Town Council Meeting

February 14, 2022 at 6:00 PM

In Person and via Zoom

Join Zoom Meeting:
https://us06web.zoom.us/j/88091550394?pwd=VjZBb3pkNHEzclZpOXlIRlhHNVRQQT09
Meeting ID: 880 9155 0394 | **Passcode:** 393900

Due to COVID-19, the Town of Howey-in-the-Hills is limiting the number of public attendees at meetings to 10 individuals. The Town of Howey-in-the-Hills is also requesting all audience members to wear masks when attending the meeting. The Town encourages everyone who is interested in participating in the meeting to join virtually via ZOOM.

AGENDA

Call the Town Council Meeting to order
Pledge of Allegiance to the Flag
Invocation

ROLL CALL
Acknowledgement of Quorum

AGENDA APPROVAL/REVIEW

CONSENT AGENDA
Routine items are placed on the Consent Agenda to expedite the meeting. If Town Council/Staff wish to discuss any item, the procedure is as follows: (1) Pull the item(s) from the Consent Agenda; (2) Vote on the remaining item(s); and (3) Discuss each pulled item and vote.

1. The approval of the minutes and ratification and confirmation of all Town Council actions at the January 24, 2022 Town Council Meeting.

2. The approval of the minutes and ratification and confirmation of all Town Council actions at the January 26, 2022 Town Council Workshop Meeting.

PUBLIC HEARING

OLD BUSINESS

3. Discussion: **Utility Consultants Review**

NEW BUSINESS

4. Consideration and Approval: **Venezia Townhomes Final Subdivision Plan Review**

DEPARTMENT REPORTS

5. Town Hall

6. Police Department

7. Code Enforcement

8. Public Works

9. Library

10. Parks & Recreation Advisory Board / Special Events

11. Town Attorney

12. Town Administrator / Finance Manager - Finance and Development Reports

COUNCIL MEMBER REPORTS

13. Mayor Pro-Tem Conroy

14. Councilor Lehning

15. Councilor Gallelli

16. Councilor Klein

17. Mayor MacFarlane

PUBLIC COMMENTS
Any person wishing to address the Mayor and Town Council and who is not on the agenda is asked to speak their name and address. Three (3) minutes is allocated per speaker.

ADJOURNMENT

To Comply with Title II of the Americans with Disabilities Act (ADA):

Qualified individuals may get assistance through the Florida Relay Service by dialing 7-1-1. Florida Relay is a service provided to residents in the State of Florida who are Deaf, Hard of Hearing, Deaf/Blind, or Speech Disabled that connects them to standard (voice) telephone users. They utilize a wide array of technologies, such as Text Telephone (TTYs) and ASCII, Voice Carry-Over (VCO), Speech to Speech (STS), Relay Conference Captioning (RCC), CapTel, Voice, Hearing Carry-Over (HCO), Video Assisted Speech to Speech (VA-STS) and Enhanced Speech to Speech.

Howey Town Hall is inviting you to a scheduled Zoom meeting.
Topic: **Town Council Meeting**
Time: **Feb 14, 2022 06:00 PM Eastern Time** (US and Canada)
Join Zoom Meeting
https://us06web.zoom.us/j/88091550394?pwd=VjZBb3pkNHEzclZpOXlIRlhHNVRQQT09
Meeting ID: 880 9155 0394
Passcode: 393900
Dial by your location
+1 646 558 8656 US (New York)
+1 346 248 7799 US (Houston)

Meeting ID: 880 9155 0394
Passcode: 393900
Find your local number: https://us06web.zoom.us/u/kMRVatnYZ

Please Note: In accordance with F.S. 286.0105: Any person who desires to appeal any decision or recommendation at this meeting will need a record of the proceedings, and that for such purposes may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is based. The Town of Howey-in-the-Hills does not prepare or provide this verbatim record. Note: In accordance with the F.S. 286.26: Persons with disabilities needing assistance to participate in any of these proceedings should contact Town Hall, 101 N. Palm Avenue, Howey-in-the-Hills, FL 34737, (352) 324-2290 at least 48 business hours in advance of the meeting.

Town Council Meeting

January 24, 2022 at 6:00 PM

In Person and via Zoom

MINUTES

Mayor MacFarlane called the Town Council Meeting to order at 6:00 p.m.
Mayor MacFarlane led the attendees in the Pledge of Allegiance to the Flag

ROLL CALL

Acknowledgement of Quorum

MEMEBERS PRESENT:
Councilor George Lehning | Councilor Marie V Gallelli | Councilor Rick Klein | Mayor Pro-Tem Ed Conroy | Mayor Martha MacFarlane

STAFF PRESENT:
Sean O'Keefe, Town Administrator | John Brock, Town Clerk | Rick Thomas, Police Chief | Morgan Cates, Public Works Director

AGENDA APPROVAL/REVIEW

Motion made by Mayor Pro-Tem Conroy to approve of the agenda; Seconded by Councilor Klein. Motion approved unanimously by voice vote.

Voting
Yea: Councilor Lehning, Councilor Gallelli, Councilor Klein, Mayor Pro-Tem Conroy, Mayor MacFarlane
Nay: None

CONSENT AGENDA

Routine items are placed on the Consent Agenda to expedite the meeting. If Town Council/Staff wish to discuss any item, the procedure is as follows: (1) Pull the item(s) from the Consent Agenda; (2) Vote on the remaining item(s); and (3) Discuss each pulled item and vote.

1. The approval of the minutes and ratification and confirmation of all Town Council actions at the January 10, 2022 Town Council Meeting.

Motion made by Councilor Lehning to approve the Consent Agenda; Seconded by Mayor Pro-Tem Conroy. Motion approved unanimously by voice vote.

Voting
Yea: Councilor Lehning, Councilor Gallelli, Councilor Klein, Mayor Pro-Tem Conroy, Mayor MacFarlane
Nay: None

DRAFT

PUBLIC HEARING

None

OLD BUSINESS

2. Consideration and Approval: **Appointment of Thomas Silvanic to the Town's Parks & Recreation Board.**

   Mayor MacFarlane introduced the item and asked Mr. Silvanic to introduce himself and state why he wanted to serve on the town's Park & Recreation Board.

   Motion made by Mayor Pro-Tem Conroy to appoint Thomas Silvanic to the town's Park & Recreation Board; Seconded by Councilor Gallelli. Motion approved unanimously by roll call vote.

   Voting
   Yea: Councilor Lehning, Councilor Gallelli, Councilor Klein, Mayor Pro-Tem Conroy, Mayor MacFarlane
   Nay: None

NEW BUSINESS

3. Consideration and Approval: **Resolution 2022-001 Dedicating part of a highway to the memory of Sheriff Gary Borders, Howey-in-the-Hills resident.**

   Mayor MacFarlane introduced this item and read Resolution 2022-001 by title only:

   A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF HOWEY-IN-THE-HILLS, LAKE COUNTY, FLORIDA, SUPPORTING THE DEDICATION OF A PORTION OF STATE ROAD 19 (S.R.19) IN MEMORY OF FORMER HOWEY-IN THE-HILLS RESIDENT, RETIRED LAKE COUNTY SHERIFF GARY S. BORDERS; PROVIDING AN EFFECTIVE DATE.

   Motion made by Councilor Lehning to approve **Resolution 2022-01 Dedicating part of a highway to the memory of Sheriff Gary Borders, Howey-in-the-Hills resident**; Seconded by Mayor Pro-Tem Conroy. Motion was approved unanimously by roll call vote.

