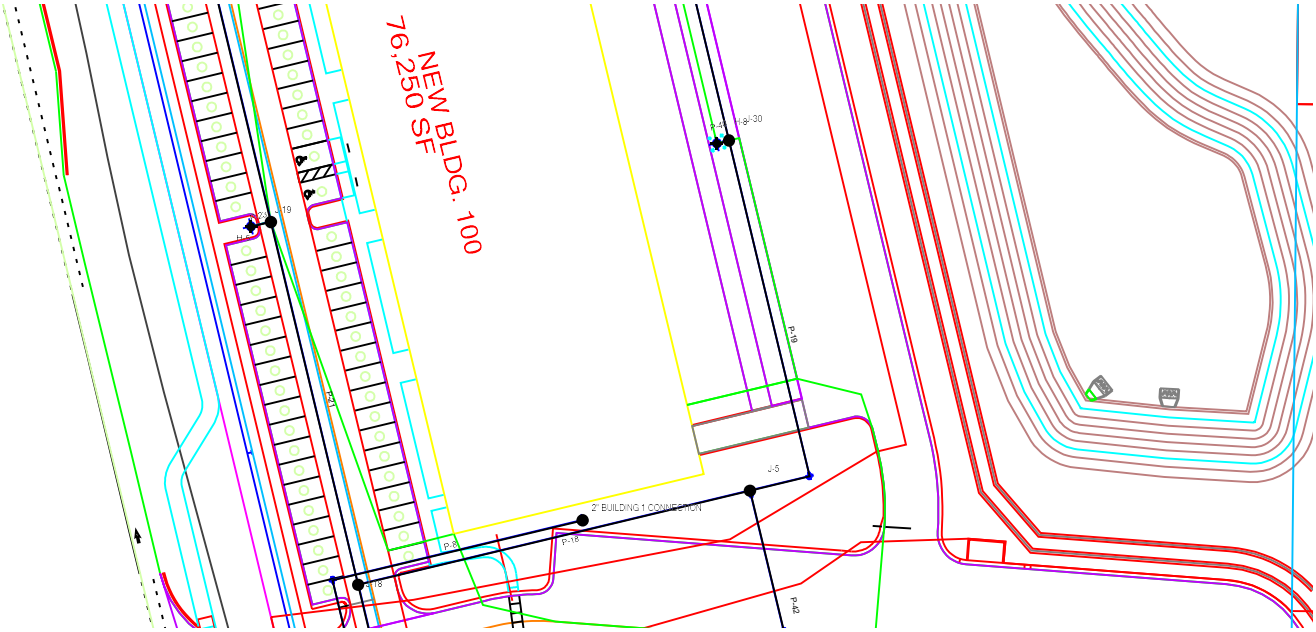
Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
R-1	352.08	17	352.08

Appendix C: WaterCAD Nodal Diagrams

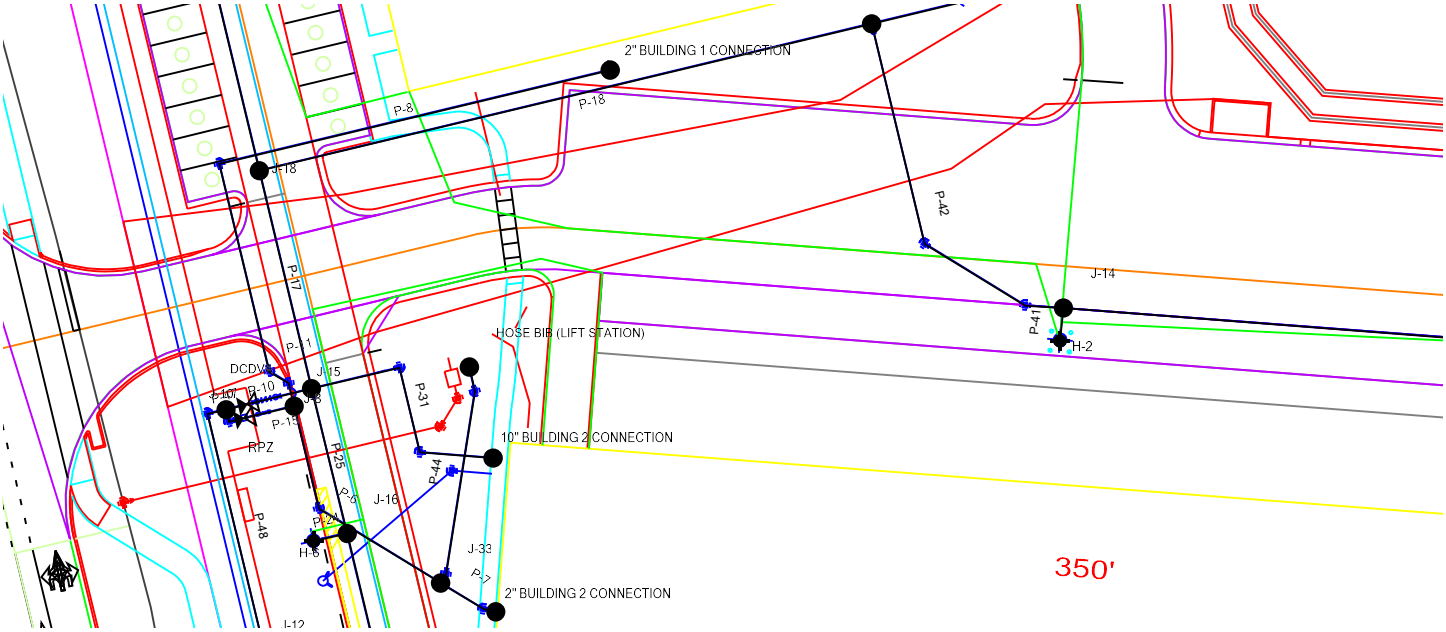
Scenario: Base



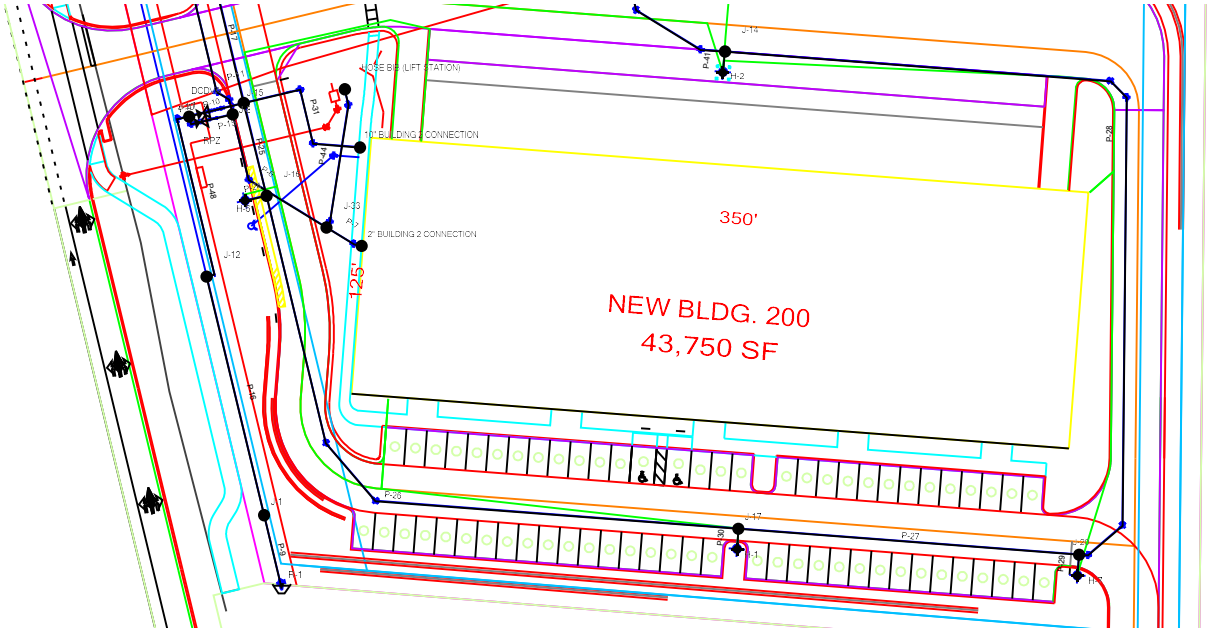
Scenario: Base



Scenario: Base



Scenario: Base



Appendix D: Pressures From City of Minneola

Requested FM Tie-In
EL: 190 ft
MDD Pressure: 34 psi
Minimum Pressure: 28 psi
Requested Potable Tie-In
EL: 195 ft
ADD Pressure: 68 psi
US Highway 27
US Highway 27
US Highway 27
Open Door
Baptist Church
12"
12"
16"
12"
10"
12"
Minneola Commerce Center
Sewer Pressurized Mains
Polyvinyl Chloride
Water Service Connections
Water Hydrants
Water Control Valves
Blowoff
Gate - Hydrant
Gate
Tee
Water Mains
Polyvinyl Chloride
Water Lateral Lines
Hydrant
N
0
200
Feet
Esri, Maxar, Earthstar Geographics, and the GIS User Community, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

