CITY COUNCIL
ZEPHYRHILLS, FLORIDA

Monday, June 22, 2026
6:00 PM

Please join the GoToMeeting
from your computer, tablet or smartphone:
https://meet.goto.com/855960693
or dial in using your phone:
+1 (646) 749-3122- Access Code: 855-960-693
(Please mute your phone unless you wish to speak on a specific item)

Zephyrhills City Hall **Council Chambers**

Call to Order — Council President Steven F. Spina, Ph.D.
Roll Call — City Clerk Ricardo Quiñones
Invocation — Kendall Deford, First Nazarene Pastor
Pledge of Allegiance —

CITIZEN COMMENTS

MAYOR

1 Discussion on Tampa Bay Regional Planning Council

2 Discussion on Water Use - Jones Edmunds
1. City of Zephyrhills-Future-Watr Supply-Final -Executive Summary
2. City of Zephyrhills-Future-Watr Supply-Final -Attachment A
3. City of Zephyrhills-Future-Watr Supply-Final -Attachment B
4. City of Zephyrhills-Future-Watr Supply-Final -Attachment C
5. City of Zephyrhills-Future-Watr Supply-Final -Attachment D
6. City of Zephyrhills-Future-Watr Supply-Final -Attachment E

7. City of Zephyrhills-Future-Watr Supply-Final -Attachment F
8. City of Zephyrhills-Future-Watr Supply-Final -Attachment G
9. City of Zephyrhills-Future-Watr Supply-Final -Attachment H

1. CONSENT ITEMS

1.1 City Council Meeting Minutes - June 08, 2026
1. 06.08.2026 CCM Minutes

1.2 Piggyback Agreement **41-2026-12** with Killebrew Inc. for As Needed Utility Construction Services
1. 41-2026-12 Piggyback Agreement with Killebrew (39844378v2)_signed

1.3 Amendment 3 to DEO Grant Agreement HL258 **(24-24-03)**, Zephyr Park Improvements
1. Agreement_HL258-A3_City_of_Zephyrhills

2. PUBLIC HEARING

2.1 Stormwater Assessment
Second Reading Ordinance No. 1522-26 **" AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, PASCO COUNTY, FLORIDA, CREATING A STORMWATER UTILITY AND A CITYWIDE STORMWATER NON-AD VALOREM ASSESSMENT BY CREATING CHAPTER 57 OF THE CODE OF ORDINANCES; RELATING TO THE PROVISION OF STORMWATER MANAGEMENT SERVICES; DETERMINING THAT CERTAIN REAL PROPERTY WILL BE SPECIALLY BENEFITED; ESTABLISHING THE METHOD OF IMPOSING AND COLLECTING THE ASSESSMENT; PROVIDING FOR CODIFICATION; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.**
A. Council President opens Public Hearing
B. Council President closes Public Hearing
C. City Council considers Ordinance No. 1522-26 on the Second Reading
1. Ordinance 1522-26 Stormwater Assessment

2.2 Data Center Moratorium
Second Reading Ordinance No. 1523-26 " **AN ORDINANCE OF THE CITY OF ZEPHYRHILLS, FLORIDA ESTABLISHING A TEMPORARY MORATORIUM ON THE ACCEPTANCE, PROCESSING, REVIEW, APPROVAL, OR ISSUANCE OF BUILDING PERMITS, REZONINGS, SITE PLANS, CONDITIONAL USE APPROVALS, VARIANCES, COMPREHENSIVE PLAN AMENDMENTS, OR OTHER CITY APPROVALS FOR THE CONSTRUCTION, ESTABLISHMENT, EXPANSION, OR INTENSIFICATION OF DATA CENTERS, DATA CENTER FACILITIES, LARGE-SCALE DATA CENTERS, AND LARGE LOAD CUSTOMER FACILITIES WITHIN THE MUNICIPAL LIMITS OF CITY OF ZEPHYRHILLS; PROVIDING LEGISLATIVE FINDINGS OF FACT; PROVIDING DEFINITIONS; DIRECTING CITY STAFF TO REVIEW AND PREPARE LAND DEVELOPMENT CODE AND RELATED REGULATORY AMENDMENTS; PROVIDING FOR SEVERABILITY, REPEALER, AND AN EFFECTIVE DATE. "**
A. Council President opens Public Hearing
B. Council President closes Public Hearing
C. City Council considers Ordinance No. 1523-26 on the Second Reading

1. Ordinance 1523-26 Data Centers Moratorium (39722228v3)
2. Data Center - Business Impact Estimate

2.3 Food Truck Ordinance
Second Reading Ordinance No. 1524-26 **" AN ORDINANCE OF THE CITY OF ZEPHYRHILLS, FLORIDA, AMENDING THE CITY OF ZEPHYRHILLS CODE OF ORDINANCES, REPEALING AND REPLACING SECTION 121: MOBILE FOOD VENDING; AMENDING THE REGULATIONS OF MOBILE FOOD OPERATIONS; ESTABLISHING REGULATIONS FOR TEMPORARY OR AUXILIARY KITCHENS ASSOCIATED WITH BARS OR TAVERNS; PROVIDING FOR APPLICABILITY, REPEALER, SEVERABILITY, INCLUSION IN THE CODE, SCRIVENER'S ERROR AND AN EFFECTIVE DATE. "**

A. Council President opens Public Hearing
B. Council President closes Public Hearing
C. City Council considers Ordinance No. 1524-26 on the Second Reading

1. 39848211v2 - Ordinance 1524-26 Food Truck Ordinance
2. Ordinance 1524-26 Food Truck Ordinance - Redline

2.4 Industrial Sign Ordinance
Second Reading Ordinance 1525-26 "**AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA CREATING SECTION 8.17.00 OF THE LAND DEVELOPMENT CODE, LARGE-FORMAT INDUSTRIAL BUILDING SIGNAGE; PROVIDING FOR REPEALER, CODIFICATION, SEVERABILITY, AND AN EFFECTIVE DATE. "**

A. Council President opens Public Hearing
B. Council President closes Public Hearing
C. City Council considers Ordinance No. 1525-26 on the Second Reading

1. Ordinance 1525-26 - Industrial Sign Oridnance (39750792v1)

3. BUSINESS ITEMS

3.1 Stormwater Assessment Rates
Resolution No. 871-26 **" A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA, REGARDING THE ESTABLISHMENT OF STORMWATER UTILITY ASSESSMENT RATES. "**

1. 39848701v2 - Resolution 871-26 - Stormwater Assessment Rates

3.2 Stormwater Assessment Mitigation Credit
Resolution No. 872-26 **" A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA, APPROVING THE STORMWATER UTILITY ASSESSMENT MITIGATION CREDIT POLICY MANUAL AND PROVIDING AN EFFECTIVE DATE. "**

1. 39848567v3 - Resolution 872-26 - Stormwater Assessment Mitigation Credit
2. Exhibit A - Zephyrhills_MitCred_PolicyMan _draftv2
3. Appendix A - Zephyrhills SWU Credit Application_draft_v2
4. Appendix B -Zephyrhills SWU Credit Recertification Application_draft_v2

3.3 Approval of agreement # **37-2026-02** - Legal Counsel Engagement Agreement for Conflict Counsel - Trask Daigneault, LLP

1. 2026-06-17 Zephyrhills - TD LLP Engagement Agreement

4. CITY MANAGER'S REPORT

    4.1 Water Video - Neptune

MAYOR ANNOUNCEMENTS

CITY MANAGER ANNOUNCEMENTS

CITY ATTORNEY ANNOUNCEMENTS

CITY COUNCIL COMMENTS

5. NOTED ITEMS

    5.1 Kimley-Horn Work Order - 6109 16th Street Stormwater Analysis

        1. KimleyHorn Work Order 26-178 6109 16th Street

ADJOURN

*** PLEASE NOTE: This is a Public Meeting. Should any interested party seek to appeal any decision made by the Council with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceeding is made, which record includes the testimony and evidence upon which the appeal is to be based. F.S. 286.0105. If you are a person with a disability which requires reasonable accommodation in order to participate in this meeting, please contact the City Clerk at 813/780-0000 at least 48 hours prior to the public hearing. A.D.A. and F.S. 286.26.**

Action Item

MAYOR 2

Discussion on Water Use - Jones Edmunds

Issue:

Mr. Mike Clark will provide a summary of the water report they conducted and provide a water status overview.

Background:

Attachment(s):

1. City of Zephyrhills-Future-Watr Supply-Final -Executive Summary
2. City of Zephyrhills-Future-Watr Supply-Final -Attachment A
3. City of Zephyrhills-Future-Watr Supply-Final -Attachment B
4. City of Zephyrhills-Future-Watr Supply-Final -Attachment C
5. City of Zephyrhills-Future-Watr Supply-Final -Attachment D
6. City of Zephyrhills-Future-Watr Supply-Final -Attachment E
7. City of Zephyrhills-Future-Watr Supply-Final -Attachment F
8. City of Zephyrhills-Future-Watr Supply-Final -Attachment G
9. City of Zephyrhills-Future-Watr Supply-Final -Attachment H

Fiscal Impact:

Staff Recommendation:

TECHNICAL MEMORANDUM

Future Water Supply Feasibility Assessment

TO: John Bostic, III; CJ Funnell

FROM: Mike Clark, PE; Ken Fraser, PE

DATE: May 5, 2026

PROJECT No.: Jones Edmunds Project No. 26110-069-01

Kenneth Acie Fraser, State of Florida, Professional Engineer, License No. 57452
This item has been digitally signed and sealed by Kenneth Acie Fraser on the date indicated here.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

1 EXECUTIVE SUMMARY

This Technical Memorandum (TM) documents the planning-level feasibility of future water supply capacity alternatives to support long-term growth for the City of Zephyrhills.

The objectives of this TM are as follows:

1. Identify technically viable and permittable future water sources to meet potable water needs.
2. Characterize and quantify infrastructure needs (i.e., new pipelines, pump requirements, etc.) and costs for alternatives to facilitate decision-making.
3. Summarize findings.

Jones Edmunds worked with City staff to identify and evaluate two alternatives to augment the City of Zephyrhills' potable water supply:

- **Alternative 1 – Water Supply from Citrus Springs Utility, LLC (Dade City):** Obtain water supply from Citrus Springs Utility (former Dade City citrus packing plant) by acquiring one of Citrus Springs Utility's wells and associated equipment/land. In subsequent discussions, the Citrus Springs Utility team proposed that Well #15 is used for this alternative.

- **Alternative 2 – Construct New Wells:** Construct two new wells at City-proposed locations. Liquid Solutions Group (LSG), Jones Edmunds' subconsultant, prepared a TM evaluating this withdrawal capacity based on the Southwest Florida Water Management District (SWFWMD)-Wide Regional Model (DWRMv4).

Both alternatives were evaluated for hydraulic compatibility with the City's water system, regulatory feasibility of the alternative, and planning-level costs. The table in Section 5 presents these parameters to facilitate a comparative assessment and implementation roadmap.

2 EVALUATION OF PIPELINE ROUTES AND HYDRAULIC COMPATIBILITY

Constructing a new 12- or 16-inch transmission pipeline will be required for both alternatives based on hydraulic modeling performed by Jones Edmunds. The preliminary hydraulic modeling results are summarized in this section. Attachment A provides a more detailed evaluation. Figure 2-1 illustrates each of the route alternatives, and Table 2-1 summarizes the modeling results. The following pipeline route options have been identified:

- **Alternative 1A:** Purchase/lease one well from Citrus Springs Utility and construct a pipeline route along Old Lakeland Highway. The proposed pipeline route would run from existing Well #15 at the Citrus Springs Utility facility along the Old Lakeland Highway to connect into the City of Zephyrhills water system at the intersection of Old Lakeland Highway and Richland Road (+/- 35,775 feet).

- **Alternative 1B:** Purchase/lease one well from Citrus Springs Utility and construct a pipeline route along US 301. The proposed pipeline route would run parallel to Dade City water mains from existing Well #15 at the Citrus Springs Utility facility along minor roads through Dade City until intersecting with US 98/301, following the US 98/301 corridor going south until intersecting with the existing interconnect pipeline where US 301 splits from US 98 (+/- 21,184 feet). Since Dade City currently owns the interconnect pipeline from the US 98/301 intersection to the high-service booster pump station demarcation point, we expect that the City of Zephyrhills would negotiate acquiring and purchasing this section of pipe. The City could then sell water to Dade City (valving at the high-service booster pump station would need to be configured to allow flow to lower elevations) or purchase water from Dade City as needed (the high-service booster pump station is currently intended to boost pressures when pumping from Dade City to Zephyrhills). Figure 2-1 addresses the Alternative 1B connection into the existing City of Zephyrhills water system in the high-pressure zone. Figure 2-1 notes that this alternative will flow through the pressure valve, which will ensure water pressures conform to Zephyrhills' requirements.

- **Alternative 2:** Construct two new wells at or near City-proposed locations (Enterprise Road) pending property purchase availability and construct a pipeline route from the new wells to connect into the existing City of Zephyrhills water system at the intersection of Old Lakeland Highway and Richland Road (+/- 18,521 feet).

Jones Edmunds performed the hydraulic analysis to identify the recommended diameter of the transmission pipeline and the required pump horsepower. Table 2-1 summarizes these results. Pipe sizing and pumping analysis was based on a well-capacity rate of 1,042 gallons per minute (gpm) for Well #15 (Attachment A provides all assumptions). Alternative 1B recommends a booster pump. The elevation difference and extended transmission distance results in pressure losses that the water well pump alone cannot overcome. The booster pump supplements the system pressure to maintain service requirements at downstream locations. In Alternatives 1A and 2, preliminary well pumps have been selected that provide sufficient pressure to convey the water to the City system.

Figure 2-1 Transmission Pipeline Routes

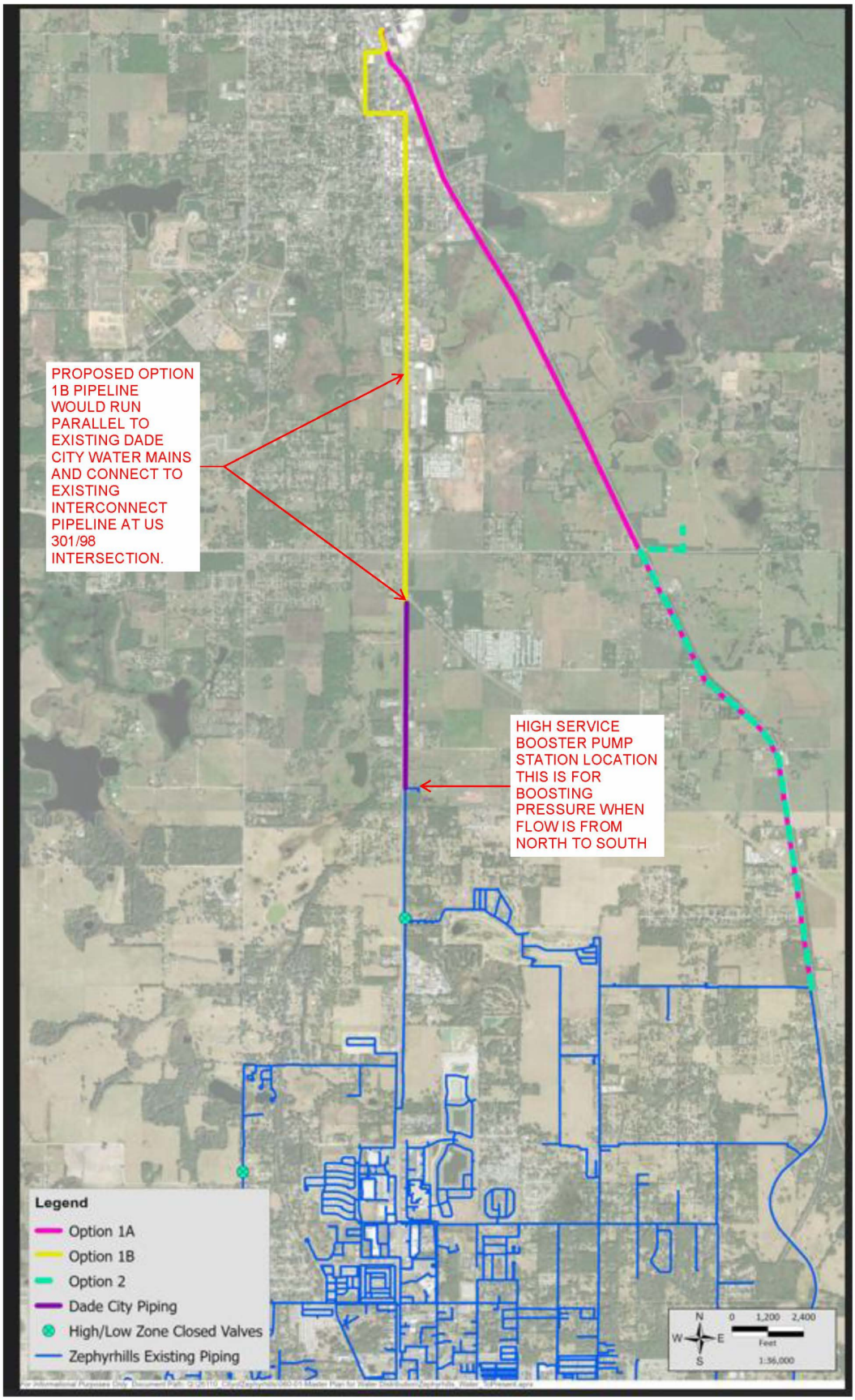


Table 2-1 Hydraulic Analysis Results

Alternative	Modeled Pipe Route Distances (LF)	Recommended Pipe Size (inch)	Design Flow (gpm)	Recommended Pump Horsepower
1A	35,775	16	1,042	64
1B	21,184	12	1,042	61 58*
2	18,521	12	1,042	60

Note: * = Alternative 1B recommends a booster pump in addition to the well pump. The provided horsepower is for the proposed booster pump.

3 ALTERNATIVE 1 — WATER SUPPLY FROM CITRUS SPRINGS UTILITY (DADE CITY)

For Alternative 1, the City of Zephyrhills would purchase or lease one Citrus Springs Utility well, equipment, and required land. This TM does not delineate the details of this acquisition.

3.1 STATUS OF EXISTING CITRUS SPRINGS UTILITY WELL

To determine the status of the existing Citrus Springs Utility well, Citrus Springs Utility has provided the following information:

- **Aquifer Performance Test (APT) documents:** Citrus Springs Utility has contracted for APT using the existing wells. The APT was accomplished via three steps: (1) preparing the APT Plan dated May 2025 by Creative Environmental Solutions, Inc. (CES), (2) APT results emailed on March 5, 2026, prepared by CES, and (3) APT results Citrus Springs Utility emailed on April 2, 2026, prepared by William Sale Partnership Ltd. (WSP). Attachment B provides these data.

- **Well #15 Analytical results:** Attachment C provides the June 4, 2024, Advanced Environmental Laboratories analytical results for the Primary and Secondary Drinking Water Standards.

- **US Geological Survey Water Resources Investigation 80-33:** the US Geological Survey and SWFWMD, prepared this investigation report, which focuses on the Dade City area and more specifically withdrawals from the Citrus Springs Utility LLC (former Lykes-Pasco) facilities. Attachment D provides this information.

- **SWFWMD Water Use Permit (WUP) #451:** Attachment E provides Permit No. 20 000451.005, which permits 3.514 MGD for industrial and commercial use.

Jones Edmunds also performed a site visit at the Citrus Springs Utility. Attachment F presents the field notes and photographs from the site visit. On reviewing these various documents and following the site visit, the Citrus Springs Utility wells appear to be viable and stable.

3.2 PERMITTING

The Citrus Springs Utility SWFWMD WUP #451 would need to be modified to transfer Well #15 to the City of Zephyrhills WUP #6040. The City would need to provide documentation and demonstrate a need for additional capacity over the current WUP #6040-permitted allocation of 4.493 MGD.

Jones Edmunds did not find issues with the analysis or presented conclusions while reviewing the Citrus Springs Utility-provided APT results. However, the APT results are only one step in the overall process of permitting additional withdrawals. We expect that SWFWMD would require groundwater modeling to evaluate potential impacts to water resources and existing users for withdrawals above the current permitted amount of 3.514 MGD. Accordingly, some next steps should include coordinating the evaluation with SWFWMD to confirm the analysis and verify the appropriate model, (i.e., SWFWMD's DWRM or others). The model to be used should be reviewed to confirm that it is consistent with the test data presented or Citrus Springs Utility may propose modifying the model parameters based on the test results. Ultimately, the well appears to produce water with minimal drawdown, but we assume that Citrus Springs Utility will still need to do the steps to quantify impacts to water resources and existing users. We expect that SWFWMD will require the groundwater modeling to show no greater than 0.049 foot of drawdown to minimum flows and levels (MFLs). The APT report also indicated that the results suggest that the confinement may be weak, discontinuous, or influenced by leakage from overlying units; therefore, additional wetland monitoring may be needed to support additional withdrawals.

To construct well pumps and piping, disinfection facilities, high-service booster pump stations, and pipelines to connect to the City of Zephyrhills system, Florida Department of Environmental Protection (FDEP) construction permits will need to be obtained.

In addition, Florida Department of Transportation (FDOT), Dade City, and Pasco County rights-of-way (ROWs) construction permits will need to be obtained for pipeline construction along ROWs. Additional permits may be required on further review and project definition.

3.3 PLANNING-LEVEL COST ASSUMPTIONS

Attachment H provides detailed engineers opinions of probable construction costs (EOPCC) for Alternatives 1A and 1B. The opinion of probable costs provided in Section 5 is based on the order-of-magnitude using +/- 50 to 100 percent typical for a Class 5 estimate as described in the Association for the Advancement of Cost Engineering publication *AACE International Recommended Practice No. 18R-97*. The EOPCC includes the following elements:

- Acquisition (cost to obtain property)
- Well Head Construction (includes below-ground and above-ground improvements)
- Pipeline/Conveyance (includes pipe/fittings/well pumps/booster pumps)
- Contingency

The table in Section 5 compares EOPCC for each Alternative. For Alternative 1, we have assumed that the existing Well #15 infrastructure will not need to be upgraded or replaced.

4 ALTERNATIVE 2 — CONSTRUCT NEW WELLS

Alternative 2 involves the preliminary analysis for constructing up to two new wells at a proposed site on Enterprise Road. The precise location of any new wells would be determined by the availability of property and negotiations by the City to obtain the property. Jones Edmunds has contracted LSG to evaluate hydrogeological elements (groundwater modeling), identify permitting requirements, and prepare a TM for Alternative 2. Portions of the TM are presented below, and Attachment G contains the entire TM.

Groundwater modeling was completed to evaluate the potential quantities that can be withdrawn from the new wellfield without impacting the Hillsborough River Groundwater Basin (HRGWB). SWFWMD's DWRM was used to evaluate the additional water that could be withdrawn from the proposed property without drawdown greater than 0.049 foot at the HRGWB. Modeling completed as part of the previous WUP renewal and modification shows that the City's existing wells have reached the maximum allowable withdrawal from the HRGWB.

Figure 4-1 shows the proposed property, the HRGWB, and the refined model grid. The wells in the model were updated to include transferring the allocation from the agricultural wells to the City as part of the Modification Application for Permit No. 6040.012. The transfer allows the City to withdraw 1.185 MGD from former Agricultural Well 3381-1, which is listed as SWFWMD ID (DID) No. 19 in WUP 6040.012.

Three options were evaluated for the proposed property. Option A assumes that the City will continue to use the withdrawal as permitted in the WUP with additional withdrawals from the proposed property. Option B evaluated transferring 1.185 MGD from DID No. 19 to the proposed property. Option C evaluates shifting some of the withdrawal from DID No. 19 to the proposed property but retains the use of DID No. 19. Table 4-1 summarizes the withdrawal quantity simulated for each option.

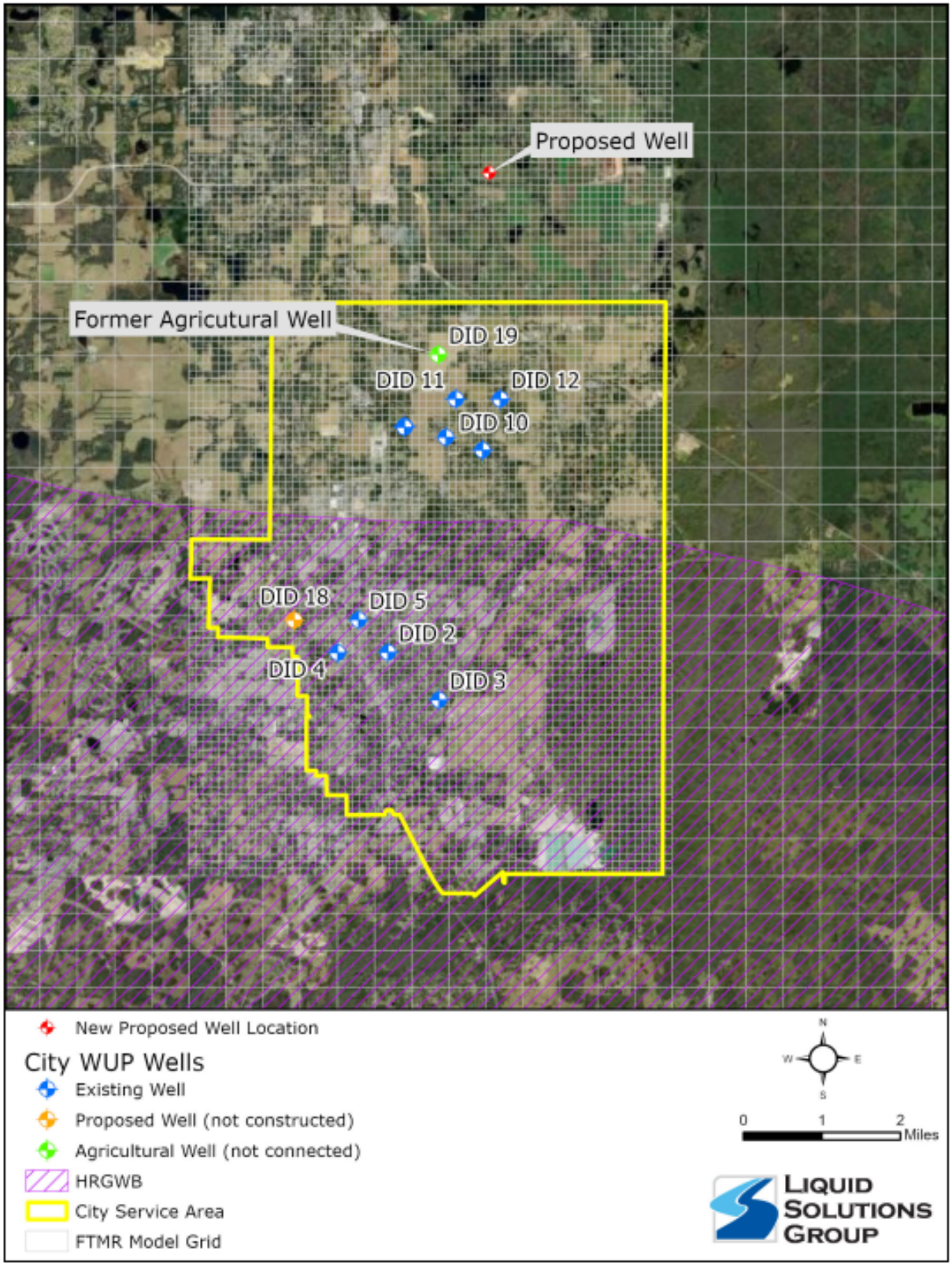
Table 4-1 Modeled Withdrawals

Withdrawal Description	Option A Withdrawal Quantity (gpd)	Option B Withdrawal Quantity (gpd)	Option C Withdrawal Quantity (gpd)
Agricultural Well 3381	1,185,500	0	400,000
Proposed New Wells	5,500	1,785,500	1,190,000
Total Pumping	1,191,000	1,785,500	1,590,000
Potential WUP Increase	5,500	600,000	404,500

Note: gpd = gallons per day.

The model only evaluates potential impacts to the HRGWB because historically this has been the greatest constraint. If the City decides to pursue one of the options, additional assessment will be needed to evaluate peak flows and potential impacts to existing users, lakes, and wetlands.

Figure 4-1 Groundwater Model Grid



4.1 PERMITTING

If the City chooses to construct a new well at the Enterprise Road location, an application to modify WUP #6040 would need to be submitted to SWFWMD. The application would need to meet the conditions for issuance in Chapter 40D-2.301, FAC. The City would need to provide documentation of water demand and demonstrate a need over the City's current permitted allocation of 4.493 MGD.

FDEP construction permits would be needed to construct well pumps and piping, disinfection facilities, high-service pump stations, and pipelines to connect to the City of Zephyrhills system.

In addition, FDOT and Pasco County ROW construction permits would be needed for pipeline construction along the ROWs. Additional permits may be required on further review and project definition.

4.2 PLANNING-LEVEL COST ASSUMPTIONS

Attachment H provides a detailed EOPCC for Alternative 2. The EOPCC provided in Section 5 is based on the order-of-magnitude, using +/- 50 to 100 percent typical for AACE Class 5 estimates. The EOPCC includes the following elements:

- Acquisition (cost to obtain property)
- Well Head Construction (includes below-ground and above-ground improvements)
- Pipeline/Conveyance (includes pipe/fittings/well pumps/booster pumps)
- Contingency

The table in Section 5 provides an EOPCC for each alternative.

5 REPORT SUMMARY

Two alternatives were evaluated to meet the City of Zephyrhills additional water supply needs. Alternative 1 involves purchasing or leasing existing wells from Citrus Springs Utility LLC in Dade City. Well #15 has reported capacity of approximately 1.5 MGD, and preliminary review indicated that the well is stable, although further verification is recommended. This option would require modifying SWFWMD WUP #451 to transfer wells to the City's WUP #6040, along with FDEP permits and ROW approvals.

Alternative 2 proposes constructing two new wells at a site on Enterprise Road. Groundwater modeling performed by LSG indicated withdrawals ranging from 1.191 to 1.785 MGD under three scenarios, with additional evaluations needed for peak flows and environmental impacts. Permitting would include a WUP modification, FDEP construction permits, and ROW approvals.

Table 5-1 summarizes an AACE Class 5 EOPCC for each alternative, and Attachment H provides details.

Before implementation, additional investigations such as water blending analysis and hydrogeologic evaluation (among others) should be performed for the selected alternative to verify groundwater compatibility with the City's active water supply.

Table 5-1 Comparison of Opinions of Probable Cost

Cost Category	Alternative 1A	Alternative 1B	Alternative 2
Division 1 Items*	$1,854,810	$1,072,815	$885,595
Acquisition	$480,000	$480,000	$240,000
Well Head Const/Mods	$960,000	$960,000	$1,680,000
Pipeline/Conveyance	$8,586,000	$4,359,300	$2,867,100
Contingency	$1,188,100	$687,200	$567,300
Rounded Total	**$13,070,000**	**$7,560,000**	**$6,241,000**
Class 5 (-50%)	**$6,600,000**	**$3,800,000**	**$3,200,000**
Class 5 (+100%)	**$26,200,000**	**$15,200,000**	**$12,500,000**

Note: * = Division 1 items include general conditions, maintenance of traffic, stormwater pollution prevention plan, and startup and testing. Numbers as provided are based on engineering opinion.

6 ATTACHMENTS

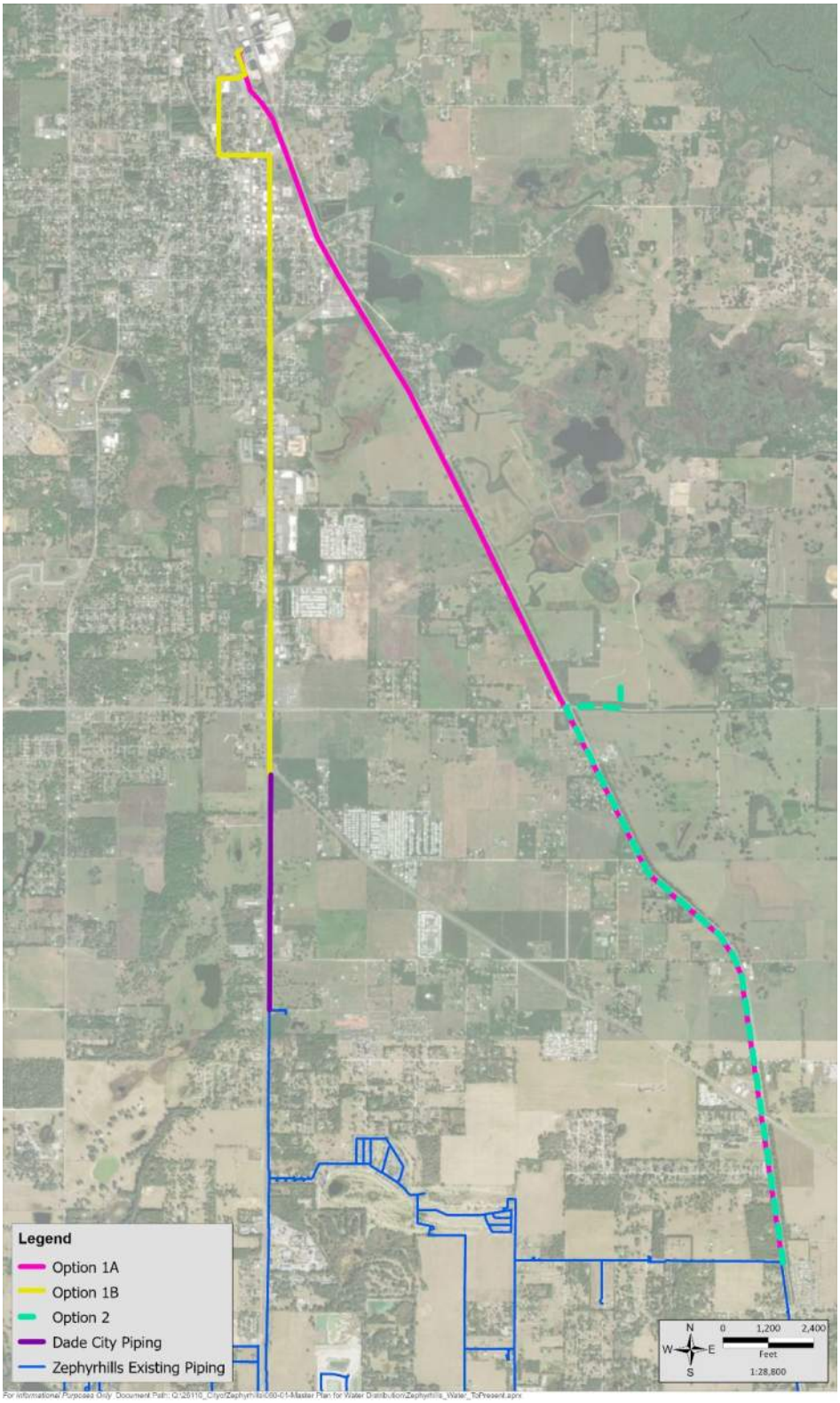
- **Attachment A:** Hydraulic Modeling Results
- **Attachment B:** Aquifer Performance Testing
- **Attachment C:** AEL Laboratory Analysis
- **Attachment D:** USGS Investigation 80-33
- **Attachment E:** SWFWMD Permit 451-007
- **Attachment F:** Site Visit Notes and Photos
- **Attachment G:** LSG Groundwater Modeling
- **Attachment H:** Opinion of Probable Cost for Alternatives Evaluated

Attachment A

Hydraulic Modeling Results

Zephyrhills Well Locations – Modeled Results

Routing Map:



Modeled Routes Distances

Option 1A: ~35,775 Linear Feet of piping

Option1B: ~21,184 Linear Feet of piping

Option 2: ~18,521 Linear Feet of piping

Assumptions

- Pump sizing is based off the assumption that water will be available at ground surface
    - Preliminary pumps are modeled as high service pump stations with storage tanks at grade.
    - Once aquifer water levels are known, the hp required to bring water from the aquifer to the surface can be determined. Once this is known, the following options for pumping water into the system are:
        - Option 1: Use one high hp pump from the aquifer into the existing system
        - Option 2: Use one pump from aquifer to storage tank at surface; use one pump from storage tank at surface to the system (model results below are just the pump from water storage at surface to the system)
            - Cost analysis between these two options is the likely key driver once more information is known
- Pipe sizing calculations assume a pressure output of 80 psi
- Flow from well assumed to be 1,500,000 gallons per day (value provided by Citrus Springs Utility for Well #15).
    - Flow is modeled at a consistent flow of 1042 gallons per minute
- Target pressure @ end of proposed piping:
    - Option 1A and 1B: 65 psi
        - Modeled data shows pressure range of 57-67 psi on average day demand scenarios and 54-65 psi on maximum day demand scenarios at the desired connection point
    - Option 2: 80 psi
        - Zephyrhills Water superintendent (CJ Funnel) confirmed typical pressure at Zephyrhills/Dade City interconnect (point of connection) is around 80 psi
- Hp calculations based on assuming 75% efficiency
- The booster pump station in scenario 1B is assumed to be an inline booster pump

Results Tables:

Pipe Sizing Results					
Scenario	Pipe size (inches)	Target pressure @ endpoint (psi)	Modeled pressure @ endpoint (psi)	Modeled Velocity (feet/second)	With BPS?
1A	12	65	34	2.95	No
	16	**65**	**65**	**1.66**	**No**
1B	12	80	47	2.95	No
	16	80	66	1.66	No
	12	**80**	**83**	**2.95**	**Yes**
2	**12**	**65**	**71**	**2.95**	**No**

Note: Bold rows represent recommended pipe sizes.
Booster Pump Station (BPS)

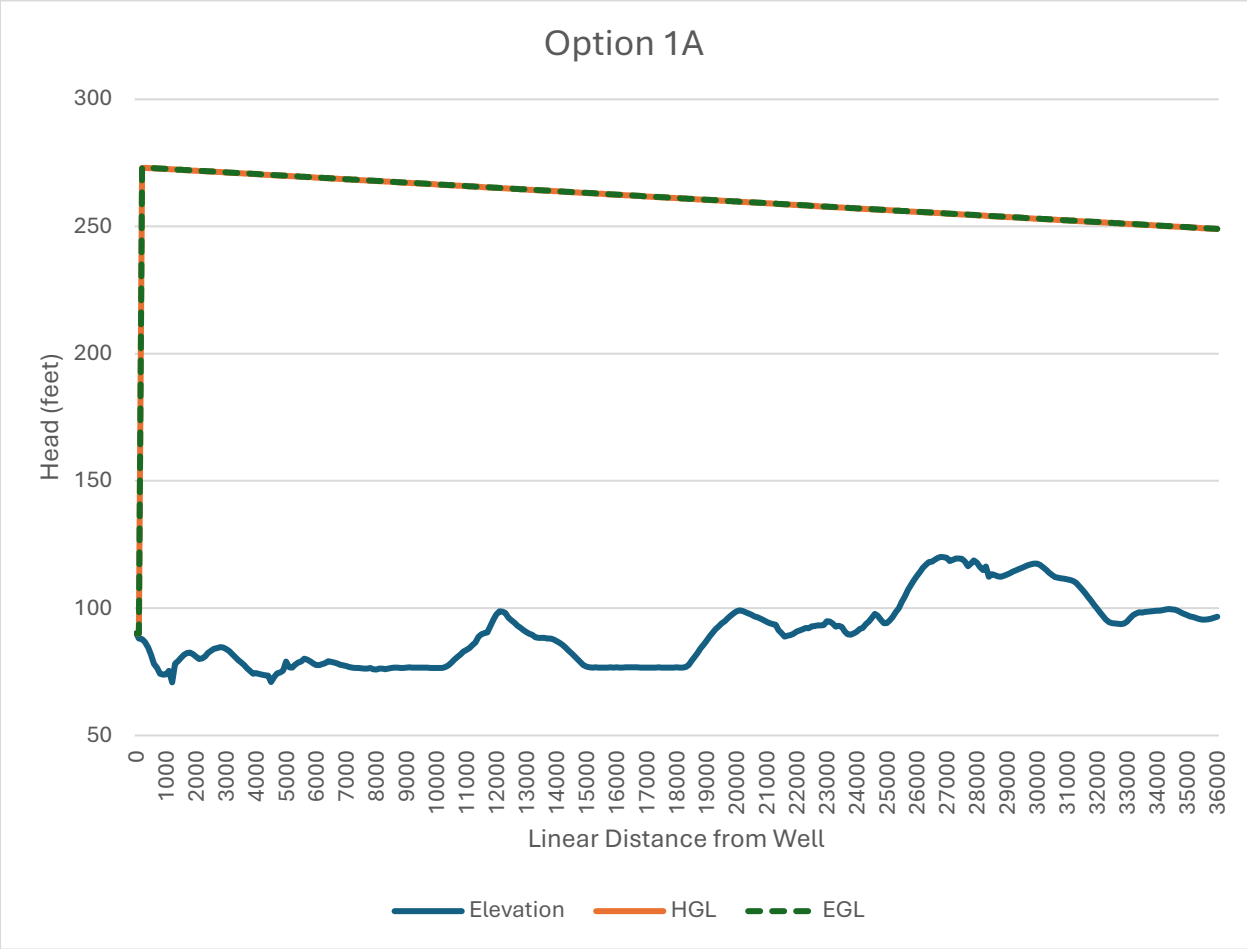
Pump Sizing Results						
Scenario	Design flow (gpm)	Pumps Required	Design head (feet)	Calculated hp	Output psi	Discharge psi
1A	1041.67	High Service	183	64	80	66
1B	1041.67	High Service/Booster	165/81	58/28	72/66	30/80
2	1041.67	High Service	172	60	75	66

Note: Scenarios shown are based on the respective pipe diameters selected above.

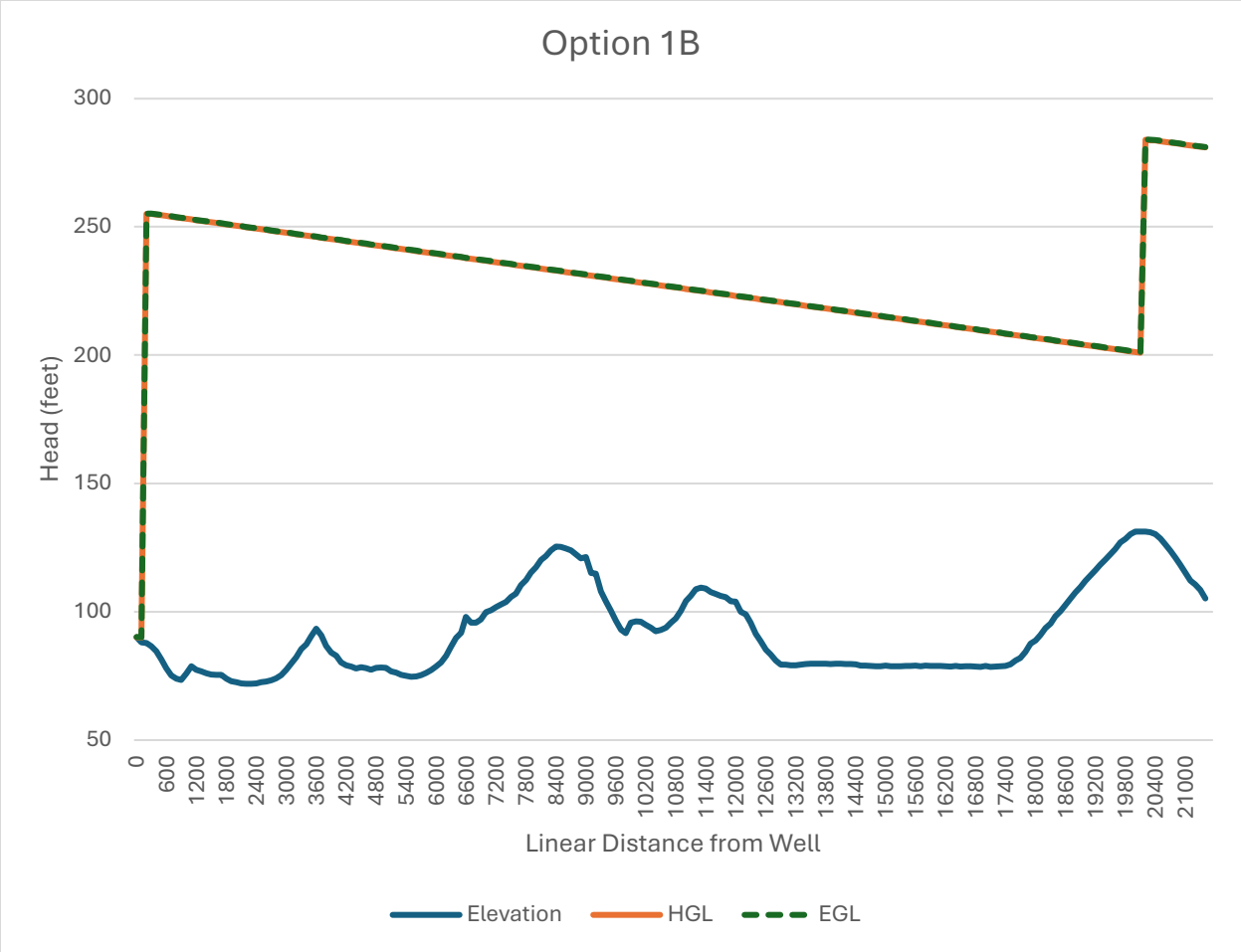
As shown in the table above, the column labeled “Pumps Required” identifies two types of pumps used in the alternatives: high service pumps and booster pumps. A high service pump takes water from the ground storage tank at the surface (assuming water has been brought from the aquifer to the surface) and delivers it into the system, providing the initial pressure required for distribution. A booster pump, on the other hand, does not draw water from a tank; in addition to the high service pump, an inline booster pump is required to increase pressure when system demands or elevation changes cause pressures to fall below acceptable levels.

In the alternative requiring a booster pump, the elevation difference and extended transmission distance result in pressure losses that the high service pump alone cannot overcome. The booster pump supplements system pressure to maintain service requirements at downstream locations. In the other alternatives, the high service pump provides sufficient pressure to convey the water without additional boosting.

Hydraulic Grade Lines



Option 1A requires the highest pump horsepower among the alternatives because the high service pump alone must overcome the longest transmission distance—approximately 35,775 feet—without assistance from a booster station. While the elevation gain along the route is modest (around 6 feet), the extended pipeline length introduces significant friction losses. To maintain the target pressure of 65 psi at the tie-in point, the high service pump must operate at a higher design head, which drives the need for a larger horsepower rating compared to Option 1B. This scenario demonstrates that distance, rather than elevation, is the primary factor influencing pump sizing for this option.



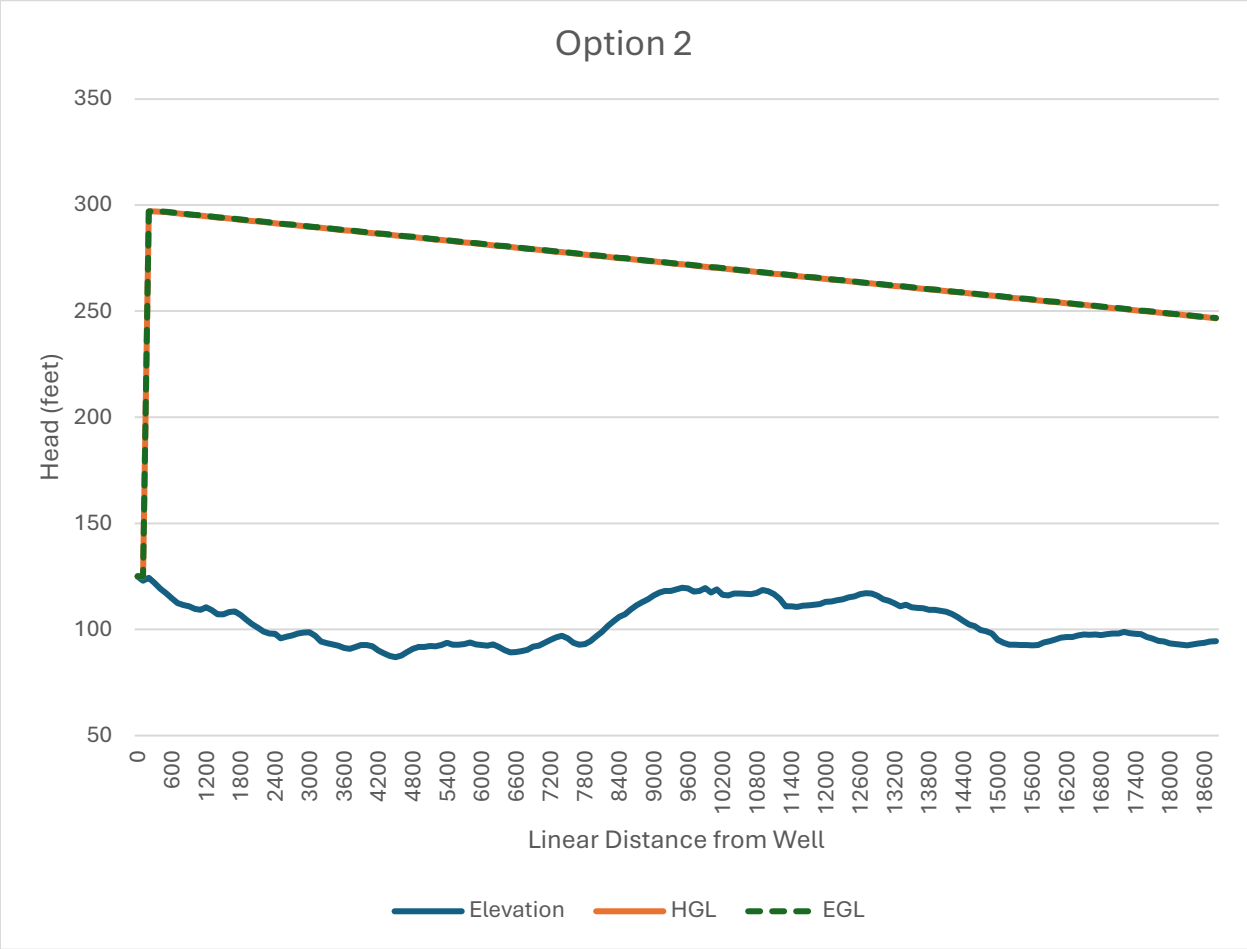
Option 1B presents the greatest elevation gain of the three alternatives, which significantly impacts system hydraulics. To achieve the required 80 psi at the interconnect without imposing excessive discharge pressure at the well, a booster pump station is incorporated into the design. This configuration allows the high service pump to operate at a lower discharge pressure, as its role is primarily to deliver water to the booster station rather than directly to the tie-in point. The booster pump then adds the necessary head to meet system requirements downstream.

Assumptions for Existing Booster Station and Interconnect Operation:

- The interconnect is assumed to operate at approximately 80 psi on both sides, based on confirmation from Zephyrhills Water staff.
- Hydraulic grade resets at the interconnect, ensuring water enters the Zephyrhills system at 80 psi regardless of downstream conditions.

- The booster station is assumed to function automatically, supplementing system pressure when demand or elevation changes cause pressure to fall below acceptable levels.
- Existing Dade City piping to the interconnect is assumed serviceable; if not, additional pipeline extension costs would be required.

This division of work between the high service pump and booster pump explains why the horsepower requirements for Option 1B are lower than those for Option 1A, despite the greater elevation gain.



Option 2 benefits from the greatest elevation decline among the alternatives, which minimizes pressure loss along the route. This favorable topography allows the high service pump to operate at a relatively lower discharge pressure while still meeting the target pressure at the tie-in point. As a result, pumping requirements for Option 2 are less demanding compared to Options 1A and 1B, making it hydraulically efficient from a pressure-loss standpoint.

Attachment B

Aquifer Performance Testing

AQUIFER PERFORMANCE TEST PLAN
CITRUS SPRINGS UTILITY
DADE CITY, PASCO COUNTY, FLORIDA
MAY 2025

1.0 INTRODUCTION

Citrus Springs Industrial Holdings, LLC (CSIH) and Citrus Springs Utility, LLC (CSU) plan to perform an aquifer performance test (APT) to obtain hydrogeologic data at their Property as part of a feasibility study to determine the quantity of water potentially available from the Upper Floridan Aquifer in this area. CSIH has engaged the services of Creative Environmental Solutions, Inc. (CES) and Technical Pump Service (TPS) to conduct the APT on existing wells on the CSIH and CSU property known as the "Dade City Industrial Center" located in Dade City, Florida. CSU currently holds a Water Use Permit No. 451.007 for 3.514 million gallons per day (MGD) average annual quantity. The intent is to conduct a 14-day aquifer performance test (APT) using existing Upper Floridan Aquifer production and monitor wells.

2.0 PHYSICAL SETTING

The address of the Property is 14900 US 301, Dade City, Pasco County, FL. A location map is attached. The property on which the proposed pumping well is situated is owned by CSU. The CSU parcel, which is 3.84 acres, is surrounded by land owned by CSIH. The proposed monitor wells and the water discharge locations are on the CSIH property, which is 323.8 acres. Deeds for property owned by CSU and CSIH are attached.

The relevant portions of the Lacoochee and Dade City USGS Quadrangle Maps (USGS, 1960) are attached. The CSU parcel and a portion of the CSIH land are situated in Section 22, Township 24 South, Range 21 East. The balance of the CSIH land is in Sections 23, 26 and 27 to the east, southeast and south, respectively.

The pumping well is situated at approximate elevation 90 feet NAVD88. The surrounding land varies in elevation from approximately 70 to 100 feet. The pumping well is on the edge of hill and the land slopes generally downward to the east into a broad wetland.

3.0 HYDROGEOLOGIC FRAMEWORK

3.1 Hydrology

The developed portion of the Property is all paved. It is served by a stormwater collection system consisting of strategically located drains and underground pipes made of concrete. All stormwater is collected in the storm drains and routed to the east of the industrial park via two separate drainage pipes. The southern drainage pipe carries the water to the southeast, where it discharges into the Dade City Canal approximately ¼ mile away from the pumping well. The northern drainage pipe carries the water to the northeast, where it discharges to the same canal approximately ¼ mile away. The canal conveys the water in a northeasterly direction for approximately 2.7 miles to Mud Lake. The Dade City

Canal and Mud Lake are clearly visible on the Lacoochee quadrangle map. Much of the area through which the ditch passes is wetland and within the floodplain of the Withlacoochee River. Mud Lake, which is really a marsh, is on land owned by the Southwest Florida Water Management District (District).

There are no constructed stormwater treatment ponds on the property or nearby that serve the property. A stormwater permit has not been issued for the property since its development pre-dates the creation of the permitting program.

2.2 Hydrogeology

Pasco County is characterized by a veneer of undifferentiated Recent/Pleistocene sand and clay deposits lying upon a thick sequence of older limestone units. According to the Geologic Map of Pasco County (Arthur, 1993), the uppermost geological unit in the area of the Property is the Hawthorn Group, consisting primarily of sandy clays. A detailed discussion of the hydrogeology of Dade City area can be found in USGS Water-Resource Investigation 80-33.

The nearest District ROMP location is ROMP 90, approximately 2 miles east of Dade City at an approximate elevation of 76 feet. The wells here penetrated undifferentiated sands and clays to 28 feet, then the Suwanee Limestone from 28 to 35 feet, the Ocala Group Limestones from 35 to 164 feet, and the Avon Park Limestones from 164 to 665 feet. The Floridan aquifer in the project area is comprised of the Suwannee, Ocala and Avon Park limestone units. The potentiometric surface maps of the District show the elevation of the surface to be between 70 and 80 feet NAVD88. Groundwater flow appears to be generally toward the north.

There may be a perched or very thin surficial aquifer at this location. Monitor well borings and soil borings were advanced in 1995 at the Former Ed's Tire facility located at 15012 US 301, approximately 400 feet east of the site at an approximate elevation of 95 feet. The borings encountered fine sand grading to clayey sand, then sandy clay, then "fat" clay, and finally limestone. Solid limestone was found at 48 feet deep, and fragments of limestone were mixed with the overlying clay in places. The water table across the site at the time averaged approximately 25 feet deep, which would be approximately 75 feet in elevation. The limestone unit encountered would presumably be the Suwannee.

3.0 WELL CONSTRUCTION SUMMARY

The wells in the following table are proposed for use in the APT. Well construction details, as known, are included in the table.

Table 1. Well Construction Summary

Well ID	Total Depth (feet)	Casing Material	Casing Diam. (in)	Casing Depth (feet bls[1])	Open/ Screened Interval (feet)	Distance from Pumping Well (feet)	Description
15	408	steel	16	250	158	0	Test production well
9	69	steel	unk	unk	unk	33	Shallow monitor well
1 or 2[2]	462	steel	unk	unk	unk	168/187	Pick one in bldg
13	466	steel	unk	unk	unk	415	UFA monitor well
12	461	steel	10	250	211	61	Active production well that supplies the industrial park
ROMP 90 Avon Park	665		8	424	241	12,000	Background well
ROMP 90 Ocala	160		8	62	98	12,000	Background well

1 Below land surface (bls)

2 The driller will select Well 1 or Well 2 during test setup based on ease of access

The onsite well locations are shown on Figure 1. The background wells (ROMP 90) are approximately two miles to the east of the site. It is presumed that the background wells are outside of the zone of influence of the APT.

4.0 AQUIFER PERFORMANCE TESTING

A short (several hours) pre-test will be conducted to ensure the equipment is functioning properly and to confirm that the water discharge pathways are adequate. The actual pumping rate to be used for the APT will be determined during the pre-test. The formal APT will commence no sooner than the following day and until the aquifer recovery stabilizes from the pre-test.

4.1 Permitting

The discharge water will be routed to a permitted stormwater system, so an NPDES permit will not required.

4.2 Pumping

The pumping well is currently idle and equipped with a turbine pump without a motor. A new motor will be installed and tested. If the pump is in good working order it will be used for the APT. If not, a new turbine pump will be installed and used for the APT. Power to the pump will be provided by connecting to the onsite electrical grid. A check valve/backflow preventer and a stainless-steel sampling port will be installed. A flow meter and gate valve will be installed on the discharge line near the well. The well is expected to be pumped at an estimated rate of 1,500 gallons per minute (GPM) for 14 days. It is expected that a total volume of approximately 30 million gallons will be pumped over the course of the 14-day APT.

At the end of 14 days, the pump will be turned off. None of the pumping or monitoring equipment will be removed from the wells during a 7-day recovery period.

4.3 Discharge Water Conveyance

The onsite storm drainage system, shown on Figure 2, will be used to manage the water generated during the APT. The subterranean drain pipes that make up the drainage system are 36 inches in diameter. The Dade City Canal into which the drain pipes discharge is generally 10 to 15 feet deep and 15 to 25 feet across. It is anticipated that 100% of the discharge can be easily conveyed offsite via this drainage network.

Water pumped from the well for the APT will be routed to one or both of the two storm drains near the pumping well via 6-inch diameter flexible hoses. Sediment control measures (e.g., hay bales) will be installed where the drain pipes empty into the canal.

4.4 Monitoring

Well 12, which supplies the industrial park, will be allowed to operate during the period of the APT. The volume of water pumped from Well 12 will be recorded with the flow meter that is already in place. Water level changes due to Well 12 pumping will be recorded during the APT pre-test period for use in detrending water levels observed during the test.

The flow from Well 15 (the APT pumping well) will be recorded with the temporary flow meter. The pumping records will be collected each day.

Groundwater levels will be measured continuously using pressure transducers with automatic data loggers in the test production well, shallow and UFA monitor well(s) listed in Table 1. Monitoring will commence at least one week prior to conducting the pre-test. The transducers will continue to collect data for at least 7 days after the pump is turned off.

Manual water levels will be collected daily in the same wells (except the background well) beginning at the start of the test and will continue until the end of the 7-day recovery period.

Water quality samples will be collected daily from the stainless-steel port on Well 15. The samples will be analyzed in the field for conductivity using a Horiba U-5000 model water quality meter. The meter will be calibrated each day in accordance with the manufacturer's instructions. Applicable FDEP SOPs will be followed during the sampling and analysis of the water samples.

Rainfall data from Station ID: US1FLPS0010 will be downloaded at the completion of the APT. The station location is 1.8 miles west-southwest of the site.

The water levels for the two wells at ROMP 90 will be downloaded at the completion of the test.

4.5 Analysis of Results

Preliminary graphs of water-level changes in selected wells will be maintained throughout the test to provide information regarding the test status.

An effort will be made to detrend and correct the data for external influences not related to pumping of the test well that are observed in the data collected from the background wells and from pre- and post-test monitoring in the test well.

Corrected data representing groundwater level changes during the test will be used to analyze for aquifer parameters, including transmissivity, storativity, and leakance. Based on test conditions, the appropriate aquifer test analytical methods will be selected and used (Driscoll, 1986).

5.0 POTENTIAL TEST-RELATED IMPACTS

5.1 Discharge Water Pumping

The flexible hoses that carry the water to the storm drains, the storm drains themselves, and the discharge points into the canal will all be inspected at least once per day during the APT to make sure there are no leaks or backups. It is not practical to inspect the full length of the canal, but where the canal passes through or beside land owned by CSIH it will be inspected for blockages that might be created by fallen trees, bank collapses, etc. The site owner has heavy equipment onsite to remove any obstructions that might develop.

In the unexpected event that some portion of the subterranean storm drain system cannot handle all of the discharge water, excess water will be diverted to the stormwater system owned by CSIH and operated by Dade City Utilities that is on the south end of the site. Pumps turn on automatically as needed. That water is pumped to Dade City Canal.

The APT will be discontinued if flooding is observed or appears to be imminent.

5.2 Noise

Noise is not expected to be an issue. The pump will be powered by a connection to the grid, so there will be no generator noise. The site is within an industrial complex sandwiched between a major highway to the west and an active rail line to the east. The site is surrounded by commercial and industrial uses. The closest homes are approximately 900 ft to the southwest.

All work will comply with applicable laws and County ordinances pertaining to noise. The APT will be discontinued if noise becomes an issue.

5.3 Nearby Wells

According to information in the District's Well Construction Permit Database, there are multiple domestic wells and several public supply and irrigation wells in the four sections encompassing and surrounding the subject site. A table of well construction details is in Appendix A.

In the event that a nearby resident or owner reports that a domestic, irrigation or public supply well has been potentially impacted during the 14-day APT, an analysis can be performed using water level data collected during the test to determine if test pumping adversely impacted the well in question. Impacts determined to be test-related will be mitigated. Reports of mitigation investigations, findings, and activities will be provided to the District. If complaints are received regarding discharge water or noise during the tests, they will be investigated and mitigated, if appropriate, in a timely manner.

6.0 REPORTING

The APT procedures and findings will be summarized in a written report that will be provided to the District within 90 days of completion of the test. The report will include, at a minimum, the following:

- well locations
- APT procedures
- data collection methods
- analytical methods
- raw test-related data
- detrended water level data
- aquifer drawdown calculations
- conductivity data

The report will be sealed by a Florida professional geologist (PG).

7.0 SCHEDULE

The APT start date is expected to be within two weeks of District approval of the APT Plan. Written notice will be provided to the District's Resource Regulation Director at least 7 days prior to the APT.

8.0 REFERENCES

Arthur, J.D,, 1993. Geologic Map of Pasco County, Florida: Florida Geological Survey Open-File Map Series 42, Scale 1:126,720

Driscoll, F. G., 1986. Groundwater and Wells. Second Edition. Johnson Division, St. Paul, Minnesota. 1089 p.

FIGURES

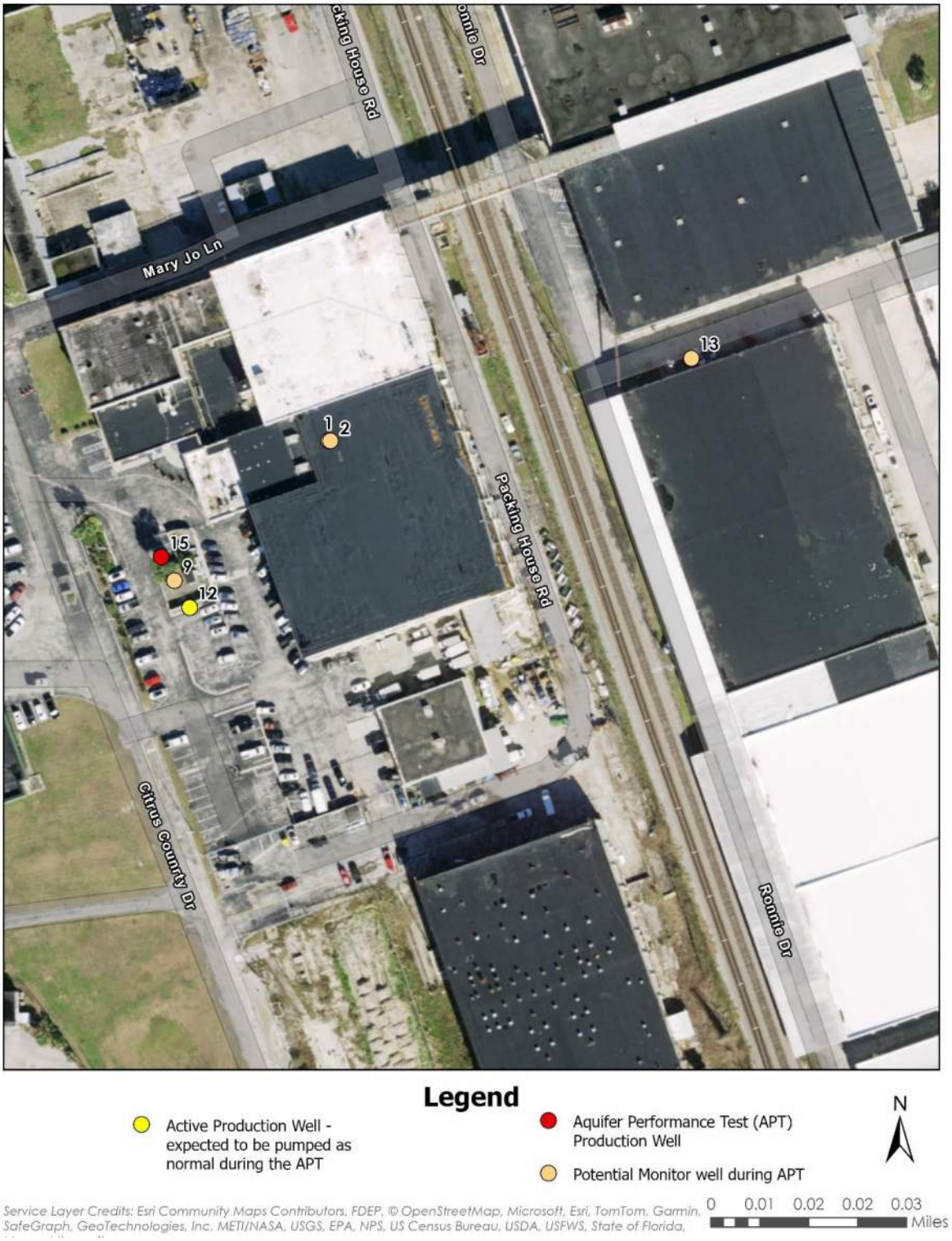


Figure 1: Onsite Well Locations and ID No

Figure 2: APT Water Routing Diagram

APPENDIX A

SWFWMD WELLS CONSTRUCTED DETAILS

WcpApplicationId	Permit #	Owner	Well Location Street	Well Use	Section	Township	Range	Diameter	Static Water Level	Casing Depth	Well Depth
12600	305896	Stephens, Jimmie G	517 GASKIN RD	DOMESTIC	22	24	21	4		210	240
15922	307960	C Dasher	NO ADDRESS	DOMESTIC	22	24	21	4	19	274	335
17322	309587	E Madill	NO ADDRESS	DOMESTIC	22	24	21	6		105	180
17582	309898	No Name - Do Not Modify	NO ADDRESS	DOMESTIC	22	24	21				
15191	310585	C Chavez	NO ADDRESS	DOMESTIC	22	24	21	4	60	130	190
20150	311513	J R Rivers	NO ADDRESS	DOMESTIC	22	24	21	4	60	84	160
25793	317965	B P Smith	NO ADDRESS	DOMESTIC	22	24	21	3	24	58	65
24605	320043	Merles Equi	NO ADDRESS	DOMESTIC	22	24	21	3	15	75	85
33281	327950	H Boltin	NO ADDRESS	DOMESTIC	22	24	21	4	25	84	145
34367	329233	P Nelson	NO ADDRESS	DOMESTIC	22	24	21	4	50	82	155
34506	329372	D H Mutters	NO ADDRESS	DOMESTIC	22	24	21	4	17	92	108
37226	331206	Pat Bass	NO ADDRESS	DOMESTIC	22	24	21	4	80	84	150
34831	331572	Maur Hobson	NO ADDRESS	DOMESTIC	22	24	21	4	60	320	335
39793	335606	Gill,Jean G	NO ADDRESS	DOMESTIC	22	24	21	4	75	147	245
40237	336117	Potter D	NO ADDRESS	DOMESTIC	22	24	21	3	12	63	84
57598	352454	Sid Larkin & Son, Inc.	203 EAST SOUTHVI	DOMESTIC	22	24	21				
62126	353718	A M Sanchez	PO BOX 1007	DOMESTIC	22	24	21	4	52	83	115
59347	359989	Ross, Frank	700 GASKING AVE	DOMESTIC	22	24	21	4	25	42	80
90480	389825	Worley, Woodrow	605 GASKIN AVE	DOMESTIC	22	24	21	3	30	84	100
138094	433667	Brown, Rodney E.	1939 LEMACK ROA	DOMESTIC	22	24	21	4	68	100	120
141176	434121	King, Jim	186 LEMAC RD	DOMESTIC	22	24	21	4	62	84	110
129445	443932	Terry, William	1825 LEMAC ROAD	DOMESTIC	22	24	21	4	78	95	120
121948	449132	Mathis, John	1705 LEMAC ROAD	DOMESTIC	22	24	21	3	60	84	137
147007	464572	Picket, Alfred	520 WEST BRANCH	DOMESTIC	22	24	21	5	15	60	100
208053	532531	Rubby Norris	1111 HILL RD	DOMESTIC	22	24	21	4	27	80	115
212935	534152	William J Ross	BOX 2415 N 301	DOMESTIC	22	24	21	4	24	63	120
199230	536667	Phillip Allen	1808 LEMACK ROA	DOMESTIC	22	24	21	4	87	126	185
235255	548211	Norma Norris	15119 HILL ROAD	DOMESTIC	22	24	21	4	32	120	150
236446	570046	Christopher S Bahr	SKYRIDGE CIRCLE	DOMESTIC	22	24	21	4	116	189	305
264280	585167	Donald J Lee Christine Lee	39652 RIVER RD	DOMESTIC	22	24	21	4	42	105	193
274571	602278	Linda F Mitchel	15912 LEMACK RD	DOMESTIC	22	24	21	4	63	80	155
275191	615752	Pioneer Florida Museum Assoc., In	15602 PIONEER MI	DOMESTIC	22	24	21	4	55	82	140
283522	626928	Gabriel Mancuso	15838 HWY 301 N	DOMESTIC	22	24	21	4	26	72	120
293161	643757	Anna Maria Carrillo	37353 BRANCH AV	DOMESTIC	22	24	21	4	12	50	80
297839	645202	General Home Development Corp.	PARCEL A HILL RD	DOMESTIC	22	24	21	4	40	86	120
93142	384330	Oakley Properties, Inc / Attn: Rona	PO BOX 4170	IRRIGATION	22	24	21	10	49	120	320
20402	316542	H S Massey	NO ADDRESS	PUBLIC SUPPLY	22	24	21	4		63	64
20403	316543	Massey Gr	NO ADDRESS	PUBLIC SUPPLY	22	24	21	4	38	63	110
104852	416279	Pro Dev Corp	714 EAST MERIDIA	PUBLIC SUPPLY	22	24	21	4	20	90	125
15926	307964	W Terrie	NO ADDRESS	DOMESTIC	23	24	21	4	67	81	125
14889	310255	T Stevens	NO ADDRESS	DOMESTIC	23	24	21	4	70	84	130
32021	330098	R L Lovett	NO ADDRESS	DOMESTIC	23	24	21	4	63	105	112
68893	363027	Bedgood, J. R.	1934 LEMACK RD	DOMESTIC	23	24	21	4	85	117	135
106052	409518	Floyd, Terrell	RT 4 BOX 181	DOMESTIC	23	24	21	4	25	42	90
131898	431813	Brown, Rodney E.	1939 LEMACK ROA	DOMESTIC	23	24	21	4	68	65	100
180690	495679	Jackson, Tammy	3876 LEMAC RD	DOMESTIC	23	24	21	4	78	90	150
184511	503353	Nunez, Ernie	1622 AUTON RD	DOMESTIC	23	24	21	4	20	165	195
170537	506378	Throwek, Mae	1902 N LEMACK RI	DOMESTIC	23	24	21	4	75	120	160
223534	557584	Chad Douberley	1905 LEMACK ROA	DOMESTIC	23	24	21	4	85	140	220
237947	570460	Bill Terrie	15971 LEMACK RD	DOMESTIC	23	24	21	4	74	120	160
260734	576414	Phyllis Sparks	15970 LEMACK RD	DOMESTIC	23	24	21	4	82	120	160
261011	584019	Janet Chapman	15983 LEMACK RD	DOMESTIC	23	24	21	4	72	105	150
307227	654433	Sparkman, J. C.	38971 SPARKMAN	DOMESTIC	23	24	21	4	53	120	200
147797	478665	Sparkman, E. B.	1451 SPARKMAN R	IRRIGATION	23	24	21	4	24	65	235
14466	304915	Prater, F E	PO BOX 6	DOMESTIC	26	24	21	4	28	63	100
25682	317842	T Anderson	NO ADDRESS	DOMESTIC	26	24	21	3	18	42	44
33274	327943	F J Collura	NO ADDRESS	DOMESTIC	26	24	21	4	70	105	150
32308	330409	F J Collura	NO ADDRESS	DOMESTIC	26	24	21	3	13	49	60
34702	331443	F E Prater	NO ADDRESS	DOMESTIC	26	24	21	4	36	63	100
34894	331635	W F Hooks	NO ADDRESS	DOMESTIC	26	24	21	4	20	79	160
44166	340727	Backiline, Louis	HWY 577 S	DOMESTIC	26	24	21	4		175	270
53233	358223	Auton, Marshall	RT 4, BOX 145	DOMESTIC	26	24	21	4	30	106	250
80981	386807	Prater, David	RT 2, BOX 311 SPA	DOMESTIC	26	24	21	4	40	63	110
128154	443727	Shive, Carolyn	1115 RIVER ROAD	DOMESTIC	26	24	21	3		58	75
152501	480148	Spano, Frank	9651 MISHA LANE	DOMESTIC	26	24	21				
222111	564517	Reginald Southward Diane Southw	626 FEAGIN ST	DOMESTIC	26	24	21				
247117	579915	General Home Development Corp.	SPARKMAN RD	DOMESTIC	26	24	21				
248824	580557	Steve Stewart	38721 SPARKMAN	DOMESTIC	26	24	21	4		203	203
264319	613855	Brian Gill	38950 RIVER ROAD	DOMESTIC	26	24	21				
264393	613929	Brian Gill	38950 RIVER RD	DOMESTIC	26	24	21	4		63	82
283521	626926	Andrew Renner	LOT 6 CAROLINE'S	DOMESTIC	26	24	21	4	115	115	260
320378	665843	Palm Harbor Village	RIVER RD.	DOMESTIC	26	24	21	4	62	120	160
21928	314843	M C Ruffing	NO ADDRESS	DOMESTIC	27	24	21	4	35	105	145
30634	326193	Elmer Sapp	NO ADDRESS	DOMESTIC	27	24	21	4	30	210	240
47253	356591	Blankenship, John R.	1214 PINELLAS AV	DOMESTIC	27	24	21	4	37	44	60
71437	378274	Lawhard, Pat	1507 S 14TH ST	DOMESTIC	27	24	21	2		45	45
269600	622769	Rita Mcdougal	31134 ST JOE RD	DOMESTIC	27	24	21	4	66	112	160
295236	658032	Westwater	20363 PASO FINO	DOMESTIC	27	24	21	4	41	84	140
35408	332254	J Mc Clain	NO ADDRESS	IRRIGATION	27	24	21	4	65	94	140
66768	355097	Azzara, Jane	306 S PARK ST	IRRIGATION	27	24	21				

PLEASE NOTE CORRESPONDENCE DOCUMENTATION IS ATTACHED AT END OF THIS PDF.

AQUIFER PERFORMANCE TEST RESULTS
CITRUS SPRINGS UTILITY
DADE CITY, PASCO COUNTY, FLORIDA

1.0 INTRODUCTION

Citrus Springs Industrial Holdings, LLC (CSIH) and Citrus Springs Utility, LLC (CSU) performed an aquifer performance test (APT) to obtain hydrogeologic data at their Property as part of a feasibility study to determine the quantity of water potentially available from the Upper Floridan Aquifer in this area. CSIH engaged the services of Creative Environmental Solutions, Inc. (CES) and Technical Pump Service (TPS) to conduct the APT on existing wells on the CSIH and CSU property known as the "Dade City Industrial Center" located in Dade City, Florida. CSU currently holds a Water Use Permit No. 451.007 for 3.514 million gallons per day (MGD) average annual quantity. The 14-day APT was conducted during the month of October of 2025 using existing Upper Floridan Aquifer production and monitor wells.

2.0 PHYSICAL SETTING

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The pumping well is situated at approximate elevation 90 feet NAVD88. The surrounding land varies in elevation from approximately 70 to 100 feet. The pumping well is on the edge of hill and the land slopes generally downward to the east into a broad wetland.

3.0 HYDROGEOLOGIC FRAMEWORK

3.1 Hydrology

The developed portion of the Property is all paved. It is served by a stormwater collection system consisting of strategically located drains and underground pipes made of concrete. All stormwater is collected in the storm drains and routed to the east of the industrial park via two separate drainage pipes. The southern drainage pipe carries the water to the southeast, where it discharges into the Dade City Canal approximately ¼ mile away from the pumping well. The northern drainage pipe carries the water to the northeast, where it discharges to the same canal approximately ¼ mile away. The canal conveys the water in a northeasterly direction for approximately 2.7 miles to Mud Lake. The Dade City Canal and Mud Lake are clearly visible on the Lacoochee quadrangle map. Much of the area through

which the ditch passes is wetland and within the floodplain of the Withlacoochee River. Mud Lake, which is really a marsh, is on land owned by the Southwest Florida Water Management District (District).

There are no constructed stormwater treatment ponds on the property or nearby that serve the property. A stormwater permit has not been issued for the property since its development pre-dates the creation of the permitting program.

2.2 Hydrogeology

Pasco County is characterized by a veneer of undifferentiated Recent/Pleistocene sand and clay deposits lying upon a thick sequence of older limestone units . According to the Geologic Map of Pasco County (Arthur, 1993), the uppermost geological unit in the area of the Property is the Hawthorn Group, consisting primarily of sandy clays. A detailed discussion of the hydrogeology of Dade City area can be found in USGS Water-Resource Investigation 80-33.

The nearest District ROMP location is ROMP 90, approximately 2 miles east of Dade City at an approximate elevation of 76 feet. The wells here penetrated undifferentiated sands and clays to 28 feet, then the Suwanee Limestone from 28 to 35 feet, the Ocala Group Limestones from 35 to 164 feet, and the Avon Park Limestones from 164 to 665 feet. The Floridan aquifer in the project area is comprised of the Suwannee, Ocala and Avon Park limestone units. The potentiometric surface maps of the District show the elevation of the surface to be between 70 and 80 feet NAVD88. Groundwater flow appears to be generally toward the north.

There may be a perched or very thin surficial aquifer at this location. Monitor well borings and soil borings were advanced in 1995 at the Former Ed's Tire facility located at 15012 US 301, approximately 400 feet east of the site at an approximate elevation of 95 feet. The borings encountered fine sand grading to clayey sand, then sandy clay, then "fat" clay, and finally limestone. Solid limestone was found at 48 feet deep, and fragments of limestone were mixed with the overlying clay in places. The water table across the site at the time averaged approximately 25 feet deep, which would be approximately 75 feet in elevation. The limestone unit encountered would presumably be the Suwannee.

3.0 WELL CONSTRUCTION SUMMARY

The wells in the following table were used in the APT. Well construction details, as known, are included in the table.

Table 1. Well Construction Summary

Well ID	Total Depth (feet)	Casing Material	Casing Diam. (in)	Casing Depth (feet bls[1])	Open/ Screened Interval (feet)	Distance from Pumping Well (feet)	Description
15	408	steel	16	250	158	0	Test production well
11	69	steel	unk	unk	unk	46	Shallow UFA monitor well
1	462	steel	unk	unk	unk	168	Large well in bldg., use for UFA monitor well
13	466	steel	unk	unk	unk	415	UFA monitor well
12	461	steel	10	250	211	61	Active production well that supplies the industrial park
9[2]	69	steel	unk	unk	unk	33	Active production well that supplies the industrial park
ROMP 90 Avon Park	665		8	424	241	12,000	Background well
ROMP 90 Ocala	160		8	62	98	12,000	Background well

1 Below land surface (bls)

2 APT Plan listed Well 9 as the shallow UFA monitor well. This well is an active production well so nearby Well 11 with same well construction was used for the monitor well.

The onsite well locations are shown on Figure 1. The background wells (ROMP 90) are approximately two miles to the east of the site. It is presumed that the background wells are outside of the zone of influence of the APT.

4.0 AQUIFER PERFORMANCE TESTING

4.1 Aquifer Performance Test Setup

A new turbine pump was installed and used for the APT. The pump was connected to the onsite electrical grid. A check valve/backflow preventer and a stainless-steel sampling port were installed. A flow meter and gate valve were installed immediately downstream of the pumping well. The discharge from the well was connected to the onsite storm drainage system via a 6-inch flexible hose.

The onsite storm drainage system, shown on Figure 2, was used to manage the water generated during the APT. The subterranean drain pipes that make up the drainage system are 36 inches in diameter. The Dade City Canal into which the drain pipes discharge is generally 10 to 15 feet deep and 15 to 25 feet across.

The APT plan called for using rainfall data from a rain gauge 1.8 miles west-southwest of the site (Station ID: US1FLPS0010). Instead, a manual rain gauge was installed on the fence next to the pumping well. The gauge was read and emptied each day.

4.2 Aquifer Performance Pre-Test

A short (several hours) pre-test was conducted on September 8, 2025 to ensure the equipment was functioning properly, to confirm that the water discharge pathways were adequate, and to determine the actual pumping rate to be used for the APT.

4.2 Aquifer Performance Test

The APT started at 11:30 AM on September 24, 2025. The test production well was pumped at an average constant rate of approximately 1,600 gallons per minute (gpm) for 14 days with a 7-day recovery. The flexible hoses that carry the water to the storm drains, the storm drains themselves, and the discharge points into the canal were all inspected at least once per day during the APT to make sure there were no leaks or backups (Figure 2).

The APT Timeline was as follows:

- 9/8/25 – 3-hour Pre-Test
- 9/24/25 – 11:30 am Start APT Pumping at 1,595 gpm
- 10/8/25 – APT pumping ends at 11:49 am, recovery begins
- 10/15/25 – Recovery complete

The pumping flow rate averaged 1,600 gpm (2.3 million gallons per day) during the APT. Daily flowmeter readings are provided in Table 2. There were no flow or backup issues during the course of the test.

The flexible hoses that carried the water to the storm drains, the storm drains themselves, and the discharge points into the canal were all inspected at least once per day during the APT to make sure there were no leaks or backups.

Table 2. Daily Flowmeter Readings During APT

Date	Time	Total (KGal)	Current (GPM)
9/24/2025	11:33	642.23	1,594.8
9/24/2025	16:54	1160.85	1,616.3
9/25/2025	8:51	2710.74	1,606.3
9/25/2025	15:59	3403.77	1,618.9
9/26/2025	8:54	5049.76	1,610.8
9/26/2025	15:57	5734.66	1,625.9
9/27/2025	11:53	7670.75	1,611.7
9/27/2025	19:48	8437.66	1,612.0
9/28/2025	11:24	9948.11	1,618.6
9/28/2025	15:50	10375.27	1,597.3
9/29/2025	9:27	12074.40	1,610.3
9/29/2025	16:00	12704.40	1,590.7
9/30/2025	9:21	14373.83	1,615.4
9/30/2025	16:02	15015.86	1,599.1
10/1/2025	9:51	16722.98	1,589.4
10/1/2025	15:15	17242.11	1,599.3
10/2/2025	9:08	18953.68	1,592.4
10/2/2025	14:38	19480.19	1,589.0
10/3/2025	9:11	21254.72	1,599.4
10/3/2025	15:24	21850.02	1,586.6
10/4/2025	8:56	23522.68	1,582.2
10/4/2025	15:31	24146.45	1,595.2
10/5/2025	8:58	25815.69	1,598.9
10/5/2025	15:18	26417.83	1,592.9
10/6/2025	8:55	28101.13	1,590.5
10/6/2025	15:07	28694.82	1,590.0
10/7/2025	9:02	30399.63	1,590.3
10/7/2025	15:09	30980.21	1,587.5
10/8/2025	11:04	32875.48	1,578.7

The rainfall values manually collected during the APT are summarized in Table 3 and for the recovery period in Table 4.

Table 3. Daily On-Site Rainfall During APT

Rain Gauge Readings - APT		
Date	**Time**	**Total (inches)**
9/24/2025	10:31	3.18
9/25/2025	8:44	0.00
9/26/2025	8:52	0.02
9/27/2025	11:55	0.04
9/28/2025	11:22	0.07
9/29/2025	9:28	0.05
9/30/2025	9:20	0.02
10/1/2025	9:50	0.00
10/2/2025	9:09	0.00
10/3/2025	9:12	0.05
10/4/2025	8:55	0.00
10/5/2025	8:58	0.10
10/6/2025	8:57	0.25
10/7/2025	9:04	0.05
10/8/2025	11:04	0.00

Table 4. Daily On-Site Rainfall During Recovery

Rain Gauge Readings - Recovery		
Date	Time	Total (inches)
10/9/2025	11:37	0.00
10/10/2025	9:55	0.14
10/11/2025	9:27	0.00
10/12/2025	9:39	0.00
10/13/2025	9:37	0.00
10/14/2025	9:30	0.00
10/15/2025	9:30	0.00

Wells 9 and 12, which supply the industrial park, were allowed to operate during the period of the APT. The volume of water pumped from Wells 9 and 12 was recorded with the flow meter that is already in

place and provided by CSU. Water level changes due to Wells 9 and 12 pumping were recorded during the APT pre-test period for use in detrending water levels observed during the test.

Groundwater levels were measured continuously using pressure transducers with automatic data loggers in the test production well, shallow and UFA monitor well(s) listed in Table 1. Monitoring commenced at least one week prior to conducting the pre-test. The transducers continued to collect data for 7 days after the pump was turned off.

Manual water levels were collected daily in the same wells (except the background well) beginning at the start of the test and continued until the end of the 7-day recovery period (Tables 5 and 6).

Table 5. Pumping Well Manual Depth to Water Level Readings

Well 15		
Date	**Time**	**DTW (feet)**
9/24/2025	11:27	22.22
9/24/2025	16:50	23.26
9/25/2025	8:50	23.37
9/25/2025	16:05	23.54
9/26/2025	8:58	23.39
9/26/2025	15:59	23.35
9/27/2025	11:54	23.42
9/27/2025	19:50	23.39
9/28/2025	11:36	23.39
9/28/2025	15:52	23.42
9/29/2025	9:32	23.46
9/29/2025	16:01	23.38
9/30/2025	9:24	23.45
9/30/2025	16:05	23.42
10/1/2025	9:53	23.49
10/1/2025	15:18	23.48
10/2/2025	9:13	23.55
10/2/2025	14:40	23.63
10/3/2025	9:15	23.8
10/3/2025	15:27	23.44
10/4/2025	8:59	23.65
10/4/2025	15:30	23.55
10/5/2025	9:01	23.64
10/5/2025	15:17	23.62
10/6/2025	9:01	23.66
10/6/2025	15:09	23.84
10/7/2025	9:07	23.67
10/7/2025	15:10	23.67
10/8/2025	11:06	23.76

Table 6. Monitor Wells Manual Depth to Water Level Readings (depth to water)

Well 1		
Date	Time	DTW (feet)
9/24/2025	10:42	22.03
9/24/2025	17:17	22.11
9/25/2025	9:20	22.25
9/25/2025	16:24	22.22
9/26/2025	9:25	22.24
9/26/2025	16:16	22.21
9/27/2025	12:13	22.38
9/27/2025	20:11	22.24
9/28/2025	11:50	22.34
9/28/2025	16:07	22.37
9/29/2025	9:54	22.33
9/29/2025	16:18	22.27
9/30/2025	9:57	22.34
9/30/2025	16:27	22.29
10/1/2025	10:15	22.38
10/1/2025	15:39	22.36
10/2/2025	9:45	22.54
10/2/2025	15:07	22.45
10/3/2025	9:38	22.49
10/3/2025	15:45	22.44
10/4/2025	9:18	22.55
10/4/2025	15:48	22.5
10/5/2025	9:15	22.56
10/5/2025	15:30	22.42
10/6/2025	9:31	22.56
10/6/2025	15:26	22.58
10/7/2025	9:29	22.58
10/7/2025	15:27	22.56
10/8/2025	11:24	22.73

Well 11		
Date	Time	DTW (feet)
9/24/2025	11:15	20.92
9/24/2025	16:47	20.94
9/25/2025	8:54	21.04
9/25/2025	16:08	21.11
9/26/2025	9:00	21.07
9/26/2025	16:01	21.04
9/27/2025	11:58	21.04
9/27/2025	19:55	21.08
9/28/2025	11:38	21.1
9/28/2025	15:54	21.22
9/29/2025	9:34	21.17
9/29/2025	16:04	21.09
9/30/2025	9:27	21.46
9/30/2025	16:10	21.13
10/1/2025	9:56	21.21
10/1/2025	15:21	21.2
10/2/2025	9:16	21.27
10/2/2025	14:42	21.47
10/3/2025	9:17	21.39
10/3/2025	15:29	21.28
10/4/2025	9:02	21.41
10/4/2025	15:35	21.31
10/5/2025	9:03	21.44
10/5/2025	15:19	21.37
10/6/2025	9:03	21.39
10/6/2025	15:11	21.44
10/7/2025	9:09	21.42
10/7/2025	15:12	21.40
10/8/2025	11:08	21.61

Well 13		
Date	Time	DTW (feet)
9/24/2025	10:59	16.68
9/24/2025	17:04	16.71
9/25/2025	9:07	16.79
9/25/2025	16:16	16.82
9/26/2025	9:18	16.79
9/26/2025	16:11	16.8
9/27/2025	12:04	16.88
9/27/2025	20:05	16.81
9/28/2025	11:45	16.91
9/28/2025	16:02	16.89
9/29/2025	9:46	16.9
9/29/2025	16:13	16.83
9/30/2025	9:48	16.89
9/30/2025	16:21	16.87
10/1/2025	10:04	16.9
10/1/2025	15:33	16.94
10/2/2025	9:36	17.02
10/2/2025	15:01	17.03
10/3/2025	9:30	17.09
10/3/2025	15:39	16.99
10/4/2025	9:13	17.08
10/4/2025	15:43	17.04
10/5/2025	9:11	17.11
10/5/2025	15:25	17.08
10/6/2025	9:25	17.12
10/6/2025	15:21	17.21
10/7/2025	9:20	17.16
10/7/2025	15:22	17.13
10/8/2025	11:20	17.27

Water quality samples were collected daily from the stainless-steel port on Well 15. The samples were analyzed in the field for conductivity using a Horiba U-5000 model water quality meter. The meter was calibrated each day in accordance with the manufacturer's instructions. Applicable FDEP SOPs were followed during the sampling and analysis of the water samples. The field conductivity is included in Table 7.

Table 7. Field Conductivity from Test Well 15 Pumping Discharge

Date	Time	Water Conductivity (uS/cm)
9/24/2025	11:55	453
9/24/2025	16:52	366
9/25/2025	8:42	858
9/25/2025	16:01	699
9/26/2025	8:49	489
9/26/2025	15:53	365
9/27/2025	11:52	557
9/27/2025	19:46	398
9/28/2025	11:25	503
9/28/2025	15:47	382
9/29/2025	9:25	557
9/29/2025	15:58	370
9/30/2025	9:19	492
9/30/2025	16:00	375
10/1/2025	9:47	457
10/1/2025	15:14	381
10/2/2025	9:08	529
10/2/2025	14:36	381
10/3/2025	9:10	492
10/3/2025	15:22	386
10/4/2025	8:52	484
10/4/2025	15:30	386
10/5/2025	8:57	520
10/5/2025	15:17	375
10/6/2025	8:54	537
10/6/2025	15:07	383
10/7/2025	9:02	512
10/7/2025	15:08	387
10/8/2025	11:02	512

A water quality sample was collected at the beginning and end of the APT and sent to Advanced Environmental Laboratories, Inc. (AEL). The water quality is fresh with low total dissolved solids (TDS). There were no indications of upconing of deeper mineralized water during the test. The full laboratory results are provided in Attachment A.

Table 8. Laboratory Water Quality Parameters

Date	Chloride (mg/L)	Sulfate (mg/L)	TDS (mg/L)
9/24/25	13	24	200
10/8/25	11	25	180

4.3 Analysis of Results

An analysis of the water level changes during the APT by WSP are included as Attachment B. An effort was made to detrend and correct the data for external influences not related to pumping of the test well that were observed in the data collected from the background wells and from pre- and post-test monitoring in the test well. Corrected data representing groundwater level changes during the test were used to analyze for aquifer parameters, including transmissivity, storativity, and leakance. Based on test conditions, the appropriate aquifer test analytical methods were selected and used (Driscoll, 1986).

The water levels for the two wells at ROMP 90 were downloaded after the test to provide regional background water level data. Transducer water level data was collected for pumping Well 15, and monitor Well 1, Well 11 and Well 13. Background and pre-test water levels were evaluated to identify the source of periodic water-level fluctuations, which were attributed to the intermittent operation of facility production wells. Multiple smoothing and correction techniques were evaluated to minimize measurement noise and external interference (such as periodic pumping from the facility wells and rainfall) in the drawdown data (Figure 3).

Corrected and smoothed drawdown data from the observation wells were analyzed using three classical analytical solutions for confined and leaky aquifers; the Theis, Cooper-Jacob, and Hantush-Jacob Methods. The three analytical methods applied yielded consistent transmissivity and storativity estimates for the Upper Floridan Aquifer based on data from Well 11 (primary observation well, 33 ft from Well 15), Well 1 (secondary observation well, 165 ft from Well 15), and Well 13 (secondary observation well, 415 ft from Well 15).

Only about 0.3 ft of drawdown was observed in the pumping well and about 0.1 ft in the monitor wells making the data difficult to analyze. The UFA in this area is not truly confined; rather, it is very leaky to nearly unconfined. The 14-day APT analysis produced very high transmissivity values, confirming that the Upper Floridan Aquifer at this site is highly productive. Transmissivities calculated from the analytical methods ranged from about 800,000 to 1,300,000 ft^2/day.

At this location, the aquifer is highly karstic, and the nearly identical time–drawdown responses observed in all three wells suggest the presence of a well-developed conduit flow system. This conduit-dominated behavior explains the rapid and uniform pressure response across observation points, which is atypical for a homogeneous porous medium. Overall, the Upper Floridan Aquifer at this site behaves as a highly transmissive, leaky, and conduit-influenced system, capable of sustaining substantial pumping rates with minimal drawdown, but with complex flow dynamics that challenge classical analytical assumptions.

5.0 SUMMARY OF TEST-RELATED IMPACTS

5.1 Conveyance of Discharge Water

No leaks or flooding were noted during the daily inspections.

5.2 Complaints and Mitigation

No complaints were received regarding discharge water, noise or well water levels during the test or the days following.

6.0 REFERENCES

Arthur, J.D,, 1993. Geologic Map of Pasco County, Florida: Florida Geological Survey Open-File Map Series 42, Scale 1:126,720

Driscoll, F. G., 1986. Groundwater and Wells. Second Edition. Johnson Division, St. Paul, Minnesota. 1089 p.

FIGURES

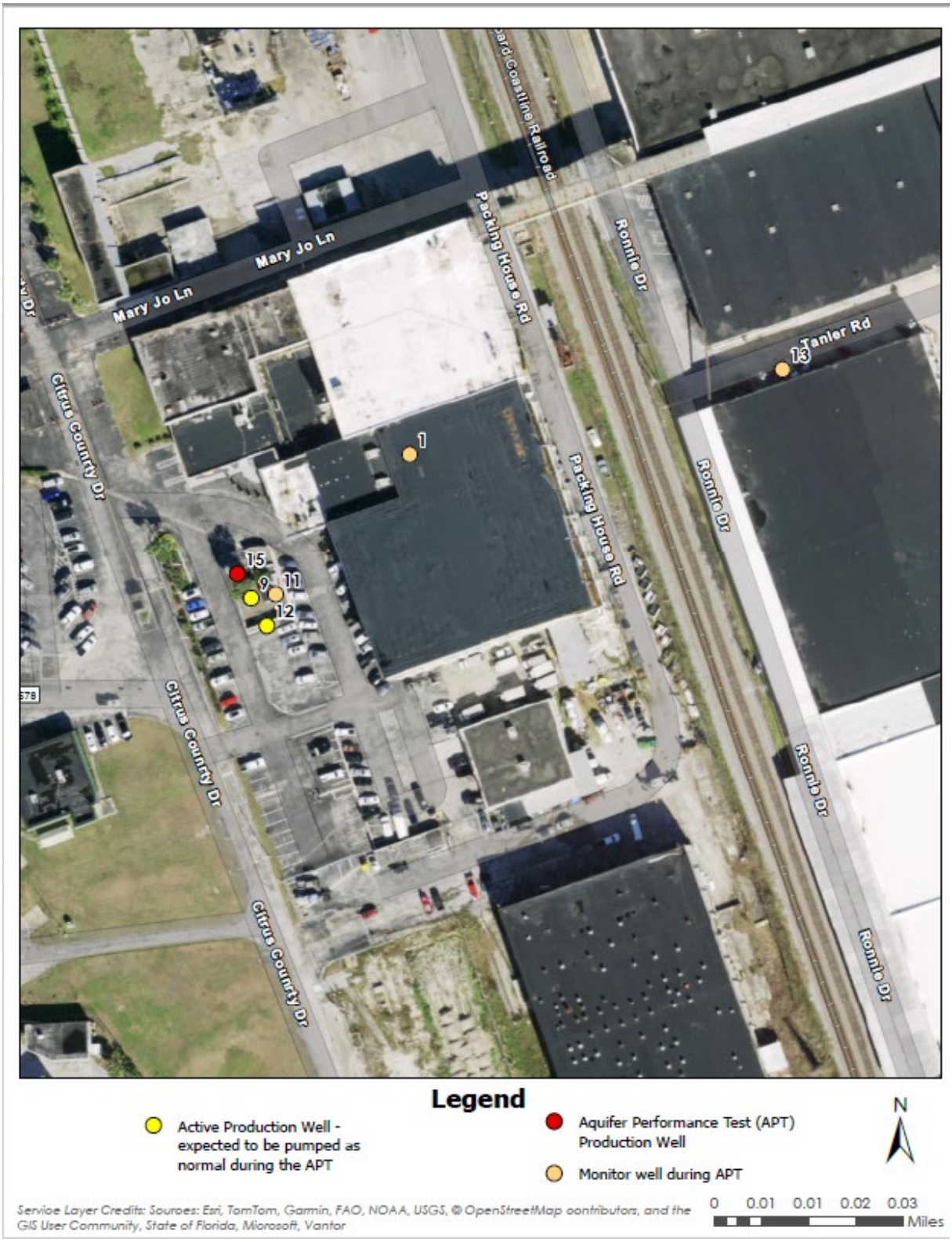

Figure 1: Onsite Well Locations and ID No.