   Voting
   Yea: Councilor Lehning, Councilor Gallelli, Councilor Klein, Mayor Pro-Tem Conroy, Mayor MacFarlane
   Nay: None

4. Discussion: **Update on Consultation Services for Wastewater**

   Mayor MacFarlane asked Town Administrator, Sean O'Keefe, to introduce this topic. Mr. O'Keefe gave an update on the hiring of a consultant/expert on wastewater services. Mr. O'Keefe stated that the town had spoken with several different consultants including Black & Veatch, who suggested that the town should work with the Florida Government Utilities Authority (FGUA).

   Public Comment:

   Chuck Millar, 11770 Us Hwy 1, Ste 308 E, Palm Beach Gardens Fl – Mr. Millar stated that Atwell consulting group was interested in assisting the town with its wastewater consulting needs.

DRAFT

Peter Tuite, 300 E Croton Way – Mr. Tuite asked if the town had a place to put a wastewater treatment plant.

COUNCIL MEMBER REPORTS

5. Mayor Pro-Tem Conroy

Mayor Pro-Tem Conroy was happy to see the town moving forward with acquiring a consultant.

6. Councilor Lehning

Councilor Lehning wanted to know about the status of the town hall sign being installed and the status of the Downtown Sewer Project.

7. Councilor Gallelli

Councilor Gallelli stated that she had spoken with residents who had concerns with developments and that the town is growing too fast. Councilor Gallelli stated that the Town Council's focus should be on building Howey better, not just bigger. Resident participation in the process and meetings is encouraged and beneficial.

8. Councilor Klein

Councilor Klein thanked Councilor Gallelli for bringing up her topic.

9. Mayor MacFarlane

Mayor MacFarlane stated that town staff would be meeting with the town's auditor soon and that town staff had been working diligently on preparing for the audit.

Mayor MacFarlane also stated that the town would be looking at its building standards as it relates to the number of water meters necessary for future developments that want to pull irrigation water from the lake.

Mayor MacFarlane also reminded everyone that there would be a Town Council Workshop on January 26th about revising the town's charter.

PUBLIC COMMENTS

Any person wishing to address the Mayor and Town Council and who is not on the agenda is asked to speak their name and address. Three (3) minutes is allocated per speaker.

None

DRAFT

ADJOURNMENT

There being no further business to discuss, a motion was made by Mayor Pro-Tem Conroy to adjourn the meeting; Councilor Gallelli seconded the motion. Motion was approved unanimously by voice vote.

The Meeting adjourned at 6:43 p.m. | **Attendees: 22**

_____
Mayor Martha MacFarlane

ATTEST:

_____
John Brock, Town Clerk

DRAFT

Town Council Charter Workshop Meeting

January 26, 2022 at 2:00 PM

In Person and via Zoom

DRAFT

MINUTES

Mayor MacFarlane called the Town Council Meeting to order at 6:00 p.m.
Mayor MacFarlane led the attendees in the Pledge of Allegiance to the Flag

ROLL CALL

Acknowledgement of Quorum

MEMBERS PRESENT:
Councilor George Lehning | Councilor Marie V Gallelli (*Virtually via Zoom*) | Councilor Rick Klein | Mayor Pro-Tem Ed Conroy | Mayor Martha MacFarlane

STAFF PRESENT:
Sean O'Keefe, Town Administrator | John Brock, Town Clerk

NEW BUSINESS

1. Discussion: **Charter Review Discussion**

   Mayor MacFarlane introduced this topic and stated that the primary reason for the charter change would be to change the town's form of government to a council / manager form of government rather that the town's current form, which was a strong-mayor form of government. Town Administrator, Sean O'Keefe, recommended the process of "less is more" in terms of specificity of limitation as enumerated in the charter. Mr. O'Keefe explained that it is an ordeal to change a charter, so if something can be addressed in the future as an ordinance, resolution, or by contract, it would be better for the town to do so in that manner.

   Mayor Pro-Tem Conroy suggested that the new charter would need to address: the process for dismissing a Town Manager; if the town would need a contract with the Town Manager; how new Boards are established; and how a vice (or Pro-Tem) Mayor would be chosen.

   Councilor Lehning suggested that a new charter should address who would fill in for the Town Manager when they are unable to fulfill their duties.

   Councilor Klein suggested that the percentage that the town is allowed to borrow should be addressed in a charter change. Mayor MacFarlane stated that she agreed with Councilor Klein, that the current restriction of 3% was too stringent to allow for things like drilling a new well. Councilor Lehning suggested removing the borrowing restriction entirely from the charter. Mayor Pro-Tem Conroy agreed with Councilor Lehning.

Councilor Gallelli suggested that, with the new charter, the town might want to select a new mayor by election rather than the current process of the Town Council selecting a mayor from the group of experienced Town Councilors.

Councilor Klein suggested that the charter's changes be limited to just changing to a council / manager form of government and eliminating the borrowing clause (debt ceiling). Mr. O'Keefe suggested that these issues should be separated when they are brought up for vote. Councilor Klein asked resident, Berniece Hower, her thoughts on the charter changes, as she had been on the previous Charter Review Committee.

Berniece Hower, 444 Bellissimo Place – Mrs. Hower stated that the draft the Councilors were reviewing has semantic issues with references to city and towns and councilors and commissioners. Also, Mrs. Hower stated that there were issues with the responsibilities between the Town Manager and Town Clerk. Mayor MacFarlane agreed and stated that the Town Clerk should remain responsible for the Town Seal, elections, and Town Public Records.

Doug Hower, 444 Bellissimo Place – Mr. Hower suggested that the process of the removal of the manager needed to be addressed. Mr. Hower also stated that the manager should not have the power to fire employees without approval of the Town Council.

Mayor MacFarlane recapped that the following would be addressed in the next version of the charter for the Town Council to review: process for dismissal of Town Manager; contract or agreement for Town Manager; putting the Mayor Pro-Tem back in the charter; not putting the voting of the mayor in; check for semantic errors (like city instead of town); and removal of section six (debt ceiling).

Town Administrator O'Keefe suggested adding verbiage to charter to make it clearer on creating future departments that would not be listed in the charter. Town Clerk Brock suggested that the town had already done that and gave the library department as an example. Also, it was stated in the current charter that Town Council could provide for future Executive Officers by Ordinance.

Mayor MacFarlane suggested that gaining public approval for removal of the debt ceiling from the charter would be a hard sale. Councilor Lehning suggested that the issue of the removal of the debt ceiling should be pushed due to a crisis in the town's water system. Councilor Gallelli suggested that Town Councilors should go door to door explaining the issues. Mayor MacFarlane suggested the town should mail out notices addressing removal of the debt ceiling.

Doug Hower, 444 Bellissimo Place – Mr. Hower suggested the removal of the debt ceiling should be written as bringing the town into municipal borrowing best practices.

Mayor MacFarlane stated that she would create a new red-lined version of the charter with changes by Thursday, February 10th and would have it sent out to Town Councilors for review.

PUBLIC COMMENTS

Any person wishing to address the Mayor and Town Council and who is not on the agenda is asked to speak their name and address. Three (3) minutes is allocated per speaker.

None

DRAFT

ADJOURNMENT

There being no further business to discuss, the meeting was adjourned.