MINNEOLA COMMERCE CENTER
AVERAGE DAILY DEMAND

GPV Table - Time: 0.00 hours

Label	Elevation (ft)	Diameter (Valve) (in)	General Purpose Valve Headloss Curve	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)	Headloss (ft)
DCDVA	184.16	8.0	8 INCH DCDVA	0	352.08	342.84	9.24
RPZ	184.41	2.0	2 INCH RPZ	4	352.07	328.25	23.82

Hydrant Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
H-1	181.46	0	352.08	74
H-2	177.02	0	342.84	72
H-3	172.80	0	342.84	74
H-4	181.10	0	352.08	74
H-5	176.93	0	352.08	76
H-6	183.22	0	352.08	73

Junction Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	194.16	0	352.08	68
J-2	188.61	0	352.08	71
J-3	185.53	0	352.08	72
J-4	178.88	0	352.08	75
J-5	184.02	0	352.08	73
J-6	176.34	0	342.84	72
J-7	181.24	0	342.84	70
J-8	180.89	0	342.84	70
J-9	176.90	3	328.20	65
J-10	183.21	0	328.25	63
J-11	181.37	2	328.24	64
J-12	173.40	0	342.84	73
J-13	173.70	0	342.84	73
J-15	185.18	0	352.08	72
J-16	185.27	0	352.08	72

Pipe Table - Time: 0.00 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-1	131	J-1	J-2	12.0	Ductile Iron	130.0	4	0.01
P-2	27	J-2	H-6	6.0	PVC	150.0	0	0.00
P-3	66	J-2	J-3	12.0	Ductile Iron	130.0	4	0.01
P-4	251	J-3	J-4	12.0	Ductile Iron	130.0	0	0.00
P-5	22	J-4	H-5	6.0	PVC	150.0	0	0.00
P-6	492	J-4	J-5	12.0	Ductile Iron	130.0	0	0.00
P-7	318	J-6	J-12	10.0	PVC	150.0	0	0.00
P-8	237	J-7	J-6	10.0	PVC	150.0	0	0.00
P-9	124	J-6	H-2	6.0	PVC	150.0	0	0.00
P-10	63	J-12	H-3	6.0	PVC	150.0	0	0.00
P-11	15	J-12	J-13	10.0	PVC	150.0	0	0.00

MINNEOLA COMMERCE CENTER
AVERAGE DAILY DEMAND
Pipe Table - Time: 0.00 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-12	50	J-7	J-8	10.0	PVC	150.0	0	0.00
P-13	106	J-10	J-11	2.0	PVC	150.0	2	0.16
P-14	204	J-10	J-9	2.0	PVC	150.0	3	0.27
P-15	37	R-1	J-1	12.0	Ductile Iron	130.0	4	0.01
P-16	234	J-1	H-1	6.0	PVC	150.0	0	0.00
P-18	58	J-5	H-4	6.0	PVC	150.0	0	0.00
P-20	4	J-15	J-16	6.0	PVC	150.0	4	0.05
P-21	4	J-3	J-15	12.0	PVC	150.0	4	0.01
P-19(1)	13	J-15	DCDVA	10.0	PVC	150.0	0	0.00
P-19(2)	49	DCDVA	J-7	10.0	PVC	150.0	0	0.00
P-22(1)	11	J-16	RPZ	2.0	PVC	150.0	4	0.43
P-22(2)	11	RPZ	J-10	2.0	PVC	150.0	4	0.43

Reservoir Table - Time: 0.00 hours

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
R-1	352.08	4	352.08

MINNEOLA COMMERCE CENTER
MAX DAILY DEMAND + FIRE FLOW
GPV Table - Time: 0.00 hours

Label	Elevation (ft)	Diameter (Valve) (in)	General Purpose Valve Headloss Curve	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)	Headloss (ft)
DCDVA	184.16	8.0	8 INCH DCDVA	1,500	350.66	339.12	11.54
RPZ	184.41	2.0	2 INCH RPZ	9	350.77	326.09	24.68

Hydrant Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
H-1	181.46	0	351.88	74
H-2	177.02	500	334.30	68
H-3	172.80	1,000	331.16	69
H-4	181.10	0	350.81	73
H-5	176.93	0	350.81	75
H-6	183.22	0	351.17	73

Junction Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	194.16	0	351.88	68
J-2	188.61	0	351.17	70
J-3	185.53	0	350.81	72
J-4	178.88	0	350.81	74
J-5	184.02	0	350.81	72
J-6	176.34	0	336.26	69
J-7	181.24	0	338.64	68
J-8	180.89	0	338.64	68
J-9	176.90	5	325.92	64
J-10	183.21	0	326.07	62
J-11	181.37	4	326.03	63
J-12	173.40	0	334.75	70
J-13	173.70	0	334.75	70
J-15	185.18	0	350.79	72
J-16	185.27	0	350.79	72

Pipe Table - Time: 0.00 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-1	131	J-1	J-2	12.0	Ductile Iron	130.0	1,509	4.28
P-2	27	J-2	H-6	6.0	PVC	150.0	0	0.00
P-3	66	J-2	J-3	12.0	Ductile Iron	130.0	1,509	4.28
P-4	251	J-3	J-4	12.0	Ductile Iron	130.0	0	0.00
P-5	22	J-4	H-5	6.0	PVC	150.0	0	0.00
P-6	492	J-4	J-5	12.0	Ductile Iron	130.0	0	0.00
P-7	318	J-6	J-12	10.0	PVC	150.0	1,000	4.08
P-8	237	J-7	J-6	10.0	PVC	150.0	1,500	6.13
P-9	124	J-6	H-2	6.0	PVC	150.0	500	5.67
P-10	63	J-12	H-3	6.0	PVC	150.0	1,000	11.35
P-11	15	J-12	J-13	10.0	PVC	150.0	0	0.00

MINNEOLA COMMERCE CENTER
MAX DAILY DEMAND + FIRE FLOW

Pipe Table - Time: 0.00 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-12	50	J-7	J-8	10.0	PVC	150.0	0	0.00
P-13	106	J-10	J-11	2.0	PVC	150.0	4	0.39
P-14	204	J-10	J-9	2.0	PVC	150.0	5	0.54
P-15	37	R-1	J-1	12.0	Ductile Iron	130.0	1,509	4.28
P-16	234	J-1	H-1	6.0	PVC	150.0	0	0.00
P-18	58	J-5	H-4	6.0	PVC	150.0	0	0.00
P-20	4	J-15	J-16	6.0	PVC	150.0	9	0.10
P-21	4	J-3	J-15	12.0	PVC	150.0	1,509	4.28
P-19(1)	13	J-15	DCDVA	10.0	PVC	150.0	1,500	6.13
P-19(2)	49	DCDVA	J-7	10.0	PVC	150.0	1,500	6.13
P-22(1)	11	J-16	RPZ	2.0	PVC	150.0	9	0.93
P-22(2)	11	RPZ	J-10	2.0	PVC	150.0	9	0.93