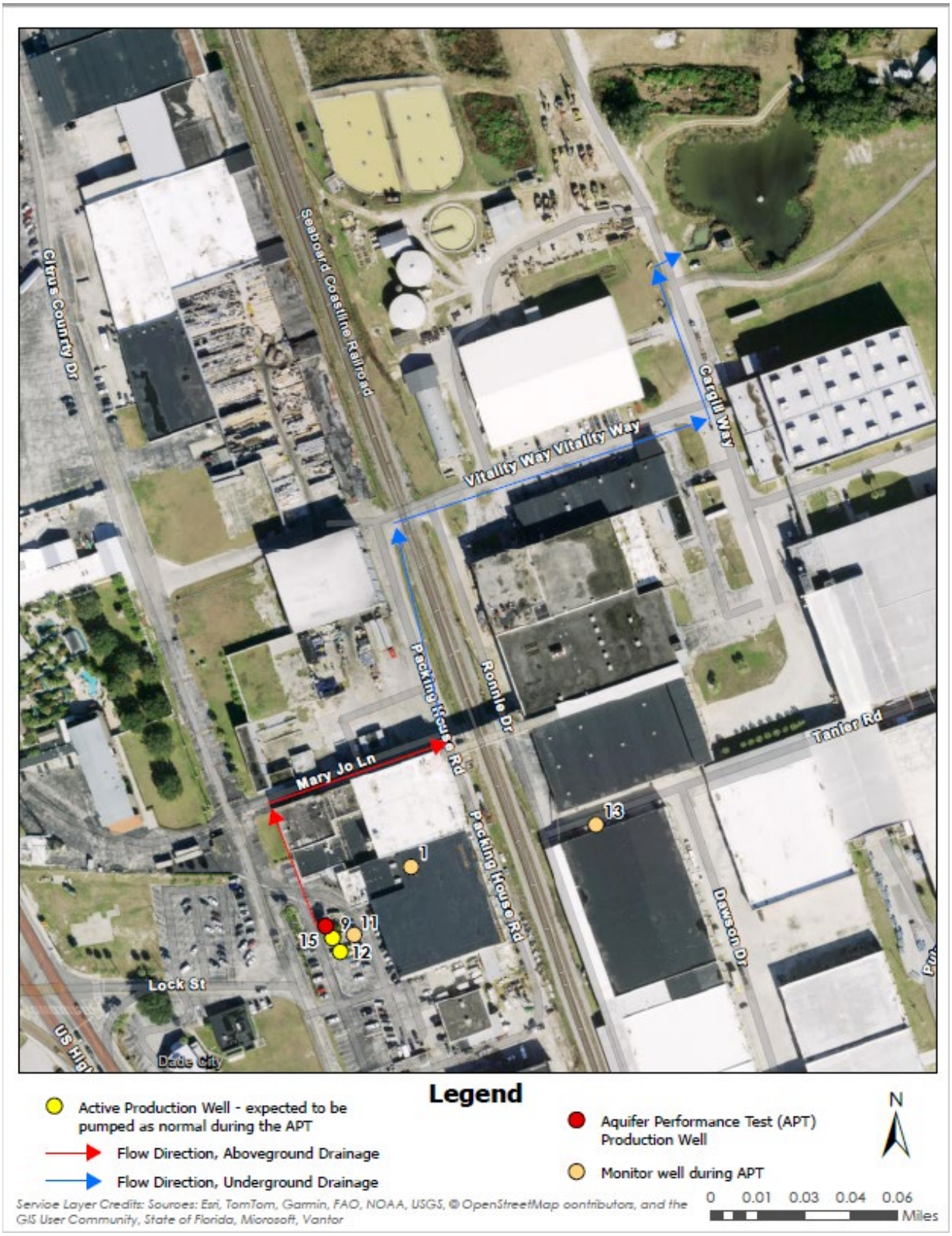

Figure 2: APT Water Routing Diagram

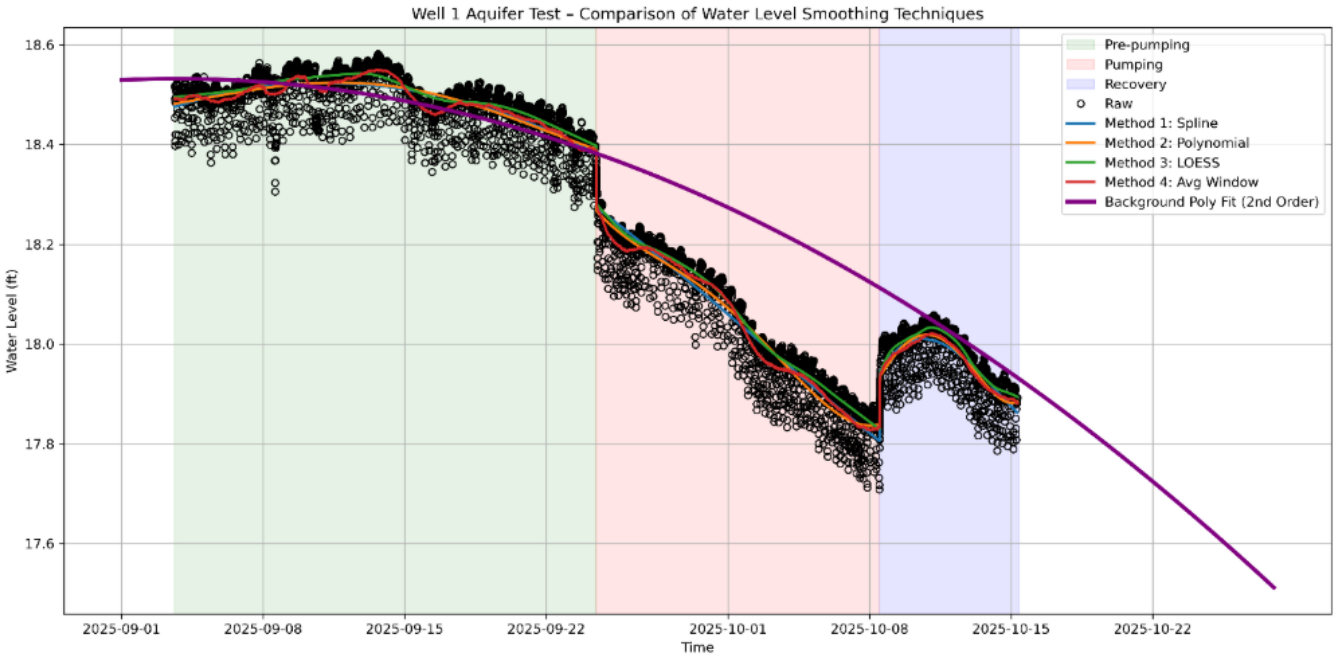

Figure 3. Background and Pumping -Period Hydrograph for Monitor Well 1 Showing Data Noise and Smoothing Methods (Attachment B – Figure 2.4)

ATTACHMENT A – LABORATORY WATER QUALITY RESULTS

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813) 630-9616
Fax: (813) 630-4327

FINAL

Workorder: Citrus Spring Industrial (T2523681)

October 03, 2025

George Foster
Creative Environmental Solutions,Inc
700 Desoto Ave
Brooksville, FL 34601

RE: Workorder: T2523681 Citrus Spring Industrial

Dear George Foster:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday September 25, 2025. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sheila Wilcox, Sr Project Manager
SWilcox@aellab.com

Certificate of Analysis

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NELAP Accredited E84589

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
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Phone: (813) 630-9616
Fax: (813) 630-4327

FINAL

Workorder: Citrus Spring Industrial (T2523681)

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported	Basis
T2523681001	Well 15	WA	EPA 300.0	09/24/2025 11:50	09/25/2025 14:00	2	NA
T2523681001	Well 15	WA	SM 2540 C-2015	09/24/2025 11:50	09/25/2025 14:00	1	NA

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FINAL

Workorder: Citrus Spring Industrial (T2523681)

Analytical Results Qualifiers

Parameter Qualifiers

U	The compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Lab Qualifiers

T	DOH Certification #E84589 (FL NELAC) AEL-Tampa

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FINAL

Workorder: Citrus Spring Industrial (T2523681)

Analytical Results

Lab ID: T2523681001 **Date Collected:** 09/24/2025 11:50 **Matrix:** Water
Sample ID: Well 15 **Date Received:** 09/25/2025 14:00

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
WET CHEMISTRY (EPA 300.0)								
Chloride	**13**	mg/L	10	2.0	2	10/01/2025 22:09	10/01/2025 22:09	T
Sulfate	**24**	mg/L	10	2.0	2	10/01/2025 22:09	10/01/2025 22:09	T
WET CHEMISTRY (SM 2540 C-2015)								
Total Dissolved Solids	**200**	mg/L	10	10	1	09/30/2025 11:40	09/30/2025 11:40	T

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Fax: (813) 630-4327

FINAL

Workorder: Citrus Spring Industrial (T2523681)

QC Results

QC Batch: WCAt/43911
Preparation Method: SM 2540 C-2015
Associated Lab IDs: T2523681001
Analysis Method: SM 2540 C-2015

Method Blank(6043436)

Parameter	Results	Units	PQL	MDL	Lab
Total Dissolved Solids	10 U	mg/L	10	10	T

Lab Control Sample (6043437)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Total Dissolved Solids	mg/L	660	690	105	85 - 115	T

Sample Duplicate (6043438); Original (T2523659001); Parent Lab Sample (T2523681001)

Parameter	Original	Duplicate	Units	RPD	RPD Limit	Lab
Total Dissolved Solids	592	572	mg/L	3	10	T

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Fax: (813) 630-4327

FINAL

Workorder: Citrus Spring Industrial (T2523681)

QC Results

QC Batch: WCAt/43984
Preparation Method: EPA 300.0
Associated Lab IDs: T2523681001
Analysis Method: EPA 300.0

Method Blank(6047898)

Parameter	Results	Units	PQL	MDL	Lab
Chloride	1.0 U	mg/L	5.0	1.0	T
Sulfate	1.0 U	mg/L	5.0	1.0	T

Lab Control Sample (6047900); Lab Control Sample Duplicate (6048457); Parent Lab Sample (T2523681001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Chloride	mg/L	50	48	96	90 - 110	48	96	0.64	10	T
Sulfate	mg/L	50	48	96	90 - 110	48	97	0.41	10	T

Matrix Spike (6048487); Matrix Spike Duplicate (6048488); Original (T2523853001); Parent Lab Sample (T2523853001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Chloride	mg/L	20	23	99	90 - 110	23	99	0.0087	10	T
Sulfate	mg/L	20	20	99	90 - 110	20	99	0.04	10	T

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Workorder: Citrus Spring Industrial (T2523681)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
WCAt/43911 - SM 2540 C-2015			
T2523681001	Well 15		
WCAt/43984 - EPA 300.0			
T2523681001	Well 15		

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☐ Jacksonville: 6681 Southpoint Pkwy., FL 32216 • 904.363.9350 • Lab ID: E82574
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☐ Gainesville: 4965 SW 41st Blvd., FL 32608 • 352.377.2349 • Lab ID: E82001
☐ Miramar: 10200 USA Today Way, FL 33025 • 954.889.2288 • Lab ID: E82535
☐ Tampa: 9610 Princess Palm Ave., FL 33619 • 813.630.9616 • Lab ID: E84589

Client Name:	Creative Environmental Solutions	Project Name:	Citrus Springs Industrial
Address:	700 Desoto Ave	Project Number:	24-163
	Brooksville, Florida 34601	PO Number:	
Phone:	352-796-3374	FDEP Facility No:	
FAX:		FDEP Facility Addr:	Pasco County
Contact:	George		
Sampled By:	T. Novelli	Special Instructions:	
Turn Around Time:	Standard X Rush		
AEL Profile #:	82097	ADaPT X EQuIS Other	

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: TDS	CL	SO4								LABORATORY I.D. NUMBER
	Preservation																	
	Field Filtered?																	
Well 15		G	9/24/25	11:50	GW	1		X	X	X								

Matrix Code: WW=wastewater, SW=surface water, GW=ground water, DW=drinking water, MW=marine water, O=oil, A=air, SO=soil, SL=sludge

Preservation Code: I=ice, H=HCl, S=H2SO4, N=HNO3, T=Sodium Thiosulfate, AA=Ascorbic/HCl, AB=Ascorbic/NaOH

Received on ice ☐ Yes ☐ No ☑ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temp. when received (observed) 5 °C Temp. when received (corrected) °C

DCN: AD-D051web Form last revised 07/26/2022 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V F: 1A

	Relinquished by:	Date	Time	Received by:	Date	Time
1	Tati Novelli	9/24/25	10:32		9/25/25	10:32
2		9/25	13:55		9:58	PW
3						
4						

FOR DRINKING WATER USE:
(When PWS
Contact Pe
Supplier of W
Site-Add

T2523681

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813) 630-9616
Fax: (813) 630-4327

FINAL

Workorder: Citrus Spring Industrial (T2524937)

October 21, 2025

George Foster
Creative Environmental Solutions,Inc
700 Desoto Ave
Brooksville, FL 34601

RE: Workorder: T2524937 Citrus Spring Industrial

Dear George Foster:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday October 9, 2025. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sheila Wilcox, Sr Project Manager
SWilcox@aellab.com

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Fax: (813) 630-4327

FINAL

Workorder: Citrus Spring Industrial (T2524937)

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported	Basis
T2524937001	Well-15	WA	EPA 300.0	10/08/2025 11:28	10/09/2025 14:10	2	NA
T2524937001	Well-15	WA	SM 2540 C-2015	10/08/2025 11:28	10/09/2025 14:10	1	NA

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FINAL

Workorder: Citrus Spring Industrial (T2524937)

Analytical Results Qualifiers

Parameter Qualifiers

U	The compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Lab Qualifiers

T	DOH Certification #E84589 (FL NELAC) AEL-Tampa

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FINAL

Workorder: Citrus Spring Industrial (T2524937)

Analytical Results

Lab ID: T2524937001 **Date Collected:** 10/08/2025 11:28 **Matrix:** Water
Sample ID: Well-15 **Date Received:** 10/09/2025 14:10

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
WET CHEMISTRY (EPA 300.0)								
Chloride	**11**	mg/L	10	2.0	2	10/13/2025 11:08	10/13/2025 11:08	T
Sulfate	**25**	mg/L	10	2.0	2	10/13/2025 11:08	10/13/2025 11:08	T
WET CHEMISTRY (SM 2540 C-2015)								
Total Dissolved Solids	**180**	mg/L	10	10	1	10/14/2025 12:00	10/14/2025 12:00	T

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Fax: (813) 630-4327

FINAL

Workorder: Citrus Spring Industrial (T2524937)

QC Results

QC Batch: WCAt/44335
Preparation Method: SM 2540 C-2015
Associated Lab IDs: T2524937001
Analysis Method: SM 2540 C-2015

Method Blank(6066267)

Parameter	Results	Units	PQL	MDL	Lab
Total Dissolved Solids	10 U	mg/L	10	10	T

Lab Control Sample (6066268)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Total Dissolved Solids	mg/L	660	700	105	85 - 115	T

Sample Duplicate (6066269); Original (T2524659001); Parent Lab Sample (T2524937001)

Parameter	Original	Duplicate	Units	RPD	RPD Limit	Lab
Total Dissolved Solids	708	690	mg/L	3	10	T

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Phone: (813) 630-9616
Fax: (813) 630-4327

FINAL

Workorder: Citrus Spring Industrial (T2524937)

QC Results

QC Batch: WCAt/44340
Preparation Method: EPA 300.0
Associated Lab IDs: T2524937001
Analysis Method: EPA 300.0

Method Blank(6066551)

Parameter	Results	Units	PQL	MDL	Lab
Chloride	1.0 U	mg/L	5.0	1.0	T
Sulfate	1.0 U	mg/L	5.0	1.0	T

Lab Control Sample (6066552)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Chloride	mg/L	50	50	99	90 - 110	T
Sulfate	mg/L	50	50	99	90 - 110	T

Matrix Spike (6066555); Matrix Spike Duplicate (6066556); Original (T2524905001); Parent Lab Sample (T2524905001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Chloride	mg/L	20	22	97	90 - 110	22	97	0.099	10	T
Sulfate	mg/L	20	20	100	90 - 110	20	100	0.23	10	T

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Phone: (813) 630-9616
Fax: (813) 630-4327

FINAL

Workorder: Citrus Spring Industrial (T2524937)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
WCAt/44335 - SM 2540 C-2015			
T2524937001	Well-15		
WCAt/44340 - EPA 300.0			
T2524937001	Well-15		

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Miramar: 10200 USA Today Way, FL 33025 • 954.889.2288 • Lab ID: E82535
Tampa: 9610 Princess Palm Ave., FL 33619 • 813.630.9616 • Lab ID: E84589

Client Name:	Creative Environmental Solutions	Project Name:	Citrus Springs Industrial Holdings
Address:	700 Desoto Ave	Project Number:	24-163
	Brooksville, Florida 34601	PO Number:	
Phone:	352-796-3374	FDEP Facility No:	
FAX:		FDEP Facility Addr:	
Contact:	George Foster		
Sampled By:	T. Novelli	Special Instructions:	
Turn Around Time:	Standard X Rush		
AEL Profile #:		ADaPT X EQuIS Other	

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT
Well -15		G	10/8/25	11:28	W	1

BOTTLE SIZE & TYPE	ANALYSIS REQUIRED	LABORATORY I.D. NUMBER
	TDS, Chloride, Sulfate	
Preservation		
Field-Filtered?		
	X	

T2524937

Matrix Code: WW=wastewater, SW=surface water, GW=ground water, DW=drinking water, MW=marine water, O=oil, A=air, SO=soil, SL=sludge

Preservation Code: I=Ice, H=HCl, S=H2SO4, N=HNO3, ... Sulfate, AA=Ascorbic/HCl, AB=Ascorbic/NaOH

Received on Ice ☐ Yes ☐ No ☑ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temp. when received (observed) 5 °C Temp. when received (corrected) ____ °C

DCN: AD-D051web Form last revised: 07/26/2022 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V F: 1A

	Relinquished by:	Date	Time	Received by:	Date	Time
1	Tate Novelli	10/8/25	10:44		10/9/25	10:44
2		10/9/25	14:04			
3						
4						

FOR DRINKING WATER USE:

(When PWS Information not otherwise supplied) PWS ID: _____

Contact Person: _____

Supplier of Water: _____

Site Address: _____

ATTACHMENT B – AQUIFER PERFORMANCE TEST ANALYSIS

Kenneth A. Fraser, PE

From: Claire Clements <claire@hrtampabay.com>
Sent: Thursday, April 2, 2026 3:01 PM
To: Kenneth A. Fraser, PE; John Bostic III; Saxon Evans; Alexander Sassoon
Subject: COMPLETED WATER TEST TBW RESULTS
Attachments: Technical Memo_CSU APT Analysis Final Report_04-02-2026.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Well Happy Easter. Here is some good reading from Citrus Springs, springs.
Thank you all for your patience. I hope this is on time. All good things take time.
Claire

CLAIRE CLEMENTS
HR TAMPA BAY LLC
9804 West Park Village Dr.
Tampa, FL 33626
(813) 293-3719

Kenneth A. Fraser, PE

From: Claire Clements <claire@hrtampabay.com>
Sent: Thursday, March 5, 2026 10:04 AM
To: Kenneth A. Fraser, PE; John Bostic III; Alexander Sassoon; Saxon Evans
Subject: Fw: APT report
Attachments: APT Report for Citrus Springs .pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sorry Ken. Here you are. Let me know if I can do more for you. Thank you. Claire

CLAIRE CLEMENTS
HR TAMPA BAY LLC
9804 West Park Village Dr.
Tampa, FL 33626
(813) 293-3719

From: George Foster <gfoster@creativeenvironmental.com>
Sent: Wednesday, March 4, 2026 3:35 PM
To: Cathleen Jonas <cjonas@tampabaywater.org>; Claire Clements <claire@hrtampabay.com>
Subject: APT report

Ladies pls see att. Cathleen, I converted conductivity from mS/cm to uS/cm (1 order of magnitude) so you see values in the hundreds and not less than 1.

Before I send this to SWFMWD (after I get the analytical report) I have to add a PG sign/seal section.

Claire, I'm going to bill for the balance so you can bill TBW and won't charge more later for the PG update.

Tks all.

George K. Foster, P.G.
CREATIVE ENVIRONMENTAL SOLUTIONS, INC.
700 DeSoto Ave.
Brooksville, FL 34601

Tel.: 352.796.3374
Fax: 352.796.2449
Mobile: 352.279.7368

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PLEASE NOTE CORRESPONDENCE DOCUMENTATION IS ATTACHED AT END OF THIS PDF.

AQUIFER PERFORMANCE TEST RESULTS CITRUS SPRINGS UTILITY

PUBLIC

March 17, 2026

AQUIFER PERFORMANCE TEST RESULTS CITRUS SPRINGS UTILITY

PUBLIC

PROJECT NO.: US0039042.9013
DATE: MARCH 2026

WSP
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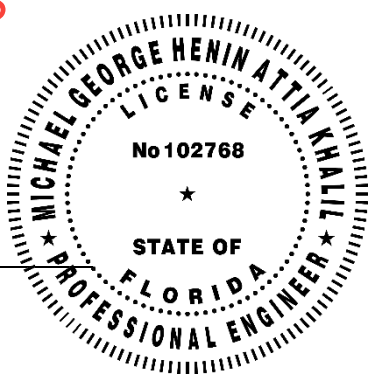
5411 SKYCENTER DR.
TAMPA, FL 33607

TEL.: +1 225 367-5749
WSP.COM

SIGNATURES

PREPARED BY

Michael Attia, PhD, PE
Hydrogeologist



REVIEWED BY

3/17/26

Robert Maliva, PhD, PG
Principal Hydrogeologist

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1 INTRODUCTION

1.1 BACKGROUND

Citrus Springs Industrial Holdings, LLC (CSIH) and Citrus Springs Utility, LLC (CSU) performed an aquifer performance test (APT) to obtain hydrogeologic data at their property in September 2025. The APT was performed in cooperation with Tampa Bay Water as part of a feasibility study to determine the quantity of water potentially available from the Upper Floridan Aquifer (UFA) in this area. CSIH engaged the services of Creative Environmental Solutions, Inc. (CES) and Technical Pump Service (TPS) to plan and conduct the APT on existing wells on the CSIH and CSU property known as the "Dade City Industrial Center" located in Dade City, Florida (82° 11′ 23.89″ W, 28° 22′ 34.97″ N). CES developed an Aquifer Performance Test Plan for the Southwest Florida Water Management District (District). Approval was provided by the District on March 12th, 2025. CSU currently holds a Water Use Permit No. 451.007 for 3.514 million gallons per day (MGD) average annual quantity. The intent was to conduct a 14-day aquifer performance test (APT) using existing Upper Floridan Aquifer production and monitor wells.

WSP was retained to analyze the APT data and prepare an APT analysis and results report.

1.2 SUMMARY OF THE WELLS, PUMPING RATES, AND DATA COLLECTIONS

1.2.1 Well Construction Summary

The wells in the following table 1.1 were used in the APT. Well construction details, as known, are included in the table.

The locations of the onsite production and observation wells are shown in Figure 1.1. Regional background water-level data were obtained from ROMP 90 wells, which are located approximately two miles east of the site. Although these wells are outside the hydraulic zone of influence of the APT pumping, they are located within the same regional climatic and precipitation setting as the test site and therefore provide representative background conditions for regional water-level trends.

Table 1.1: Well Construction Summary

Well ID	Total Depth (feet)	Casing Material	Casing Diam. (in)	Casing Depth (feet bls)	Open/ Screened Interval (feet)	Distance from Pumping Well (feet)	Description
15	408	steel	16	250	158	0	Pumping well
11	69	steel	10	unk	unk	46	Shallow UFA observation well
1	462	steel	8	unk	unk	168	UFA observation well
13	466	steel	10	unk	unk	415	UFA observation well
9	69	steel	unk	unk	unk	33	Active production well during the APT
12	461	steel	10	250	211	61	Active production well during the APT
ROMP 90 Avon Park	665	unk	8	424	241	12,000	Background well
ROMP 90 Ocala	160	unk	8	62	98	12,000	Background well

1. Below land surface (bls)
2. Unknown value (unk)

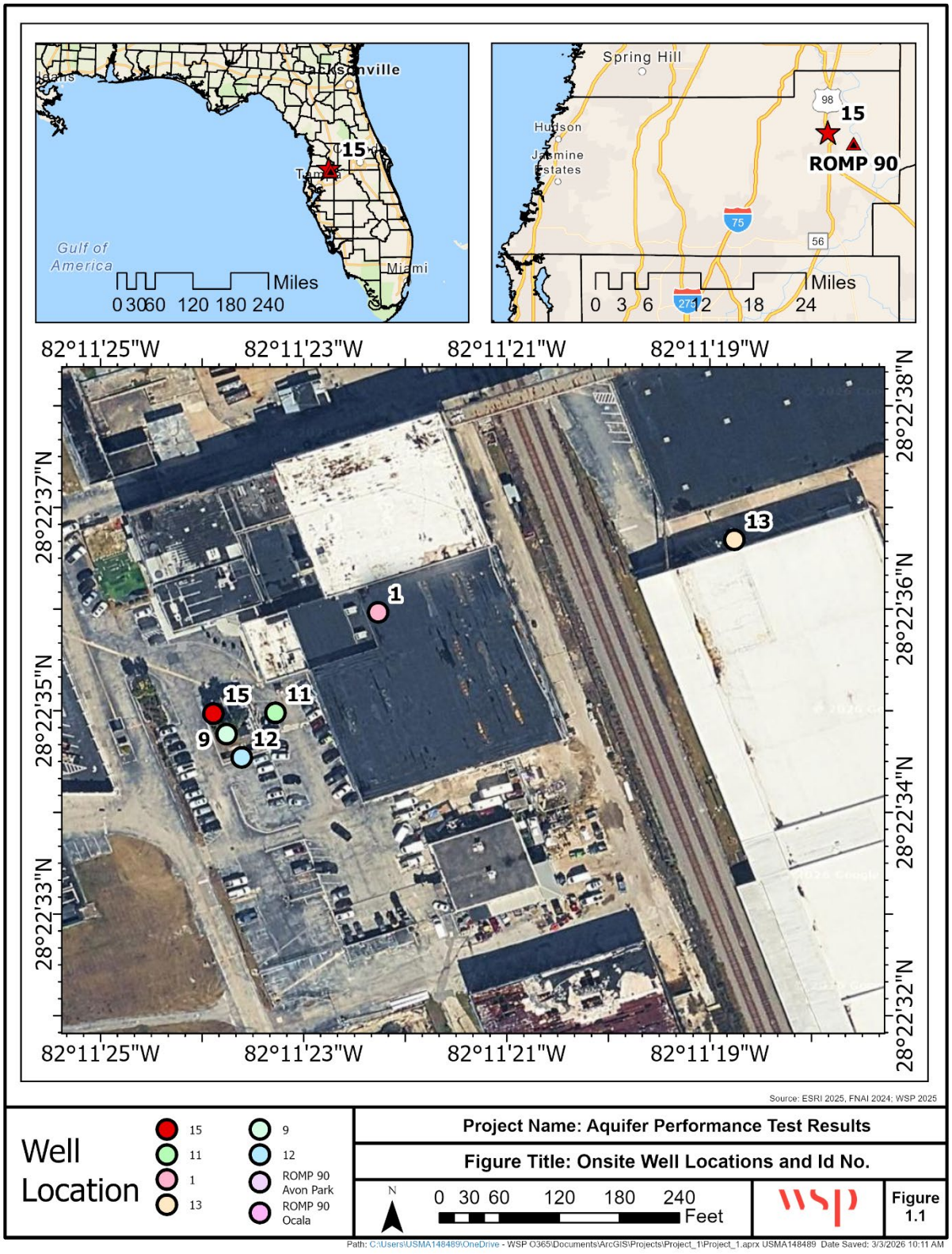

Figure 1.1: Onsite Well Locations and ID No.

1.2.2 PUMPING

The pumping well (Well 15) was out of service before the test. A new pump was installed on August 15 and tested on September 10. Power to the pump was provided by the on-site electrical grid. A check valve/backflow preventer and a stainless-steel sampling port were installed. A flow meter and gate valve were installed on the discharge line near the well. The well was pumped at an average rate of approximately 1,600 gallons per minute (GPM) for 14 days. A total volume of 32.86 million gallons was pumped over the course of the 14-day APT.

At the end of 14 days, the pump was turned off, and recovery was monitored. None of the pumping or monitoring equipment was removed from the wells during the 7-day recovery period.

1.2.3 DISCHARGE WATER CONVEYANCE

The onsite storm drainage system was used to manage the water generated during the APT. The subterranean drainpipes that make up the drainage system are 36 inches in diameter. The Dade City Canal, into which the drainpipes discharge, is generally 10 to 15 feet deep and 15 to 25 feet across.

Water pumped from the well for the APT was routed to a storm drain near the pumping well via 6-inch diameter flexible hoses. Sediment control measures (e.g., hay bales) were installed where the drainpipe discharges into the canal.

1.2.4 MONITORING

Wells 9 and 12, which supply the industrial park, operated periodically during the period of the APT. As summarized in Table 1.1, these wells are relatively shallow (total depths of approximately 69 ft and 461 ft respectively) compared to the primary Upper Floridan production and observation wells. The volume of water pumped from the wells was recorded with the flow meter that is already in place. Water level changes due to the periodic pumping were recorded during the APT pre-test period for use in determining water levels observed during the test.

The flow from Well 15 (the APT pumping well) was recorded with the temporary flow meter. The pumping records were collected each day.

Groundwater levels were measured continuously using pressure transducers with automatic data loggers in Well 15 and the UFA observation wells (Wells 1, 11, and 13). Background water level data were collected from September 11, 2025, until the start of pumping on September 24. The transducers continued collecting recovery data for 7 days after the pump was turned off.

Manual water levels were collected daily in the same wells (except for the background well) beginning at the start of the test and continued until the end of the 7-day recovery period.

Rainfall data were obtained from manual rain gauge measurements (Table 1.2), including daily rainfall recorded by a manual rain gauge installed on site during the APT pumping period.

Water levels in the two wells at ROMP 90 were downloaded following the aquifer test to establish regional background water-level conditions. As shown in Figure 1.2, background water levels in

both the Ocala and Avon Park aquifers exhibit a gradual declining trend prior to, during, and after the pumping period, reflecting regional influences rather than localized test effects.

Table 1.2: Rainfall data from on-site manual rain gauge measurements

Date	Time	Total (inches)
9/24/2025	10:31	3.18
9/25/2025	8:44	0.00
9/26/2025	8:52	0.02
9/27/2025	11:55	0.04
9/28/2025	11:22	0.07
9/29/2025	9:28	0.05
9/30/2025	9:20	0.02
10/1/2025	9:50	0.00
10/2/2025	9:09	0.00
10/3/2025	9:12	0.05
10/4/2025	8:55	0.00
10/5/2025	8:58	0.10
10/6/2025	8:57	0.25
10/7/2025	9:04	0.05
10/8/2025	11:04	0.00

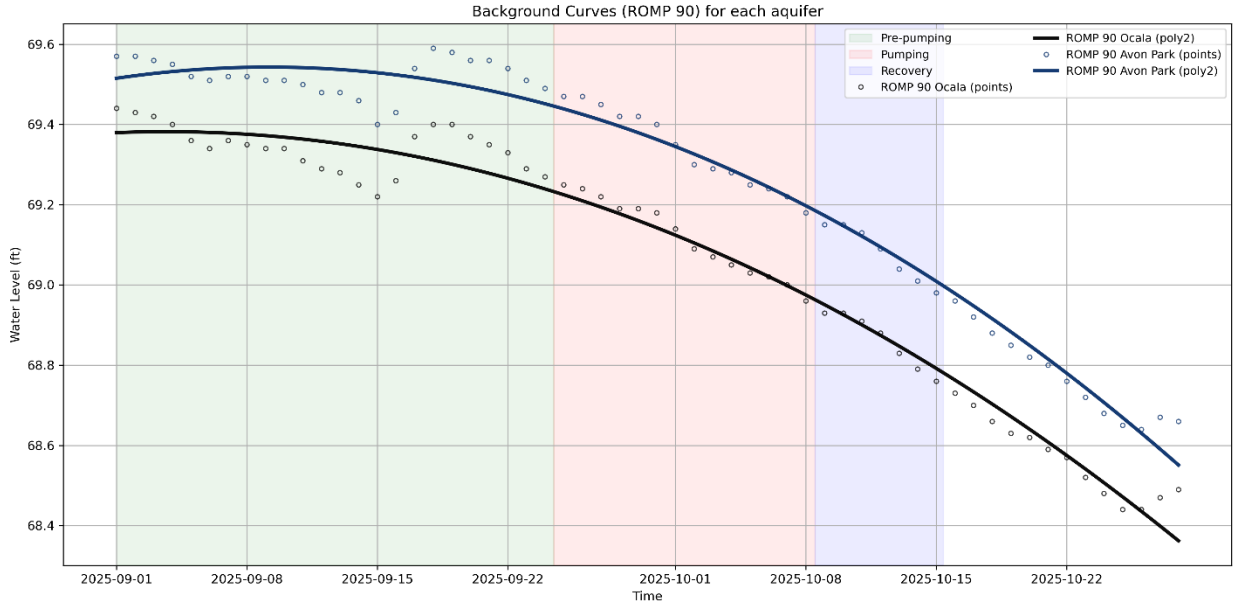

Figure 1.2: Illustrates the background well water levels at ROMP 90 before, during, and after the aquifer test, with measured data points and polynomial trend curves used to characterize temporal behavior.

2 AQUIFER TEST DATA PREPARATION

2.1 FOURTEEN-DAY AQUIFER PERFORMANCE TEST (APT)

The purpose of the 14-day Aquifer Performance Test (APT) was to collect high-resolution time–drawdown data to calculate the transmissivity and storativity of the Upper Floridan aquifer at the test site.

2.1.1 TEST PHASES AND DATA COLLECTION:

Background water-level monitoring began on September 11. The background monitoring period extended from September 11 through September 24 (prior to 9:00 AM).

Pumping began on September 24 at 11:30 AM and continued for 14 days, ending on October 8 at 11:49 AM. Data collected after 11:49 AM on October 8 corresponds to the recovery phase.

2.1.1.1 WELL CONFIGURATION:

- Well 15 — Pumped well
- Well 11 — Primary shallow UFA observation well (located approximately 46 ft from Well 15)
- Well 1 — Secondary observation well (located approximately 165 ft northeast from Well 15)
- Well 13 — Secondary observation well (located approximately 415 ft northeast from Well 15)

Background and pre-pumping hydrographs for the observation wells (Wells 11, 1, and 13; Figures 2.1–2.2, 2.4–2.5, and 2.7–2.8, respectively) were evaluated to identify the sources of periodic water-level fluctuations. These fluctuations were attributed primarily to the intermittent operation of nearby facility production wells and were accounted for through background trend evaluation and subsequent data processing.

2.1.1.2 TEMPORAL DATA RESOLUTION:

During the pumping and recovery periods, the data were collected at different resolutions to balance temporal precision and computational efficiency:

- First 15 minutes: 5-second interval data
- Next 30 minutes: 60-second (1-minute) interval data
- Remaining duration: 600-second (10-minute) interval data

These adaptive time steps ensured high temporal accuracy during the initial rapid drawdown phase and reduced redundancy during the quasi-steady state and recovery periods.

Figures 2.1 through 2.12 present the background, pumping period, and recovery hydrographs for the pumping well (Well 15) and the observation wells (Wells 11, 1, and 13), along with the processed water level data used for drawdown analysis. For each well, the first set of figures (Figures 2.1, 2.4, 2.7, and 2.10) illustrates the raw background and pumping period water level measurements and highlights short-term variability associated with measurement noise and

external influences, including intermittent operation of nearby facility production wells. The corresponding smoothed hydrographs and estimated background trends are shown in Figures 2.2, 2.5, 2.8, and 2.11, which represent the selected smoothing approach applied to isolate the dominant aquifer response to pumping. Figures 2.3, 2.6, 2.9, and 2.12 present the computed drawdown for each well, derived by removing the regional background trend from the corrected water level data. Collectively, these figures demonstrate the progression from raw water level observations to background corrected drawdown curves and provide the basis for subsequent analytical evaluation of aquifer hydraulic properties.

2.2 Data Smoothing

Examination of the raw hydrograph data indicates that drawdown responses associated with nearby production wells are not discrete or temporally isolated signals that can be readily removed from the dataset. Instead, the effects of intermittent pumping are expressed as continuous, overlapping fluctuations superimposed on the regional trend and the primary APT drawdown response. As shown in the hydrographs, these undulations vary in magnitude and frequency through time, occur during both pumping and recovery periods, and do not correspond to consistent start–stop events that could be confidently attributed to individual wells. Under these conditions, direct subtraction of interfering-well drawdown would be subjective and likely to introduce greater distortion than correction. Consequently, background trend removal and segment-based smoothing were used to preserve the physically meaningful aquifer response while minimizing short-term variability that cannot be uniquely deconvolved from the raw record.

Multiple smoothing and correction techniques were evaluated to minimize measurement noise and external interference (such as periodic pumping from the facility wells and rainfall) in the drawdown data. Among the tested approaches, four methods provided the most accurate and stable representations of the aquifer response. The following is the summary of the methods:

2.2.1 METHOD 1: PIECEWISE SPLINE SMOOTHING

This method fits smooth, continuous spline curves to each aquifer-test segment (pre-pumping, pumping, and recovery) separately. It minimizes curvature while preserving hydraulic breakpoints at the start and end of pumping. The resulting curve effectively represents the aquifer's overall response while filtering out high-frequency fluctuations.

2.2.2 METHOD 2: PIECEWISE POLYNOMIAL REGRESSION

Polynomial regression is independently applied to each segment of the test. This segmentation prevents artificial smoothing across abrupt transitions and yields clean, interpretable drawdown trends suitable for comparison with the analytical solution.

2.2.3 METHOD 3: LOESS (LOCALLY WEIGHTED REGRESSION)

The LOESS method applies to adaptive local smoothing that adjusts to the shape of the signal. Performing LOESS separately for each test segment enables an accurate depiction of gradual aquifer behavior while suppressing external noise and pump-induced oscillations.

2.2.4 METHOD 4: SEGMENT-BASED MOVING AVERAGE WINDOW

This approach computes localized averages within defined time windows for each test phase. It effectively removes short-term variability caused by pump cycling or external interference without altering the fundamental drawdown and recovery characteristics. Owing to its simplicity and consistent physical behavior, this method was adopted for final analysis.

2.3 Selecting the Best Smoothing Method

The Segment-Based Moving Average Window method was adopted for final analysis due to its simplicity, physical realism, and stability. Using the background water level, the drawdown was calculated. Figures 2.1–2.12 illustrate the comparison of smoothing techniques, the selected method, and the drawdown applied to Wells 15, 11, 1, and 13.

A rainfall event totaling approximately 3.18 inches was recorded on September 24, 2025, coincident with the early pumping period of the APT. The potential influence of this event was evaluated using background hydrographs, regional reference wells, and comparison of water level responses across observation wells at varying distances from the pumping well. While short-term water level perturbations associated with rainfall recharge may be present, the dominant drawdown signal observed during the test exhibits a consistent temporal progression and magnitude across all monitored wells that is characteristic of pumping-induced stress rather than recharge response. Accordingly, rainfall effects were accounted for through background trend removal and smoothing of the raw hydrographs, ensuring that transient recharge-related variability did not bias the analytical interpretation of aquifer parameters.

The hydrographs for Wells 15, 11, 1, and 13 exhibit minor short-term fluctuations and undulations superimposed on the overall pumping-induced drawdown trend. These features are attributed primarily to intermittent operation of nearby on-site production wells (Wells 9 and 12), which were active throughout the background, pumping, and recovery periods and could not be taken offline during the test. The influence of these wells is most evident as brief deviations from smooth drawdown or recovery curves and is consistent with their proximity to the observation wells. Additional minor variability may reflect transient system responses typical of a karst-influenced aquifer, including rapid pressure propagation through conduit-dominated flow paths. Despite these localized anomalies, the dominant drawdown signal associated with the APT pumping well is clearly distinguishable and isolated through background trend removal and data smoothing prior to analytical interpretation.

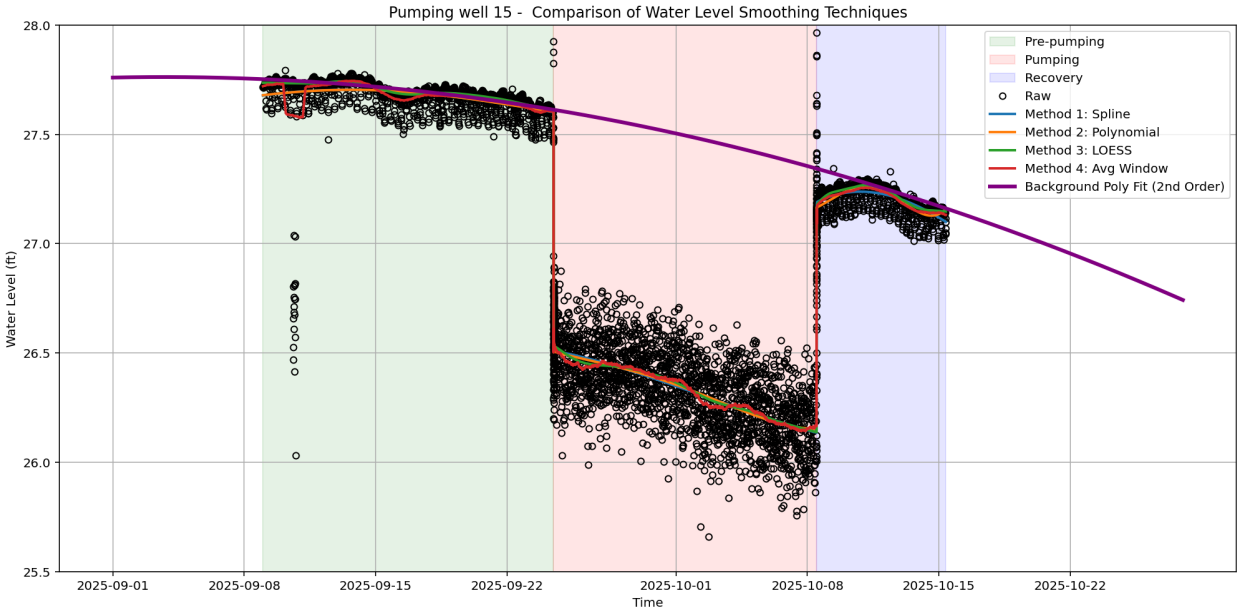

Figure 2.1: Background and Pumping-Period Hydrograph for Pumping Well 15 Showing Data Noise and Smoothing Methods.

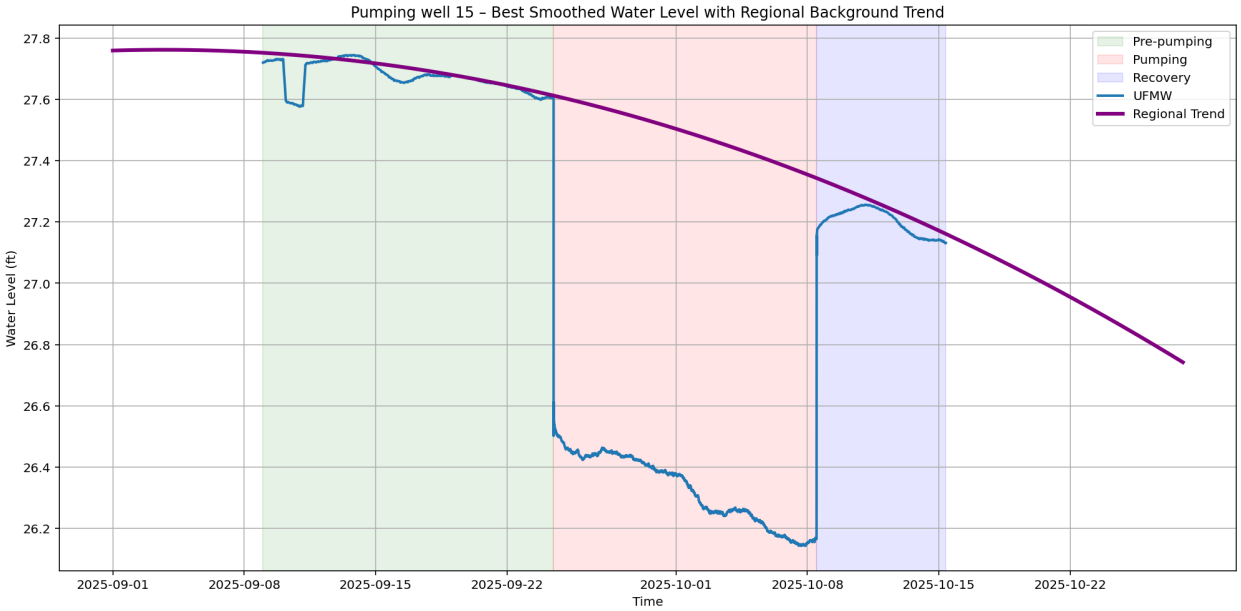

Figure 2.2: The Best Smoothed Water Level and the Background for Pumping Well 15.

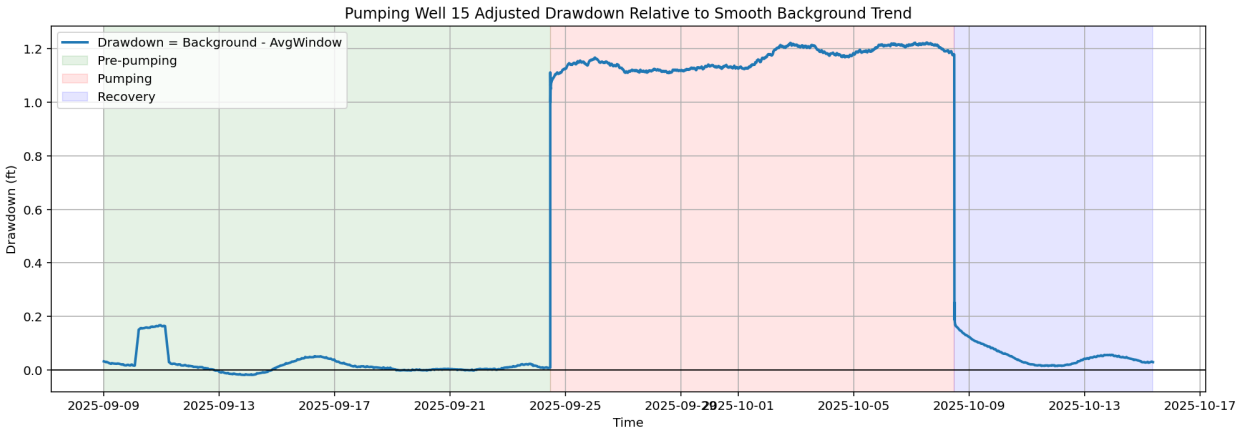

Figure 2.3: Computed Drawdown for Pumping Well 15 Derived from Corrected Water-Level Data and the Regional Background Trend.

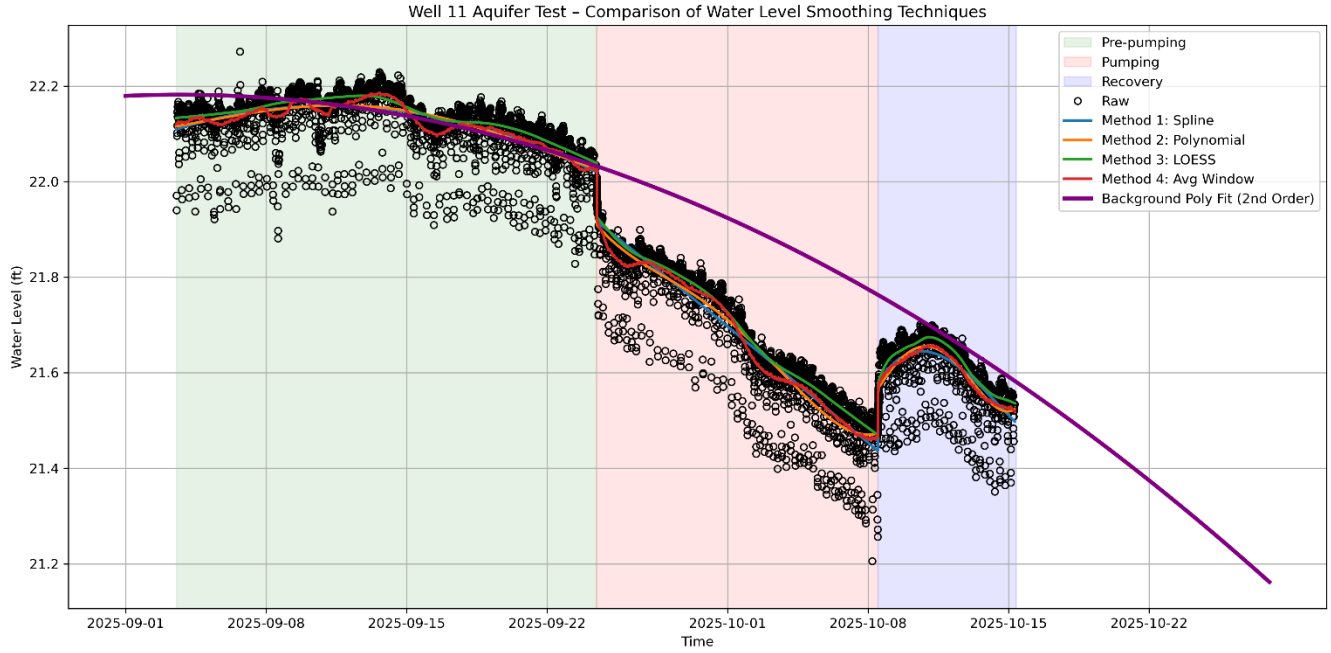

Figure 2.4: Background and Pumping-Period Hydrograph for Well 11 Showing Data Noise and Smoothing Methods.

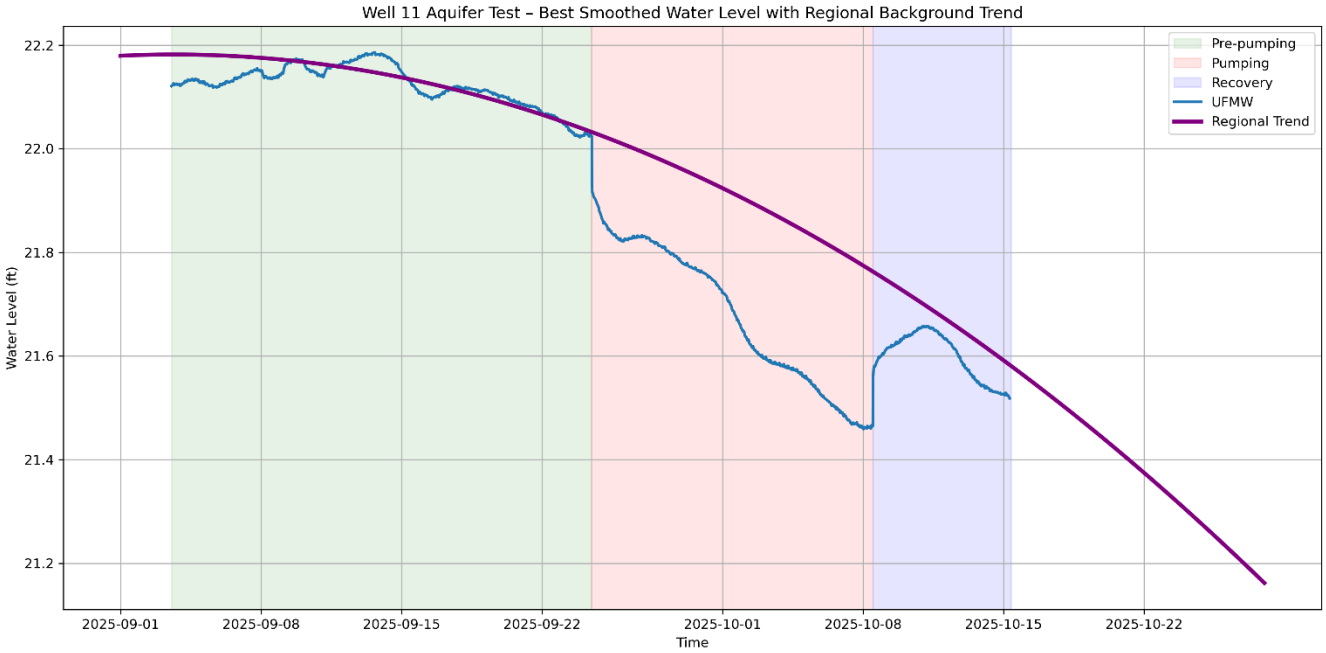

Figure 2.5: The Best Smoothed Water Level and the Background for Well 11.

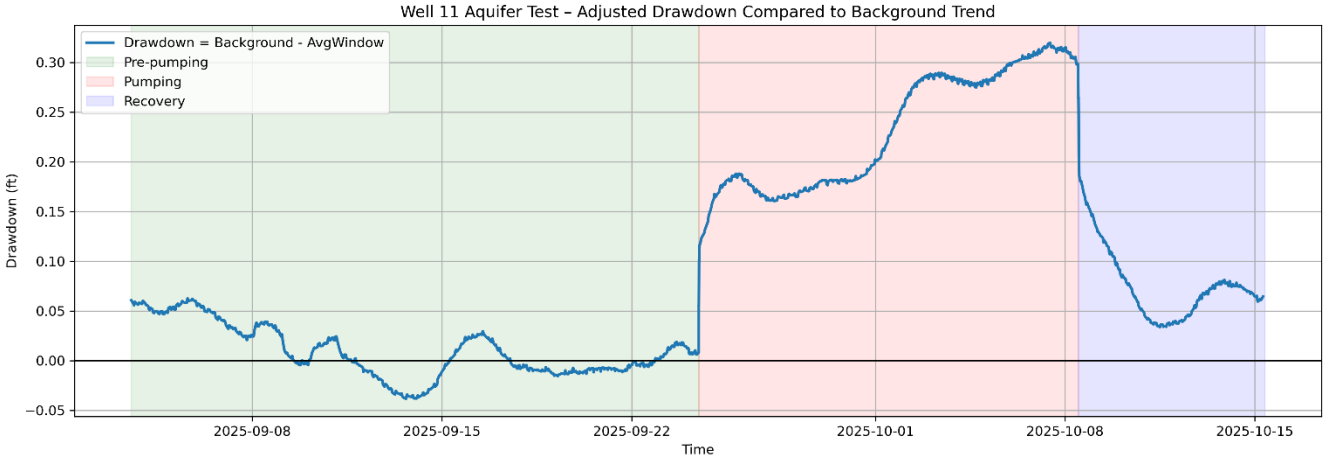

Figure 2.6: Computed Drawdown for Well 11 Derived from Corrected Water-Level Data and The Regional Background Trend.

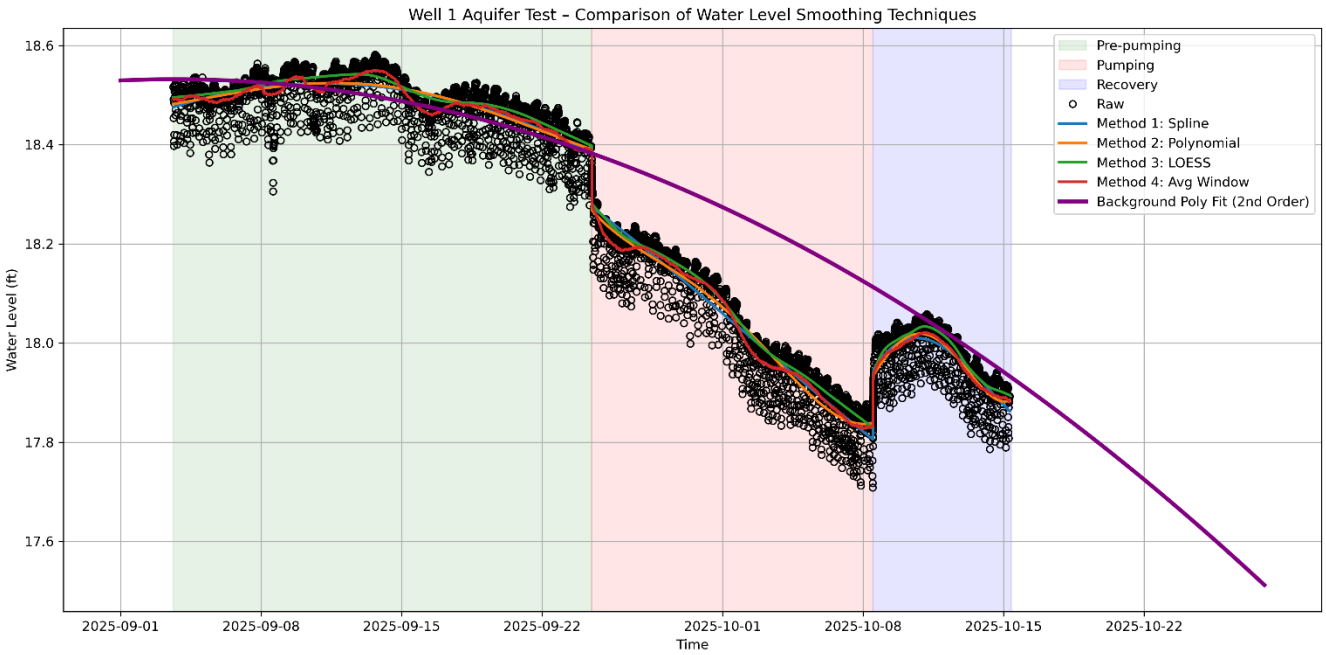

Figure 2.7: Background and Pumping-Period Hydrograph for Well 1 Showing Data Noise and Smoothing Methods.

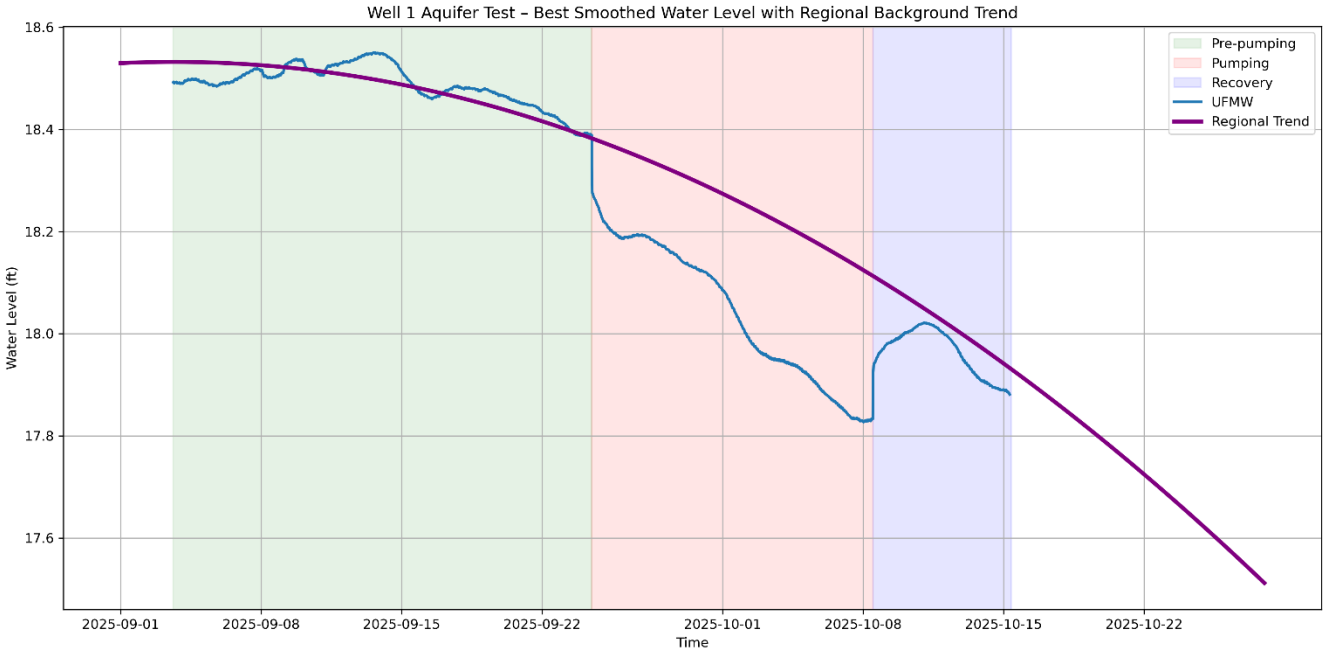

Figure 2.8: The Best Smoothed Water Level and The Background for Well 1.

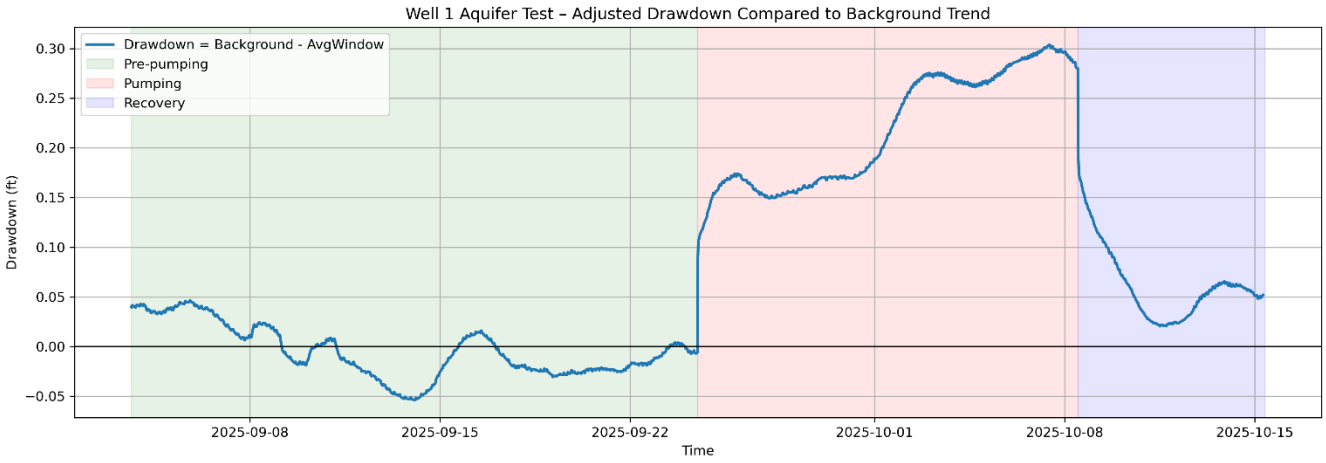

Figure 2.9: Computed Drawdown for Well 1 Derived from Corrected Water-Level Data and the Regional Background Trend .

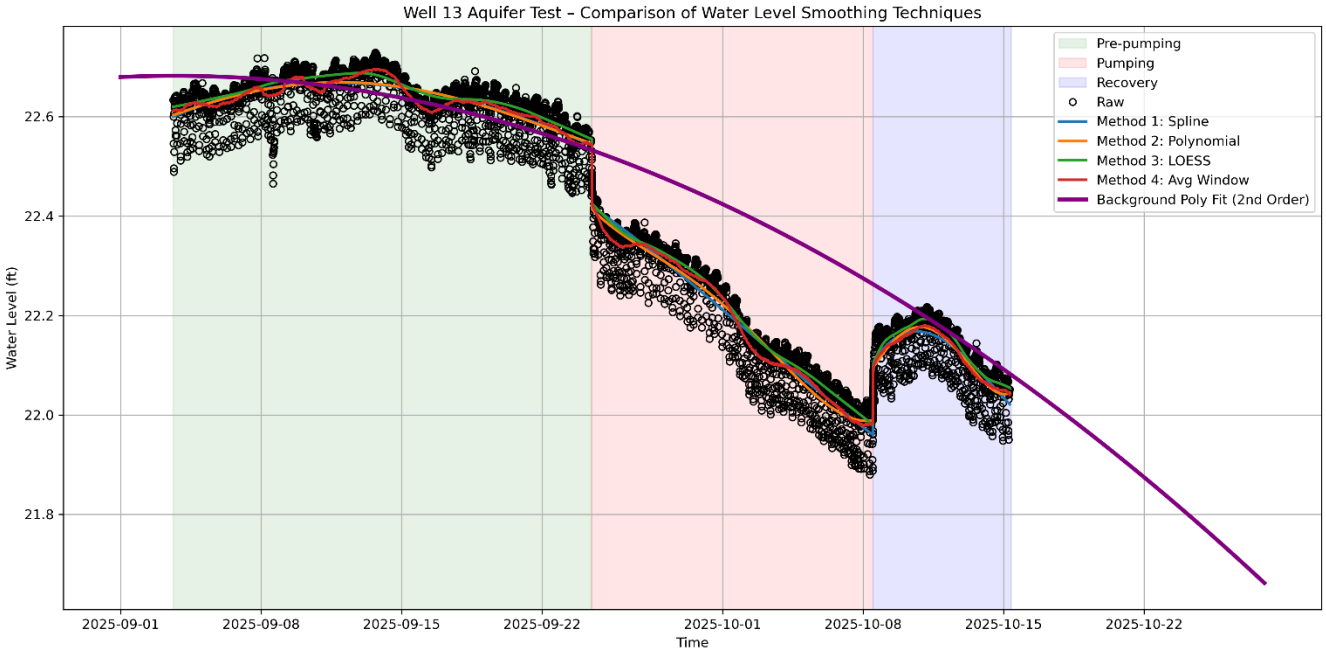

Figure 2.10: Background and Pumping-Period Hydrograph for Well 13 Showing Data Noise and Smoothing Methods.

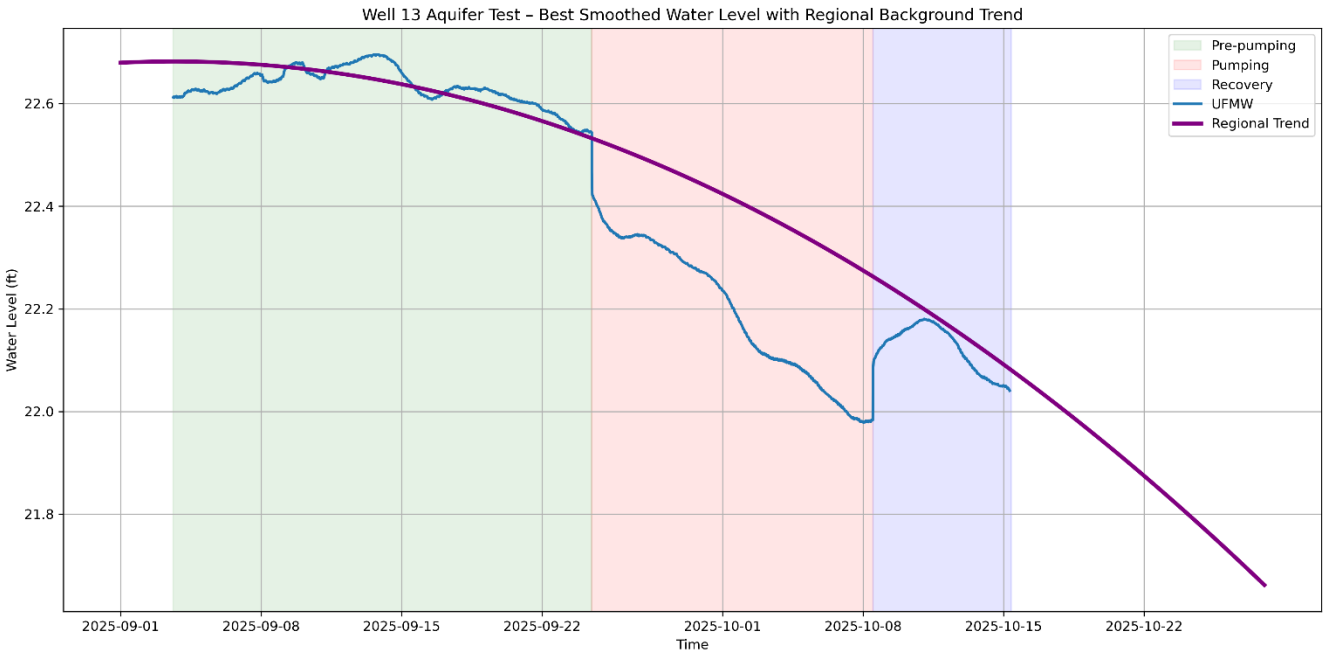

Figure 2.11: The Best Smoothed Water Level and The Background for Well 13.

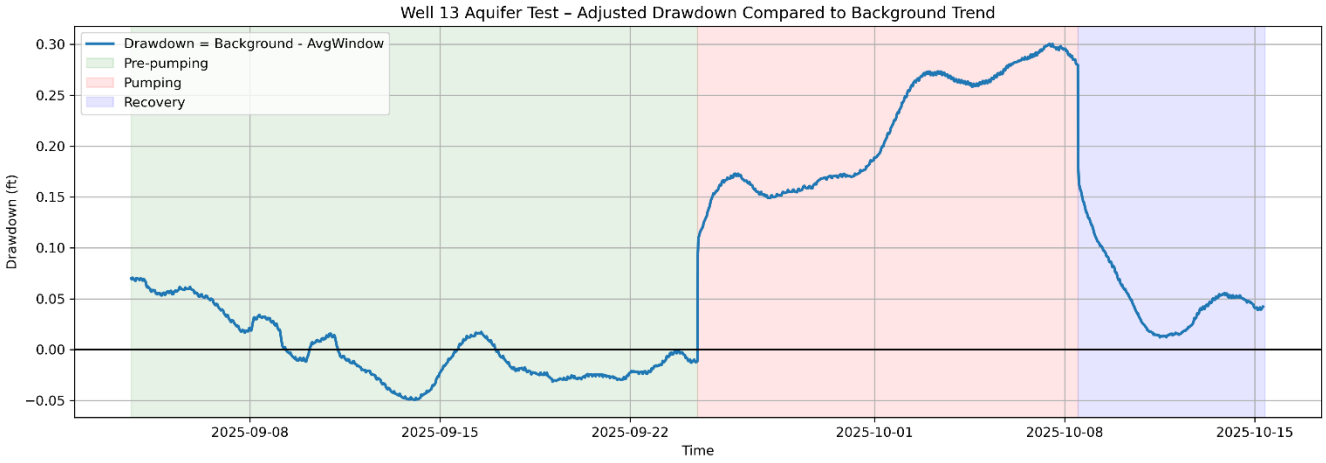

Figure 2.12: Computed Drawdown for Well 13 Derived from Corrected Water-Level Data and The Regional Background Trend.

3 AQUIFER TEST DATA ANALYSIS

3.1 FOURTEEN-DAY AQUIFER PERFORMANCE TEST (APT)

This section describes the data analysis procedures and results of the 14-day Aquifer Performance Test (APT) conducted at the Upper Floridan Aquifer test site. The objectives of the analysis were to determine the transmissivity (T, ft^2/day) and storativity (S) of the Upper Floridan aquifer system using time-drawdown data collected during the pumping and recovery periods.

3.1.1 PUMPING WELL RESPONSE (WELL 15)

Water-level data from the pumping well (Well 15) were evaluated to characterize the direct aquifer response to sustained pumping and subsequent recovery. After removal of the regional background trend and application of the selected smoothing method, the adjusted drawdown hydrograph for Well 15 shows a rapid onset of drawdown coincidence with pump start-up, followed by a relatively stable drawdown magnitude during the 14-day pumping period. Maximum adjusted drawdown in Well 15 was on the order of approximately 1.1 to 1.2 ft, with minor short-term fluctuations superimposed on the overall trend.

These short-term fluctuations are attributed primarily to intermittent operation of nearby on-site production wells and minor system perturbations typical of a highly transmissive, karst-influenced aquifer. Upon pump shutdown, Well 15 exhibited rapid initial recovery, followed by a more gradual rebound toward background levels. Although water levels did not fully return to pre-test conditions during the monitored recovery period, the recovery behavior is consistent with continued intermittent pumping from nearby wells and the high transmissivity of the Upper Floridan Aquifer, which limits the establishment of a stable static baseline over short time scales.

3.1.2 OBSERVATION WELL RESPONSE (WELLS 11, 1, AND 13)

The maximum drawdown recorded in observation Wells 11, 1, and 13 during pumping was approximately 0.3 ft. Drawdown responses at increasing distances from the pumping well were rapid and similar in magnitude, indicating strong hydraulic connectivity and a highly transmissive aquifer system. During the recovery phase, water levels in the observation wells rose steadily but did not fully return to pre-test background conditions within the monitoring period.

This behavior reflects the combined influence of continued intermittent pumping from nearby on-site production wells and the karst-influenced nature of the aquifer, which promotes rapid pressure propagation and dampens the development of a stable static water level following pumping cessation.

3.1.3 INFLUENCE OF RAINFALL AND EXTERNAL STRESSORS

A rainfall event totaling 3.18 inches occurred on September 24, 2025, at 10:31, coincident with the early portion of the APT pumping period. Following this event, recorded daily rainfall amounts during the remainder of the pumping period were minimal, generally ≤ 0.10 inches per day, with a single moderate event of 0.25 inches on October 6, 2025. The limited magnitude and short duration

of rainfall after September 24 indicate that precipitation-related recharge effects were transient and unlikely to dominate the observed groundwater response.

The potential influence of rainfall was evaluated using background hydrographs, regional reference wells, and comparison of water-level responses across the pumping and observation wells at varying distances from the pumping well. While minor short-term water-level perturbations associated with the September 24 event may be present, the timing, magnitude, and persistence of drawdown observed in both the pumping well (Well 15) and observation wells are consistent with pumping-induced stress rather than precipitation-driven recharge. Accordingly, rainfall influences were addressed through background trend removal and smoothing of the raw hydrographs to ensure that transient recharge-related variability did not bias the analytical interpretation of aquifer hydraulic properties.

3.2 ANALYTICAL METHODS

Corrected and smoothed drawdown data from the observation wells were analyzed using two classical analytical solutions for confined and leaky aquifers:

1. Theis Method (Theis, 1935, in Kruseman and de Ridder, 2000)
2. Cooper–Jacob Method (Cooper and Jacob, 1946, in Kruseman and de Ridder, 2000)

Time–drawdown data from all three observation wells (Wells 11, 1, and 13) were evaluated to characterize the hydraulic response of the Upper Floridan Aquifer at varying distances from the pumping well. Well 11, the closest observation well, was used as the primary analytical well, while results from Wells 1 and 13 were used to assess consistency of the derived aquifer parameters and spatial response behavior.

In addition, water-level recovery data from the pumping well (Well 15) were evaluated qualitatively to assess aquifer response following pump shutdown. Recovery behavior in the pumping well was used to support interpretation of aquifer transmissivity and system behavior; however, recovery-based parameter estimates were not relied upon as the primary basis for transmissivity or storativity calculations due to the influence of intermittent nearby pumping and the highly transmissive, karst-influenced nature of the aquifer.

3.2.1 THEIS METHOD

The Theis Method is a log-log curve-matching method in which the time-drawdown data are best fit to a set of type curves to derive a time-drawdown versus W(u) and a 1/u match point. Transmissivity is calculated with the equation:

$$T = \left(\frac{Q}{4\pi s}\right) W(u)$$

where Q is the pumping rate, and s and W(u) are matching point drawdown and well function values, respectively.

Storativity is calculated with the equation:

$$S = \frac{4Tt}{r^2}$$

where T is transmissivity, t is the time match point, and r is the distance from the pumped well to the observation well.

3.2.2 COOPER AND JACOB METHOD

The Cooper and Jacob Method is a semi-log straight-line method in which the time- drawdown data are best fit to a straight line. Transmissivity is calculated with the equation:

$$T = \frac{2.3Q}{4\pi\Delta s}$$

where Q is the pumping rate, and Δs is the change in drawdown across one log cycle of time.

Storativity is calculated with the equation:

$$S = \frac{2.25Tt_0}{r^2}$$

where T is transmissivity, t_0 is the time where the straight line intercepts the x-axis, and r is the distance from the pumped well to the observation well.

3.3 RESULTS

The analytical methods were applied to time–drawdown data from all three observation wells: Well 11 (primary observation well, approximately 46 ft from Well 15), Well 1 (approximately 165 ft from Well 15), and Well 13 (approximately 415 ft from Well 15). Figures 4.1–4.8 present the curve-fit results used to estimate aquifer parameters and evaluate model applicability:

- Figures 4.1 - 4.3: Theis Method for Wells 11, 1, and 13
- Figures 4.4 - 4.6: Cooper–Jacob Method for Wells 11, 1, and 13
- Figure 4.7 - 4.8: Recovery plot (Theis recovery method) for Well 15 and Well 11

3.3.1 THEIS METHOD

The Theis method produced transmissivity (T) values of 781,100 ft²/day (Well 11), 777,900 ft²/day (Well 1), and 878,400 ft²/day (Well 13). Computed storativity (S) values ranged from 0.022 (Well 13) to 4.70 (Well 11). The storativity estimate S > 1.0 at Well 11 is physically unrealistic and is attributed to early-time sensitivity and the very small, rapid drawdown response immediately following pumping initiation. Accordingly, storativity interpretation relies primarily on Wells 1 and 13, where values fall within physically plausible ranges and better reflect late-time aquifer response.

3.3.2 COOPER–JACOB METHOD

The Cooper–Jacob method yielded transmissivity values of 856,900 ft²/day (Well 11), 897,000 ft²/day (Well 1), and 944,600 ft²/day (Well 13). Storativity estimates ranged from 0.013 (Well 13) to 2.47 (Well 11). As with the Theis results, the storativity estimate S > 1.0 at Well 11 is not

physically realistic and is interpreted as an artifact of early-time behavior and model sensitivity rather than a representative aquifer property. Overall, the Theis and Cooper–Jacob results consistently indicate a highly transmissive system, while storativity is less well constrained and is best represented by the values derived from Wells 1 and 13.

3.3.3 RECOVERY EVALUATION

Recovery behavior was evaluated using water-level data from both the pumping well (Well 15) and the primary observation well (Well 11) following cessation of pumping (Figures 4.7 and 4.8). Recovery in the pumping well provides the most direct representation of aquifer response to stress removal and is therefore considered the primary recovery dataset for interpretation of system behavior.

The pumping well (Well 15) exhibits rapid initial recovery immediately following pump shutdown, followed by a more gradual rebound toward background conditions with residual drawdown persisting throughout the monitored recovery period. This response is consistent with a highly transmissive aquifer system and reflects the continued influence of intermittent nearby on-site production wells and karst-influenced flow conditions, which limit the establishment of a stable static baseline over short time scales.

Recovery observed in Well 11 shows a similar general trend but is affected by a smaller drawdown magnitude, greater sensitivity to external stresses, and uncertainty associated with well construction and vertical hydraulic influences. As a result, recovery-based transmissivity estimates derived from both the pumping and observation wells are considered qualitative only and are not relied upon as the primary basis for aquifer parameter estimation. Instead, recovery behavior is used to support interpretation of aquifer transmissivity and hydraulic connectivity inferred from pumping-period analyses.

3.3.4 OVERALL INTERPRETATION

Taken together, the Theis and Cooper–Jacob analyses indicate an exceptionally high transmissivity Upper Floridan aquifer system at the site, with small drawdowns observed at multiple distances. The aquifer does not behave as a perfectly confined porous medium; instead, results are consistent with a leaky to semi-confined system influenced by karst features and conduit flow, which helps explain the rapid and relatively uniform pressure response and the sensitivity of storativity estimates to model assumptions.

3.4 AQUIFER CHARACTERISTICS

The 14-day Aquifer Performance Test (APT) analysis produced consistently high transmissivity values, confirming that the Upper Floridan Aquifer (UFA) at the site is highly productive. Aquifer parameters were evaluated using pumping-period drawdown data from Well 11 (primary observation well, approximately 46 ft from Well 15), Well 1 (approximately 165 ft from Well 15), and Well 13 (approximately 415 ft from Well 15) using the Theis and Cooper–Jacob analytical methods. Recovery-based analyses were evaluated separately and are not included in the summarized aquifer characteristics due to non-ideal recovery conditions and external interference.

- Theis Method
    - Well 11: T = 781,100 ft²/day
    - Well 1: T = 777,900 ft²/day, S = 0.293
    - Well 13: T = 878,400 ft²/day, S = 0.022
- Cooper–Jacob Method
    - Well 11: T = 856,900 ft²/day
    - Well 1: T = 897,000 ft²/day, S = 0.113
    - Well 13: T = 944,600 ft²/day, S = 0.013

Transmissivity values from Well 11 are reported for completeness but are interpreted with caution due to early-time sensitivity and minimal drawdown near the pumping well. Parameter interpretation, therefore, emphasizes results from Wells 1 and 13, which provide more stable late-time responses at greater distances from the pumping well.

Storativity estimates derived from Well 11 were excluded from interpretation where values exceeded physically plausible limits (> 1.0), reflecting early-time sensitivity and limitations associated with rapid, minimal drawdown response near the pumping well. Accordingly, storativity values from Wells 1 and 13 are considered more representative of aquifer behavior at the scale of observation.

The UFA at the site does not exhibit behavior consistent with a perfectly confined, homogeneous porous medium. Instead, the nearly identical time–drawdown responses observed at increasing distances from the pumping well indicate a highly transmissive system with strong hydraulic connectivity. This response is consistent with karst-influenced and conduit-enhanced flow conditions typical of the Upper Floridan Aquifer in this region. While the degree of vertical confinement cannot be conclusively defined due to the absence of surficial monitoring data and incomplete construction information, results suggest confinement may be weak, discontinuous, or influenced by leakage from overlying units.

Overall, the Upper Floridan Aquifer at the site behaves as a highly transmissive system capable of sustaining substantial pumping rates with minimal drawdown. However, the observed response characteristics indicate that site-specific conditions deviate from classical analytical assumptions, necessitating cautious interpretation of storativity and reinforcing the importance of transmissivity as the most reliable parameter derived from the APT.

4 FIGURES

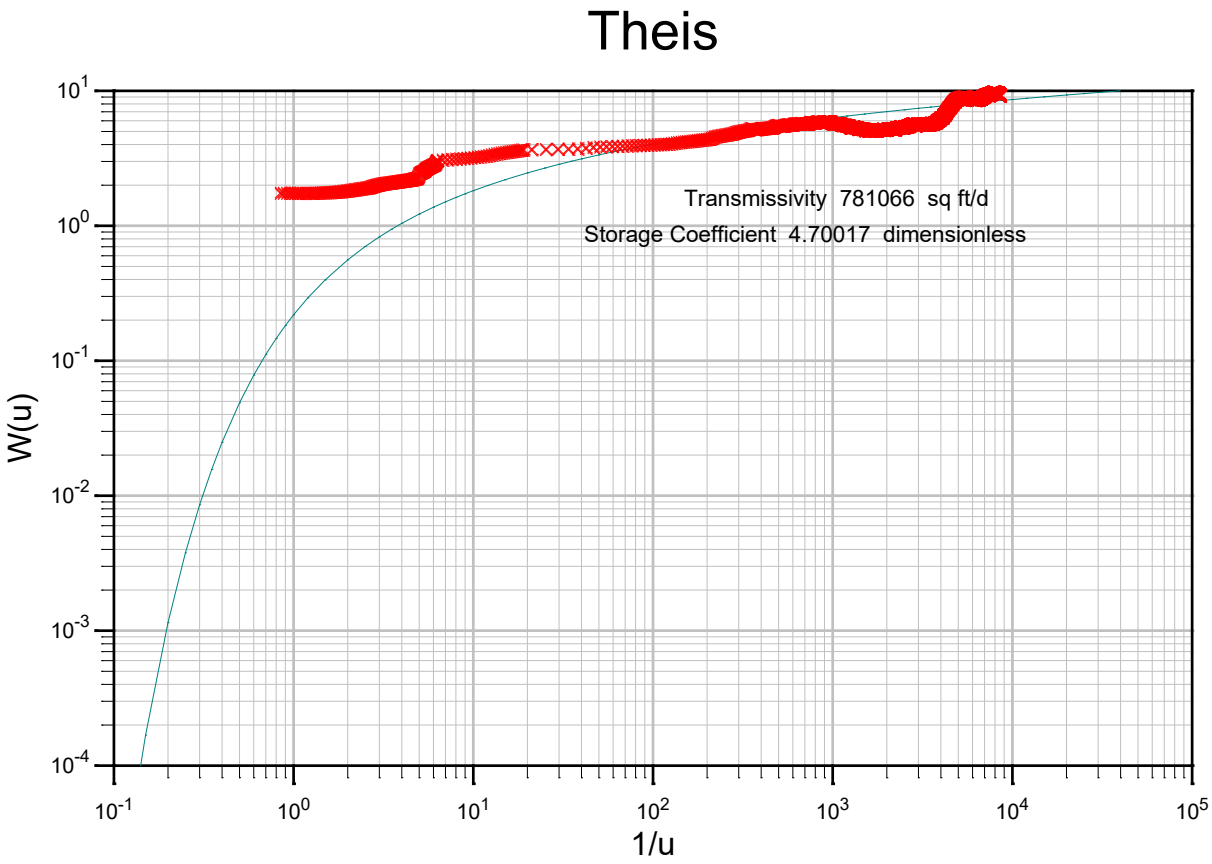

Figure 4.1: APT Theis Method for Well 11.

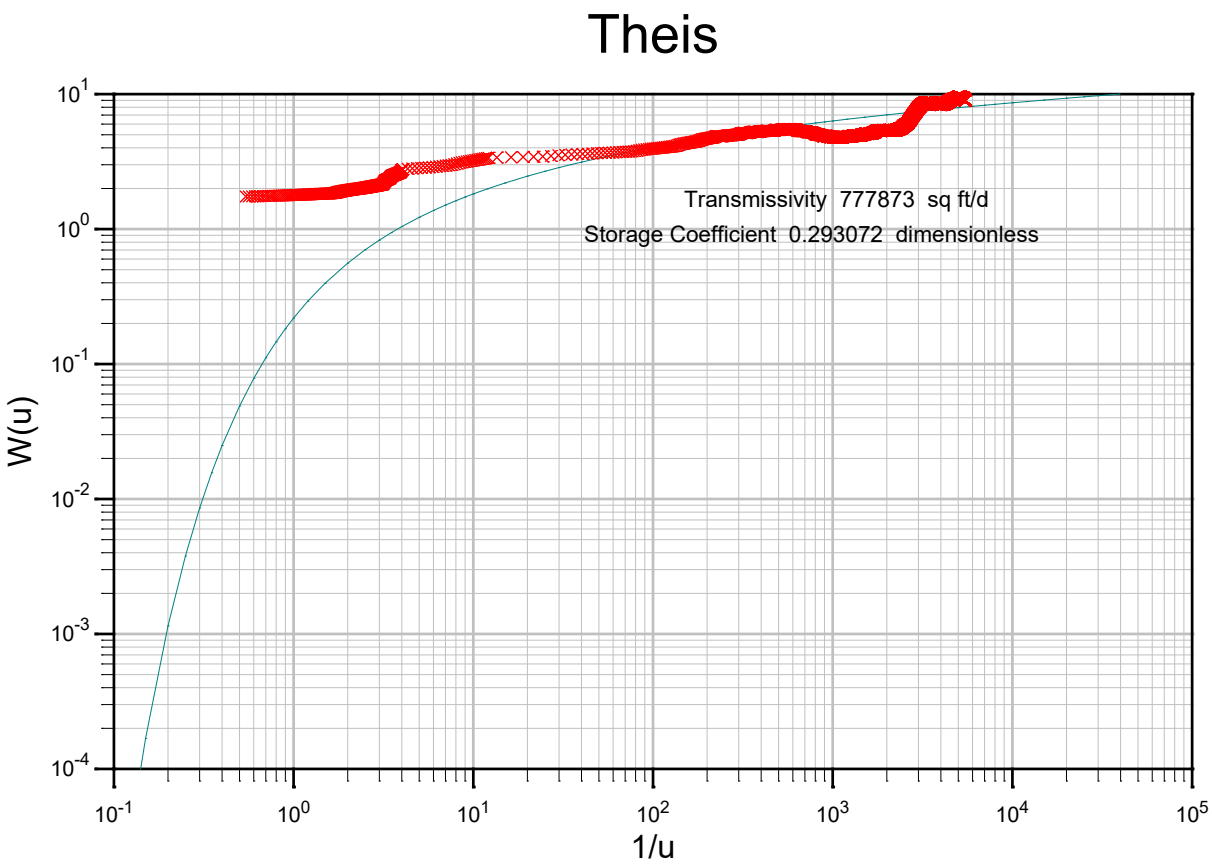

Figure 4.2: APT Theis Method for Well 1.

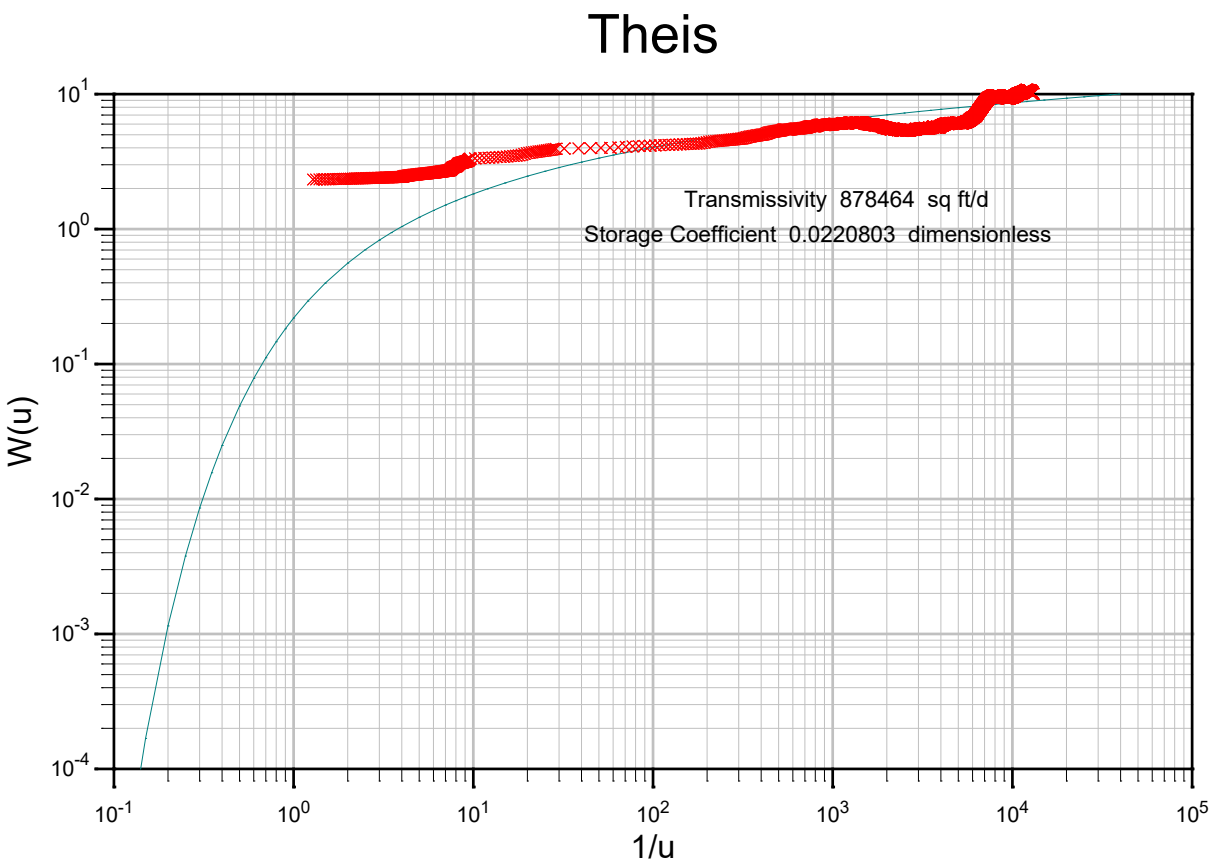

Figure 4.3: APT Theis Method for Well 13.

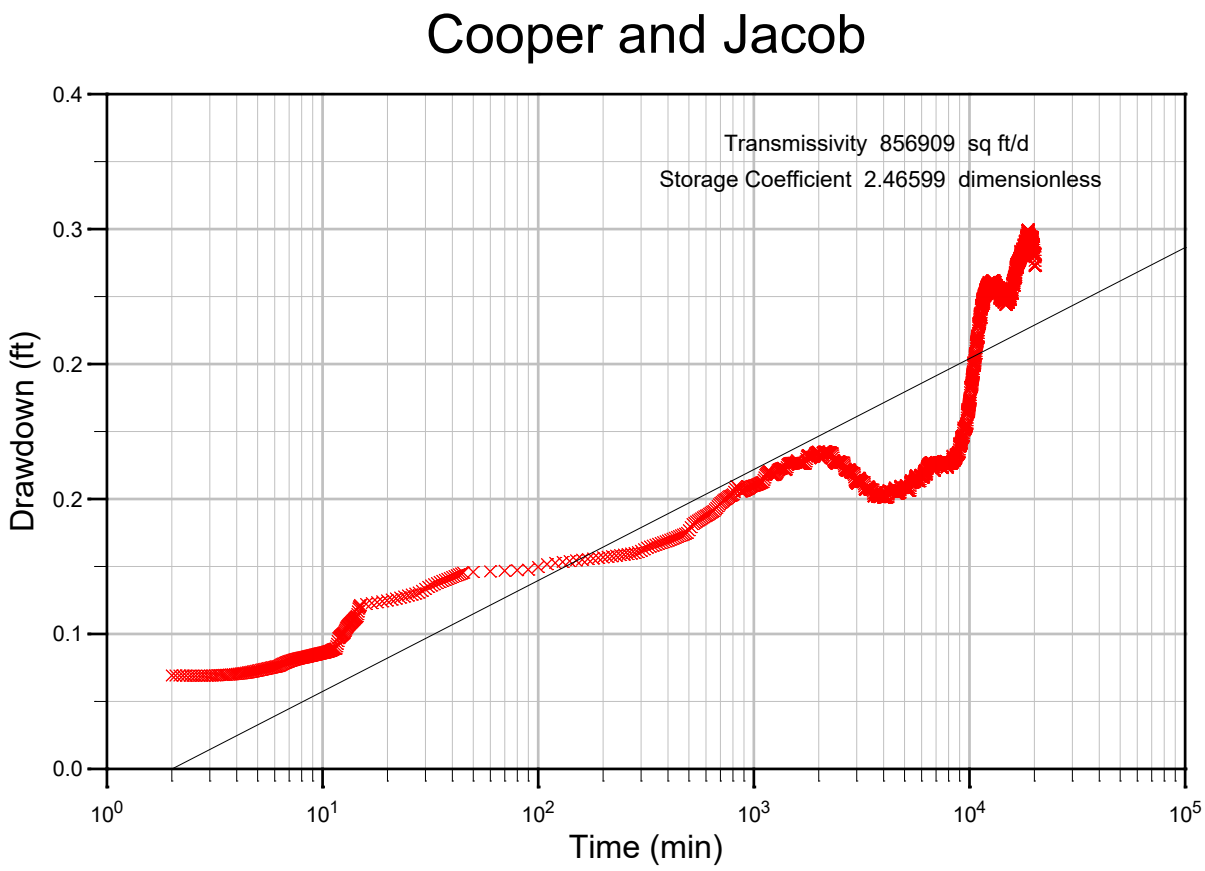

Figure 4.4: APT Cooper and Jacob Method for Well 11.

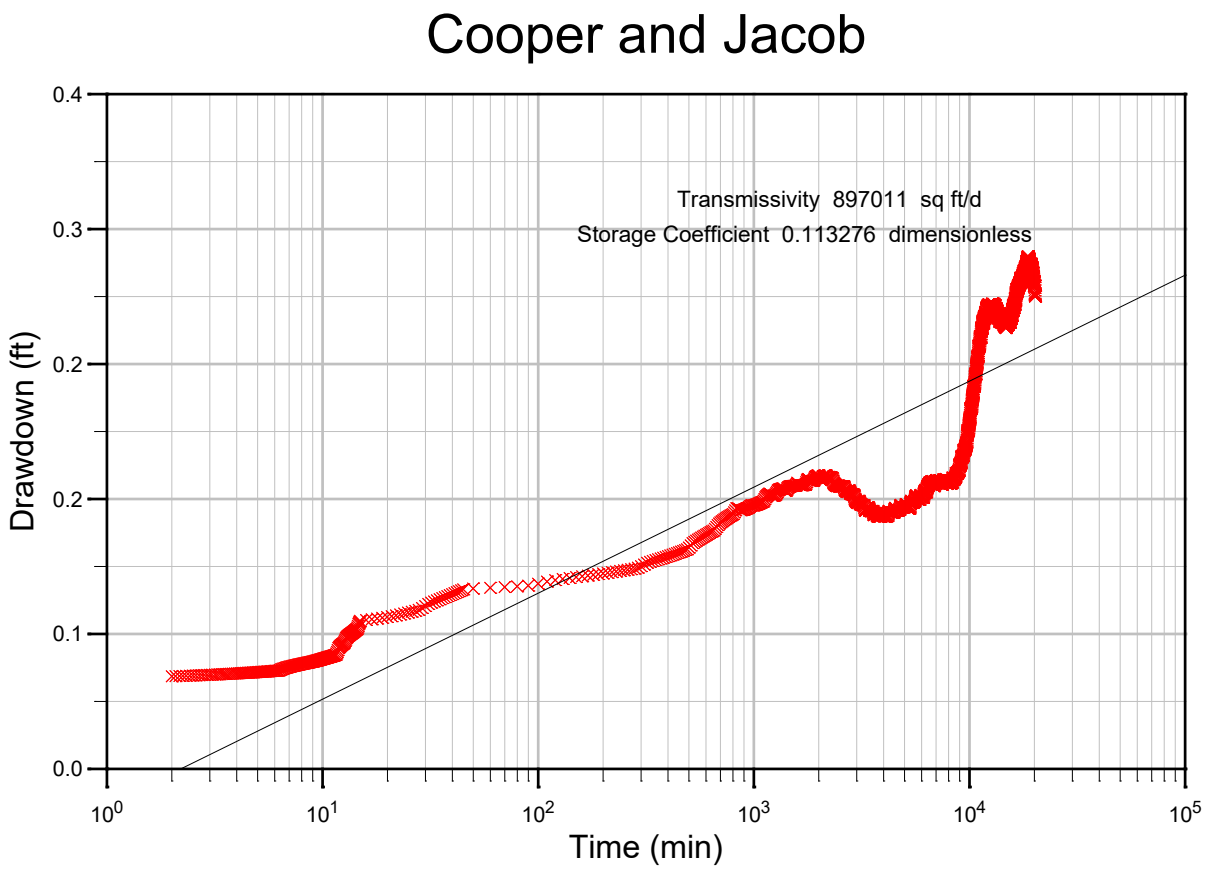

Figure 4.5: APT Cooper and Jacob Method for Well 1.