The Meeting adjourned at 3:08 p.m. | **Attendees: 9**

_____
Mayor Martha MacFarlane

ATTEST:

_____
John Brock, Town Clerk

DRAFT

Date: February 14, 2022

To: Mayor and Town Council

From: Sean O'Keefe, Town Administrator

Re: Discussion: Utility Consultants Review

Objective:

To address the council's request to investigate obtaining professional utility consulting services, primarily for wastewater.

Summary:

The Town Council has been considering the best approaches to managing its utility needs. In previous meetings and a workshop, it was determined to consider bringing in professional consulting services to advise how best to deal with upcoming challenges regarding utilities, especially considering the imminent approved and proposed developments.

The Town has received a range of initial responses from the consultants approached so far.

On one end, the Town could approach the topic with a step-by-step approach, creating one analysis report at a time per utility to determine if further analysis would be profitable. As the cost of studies increase, a request for proposals (RFP) for these services will need to be posted.

On the other end, a full comprehensive service could provide a complete series of studies on both water and wastewater as well as assistance in acquisition of systems. If pursued through a governmental body such as Florida Government Utility Authority (FGUA), an interlocal would be required rather than an RFP.

Fiscal Impact:

Expenditures for a full-scale consultant review could range up to $75,000-$95,000.

Staff Recommendation:

Pursue a full-service, comprehensive approach to consultant services.

SUMTER COUNTY BOARD OF COUNTY COMMISSIONERS
EXECUTIVE SUMMARY

SUBJECT: **Approve the interlocal agreement with the Florida Government Utility Authority to conduct the feasibility study for water and wastewater services for the City of Center Hill and the City of Webster (Staff Recommends Approval).**

REQUESTED ACTION: **Staff Recommends Approval**

Meeting Type: Regular Meeting **DATE OF MEETING:** **4/27/2021**

CONTRACT: ☐ N/A Vendor/Entity: FGUA
Effective Date 04/27/2021 Termination Date: 10/27/21 – time to complete the study
Managing Division / Dept: **Building & Code / Development Services**

BUDGET IMPACT: $75,000
FUNDING SOURCE: **General Fund**
Type: N/A **EXPENDITURE ACCOUNT:** **Planning if approved**

HISTORY/FACTS/ISSUES:

The Board has an interlocal service boundary agreement with both the City of Center Hill and the City of Webster for consolidated planning. As part of the consolidated planning support, this feasibility study was a directive of the Board with support from both cities.

The feasibility study will review the existing water and wastewater infrastructure and the expansion capabilities, as well as the addition of new facilities to service the utility service areas of each of the cities. The study will consider the consolidated approach of the service between the two cities as well as preview possible future land-use changes to greater densities with its impact on future water and wastewater demands.

The study is planned to be completed in six months, and the final product contributes to the planning support efforts of the County for each of these cities.

Staff recommends approval.

Prepared by: **Bradley Arnold** **Grammarly Check** ☒

APPROVED

April 27, 2021

DocuSign Envelope ID: CD11044C-44E7-44FF-AF78-6D09C50307BB

Interlocal Agreement
By and Between Sumter County, Florida and the
Florida Governmental Utility Authority for
South County Water and Wastewater Utility Consolidation Feasibility Analysis

This Interlocal Agreement ("Agreement") is made and entered into this 15 day of April 2021, by and between Sumter County, Florida (the "County"), a political subdivision of the State of Florida, and the Florida Governmental Utility Authority (the "FGUA" or "Authority"), a legal entity and public body created by interlocal agreement pursuant to Section 163.01(7), Florida Statutes.

WITNESSETH:

WHEREAS, the County is anticipating significant growth in the southern portion of the County which will require expansion of the water and wastewater utility infrastructure to accommodate such growth; and

WHEREAS, the County and the cities of Center Hill and Webster are interested in evaluating the feasibility of consolidating the water and wastewater systems in the area to improve the availability and efficiency of utility service; and

WHEREAS, the FGUA is a multi-jurisdictional utility authority dedicated to the improvement of water and wastewater utility services in Florida in collaboration with other governments; and

WHEREAS, the FGUA and its team possess the unique experience and expertise to evaluate the feasibility of consolidation and expansion of the utility services in southern Sumter County.

NOW, THEREFORE, the parties hereto agree as follows:

SECTION 1. Incorporation. The above recitals are true and correct and are hereby incorporated herein by reference.

SECTION 2. Scope of Services.

A. FGUA Responsibilities

The FGUA will perform the "Scope of Services" set forth in Attachment A, which is attached hereto and incorporated herein by reference. As a special purpose government focused solely on the management, operation, maintenance, and improvement of water and wastewater services, the FGUA will utilize the services of various subcontractors under contract with the FGUA who possess the necessary skills and expertise to provide relevant portions of the Scope of Services in a professional and workmanlike manner consistent with industry standards. These contractors include, but are not limited to, Kimley-Horn (engineering), Government Services Group, Inc. (management), U.S. Water Services Corporation (operations), and Raftelis (financial).

B. County Responsibilities

For the FGUA to complete the Scope of Services, the County agrees to assist the FGUA team in securing all data, plans and related information concerning the projects assigned and reasonably required by the FGUA. This assistance shall include coordination as may be necessary with the various cities and governmental entities in the area.

SECTION 3. Compensation.

A. Fees

The County shall pay to the FGUA a total of $75,000 to perform and complete the Scope of Services to include the feasibility analyses associated with the consolidation and expansion of utility services to the designated joint planning areas for the City of Center Hill and the City of Webster.

B. Payment

The FGUA shall invoice the County for the referenced fee in three (3) equal payments. The first will be thirty (30) days after approval of this interlocal agreement by both parties. The second will be upon 50% completion of the Scope of Services. The final invoice will be submitted after 100% completion of the scope of service and presentation of the findings to the County. All invoices shall be paid in accordance with the Florida Prompt Payment Act.

SECTION 4. Schedule.

The Scope of Services will be substantially completed within six (6) months after approval of this interlocal agreement by both parties.

SECTION 5. Records.

A. Public Records

1. Both parties, shall, at all times, comply with the Florida Public Records Law, the Florida Open Meeting Law and all other applicable laws, rules and regulations of the State of Florida.

2. The FGUA is required to: (i) keep and maintain public records required by Sumter County; (ii) provide Sumter County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a reasonable or as otherwise provided by law upon request from Sumter County's custodian of public records; (iii) ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the term of this Agreement, and following completion of this Agreement if the FGUA does not

transfer the records to Sumter County; and (iv) transfer, at no cost, to Sumter County all public records in possession of the FGUA or keep and maintain public records required by Sumter County upon completion of the Agreement.

3. If the FGUA transfers all public records to Sumter County upon completion of the Agreement, the FGUA shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If FGUA keeps and maintains public records upon completion of this Agreement, the FGUA shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to Sumter County, upon request from Sumter County's custodian of public records, in a format that is compatible with the information technology systems of Sumter County.

4. If either party does not comply with a public record request related to the Scope of Services, that failure shall be treated as breach of this Agreement and the contract provisions shall be enforced accordingly. Additionally, if either party fails to provide records when requested, they may be subject to penalties under Section 119.10, Florida Statutes and reasonable costs of enforcement, including attorney fees.