Reservoir Table - Time: 0.00 hours

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
R-1	352.08	1,509	352.08

MINNEOLA COMMERCE CENTER

PEAK HOUR FLOW

GPV Table - Time: 0.00 hours

Label	Elevation (ft)	Diameter (Valve) (in)	General Purpose Valve Headloss Curve	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)	Headloss (ft)
DCDVA	184.16	8.0	8 INCH DCDVA	0	352.08	342.84	9.24
RPZ	184.41	2.0	2 INCH RPZ	17	352.01	326.02	25.99

Hydrant Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
H-1	181.46	0	352.08	74
H-2	177.02	0	342.84	72
H-3	172.80	0	342.84	74
H-4	181.10	0	352.08	74
H-5	176.93	0	352.08	76
H-6	183.22	0	352.08	73

Junction Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	194.16	0	352.08	68
J-2	188.61	0	352.08	71
J-3	185.53	0	352.08	72
J-4	178.88	0	352.08	75
J-5	184.02	0	352.08	73
J-6	176.34	0	342.84	72
J-7	181.24	0	342.84	70
J-8	180.89	0	342.84	70
J-9	176.90	11	325.42	64
J-10	183.21	0	325.95	62
J-11	181.37	6	325.85	63
J-12	173.40	0	342.84	73
J-13	173.70	0	342.84	73
J-15	185.18	0	352.08	72
J-16	185.27	0	352.08	72

Pipe Table - Time: 0.00 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-1	131	J-1	J-2	12.0	Ductile Iron	130.0	17	0.05
P-2	27	J-2	H-6	6.0	PVC	150.0	0	0.00
P-3	66	J-2	J-3	12.0	Ductile Iron	130.0	17	0.05
P-4	251	J-3	J-4	12.0	Ductile Iron	130.0	0	0.00
P-5	22	J-4	H-5	6.0	PVC	150.0	0	0.00
P-6	492	J-4	J-5	12.0	Ductile Iron	130.0	0	0.00
P-7	318	J-6	J-12	10.0	PVC	150.0	0	0.00
P-8	237	J-7	J-6	10.0	PVC	150.0	0	0.00
P-9	124	J-6	H-2	6.0	PVC	150.0	0	0.00
P-10	63	J-12	H-3	6.0	PVC	150.0	0	0.00
P-11	15	J-12	J-13	10.0	PVC	150.0	0	0.00

MINNEOLA COMMERCE CENTER

PEAK HOUR FLOW

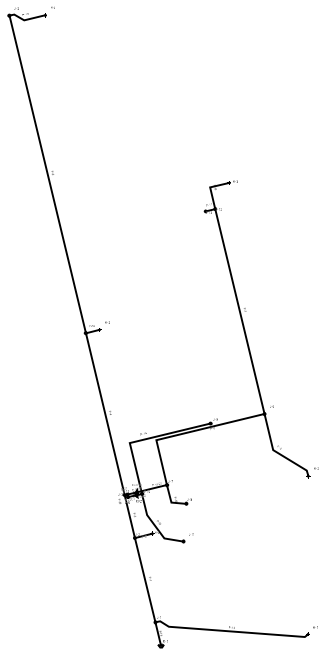
Pipe Table - Time: 0.00 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-12	50	J-7	J-8	10.0	PVC	150.0	0	0.00
P-13	106	J-10	J-11	2.0	PVC	150.0	6	0.62
P-14	204	J-10	J-9	2.0	PVC	150.0	11	1.08
P-15	37	R-1	J-1	12.0	Ductile Iron	130.0	17	0.05
P-16	234	J-1	H-1	6.0	PVC	150.0	0	0.00
P-18	58	J-5	H-4	6.0	PVC	150.0	0	0.00
P-20	4	J-15	J-16	6.0	PVC	150.0	17	0.19
P-21	4	J-3	J-15	12.0	PVC	150.0	17	0.05
P-19(1)	13	J-15	DCDVA	10.0	PVC	150.0	0	0.00
P-19(2)	49	DCDVA	J-7	10.0	PVC	150.0	0	0.00
P-22(1)	11	J-16	RPZ	2.0	PVC	150.0	17	1.70
P-22(2)	11	RPZ	J-10	2.0	PVC	150.0	17	1.70