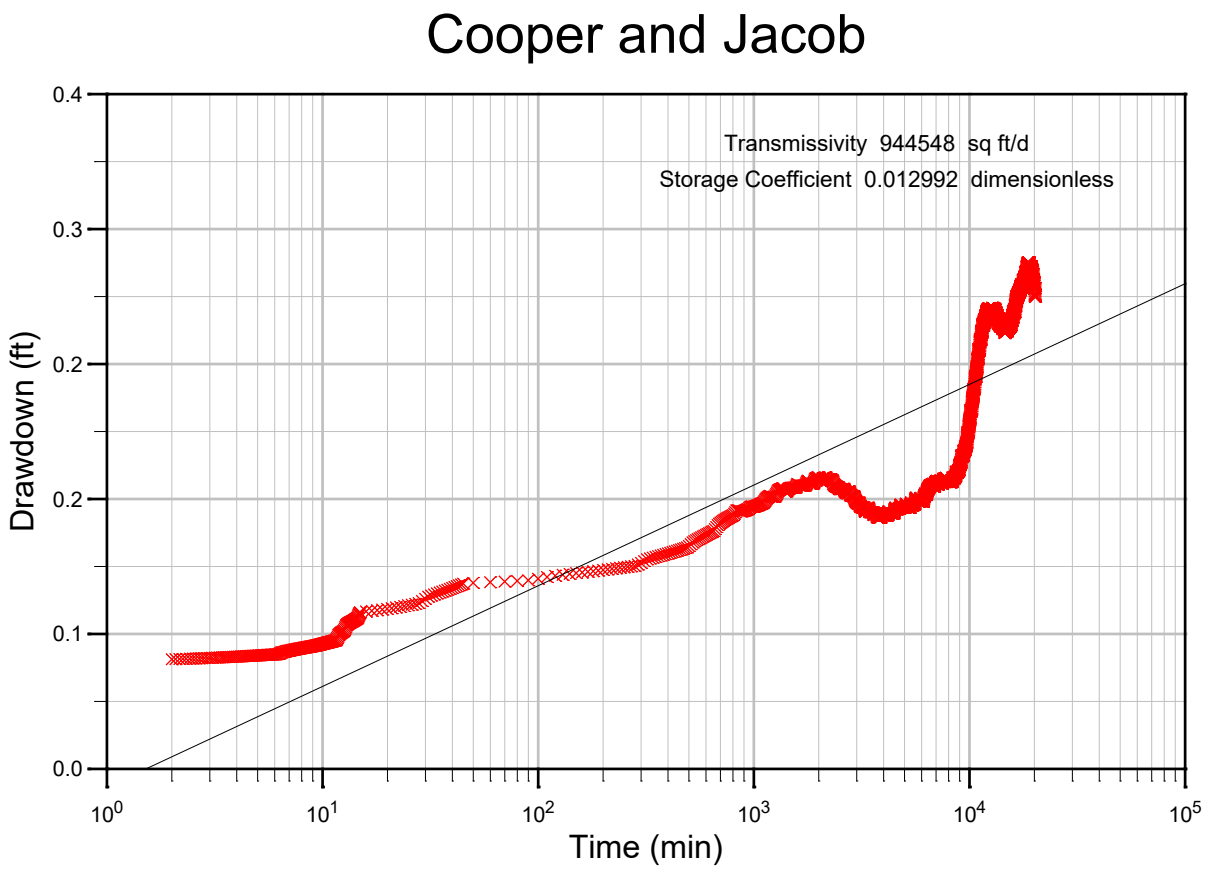

Figure 4.6: APT Cooper and Jacob Method for Well 13.

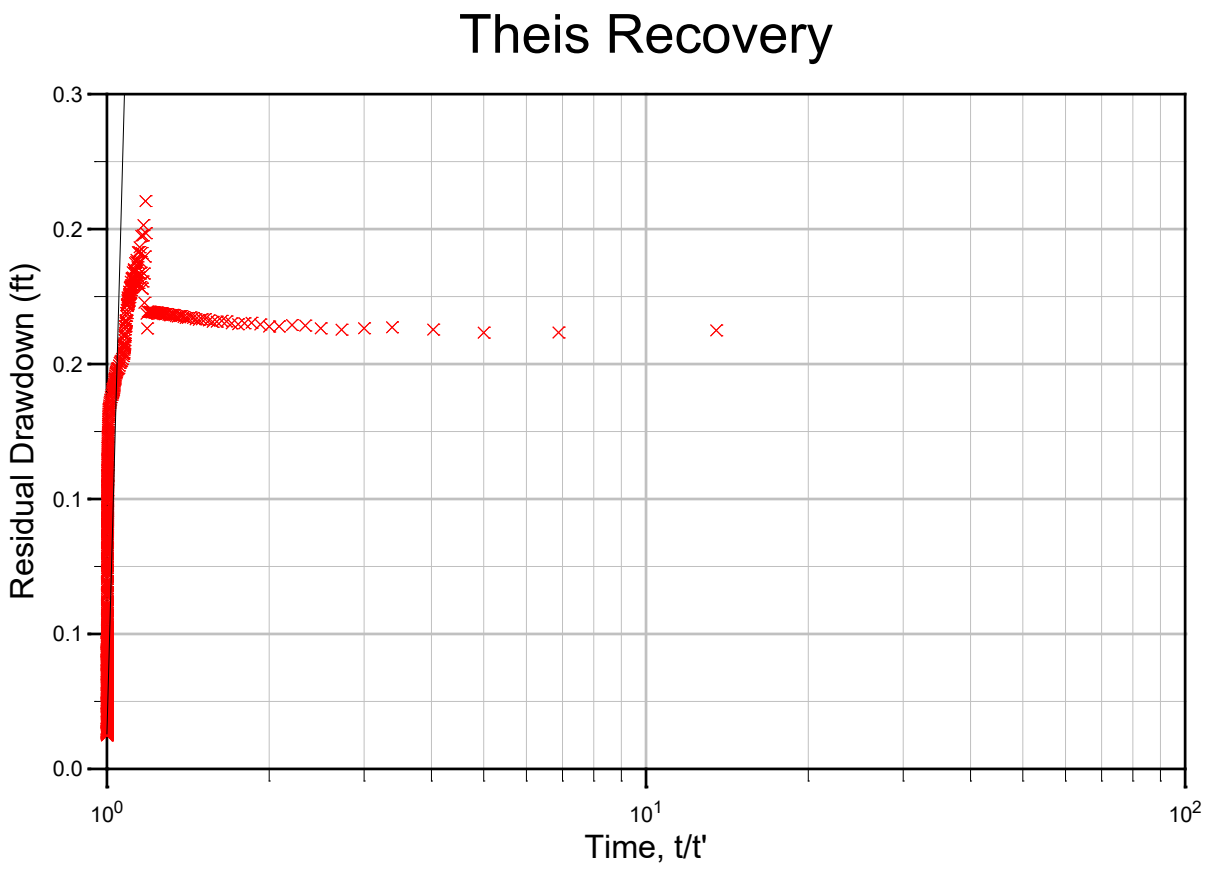

Figure 4.7: APT Recovery Theis Method for Pumping Well 15.

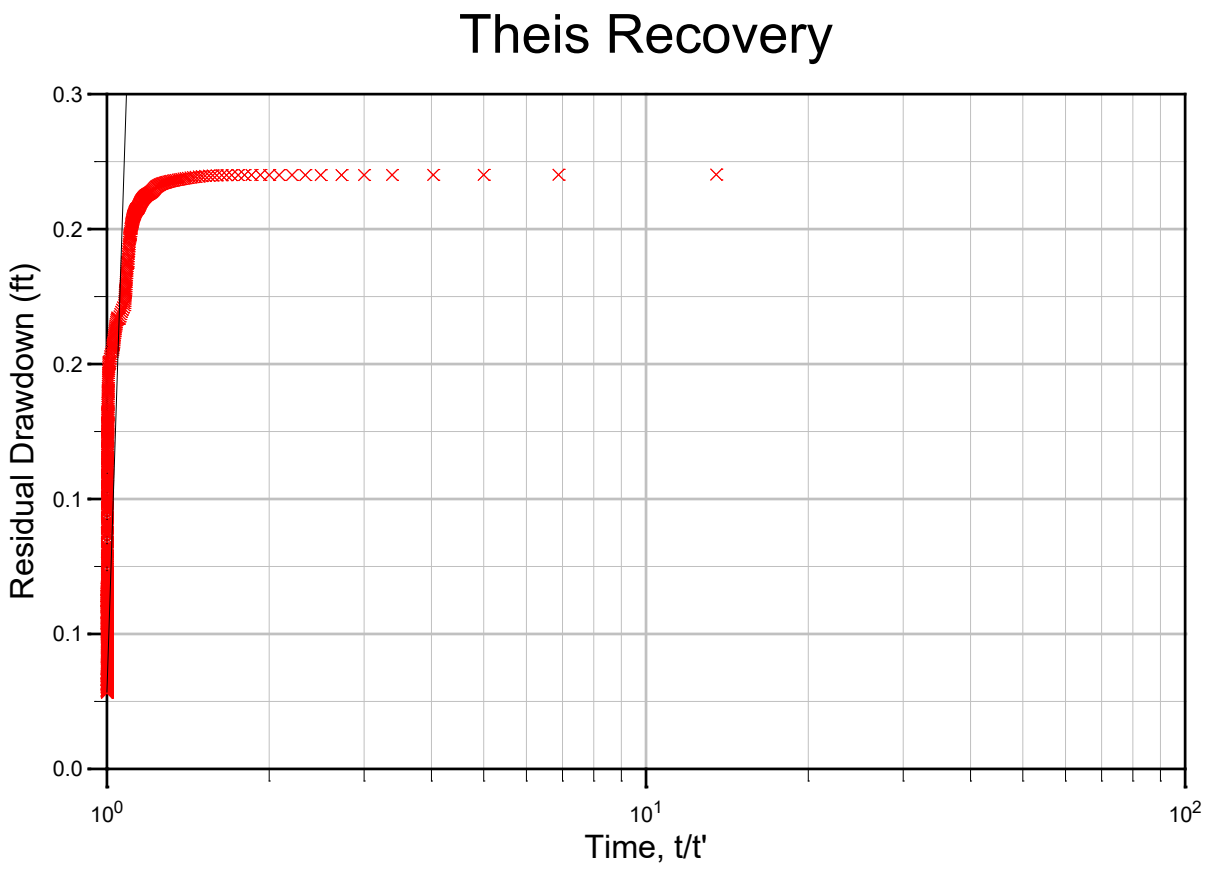

Figure 4.8: APT Recovery Theis Method for Well 11.

5 TABLES

Table 5.1: Summary of Aquifer Characteristics From APT

Method	Transmissivity (ft^2/day)	Storativity
Theis	777,900 ~ 878,500	0.022 ~ 0.293
Cooper and Jacob	856,900 ~ 944,500	0.020 ~ 0.113

6 SUMMARY

A 14-day Aquifer Performance Test (APT) was conducted at the Citrus Springs Utility site in September 2025 to evaluate the hydraulic characteristics of the Upper Floridan Aquifer (UFA). Pumping was maintained at an average rate of approximately 1,600 gallons per minute from Well 15, with groundwater levels monitored in three observation wells (Wells 11, 1, and 13) and two regional background wells.

Water-level data were processed using background trend removal and smoothing techniques to minimize the effects of short-term variability associated with intermittent on-site pumping and other external influences. The Segment-Based Moving Average Window method was selected for final analysis based on its stability, physical realism, and ability to preserve the dominant pumping-induced response. Analytical evaluation based on pumping-period drawdown data using the Theis and Cooper–Jacob methods indicate an exceptionally highly transmissive aquifer system, with transmissivity values consistently on the order of 800,000 ft^2/day across all observation wells.

Storativity estimates exhibited greater variability and sensitivity to early-time response and observation well distance. Storativity values derived from the nearest observation well were not considered physically representative and were excluded from interpretation, while values from Wells 1 and 13 are considered more indicative of aquifer behavior at the scale of observation and indicate a storativity value of approximately 0.02. Overall, transmissivity is the most reliably constrained hydraulic parameter derived from the APT.

The UFA at the site does not behave as a perfectly confined, homogeneous porous medium. Instead, the rapid and nearly uniform time–drawdown responses observed at increasing distances from the pumping well indicate strong hydraulic connectivity and karst-influenced, conduit-enhanced flow conditions typical of the Upper Floridan Aquifer in this region. The degree of vertical confinement cannot be conclusively defined based on available data; however, results suggest that confinement may be weak, discontinuous, or influenced by leakage from overlying units.

Overall, the Upper Floridan Aquifer at the Citrus Springs Utility site demonstrates the capacity to sustain substantial pumping rates with minimal drawdown, supporting feasibility for long-term water-supply development. Future evaluations and wellfield planning should account for the highly transmissive, karst-influenced nature of the aquifer and the potential limitations of classical analytical assumptions when predicting regional impacts.

7 REPORT LIMITATIONS

This report has been prepared for the specific purpose described herein, at the request of and for the use of the Client. The observations, conclusions, and recommendations presented are professional opinions based on the scope of services performed, information obtained through site-specific measurements and observations by WSP USA, and the interpretation and extrapolation of secondary data from published and unpublished sources.

The report may infer the configuration of subsurface strata, groundwater conditions, and hydrogeologic properties between data points or below the maximum depth of investigation. Temporal trends and averages for climatic, hydrological, or water quality parameters may also be estimated. Such interpretations and extrapolations are indicative only, and no liability is assumed for differences between the opinions expressed herein and conditions that may be observed through future measurements or investigations.

Unless otherwise agreed in writing by WSP USA, WSP USA assumes no responsibility for any use of, or reliance upon, the contents of this report by any person or entity, for any loss, damage, or expense arising from such use or reliance. Any unauthorized third-party use of the information contained herein is undertaken solely at the user's own risk.

8 REFERENCES

Cooper, H.H., and Jacob, C.E. (1946). A generalized graphical method for evaluating formation constants and summarizing well-field history. Transactions of the American Geophysical Union, 27, 526–534. https://doi.org/10.1029/TR027i004p00526

Kruseman, G.P., and de Ridder, N.A. (2000). Analysis and Evaluation of Pumping Test Data (2nd ed.). International Institute for Land Reclamation and Improvement (ILRI), Publication 47, Wageningen, The Netherlands.

Theis, C.V. (1935). The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well-using ground-water storage. Transactions of the American Geophysical Union, 16, 519–524. https://doi.org/10.1029/TR016i002p00519

DRAFT

Kenneth A. Fraser, PE

From: Claire Clements <claire@hrtampabay.com>
Sent: Thursday, April 2, 2026 3:01 PM
To: Kenneth A. Fraser, PE; John Bostic III; Saxon Evans; Alexander Sassoon
Subject: COMPLETED WATER TEST TBW RESULTS
Attachments: Technical Memo_CSU APT Analysis Final Report_04-02-2026.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Well Happy Easter. Here is some good reading from Citrus Springs, springs.
Thank you all for your patience. I hope this is on time. All good things take time.
Claire

CLAIRE CLEMENTS
HR TAMPA BAY LLC
9804 West Park Village Dr.
Tampa, FL 33626
(813) 293-3719

Attachment C

AEL Laboratory Analysis

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9610 Princess Palm Ave Tampa, FL 33619
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Fax: (813) 630-4327

FINAL

Workorder: Source Water (T2410683)

June 04, 2024

Ramon Campos
YOS
15240 Citrus County
Dade City, FL 33523

RE: Workorder: T2410683 Source Water

Dear Ramon Campos:

Enclosed are the analytical results for sample(s) received by the laboratory between Tuesday May 7, 2024 and Wednesday May 8, 2024. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brandy Devilbiss, Project Manager I
BDevilbiss@aellab.com

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FINAL

Workorder: Source Water (T2410683)

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported	Basis
T2410683001	Source Water	DW	EPA 504.1	05/07/2024 12:30	05/07/2024 15:50	2	NA
T2410683001	Source Water	DW	EPA 508	05/07/2024 12:30	05/07/2024 15:50	10	NA
T2410683001	Source Water	DW	EPA 515.3	05/07/2024 12:30	05/07/2024 15:50	6	NA
T2410683001	Source Water	DW	EPA 525.2	05/07/2024 12:30	05/07/2024 15:50	6	NA
T2410683001	Source Water	DW	EPA 531.1	05/07/2024 12:30	05/07/2024 15:50	2	NA
T2410683001	Source Water	DW	EPA 547	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683001	Source Water	DW	EPA 548.1	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683001	Source Water	DW	EPA 549.2	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683002	Source Water	DW	EPA 524.2	05/07/2024 12:30	05/07/2024 15:50	21	NA
T2410683003	Source Water	DW	EPA 200.7	05/07/2024 12:30	05/07/2024 15:50	6	NA
T2410683003	Source Water	DW	EPA 200.8	05/07/2024 12:30	05/07/2024 15:50	12	NA
T2410683003	Source Water	DW	EPA 245.1	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683003	Source Water	DW	EPA 300.0	05/07/2024 12:30	05/07/2024 15:50	3	NA
T2410683003	Source Water	DW	SM 2120 B	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683003	Source Water	DW	SM 2150 B	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683003	Source Water	DW	SM 2540 C	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683003	Source Water	DW	SM 4500-CN-E	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683003	Source Water	DW	SM 4500H+B	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683003	Source Water	DW	SM 4500NO3-F	05/07/2024 12:30	05/07/2024 15:50	2	NA
T2410683003	Source Water	DW	SM 5540 C	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683004	Source Water	DW	EPA 900 Gross Alpha	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683004	Source Water	DW	EPA 903.1 R226	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683004	Source Water	DW	EPA Ra-05 R228	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683005	Source Water	DW	EPA 1613	05/07/2024 12:30	05/07/2024 15:50	1	NA
T2410683006	Source Water	DW	EPA 100.1	05/08/2024 13:00	05/08/2024 13:50	1	NA
T2410683007	Source Water	DW	EPA 300.1	05/07/2024 12:30	05/07/2024 15:50	3	NA
T2410683008	Source Water	DW	EPA 524.2	05/07/2024 12:30	05/07/2024 15:50	5	NA
T2410683008	Source Water	DW	EPA 552.2	05/07/2024 12:30	05/07/2024 15:50	6	NA

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FINAL

Workorder: Source Water (T2410683)

Workorder Summary

Method Comments

COLR-SM-W

Batch Comments

GCSj/6397 - E515.3 Analysis,Water

The samples associated with this analysis batch were extracted on 05/20/2024 16:59.

HPLj/2697 - E549.2 Analysis,Water

The spike recovery of Diquat (at 144%) for the Laboratory Control Sample (LCS) was outside the upper control criterion (Limits 70-130%). The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.

ICMj/4313 - ICPMS 200.8 Analysis (QC Reqr)

The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): Uranium. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

MSSj/3974 - E548.1 Analysis,Water

All samples associated with this analysis batch were extracted on 05/08/2024 at 09:47.

MSSj/3979 - E525.2 Analysis,Water

All samples associated with this analysis batch were extracted on 05/14/2024 at 13:15.

WCAt/29799 - NO3,NO2 SM4500NO3F,Water

The matrix spike recoveries of Nitrate T2410670001 (MS 145% and MSD 139%) and T2410704002 (MS 199% and MSD 197%). Recovery in the Laboratory Control Sample (LCS) were acceptable, which indicates the analytical batch was in control. The matrix spike outliers suggest a potential high bias in this matrix. No further corrective action was required.

WCAt/30327 - IC,E300.0,Water

The matrix spike recovery of Sulfate for T2410587006 and T2410721001 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS), and %RPD were acceptable, which indicates the analytical batch was in control. No further corrective action was required.

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FINAL

Workorder: Source Water (T2410683)

QC Results Qualifiers

Parameter Qualifiers

U	The compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
Q	Missed Hold Time

Lab Qualifiers

G	DOH Certification #E82001 (FL NELAC) AEL-Gainesville
J	DOH Certification #E82574 (FL NELAC) AEL-Jacksonville DOD-ELAP Certification #L23-514 (ISO/IEC 17025:2017) AEL-Jacksonville
T	DOH Certification #E84589 (FL NELAC) AEL-Tampa

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Workorder: Source Water (T2410683)

QC Results

QC Batch: CVAt/2224
Preparation Method: EPA 245.1
Associated Lab IDs: T2410683003
Analysis Method: EPA 245.1

Method Blank(5299435)

Parameter	Results	Units	PQL	MDL	Lab
Mercury	0.000011 U	mg/L	0.00010	0.000011	T

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Workorder: Source Water (T2410683)

QC Results

QC Batch: GCSj/6349
Preparation Method: EPA 508
Associated Lab IDs: T2410683001
Analysis Method: EPA 508

Method Blank(5293737)

Parameter	Results	Units	PQL	MDL	Lab
Hexachlorocyclopentadiene	0.019 U	ug/L	0.020	0.019	J
Hexachlorobenzene	0.0063 U	ug/L	0.020	0.0063	J
gamma-BHC (Lindane)	0.0071 U	ug/L	0.020	0.0071	J
Heptachlor	0.0060 U	ug/L	0.020	0.0060	J
Heptachlor Epoxide	0.0052 U	ug/L	0.020	0.0052	J
Endrin	0.0069 U	ug/L	0.020	0.0069	J
Methoxychlor	0.0068 U	ug/L	0.020	0.0068	J
PCBs	0.093 U	ug/L	0.20	0.093	J
Chlordane (technical)	0.053 U	ug/L	0.20	0.053	J
Toxaphene	0.12 U	ug/L	0.20	0.12	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	mg/L	0.0005	0.0005	100	70 - 130	J

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Workorder: Source Water (T2410683)

QC Results

QC Batch: GCSj/6397
Preparation Method: EPA 515.3
Associated Lab IDs: T2410683001
Analysis Method: EPA 515.3

Method Blank(5316067)

Parameter	Results	Units	PQL	MDL	Lab
Dalapon	0.90 U	ug/L	5.0	0.90	J
2,4-D	0.095 U	ug/L	5.0	0.095	J
Pentachlorophenol	0.038 U	ug/L	0.50	0.038	J
Silvex (2,4,5-TP)	0.090 U	ug/L	1.0	0.090	J
Picloram	0.090 U	ug/L	0.50	0.090	J
Dinoseb	0.18 U	ug/L	2.5	0.18	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2,4-Dichlorophenylacetic acid (S)	ug/L	25	18	72	70 - 130	J

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: GCSt/4563
Preparation Method: EPA 504.1
Associated Lab IDs: T2410683001
Analysis Method: EPA 504.1

Method Blank(5296510)

Parameter	Results	Units	PQL	MDL	Lab
Ethylene Dibromide (EDB)	0.0076 U	ug/L	0.020	0.0076	T^
1,2-Dibromo-3-Chloropropane	0.0049 U	ug/L	0.020	0.0049	T^

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Tetrachloro-m-xylene (S)	ug/L	1	0.90	90	64 - 150	T

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: GCSt/4564
Preparation Method: EPA 552.2
Associated Lab IDs: T2410683008
Analysis Method: EPA 552.2

Method Blank(5299323)

Parameter	Results	Units	PQL	MDL	Lab
Chloroacetic Acid	0.98 U	ug/L	1.0	0.98	T
Bromoacetic Acid	0.41 U	ug/L	1.0	0.41	T
Dichloroacetic Acid	0.42 U	ug/L	1.0	0.42	T
Trichloroacetic Acid	0.94 U	ug/L	1.0	0.94	T
Dibromoacetic Acid	0.74 U	ug/L	1.0	0.74	T
Total Haloacetic Acids (HAA5)	0.98 U	ug/L	1.0	0.98	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2,3-Dibromopropionic Acid (S)	ug/L	20	17	85	70 - 130	T

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: HPLj/2668
Preparation Method: EPA 547
Associated Lab IDs: T2410683001
Analysis Method: EPA 547

Method Blank(5299470)

Parameter	Results	Units	PQL	MDL	Lab
Glyphosate	5.9 U	ug/L	50	5.9	J

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: HPLj/2692
Preparation Method: EPA 531.1
Associated Lab IDs: T2410683001
Analysis Method: EPA 531.1

Method Blank(5318037)

Parameter	Results	Units	PQL	MDL	Lab
Oxamyl	1.8 U	ug/L	2.5	1.8	J
Carbofuran	0.67 U	ug/L	2.5	0.67	J

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: HPLj/2697
Preparation Method: EPA 549.2
Associated Lab IDs: T2410683001
Analysis Method: EPA 549.2

Method Blank(5301504)

Parameter	Results	Units	PQL	MDL	Lab
Diquat	0.37 U	ug/L	5.0	0.37	J

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: ICMj/4313
Preparation Method: EPA 200.8
Associated Lab IDs: T2410683003
Analysis Method: EPA 200.8

Method Blank(5296406)

Parameter	Results	Units	PQL	MDL	Lab
Manganese	0.0010 U	mg/L	0.0040	0.0010	J
Copper	0.0010 U	mg/L	0.0040	0.0010	J
Zinc	0.0060 U	mg/L	0.024	0.0060	J
Arsenic	0.00025 U	mg/L	0.0010	0.00025	J
Selenium	0.0012 U	mg/L	0.0050	0.0012	J
Silver	0.00050 U	mg/L	0.0020	0.00050	J
Cadmium	0.00025 U	mg/L	0.0010	0.00025	J
Antimony	0.0010 U	mg/L	0.0040	0.0010	J
Barium	0.00050 U	mg/L	0.0020	0.00050	J
Thallium	0.00025 U	mg/L	0.0010	0.00025	J
Lead	0.00050 U	mg/L	0.0020	0.00050	J
Uranium	0.20 U	ug/L	0.80	0.20	J

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Fax: (813) 630-4327

FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: ICPt/4735
Preparation Method: EPA 200.7
Associated Lab IDs: T2410683003
Analysis Method: EPA 200.7

Method Blank(5305894)

Parameter	Results	Units	PQL	MDL	Lab
Aluminum	0.021 U	mg/L	0.10	0.021	T
Beryllium	0.0020 U	mg/L	0.010	0.0020	T
Chromium	0.0050 U	mg/L	0.010	0.0050	T
Iron	0.0067 U	mg/L	0.10	0.0067	T
Sodium	0.80 U	mg/L	1.0	0.80	T
Nickel	0.0080 U	mg/L	0.010	0.0080	T

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: MSSj/3974
Preparation Method: EPA 548.1
Associated Lab IDs: T2410683001
Analysis Method: EPA 548.1

Method Blank(5299896)

Parameter	Results	Units	PQL	MDL	Lab
Endothall	6.0 U	ug/L	8.0	6.0	J

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: MSSj/3979
Preparation Method: EPA 525.2
Associated Lab IDs: T2410683001
Analysis Method: EPA 525.2

Method Blank(5306740)

Parameter	Results	Units	PQL	MDL	Lab
Simazine	0.060 U	ug/L	0.50	0.060	J
Atrazine	0.090 U	ug/L	0.50	0.090	J
Alachlor	0.15 U	ug/L	0.50	0.15	J
Di(2-ethylhexyl) adipate	0.50 U	ug/L	1.0	0.50	J
bis(2-Ethylhexyl) phthalate	0.50 U	ug/L	2.0	0.50	J
Benzo[a]pyrene	0.015 U	ug/L	0.50	0.015	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
p-Terphenyl-d14 (S)	mg/L	0.0050	0.0048	96	70 - 130	J

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: MSVt/9235
Preparation Method: EPA 524.2
Associated Lab IDs: T2410683008
Analysis Method: EPA 524.2

Method Blank(5303613)

Parameter	Results	Units	PQL	MDL	Lab
Chloroform	0.32 U	ug/L	1.0	0.32	T
Bromodichloromethane	0.42 U	ug/L	1.0	0.42	T
Dibromochloromethane	0.37 U	ug/L	1.0	0.37	T
Bromoform	0.45 U	ug/L	1.0	0.45	T
Total Trihalomethanes	0.45 U	ug/L	1.0	0.45	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	50	100	70 - 130	T
Bromofluorobenzene (S)	ug/L	50	51	102	70 - 130	T
Toluene-d8 (S)	ug/L	50	40	80	70 - 130	T

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: MSVt/9261
Preparation Method: EPA 524.2
Associated Lab IDs: T2410683002
Analysis Method: EPA 524.2

Method Blank(5310827)

Parameter	Results	Units	PQL	MDL	Lab
Vinyl Chloride	0.29 U	ug/L	1.0	0.29	T^
1,1-Dichloroethylene	0.22 U	ug/L	1.0	0.22	T^
Methylene Chloride	0.44 U	ug/L	1.0	0.44	T^
trans-1,2-Dichloroethylene	0.21 U	ug/L	1.0	0.21	T^
cis-1,2-Dichloroethylene	0.27 U	ug/L	1.0	0.27	T^
1,2-Dichloroethane	0.24 U	ug/L	1.0	0.24	T^
1,1,1-Trichloroethane	0.29 U	ug/L	1.0	0.29	T^
Carbon Tetrachloride	0.25 U	ug/L	1.0	0.25	T^
Benzene	0.26 U	ug/L	1.0	0.26	T^
1,2-Dichloropropane	0.26 U	ug/L	1.0	0.26	T^
Trichloroethene	0.14 U	ug/L	1.0	0.14	T^
1,1,2-Trichloroethane	0.27 U	ug/L	1.0	0.27	T^
Toluene	0.33 U	ug/L	1.0	0.33	T^
Tetrachloroethylene (PCE)	0.42 U	ug/L	1.0	0.42	T^
Chlorobenzene	0.36 U	ug/L	1.0	0.36	T^
Ethylbenzene	0.31 U	ug/L	1.0	0.31	T^
Styrene	0.25 U	ug/L	1.0	0.25	T^
1,4-Dichlorobenzene	0.33 U	ug/L	1.0	0.33	T^
1,2-Dichlorobenzene	0.39 U	ug/L	1.0	0.39	T^
1,2,4-Trichlorobenzene	0.44 U	ug/L	1.0	0.44	T^
Xylene (Total)	0.44 U	ug/L	3.0	0.44	T^

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	50	99	70 - 130	T
Bromofluorobenzene (S)	ug/L	50	54	107	70 - 130	T
Toluene-d8 (S)	ug/L	50	51	102	70 - 130	T

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: WCAg/16180
Preparation Method: SM 5540 C
Associated Lab IDs: T2410683003

Analysis Method: SM 5540 C

Method Blank(5297643)

Parameter	Results	Units	PQL	MDL	Lab
MBAS,as LAS,mol.wt.348	0.040 U	mg/L	0.20	0.040	G

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: WCAt/29799
Preparation Method: SM 4500NO3-F
Associated Lab IDs: T2410683003
Analysis Method: SM 4500NO3-F

Method Blank(5295027)

Parameter	Results	Units	PQL	MDL	Lab
Nitrate (as N)	0.092 U	mg/L	0.10	0.092	T
Nitrite (as N)	0.081 U	mg/L	0.10	0.081	T

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: WCAt/29804
Preparation Method: SM 2540 C
Associated Lab IDs: T2410683003

Analysis Method: SM 2540 C

Method Blank(5295949)

Parameter	Results	Units	PQL	MDL	Lab
Total Dissolved Solids	10 U	mg/L	10	10	T

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: WCAt/29806
Preparation Method: SM 2120 B
Associated Lab IDs: T2410683003
Analysis Method: SM 2120 B

Method Blank(5296136)

Parameter	Results	Units	PQL	MDL	Lab
Color	4.3 U	PCU	5.0	4.3	T

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: WCAt/30013
Preparation Method: SM 4500-CN-E
Associated Lab IDs: T2410683003

Analysis Method: SM 4500-CN-E

Method Blank(5307281)

Parameter	Results	Units	PQL	MDL	Lab
Cyanide	0.0040 U	mg/L	0.010	0.0040	T

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: WCAt/30310
Preparation Method: EPA 300.1
Associated Lab IDs: T2410683007
Analysis Method: EPA 300.1

Method Blank(5322456)

Parameter	Results	Units	PQL	MDL	Lab
Bromate	0.40 U	ug/L	10	0.40	T
Chlorate	0.65 U	ug/L	10	0.65	T
Chlorite	0.95 U	ug/L	10	0.95	T

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FINAL

Workorder: Source Water (T2410683)

QC Results

QC Batch: WCAt/30327
Preparation Method: EPA 300.0
Associated Lab IDs: T2410683003
Analysis Method: EPA 300.0

Method Blank(5323099)

Parameter	Results	Units	PQL	MDL	Lab
Fluoride	0.20 U	mg/L	0.50	0.20	T
Chloride	1.0 U	mg/L	5.0	1.0	T
Sulfate	1.0 U	mg/L	5.0	1.0	T

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FINAL

Workorder: Source Water (T2410683)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
CVAt/2224 - EPA 245.1			
T2410683003	Source Water	DGMt/7736	EPA 245.1
GCSj/6349 - EPA 508			
T2410683001	Source Water	EXTj/8982	EPA 508
GCSj/6397 - EPA 515.3			
T2410683001	Source Water	GCSj/6396	EPA 515.3
GCSt/4563 - EPA 504.1			
T2410683001	Source Water	EXTt/5805	EPA 504.1
GCSt/4564 - EPA 552.2			
T2410683008	Source Water	GCSt/4559	EPA 552.2
HPLj/2668 - EPA 547			
T2410683001	Source Water		
HPLj/2692 - EPA 531.1			
T2410683001	Source Water		
HPLj/2697 - EPA 549.2			
T2410683001	Source Water	EXTj/9014	EPA 549.2
ICMj/4313 - EPA 200.8			
T2410683003	Source Water		
ICPt/4735 - EPA 200.7			
T2410683003	Source Water		
MSSj/3974 - EPA 548.1			
T2410683001	Source Water	EXTj/8999	EPA 548.1
MSSj/3979 - EPA 525.2			
T2410683001	Source Water	EXTj/9045	EPA 525.2
MSVt/9235 - EPA 524.2			
T2410683008	Source Water		
MSVt/9261 - EPA 524.2			
T2410683002	Source Water		
WCAg/16180 - SM 5540 C			
T2410683003	Source Water		

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FINAL

Workorder: Source Water (T2410683)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
WCAt/29778 - SM 2150 B			
T2410683003	Source Water		
WCAt/29790 - SM 4500H+B			
T2410683003	Source Water		
WCAt/29799 - SM 4500NO3-F			
T2410683003	Source Water		
WCAt/29804 - SM 2540 C			
T2410683003	Source Water		
WCAt/29806 - SM 2120 B			
T2410683003	Source Water		
WCAt/30013 - SM 4500-CN-E			
T2410683003	Source Water		
WCAt/30310 - EPA 300.1			
T2410683007	Source Water		
WCAt/30327 - EPA 300.0			
T2410683003	Source Water		

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Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

PUBLIC WATER SYSTEM INFORMATION (to be completed by sampler – please type or print legibly)

System Name: Source Water PWS I.D. #: 6512214

System Type (check one): ☐ Community ☐ Nontransient Noncommunity ☐ Transient Noncommunity

Address:

City: ZIP Code:

Phone #: Fax #: E-Mail Address:

SAMPLE INFORMATION (to be completed by sampler)

Sample Number: T2410683001 Sample Date: 05/07/2024 Sample Time: 12:30 AM PM (Circle One)

Sample Location (be specific): Source Water Location Code:

Disinfectant Residual (Required when reporting results for trihalomethanes and haloacetic acids mg/L Field pH:

Sample Type (Check Only One)

- ☐ Distribution
- ☐ Entry Point (to Distribution)
- ☐ Plant Tap (not for compliance with 62-550
- ☐ Raw (at well or intake)
- ☐ Max Residence Time
- ☐ Ave Residence Time
- ☐ Near First Customer

Reason(s) for Sample (Check all that apply)

- ☐ Routine Compliance with 62-550
- ☐ Confirmation of MCL Exceedance*
- ☐ Composite of Multiple Sites*
- ☐ Other:
- ☐ Replacement (of Invalidated Sample)
- ☐ Special (not for compliance with 62-550)
- ☐ Clearance (permitting)

Sampling Procedure Used or Other Comments:

*See 62-550(6) for requirements and restrictions. And 62-550.512(3) for nitrate or nitrite exceedances.

*See 62-550.550(4) for requirements and attach a results page for each site.

SAMPLER CERTIFICATION

I , , do HEREBY CERTIFY
(Print Name (Print Title)

that the above public water system and sample collection information is complete and correct.

Signature: Date:

Certified Operator # Phone # Sampler's Fax #:

Sampler's E-mail:

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

LABORATORY CERTIFICATION INFORMATION (to be completed by lab – please type or print legibly)

Lab Name: Advanced Environmental Laboratories, Inc. Florida DOH Certification #: E84589 Certification Expiration Date: 06/30/2024

ATTACH CURRENT DOH ANALYTE SHEET*

Address: 9610 Princess Palm Ave, Tampa, FL 33619 Phone #: (813) 630-9616

Were any analyses subcontracted ☑ Yes ☐ No If yes, please provide DOH certification number(s): E84025,SUBc,SUB0,E82001,E82574

ATTACH DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB

ANALYSIS INFORMATION (to be completed by lab) Date Sample(s) Received: 05/07/2024

PWS ID: (From Page 1): 6512214 Sample Number (From Page 1): T2410683001 Lab Assigned Report # Or Job ID: T2410683

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

Inorganics	Synthetic Organics	Volatile Organics	Disinfection Byproducts	Radionuclides	Secondaries
☐ All except Asbestos	☐ All 30	☐ All 21	☐ Trihalomethanes	☐ Single Sample	☐ All 14
☐ Partial	☑ All Except Dioxin	☐ Partial	☐ Haloacetic Acids	☐ Qtrly Composite*	☐ Partial
☐ Nitrate	☑ Partial		☐ Chlorite		
☐ Nitrite	☐ Dioxin Only		☐ Bromate		
☐ Asbestos					

LAB CERTIFICATION

I, Brandy Devilbiss (Print Name), Project Manager I (Print Title), do HEREBY CERTIFY that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature: Brandy Devilbiss Date: 06/04/2024

* Failure to provide a valid and current Florida DOH lab certification number and a current Analyte Sheet for the attached analysis results will result in rejection of the report, possible enforcement against the public water system for failure to sample, and may result in notification of the DOH Bureau of Laboratory Services.

** Please provide radiological sample dates & locations for each quarter.

CONFIRMATION & NOTIFICATION IS REQUIRED WITHIN 24 HRS FOR NITRATE OR NITRITE MCL EXCEEDANCES

NON-DETECTS ARE TO BE REPORTED AS THE MDL WITH "U" QUALIFIER. (Non-detects reported as "BDL" or with a "<" are not acceptable.)

COMPLIANCE DETERMINATION (to be completed by DEP or DOH -- attach notes as necessary)

Sample Collection & Analysis Satisfactory: ☐ Yes ☐ No _____ Replacement Sample or Report Requested (circle or highlight group(s) above)

Person Notified: _____ Date Notified: _____ DEP/DOH Reviewing Official: _____

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

SYNTHETIC ORGANICS

Report Number / Job ID: T2410683001 PWS ID (From Page 1): 6512214

62-550.310(4)(b)

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	RDL	Extraction Date	Analysis Date	Analysis Time	DOH Lab Certification #
2005	Endrin	2	ug/L	0.0069	U	EPA 508	0.0069	0.01	05/09/2024	05/11/2024	06:35	E82574
2010	Lindane	0.2	ug/L	0.0071	U	EPA 508	0.0071	0.02	05/09/2024	05/11/2024	06:35	E82574
2015	Methoxychlor	40	ug/L	0.0068	U	EPA 508	0.0068	0.1	05/09/2024	05/11/2024	06:35	E82574
2020	Toxaphene	3	ug/L	0.12	U	EPA 508	0.12	1	05/09/2024	05/11/2024	06:35	E82574
2031	Dalapon	200	ug/L	0.90	U	EPA 515.3	0.90	1	05/20/2024	05/23/2024	17:17	E82574
2032	Diquat	20	ug/L	0.37	U	EPA 549.2	0.37	0.4	05/13/2024	05/24/2024	11:36	E82574
2033	Endothall	100	ug/L	6.0	U	EPA 548.1	6.0	9	05/08/2024	05/18/2024	02:57	E82574
2034	Glyphosate	700	ug/L	5.9	U	EPA 547	5.9	6		05/13/2024	21:20	E82574
2035	Di(2-ethylhexyl)adipate	400	ug/L	0.50	U	EPA 525.2	0.50	0.6	05/14/2024	05/22/2024	12:29	E82574
2036	Oxamyl (Vydate)	200	ug/L	1.8	U	EPA 531.1	1.8	2		05/25/2024	07:46	E82574
2037	Simazine	4	ug/L	0.060	U	EPA 525.2	0.060	0.07	05/14/2024	05/22/2024	12:29	E82574
2039	Di(2-ethylhexyl)phthalate	6	ug/L	0.50	U	EPA 525.2	0.50	0.6	05/14/2024	05/22/2024	12:29	E82574
2040	Picloram	500	ug/L	0.090	U	EPA 515.3	0.090	0.1	05/20/2024	05/23/2024	17:17	E82574
2041	Dinoseb	7	ug/L	0.18	U	EPA 515.3	0.18	0.2	05/20/2024	05/23/2024	17:17	E82574
2042	Hexachlorocyclopentadinene	50	ug/L	0.019	U	EPA 508	0.019	0.1	05/09/2024	05/11/2024	06:35	E82574
2046	Carbofuran	40	ug/L	0.67	U	EPA 531.1	0.67	0.9		05/25/2024	07:46	E82574
2050	Atrazine	3	ug/L	0.090	U	EPA 525.2	0.090	0.1	05/14/2024	05/22/2024	12:29	E82574
2051	Alachlor	2	ug/L	0.15	U	EPA 525.2	0.15	0.2	05/14/2024	05/22/2024	12:29	E82574
2065	Heptachlor	0.4	ug/L	0.0060	U	EPA 508	0.0060	0.04	05/09/2024	05/11/2024	06:35	E82574
2067	Heptachlor Epoxide	0.2	ug/L	0.0052	U	EPA 508	0.0052	0.02	05/09/2024	05/11/2024	06:35	E82574
2105	2,4-D	70	ug/L	0.095	U	EPA 515.3	0.095	0.1	05/20/2024	05/23/2024	17:17	E82574
2110	2,4,5-TP (Silvex)	50	ug/L	0.090	U	EPA 515.3	0.090	0.2	05/20/2024	05/23/2024	17:17	E82574
2274	Hexachlorobenzene	1	ug/L	0.0063	U	EPA 508	0.0063	0.1	05/09/2024	05/11/2024	06:35	E82574
2306	Benzo(a)pyrene	0.2	ug/L	0.015	U	EPA 525.2	0.015	0.02	05/14/2024	05/22/2024	12:29	E82574
2326	Pentachlorophenol	1	ug/L	0.038	U	EPA 515.3	0.038	0.04	05/20/2024	05/23/2024	17:17	E82574
2383	Polychlorinated biphenyls (PCBs)	0.5	ug/L	0.093	U	EPA 508	0.093	0.1	05/09/2024	05/11/2024	06:35	E82574
2931	Dibromochloropropane	0.2	ug/L	0.0049	U	EPA 504.1	0.0049	0.02	05/10/2024	05/11/2024	00:11	E84589
2946	Ethylene Dibromide (EDB)	0.02	ug/L	0.0076	U	EPA 504.1	0.0076	0.01	05/10/2024	05/11/2024	00:11	E84589
2959	Chlordane	2	ug/L	0.053	U	EPA 508	0.053	0.2	05/09/2024	05/11/2024	06:35	E82574

Note: Results indicating non-detection with a reported lab MDL >50% of the MCL will not be accepted for compliance.

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

PUBLIC WATER SYSTEM INFORMATION (to be completed by sampler – please type or print legibly)

System Name: Source Water PWS I.D. #: 6512214

System Type (check one): ☐ Community ☐ Nontransient Noncommunity ☐ Transient Noncommunity

Address: _____

City: _____ ZIP Code: _____

Phone #: _____ Fax #: _____ E-Mail Address: _____

SAMPLE INFORMATION (to be completed by sampler)

Sample Number: T2410683002 Sample Date: 05/07/2024 Sample Time: 12:30 AM PM (Circle One)

Sample Location (be specific): Source Water Location Code: _____

Disinfectant Residual (Required when reporting results for trihalomethanes and haloacetic acids _____ mg/L Field pH: _____

Sample Type (Check Only One)

- ☐ Distribution
- ☐ Entry Point (to Distribution)
- ☐ Plant Tap (not for compliance with 62-550
- ☐ Raw (at well or intake)
- ☐ Max Residence Time
- ☐ Ave Residence Time
- ☐ Near First Customer

Reason(s) for Sample (Check all that apply)

- ☐ Routine Compliance with 62-550
- ☐ Confirmation of MCL Exceedance*
- ☐ Composite of Multiple Sites*
- ☐ Other: _____
- ☐ Replacement (of Invalidated Sample)
- ☐ Special (not for compliance with 62-550)
- ☐ Clearance (permitting)

Sampling Procedure Used or Other Comments: _____

*See 62-550(6) for requirements and restrictions. And 62-550.512(3) for nitrate or nitrite exceedances.

*See 62-550.550(4) for requirements and attach a results page for each site.

SAMPLER CERTIFICATION

I _____ (Print Name) , _____ (Print Title) , do HEREBY CERTIFY that the above public water system and sample collection information is complete and correct.

Signature: _____ Date: _____

Certified Operator # _____ Phone # _____ Sampler's Fax #: _____

Sampler's E-mail: _____

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

LABORATORY CERTIFICATION INFORMATION (to be completed by lab – please type or print legibly)

Lab Name: Advanced Environmental Laboratories, Inc. Florida DOH Certification #: E84589 Certification Expiration Date: 06/30/2024

ATTACH CURRENT DOH ANALYTE SHEET*

Address: 9610 Princess Palm Ave, Tampa, FL 33619 Phone #: (813) 630-9616

Were any analyses subcontracted ☑ Yes ☐ No If yes, please provide DOH certification number(s): E84025,SUBc,SUB0,E82001,E82574

ATTACH DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB

ANALYSIS INFORMATION (to be completed by lab) Date Sample(s) Received: 05/07/2024

PWS ID: (From Page 1): 6512214 Sample Number (From Page 1): T2410683002 Lab Assigned Report # Or Job ID: T2410683

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

Inorganics	Synthetic Organics	Volatile Organics	Disinfection Byproducts	Radionuclides	Secondaries
☐ All except Asbestos	☐ All 30	☑ All 21	☐ Trihalomethanes	☐ Single Sample	☐ All 14
☐ Partial	☐ All Except Dioxin	☐ Partial	☐ Haloacetic Acids	☐ Qtrly Composite*	☐ Partial
☐ Nitrate	☐ Partial		☐ Chlorite		
☐ Nitrite	☐ Dioxin Only		☐ Bromate		
☐ Asbestos					

LAB CERTIFICATION

I, Brandy Devilbiss (Print Name), Project Manager I (Print Title), do HEREBY CERTIFY that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature: Brandy Devilbiss Date: 06/04/2024

* Failure to provide a valid and current Florida DOH lab certification number and a current Analyte Sheet for the attached analysis results will result in rejection of the report, possible enforcement against the public water system for failure to sample, and may result in notification of the DOH Bureau of Laboratory Services.

** Please provide radiological sample dates & locations for each quarter.

CONFIRMATION & NOTIFICATION IS REQUIRED WITHIN 24 HRS FOR NITRATE OR NITRITE MCL EXCEEDANCES

NON-DETECTS ARE TO BE REPORTED AS THE MDL WITH "U" QUALIFIER. (Non-detects reported as "BDL" or with a "<" are not acceptable.)

COMPLIANCE DETERMINATION (to be completed by DEP or DOH -- attach notes as necessary)

Sample Collection & Analysis Satisfactory: ☐ Yes ☐ No _____ Replacement Sample or Report Requested (circle or highlight group(s) above)

Person Notified: _____ Date Notified: _____ DEP/DOH Reviewing Official: _____

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

VOLATILE ORGANICS
62-550.310(4)(a)

Report Number / Job ID: T2410683002

PWS ID (From Page 1): 6512214

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	RDL	Analysis Date	Analysis Time	DOH Lab Certification #
2378	1,2,4-Trichlorobenzene	70	ug/L	0.44	U	EPA 524.2	0.44	0.5	05/16/2024	07:51	E84589
2380	cis-1,2-Dichloroethylene	70	ug/L	0.27	U	EPA 524.2	0.27	0.5	05/16/2024	07:51	E84589
2955	Xylenes (total)	10000	ug/L	0.44	U	EPA 524.2	0.44	0.5	05/16/2024	07:51	E84589
2964	Dichloromethane	5	ug/L	0.44	U	EPA 524.2	0.44	0.5	05/16/2024	07:51	E84589
2968	o-Dichlorobenzene	600	ug/L	0.39	U	EPA 524.2	0.39	0.5	05/16/2024	07:51	E84589
2969	para-Dichlorobenzene	75	ug/L	0.33	U	EPA 524.2	0.33	0.5	05/16/2024	07:51	E84589
2976	Vinyl Chloride	1	ug/L	0.29	U	EPA 524.2	0.29	0.5	05/16/2024	07:51	E84589
2977	1,1-Dichloroethylene	7	ug/L	0.22	U	EPA 524.2	0.22	0.5	05/16/2024	07:51	E84589
2979	trans-1,2-Dichloroethylene	100	ug/L	0.21	U	EPA 524.2	0.21	0.5	05/16/2024	07:51	E84589
2980	1,2-Dichloroethane	3	ug/L	0.24	U	EPA 524.2	0.24	0.5	05/16/2024	07:51	E84589
2981	1,1,1-Trichloroethane	200	ug/L	0.29	U	EPA 524.2	0.29	0.5	05/16/2024	07:51	E84589
2982	Carbon tetrachloride	3	ug/L	0.25	U	EPA 524.2	0.25	0.5	05/16/2024	07:51	E84589
2983	1,2-Dichloropropane	5	ug/L	0.26	U	EPA 524.2	0.26	0.5	05/16/2024	07:51	E84589
2984	Trichloroethylene	3	ug/L	0.14	U	EPA 524.2	0.14	0.5	05/16/2024	07:51	E84589
2985	1,1,2-Trichloroethane	5	ug/L	0.27	U	EPA 524.2	0.27	0.5	05/16/2024	07:51	E84589
2987	Tetrachloroethylene	3	ug/L	0.42	U	EPA 524.2	0.42	0.5	05/16/2024	07:51	E84589
2989	Monochlorobenzene	100	ug/L	0.36	U	EPA 524.2	0.36	0.5	05/16/2024	07:51	E84589
2990	Benzene	1	ug/L	0.26	U	EPA 524.2	0.26	0.5	05/16/2024	07:51	E84589
2991	Toluene	1000	ug/L	0.33	U	EPA 524.2	0.33	0.5	05/16/2024	07:51	E84589
2992	Ethylbenzene	700	ug/L	0.31	U	EPA 524.2	0.31	0.5	05/16/2024	07:51	E84589
2996	Styrene	100	ug/L	0.25	U	EPA 524.2	0.25	0.5	05/16/2024	07:51	E84589

Note: Results indicating non-detection with a reported lab MDL > .5 µg/L will not be accepted for compliance.

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

PUBLIC WATER SYSTEM INFORMATION (to be completed by sampler – please type or print legibly)

System Name: Source Water PWS I.D. #: 6512214

System Type (check one): ☐ Community ☐ Nontransient Noncommunity ☐ Transient Noncommunity

Address:

City: ZIP Code:

Phone #: Fax #: E-Mail Address:

SAMPLE INFORMATION (to be completed by sampler)

Sample Number: T2410683003 Sample Date: 05/07/2024 Sample Time: 12:30 AM PM (Circle One)

Sample Location (be specific): Source Water Location Code:

Disinfectant Residual (Required when reporting results for trihalomethanes and haloacetic acids mg/L Field pH:

Sample Type (Check Only One)

- ☐ Distribution
- ☐ Entry Point (to Distribution)
- ☐ Plant Tap (not for compliance with 62-550
- ☐ Raw (at well or intake)
- ☐ Max Residence Time
- ☐ Ave Residence Time
- ☐ Near First Customer

Reason(s) for Sample (Check all that apply)

- ☐ Routine Compliance with 62-550
- ☐ Confirmation of MCL Exceedance*
- ☐ Composite of Multiple Sites*
- ☐ Other:
- ☐ Replacement (of Invalidated Sample)
- ☐ Special (not for compliance with 62-550)
- ☐ Clearance (permitting)

Sampling Procedure Used or Other Comments:

*See 62-550(6) for requirements and restrictions. And 62-550.512(3) for nitrate or nitrite exceedances.

*See 62-550.550(4) for requirements and attach a results page for each site.

SAMPLER CERTIFICATION

I , , do HEREBY CERTIFY
(Print Name (Print Title)

that the above public water system and sample collection information is complete and correct.

Signature: Date:

Certified Operator # Phone # Sampler's Fax #:

Sampler's E-mail:

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

LABORATORY CERTIFICATION INFORMATION (to be completed by lab – please type or print legibly)

Lab Name: Advanced Environmental Laboratories, Inc. Florida DOH Certification #: E84589 Certification Expiration Date: 06/30/2024

ATTACH CURRENT DOH ANALYTE SHEET*

Address: 9610 Princess Palm Ave, Tampa, FL 33619 Phone #: (813) 630-9616

Were any analyses subcontracted ☑ Yes ☐ No If yes, please provide DOH certification number(s): E84025,SUBc,SUB0,E82001,E82574

ATTACH DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB

ANALYSIS INFORMATION (to be completed by lab) Date Sample(s) Received: 05/07/2024

PWS ID: (From Page 1): 6512214 Sample Number (From Page 1): T2410683003 Lab Assigned Report # Or Job ID: T2410683

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

Inorganics	Synthetic Organics	Volatile Organics	Disinfection Byproducts	Radionuclides	Secondaries
☑ All except Asbestos	☐ All 30	☐ All 21	☐ Trihalomethanes	☑ Single Sample	☑ All 14
☐ Partial	☐ All Except Dioxin	☐ Partial	☐ Haloacetic Acids	☐ Qtrly Composite*	☐ Partial
☑ Nitrate	☐ Partial		☐ Chlorite		
☑ Nitrite	☐ Dioxin Only		☐ Bromate		
☐ Asbestos					

LAB CERTIFICATION

I, Brandy Devilbiss (Print Name), Project Manager I (Print Title), do HEREBY CERTIFY that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature: Brandy Devilbiss Date: 06/04/2024

* Failure to provide a valid and current Florida DOH lab certification number and a current Analyte Sheet for the attached analysis results will result in rejection of the report, possible enforcement against the public water system for failure to sample, and may result in notification of the DOH Bureau of Laboratory Services.

** Please provide radiological sample dates & locations for each quarter.

CONFIRMATION & NOTIFICATION IS REQUIRED WITHIN 24 HRS FOR NITRATE OR NITRITE MCL EXCEEDANCES

NON-DETECTS ARE TO BE REPORTED AS THE MDL WITH "U" QUALIFIER. (Non-detects reported as "BDL" or with a "<" are not acceptable.)

COMPLIANCE DETERMINATION (to be completed by DEP or DOH -- attach notes as necessary)

Sample Collection & Analysis Satisfactory: ☐ Yes ☐ No _____ Replacement Sample or Report Requested (circle or highlight group(s) above)

Person Notified: _____ Date Notified: _____ DEP/DOH Reviewing Official: _____

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

INORGANIC CONTAMINANTS
62-550.310(1)

Report Number / Job ID: T2410683003

PWS ID (From Page 1): 6512214

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
1040	Nitrate (as N)	10	mg/L	1.6		SM 4500NO3-F	0.092	05/08/2024	14:19	E84589
1041	Nitrite (as N)	1	mg/L	0.081	U	SM 4500NO3-F	0.081	05/08/2024	14:19	E84589
1005	Arsenic	0.01	mg/L	0.00025	U	EPA 200.8	0.00025	05/09/2024	13:18	E82574
1010	Barium	2	mg/L	0.0056		EPA 200.8	0.00050	05/09/2024	13:18	E82574
1015	Cadmium	0.005	mg/L	0.00025	U	EPA 200.8	0.00025	05/09/2024	13:18	E82574
1020	Chromium	0.1	mg/L	0.0050	U	EPA 200.7	0.0050	05/15/2024	12:38	E84589
1024	Cyanide	0.2	mg/L	0.0040	U	SM 4500-CN-E	0.0040	05/14/2024	19:47	E84589
1025	Fluoride	4	mg/L	0.40	U	EPA 300.0	0.40	05/24/2024	17:08	E84589
1030	Lead	0.015	mg/L	0.00091	I	EPA 200.8	0.00050	05/09/2024	13:18	E82574
1035	Mercury	0.002	mg/L	0.000011	U	EPA 245.1	0.000011	05/10/2024	11:05	E84589
1036	Nickel	0.1	mg/L	0.0080	U	EPA 200.7	0.0080	05/15/2024	12:38	E84589
1045	Selenium	0.05	mg/L	0.0012	U	EPA 200.8	0.0012	05/09/2024	13:18	E82574
1052	Sodium	160	mg/L	8.1		EPA 200.7	0.80	05/15/2024	12:38	E84589
1074	Antimony	0.006	mg/L	0.0010	U	EPA 200.8	0.0010	05/09/2024	13:18	E82574
1075	Beryllium	0.004	mg/L	0.0020	U	EPA 200.7	0.0020	05/15/2024	12:38	E84589
1085	Thallium	0.002	mg/L	0.00025	U	EPA 200.8	0.00025	05/09/2024	13:18	E82574

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

SECONDARY CONTAMINANTS
62-550.320

Report Number / Job ID: T2410683003

PWS ID (From Page 1): 6512214

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
1002	Aluminum	0.2	mg/L	0.021	U	EPA 200.7	0.021	05/15/2024	12:38	E84589
1017	Chloride	250	mg/L	13		EPA 300.0	2.0	05/24/2024	17:08	E84589
1022	Copper	1	mg/L	0.035		EPA 200.8	0.0010	05/09/2024	13:18	E82574
1025	Fluoride	2	mg/L	0.40	U	EPA 300.0	0.40	05/24/2024	17:08	E84589
1028	Iron	0.3	mg/L	0.052	I	EPA 200.7	0.0067	05/15/2024	12:38	E84589
1032	Manganese	0.05	mg/L	0.0010	U	EPA 200.8	0.0010	05/09/2024	13:18	E82574
1050	Silver	0.1	mg/L	0.00050	U	EPA 200.8	0.00050	05/09/2024	13:18	E82574
1055	Sulfate	250	mg/L	21		EPA 300.0	2.0	05/24/2024	17:08	E84589
1095	Zinc	5	mg/L	0.33		EPA 200.8	0.0060	05/09/2024	13:18	E82574
1905	Color	15	CU	4.3	U	SM 2120 B	4.3	05/08/2024	12:00	E84589
1920	Odor	3	TON	1.0	U	SM 2150 B	1.0	05/07/2024	16:30	E84589
1925	pH (field pH from page 1)	6.5 - 8.5		7.48	Q	SM 4500H+B		05/08/2024	10:30	E84589
1930	Total Dissolved Solids	500	mg/L	190		SM 2540 C	10	05/09/2024	15:00	E84589
2905	Foaming Agents	0.5	mg/L	0.041	I	SM 5540 C	0.040	05/09/2024	10:00	E82001

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

RADIONUCLIDES
62-550.310(6)

Report Number / Job ID: T2410683003

PWS ID (From Page 1): 6512214

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	RDL	Analysis Error	Analysis Date	Analysis Time	DOH Lab Certification #
4006	Combined Uranium	30	ug/L	0.37	I	EPA 200.8	0.20	1		05/10/2024	18:25	E82574

** If the result exceeds 5 pCi/L, a measurement for radium-226 is required. Uranium is reported separately under Contam ID 4006.

*** If the results exceed 5 pCi/L, a measurement for radium-226 is required. If the results exceed 15 pCi/L, a measurement for Combined Uranium must be reported separately. The DEP/DOH will subtract the U value from the Gross Alpha (ID 4002) to determine compliance with MCL for Gross Alpha (Excl. U) of 15pCi/L. If the result for ID 4002 Gross Alpha (Including Uranium) does not exceed 15pCi/L, Combined Uranium need not be measured nor reported.

**** If using Uranium testing methods ASTM D5174 or EPA 200.8 only, then Analysis Error need not be reported.

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

PUBLIC WATER SYSTEM INFORMATION (to be completed by sampler – please type or print legibly)

System Name: Source Water PWS I.D. #: 6512214

System Type (check one): ☐ Community ☐ Nontransient Noncommunity ☐ Transient Noncommunity

Address:

City: ZIP Code:

Phone #: Fax #: E-Mail Address:

SAMPLE INFORMATION (to be completed by sampler)

Sample Number: T2410683004 Sample Date: 05/07/2024 Sample Time: 12:30 AM PM (Circle One)

Sample Location (be specific): Source Water Location Code:

Disinfectant Residual (Required when reporting results for trihalomethanes and haloacetic acids mg/L Field pH:

Sample Type (Check Only One)

- ☐ Distribution
- ☐ Entry Point (to Distribution)
- ☐ Plant Tap (not for compliance with 62-550
- ☐ Raw (at well or intake)
- ☐ Max Residence Time
- ☐ Ave Residence Time
- ☐ Near First Customer

Reason(s) for Sample (Check all that apply)

- ☐ Routine Compliance with 62-550
- ☐ Confirmation of MCL Exceedance*
- ☐ Composite of Multiple Sites*
- ☐ Other:
- ☐ Replacement (of Invalidated Sample)
- ☐ Special (not for compliance with 62-550)
- ☐ Clearance (permitting)

Sampling Procedure Used or Other Comments:

*See 62-550(6) for requirements and restrictions. And 62-550.512(3) for nitrate or nitrite exceedances.

*See 62-550.550(4) for requirements and attach a results page for each site.

SAMPLER CERTIFICATION

I , , do HEREBY CERTIFY
(Print Name (Print Title)

that the above public water system and sample collection information is complete and correct.

Signature: Date:

Certified Operator # Phone # Sampler's Fax #:

Sampler's E-mail:

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

LABORATORY CERTIFICATION INFORMATION (to be completed by lab – please type or print legibly)

Lab Name: Advanced Environmental Laboratories, Inc. Florida DOH Certification #: E84589 Certification Expiration Date: 06/30/2024

ATTACH CURRENT DOH ANALYTE SHEET*

Address: 9610 Princess Palm Ave, Tampa, FL 33619 Phone #: (813) 630-9616

Were any analyses subcontracted ☑ Yes ☐ No If yes, please provide DOH certification number(s): E84025,SUBc,SUB0,E82001,E82574

ATTACH DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB

ANALYSIS INFORMATION (to be completed by lab) Date Sample(s) Received: 05/07/2024

PWS ID: (From Page 1): 6512214 Sample Number (From Page 1): T2410683004 Lab Assigned Report # Or Job ID: T2410683

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

Inorganics	Synthetic Organics	Volatile Organics	Disinfection Byproducts	Radionuclides	Secondaries
☐ All except Asbestos	☐ All 30	☐ All 21	☐ Trihalomethanes	☐ Single Sample	☐ All 14
☐ Partial	☐ All Except Dioxin	☐ Partial	☐ Haloacetic Acids	☐ Qtrly Composite*	☐ Partial
☐ Nitrate	☐ Partial		☐ Chlorite		
☐ Nitrite	☐ Dioxin Only		☐ Bromate		
☐ Asbestos					

LAB CERTIFICATION

I, Brandy Devilbiss (Print Name), Project Manager I (Print Title), do HEREBY CERTIFY that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature: Brandy Devilbiss Date: 06/04/2024

* Failure to provide a valid and current Florida DOH lab certification number and a current Analyte Sheet for the attached analysis results will result in rejection of the report, possible enforcement against the public water system for failure to sample, and may result in notification of the DOH Bureau of Laboratory Services.

** Please provide radiological sample dates & locations for each quarter.

CONFIRMATION & NOTIFICATION IS REQUIRED WITHIN 24 HRS FOR NITRATE OR NITRITE MCL EXCEEDANCES

NON-DETECTS ARE TO BE REPORTED AS THE MDL WITH "U" QUALIFIER. (Non-detects reported as "BDL" or with a "<" are not acceptable.)

COMPLIANCE DETERMINATION (to be completed by DEP or DOH -- attach notes as necessary)

Sample Collection & Analysis Satisfactory: ☐ Yes ☐ No _____ Replacement Sample or Report Requested (circle or highlight group(s) above)

Person Notified: _____ Date Notified: _____ DEP/DOH Reviewing Official: _____

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

OTHER CONTAMINANTS

Report Number / Job ID: T2410683004

PWS ID (From Page 1): 6512214

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
	Unknown	N/A	mg/L	0	U	EPA Ra-05 R22		05/20/2024	15:30	
	Unknown	N/A	mg/L	0	U	EPA 903.1 R22		05/20/2024	15:30	
	Unknown	N/A	mg/L	0	U	EPA 900 Gross		05/20/2024	15:31	

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

PUBLIC WATER SYSTEM INFORMATION (to be completed by sampler – please type or print legibly)

System Name: Source Water PWS I.D. #: 6512214

System Type (check one): ☐ Community ☐ Nontransient Noncommunity ☐ Transient Noncommunity

Address:

City: ZIP Code:

Phone #: Fax #: E-Mail Address:

SAMPLE INFORMATION (to be completed by sampler)

Sample Number: T2410683005 Sample Date: 05/07/2024 Sample Time: 12:30 AM PM (Circle One)

Sample Location (be specific): Source Water Location Code:

Disinfectant Residual (Required when reporting results for trihalomethanes and haloacetic acids mg/L Field pH:

Sample Type (Check Only One)

- ☐ Distribution
- ☐ Entry Point (to Distribution)
- ☐ Plant Tap (not for compliance with 62-550
- ☐ Raw (at well or intake)
- ☐ Max Residence Time
- ☐ Ave Residence Time
- ☐ Near First Customer

Reason(s) for Sample (Check all that apply)

- ☐ Routine Compliance with 62-550
- ☐ Confirmation of MCL Exceedance*
- ☐ Composite of Multiple Sites*
- ☐ Other:
- ☐ Replacement (of Invalidated Sample)
- ☐ Special (not for compliance with 62-550)
- ☐ Clearance (permitting)

Sampling Procedure Used or Other Comments:

*See 62-550(6) for requirements and restrictions. And 62-550.512(3) for nitrate or nitrite exceedances.

*See 62-550.550(4) for requirements and attach a results page for each site.

SAMPLER CERTIFICATION

I , , do HEREBY CERTIFY
(Print Name (Print Title)

that the above public water system and sample collection information is complete and correct.

Signature: Date:

Certified Operator # Phone # Sampler's Fax #:

Sampler's E-mail:

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

LABORATORY CERTIFICATION INFORMATION (to be completed by lab – please type or print legibly)

Lab Name: Advanced Environmental Laboratories, Inc. Florida DOH Certification #: E84589 Certification Expiration Date: 06/30/2024

ATTACH CURRENT DOH ANALYTE SHEET*

Address: 9610 Princess Palm Ave, Tampa, FL 33619 Phone #: (813) 630-9616

Were any analyses subcontracted ☑ Yes ☐ No If yes, please provide DOH certification number(s): E84025,SUBc,SUB0,E82001,E82574

ATTACH DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB

ANALYSIS INFORMATION (to be completed by lab) Date Sample(s) Received: 05/07/2024

PWS ID: (From Page 1): 6512214 Sample Number (From Page 1): T2410683005 Lab Assigned Report # Or Job ID: T2410683

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

Inorganics	Synthetic Organics	Volatile Organics	Disinfection Byproducts	Radionuclides	Secondaries
☐ All except Asbestos	☐ All 30	☐ All 21	☐ Trihalomethanes	☐ Single Sample	☐ All 14
☐ Partial	☐ All Except Dioxin	☐ Partial	☐ Haloacetic Acids	☐ Qtrly Composite*	☐ Partial
☐ Nitrate	☐ Partial		☐ Chlorite		
☐ Nitrite	☐ Dioxin Only		☐ Bromate		
☐ Asbestos					

LAB CERTIFICATION

I, Brandy Devilbiss (Print Name), Project Manager I (Print Title), do HEREBY CERTIFY that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature: Brandy Devilbiss Date: 06/04/2024

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** Please provide radiological sample dates & locations for each quarter.

CONFIRMATION & NOTIFICATION IS REQUIRED WITHIN 24 HRS FOR NITRATE OR NITRITE MCL EXCEEDANCES

NON-DETECTS ARE TO BE REPORTED AS THE MDL WITH "U" QUALIFIER. (Non-detects reported as "BDL" or with a "<" are not acceptable.)

COMPLIANCE DETERMINATION (to be completed by DEP or DOH -- attach notes as necessary)

Sample Collection & Analysis Satisfactory: ☐ Yes ☐ No _____ Replacement Sample or Report Requested (circle or highlight group(s) above)

Person Notified: _____ Date Notified: _____ DEP/DOH Reviewing Official: _____

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

OTHER CONTAMINANTS

Report Number / Job ID: T2410683005

PWS ID (From Page 1): 6512214

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
	Unknown	N/A	mg/L	0	U	EPA 1613		06/04/2024	11:28	

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

PUBLIC WATER SYSTEM INFORMATION (to be completed by sampler – please type or print legibly)

System Name: Source Water PWS I.D. #: 6512214

System Type (check one): ☐ Community ☐ Nontransient Noncommunity ☐ Transient Noncommunity

Address:

City: ZIP Code:

Phone #: Fax #: E-Mail Address:

SAMPLE INFORMATION (to be completed by sampler)

Sample Number: T2410683007 Sample Date: 05/07/2024 Sample Time: 12:30 AM PM (Circle One)

Sample Location (be specific): Source Water Location Code:

Disinfectant Residual (Required when reporting results for trihalomethanes and haloacetic acids mg/L Field pH:

Sample Type (Check Only One)

- ☐ Distribution
- ☐ Entry Point (to Distribution)
- ☐ Plant Tap (not for compliance with 62-550
- ☐ Raw (at well or intake)
- ☐ Max Residence Time
- ☐ Ave Residence Time
- ☐ Near First Customer

Reason(s) for Sample (Check all that apply)

- ☐ Routine Compliance with 62-550
- ☐ Confirmation of MCL Exceedance*
- ☐ Composite of Multiple Sites*
- ☐ Other:
- ☐ Replacement (of Invalidated Sample)
- ☐ Special (not for compliance with 62-550)
- ☐ Clearance (permitting)

Sampling Procedure Used or Other Comments:

*See 62-550(6) for requirements and restrictions. And 62-550.512(3) for nitrate or nitrite exceedances.

*See 62-550.550(4) for requirements and attach a results page for each site.

SAMPLER CERTIFICATION

I , , do HEREBY CERTIFY
(Print Name (Print Title)

that the above public water system and sample collection information is complete and correct.

Signature: Date:

Certified Operator # Phone # Sampler's Fax #:

Sampler's E-mail:

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

LABORATORY CERTIFICATION INFORMATION (to be completed by lab – please type or print legibly)

Lab Name: Advanced Environmental Laboratories, Inc. Florida DOH Certification #: E84589 Certification Expiration Date: 06/30/2024

ATTACH CURRENT DOH ANALYTE SHEET*

Address: 9610 Princess Palm Ave, Tampa, FL 33619 Phone #: (813) 630-9616

Were any analyses subcontracted ☑ Yes ☐ No If yes, please provide DOH certification number(s): E84025,SUBc,SUB0,E82001,E82574

ATTACH DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB

ANALYSIS INFORMATION (to be completed by lab) Date Sample(s) Received: 05/07/2024

PWS ID: (From Page 1): 6512214 Sample Number (From Page 1): T2410683007 Lab Assigned Report # Or Job ID: T2410683

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

Inorganics	Synthetic Organics	Volatile Organics	Disinfection Byproducts	Radionuclides	Secondaries
☐ All except Asbestos	☐ All 30	☐ All 21	☐ Trihalomethanes	☐ Single Sample	☐ All 14
☐ Partial	☐ All Except Dioxin	☐ Partial	☐ Haloacetic Acids	☐ Qtrly Composite*	☐ Partial
☐ Nitrate	☐ Partial		☑ Chlorite		
☐ Nitrite	☐ Dioxin Only		☑ Bromate		
☐ Asbestos					

LAB CERTIFICATION

I, Brandy Devilbiss (Print Name), Project Manager I (Print Title), do HEREBY CERTIFY that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature: Brandy Devilbiss Date: 06/04/2024

* Failure to provide a valid and current Florida DOH lab certification number and a current Analyte Sheet for the attached analysis results will result in rejection of the report, possible enforcement against the public water system for failure to sample, and may result in notification of the DOH Bureau of Laboratory Services.

** Please provide radiological sample dates & locations for each quarter.

CONFIRMATION & NOTIFICATION IS REQUIRED WITHIN 24 HRS FOR NITRATE OR NITRITE MCL EXCEEDANCES

NON-DETECTS ARE TO BE REPORTED AS THE MDL WITH "U" QUALIFIER. (Non-detects reported as "BDL" or with a "<" are not acceptable.)

COMPLIANCE DETERMINATION (to be completed by DEP or DOH -- attach notes as necessary)

Sample Collection & Analysis Satisfactory: ☐ Yes ☐ No _____ Replacement Sample or Report Requested (circle or highlight group(s) above)

Person Notified: _____ Date Notified: _____ DEP/DOH Reviewing Official: _____

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

DISINFECTION BYPRODUCTS
62-550.310(3)

Report Number / Job ID: T2410683007

Disinfectant Residual (mg/L):

PWS ID (From Page 1): 6512214

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Regulatory MRL**	Analysis Date	Analysis Time	DOH Lab Certification #
1009	Chlorite	1000	ug/L	0.95	U	EPA 300.1	0.95	20***	05/20/2024	12:46	E84589
1011	Bromate	10	ug/L	0.40	U	EPA 300.1	0.40	5.0 or 1.0**	05/20/2024	12:46	E84589

** Laboratories are required to adhere to the minimum reporting level (MRL) requirements of 40 CFR 141.131(b)(2)(iv).

*** Applicable to monitoring as prescribed in 40 CFR 141.132.(b)(2)(i)(B) and (b)(2)(ii).

**** Laboratories that use EPA Methods 317.0 Revision 2.0, 326.0 or 321.8 must meet a 1.0 µg/L MRL for bromate.

Note: Do not round values. Report results to the accuracy, precision, and sensitivity of the analytical method used.

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

OTHER CONTAMINANTS

Report Number / Job ID: T2410683007

PWS ID (From Page 1): 6512214

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
	Chlorate	N/A	mg/L	.16		EPA 300.1	.00065	05/20/2024	12:46	E84589

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

PUBLIC WATER SYSTEM INFORMATION (to be completed by sampler – please type or print legibly)

System Name: Source Water PWS I.D. #: 6512214

System Type (check one): ☐ Community ☐ Nontransient Noncommunity ☐ Transient Noncommunity

Address:

City: ZIP Code:

Phone #: Fax #: E-Mail Address:

SAMPLE INFORMATION (to be completed by sampler)

Sample Number: T2410683008 Sample Date: 05/07/2024 Sample Time: 12:30 AM PM (Circle One)

Sample Location (be specific): Source Water Location Code:

Disinfectant Residual (Required when reporting results for trihalomethanes and haloacetic acids mg/L Field pH:

Sample Type (Check Only One)

- ☐ Distribution
- ☐ Entry Point (to Distribution)
- ☐ Plant Tap (not for compliance with 62-550
- ☐ Raw (at well or intake)
- ☐ Max Residence Time
- ☐ Ave Residence Time
- ☐ Near First Customer

Reason(s) for Sample (Check all that apply)

- ☐ Routine Compliance with 62-550
- ☐ Confirmation of MCL Exceedance*
- ☐ Composite of Multiple Sites*
- ☐ Other:
- ☐ Replacement (of Invalidated Sample)
- ☐ Special (not for compliance with 62-550)
- ☐ Clearance (permitting)

Sampling Procedure Used or Other Comments:

*See 62-550(6) for requirements and restrictions. And 62-550.512(3) for nitrate or nitrite exceedances.

*See 62-550.550(4) for requirements and attach a results page for each site.

SAMPLER CERTIFICATION

I , , do HEREBY CERTIFY
(Print Name (Print Title)

that the above public water system and sample collection information is complete and correct.

Signature: Date:

Certified Operator # Phone # Sampler's Fax #:

Sampler's E-mail:

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Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

LABORATORY CERTIFICATION INFORMATION (to be completed by lab – please type or print legibly)

Lab Name: Advanced Environmental Laboratories, Inc. Florida DOH Certification #: E84589 Certification Expiration Date: 06/30/2024

ATTACH CURRENT DOH ANALYTE SHEET*

Address: 9610 Princess Palm Ave, Tampa, FL 33619 Phone #: (813) 630-9616

Were any analyses subcontracted ☑ Yes ☐ No If yes, please provide DOH certification number(s): E84025,SUBc,SUB0,E82001,E82574

ATTACH DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB

ANALYSIS INFORMATION (to be completed by lab) Date Sample(s) Received: 05/07/2024

PWS ID: (From Page 1): 6512214 Sample Number (From Page 1): T2410683008 Lab Assigned Report # Or Job ID: T2410683

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

Inorganics	Synthetic Organics	Volatile Organics	Disinfection Byproducts	Radionuclides	Secondaries
☐ All except Asbestos	☐ All 30	☐ All 21	☑ Trihalomethanes	☐ Single Sample	☐ All 14
☐ Partial	☐ All Except Dioxin	☐ Partial	☑ Haloacetic Acids	☐ Qtrly Composite*	☐ Partial
☐ Nitrate	☐ Partial		☐ Chlorite		
☐ Nitrite	☐ Dioxin Only		☐ Bromate		
☐ Asbestos					

LAB CERTIFICATION

I, Brandy Devilbiss (Print Name), Project Manager I (Print Title), do HEREBY CERTIFY that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature: Brandy Devilbiss Date: 06/04/2024

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NON-DETECTS ARE TO BE REPORTED AS THE MDL WITH "U" QUALIFIER. (Non-detects reported as "BDL" or with a "<" are not acceptable.)

COMPLIANCE DETERMINATION (to be completed by DEP or DOH -- attach notes as necessary)

Sample Collection & Analysis Satisfactory: ☐ Yes ☐ No _____ Replacement Sample or Report Requested (circle or highlight group(s) above)

Person Notified: _____ Date Notified: _____ DEP/DOH Reviewing Official: _____

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

DISINFECTION BYPRODUCTS
62-550.310(3)

Report Number / Job ID: T2410683008

Disinfectant Residual (mg/L):

PWS ID (From Page 1): 6512214

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Regulatory MRL**	Analysis Date	Analysis Time	DOH Lab Certification #
2450	Monochloroacetic Acid	N/A	ug/L	2.02		EPA 552.2	0.98	2	05/11/2024	05:28	E84589
2451	Dichloroacetic Acid	N/A	ug/L	9.66		EPA 552.2	0.42	1	05/11/2024	05:28	E84589
2452	Trichloroacetic Acid	N/A	ug/L	0.94	U	EPA 552.2	0.94	1	05/11/2024	05:28	E84589
2453	Monobromoacetic Acid	N/A	ug/L	0.41	U	EPA 552.2	0.41	1	05/11/2024	05:28	E84589
2454	Dibromoacetic Acid	N/A	ug/L	0.74	U	EPA 552.2	0.74	1	05/11/2024	05:28	E84589
2456	Total Haloacetic Acids (HAA5)	60	ug/L	11.68		EPA 552.2	0.98	---	05/11/2024	05:28	E84589

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Regulatory MRL**	Analysis Date	Analysis Time	DOH Lab Certification #
2941	Chloroform	N/A	ug/L	0.96	I	EPA 524.2	0.32	1	05/14/2024	01:23	E84589
2942	Bromoform	N/A	ug/L	0.45	U	EPA 524.2	0.45	1	05/14/2024	01:23	E84589
2943	Bromodichloromethane	N/A	ug/L	1.23		EPA 524.2	0.42	1	05/14/2024	01:23	E84589
2944	Dibromochloromethane	N/A	ug/L	1.46		EPA 524.2	0.37	1	05/14/2024	01:23	E84589
2950	Total Trihalomethanes (TTHM)	80	ug/L	3.65		EPA 524.2	0.45	---	05/14/2024	01:23	E84589

** Laboratories are required to adhere to the minimum reporting level (MRL) requirements of 40 CFR 141.131(b)(2)(iv).

*** Applicable to monitoring as prescribed in 40 CFR 141.132.(b)(2)(i)(B) and (b)(2)(ii).

**** Laboratories that use EPA Methods 317.0 Revision 2.0, 326.0 or 321.8 must meet a 1.0 µg/L MRL for bromate.

Note: Do not round values. Report results to the accuracy, precision, and sensitivity of the analytical method used.

*Results must be reported with appropraite qualifers in accordance with Florida Administration Code Rule 62-160, Table1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Advanced Environmental Laboratories, Inc. 5/21

Page ____ of ____

Altamonte Springs: 380 Northlake Blvd., Ste. 1048, FL 32701 • 407.937.1594 • Lab ID: E53076
Fort Myers: 13100 Westlinks Terrace, Ste. 10, FL 33913 • 239.674.8130 • Lab ID: E84492
Jacksonville: 6681 Southpoint Pkwy., FL 32216 • 904.363.9350 • Lab ID: E82574
Tallahassee: 2639 North Monroe St., Suite D, FL 32303 • 850.219.6274 • Lab ID: E811095
Gainesville: 4965 SW 41st Blvd., FL 32608 • 352.377.2349 • Lab ID: E82001
Miramar: 10200 USA Today Way, FL 33025 • 954.889.2268 • Lab ID: E82535
Tampa: 9610 Princess Palm Ave., FL 33619 • 813.630.9616 • Lab ID: E84589

Client Name: Vos Bottling
Address:
Phone:
FAX:
Contact:
Sampled By:
Standard Rush
AEL Profile #:

Project Name:
Project Number:
PO Number:
FDEP Facility No:
FDEP Facility Addr:
Special Instructions:
ADaPT EQuIS Other

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT
1	Source Water	G	5/1/24	12:30	DW	Kit

5/8/24 1300

T2410683

BOTTLE SIZE & TYPE	Kit											LABORATORY I.D. NUMBER
ANALYSIS REQUIRED	Primary	Secondary	VOC	SOC	Asbestos	Dioxin	Rad 226/228	GA	300.1	THM / HAA		
Preservation	Ice											
Field-Filtered?	NO											
				X								001
			X									002
	X	X										003
							X	X				004
						X						005
					X							006
									X			007

Matrix Code: WW=wastewater, SW=surface water, GW=ground water, DW=drinking water, MW=marine water, O=oil, A=air, SO=soil, SL=sludge

Preservation Code: I=Ice, H=HCl, S=H2SO4, N=HNO3, T=Sodium Thiosulfate, AA=Ascorbic/HCl, AB=Ascorbic/NaOH

Received on Ice ☑ Yes ☐ No ☑ Temp taken from sample ☐ Temp from blank ☑ Where required, pH checked

Temp. when received (observed) 6 °C Temp. when received (corrected) ____ °C

Rev: AD-D051web Form last revised 07/26/2022

Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V F: 1A

Relinquished by:	Date	Time	Received by:	Date	Time
Ryan Krig	5/1/24	3:50 PM	[signature]	5/1/24	3:50 PM

FOR DRINKING WATER USE:
(When PWS Information not otherwise supplied) PWS ID:
Contact Person:
Supplier of Water:

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

INORGANIC CONTAMINANTS

Report Number / Job ID: 172402092 Sample bottle provided by client..

62-550.310(1)

T2410683-006

PWS ID (From Page 1):

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
1040	Nitrate (as N)	10	mg/L							E
1041	Nitrite (as N)	1	mg/L							E
1005	Arsenic	0.010	mg/L							E
1010	Barium	2	mg/L							E
1015	Cadmium	0.005	mg/L							E
1020	Chromium	0.1	mg/L							E
1024	Cyanide	0.2	mg/L							E
1025	Fluoride	4.0	mg/L							E
1030	Lead	0.015	mg/L							E
1035	Mercury	0.002	mg/L							E
1036	Nickel	0.1	mg/L							E
1045	Selenium	0.05	mg/L							E
1052	Sodium	160	mg/L							E
1074	Antimony	0.006	mg/L							E
1075	Beryllium	0.004	mg/L							E
1085	Thallium	0.002	mg/L							E
1094	Asbestos	7 MFL	MFL	<0.18	U	EPA 100.2	0.18	5-10-24	15:05	E86795

*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

CFA | Cape Fear Analytical LLC
an affiliate of The GEL Group INC

3306 Kitty Hawk Road, Suite 120 Wilmington, NC 28405
P 910.795.0421
www.capefearanalytical.com

May 21, 2024

Mr. Michael Cammarata
Advanced Environmental Laboratories, Incorporated
9610 Princess Palm Avenue
Tampa, Florida 33619

Re: Dioxin Subcontract - Tampa
Work Order: 22572
SDG: T2410683

Dear Mr. Cammarata:

Cape Fear Analytical LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on May 09, 2024. This original data report has been prepared and reviewed in accordance with CFA's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at 910-795-0421.

Sincerely,

Alexis Finks for
Cynde Larkins
Project Manager

Purchase Order: T-PO-26154
Enclosures

problem solved

Advanced Environmental Laboratories, Inc.

☐ Altamonte Springs: 380 Northlake Blvd., Ste. 1048, FL 32701 • 407.937.1594 • Lab ID: E53076
☐ Fort Myers: 13100 Westlinks Terrace, Ste. 10, FL 33913 • 239.674.8130 • Lab ID: E84492
☐ Jacksonville: 6681 Southpoint Pkwy., FL 32216 • 904.363.9350 • Lab ID: E82574
☐ Tallahassee: 2639 North Monroe St., Suite D, FL 32303 • 850.219.6274 • Lab ID: E811095
☐ Gainesville: 4965 SW 41st Blvd., FL 32608 • 352.377.2349 • Lab ID: E82001
☐ Miramar: 10200 USA Today Way, FL 33025 • 954.889.2288 • Lab ID: E82535
☐ Tampa: 9610 Princess Palm Ave., FL 33619 • 813.630.9616 • Lab ID: E84589

CFA WO# 22572 Page _____ of _____

Client Name:	Advanced Environmental Lab	Project Number: T2410683	
Address:	Tampa Fl 33619	Project Number:	
		T-PO-26154	
Phone:	813-630-9616	FDEP Facility No:	
FAX:	813-630-4327	FDEP Facility Address:	
Contact:	mcammarata@aellab.com		
Sampled By:		Even though matrix WA please include DW report along with EVN report	
Turn Around Time: ☐ STANDARD ☐ RUSH			
AEL Profile #:		☐ADaPT ☐EQuIS ☐ Other	

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: Dioxin-1613 TCDD only 2 week TAT										LABORATORY I.D. NUMBER
							Preservation											
							Field-Filtered?											
	T2410683-005		05.07.24	12:30	DW	1		X										

Matrix Code: **WW** = wastewater **SW** = surface water **GW** = ground water **DW** = drinking water **O** = oil **A** = air **SO** = soil **SL** = sludge

Preservation Code: I = ice H=(HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Received on Ice ☒ Yes ☐ No ☒ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked

Temp. when received (observed) 1.4 °C Temp. when received (corrected) 1.3 °C

DCN: AD-D051 Form last revised 08/07/2019

Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V F: 1A

	Relinquished by:	Date	Time	Received by:	Date	Time
1	Carol Voorbrood	05.08.24	10:00		5/9/24	12:20
2						
3						
4						

FOR DRINKING WATER USE:

(When PWS Information not otherwise supplied) PWS ID: _____

Contact Person: _____ Phone: _____

Supplier of Water: _____

Site-Address: _____

SAMPLE RECEIPT CHECKLIST

Cape Fear Analytical

Client: AEL	Work Order: 22572
Shipping Company: FedEx	Date/Time Received: 5/9/24 12:20

Suspected Hazard Information	Yes	NA	No
Shipped as DOT Hazardous?			✓
Samples identified as Foreign Soil?			✓

DOE Site Sample Packages	Yes	NA	No*
Screened <0.5 mR/hr?		✓	
Samples < 2x background?		✓	

* Notify RSO of any responses in this column immediately.

Air Sample Receipt Specifics	Yes	NA	No
Air sample in shipment?			✓

Air Witness: _____

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other(describe)
2	Custody seal/s present on cooler?			✓	Seal intact? Yes No
3	Chain of Custody documents included with shipment?	✓			
4	Samples requiring cold preservation within 0-6°C?	✓			Preservation Method: ice bags loose ice blue ice dry ice none other (describe) Temperature Blank present: Yes (No) 1.4 - 0.1 = 1.3°
5	Aqueous samples found to have visible solids?			✓	Sample IDs, containers affected:
5	Samples requiring chemical preservation at proper pH?	✓			Sample IDs, containers affected and pH observed: pH=7 If preservative added, Lot#:
7	Samples requiring preservation have no residual chlorine?			✓	Sample IDs, containers affected: Chlorine = 0.5 ppm. Added ~800 mg sodium If preservative added, Lot#: thiosulfate and tested again, chlorine = 0
8	Samples received within holding time?	✓			Sample IDs, tests affected: 194203
9	Sample IDs on COC match IDs on containers?	✓			Sample IDs, containers affected:
10	Date & time of COC match date & time on containers?	✓			Sample IDs, containers affected:
11	Number of containers received match number indicated on COC?	✓			List type and number of containers / Sample IDs, containers affected: Received 1-1L NM unpres
12	COC form is properly signed in relinquished/received sections?	✓			

Comments:

Checklist performed by: Initials: N Date: 5/9/24

CF-UD-F-7

High Resolution Dioxins and Furans Analysis

Case Narrative

HDOX Case Narrative
Advanced Environmental Laboratories, Incorporated (AELI)
SDG T2410683
Work Order 22572

Method/Analysis Information

Product:	**TCDD Only by EPA Method 1613B in Liquids**
Analytical Method:	EPA Method 1613B
Extraction Method:	SW846 3520C
Analytical Batch Number:	55520
Clean Up Batch Number:	55519
Extraction Batch Number:	55518

Sample Analysis

Sample 22572001 was received at 1.3 °C.
The following samples were analyzed using the analytical protocol as established in EPA Method 1613B:

Sample ID	Client ID
12036499	Method Blank (MB)
12036500	Laboratory Control Sample (LCS)
12036501	Laboratory Control Sample Duplicate (LCSD)
22572001	T2410683-005

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-002 REV# 21.

Raw data reports are processed and reviewed by the analyst using the TargetLynx software package.

Calibration Information

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (CVS) met the acceptance criteria.

Quality Control (QC) Information

Certification Statement
The test results presented in this document are certified to meet all requirements of the 2009 TNI Standard.

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery
The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement
The RPD(s) between the LCS and LCSD met the acceptance limits.

QC Sample Designation
A matrix spike and matrix spike duplicate analysis was not required for this SDG.

Technical Information

Receipt Temperature
Sample was received within temperature requirements.

Holding Time Specifications
CFA assigns holding times based on the associated methodology, which assigns the date and time from sample collection. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Manual Integrations

Certain standards and QC samples required manual integrations to correctly position the baseline as set in the calibration standard injections. Where manual integrations were performed, copies of all manual integration peak profiles are included in the raw data section of this fraction. Manual integrations were required for data files in this SDG.

System Configuration

This analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
HRP722_2	Primary Dioxin Analysis	Dioxin Analysis	DB-5MS	60m x 0.25mm, 0.25um

Sample Data Summary

Cape Fear Analytical, LLC
3306 Kitty Hawk Road Suite 120, Wilmington, NC 28405 - (910) 795-0421 - www.capefearanalytical.com

Qualifier Definition Report
for

AELI001 Advanced Environmental Laboratories, Incorporated

Client SDG: T2410683 CFA Work Order: 22572

The Qualifiers in this report are defined as follows:

U Analyte was analyzed for, but not detected above the specified detection limit.

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

Cape Fear Analytical requires all analytical data to be verified by a qualified data reviewer.

The following data validator verified the information presented in this case narrative:

Signature: **Name: Erin Suhrie**

Date: 21 MAY 2024 **Title: Data Validator**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**T2410683**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**22572001**	**Date Collected:**	**05/07/2024 12:30**	**Matrix:**	**WATER**
Client Sample:	**1613B TCDD Water**	**Date Received:**	**05/09/2024 12:20**		
Client ID:	**T2410683-005**			**Prep Basis:**	**As Received**
Batch ID:	**55520**	**Method:**	**EPA Method 1613B**		
Run Date:	**05/17/2024 16:23**	**Analyst:**	**GM1**	**Instrument:**	**HRP722**
Data File:	**f17may24a-6**			**Dilution:**	**1**
Prep Batch:	**55518**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**13-MAY-24**	**Prep Aliquot:**	**952.8 mL**		

CAS No.	Parmname	Qual	Result	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.00362	ng/L	0.00362	0.0105

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1.83	2.10	ng/L	87.2	(31%-137%)
37Cl-2,3,7,8-TCDD		0.192	0.210	ng/L	91.3	(42%-164%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Quality Control Summary

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: T2410683

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12036500	LCS for batch 55518	13C-2,3,7,8-TCDD		72.0	(25%-141%)
		37Cl-2,3,7,8-TCDD		85.2	(37%-158%)
12036501	LCSD for batch 55518	13C-2,3,7,8-TCDD		85.0	(25%-141%)
		37Cl-2,3,7,8-TCDD		86.2	(37%-158%)
12036499	MB for batch 55518	13C-2,3,7,8-TCDD		85.1	(31%-137%)
		37Cl-2,3,7,8-TCDD		91.5	(42%-164%)
22572001	T2410683-005	13C-2,3,7,8-TCDD		87.2	(31%-137%)
		37Cl-2,3,7,8-TCDD		91.3	(42%-164%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: T2410683 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 55518 **Matrix:** WATER

Lab Sample ID: 12036500

Instrument: HRP722 **Analysis Date:** 05/17/2024 13:07 **Dilution:** 1

Analyst: GM1 **Prep Batch ID:** 55518

Batch ID: 55520

CAS No.		Parmname	Amount Added ng/L	Spike Conc. ng/L	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	0.100	0.0914	91.4	73-146

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: T2410683 **Sample Type:** Laboratory Control Sample Duplicate

Client ID: LCSD for batch 55518 **Matrix:** WATER

Lab Sample ID: 12036501

Instrument: HRP722 **Analysis Date:** 05/17/2024 13:56 **Dilution:** 1

Analyst: GM1 **Prep Batch ID:** 55518

Batch ID: 55520

CAS No.		Parmname	Amount Added ng/L	Spike Conc. ng/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	LCSD	2,3,7,8-TCDD	0.100	0.0790	79	73-146	14.6	0-20

Method Blank Summary

SDG Number:	**T2410683**	**Client:**	**AELI001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 55518**	**Instrument ID:**	**HRP722**	**Data File:**	**f17may24a-4**
Lab Sample ID:	**12036499**	**Prep Date:**	**13-MAY-24**	**Analyzed:**	**05/17/24 14:45**
Column:					

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 55518	12036500	f17may24a-2	05/17/24	1307
02	LCSD for batch 55518	12036501	f17may24a-3	05/17/24	1356
03	T2410683-005	22572001	f17may24a-6	05/17/24	1623

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**T2410683**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**12036499**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 55518**				
Client ID:	**MB for batch 55518**			**Prep Basis:**	**As Received**
Batch ID:	**55520**	**Method:**	**EPA Method 1613B**		
Run Date:	**05/17/2024 14:45**	**Analyst:**	**GM1**	**Instrument:**	**HRP722**
Data File:	**f17may24a-4**			**Dilution:**	**1**
Prep Batch:	**55518**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**13-MAY-24**	**Prep Aliquot:**	**2000 mL**		

CAS No.	Parmname	Qual	Result	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.00172	ng/L	0.00172	0.00500

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		0.851	1.00	ng/L	85.1	(31%-137%)
37Cl-2,3,7,8-TCDD		0.0915	0.100	ng/L	91.5	(42%-164%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**T2410683**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**12036500**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 55518**				
Client ID:	**LCS for batch 55518**			**Prep Basis:**	**As Received**
Batch ID:	**55520**	**Method:**	**EPA Method 1613B**		
Run Date:	**05/17/2024 13:07**	**Analyst:**	**GM1**	**Instrument:**	**HRP722**
Data File:	**f17may24a-2**			**Dilution:**	**1**
Prep Batch:	**55518**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**13-MAY-24**	**Prep Aliquot:**	**2000 mL**		

CAS No.	Parmname	Qual	Result	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD		0.0914	ng/L	0.00172	0.00500

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		0.720	1.00	ng/L	72.0	(25%-141%)
37Cl-2,3,7,8-TCDD		0.0852	0.100	ng/L	85.2	(37%-158%)

Comments:

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**T2410683**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**12036501**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 55518**				
Client ID:	**LCSD for batch 55518**			**Prep Basis:**	**As Received**
Batch ID:	**55520**	**Method:**	**EPA Method 1613B**		
Run Date:	**05/17/2024 13:56**	**Analyst:**	**GM1**	**Instrument:**	**HRP722**
Data File:	**f17may24a-3**			**Dilution:**	**1**
Prep Batch:	**55518**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**13-MAY-24**	**Prep Aliquot:**	**2000 mL**		

CAS No.	Parmname	Qual	Result	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD		0.0790	ng/L	0.00172	0.00500

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		0.850	1.00	ng/L	85.0	(25%-141%)
37Cl-2,3,7,8-TCDD		0.0862	0.100	ng/L	86.2	(37%-158%)

Comments:

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

LABORATORY CERTIFICATION INFORMATION (to be completed by lab – please type or print legibly)

Lab Name: **KNL Environmental Testing** Florida DOH Certification #: **E84025** Certification Expiration Date: **June Renewal**

ATTACH CURRENT DOH ANALYTE SHEET*

Address: **3202 N. Florida Ave. Tampa, FL 33603** Phone #: **813-229-2879**

Were any analyses subcontracted? ☐Yes ☒No If yes, please provide DOH certification number(s): _____

ATTACH DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB*

ANALYSIS INFORMATION (to be completed by lab) Date Sample(s) Received: 5-8-24

PWS ID (From Pg 1): _____ Sample # (From Pg 1): T2410683004 Lab Assigned Report # or Job ID: 24.8128

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

Inorganics	Synthetic Organics	Volatile Organics	Disinfection Byproducts	Radionuclides	Secondaries
☐All Except Asbestos	☐All 30	☐All 21	☐Trihalomethanes	☒Single Sample	☐All 14
☐Partial	☐All Except Dioxin	☐Partial	☐Haloacetic Acids	☐Qtrly Composite**	☐Partial
☐Nitrate	☐Partial		☐Chlorite		
☐Nitrite	☐Dioxin Only		☐Bromate		
☐Asbestos					

LAB CERTIFICATION

I, **Thomas Weeks** / Anthony Tyson, **Laboratory Director** VP, do HEREBY CERTIFY
(Print Name) (Print Title)

that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature: _____ Date: 5-20-24

* Failure to provide a valid and current Florida DOH lab certification number and a current Analyte Sheet for the attached analysis results will result in rejection of the report, possible enforcement against the public water system for failure to sample, and may result in notification of the DOH Bureau of Laboratory Services.