IF EITHER PARTY HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE OTHER'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 352-689-4400, Sumter County Board of County Commissioners, 7375 Powell Road, Wildwood, Florida 34785 or via email at Records@sumtercountyfl.gov, for Sumter OR FOR THE FGUA AT (407)-629-6900, lduckworth@govmserv.com, 280 Wekiva Springs Road, Suite 2070, Longwood, FL 32779-6026

SECTION 6. Miscellaneous Provisions.

A. Notice/Project Manager

The project manager for the FGUA will be Stephen M. Spratt, System Manager. The project manager for the County shall be Bradley Arnold, County Administrator. All notices and correspondence shall be addressed as follows:

Sumter County
Bradley Arnold, County Administrator
7375 Powell Road
Wildwood, FL 34785

FGUA
Stephen M. Spratt, System Manager
Government Services Group, Inc.
280 Wekiva Springs Road, Suite 2070
Longwood, FL 32779-6026

B. Severability

The invalidity, illegality, or unenforceability of any provision of this Agreement, or the occurrence of any event rendering any portion or provision of this Agreement void, shall in no way affect the validity or enforceability of any other portion or provision of the Agreement. Any void provision shall be deemed severed from the Agreement and the balance of the Agreement shall be construed and enforced as if the Agreement did not contain the particular portion or provision held to be void.

C. Termination

This Agreement may be terminated by either party for convenience upon thirty (30) days' prior written notice to the other party. This Agreement may be terminated by either party immediately upon written notice to the other party in the event of the substantial failure of that party to perform in accordance with the terms of this Agreement. Unless the FGUA is in breach of this Agreement, the FGUA shall be paid for services rendered through the date of termination.

D. Entirety of Agreement

The County and the FGUA agree that this Agreement sets forth the entire Agreement between the parties related to the matters contained with the Scope of Services, and that there are no promises or understandings other than those stated herein. This Agreement supersedes all prior agreements, contracts, proposals, representations, negotiations, letters, or other communications between the County and FGUA pertaining to the Scope of Services, whether written or oral. None of the provisions, terms and conditions contained in this Agreement may be added to, modified, superseded, or otherwise altered except by written instrument executed by the parties hereto.

E. Filing

This Interlocal Agreement shall be filed with the Clerk of the Circuit Court of Sumter County and with the Clerk of the Circuit Court of Leon County.

F. Disputes.

If the parties to this Agreement fail to resolve any conflicts related to issues covered in this Agreement, such dispute shall be resolved in accordance with governmental conflict resolution procedures specified in the Florida Governmental Conflict Resolution Act, Fla. Stat. §§ 164.l01-164.1061.

G. Assignment.

No assignment, delegation, or transfer of this Agreement, or part hereof, shall be made, unless approved in writing by the parties.

H. Waiver.

No waiver or estoppel as to or against any party shall result from any failure to exercise or enforce any right or power hereunder, save only to the extent necessarily implied as to the

particular matter directly concerned and then only for time being with respect thereto, and not in any way as to the future or as to any other matter.

I. Governing Law and Venue.

The laws of the State of Florida shall govern the validity, performance and enforcement of this Agreement. For purposes of any action, suit or other proceeding arising out of or relating to this Agreement, the parties hereto do acknowledge, consent and agree that venue shall be in Sumter county absent mutual agreement by the parties to some other venue. Each party shall be responsible for its own costs and attorneys' fees in the event of any dispute, claim, action or appeal related to or arising from this Agreement.

J. Joint Preparation.

The preparation of this Agreement has been a joint effort of the parties hereto and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the parties than the other.

K. Counterparts.

This Agreement may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one in the same instrument.

IN WITNESS WHEREOF, the County and the FGUA have caused this Interlocal Agreement to be duly executed and entered into on the date first above written.

FLORIDA GOVERNMENTAL UTILITY AUTHORITY

DocuSigned by:

By: ken Cheek
551AF3D140DC4F6...

Its: Chair

Date: 4/19/2021

Attest:

DocuSigned by:
Lauren Duckworth
FEAF00B5A85D4D3

Clerk

Date: 4/19/2021

FLORIDA GOVERNMENTAL UTILITY AUTHORITY
SEAL

SUMTER COUNTY, FLORIDA

By: _____

Its: GARRY BREEDEN

Date: 4/27/2021

BOARD OF COUNTY COMMISSIONERS SEAL FLORIDA

Attest: Caroline Altstimaier

Clerk

Date: 4/27/2021

Attachment A

Scope of Services

Consolidation and Utility Service Expansion Feasibility Analysis

The FGUA will perform the following services for Sumter County related to the public water and wastewater utility systems and service areas of the City of Center Hill and the City of Webster:

1. Engage the appropriate and necessary FGUA subconsultants to carry out this scope of services.
2. Establish a contact person/liaison with the subject jurisdictions and coordinate, as necessary.
3. Gather financial, regulatory, customer, and utility operational system data for each of the subject utility systems.
4. Gather existing population projection information and growth-related data necessary to develop estimated future utility needs.
5. Assess the condition of the current utility assets in each of the City owned utility systems and develop both a capital and operations budget for each system.
6. Gather all data necessary and conduct financial feasibility analyses for an FGUA acquisition of the City of Center Hill and City of Webster utility systems.
7. Consider and explore expansion and growth opportunities that may enhance the feasibility of an acquisition by the FGUA.
8. If an acquisition is feasible, develop an acquisition plan and schedule of events for the acquisition of the utility systems by the FGUA.
9. Formulate a concept plan for expanding the availability of water and wastewater utility services in the joint planning areas of each City over a 5–10-year period, including estimates of the costs, as well as identification of targeted funding sources. This plan will be targeted to an FGUA ownership model if an acquisition is feasible and targeted to continued City ownership if an FGUA acquisition is determined not to be feasible.
10. Meet with the County Administrator and representatives of the other jurisdictions to review preliminary findings and conclusions.
11. Finalize report and present to the governing bodies of the City of Center Hill and City of Webster and provide all planning documents developed and the report for use by Sumter County and each city in their future planning efforts.

Interlocal Agreement
Between
Sumter County (the "County"), a political subdivision of the State of Florida
and the
Florida Governmental Utility Authority (the "FGUA"), a legal entity and public body
created by interlocal agreement pursuant to Section 163.01(7) Florida Statutes

Lake Panasoffkee Area Water and Wastewater Utility Consolidation Feasibility Analysis

This Interlocal Agreement ("Agreement") is made and entered into this 24th day of August 2021, by and between Sumter County, Florida (the "County"), a political subdivision of the State of Florida, and the Florida Governmental Utility Authority (the "FGUA" or "Authority"), a legal entity and public body created by interlocal agreement pursuant to Section 163.01(7), Florida Statutes.

WITNESSETH:

WHEREAS, the County is anticipating significant growth in the future which will require expansion of the water and sewer utility infrastructure to accommodate such growth; and

WHEREAS, the County and the Lake Panasoffkee Water Association (LPWA) are interested in evaluating the feasibility of consolidating the water and wastewater systems and service territories in the area to improve the availability and efficiency of utility service; and

WHEREAS, the FGUA is a multi-jurisdictional utility authority dedicated to the improvement of water and wastewater utility services in Florida in collaboration with other governments; and

WHEREAS, the FGUA and its team possess the unique experience and expertise to evaluate the feasibility of consolidation and expansion of the utility services in this area of Sumter County..

NOW, THEREFORE, the parties hereto agree as follows:

SECTION 1. Incorporation. The above recitals are true and correct and are hereby incorporated herein by reference.