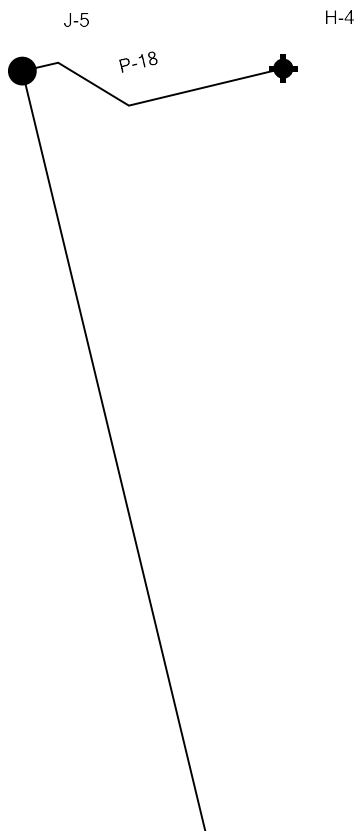
Reservoir Table - Time: 0.00 hours

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
R-1	352.08	17	352.08

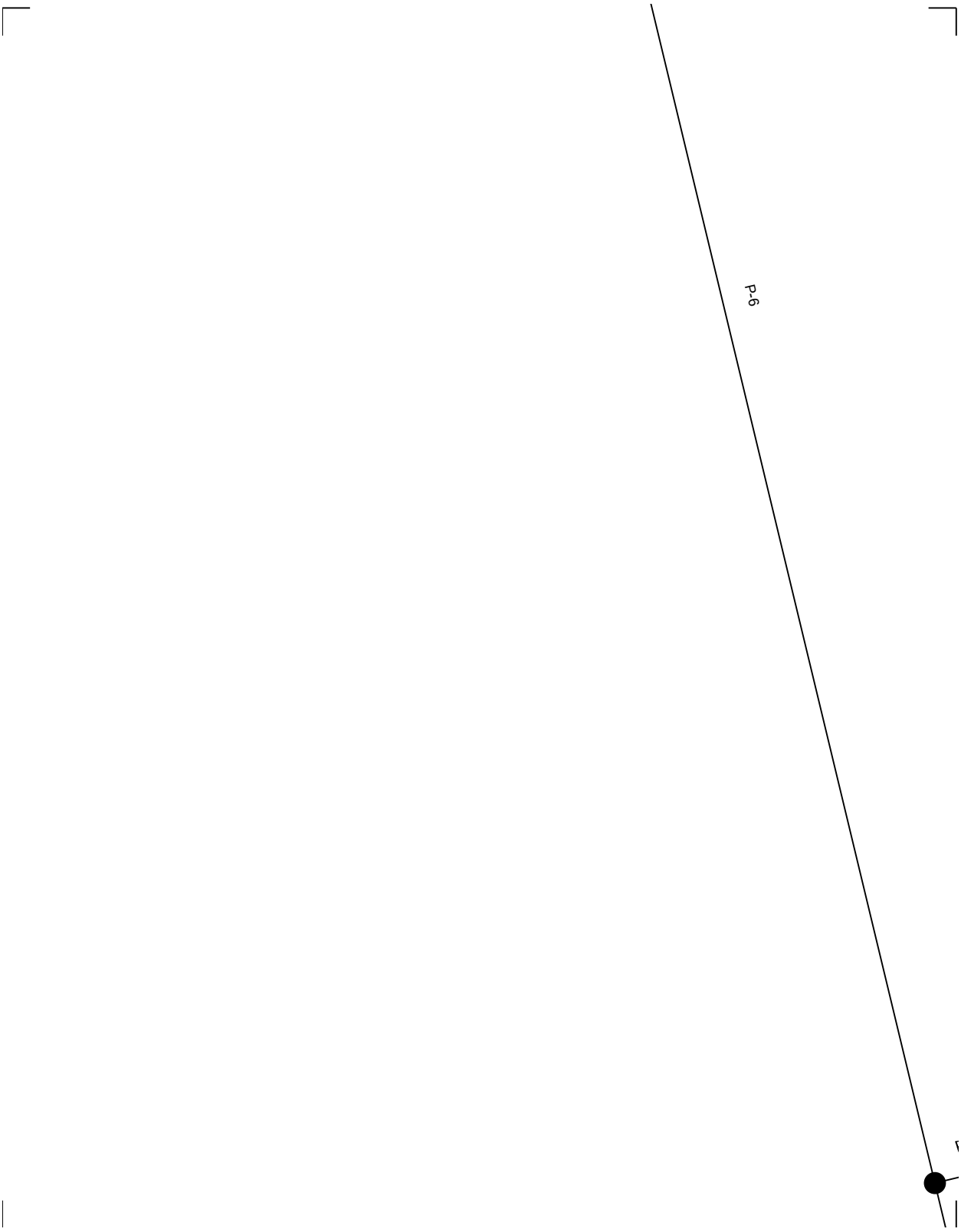
Scenario: Base



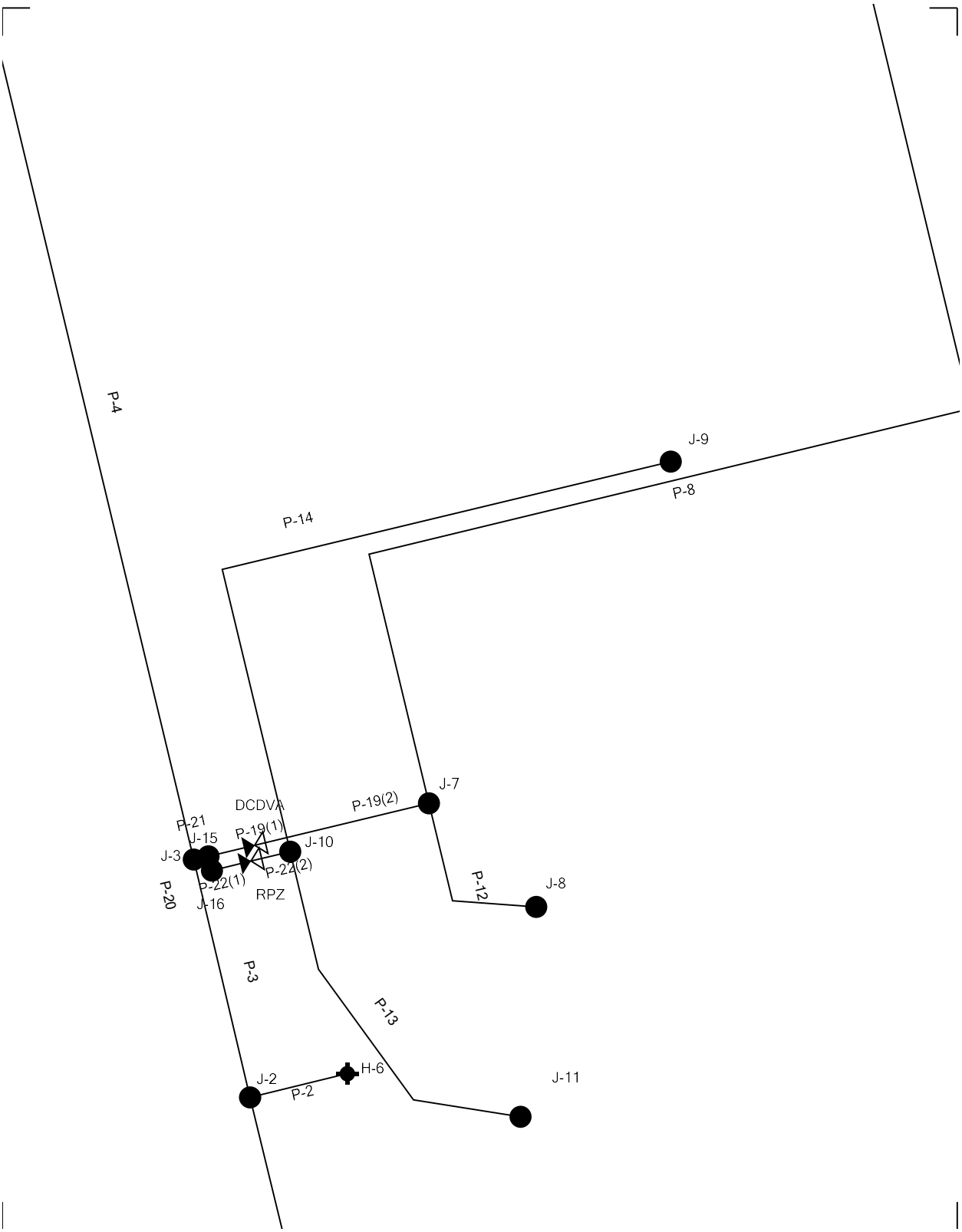
Scenario: Base



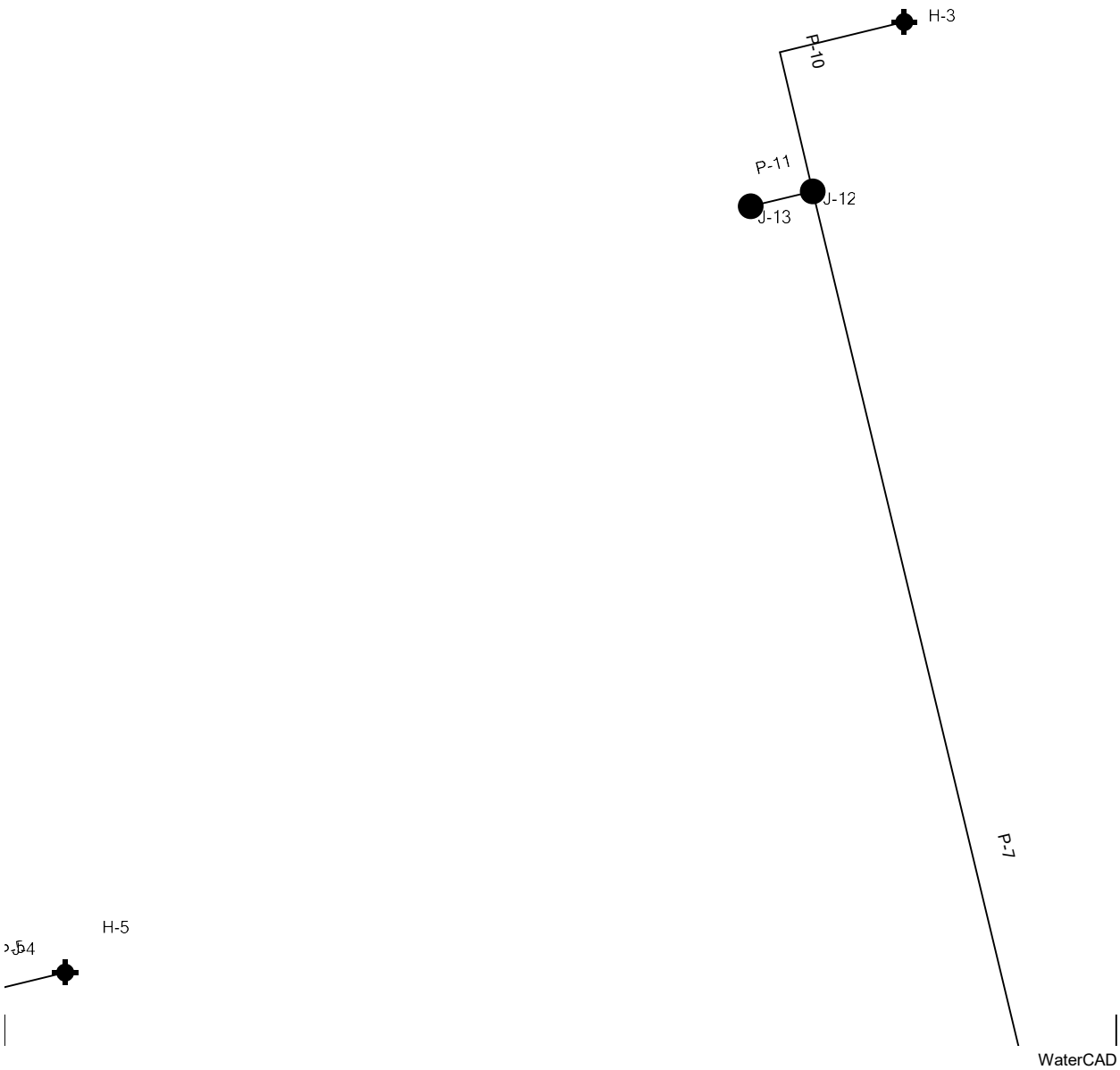
Scenario: Base



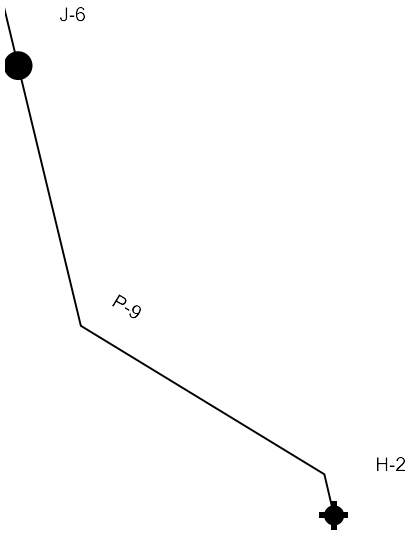
Scenario: Base



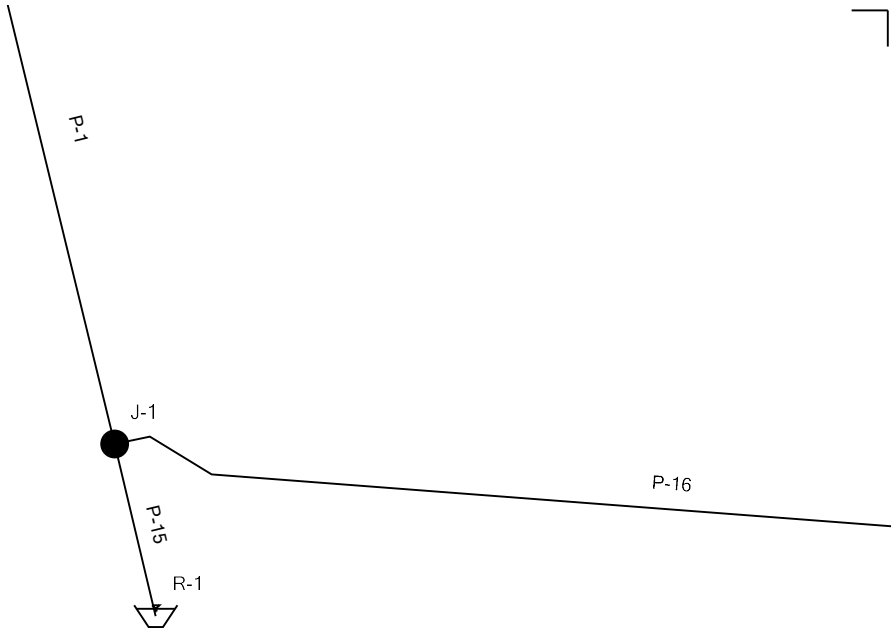
Scenario: Base



Scenario: Base



Scenario: Base



Scenario: Base

CITY OF MINNEOLA
P.O. BOX 678
MINNEOLA, FL 34755
(352) 394-3598

NOTICE OF PUBLIC MEETING

The City of Minneola Planning and Zoning Commission will hold a public meeting on **Monday, September 14, 2026 at 6:30 p.m**. at the Minneola City Hall located at 800 North U.S. 27, Minneola, FL, to consider a request from **Grassy Lake Holdings, LLC**, a Florida limited liability company, for a site plan for approximately 14.52 acres generally located east of US Highway 27 and south of Citrus Grove Road.

The Minneola City Council will hold a public meeting on **Tuesday, October 6, 2026 at 6:30 p.m**. at the Minneola City Hall 800 North U.S. 27, Minneola, FL, to consider the request.

The staff report on the case shall be sent to the City Council and will be available to the general public at least five (5) days prior to the meeting on the case.

A person who decides to appeal any decision made by any board, agency, or council with respect to any matter considered at such meeting, will need a record of the proceedings. For such purposes, any such person may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is based (Florida Statutes, 286.0105).

The City of Minneola Land Development Code is available for inspection at the City Hall, 800 North U.S. 27, Minneola, FL, during normal working hours 8:00 a.m. to 5:00 p.m.