** Please provide radiological sample dates & locations for each quarter.

CONFIRMATION & NOTIFICATION IS REQUIRED WITHIN 24 HRS FOR NITRATE OR NITRITE MCL EXCEEDANCES
NON-DETECTS ARE TO BE REPORTED AS THE MDL WITH A "U" QUALIFIER. (Non-detects reported as "BDL" or with a "<" are not acceptable.)

COMPLIANCE DETERMINATION (to be completed by DEP or DOH -- attach notes as necessary)

Sample Collection & Analysis Satisfactory: ☐Yes ☐No _____ Replacement Sample or Report Requested (circle or highlight group(s) above)

Person Notified: _____ Date Notified: _____ DEP/DOH Reviewing Official: _____

KNL Environmental Testing
3202 N. Florida Ave.
Tampa, FL 33603

Ph: (813) 229-2879 Fax: (813) 229-0002

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

RADIONUCLIDES
62-550.310(6)

KNL Report Number/Job ID: 24.8128
PWS ID(From Page 1):

Client ID: AEL-Tampa // T2410683004

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier *	Analytical Method	Lab MDL	RDL	Analysis Error	Analysis Date	Analysis Time	DOH Lab Certification #
4002	Gross Alpha (incl Uranium)	15 ***	pCi/L	1.4	I	EPA 900.0	0.9	3	0.6	5-10-24	1657	E84025
4020	Radium-226	5	pCi/L	0.7	I	EPA 903.0 *****	0.4	1	0.3	5-17-24	1229	E84025
4030	Radium-228		pCi/L	0.8	U	EPA Ra-05	0.8	1	0.6	5-16-24	1242	E84025

Reporting Format 62-550.730
Effective January 1995, Revised February 2010.

* Qualifier Codes: U = indicates that the compound was analyzed for but not detected.
I = the reported value is between the laboratory detection limit and the laboratory practical quantitation limit.

** If the result exceeds 5 pCi/L, a measurement for radium-226 is required. Uranium is reported separately under Contam ID 4006.

*** If the results exceed 5 pCi/L, a measurement for radium-226 is required. If the results exceed 15 pCi/L, a measurement for Combined Uranium must be reported separately. The DEP/DOH will subtract the U value from the Gross Alpha (ID 4002) to determine compliance with MCL for Gross Alpha (Excl.U) of 15 pCi/L. If the result for ID 4002 Gross Alpha (incl.Uranium) does not exceed 15 pCi/L, Combined Uranium need not be measured nor reported.

**** If using Uranium testing methods ASTM D5174 or EPA 200.8 only, then Analysis Error need not be reported.

***** 93% carrier recovery

Page of

Test results meet all requirements of the 2016 TNI standards. Statement of estimated uncertainty available upon request. Test results refer only to sample(s) listed.
Contact person: Thomas Weeks (813) 229-2879.

Approved by: Thomas J. Weeks
Laboratory Director

24 8128

5-5-24

Advanced Environmental Laboratories, Inc.

☐ Alamonte Springs: 900 Northlake Blvd., Ste. 1048, FL 32701 • 407.937.1899 • Lab ID: E83018
☐ Fort Myers: 10100 Westlake Terrace, Ste. 10, FL 33913 • 239.874.8130 • Lab ID: E84482
☐ Jacksonville: 8880 Baymeadows Pkwy., FL 32216 • 904.363.9350 • Lab ID: E82574
☐ Tallahassee: 2639 North Monroe St., Suite D, FL 32303 • 850.210.8274 • Lab ID: E81095

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LE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	BOTTLE SIZE & TYPE	Preservation Field Filtered	ANALYSIS REQUIRED Rad 226	Rad 228	Gross Alpha	LABORATORY I.D. NUMBER
	T24100683005		5/7/24	1230	DW				X	X	X	

WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = Ice H = (HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

☐ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked

Temp. when received (observed) ____ °C Temp. when received (corrected) ____ °C

Form last revised 08/07/2019

Device used for measuring Temp by unique identifier (circle IR temp gun used): J: 9A G: LT-1, LT-2 T: 10A A: 8A M: 3A B: 1V F: 1A

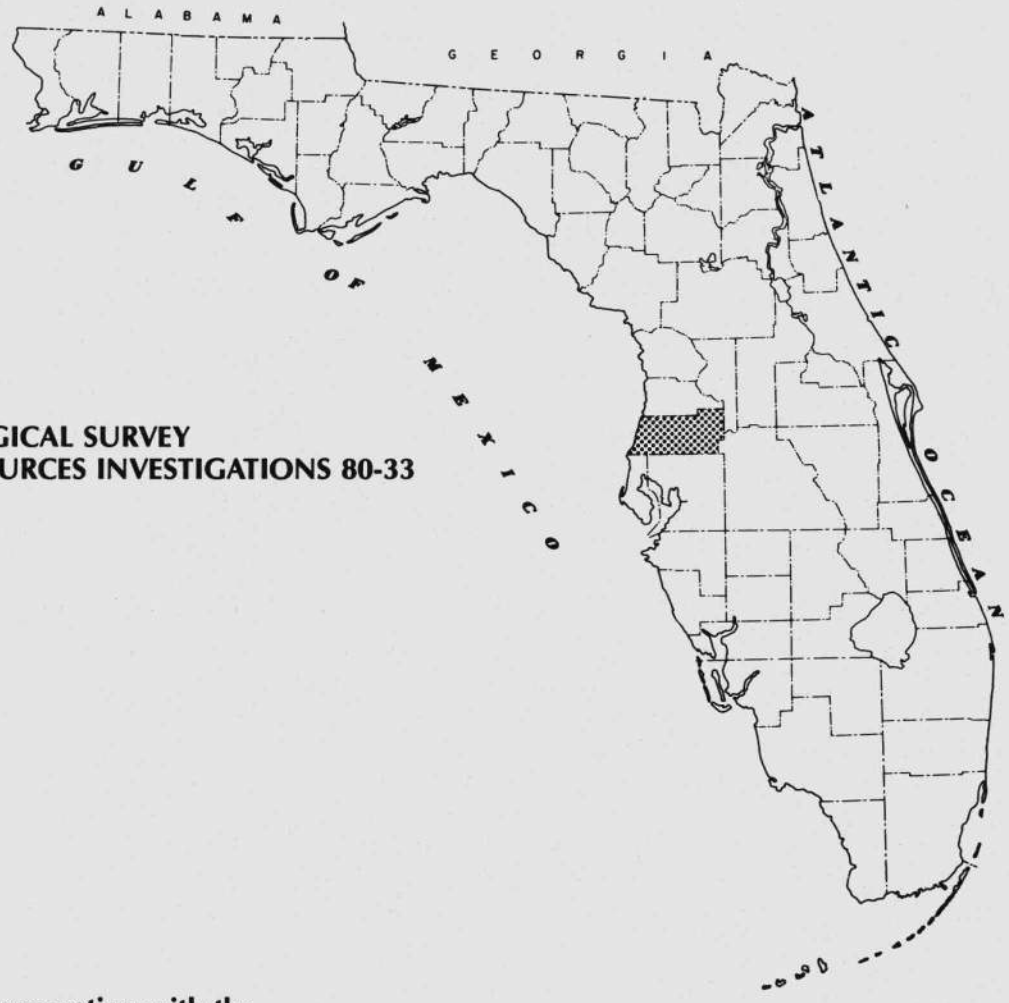
Relinquished by:	Date	Time	Received by:	Date	Time
Jillyn Pasquali				5-8-24	1425

FOR DRINKING WATER USE:
(When PWS information not otherwise supplied) PWS ID:
Contact Person: Phone:

Attachment D

USGS Investigation 80-33

GROUND-WATER HYDROLOGY OF THE DADE CITY AREA, PASCO COUNTY, FLORIDA, WITH EMPHASIS ON THE HYDROLOGIC EFFECTS OF PUMPING FROM THE FLORIDAN AQUIFER



U.S. GEOLOGICAL SURVEY
WATER-RESOURCES INVESTIGATIONS 80-33

Prepared in cooperation with the

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

80-33

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Southwest Florida Water Management District

16. Abstract (Limit: 200 words)

The Dade City area, northeast Pasco County, Florida is an area of about 260 square miles. Of the approximately 32 million gallons per day pumped from the Floridan aquifer in the area in 1975, about 16 million gallons per day were pumped from an area of about 0.25 square miles by Lykes-Pasco Packing Company, a citrus processing plant. There are essentially two producing zones in the Floridan aquifer in the Dade City area. The upper zone is from about 10 feet above to about 150 feet below National Geodetic Vertical Datum of 1929, and the lower zone from about 300 to about 500 feet below NGVD of 1929. There is evidence of hydraulic interconnection of the upper and lower zones of the Floridan aquifer. This appears to be highly significant in terms of the geohydrology of the Floridan aquifer in the area, particularly with regard to its ground-water flow pattern, water quality, and aquifer hydraulic characteristics. In the immediate vicinity of Lykes-Pasco Packing, aquifer transmissivity may range from 200,000 ft^2/d to as much as 400,000 ft^2/d. It is probable the Floridan is only semi-confined in the immediate vicinity of Lykes-Pasco. High aquifer transmissivity in the area is the reason why there are only a few feet of drawdown of the Floridan's potentiometric level even near the center of Lykes-Pasco's well field.

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b. Identifiers/Open-Ended Terms

Floridan aquifer, Dade City, Pasco County, Florida

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GROUND-WATER HYDROLOGY OF THE DADE CITY AREA, PASCO COUNTY, FLORIDA, WITH EMPHASIS ON THE HYDROLOGIC EFFECTS OF PUMPING FROM THE FLORIDAN AQUIFER

By C. H. Tibbals, Warren Anderson, and C. P. Laughlin

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations 80-33

Prepared in cooperation with the

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

1980

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

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CONVERSION FACTORS

For use of those readers who may prefer to use metric units rather than inch-pound units, the conversion factors for the terms used in this report are listed below:

Multiply inch-pound units	By	To obtain metric units
ft (foot)	0.3048	m (meter)
ft^2/d (foot squared per day)	0.0929	m^2d (meter squared per day)
ft^3/s (cubic foot per second)	$2.832X10^{-2}$	m^3/s (cubic meter per second)
gal/min (gallon per minute)	$6.309X10^{-2}$	L/s (liter per second)
Mgal/d (million gallon per day)	0.0438	m^3/s (cubic meter per second)
in. (inch)	$2.540X10^{+1}$	mm (millimeter)
in./yr (inch per year)	$2.540X10^{+1}$	mm/yr (millimeter per year)
mi (mile)	1.609	km (kilometer)
mi^2 (square mile)	2.590	km^2 (square kilometer)

Temperature in degrees Farenheit (°F) can be converted to degrees Celsius (°C) as follows:

$$°C = \frac{°F-32}{1.8} .$$

National Geodetic Vertical Datum (NGVD) of 1929 as used in this report describes what is more commonly known as mean sea level.

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ABSTRACT

The Dade City area, northeast Pasco County, Florida, is an area of about 260 square miles. Almost all water used in the area is pumped from the Floridan aquifer. Of the approximately 32 million gallons per day pumped from the aquifer in the area in 1975 about 16 million gallons per day were pumped from an area of about 0.25 square miles by a citrus processing plant. Peak, or instantaneous pumping rates, have been as high as 66 million gallons per day (April 28, 1964). Since 1972, the citrus processing plant has made increased use of recycled water and, thus, has reduced ground-water withdrawals. There are essentially two producing zones in the Floridan aquifer in the Dade City area. The upper zone is from about 10 feet above NGVD of 1929 (National Geodetic Vertical Datum of 1929) to about 150 feet below NGVD of 1929. The lower producing zone is from about 300 feet to about 500 feet below NGVD of 1929. There is some evidence that either trenching by ancient surface streams or deep vertical solution activity has resulted in the interconnection of the upper and lower zones of the Floridan aquifer. This appears to be highly significant in terms of the geohydrology of the Floridan aquifer in the area, particularly with regard to its ground-water flow pattern, water quality, and aquifer hydraulic characteristics. In the immediate vicinity of the citrus processing plant, aquifer transmissivity may range from 200,000 feet squared per day to as much as 400,000 feet squared per day. It is also probable the Floridan is only semiconfined in the immediate vicinity of the plant. High aquifer transmissivity in the area is the reason why there are only a few feet of drawdown of the Floridan potentiometric surface even near the center of the plant's well field. The long-term effects of the plant's pumping since about 1942 are not discernible from available well records. Fluctuations of the potentiometric surface of the Floridan are due mainly to variations in recharge due to the seasonal variations in the amount of rainfall. The data indicate that the relation of rainfall at Saint Leo to the flow of Weekiwachee Springs near Brooksville has changed. Since about 1950, the spring has discharged more water for a given amount of rainfall than for the period of record prior to 1950.

INTRODUCTION

The Dade City area, herein referred to as the study area, is an area of 260 mi^2 in northeast Pasco County (fig. 1). Almost all water supplies pumped in the Dade City area are from the Floridan aquifer, an areally-extensive limestone aquifer that underlies all of Florida and parts of Alabama, Georgia, and South Carolina. Most of the ground water used in Dade City area is for industrial use in the form of citrus processing. The largest user of ground water in the area is Lykes-Pasco Packing Co. In 1975, this citrus processing plant pumped an average of 16 Mgal/d from the Floridan aquifer from an area of less than 0.25 mi^2, a relatively large withdrawal rate as compared to the 1.06 Mgal/d pumped for public supply by Dade City (Healy, 1977) in an area of about 2 mi^2.

The Dade City area is on the northeast fringe of an area of heavy ground-water development that partially supplies the Tampa Bay area. The Southwest Florida Water Management District (SWFWMD) has the responsibility for the regulation and permitting of water use in the District whose total area includes both the Tampa Bay and Dade City areas.

Purpose and Scope

The purpose and scope of this study is to describe the ground-water hydrology of the Dade City area and to evaluate the effects of relatively large ground-water withdrawals on the local ground-water regimen. This report represents the results of about 16 months of field study.

The studied area surrounds the major center of pumping, the Lykes-Pasco citrus processing plant at Dade City which is the main focus of the study because it is the largest single water user in the area.

The results of this study should help water managers in making informed decisions in planning for future allocations of ground-water withdrawals in the area.

Previous Studies

The Dade City area has been investigated, to some degree, in four previous geohydrologic studies. Wetterhall (1964) made a geohydrologic reconnaissance of Pasco and south Hernando County. The Dade City area is included on the west fringe areas of two studies describing the hydrology of the Green Swamp area (Pride and others, 1966; Grubb and Rutledge, 1978). William F. Guyton and Associates (1974) estimated the likely effects of pumping from proposed well fields in south-central and southwest Pasco County.

Figure 1.--Location of study area.

Other investigators have included Pasco County and the Dade City area in relatively broad-scoped regional or statewide hydrologic studies. Sellards (1908), Sellards and Gunter (1913), Matson and Sanford (1913), Gunter and Ponton (1931), Stringfield (1935, 1936, 1966), Stringfield and Cooper (1950), and Cooper and others (1953) have included the area in their hydrologic reports.

The potentiometric surface of the Floridan aquifer in the SWFWMD has been mapped and published by the U.S. Geological Survey -- intermittently from 1934 to January 1964, every other year from May 1969 to May 1973, annually from May 1973 to May 1975, and in May and September beginning in May 1975.

Hydrologic data on surface water, ground water, and quality of water are published annually in the U.S. Geological Survey series, "Water resources data for Florida." In addition, flow-duration, low-flow, and high-flow characteristics for selected gaged streams in the area have been tabulated in a report by Heath and Wimberly (1971).

Some of the more important geologic and geomorphologic studies that include the Dade City area are those of Cooke (1939, 1945), Carr and Alverson (1959), White (1958, 1970), Yon and Hendry (1972), and Randazzo (1972).

Acknowledgments

The authors express their appreciation to Norvell W. Hunt, Director of Environmental Control, Lykes-Pasco Packing Co., for his assistance and many helpful comments during the investigation.

The authors are grateful to Lykes-Pasco Packing Co. for furnishing pumping data and information on their wells. Thanks are also extended to the many ranchers, grove operators, and other land owners who permitted access to their land and allowed the sampling of water and measuring of water levels in their wells.

Well-Numbering System

In this report, well data are used that are taken from files and publications of several agencies. Each agency has its own well-numbering system. Hence, to attain a consistent well-numbering system in this report, the wells used here in (fig. 2) are assigned numbers in sequential format. Table 1 is used to cross-reference the wells to their respective agencies.

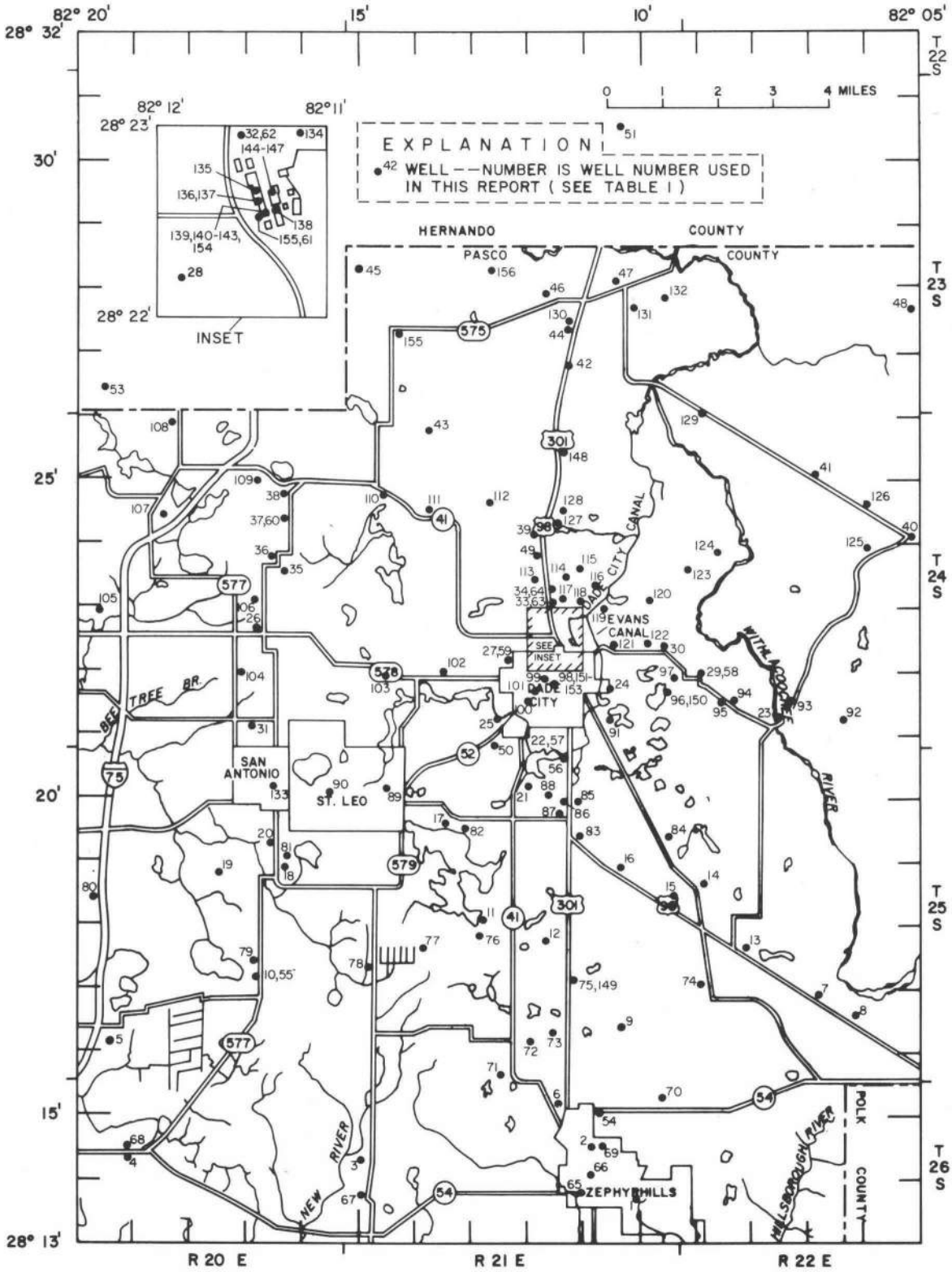

Figure 2.--Locations of wells used in this report.

Table 1.--Index to well numbers and to geologic and drillers' logs used in this report

WELL NUMBER	U.S. GEOLOGICAL SURVEY NUMBER WATER RESOURCES DIVISION	GEOLOGIC DIVISION[1]	FLORIDA BUREAU OF GEOLOGY WELL NUMBER	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT NUMBER	FLORIDA DEPARTMENT OF NATURAL RESOURCES NUMBER	OTHER NUMBER[2]
1	-	-	-	-	-	813-210-01
2	-	-	W- 2972	-	-	-
3	281414082145901	-	-	-	-	814-214-01
4	281419082190601	-	-	-	-	814-219-01
5	281608082192401	-	-	-	-	816-219-01
6	-	-	W- 3284	-	-	-
7	281654082065901	-	W- 5350	-	-	816-206-01
8	-	G110	-	-	-	-
9	-	-	W-12536	-	-	-
10	281715082164401	-	W- 7466	-	-	817-216-01
11	-	-	-	-	-	819-212-01
12	281749082112701	-	W- 2160	-	-	817-211-01
13	-	G111	-	-	-	-
14	281846082085501	-	-	72- 1643	-	818-208-01
15	-	G112	-	-	-	-
16	-	G113	-	-	-	-
17	-	-	W- 5282	-	-	-
18	-	-	W- 5977	-	-	-
19	-	-	W- 5863	-	-	-
20	-	-	W- 5865	-	-	-
21	-	-	W-10617	-	-	-
22	282038082112001	-	-	-	-	820-211-01
23	282109082073301	-	-	-	-	821-207-03
24	282141082101901	-	-	-	3289	821-210-02
25	-	-	W- 6504	-	-	-
26	282234082164401	-	-	73-10989	-	822-216-01
27	282212082121801	-	W- 2707	-	-	822-212-01
28	-	-	W- 5124	-	-	-
29	282153082085602	-	-	73-13441	-	821-208-04
30	282220082093301	-	-	-	-	822-209-02
31	-	-	W- 8507	-	-	-
32	282258082113101	-	-	72- 1438	-	822-211-16
33	282303082113401	-	-	72- 4464	-	823-211-02
34	-	G114	-	-	-	-
35	-	-	W- 5866	-	-	-
36	-	-	W- 5942	-	-	-
37	282418082161301	-	-	72- 4044	-	824-216-03
38	-	-	W- 2199	-	-	-
39	-	-	W- 8840	-	-	-
40	282408082051401	-	-	-	-	824-205-01

41	282505082065501	-	-	-	-	825-206-01
42	282641082112001	-	-	-	-	826-211-01
43	-	-	-	72- 4231	-	-
44	-	-	W-11593	-	-	-
45	-	-	W-10298	-	-	-
46	-	-	W- 6470	-	-	-
47	-	-	-	72- 8946	-	-
48	282740082050801	-	-	-	-	827-205-01
49	282346082114901	-	-	-	29710	823-211-05
50	282048082123301	-	-	-	-	820-212-01
51	283050082105001	-	W- 4410	-	-	830-210-01
52	282905082163401	-	-	-	-	829-216-01
53	-	-	W- 8426	-	-	-
54	281504082104801	-	-	ROMP DP 86	-	815-210-01
55	281715082164402	-	-	-	-	817-216-02
56	282036082112101	-	-	-	-	820-211-02
57	282037082111601	-	-	-	-	820-211-03
58	282153082065601	-	-	-	-	821-208-03
59	282212082121802	-	-	-	-	822-212-02
60	282418082162001	-	-	-	-	824-216-01
61	282230082112202	-	-	-	-	822-211-18
62	282258082113102	-	-	-	-	822-211-17
63	282302082113401	-	-	-	-	823-211-01
64	282315082113601	-	-	-	-	823-211-03
65	281348082110201	-	-	-	-	813-211-01
66	281404082105201	-	-	-	-	814-210-02
67	281331082145301	-	-	-	-	813-214-01
68	281425082190801	-	-	-	-	814-219-02
69	281431082104701	-	-	-	-	814-210-01
70	281513082094601	-	-	-	-	815-209-01
71	281545082122001	-	-	-	-	815-212-01
72	281610082115901	-	-	-	-	816-211-02
73	281621082113001	-	-	-	-	816-211-01
74	281704082085201	-	-	-	-	817-208-01
75	281730082111101	-	-	-	-	817-211-02
76	281755082124501	-	-	-	-	817-212-01
77	281743082135101	-	-	-	-	817-213-01
78	281725082144801	-	-	-	-	817-214-01
79	281725082164401	-	-	-	-	817-216-03
80	281827082194501	-	-	-	-	818-219-01

[1] Carr and Alverson (1959).

[2] Wetterhall (1964).

Table 1.--Index to well numbers and to geologic and drillers' logs used in this report - Continued

WELL NUMBER	U.S. GEOLOGICAL SURVEY WATER RESOURCES DIVISION	NUMBER GEOLOGIC DIVISION[1]	FLORIDA BUREAU OF GEOLOGY WELL NUMBER	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT NUMBER	FLORIDA DEPARTMENT OF NATURAL RESOURCES NUMBER	OTHER NUMBER[2]
81	261906082161601	-	-	-	-	819-216-01
82	261929082131301	-	-	-	-	819-213-01
83	261927082111201	-	-	-	-	819-211-01
84	261930082093701	-	-	-	-	819-209-01
85	261958082110201	-	-	-	-	819-211-05
86	261955082111701	-	-	-	-	819-211-04
87	261942082113101	-	-	-	-	819-211-03
88	262005082112801	-	-	-	-	820-211-04
89	262007082142901	-	-	-	-	820-214-01
90	262005082153501	-	-	-	-	820-215-01
91	262114082103101	-	-	-	-	821-210-01
92	262117082062001	-	-	-	-	821-206-01
93	262121082071101	-	-	-	-	821-207-02
94	262130082082401	-	-	-	-	821-208-02
95	262130082082901	-	-	-	-	821-208-01
96	262143082093201	-	-	-	-	821-209-02
97	262153082092601	-	-	-	-	821-209-01
98	262147082113001	-	-	-	-	821-211-01
99	262152082114101	-	-	-	-	821-211-05
100	262132082115901	-	-	-	-	821-211-06
101	262138082115201	-	-	-	-	821-211-07
102	262155082132601	-	-	-	-	821-213-01
103	262154082142401	-	-	-	-	821-214-01
104	262158082170801	-	-	-	-	821-217-01
105	262258082193601	-	-	-	-	822-219-01
106	262304082164401	-	-	-	-	823-216-01
107	262428082182801	-	-	-	-	824-218-01
108	262552082181201	-	-	-	-	825-218-01
109	262459082164301	-	-	-	-	824-216-02
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111	262428082134501	-	-	-	-	824-213-01
112	262442082124401	-	-	-	-	824-212-01
113	262319082115001	-	-	-	-	823-211-04
114	262326082112001	-	-	-	-	823-211-09
115	262332082110101	-	-	-	-	823-211-06
116	262319082105201	-	-	-	-	823-210-02
117	262306082112601	-	-	-	-	823-211-07
118	262307082111101	-	-	-	-	823-211-08
119	262259082104101	-	-	-	-	822-210-02
120	262303082094901	-	-	-	-	823-209-01

121	282221082103001	-	-	-	-	822-210-01
122	282212082094801	-	-	-	-	822-209-01
123	282336082091001	-	-	-	-	823-209-02
124	282352082083501	-	-	-	-	823-208-01
125	282353082055301	-	-	-	-	823-205-01
126	282434082055801	-	-	-	-	824-206-01
127	282425082112901	-	-	-	-	824-211-01
128	282430082112101	-	-	-	-	824-211-02
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133	282011082162701	-	-	-	-	820-216-01
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137	282235082112302	-	-	-	-	822-211-06
138	282235082111901	-	-	-	-	822-211-15
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140	282233082112204	-	-	-	-	822-211-03
141	282233082112201	-	-	-	-	822-211-04
142	282233082112202	-	-	-	-	822-211-12
143	282233082112206	-	-	-	-	822-211-13
144	282240082112001	-	-	-	-	822-211-08
145	282240082112002	-	-	-	-	822-211-09
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147	282240082112004	-	-	-	-	822-211-11
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149	281713082111501	-	-	-	-	817-211-03
150	282143082093301	-	-	-	-	821-209-03
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152	282147082113003	-	-	-	-	821-211-03
153	282147082113004	-	-	-	-	821-211-04
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	-	-	-	-	-	-
	-	-	-	-	-	-

[1] Carr and Alverson (1959).

[2] Wetterhall (1964).

DESCRIPTION OF THE AREA

The study area is mostly rural. According to the Pasco County Planning Department (David Pettrow, written commun., August 24, 1978), of the estimated 46,000 people living in the entire 260 mi^2 area as of July 1, 1977, about 10,500 live in the 10 mi^2 of incorporated areas comprised by San Antonio, St. (Saint) Leo, Zephyrhills, and Dade City. The rural population consists of about 36,000 people living in an area of about 250 mi^2, a population density of about 140 people per mi^2 as opposed to about 1,050 people per mi^2 in the incorporated areas.

Much of the area north and east of U.S. Highway 98 and east of Zephyrhills is flat and swampy and is generally used only for cattle ranching and timber harvesting for pulpwood. In the past, the area was extensively logged for cypress. Most of the remainder of the study area is also in agricultural use; citrus and cattle ranching being the predominant land-use categories.

The study area is on the west flank of Cooke's (1939, 1945) Central Highlands. A more specific physiographic breakdown is made by referring to White (1970, pl. 1-B) and figure 3: The part of the study area that has surface altitudes greater than about 100 ft is herein considered part of the Brooksville Ridge, the dominant topographic feature in the area. An adjacent area consisting of an approximately 2- to 3-mile-wide swath dissected by the Withlacoochee River and extending from the north limit of the study area to about the south latitude of Dade City is part of the Tsala Apopka Plain. The remainder of the study area is in the Western Valley.

The topography of the study area ranges from virtually flat to steeply rolling. Land surface altitudes range from 301 ft above NGVD of 1929 6 mi northwest of Dade City to about 60 ft above NGVD of 1929 along the flood plain of the Withlacoochee River in the northeast. Scattered throughout the south-central part of the area are relatively small, topographically high "islands," some of which are 50 to 60 ft higher than the surrounding area.

In terms of surface drainage, the extreme northwest part of the study area is drained by tributaries to the Pithlachascotee River, the west and south parts are drained by the Hillsborough River and its tributaries, and the remainder of the area is drained by the Withlacoochee River and its tributaries (fig. 3).

At high stages there is diversion of water from the upper Withlacoochee River basin into the headwaters of the Hillsborough River. According to Pride and others (1966), at high stages more than one-fourth of the flow from the upper Withlacoochee is diverted into the Hillsborough.

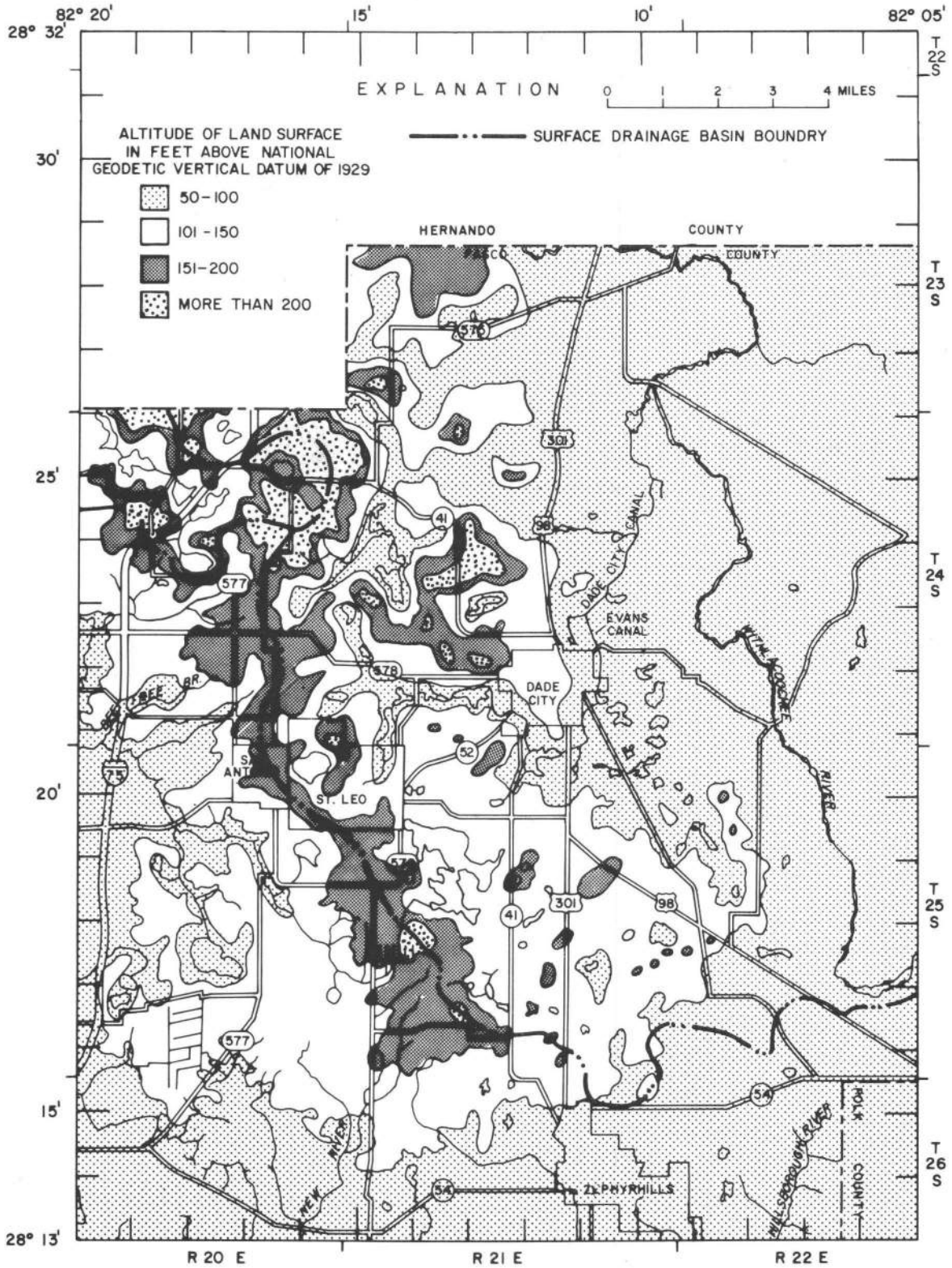

Figure 3.--Generalized topography and surface drainage in the Dade City area.

CLIMATE

The climate of central Florida is classed as subtropical humid and is characterized by long, warm, relatively wet summers and mild, relatively dry winters.

According to the National Oceanographic and Atmospheric Administration records for St. Leo, the average annual rainfall is 56.36 in./yr. For the period of record, 1902 through 1977, the maximum yearly rainfall was 81.93 in. in 1945 and the minimum was 36.61 in. in 1961.

Rainfall is unevenly distributed during the year. About 55 percent of the annual rainfall occurs during four summer months, June, July, August, and September (fig. 4). In addition to the uneven temporal distribution of the rainfall, it can also be unevenly distributed throughout the area at any given time, especially during the summer. This is because most of the summer rainfall is derived from local showers or thunderstorms that occur in a generally random manner throughout the area. Many of those local storms wet only a relatively small part of the total study area. The summer rainfall can be substantially augmented by tropical storms and hurricanes that pass through or near the Florida peninsula from time to time.

Winter rainfall generally results from cold air masses from the north (in the form of fronts) moving south through the area causing the resident warm air masses to lose their moisture, almost always in the form of rain. Winter rainfall generally occurs over wide areas and thus is not as spotty as summer rainfall.

The average annual temperature at St. Leo is about $72^{\circ}F$. Monthly mean temperatures range from about $61^{\circ}F$ in January to about $82^{\circ}F$ in August. Most years have a few days of freezing temperatures but the minimum daily temperature rarely falls below $20^{\circ}F$. The maximum temperature frequently exceeds $90^{\circ}F$ but only occasionally exceeds $100^{\circ}F$.

GEOLOGIC SETTING

As noted in the section on previous studies, the geology of the area has been described by several investigators including Wetterhall (1964) and Pride and others (1966). The geologic information in this report is mainly a summary of the data obtained by those previous investigators. Those data in addition to information from numerous drillers' logs on file with the Florida Bureau of Geology, Southwest Florida Water Management District, and the Florida Department of Natural Resources are used to construct several geologic sections (figs. 6-13), the locations of which are shown in figure 5. The generalized water-bearing characteristics of the various geologic formations are described in table 2.

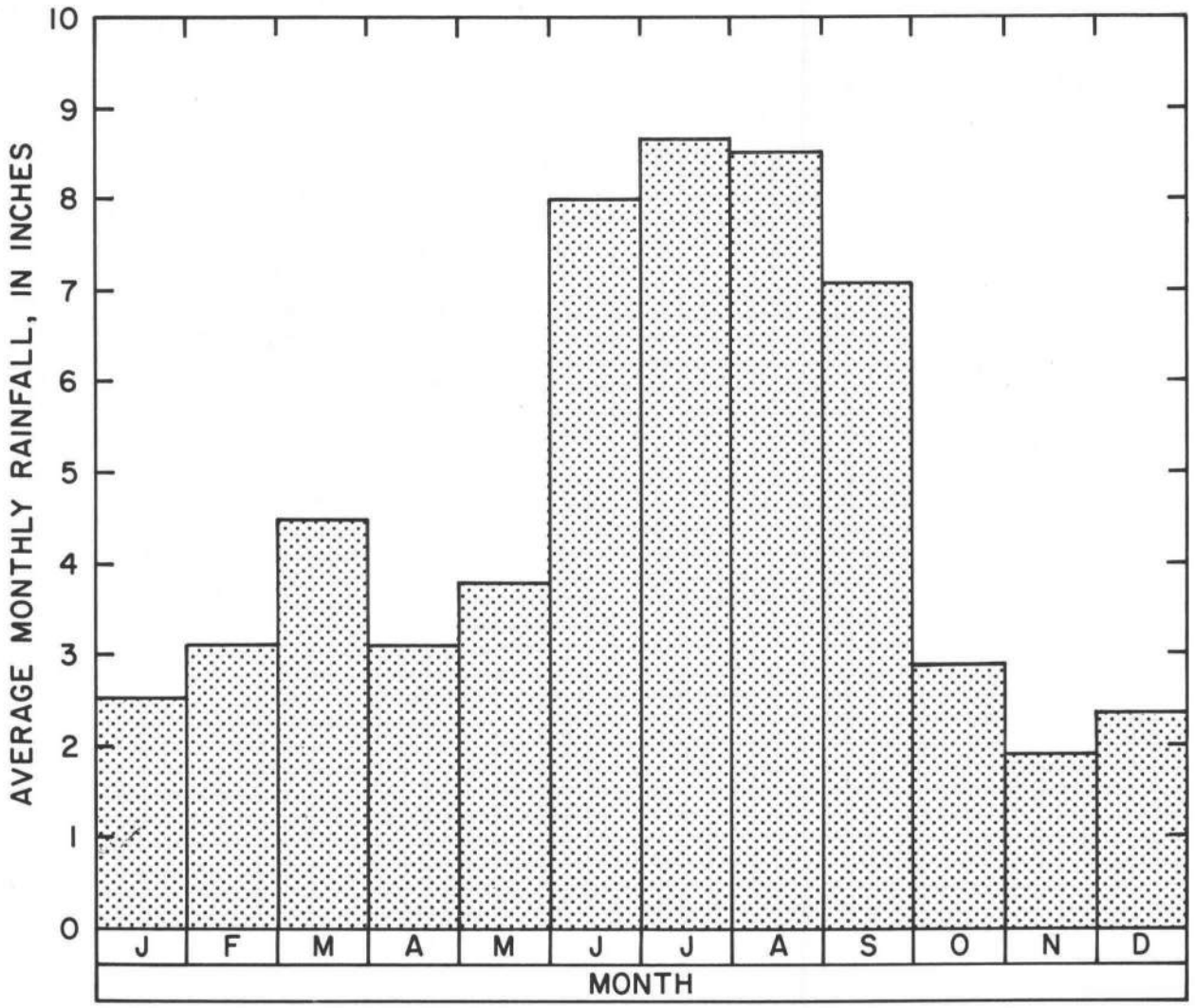

Figure 4. Average monthly rainfall at St. Leo, Florida.

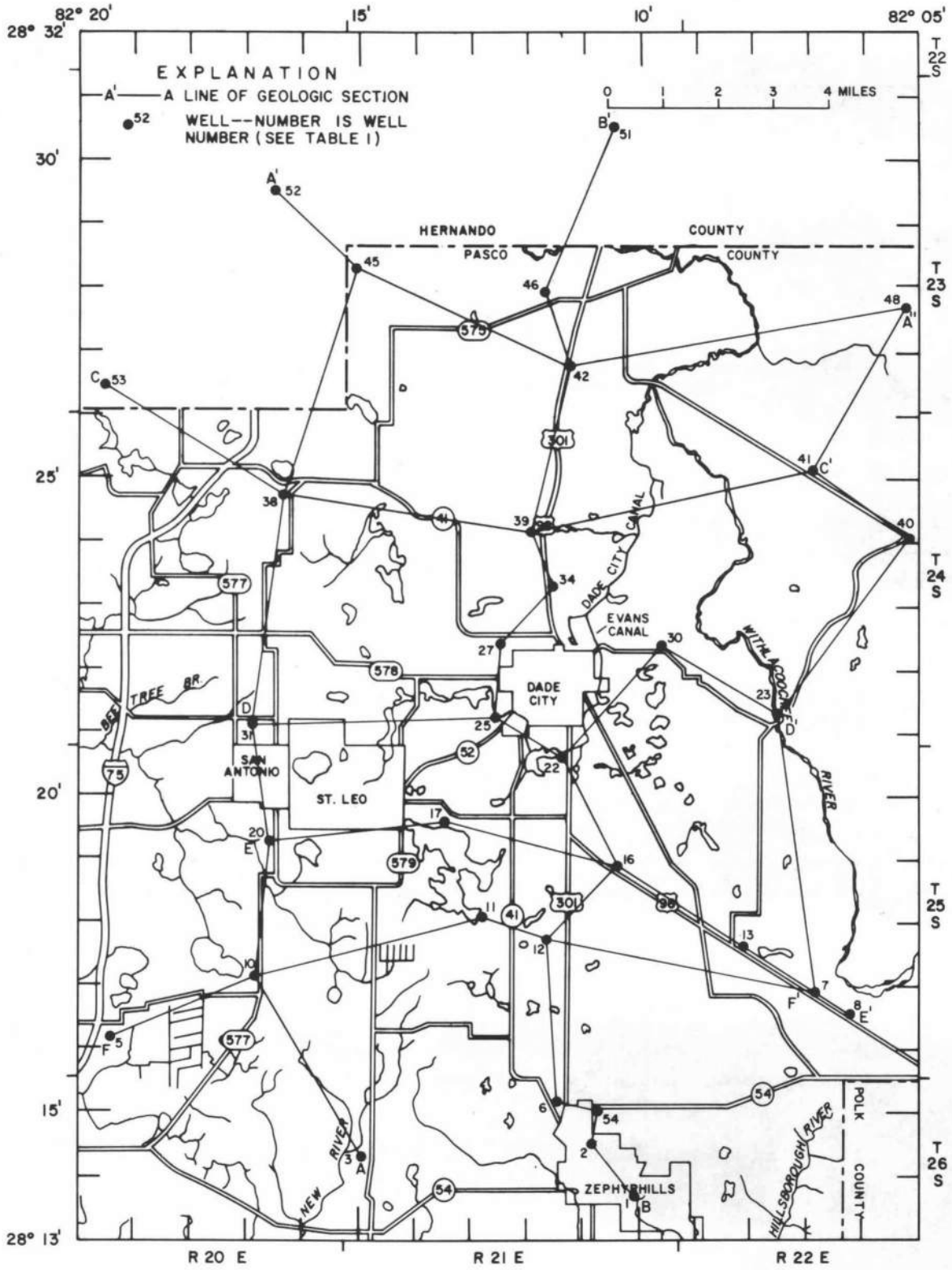

Figure 5.--Locations of geologic sections shown in figures 6-13.

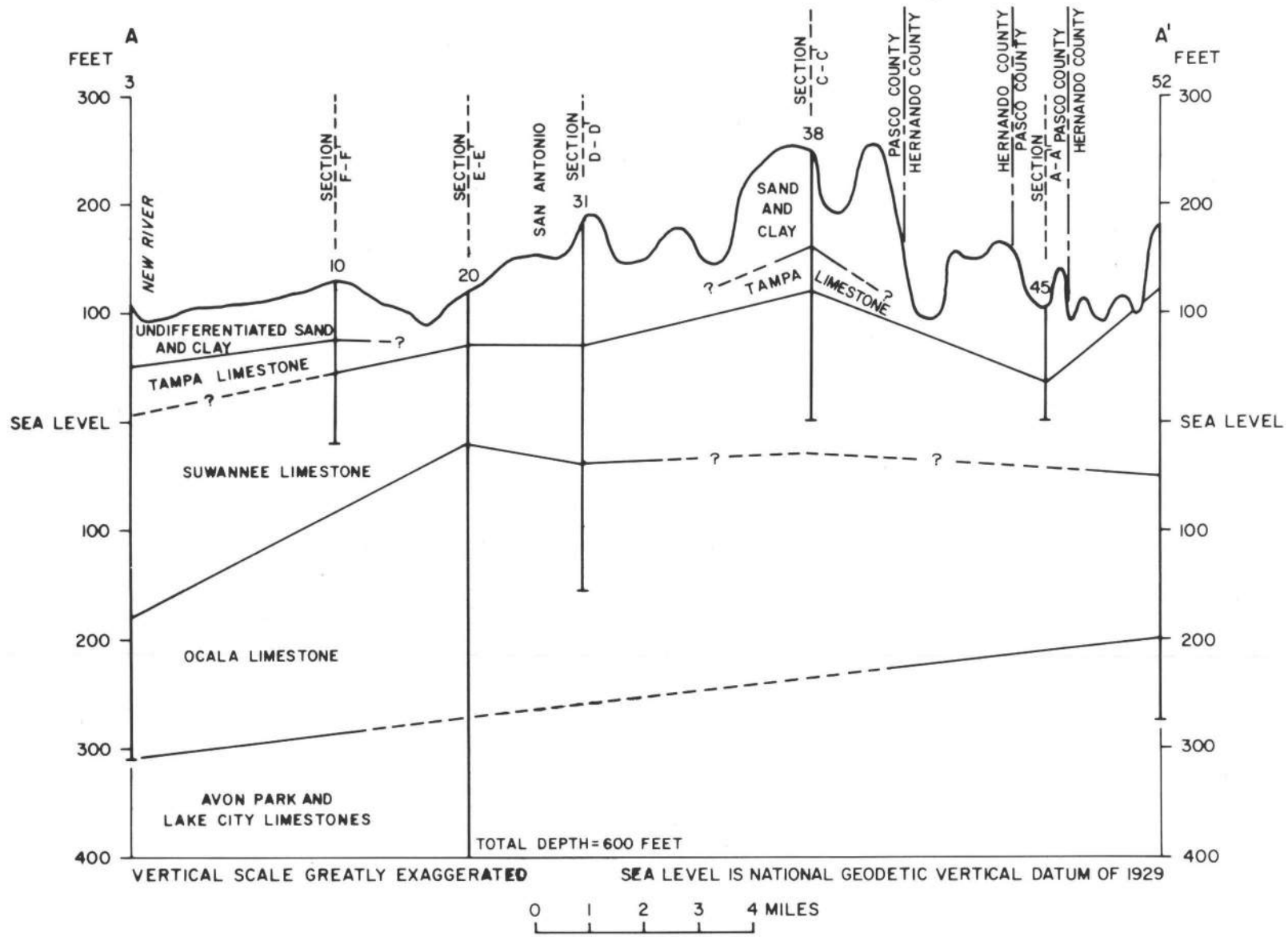

Figure 6.--Geologic section A-A'.

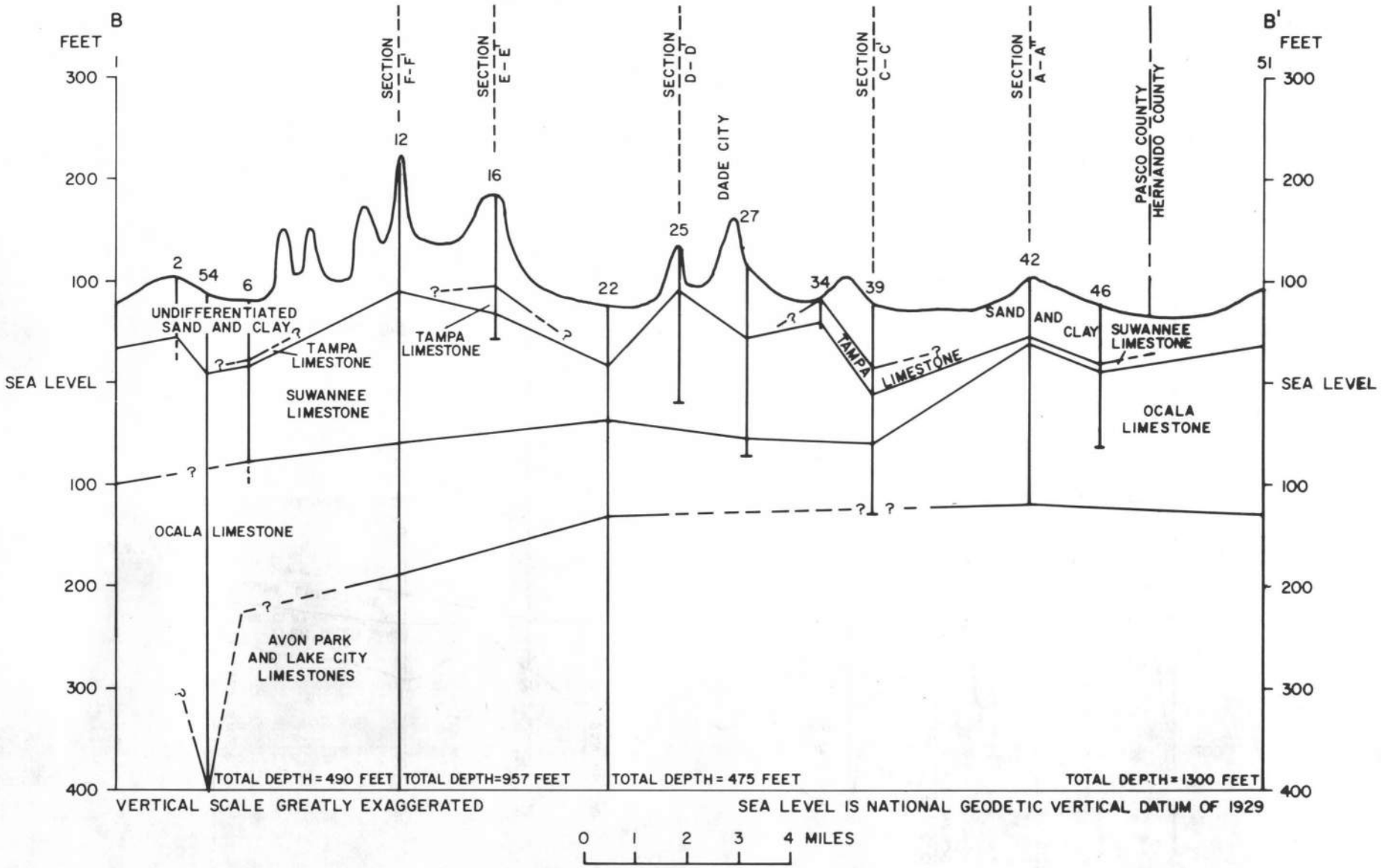

Figure 7.--Geologic section B-B'.

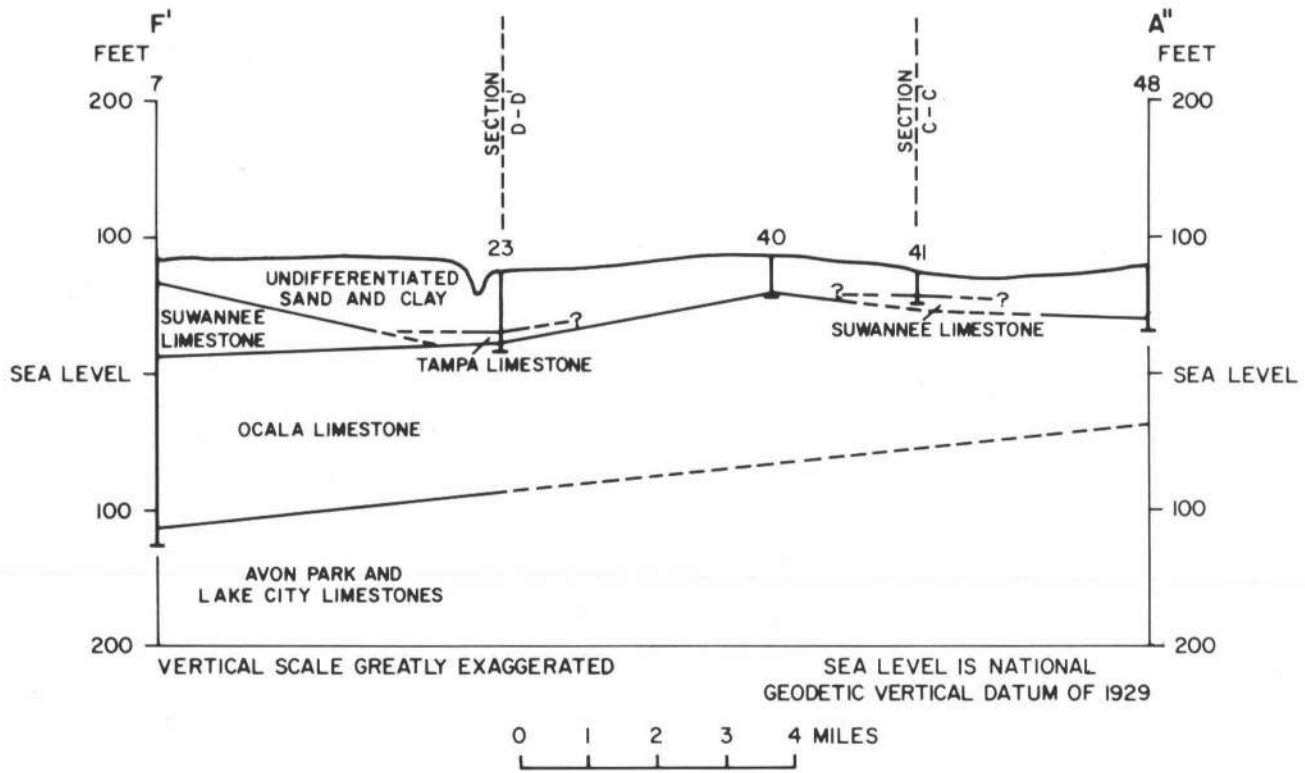

Figure 8.--Geologic section F'-A".

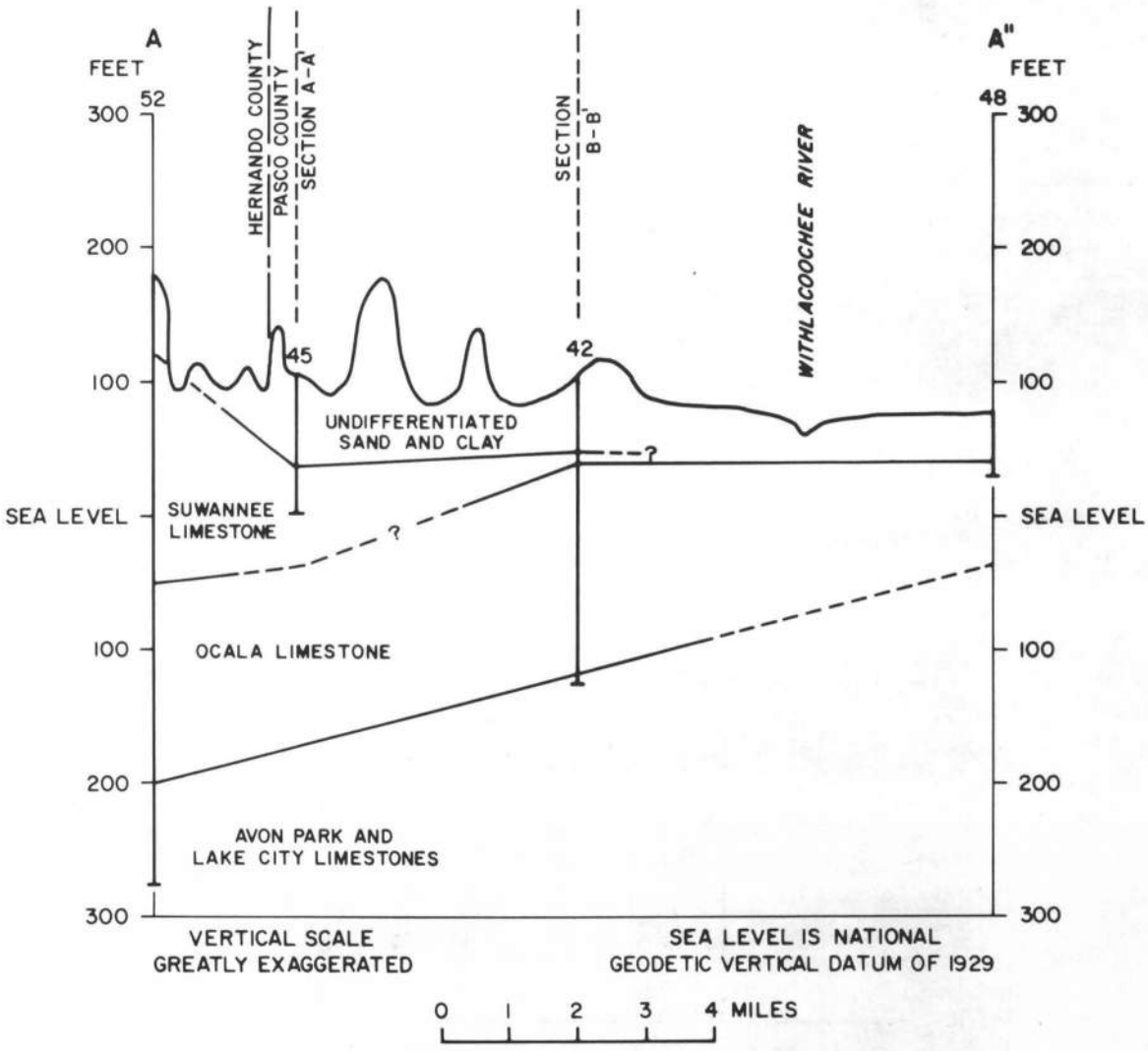

Figure 9.--Geologic section A'-A".

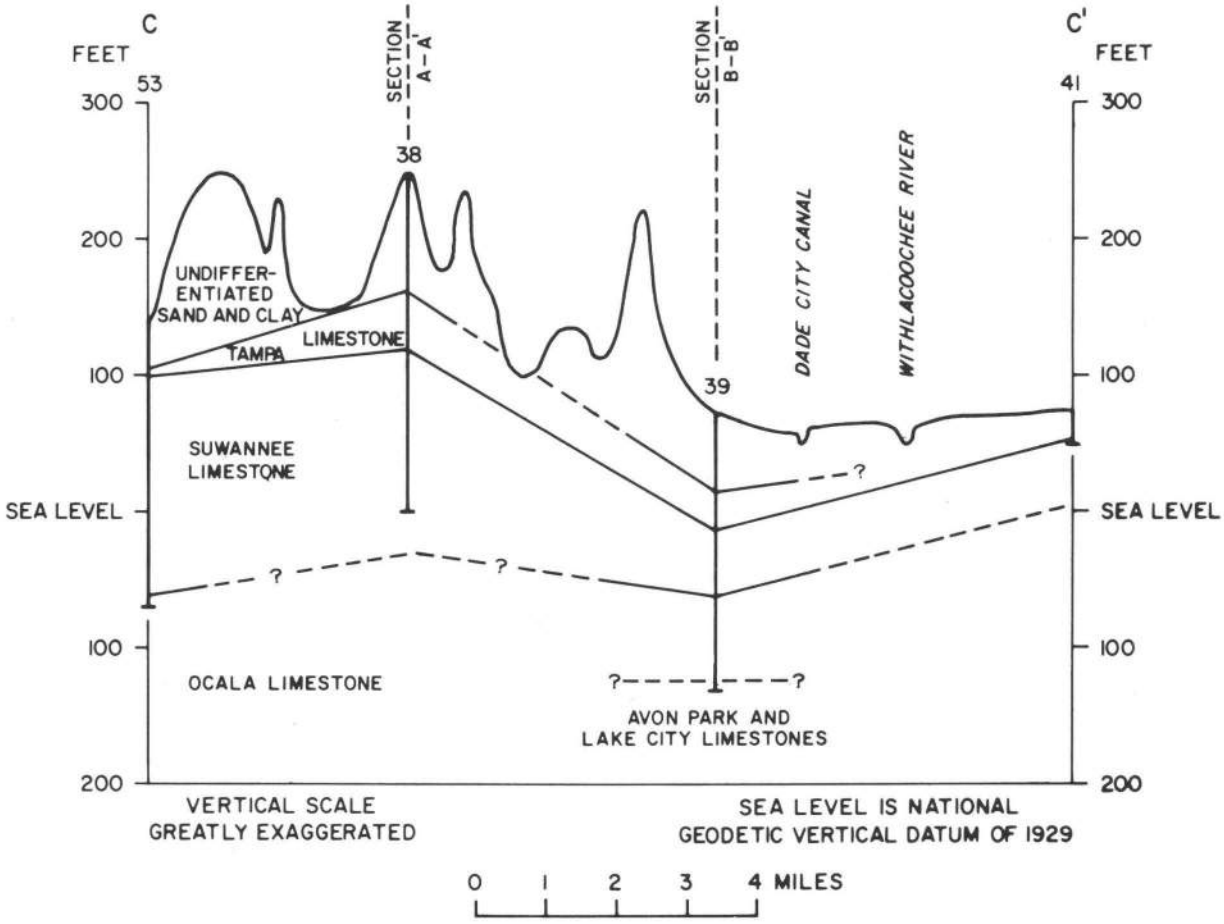

Figure 10.--Geologic section C-C'.

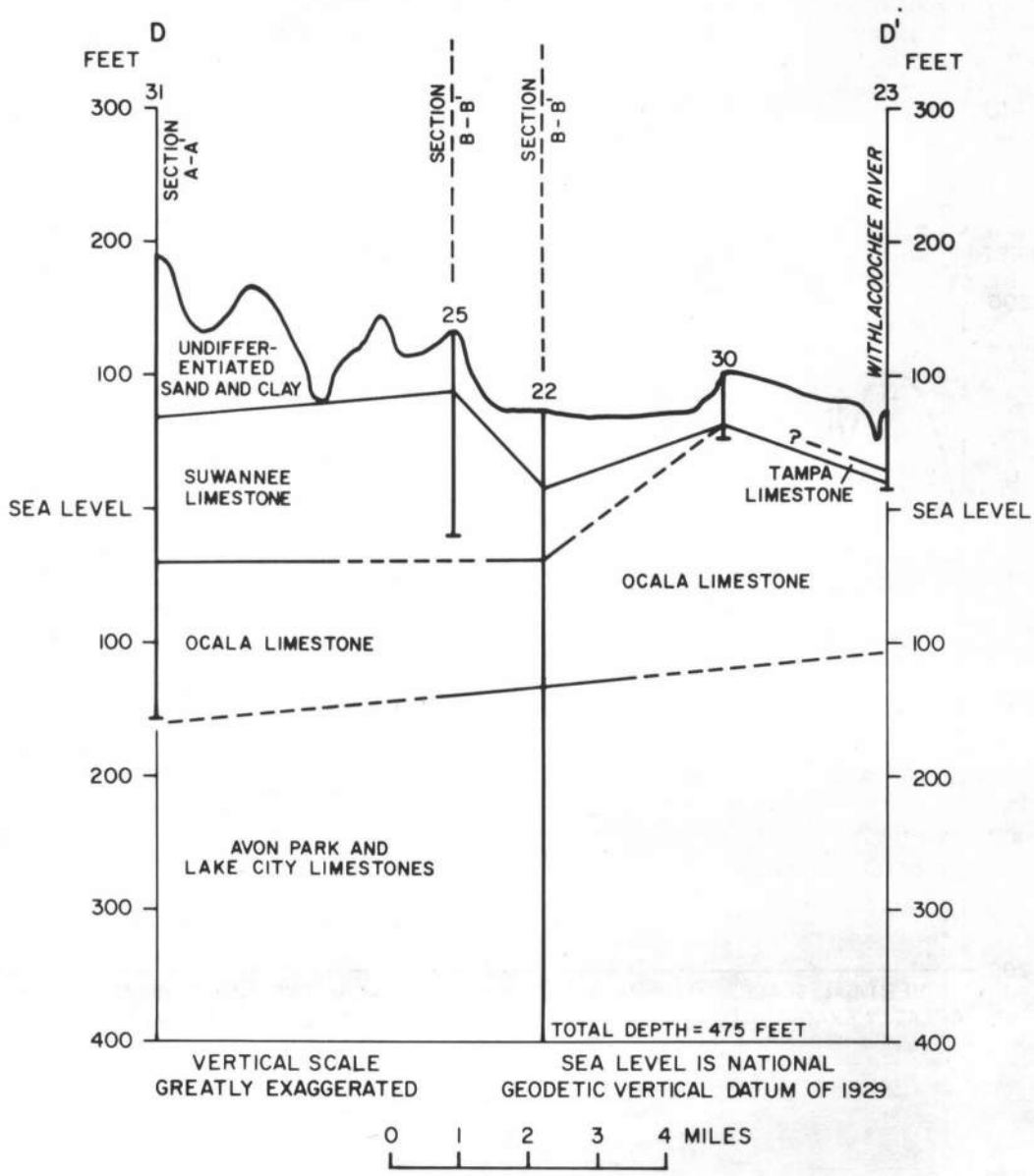

Figure 11.--Geologic section D-D'.

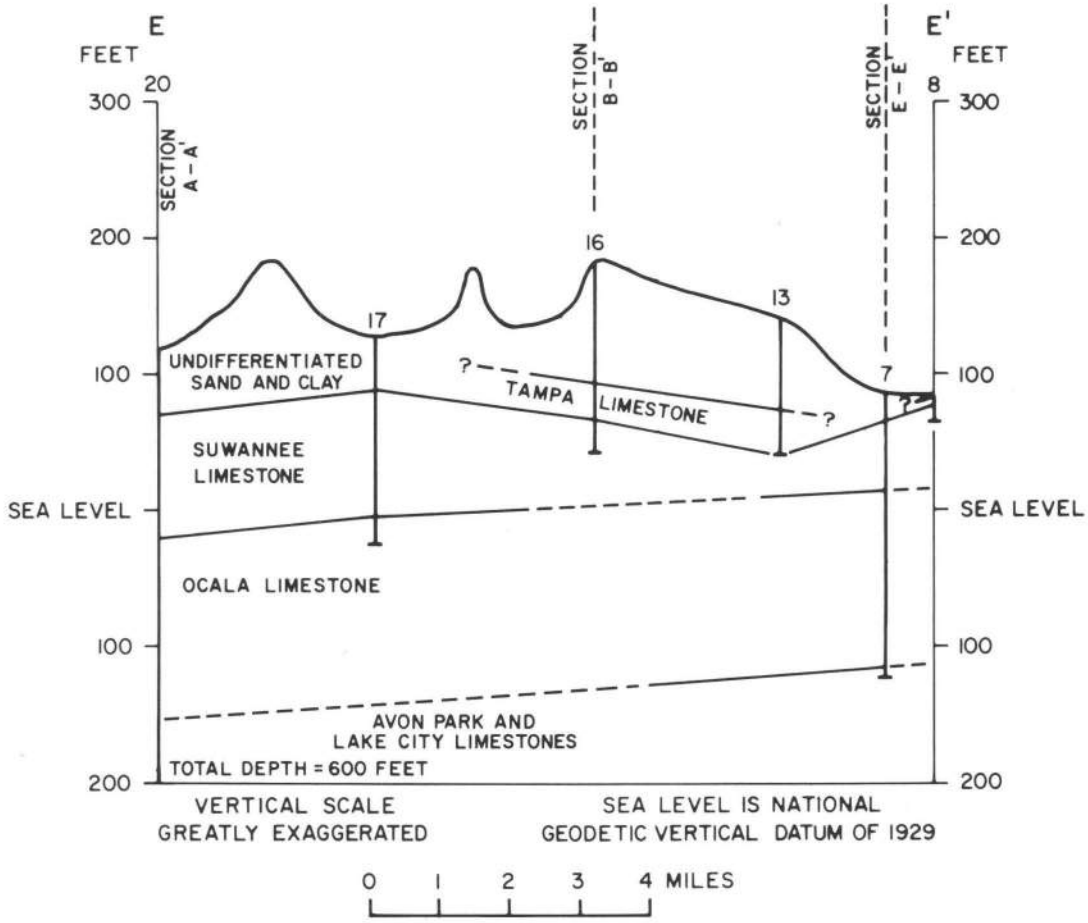

Figure 12.--Geologic section E-E'.

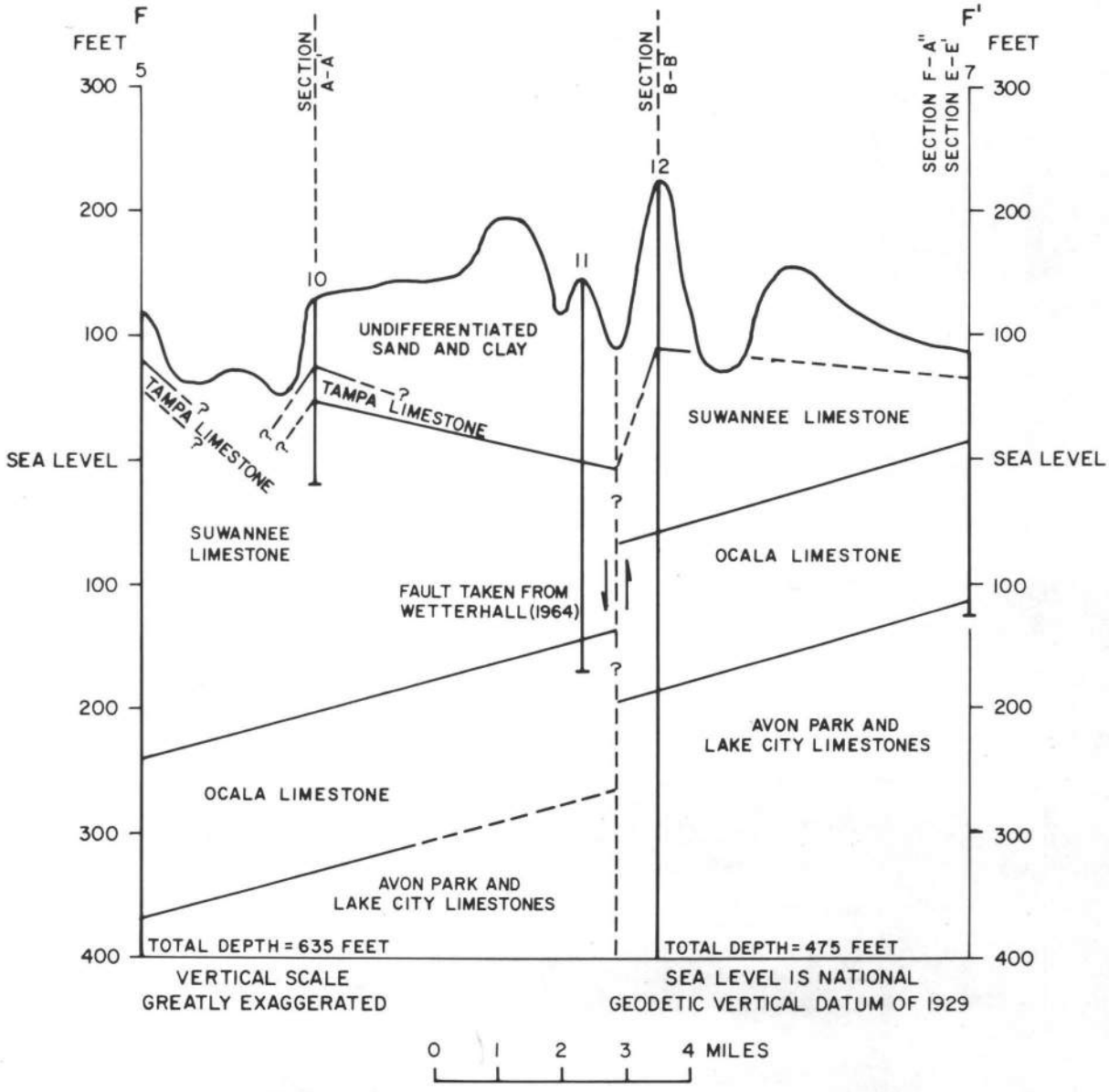

Figure 13.--Geologic section F-F'.

Table 2.--Geologic formations and their water-bearing characteristics in the Dade City area

Age	Formation	Lithology	Quality of water	Use
Holocene and Pleistocene	Undifferentiated sand and clay	Interbedded sand and clay up to 250 feet thick.	Objectionable concentration of iron and high organic color are common.	Only a few small domestic wells.
Miocene	Tampa Limestone	White to gray, sandy, fossiliferous limestone.	Generally satisfactory for domestic supplies without treatment.	Most domestic and many irrigation wells produce water from the basal Suwannee Limestone. Some wells in southwestern Pasco County produce water from the Tampa Limestone if the Suwannee Limestone contains salty water.
Oligocene	Suwannee Limestone	Fossiliferous, yellow to white, finegrained limestone. Hard at bottom.		
Eocene	Ocala Limestone	Soft, chalky, white to tan coquinoid limestone.	Not well known but probably similar to water from Suwannee Limestone in most areas.	Only a few wells produce water from local cavities.
		Hard, fossilferous, brown to gray dolomitic limestone.	Contains more sulfate than water from overlying formations but probably does not exceed public health limits in most of area.	Most wells that produce more than 1,000 gal/min penetrate the lower part of the Ocala Limestone and/or part of the hard brown dolomitic section of the Avon Park and Lake City Limestones.
	Avon Park Limestone	Soft to hard, fossilferous, brown limestone with dark brown beds of dolomitic limestone. Some sapropel.		
	Lake City Limestone			

GROUND WATER

In the study area, ground water occurs under nonartesian and artesian conditions. Nonartesian conditions occur where the upper surface of the zone of saturation (water table) is free to rise and fall in direct response to local rainfall (recharge) and to discharge. Artesian conditions occur where the water in an aquifer is confined by a bed of less permeable material and will rise, in a tightly cased well, above the base of the confining bed. The level to which the water will rise defines the altitude of the aquifer's potentiometric surface, or head, at that location. If the head is above land surface, the well will flow. Measurements of the water level in many artesian wells are used to define the configuration of the potentiometric surface over broad areas.

Surficial Aquifer

The surficial aquifer in the study area is unconfined and consists of sedimentary deposits of white-to-tan, fine to medium-fine quartz sands that grade downward into orange-to-red clayey sand. At some depth below the water table the sand and clayey sand generally grade into a zone of blue or gray-green clay and sandy clay that acts as a confining bed for the underlying limestones that comprise the Floridan aquifer.

The saturated thickness of the surficial aquifer is variable. Its thickness ranges from virtually zero near where the Withlacoochee River borders Hernando County to as much as 90 ft in the topographically-high sand hills northwest of Dade City (fig. 3).

The water table in the surficial aquifer ranges from at or near land surface in the lowlands to a depth of several tens of feet in the sand hills northwest of Dade City. Where the surficial aquifer is thin or where it is underlain by relatively impermeable materials, the water table can stand near land surface even though in the sand hills. For example, about 2 mi south of St. Leo, in a topographically high area (fig. 3) there is a network of drainage ditches used to help maintain the water table at levels lower than it would stand under natural conditions.

The surficial aquifer is recharged by local rainfall, irrigation, septic-tank effluent, and, in areas where the potentiometric surface of the Floridan aquifer is above the water table, from the Floridan by upward leakage through confining beds. Water leaves the surficial aquifer by seepage to lakes, ditches, and streams; by evapotranspiration where the water table is near land surface; by pumpage; and, where the potentiometric surface of the Floridan aquifer is below the water table, by downward leakage to the Floridan.

In terms of the potable water supply of the Dade City area, the most important function of the surficial aquifer is to store water, some of which recharges the Floridan aquifer. The surficial aquifer is little used as a direct source of ground water because, relative to the Floridan aquifer, its permeability is low resulting in relatively low yields to wells. Also, according to Wetterhall (1964), water from the surficial aquifer often contains objectionable concentrations of dissolved iron and is likely to be highly colored.

Floridan Aquifer

In the Dade City area, the principal artesian aquifer is the Floridan aquifer, an approximately 2,000-foot-thick limestone and dolomitic limestone. The top of the Floridan (fig. 14), as used in this report, is characterized by the first vertically persistent occurrence of consolidated carbonate rocks.

In the Dade City area, the Floridan consists of those parts of the Tampa Limestone that meet the above criterion, the Suwannee Limestone, Ocala Limestone, Avon Park Limestone, and part, or, perhaps, all of the Lake City Limestone.

The base of the aquifer and top of the sub-Floridan confining unit is defined as the top of the first vertically persistent anhydrite beds or, in their absence, the top of the transition of the generally permeable carbonate sequence to the much less permeable gypsiferous and anhydritic carbonate beds and beds of chalk. The supra-Floridan confining unit in the Dade City area generally consists of the blue to gray-green clay and sandy clay that, where present, extends from the base of the surficial aquifer to the top of the Floridan.

The Floridan aquifer is recharged (1) by downward leakage from the surficial aquifer in areas where the water table is above the potentiometric surface of the Floridan and where the supra-Floridan confining beds are semipermeable, thin, or breached by sinkholes and (2) by direct rainfall in areas where the Floridan crops out. Discharge from the Floridan occurs by pumping wells, springflow, and by upward leakage to the surficial aquifer in areas where the potentiometric surface of the Floridan is above the water table.

The geologic sections (figs. 6-13) show only one vertical displacement in the Floridan aquifer that could be attributable to faulting (fig. 13) but this does not rule out the possibility of jointing or solution activity causing high transmissivity lineations and, thus, preferential vertical and horizontal flow patterns due to such lineations. The map showing altitude of the top of the Floridan aquifer (fig. 14) shows two generally north-south trending troughs or trench-like features. These features and their hydrologic significance are discussed in later sections of this report.

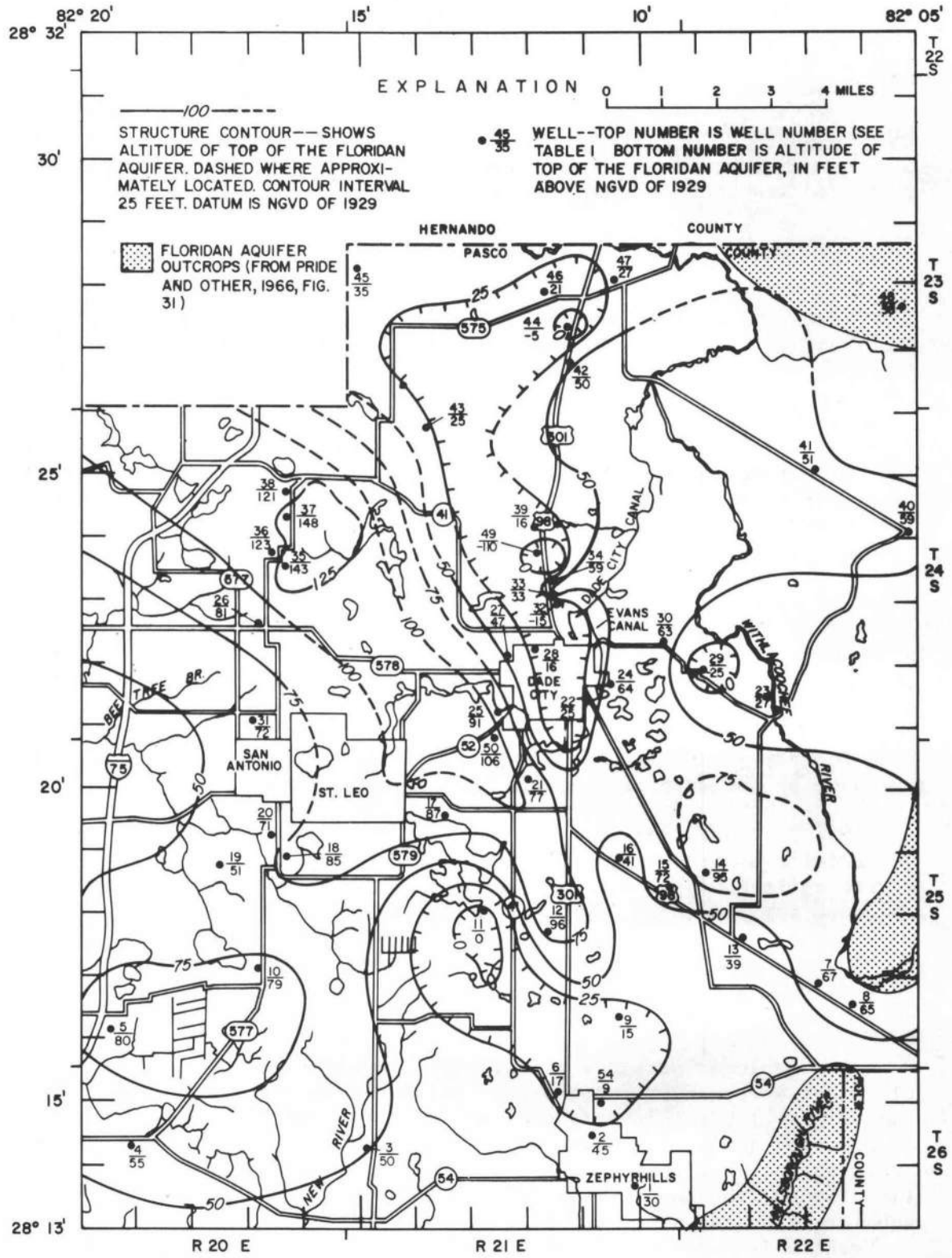

Figure 14. Altitude of top of the Floridan aquifer in the Dade City area.

Figure 15 shows the depths of wells inventoried in the study area by the U.S. Geological Survey. If the well depths shown in figure 15 are considered representative of typical well depths in the study area and if it is assumed that wells are generally drilled no deeper than the depth at which the required amount of water is obtained, then figure 15 suggests that there are essentially two primary producing zones in the Floridan. One zone is from about 10 ft above NGVD of 1929 to 150 ft below NGVD of 1929 and another zone is from about 300 ft to 500 ft below NGVD of 1929. Ryder (1978, fig. 3, p. 7) found nearly the same vertical distribution of water bearing zones in an area about 14 mi southwest of Dade City in the Cypress Creek well-field area. Caliper logs of a few wells (table 3) indicate the presence of cavities in the Floridan aquifer at about the same depths as suggested by figure 15.

Potentiometric Surface

The altitude of the potentiometric surface is constantly changing, mainly in response to changes in rates of recharge and discharge and, to a lesser extent, barometric fluctuations and earth tides. Major fluctuations of the potentiometric surface are seasonal and in response to rainfall or the lack of rainfall. Hydrographs of the two wells in figure 16 show that ground-water levels follow a cyclical pattern of rise and fall that, in general, corresponds with the wet and dry seasons of the year. The long-term trends of water levels of the Floridan aquifer in the Dade City area show no large decline in spite of generally below-normal rainfall since mid-1966 (fig. 16).

Figure 17 shows the regional configuration of the potentiometric surface of the Floridan aquifer in west-central peninsular Florida. The regional flow of ground water in the Floridan aquifer is from areas of high altitude of the potentiometric surface to areas of low altitude, and from areas of recharge to areas of discharge. In the study area, water in the Floridan aquifer flows toward the center from east and west and flows out of the area to the north and south. A north-south trending "trough" in the potentiometric surface in the center of the study area was shown as early as 1934 (fig. 18) by Stringfield (1936, pl. 12). The trough shown by Stringfield is also present in the more recent and detailed Floridan potentiometric maps constructed during this investigation (figs. 19-22). Possible reasons for the occurrence of the trough are: (1) pumping by wells and natural Floridan aquifer discharge, (2) higher aquifer transmissivity in a narrow north-south-trending zone, or (3) a combination of (1) and (2). Reasons (1) and (2) are discussed in the section on "Geohydrology."

Quality of Water

The chemical characteristics of ground water are mostly determined by the types of rocks with which it is in contact, and the length of time the water has been in contact with the rocks.

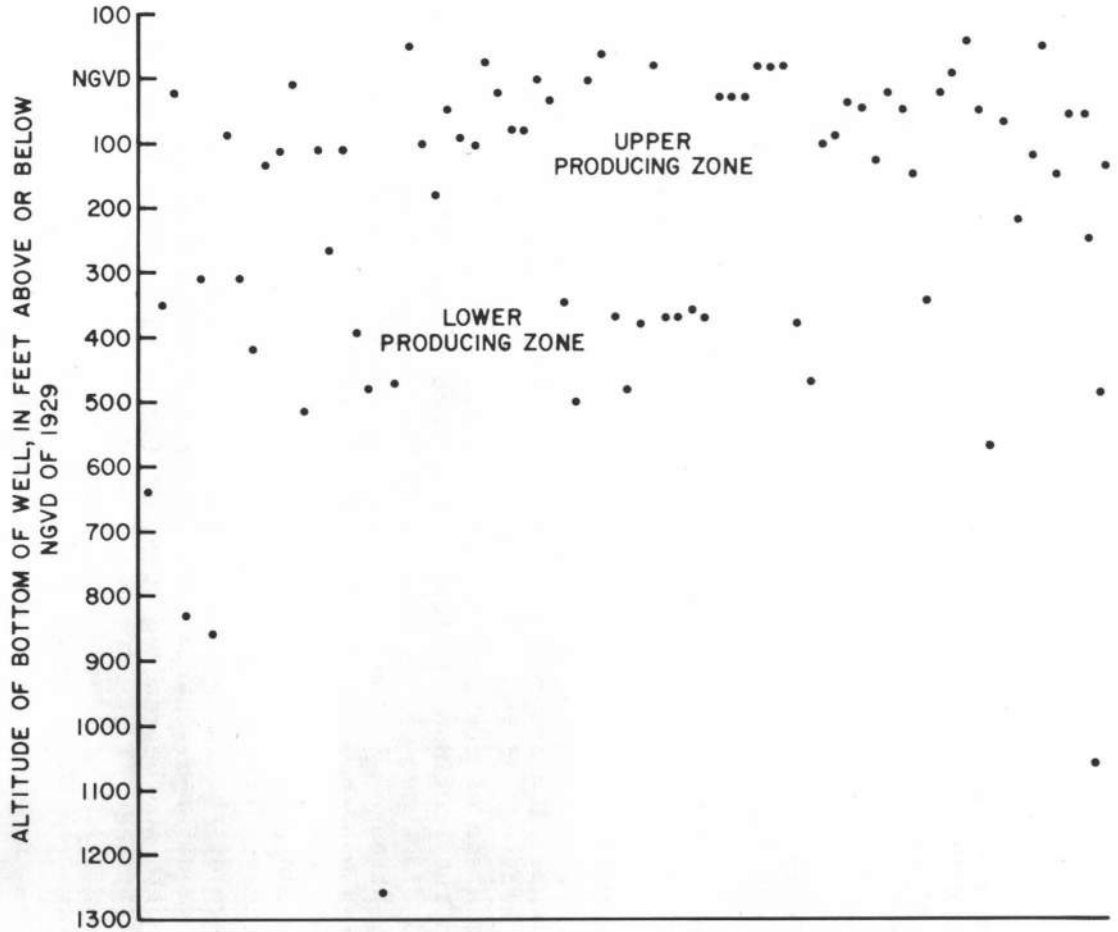

Figure 15.--Altitude of bottoms of inventoried wells in the study area.

Table 3.--Floridan aquifer wells in the Dade City area for which caliper logs are available

Well (see table 1)	Depth interval logged (feet) from	to	Total depth (feet)	Altitude of land surface (feet above NGVD of 1929)
[1]50	64	1425	1434	175.66
[2]139	248	460	461	88.56
[3]62	62	178	178	77.43
[4]61	116	171	176	85.27

[1]Krissman's well; logs furnished by Craig Helpling, Florida Department of Environmental Regulation.
[2]Lykes-Pasco Packing Co.; potable supply.
[3]Lykes-Pasco Packing Co.; fire well test hole.
[4]Lykes-Pasco Packing Co.; observation well.

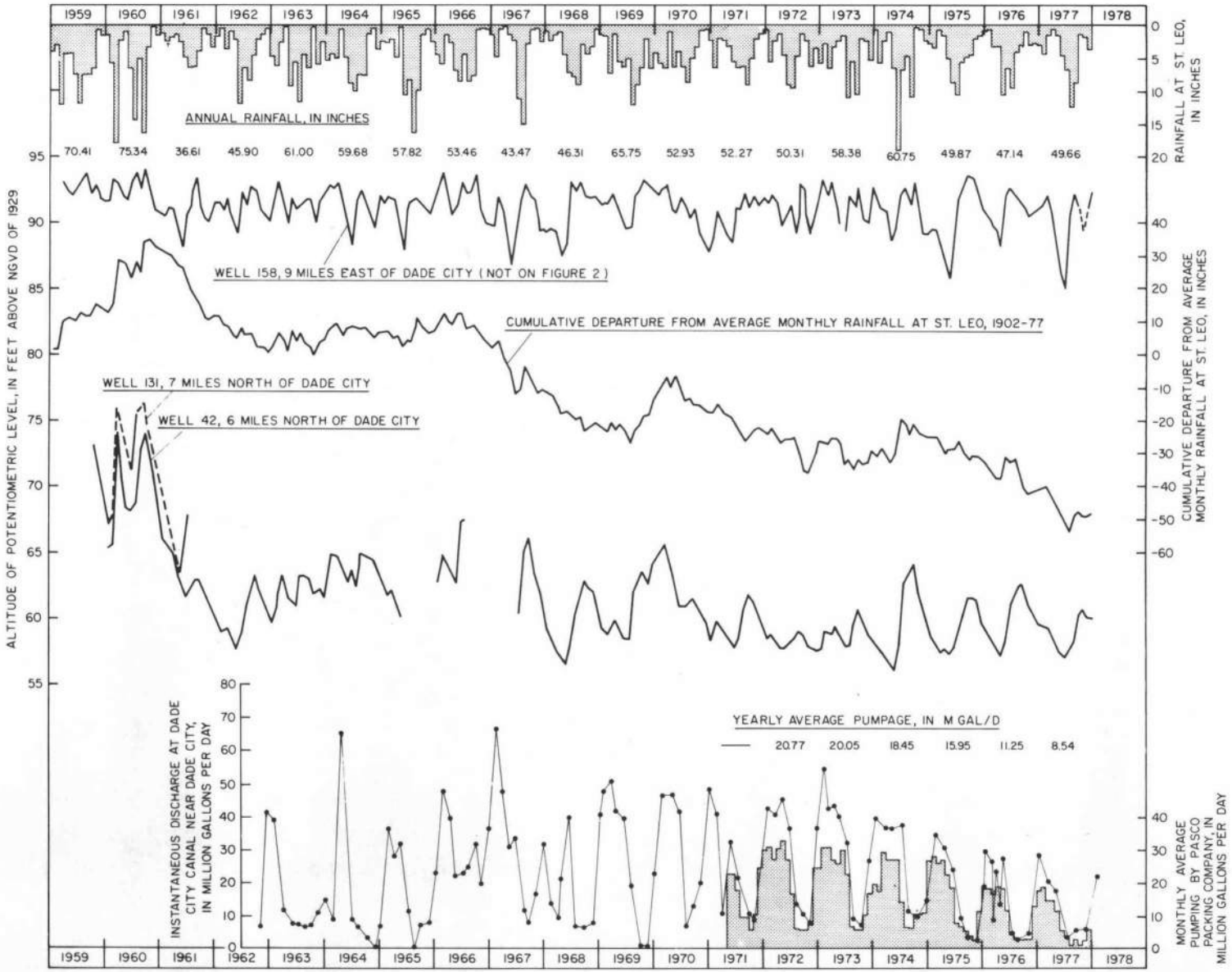

Figure 16.--Monthend potentiometric levels in selected Floridan aquifer wells, monthly rainfall at St. Leo, cumulative departure from average monthly rainfall at St. Leo, discharge of Dade City Canal near Dade City, and pumping by Lykes-Pasco Packing Co., January 1959-December 1977.

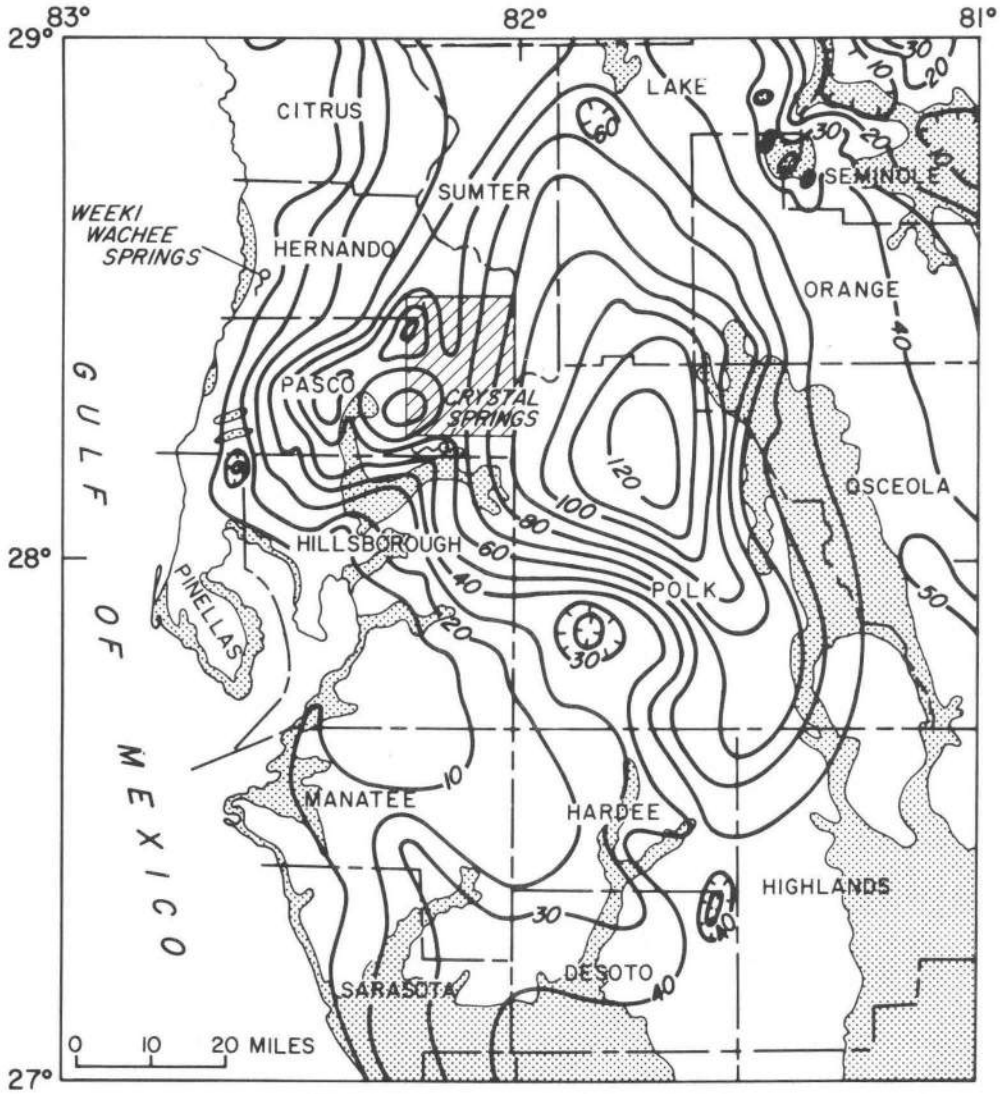

Figure 17.--Potentiometric surface and areas of artesian flow of the Floridan aquifer in west-central peninsular Florida, May 1974.