SECTION 2. Scope of Services.

A. FGUA Responsibilities

The FGUA will perform the "Scope of Services" set forth in Attachment A, attached hereto and which is incorporated herein by reference. As a special purpose government focused solely on the management, operation, maintenance, and improvement of water and wastewater services, the FGUA will utilize the services of various subcontractors under contract with the FGUA who possess the necessary skills and expertise to provide

relevant portions of the Scope of Services in a professional and workmanlike manner consistent with industry standards. These contractors include, but are not limited to, Kimley-Horn (engineering), Government Services Group, Inc. (management), U.S. Water Services Corporation (operations), and Raftelis (financial).

B. County Responsibilities

For the FGUA to complete the Scope of Services, the County agrees to assist the FGUA team in securing all data, plans and related information concerning the projects assigned and reasonably required by the FGUA. This assistance shall include coordination as may be necessary with the governmental entities in the area.

SECTION 3. Compensation.

A. Fees

1. Feasibility Analysis of the Potential FGUA Acquisition of the LPWA Water Distribution System - The FGUA team will undertake the review of the potential acquisition of the LPWA water distribution system (#3 in scope of services) on an "at risk" basis, where the fees will only be paid if there is a successful transaction, and the fees will be paid from transaction proceeds.

2. Conceptual Plan for a Wastewater Utility System in the Lake Panasoffkee Area - The County shall pay to the FGUA a total of $96,750 to perform and complete the Scope of services to include the feasibility analyses associated with evaluating the potential development of a wastewater utility (item #4 in scope of services) in the Lake Panasoffkee area.

B. Payment

The FGUA shall invoice the County for the fee referenced 3(A)(2) above in two (2) equal payments. The first will be ninety (90) days after approval of this interlocal agreement by both parties. The FGUA will provide a progress report as part of the initial payment invoice. The final invoice will be submitted after 100% completion of the Scope of Service and presentation of the findings to the County. All invoices shall be paid in accordance with the Florida Prompt Payment Act.

SECTION 4. Schedule.

The Scope of Services will be substantially completed by March 31, 2022.

SECTION 5. Records.

A. Public Records

The FGUA and the County shall comply with public records laws embodied in Chapter 119, Florida Statutes, and specifically shall:

1. Keep and maintain public records required by the County or the FGUA in order to perform the Scope of Services described herein.

2. Upon request from the other party provide any requested public records or allow the requested records to be inspected or copied within a reasonable time by the other party.

3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the Agreement term, and thereafter.

4. Transfer, at no cost, all public records in possession of the other party upon termination of this Agreement and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided upon request from the other party, in a format that is compatible with the information technology systems of that party. If the FGUA keeps and maintains public records upon the conclusion of this Agreement, the FGUA shall meet all applicable requirements for retaining public records that would apply to the County.

5. If either party does not comply with a public record request related to the Scope of Services, that failure shall be treated as breach of this Agreement and the contract provisions shall be enforced accordingly. Additionally, if either party fails to provide records when requested, they may be subject to penalties under Section 119.10, Florida Statutes and reasonable costs of enforcement, including attorney fees.

IF EITHER PARTY HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, AS TO ITS DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS FOR THE COUNTY AT 352-689-4400, Sumter County Board of County Commissioners, 7375 Powell Road, Wildwood, Florida 34785 or via email at Records@sumtercountyfl.gov, OR FOR THE FGUA AT (407)-629-6900, lduckworth@govmserv.com, 280 Wekiva Springs Road, Suite 2070, Longwood, FL 32779

If either party does not comply with a public record request related to the Scope of Services, that failure shall be treated as breach of this Agreement and the contract provisions shall be enforced accordingly. Additionally, if either party fails to provide records when requested, they may be subject to penalties under Section 119.10, Florida Statutes and reasonable costs of enforcement, including attorney fees.

SECTION 6. Miscellaneous Provisions.

A. Notice/Project Manager

The project manager for the FGUA will be Stephen M. Spratt, System Manager. The project manager for the County shall be Bradley Arnold, County Administrator. All notices and correspondence shall be addressed as follows:

Sumter County
Bradley Arnold, County Administrator
7375 Powell Road
Wildwood, FL 34785

FGUA
Stephen M. Spratt, System Manager
Government Services Group, Inc.
280 Wekiva Springs Road, Suite 2070
Longwood, FL 32779

B. Severability

The invalidity, illegality, or unenforceability of any provision of this Agreement, or the occurrence of any event rendering any portion or provision of this Agreement void, shall in no way affect the validity or enforceability of any other portion or provision of the Agreement. Any void provision shall be deemed severed from the Agreement and the balance of the Agreement shall be construed and enforced as if the Agreement did not contain the particular portion or provision held to be void.

C. Termination

This Agreement may be terminated by either party for convenience upon thirty (30) days' prior written notice to the other party. This Agreement may be terminated by either party immediately upon written notice to the other party in the event of the substantial failure of that party to perform in accordance with the terms of this Agreement. Unless the FGUA is in breach of this Agreement, the FGUA shall be paid for services rendered through the date of termination.

D. Entirety of Agreement

The County and the FGUA agree that this Agreement sets forth the entire Agreement between the parties related to the matters contained with the Scope of Services, and that there are no promises or understandings other than those stated herein. This Agreement supersedes all prior agreements, contracts, proposals, representations, negotiations, letters, or other communications between the County and FGUA pertaining to the Scope of Services, whether written or oral. None of the provisions, terms and conditions contained in this Agreement may be added to, modified, superseded, or otherwise altered except by written instrument executed by the parties hereto.

E. Filing

This Interlocal Agreement shall be filed with the Clerk of the Circuit Court of Sumter County and with the Clerk of the Circuit Court of Leon County.

F. Disputes.

If the parties to this Agreement fail to resolve any conflicts related to issues covered in this Agreement, such dispute shall be resolved in accordance with governmental conflict resolution procedures specified in the Florida Governmental Conflict Resolution Act, Fla. Stat. §§ 164.101-164.1061. For purposes herein, the parties agree that should such dispute result which necessitates judicial intervention, that all conditions and prerequisites under the Florida Governmental Conflict Resolution Act (set forth in Chapter 164, Florida Statutes) shall be deemed to have been met and that the parties shall be presumed to be at impasse for all purpose including judicial review. Further, to the

extent allowed by law, the parties expressly waive all procedures, processes, and time-frames set forth in Chapter 164, Florida Statutes.

G. Assignment.

No assignment, delegation, or transfer of this Agreement, or part hereof, shall be made, unless approved in writing by the parties.

H. Waiver.

No waiver or estoppel as to or against any party shall result from any failure to exercise or enforce any right or power hereunder, save only to the extent necessarily implied as to the particular matter directly concerned and then only for time being with respect thereto, and not in any way as to the future or as to any other matter.

I. Governing Law and Venue.

The laws of the State of Florida shall govern the validity, performance and enforcement of this Agreement. For purposes of any action, suit or other proceeding arising out of or relating to this Agreement, the parties hereto do acknowledge, consent and agree that venue shall be in Sumter county absent mutual agreement by the parties to some other venue. Each party shall be responsible for its own costs and attorneys' fees in the event of any dispute, claim, action or appeal related to or arising from this Agreement.

J. Joint Preparation.

The preparation of this Agreement has been a joint effort of the parties hereto and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the parties than the other.