PERSONS WITH DISABILITIES NEEDING ASSISTANCE TO PARTICIPATE IN ANY OF THESE PROCEEDINGS SHOULD CONTACT KRISTINE THOMPSON, CITY CLERK AT (352) 394-3598, ext. 111, AT LEAST 48 HOURS BEFORE THE DATE OF THE SCHEDULED MEETING.

OwnerNam	OwnerAddr	OwnerCity	Owner Stat	OwnerZip
FIELDS EC	PO BOX 11	WINTER H	FL	32882-0113
GRASSY L	5832 WOO	BELL ISLE	FL	32809
GRASSY L	5832 WOO	BELL ISLE	FL	32809
OMBS LLC	PO BOX 12	CLERMON	FL	34712-0788
OMBS LLC	PO BOX 12	CLERMON	FL	34712-0788
OPEN DO(	17140 US H	CLERMON	FL	34715
ZAVY ENT	23825 INTE	SORRENT	FL	32776
CITRUS GI	15 CREEK	HILLSBOR	CA	94010
GHULAM [	9229 195TI	HOILLIS	NY	11423
DOORSAM	17350 US H	CLERMON	FL	34715-9272
FALZONE	17358 N US	CLERMON	FL	34715
QUINN CE	41634 CR 4	LEESDBUI	FL	34788
VISTA GR/	13940 ASH	MINNEOLA	FL	34715
CLEM CON	10800 CLA	LEESBUR(	FL	34788
CONGREG	12205 CITI	CLERMON	FL	34715
SCHMIDT I	6420 LU EI	GROVELA	FL	34736-9747
LAKE CO E	315 W MAI	TAVARES	FL	32778
PROFESSI	1200 NETV	EFFINGHA	IL	62401
DE NOYEL	3149 SCRL	OVIEDO	FL	32765
SOUTH LA	17335 US H	CLERMON	FL	34715-9220
DUKE ENE	PO BOX 37	CHARLKIC	NC	28237-7996

CITY OF MINNEOLA
CITY OF MINNEOLA
CITY OF MINNEOLA

CITY OF MINNEOLA
CITY OF MINNEOLA
CITY OF MINNEOLA

To: Joyce Heffington, AICP, Minneola CRA Administrator

From: Eric Raasch, AICP, Inspire Project Manager

CC: Gabriela Castro, AICP

Date: September 1, 2026

Reference: Minneola Commerce Center Traffic Study Review

MAPS has conducted a review of the Access Connection Permit Traffic Study Report for Greenberg Gibbons Light Industrial, dated July 2025, and prepared by Luke Transportation Engineering Consultants. The TIA should follow the methodology/guidelines defined in the Lake-Sumter MPO Traffic Impact Study Methodology and Guidelines (2022). Below are the comments regarding the TIA Report.

1. Background traffic from approved developments in the area or based on historical traffic growth should be applied up to the build-out period. The additional background traffic should be incorporated into the future traffic analysis.