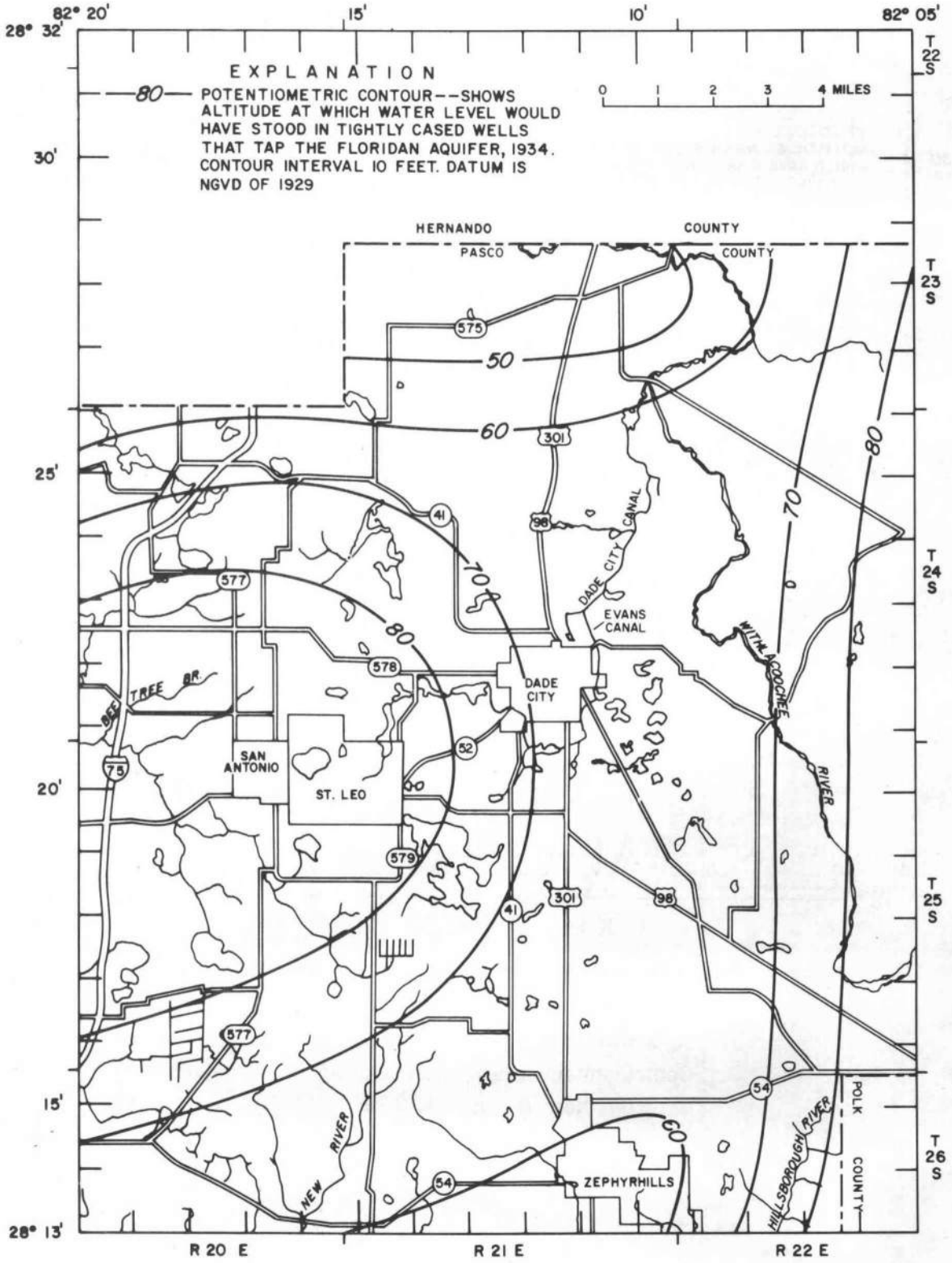

Figure 18.--Potentiometric surface of the Floridan aquifer in the Dade City area, 1934 (adapted from Stringfield, 1936).

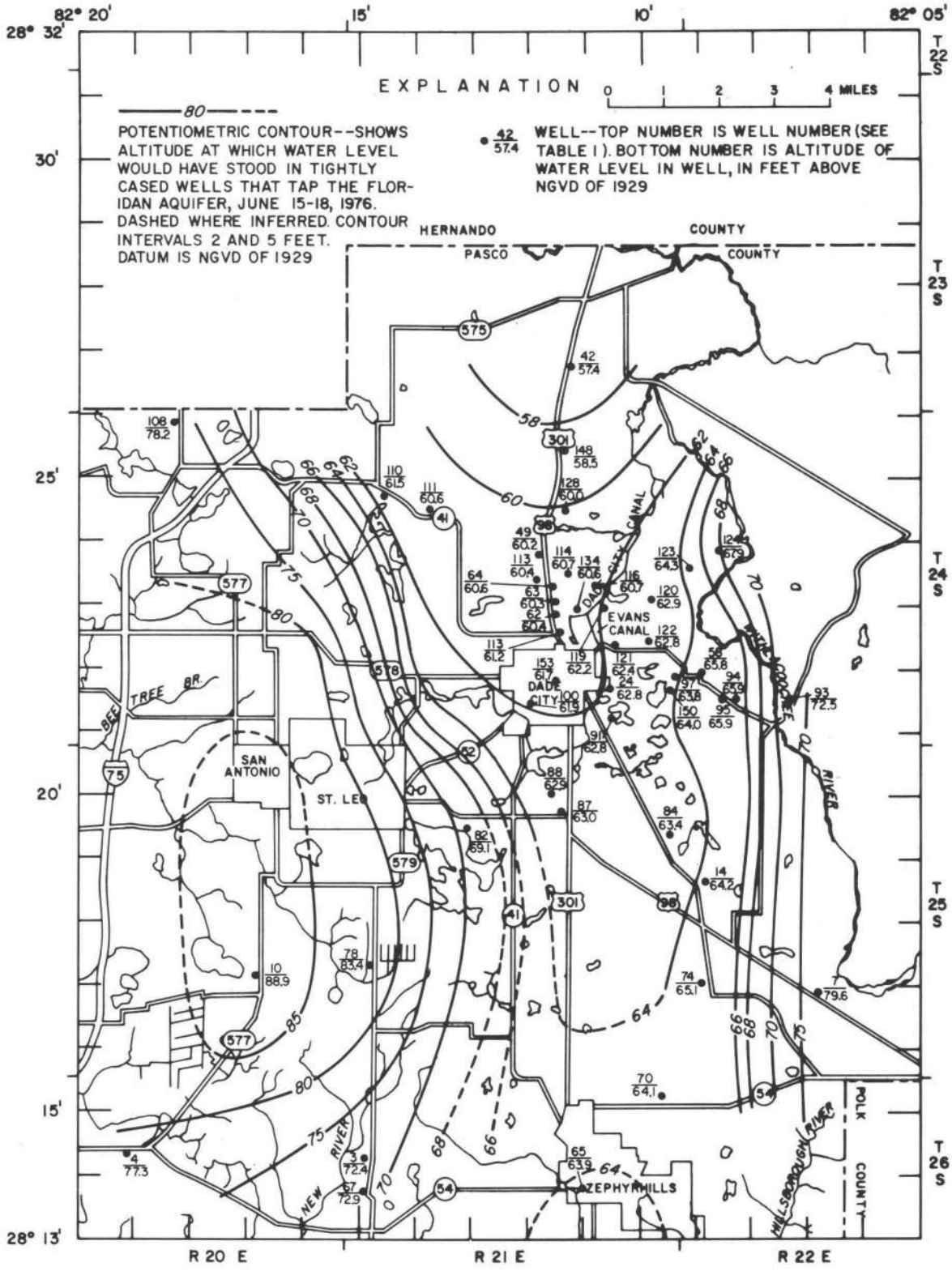

Figure 19.--Potentiometric surface of the Floridan aquifer in the Dade City area, June 15-18, 1976.

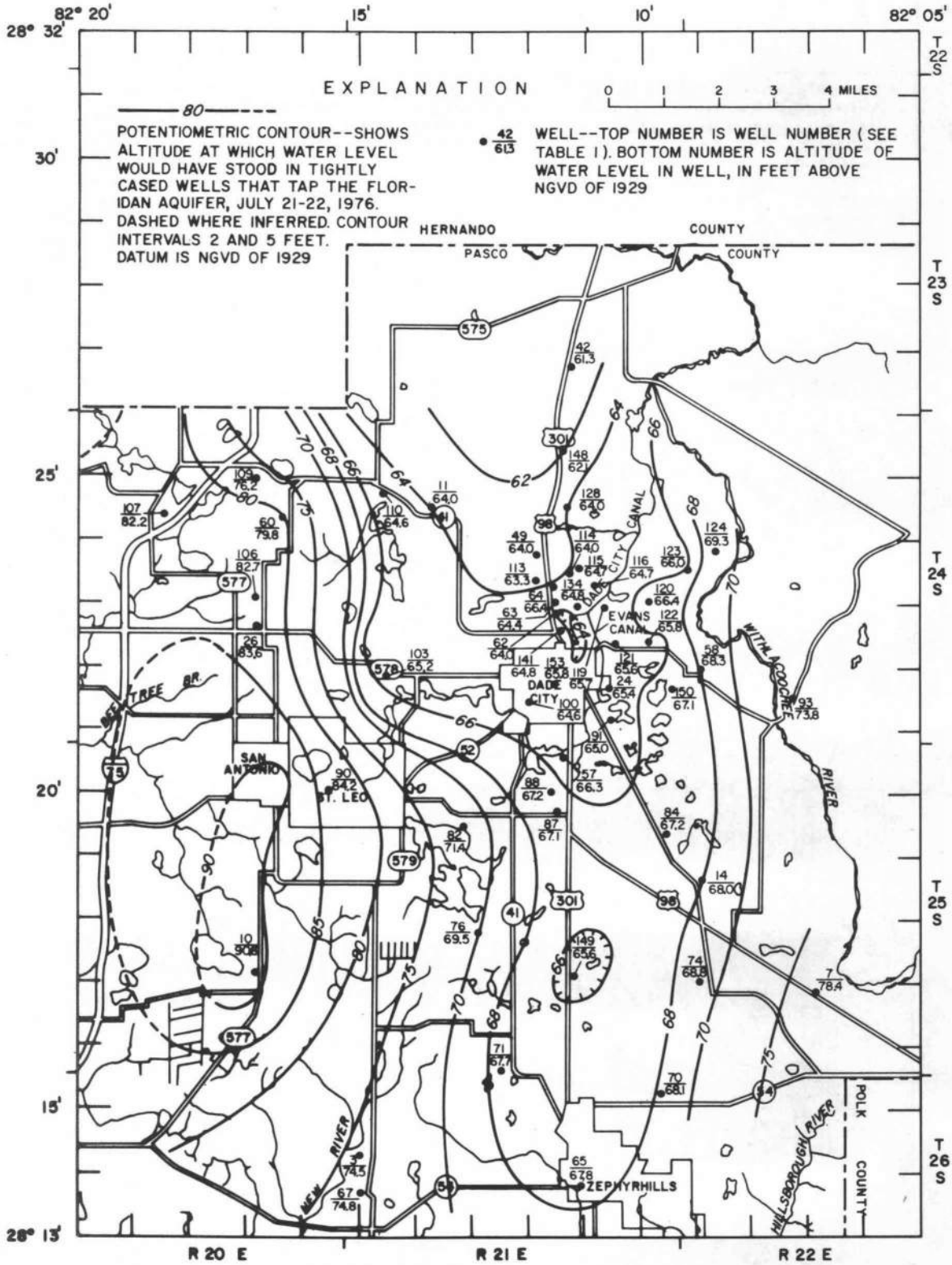

Figure 20.--Potentiometric surface of the Floridan aquifer in the Dade City area, July 21-22, 1976.

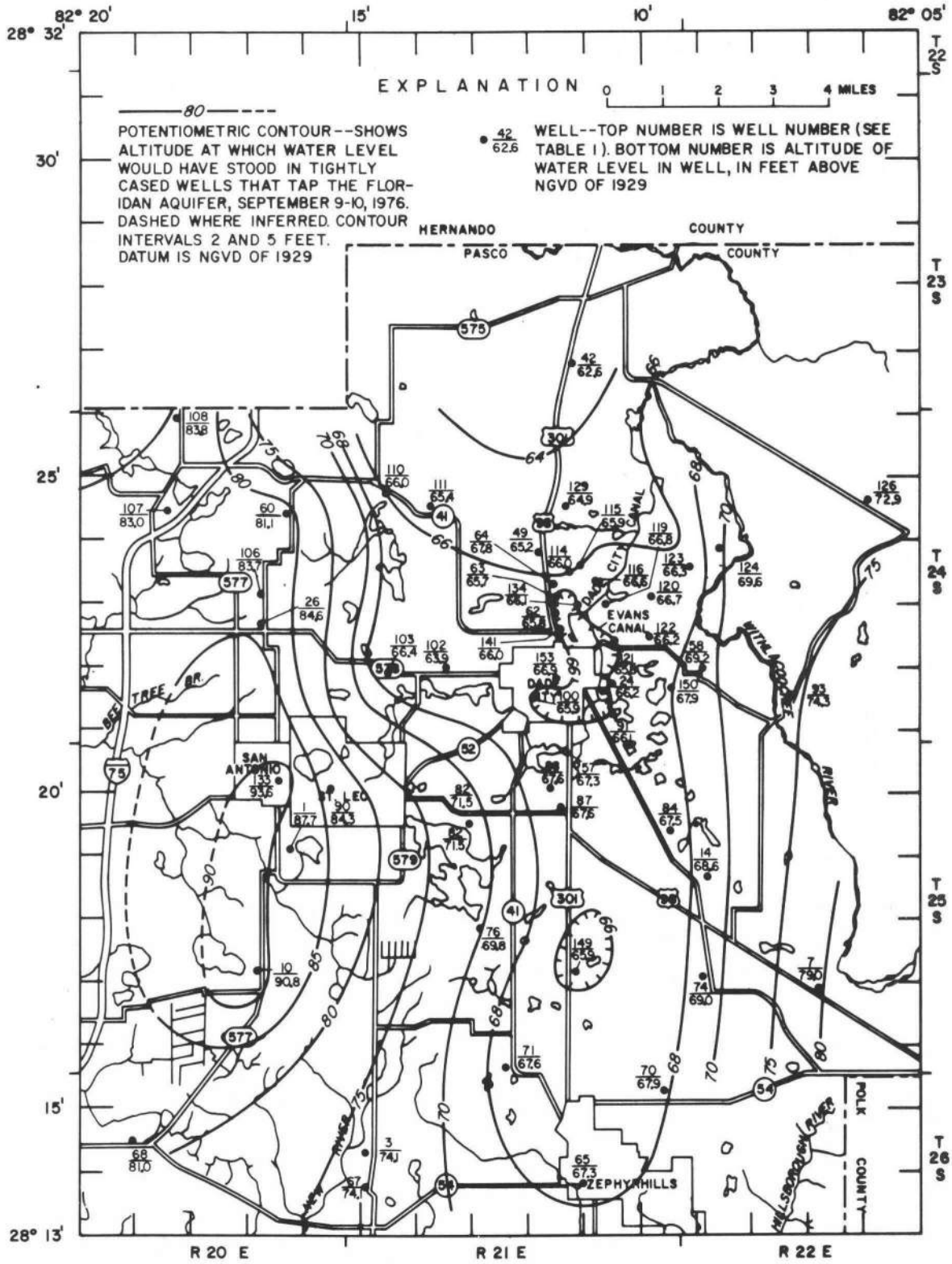

Figure 21.--Potentiometric surface of the Floridan aquifer in the Dade City area, September 9-10, 1976.

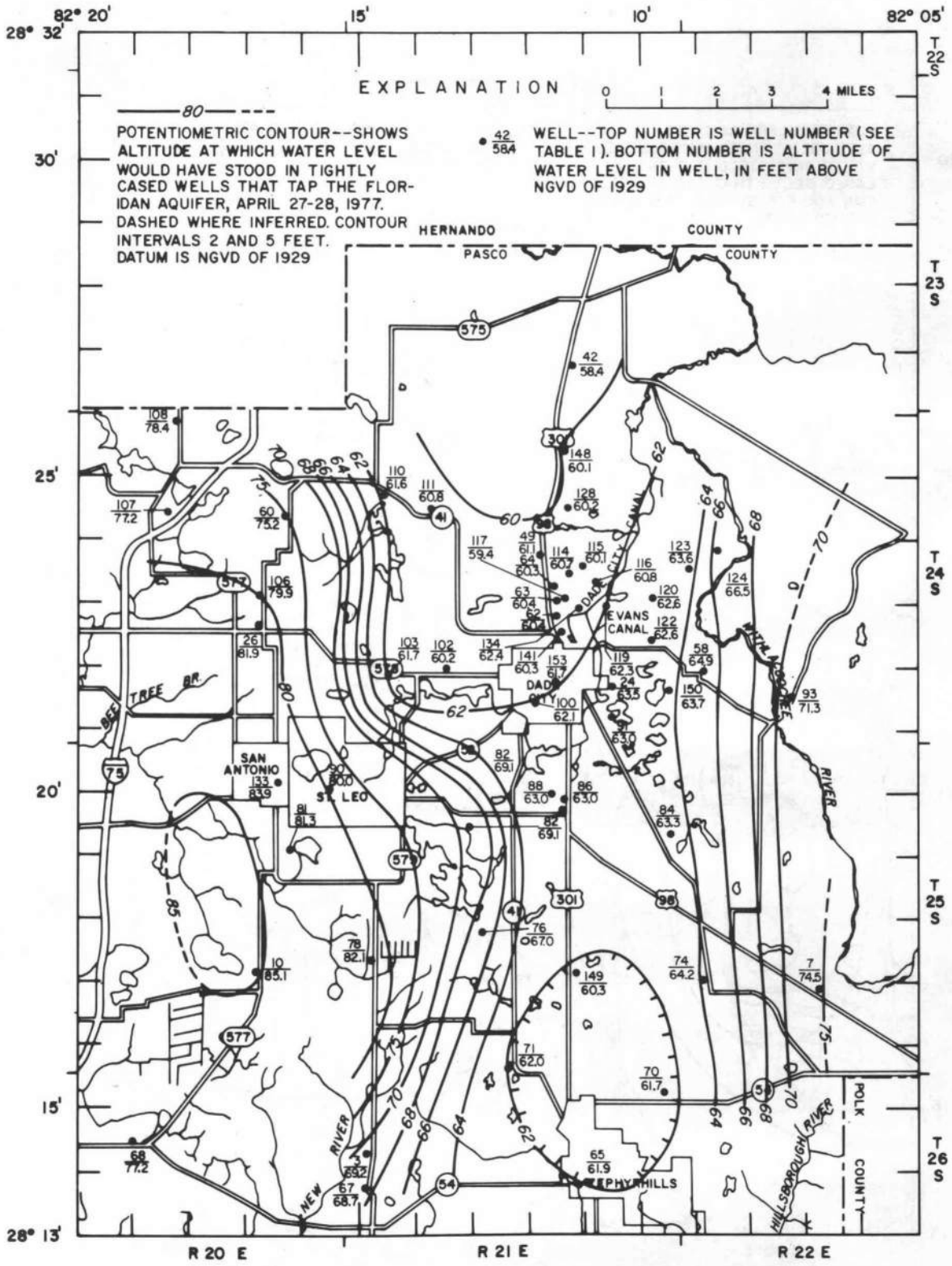

Figure 22.--Potentiometric surface of the Floridan aquifer in the Dade City area, April 27-28, 1977.

In general, the mineralization of water in the Floridan aquifer in the study area tends to increase with depth. An example of such increase in mineralization is given by figure 23. Note that, below an altitude of about 650 ft below NGVD of 1929, the mineralization of the water in well 50, as represented by its hardness, dissolved solids concentration, and specific conductance, increases rather steeply. This indicates that, at altitudes of less than about 650 ft below NGVD of 1929 the Floridan aquifer flow system is relatively sluggish as compared to the flow system at shallower depths.

Though mineralization tends to increase with depth, the chemical quality of Floridan aquifer water also varies from place to place within the study area. The chemical characteristics of Floridan aquifer water at depths of 650 ft or less with respect to dissolved solids, hardness, and sulfate in the Dade City area are shown in figures 24-26. Those parameters vary areally and definite patterns are readily apparent.

The hardness of water and the dissolved solids concentration is greatest on the east and west flanks of the study area and lowest in the center to the north and south of Dade City (figs. 24 and 25). The sulfate concentration in the water is greatest in the immediate vicinity of Dade City and least to the west, south, and east of Dade City (fig. 26). Within any of the patterned areas of figures 24-26 the concentration or value of the chemical parameter is, in general, greater in the deeper wells. Where the values are considered anomalously high for a particular area they are ignored in the overall interpretation but remain as data points on the figures. The data values are flagged as "not representative." Examples of such wells are the northernmost wells sampled in Zephyrhills (well 69) and well 60, 2 mi south of Hernando County and 2 mi east of Interstate Highway 75 (figs. 24-26).

The sulfate concentration is relatively high in water from relatively shallow Floridan aquifer wells in the immediate vicinity and to the north and south of Lykes-Pasco Packing Co. (figs. 26 and 27). The reason for the occurrence of these relatively shallow, high-sulfate waters, usually indicative of water at greater depths, is not known but it could be the result of joints or solution channels in the limestone. It is possible that such joints or channels could provide an avenue for upward movement of deeper waters in response to pumping. Some indirect evidence for interconnection of zones of the Floridan aquifer in the immediate vicinity of Lykes-Pasco is presented in the "Geohydrology" section of this report. An alternative explanation for the relatively shallow, high-sulfate waters is that unreported beds of gypsum or anhydrite (sulfate-bearing rocks) might exist at shallow depths in the area.

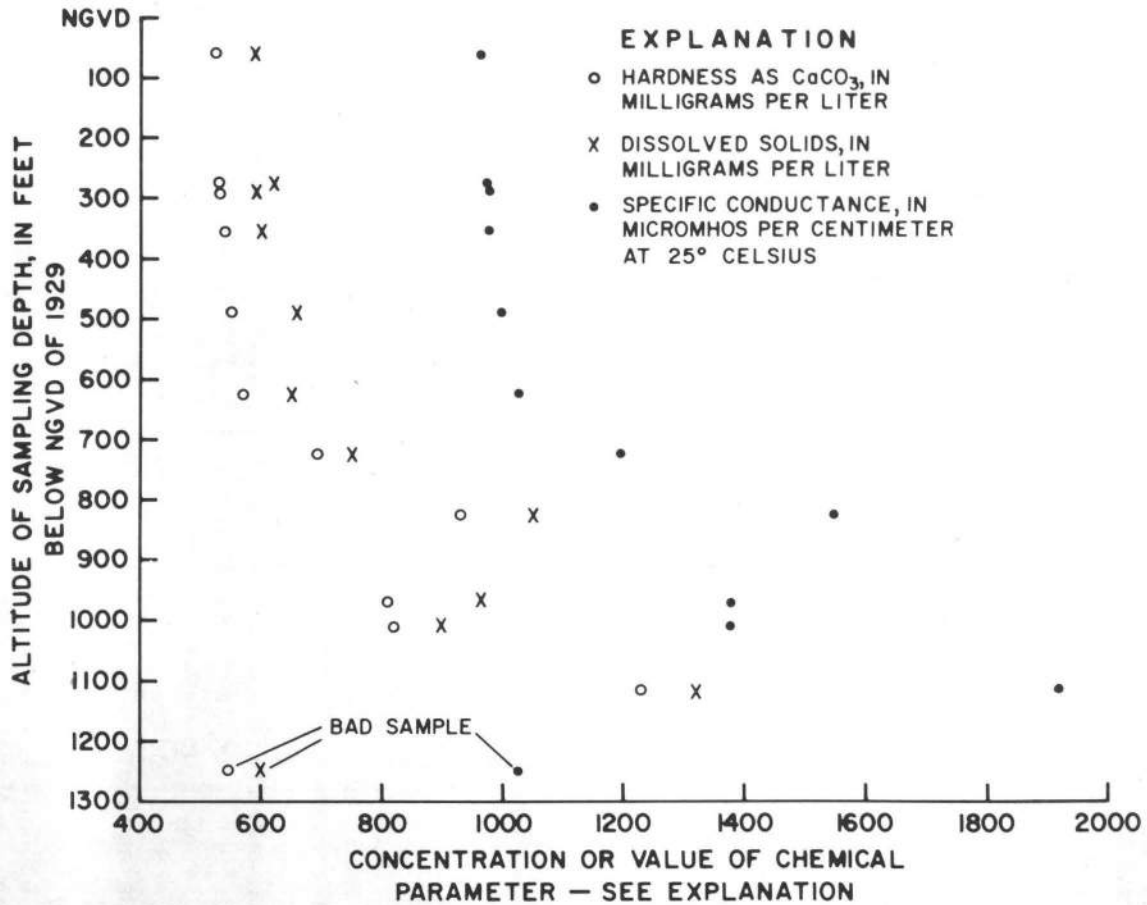

Figure 23.--Hardness, dissolved solids concentration, and specific conductance of water at various depths in well 50, December 16-17, 1975.

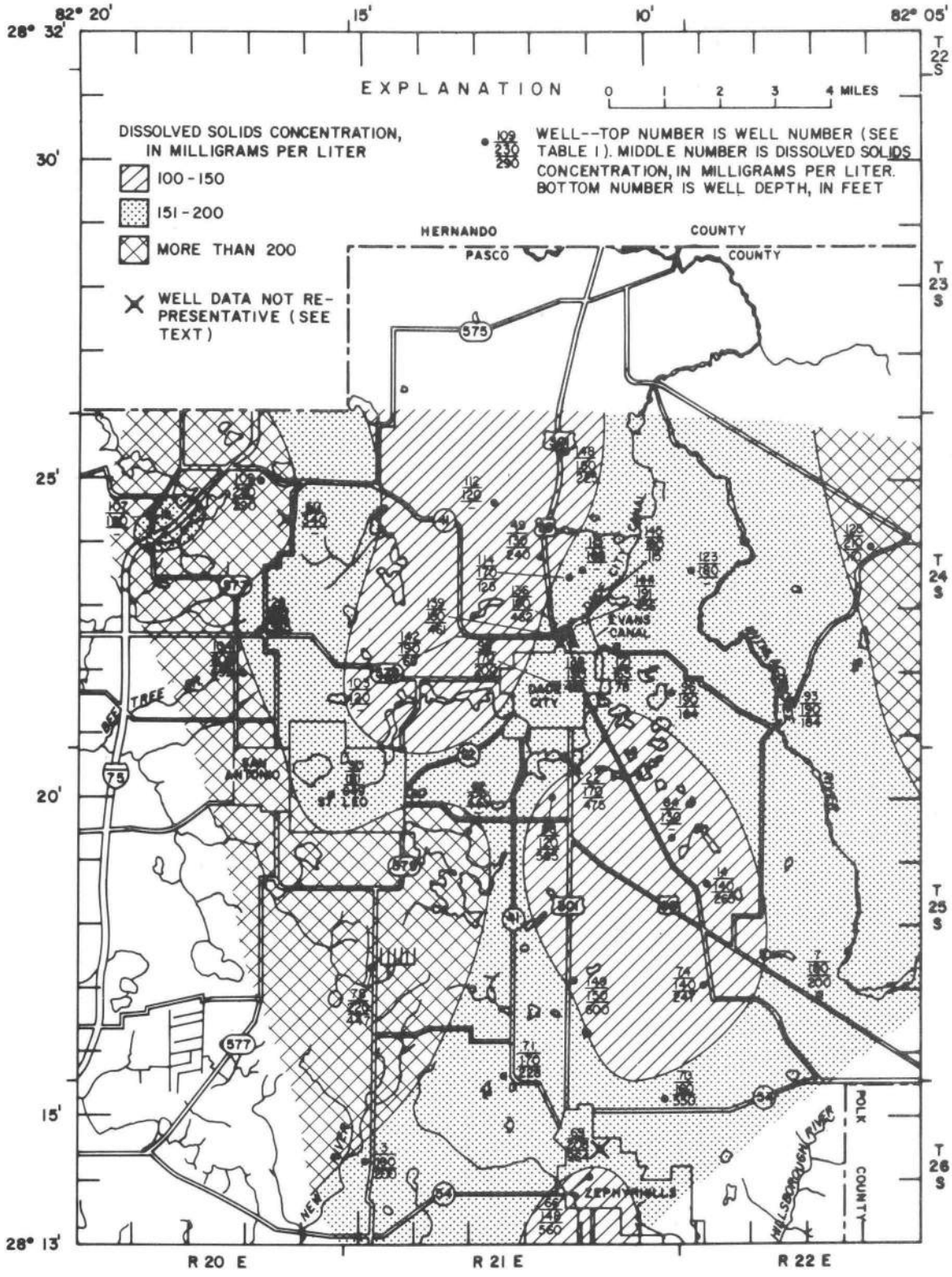

Figure 24.--Dissolved solids concentration in water from wells that tap the Floridan aquifer at depths of 650 feet or less in the Dade City area.

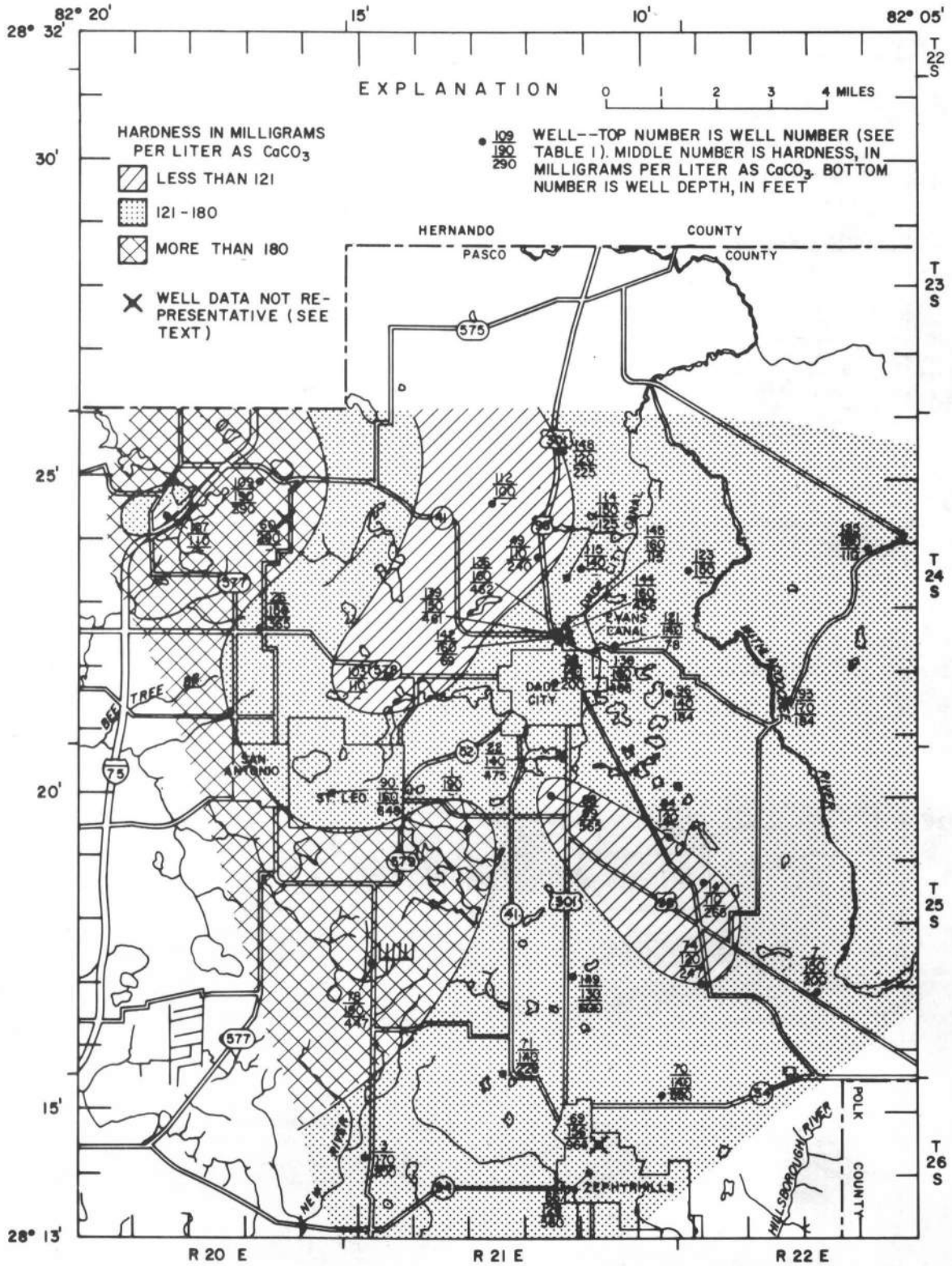

Figure 25.--Hardness of water from wells that tap the Floridan aquifer at depths of 650 feet or less in the Dade City area.

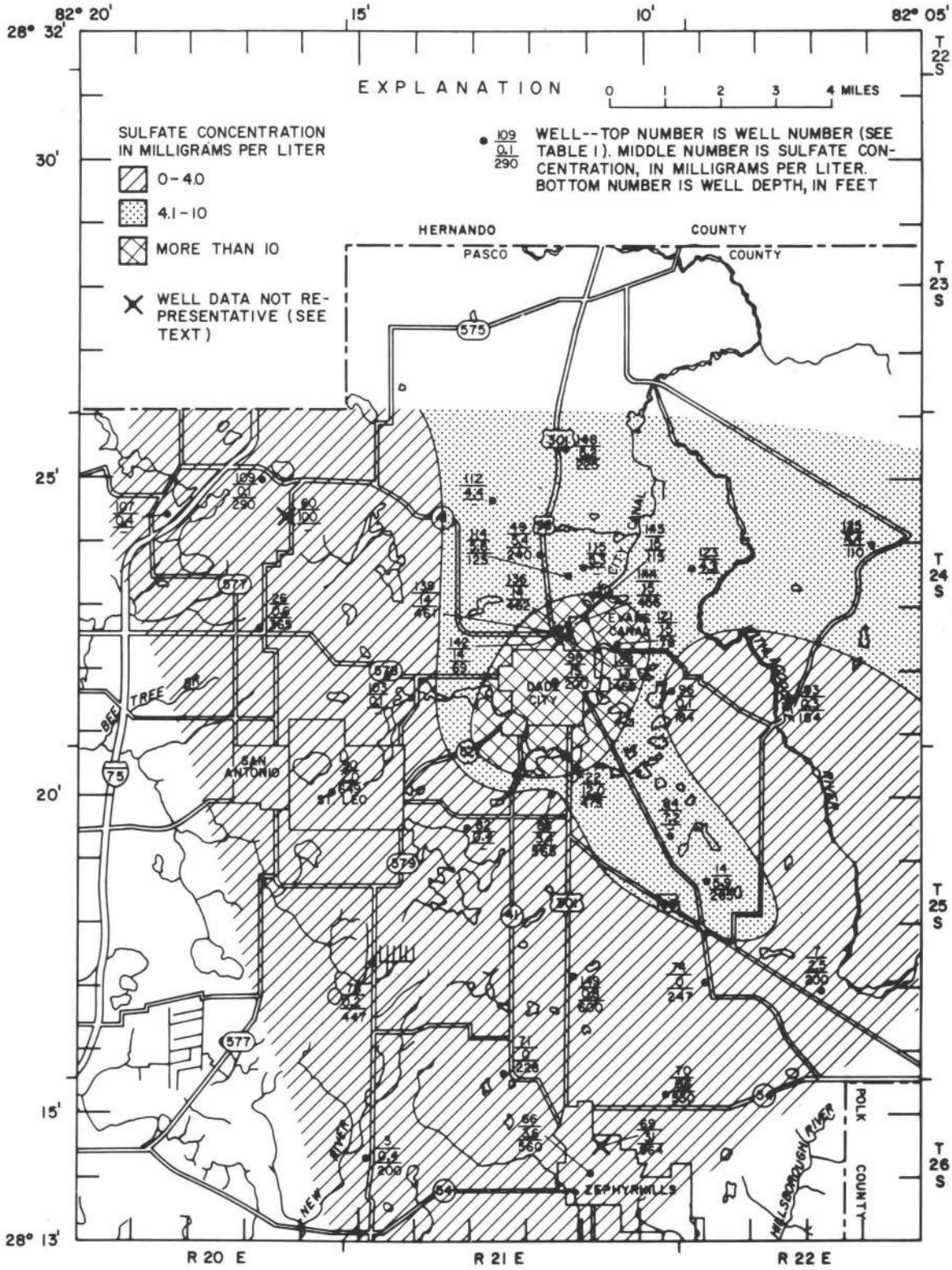

Figure 26.--Sulfate concentration in water from wells that tap the Floridan aquifer at depths of 650 feet or less in the Dade City area.

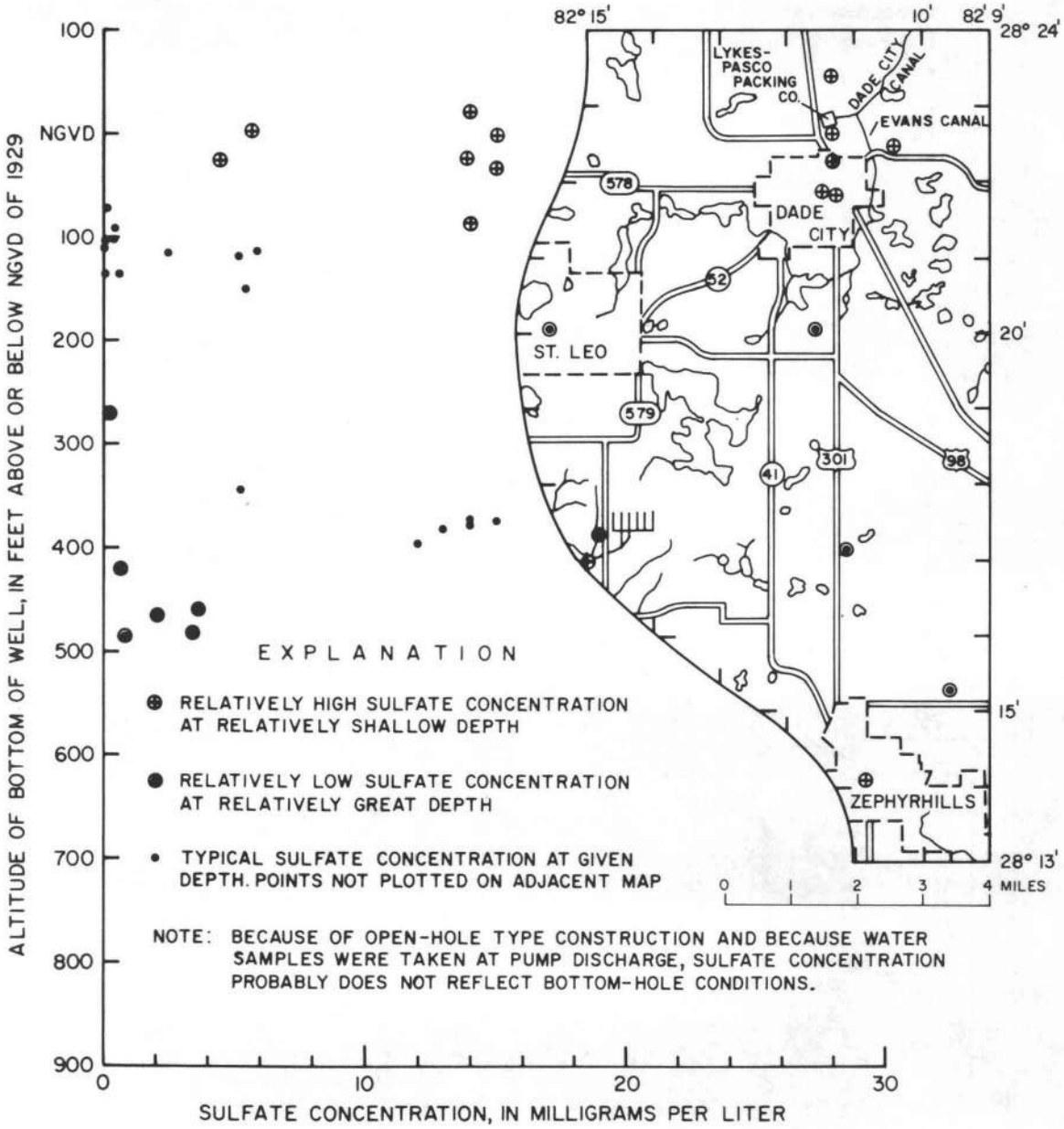

Figure 27.--Relation of sulfate concentration to altitude of bottoms of selected wells in the study area.

Ground-Water Use

Virtually all ground water used in the study area is pumped from wells that tap the Floridan aquifer. In 1975, about 32 Mgal/d were pumped from the Floridan in the Dade City area, whereas about 75 Mgal/d were pumped in the county as a whole (table 4). The largest single user of ground water in the study area is Lykes-Pasco Packing Co. Of the approximately 19.8 Mgal/d pumped by self-supplied industry in 1975 (table 4) in the study area, about 16 Mgal/d were pumped by this citrus processing plant about 1 mi north of Dade City (fig. 2). From 1975 to 1977, pumping by self-supplied industry has apparently declined (table 4). This decline is primarily because Lykes-Pasco has been recycling their process water so that less new "make-up" water is required (Norvell W. Hunt, written commun. June 8, 1977). According to Mr. Hunt, Lykes-Pasco began recycling water in 1971. This is shown by the reported water use data shown in figure 16.

GEOHYDROLOGY

The north-south trending trough in the potentiometric surface of the Floridan aquifer (figs. 17-22) existed as early as 1934 (fig. 18), about 7 years prior to the beginning of pumping by Lykes-Pasco. The trough could be caused by a line sink of discharge along the orientation of the trough or by points of discharge near each end of the trough. Since the potentiometric surface is below land surface throughout almost the entire area of the trough, the line sink is ruled out because it is probable that recharge, rather than natural discharge, is taking place over most of that area. The following discussion concerns the occurrence of Floridan aquifer point discharges at or near the ends of the trough.

On May 25, 1961, during a period of low flow, there was about 12 ft^3/s measured increase in the flow of the Withlacoochee River between station 42 at U.S. Highway 301 and at station 41, approximately 5 mi upstream (fig. 28). Pride and others (1966, p. 81) indicated there was a Floridan aquifer spring at the confluence of Gator Hole Slough and the Withlacoochee River, downstream from Dade City and between stations 41 and 42 (fig. 28). This spring is probably the source of most of the 12 ft^3/s increase in streamflow. These low-flow measurements were made during a period of extreme low flow (Pride and others, 1966, p. 38). Therefore, there was little if any surface inflow and probably only minor amounts of seepage from the surficial aquifer.

In addition to the approximately 12 ft^3/s of apparent Floridan aquifer discharge into the Withlacoochee River between stations 41 and 42 (fig. 28) there apparently was an additional 39 ft^3/s of Floridan discharge into the river between stations 42 and 44. The Little Withlacoochee River flows into the Withlacoochee between stations 42 and 44 but only 0.10 ft^3/s was measured as inflow to

Table 4.--Floridan aquifer ground-water use in Pasco County, 1975, and in the study area, 1975-77 (estimated except where noted)

	Pumping rate, in (Mgal/d)			
	Study area (county[1]) 1975		Study area 1976	Study area 1977
Public supply	[1]1.06	(2.96)	1.1	1.2
Rural domestic	3.2	(10.39)	3.4	3.6
Self-supplied industry[2]	19.8	(24.03)	15.1	12.4
Irrigation	8	(37.75)	8	8
Total	32.1	(75.13)	27.6	25.2

[1]From Healy (1977).
[2]Includes Lykes-Pasco Packing Co. (see fig. 16).

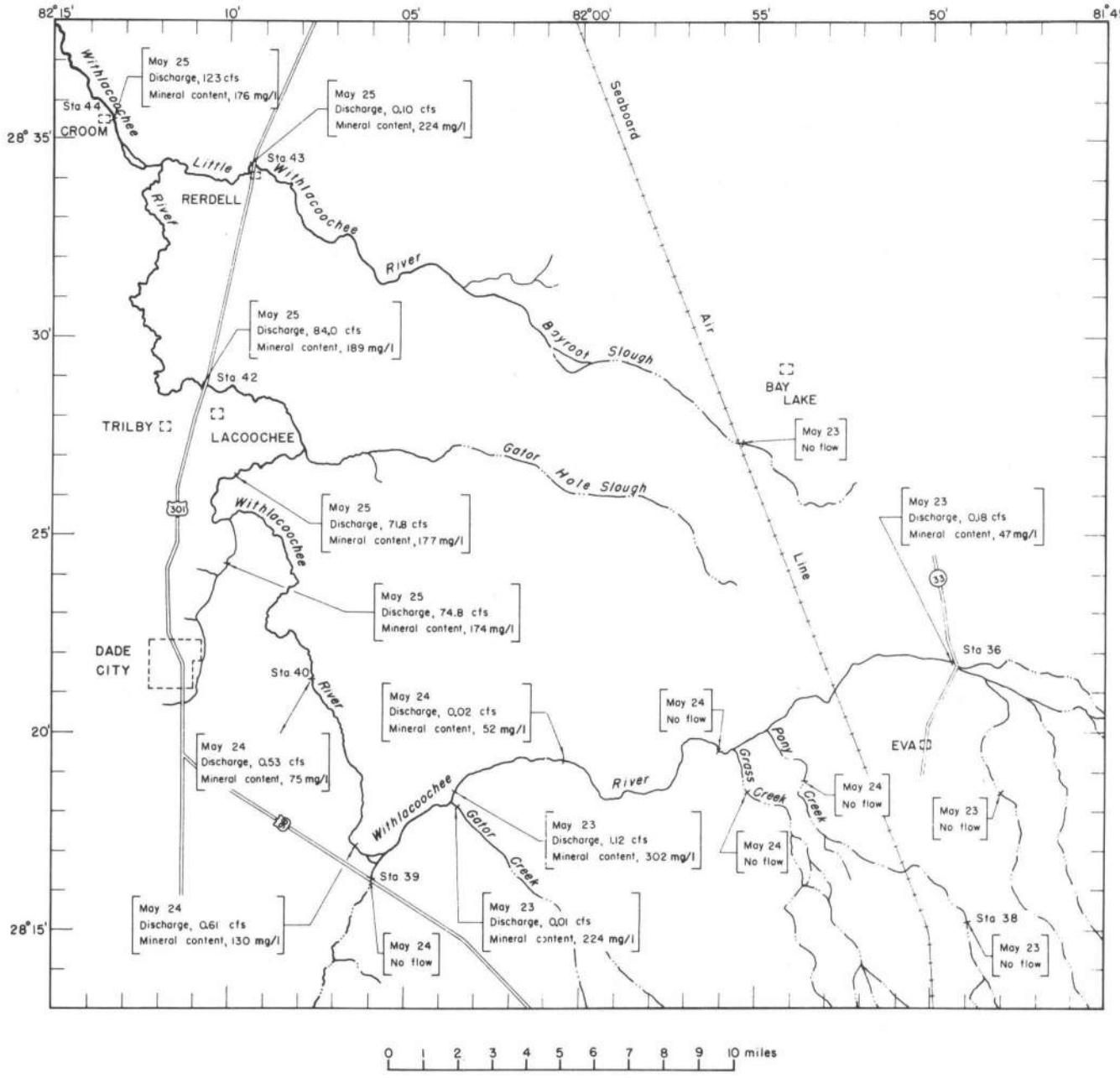

Figure 28.--Results of low-flow investigation of Withlacoochee River, May 23-25, 1961.

the Withlacoochee River from the Little Withlacoochee River (station 43, fig. 28). Since the Little Withlacoochee River was not the source of the increase in flow between stations 42 and 44, the increase is probably due to Floridan aquifer discharge into the Withlacoochee River.

At station 40, upstream from the confluence of Dade City Canal, only 0.53 ft^3/s was measured whereas at station 41A on Dade City Canal downstream from Lykes-Pasco Packing Co., 74.8 ft^3/s was measured. Though no records of pumping by Lykes-Pasco are available for May 1961, it is possible that almost all the water flowing in Dade City Canal was discharged by Floridan aquifer wells at Lykes-Pasco Packing Co.

Thus, in May 1961 there probably was about 126 ft^3/s of Floridan aquifer discharge into the Withlacoochee River near the north end of the trough in the Floridan aquifer potentiometric surface. The Withlacoochee shows a loss of about 3 ft^3/s between stations 41A and 41 (fig. 28) but the difference in measured flow could be due to measurement error. Measurement error affected all the measurements to some extent.

The 12 ft^3/s water discharged into the Withlacoochee River between stations 41 and 42 is apparently from the Floridan aquifer because according to the equation:

$$Q_{41}C_{41} + Q_pC_p = Q_{42}C_{42}$$

where:

Q_{41} = 71.8 ft^3/s (discharge at station 41),
C_{41} = 177 mg/L (concentration of dissolved solids at station 41),
Q_p = 12.2 ft^3/s (increase in flow between station 41 and 42),
C_p = dissolved solids concentration of flow increase between stations 41 and 42,
Q_{42} = 84 ft^3/s (discharge at station 42),
C_{42} = 189 mg/L (concentration of dissolved solids at station 42),

and solving for C_p, the concentration of dissolved solids in the 12 ft^3/s increase in flow between stations 41 and 42, C_p = 260 mg/L. This is approximately the dissolved solids concentration of water in the Floridan aquifer along the reach of the Withlacoochee River between stations 41 and 42 (Pride and others, 1966, fig. 45). The Floridan aquifer crops out or is within 10 ft of land surface along the reach of the Withlacoochee River from stations 41 to 44 (fig. 28) (Pride and others, 1966, fig. 31; Grubb, 1977, fig. 6) so it is probable that the Withlacoochee River has incised the Floridan (fig. 14).

Crystal Springs (fig. 17), a Floridan aquifer spring near the south end of the potentiometric trough, about 5 mi south of the north city boundary of Zephyrhills on the left bank of the Hillsborough River, discharges, on the average, about 59 ft^3/s into the Hillsborough River (U.S. Geological Survey, 1977).

Lykes-Pasco pumping and upward leakage from the Floridan to streams are points of Floridan discharge north of the Dade City area. The flow of Crystal Springs is a point of discharge from the Floridan south of Dade City. Thus, there is point discharge near each end of the Floridan potentiometric trough in the study area. But, according to the low-flow analysis of Pride and others (1966), there could be as much as 48 ft^3/s of naturally-occurring Floridan discharge near the north end of the potentiometric trough between stations 41 and 44 (fig. 28).

The potentiometric trough could also be due to a north-south trending zone of relatively high aquifer transmissivity. This zone could act as a lateral drain and cause a depression in potentiometric head which in turn would cause a trough in the potentiometric surface. Water would then flow toward the trough from the east and west and leave the trough to the north and south under very small hydraulic gradients. There is some evidence of north-south trending joints or solution channels in the limestone of the Floridan aquifer. Topographic maps in the U.S. Geological Survey's 7½-minute series show several lakes along an 8-mi alinement paralleling U.S. Highway 98 and U.S. Highways 98 and 301. These lakes were probably formed by solution of the underlying limestone but the lakes themselves are probably not open to the limestone. The solution activity that formed these lakes may have been enhanced in the geologic past by the Withlacoochee incising a channel along the lakes' alinement rather than in its present channel. White (1958, p. 19-27) suggests that, in the geologic past, the Withlacoochee may have been alternately submergent and emergent because of major oscillations of sea level during glacial and interglacial periods and that the Withlacoochee River could have trenched deeply during glacial periods of low sea level. Such trenching could have incised the limestone of the Floridan aquifer. He also suggests that, not only did the Withlacoochee follow another course in the Tsala-Apopka Lake area in Citrus County, but that it actually flowed south and joined with the Hillsborough River.

The water-quality maps showing dissolved solids concentration, hardness, and, to some extent, sulfate concentration (figs. 24-26) show definite north-south lineations along the general orientation of the potentiometric trough (figs. 18-22). In general, the dissolved solids concentration and hardness are least along the trough except in the immediate Dade City area and near Lykes-Pasco, whereas the sulfate concentration tends to be greater there than to the east and west. There appears to be a contradiction here because the lower dissolved solid concentration and hardness imply vigorous downward circulation of recently recharged water whereas the higher sulfate waters are usually indicative of water that has been in the aquifer for a long time or water that has come in contact with beds of gypsum or anhydrite. These beds usually occur at relatively great depth, usually near the base of the Floridan aquifer or, at least, near the base of the Lake City Limestone (Wetterhall, 1965, p. 9).

The relatively high sulfate concentration in water at shallow depths in the immediate Dade City area is perhaps indicative of some interconnection of deep and shallow aquifer zones.

There is a cone of depression in the Floridan aquifer potentiometric surface near U.S. Highway 301 about 2 mi north of Zephyrhills (figs. 20-22). Wetterhall (1964, fig. 1) noted a similar depression on his 1960 map. There is no appreciable pumping from the Floridan aquifer in the area of the depression so pumping apparently is not the cause. On all recent maps where the depression is shown, the interpretation is based upon water levels measured in only one well. However, Wetterhall measured a different well (well 12) than was used in this study (well 149), thus some degree of corroboration is implied. The well Wetterhall measured is 18 in. in diameter and 957 ft deep (verified by Florida Geological Survey -- now Florida Bureau of Geology -- well log W-2160). The depth of the well measured in this study is unknown. However it is only 4 in. in diameter so it is unlikely that it is more than a few hundred feet deep. In most of the study area where the potentiometric surface of the Floridan aquifer is below land surface, the deeper Florida aquifer wells have lower water levels than shallower Floridan wells in the same immediate vicinity. For example, well 50 near State Highway 52 near the southwest city limit of Dade City (fig. 2) is 1,434 ft deep, cased to a depth of 64 ft, and its water level stood at about 59 ft above NGVD of 1929 July 1976, whereas, according to the potentiometric contours (fig. 20), the water level in a well tapping only the upper part of the aquifer would have stood at about 66 ft above NGVD of 1929. The water level measured in well 50 was not used to construct the map in figure 20 because of its low water level and the fact that its depth was known to be unusually deep compared to the other wells used to construct the map.

It is possible that the cone of depression shown in this study (figs. 20-22) and in Wetterhall (1964, fig. 1) using the water levels in wells 149 and 12, respectively, could be a misinterpretation. This could be because both wells are so deep that they have water levels that are not representative of the potentiometric surface in the upper part of the Floridan. This probably is the case in Wetterhall's (1964, fig. 1) potentiometric map but the depth of the well used in this study is not known so the validity of the interpretation remains in question. If in fact the cone of depression shown in figures 20-22 and in Wetterhall (1964, fig. 1) does represent head levels in the upper Floridan, then there is reason to suspect that there is an exceptionally good interconnection of the upper and lower producing zones in the Floridan aquifer as shown in figure 15. This would tend to depress the head in the upper zone because water would tend to leak downward into the lower zone at a rate somewhat faster than in areas where the interconnection of the zones is not as effective.

In the immediate vicinity of Lykes-Pasco Packing Co., the upper and lower producing zones of the Floridan aquifer (fig. 15) appear to be in good hydraulic connection. In figure 29, the water levels in selected wells on February 2-3, 1977, are plotted against their respective well depths referenced to NGVD of 1929. The main center of pumping for Lykes-Pasco is near wells 141 and 61 and inside a trough that describes the altitude of the top of the Floridan aquifer (figs. 14 and 29). Note that water levels in 3 of the 4 groups of wells are nearly the same, regardless of their depths. The exceptions are wells 121 and 119. Though these wells are approximately the same distance to the center of pumping and are both relatively shallow wells, well 119 has a water level that is about 1.5 ft lower than that of well 121. Both wells are on the east flank of the trough in the surface of the Floridan aquifer. Their different heads could be attributable to lateral anisotropy or aquifer heterogeneity.

The geohydrologic information in this report is representative, primarily, of the upper producing zone of the Floridan aquifer. There is little information available on the lower producing zone. Information on the lower zone is difficult to obtain because there are relatively few deep wells and they are usually equipped with turbine pumps which are difficult to remove. Hence, geophysical logging is precluded and it is often difficult to obtain accurate water level measurements. Since many of the wells are irrigation wells in remote areas, it is sometimes difficult to have the owners present to operate the pumps so that water samples can be obtained.

HYDROLOGIC SIGNIFICANCE OF GROUND-WATER WITHDRAWALS IN THE DADE CITY AREA BY LYKES-PASCO PACKING CO.

Lykes-Pasco Packing Co. began citrus processing operations in 1942 but pumpage records are available only since about mid-1971. Estimates of ground-water withdrawals prior to 1971 can be made because most of the flow in Dade City Canal near Dade City (fig. 2) is ground water pumped by this citrus processing plant. Periodic measurements of that flow have been made and recorded since late 1963 (fig. 16). There is a good relation between average annual flow in Dade City Canal and average annual discharge by the plant from 1972-77 (fig. 30A). The regression equation describing that relation is used to estimate the average annual pumping by the plant from 1963-71 (fig. 30B). There is no satisfactory method to estimate pumping by Lykes-Pasco prior to 1963.

Of the 16 Lykes-Pasco production wells, 9 tap the lower Floridan producing zone. Of that nine, at least three are cased through the upper producing zone and, thus, are open only to the lower zone while the cased depths of six are unknown. Thus it is possible that six wells are open to both the upper and lower zones. Seven wells are open only to the upper producing zone.

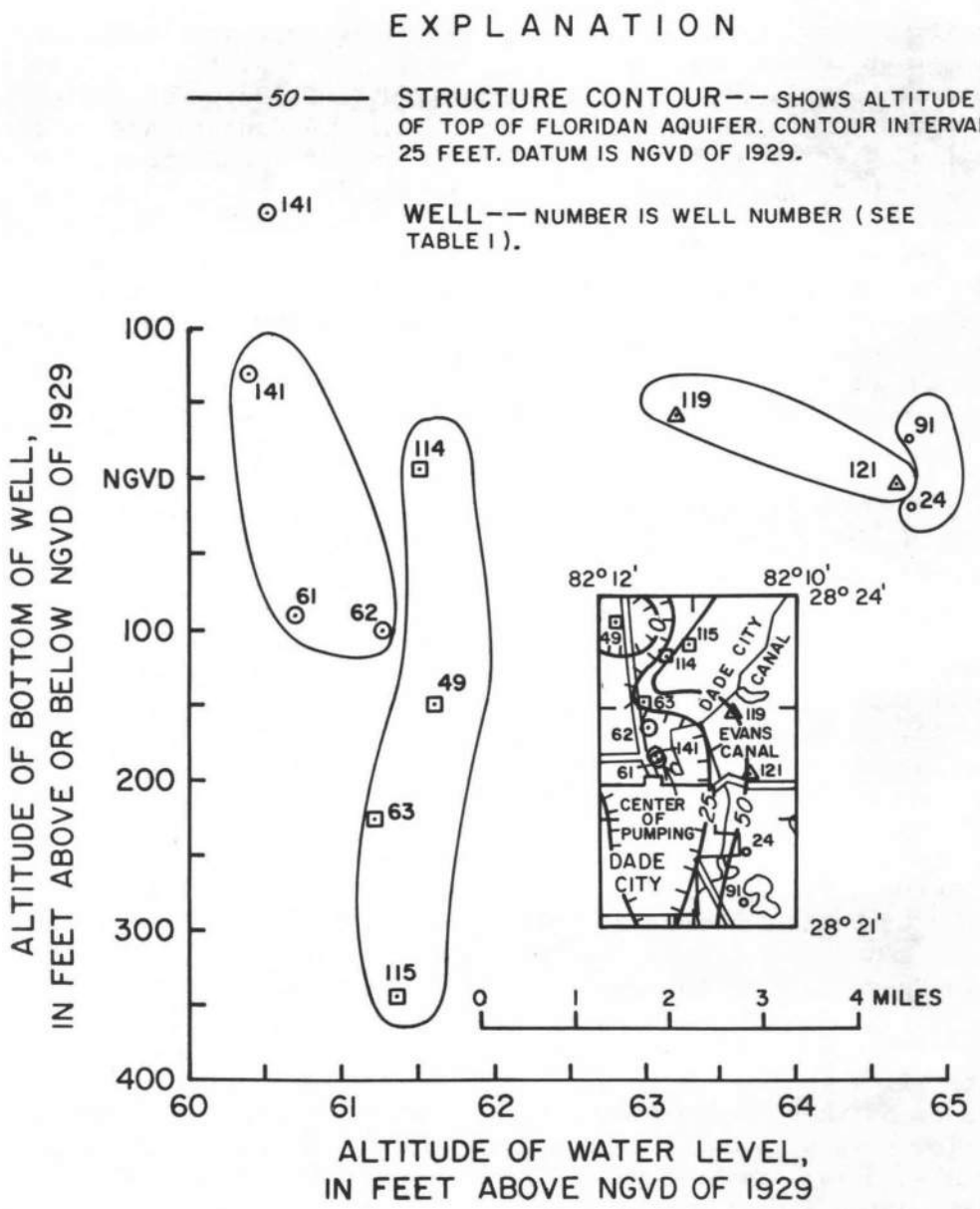

Figure 29.--Well depth versus potentiometric surface of the Floridan aquifer in the vicinity of Lykes-Pasco Packing Co., February 2-3, 1977.

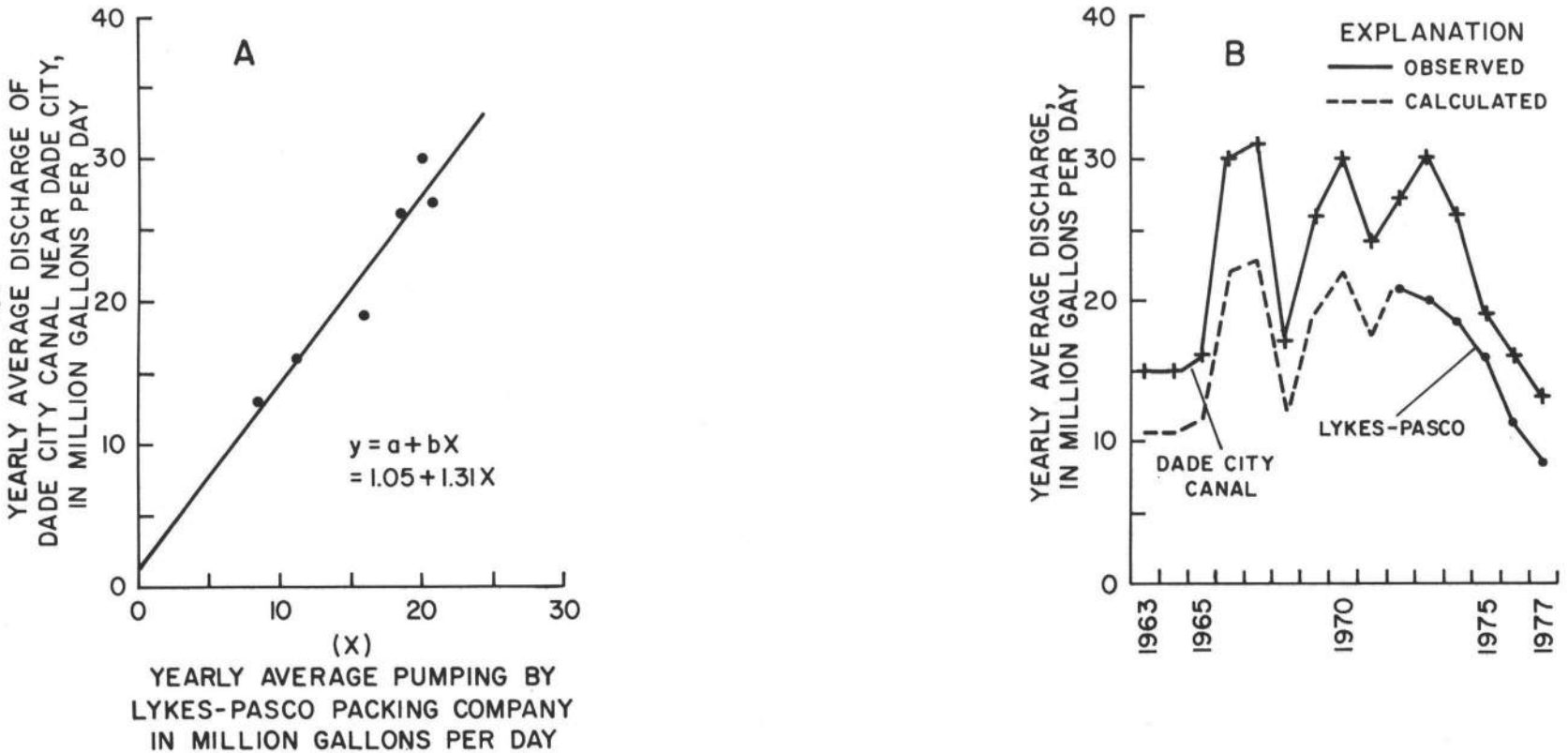

Figure 30.--Relation of flow in Dade City Canal near Dade City to pumping by Lykes-Pasco Packing Co.

The individual pumping rates of the production wells are unknown. Also, the periods of pumping of the various wells are mixed. This lack of information plus the uncertainty of the producing zones tapped by the wells precludes an exact determination of the amounts of water taken from each of the Floridan producing zones. Ryder (1978, p. 8) states that field tests in the Cypress Creek well field, 14 mi southwest of Dade City, indicate that the lower producing zone may supply most of the water to pumping wells that are open to both zones.

During 1963-77, the maximum annual pumping rate was about 30 Mgal/d and probably occurred in either 1966 or 1967 (fig. 30B). Peak, or instantaneous, pumping rates have been as high as 66 Mgal/d (April 28, 1964, fig. 16). Since 1972, annual pumping has steadily declined and, by 1977, was about 9 Mgal/d. According to Mr. Norvell Hunt, Director of Environmental Control, Lykes-Pasco Packing Co. (oral commun.) the lower pumping rates reflect the plant's increased use of recycled water during citrus processing.

From early 1976 through December 1977, water levels were measured continuously in four Floridan aquifer wells in and near the center of pumping of the citrus processing plant (fig. 31). In January-April 1976, water levels declined at a rate of about 0.02 ft/d. During this period the plant was pumping at about 20 Mgal/d (figs. 16 and 31) and rainfall was about 8 in. below normal. During May-September 1976 water levels rose about 7 ft because (1) of seasonal increases in rainfall that, in addition, were about 7 in. above normal and (2) the citrus processing plant had decreased their pumping rate to about 3 Mgal/d. In the first 9 months of 1976, seasonal variations in rainfall and in pumping by the plant were somewhat in phase and it is not possible to separate their effects on water levels in the observation wells (fig. 31). However, in October-November 1976, at the beginning of the seasonal dry period, water levels began to decline at a rate of about 0.03 ft/d even though the plant was still pumping at a reduced rate of about 3 Mgal/d. Rainfall during September-October 1976 was about 8 in. below normal. Rainfall during November-December 1976 was about normal for this ordinarily dry period. On December 6, 1976 the plant increased the pumping rate. It is estimated from the discharge record at Dade City Canal that, by December 7, the plant was pumping at a rate of about 25 Mgal/d, an increase of about 22 Mgal/d. On December 6, water levels in the three observation wells began to decline, clearly in response to the increased pumping rate. The 25 Mgal/d pumping rate remained relatively constant for about 3 days (through December 10). After that time the pumping rate was reduced intermittently.

The drawdown resulting from the increased pumping rate is estimated by extrapolating the trend of declining water levels (prior to pumping) past the time at which pumping began and, at any given time, subtracting the altitude of the observed water level (after

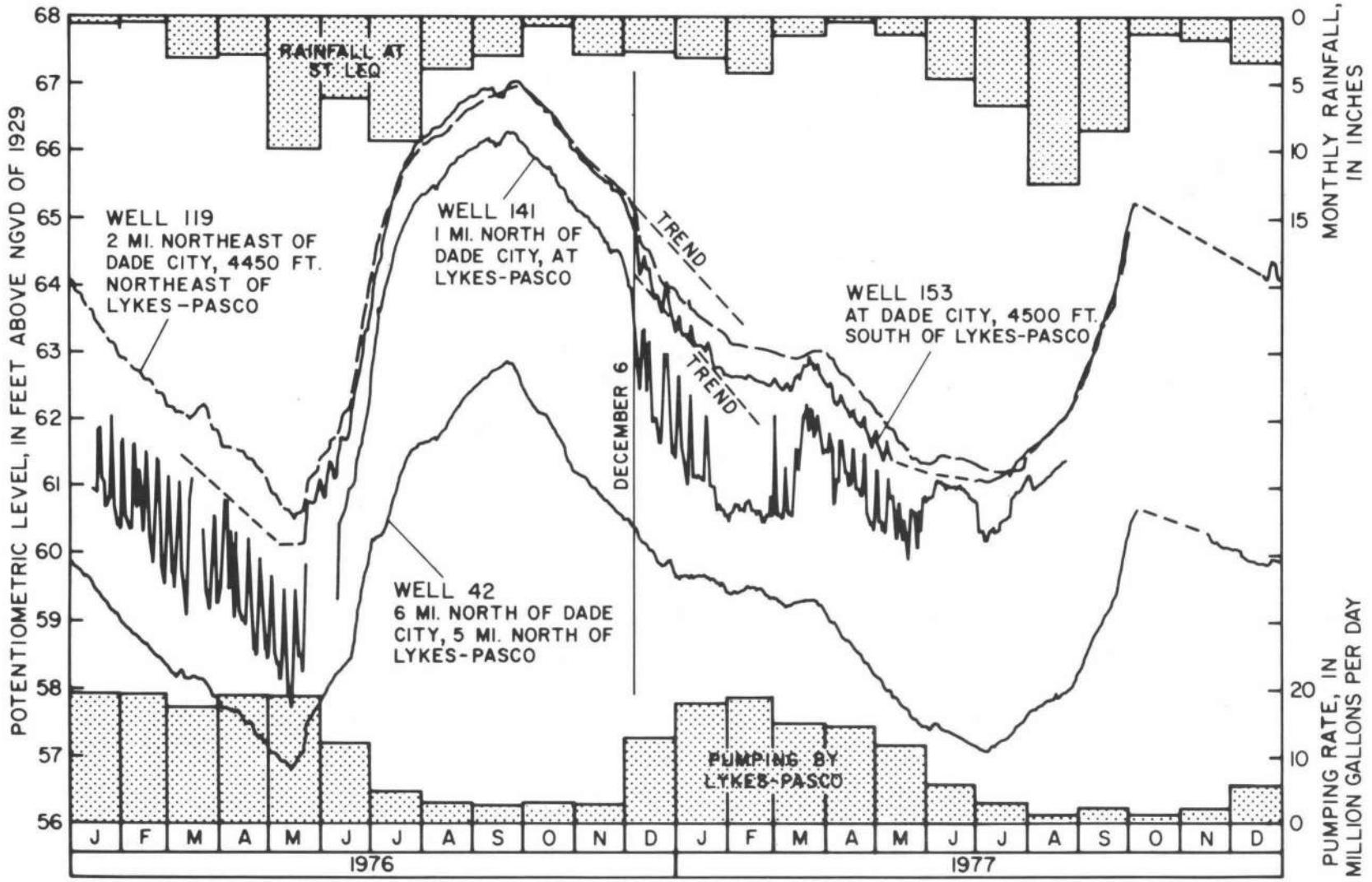

Figure 31.--Daily high potentiometric levels in selected Floridan aquifer wells in the Dade City area, monthly rainfall at St. Leo, and pumping by Lykes-Pasco Packing Co., January 1976 to December 1977.

smoothing the hydrograph) from that which is estimated that would have occurred had there been no increase in pumping (fig. 31). Drawdowns are thus calculated at several times after pumping started and are used to construct a graph of estimated drawdown versus time (fig. 32). Only the first 4 data points corresponding to the first 4 days of pumping are considered valid for the increased pumping rate of 22 Mgal/d.

In the immediate vicinity of the citrus processing plant the upper and lower producing zones (as suggested by figs. 15 and 29) of the Floridan are probably in good hydraulic connection. This is also implied by (1) figures 24 and 27 that show sulfate concentration in water from the deep and shallow Floridan wells to be virtually the same and (2) the apparent trenching on the top of the aquifer (fig. 14) that could be indicative of deep-seated interconnection of zones caused by solution activity. This was discussed in the section of this report entitled "Geohydrology." Further evidence of a good hydraulic connection between aquifer zones is implied by the almost instantaneous decline in water levels in the three wells closest to the center of pumping; wells 153 and 119 are about 4,500 ft from the pumping center and well 141 is near the center of pumping. The fourth well (well 42) is 5 mi from the center of pumping and the short-term drawdown effects, if any, are so small as to be undetectable.

Distance-drawdown analytical techniques or techniques that require the plotting of drawdown versus time divided by the square of the effective distances of the observation wells cannot be used to calculate Floridan aquifer coefficients of transmissivity, storage, and leakance. This is because two of the wells are at virtually the same distance from the center of pumping and also because the effective distance of the well nearest the center of pumping is unknown. The effective distance is unknown because the actual discharge rates of the various Lykes-Pasco wells are unknown and it is also unknown as to exactly which wells were actually pumping. Another consideration that makes the analysis of the drawdown data difficult is that, in the immediate vicinity of the plant, it is probable the aquifer is poorly confined. That is, the top of the upper producing zone of the Floridan is within a few tens of feet from land surface and the sediments that overlie the aquifer are probably fairly permeable. However, it is believed possible to obtain a rough estimate of aquifer transmissivity using the modified Theis (1935) nonequilibrium formula developed by Cooper and Jacob (1946). In this method the slope of the straight-line segment of drawdown in the observation well versus the logarithum of time (semilogarithmic plot) is used to calculate an estimate of aquifer transmissivity (fig. 32).

Computation of transmissivity was made only from the drawdown data for the nearest observation well (well 141). However, drawdowns for the other observation wells follow the same trend with time as those

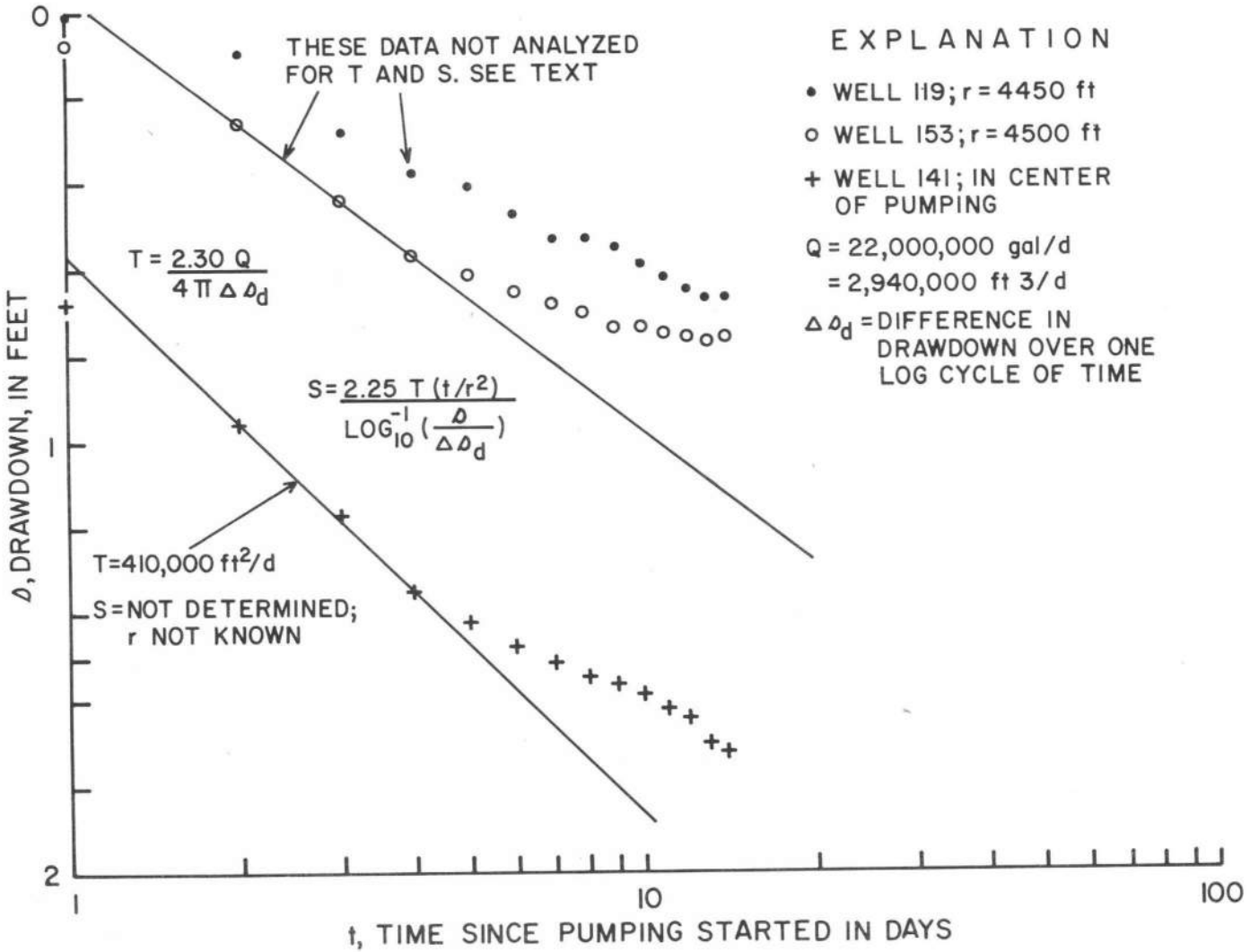

Figure 32.--Estimated drawdown versus time in response to increase in pumping rate by Lykes-Pasco Packing Co., December 6-20, 1976.

for well 141, and thus their analysis would yield somewhat comparable values for transmissivity. But because of the leaky nature of the Floridan aquifer in the area of the plant, the best estimate of transmissivity is obtained from drawdowns in the well nearest to the center of pumping. Leakage from the surficial aquifer would affect the more distant wells to a greater degree.

As stated by Lohman (1972, p. 22), the straight-line solution employed here is applicable only when μ is less than or equal to about 0.01 and

$$\mu=\frac{r^2S}{4Tt}$$

Taking the estimate of transmissivity (T)=400,000 ft^2/d (rounded), determined from figure 32; assuming a storage coefficient (S) of 0.001, a value near the upper end of typical values for the Floridan aquifer where it is confined; and taking radii (r) ranging from, say, 50 ft for well 141 to 4500 ft for well 153; it is seen that observations made at times (t) about 1 day or more after the beginning of pumping may be used in the straight-line plot method, considering even the most distant well. As observations made 2 to 4 days after pumping began were used to define the slope of the straight-line, the criterion of μ being less than or about equal to 0.01 is satisfied.

The transmissivity of 400,000 ft^2/d estimated in figure 32 may be too high because of the effect that downward leakage may have had on reducing observed drawdown. Also, the drawdown observed may not have been representative because the observation wells did not penetrate the full thickness of aquifer that is tapped by most of the Lykes-Pasco supply wells. This would also cause the calculated transmissivity to be too high. Nevertheless, it is believed the transmissivity of the Floridan aquifer can be at least estimated to be greater than 200,000 ft^2/d and perhaps as high as 400,000 ft^2/d in the immediate vicinity of the citrus processing plant.

Several double-mass plots were compiled to indicate hydrologic trends of rainfall, streamflow, springflow, and water levels and to see if the hydrologic effects of pumping by the plant could be discerned. Figure 33 shows long-term double-mass plots of rainfall at St. Leo versus discharge of the Withlacoochee River at Trilby (fig. 29, station 42), discharge of Weekiwachee Springs (fig. 17), and discharge of Crystal Springs near Zephyrhills, about 13 mi south of Dade City, on the left bank of the Hillsborough River. Figure 34 shows a double-mass curve of rainfall at St. Leo versus water level in well 42, 6 mi north of Dade City and 5 mi north of Lykes-Pasco Packing Co. (fig. 2). Though not shown, the rainfall record for St. Leo was double-massed against rainfall at Gainesville and also against the annual average flow of Silver Springs. Those double-mass relations showed that rainfall at St. Leo is suitable for use in the double-mass curve analyses presented herein.

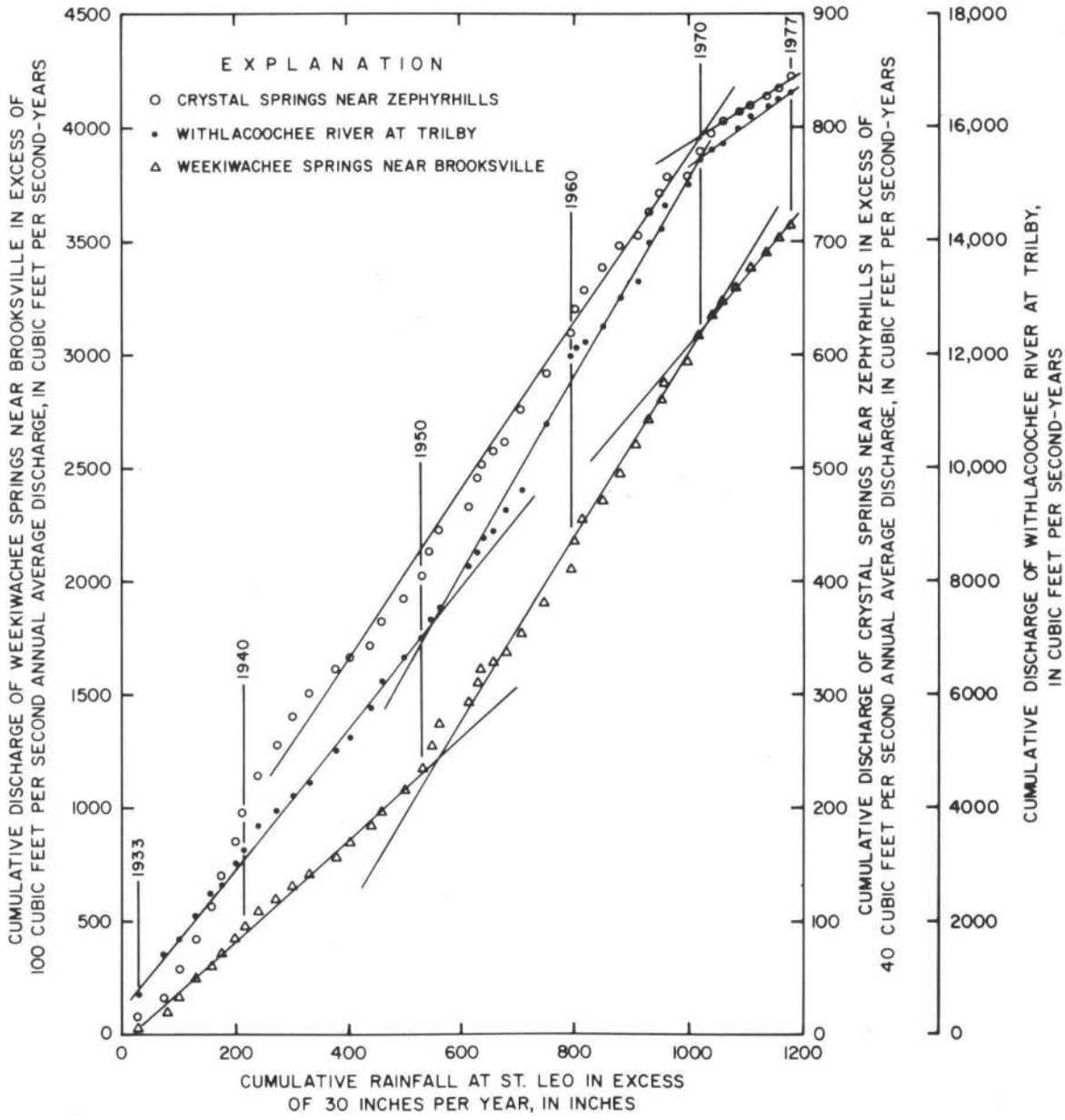

Figure 33.--Double-mass curves of rainfall at St. Leo versus discharge of Withlacoochee River at Trilby, discharge of Weekiwachee Springs near Brooksville, and discharge of Crystal Springs near Zephyrhills.

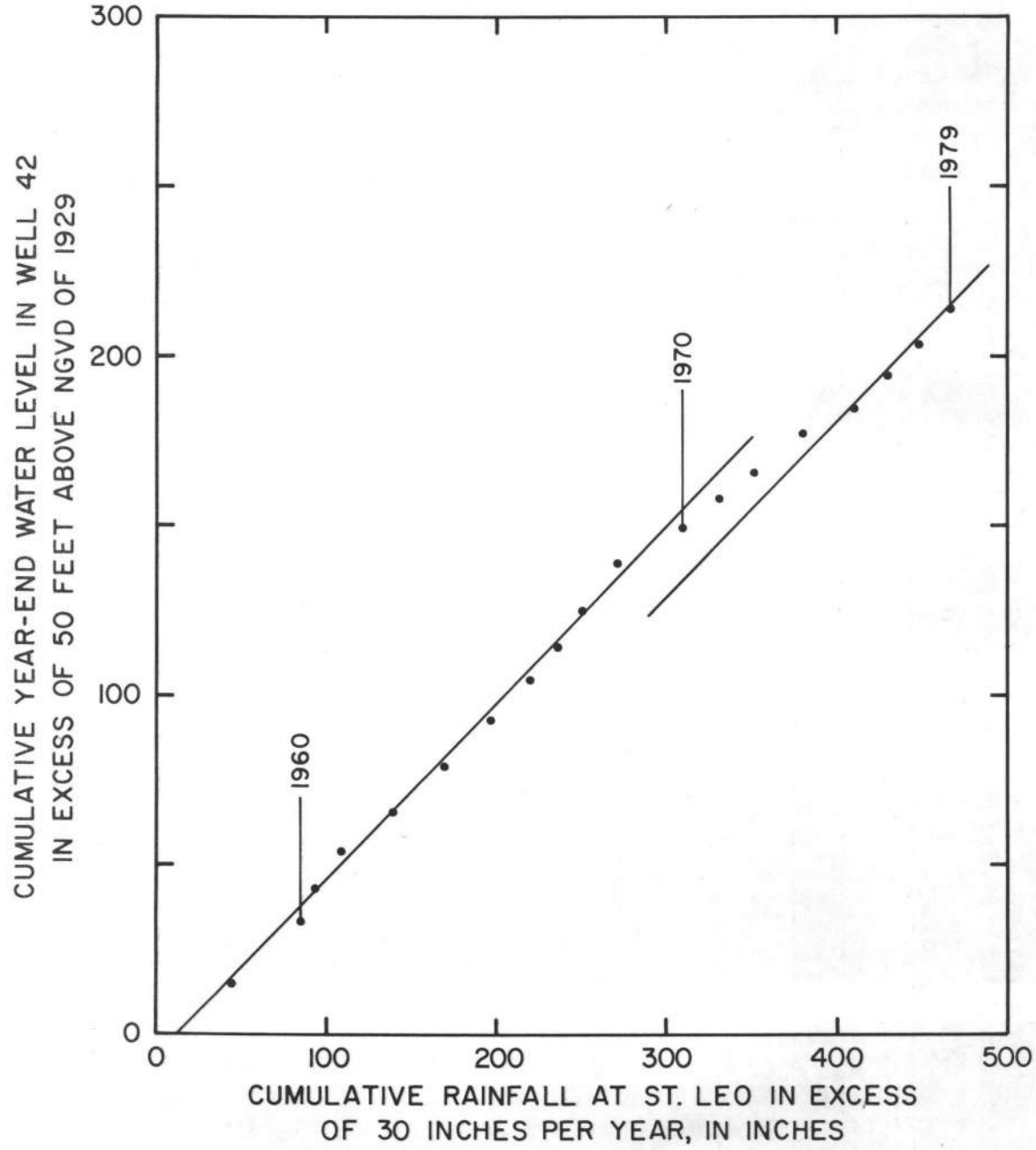

Figure 34.--Double-mass curve of rainfall at St. Leo versus potentiometric level in well 42.

The effects of the citrus processing plant discharging into Dade City Canal should be detectable by increased flow at the Withlacoochee River at Trilby that would be indicated by an increase in slope of the double-mass plot. An increase in slope apparently occurred about 1951 or 1952. From about 1952 until about 1971 that slope remained essentially constant. From 1971 to 1977 a decrease in slope occurred. That could be due in part to the decrease in pumping by the plant that began in about 1972 (fig. 30).

Weekiwachee Springs and Crystal Springs are the nearest, largest-yielding springs downgradient from the citrus processing plant for which long-term discharge records are available. If pumping by the plant caused a reduction of the flow in the regional Floridan ground-water flow system a resultant reduction in the slope of the springs double-mass plots (fig. 33) should occur. In about 1951 there is an apparent increase in slope of the double-mass plot for Weekiwachee Springs indicating that, since about 1950, the spring discharged more water for a given amount of annual rainfall than for the prior period of record. This obscures the effect that pumping by the citrus processing plant might have had on the regional Floridan aquifer flow system but it also results in the interesting implication that increased Floridan aquifer discharge in the form of springflow could, in turn cause the natural lowering of potentiometric levels over a spring's entire drainage area. The phenomenon of apparent increased springflow compared to rainfall was also observed by Anderson and Hughes (1975) in the flow of the Wekiva River near Sanford whose base flow of about 200 ft^3/s is derived almost entirely from springflow. There, the rainfall-springflow relation changed in about 1960. Presumably, this could have been caused by the extraordinarily high springflows of 1959 and 1960 flushing out silt and debris in the spring vents and, hence, improving their conveyance thereby reducing the amount of hydraulic head or pressure necessary for water to flow through the vents. The vents of Weekiwachee Springs could have been flushed out by the high flows of the late 1940's and early 1950's or by man's activities in and around the spring while it was being prepared as a tourist attraction. Reductions in backpressure on spring vents would cause water levels to decline elsewhere in the spring basins. An analysis of this phenomenon is beyond the scope of this report but further study is recommended.

The double-mass curve for Crystal Springs (fig. 33) shows a rather constant rainfall-springflow relation from 1933 to about 1942. Since 1942 there is a reduction in the slope of the curve. That reduction in slope indicates less springflow in relation to rainfall than for the period prior to 1942. The time at which the rainfall-springflow relation changed coincides with the beginning of pumping by Lykes-Pasco. But it also coincides with the time at which pumping by the phosphate mining industry in a 30 mi wide area (about 12 mi to the south and southeast of Crystal Springs) began increasing from a rather constant rate of about 36 Mgal/d prior to 1942 to about 140 Mgal/d by

1960, an annual rate of increase of about 4 Mgal/d per year (Robertson and Mills, 1974, fig. 3). About 1960, pumping by the phosphate industry sharply increased and by 1968 was about 280 Mgal/d. That sharp increase was not accompanied by a reduction in slope of the double-mass curve of Crystal Springs, probably because the 1960-68 increases in pumping occurred further from Crystal Springs than did the 1942-60 increases. In 1970, there was another reduction in the slope of the double-mass curve. This reduction in springflow in relation to rainfall is perhaps due to an increase in pumping from the Floridan aquifer in the vicinity of Crystal Springs. The increase in pumping is probably due to increased withdrawals for public supplies or irrigation because, according to Robertson and Mills (1974), since about 1968 pumping by the phosphate mining industry has declined because of increased use of recirculated water in mining operations.

The effect of pumping by Lykes-Pasco is not apparent in the double-mass plot of water levels in well 42 (fig. 34) probably because its period of record is so short (1959-77) that any decrease in slope of the double-mass curve caused by pumping would have occurred prior to the beginning of record. The relatively recent decline in pumping by Lykes-Pasco from 1972-77 should have caused an increase in slope. However, no such marked change in slope is shown in figure 34.

Records of water levels in Floridan aquifer wells in the study area show no major decline. For example, since mid-1966, the water level in well 42 has declined only about 4 ft (fig. 16). Most of that decline is probably due to a cumulative rainfall deficiency of about 40 in. since mid-1967 (fig. 16).

It seems as if the hydraulic characteristics of the upper part of the Floridan aquifer in the study area are affected primarily by amounts of rainfall (recharge) and by natural discharge. These controls mask the hydrologic effects of pumping by Lykes-Pasco Packing Co. It is possible that the upper and lower producing zones are in good hydraulic connection in the immediate vicinity of the plant but elsewhere the connection is not as effective. If that is the case and if most of the water pumped by the plant is taken from the lower producing zone, then the hydraulic effects, or drawdown resulting from that pumping, would extend primarily to only the lower zone except in the immediate vicinity of the plant. The drawdown in the lower zone would cause water from the upper zone to leak into the lower zone at a rate faster than that which would occur were there no pumping from the lower zone but the leakage would occur over a large area and thus not appreciably lower the potentiometric surface of the upper zone. But, as discussed previously, except for the work done by Ryder (1978) there is very little information available on the lower zone on an areal basis, so it is not known if the preceding hypothesis is valid. However, such a hypothesis would explain why the long-term effects of pumping by the plant are difficult to detect in the upper zone of the Floridan aquifer in the study area.

SUMMARY AND CONCLUSIONS

1. Lykes-Pasco Packing Co. is the largest single water user in the Dade City area. During the period 1963-77, the maximum annual pumping rate by this citrus processing plant was about 30 Mgal/d and occurred in either 1966 or 1967. Peak, or instantaneous pumping rates have been as high as 66 Mgal/d.

2. Since 1972, annual pumping rates by the plant have declined because of the company's efforts to recycle water. By 1977, the annual pumping rate was about 9 Mgal/d.

3. There are two major producing zones in the Floridan aquifer in the Dade City area. These zones are apparently in fairly good hydraulic connection in the immediate vicinity and to the south of Lykes-Pasco.

4. The transmissivity of the Floridan aquifer in the immediate vicinity of Lykes-Pasco is considered high compared to that in other nearby areas. The transmissivity is estimated to range from 200,000 ft^2/d to as much as 400,000 ft^2/d.

5. It is believed that Lykes-Pasco pumps most of its water from the lower Floridan producing zone. Water levels in the study area are measured in the upper producing zone. Drawdown of potentiometric surface of the lower zone extends to the upper producing zone but it is believed to be somewhat attentuated except in the immediate vicinity of the plant.

6. Thus, the vertical zonation of the aquifer and also its high transmissivity are the reasons why Lykes-Pasco's pumping has not resulted in large drawdowns of the potentiometric surface of the upper producing zone in the study area.

7. The effects that the plant's pumping has on the potentiometric surface of the Floridan aquifer are masked by the natural, seasonal fluctuations in levels caused by naturally-occurring recharge and discharge. Records of water levels in the area show no major declines that can be attributed to pumping.

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☆U.S. GOVERNMENT PRINTING OFFICE: 1980-64

Attachment E

SWFWMD Permit 451-007

Southwest Florida Water Management District
2379 Broad Street, Brooksville, Florida 34604-6899
(352) 796-7211 or 1-800-423-1476 (FL only)
TDD only: 1-800-231-6103 (FL only)
On the Internet at *WaterMatters.org*

An Equal Opportunity Employer

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-492-7862 (FL only)

Sarasota Service Office
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or
1-800-320-3503 (FL only)

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)

January 19th, 2023

Citrus Springs Utility, LLC
Attn: Claire Clements
2000 Island Boulevard, Suite 1505
Aventura, FL 33160

Subject: Transfer of Water Use Permit No. 20000451.006

Dear Claire Clements:

The Water Use Permit referenced above has been transferred. Please note that the transfer of the Water Use Permit only authorizes continuance of the activities currently listed in the permit. Any changes to the withdrawals, use type, or water use must be approved through a Water Use Permit Modification application prior to the changes. Please be advised the Permittee is responsible for compliance with all terms of the permit including the Special and Standard Conditions listed in the Permit. This includes any data reporting such as meter readings, pumpage, water quality, or water levels as well as any water conservation or feasibility analysis. In the event a water shortage order is declared, the District may modify the permit. Additionally, the permit may be subject to any new rules adopted by the District.

If you have any questions or concerns regarding your permit or any other information, please contact Patience Wentz at 813-445-5181, in the Tampa Service Office, Water Use Permit Bureau.

Sincerely,

Patience Wentz
Environmental Scientist
Water Use Permit Bureau
Regulation Division

Enclosures: Copy of Transferred Permit
cc: File of Record

LETTER MODIFICATION
Water Use Permit No: 20000451.006
Attachment A

MODIFICATIONS

The following constitutes modifications to the terms and conditions of Water Use Permit No. 20000451.006, effective November 12, 2021. This letter modification extends the duration of this Water Use Permit for ten years under Rule 40D-2.331, with a new expiration date of April 24, 2032.

1. No Special Condition Changes

All other terms and conditions of this permit shall remain unchanged unless specifically modified by this Letter Modification, and this permit will expire on April 24, 2032.

Transferred On: January 19, 2023
To: Citrus Springs Utility, LLC
Attn: Claire Clements
2000 Island Boulevard, Suite 1505
Aventura, FL 33160
Expiration Date: April 24, 2032
New Permit No: 2000451.007

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
WATER USE PERMIT
INDIVIDUAL
PERMIT NO. 20 000451.005

PERMIT ISSUE DATE: **April 24, 2012** **EXPIRATION DATE:** **April 24, 2022**

The Permittee is responsible for submitting an application to renew this permit no sooner than one year prior to the expiration date, and no later than the end of the last business day before the expiration date, whether or not the Permittee receives prior notification by mail. Failure to submit a renewal application prior to the expiration date and continuing to withdraw water after the expiration date is a violation of Chapter 373, Florida Statutes, and Chapter 40D-2, Florida Administrative Code, and may result in a monetary penalty and/or loss of the right to use the water. Issuance of a renewal of this permit is contingent upon District approval.

TYPE OF APPLICATION: Renewal

GRANTED TO: Tanler Water Company/Attn: Jeff Knox
14950 Us Highway 301
Dade City, FL 33523-2807

PROJECT NAME: Tanler Water Co

WATER USE CAUTION AREA(S): Northern Tampa Bay

COUNTY: Pasco

TOTAL QUANTITIES AUTHORIZED UNDER THIS PERMIT (in gallons per day)

ANNUAL AVERAGE	3,514,000 gpd
PEAK MONTH [1]	7,021,000 gpd

1 Peak Month: Average daily use during the highest water use month.

ABSTRACT:

This is a renewal of an existing water use permit for industrial/commercial use. The authorized quantities are unchanged from the previously permitted annual average and peak month quantities of 3,514,000 gallons per day (gpd) and 7,021,000 gpd, respectively. There are no changes in Use Type from the previous revision. The quantities are necessary to meet the demand for commercial/industrial use and on-site landscape irrigation.

Special Conditions include those that require the Permittee to record and report monthly meter readings from all withdrawal points; modify the permit to reflect incorporation of any new alternative water sources; investigate the use of reclaimed water; cap all wells not in use; and implement a water conservation plan.