K. Counterparts.

This Agreement may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one in the same instrument.

IN WITNESS WHEREOF, the County and the FGUA have caused this Interlocal Agreement to be duly executed and entered into on the date first above written.

FLORIDA GOVERNMENTAL UTILITY AUTHORTY

FLORIDA GOVERNMENTAL UTILITY AUTHORITY SEAL

By: James K Chesley

Its: FGUA Board Chair

Date: 9/20/21

Attest:

Clerk

Date: 9/17/21

SUMTER COUNTY, FLORIDA

By:

Its: CHAIRMAN

Date: 8/24/21

Attest:

Melissa Ellett D.C.

Clerk

Date: 8/24/21

00939269

Attachment A

Scope of Services

Lake Panasoffkee Area Water and Wastewater Utility Consolidation Feasibility Analysis

The FGUA will perform the following services for Sumter County related to the water and wastewater utility systems and service areas in the vicinity of the Lake Panasoffkee Water Association (LPWA):

1. Engage the appropriate and necessary FGUA subconsultants to carry out this scope of services.
2. Establish a contact person/liaison with the LPWA and the County and coordinate, as necessary.
3. Conduct a feasibility analysis of the potential acquisition by the FGUA of the LPWA water distribution system, assuming bulk water supply provided by the LPWA.
    a. Gather financial, regulatory, customer, and utility operational system data for the LPWA utility systems.
    b. Assess the condition of the current LPWA distribution system assets in and develop both a capital and operations budget for the system assuming FGUA ownership.
    c. Consider and explore expansion and growth opportunities that may enhance the feasibility of an acquisition by the FGUA.
    d. If an acquisition is feasible, develop an acquisition plan and schedule of events for the acquisition of the utility system by the FGUA.
    e. Finalize report and present to the County and LPWA officials.
4. Develop a conceptual plan for establishing a publicly owned wastewater utility for the Lake Panasoffkee area.
    a. Gather the necessary data for determining the wastewater utility needs and potential customer base for the target area for the next ten (10) years.
    b. Determine the size and type of wastewater treatment plant required utilizing the Sumter County parcels J16-035, J21-005, and J21-003 permitted for this purpose by Sumter County's special use determination as well as the access parcel of J16-015.
    c. Develop a phasing plan for extending wastewater service to the target service area.
    d. Develop cost estimates, potential funding alternatives, and timelines for implementing the plan, and assess the financial feasibility of implementing the wastewater utility conceptual plan.
    e. Meet with the County Administrator and representatives of the LPWA to review preliminary findings and conclusions.
    f. Finalize report and present to the County and LPWA officials.

Solicitation 20-032

On-Call Professional Civil Engineer Services

Bid Designation: Public

City of Clermont

Bid 20-032
On-Call Professional Civil Engineer Services

Bid Number	**20-032**
Bid Title	**On-Call Professional Civil Engineer Services**
Bid Start Date	**Aug 12, 2020 8:00:57 AM EDT**
Bid End Date	**Sep 17, 2020 2:00:00 PM EDT**
Question & Answer End Date	**Sep 10, 2020 3:00:00 PM EDT**
Bid Contact	**Freddy L. Suarez** **Purchasing Manager** **352-241-7350** **fsuarez@clermontfl.org**
Contract Duration	**3 years**
Contract Renewal	**3 annual renewals**
Prices Good for	**Not Applicable**
Pre-Bid Conference	**Sep 1, 2020 2:00:00 PM EDT** **Attendance is optional** **Location: Clermont City Hall Council Chambers, 1st Floor** **685 W. Montrose Street** **Clemront, FL 34711**
Bid Comments	**The purpose of this solicitation is to receive responses from qualified respondents pursuant to Florida Statute 287.055 (the Consultant's Competitive Negotiation Act or CCNA) to provide on-call civil engineer professional services to the City of Clermont (hereinafter referred to as the City).** **Deadline for written questions September 10, 2020 at 3:00 P.M. and must be submitted through BidSync. Responses to questions will be provided online.** **Proposals must be submitted electronically by uploading documents in BidSync** **All proposals will be publicly opened and read through a live Zoom meeting.** **The Zoom meeting information is provided below:** **https://zoom.us/j/98314521011?pwd=MEtXSzZKS0lvaFoySWtpMW80bURZdz09** **Meeting ID: 983 1452 1011 Password: 1q2SPQ** **Only the company names who submitted a response to this solicitation will be read.**
Required Vendor Qualifications	**W-9**

Item Response Form

Item	**20-032--01-01 - On-Call Professional Civil Engineer Services**
Quantity	**1 each**

Prices are not requested for this item.

Delivery Location **City of Clermont**

Clermont City Hall
685 West Montrose Street
Clermont FL 34711
Qty 1

Description
On-Call Professional Civil Engineer Services

REQUEST FOR QUALIFICATIONS

On-Call Professional Civil Engineer Services

CONTACT INFORMATION:	RFQ No. **20-032**	ISSUED DATE: *August 12, 2020*
Freddy Suarez, MPA, CPPB Procurement Services Director EMAIL: fsuarez@clermontfl.org Phone: (352) 241-7350	**RESPONSE DUE DATE: September 17, 2020 at 2:00 P.M. (EST)** **PRE- PROPOSAL CONFERENCE: September 1, 2020 at 2:00 P.M.** **DEADLINE FOR WRITTEN QUESTIONS: September 10, 2020** at **3:00 P.M.** and must be submitted through BidSync.	

SOLICITATION RESPONSE: Electronic proposals will be received until the response due date specified above or as otherwise amended. No late responses will be accepted.

Procurement Services Department Information:

City of Clermont Procurement Services Department, 685 West Montrose Street, 2nd Floor, Clermont, FL 34711.

OFFER PERIOD: All responses must remain firm for a period of **Ninety (90)** calendar days from the response due date specified above or as otherwise amended.

The following documents, if indicated below, must be completed and submitted with response.

	SECTION A Response Procedures		SECTION B Scope of Services		SECTION C Response Format
	SECTION D Evaluation Process		SECTION E Terms and Conditions	X	SECTION F Conflict of Interest
X	SECTION G Drug-Free Workplace	X	SECTION H Supplemental Questionnaire	X	SECTION I Non-Collusion Affidavit
X	SECTION J Signature Page		SECTION K Intentionally Omitted		SECTION L Intentionally Omitted
	SECTION M Intentionally Omitted		SECTION N Intentionally Omitted		SECTION O Intentionally Omitted

COMPANY NAME:	PHONE:
MAILING ADDRESS:	NAME OF AUTHORIZED REPRESENTATIVE:

SECTION – A
RESPONSE PROCEDURES

1 – PURPOSE

The purpose of this solicitation is to receive responses from qualified respondents pursuant to Florida Statute 287.055 (the Consultant's Competitive Negotiation Act or CCNA) to provide on-call civil engineer professional services to the City of Clermont (hereinafter referred to as the City). Upon the completion of the response review process, the City intends to enter into direct negotiations with the most qualified respondent.

The City reserves the right to make multiple continuing contract awards if deemed appropriate considering anticipated workload or other factors. The negotiated price schedule will become part of this contract and the price will be utilized for future jobs.