2. Summarize planned improvements in the area up to the buildout year. Reference the Lake-Sumter Metropolitan Planning Organization (LSMPO) Transportation Improvement Program (TIP) and the Florida Department of Transportation (FDOT) 5-year Work Program. An improvement should be considered "programmed" for construction if construction funding is identified with the first 3 years of the Work Program/TIP.

3. Assess which roadways within and outside the one-mile radius are impacted by five percent (5%) of the project's peak hour trips compared to the roadway's two-way peak hour generalized service volume based on the adopted LOS and committed number of lanes as listed in the Lake County CMP Database. This analysis will determine the extent of the study area and if any additional intersections should be analyzed.

4. Include the traffic control timing sheets for the intersection of Citrus Grove Rd and US 27 in the Appendix.

To: GGW Flex Holdings, LLC

From: Eric Raasch, AICP, Inspire Project Manager

CC: Joyce Heffington, AICP; Tom Grimms, AICP; Gabriela Castro, AICP

Date: August 26, 2026

Reference: Minneola Commerce Center US N 27 (Inspire Case #240b)

We have conducted a third review of the **Site Plan** for the above-referenced project. This project is located in the PUD-C zoning district and Planned Unit Development Commercial Future Land Use category. The proposed Project ±13.4-acre development site will consist of 120,000 square feet (SF) of light industrial space in two buildings (76,250 SF and 43,750 SF). The applicant is also proposing a Future Land Use Map (FLUM) amendment and rezoning to PUD – Industrial with an associated updated Development Agreement that will determine the standards for review of this SP application. No site visit was conducted. The following review is based on the applicant's letter of response to staff comments, dated July 14, 2026.

Planning

General Comments

1. This application relies on the annexation of the FDOT stormwater pond within the U.S. 27 right-of-way. No application for annexation has been received at this time. *Inspire recommends that any recommendation on this SP application be contingent on the annexation.*

2. A portion of the subject property is owned by FDOT. *Please submit authorization from FDOT for this SP request.*

3. The applicant has submitted a proposed Development Agreement establishing revised land use, development, and site design standards for the property. The Development Agreement is currently under review and has not yet been approved. The Development Agreement and site plan applications may be processed concurrently; however, the current site plan cannot be approved based on standards contained in the proposed Agreement until the Agreement and all applicable associated entitlements become effective. *Inspire recommends that any approval of this Site Plan be contingent on the approval of the Development Agreement containing the standards that support the proposed site design. Any changes to the terms of the DA will require additional revisions and review of this SP.*

4. In response to a previous Inspire comment pointing to the absence of required concurrent applications, the applicant separately submitted a Future Land Use Map amendment and PD modification application. Inspire has reviewed these applications, together with the draft Development Agreement included in the resubmittal. Comments have been provided separately. *The applications may be processed concurrently, but Inspire defers to the City Attorney's Office on application sequencing.*

5. The total number of bays is not listed. It appears that Commerce Center 1 has 17 entryways and Commerce Center 2 has 10 entryways leading to the conclusion that the maximum possible bays is 17. *Please list the total number of bays on Sheet C3. This number will also be used as the maximum number of tenants.*

6. The applicant has acknowledged that a permit from FWC will be required. *Informational comment. No response is necessary.*

7. No sign package was provided with the second resubmittal. Directional and regulatory sign types and locations are noted on Sheet C3 of the first resubmittal. The applicant states that a complete sign package will be submitted with the building permits. However, Sec. 122.42(3)b.9. also requires "photographs or sketches of proposed signage with dimensions and material type" for site development approval. *Please provide the conceptual signage package for this project.*

CHAPTER 94, Development Standards

8. **Section 94-4(f)(6)** requires a minimum of three building design treatments. The applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. The submitted elevations do not appear to include any of the listed building design treatments. *Please refer to the options in this section and list or show the proposed design elements on the architectural plans.*

9. **Section 94-4(f)(7)b.** states that blank wall areas shall not exceed ten feet in the vertical direction, nor 20 feet in the horizontal direction of any primary facade. The applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. *Please provide dimensions for the blank wall area and reduce the area to comply if needed.*

10. **Section 94-4(f)(9)** requires variation in rooflines. **Subsection (9)b** states that at a minimum of two locations, the roof edge and/or parapet shall have a vertical change from the dominant roof condition, a minimum of two feet. At least one such change shall be located on a primary facade adjacent to a collector or arterial right-of-way. In response, the applicant states that architectural features are part of the building permit submittal, while building elevations are included with the draft DA. It should be noted that building elevations were submitted with the

first resubmittal, not with the draft DA. Additionally, the roofline appears to lack a height variation. *Please review the roof requirements and revise elevation plans to show height variation.*

11. **Section 94-4(f)(9)c** states that parapets shall be used to conceal roof top equipment and flat roofs. The applicant has provided a line-of-sight diagram showing a 2-ft parapet. However, the Architectural Package previously submitted has not been updated to include this diagram. *Please revise the schematic elevations to incorporate the proposed parapet around the roofline and the provided diagram.*

CHAPTER 110, Landscaping and Tree Protection

12. The applicant states that the landscape buffers were approved on the existing PUD. However, the applicant is in the process of amending the existing PUD to add more intense uses, which have historically necessitated larger buffers based on the City's code. *Please review Inspire's comments on the associated DA amendment regarding landscape buffer widths and revise as needed.*

13. **Section 110-7(a)** states that irrigation shall meet or exceed the criteria for the Florida Water Star certification program. The irrigation plan does not include Florida Water Star certification or applicable irrigation zones Sheet IR100 Note #5 states, "All zones to be low volume drip and bubbler zones". *Please provide a statement on the irrigation plan to state that it will comply with the Florida Water Star certification program and please include applicable irrigation zones on this plan.*

CHAPTER 122, Site Development

14. **Section 122-35** lists the required amount of off-street parking per use. Sheet C3 states that parking is provided at a rate of 1 space per 1,000 SF. It is unclear as to which use in the tables listed in this section was used to reach this rate. *Please define the uses being proposed and provide minimum parking spaces required.*

15. **Section 122-39(c)(2)a.** states that a standard parking space is 10' by 20' and Section 122-39(c)(2) states that reduced width and length may be acceptable if increased landscape and grass areas are included. Spaces have been revised to a size of 10' by 18', not 10' by 20' which are required. The applicant has provided 7' sidewalks instead of increased landscape area. *Inspire recommends providing the required 20' depth, as the current code only allows for reductions based on landscape areas, not pedestrian areas.*

Development Agreement

16. **Section 5** states the approved architectural design and colors. This section states that colors shall be earth tones and natural colors. The proposed color scheme is gray. The applicant states that architectural features are part of the building permit submittal and building

elevations are included in the draft DA. It should be noted that building elevations were submitted with the first resubmittal, not with the draft DA. *Please note that the proposed DA will need to be approved to support the proposed building colors.*

17. The land use plan exhibit states that mediterranean / Florida vernacular architecture shall be used. *Please note that the proposed DA will need to be approved to support the proposed building colors.*

Public Works

1. Comments pending.

Engineering

1. **Informational Comment, No Response Required.** The applicant is cautioned that the issuance of City approval does not relieve them of their responsibility from obtaining all other required regulatory approvals and permits. Other permits may include but are not limited to the following:

   FDEP NPDES Construction
   St. Johns River Water Management District (SJRWMD) ERP
   USFW Permit
   FDEP Water
   FDEP Sewer
   FDOT Driveway Connection
   FDOT Right of Way Utilization

2. **Comment Resolved.** The Geotech report provided does not appear to provide recovery analysis parameters such as horizontal conductivity (Kh) and vertical infiltration rate (Iv), safety factors, etc. It is unclear where the design values originate in the stormwater report.

   Applicant provided a revised Geotech report which includes the requested recovery analysis parameters.