WATER USE TABLE (in gpd)

USE	ANNUAL AVERAGE	PEAK MONTH
Industrial And Commercial	3,514,000	7,021,000

IRRIGATION ALLOCATION RATE TABLE

CROP/USE TYPE	IRRIGATED ACRES	IRRIGATION METHOD	STANDARD IRRIGATION RATE
Lawn & Landscape Irrigation	4.00	Low Volume Spray	27.10"/yr.
Fire Protection/Testing			
Industrial Other Uses			
Personal Sanitary Use			

WITHDRAWAL POINT QUANTITY TABLE

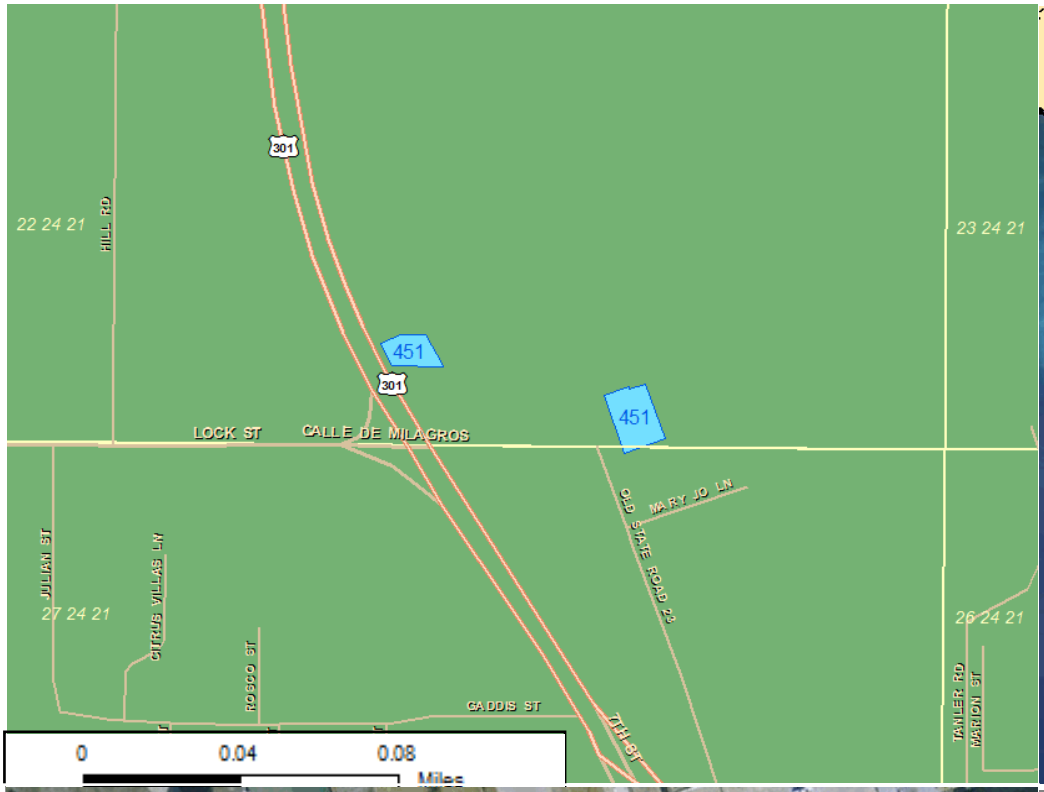
Water use from these withdrawal points are restricted to the quantities given below:

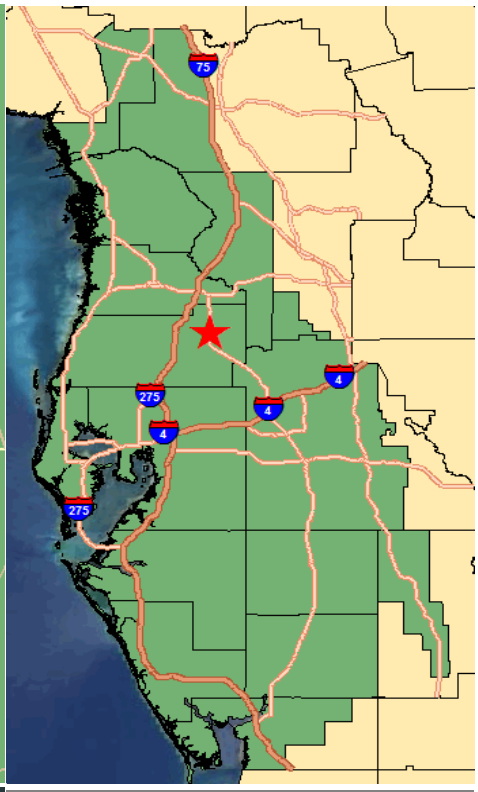
I.D. NO. PERMITTEE/ DISTRICT	DIAM (in.)	DEPTH TTL./CSD.FT. (feet bls)	USE DESCRIPTION	AVERAGE (gpd)	PEAK MONTH (gpd)
MP3B / 9	10	67 / UNK	Industrial-Commercial	1,070,000	2,140,000
MP2 / 12	10	461 / 250	Industrial-Commercial	1,620,000	3,240,000
MP3E / 15	16	408 / 250	Industrial-Commercial	810,000	1,620,000
MP8 / 16	16	490 / UNK	Industrial-Commercial	14,000	21,000

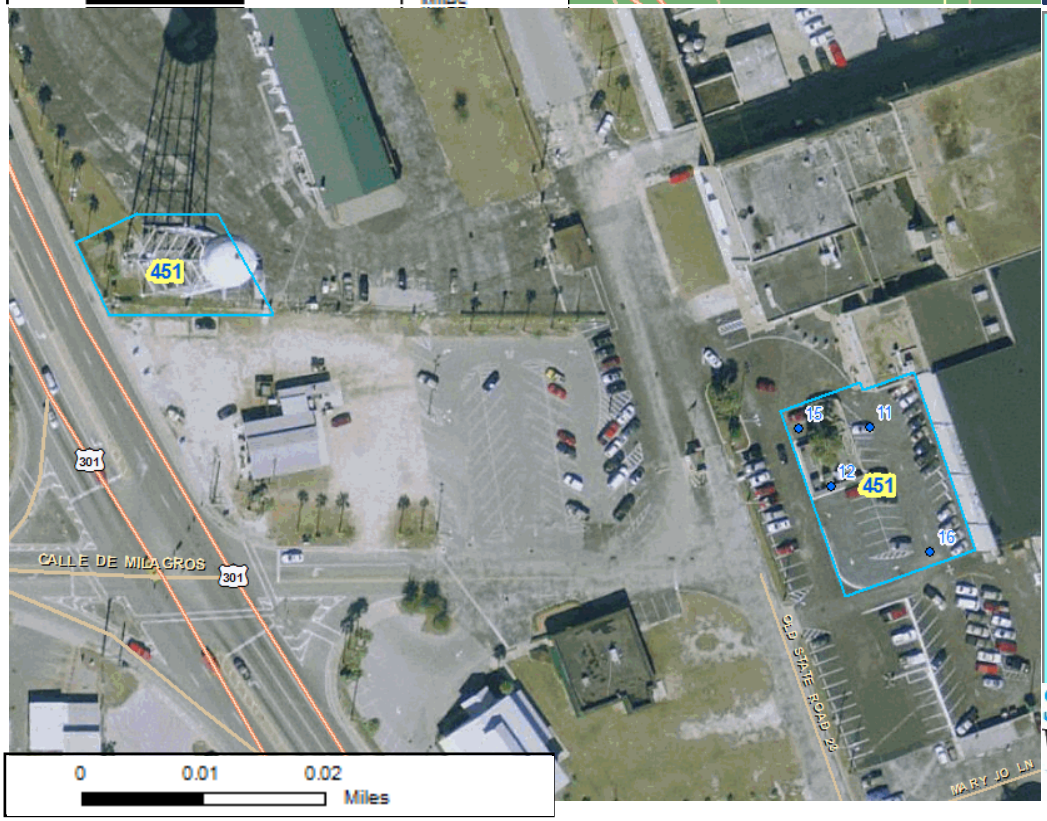
WITHDRAWAL POINT LOCATION TABLE

DISTRICT I.D. NO.	LATITUDE/LONGITUDE
9	28° 22' 34.77"/82° 11' 23.76"
12	28° 22' 34.54"/82° 11' 23.61"
15	28° 22' 34.97"/82° 11' 23.89"
16	28° 22' 34.05"/82° 11' 22.77"

Location Map
Tanler Water Company/Attn: Jeff Knox
WUP No. 20 000451.005







Legend

- DIDs
- WUP Boundary
- 2010 Natural Color Imagery

PASCO COUNTY

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Southwest Florida Water Management District

STANDARD CONDITIONS:

The Permittee shall comply with the Standard Conditions attached hereto, incorporated herein by reference as Exhibit A and made a part hereof.

SPECIAL CONDITIONS:

1. The Permittee shall evaluate the feasibility of improving the efficiency of the current irrigation system or converting to a more efficient system. This condition includes implementation of the improvement(s) or conversion when determined to be operationally and economically feasible.(296)

2. The Permittee shall implement a leak detection and repair program as an element of an ongoing system maintenance program. This program shall include a system-wide inspection at least once per year.(309)

3. The Permittee shall incorporate best water management practices, specifically including but not limited to irrigation practices, as recommended for the permitted activities in reports and publications by the IFAS.(312)

4. The Permittee shall limit daytime irrigation to the greatest extent practicable to reduce losses from evaporation. Daytime irrigation for purposes of system maintenance, control of heat stress, crop protection, plant establishment, or for other reasons which require daytime irrigation are permissible; but should be limited to the minimum amount necessary as indicated by best management practices. (331)

5. All reports and data required by condition(s) of the permit shall be submitted to the District according to the due date(s) contained in the specific condition. If the condition specifies that a District-supplied form is to be used, the Permittee should use that form in order for their submission to be acknowledged in a timely manner. The only alternative to this requirement is to use the District Permit Information Center (www.swfwmd.state.fl.us/permits/epermitting/) to submit data, plans or reports online. There are instructions at the District website on how to register to set up an account to do so. If the report or data is received on or before the tenth day of the month following data collection, it shall be deemed as a timely submittal.

   All mailed reports and data are to be sent to:

   Southwest Florida Water Management District
   Tampa Service Office, Water Use Permit Bureau
   7601 U.S. Hwy. 301 North
   Tampa, Florida 33637-6759

   Submission of plans and reports: Unless submitted online or otherwise indicated in the special condition, the original and two copies of each plan and report, such as conservation plans, environmental analyses, aquifer test results, per capita annual reports, etc. are required.

   Submission of data: Unless otherwise indicated in the special condition, an original (no copies) is required for data submittals such as crop report forms, meter readings and/or pumpage, rainfall, water level evapotranspiration, or water quality data.
   (499)

6. Within 90 days of the replacement of 10% or more withdrawal quantities from ground water or surface water bodies with an Alternative Water Supply, the Permittee shall apply to modify this permit to place equal quantities of permitted withdrawals from the ground and/or surface water resource on standby. The standby quantities can be used in the event that some or all of the alternative source is not available.(363)

7. The Permittee shall immediately implement the District-approved water conservation plan dated that was submitted on April 3, 2012 in support of the application for this permit. Conservation measures that the Permittee has already implemented shall continue, and proposed conservation measures shall be implemented as proposed in the plan. Progress reports on the implementation of water conservation practices indicated as proposed in the plan as well as achievements in water savings that have been realized from each water conservation practice shall be submitted on May 1, 2017.(449)

8. The Permittee shall investigate the feasibility of using reclaimed water as a water source and submit a report describing the feasibility to the Water Use Permit Bureau, by May 1, 2014. The report shall contain an analysis of reclaimed water sources for the area, including the relative location of these sources to the Permittee's property, the quantity of reclaimed water available, the projected date(s) of availability, costs associated with obtaining the reclaimed water, and an implementation schedule for reuse, if feasible. Infeasibility shall be supported with a detailed explanation. If the use of reclaimed water is determined to be feasible by the Permittee or by the District, then the Permittee shall submit an application to modify this water use permit to include reclaimed water as a source of water. The modification application shall include a date when the reclaimed water will be available and shall indicate a proposed reduction in permitted quantities. If the permit application is not submitted by the Permittee, the District may reduce, following notice to the Permittee, the quantities authorized with this permit to account for the availability of reclaimed water.
(458)

9. Any wells not in use, and in which pumping equipment is not installed shall be capped or valved in a water tight manner in accordance with Chapter 62-532.500(3)(a)(4), F.A.C.(568)

10. The following withdrawal facilities shall continue to be maintained and operated with existing, non-resettable, totalizing flow meter(s) or other measuring device(s) as approved by the Water Use Permit Bureau Chief: District ID No(s). 9, 12, 15, and 16, Permittee ID No(s). MP3B, MP2, MP3E, and MP8. Meter reading and reporting, as well as meter accuracy checks every five years shall be in accordance with instructions in Exhibit B, Metering Instructions, attached to and made part of this permit.(719)

40D-2
Exhibit A

WATER USE PERMIT STANDARD CONDITIONS

1. The Permittee shall provide access to an authorized District representative to enter the property at any reasonable time to inspect the facility and make environmental or hydrologic assessments. The Permittee shall either accompany District staff onto the property or make provision for access onto the property.

2. When necessary to analyze impacts to the water resource or existing users, the District shall require the Permittee to install flow metering or other measuring devices to record withdrawal quantities and submit the data to the District.

3. The District shall collect water samples from any withdrawal point listed in the permit or shall require the permittee to submit water samples when the District determines there is a potential for adverse impacts to water quality.

4. A District identification tag shall be prominently displayed at each withdrawal point that is required by the District to be metered or for which withdrawal quantities are required to be reported to the District, by permanently affixing the tag to the withdrawal facility.

5. The Permittee shall mitigate to the satisfaction of the District any adverse impact to environmental features or off-site land uses as a result of withdrawals. When adverse impacts occur or are imminent, the District shall require the Permittee to mitigate the impacts. Adverse impacts include the following:

   A. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses; or
   B. Damage to crops and other vegetation causing financial harm to the owner; and
   C. Damage to the habitat of endangered or threatened species.

6. The Permittee shall mitigate, to the satisfaction of the District, any adverse impact to existing legal uses caused by withdrawals. When adverse impacts occur or are imminent, the District shall require the Permittee to mitigate the impacts. Adverse impacts include the following:

   A. A reduction in water levels which impairs the ability of a well to produce water;
   B. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses; or
   C. Significant inducement of natural or manmade contaminants into a water supply or into a usable portion of an aquifer or water body.

7. Notwithstanding the provisions of Rule 40D-1.6105, F.A.C., persons who wish to continue the water use permitted herein and who have acquired ownership or legal control of permitted water withdrawal facilities or the land on which the facilities are located must apply to transfer the permit to themselves within 45 days of acquiring ownership or legal control of the water withdrawal facilities or the land.

8. If any of the statements in the application and in the supporting data are found to be untrue and inaccurate, or if the Permittee fails to comply with all of the provisions of Chapter 373, Florida Statutes (F.S.), Chapter 40D, Florida Administrative Code (F.A.C.), or the conditions set forth herein, the Governing Board shall revoke this permit in accordance with Rule 40D-2.341, F.A.C., following notice and hearing.

9. Issuance of this permit does not exempt the Permittee from any other District permitting requirements.

10. The Permittee shall cease or reduce surface water withdrawal as directed by the District if water levels in lakes fall below the applicable minimum water level established in Chapter 40D-8, F.A.C., or rates of flow in streams fall below the minimum levels established in Chapter 40D-8, F.A.C.

11. The Permittee shall cease or reduce withdrawal as directed by the District if water levels in aquifers fall below the minimum levels established by the Governing Board.

12. The Permittee shall not deviate from any of the terms or conditions of this permit without written approval by the District.

13. The Permittee shall practice water conservation to increase the efficiency of transport, application, and use, as well as to decrease waste and to minimize runoff from the property. At such time as the Governing Board adopts specific conservation requirements for the Permittee's water use classification, this permit shall be subject to those requirements upon notice and after a reasonable period for compliance.

14. The District may establish special regulations for Water-Use Caution Areas. At such time as the Governing Board adopts such provisions, this permit shall be subject to them upon notice and after a reasonable period for compliance.

15. In the event the District declares that a Water Shortage exists pursuant to Chapter 40D-21, F.A.C., the District shall alter, modify, or declare inactive all or parts of this permit as necessary to address the water shortage.

16. This permit is issued based on information provided by the Permittee demonstrating that the use of water is reasonable and beneficial, consistent with the public interest, and will not interfere with any existing legal use of water. If, during the term of the permit, it is determined by the District that the use is not reasonable and beneficial, in the public interest, or does impact an existing legal use of water, the Governing Board shall modify this permit or shall revoke this permit following notice and hearing.

17. All permits issued pursuant to these Rules are contingent upon continued ownership or legal control of all property on which pumps, wells, diversions or other water withdrawal facilities are located.

Exhibit B
Instructions

METERING INSTRUCTIONS

The Permittee shall meter withdrawals from surface waters and/or the ground water resources, and meter readings from each withdrawal facility shall be recorded on a monthly basis within the last week of the month. The meter reading(s) shall be reported to the Water Use Permit Bureau on or before the tenth day of the following month .The Permittee shall submit meter readings online using the Permit Information Center at www.swfwmd.state.fl.us/permits/epermitting/ or on District supplied scanning forms unless another arrangement for submission of this data has been approved by the District. Submission of such data by any other unauthorized form or mechanism may result in loss of data and subsequent delinquency notifications. Call the Water Use Permit Bureau in Tampa at (813) 985-7481 if difficulty is encountered.

The meters shall adhere to the following descriptions and shall be installed or maintained as follows:

1. The meter(s) shall be non-resettable, totalizing flow meter(s) that have a totalizer of sufficient magnitude to retain total gallon data for a minimum of the three highest consecutive months permitted quantities. If other measuring device(s) are proposed, prior to installation, approval shall be obtained in writing from the Water Use Permit Bureau Chief.
2. The Permittee shall report non-use on all metered standby withdrawal facilities on the scanning form or approved alternative reporting method.
3. If a metered withdrawal facility is not used during any given month, the meter report shall be submitted to the District indicating the same meter reading as was submitted the previous month.
4. The flow meter(s) or other approved device(s) shall have and maintain an accuracy within five percent of the actual flow as installed.
5. Meter accuracy testing requirements:
   A. For newly metered withdrawal points, the flow meter installation shall be designed for inline field access for meter accuracy testing.
   B. The meter shall be tested for accuracy on-site, as installed according to the Flow Meter Accuracy Test Instructions in this Exhibit B, every five years in the assigned month for the county, beginning from the date of its installation for new meters or from the date of initial issuance of this permit containing the metering condition with an accuracy test requirement for existing meters.
   C. The testing frequency will be decreased if the Permittee demonstrates to the satisfaction of the District that a longer period of time for testing is warranted.
   D. The test will be accepted by the District only if performed by a person knowledgeable in the testing equipment used.
   E. If the actual flow is found to be greater than 5% different from the measured flow, within 30 days, the Permittee shall have the meter re-calibrated, repaired, or replaced, whichever is necessary. Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration.
6. The meter shall be installed according to the manufacturer's instructions for achieving accurate flow to the specifications above, or it shall be installed in a straight length of pipe where there is at least an upstream length equal to ten (10) times the outside pipe diameter and a downstream length equal to two (2) times the outside pipe diameter. Where there is not at least a length of ten diameters upstream available, flow straightening vanes shall be used in the upstream line.
7. Broken or malfunctioning meter:

   A. If the meter or other flow measuring device malfunctions or breaks, the Permittee shall notify the District within 15 days of discovering the malfunction or breakage.
   B. The meter must be replaced with a repaired or new meter, subject to the same specifications given above, within 30 days of the discovery.
   C. If the meter is removed from the withdrawal point for any other reason, it shall be replaced with another meter having the same specifications given above, or the meter shall be reinstalled within 30 days of its removal from the withdrawal. In either event, a fully functioning meter shall not be off the withdrawal point for more than 60 consecutive days.

8. While the meter is not functioning correctly, the Permittee shall keep track of the total amount of time the withdrawal point was used for each month and multiply those minutes times the pump capacity (in gallons per minute) for total gallons. The estimate of the number of gallons used each month during that period shall be submitted on District scanning forms and noted as estimated per instructions on the form. If the data is submitted by another approved method, the fact that it is estimated must be indicated. The reason for the necessity to estimate pumpage shall be reported with the estimate.
9. In the event a new meter is installed to replace a broken meter, it and its installation shall meet the specifications of this condition. The permittee shall notify the District of the replacement with the first submittal of meter readings from the new meter.

FLOW METER ACCURACY TEST INSTRUCTIONS

1. **Accuracy Test Due Date -** The Permittee is to schedule their accuracy test according to the following schedule:

   A. For existing metered withdrawal points, add five years to the previous test year, and make the test in the month assigned to your county.
   B. For withdrawal points for which metering is added for the first time, the test is to be scheduled five years from the issue year in the month assigned to your county.
   C. For proposed withdrawal points, the test date is five years from the completion date of the withdrawal point in the month assigned to your county.
   D. For the Permittee's convenience, if there are multiple due-years for meter accuracy testing because of the timing of the installation and/or previous accuracy tests of meters, the Permittee can submit a request in writing to the Water Use Permit Bureau Chief for one specific year to be assigned as the due date year for meter testing. Permittees with many meters to test may also request the tests to be grouped into one year or spread out evenly over two to three years.
   E. The months for accuracy testing of meters are assigned by county. The Permittee is requested but not required to have their testing done in the month assigned to their county. This is to have sufficient District staff available for assistance.

January	Hillsborough
February	Manatee, Pasco
March	Polk (for odd numbered permits)*
April	Polk (for even numbered permits)*
May	Highlands
June	Hardee, Charlotte
July	None or Special Request
August	None or Special Request
September	Desoto, Sarasota
October	Citrus, Levy, Lake
November	Hernando, Sumter, Marion
December	Pinellas

   * The permittee may request their multiple permits be tested in the same month.

2. **Accuracy Test Requirements**: The Permittee shall test the accuracy of flow meters on permitted withdrawal points as follows:

   A. The equipment water temperature shall be set to 72 degrees Fahrenheit for ground water, and to the measured water temperature for other water sources.
   B. A minimum of two separate timed tests shall be performed for each meter. Each timed test shall consist of measuring flow using the test meter and the installed meter for a minimum of four minutes duration. If the two tests do not yield consistent results, additional tests shall be performed for a minimum of eight minutes or longer per test until consistent results are obtained.
   C. If the installed meter has a rate of flow, or large multiplier that does not allow for consistent results to be obtained with four- or eight-minute tests, the duration of the test shall be increased as necessary to obtain accurate and consistent results with respect to the type of flow meter installed.
   D. The results of two consistent tests shall be averaged, and the result will be considered the test result for the meter being tested. This result shall be expressed as a plus or minus percent (rounded to the nearest one-tenth percent) accuracy of the installed meter relative to the test meter. The percent accuracy indicates the deviation (if any), of the meter being tested from the test meter.

3. **Accuracy Test Report:** The Permittees shall demonstrate that the results of the meter test(s) are accurate by submitting the following information within 30 days of the test:

   A. A completed Flow Meter Accuracy Verification Form, Form LEG-R.014.00 (07/08) for each flow meter tested. This form can be obtained from the District's website (www.watermatters.org) under "ePermitting and Rules" for Water Use Permits.

   B. A printout of data that was input into the test equipment, if the test equipment is capable of creating such a printout;

   C. A statement attesting that the manufacturer of the test equipment, or an entity approved or authorized by the manufacturer, has trained the operator to use the specific model test equipment used for testing;

   D. The date of the test equipment's most recent calibration that demonstrates that it was calibrated within the previous twelve months, and the test lab's National Institute of Standards and Testing (N.I.S.T.) traceability reference number.

   E. A diagram showing the precise location on the pipe where the testing equipment was mounted shall be supplied with the form. This diagram shall also show the pump, installed meter, the configuration (with all valves, tees, elbows, and any other possible flow disturbing devices) that exists between the pump and the test location clearly noted with measurements. If flow straightening vanes are utilized, their location(s) shall also be included in the diagram.

   F. A picture of the test location, including the pump, installed flow meter, and the measuring device, or for sites where the picture does not include all of the items listed above, a picture of the test site with a notation of distances to these items. with a notation of distances to these items.

Darrin Herbst, P.G.

Authorized Signature
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

This permit, issued under the provision of Chapter 373, Florida Statues and Florida Administrative Code 40D-2, authorizes the Permittee to withdraw the quantities outlined above, and may require various activities to be performed by the Permittee as described in the permit, including the Special Conditions. The permit does not convey to the Permittee any property rights or privileges other than those specified herein, nor relieve the Permittee from complying with any applicable local government, state, or federal law, rule, or ordinance.

Attachment F

Site Visit Notes and Photos

12/5/25 Lykes Facility Site Visit Notes

- Sam Allen and Gregg Fruecht from Jones Edmunds drove around and looked at the 16 wells, water treatment building, and elevated storage tank with Claire Clements and Saxon Evans from HR Tampa Bay at the Lykes Facility in Dade City.
- The visit began at 10am and ended around 12pm
- We first looked at Wells 8-12 and 14-15 which were located inside a fenced area.
- We then looked at Wells 1 and 2 which were located inside of a building
- We then looked at Wells 4-7 which were blocked off by a wall and inside of a building as shown in the photos
- We then looked at Well 13 and 16
- Well 3 we were unable to see because it is capped and pulled out
- The overall site footprint is approximately 75 acres of buildings, 280 acres of land, and 110 acres of spray fields
- Of the 16 wells at the site, 14 of them are temporarily out of use and 2 are active those being wells (I believe the two active wells are well 9 and 12 but need to confirm)
- Based on the piping sizes throughout the piping network, there is approximately 22 MGD of mechanical pumping capacity
- The active wells produce 0.25-1MGD and this water is used for the surrounding buildings/businesses
- The wells feed water into a package plant which includes 2 high service pumps and a sodium hypochlorite injection quill with pressures around 70 psi.
- Once the water is disinfected, it goes into the elevated storage tank directly above the disinfection building with a capacity of 0.275 MG at a height of 146ft above ground.
- Well 16 is used only for fire suppression
- TDS is around 140 mg/L and alkalinity is around 80 mg/L (estimate of general water quality)
- The wells were originally built in the 1940’s and recased in the 1960’s and 1980’s
- 480 V power is available for wells 9 and 12.
- Based on discussions, it seems like it would be viable to connect the pipeline near the elevated storage tank/disinfection building
- Well 15 had the well head taken apart (can’t remember why)
- Wells are interconnected by piping network (shown in drawings)
- Photographs of site visit are below

Southwest Florida
Water Management District

Brooksville, Florida 34604-6899 • 352-796-7211 • 1-800-423-1476

WATER USE PERMIT TAG

20000451

WUP Number

MP3B

Permittee ID

9

Site ID/District ID

10

Diameter

FLORIDA UNIQUE WELL ID

AA01701

FOR INFORMATION CALL: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AT (850) 245-8651

#9

WORLDWIDE Electric Corp

THREE-PHASE VHS MOTOR

Model: WVHS100-18-180-1011B-DB-10.5				
Frame: 1011B	Ins Cl: F	Hz:	60	50
HP: 180	AMB. 40 C	Volt:	460	400
Duty: CONT	Lbs.	Amps:	190	141
Eff: 923		RPM:	1770	1470
Encl: WPI DP		SF:	1.15	1.15
DE/ODE Brng: 6317 / 6305		SFA:	197 A	162 A
S/N 15010070		LRA:	770 A	987 A

460V
T4 T9 T6
T8 T5 T7
T10 T11 T12
T2 T3 T1

MADE IN CHINA

Inverter Rated 10:1 VT

ROTATION

WORLDWIDE ELECTRIC CORPORATION

CAUTION

Upper motor bearing chamber must be filled with oil before start up!
Fill to the center of the sight glass with Turbine Oil with a viscosity
of ISO 32 for temperatures from -15C to 40C

THIS MOTOR IS EQUIPPED WITH SPACE HEATERS
THE LEADS ARE LABELED H1 AND H2
PLEASE USE SINGLE PHASE 120 VAC 50Hz
PLEASE SEE LABEL INSIDE JUNCTION BOX FOR WIRING

WORLDWIDE Electric Corp

THREE-PHASE VHS MOTOR

Model: WVHS100-[illegible]

Frame: 404TP	Ins Cl: F	Hz:	60	50
HP: 100	AMB. 40 C	Volt:	460	400
Duty: CONT	[illegible] Lbs.	Amps:	[illegible]	141
Eff: [illegible]		RPM:	[illegible]	1470
Encl: WPI DP		SF:	[illegible]	1.15
DE/ODE Brng: 6317/7230		SFA:	[illegible] A	162 A
S/N [illegible]		LRA:	[illegible] A	[illegible] A

Inverter Rated 10:1 VT

ROTATION

WORLDWIDE ELECTRIC CORPORATION

460V

T4 T9 T6

T8 T5 T7

T10 T11 T12

T2 T3 T1

MADE IN CHINA

CAUTION

Upper motor bearing chamber must be filled with oil before start up!
Fill to the center of the sight glass with Turbine Oil with a viscosity of ISO 32 for temperatures from -15C to 40C

THIS MOTOR IS EQUIPPED WITH SPACE HEATERS
THE LEADS ARE LABELED H1 AND H2
PLEASE USE SINGLE PHASE 120 volt-60Hz
PLEASE SEE LABEL INSIDE CONDUIT BOX FOR WIRING

15486 US-301 N

Marked Location · 0 ft away

Directions | Download | Move | More

SA Well 15

At This Address

Dade City Business Center
15486 US-301 N, Dade City

Details

Address
15486 US-301 N
Dade City, FL 33523
United States

Coordinates
28.37649° N, 82.19011° W

Report Something Missing

Pin

Remove

Motor Supplied with Inverter Duty W

#12

THREE-PHASE VHS MOTOR

Model:	Ins. Cl: F	Hz:	60	50	460V
Frame:	AMB. 40 C	Volt:	460	400	
HP:	Lbs.	Amps:			
Duty: CONT		RPM:			
Eff:		SF:		A	
Encl: WPI DP		SFA:		A	
DE/ODE Brng:		LRA:			
S/N					

Inverter Rated 10:1 VT

ROTATION

WORLDWIDE ELECTRIC CORPORATION

THIS MOTOR IS EQUIPPED WITH SPACE HEATERS
THE LEADS ARE LABELED H1 AND H2
PLEASE USE SINGLE PHASE 120 volt~60Hz
PLEASE SEE LABEL INSIDE CONDUIT BOX FOR WIRING

CAUTION

Upper motor bearing chamber must be filled with oil before start
Fill to the center of the sight glass with Turbine Oil with a viscosity
of ISO 32 for temperatures from 25C to 40C

APC
www.DeZURIK.com
AIR RELEASE VALVE
50 A 1½",¾",1" DI
BODY
Ø3/32"

THREE-PHASE VHS MOTOR

WORLDWIDE Electric Corp

Model:

Frame:	Ins Cl: F	Hz:	60	50
HP:	AMB. 40 C	Volt:	460	400
Duty: CONT	Lbs.	Amps:		
Eff:		RPM:		
Encl: WPI DP		SF:		
DE/ODE Brng:		SFA:	A	A
S/N		LRA:	A	A

460V

T4 T9 T6

T8 T5 T7

T10 T11 T12

T2 T3 T1

MADE IN CHINA

Inverter Rated 10:1 VT

ROTATION

WORLDWIDE ELECTRIC CORPORATION

THIS MOTOR IS EQUIPPED WITH SPACE HEATERS

THE LEADS ARE LABELED H1 AND H2

PLEASE USE SINGLE PHASE 120 volt–60Hz

PLEASE SEE LABEL INSIDE CONDUIT BOX FOR WIRING

CAUTION

Upper motor bearing chamber must be filled with oil before start up!
Fill to the center of the sight glass with Turbine Oil with a viscosity
of ISO 32 for temperatures from -15C to 60C

15486 US-301 N

Marked Location · 0 ft away

Directions | Download | Move | More

SA Well 12

At This Address

Dade City Business Center
15486 US-301 N, Dade City

Details

Address
15486 US-301 N
Dade City, FL 33523
United States

Coordinates
28.37631° N, 82.18981° W

Report Something Missing

Pin

Remove

PEERLESS

10:31 5G 78

15486 US-301 N

Directions Download Move More

SA Well 9

At This Address

Dade City Business Center
15486 US-301 N, Dade City

Details

Address
15486 US-301 N
Dade City, FL 33523
United States

Coordinates
28.37638° N, 82.18978° W

Report Something Missing

Pin

Remove

Southwest Florida
Water Management District
Brooksville, Florida 34604-6899 • 352-796-7211 • 1-800-423-1476
WATER USE PERMIT TAG

20000451
WUP Number

MP3A
Permittee ID

8
Site ID/District ID

CAPPED

10
Diameter

2
DEEP WELL
2400 VOLTS

15486 US-301 N

Marked Location · 0 ft away

Directions | Download | Move | More

SA Well 2

At This Address

Dade City Business Center
15486 US-301 N, Dade City

Details

Address
15486 US-301 N
Dade City, FL 33523
United States

Coordinates
28.37655° N, 82.19001° W

Report Something Missing

Pin

Remove

ISO-flex
2400 VOLTS
DANGER
HIGH VOLTAGE
2400 VOLTS
100 HP

#1
DEEP WELL
220 VOLTS

15486 US-301 N

Marked Location · 0 ft away

Directions | Download | Move | More

SA Well 1

At This Address

Dade City Business Center
15486 US-301 N, Dade City

Details

Address
15486 US-301 N
Dade City, FL 33523
United States

Coordinates
28.37657° N, 82.18994° W

Report Something Missing

Pin

Remove

WELL WATER
EXIT
Zephyrhills

220 VOLTS

220 VOLTS
#1
DEEP WELL
220 VOLTS

Southwest Florida
Water Management Distric
ID/Distric
WATER USE PERMIT TAG
WUP Number
20010413

10:43 5G 75

15000 Citrus Country Dr

Directions | Download | Move | More

SA Well 14

6 Places at This Address

Dade City Mar-tial Arts

15000 Citrus Country Dr, Unit 11...

Backlinie Bail Bonds of Dade...

15000 Citrus Country Dr, Ste 32...

Details

Address
15000 Citrus Country Dr
Dade City, FL 33523
United States

Coordinates
28.37584° N, 82.18973° W

Report Something Missing

FED FROM MCC-3
011D100
WELL PUMP

6
7

6
7
4

Southwest Florida
Water Management District

Brooksville, Florida 34604-6899 • 352-796-7211 • 1-800-423-1476

WATER USE PERMIT TAG

20000451

WUP Number

MP6

Permittee ID

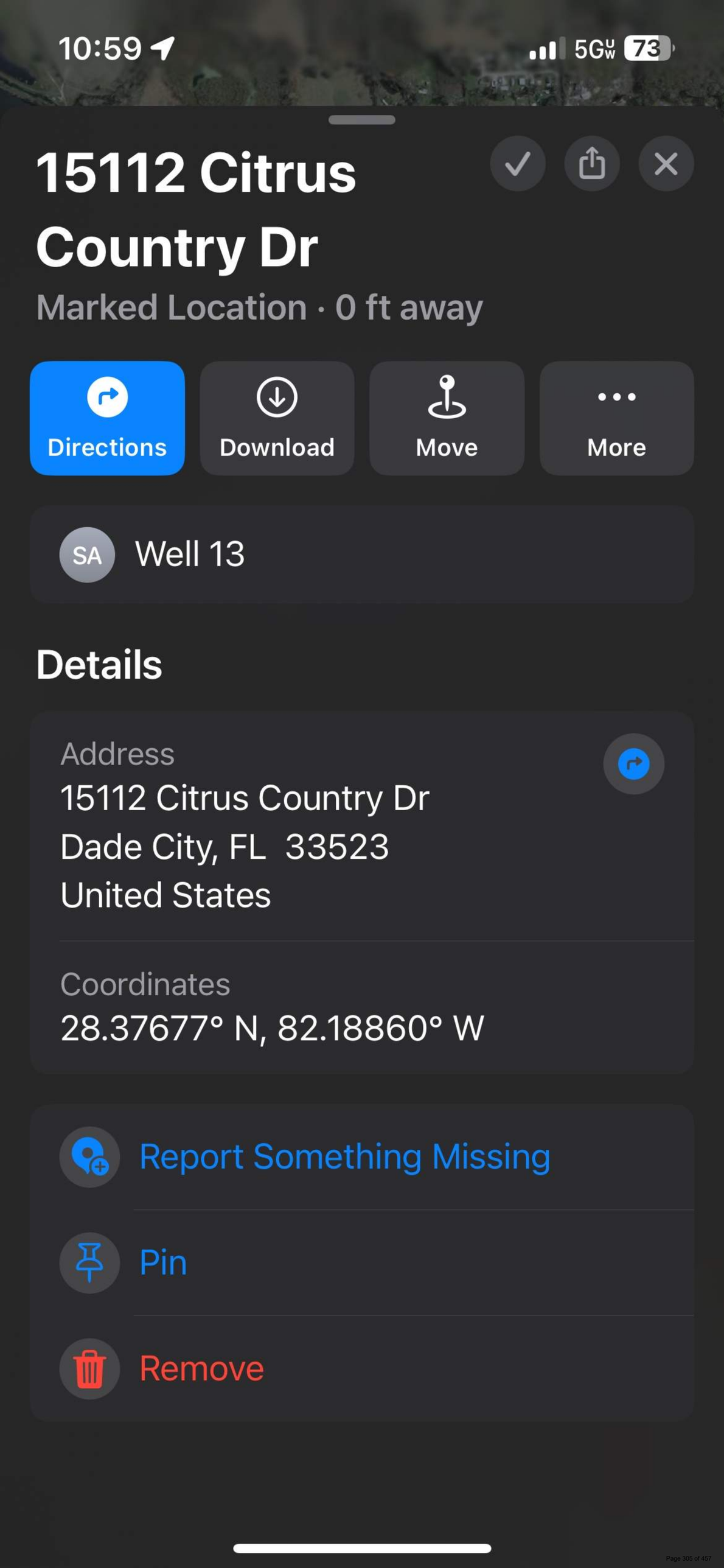
13

Site ID/District ID

10

Diameter

CAPPED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5G
73
15112 Citrus Country Dr
Marked Location · 0 ft away
Directions
Download
Move
More
SA
Well 13
Details
Address
15112 Citrus Country Dr
Dade City, FL 33523
United States
Coordinates
28.37677° N, 82.18860° W
Report Something Missing
Pin
Remove

TRADE **U.S.** *Auto Start Ball-Bearing* **MOTOR**

H.P.	100
VOLTS	2300
TYPE.	CF
SPEC.	
PHASE	3
FRAME	505
DESIGN	B
CODE	F

869829

60 CY. 40°C

23.2

1800

50 CY. 50°C

U. S. ELECTRICAL MOTORS, INC.

MILFORD, CONN. — LOS ANGELES, CALIF.

10
125 S
200 WOG
OIC
10
28

AD0451.02 LYKES PASCO, INC.

1,656,000 2,568,000 N/A

1,656,000 10

HP6 12 06/10/2002

BRIDGEPORT

T.C.I.
WHITE
RAGS
TOOL
BOX

SODIUM HYPOCHLORITE SOLUTION 10.5%
BRENNTAG
NSF
EMERGENCY NUMBER
270-830-1222
Manufactured by:
Brenntag Mid-South, Inc.
1405 Highway 136 West, Henderson, KY 42420
GPI 2.5
U.S. PATENT 9,162,816
WARNING
TANK DESIGN RATING
1.7 SPECIFIC GRAVITY
05/17
GPI 2.5
U.S. PATENT 9,162,816
WARNING
1.7 SPECIFIC GRAVITY
NSF
Certified to NSF/ANSI 61
1791
11/18
SODIUM HYPOCHLORITE
BRENNTAG
DANGER
BULK STORAGE
UP
DO NOT STACK OVER 4 HIGH

GPI2.5
05/17

DN250

MWWT 140F

ZURN

WILKINS

10

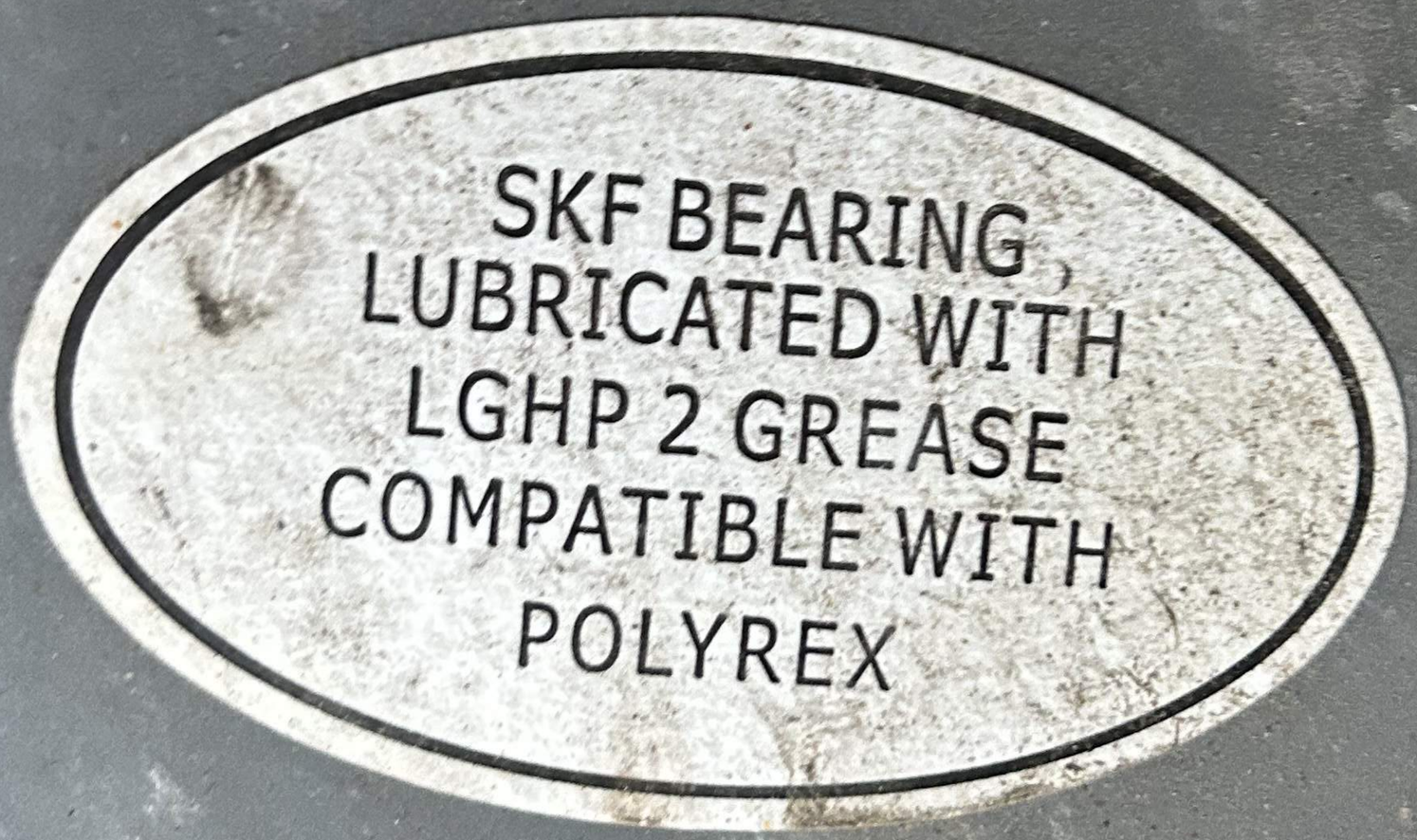
MDWP 175PSI

ULSTEIN
KENNEDY
ZORN
WILKINS
10

TANLER WATER SYSTEM - DAILY WATER TREATMENT PLANT LOG

MONTH: 12 YEAR: 25

DATE	EFFLUENT METER	TOTAL FLOW X1000	FREE CHLORINE - PT	FREE CHLORINE - RT	FREE CHLORINE ANALYZER	CHLORINE ON HAND 1	CHLORINE ON HAND 2	EFFLUENT PRESSURE	FIRE SYSTEM PRESSURE	INITIALS
	3731631	146	1.01	0.73	1.01	109				
	3731777	247	1.14	0.72	1.00	104	109	64.7	156.6	TG
	3732024	288	1.40	0.75	1.00	102	107	64.2	138.1	LT
	3732312	151	1.06	0.77	1.00	99	105	64.8	163.2	LT
	3732469		1.08	0.72	1.00	98	103	65.2	147.4	TG
							101	64.7	146.4	LT


SKF BEARING,
LUBRICATED WITH
LGHP 2 GREASE
COMPATIBLE WITH
POLYREX

WORLDWIDE

LEADGO®

PREMIUM EFFICIENCY
3-PHASE INDUCTION MOTOR

259277

CE

C SA US Energy Verified

CC006A

ISO9001

Model	PEWE50						
HP	50	S.F.		Type		Ser No.	
Frame	326T	P.F.		Ins Cl	F	Encl	IP
Voltage	230/460	Hz		Design		Rating	40 ℃ Amb Cont
Amps		RPM	3575	Code	G	DE Brng	
Nom. Eff.	FL	%	3/4	%	230/460 V	ODE Brng	
						Date	

Usable on 208V network at Amps 1.0SF

10:1 CT 20:1 VT PWM VFD 1.0SF

Class I Div. 2 Groups A B C D
Class I Zone 2 IIC

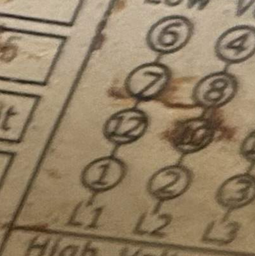
Amb.40℃

Amb.55℃

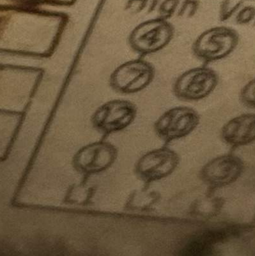
50Hz HP V A rpm 1.0SF

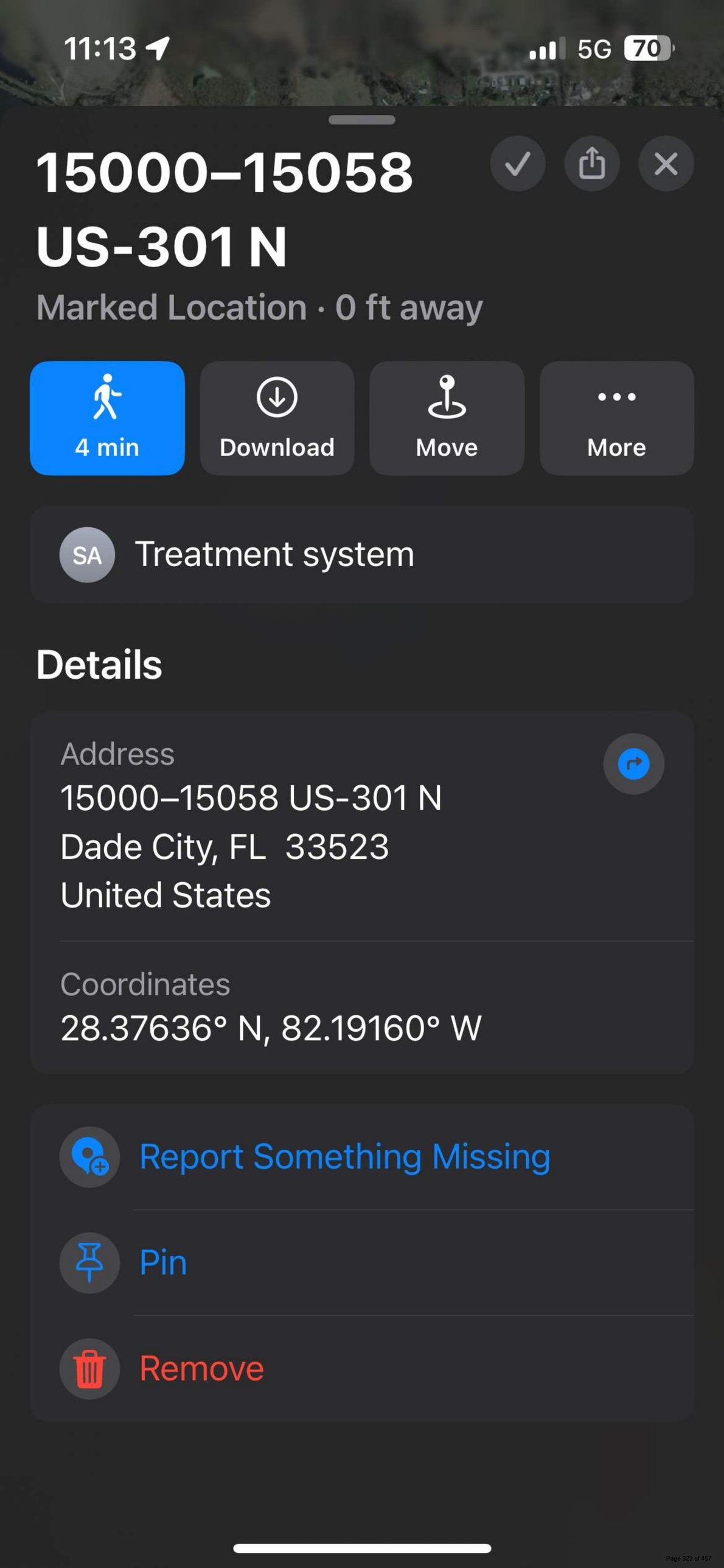
WorldWide Electric Corporation

Low Voltage



High Voltage

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15000–15058 US-301 N
Marked Location · 0 ft away
4 min
Download
Move
More
SA
Treatment system
Details
Address
15000–15058 US-301 N
Dade City, FL 33523
United States
Coordinates
28.37636° N, 82.19160° W
Report Something Missing
Pin
Remove

CONTROL
CUTLER-HAMMER

4D Service Group
Specializing in booster pump maintenance
NEED SERVICE
866-682-3626
FACTORY REP FOR
VC Systems

MOTOR RUN

MOTOR RUN

HAND OFF AUTO

PLC
OLD OFF NEW

HAND OFF AUTO

RUN IN AUTO
FOR NORMAL OPERATION

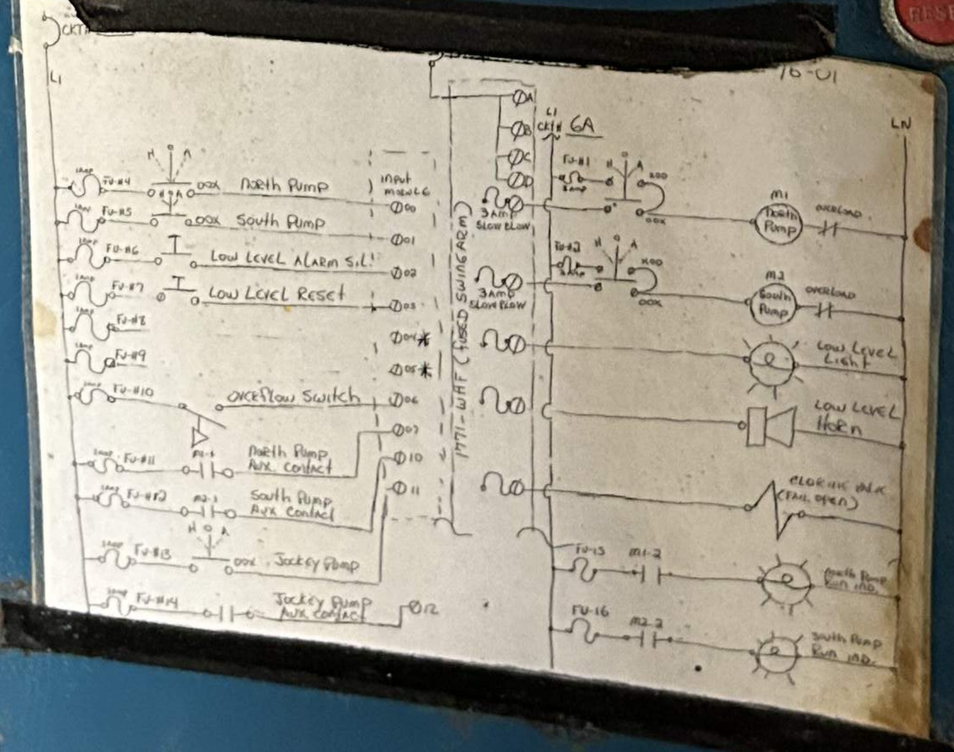
SOUTH PUMP CONTROL SWITCH

RUN IN AUTO
FOR NORMAL OPERATION

NORTH PUMP CONTROL SWITCH

STOP RESET

STOP RESET



66
PN: SCT60-A1E000-0000-GM2HR
MWP: CLAMP

BRENNTAG

101

FILL

MODE

DATA SERVICED BY ANOVA

17020

UNIT ID:
E30014AC

1871

Attachment G

Liquid Solutions Groundwater Modeling

LIQUID SOLUTIONS GROUP

TECHNICAL MEMORANDUM

To:	Michael Clark, PE Jones Edmunds	**Date:**	December 19, 2025
From:	Michelle Hays, PG	**Reference:**	Zephyrhills WUP 6040.011

Subject: **New Wellfield Evaluation**
Groundwater Modeling Results

INTRODUCTION

Water Use Permit (WUP) Number 6040.011 issued by the Southwest Florida Water Management District (SWFWMD) authorizes the City of Zephyrhills (City) to withdraw 4,493,900 gallons per day (gpd) on an annual average basis for public supply use. The City is evaluating options to meet future water demands above the current permitted quantity. As noted in previous permit applications, the SWFWMD has established MFL rules for the upper and lower segments of the Hillsborough River. The majority of City's service area is within the Hillsborough River Groundwater Basin (HRGWB). Modeling completed as part of the previous WUP renewal and modification have showed that the City's existing wells have reached the maximum allowable withdrawal from the HRGWB.

The City has identified a property outside the HRGWB as a potential future water source. The City has requested that groundwater modeling be performed to evaluate options for use of this site to increase the City's groundwater supply. Namely, three options were evaluated as follows:

- Withdrawals from the proposed property with continued use of the City's permitted withdrawals in WUP 6040.011.
- Transfer of withdrawals from the agricultural well (WUP DID No. 19, transferred to the City WUP but not yet in service) to the proposed property.
- Reduced withdrawals from the existing agricultural well and withdrawals from the proposed property.

This Technical Memorandum documents the groundwater modeling completed to evaluate the potential quantities that can be withdrawn from the new wellfield without impacting the HRGWB.

Model Simulations

The SWFWMD's District-Wide Regulation Model (DWRM) was used to evaluate the additional water that could be withdrawn from the proposed property without drawdown greater than 0.049 foot at the HRGWB. The groundwater model used for the 2025 WUP modification dated 08/26/2025, was developed using the Focus Telescopic Mesh Refinement (FTMR) tool. The proposed property associated with this new evaluation is outside the refined grid created for the previous permit application; therefore, a new FTMR model was exported from DWRM for the evaluation of the proposed property. The FTMR model was exported from the DRWM4_2021_20231219_6040.gwv downloaded from Environmental Simulations Incorporated's (ESI's) Website. The construction of the FTMR model followed the procedures outlined in the guidance documents downloaded with the model files (ESI, 2022). **Figure 1** shows the proposed property, the HRGWB, and the refined model grid. The wells in the model were updated to include the transfer of allocation from the agricultural wells to the City as part of the modification application for permit 6040.011. The transfer allows the City to withdraw 1.185 MGD from former agricultural well 3381-1, which is listed as District ID (DID) No. 19 in WUP 6040.011.

The DWRM consists of 13 layers. In the area of the proposed withdrawals, Layer 1 represents the surficial aquifer, layer 2 represents the confining units of the Hawthorn Group, Layers 7 through 9 represent the Upper Floridan Aquifer (UFA), and layers 11 through 13 represent the Lower Floridan Aquifer. Layers 3 through 6 and 10 are inactive. The proposed withdrawals were simulated in Layers 7 through 9.

Three scenarios were evaluated for the proposed property. Option A assumes the City continues to use the withdrawals as permitted in WUP (6040.011) with additional withdrawals from the proposed property. Option B evaluates transferring the 1.185 MGD from the DID No. 19 to the proposed property. Option C evaluates shifting some of the withdrawals from the DID No. 19 to the proposed property but retains use of the DID No. 19.

Model Results and Conclusions

Table 1 presents the maximum simulated withdrawals for each option that does not cause greater than 0.049 foot of drawdown to the HRGWB. **Figures 2 through 4** show the simulated Layer 7 drawdown contours for the three options. Only the Layer 7 drawdown contours are shown; however, drawdown in the other UFA layers (8 and 9) and Layer 11 of the LFA are essentially the same. Drawdown in the surficial aquifer and lower units of the LFA are less.

Option A provides very little additional withdrawal due to the agricultural well's proximity to the HRGWB. Option A would only add an additional 5,500 gpd to the current permit. Option B, which transfers all the withdrawals to the proposed property, provides the greatest total withdrawal increase of 600,000 gpd. Option C is a combination of Options A and B and utilizes both withdrawal locations. Option C shows how the total withdrawal capacity decreases as flows are shifted to the agricultural well.

Table 1. Model Simulated Withdrawals

Withdrawal ID	Withdrawal Description	Option A Simulated Quantity (gpd)	Option B Simulated Quantity (gpd)	Option C Simulated Quantity (gpd)
DID 19	Agriculture Well 3381	1,185,500	0	400,000
Proposed	New Wells at Old Lakeland Hwy and Enterprise Rd.	5,500	1,785,500	1,190,000
Total Simulated Pumpage		1,191,000	1,785,500	1,590,000
Potential WUP Increase		5,500	600,000	404,500

The groundwater modeling only evaluates potential impacts to the HRGWB because historically this has been the greatest constraint. If the City decides to pursue one of the options, additional assessments will need to be completed to evaluate peak flows and potential impacts to existing users, lakes, and wetlands.

Water Use Permitting Requirements

If the City wishes to pursue a new well at the Enterprise Road location an application to modify WUP No. 6151 would need to be submitted to the SWFWMD. The application needs to meet the conditions for issuance in Chapter 40D-2.301, which requires that the withdrawal:

- Is a reasonable-beneficial use;
- Will not interfere with any presently existing legal use of water; and
- Is consistent with the public interest.
- Will utilize a water source that is suitable for the consumptive use;
- Will utilize a water source that is capable of producing the requested amount;
- Except when the use is for human food preparation or direct human consumption, will utilize the lowest quality water source that is suitable for the purpose and is technically, environmentally, and economically feasible;
- Will not cause harm to existing offsite land uses resulting from hydrologic alterations;
- Will not cause harm to the water resources of the area in any of the following ways:
- Will not cause harmful water quality impacts to the water source resulting from the withdrawal or diversion;
- Will not cause harmful water quality impacts from dewatering discharge to receiving waters;
- Will not cause harmful saline water intrusion or harmful upconing;
- Will not cause harmful hydrologic alterations to natural systems, including wetlands or other surface waters; and
- Will not otherwise cause harmful hydrologic alterations to the water resources of the area.

- Is in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.; and
- Will not use water reserved pursuant to Section 373.223(4), F.S.

An application to modify the permit should include:

- Revised demand projections with a demonstration of need, including utility service agreements for any new developments and/or commercial or industrial users.
- A groundwater modeling report showing that the proposed withdrawals will not cause harm to wetlands, lakes, or existing legal users and that withdrawals will not cause unmitigated impacts to Minimum Flows and Levels (MFLs).
- An updated Environmental Monitoring Plan to monitor potential changes to wetland water levels.
- An updated Water Conservation Plan (updated within the previous year).
- Information regarding the City's plans for wastewater disposal and beneficial reuse.
- A test plan for the new well(s).

The City's service area is predominantly within the Hillsborough River Groundwater Basin (HRGWB) and SWFWMD has established MFL rules for the upper and lower segments of the Hillsborough River. Modeling completed as part of 2020 permit application required use of the Integrated Northern Tampa Bay (INTB) model which is an is an integrated surface water and groundwater model developed as a joint effort of Tampa Bay Water and the SWFWMD. The INTB modeling included simulation of groundwater withdrawals and return flows from the City Rapid Infiltration Basins (RIBs) and existing reclaimed system to mitigate impacts to the MFLs. The INTB modeling showed that the City's wells have reached the maximum allowable withdrawal amount from the HRGWB. The groundwater modeling presented in this technical memorandum shows that the proposed options do not impact the HRGWB; therefore, it is likely that the SWFWMD would allow the City to utilize the DWRM model for the permit modification, like the modification completed in 2025. However, if the City wishes to include changes to withdrawals of wells within the HRGWB or to modify return flows to the City's RIBs, additional modeling using the INTB could be required.

If the City chooses to instead purchase water from another entity, the seller would be required to obtain a WUP (or modify an existing WUP) for the use. The City would need to provide documentation of water demand and a demonstration of need. The demonstration of need would need to cover demands more than the City's current permitted allocation of 4.493 MGD. If the City wishes to obtain some of the 4.493 MGD through purchase of water, the City would also need to modify their WUP to account for the additional water source.

References

ESI, 2022. *Documentation of Nested Mesh Refinement Options Groundwater Vistas & MODFLOW-USG*, File dated September 29, 2022.

Figure 1. FTMR Grid

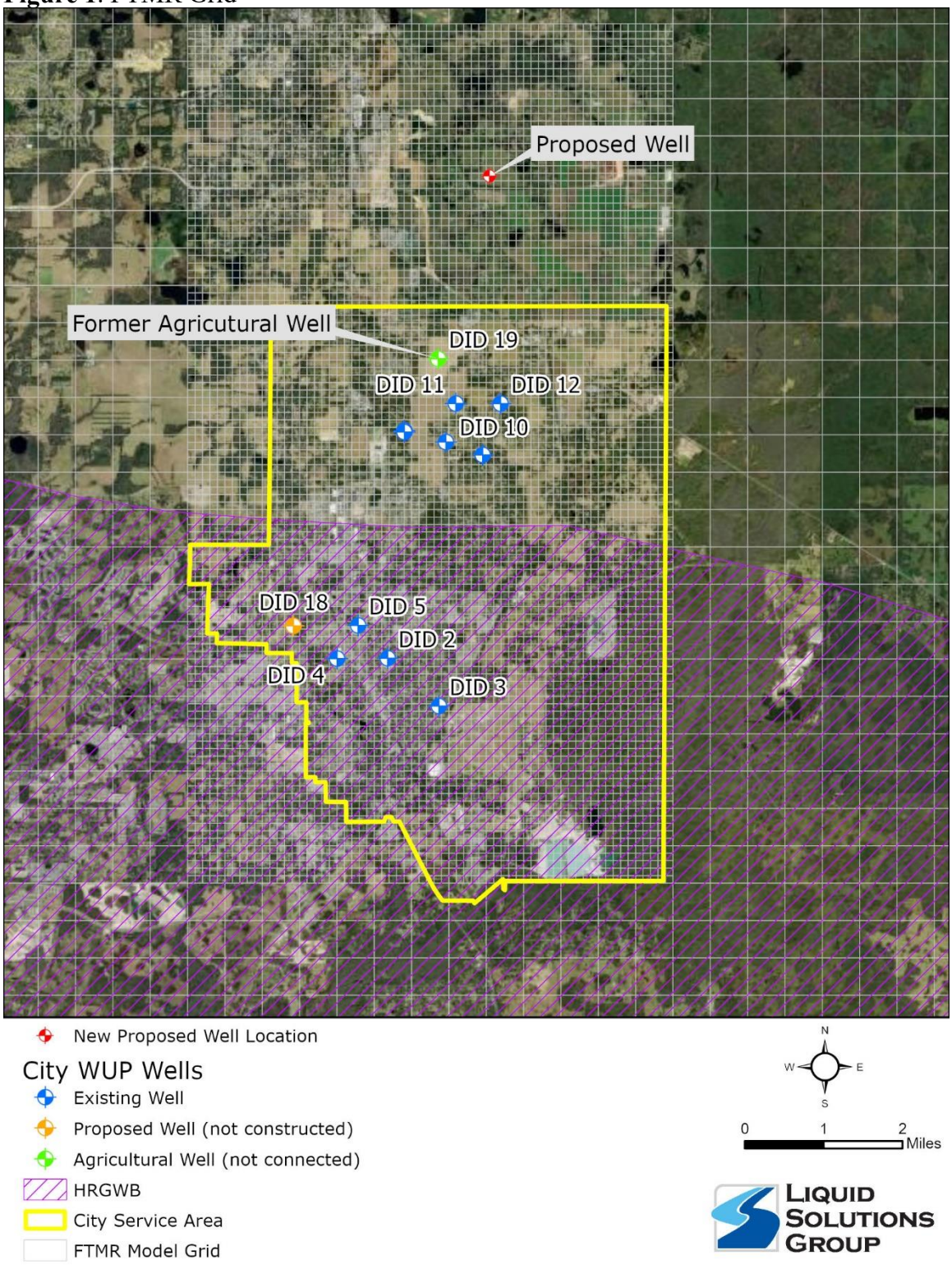


Figure 2. Option A, Layer 7 Drawdown Contours.

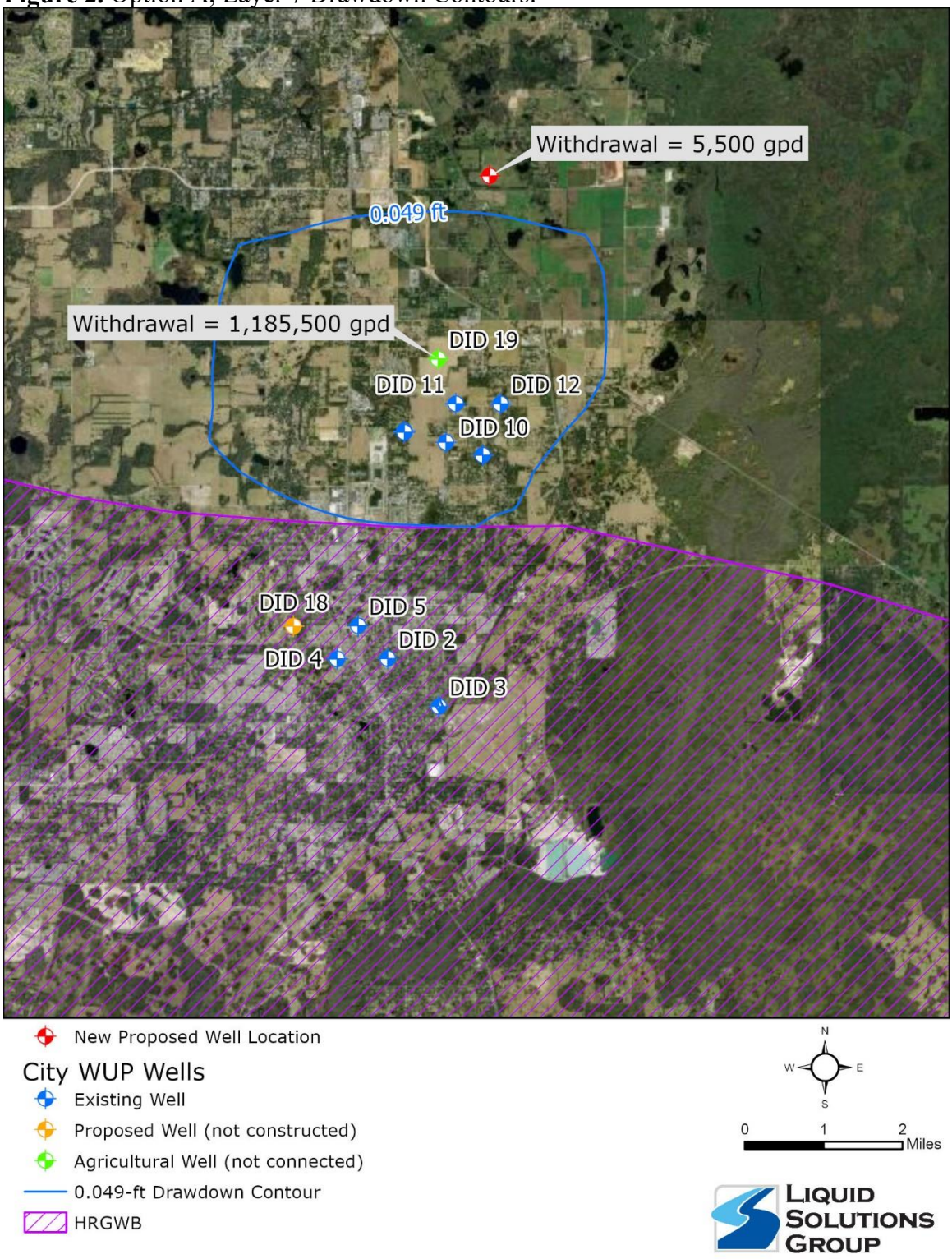


Figure 3. Option B, Layer 7 Drawdown Contours.

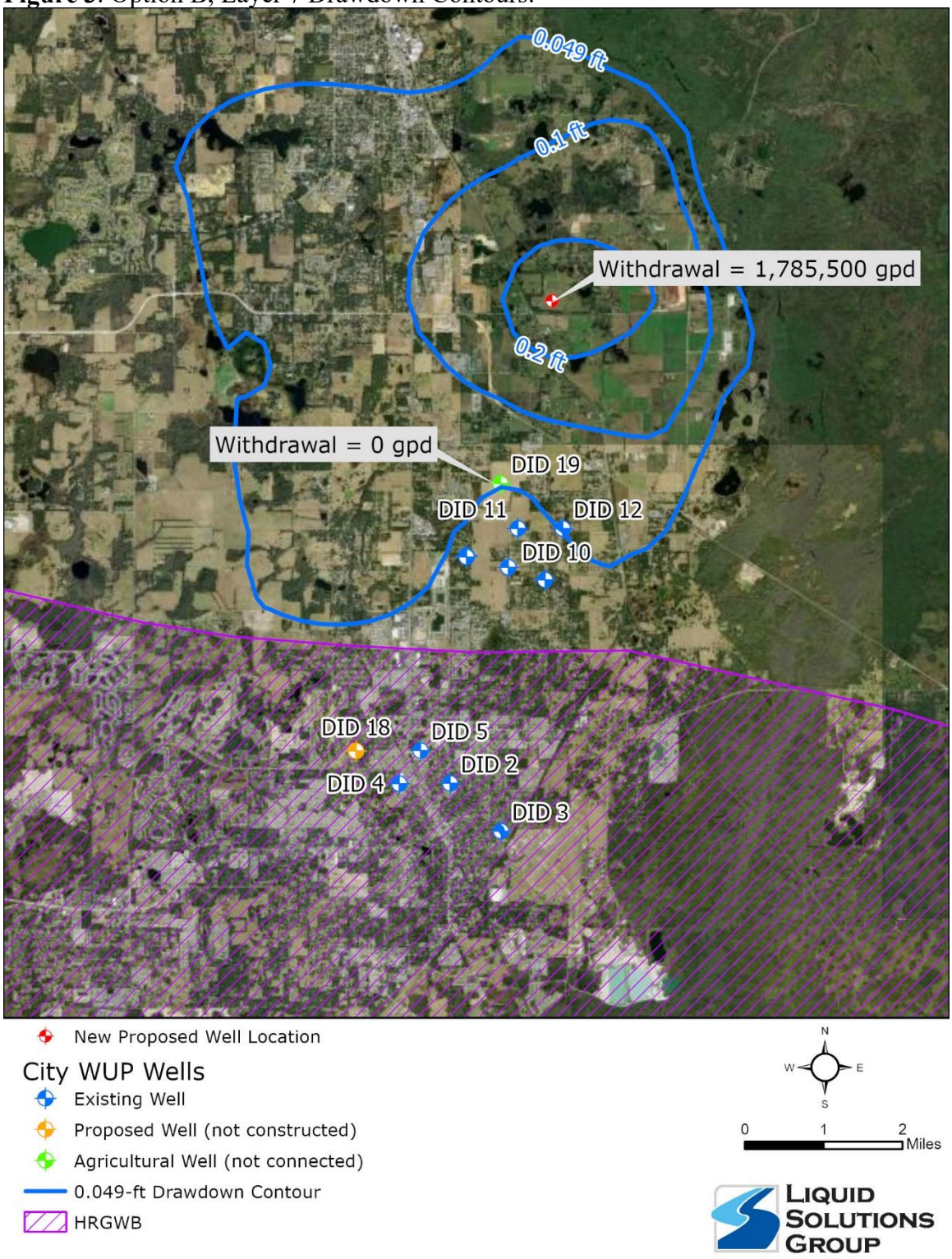
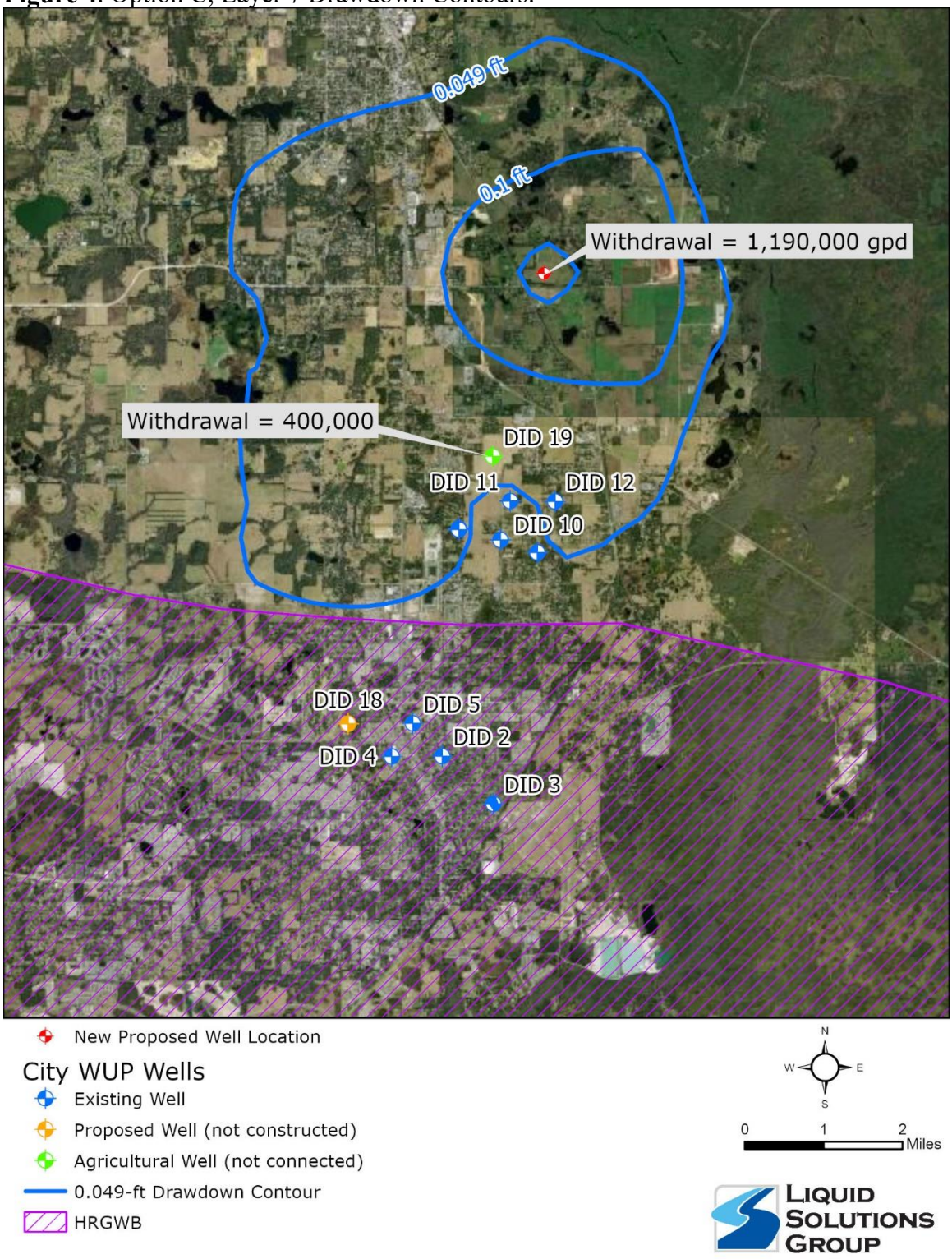


Figure 4. Option C, Layer 7 Drawdown Contours.



Attachment H

Alternative Engineer's Opinion of Probable Construction Costs

JonesEdmunds
Integrity • Knowledge • Service

OPINION OF PROBABLE CONSTRUCTION COST - DETAILS

OWNER:	ESTIMATED BY:
City of Zephyrhills	**K. Fraser**
CLIENT:	CHECKED BY:
City of Zephyrhills	**M, Clark**
PROJECT TITLE:	PROJECT SEGMENT
Future Water Feasibility Study	**ALTERNATE 1A-PURCHASE/LEASE WELL OLD LAKELAND ROUTE**
PROJECT NUMBER:	DATE:
26110-069-01	**1/6/2026**
ESTIMATE TYPE (ROM, BUDGET, DEFINITIVE):	CONSTRUCTION OR PROJECT
Class 5 (AACE)	**Project**

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
GENERAL CONDITIONS	LS	10.0%		$ 1,002,600
MAINTENANCE OF TRAFFIC (2% OF BASE BID)	LS	2.0%		$ 200,520
STORMWATER POLLUTION PREVENTION PLAN (1.5% OF BASE BID)	LS	1.5%		$ 150,390
STARTUP AND TESTING (5% OF BASE BID)	LS	5%		$ 501,300
SUBTOTAL DIVISION 1 ITEMS				$ 1,854,810
ACQUISITION				
WELL	LS	1	$ 400,000	$ 400,000
SUBTOTAL	LS	1	$ 400,000	$ 400,000
OVERHEAD & PROFIT	LS	20%	$ 80,000	$ 80,000
				$ 480,000
WELL HEAD CONSTRUCTION				
BELOW GROUND	LS		$ 300,000	$ -
ABOVE GROUND	LS	1	$ 800,000	$ 800,000
SUBTOTAL	LS	1	$ 800,000	$ 800,000
OVERHEAD & PROFIT	LS	20%	$ 160,000	$ 160,000
				$ 960,000
PIPELINE/CONVEYANCE				
16-INCH PIPE AND FITTINGS	LF	35,775	$ 200	$ 7,155,000
SUBTOTAL	LS	1	$ 7,155,000	$ 7,155,000
OVERHEAD & PROFIT	LS	20%	$ 1,431,000	$ 1,431,000
				$ 8,586,000
SUBTOTAL				**$ 10,026,000**
SUM OF DIVISION 1 ITEMS				$ 1,855,000
SUBTOTAL				**$ 11,881,000**
CONTINGENCY (10%)		10%		$ 1,188,100
		TOTAL		**$ 13,069,100**
		ROUNDED TOTAL		**$ 13,070,000**

Range of Accuracy (Class 5-Per AACE 18R-97)		
Low End	-50%	**$ 6,600,000**
High End	100%	**$ 26,200,000**

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OPINION OF PROBABLE CONSTRUCTION COST - DETAILS

OWNER:	ESTIMATED BY:
City of Zephyrhills	**K. Fraser**
CLIENT:	CHECKED BY:
City of Zephyrhills	**M, Clark**
PROJECT TITLE:	PROJECT SEGMENT
Future Water Feasibility Study	**ALTERNATE 1B-PURCHASE/LEASE-WELL-US-301 ROUTE**
PROJECT NUMBER:	DATE:
26110-069-01	**1/6/2026**
ESTIMATE TYPE (ROM, BUDGET, DEFINITIVE):	CONSTRUCTION OR PROJECT
Class 5 (AACE)	**Project**

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
GENERAL CONDITIONS	LS	10.0%		$ 579,900
MAINTENANCE OF TRAFFIC (2% OF BASE BID)	LS	2.0%		$ 115,980
STORMWATER POLLUTION PREVENTION PLAN (1.5% OF BASE BID)	LS	1.5%		$ 86,985
STARTUP AND TESTING (5% OF BASE BID)	LS	5%		$ 289,950
SUBTOTAL DIVISION 1 ITEMS				$ 1,072,815
ACQUISITION				
WELL	LS	1	$ 400,000	$ 400,000
SUBTOTAL	LS	1	$ 400,000	$ 400,000
OVERHEAD & PROFIT	LS	20%	$ 80,000	$ 80,000
				$ 480,000
WELL HEAD CONSTRUCTION				
BELOW GROUND	LS		$ 300,000	$ -
ABOVE GROUND	LS	1	$ 800,000	$ 800,000
SUBTOTAL	LS	1	$ 800,000	$ 800,000
OVERHEAD & PROFIT	LS	20%	$ 160,000	$ 160,000
				$ 960,000
PIPELINE/CONVEYANCE				
12-INCH PIPE AND FITTINGS	LF	21,184	$ 129	$ 2,732,736
BOOSTER PUMP STATION	EA	1	$ 900,000	$ 900,000
SUBTOTAL	LS	1	$ 3,632,700	$ 3,632,700
OVERHEAD & PROFIT	LS	20%	$ 726,540	$ 726,540
				$ 4,359,300
SUBTOTAL				**$ 5,799,000**
SUM OF DIVISION 1 ITEMS				$ 1,073,000
SUBTOTAL				**$ 6,872,000**
CONTINGENCY (10%)		10%		$ 687,200
		TOTAL		**$ 7,559,200**
		ROUNDED TOTAL		**$ 7,560,000**

Range of Accuracy (Class 5-Per AACE 18R-97)		
Low End	-50%	**$ 3,800,000**
High End	100%	**$ 15,200,000**

JonesEdmunds
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OPINION OF PROBABLE CONSTRUCTION COST - DETAILS

OWNER:	ESTIMATED BY:
City of Zephyrhills	**K. Fraser**
CLIENT:	CHECKED BY:
City of Zephyrhills	**M, Clark**
PROJECT TITLE:	PROJECT SEGMENT
Future Water Feasibility Study	**ALTERNATE 2-CONSTRUCT TWO NEW WELLS**
PROJECT NUMBER:	DATE:
26110-069-01	**1/6/2026**
ESTIMATE TYPE (ROM, BUDGET, DEFINITIVE):	CONSTRUCTION OR PROJECT
Class 5 (AACE)	**Project**

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
GENERAL CONDITIONS	LS	10.0%		$ 478,700
MAINTENANCE OF TRAFFIC (2% OF BASE BID)	LS	2.0%		$ 95,740
STORMWATER POLLUTION PREVENTION PLAN (1.5% OF BASE BID)	LS	1.5%		$ 71,805
STARTUP AND TESTING (5% OF BASE BID)	LS	5%		$ 239,350
SUBTOTAL DIVISION 1 ITEMS				$ 885,595
ACQUISITION				
PROPERTY	LS	1	$ 200,000	$ 200,000
SUBTOTAL	LS	1	$ 200,000	$ 200,000
OVERHEAD & PROFIT	LS	20%	$ 40,000	$ 40,000
				$ 240,000
WELL HEAD CONSTRUCTION				
BELOW GROUND	LS	2	$ 300,000	$ 600,000
ABOVE GROUND	LS	1	$ 800,000	$ 800,000
SUBTOTAL	LS	1	$ 1,400,000	$ 1,400,000
OVERHEAD & PROFIT	LS	20%	$ 280,000	$ 280,000
				$ 1,680,000
PIPELINE/CONVEYANCE				
12-INCH PIPE AND FITTINGS	LF	18,521	$ 129	$ 2,389,209
SUBTOTAL	LS	1	$ 2,389,200	$ 2,389,200
OVERHEAD & PROFIT	LS	20%	$ 477,840	$ 477,840
				$ 2,867,100
SUBTOTAL				**$ 4,787,000**
SUM OF DIVISION 1 ITEMS				$ 886,000
SUBTOTAL				**$ 5,673,000**
CONTINGENCY (10%)		10%		$ 567,300
		TOTAL		**$ 6,240,300**
		ROUNDED TOTAL		**$ 6,241,000**

Range of Accuracy (Class 5-Per AACE 18R-97)		
Low End	-50%	**$ 3,200,000**
High End	100%	**$ 12,500,000**

Action Item

CONSENT ITEMS 1.1

City Council Meeting Minutes - June 08, 2026

Issue:
A regular City Council Meeting was held on June 08, 2026

Background:
Minutes from that meeting were taken for review by City Council

Attachment(s):
1. 06.08.2026 CCM Minutes

Fiscal Impact:
N/A

Staff Recommendation:
Staff recommends approval of meeting minutes

A Regular City Council Meeting was held on June 8, 2026 at 6:00 PM in the Council Chambers of City Hall and Via GoToMeeting (646) 749-3122 - Access Code: 855-960-693. Council President Steven F. Spina, Ph.D., called the meeting to order at 6:06 PM

Roll call was taken. Present were members Kenneth Burgess, Charles Proctor, Steven Spinaand Mayor Melonie Monson. City Manager William Poe and City Attorney Matthew Maggard were also present. Lance Smith and Jodi Wilkeson were not present.

Staff present: Chief of Police Derek Brewer, Public Works Director Shane LeBlanc, Building Official Kalvin Switzer, Senior Code Support Specialist Jackie Boges, Airport Manager Nathan Coleman, IT Director Mike Panak, CRA Director Gail Hamilton, Human Resources & Risk Management Director Sandra Amerson, Planning Director Rodney Corriveau, Historic Preservation Specialist Will McCaw, GIS Community Planner Hansel Rodriguez, Finance Director Ted Beason, Assistant Finance Director Jessica Carter, Public Information Officer Kevin Weiss and City Clerk Ricardo Quiñones.

Invocation was led by Jackie Boges, Senior Code Support Specialist.

The Pledge of Allegiance followed.

CITIZEN COMMENTS

Caitlyn Hodges, 39772 Meadow Wood Loop, spoke from the floor. Mrs. Hodges addressed Council regarding a code enforcement case involving her home-based cottage food business, Flour and Glow. She described the business as a small-scale operation conducted from her residence and presented a petition from residents and customers supporting the business. Ms. Hodges expressed concerns regarding the City's interpretation of the applicable ordinance and requested that the case be dismissed. In response to questions to Council & Staff, the City Attorney explained that the City was not seeking to prohibit the business but rather require that it operate in a manner consistent with the City's home occupation regulations and Florida's Cottage Food Law. The City Attorney advised that sales conducted from the residence, such as through a garage or other portion of the dwelling, could potentially satisfy the ordinance requirements, whereas the current pickup arrangement from a separate structure presented compliance concerns. Council encouraged Ms. Hodges to meet with Staff to discuss modifications that would allow the business to continue operating while complying with regulations.

Susan Hodges, 41003 River Rd Dade City, FL 33525, spoke in support of Ms. Caitlin Hodges and her cottage food business. She stated that similar cottage food operations exist in other communities and contribute to the small-town character valued by residents. Ms. Hodges encouraged the City to consider the intent of Florida's Cottage Food Law and expressed support for allowing the business to continue operating. She also expressed optimism that a workable solution could be reached through continued discussions between the business owner and City staff.

MAYOR

1. Juneteenth Proclamation

Mayor Monson read a proclamation recognizing June 19, 2026, as Juneteenth Community Celebration Day in the City of Zephyrhills. Following the proclamation, Ms. Kim Miller of Pasco County Adaptive and Inclusive Recreation thanked the City for its recognition and provided an overview of Juneteenth activities planned throughout Pasco County. She encouraged residents to participate in the events and visit Pasco County Parks' resources for additional information.

1. CONSENT ITEMS

Kenneth Burgess pulled item 1.5 and Steven Spina pulled item 1.4 for separate discussions.

1.1 City Council Meeting Minutes - May 11, 2026

1.2 Appointment of Board Members

1.3 Utility Service Agreement 45-2026-05 for MARION SMITH (6823 20th street)

1.6 Rep Services Change Order - Shepard Park Equipment [41-25-19]

Charles Proctor motioned to Approve Consent Items 1.1, 1.2, 1.3, and 1.6. Seconded by Kenneth Burgess. Motion passed unanimously.

1.4 A.D. Morgan Task Order - Indoor Sports Facility [37-25-09]

City Manager Poe explained that the originally installed wall covering had not proven durable enough for the facility's multi-sport use and that the proposed padding would provide greater protection for both participants and the building. The project would be funded through available Penny for Pasco savings from the Depot Park parking lot project.

Steven Spina questioned whether the facility was being utilized for indoor tennis as originally envisioned and expressed concern that the flooring may not adequately support all intended sports. Mr. Poe explained that the flooring was selected as a multi-purpose surface and was specified by the facility operator during construction. Public Works Director Shane LeBlanc noted that concerns regarding playability had primarily involved pickleball rather than tennis. Dr. Spina requested clarification regarding the original funding language and Intended use of the facility.

Charles Proctor motioned to Approve of Item 1.4. Seconded by Kenenth Burgess. Motion passed unanimously.

1.5 Kimley Horn Change Order - Zephyr Park GeoTech Services [37-24-07]

It was noted that the comments made were intended for item 1.6, which was previously approved.

Kenneth Burgess raised concerns regarding the cost associated with the purchase and installation of benches and trash receptacles. Mr. Burgess encouraged Staff to closely review pricing and procurement costs on smaller projects, particularly installation, delivery, and contractor markups, to ensure cost effectiveness and maximize value for taxpayers.

Kenneth Burgess motioned to Approve of Item 1.5. Seconded by Charles Proctor. Motion passed unanimously.

2. FINANCE DIRECTOR'S REPORT

2.1 Audit Report

Finance Director Ted Beason introduced the City's FY2025 audit. Julie Fowler of CliftonLarsonAllen presented the results and reported the City received an unmodified (clean) opinion. The General Fund increased approximately $4.8 million and ended the fiscal year with approximately $17 million in unassigned fund balance. Utility, Sanitation, and Airport funds also reported positive financial performance. Two findings were noted involving accounting adjustments and CRA budget documentation procedures. Auditors emphasized neither finding involved missing funds or financial irregularities. Council discussed the City's strong financial position and bond rating. Council discussed the City's strong financial position and recent bond rating success.

Kenenth Burgess motioned to accept the audit report. Seconded by Charles Proctor. Motion passed unanimously.

2.2 FEMA Appeal - Engage Baker Donelson

Finance Director Ted Beason reported FEMA denied approximately S812,000 in debris removal reimbursements related to Hurricane Milton. Staff recommended retaining Baker Donelson to pursue an appeal. Council discussed the appeal strategy and associated costs.

Kenneth Burgess motioned to Authorize Staff to proceed with the FEMA appeal and engage Baker Donelson for legal representation. Seconded by Charles Proctor. Motion passed unanimously.

3. PUBLIC HEARING

3.1 Advisory Board Term Alignment

Second Reading Ordinance No. 1518-26 " **AN ORDINANCE OF THE CITY OF ZEPHYRHILLS, FLORIDA, AMENDING SECTIONS, 30.035, 30.132, 30.162, 30.172, AND 30.180, OF THE CODE OF ORDINANCES TO ALIGN BOARD AND COMMISSION TERMS WITH CITY COUNCIL AND MAYORAL TERMS; INCREASING TERMS OF OFFICE FROM THREE (3) YEARS TO FOUR (4) YEARS FOR THE MUNICIPAL AIRPORT AUTHORITY, PLANNING COMMISSION, PARKS AND RECREATION ADVISORY BOARD, LIBRARY ADVISORY BOARD AND THE HISTORIC PRESERVATION BOARD TO ALIGN THE BOARD AND COMMISSION WITH THE CITY COUNCIL AND MAYORAL TERMS; PROVIDING FOR STAGGERED TERMS, TRANSITION, REPEALER, SEVERABILITY, CODIFICATION, AND AN EFFECTIVE DATE. "**

City Attorney Maggard read Ordinance No. 1518-26 by title.

Council President Spina opened the public hearing. No public comments were received.

Staff explained the ordinance aligns advisory board terms with the City's four-year elected terms while preserving Council's existing appointment and reappointment authority.

Council President Spina then closed the public hearing.

Charles Proctor motioned to Approve Ordinance No. 1518-26 on second reading. Seconded by Kenneth Burgess. Motion passed unanimously.

4. BUSINESS ITEMS

4.1 A.D. Morgan Change Order - Civil Engineering for City Complex [37-25-09]

Public Works Director Shane LeBlanc presented a proposed $509,000 change order for the City Maintenance Complex project. John Lente of CPH explained that delays in obtaining SWFWMD permitting resulted in the project becoming subject to updated stormwater treatment requirements, necessitating modifications to the stormwater system design. Logan Mushro of A.D. Morgan advised that the additional costs would be funded through project buyout savings identified during subcontractor procurement and scope refinement.

Council discussed the cause of the change order, overall project costs, and budget controls. Staff and A.D. Morgan confirmed the project remains fully bought out, within the approved Guaranteed Maximum Price (GMP), and on schedule, with contingency funds still available. Charles Proctor motioned to approve the A.D. Morgan Change Order - Civil Engineering for City Complex. Seconded by Kenneth Burgess. Motion passed unanimously.

4.2 Stormwater Assessment

First Reading Ordinance No. 1522-26 **" AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, PASCO COUNTY, FLORIDA, CREATING A STORMWATER UTILITY AND A CITYWIDE STORMWATER NON-AD VALOREM ASSESSMENT BY CREATING CHAPTER 57 OF THE CODE OF ORDINANCES; RELATING TO THE PROVISION OF STORMWATER MANAGEMENT SERVICES; DETERMINING THAT CERTAIN REAL PROPERTY WILL BE SPECIALLY BENEFITED; ESTABLISHING THE METHOD OF IMPOSING AND COLLECTING THE ASSESSMENT; PROVIDING FOR CODIFICATION; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE. "**

The City Attorney read Ordinance No. 1522-26 by title

Christina Conchilla of Raftelis presented the proposed stormwater assessment credit program and explained that credits would be available to properties meeting current stormwater management standards that reduce demand on the City's system. Council discussed eligibility, fairness to older developments, and administration of the credit program. Staff noted the credits would have a limited impact on overall assessment revenues and are intended to encourage compliance with modern stormwater standards verified through SWFWMD permitting records.

Kenneth Burgess motioned to approve Ordinance No. 1522-26 on first reading. Seconded by Charles Proctor. Motion passed unanimously.

4.3 Data Center Moratorium

First Reading Ordinance No. 1523-26 **" AN ORDINANCE OF THE CITY OF ZEPHYRHILLS, FLORIDA ESTABLISHING A TEMPORARY MORATORIUM ON THE ACCEPTANCE, PROCESSING, REVIEW, APPROVAL, OR ISSUANCE OF BUILDING PERMITS, REZONINGS, SITE PLANS, CONDITIONAL USE APPROVALS, VARIANCES, COMPREHENSIVE PLAN AMENDMENTS, OR OTHER CITY APPROVALS FOR THE CONSTRUCTION, ESTABLISHMENT, EXPANSION, OR INTENSIFICATION OF DATA CENTERS, DATA CENTER FACILITIES, LARGE-SCALE DATA CENTERS, AND LARGE LOAD CUSTOMER FACILITIES WITHIN THE MUNICIPAL LIMITS OF CITY OF ZEPHYRHILLS; PROVIDING LEGISLATIVE FINDINGS OF FACT; PROVIDING DEFINITIONS; DIRECTING CITY STAFF TO REVIEW AND PREPARE LAND DEVELOPMENT CODE AND RELATED REGULATORY AMENDMENTS; PROVIDING FOR SEVERABILITY, REPEALER, AND AN EFFECTIVE DATE. "**

The City Attorney read Ordinance No. 1523-26 by title.

Planning Director Rodney Corriveau explained that data centers present unique considerations not currently addressed in the City's land development regulations, including significant demands on electrical infrastructure, water supply, wastewater capacity, stormwater systems, emergency services, and overall utility resources. He stated that the purpose of the moratorium is to provide Staff sufficient time to evaluate potential impacts and develop appropriate regulations before such facilities are considered. Staff also noted that several Florida jurisdictions have recently adopted similar moratoriums. Corriveau noted that in some communities, data centers had been approved without significant public awareness, resulting in community concerns after the fact.

Laura Strange, 39433 Ringwood Ave, spoke from the floor regarding the substantial water consumption associated with data centers, the potential impact on local water resources, and other operational considerations such as cooling requirements and utility demands.

Kenneth Burgess motioned to approve Ordinance No. 1523-26 on first reading. Seconded by Charles Proctor. Motion passed unanimously.

4.4 Food Truck Ordinance

First Reading Ordinance No. 1524-26 **" AN ORDINANCE OF THE CITY OF ZEPHYRHILLS, FLORIDA, AMENDING THE CITY OF ZEPHYRHILLS CODE OF ORDINANCES, REPEALING AND REPLACING SECTION 121: MOBILE FOOD VENDING; AMENDING THE REGULATIONS OF MOBILE FOOD OPERATIONS; ESTABLISHING REGULATIONS FOR TEMPORARY OR AUXILIARY KITCHENS ASSOCIATED WITH BARS OR TAVERNS; PROVIDING FOR APPLICABILITY, REPEALER, SEVERABILITY, INCLUSION IN THE CODE, SCRIVENER'S ERROR AND AN EFFECTIVE DATE. "**

The City Attorney read Ordinance No. 1524-26 by title.

Planning Director Rodney Corriveau presented the proposed revisions to the City's mobile food vending regulations. The ordinance expands opportunities for food trucks while addressing temporary kitchen operations associated with bars and taverns. Council discussed balancing food truck operations with the interests of existing brick-and-mortar businesses.

Kenneth Burgess motioned to Approve Ordinance No. 1524-26 on first reading. Seconded by Charles Proctor. Motion passed unanimously.

4.5 Industrial Sign Ordinance

First Reading Ordinance 1525-26 **"AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA CREATING SECTION 8.17.OO OF THE LAND DEVELOPMENT CODE, LARGE-FORMAT INDUSTRIAL BUILDING SIGNAGE; PROVIDING FOR REPEALER, CODIFICATION, SEVERABILITY, AND AN EFFECTIVE DATE. "**

The City Attorney read Ordinance No. 1525-26 by title.

Building Official Kalvin Switzer explained that the existing sign regulations did not adequately address the size and scale of newer industrial facilities within the City's industrial corridor, such as MiTek and Bauducco. The proposed ordinance creates a separate signage standard for large-format industrial buildings, allowing sign sizes to be proportionate to larger building facades while maintaining appropriate development standards.

Council members noted that the amendment addresses concerns raised during previous discussions regarding signage limitations for large industrial users.

Charles Proctor motioned to approve Ordinance No. 1525-26 on first reading. Seconded by Kenneth Burgess. Motion passed unanimously.

5. PLANNING DIRECTOR'S REPORT

Planning Director Rodney Corriveau introduced GIS Community Planner Hansel Rodriguez and provided an update on the City's traffic hotspot initiative.