The City of Clermont uses BidSync, a central notification system which provides bid notification services to interested vendors. BidSync allows for vendors to register online and receive notification of new solicitations, addendum and awards. There is no charge to vendors/contractors to register and participate in the solicitation, nor will any fees be charged to the awarded vendor. Vendors with internet access should review the registration options at the following website: https://prod.bidsync.com/the-city-of-clermont. If no internet access is available, please contact BidSync vendor support group at 800-990-9339.

2 – PRE-PROPOSAL CONFERENCE
Tuesday, September 1, 2020 at 2:00 P.M.

All potential respondents are encouraged to attend this non-mandatory pre-proposal conference. The meeting will present an opportunity to ask questions and/or seek clarification regarding any and all aspects of this solicitation. The City will provide written responses in the form of addenda to formal and material questions received during this non-mandatory meeting.

Any verbal discussions at the meeting will not be considered part of the solicitation unless incorporated into the solicitation through the formal written addenda process. Questions asked at the meeting that cannot be adequately answered during the meeting may be deferred until issuance of the addenda. A copy of the questions and the responses will be available to all potential respondents in the form of addenda.

Potential respondents are requested to bring this solicitation document to the pre-proposal conference as additional copies may not be available.

Meeting Location:

City Hall Council Chambers (1st Floor)

685 West Montrose Street, Clermont, Florida

SECTION – A
RESPONSE PROCEDURES

Meeting will begin promptly at the time specified above.

3 – QUESTIONS DEADLINE

To ensure that all prospective respondents have accurately and completely understood the requirements, the City of Clermont – Procurement Services Department will accept written questions up until 3:00 P.M. on Thursday, September 10, 2020 seek additional information or clarification or to communicate in writing with the Procurement Services Director.

The City of Clermont requires **all** questions relating to this solicitation be entered through the **"Create New Question"** option available on the BidSync website. Responses to questions will be provided online at https://prod.bidsync.com/the-city-of-clermont.

- **ALL QUESTIONS MUST BE SUBMITTED PRIOR TO THE DEADLINE.**
- **QUESTIONS WILL NOT BE ANSWERED VIA TELEPHONE OR FAX.**

4 – DELIVERY OF PROPOSAL

Proposals must be submitted electronically by uploading documents in BidSync which will be kept in a secure digital mailbox until the due date and time. Responses submitted early may be withdrawn prior to the deadline by the responder. All responses must remain valid for at least ninety (90) calendar days, and will remain the property of the City. Responses to this solicitation will not be accepted by fax or email.

All proposals will be publicly opened and read through a live Zoom meeting, in person at City Hall, 685 W. Montrose Street, 2nd floor conference room number 232, or as otherwise amended. The Zoom meeting information is provided below:

https://zoom.us/j/98314521011?pwd=MEtXSzZKS0IvaFoySWtpMW80bURZdz09

Meeting ID: 983 1452 1011 Password: 1q2SPQ

Only the company names who submitted a response to this solicitation will be read.

(a) Electronic Responses

Electronic responses will be received through a secure digital mailbox at BidSync.com and will remain unopened until the response due date has passed, as indicated in this solicitation. It is the sole responsibility of the respondent that the response is submitted and received before the due date and time as specified in this document. The City of Clermont is not responsible for delays in transmittal or delays

caused by any other occurrence. Please allow sufficient time to complete the response and upload documents into BidSync.

(b) Uploading Electronic Documents

Once the "Place Offer" button has been selected in BidSync, a screen will appear allowing the vendor to enter their response information. There will be an "Upload Attachment" link next to the "Attachments" which is located below the Unit Price box. To upload the attachment, select the "Upload Attachment" link. In the new window that will appear, select the "Browse" button, locate the desired document on hard drive, highlight the document, and select "Open". In the pop-up Upload Attachment window, the document heading will be shown. Select the "Submit" button to save the uploaded document. The screen will then refresh and the document heading will be shown next to the "Attachments" heading on the Submit Offer page. Once all information is uploaded, click the "Review Response" button at the bottom of the page. A confirmation page will appear where the vendor can review the attachment that have been added to the offer. At the bottom of the confirmation page, vendors can type in their password and click "Confirm & Submit Response". The offer is then sealed and cannot be viewed by anyone until after the response due date and time.

5 – RESPONSE INFORMATION AS PUBLIC DOCUMENTS

Any and all materials initially submitted or subsequently submitted as part of this solicitation process will become property of the City and will be treated as City documents subject to typical practice and/or applicable laws for public records. Otherwise, the City will not distinguish or treat any material received as confidential, proprietary, and/or a trade secret, unless specifically designated as such by the respondent. Financial statements will not become subject to public record as per Section 119.07(1) Florida Statutes. Furthermore, by submitting a response, the respondent agrees to hold the City harmless for any public use or dissemination of and all information submitted through this process.

6 – TIMETABLE

The following dates are set forth for information and planning purposes; however the City reserves the right to change the dates as needed. Respondents are advised to closely monitor any potential date changes through the City's web based partner BidSync at https://prod.bidsync.com/the-city-of-clermont. (Please note that there is no charge or fee involved for respondents to register and utilize BidSync).

SECTION – A
RESPONSE PROCEDURES

Task	Date
Solicitation Issued Date	August 12, 2020
Newspaper Advertisement	August 14, 2020
Pre-Proposal Conference	September 1, 2020 at 2:00 P.M.
Questions Deadline	September 10, 2020 at 3:00 P.M.
Release of Addenda	T.B.D.
Response Due Date (Deadline)	September 17, 2020 at 2:00 P.M. (EST)
Evaluation / Scoring Meeting	T.B.D.
Anticipated Approval	T.B.D.

7 – RESTRICTION OF COMMUNICATION

Respondents are strongly cautioned that inappropriate efforts to lobby or influence individuals or organizations involved in this selection process may result in dismissal from further consideration.

8 – RESERVATION OF RIGHTS TO THE CITY

The issuance of this solicitation and the acceptance of responses do not constitute an agreement by the City that it will enter into a contract with any of the respondents to this solicitation.

The City reserves the right to extend the response due date, request additional information from any and all respondents, reject any and all responses, to enter into negotiations with the next qualified respondent(s) if negotiations with the top respondent do not result in an agreement, cancel the project, and/or re-advertise the solicitation. The City reserves the right to disqualify any respondent at the sole discretion of the City.

By submitting a response and subsequent information, the respondents waive the right to object to the exercise of the City's right to disqualify a respondent and/or a response, either now or in the future.

9 – RESPONSE EXPENSES

All cost associated with the preparation to this response will be the sole responsibility of the respondent, including but not limited to document preparation, and any and all travel expenses.

SECTION – A
RESPONSE PROCEDURES

10 – INSURANCE REQUIREMENTS

The selected respondent(s) is required to provide proof of insurance with their response to this solicitation using a standard Accord form, showing no less than the amounts indicated below. If an Accord form cannot be provided, a signed letter from insurance company agency, on its letter head, must be provided stating current insurance as described below or that can receive the required insurance coverage. The selected respondent(s) will be required to provide proof of insurance within five (5) business days of request.

All suppliers performing work on City property or public right-of-way must provide the City a certificate of insurance evidencing the coverage provisions identified herein. Respondents must provide the City with evidence that all subcontractors performing work on the project have the same types and amounts of coverage as required herein or that the subcontractors are included under the contractor's policy. The City, at its own discretion may require a certified copy of the policy.

Listed below are the types and amounts of insurance required. The City reserves the right to amend or require additional types and amounts of coverage or provisions depending on the nature of the work.