3. **Deferred to Planning.** Overall zoning and land use requirements, allotted uses, recreational areas, setbacks, open space, densities, pedestrian access and trail requirements, roadway connection requirements, right-of-way dedication requirements, development agreement criteria, and all other overall approval criteria are deferred to Planning and City Attorney as applicable.

4. Parking spaces must be at minimum 10ft wide and 20ft long as described in LDC 122-35, except where two feet of grassed overhang is provided, in which case the length may be reduced to 18ft.

   Applicant has widened parking spaces to 10ft. They responded that "Their lengths are 18' since the adjacent monolithic sidewalks are 7' to account for 2' of overhang." Per LDC 122-39 (c)(2)b,

reduced length is only acceptable if two feet of grassy overhang is provided. The applicant responds that additional landscaping above code minimum has been provided adjacent to the proposed building. It is unclear if variance is requested for the parking space dimensions.

5. Public to private demarcation on the utility plan is recommended. The 12 inch potable water main adjacent to US 27 is understood to be public. The internal water main, fire line, lift station, and 2-inch force main is understood to be privately owned, operated, and maintained.

    a. **Comment Resolved.** *Applicant has added a callout on Detail A, Utility Plan Sheet C4.1, depicting the beginning of privately owned potable and fire lines. Ownership of the 2-inch force main is not identified.*

    Applicant has also added a callout detailing private ownership of force main, and increased the force main size from 2" to 3" on sheet C4.1.

    b. **Comment Resolved.** *It is unclear if the lift station is to be public or private. Additional comment may be generated upon clarification.*

    Applicant has added a callout and note detailing private ownership of lift station on sheet C4.1.

6. **Comment Resolved.** Note #3 on sheet C4.1 references the Gibson Place Utilities Department.
7. **Comment Resolved.** Material of proposed pipes (water, sewer, fire) not shown on utility plan.

    The applicant has identified the 3-inch force main as HDPE on sheet C4.1. The 3-inch force main is identified as privately owned.

8. **Comment Resolved.** Utility calculations (water, sewer) were not provided.

    Applicant has added utility calculations to sheet C4.1. Lift station calculations were provided. However, the standby diesel pump curves were not included. In addition, a standby diesel pump is provided on the City standard detail on C10.0, however, it is not shown in the site specific plan view on C10.0. Clarification on if the lift station is to be public or privately owned, operated, and maintained is required.

    Applicant has responded that because the lift station is privately owned, operated, and maintained, a standby diesel generator is not required.

9. **Defer to Fire Chief.** Fire flow calculations were not provided.

    Applicant has included fire flow calculations, added a hydrant, and moved two hydrants away from loading zones. Defer fire flow approval and fire hydrant spacing to Fire Chief.

10. **Comment Resolved.** Tie in locations for water and sewer should be called out on the utility plan.

    Applicant has added utility tie in callouts to sheet C4.1.

11. Additional north-south and east-west cross sections should be provided to verify site grading, proposed slopes, cut/fill, and other design elements.

    Applicant has added additional north-south and east-west cross sections as requested, however, 3:1 grading is shown. Grading shall not exceed 4:1 per LDC 122-85 (d)(5). ***It is unclear if the project PUD allows for 3:1 grading. Clarification required.***

12. **Comment Resolved.** Child prevention grates required on mitered end sections.

    Applicant has added child prevention grate call out and detail to sheets C6.0 and C8.0.

13. **Comment Resolved.** The 12-inch public potable pipe should be ductile iron under roadway crossings.

    Applicant has responded "Call outs added to Utility Plan; see sheet C4.1.", but Ductile Iron Pipe does not appear to be called out under paved areas.

    Applicant has called out DIP water main underneath the north entrance, and directionally drilled HDPE underneath the south entrance. A directional drill profile has been added on sheet C4.2.

14. **Comment Resolved.** Finished floor elevations of buildings not provided on grading plan.

    Finished floor elevations have been added to sheet C5.0.

15. Gopher tortoise observed on site. Mitigation required before construction on site begins.

    Applicant responded that "mitigation will be coordinated prior to construction." Defer to Planning and Certification of Occupancy (C.O.) process.

16. **Defer to Planning.** 8 parking spaces maximum without island, per LDC 110-3.

    Applicant responded "Please see note 1 on existing PD. It states the maximum number of spaces between islands is 20." Defer to Planning.

17. **Comment Resolved.** Missing a 12x8" reducer on the Potable water line in Detail A of sheet C4.1

    Applicant has added the 12x8" reducer on sheet C4.1.

18. **Defer to Public Works.** The applicant has provided a 15-foot utility easement along US 27. The city typically requests a 20-foot utility easement along US 27. Discussion recommended.

    Applicant has responded "The easement width was discussed with public works and engineering. Due to the property constraints and by purchasing the FDOT pond, which currently cannot be granted an easement, we agreed 15' is sufficient."

19. **Deferred to Traffic Consultant**. Defer traffic study review to Traffic Consultant.

20. New Comment. The applicant proposes a directional drill of the potable water line under the project driveway. Per previous DRC meeting, this was per FDOT requirements. FDOT rationale for the HDD is unclear. The HDD depth is 18'+ deep. The proposed utility easement is 15' wide. It is unclear how the City would access the line in the future if required. Discussion warranted.

Fire

1. Approved.

Lake County

1. Comments pending.

Inspire
PLACEMAKING COLLECTIVE

To: Joyce Heffington, AICP, Minneola CRA Administrator

From: Eric Raasch, AICP, Inspire Project Manager

CC: Gabriela Castro, AICP

Date: August 25, 2026

Reference: Minneola Commerce Center Future Land Use Map Amendment, PUD, and DA Amendment

We have conducted a review of the proposed Future Land Use Map (FLUM), Planned Unit Development rezoning and Development Agreement amendments for the above-referenced project. The site, located within the Minneola city boundaries and consisting of two parcels identified by Parcel Nos. 06-22-26-0003-000-06300 and 06-22-26-0003-000-04700, has an approximate area of 12.42 acres according to Lake County Property Appraiser data.

The request considered here is to amend the subject property's FLUM designation from PD-Commercial to PD-Industrial, and to amend the terms of the Development Agreement dated October 18, 2018, including PD standards. The new agreement is a substantive change to the previous development framework. The proposal shifts the project toward a shallow-bay industrial/flex-commercial development, substantially expands the use framework, changes the architectural character, modifies development standards, adds/redefines property, and extends the agreement term from 10 to 30 years. The proposal also incorporates a 1.199-acre FDOT parcel into the defined "Property", while the parcel remains publicly owned and outside the City limits. The applicant has expressed an intent to request annexation of the parcel. However, an annexation application has not been submitted at the time of this staff report.

Planning

General Comments

1. Staff has not received an annexation request for the FDOT pond. *Inspire recommends that any action taken be contingent on annexation of the FDOT pond parcel into the City*.

2. No Environmental Assessment or Traffic Impact Analysis was provided with this request. However, a listed species survey and FDOT driveway connection TIA were submitted with the associated Site Plan. *Please note that these studies will be considered and reviewed as part of the FLUM / PUD rezoning application.*

3. Please reconcile data across all applications or provide clarification, including:

a. The application states that the site size is 14.96 acres, but the Property Appraiser records for the two parcels indicate a combined acreage of 12.42 acres. The survey submitted with the application package does not provide confirmation of the covered acreage.

b. The application indicates the existing FLU designation as being PD-Commercial, which appears to be consistent with the most current version of the Future Land Use Map. However, the Development Agreement dated October 18, 2018, calls the designation of the property "Grassy Lake Holdings Mixed Use Commercial Development." *Please update the DA.*

c. The proposed Development Agreement includes a legal description that encompasses the 1.191-FDOT parcel, but the legal description provided on the topographic survey by Allen & Company dated 3/14/25 does not. *Please reconcile for consistency.*

Development Agreement

1. The recitals refer to approximately 13.32 acres within the city limits, but the first 2018 agreement covered approximately *12.31 acres*, not 13.32. *Please clarify/reconcile the difference*.