Corriveau reported progress on several priority projects including Greenslope Drive/Daughtry Road, Fort King Road/Eiland Boulevard, Pretty Pond Road/Wire Road, Pretty Pond Road/U.S. 301, Chancey Road/Gall Boulevard lighting improvements, Chancey Road/Wire Road reopening, U.S. 301/Daughtry Road, Geiger Road/U.S. 301, 8th Street right-of-way corrections, Chancey Road/Copeland Drive, and future safety improvements near St. Joseph's Hospital.

Corriveau advised that construction has begun on the first phase of new GoPasco bus stop pads and noted staff is coordinating with GoPasco on Zephyrhills-branded shelters.

Council thanked staff for their work and discussed additional funding opportunities for transportation improvements.

Laura Strange, 39433 Ringwood Ave., spoke regarding traffic congestion, roadway capacity, and emergency evacuation concerns associated with continued growth. Corriveau responded that transportation connectivity remains a primary consideration during development review and highlighted several planned roadway improvements.

6. CITY MANAGER'S REPORT

6.1 Language Differential

City Manager Poe presented a proposed amendment to the City's personnel policies establishing a Foreign Language Proficiency Incentive for eligible employees. The program would provide a $75 monthly incentive to employees who demonstrate at least 70 percent proficiency in a language determined by the City to be beneficial for serving residents and customers.

Mr. Poe noted that the proposal mirrors provisions already included in the City's union agreements and is intended to recognize employees who assist the public by communicating in

languages other than English. Council discussed the growing number of residents seeking assistance in Spanish and briefly discussed other languages that may be beneficial to City operations in the future.

Charles Proctor motioned to approve the addition of Section 29 to the City's personnel policies establishing a Foreign Language Proficiency Incentive. Seconded by Kenneth Burgess. Motion passed unanimously.

6.2 Pasco County Parks Municipal Service Taxing Unit (MSTU) - Discussion

City Manager Poe presented a discussion item regarding Pasco County's request for municipalities to participate in a proposed Parks Municipal Services Taxing Unit (MSTU). He explained that Pasco County is moving forward with an increase to the existing Fire Rescue MSTU and is evaluating the creation of a separate parks MSTU. Mr. Poe expressed concern about the City's limited remaining capacity under Florida's 10-mill cap, noting that the City's current millage rate combined with the existing and proposed Fire Rescue MSTU assessments would leave little flexibility for future City needs. He also cited uncertainty surrounding potential statewide property tax reforms.

Council discussed the proposal and expressed concerns regarding the additional tax burden on residents, the City's existing investment in parks and recreation facilities, and the significant role Zephyrhills parks already play in serving residents throughout the surrounding area. Council members noted that the City has made substantial investments in facilities such as Zephyr Park and Hercules Park and questioned whether participation in the countywide parks MSTU would provide sufficient benefit to City residents. Following discussion, Council indicated there was no consensus to pursue participation in the proposed Parks MSTU. Staff was directed not to bring the item back for further consideration.

6.3 Residential Moratorium - Discussion

City Manager Poe reviewed the status of the residential moratorium and advised that Jones Edmunds would present updated water capacity information at the next meeting. Council discussed available water capacity, development projects currently in the queue, reservation of capacity through capacity fees, and the need to balance residential growth with future economic development opportunities.

Rod Neil, 6220 Fort King Road, Suite A, spoke regarding groundwater availability and encouraged Council to consider impacts on private wells.

Council expressed support for a cautious approach and agreed additional information should be reviewed before considering future action.

MAYOR ANNOUNCEMENTS

Mayor Monson thanked City staff for bringing forward the proposed data center moratorium, emphasizing the importance of carefully evaluating potential impacts on the City's water resources before allowing such development.

Mayor Monson raised concerns regarding shade availability and disruptive behavior at Hercules Park. Staff discussed ongoing efforts to evaluate long-term shade solutions and potential security enhancements. City Manager Poe advised that staff, Information Technology personnel, and the Police Department are evaluating potential security measures and other options to improve safety and enhance the user experience at the park.

CITY MANAGER ANNOUNCEMENTS

City Manager Poe reported that the City's Summer Recreation Program began on June 8, 2026, with approximately 150 youth participating in camp and tennis activities at the Mouratoglou Tennis Center.

Mr. Poe reminded Council that SummerFest and the City's annual fireworks celebration will be held on June 27, 2026.

Mr. Poe shared he would be attending a Public Risk Management of Florida (PRM) conference Wednesday through Friday this week.

Additionally, Mr. Poe referenced the agreement for the Tennis Center facility and stated that the agreement provides for the design and construction of an indoor tennis and athletic facility. Council briefly discussed the facility's intended use and the language contained within the agreement.

Lastly, Mr. Poe reviewed the upcoming budget calendar and requested that the July budget workshop be rescheduled from July 20, 2026. Council reached consensus to conduct the budget workshop on July 13, 2026, in conjunction with the regular City Council meeting.

CITY ATTORNEY ANNOUNCEMENTS - NONE

CITY COUNCIL COMMENTS

Kenneth Burgess humorously remarked that, following the holiday break, Council appeared somewhat out of practice and noted the meeting had been unusually lengthy.

Charles Proctor thanked City staff for their continued work and dedication.

Steven Spina requested an update on the status of the new park entrance signs. Staff explained that delays related to design and fabrication have pushed installation later than anticipated, although efforts are underway to expedite the project. Spina expressed disappointment with the delay and emphasized the importance of completing the signs as park improvements continue throughout the City. Spina also complimented the City's new recycling carts and noted the positive feedback received from residents.

7. **NOTED ITEMS**

7.1 C.W. Roberts Deductive Change Order - Runway 1-19

The meeting was adjourned at 8:41 PM
Submitted by Ricardo Quiñones

City Council Meeting
June 22, 2026

Action Item

CONSENT ITEMS 1.2

Piggyback Agreement **41-2026-12** with Killebrew Inc. for As Needed Utility Construction Services

Issue:
The Utilities Department is planning to have some projects which Killebrew is highly qualified to complete.

Background:
There are future projects for the Utilities Department which we need a reliable contractor to perform. If engineering is required, they do this as a service also.

Attachment(s):
1. 41-2026-12 Piggyback Agreement with Killebrew (39844378v2)_signed

Fiscal Impact:
No fiscal impact. Just an agreement.

Staff Recommendation:
It is the staff's recommendation to the City Council to approve this item as presented.

AGREEMENT TO PIGGYBACK A CONTRACT FOR UTILITY CONSTRUCTION SERVICES BID BY ANOTHER GOVERNMENTAL ENTITY

City Contract No. 41-2026-12

WHEREAS, Killebrew, Inc., a Florida profit corporation ("**Contractor**"), with principal offices at 2830 Winter Lake Road, Lakeland, Florida 33803, entered into an agreement with **Polk County, Florida** ("**Polk County**"), identified as Polk County Contract No. 2024-084, awarded pursuant to Polk County Request for Proposals No. 24-246 ("RFP 24-246") for Utilities Construction Services (collectively, the "**Source Contract**"); and

WHEREAS, the City of Zephyrhills, a Florida municipal corporation, with principal offices at 5335 8th Street, Zephyrhills, Florida 33542 ("**City**"), has the legal authority under Section 287.012, Florida Statutes, its purchasing policies, and Zephyrhills City Code to "piggyback" onto a contract competitively procured by another governmental entity when seeking to utilize the same or substantially similar services provided for in such contract; and

WHEREAS, Polk County competitively solicited and procured utilities construction services through RFP 24-246, and the Source Contract provides for indefinite-quantity, indefinite-delivery, as-needed planned and emergency utility-related construction projects; and

WHEREAS, Contractor, by letter dated April 6, 2026 (the "**Extension Letter**"), has expressly extended the use of all prices, conditions, and terms of the Source Contract for use by the City of Zephyrhills; and

WHEREAS, Polk County, through its Procurement Division, has stated that it has no objections or opinion with the Source Contract being utilized by another municipality in accordance with applicable state law; and

WHEREAS, the City desires to piggyback the Source Contract for ***utility construction services only***, limited to the scope, prices, terms, and conditions competitively procured by Polk County and extended by Contractor, and does not intend to procure professional services governed by Section 287.055, Florida Statutes, through this Agreement; and

NOW THEREFORE, having found it to be in the public interest, the City and Contractor agree as follows:

1. **Incorporation of Source Contract.** The following documents are incorporated into this Agreement by reference and constitute the governing scope, price, and terms for all work performed hereunder (collectively, the **"Incorporated Documents"**):

    a. Polk County RFP 24-246, including all addenda;

    b. Polk County Contract No. 2024-084, including all exhibits, amendments, and the Fee Schedule / Cost Sheet (Exhibit B thereto);

c. Contractor's Extension Letter dated April 6, 2026.

The City accepts the same prices, terms, and conditions extended by Contractor in the Extension Letter. No material expansion of scope, price, or terms beyond those contained in the Source Contract is authorized under this Agreement.

2. **Scope of Services; Construction Services Only.** Contractor shall provide utility construction services to the City on an as-needed, non-exclusive, indefinite-quantity basis, limited to services within the scope, prices, terms, and conditions competitively procured by Polk County in RFP 24-246 and extended by Contractor. Services authorized under this Agreement are limited to utility construction services, labor, materials, equipment, and contractor services, including but not limited to:

   a. Water main repair and replacement (ruptured mains, service laterals, meter sets, wet taps, line stops);

   b. Force main and reclaimed water main construction and repair;

   c. Gravity sewer repair, manhole replacement, and pipe bursting;

   d. Concrete and asphalt repair, sidewalk and curb restoration;

   e. Cross drains and side drains, including culvert pipe replacement;

   f. Horizontal directional drilling, jack and bore operations;

   g. Maintenance of traffic control plan setup and maintenance (construction-level only);

   h. Site restoration, clearing, grubbing, grading, erosion control, and right-of-way restoration;

   i. Dewatering and bypass pumping;

   j. System testing, inspection, and disinfection;

   k. Treatment facility repair, replacement, modification, or demolition (construction only);

   l. Metering stations, pressure booster stations, and pump stations (construction and installation only);

   m. Roadway restoration, including storm sewer, subgrade, base, paving, striping, curb, and gutter; and

   n. Such other utility-related construction services as are within the Source Contract scope and authorized by Task Authorization.

All services are subject to authorization through individual written Task Authorizations issued by the City. The City makes no guarantee of any minimum quantity of work or minimum compensation. This Agreement is non-exclusive.

3. **Exclusion of CCNA Professional Services.** Notwithstanding anything in Polk County RFP 24-246, Polk County Contract 2024-084, the Fee Schedule, any Task Authorization, or any incorporated document to the contrary, **this Agreement does not procure and Contractor is not authorized to provide professional services governed by Section 287.055, Florida Statutes**, including professional engineering, architecture, landscape architecture, registered surveying and mapping, or design-build services. The City's use of Polk County RFP 24-246/Contract 2024-084 is limited to utility construction services, labor, materials, equipment, and contractor services that are within the scope, prices, terms, and conditions competitively procured by Polk County and extended by Contractor to the City. Any professional services required for a Project, including signed or sealed plans, engineering design, surveying, mapping, record drawing certification, design criteria packages, or design-build services, shall be procured separately by the City in accordance with Section 287.055, Florida Statutes, or performed by professionals separately retained or authorized by the City. *See Exhibit A* for a detailed list of excluded professional services categories.

4. **No Expansion of Source Contract.** Consistent with applicable Florida procurement law, including *Accela, Inc. v. Sarasota County*, 993 So. 2d 1035 (Fla. 2d DCA 2008), this Agreement is not intended to, and shall not be used to, negotiate or procure materially different services, pricing, or a materially expanded scope beyond the Source Contract. All work must remain within the four corners of the Source Contract scope and the prices, terms, and conditions extended by Contractor. Any work or services outside the Source Contract scope shall require separate written procurement authorization by the City in accordance with applicable law.

5. **Term and Expiration.** This Agreement shall be effective as of June 22, 2026 and shall be coterminous with the Source Contract. This Agreement may not extend beyond the term of the Source Contract, including exercised renewals. Any Task Authorization properly issued prior to expiration of this Agreement may survive solely to complete the authorized construction work, subject to applicable law and the annual appropriations provision of this Agreement.

6. **Compensation.** Compensation shall be based on the Polk County Contract Exhibit B / Fee Schedule / Cost Sheet as extended by Contractor to the City. Compensation for each Task Authorization may be established as a not-to-exceed or lump-sum amount, as specified therein. No material deviation from the Source Contract pricing is authorized. Out-of-scope work shall not be performed without prior written City authorization.

7. **Payment.** The City shall have forty-five (45) days from the date of a correct, fully documented invoice to provide payment pursuant to Section 218.74, Florida Statutes (Local Government Prompt Payment Act), unless the Prompt Payment Act or City Code requires otherwise.

8. **Governing Law; Venue.** This Agreement shall be governed by and construed under the laws of the State of Florida. Venue for any litigation arising from this Agreement shall be in Dade City, Pasco County, Florida, in the Circuit Court of the Sixth Judicial Circuit (or if the Circuit Court does not have jurisdiction, then in the court sitting in Pasco County having subject-matter jurisdiction).

9. **Public Records. IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 813-780-0000, EXT. 3543 OR CITYCLERK@CI.ZEPHYRHILLS.FL.US OR CITY CLERK, CITY OF ZEPHYRHILLS, 5335 EIGHTH STREET, ZEPHYRHILLS, FLORIDA 33542.**

   Contractor shall comply with all requirements of Chapter 119, Florida Statutes, including: (a) keeping and maintaining public records required by the City; (b) upon request, providing the City with copies of requested records or allowing inspection at a cost not exceeding that provided by law; (c) ensuring that exempt or confidential records are not disclosed except as authorized by law; and (d) upon completion of this Agreement, transferring all public records to the City at no cost or retaining them in compliance with all applicable retention requirements.

10. **Indemnification.** Contractor shall defend, indemnify, and hold harmless the City of Zephyrhills and all of the City's officers, agents, and employees from and against all claims, liability, loss, and expense, including reasonable costs, collection expenses, attorneys' fees, and court costs which may arise because of the negligence (whether active or passive), misconduct, or other fault, in whole or in part (whether joint, concurrent, or contributing), of Contractor, its officers, agents, or employees in performance or non-performance of its obligations under this Agreement. Contractor recognizes the broad nature of this indemnification and hold harmless clause, as well as the provision of a legal defense to the City when necessary, and voluntarily makes this covenant and expressly acknowledges the receipt of good and valuable consideration provided by the City in support of these indemnification, legal defense, and hold harmless obligations in accordance with the laws of the State of Florida. This clause shall survive termination of this Agreement. Compliance with insurance requirements shall not relieve Contractor of its obligations under this Section. Nothing herein shall be construed to extend the City's liability beyond that provided in Section 768.28, Florida Statutes.

11. **Insurance.** Contractor shall, at its sole cost and expense, procure and maintain throughout the term of this Agreement insurance coverages at least equal to those required by the Source Contract, and in no event less than:

    a. Commercial General Liability: $1,000,000 per occurrence / $2,000,000 aggregate;

    b. Automobile Liability: $1,000,000 combined single limit;

    c. Workers' Compensation: Statutory limits, with Employer's Liability of $1,000,000/$1,000,000/$1,000,000.

    Contractor shall provide endorsed certificates of insurance naming the City of Zephyrhills as additional insured. Certificates must accompany this executed Agreement and must be provided prior to commencement of any work. Said insurance shall be primary and non-contributory over any other insurance or self-insurance available to the City.

12. **Builders' Risk.** If work authorized under this Agreement includes: (1) construction of a new above-ground structure or structures; (2) any addition(s), improvement(s), alteration(s), or repair(s) to an existing above-ground structure or structures; or (3) the installation of machinery or equipment into an existing structure, the Contractor shall provide, in a policy acceptable to the City, "all risk" (i.e. Special Form) property insurance on any such construction, additions, machinery, or equipment. The amount of insurance shall be no less than the estimated replacement value at the time of the City's final acceptance of such new structures, addition(s), improvement(s), alteration(s), repair(s), machinery, or equipment. The coverage shall not be subject to any restriction with respect to occupancy or use by the City and, subject to thirty (30) days' prior written notice to the City, shall remain in full effect until final acceptance by the City. In addition, the City and Contractor's subcontractors of any tier shall be additional insureds on this policy. The insurance shall include a deductible no greater than one percent (1%) of the Task Authorization amount, or $25,000, whichever is smaller, for which the Contractor shall be responsible. The risk of loss, whether insured or not, shall remain with the Contractor until final acceptance. Upon request, Contractor shall furnish to the City complete copies of the insurance policy.

13. **Public Construction Bonds.** For any Task Authorization where required by Chapter 255 or Section 255.05, Florida Statutes, the Source Contract, or applicable City policy, Contractor shall furnish a public construction bond (payment and performance bond) in the amount specified in the Task Authorization or as required by law, issued by a surety authorized to do business in Florida and acceptable to the City, prior to commencement of work.

14. **Applicable Law; Procurement Compliance.** This Agreement is subject to Sections 255.20 and 287.055, Florida Statutes, the City's procurement code, and all applicable

Florida law. The City shall maintain a procurement file reflecting compliance with applicable piggyback procurement requirements, including identification of the source public entity, the vendor's extension of the same terms and conditions, a determination that the originating procurement was competitive and adequate, and confirmation that the scope, prices, and terms are substantially the same as the Source Contract.

15. **Notices.** All notices and communications under this Agreement shall be in writing and deemed given when delivered personally, by certified mail (return receipt requested), or by nationally recognized overnight courier, addressed as follows:

To City:
City of Zephyrhills
Attn: City Manager
5335 8th Street
Zephyrhills, Florida 33542
Email: wpoe@ci.zephyrhills.fl.us

With copy to:
Matthew E. Maggard, Esq.
Shumaker, Loop & Kendrick, LLP
13134 US Highway 301
Dade City, Florida 33525
Email: mmaggard@shumaker.com

To Contractor:
Killebrew, Inc.
Attn: William Thomas, IV / Ian Lund
2830 Winter Lake Road
Lakeland, Florida 33803
(Mailing: P.O. Box 6258, Lakeland, FL 33807)
Tel: (863) 701-0273 / Fax: (863) 701-0621

16. **General Provisions.**

c. **Entire Agreement; Amendments.** This Agreement, together with the Incorporated Documents, constitutes the entire agreement of the parties. No modification shall be binding unless in writing and signed by both parties.

d. **Severability.** If any provision is held invalid, the remaining provisions remain in full force and effect.

f. **Annual Appropriations.** The City's obligations are subject to annual budgetary appropriation by the City Council. If funds are not appropriated, the City may terminate this Agreement without penalty upon written notice.

j. **Nondiscrimination.** Contractor shall not discriminate on the basis of race, sex, color, creed, national origin, age, disability, or any other protected classification.

l. **Counterparts; Electronic Signatures.** This Agreement may be executed in counterparts, each constituting an original. Electronic signatures shall have the same force and effect as original signatures to the extent permitted by law.

m. **Termination.** The City may terminate this Agreement for convenience upon thirty (30) days' written notice. In such event, Contractor shall be compensated for services satisfactorily rendered prior to termination. The City may terminate for cause if Contractor fails to cure a default within ten (10) business days after written notice.

n. **Sovereign Immunity.** Nothing in this Agreement shall be deemed a waiver of the City's sovereign immunity beyond the limits of Section 768.28, Florida Statutes.

17. Source Contract Documents. This piggyback shall be based on the arrangements made in the Polk County solicitation. Incorporated documents include:

a. Polk County RFP 24-246 and all addenda;

b. Polk County Contract No. 2024-084 (including Fee Schedule / Cost Sheet);

c. Contractor's Extension Letter dated April 6, 2026.

18. Exhibits. The following Exhibit is attached hereto and incorporated by reference:

Exhibit A — Excluded Professional Services / CCNA Carve-Out

[The remainder of this page is intentionally left blank.]

CONTRACTOR:

KILLEBREW, INC.

6/18/26

_____
Signature Date

Print Name: Ian Lund
Title: VP

WITNESS:

_____
Signature Date

_____
Print Name

CITY OF ZEPHYRHILLS:

_____ _____
Steven F. Spina, Ph.D., Council President Date

ATTEST:

_____ _____
Ricardo Quiñones, City Clerk Date

EXHIBIT A

EXCLUDED PROFESSIONAL SERVICES / CCNA CARVE-OUT

Pursuant to Section 3 of this Agreement, the following categories of professional services are **excluded** from the scope of this Agreement and may **not** be performed by Contractor under any Task Authorization issued hereunder:

(i) Professional engineering services (as defined in Chapter 471, Florida Statutes);

(ii) Plan preparation for permitting where professional engineering design, certification, or signing/sealing is required;

(iii) Professional surveying and mapping (as defined in Chapter 472, Florida Statutes);

(iv) RSM-signed or RSM-certified record documents (as-built drawings requiring professional surveyor certification);

(v) Certified design and/or construction plans requiring professional engineer signature and seal;

(vi) Signed and sealed maintenance-of-traffic plans where professional engineering certification is required by FDOT or applicable permitting authority;

(vii) Design-build services as defined in Section 287.055(1)(h), Florida Statutes; and

(viii) Any other service constituting a "professional service" under Section 287.055, Florida Statutes, or requiring licensure under Chapters 471, 472, 481, or 492, Florida Statutes.

Permitted Non-Professional Construction Support. Notwithstanding the above exclusions, Contractor may provide the following non-professional construction support services to the extent such services do not constitute professional services under Section 287.055, Florida Statutes, are within the Source Contract scope, and do not require professional licensure:

(a) Non-professional administrative permit coordination and contractor submittals;

(b) Construction layout support not requiring professional surveyor licensure;

(c) Construction as-built information and field measurements (not constituting certified record drawings); and

(d) Other construction-level support activities within the Source Contract scope that do not require CCNA-covered professional services.

If any question arises as to whether a particular service constitutes a CCNA-covered professional service, the City Attorney's determination shall control, and the service shall not be performed under this Agreement until such determination has been made.

[END OF EXHIBIT A]

City Council Meeting
June 22, 2026

Action Item

CONSENT ITEMS 1.3

Amendment 3 to DEO Grant Agreement HL258 **(24-24-03)**, Zephyr Park Improvements

Issue:

Amendment 3 to DEO Grant Agreement HL258 **(24-24-03)**, Zephyr Park Improvements

Background:

With Amendment 2 the remaining grant funds were allocated to pre-construction design and engineering costs as we prepare for the rehab of Zephyr Park so we can maximize the total $600,000 in State Appropriation. Unfortunately, the pre-construction design and engineering costs are already being funded by ARPA grant funds and we are not allowed to double-dip on grant funds. After coordinating with the FDEO we have gone back to the original grant construction activities since all the items listed below will be done during the Zephyr Park construction. The City requested an amendment to Grant Agreement No. HL258 as follows:

1. Remove Task #3 - Pre-Construction Design and Engineering Costs
2. Add - Provide Copies of final Design, Engineering and Construction Plans and executed Pre-Construction and Construction contracts
3. Add - Complete Pre-Construction Activities as defined in the executed contract
4. Add - Complete Construction Activities as defined in the executed contract
5. Amend the current agreement period "Expiration Date" (June 30, 2026) to December 31, 2026

Attachment(s):

1. Agreement_HL258-A3_City_of_Zephyrhills

Fiscal Impact:

$600,000 State Appropriation. Remaining Grant Funds available for reimbursement is $518,377.85.

Staff Recommendation:

Staff recommends approval for Amendment 3 to HL258.

Docusign Envelope ID: BD86C429-7C4B-8BFD-80F4-9379D3D1D3AC

AMENDMENT THREE
TO AGREEMENT
BETWEEN
THE FLORIDA DEPARTMENT OF COMMERCE
AND
CITY OF ZEPHYRHILLS

On January 30, 2024, the State of Florida, Department of Commerce ("Commerce") and the City of Zephyrhills ("Grantee"), entered into an Agreement for the City of Zephyrhills Zephyr Lake Park Center Project. Commerce and Grantee are sometimes referred to herein individually as a "Party" and collectively as "the Parties."

WHEREAS, Section D, Modification, of the Agreement provides that any amendment or modification to the Agreement shall be in writing executed by the Parties thereto; and

WHEREAS, the Agreement was previously amended on July 30, 2025, and January 14, 2026; and

WHEREAS, the Parties wish to amend the Agreement as set forth herein;

NOW THEREFORE, in consideration of the mutual covenants and obligations set forth herein, the receipt and sufficiency of which are hereby acknowledged, the Parties agree to the following:

1. Section A, Agreement Period, is hereby deleted in its entirety and is replaced with the following:

A. AGREEMENT PERIOD

This Agreement is effective as of July 1, 2023 (the "Effective Date") and shall continue until the earlier to occur of (a) December 31, 2026 (the "Expiration Date") or (b) the date on which either Party terminates this Agreement (the "Termination Date"). The period of time between the Effective Date and the Expiration Date or Termination is the "Agreement Period."

2. Sections B., Grantee Responsibilities of Attachment 1, Scope of Work, is hereby deleted in its entirety and replaced with the following:

B. GRANTEE RESPONSIBILITIES Grantee shall, in addition to all other requirements set forth in the Agreement and this Scope of Work, perform the following activities:

1) Submit a copy of the following to Commerce's Agreement Manager:
   i. Final Design, Engineering and Construction Plans
   ii. Executed Pre-Construction and Construction Contracts

2) Complete preconstruction activities as defined in the executed pre-construction contract, herein incorporated by reference.

3) Complete construction activities as defined in the executed construction contract, herein incorporated by reference.

Docusign Envelope ID: BD86C429-7C4B-8BFD-80F4-9379D3D1D3AC

4) Complete the following arborist activities
   i. Complete and submit Arborist Report
   ii. Removal and/or pruning of trees in accordance with Arborist Report

5) Provide Commerce copies of all contracts and subcontracts entered into in furtherance of the Project, for which Grantee is seeking reimbursement under this Agreement. All such contracts and subcontracts must be procured in compliance with the Grantee's policies and procedures, and with applicable law.

6) In performing under this Agreement, Grantee shall comply with all applicable laws, rules, and regulations, including but not limited to any applicable requirements of Chapter 255, Florida Statutes.

7) Provide a minimum of One Million Dollars and Zero Cents ($1,000,000.00) in local and other match as match for the Project, by the end of the Agreement period. Grantee shall provide a letter and supporting documentation to Commerce's Agreement Manager which demonstrates that the Grantee met its match requirements, including, but not necessarily limited to: the source of the contribution; the amount of each contribution and provide a summary of all match contributions. Commerce reserves the right to request any additional documentation Commerce deems necessary to support the Grantee's claim that it has met the match requirement. Commerce shall retain five percent (5%) of the total grant award as a financial consequence if Grantee fails to provide proof of match funds.

3. Section D., Deliverables of Attachment 1, Scope of Work, is hereby deleted in its entirety and replaced with the following:

D. DELIVERABLES: Grantee agrees to provide the following services as specified:

Deliverable No. 1 Construction Activities for Zephyr Lake Park		
Tasks	**Minimum Level of Service**	**Financial Consequences**
Grantee shall complete the activities in accordance with Section B. of this Scope of Work.	Grantee may request reimbursement upon completion of a minimum of one (1) activity in accordance with Section B. of this Scope of Work as evidenced by submission of the following documentation: a. Completed AIA Forms G702 and G703 or their substantive equivalents, signed by a licensed professional certifying to the percentage of Project completion; b. Photographs of Project in progress (if applicable); and	Failure to complete the Minimum Level of Service will result in non-payment.

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	c. Invoice package in accordance with Section F. of this Scope of Work.	
		Deliverable 1 - $600,000.00
TOTAL AWARD NOT TO EXECEED: $600,000.00		

4. All other terms and conditions of the Agreement remain in full force and effect.

Docusign Envelope ID: BD86C429-7C4B-8BFD-80F4-9379D3D1D3AC

IN WITNESS THEREOF, by signature below, the Parties agree to abide by the terms, conditions, and provisions of Agreement HL258 as amended. This Amendment is effective on the date the last party signs or June 30, 2026, whichever happens earlier.

FLORIDA DEPARTMENT OF COMMERCE	**CITY OF ZEPHYRHILLS**
By _____	**By** _____
Signature	Signature
J. Alex Kelly	**Steven F. Spina, Ph.D.**
Title **Secretary**	**Title** **Council President**
Date _____	**Date** _____

Approved as to form and legal sufficiency, subject only to full and proper execution by the Parties.

OFFICE OF GENERAL COUNSEL

FLORIDA DEPARTMENT OF COMMERCE

By: _____

Approved Date: _____

Ordinance

PUBLIC HEARING 2.1

Stormwater Assessment
Second Reading Ordinance No. 1522-26 **" AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, PASCO COUNTY, FLORIDA, CREATING A STORMWATER UTILITY AND A CITYWIDE STORMWATER NON-AD VALOREM ASSESSMENT BY CREATING CHAPTER 57 OF THE CODE OF ORDINANCES; RELATING TO THE PROVISION OF STORMWATER MANAGEMENT SERVICES; DETERMINING THAT CERTAIN REAL PROPERTY WILL BE SPECIALLY BENEFITED; ESTABLISHING THE METHOD OF IMPOSING AND COLLECTING THE ASSESSMENT; PROVIDING FOR CODIFICATION; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.**

A. Council President opens Public Hearing
B. Council President closes Public Hearing
C. City Council considers Ordinance No. 1522-26 on the Second Reading

Issue:

The City of Zephyrhills owns, operates, and maintains an extensive stormwater management system consisting of drainage infrastructure, conveyance facilities, retention and detention systems, treatment facilities, easements, and associated improvements. These facilities are essential for flood protection, water quality enhancement, regulatory compliance, and the protection of public and private property.

Increasing regulatory requirements, aging infrastructure, recurring maintenance needs, and the need for future capital improvements have created the necessity for a dedicated and sustainable funding source for stormwater management activities. Currently, many stormwater-related expenditures are funded through general governmental revenues, creating competition with other municipal priorities and limiting the City's ability to adequately plan and fund long-term infrastructure improvements.

The proposed ordinance establishes a Stormwater Utility Fund and creates a dedicated user-based funding mechanism whereby developed properties that contribute stormwater runoff and benefit from the City's stormwater system share equitably in the costs of operating, maintaining, repairing, replacing, and improving that system.
On December 8, 2025, the City Council adopted Resolution No. 864-25 expressing the City's intent to utilize the uniform method of collection provided in Section 197.3632, Florida Statutes. The required public hearing was advertised in accordance with state law.

Background:

Ordinance No. 1522-26 creates Chapter 57, "Stormwater Utility and Assessments," within the City's Code of Ordinances and establishes the framework for administration, assessment, collection, and enforcement of stormwater fees.

Key provisions include:
• Creation of a Stormwater Utility administered by the City Manager or designee.
• Establishment of a dedicated Stormwater Utility Fund, ensuring revenues are used solely for stormwater-related purposes.
• Authorization to fund stormwater management services, regulatory compliance activities, maintenance, repair, replacement, capital improvements, and debt service associated with stormwater infrastructure.
• Establishment of a citywide stormwater assessment applicable to developed properties that receive a special benefit from the City's stormwater management system.
• Adoption of an Equivalent Residential Unit (ERU) methodology to equitably apportion costs among benefited properties based on impervious surface area.
• Definition of one ERU as 2,770 square feet of impervious area.
• Assessment of single-family residential properties at one ERU per parcel.
• Assessment of non-single-family residential properties based on measured impervious area divided by the ERU factor.
• Assessment methodology for multi-family residential and single-family attached developments that allocates total development impervious area among dwelling units.
• Provision for stormwater mitigation credits for qualifying privately maintained stormwater systems.
• Establishment of annual procedures for setting assessment rates and adopting the stormwater assessment roll through City Council action.
• Authorization to collect assessments using the uniform non-ad valorem assessment method on the annual property tax bill.
• Creation of administrative appeal procedures for property owners contesting ERU calculations, classifications, or mitigation credit determinations.
• Authorization for the issuance of debt obligations to finance future stormwater capital improvements.

Attachment(s):
1. Ordinance 1522-26 Stormwater Assessment

Fiscal Impact:
The ordinance itself does not establish a specific assessment rate. Assessment rates will be established annually by resolution of the City Council as part of the budget process.

Staff Recommendation:
Staff recommends approval of Ordinance No. 1522-26 establishing Chapter 57 of the City of Zephyrhills Code of Ordinances, creating a Stormwater Utility and authorizing the implementation of a citywide stormwater non-ad valorem assessment program on the second

reading.

ORDINANCE 1522-26

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, PASCO COUNTY, FLORIDA, CREATING A STORMWATER UTILITY AND A CITYWIDE STORMWATER NON-AD VALOREM ASSESSMENT BY CREATING CHAPTER 57 OF THE CODE OF ORDINANCES; RELATING TO THE PROVISION OF STORMWATER MANAGEMENT SERVICES; DETERMINING THAT CERTAIN REAL PROPERTY WILL BE SPECIALLY BENEFITED; ESTABLISHING THE METHOD OF IMPOSING AND COLLECTING THE ASSESSMENT; PROVIDING FOR CODIFICATION; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, pursuant to the authority set forth in Chapter 166, Florida Statutes, including section 166.021, and Section 2(b) of Article VIII of the Constitution of the State of Florida, municipalities have the governmental, corporate, and proprietary power to conduct municipal government, perform municipal functions, and render municipal services and may exercise any power for municipal purposes, except as expressly prohibited by law;

WHEREAS, such statutory and constitutional authorization includes the ability to levy a special assessment for the operation and maintenance of the stormwater conveyance system within the corporate limits of the City of Zephyrhills; and

WHEREAS, Chapter 197, Florida Statutes, Section 197.3632, sets forth the required procedure to be followed by the City to use the uniform method of levying, collecting, and enforcing non-ad valorem assessments; and

WHEREAS, the City Council held a public hearing on the Stormwater Assessment Resolution 864-25 on December 8, 2025, after advertising in the Tampa Bay Times for four (4) consecutive weeks as required by Chapter 197, Florida Statutes, Section 197.3632 (3)(a); and

WHEREAS, Resolution 864-25 satisfies the requirements of Section 197.3632(3)(a), Florida Statutes, by stating the City's intent to collect stormwater assessments using the uniform method of collecting such assessments; and

WHEREAS, by this Ordinance, the City Council desires to establish a stormwater utility and stormwater assessments, which shall be the means of implementing and otherwise carrying out the functional requirements of the City's stormwater management system to construct or acquire stormwater improvements and provide stormwater management services.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Zephyrhills, Florida, that:

SECTION 1: RECITALS.

The Whereas clauses above are true and accurate and are incorporated by reference and made a part of this Ordinance.

SECTION 2: STORMWATER UTILITY AND ASSESSMENTS ORDINANCE.

Chapter 57: Stormwater Utility and Assessments of the Code of Ordinances of the City of Zephyrhills is hereby created:

CHAPTER 57. STORMWATER UTILITY AND ASSESSMENTS

DIVISION 1. INTRODUCTION

Sec. 57-01. Intent and purpose.
(a) This chapter establishes a stormwater utility and provides a uniform, equitable framework to finance stormwater management services and improvements for the protection of the public health, safety, and welfare, including flood risk reduction, protection of public and private property, and the preservation and enhancement of surface-water quality.

(b) Stormwater management services funded under this chapter include planning, permitting, regulatory compliance, operation, maintenance, repair, replacement, and expansion of the City's stormwater management system and related capital improvements necessary to meet adopted levels of service and regulatory requirements.

(c) The stormwater assessment shall be imposed only on Developed Property specially benefited by the availability and provision of stormwater management services and improvements, and shall be fairly and reasonably apportioned among benefited properties using an Equivalent Residential Unit (ERU) methodology, as further provided in this chapter.

(d) Revenues derived under this chapter shall be deposited in the stormwater utility fund and used solely for stormwater purposes authorized herein.

(e) This chapter is adopted pursuant to the City's constitutional and statutory home-rule powers and other applicable law, is supplemental to other City powers and remedies, and shall be liberally construed to effect its purposes. The stormwater assessment is a non-ad valorem special assessment and not a tax

Sec. 57-02. Definitions.
When used in this article, the following terms shall have the following meanings, unless the context clearly requires otherwise:

Annual stormwater assessment resolution means the resolution described in section 57-14 hereof, approving a stormwater assessment roll for a specific fiscal year.

Assessed property means all parcels of real property included on the stormwater assessment roll that receive a special benefit from the stormwater improvements and stormwater management services identified in an annual stormwater assessment resolution.

Capital cost means all or any portion of the expenses that are properly attributable to the acquisition, construction, design, installation, reconstruction, renewal or replacement (including demolition, environmental mitigation and relocation) of stormwater improvements under generally accepted accounting principles and including reimbursement to the City for any moneys advanced for capital cost and interest on any interfund or intrafund loan for such purposes.

Capital Improvement Plan is a strategic plan that outlines the necessary investments in stormwater infrastructure improvements and stormwater management systems to ensure effective control and treatment of stormwater runoff.

County means Pasco County, Florida.

Developed property means property that has been developed with impervious area including, but not limited to, rooftops, sidewalks, walkways, patio areas, driveways, parking lots, storage areas and other surfaces which similarly impact the natural infiltration or runoff patterns, which existed prior to development.

Equivalent residential unit (ERU) means a unit of measure of impervious surface in square feet, which represents the impervious surface area on a typical single-family residential parcel within the service area as a unit of comparison. For the purposes of this definition, one ERU shall equal 2,770 square feet.

Fiscal year means the period commencing on October 1 of each year and continuing through the next succeeding September 30, or such other period as may be prescribed by law as the fiscal year for the City.

Government property means property owned by the United States of America, the State of Florida, a sovereign state or nation, a county, a special district, a municipal corporation, or any of their respective agencies or political subdivisions.

Impervious area means the extent or measurement of impervious surface on a property.

Impervious surface means hard or artificial surface areas which either prevent, alter, reduce, or severely restrict the entry of water into the soil mantle and/or cause water to run off the surface in greater quantities or at an increased rate of flow from that present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, rooftops, sidewalks, walkways, patio areas, driveways, parking lots, storage areas, and other artificial or non-natural surfaces which similarly affect the natural infiltration or runoff patterns which existed prior to development.

Maximum assessment rate means the maximum rate of assessment established by the annual stormwater assessment resolution.

Mitigation credit means a credit applied to a stormwater assessment for a developed property in consideration of the management of the on-site stormwater system operation and maintenance budget as a consequence of the location of a mitigation facility or in consideration of discharge to a City or non-City stormwater system for the conveyance and/or treatment of stormwater or as otherwise required by law.

Multi-family residential (MFR) means all residential developments not classified as single-family attached or single-family residential. This includes all property that contains residential uses such as condominiums, cooperatives and mobile homes where there are multiple residential dwelling units on one parcel.

Non-single family residential (NSFR) means all property that is classified or used for non-residential purposes, including but not limited to commercial, industrial, retail, governmental, and includes all developed real property not classified as single-family attached, single-family residential, or multi-family residential.

Obligations mean a series of bonds or other evidence of indebtedness, including, but not limited to notes, commercial paper, capital leases or any other obligations of the City issued or incurred to finance any portion of the capital cost of a stormwater improvement and secured, in whole or in part, by proceeds of the stormwater improvement assessments.

Ordinance means this stormwater ordinance, as amended from time to time.

Pervious surface means any material that permits full or partial absorption of stormwater into the earth. Pervious surfaces include, but are not limited to, lawns, gardens, uncompacted soils, and approved permeable pavements meeting City specifications. Asphalt and concrete are impervious. Compacted gravel or shell may be treated as impervious where determined by the City's adopted methodology.

Pledged revenue means, as to any series of obligations, (a) the proceeds of such obligations, including investment earnings, (b) proceeds of the stormwater improvement assessments pledged to secure the payment of such obligations, and (c) any other legally available non-ad valorem revenue pledged to secure the payment of such obligations, as specified by the resolution authorizing such obligations.

Private stormwater management system means a manmade facility or structure on the site of a developed property which, by its design and function, retains stormwater on-site and treats and attenuates stormwater from the site.

Project cost means, (a) the capital cost of a stormwater improvement, (b) the transaction cost associated with the obligations to finance the stormwater improvement, (c) interest accruing on such obligations for such period of time as the City deems appropriate, (d) the debt service reserve fund or account, if any, established for the obligations which financed the stormwater improvement, and (e) any other costs or expenses related thereto.

Property appraiser means the Pasco County Property Appraiser.

Single-family attached (SFA) means townhomes and other attached single-family residential dwellings that share one or more common walls and common areas.

Single-family residential (SFR) means a single family detached residence on one parcel, and may include single mobile home residences on one parcel.

Statutory stormwater assessment resolution means the resolution required by Section 197.3632(3)(a), Fla. Stats., stating the City's intent to collect stormwater assessments using the uniform method of collecting such assessments.

Stormwater means the flow of water which results from, and which occurs following, a rainfall event.

Stormwater assessment means either a stormwater improvement assessment, a stormwater service assessment, or both.

Stormwater assessment roll means the special assessment roll created that includes all parcels within the City and their assigned stormwater assessment relating to stormwater improvements or stormwater management services approved by an annual stormwater assessment resolution pursuant to section 57-10 hereof.

Stormwater basin means a part of the earth's surface that contributes stormwater runoff to a drainage system, which consists of diffuse surface waters, together with all natural or artificial tributary surface streams and/or bodies of impounded surface water.

Stormwater improvement means land, capital facilities, equipment, and improvements acquired or provided to detain, retain, convey, or treat stormwater.

Stormwater improvement area means one or more stormwater basins, or any portion or portions thereof, encompassing those parcels of property specially benefited by the purchase, construction, reconstruction or installation of all or any portion of a stormwater improvement that removes, detains, retains or treats, in whole or in part, the stormwater burden expected to be generated by the physical characteristics and use of the assessed property. Each stormwater improvement area will include either, (a) the property, which is hydrologically connected, directly or indirectly, to the stormwater improvement, or (b) all property located within a hydrologically defined area in which the City constructs one or more stormwater improvements to correct existing deficiencies with respect to a specific level of service and provide a consistent level of stormwater management.

Stormwater management service means, (a) stormwater program engineering, (b) stormwater improvements to be acquired or constructed during a single fiscal year without the issuance of any obligations, (c) billing and collection of stormwater assessments, including customer information and educational services and reserves for statutory discounts, (d) maintaining the City's capital facilities for stormwater management, including extraordinary maintenance, and (e) legal, engineering, and other consultant services.

Stormwater service area means the geographic area that encompasses all parcels within the City, which specially benefits from the stormwater management service and all parcels to which stormwater management services are provided.

Stormwater service cost means the estimated amount for any fiscal year of all expenditures and reasonable reserves that are properly attributable to the stormwater management service provided within the stormwater service area under generally accepted accounting principles, including, without limiting the generality of the foregoing, reimbursement to the City for any moneys advanced for the stormwater management service, and interest on any interfund or intrafund loan for such purpose.

Stormwater utility means the entity established by section 57-06 hereof to implement the stormwater management program of the City.

Tax collector means the Pasco County Tax Collector.

Tax roll means the real property ad valorem tax assessment roll maintained by the Property Appraiser for the purpose of the levy and collection of ad valorem taxes.

City means City of Zephyrhills, Florida.

City Clerk means the City Clerk of the City of Zephyrhills, Florida, or such other person as may be duly authorized to act on such person's behalf.

City Manager means the chief administrative officer of the City or such person's designee.

Transaction cost means the costs, fees and expenses incurred by the City in connection with the issuance and sale of any series of obligations, including, but not limited to, (a) rating agency and other financing fees, (b) the fees and disbursements of bond counsel, (c) the underwriters' discount, (d) the fees and disbursements of the City's financial advisor, (e) the costs of preparing or printing the obligations and the documentation supporting issuance of the obligations, (f) the fees payable in respect of any municipal bond insurance policy, and (g) any other costs of a similar nature incurred in connection with issuance of such obligations.

Uniform Assessment Collection Act means F.S. §§ 197.3632 and 197.3635, or any successor statutes authorizing the collection of non-ad valorem assessments on the same bill as ad valorem taxes, and any applicable regulations promulgated thereunder.

Sec. 57-03. Interpretation.
Unless the context indicates otherwise, words importing the singular number include the plural number and vice versa; the terms "hereof," "hereby," "herein," "hereto," "hereunder" and similar terms refer to this article; and the term "hereafter" means after, and the term "heretofore" means before, the effective date of this article. Words of any gender include the correlative words of the other genders unless the context indicates otherwise.

Sec. 57-04. Technical standards; cross-references.
The stormwater utility shall be operated in conformity with Chapter 54 (Stormwater Quality Management) of this Code, the Land Development Code, the City’s NPDES MS4 permit, and applicable rules of FDEP and the Southwest Florida Water Management District.

Sec. 57-05. General findings.
It is hereby ascertained, determined, and declared that:

(a) Pursuant to Article VIII, section 2(b), Florida Constitution, and F.S. § 166.021, municipalities shall have the governmental, corporate, and proprietary powers to enable them to conduct municipal government, perform municipal functions, and render municipal services, and

may exercise any power for municipal purposes, except when expressly prohibited by law. These municipal powers include the adoption of ordinances.

(b) The purpose of this article is to:

(1) Provide procedures and standards for the imposition of stormwater assessments under the constitutional and statutory power of the City;

(2) Authorize a procedure for the funding of stormwater management services, facilities, or programs providing special benefit to assessed property within the stormwater service area;

(3) Authorize a procedure for the funding of stormwater improvements providing special benefit to assessed property within the stormwater service area; and

(4) Legislatively determine the special benefit provided to assessed property from the stormwater utility.

(c) The Florida Legislature has mandated that local governments in the State of Florida, including the City, have the responsibility for developing mutually compatible stormwater management programs consistent with the rules and regulations of the Florida Department of Environmental Protection, the Federal Clean Water Act, the water management districts, and the stormwater management programs established and maintained by other local governments.

(d) The stormwater assessments imposed hereby are consistent with the authority granted in F.S. § 403.0893. This statutory provision is additional and supplemental authority to the constitutional and statutory powers granted to a municipality.

(e) The City maintains a system of stormwater and surface water management facilities, including, but not limited to inlets, conduits, manholes, channels, ditches, drainage easements, retention and detention basins, infiltration facilities, treatment ponds, pump stations and other components as well as natural waterways.

(f) Those elements of the City stormwater and surface water management system that provide for the collection, storage, treatment, and conveyance of stormwater are of benefit and provide services to all developed property within the City.

(g) The cost of maintaining the stormwater management system and providing stormwater management services in accordance with existing permits and the financing of existing and future repairs, replacements, improvements, and extension thereof should, to the extent practicable, be allocated in relationship to the benefits enjoyed, services received, or burden caused therefrom.

(h) The public health, safety, and welfare are adversely affected by poor water quality and flooding resulting from inadequate stormwater management practices. All developed property either uses the stormwater management system or benefits from the provision and operation of the stormwater management services.

DIVISION 2. STORMWATER UTILITY

Sec. 57-06. Stormwater utility.
There is hereby established a stormwater utility, which shall be the means of implementing and otherwise carrying out the functional requirements of the City's stormwater management system to construct or acquire stormwater improvements and provide stormwater management services. The stormwater utility shall provide for the preparation of stormwater studies and the implementation of the stormwater utility and the repair, replacement, improvement, and enhancement, of the City's capital facilities for stormwater management. The stormwater utility shall place emphasis on the achievement of maximum efficiency through identifying programs and funding sources which are complementary to other regional, state, and federal programs. The City Manager or their designee shall be responsible for administration of the stormwater utility.

Sec. 57-07. Stormwater utility fund.
The City Council intends to fund the cost of providing stormwater management services and capital facilities for stormwater management through stormwater assessments. The City Council has further concluded that periodic determination of revenues earned, and expenses incurred in connection with the provision of capital facilities and equipment for stormwater management will enhance accountability and management control of the City's stormwater utility and will facilitate implementation of the City Council's funding policy for stormwater management. Accordingly, there shall be established a stormwater utility fund. From an accounting perspective, the stormwater utility fund shall be established as an enterprise fund. Proceeds of the stormwater service assessment shall be used for payment of the stormwater service cost; capital cost of stormwater improvements including any required surface restoration or improvements; debt service on obligations issued to finance stormwater improvements; and restoration or repairs to any City-owned property or infrastructure (including but not limited to roads, sidewalks, swales, structures, or hardscape) that is damaged due to improvement, repair or failure of stormwater infrastructure.

DIVISION 3. STORMWATER ASSESSMENTS

Sec. 57-08. Legislative declarations of special benefit.
It is hereby ascertained and declared that the stormwater utility, the stormwater management services, and the stormwater improvements provide a special benefit to the assessed property based upon the following legislative determinations:

(a) The stormwater utility possesses a logical relationship to the use and enjoyment of all developed property by treating and controlling contaminated stormwater generated by improvements constructed on developed property, which resulted in the alteration of such property from its natural state to accommodate such improvements.

(b) The special benefit received by assessed property is the control, management and treatment of the stormwater burden generated by the improvements on developed property in the City.

(c) Substantially all the stormwater burden managed, controlled, and treated by the stormwater utility is generated by developed property and the amount of stormwater generated by property in its natural state that is managed, controlled, and treated by the stormwater utility is inconsequential.

(d) The City is planning to adopt a capital improvement plan, which sets forth drainage goals and objectives that make it necessary and essential to construct improvements and enhancements to the existing stormwater system so the collection, storage, treatment, and conveyance of stormwater within the City adequately protects the health, safety, and welfare of the citizens of the City. The creation and maintenance of the stormwater utility is designed to meet the drainage goals and objectives of the City and other municipal, federal, and state policies mandating stormwater management programs by local governments.

(e) The special benefits provided by the stormwater management services and stormwater improvements to all developed property include, but are not limited to:

(1) the provision of stormwater management services and the availability of stormwater improvements to properly and safely detain, retain, convey, and treat stormwater runoff generated by or discharged from developed property, whether or not the individual parcel is directly connected to or makes direct use of the City's stormwater conveyance infrastructure;

(2) the treatment and management of polluted stormwater runoff contributed by developed property, including the reduction of pollutant loads for total nitrogen, total phosphorus, total suspended solids, and other contaminants that would otherwise degrade receiving water bodies;

(3) the City's compliance with federal and state regulatory mandates, including the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit which protect and preserve the water quality of receiving water bodies for the benefit of all property within the City;

(4) increased safety and improved access to developed property through the management of stormwater on public rights-of-way, roadways, and other public infrastructure;

(5) alleviation of the burdens caused by stormwater runoff and accumulation attendant with the use of developed property, including flood control;

Sec. 57-09. Stormwater assessments and rates.

(a) The City Council is hereby authorized to impose stormwater assessments for service and improvement costs against each developed parcel located within the stormwater service area for services and facilities provided by the stormwater system. These costs will be assessed against developed property located within the stormwater service area at a rate of assessment based upon the special benefit accruing to such property from the stormwater management service provided by the City, measured by the number of ERUs attributable to each parcel.

(b) Notwithstanding the foregoing, if the City Council specifically determines that any portion of the stormwater service area receives a distinct special benefit from any component of the stormwater management service that is materially different in kind or degree from the special benefit received by other portions of the stormwater service area, the stormwater service cost related to such component shall be assessed against the portion of the stormwater service area receiving the distinct special benefit.

(c) Stormwater assessments will be based on total Impervious Area (IA) within a parcel as represented by ERUs. The following rate structure for the stormwater assessment is hereby established:

(d) Basis of apportionment and ERU. One ERU equals 2,770 square feet of impervious area, as established by City Council based on the City's rate and apportionment study adopted by resolution. The City Council may update the ERU value or apportionment methodology by resolution following a public hearing.

(1) Each SFR parcel shall be billed the annual rate for 1 ERU

(2) Total ERUs for all Non-Single Family Residential (NSFR) parcels will be calculated by dividing measured IA by the ERU value then rounding up to the nearest whole number. The NSFR parcel shall then be billed for the total ERU multiplied by the annual rate.

(3) For properties that have common area space, such as Single Family Attached (SFA) and Multi-Family Residential (MFR) parcels, total ERUs are calculated by first summing the measured IA for both common area parcels and dwelling unit parcels in the development and then dividing that by the ERU value and rounding it up the nearest whole number. The total ERUs are then equally allocated to each dwelling unit in the development by dividing total ERUs by the number of dwelling units. The MFR and SFA dwelling unit parcels shall then be billed by the allocated ERUs multiplied by the annual rate.

(d) Stormwater assessments shall apply to all developed properties within the City that are benefited by the system including those properties owned or occupied by a nonexempt governmental or nonprofit entity that are otherwise tax-exempt for ad valorem tax purposes.

(e) Public rights-of-way and bodies of water are exempt from the application of stormwater assessments.

(f) Properties with less than 400 sq ft of impervious area will not be levied a stormwater assessment.

(g) Mitigation credits and exemptions. Developed properties with on-site, privately operated and maintained stormwater management systems with a valid Southwest Florida Water Management District Environmental Resource Permit meeting current design criteria may apply for stormwater mitigation credits. Credits reduce the parcel's calculated ERUs in accordance with

a City credit policy adopted by resolution of the City Council. The City Manager administers the program; amendments to the credit policy shall be adopted by City Council resolution. The current policy is on file with the City Clerk.

Sec. 57-10. Stormwater assessment roll.

(a) The City Manager shall prepare, or direct the preparation of, a preliminary stormwater assessment roll that contains the following information:

(1) A summary description of each parcel of property (conforming to the description contained on the tax roll) subject to the stormwater assessment;

(2) The name of the owner of record of each parcel as shown on the tax roll;

(3) The number of ERUs attributable to each parcel; and

(4) The estimated maximum stormwater assessment to become due in any fiscal year for each ERU and each tax parcel.

(b) Copies of the statutory stormwater assessment resolution and the preliminary stormwater assessment roll shall be on file in the office of the City Clerk and open to public inspection. The foregoing shall not be construed to require that the stormwater assessment roll be in printed form if the amount of the stormwater assessment for each parcel of property can be determined by use of a computer terminal available for use by the public.

Sec. 57-11. Notice by publication.

After filing the stormwater assessment roll in the office of the City Clerk, as required by section 57-10 hereof, the City Clerk shall publish once in a newspaper of general circulation within the City a notice stating that a public hearing of the City Council will be held on a certain day and hour, not earlier than twenty (20) calendar days from such publication, at which hearing the City Council will receive written comments and hear testimony from all interested persons regarding adoption of the statutory stormwater assessment resolution and approval of the stormwater assessment roll. The published notice shall conform to the requirements set forth in the Uniform Assessment Collection Act for purposes of the stormwater assessments.

Sec. 57-12. Notice by mail.

In addition to the published notice required by section 57-11, the City Manager shall provide notice of the proposed stormwater assessments by First Class U.S. Mail to the owner of each parcel of property subject to the stormwater assessments, which notice shall conform to the requirements set forth in the Uniform Assessment Collection Act. Notice shall be mailed at least twenty (20) calendar days prior to the hearing to each property owner at such address, as is shown on the tax roll on the twentieth (20th) calendar day prior to the date of mailing. Notice shall be deemed mailed upon delivery thereof to the possession of the U.S. Postal Service. The City Manager shall provide proof of such notice by affidavit. Failure of the owner to receive such notice due to mistake or inadvertence shall not affect the validity of the stormwater assessment roll, nor release or discharge

any obligation for the payment of a stormwater assessment imposed by the City Council pursuant to this article.

Sec. 57-13. Statutory stormwater assessment resolution.
The adoption of the statutory stormwater assessment resolution by the City Council shall constitute a legislative determination that all parcels assessed derive a special benefit from the services, facilities or programs to be provided or constructed and a legislative determination that the stormwater assessments are equitably and reasonably apportioned among the properties that receive the special benefit. All objections to adoption of the stormwater assessment resolution shall be made in writing and filed with the City Clerk at or before the time or adjourned time of such hearing. The statutory stormwater assessment resolution shall constitute the City's intent to collect stormwater assessments using the uniform method of collection pursuant to Section 197.3632, Florida Statutes and was adopted prior to the effective date of this article.

Sec. 57-14. Annual stormwater assessment resolution.
(a) Annually, during its budget adoption process, the City Council shall determine whether to re-impose a stormwater assessment for each fiscal year following the initial fiscal year. If the City Council elects to re-impose a stormwater assessment, the procedures in this section 57-14 shall be followed.

(b) The City Council shall adopt an annual stormwater assessment resolution for each fiscal year.

(c) The annual stormwater assessment resolution shall:

(1) Establish the rate of assessment to be imposed in the upcoming fiscal year; and

(2) Approve the stormwater assessment roll for the upcoming fiscal year with such adjustments as the City Council deems just and right. The stormwater assessment roll shall be prepared in accordance with the method of apportionment set forward in the annual stormwater assessment resolution.

(d) If the proposed stormwater assessment for any parcel of developed property exceeds the maximum assessment rate established in the annual stormwater assessment resolution, or if a stormwater assessment is imposed against property not previously subject thereto, the City Council shall provide notice to the owner of such property by mail in accordance with section 57-12 hereof and conduct a public hearing prior to adoption of the assessment rate.

Sec. 57-15. Effect of stormwater resolution.
The adoption of the annual stormwater assessment resolution shall be the final adjudication of the issues presented (including, but not limited to, the apportionment methodology, the rate of assessment, the adoption of the stormwater assessment roll and the levy and lien of the stormwater assessments), unless proper steps are initiated in a court of competent jurisdiction to secure relief within twenty (20) days from the date of City Council adoption of the annual stormwater assessment resolution. The stormwater assessments for each fiscal year shall be established upon adoption of the annual stormwater assessment resolution. The stormwater assessment roll, as

approved by the annual stormwater assessment resolution, shall be delivered to the Tax Collector, or such other official as the City Council, by resolution, deems appropriate.

Sec. 57-16. Lien of stormwater assessments.

(a) Upon adoption of the annual stormwater assessment resolution for each fiscal year, stormwater assessments to be collected under the Uniform Assessment Collection Act shall constitute a lien against assessed property equal in rank and dignity with the liens of all state, county, district or municipal taxes and other non-ad valorem assessments. Except as otherwise provided by law, such lien shall be superior in dignity to all other prior liens, titles, and claims, until paid. The lien shall be deemed perfected upon adoption by the City Council of the annual stormwater rate resolution and shall attach to the property included on the stormwater assessment roll as of the prior January 1, the lien date for ad valorem taxes.

(b) Upon adoption of the statutory stormwater assessment resolution, stormwater assessments to be collected under the alternative method of collection provided in section 57-22 hereof, shall constitute a lien against assessed property equal in rank and dignity with the liens of all state, county, district or municipal taxes and other non-ad valorem assessments. Except as otherwise provided by law, such lien shall be superior in dignity to all other prior liens, titles, and claims, until paid. The lien shall be deemed perfected on the date notice thereof is recorded in the official records of Pasco County, Florida.

Sec. 57-17. Authorization for exemptions.

(a) The City Council, in its sole discretion, shall determine whether to provide exemptions from payment of a stormwater assessment for government property, whose use is wholly or partially exempt from ad valorem taxation under Florida law.

(b) The City Council shall designate the funds available to provide any exemptions. The provision of an exemption in any one (1) year shall in no way establish a right or entitlement to such exemption in any subsequent year, and the provision of funds in any year may be limited to the extent funds are available and appropriated by the City Council. Any funds designated for exemptions shall be paid by the City from funds other than those generated by the stormwater assessment.

(c) Any shortfall in the expected stormwater assessment proceeds, due to any exemption from payment of the stormwater assessments required by law or authorized by the City Council, shall be supplemented by any legally available funds, or combination of such funds, and shall not be paid for by proceeds or funds derived from the assessments. In the event a court of competent jurisdiction determines any exemption by the City Council is improper or otherwise adversely affects the validity of the stormwater assessment imposed for any fiscal year, the sole and exclusive remedy shall be the imposition of an assessment upon each affected tax parcel in the amount of the stormwater assessment that would have been otherwise imposed, save for such exemption afforded the tax parcel by the City Council.

DIVISION 4. COLLECTION OF STORMWATER ASSESSMENTS

Sec. 57-18. Method of collection of stormwater assessments.

Unless directed otherwise by the City Council, stormwater assessments shall be collected pursuant to the Uniform Assessment Collection Act, and the City shall comply with all applicable provisions thereof. Any hearing or notice required by this article may be combined with any other hearing or notice required by the Uniform Assessment Collection Act.

Sec. 57-19. Properties subject to the special assessment.

(a) Geographic applicability. The stormwater assessment is levied upon all Developed Property located within the corporate limits of the City of Zephyrhills, Florida, as such corporate limits exist from time to time pursuant to section 2.01, Article II of the City Charter and chapter 171, Florida Statutes.

(b) Official boundary/map. The City's corporate limits are depicted on the official municipal boundary map maintained by the City Clerk. The map, and any amendment thereto, is incorporated by reference for purposes of this section.

(c) Annexations and contractions.

(1) Newly annexed property. Developed Property annexed into the City shall be included on the stormwater assessment roll beginning with the first fiscal year for which the assessment roll can be timely prepared and certified in accordance with section 57-20 and the Uniform Assessment Collection Act (section 197.3632, Florida Statutes). If annexation occurs after the City's certification deadline for a fiscal year, such property shall be included on the next ensuing assessment roll; the City may use the alternative collection method authorized in section 57-22 for the interim period.

(2) Contractions. Property removed from the corporate limits shall not be subject to the stormwater assessment for periods after the effective date of the contraction; assessments previously levied and certified remain due and collectible.

(d) Parcels intersecting the City boundary. If a tax parcel lies partially within and partially outside the City's corporate limits, only the portion within the City is subject to the assessment. The City Manager may prorate ERUs for such a parcel based on a sealed survey, recorded legal description, GIS area calculation, or other competent evidence.

(e) Exemptions and credits. Any exemptions, credits, or adjustments to the stormwater assessment shall be applied as provided in sections 57-17 and 57-09(g).

Sec. 57-20. Annual certification.

By September 15th of each year, the office of the City Manager shall certify to the Pasco County Tax Collector a list of all properties within the City subject to the special assessment at any time subsequent to the last annual certification and prior to the date of the then current certification.

Sec. 57-21. Interlocal agreement.

The City Council is authorized to enter into an interlocal agreement with Pasco County in connection herewith.

Sec. 57-22. Alternative method of collection of stormwater assessments.

In lieu of using the Uniform Assessment Collection Act, the City may elect to collect the stormwater assessment by any other method which is authorized by law or under an alternative collection method provided by this section 57-22.

(a) The City shall provide stormwater assessment bills by First Class U.S. Mail to the owner of each affected parcel of property, other than government property. The bill or accompanying explanatory material shall include:

(1) A brief explanation of the stormwater assessment;
(2) A description of the ERU calculation used to determine the amount of the assessment;
(3) The number of ERUs attributed to the parcel;
(4) The total amount of the parcel's stormwater assessment for the appropriate period;
(5) The location at which payment will be accepted;
(6) The date on which the stormwater assessment is due; and
(7) A statement that the stormwater assessment constitutes a lien against assessed property equal in rank and dignity with the liens of all state, county, district or municipal taxes and other non-ad valorem assessments.

(b) A general notice of the lien resulting from imposition of the stormwater assessments shall be recorded in the official records of Pasco County, Florida. Nothing herein shall be construed to require that individual liens or releases be filed in the official records.

(c) The City shall have the right to appoint or retain an agent to foreclose and collect all delinquent stormwater assessments in the manner provided by law. A stormwater assessment shall become delinquent if it is not paid within thirty (30) days from the date any installment is due. The City or its agent shall notify any property owner who is delinquent in payment of his or her stormwater assessment within sixty (60) days from the date the stormwater assessment was due. Such notice shall state in effect that the City or its agent will initiate a foreclosure action and cause the foreclosure of such property subject to a delinquent stormwater assessment in a method now or hereafter provided by law for foreclosure of mortgages on real estate, or otherwise as provided by law.

(d) All costs, fees, and expenses, including reasonable attorney's fees and title search expenses, related to any foreclosure action as described herein, shall be included in any judgment or decree rendered therein. At the sale pursuant to decree in any such action, the City may be the purchaser to the same extent as an individual person or corporation. The City may join in one foreclosure action the collection of stormwater assessments against any or all property assessed in accordance with the provisions hereof. All delinquent property owners whose property is foreclosed shall be liable for an apportioned amount of reasonable costs and expenses incurred by the City and its agents, including reasonable attorney's fees in collection of such delinquent stormwater assessments and any other costs incurred by the City as a result of such delinquent stormwater assessments including, but not limited to, costs paid for draws on a credit facility, and the same shall be collectible as a part of or in addition to, the costs of the action.

(e) In lieu of foreclosure, any delinquent stormwater assessment and the costs, fees, and expenses attributable thereto, may be collected pursuant to the Uniform Assessment Collection Act; provided, however, that:

(1) Notice is provided to the owner in the manner required by law and this article; and
(2) Any existing lien of record on the affected parcel for the delinquent stormwater assessment is supplanted by the lien resulting from certification of the stormwater assessment roll to the Tax Collector.

Sec. 57-23. Collection of stormwater assessments from government property.

(a) Unless directed otherwise by the City Council, the City may provide stormwater assessment bills by First Class U.S. Mail to the owner of each affected parcel of government property. The bill or accompanying explanatory material shall include:

(1) A brief explanation of the stormwater assessment;
(2) A description of the ERUs or other unit used to determine the amount of the stormwater assessment;
(3) The number of ERUs (or other units used to calculate the amount of the stormwater assessment) attributed to the parcel;
(4) The total amount of the parcel's stormwater assessment for the appropriate period;
(5) The location at which payment will be accepted; and
(6) The date on which the stormwater assessment is due.

(b) A stormwater assessment shall become delinquent if it is not paid within thirty (30) days from the date any installment is due. The City shall notify the owner of any government property that is delinquent in payment of its stormwater assessment within sixty (60) days from the date the stormwater assessment was due. Such notice shall state in effect that the City will initiate a mandamus or other appropriate judicial action to compel payment.

(c) All costs, fees, and expenses, including reasonable attorney's fees and title search expenses, related to any mandamus or other action as described herein shall be included in any judgment or decree rendered therein. All delinquent owners of government property against which a mandamus or other appropriate action is filed shall be liable for an apportioned amount of reasonable costs and expenses incurred by the City, including reasonable attorney's fees in collection of such delinquent stormwater assessments and any other costs incurred by the City as a result of such delinquent stormwater assessments including, but not limited to, costs paid for draws on a credit facility, and the same shall be collectible as a part of or in addition to, the costs of the action.

Sec. 57-24. Responsibility for enforcement.

The City and its agent, if any, shall maintain the duty to enforce the prompt collection of stormwater assessments by the means provided herein. The duties related to collection of stormwater assessments may be enforced at the suit of any holder of obligations in a court of competent jurisdiction by mandamus or other appropriate proceedings or actions.

DIVISION 5. GENERAL PROVISIONS

Sec. 57-25. Issuance of obligations.

(a) Upon adoption of the annual stormwater assessment resolution imposing stormwater improvement assessments, or at any time thereafter, the City Council shall have the power and is hereby authorized to provide by ordinance or resolution, at one time or from time-to-time in series, for the issuance of obligations of the City to fund the project cost thereof, and any amounts to be paid or accrued in connection with issuance of such obligations, including, but not limited to capitalized interest, transaction costs and reserve account deposits.

(b) (b)The principal of and interest on each series of obligations shall be payable from pledged revenue. At the option of the City Council, the City may agree, by ordinance or resolution, to budget and appropriate funds to make up any deficiency in the reserve account established for the obligations or in the payment of the obligations, from other non-ad valorem revenue sources. The City Council may also provide, by ordinance or resolution, for a pledge of or lien upon proceeds of such non-ad valorem revenue sources for the benefit of the holders of the obligations. Any such ordinance or resolution shall determine the nature and extent of any pledge of or lien upon proceeds of such non-ad valorem revenue sources.

Sec. 57-26. Revisions to stormwater assessments.

If any stormwater assessment made under the provisions of this article is either in whole or in part annulled, vacated or set aside by the judgment of any court, or if the City Council is satisfied that any such stormwater assessment is so irregular or defective that the same cannot be enforced or collected, or if the City Council has failed to include any property on the stormwater assessment roll that should have been so included, the City Council may take all necessary steps to impose a new stormwater assessment against any such property, following as nearly as may be practicable, the provisions of this article and in case such second stormwater assessment is annulled, the City Council may obtain and impose other stormwater assessments until a valid stormwater assessment is imposed.

Sec. 57-27. Procedural irregularities.

Any irregularity in the proceedings in connection with the levy of any stormwater assessment under the provisions of this article shall not affect the validity of the same after the approval thereof, and any stormwater assessment as finally approved shall be competent and sufficient evidence that such stormwater assessment was duly levied, that the stormwater assessment was duly made and adopted, and that all other proceedings adequate to such stormwater assessment were duly had, taken and performed as required by this article, and no variance from the directions hereunder shall be held material unless it be clearly shown that the party objecting was materially injured thereby. Notwithstanding the provisions of this section 57-27, any party objecting to a stormwater assessment imposed pursuant to this article must file an objection with a court of competent jurisdiction within the time period prescribed in section 57-15 of this article.

Sec. 57-28. Correction of errors and omissions.

(a) No act of error or omission on the part of the City Council, City Manager, Property Appraiser, Tax Collector, City Clerk, or their respective deputies, employees or designees, shall

operate to release or discharge any obligation for payment of any stormwater assessment imposed by the City Council under the provisions of this article.

(b) The number of ERUs attributed to a parcel of property may be corrected at any time by the Public Works Director or City Manager. Any such correction which reduces a stormwater assessment shall be considered valid from the date on which the stormwater assessment was imposed as allowable by the Tax Collector and shall in no way affect the enforcement of the stormwater assessment imposed under the provisions of this article. Any such correction which increases a stormwater assessment or imposes a stormwater assessment on omitted property shall first require notice to the affected owner by mail in the manner described in section 57-12 hereof, providing the date, time and place that the City Council will consider confirming the correction and offering the owner an opportunity to be heard.

Sec. 57-29. Administrative appeals and adjustments.
A property owner may appeal the ERU calculation, credit determination, or parcel classification within thirty (30) days of the mailing of the initial or revised notice. Appeals shall first be submitted to the Public Works Director; decisions may be further appealed to the City Manager, whose written determination may be appealed to the City Council at a noticed public meeting. Appeals must include competent evidence (e.g., sealed survey, as-built plans, or permit documents). Approved adjustments take effect prospectively unless otherwise required by law.

(c) After the stormwater assessment roll has been delivered to the Tax Collector, any changes, modifications, or corrections thereto shall be made in accordance with the procedures applicable to errors and insolvencies for ad valorem taxes under state law.

Sec. 57-30. Applicability.
This article and the City's authority to impose stormwater assessments pursuant hereto shall be applicable throughout the City.

Sec. 57-31. Alternative method.
This article shall be deemed to provide an additional and alternative method for the doing of the things authorized hereby and shall be regarded as supplemental and additional to powers conferred by other laws and shall not be regarded as in derogation of any powers now existing or which may hereafter come into existence. This article, being necessary for the welfare of the inhabitants of the City, shall be liberally construed to affect the purposes hereof.

SECTION 3. REPEALER.

Any and all ordinances in conflict herewith are hereby repealed to the extent of any conflict.

SECTION 4. SEVERABILITY.

It is declared to be the intent of the City Council of the City of Zephyrhills, Florida, that if any section, subsection, sentence, clause, or provision of this ordinance is held invalid, the

remainder of the ordinance shall be construed as not having continued the said section, subsection, sentence, clause, or provision and shall not be affected by such holding.

SECTION 5. INCLUSION INTO THE CODE.

It is the intent of the City Council that the provisions of this Ordinance shall become and be made a part of the City of Zephyrhills code, and that the sections of this Ordinance may be renumbered or re-lettered and the word "ordinance" may be changed to "section," "article," "regulation," or such other appropriate word or phrase in order to accomplish such intentions.

SECTION 6. EFFECTIVE DATE.

This Ordinance shall become effective upon passage on the second reading and signing by the Mayor.

The foregoing Ordinance No. 1522-26 was read and passed on the first reading in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 8th day of June, 2026.

Attest: _____ _____

Ricardo Quiñones, City Clerk — Steven F. Spina, Council President

The foregoing Ordinance No. 1522-26 was read and passed on the second reading following a public hearing in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 22nd day of June, 2026.

Attest: _____ _____

Ricardo Quiñones, City Clerk — Steven F. Spina, Council President

The foregoing Ordinance No. 1522-26 was approved by me this 22nd day of June, 2026.

_____

Melonie Bahr Monson, Mayor

Approved as to legal form and content

_____

Matthew E. Maggard, City Attorney

Ordinance

PUBLIC HEARING 2.2

Data Center Moratorium
Second Reading Ordinance No. 1523-26 " **AN ORDINANCE OF THE CITY OF ZEPHYRHILLS, FLORIDA ESTABLISHING A TEMPORARY MORATORIUM ON THE ACCEPTANCE, PROCESSING, REVIEW, APPROVAL, OR ISSUANCE OF BUILDING PERMITS, REZONINGS, SITE PLANS, CONDITIONAL USE APPROVALS, VARIANCES, COMPREHENSIVE PLAN AMENDMENTS, OR OTHER CITY APPROVALS FOR THE CONSTRUCTION, ESTABLISHMENT, EXPANSION, OR INTENSIFICATION OF DATA CENTERS, DATA CENTER FACILITIES, LARGE-SCALE DATA CENTERS, AND LARGE LOAD CUSTOMER FACILITIES WITHIN THE MUNICIPAL LIMITS OF CITY OF ZEPHYRHILLS; PROVIDING LEGISLATIVE FINDINGS OF FACT; PROVIDING DEFINITIONS; DIRECTING CITY STAFF TO REVIEW AND PREPARE LAND DEVELOPMENT CODE AND RELATED REGULATORY AMENDMENTS; PROVIDING FOR SEVERABILITY, REPEALER, AND AN EFFECTIVE DATE. "**

A. Council President opens Public Hearing
B. Council President closes Public Hearing
C. City Council considers Ordinance No. 1523-26 on the Second Reading

Issue:

Recent advances in cloud computing, artificial intelligence, machine learning, cryptocurrency mining, and other computationally intensive technologies have resulted in a substantial increase in the development of large-scale data centers throughout Florida and the United States. These facilities often require significant and continuous electrical demand, large quantities of water for cooling, extensive utility infrastructure, backup power generation systems, telecommunications infrastructure, and specialized public safety and emergency response capabilities.

The Florida Legislature recently enacted Chapter 2026-65, Laws of Florida, creating Section 163.326, Florida Statutes, which recognizes that certain land uses, including data centers and other large load customers, present unique planning, infrastructure, and compatibility considerations. The legislation further affirms the authority of local governments to exercise their comprehensive planning and land development responsibilities regarding such facilities.

The City's current Land Development Code does not contain specific standards governing the location, design, operation, infrastructure impacts, utility demands, environmental considerations, or compatibility requirements associated with data centers or other large load customer facilities. As a result, staff believes it is prudent to temporarily pause consideration of such facilities while a comprehensive review of the City's regulations is conducted.

The proposed moratorium is intended to preserve the status quo while the City evaluates the

potential impacts of these facilities and develops appropriate regulatory standards to ensure that future development occurs in a manner consistent with the City's long-term planning objectives and infrastructure capabilities.

Background:

Data centers and large load customer facilities present a variety of unique considerations that are not specifically addressed in the City's existing development regulations.

These considerations include:

- Significant electrical demand and associated utility infrastructure requirements.
- Potential impacts on local and regional power grid capacity.
- Water supply demands associated with cooling systems and related operations.
- Wastewater generation and treatment capacity requirements.
- Stormwater management and site design considerations.
- Noise, lighting, and visual impacts on surrounding properties.
- Emergency response planning and fire protection requirements.
- Backup generation facilities, battery energy storage systems, and fuel storage considerations.
- Land use compatibility with surrounding residential, commercial, and industrial development.
- Long-term environmental and natural resource impacts.

Attachment(s):

1. Ordinance 1523-26 Data Centers Moratorium (39722228v3)
2. Data Center - Business Impact Estimate

Fiscal Impact:

There is no direct fiscal impact associated with adoption of the ordinance.

Staff Recommendation:

Staff recommends approval of Ordinance No. 1523-26 establishing a temporary one-year moratorium on the acceptance, processing, review, approval, and issuance of development approvals for data centers, data center facilities, large-scale data centers, and large load customer facilities within the City of Zephyrhills.

ORDINANCE NO. 1523-26

AN ORDINANCE OF THE CITY OF ZEPHYRHILLS, FLORIDA ESTABLISHING A TEMPORARY MORATORIUM ON THE ACCEPTANCE, PROCESSING, REVIEW, APPROVAL, OR ISSUANCE OF BUILDING PERMITS, REZONINGS, SITE PLANS, CONDITIONAL USE APPROVALS, VARIANCES, COMPREHENSIVE PLAN AMENDMENTS, OR OTHER CITY APPROVALS FOR THE CONSTRUCTION, ESTABLISHMENT, EXPANSION, OR INTENSIFICATION OF DATA CENTERS, DATA CENTER FACILITIES, LARGE-SCALE DATA CENTERS, AND LARGE LOAD CUSTOMER FACILITIES WITHIN THE MUNICIPAL LIMITS OF CITY OF ZEPHYRHILLS; PROVIDING LEGISLATIVE FINDINGS OF FACT; PROVIDING DEFINITIONS; DIRECTING CITY STAFF TO REVIEW AND PREPARE LAND DEVELOPMENT CODE AND RELATED REGULATORY AMENDMENTS; PROVIDING FOR SEVERABILITY, REPEALER, AND AN EFFECTIVE DATE.

WHEREAS, as provided in section 2(b), Article VIII of the Constitution of the State of Florida, and section 166.021(1), Florida Statutes, the City of Zephyrhills, Florida (the "City"), a municipal corporation, enjoys all governmental, corporate, and proprietary powers necessary to conduct municipal government, perform municipal functions, and render municipal services, and may exercise any power for municipal purposes, except as expressly prohibited by law; and

WHEREAS, as provided in section 166.021(3), Florida Statutes, the governing body of each municipality in the state has the power to enact legislation concerning any subject matter upon which the state Legislature may act, except when expressly prohibited by law; and

WHEREAS, section 166.041, Florida Statutes, establishes procedures for the adoption of municipal ordinances; and

WHEREAS, the City Council recognizes the importance of maintaining land development regulations that reflect current law, promote orderly development, protect public infrastructure, and preserve the health, safety, and welfare of the community; and

WHEREAS, data centers, data center facilities, large-scale data centers, and large load customer facilities may require significant and continuous electric demand, water supply, cooling infrastructure, wastewater capacity, stormwater infrastructure, backup generation, fuel storage, fire protection, emergency response planning, security infrastructure, and related public facilities and services; and

WHEREAS, such facilities may present unique planning, infrastructure, compatibility, environmental, utility, and public safety considerations; and

WHEREAS, Chapter 2026-65, Laws of Florida, created section 163.326, Florida Statutes, relating to large load customer considerations; and

WHEREAS, section 163.326, Florida Statutes, recognizes that certain land uses, including facilities with substantial electric or other utility demands, such as data centers and other large load customers, may present unique planning, infrastructure and compatibility considerations; and

WHEREAS, section 163.326, Florida Statutes, further recognizes that local governments maintain authority to exercise powers and responsibilities for comprehensive planning and land development regulation with respect to large load customers; and

WHEREAS, the City Council finds that the City's current Land Development Code and related development regulations do not contain sufficient specific standards addressing the siting, compatibility, infrastructure capacity, water demand, environmental impacts, emergency service impacts, and operational characteristics of data centers, data center facilities, large-scale data centers, and large load customer facilities; and

WHEREAS, the City Council finds that allowing such facilities to be constructed, established, expanded, intensified, approved, or vested before the City has completed appropriate study and regulatory review could create risks to the City's land use planning objectives, infrastructure capacity, water and wastewater systems, electric infrastructure coordination, emergency response capacity, environmental resources, surrounding properties, and long-term community development strategy; and

WHEREAS, Courts have recognized that local governments may enact temporary land use moratoria when such moratoria are intended to preserve the status quo and are rationally related to the government's effort to study and adopt appropriate land development regulations. *See WCI Communities Inc. v. City of Coral Springs*, 885 So. 2d 912 (Fla. 4th DCA 2004); *see Tahoe–Sierra Pres. Council, Inc. v. Tahoe Reg'l Planning Agency,* 535 U.S. 302, 337, 122 S.Ct. 1465, 152 L.Ed.2d 517 (2002); and

WHEREAS, the City Council finds that a temporary moratorium is necessary and appropriate to preserve the status quo while City staff, consultants, and legal counsel review the City's Land Development Code and related regulations and prepare appropriate amendments addressing data centers, data center facilities, large-scale data centers, and large load customer facilities; and

WHEREAS, the City Council finds that a one-year moratorium is reasonable in duration and necessary to allow for staff review, technical analysis, utility coordination, public input, drafting, legal review, notice, public hearings, adoption, and implementation of appropriate regulations; and

WHEREAS, the City Council finds that this Ordinance serves a valid municipal purpose and is necessary to protect the public health, safety and welfare of the residents, businesses, property owners, and visitors of the City of Zephyrhills.

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

Section 1. Authority.

This Ordinance is enacted pursuant to Chapter 163, Florida Statutes, and Chapter 166, Florida Statutes, under the home rule powers of the City.

Section 2. Legislative Findings of Fact.

The foregoing **WHEREAS** clauses are hereby adopted as legislative findings of the City Council of the City of Zephyrhills and are ratified and confirmed as being true and correct and are hereby made a specific part of this Ordinance upon adoption hereof.

Section 3. Intent.

The intent of this Ordinance is to establish a temporary moratorium on the acceptance, processing, review, approval, or issuance of applications and approvals for data centers, data center facilities, large-scale data centers, and large load customer facilities within the municipal limits of the City of Zephyrhills while the City studies and prepares appropriate amendments to its Land Development Code and related regulations.

Section 4. Definitions.

For the purposes of this Ordinance, the following words, terms, and phrases, including their respective derivatives, have the following meanings:

a. *Data Center* means a facility, building, dedicated space within a building, or group of buildings whose primary purpose is to process, store, transmit, distribute, host, or manage digital information, data, or electronic information, and which contains computer systems, servers, networking equipment, telecommunications equipment, data processing systems, digital storage systems, environmental control equipment, cooling systems, power distribution equipment, or other associated components.

b. *Data center facility* means a data center and any accessory, supporting, or related infrastructure, equipment, structure, or use, including but not limited to air handlers, chillers, cooling towers, water cooling systems, water storage facilities, electrical rooms, electrical substations transformers, switchgear, backup generators, battery energy storage systems, fuel storage, security infrastructure, telecommunications infrastructure, and other infrastructure used to support data center operations.

c. *Covered Facility* means any Data Center, Data Center Facility, Large-Scale Data Center, or Large Load Customer Facility, as those terms are defined in this Ordinance.

d. *Large load customer facility* means any facility, use, development, or operation with an anticipated monthly peak electric load of fifty megawatts or more, calculated as the highest average load over a fifteen-minute interval at a single location. A customer, applicant, owner, operator, tenant, affiliate, or related entity may not separate or divide electrical load into multiple smaller connections, meters, accounts, parcels, phases, tenants, buildings, or related facilities at a single location for the purpose of avoiding this definition. The term includes customers or other entities that have entered into a colocation, hosting, leasing, service, or similar agreement at a single location where the aggregate anticipated monthly peak load at that location meets or exceeds fifty megawatts.

e. *Large-scale data center* means a data center, data center facility, or single location containing one or more data center uses that has an anticipated monthly peak electric load of fifty megawatts or more, calculated as the highest average load over a fifteen-minute interval. The term includes customers, tenants, users, operators, or other entities that have entered into colocation, hosting, leasing, services, or similar agreement at a single location where the aggregate anticipated monthly peak load at that location meets or exceeds fifty megawatts.

f. *Development approval* means any rezoning, comprehensive plan amendment, conditional use approval, special exception, variance, site plan approval, development agreement, development order, development permit, building permit, construction plan approval, engineering approval, certificate of concurrency, capacity reservation, utility capacity approval, or other City approval necessary to establish, construct, expand, intensify, or operate a Covered Facility.

g. *Expansion or intensification* means any physical, operational, electrical, utility, site, structural, or equipment related change that increases or is reasonably expected to increase floor area, impervious area, electric load, water demand, wastewater generation, cooling capacity, generator capacity, battery storage capacity, fuel storage capacity, server capacity, operational intensity, or public facility demand associated with a Covered Facility.

h. *Moratorium Period* means the period beginning on the effective date of this Ordinance and ending one year thereafter, unless earlier terminated or extended by ordinance of the City Council.

Section 5. Temporary Moratorium

A temporary moratorium is hereby imposed on the acceptance, processing, review, approval, or issuance of any Development Approval for the establishment, Expansion or Intensification of any Covered Facility within the municipal limits of the City of Zephyrhills.

During the Moratorium Period, City staff shall not accept, process, review, approve, or issue any such application or approval, except as expressly provided in this Ordinance.
Examples of uses or activities covered by this Ordinance include, but are not limited to, cryptocurrency mining, artificial intelligence computing, machine learning computing, high-performance computing, weather modeling, genome sequencing, application hosting, cloud storage, data hosting, data processing, and similar computationally intensive uses.

Section 6. Duration.

The temporary moratorium imposed by section 5 of this Ordinance expires as of the earliest of the following occurrences:

a. Twelve (12) months from the effective date of this Ordinance; or

b. A date before the expiration in subsection 6(a) above, if provided by Ordinance of the City Council of the City of Zephyrhills, Florida.

Section 7. Applicability and Pending Applications.

This Ordinance applies to all new applications submitted on or after the effective date of this Ordinance.

This Ordinance also applies to all pending applications, including any application submitted before the effective date of this Ordinance, regardless of whether the application has been deemed complete.

No applicant shall obtain vested rights by submitting an application on or after the effective date of this Ordinance.

Section 8. Study and Evaluation.

The City Council hereby directs City staff, in consultation with the City Attorney, consultants, utility providers, and other appropriate agencies or stakeholders, to review the City's Land Development Code and related development regulations and prepare proposed amendments addressing the siting, design, review, compatibility, infrastructure capacity, environmental impacts, water resource impacts, emergency service impacts, public safety impacts, and public facility impacts of Covered Facilities. During the Moratorium Period, City staff shall conduct a comprehensive review of the potential impacts associated with Covered Facilities, including but not limited to:

1. Groundwater withdrawal impacts, particularly as they relate to the Floridan Aquifer and regional aquifer management policies.

2. Water supply and wastewater treatment capacity, including potential impacts on municipal and regional water systems.

3. Electrical grid capacity and infrastructure requirements, including consultation with regional electric utilities regarding potential long-term demand impacts.

4. Land use compatibility, including appropriate zoning classifications and development standards for such facilities.

5. Environmental considerations, including impacts on wetlands, coastal ecosystems, noise, lighting, and surrounding land uses.

6. Best practices adopted by other jurisdictions in Florida and throughout the United States for the regulation of data center development.

Section 9. Enforcement.

Any Development Approval issued in violation of this Ordinance shall be null and void. Any person who commences or continues the construction, establishment, Expansion, or Intensification of a Covered Facility in violation of this Ordinance shall be subject to code enforcement proceedings and the penalties provided in the City of Zephyrhills Code of Ordinances. The city may seek injunctive or other equitable relief in a court of competent jurisdiction to enforce this Ordinance. Each day a violation continues shall constitute a separate offense.

Section 10. Notice to Applicants.

Within thirty (30) days after the effective date of this Ordinance, City staff shall provide written notice of this moratorium to all applicants with pending applications for Development

Approvals for Covered Facilities. City staff shall also post notice of this moratorium on the City's official website and at City Hall. Such notice shall include a summary of the moratorium, the anticipated duration, and contact information for the City Clerk.

Section 11. Repealer.

Any and all ordinances in conflict herewith are hereby repealed or suspended to the extent any conflict exists during the Moratorium Period.

Section 12. Severability.

It is declared to be the intent of the City Council of the City of Zephyrhills, Florida, that if any section, subsection, sentence, clause, or provision of this ordinance is held invalid, the remainder of the Ordinance shall be construed as not having continued the said section, subsection, sentence, clause, or provision and shall not be affected by such holding.

Section 13. Effective Date.

This Ordinance shall become effective upon passage on the second reading and signing by the Mayor.

The foregoing Ordinance No. 1523-26 was read and passed on the first reading in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 8th day of June, 2026.

Attest: _____ _____
Ricardo Quiñones, City Clerk
Steven F. Spina
Council President

The foregoing Ordinance No. 1523-26 was read and passed on the second reading, following a public hearing, in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 22nd day of June, 2026.

Attest: _____ _____
Ricardo Quiñones, City Clerk
Steven F. Spina
Council President

The foregoing Ordinance No: 1523-26 was approved by me this 22nd day of June, 2026.

_____
Melonie Bahr Monson, Mayor

Approved as to legal form and content:

_____
Matthew E. Maggard, Esq.
City Attorney

Business Impact Estimate

This form should be included in the agenda packet for the item under which the proposed ordinance is to be considered and must be posted on the City of Zephyrhills website by the time notice of the proposed ordinance is published.

Proposed ordinance's Ordinance Number and Short Title:

Ordinance No. 1523-26 Data Center Moratorium

This Business Impact Estimate is provided in accordance with Section 166.041(4), Florida Statutes.
If one or more boxes are checked below, this means the City of Zephyrhills (City) is of the view that a business impact estimate is not required by state law[1] for the proposed ordinance, but the City is, nevertheless, providing this Business Impact Estimate as a courtesy and to avoid any procedural issues that could impact the enactment of the proposed ordinance. This Business Impact Estimate may be revised following its initial posting.

- ☐ The proposed ordinance is required for compliance with Federal or State law or regulation;
- ☐ The proposed ordinance relates to the issuance or refinancing of debt;
- ☐ The proposed ordinance relates to the adoption of budgets or budget amendments, including revenue sources necessary to fund the budget;
- ☐ The proposed ordinance is required to implement a contract or an agreement, including, but not limited to, any Federal, State, local, or private grant or other financial assistance accepted by the municipal government;
- ☐ The proposed ordinance is an emergency ordinance;
- ☐ The ordinance relates to procurement; or
- ☑ The proposed ordinance is enacted to implement the following:
  a. Part II of Chapter 163, Florida Statutes, relating to growth policy, county and municipal planning, and land development regulation, including zoning, development orders, development agreements and development permits;
  b. Sections 190.005 and 190.046, Florida Statutes, regarding community development districts;
  c. Section 553.73, Florida Statutes, relating to the Florida Building Code; or
  d. Section 633.202, Florida Statutes, relating to the Florida Fire Prevention Code.

[1] See Section 166.041(4)(c), Florida Statutes

In accordance with the provisions of controlling law, even notwithstanding the fact that an exemption noted above may apply, the City of Zephyrhills hereby publishes the following information:

1. Summary of the proposed ordinance (must include a statement of the public purpose, such as serving the public health, safety, morals and welfare):

Due to the nature of the emerging market of large scale data centers, their associated water use, and environmental concerns related to public health, as well as ongoing water use restraints the City is under, staff is recommending enacting a moratorium on acceptance, processing, review, approval, or issuance of any Development Approval on proposed data centers for up to an additional 12 months to ensure that public safety and welfare is not impacted by allowing use in excess of permitted water draw capacity.

2. An estimate of the direct economic impact of the proposed ordinance on private, for-profit business in the City of Zephyrhills, if any:
(a) An estimate of direct compliance costs that businesses may reasonably incur;
(b) Any new charge or fee imposed by the proposed ordinance or for which businesses will be financially responsible; and
(c) An estimate of the City of Zephyrhills regulatory costs, including estimated revenues from any new charges or fees to cover such costs.

No fees, compliance or regulatory costs are anticipated to result from adoption of this ordinance.

3 Good faith estimate of the number of businesses likely to be impacted by the proposed ordinance

0

4 Additional information the governing body deems useful (if any):

None

City Council Meeting
June 22, 2026

Action Item

PUBLIC HEARING 2.3

Food Truck Ordinance
Second Reading Ordinance No. 1524-26 **" AN ORDINANCE OF THE CITY OF ZEPHYRHILLS, FLORIDA, AMENDING THE CITY OF ZEPHYRHILLS CODE OF ORDINANCES, REPEALING AND REPLACING SECTION 121: MOBILE FOOD VENDING; AMENDING THE REGULATIONS OF MOBILE FOOD OPERATIONS; ESTABLISHING REGULATIONS FOR TEMPORARY OR AUXILIARY KITCHENS ASSOCIATED WITH BARS OR TAVERNS; PROVIDING FOR APPLICABILITY, REPEALER, SEVERABILITY, INCLUSION IN THE CODE, SCRIVENER'S ERROR AND AN EFFECTIVE DATE. "**

A. Council President opens Public Hearing
B. Council President closes Public Hearing
C. City Council considers Ordinance No. 1524-26 on the Second Reading

Issue:

The City's existing Mobile Food Vending regulations require updates to ensure consistency with current Florida law and to establish clear operational standards for mobile food vendors within the City of Zephyrhills. In 2020, the Florida Legislature adopted Section 509.102, Florida Statutes, which preempts local governments from requiring separate licenses, registrations, permits, or fees for state-licensed mobile food dispensing vehicles. While the statute limits local regulation in certain areas, municipalities retain authority to regulate zoning, land use, public safety, traffic circulation, right-of-way use, and other operational impacts associated with mobile food activities.

This ordinance repeals and replaces Chapter 121 of the City Code to create a regulatory framework that balances state preemption requirements with the City's responsibility to protect public health, safety, and welfare.

Background:

The ordinance establishes comprehensive regulations governing mobile food operations throughout the City, including:

- Clarifies definitions for Mobile Food Vendors, Mobile Food Dispensing Vehicles, Mobile Food Establishments, and Food Truck Courts.
- Recognizes state licensing authority and expressly eliminates any separate City licensing or permit requirement for mobile food vendors.
- Establishes permitted locations and operational standards for mobile food vendors on

private non-residential properties, City parks, and limited areas of the public right-of-way.

- Prohibits mobile food operations on residential properties, with limited exceptions for Community Development District (CDD) and homeowners' association common areas and active construction sites.
- Creates standards and approval requirements for Food Truck Courts, including parking, landscaping, lighting, restroom facilities, waste management, and site design requirements.
- Establishes uniform operational standards regarding hours of operation, setbacks, signage, sanitation, waste disposal, electrical service, noise, and public safety.
- Clarifies regulations for mobile food vendors participating in special events.
- Creates a new section addressing temporary or auxiliary kitchens associated with bars, taverns, and similar drinking establishments to prevent the use of temporary food preparation units as a means of satisfying restaurant requirements for zoning or alcohol licensing purposes.

Attachment(s):

1. 39848211v2 - Ordinance 1524-26 Food Truck Ordinance
2. Ordinance 1524-26 Food Truck Ordinance - Redline

Fiscal Impact:

No significant fiscal impact is anticipated. Administration and enforcement of the ordinance will be performed through existing staff resources.

Staff Recommendation:

Staff recommends approval of Ordinance No. 1524-26 on the second reading.

ORDINANCE NO. 1524-26

AN ORDINANCE OF THE CITY OF ZEPHYRHILLS, FLORIDA, AMENDING THE CITY OF ZEPHYRHILLS CODE OF ORDINANCES, REPEALING AND REPLACING SECTION 121: MOBILE FOOD VENDING; AMENDING THE REGULATIONS OF MOBILE FOOD OPERATIONS; ESTABLISHING REGULATIONS FOR TEMPORARY OR AUXILIARY KITCHENS ASSOCIATED WITH BARS OR TAVERNS; PROVIDING FOR APPLICABILITY, REPEALER, SEVERABILITY, INCLUSION IN THE CODE, SCRIVENER'S ERROR AND AN EFFECTIVE DATE.

WHEREAS, pursuant to Article VIII, Florida Constitution of 1968, and Chapter 166, Florida Statutes, the City of Zephyrhills has the authority to adopt regulations relating to Mobile Food Vendors; and

WHEREAS, the City Council recognizes that effective July 1, 2020, Section 509.102, Florida Statutes, provides a limited state preemption regarding "mobile food dispensing vehicles" and that a municipality may not require a separate license, registration or permit other than the license required by the state, or require the payment of any license, registration, or permit fee other than the fee required by the state, as a condition for the operation of a Mobile Food Dispensing Vehicle within the municipality; and

WHEREAS, the City Council also recognizes that Section 509.102, Florida Statutes provides that a municipality may not prohibit mobile food dispensing vehicles from operating within the entirety of a municipal jurisdiction; and

WHEREAS, the City Council finds that although Section 509.102, Florida Statutes does preempt municipalities in certain areas, Section 509.102, Florida Statutes is intended to be a partial preemption of municipal home rule authority because it expressly states that "this section may not be construed to effect a municipality, county or other local governmental entity's authority to regulate the operation of mobile food dispensing vehicles other than the regulations described in Section 509.102(2), Florida Statutes"; and

WHEREAS, the City Council finds that despite Section 509.102, Florida Statutes, municipalities continue to enjoy significant home rule authority to regulate land use, zoning, and operational standards related to mobile food operations; and

WHEREAS, the City intends that this Ordinance be administered in a manner consistent with section 509.102, Florida Statutes, and that no separate City license, registration, or permit—or related fee—shall be imposed on Mobile Food Dispensing Vehicles, with City regulation limited to zoning, right-of-way use, fire and life safety, traffic, and other land-use impacts;

WHEREAS, the City Council finds that mobile food operations provide an important resource to the community different in nature than mobile non-food retail sales; and

WHEREAS, the City Council is supportive of the legal, safe and sanitary operation of mobile food operations in the incorporated area of the City of Zephyrhills; and

WHEREAS, the City Council finds that the use and operation of mobile food operations on real property directly affects the use of land within the city, and therefore, such uses are subject to the City's legitimate land use and zoning powers under Florida Municipal Home Rule Powers Act, Community Planning and other applicable law; and

WHEREAS, the City Council deems it necessary to regulate mobile food operations on streets and rights-of-way within the city to ensure sufficient pedestrian and vehicle traffic and avoid traffic conflicts and congestion, and otherwise generally protect public safety; and

WHEREAS, the City Council of the City of Zephyrhills, Florida, hereby finds this Ordinance to be in the best interest of public health, safety and welfare, and that it advances a valid and important public purpose.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Zephyrhills, Florida, as follows:

SECTION 1: RECITALS.

The Whereas clauses above are true and accurate and are incorporated by reference and made a part of this Ordinance.

SECTION 2: MOBILE FOOD VENDING ORDINANCE.