2. The DA is silent on the amount of square footage proposed for the project. *Please add the amount of proposed square feet by use.*

3. The new agreement expressly amends certain provisions of the original development agreement "while ratifying and affirming all remaining terms and conditions." However, the Conditions-precedent section has been removed entirely, rather than updated. The new agreement states that the owner has filed applications for annexation, rezoning, and comprehensive plan amendment for an adjoining 1.191-acre FDOT-owned parcel in unincorporated Lake County, and that the owner has "full power and authority to make, deliver, enter into, and perform pursuant to the terms and conditions of the proposed agreement without submitting an annexation application at this time. The applicant has submitted a warranty deed as providing evidence of ownership or authority, but it is unclear whether this includes the 1.191-acre parcel. *Please submit additional documentation or clarify that the proposed agreement establishes only a future development framework without granting any development rights prior to acquisition and completion of the required annexation, comprehensive plan amendment, and rezoning.* [NOTE: This is *not* a legal opinion; Inspire defers to the City Attorney's Office.]

4. The new agreement appears to retain the B-1/PD framework language but makes development subject to a new Land Use Plan and amended use/standards provisions; overall character is described as shallow-bay industrial and flex commercial. The Land Use Plan exhibit was not included as an exhibit to the DA document, but it is part of the overall application package. *We observe that the graphic (which appears to be from the 2018 approval, relabeled as "Minneola Commerce Center" and renumbered as Sheet "LUP-01") is annotated to show the proposed zoning to be "I-1 & B-1 with PD" under the Project Description, but only "I-1" in the Notes section, so please clarify the proposed zoning.*

5. The new agreement includes broad categories covering light industrial, warehousing, logistics, distribution, fulfillment, flex-space, manufacturing, wholesale, construction/contractor, R&D, office, showroom and service-commercial uses, plus specified NAICS sectors. Notably, the amendment permits all uses within Sectors 31–33, including food, beverage, textile, wood, printing, chemical, plastics/rubber, mineral products, fabricated metal, machinery, electronics, transportation equipment, furniture, medical devices and miscellaneous manufacturing. Specifically, the blanket authorization of NAICS Sectors 31–33 appears broader than the stated "shallow-bay industrial and flex commercial" character and includes uses with substantially different potential impacts, while relying primarily on visual screening doesn't address potential noise, odor, truck activity, vibration, or other operational impacts. *Inspire recommends limiting permitted manufacturing to enclosed, low-impact/light manufacturing and establishing performance standards; or shift to conditional review for the higher-intensity / higher-impact manufacturing uses.*

6. The new list of conditional uses focuses on commercial recreation, day care, gun range, kennel/pet care, laboratories/R&D, motor vehicle sales/repair, nurseries/home-building materials, shopping center, veterinary and similar uses. *Please confirm the status of previous commercial uses such as restaurants, hotels, drive-throughs, and residential-care which are no longer expressly identified and may not be covered by the similarity clause.*

7. The new agreement retains 50-ft height and 20% open space but removes the explicit 90% ISR cap. However, the Land Use Plan retains the 90% ISR cap. *Please clarify the proposed ISR.*

8. Section 5(i) of the proposed DA addresses setbacks. The applicant is proposing setbacks of 30' on the north, 30' on the east, 10' on the south and 50' on the west. These setbacks are generally consistent with the setbacks required in the City's most comparable I-1 District. *Informational comment only. No response required.*

9. Section 5(ii) of the proposed DA addresses landscape buffers. Sec. 110-3(b)(Chart A-1) outlines buffer area requirements by use. Per the chart, PUD buffering is to be reviewed individually with each application. The applicant is proposing I-1 uses and the adjacent properties are zoned B-1 (north), B-1 and Lake County A (east), Lake County CFD (south), and B-1, Utilities, Lake County C-2 (west across US 27 ROW). Based on these designations, the site would warrant a Class C buffer (30') on the north, a Class C buffer (30') on the east, a Class D buffer (30') to the south, and a Class C buffer (30') to the west. The applicant is proposing a 0' buffer on the north (due to an access easement), a 10' buffer on the east, a 10' buffer on the south, and a 10' buffer on the west. *Inspire recommends increasing these buffers due to the increased intensity of the proposed uses.*

10. Section 5(iii) of the proposed DA addresses building height. The applicant is proposing a maximum building height of 50', which exceeds the maximum height of 35' feet for I-1 zoned property. While not prohibited, this information will be presented to City Council for review. *Informational comment only. No response required.*

11. **Section 5(v)** of the proposed DA addresses quantity of off-street parking. **LDC Sec. 122-35(b)(4)** outlines the City's minimum parking requirements. The applicant is proposing parking at a ratio of 1 parking space per 1,000 square feet of gross floor area. Due to the number of proposed permitted uses, the extent that this ratio deviates from code is unknown. For example, the City's parking requirement for manufacturing is 1 parking space per 600 SF of floor area dedicated to manufacturing, please the required parking square footage devoted to other uses (i.e. office). The applicant's request also includes all B-1 uses, some of which have significantly higher parking requirements than 1 space per 1,000 SF. For example, restaurants require 1 space per 2 seats, plus one space per 2 employees. *Inspire recommends reducing the amount of requested uses and providing a parking study to justify the requested reduction.*

12. **Section 5(v)** of the proposed DA addresses the maximum number of parking spaces between landscape islands. **LDC Sec. 110-3(a)(1)** states that the maximum number of uninterrupted spaces between landscaping areas is eight. The applicant is proposing 20 spaces between landscape islands. *Inspire recommends revising the agreement to reduce the number of spaces between landscape islands to a maximum of eight.*

13. **Section 5(v)** of the proposed DA addresses parking space sizing. **LDC Sec. 122-39(b)** states the minimum parking space size within the City. Standard parking spaces shall be 20' long. The applicant is proposing a minimum parking space depth of 17', provided an adjacent sidewalk or pedestrian area of sufficient width is provided to accommodate vehicle overhang. *Inspire recommends compliance with the City's standard parking space requirements, and notes that pedestrian areas should remain unobstructed from vehicles.*

14. **Section 6(i)** of the proposed DA includes building materials. The change in architectural character is appropriate to the proposed industrial/flex use; however, the revised standards provide limited direction regarding building massing, façade articulation and architectural quality. Please note that all architectural treatments will need to comply with **LDC Sec. 94-4**. *Informational comment only. No response required.*

15. **Section 6(iii)** of the proposed DA requests the use of a TPO roof for this project. Per the **LDC Sec. 94-4(f)(9)c.4** tile or metal shall be the dominant roof material. This deviation will be presented to City Council. *Informational comment only. No response required.*

16. **Section 16** of the proposed DA requests the ability to permit grading changes of 16' in lieu of 15'. This deviation will be presented to City Council. *Informational comment only. No response required.*

Comprehensive Plan

1. **FLU Policies 1-1.1.3 and 1-1.1.4** include compatibility standards for residential and non-residential development. *Please provide a narrative that addresses how the proposed FLUM is consistent with the City's Comprehensive Plan policies and compatible with the surrounding land uses.*

2. **FLU Policy 1-1.7.1** requires land use activities to occur on soil types capable of supporting the structures and facilities proposed to be placed on them, Table 1-1 stipulates which land uses are deemed suitable or unsuitable for each soil type. *Please provide a soils map with the proposed land uses to demonstrate compliance with FLU Policy 1-1.7.1.*

3. **FLU Policy 1-3.1.2** requires proposed amendments to the comprehensive plan to demonstrate that all facilities and service capacities are currently available or shall be available after the implementation of scheduled capital improvements, to meet general needs of the proposed land use. *Please provide a public facilities analysis.*

4. **CONS Policy 5-1.3.1** provides standards for maximum impervious surface area by use. *Please provide additional detail regarding proposed uses for the project and demonstrate compliance with the maximum ISR consistent with CONS Policy 5-1.3.1.*

Public Works

1. No comments. Defer to Planning Division.

Fire

1. No comments.

Lake County

1. Pending response.

Engineering

1. Pending response.