Chapter 121: Mobile Food Vending, of the Code of Ordinances, is hereby repealed in its entirety and replaced with the following:

CHAPTER 121 – MOBILE FOOD VENDING

121.01 Mobile Food Vendors.

(A) **Definitions.** For the purpose of this chapter, the following definitions shall apply, unless the context clearly indicates or requires a different meaning:

(1) ***Food Truck Court.*** A site developed and/or improved for the location of two (2) or more Mobile Food Vendors (food trucks) as either a principal or accessory use located on the same parcel.

(2) ***Mobile Food Dispensing Vehicle.*** The term Mobile Food Dispensing Vehicle shall have the same meaning as set forth in Section 509.102, Florida Statutes, and shall mean any vehicle that has a public food service establishment and that is self-propelled or otherwise moveable from place to place and includes self-contained utilities, including, but not limited to, gas, water, electricity, or liquid waste disposal. Mobile food dispensing vehicles are regulated by the Florida Department of Business and Professional Regulation (DBPR), Division of Hotels and Restaurants, and are sometimes referred to as "food trucks."

(3) ***Mobile Food Establishment.*** Mobile Food Establishments are individuals selling prepackaged foods or non-potentially hazardous food items (other than fresh fruits and vegetables) from trucks, trailers or similar self-propelled conveyances, or non-fixed structures such as tables, booths or kiosks. Mobile food establishments are regulated by the Florida Department of Agriculture and Consumer Services (FDACS).

(4) ***Mobile Food Operations.*** The preparation/cooking and/or sale of food from a portable stand, vehicle, cart, kiosk or trailer.

(5) ***Mobile Food Vendor.*** For the purpose of this chapter, a mobile food vendor shall include both mobile food dispensing vehicles and mobile food establishments.

(B) **Intent and Purpose.**

(1) It is the intent of this chapter to establish regulations related to the location and operation of Mobile Food Vendors on private and public property within the city.

(2) The purpose of this chapter is to promote the public health, safety, and general welfare by providing reasonable regulations and review procedures that allow Mobile Food Vendors to operate in a safe, orderly, and sanitary manner.

(3) It is not the intent of this chapter to:

(a) Prohibit Mobile Food Dispensing Vehicles from operating within the City;

(b) Regulate the licensing, registration, or permitting of mobile food dispensing vehicles, or the fees associated therewith, where such authority is expressly preempted to the State pursuant to Section 509.102, Florida Statutes; or

(c) Regulate food delivery services, food prepared by individuals for private consumption where such food is not offered for public sale, or the operation of produce stand.

(4) Notwithstanding state preemption of licensing and permitting, the City retains authority to regulate the zoning, location, hours of operation, sanitation, safety, and other land use impacts of mobile food vendors in order to protect the health, safety, and welfare of the public

(5) The provisions of this chapter shall apply to all qualifying Mobile Food Vendors and to private property owners hosting Mobile Food Vendors on all Light Industrial (LI) zoned properties within the City. These provisions shall also apply to Mobile Food Vendors and/or the establishment of a Food Truck Court within the Form-Based Code (FBC) area of the Zephyrhills; provided, however, that this chapter shall not apply within the Special District (SD) or within the area bounded by 4th Avenue to 6th Avenue and 5th Street to Gall Boulevard, where mobile food operations are expressly prohibited (see Exhibit A).

(6) In addition, Mobile Food Vendors shall be permitted on any active construction site within the City, subject to compliance with all applicable safety, access, and operational requirements of this chapter and all other applicable federal, state, and local regulations.

(7) Qualifying Mobile Food Vendors may avail themselves of the provisions of this chapter. Qualifying Mobile Food Vendors are those meeting all applicable requirements of the Florida Department of Agriculture and Consumer Services, Division of Food Safety or the Florida Department of Business and Professional Regulations, Division of Hotels and Restaurants, as applicable; and the Florida Department of Health; Florida Statutes; the Florida Administrative Code; the FDA Food Code, as may be amended from time to time; the National Fire Protection Association Codes and Standards; the Florida Building Code; the Florida Fire Prevention Code; and the city's Code of Ordinances and Land Development Code; and all required permits and licenses from the State of Florida.

(8) Private property owners may avail themselves of these provisions and host qualifying Mobile Food Vendors regularly on their sites in accordance with Section 121.03, and/or to develop non-residential property as a Food Truck Court in accordance with Section 121.06.

(C) **Licensing.** In accordance with Section 509.102, Florida Statutes, the City of Zephyrhills does not require a separate license, registration or permit other than the license, registration and/or permit required by the state, nor does the City require a separate license, registration and/or permit fee other than the fee required by the state, as a condition for the operation of a Mobile Food Dispensing Vehicle within the city. The City further extends this standard to mobile food establishments and all Mobile Food Vendors covered by this chapter. Mobile food operation in the city limits without a valid State of Florida license, registration or permit, as may be required, shall be prohibited. Nothing in this Chapter shall be construed to impose a separate City license, registration, or permit, or any related fee, on Mobile Food Dispensing Vehicles, or to prohibit Mobile Food Dispensing Vehicles from operating within the entirety of the City, in a manner inconsistent with section 509.102, Florida Statutes. This Chapter regulates location, hours, sanitation as a site condition, safety, traffic, and other land-use impacts pursuant to the City's home-rule and zoning authority.

(D) **Enforcement and Right to Inspect.** The City may inspect sites and operations for compliance with this Chapter, the Land Development Code, the Florida Building Code, the Florida Fire Prevention Code, and other applicable laws within the City's police powers, including but not limited to fire and life safety, right-of-way use, traffic and pedestrian safety, signage, noise, stormwater, and public nuisance. City inspections shall not duplicate state inspections of food-handling or sanitation matters within the exclusive jurisdiction of the Florida Department of Business and Professional Regulation or the Florida Department of Agriculture and Consumer Services, except as otherwise authorized by law.

121.02 Mobile Food Vendors on Residential Properties Prohibited.

(A) Mobile Food Vendors are prohibited from operating on all residential property within the City of Zephyrhills. For purposes of this section, residential property shall include: (this section shall not apply to Mobile Food Vendors operating at active construction sites as permitted under Section B(6)121.01(B)(6), above):

(1) All property zoned residential (ER, R1, R2, R3, R4, M1, M2, M3, M4);

(2) All residential portions of Planned Unit Developments (PUDs); and

(3) All property used for residential purposes, including existing non-conforming residential uses located on non-residentially zoned property.

(B) Property zoned residential but designated and used for recreational amenities or common parking areas owned by a Community Development District (CDD) or property owners' association shall be exempt from this prohibition and considered non-residential property for purposes of this section.

(C) CDD's and property owners' associations may permit mobile food vendors on such properties in accordance with the requirements and procedures established in Section 121.03.

121.03 Mobile Food Vendors on Private Non-Residential Property.

(A) Mobile Food Vendors may operate on private non-residential property, subject to the following conditions:

(B) The Mobile Food Vendor must have the express written permission of the property owner (or the owner's authorized agent) to operate on the site, and a copy of such permission shall be kept on the vendor's vehicle and made available for inspection upon request.

(1) The subject property shall not be vacant or undeveloped.

(2) The subject property shall not be under an active code enforcement violation.

(3) The property owner shall require that all mobile food vendors comply with applicable federal, state, and local regulations, as well as zoning requirements pertaining to the property and the Mobile Food Operation.

(4) The property owner and the mobile food vendor shall be jointly and severally responsible for any code violations arising from mobile food operations conducted on the property.

(5) The property owner shall ensure that the property is maintained in a neat, clean, and orderly condition at all times. Mobile Food Operations shall be limited to accessory use of the property unless developed and approved as a Food Truck Court in accordance with Section 121.06.

(6) No more than one (1) Mobile Food Operation shall be permitted on private property, except as authorized under the standards for Food Truck Courts set forth in Section 121.06.

(7) Compliance with all applicable local codes and ordinances shall be required.

(8) General regulations in Section 121.07 shall apply.

(C) Mobile Food Vendors shall be considered a temporary use only and shall not locate or operate on the same private non-residential property more than three (3) calendar days per week.

121.04 Mobile Food Vendors in City Parks.

(A) Mobile Food Vendors shall be permitted to operate as a temporary use within City parks, subject to the following:

(1) Vendors shall locate only within designated mobile food vendor spaces posted by the City of Zephyrhills.

(a) Spaces shall be available on a first-come, first-served basis and may not be individually reserved.

(b) The City reserves the right to remove, relocate, or temporarily close any designated space at any time without prior notice.

(c) Designated spaces shall be closed by the City on the day of any permitted special event occurring within the park. Vendors wishing to participate in such events must obtain approval from the special event permit holder.

(B) Mobile Food Vendors shall be considered a temporary use only and shall not locate or operate within the same City park more than three (3) calendar days per week.

(C) Mobile Food Vendors shall not drive upon, through, or otherwise locate within any area of a park designated for open space, recreation, pedestrian circulation, or any area closed to vehicular or public access.

(D) Mobile Food Vendors shall comply with all park rules and regulations, whether posted on-site or set forth in the City of Zephyrhills Code of Ordinances, including but not limited to Section 130.22, in addition to the requirements of this chapter. Vendors shall not locate or operate within any park outside of posted park hours.

(E) Mobile Food Vendors shall not be parked, stored, or left overnight within any public park.

(F) No more than one (1) mobile food vendor shall operate within a City park at any one time, except when participating in a permitted special event.

(G) General regulations in Section 121.07 shall apply.

121.05 Mobile Food Vendors on Public Right-of-Way.

Mobile Food Vendors are prohibited from parking, locating, or operating within or upon any public or private right-of-way, street, alleyway, sidewalk, or trail in the City, except as provided herein. Mobile Food Vendors may be permitted to temporarily park, locate, and operate from City on-street parallel parking spaces within the TCBD, TCBD-H, TMU, TMU-H, and within mapped Form-Based Code transect zones authorizing on-street vending (including T5 zoning districts, where designated), subject to the following conditions: Use of curb space remains subject to posted parking/time limits, temporary closures, and traffic control devices, and may be suspended for special events or public-safety needs without prior notice.

(A) Mobile Food Vendors shall be located only within public parallel parking spaces adjacent to a City street and shall be oriented to vend to patrons on the sidewalk. Under no circumstances shall vending occur directly to patrons located within the street.

(B) Mobile Food Vendors shall not be parked, stored, or left overnight within the public right-of-way.

(C) Mobile Food Vendors operating pursuant to this section shall be considered a temporary use and shall not operate on the same public street for more than three (3) calendar days per week.

(D) No more than two (2) mobile food operations shall be permitted to park, locate, or operate simultaneously along the same City roadway or right-of-way. Such locations shall be allocated on a first-come, first-served basis.

(E) Accessory seating areas, tents, or similar appurtenances are prohibited when operating a mobile food dispensing vehicle under this section.

(F) General regulations set forth in Section 121.07 shall apply.

121.06 Food Truck Courts

Persons seeking to establish a permanent site on non-residential private property for the simultaneous operation of multiple Mobile Food Vendors ("Food Truck Court") shall be subject to the following requirements:

(A) A site development plan, pursuant to Section 4.03.03 of the Land Development Code (LDC), shall be submitted for review and approval by the Site Plan Review Committee.

(B) Food Truck Courts shall be designed and developed in compliance with the following standards:

(1) **Setbacks**. A minimum setback of ten (10) feet shall be maintained from all property lines.

(2) **Parking**. Parking areas for Mobile Food Vendors shall consist of an improved, stabilized surface, including concrete, asphalt, gravel, or similar material. Where located within an off-street parking area, spaces utilized shall be credited toward the minimum parking ratio required for the principal use. Parking shall not be reduced below the minimum required for the principal use, pursuant to Part 7.03.00, LDC. To the extent operation materially reduces available customer parking for the principal use, the Site Plan Review Committee may require a parking assessment and operational plan to ensure compliance with LDC § 7.03.04.

(3) **Solid Waste**. Solid waste and recycling receptacles shall be provided. All waste and recyclables shall be disposed of in an approved off-site facility or in an on-site dumpster provided by the property owner.

(4) **Landscaping**. Adequate landscape screening and buffering shall be provided in accordance with Part 7.06.00, LDC. Where a Food Truck Court is located on property with an existing principal use, landscaping for the entire property shall comply with, or be brought into compliance with, Part 7.06.00, LDC prior to final approval.

(5) **Lighting**. Adequate lighting shall be provided during non-daylight hours to ensure safe conditions for pedestrians, bicyclists, and vehicles.

(6) **Separation.** A minimum separation of ten (10) feet shall be maintained between each Mobile Food Vendor.

(7) **Restrooms.** Adequate restroom facilities shall be provided on-site or through a written shared-use agreement with an adjacent property within 300 feet, connected by an ADA-compliant route, in compliance with applicable health and building codes.

(C) General regulations in Section 121.07 shall apply.

121.07 Mobile Food Vendor General Regulations.

The following regulations shall apply to all Mobile Food Vendors, including those participating in an approved special event.

(A) **Compliance.** Mobile Food Vendors shall ensure all required state-issued licenses, registration and/or permit information is available onsite at all times. Mobile Food Vendors shall be required to immediately comply with any request by law enforcement and/or code enforcement officers, which may include relocation of the Mobile Food Operation, if deemed

by the officer to be creating an unsafe or hazardous condition, or otherwise not meeting the requirements of this Chapter.

(B) **Hours of Operation.** Mobile Food Operations, including any setup and closure, shall be limited to the hours of 6:00 a.m. to 10:00 p.m., except as follows: When operating within 100 feet of residentially-zoned property, use of portable generators after 10:00 p.m. is prohibited unless connected to approved shore power.

(1) When located on a site with a principal business whose hours extend beyond 10:00 p.m. unless when operating within 100 feet of residentially-zoned property, use of portable generators after 10:00 p.m. is prohibited a;

(2) When operating as part of an approved special event; or

(3) When located within a City Park, provided that no operation or location shall occur outside of park hours, regardless of whether participating in an approved special event.

(C) **Setbacks.** Mobile Food Vendors shall maintain the following minimum setbacks:

(1) Five (5) feet from any crosswalk, handicap ramp, or building entrance/exit;

(2) Five (5) feet from any sidewalk or trail, except when located along a public street or right-of-way, in compliance with Section 121.05 of this chapter;

(3) Ten (10) feet from any driveway, intersection, or above-ground utility;

(4) Fifteen (15) feet from any fire hydrant; and

(5) Fifty (50) feet from any residentially-zoned property, except when operating at active construction sites as permitted under Section 121.01 (B)(6), above.

(D) **Signage.** In addition to signage affixed to the Mobile Food Dispensing Vehicle, one sandwich board sign shall be permitted, not exceeding three and one-half (3.5) feet in height and two (2) feet in width. Such sign shall be located within five (5) feet of the Mobile Food vendor. No flags, sandwich boards, menus, or other signage shall be placed within any roadway median or beyond five (5) feet from the Mobile Food Dispensing Vehicle.

(E) **Solid Waste.** Mobile Food Vendors shall provide trash and recycling receptacles, which shall be removed from the site each day, unless located within an approved Food Truck Court.

(1) Public trash and recycling receptacles shall not be used by Mobile Food Vendors but may be used by patrons.

(2) Dumpsters serving existing principal uses shall not be used without the express permission of the property owner.

(F) **Sanitation.** Mobile Food Vendors shall maintain the property and surrounding area in a clean and sanitary condition during and immediately following operations. The discharge of any liquid or solid waste into the stormwater drainage system, public rights-of-way, roadways, sidewalks, trails, landscaped areas, or grassed areas within the City of Zephyrhills is strictly prohibited.

(G) **Liquid Waste**. All liquid waste, including but not limited to grease and cooking oil, shall be disposed of through a licensed commissary or a licensed sanitary sewer disposal facility equipped with an approved grease trap. Disposal of liquid waste into any City-owned public trash or recycling receptacles, storm drains, sidewalks, landscaped areas, grassed areas, or any unauthorized location is strictly prohibited. Discharge of graywater to landscaped or grassed areas is prohibited. Mobile Food Vendors shall maintain an appropriate spill kit on site whenever operating generators or handling cooking oils or grease.

(H) **Electricity.** Electrical service may be supplied by an on-board generator or by a temporary electrical connection within an approved Food Truck Court. Connection to City-owned electrical receptacles is prohibited. All electrical service, including generators and temporary connections, shall comply with applicable fire, electrical, and safety codes.

(I) **Seating Prohibited.** Mobile Food Vendors shall not provide seating of any kind, including but not limited to tables, chairs, benches, stools, or other furnishings, whether temporary, portable, or permanent. Seating areas intended for use by patrons of mobile food vendors are prohibited unless otherwise expressly authorized as part of an approved Food Truck Court pursuant to Section 121.06.

(J) **General Prohibitions.** Mobile Food Vendors shall not:

(1) Park or operate within landscape buffers, islands, medians, or grassed rights-of-way;

(2) Obstruct designated clear sight triangles;

(3) Impede the safe movement of vehicles, pedestrians, or bicyclists, including parking lot circulation and access to sidewalks or crosswalks;

(4) Provide amplified music, announcements, or any other form of disruptive sound;

(5) Sell or dispense food to customers in moving vehicles or otherwise conduct drive-up sales;

(6) Sell or dispense alcohol, except during a permitted special event and in full compliance with all applicable state and local regulations, including LDC § 7.09.03;

(7) Engage in any activity that constitutes a public nuisance or otherwise endangers the health, safety, or general welfare of the public.

121.08 Mobile Food Operations During Special Events.

Areas within City parks, streets, and rights-of-way designated for Mobile Food Vendors shall be closed for use by the City on the day of, or immediately prior to, a permitted special event. Mobile Food Vendors shall not operate or locate within the boundaries of a permitted special event unless expressly authorized by the event promoter as an approved participant.

121.09 Temporary or Auxiliary Kitchens Associated with Drinking Establishment, Bar, or Taverns.

(A) Purpose. This section is intended to prevent temporary or auxiliary food preparation units, including trailers or mobile kitchens, from being used to satisfy the classification of a “restaurant” for zoning, permitting, or alcohol licensing purposes when associated with an existing drinking establishment, bar, tavern, or similar alcoholic beverage establishment.

(B) Prohibitions. Temporary or auxiliary food preparation units located in conjunction with a bar, tavern, or similar establishment shall not:

1. 1. Be used to qualify the primary establishment as a “restaurant” as defined in Table 2.02.01 for zoning, permitting, or alcohol licensing purposes.;and administered under LDCand LDC § 7.09.03

2. Operate in the absence of a fully permitted, permanent food establishment on the premises.

3. Circumvent applicable health, safety, or zoning regulations.

4. Dispense alcohol independently of the primary establishment’s license, except as allowed for special events under state and local law.

5. Create any public nuisance, safety hazard, or otherwise endanger the health, safety, or general welfare of the public.

(C) Enforcement. Violations of this section may be enforced in accordance with City Code provisions for zoning, health, safety, or alcohol licensing compliance, including but not limited to issuance of notices of violation, fines, or suspension of operating privileges.

(D) Relationship to Mobile Food Vendor Regulations. This section shall not be construed to modify, amend, or limit the provisions of Section 121.07 or Section 121.08, which apply to state-licensed Mobile Food Vendors. Mobile Food Vendors operating independently of a bar or tavern are subject solely to Sections 121.07 and 121.08. Nothing in this section authorizes any temporary or auxiliary unit to satisfy "restaurant" status for zoning or alcohol purposes under LDC Table 2.02.01 or LDC § 7.09.03.

SECTION 3 APPLICABILITY.

All provisions of this Ordinance shall apply to the City Limits of the City of Zephyrhills, Florida.

SECTION 4 REPEALER.

Any ordinance or part of any ordinance in conflict herewith is hereby repealed to the extent of any conflict.

SECTION 5 SEVERABILITY.

If any provision or portion of this ordinance, or the application thereof, is declared invalid by any court of competent jurisdiction or found not in compliance by the State Land Planning Agency, such provision shall be severed. The severance shall not affect the validity of the remaining provisions of this ordinance, the City of Zephyrhills Comprehensive Plan, or the City of Zephyrhills Land Development Code.

SECTION 6 INCLUSION INTO THE CODE OF ORDINANCES.

The provisions of this Ordinance shall become and be made part of the Code of Ordinances and Land Development Code of the City of Zephyrhills, Florida. The sections of this Ordinance may be renumbered or re-lettered and the word "ordinance" may be changed to "section," "article," or such other appropriate word or phrase in order to accomplish such.

SECTION 7 SCRIVENER'S ERROR.

Corrections of typographical errors which do not affect the intent may be authorized by the City Manager, or the City Manager's designee, without need of further action of the City Council by filing a corrected copy of same with the City Clerk.

SECTION 8 EFFECTIVE DATE.

This Ordinance shall become effective upon passage on the second reading and signing by the Mayor.

The foregoing Ordinance No. 1524-26 was read and passed on the first reading in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 8th day of June, 2026.

Attest:

Ricardo Quiñones, City Clerk	Steven F. Spina, Council President

The foregoing Ordinance No. 1524-26 was read and passed on the first reading in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 22nd day of June, 2026.

Attest:

_____	_____
Ricardo Quiñones, City Clerk	Steven F. Spina, Council President

The foregoing Ordinance No. 1524-26 was approved by me this 22nd day of June, 2026.

_____
Melonie Bahr Monson, Mayor

Approved as to legal form and legal content
for the reliance of the City of Zephyrhills only:

_____
Matthew E. Maggard, Esq.
City Attorney

ORDINANCE NO. 1524-26

AN ORDINANCE OF THE CITY OF ZEPHYRHILLS, FLORIDA, AMENDING THE CITY OF ZEPHYRHILLS CODE OF ORDINANCES, REPEALING AND REPLACING SECTION 121: MOBILE FOOD VENDING; AMENDING THE REGULATIONS OF MOBILE FOOD OPERATIONS; ESTABLISHING REGULATIONS FOR TEMPORARY OR AUXILIARY KITCHENS ASSOCIATED WITH BARS OR TAVERNS; PROVIDING FOR APPLICABILITY, REPEALER, SEVERABILITY, INCLUSION IN THE CODE, SCRIVENER'S ERROR AND AN EFFECTIVE DATE.

WHEREAS, pursuant to Article VIII, Florida Constitution of 1968, and Chapter 166, Florida Statutes, the City of Zephyrhills has the authority to adopt regulations relating to Mobile Food Vendors; and

WHEREAS, the City Council recognizes that effective July 1, 2020, Section 509.102, Florida Statutes, provides a limited state preemption regarding "mobile food dispensing vehicles" and that a municipality may not require a separate license, registration or permit other than the license required by the state, or require the payment of any license, registration, or permit fee other than the fee required by the state, as a condition for the operation of a Mobile Food Dispensing Vehicle within the municipality; and

WHEREAS, the City Council also recognizes that Section 509.102, Florida Statutes provides that a municipality may not prohibit mobile food dispensing vehicles from operating within the entirety of a municipal jurisdiction; and

WHEREAS, the City Council finds that although Section 509.102, Florida Statutes does preempt municipalities in certain areas, Section 509.102, Florida Statutes is intended to be a partial preemption of municipal home rule authority because it expressly states that "this section may not be construed to effect a municipality, county or other local governmental entity's authority to regulate the operation of mobile food dispensing vehicles other than the regulations described in Section 509.102(2), Florida Statutes"; and

WHEREAS, the City Council finds that despite Section 509.102, Florida Statutes, municipalities continue to enjoy significant home rule authority to regulate land use, zoning, and operational standards related to mobile food operations; and

WHEREAS, the City intends that this Ordinance be administered in a manner consistent with section 509.102, Florida Statutes, and that no separate City license, registration, or permit—or related fee—shall be imposed on Mobile Food Dispensing Vehicles, with City regulation limited to zoning, right-of-way use, fire and life safety, traffic, and other land-use impacts;

WHEREAS, the City Council finds that mobile food operations provide an important resource to the community different in nature than mobile non-food retail sales; and

WHEREAS, the City Council is supportive of the legal, safe and sanitary operation of mobile food operations in the incorporated area of the City of Zephyrhills; and

WHEREAS, the City Council finds that the use and operation of mobile food operations on real property directly affects the use of land within the city, and therefore, such uses are subject to the City's legitimate land use and zoning powers under Florida Municipal Home Rule Powers Act, Community Planning and other applicable law; and

WHEREAS, the City Council deems it necessary to regulate mobile food operations on streets and rights-of-way within the city to ensure sufficient pedestrian and vehicle traffic and avoid traffic conflicts and congestion, and otherwise generally protect public safety; and

WHEREAS, the City Council of the City of Zephyrhills, Florida, hereby finds this Ordinance to be in the best interest of public health, safety and welfare, and that it advances a valid and important public purpose.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Zephyrhills, Florida, as follows:

SECTION 1: RECITALS.

The Whereas clauses above are true and accurate and are incorporated by reference and made a part of this Ordinance.

SECTION 2: MOBILE FOOD VENDING ORDINANCE.

Chapter 121: Mobile Food Vending, of the Code of Ordinances, is hereby repealed in its entirety and replaced with the following:

CHAPTER 121 – MOBILE FOOD VENDING

121.01 Mobile Food Vendors.

(A) **Definitions.** For the purpose of this chapter, the following definitions shall apply, unless the context clearly indicates or requires a different meaning:

(1) ***Food Truck Court.*** A site developed and/or improved for the location of two (2) or more Mobile Food Vendors (food trucks) as either a principal or accessory use located on the same parcel.

(2) ***Mobile Food Dispensing Vehicle.*** The term Mobile Food Dispensing Vehicle shall have the same meaning as set forth in Section 509.102, Florida Statutes, and shall mean any vehicle that has a public food service establishment and that is self-propelled or otherwise moveable from place to place and includes self-contained utilities, including, but not limited to, gas, water, electricity, or liquid waste disposal. Mobile food dispensing vehicles are regulated by the Florida Department of Business and Professional Regulation (DBPR), Division of Hotels and Restaurants, and are sometimes referred to as "food trucks."

(3) ***Mobile Food Establishment.*** Mobile Food Establishments are individuals selling prepackaged foods or non-potentially hazardous food items (other than fresh fruits and vegetables) from trucks, trailers or similar self-propelled conveyances, or non-fixed structures such as tables, booths or kiosks. Mobile food establishments are regulated by the Florida Department of Agriculture and Consumer Services (FDACS).

(4) ***Mobile Food Operations.*** The preparation/cooking and/or sale of food from a portable stand, vehicle, cart, kiosk or trailer.

(5) ***Mobile Food Vendor.*** For the purpose of this chapter, a mobile food vendor shall include both mobile food dispensing vehicles and mobile food establishments.

(B) **Intent and Purpose.**

(1) It is the intent of this chapter to establish regulations related to the location and operation of Mobile Food Vendors on private and public property within the city.

(2) The purpose of this chapter is to promote the public health, safety, and general welfare by providing reasonable regulations and review procedures that allow Mobile Food Vendors to operate in a safe, orderly, and sanitary manner.

(3) It is not the intent of this chapter to:

(a) Prohibit Mobile Food Dispensing Vehicles from operating within the City;

(b) Regulate the licensing, registration, or permitting of mobile food dispensing vehicles, or the fees associated therewith, where such authority is expressly preempted to the State pursuant to Section 509.102, Florida Statutes; or

(c) Regulate food delivery services, food prepared by individuals for private consumption where such food is not offered for public sale, or the operation of produce stand.

(4) Notwithstanding state preemption of licensing and permitting, the City retains authority to regulate the zoning, location, hours of operation, sanitation, safety, and other land use impacts of mobile food vendors in order to protect the health, safety, and welfare of the public

(5) The provisions of this chapter shall apply to all qualifying Mobile Food Vendors and to private property owners hosting Mobile Food Vendors on all Light Industrial (LI) zoned properties within the City. These provisions shall also apply to Mobile Food Vendors and/or the establishment of a Food Truck Court within the Form-Based Code (FBC) area of the Zephyrhills; provided, however, that this chapter shall not apply within the Special District (SD) or within the area bounded by 4th Avenue to 6th Avenue and 5th Street to Gall Boulevard, where mobile food operations are expressly prohibited (see Exhibit A).

(6) In addition, Mobile Food Vendors shall be permitted on any active construction site within the City, subject to compliance with all applicable safety, access, and operational requirements of this chapter and all other applicable federal, state, and local regulations.

(7) Qualifying Mobile Food Vendors may avail themselves of the provisions of this chapter. Qualifying Mobile Food Vendors are those meeting all applicable requirements of the Florida Department of Agriculture and Consumer Services, Division of Food Safety or the Florida Department of Business and Professional Regulations, Division of Hotels and Restaurants, as applicable; and the Florida Department of Health; Florida Statutes; the Florida Administrative Code; the FDA Food Code, as may be amended from time to time; the National Fire Protection Association Codes and Standards; the Florida Building Code; the Florida Fire Prevention Code; and the city's Code of Ordinances and Land Development Code; and all required permits and licenses from the State of Florida.

(8) Private property owners may avail themselves of these provisions and host qualifying Mobile Food Vendors regularly on their sites in accordance with Section 121.03, and/or to develop non-residential property as a Food Truck Court in accordance with Section 121.06.

(C) **Licensing.** In accordance with Section 509.102, Florida Statutes, the City of Zephyrhills does not require a separate license, registration or permit other than the license, registration and/or permit required by the state, nor does the City require a separate license, registration and/or permit fee other than the fee required by the state, as a condition for the operation of a Mobile Food Dispensing Vehicle within the city. The City further extends this standard to mobile food establishments and all Mobile Food Vendors covered by this chapter. Mobile food operation in the city limits without a valid State of Florida license, registration or permit, as may be required, shall be prohibited. Nothing in this Chapter shall be construed to impose a separate City license, registration, or permit, or any related fee, on Mobile Food Dispensing Vehicles, or to prohibit Mobile Food Dispensing Vehicles from operating within the entirety of the City, in a manner inconsistent with section 509.102, Florida Statutes. This Chapter regulates location, hours, sanitation as a site condition, safety, traffic, and other land-use impacts pursuant to the City's home-rule and zoning authority.

(D) **Enforcement and Right to Inspect.** The City may inspect sites and operations for compliance with this Chapter, the Land Development Code, the Florida Building Code, the Florida Fire Prevention Code, and other applicable laws within the City's police powers,

including but not limited to fire and life safety, right-of-way use, traffic and pedestrian safety, signage, noise, stormwater, and public nuisance. City inspections shall not duplicate state inspections of food-handling or sanitation matters within the exclusive jurisdiction of the Florida Department of Business and Professional Regulation or the Florida Department of Agriculture and Consumer Services, except as otherwise authorized by law.

121.02 Mobile Food Vendors on Residential Properties Prohibited.

(A) Mobile Food Vendors are prohibited from operating on all residential property within the City of Zephyrhills. For purposes of this section, residential property shall include: (this section shall not apply to Mobile Food Vendors operating at active construction sites as permitted under Section B(6)121.01(B)(6), above):

(1) All property zoned residential (ER, R1, R2, R3, R4, M1, M2, M3, M4);

(2) All residential portions of Planned Unit Developments (PUDs); and

(3) All property used for residential purposes, including existing non-conforming residential uses located on non-residentially zoned property.

(B) Property zoned residential but designated and used for recreational amenities or common parking areas owned by a Community Development District (CDD) or property owners' association shall be exempt from this prohibition and considered non-residential property for purposes of this section.

(C) CDD's and property owners' associations may permit mobile food vendors on such properties in accordance with the requirements and procedures established in Section 121.03.

121.03 Mobile Food Vendors on Private Non-Residential Property.

(A) Mobile Food Vendors may operate on private non-residential property, subject to the following conditions:

(B) The Mobile Food Vendor must have the express written permission of the property owner (or the owner's authorized agent) to operate on the site, and a copy of such permission shall be kept on the vendor's vehicle and made available for inspection upon request.

(1) The subject property shall not be vacant or undeveloped.

(2) The subject property shall not be under an active code enforcement violation.

(3) The property owner shall require that all mobile food vendors comply with applicable federal, state, and local regulations, as well as zoning requirements pertaining to the property and the Mobile Food Operation.

(4) The property owner and the mobile food vendor shall be jointly and severally responsible for any code violations arising from mobile food operations conducted on the property.

(5) The property owner shall ensure that the property is maintained in a neat, clean, and orderly condition at all times. Mobile Food Operations shall be limited to accessory use of the property unless developed and approved as a Food Truck Court in accordance with Section 121.06.

(6) No more than one (1) Mobile Food Operation shall be permitted on private property, except as authorized under the standards for Food Truck Courts set forth in Section 121.06.

(7) Compliance with all applicable local codes and ordinances shall be required.

(8) General regulations in Section 121.07 shall apply.

(C) Mobile Food Vendors shall be considered a temporary use only and shall not locate or operate on the same private non-residential property more than three (3) calendar days per week.

121.04 Mobile Food Vendors in City Parks.

(A) Mobile Food Vendors shall be permitted to operate as a temporary use within City parks, subject to the following:

(1) Vendors shall locate only within designated mobile food vendor spaces posted by the City of Zephyrhills.

(a) Spaces shall be available on a first-come, first-served basis and may not be individually reserved.

(b) The City reserves the right to remove, relocate, or temporarily close any designated space at any time without prior notice.

(c) Designated spaces shall be closed by the City on the day of any permitted special event occurring within the park. Vendors wishing to participate in such events must obtain approval from the special event permit holder.

(B) Mobile Food Vendors shall be considered a temporary use only and shall not locate or operate within the same City park more than three (3) calendar days per week.

(C) Mobile Food Vendors shall not drive upon, through, or otherwise locate within any area of a park designated for open space, recreation, pedestrian circulation, or any area closed to vehicular or public access.

(D) Mobile Food Vendors shall comply with all park rules and regulations, whether posted on-site or set forth in the City of Zephyrhills Code of Ordinances, including but not limited to Section 130.22, in addition to the requirements of this chapter. Vendors shall not locate or operate within any park outside of posted park hours.

(E) Mobile Food Vendors shall not be parked, stored, or left overnight within any public park.

(F) No more than one (1) mobile food vendor shall operate within a City park at any one time, except when participating in a permitted special event.

(G) General regulations in Section 121.07 shall apply.

121.05 Mobile Food Vendors on Public Right-of-Way.

Mobile Food Vendors are prohibited from parking, locating, or operating within or upon any public or private right-of-way, street, alleyway, sidewalk, or trail in the City, except as provided herein. Mobile Food Vendors may be permitted to temporarily park, locate, and operate from City on-street parallel parking spaces within the TCBD, TCBD-H, TMU, TMU-H, and within mapped Form-Based Code transect zones authorizing on-street vending (including T5 zoning districts, where designated), subject to the following conditions: Use of curb space remains subject to posted parking/time limits, temporary closures, and traffic control devices, and may be suspended for special events or public-safety needs without prior notice.

(A) Mobile Food Vendors shall be located only within public parallel parking spaces adjacent to a City street and shall be oriented to vend to patrons on the sidewalk. Under no circumstances shall vending occur directly to patrons located within the street.

(B) Mobile Food Vendors shall not be parked, stored, or left overnight within the public right-of-way.

(C) Mobile Food Vendors operating pursuant to this section shall be considered a temporary use and shall not operate on the same public street for more than three (3) calendar days per week.

(D) No more than two (2) mobile food operations shall be permitted to park, locate, or operate simultaneously along the same City roadway or right-of-way. Such locations shall be allocated on a first-come, first-served basis.

(E) Accessory seating areas, tents, or similar appurtenances are prohibited when operating a mobile food dispensing vehicle under this section.

(F) General regulations set forth in Section 121.07 shall apply.

121.06 Food Truck Courts

Persons seeking to establish a permanent site on non-residential private property for the simultaneous operation of multiple Mobile Food Vendors ("Food Truck Court") shall be subject to the following requirements:

(A) A site development plan, pursuant to Section 4.03.03 of the Land Development Code (LDC), shall be submitted for review and approval by the Site Plan Review Committee.

(B) Food Truck Courts shall be designed and developed in compliance with the following standards:

(1) **Setbacks**. A minimum setback of ten (10) feet shall be maintained from all property lines.

(2) **Parking**. Parking areas for Mobile Food Vendors shall consist of an improved, stabilized surface, including concrete, asphalt, gravel, or similar material. Where located within an off-street parking area, spaces utilized shall be credited toward the minimum parking ratio required for the principal use. Parking shall not be reduced below the minimum required for the principal use, pursuant to Part 7.03.00, LDC. To the extent operation materially reduces available customer parking for the principal use, the Site Plan Review Committee may require a parking assessment and operational plan to ensure compliance with LDC § 7.03.04.

(3) **Solid Waste**. Solid waste and recycling receptacles shall be provided. All waste and recyclables shall be disposed of in an approved off-site facility or in an on-site dumpster provided by the property owner.

(4) **Landscaping**. Adequate landscape screening and buffering shall be provided in accordance with Part 7.06.00, LDC. Where a Food Truck Court is located on property with an existing principal use, landscaping for the entire property shall comply with, or be brought into compliance with, Part 7.06.00, LDC prior to final approval.

(5) **Lighting**. Adequate lighting shall be provided during non-daylight hours to ensure safe conditions for pedestrians, bicyclists, and vehicles.

(6) **Separation.** A minimum separation of ten (10) feet shall be maintained between each Mobile Food Vendor.

(7) **Restrooms.** Adequate restroom facilities shall be provided on-site or through a written shared-use agreement with an adjacent property within 300 feet, connected by an ADA-compliant route, in compliance with applicable health and building codes.

(C) General regulations in Section 121.07 shall apply.

121.07 Mobile Food Vendor General Regulations.

The following regulations shall apply to all Mobile Food Vendors, including those participating in an approved special event.

(A) **Compliance.** Mobile Food Vendors shall ensure all required state-issued licenses, registration and/or permit information is available onsite at all times. Mobile Food Vendors shall be required to immediately comply with any request by law enforcement and/or code enforcement officers, which may include relocation of the Mobile Food Operation, if deemed by the officer to be creating an unsafe or hazardous condition, or otherwise not meeting the requirements of this Chapter.

(B) **Hours of Operation.** Mobile Food Operations, including any setup and closure, shall be limited to the hours of 6:00 a.m. to 10:00 p.m., except as follows: When operating within 100 feet of residentially-zoned property, use of portable generators after 10:00 p.m. is prohibited unless connected to approved shore power.

(1) When located on a site with a principal business whose hours extend beyond 10:00 p.m. unless when operating within 100 feet of residentially-zoned property, use of portable generators after 10:00 p.m. is prohibited a;

(2) When operating as part of an approved special event; or

(3) When located within a City Park, provided that no operation or location shall occur outside of park hours, regardless of whether participating in an approved special event.

(C) **Setbacks.** Mobile Food Vendors shall maintain the following minimum setbacks:

(1) Five (5) feet from any crosswalk, handicap ramp, or building entrance/exit;

(2) Five (5) feet from any sidewalk or trail, except when located along a public street or right-of-way, in compliance with Section 121.05 of this chapter;

(3) Ten (10) feet from any driveway, intersection, or above-ground utility;

(4) Fifteen (15) feet from any fire hydrant; and

(5) Fifty (50) feet from any residentially-zoned property, except when operating at active construction sites as permitted under Section 121.01 (B)(6), above.

(D) **Signage.** In addition to signage affixed to the Mobile Food Dispensing Vehicle, one sandwich board sign shall be permitted, not exceeding three and one-half (3.5) feet in height and two (2) feet in width. Such sign shall be located within five (5) feet of the Mobile Food vendor. No flags, sandwich boards, menus, or other signage shall be placed within any roadway median or beyond five (5) feet from the Mobile Food Dispensing Vehicle.

(E) **Solid Waste.** Mobile Food Vendors shall provide trash and recycling receptacles, which shall be removed from the site each day, unless located within an approved Food Truck Court.

(1) Public trash and recycling receptacles shall not be used by Mobile Food Vendors but may be used by patrons.

(2) Dumpsters serving existing principal uses shall not be used without the express permission of the property owner.

(F) **Sanitation.** Mobile Food Vendors shall maintain the property and surrounding area in a clean and sanitary condition during and immediately following operations. The discharge of

any liquid or solid waste into the stormwater drainage system, public rights-of-way, roadways, sidewalks, trails, landscaped areas, or grassed areas within the City of Zephyrhills is strictly prohibited.

(G) **Liquid Waste**. All liquid waste, including but not limited to grease and cooking oil, shall be disposed of through a licensed commissary or a licensed sanitary sewer disposal facility equipped with an approved grease trap. Disposal of liquid waste into any City-owned public trash or recycling receptacles, storm drains, sidewalks, landscaped areas, grassed areas, or any unauthorized location is strictly prohibited. Discharge of graywater to landscaped or grassed areas is prohibited. Mobile Food Vendors shall maintain an appropriate spill kit on site whenever operating generators or handling cooking oils or grease.

(H) **Electricity.** Electrical service may be supplied by an on-board generator or by a temporary electrical connection within an approved Food Truck Court. Connection to City-owned electrical receptacles is prohibited. All electrical service, including generators and temporary connections, shall comply with applicable fire, electrical, and safety codes.

(I) **Seating Prohibited.** Mobile Food Vendors shall not provide seating of any kind, including but not limited to tables, chairs, benches, stools, or other furnishings, whether temporary, portable, or permanent. Seating areas intended for use by patrons of mobile food vendors are prohibited unless otherwise expressly authorized as part of an approved Food Truck Court pursuant to Section 121.06.

(J) **General Prohibitions.** Mobile Food Vendors shall not:

(1) Park or operate within landscape buffers, islands, medians, or grassed rights-of-way;

(2) Obstruct designated clear sight triangles;

(3) Impede the safe movement of vehicles, pedestrians, or bicyclists, including parking lot circulation and access to sidewalks or crosswalks;

(4) Provide amplified music, announcements, or any other form of disruptive sound;

(5) Sell or dispense food to customers in moving vehicles or otherwise conduct drive-up sales;

(6) Sell or dispense alcohol, except during a permitted special event and in full compliance with all applicable state and local regulations, including LDC § 7.09.03;

(7) Engage in any activity that constitutes a public nuisance or otherwise endangers the health, safety, or general welfare of the public.

121.08 Mobile Food Operations During Special Events.

Areas within City parks, streets, and rights-of-way designated for Mobile Food Vendors shall be closed for use by the City on the day of, or immediately prior to, a permitted special event. Mobile Food Vendors shall not operate or locate within the boundaries of a permitted special event unless expressly authorized by the event promoter as an approved participant.

121.09 Temporary or Auxiliary Kitchens Associated with Drinking Establishment, Bar, or Taverns.

(A) Purpose. This section is intended to prevent temporary or auxiliary food preparation units, including trailers or mobile kitchens, from being used to satisfy the classification of a "restaurant" for zoning, permitting, or alcohol licensing purposes when associated with an existing drinking establishment, bar, tavern, or similar alcoholic beverage establishment.

(B) Prohibitions. Temporary or auxiliary food preparation units located in conjunction with a bar, tavern, or similar establishment shall not:

1. 1. Be used to qualify the primary establishment as a "restaurant" as defined in Table 2.02.01 for zoning, permitting, or alcohol licensing purposes.;and administered under LDCand LDC § 7.09.03

2. Operate in the absence of a fully permitted, permanent food establishment on the premises.

3. Circumvent applicable health, safety, or zoning regulations.

4. Dispense alcohol independently of the primary establishment's license, except as allowed for special events under state and local law.

5. Create any public nuisance, safety hazard, or otherwise endanger the health, safety, or general welfare of the public.

(C) Enforcement. Violations of this section may be enforced in accordance with City Code provisions for zoning, health, safety, or alcohol licensing compliance, including but not limited to issuance of notices of violation, fines, or suspension of operating privileges.

(D) Relationship to Mobile Food Vendor Regulations. This section shall not be construed to modify, amend, or limit the provisions of Section 121.07 or Section 121.08, which apply to state-licensed Mobile Food Vendors. Mobile Food Vendors operating independently of a bar or tavern are subject solely to Sections 121.07 and 121.08. Nothing in this section authorizes any temporary or auxiliary unit to satisfy "restaurant" status for zoning or alcohol purposes under LDC Table 2.02.01 or LDC § 7.09.03.

SECTION 3 APPLICABILITY.

All provisions of this Ordinance shall apply to the City Limits of the City of Zephyrhills, Florida.

SECTION 4 REPEALER.

Any ordinance or part of any ordinance in conflict herewith is hereby repealed to the extent of any conflict.

SECTION 5 SEVERABILITY.

If any provision or portion of this ordinance, or the application thereof, is declared invalid by any court of competent jurisdiction or found not in compliance by the State Land Planning Agency, such provision shall be severed. The severance shall not affect the validity of the remaining provisions of this ordinance, the City of Zephyrhills Comprehensive Plan, or the City of Zephyrhills Land Development Code.

SECTION 6 INCLUSION INTO THE CODE OF ORDINANCES.

The provisions of this Ordinance shall become and be made part of the Code of Ordinances and Land Development Code of the City of Zephyrhills, Florida. The sections of this Ordinance may be renumbered or re-lettered and the word "ordinance" may be changed to "section," "article," or such other appropriate word or phrase in order to accomplish such.

SECTION 7 SCRIVENER'S ERROR.

Corrections of typographical errors which do not affect the intent may be authorized by the City Manager, or the City Manager's designee, without need of further action of the City Council by filing a corrected copy of same with the City Clerk.

SECTION 8 EFFECTIVE DATE.

This Ordinance shall become effective upon passage on the second reading and signing by the Mayor.

The foregoing Ordinance No. 1524-26 was read and passed on the first reading in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 8th day of June, 2026.

Attest:

Ricardo Quiñones, City Clerk	Steven F. Spina, Council President

The foregoing Ordinance No. 1524-26 was read and passed on the first reading in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 22nd day of June, 2026.

Attest:

Ricardo Quiñones, City Clerk	Steven F. Spina, Council President

The foregoing Ordinance No. 1524-26 was approved by me this 22nd day of June, 2026.

Melonie Bahr Monson, Mayor

Approved as to legal form and legal content
for the reliance of the City of Zephyrhills only:

Matthew E. Maggard, Esq.
City Attorney

Summary report: Litera Compare for Word 11.15.0.58 Document comparison done on 6/18/2026 12:04:12 PM	
Style name: Default Style	
Intelligent Table Comparison: Active	
Original DMS: iw://cloudimanage.com/imanage/39848211/1 - Ordinance 1524-26 Food Truck Ordinance.docx	
Modified DMS: iw://cloudimanage.com/imanage/39848211/2 - Ordinance 1524-26 Food Truck Ordinance.docx	
Changes:	
Add	2
~~Delete~~	1
~~Move From~~	0
Move To	0
Table Insert	0
~~Table Delete~~	0
Table moves to	0
~~Table moves from~~	0
Embedded Graphics (Visio, ChemDraw, Images etc.)	0
Embedded Excel	0
Format changes	0
Total Changes:	3

City Council Meeting
June 22, 2026

Action Item

PUBLIC HEARING 2.4

Industrial Sign Ordinance
Second Reading Ordinance 1525-26 "**AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA CREATING SECTION 8.17.00 OF THE LAND DEVELOPMENT CODE, LARGE-FORMAT INDUSTRIAL BUILDING SIGNAGE; PROVIDING FOR REPEALER, CODIFICATION, SEVERABILITY, AND AN EFFECTIVE DATE. "**

A. Council President opens Public Hearing
B. Council President closes Public Hearing
C. City Council considers Ordinance No. 1525-26 on the Second Reading

Issue:
The purpose of this section is to recognize the unique visibility and identification needs of large industrial developments. Buildings exceeding 150,000 square feet typically occupy substantially larger sites and serve regional economic functions. The increased sign area is intended to provide reasonable identification while maintaining the overall aesthetic standards of the City.

Background:

As industrial development continues within the City, staff has identified the need for signage standards tailored to large-format industrial and logistics facilities. Due to their size and visibility, these buildings present unique signage considerations that differ from traditional commercial and industrial development.

Ordinance No. 1525-26 creates a new section within Article VIII (Signs) of the Land Development Code establishing sign regulations for buildings located within the Light Industrial (LI) and Airport Development (AP2) zoning districts that contain 150,000 square feet or more of gross floor area. The proposed standards provide for signage that is proportionate to building scale while maintaining architectural compatibility and minimizing visual impacts on adjacent properties and public rights-of-way.

The ordinance establishes maximum sign area, limits on the number and size of wall signs, design standards, and procedures for the review of master sign plans.

Attachment(s):
1. Ordinance 1525-26 - Industrial Sign Oridnance (39750792v1)

Fiscal Impact:

N/A

Staff Recommendation:
Staff recommends approval of Ordinance #1525-26 on the second reading.

ORDINANCE NO.: 1525-26

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA CREATING SECTION 8.17.00 OF THE LAND DEVELOPMENT CODE, LARGE-FORMAT INDUSTRIAL BUILDING SIGNAGE; PROVIDING FOR REPEALER, CODIFICATION, SEVERABILITY, AND AN EFFECTIVE DATE.

WHEREAS, as provided in section 2(b), Article VIII of the Constitution of the State of Florida, and section 166.021(1), Florida Statutes, the City of Zephyrhills, Florida (the "City"), a municipal corporation, enjoys all governmental, corporate, and proprietary powers necessary to conduct municipal government, perform municipal functions, and render municipal services, and may exercise any power for municipal purposes, except as expressly prohibited by law; and

WHEREAS, as provided in section 166.021(3), Florida Statutes, the governing body of each municipality in the state has the power to enact legislation concerning any subject matter upon which the state legislature may act, except when expressly prohibited by law; and

WHEREAS, the City Council has determined that it is in the City's interest to amend the City's Land Development Code from time to time to assure that the Code adequately meets the needs of the City; and

WHEREAS, the City Council recognizes that large-format industrial and logistics buildings present unique signage challenges due to their scale and visibility, which differ from typical smaller-scale industrial or commercial development; and

WHEREAS, the City Council finds that establishing sign standards specifically tailored to large-format industrial buildings will allow signage that is proportionate to large building mass and scale, ensure high-quality design and compatibility with building architecture, and prevent excessive visual impacts on adjacent properties and public rights-of-way; and

WHEREAS, the City Council hereby finds and declares that this Ordinance is in the best interest of the public health, safety, and welfare, and that it advances a valid and important public purpose.

NOW, THEREFORE, BE IT ENACTED, AND ORDAINED BY THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA, AS FOLLOW:

Section 1. Authority.

This Ordinance is enacted pursuant to Chapter 163, Florida Statutes, and under the home rule powers of the City.

Section 2. Legislative Findings of Fact.

The foregoing WHEREAS clauses are hereby adopted as legislative findings of the City Council of the City of Zephyrhills and are ratified and confirmed as being true and correct and are hereby made a specific part of this Ordinance upon adoption hereof.

Section 3. Creation of Section 8.17.00 of the City of Zephyrhills Land Development Code — Large-Format Industrial Building Signage.

Section 8.17.00 — Large-Format Industrial Building Signage is hereby created as part of Article VIII (Signs) of the City of Zephyrhills Land Development Code as follows:

Sec. 8.17.00. — Large-Format Industrial Building Signage

A. Purpose and Intent. The purpose of this section is to establish sign standards for large-format industrial and/or logistics buildings whose scale and visibility differ from typical smaller-scale industrial or commercial development. These standards are intended to:

1. Allow signage that is proportionate to large building mass and scale;
2. Ensure high-quality design and compatibility with building architecture; and
3. Prevent excessive visual impacts on adjacent properties and public rights-of-way.

B. Applicability.

1. This section shall apply to all principal buildings: (a) located within the Light Industrial (LI) or Airport Development (AP2) zoning districts; and (b) containing 150,000 square feet or more of gross floor area.
2. For purposes of this section, a qualifying building shall be treated as a single establishment, regardless of the number of tenants or occupants.

C. Relationship to Other Sign Regulations.

1. The standards of this section shall supersede the wall sign area, height, number, per-sign size, and frontage-based limitations set forth elsewhere in this Code, including Sec. 8.13.00(B) (maximum sign height and maximum sign structure area in non-residential districts) and Sec. 8.11.00(C)(2) (wall sign area and number limitations).
2. All other applicable provisions of this Code, including but not limited to illumination, maintenance, and prohibited sign types, shall remain in effect unless expressly modified herein.

D. Maximum Allowable Sign Area.

1. Buildings meeting the applicability requirements may be permitted wall signage with a total cumulative area not to exceed 0.7 percent (0.007) of the building's gross floor area.

   Formula: Maximum Total Sign Area (sq. ft.) = Gross Floor Area × 0.007

E. Number and Size of Signs.

1. A maximum of three (3) wall signs per building shall be permitted.
2. No individual wall sign shall exceed 450 square feet in area.
3. Sign area shall be calculated in accordance with the applicable measurement of sign area provisions of this Code.
4. No wall sign shall extend above the roofline or parapet of the building to which it is attached, nor shall any wall sign project more than 12 inches from the building wall.

F. Distribution of Signage.

1. The total allowable sign area may be distributed across multiple building elevations.
2. No single building elevation shall contain more than fifty percent (50%) of the total allowable sign area.
3. Wall signs shall be placed and designed so as not to create the appearance of a single larger sign or result in visual clutter.

G. Design Standards.

1. All signage shall be architecturally integrated with the building and shall be compatible with the building's scale, materials, and design.
2. Signage shall not create visual clutter or adversely impact adjacent properties or public rights-of-way.
3. Preferred sign types include channel letters, halo-illuminated letters, or comparable high-quality designs.
4. Internally illuminated cabinet signs shall be prohibited unless approved as part of a Master Sign Plan submitted in accordance with subsection H of this section.

H. Master Sign Plan.

A property owner or authorized agent may submit a Master Sign Plan for review and approval by the Site Plan Review Committee. The Master Sign Plan shall include the following:

(a) A site plan showing the location, size, and elevation of each proposed sign on the building;
(b) Specifications for materials, colors, and illumination type for each proposed sign;
(c) A demonstration that the proposed signage is architecturally compatible with the building and will not adversely impact adjacent properties or public rights-of-way.

Approval of a Master Sign Plan shall not authorize signage that exceeds the maximum total sign area or number of signs permitted under this section. A Master Sign Plan may be amended by submitting a revised plan for approval in the same manner as the original.

I. Illumination.

All illuminated signage permitted under this section shall not produce more than one foot-candle of illumination four feet from the sign, as measured from the base of such sign. Exposed neon tubing shall not be permitted.

SECTION 4. Repealer.

Any and all ordinances in conflict herewith are hereby repealed to the extent of any conflict.

Section 5. Severability.

It is declared to be the intent of the City Council of the City of Zephyrhills, Florida, that if any section, subsection, sentence, clause, or provision of this ordinance is held invalid, the remainder of the ordinance shall be construed as not having continued the said section, subsection, sentence, clause, or provision and shall not be affected by such holding.

Section 6. Inclusion into the Code.

It is the intent of the City Council that the provisions of this Ordinance shall become and be made a part of the City of Zephyrhills Land Development Code, and that the sections of this Ordinance may be renumbered or re-lettered and the word "ordinance" may be changed to "section," "article," "regulation," or such other appropriate word or phrase in order to accomplish such intentions.

Section 7. Effective Date.

This Ordinance shall become effective upon passage on the second reading and signing by the Mayor.

The foregoing Ordinance No. 1525-26 was passed on the first reading in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 8th day of June, 2026.

Attest:

Ricardo Quinones, City Clerk	Steven F. Spina, Ph.D., Council President

The foregoing Ordinance No. 1525-26 was passed on the second reading, following a public hearing, in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 22nd day of June, 2026.

Attest:

Ricardo Quinones, City Clerk	Steven F. Spina, Ph.D., Council President

The foregoing Ordinance No. 1525-26 was approved by me this 22nd day of June, 2026.

Melonie Bahr Monson, Mayor

Approved as to legal form and legal content for the reliance of the City of Zephyrhills only:

Matthew E. Maggard, Esq.
City Attorney

City Council Meeting
June 22, 2026

Action Item

BUSINESS ITEMS 3.1

Stormwater Assessment Rates
Resolution No. 871-26 **" A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA, REGARDING THE ESTABLISHMENT OF STORMWATER UTILITY ASSESSMENT RATES. "**

Issue:

City Council of the City of Zephyrhills, Florida has enacted Ordinance No. 1522-26, which creates Chapter 57 of the City's Code of Ordinances (the "Stormwater Code") to establish a stormwater utility and stormwater assessments.

Background:

Section 9 of the Stormwater Code authorizes the City Council to impose stormwater assessments against each developed parcel located within the stormwater service area, measured by the number of Equivalent Residential Units (ERUs) attributable to each parcel, based upon the special benefit accruing to such property from the stormwater management service provided by the City.

Attachment(s):

1. 39848701v2 - Resolution 871-26 - Stormwater Assessment Rates

Fiscal Impact:

No Fiscal Expenditures.

Staff Recommendation:

The Public Works Director and City Manager recommend approval of this resolution as presented.

RESOLUTION NO. 871-26

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA, REGARDING THE ESTABLISHMENT OF STORMWATER UTILITY ASSESSMENT RATES.

WHEREAS, the City Council (the "Council") of the City of Zephyrhills, Florida (the "City") has enacted Ordinance No. 1522-26, which creates Chapter 57 of the City's Code of Ordinances (the "Stormwater Code") to establish a stormwater utility and stormwater assessments; and

WHEREAS, Section 57-09 of the Stormwater Code authorizes the City Council to impose stormwater assessments against each developed parcel located within the stormwater service area, measured by the number of Equivalent Residential Units (ERUs) attributable to each parcel, based upon the special benefit accruing to such property from the stormwater management service provided by the City; and

WHEREAS, the City Council finds that the assessment of stormwater service and improvement costs based on impervious area, as represented by ERUs, fairly and reasonably apportions those costs in proportion to the special benefit received by each developed parcel; and

WHEREAS, the City has caused to be prepared a rate and apportionment study demonstrating that the stormwater assessment rates set forth herein are fair and reasonable and do not exceed the proportional special benefit conferred upon each assessed parcel; and

WHEREAS, notice of this public hearing has been provided in accordance with applicable law and Chapter 57 of the City Code; and

WHEREAS, the City Council finds it necessary and in the best interest of public health, safety, and welfare to establish stormwater assessment rates per ERU for Fiscal Years 2027 through 2031.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA:

Section 1. Recitals. The foregoing recitals are true and correct and are hereby incorporated herein by reference.

Section 2. Establishment of Rates. The City hereby establishes the annual stormwater assessment rates per ERU for Fiscal Years 2027 through 2031 to be between $118.00 and $128.00. The annual stormwater assessment rates per ERU for each fiscal year shall be as follows:

Fiscal Year 2026–2027: $118.00 per ERU

Fiscal Year 2027–2028: $118.00 per ERU

Fiscal Year 2028–2029: $118.00 per ERU

Fiscal Year 2029–2030: $125.00 per ERU

Fiscal Year 2030–2031: $128.00 per ERU

The rates for Fiscal Years 2027–2028 through 2030–2031 are projected maximum rates. The actual rate for each such fiscal year shall be established by the annual stormwater assessment resolution adopted pursuant to Section 57-14 of the City Code for the applicable fiscal year and shall not exceed the projected maximum rate without further action of the City Council following notice and hearing as required by law.

Section 3. Effective Date. This Resolution shall take effect upon adoption by the City Council; provided, however, that the stormwater assessments imposed hereby shall not be levied or collected unless and until Ordinance No. 1522-26 has become effective in accordance with its terms.

The foregoing Resolution No. 871-26 was read and passed, following a public hearing, in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 22nd day of June, 2026.

Attest: _____ _____

Ricardo Quiñones, City Clerk Steven F. Spina, Ph.D., Council President

The foregoing Resolution No. 871-26 was approved by me this 22nd day of June, 2026.

_____

Melonie Bahr Monson, Mayor

Approved as to legal form and legal content
for the sole reliance of the City of Zephyrhills

_____

Matthew E. Maggard, City Attorney

City Council Meeting
June 22, 2026

Action Item

BUSINESS ITEMS 3.2

Stormwater Assessment Mitigation Credit
Resolution No. 872-26 **" A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA, APPROVING THE STORMWATER UTILITY ASSESSMENT MITIGATION CREDIT POLICY MANUAL AND PROVIDING AN EFFECTIVE DATE. "**

Issue:

The proposed Policy Manual provides a structured and equitable process for recognizing privately maintained stormwater facilities that reduce demands on the City's stormwater infrastructure. Property owners who demonstrate compliance with the eligibility criteria may receive a percentage reduction in their annual stormwater utility assessment.

The Manual authorizes the Public Works Director, or designee, to administer the program, including review and approval of applications, inspections, recertification requirements, and enforcement provisions. To facilitate implementation during the first year of the Stormwater Utility, the resolution establishes August 3, 2026, as the application deadline for credits to be considered for the 2026 assessment year.

Approval of the Policy Manual will ensure consistent administration of the mitigation credit program and provide transparency and fairness for property owners seeking assessment reductions based on qualifying stormwater management practices.

Background:

On June 22, 2026, the City Council will consider Resolution No. 872-26, which approves the Stormwater Utility Assessment Mitigation Credit Policy Manual as required by Chapter 57 of the City Code of Ordinances (Stormwater Code), established through Ordinance No. 1522-26.

The Stormwater Utility was created to provide a dedicated and equitable funding source for the operation, maintenance, repair, replacement, and improvement of the City's stormwater management system. As part of the adopted Stormwater Code, developed properties that maintain qualifying private stormwater management facilities may be eligible to receive mitigation credits that reduce their stormwater utility assessment.

Section 9 of the Stormwater Code authorizes the City to establish a mitigation credit program for developed properties that have privately operated and maintained stormwater management

systems that meet current design standards and are operating under a valid Southwest Florida Water Management District Environmental Resource Permit. The Stormwater Utility Assessment Mitigation Credit Policy Manual establishes the eligibility requirements, application procedures, documentation standards, inspection requirements, recertification process, and administrative procedures necessary to implement the program.

Attachment(s):

1. 39848567v3 - Resolution 872-26 - Stormwater Assessment Mitigation Credit
2. Exhibit A - Zephyrhills_MitCred_PolicyMan _draftv2
3. Appendix A - Zephyrhills SWU Credit Application_draft_v2
4. Appendix B -Zephyrhills SWU Credit Recertification Application_draft_v2

Fiscal Impact:

The mitigation credit program may reduce stormwater utility assessment revenues for eligible properties; however, the program is structured to recognize and account for privately maintained stormwater facilities that provide stormwater management benefits and reduce impacts on the City's public stormwater system. The fiscal impact is anticipated and incorporated into the overall Stormwater Utility framework adopted by the City Council.

Staff Recommendation:

Staff recommends that the City Council adopt Resolution No. 872-26 approving the Stormwater Utility Assessment Mitigation Credit Policy Manual.

RESOLUTION NO. 872-26

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA, APPROVING THE STORMWATER UTILITY ASSESSMENT MITIGATION CREDIT POLICY MANUAL AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council (the "Council") of the City of Zephyrhills, Florida (the "City") has enacted Ordinance No. 1522-26, which creates Chapter 57 of the City's Code of Ordinances (the "Stormwater Code") to establish a stormwater utility and stormwater assessments; and

WHEREAS, pursuant to Section 57-09(g) of the Stormwater Code, developed properties with on-site, privately operated and maintained stormwater management systems with a valid Southwest Florida Water Management District Environmental Resource Permit meeting current design criteria may apply for stormwater mitigation credits; and

WHEREAS, the City's Stormwater Utility Assessment Mitigation Credit Policy Manual (the "Credit Manual") is to be approved by resolution, as required by Section 57-09(g) of the Stormwater Code; and

WHEREAS, the Council finds that it is in the best interest of the City and its property owners and residents to adopt the Credit Manual attached hereto as Exhibit A and incorporated herein by reference.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ZEPHYRHILLS, FLORIDA:

Section 1. Recitals. The foregoing recitals are true and correct and are hereby incorporated herein by reference.

Section 2. Approval of Credit Manual. The City Council hereby finds that the Credit Manual attached hereto as Exhibit A is fair and reasonable and hereby adopts and approves the Credit Manual. Eligible parcel owners may receive a mitigation credit applied as a percentage reduction to the stormwater utility assessment in accordance with the eligibility criteria, terms, and procedures set forth in the Credit Manual.

Section 3. Administration and Implementation. The City Manager, or the City Manager's designee (including the Public Works Director), is authorized to administer the mitigation credit program in accordance with the Credit Manual, including the review and approval of applications, inspections, recertification, and enforcement of the program's requirements. Applications for mitigation credit shall be submitted in accordance with the schedule set forth in the Credit Manual; provided, however, that for Fiscal Year 2026–2027, the initial assessment year, applications shall be submitted no later than August 3, 2026.

Amendments to the Credit Manual that alter eligibility criteria, credit amounts, or property-owner obligations shall be adopted by resolution of the City Council, as required by Section 57-09(g) of the City Code. Non-substantive amendments to administrative forms and procedures that

do not alter eligibility, credit amounts, or owner obligations may be adopted administratively by the City Manager.

Section 4. Administrative Appeals. Any property owner aggrieved by a credit determination under the Credit Manual may seek administrative review in accordance with the procedures set forth in Section 57-29 of the City Code.

Section 5. Repealer. All resolutions or parts of resolutions in conflict herewith are hereby repealed to the extent of any conflict.

Section 6. Effective Date. This Resolution shall take effect upon adoption by the City Council; provided, however, that the mitigation credit program established hereby shall not be implemented unless and until Ordinance No. 1522-26 has become effective in accordance with its terms.

The foregoing Resolution No. 872-26 was read and passed, following a public hearing, in an open and regular meeting of the City Council of the City of Zephyrhills, Florida, on this 22nd day of June, 2026.

Attest: _____ _____

Ricardo Quiñones, City Clerk Steven F. Spina, Ph.D., Council President

The foregoing Resolution No. 872-26 was approved by me this 22nd day of June, 2026.

_____

Melonie Bahr Monson, Mayor

Approved as to legal form and legal content
for the sole reliance of the City of Zephyrhills

_____

Matthew E. Maggard, City Attorney

City of Zephyrhills, Florida

Stormwater Utility Assessment

Mitigation Credit Policy Manual

June 22, 2026

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DRAFT

Section 1 - Introduction

The City of Zephyrhills (City) is establishing a stormwater utility to fund the planning, construction, operation, maintenance, and management of the City's stormwater management system. The stormwater utility assessment is be based upon the amount of impervious area on a given parcel. The assessment will be applied uniformly and equitably to all parcels within the City, in accordance with applicable state and local law.

Under this framework, parcels that generate stormwater runoff contribute to the demand placed upon the City's stormwater infrastructure. However, some parcel owners have constructed and maintained privately owned stormwater management systems that mitigate the impact of their stormwater runoff on the City's system. The mitigation credit program described in this manual provides a mechanism by which eligible parcel owners may receive a partial reduction, referred to as a mitigation credit, applied to their stormwater utility assessment.

This Mitigation Credit Policy Manual (Manual) establishes the policies, procedures, and criteria governing the application for, and granting of, mitigation credits. The City reserves the right to amend this Manual at any time to reflect changes in applicable law, regulatory standards, or City policy.

Section 1.1 Purpose

The purpose of this Manual is to:

1. Provide a fair and transparent process for property owners to apply for mitigation credits against their stormwater utility assessment.

2. Establish eligibility criteria based on the level of stormwater treatment provided by privately owned stormwater management systems.

3. Define the documentation requirements and review process for credit applications.

4. Promote the proper operation, maintenance, and continued existence of privately owned stormwater management systems that reduce the burden on the City's public stormwater infrastructure.

Section 1.2 Applicability

This Manual applies to all parcels within the City of Zephyrhills that are subject to the stormwater utility assessment and that have a privately owned and operated stormwater management system. Mitigation credits are available to single-family residential, non-residential, and multi-family residential parcel owners whose stormwater management systems meet the eligibility criteria set forth in Section 2 of this Manual.

Mitigation credits do not exempt a parcel from the stormwater utility assessment. Rather, credits reduce the assessment by a specified percentage based on the level of stormwater treatment the private system provides. The stormwater utility assessment, as reduced by any applicable mitigation credit, remains the responsibility of the parcel owner.

DRAFT

Section 1.3 Regulatory Background

The City of Zephyrhills is located within the jurisdictional boundaries of the Southwest Florida Water Management District (SWFWMD). All development within the City that meets applicable thresholds is subject to the Environmental Resource Permit (ERP) program administered by SWFWMD under Part IV of Chapter 373, Florida Statutes, and Chapter 62-330 of the Florida Administrative Code (FAC).

The ERP program requires that new developments properly treat stormwater runoff to reduce pollutant loading to receiving water bodies. Florida's stormwater treatment performance standard requires an 80% reduction in the average annual post-development loading of Total Suspended Solids (TSS) from new development. Effective June 28, 2024, the ERP program was amended to include nutrient-specific performance standards for Total Nitrogen (TN) and Total Phosphorus (TP). Under the updated standards, stormwater management systems must demonstrate a net improvement in nutrient loading, meaning post-development TN and TP loads must be equal to or less than pre-development loads. For projects discharging to impaired water bodies with adopted Total Maximum Daily Loads (TMDLs) or Basin Management Action Plans (BMAPs), the stormwater system must meet the more stringent of either the net improvement standard or the specific load reduction allocations established in the applicable TMDL or BMAP. Applicants are required to demonstrate compliance through quantitative pollutant load calculations using methodologies specified in Section 9.0 of the updated Volume II. Design criteria for stormwater management systems are contained in the ERP Applicant's Handbook Volume II, Design Requirements for Stormwater Treatment and Management Systems—Water Quality and Water Quantity, adopted by SWFWMD effective October 31, 2025, as may be amended from time to time.

In addition to the SWFWMD ERP framework, the City of Zephyrhills has adopted local stormwater management requirements for designated drainage areas within its jurisdiction. City Ordinance No. 941-05, effective January 9, 2006, established Basins of Special Concern within the City. The ordinance identifies specific drainage basins where additional stormwater management standards apply due to flooding concerns, environmental sensitivity, or limited outfall capacity. All development(s) located within a designated Basin of Special Concern are required to meet the stormwater management standards set forth in Ordinance No. 941-05, which may be more stringent than the SWFWMD ERP requirements. The Basin of Special Concern designations and associated design criteria are incorporated into the City's Public Works Design Manual (Section 9, Stormwater Management). Properties located within a designated Basin of Special Concern that demonstrate compliance with the applicable ordinance requirements may be eligible for a mitigation credit as described in Section 2 of this Manual, provided all other eligibility criteria are met.

DRAFT

Section 2 - Mitigation Credits

The City of Zephyrhills stormwater utility assessment will be based on the amount of impervious area on each parcel. Impervious area is defined as hard surfaces that prevent or significantly reduce the natural infiltration of stormwater into the ground, including rooftops, paved areas, sidewalks, driveways, and other constructed surfaces. The stormwater utility assessment will fund the City's stormwater management program, which includes the operation, maintenance, and improvement of the stormwater infrastructure that serves all properties within the City.

The following principles form the basis for the mitigation credit program:

1. All developed properties within the City contribute to stormwater runoff in proportion to their impervious area.

2. Some property owners (and/or entities such as condominium associations or homeowners associations) contribute to the management of stormwater through the construction and maintenance of privately owned and operated stormwater management systems that were designed and permitted to meet state and local stormwater management standards.

3. In light of the contribution of these privately maintained stormwater management systems, a mitigation credit program has been established.

4. It is in the City's interest to encourage proper operation and maintenance and continued existence of privately owned and operated stormwater management facilities on developed properties.

5. The mitigation credit will not result in any property paying less than its fair share of the costs of the City's overall stormwater management program.

2.1 Mitigation Credit Qualification

Property owners may qualify for mitigation credits on their stormwater utility assessment by demonstrating that their property (or properties within a common development) is served by a privately owned and operated stormwater management system that was designed and permitted in accordance with applicable state and local stormwater management standards. The mitigation credit is a percentage reduction applied to the property's stormwater utility assessment.

Stormwater Management System Credit: A credit of 50% of the stormwater utility assessment may be granted to properties that have a stormwater management system that meets the current design standards and has an approved or self-certified ERP issued by SWFWMD. Current design standards are those set forth in the ERP Applicant's Handbook Volume II adopted by SWFWMD effective October 31, 2025, as may be amended, or the City of Zephyrhills' Basin of Special Concern Ordinance, whichever is more stringent.

To maintain credit eligibility, stormwater systems must be maintained in such a manner that the intended retention, detention or treatment functions are being met. Credits *may* be granted for a 5-year period provided the following data (at a minimum) is submitted, reviewed and approved by the City Public Works Director or their designee:

1. Completed *Zephyrhills Stormwater Utility Assessment Mitigation Credit Application* (Appendix A).
2. Valid and current permit(s) granted by SWFWMD or the City of Zephyrhills.
3. Current inspection/maintenance reports for the stormwater management system.
4. Current design plans or as-built drawings for the stormwater management system.
5. Current Operation and Maintenance (O&M) Plan for the stormwater management system.
6. Current O&M budget for the stormwater management system.

2.1.1 Restrictions

a) Public or private property that fails to meet the criteria listed above shall not receive a credit to offset their stormwater assessment fee.

b) Credit shall only be given to the property owner(s) of record.

c) Credits shall be effective for 5 years requiring inspection and recertification to continue to receive the credit. The *Zephyrhills Stormwater Utility Assessment Mitigation Credit Recertification* Form can be found in Appendix B.

2.1.2 Terms

a) A permitted facility number must be provided.

b) Pasco County Property Appraiser Parcel Identification Numbers for each property being treated by the stormwater management system must be provided.

c) Credits will be defined as percent (%) reductions applied as a credit adjustment to the assessment/fee.

d) If the stormwater management system is functioning as approved (as demonstrated by self-certification reports and City inspections), the credit will be applied to the fee. If the approved practice is not functioning as approved, the credit will be cancelled, and the fee will return to the baseline calculation. Reapplication is governed by the Mitigation Credit Enforcement Policy (Section 5).

e) Proper operation and maintenance of stormwater facilities is essential for the facilities to continue to perform as intended. To continue to receive credit, the applicant must inspect the stormwater facility annually and perform maintenance if identified during that inspection.

Section 3 - Application Procedures

A property owner seeking a fee credit must comply with the procedures outlined in this manual and must submit a *Zephyrhills Stormwater Utility Assessment Mitigation Credit Application Form* (Appendix A). All information necessary for the City to review and render a decision must be supplied as outlined in the manual and credit application. Failure to comply with the procedures outlined in the manual will result in a denial of the credit application. Applications must be received by the City no later than June 1 of each calendar year in order to apply to that year's assessment, except for 2026, the first year of the utility, when applications must be submitted by August 3, 2026. Stormwater mitigation credits will not be retroactively applied to any previous year's assessment.

Section 4 - Appeal Process

Any person disagreeing with the interpretation or application of a provision in this manual, or the related laws or ordinances pertaining to stormwater management in the City, may appeal in writing to the City by supplying Pasco County Property Appraiser records, survey data, or other pertinent information to support the appeal. The City Public Works Director or their designee will notify all parties, in writing, of their decision within 90 days of receipt of any appeal.

Section 5 - Mitigation Credit Enforcement Policy

The City reserves the right to review the application and any approved credit and all facts supporting any approved credit for accuracy and/or inspect and review documentation confirming the provision of the facility at any time. If, after its review or inspection or approval, the City finds the application to be inaccurate or the projected level of service is not being provided or continued, the customer will be notified in writing and given 45 days to correct the deficiency. The property owner must provide written documentation to the City Public Works Director or their designee within 45 days of the original notice by the City Public Works Director or their designee that the requirements are being met or continued as agreed, in addition to such evidence as the City Public Works Director or their designee reasonably requires showing that the deficiency has been corrected. If, in the opinion of the City Public Works Director or their designee, the deficiency is not satisfactorily corrected, the fee credit attributable to the deficiency will be terminated on the following assessment period. Reapplication for fee credit will not be reviewed until the requirements have been adequately met and evidence of the corrections has been provided with the reapplication.

Once the credit reduction has been canceled, a customer may not reapply for that credit until the following assessment period and then only if the deficiency has been corrected, as determined by the City inspection. It will be the responsibility of the customer to prove the stormwater management goals are met prior to the credit being reissued.

DRAFT

APPENDIX A

ZEPHYRHILLS STORMWATER UTILITY ASSESSMENT MITIGATION CREDIT APPLICATION FORM

APPENDIX B

ZEPHYRHILLS STORMWATER UTILITY ASSESSMENT MITIGATION CREDIT RE-CERTIFICATION FORM

City of Zephyrhills Stormwater Utility Assessment Mitigation Credit Application

Public Works Department
Attn: Stormwater Credits
39421 South Avenue
Zephyrhills, FL 33542
(813) 780-0022 Ext. 3574
Aknoechelman@zephyrhills.gov

This application is for a stormwater utility fee credit, available for customers who have privately owned stormwater control devices on their property and/or within a common development, that treat and attenuate stormwater in accordance with the Stormwater Utility Assessment Mitigation Credit Policy Manual.

(* = REQUIRED Information)

[Section 1] CONTACT INFORMATION (Property Owner or Authorized Representative):

*Applicant's Name: _____ * Daytime Phone #:_____

*Company or Business Name: _____

Your MAILING address for return response by mail: Email: _____

*Street or P.O. Box: _____

*City: _____ *State: _____ *Zip Code: _____

[Section 2] PROPERTY INFORMATION:

*Physical Property Address: _____Floor or Unit # (if applicable):_____

*Parcel Number(s): _____ *Property Owner Name (If different from applicant): _____

Current Annual Stormwater Utility Fee(s): $_____

[Section 3] STORMWATER PERMIT INFORMATION (please submit all relevant permit documentation as outlined in Manual):

Facility Permit #:	Facility Permit #:	Facility Permit #:
Granting Entity:	*Granting Entity:*	*Granting Entity:*
☐City of Zephyrhills (in Basin of Special Concern)	☐ City of Zephyrhills (in Basin of Special Concern)	☐ City of Zephyrhills (in Basin of Special Concern)
☐Southwest Florida Water Management District (SWFWMD)	☐ Southwest Florida Water Management District (SWFWMD)	☐Southwest Florida Water Management District (SWFWMD)

*Is the stormwater management system being maintained in accordance with permit requirements? ☐ Yes ☐ No ☐ Unsure

[Section 4] MITIGATION CREDITS:

Mitigation credits are associated with the construction, operation, and maintenance of privately owned stormwater management systems that provide benefit to the City by reducing runoff into the City maintained system. Mitigation credit classifications and their maximum allowed percentages (%) are as follows:

1. **Stormwater Management System Credit**: A credit of 50% of the stormwater utility assessment may be granted to properties, and/or within a common development, that have a stormwater management system that meets the current design standards and has an approved or self-certified Environmental Resource Permit (ERP) issued by the Southwest Florida Water Management District (SWFWMD). Current design standards are those set forth in the ERP Applicant's Handbook Volume II adopted by SWFWMD effective October 31, 2025, as may be amended, or the City of Zephyrhills' Basin of Special Concern Ordinance, whichever is more stringent.

City of Zephyrhills Stormwater Utility Assessment Mitigation Credit Application

Public Works Department
Attn: Stormwater Credits
39421 South Avenue
Zephyrhills, FL 33542
(813) 780-0022 Ext. 3574
Aknoechelman@zephyrhills.gov

[Section 5] RESTRICTIONS & REQUIREMENTS:

The following restrictions and requirements apply to the above mitigation credits:

- No public or private property shall receive credit to offset fees for any condition or activity unrelated to the City's cost of providing stormwater management services.
- Credit shall only be given to the specific parcel(s) listed on this form. Additional Parcel Identification Numbers can be attached to this application on a separate piece of paper.
- Credits may be effective for 60 months requiring inspection or recertification to continue to receive the credit.
- All applications must be accompanied by the appropriate documentation supporting the mitigation credit classification requested as outlined in the Stormwater Utility Assessment Mitigation Credit Policy Manual.

Incomplete or inaccurate information submitted on this form may cause the application to be rejected and no Stormwater Mitigation Credit to be applied. The Applicant hereby states that, by submitting this form, the information provided is true and correct to the best of the Applicant's knowledge and the Applicant understands that submitting this application does not guarantee approval of a mitigation credit.

Submit this application and additional supporting documentation by mail, fax, email, or in person, to the Public Works contact information listed at the top of the form. The City Public Works Department will respond to the Applicant within sixty (60) days from the date of receipt.

*Signature of Applicant:_____ *Date: _____

CITY USE ONLY

Date Received: _____ Review Date: _____

Valid Facility Stormwater Permit: ☐Yes ☐ No ☐ N/A

Stormwater facilities are regularly maintained and in good working order (if applicable, to Permit requirements?) ☐Yes ☐ No

Mitigation Credit Granted: ☐Yes ☐No

Reviewer Name/Title:

_____

Approval Signature:

_____

Additional Notes:

City of Zephyrhills
Stormwater Utility Assessment Mitigation Credit Recertification Application

Public Works Department
Attn: Stormwater Credits
39421 South Avenue
Zephyrhills, FL 33542
(813) 780-0022 Ext. 3574
Aknoechelman@zephyrhills.gov

This application is for a stormwater utility fee credit recertification, available for customers who have existing credits based upon privately owned stormwater management systems on their property, and/or within a common development, that continue to treat and attenuate stormwater in accordance with the Stormwater Utility Assessment Mitigation Credit Policy Manual.

(* = REQUIRED Information)

[Section 1] CONTACT INFORMATION (Property Owner or Authorized Representative):

*Applicant's Name: _____ * Daytime Phone #:_____

*Company or Business Name: _____

Your MAILING address for return response by mail: Email: _____

*Street or P.O. Box: _____

*City: _____ *State: _____ *Zip Code: _____

[Section 2] PROPERTY INFORMATION:

*Physical Property Address: _____Floor or Unit # (if applicable):_____

*Parcel Number(s): _____ *Property Owner Name (If different from applicant): _____

Current Annual Stormwater Utility Fee(s): $_____

[Section 3] DOCUMENTATION REQUIRED:

The following documentation is required to obtain credit recertification:

1. Valid and current permits granted by the Southwest Florida Water Management District (SWFWMD) or the City of Zephyrhills are acceptable evidence to recertify the credit.
2. Current inspection/maintenance reports for the stormwater management system.
3. Design plans or as-built drawings for the stormwater management system.
4. Current Operation and Maintenance (O&M) Plan for the stormwater management system.
5. Current O&M budget for the stormwater control device.

*Is the stormwater management system being maintained in accordance with permit requirements? ☐ Yes ☐ No ☐ Unsure

Incomplete or inaccurate information submitted on this form may cause the application to be rejected and the Stormwater Mitigation Credit to not be recertified. The Applicant hereby states that, by submitting this form, the information provided is true and correct to the best of the Applicant's knowledge and the Applicant understands that submitting this application does not guarantee approval of a mitigation credit.

Submit this application and additional supporting documentation by mail, fax, email, or in person, to the Public Works contact information listed at the top of the form. The City Public Works Department will respond to the Applicant within sixty (60) days from the date of receipt.

*Signature of Applicant:_____ *Date: _____

CITY USE ONLY

Date Received: _____ Date Reviewed: _____
Required Documentation Received: ☐Yes ☐ No
Mitigation Credit Recertified: ☐Yes ☐No
Reviewer Name/Title/Signature:
_____

Action Item

BUSINESS ITEMS 3.3

Approval of agreement # **37-2026-02** - Legal Counsel Engagement Agreement for Conflict Counsel - Trask Daigneault, LLP

Issue:

The City periodically encounters matters in which the City Attorney's Office may have a conflict of interest, require additional legal resources, or determine that independent legal counsel is necessary to represent the City's interests. In such circumstances, the City benefits from having qualified outside counsel available to provide legal representation, independent legal advice, and specialized legal services on an as-needed basis.

Trask Daigneault, LLP, located in Clearwater, Florida, has submitted the attached Legal Counsel Engagement Agreement to serve as conflict counsel for the City. Under the proposed agreement, the firm would represent the City in code enforcement proceedings before boards, magistrates, courts, and administrative bodies, provide independent legal advice, and perform other legal services as requested by the City Attorney or City Manager.

Background:

The proposed agreement establishes the terms under which Trask Daigneault, LLP may provide legal services to the City on an as-needed basis. The agreement limits the firm's engagement to the specified scope of services and outlines the responsibilities of both the City and the firm.

Compensation under the agreement is based upon the following hourly rates:
• Partners: $300.00 per hour
• Associates: $275.00 per hour
• Paralegals: $85.00 per hour
• Travel Time: $250.00 per hour

In addition to legal fees, the City would be responsible for reimbursing reasonable costs associated with representation, including public records requests, travel expenses, expert witness fees, investigations, and other litigation-related expenses as necessary.

The agreement does not obligate the City to utilize the firm for any specific matter, nor does it guarantee any minimum amount of work. Rather, it establishes a framework under which the City may engage the firm when conflict counsel or independent legal services are needed.

Attachment(s):

1. 2026-06-17 Zephyrhills - TD LLP Engagement Agreement

Fiscal Impact:

Legal services provided under this agreement will be billed on an hourly basis and paid from the appropriate departmental legal services budget or other authorized funding source. Costs will be incurred only when services are requested and performed.

Staff Recommendation:

Staff recommends that the City Council approve the Legal Counsel Engagement Agreement with Trask Daigneault, LLP for the provision of conflict counsel services, independent legal advice, and related legal representation on an as-needed basis, and authorize the City Manager to execute the agreement on behalf of the City.

TRASK DAIGNEAULT LLP ATTORNEYS

THOMAS J. TRASK, B.C.S.*
JAY DAIGNEAULT, B.C.S.*
ERICA F. AUGELLO, B.C.S.*
RANDY D. MORA, B.C.S.*
ROBERT ESCHENFELDER, B.C.S.*
NANCY S. MEYER, B.C.S.*
TAMMI BACH, B.C.S.*
ZOE S. RAWLS
CAROLINE SPRADLIN

* *Board Certified by the Florida Bar in City, County and Local Government Law*

LEGAL COUNSEL ENGAGEMENT AGREEMENT

I, on behalf of the undersigned client, do hereby retain and employ TRASK DAIGNEAULT, LLP, 1001 South Fort Harrison Ave, Ste. 201, Clearwater, Florida 33756 (the "Firm") to represent the City of Zephyrhills (the "City" or "Client") as its attorneys to serve as conflict counsel in code enforcement proceedings before any board, magistrate, court, or administrative body, to provide independent legal advice, and otherwise assist with any other legal analysis and representation as may be requested or required by the City Attorney or City Manager on an as needed basis. (the "Scope of Services").

I, on behalf of the City, understand and agree that that the City has retained the Firm and that the Firm has accepted representation of the City in this matter subject to the following terms:

1. This engagement is limited to the Scope of Services set forth above.

2. The City understands that it is impossible at this time for the Firm to formulate any opinions regarding any legal conclusions, administrative process, or potential claims without further information, investigation, or analysis. The Firm has not made any assurances, representations, or guarantees to the City concerning the ultimate outcome of the Firm's services or that the Firm will reach a pre-determined legal conclusion regarding the identified Scope of Services.

3. The City understands that it is the Client's obligation to be truthful in all matters relating or relevant to the Firm's representation.

4. The Firm reserves the right to withdraw from this limited engagement if the City, or its officers or agents: (a) fail to communicate with the Firm; (b) refuses to follow the Firm's recommendations regarding the engagement; (c) misrepresents any facts to or about the Firm; or (d) fails to pay any cost deposit required under this agreement, or any outstanding invoices. If the

Firm should withdraw from the engagement, it shall be Client's responsibility to seek legal services from another attorney or to investigate/pursue any potential claims without representation.

5. If the Firm withdraws from this limited engagement, or if the City should discharge the Firm from this engagement, the Firm has the right to retain any and all files, papers, and other property coming into their possession in connection with their engagement without liability to the Firm or its partners or employees until Client has fully paid all fees and costs due the Firm pursuant to this agreement.

6. Client agrees to pay for all costs and fully reimburse the Firm for any costs advanced incidental to the scope of services, including, but not limited to, the following:

A. Photocopies
B. Cost of land use surveys, plats, public records requests and other reports and records
C. Travel expenses
D. Accounting and appraisal fees
E. Investigation fees and expenses
F. Fees and expenses of experts and expert witnesses which the Firm feels necessary to assist in the investigation of any claims

7. The City agrees to pay the Firm for the legal services it renders pursuant to the Scope of Services, and any agreed-upon modification thereof.

8. The City agrees to compensate the Firm at the following hourly rates: (1) $300.00 per hour for work done by Randy D. Mora, Esq., or any of the other partners of the Firm; (2) $275.00 per hour for work done by associates of the Firm, and (3) $85.00 per hour for work that may be completed by paralegals. The City further agrees to compensate the Firm for any travel relating $250.00 per hour.

9. The City understands that the only way the Firm can provide it with legal services is for the City to pay the Firm's fees and costs upon receipt of the monthly billing statement. The City understands that no lawyer at the Firm may continue working on its file if the previous billing statement has not been paid. If the monthly billing statement is not paid, the Firm reserves the right to cease legal work and terminate the engagement, and the City hereby consents to such termination. The City understands that funds that have been earned for legal services or that have been expended for costs are not refundable.

DATED in Pasco County, Florida, this ____day of June, 2026.

On behalf of:
THE CITY OF ZEPHYRHILLS

Signature: _____

Printed Name: _____

Title: _____

The above employment is accepted upon the terms stated in this agreement.

TRASK DAIGNEAULT, L.L.P.

_____
Randol D. Mora, Esq., Partner

City Council Meeting
June 22, 2026

Information Only

CITY MANAGER'S REPORT 4.1

Water Video - Neptune

Issue:

Presentation of a video produced by Neptune Technology Group highlighting the City of Zephyrhills Utilities-Water Division's ongoing efforts to modernize the City's water system through advanced metering technology.

Background:

Neptune Technology Group recently collaborated with the City of Zephyrhills Utilities-Water Division and Public Information Office to produce a video showcasing the City's transition to Advanced Metering Infrastructure (AMI) utilizing Neptune MACH 10 ultrasonic water meters.

For nearly 20 years, Neptune has been a partner in the City's water utility operations. The video highlights Zephyrhills' commitment to continual improvement, including the transition from traditional static water meters to AMI technology. These upgrades have enhanced system accuracy, reliability, operational efficiency, and customer service capabilities.

The video also provides an opportunity to recognize the dedicated employees of the Utilities-Water Division who work daily to ensure reliable water service throughout the community.

Attachment(s):

None

Fiscal Impact:

None.

Staff Recommendation:

City Council Meeting
June 22, 2026

Information Only

NOTED ITEMS 5.1

Kimley-Horn Work Order - 6109 16th Street Stormwater Analysis

Issue:

The City recently purchased this property located at 6109 16th Street. This parcel flooded during Hurricane Milton in 2024

Background:

Flood-prone property adjacent to an existing City retention pond. The intent is to double the size of the existing retention pond for additional treatment and storage in an effort to improve localized flooding at this location.

Attachment(s):

1. KimleyHorn Work Order 26-178 6109 16th Street

Fiscal Impact:

FY 26 Stormwater Professional Services - Not to Exceed $41,035.00

Staff Recommendation:

The Public Works Director and City Manager recommend approval of this item as presented.

WORK ORDER NO. 26-178
Pursuant to Continuing Service Contract Engineering Services Agreement Between City of Zephyrhills and Kimley-Horn and Associates, Inc. for Professional Services

This agreement, executed this 15th day June, 2026, is Work Order No. 26-178 to Continuing Services Contract Engineering Services agreement between the City of Zephyrhills (hereinafter referred to as "City" or "Client"), and Kimley-Horn and Associates, Inc., (hereinafter referred to as "Kimley-Horn" or "Consultant"), dated November 27, 2018.

WHEREAS, the City and the Consultant entered into an Agreement to provide Continuing Services for Engineering Services; and

WHEREAS, the Agreement provided that the City would make individual technical service requests of the Consultant; and

NOW, THEREFORE, in consideration of the promises and mutual benefits which will accrue to the parties, it is mutually understood and agreed as follows:

I. General Scope of this Work Order

The Consultant will be responsible for providing professional and technical services as requested by the City. These services will focus on Design, Permitting, and Limited Construction Phase Services for the Site Improvements to the Stormwater Pond at 6109 16th St within the City of Zephyrhills City limits, as discussed in Section II.

The Consultant will be responsible for ensuring that all necessary documentation and plans are prepared for the 6109 16th St Stormwater Pond Improvements in accordance with the project requirements.

II. Scope of Work

The following scope of work is summarized as follows:

Pursuant to the City's request, Kimley-Horn has prepared the following Scope of Services for this project. Kimley-Horn proposes the following tasks to the City to provide Civil Engineering services for the requested 6109 16th St Stormwater Analysis.

TASK	DESCRIPTION
1	**Engineering Design** – Kimley-Horn will prepare an onsite drainage memo with supporting calculations showing the proposed improvements to the stormwater pond at 6109 16th St are consistent with the Southwest Florida Water Management District and City of Zephyrhills Basis of Review. The drainage memo will include analysis of the flood plain storage volume in the existing and proposed conditions. The intent of the stormwater analysis will be to demonstrate that the proposed site development complies with SWFWMD and City of Zephyrhills regulations and show "cup for cup" compensation for the stormwater improvements within the 100-year Floodplain. No stormwater modeling or regional floodplain modeling is included in this task.

2	**Civil Design Development Plans 60%** – Kimley-Horn will prepare Design Development Plans which will include Cover Sheet, General Notes, Erosion Control, Site Plan, Grading Plan, Utility Plan (if necessary), and Details. These documents will be approximately 60% complete and will include detail for the City's review. These documents are intended to guide the design and planning for the City and can be used to provide an approximate cost to the Client from their contractor as estimated construction costs of the proposed improvements. This task includes Kimley-Horn's attendance at one (1) Project Kick Off Meeting with Client and one (1) Site Walk.
3	**Civil Construction Plans 100%** – Kimley-Horn will prepare Design Construction Plans which will include Cover Sheet, General Notes, Erosion Control, Site Plan, Grading Plan, Utility Plan (if necessary), and Details. These documents will be ready for permit review from the City and SWFWMD. These documents are intended to guide the design and planning for the City and may be used by the Client's contractor to provide estimated construction costs for the proposed improvements to the Client.
4	**Permitting** - Kimley-Horn will prepare and submit, on the Client's behalf, the following permit applications, provide support in requesting approvals from the jurisdictions noted below. This task includes Kimley-Horn's attendance at one (1) SWFWMD Pre-Application Meeting. • City of Zephyrhills Site Development Permit • Southwest Florida Water Management District (SWFWMD) Environmental Resource Permit A floodplain volume analysis will be done to help show the volume gained from the improvements (Task 1). There are no impervious improvements anticipated for this project. Stormwater modeling is not included in this Work Order.
5	**Construction Phase Services** - Kimley-Horn will make up to four (4) site visits to observe the progress of the work. Observations will not be exhaustive or extend to every aspect of the Contractor's work, but will be limited to spot checking, and similar methods of general observation. Based on the site visits, Kimley-horn will evaluate whether the Contractor's work is generally proceeding in accordance with the Contract Document and keep Client informed of the general progress of the work. Kimley-Horn will not supervise, direct, or control the Contractor's work, and will not have authority to stop the Work or responsibility for the means, methods, techniques, equipment choice and use, schedules, or procedures of construction selected by the Contractor, for safety programs incident to the Contractor's work, or for failure of the Contractor to comply with laws. Kimley-Horn does not guarantee the Contractor's performance and has no responsibility for the Contractor's failure to perform in accordance with the Contract Documents. Kimley-Horn is not responsible for any duties assigned to it in the construction contract that are not expressly provided for in this Agreement.

III. Additional Services

The following are services that are not included in the scope of services but can be provided as additional services if authorized by the Client. Compensation for additional services will be agreed to prior to their performance.

- Attendance at public hearings
- Stormwater Modeling in ICPR
- Additional reviews beyond milestone meetings
- LOMR Map Change

IV. Information Provided by Client

The following information, upon which the Consultant can rely, shall be provided by the Client or the developer of the project.

- Topographic Survey
- Geotechnical Report

V. Compensation

The Consultant's fee for this project is summarized by work task and labor category on the attached Exhibit A. The cost for Tasks 1 through 5 will be a lump sum fee of $41,035. The Consultant will not exceed this maximum fee unless they have received written authorization.

VI. Schedule

We will provide our services as expeditiously as practicable to meet a mutually agreed upon schedule.

VII. Other Provisions

All provisions contained in the Corridor, Sub-area, and Special Transportation Studies Agreement not specifically modified herein shall remain in full force and effect and are incorporated by reference herein.

KIMLEY-HORN AND ASSOCIATES, INC.	CITY OF ZEPHYRHILLS
By: _____	By: _____
Print Name: Dawn Dodge, P.E.	Print Name: William Poe
Title: Vice President	Title: City Manager
Kimley-Horn and Associates, Inc.	
Witness: _____	Attest: _____

EXHIBIT A
City of Zephyrhills, Florida

Man-hour Estimate

	Task / Work Description	Chief Engineer $ 298.00	Senior Engineer $ 230.00	Project Engineer $ 180.00	Engineering Intern $ 135.00	Engineering Technician $ 118.00	Support Staff $ 90.00	Accountant $ 127.50	Fee
		HOURS							
1	Engineering Design	2	10	25					$7,396
2	Design Development – 60%		10	20		5	5		$8,940
3	Construction Plans – 100%	2	10	20		5	5		$9,536
4	Permitting	1	10	25		5	5		$8,138
5	Construction Phase Services		10	15	15				$7,025
							Total =		$ 41,035

EXHIBIT B- UNIT LABOR RATES

Consultant shall list a complete fee schedule to be referred to when proposing services for each project assigned by the CITY OF ZEPHYRHILLS. The Fee Schedule shall include but not be limited to services required to support the Scope of Services, as so stated in Exhibit A.

Fees, which shall be inclusive of all overhead of Consultant, for basic services and additional services (only when approved in writing by the CITY), be reimbursed at the following hourly rates:

City of Zephyrhills Kimley-Horn and Associates, Inc. CONTRACT BILLING RATES	
Job Classification	Average Hourly Billing Rate
Chief Engineer	$ 298.00
Senior Project Manager	$ 285.00
Project Manager	$ 215.00
Senior Professional Engineer	$ 230.00
Senior Environmental Scientist	$ 200.00
Professional Engineer II/Wetland Scientist/Geologist	$ 180.00
Professional Engineer I/Wetland Scientist/Geologist	$ 165.00
Engineer Intern	$ 135.00
Senior Designer/Engineering Tech	$ 138.00
Designer/Engineering Tech	$ 118.00
Drafter/CADD Operator	$ 100.00
Sr. Planner	$ 230.00
Planner	$ 150.00
GIS Specialist	$ 120.00
Sr. Landscape Architect	$ 230.00
Landscape Architect	$ 180.00
Landscape Intern	$ 135.00
Construction Engineer	$ 175.00
Construction Inspector	$ 145.00
Administrative/Clerical	$ 90.00