XX	1. General Liability with limits of liability $2,000,000 per occurrence for bodily injury property damage to include Premises/ Operations; Products, Completed Operations and Contractual Liability. **Contractual Liability** and Contractual Indemnity (Hold harmless endorsement as written in Section-A, No. 11).	
XX	2. Automobile Liability - $1,000,000 each occurrence – owned/non-owned/hired automobiles included.	
XX	3. Workers' Compensation and Employer's Liability per the statutory limits of the State of Florida ($100,000 each accident and $100,000 each employee with $500,000 policy limit for disease).	
	4. Excess Liability - $_____. 00 per occurrence to follow the primary coverage.	
XX	5. The City of Clermont must be named as an Additional Insured with regards to General Liability policies; and it **must** be stated on the certificate.	
XX	6. Other insurance as indicated: ___ Builders Risk Completed Value ___ Garage Keeper Liability ___ Garage Liability ___ Liquor Liability ___ Fire Legal Liability ___ Pollution Liability	 $_____.00 $_____.00 $_____.00 $_____.00 $_____.00 $_____.00

SECTION – A
RESPONSE PROCEDURES

	___ Protection and Indemnity	$_____.00
	___ Employee dishonesty Bond	$_____.00
	_X_ Professional Liability / Errors & Omissions	$1,000,000.00
	___ Other	$_____.00
XX	7. Thirty (30) days written cancellation notice required.	
XX	8. Best's guide rating B+:VI or better, latest edition or as otherwise acceptable to the City.	
XX	9. The certificate must state the solicitation number and title.	

11 – LIABILITY, INSURANCE, LICENSES, AND PERMITS

Where the successful respondent is required to enter or go into City of Clermont property to deliver materials, perform work or services as a result of an award, the respondent will assume the duty, obligation, and expense of obtaining all necessary licenses, permits, and insurance. Successful respondent must obtain, provide, and maintain during the term of the contract the types and amounts of insurance indicated in Section A "Insurance Requirements". Insurance must be maintained with insurers licensed to sell insurance in the State of Florida and have a B+, VI, or higher rating in the latest edition of A.M. Best's insurance guide. Successful respondent(s) must name the City of Clermont as an additional insured on all liability policies required as a result of an award. When naming the City of Clermont as an additional insured, the insurance company hereby agrees and endorses the policies, to state that the City will not be liable for the payment of any premiums or assessments. Successful respondent failure to procure or maintain required insurance program shall constitute a material breach of agreement under which City may immediately terminate the award or contract.

All work performed must comply with applicable County and municipal code requirements, as well as the Florida Building Code. The successful respondent will be liable for any damages or loss to the City, occasioned by negligence of the respondent, agent, or any person the respondent has designated in the completion of the contract as a result of this solicitation.

12 – CONTRACT NEGOTIATIONS

It is the intent of the City to enter into a contract for the services as outlined. The responses constitute an agreement that any contract resulting from this solicitation will be prepared by the City. Consequently the City does not agree to necessarily accept terms the respondent may propose during the negotiations phase of the contract.

SECTION – A
RESPONSE PROCEDURES

13 – CONTRACT PERIOD

This contract will commence on the first calendar day of the month succeeding approval of the contract by City Council or designee, unless otherwise stipulated in the Notice of Award Letter distributed by the City's Procurement Services Department; and will be contingent upon the completion and submittal of all required pre-award documents. The initial contract term will remain in effect for thirty-six (36) months, and then the contract will remain in effect until completion of the expressed and/or implied warranty period. The contract prices resultant from this solicitation will prevail for the full duration of the initial contract term unless otherwise indicated elsewhere in this document.

14 – OPTION TO RENEW

Prior to, or upon completion, of the initial term of this contract, the City will have the option to renew this contract for three (3) additional twelve (12) month period(s). The contractor must maintain, for the entirety of the stated additional period(s), the same prices, terms, and conditions included within the originally awarded contract. Continuation of the contract beyond the initial period, and any option subsequently exercised, is a City prerogative, and not a right of the contractor. This prerogative may be exercised only when such continuation is clearly in the best interest of the City.

15 – SITE VISIT

Not applicable to this solicitation.

16 – TIE RESPONSES

Should there be a tie between one or more respondents, the tie may be broken and the successful respondent selected by the following criteria presented in order of importance, as determined by the Procurement Services Director, will be awarded the contract or purchase:

(1) Quality of the items or services provided if such quality is ascertainable.

(2) Delivery time if provided in the response by the respondents.

(3) Preference of businesses with drug-free workplace programs as defined in Section 287.087, Florida Statutes.

(4) The vendor closest to the City of Clermont City Hall located at 685 Montrose Street, as determined by the Procurement Services Director.

(5) If items 1-4 are not applicable, the tie breaker will be decided by flipping a coin to receive the first opportunity to negotiate, as applicable.

SECTION – A
RESPONSE PROCEDURES

17 – LOBBYING

Lobbying of Evaluation Committee members, City of Clermont employees, or elected officials regarding this Request for Qualifications (RFQ), by the respondent or any member of the respondent's staff, an agent of the respondent, or any person employed by any legal entity affiliated with an organization that is responding to the RFQ is strictly prohibited upon advertisement and will be prohibited until a written recommendation of award is made. For purposes of this provision, lobbying activities will include but not be limited to, influencing or attempting to influence action or non-action in connection with this RFQ through direct or indirect oral or written communication or an attempt to obtain goodwill of persons and/or entities specified in this provision. Such actions may cause the RFQ response or subsequent contract to be rejected or terminated.

END OF SECTION – A

SECTION – B
SCOPE OF SERVICES

The City of Clermont is soliciting proposals for continuing Civil Engineer services to assist with the design and implementation of municipal engineering projects. The type of project which may be assigned may include, but is not limited to, the following:

Potable water related services:

- Water supply planning (including alternative water supply).
- Water supply master planning.
- Modeling, groundwater, surface water, integrated.
- Water treatment.
- Water transmission and treatment plant design.
- Water storage.

Wastewater / reclaim water related services:

- Waste water treatment, collection and facility design.
- SCADA integration and programming services.
- Reclaim water supply and distribution.
- Lift and pump station design including condition assessments and rehabilitation.
- Waste water system master planning.

Storm water related services:

- Stormwater system design and modeling.
- NPDES MS4 support.
- Erosion and sediment control design.
- SWPPP development.
- Stormwater system master planning.

Environmental services:

- Environmental permitting.
- Wetland delineation, ecological investigations, species surveys.
- Environmental analysis of underground fuel tanks.
- Environmental assessments.

Transportation related services:

- Road construction & re-construction.
- Pavement maintenance.
- Pavement evaluation (paver or IMS).

SECTION – B
SCOPE OF SERVICES

- Streetscapes.
- Traffic studies.
- MUTCD compliance.
- Pavement markings.
- Bicycle trails.
- Pedestrian sidewalks.
- Complete streets design.

Construction related services:

- Preparation of construction documents.
- Construction project management.
- Shop drawing review.
- Cost estimates and value engineering.
- Coordination with city staff, city consultants and contractors.
- Construction administration services.

General engineering services:

- Development site review.
- CUP permitting.
- GIS and hydraulic modeling services.
- Surveying services.
- Geotechnical services.
- Utility feasibility studies.
- Predesign studies and reports.
- Engineering analysis, cost estimates and reports.
- Preparation of project rendering and presentation material.
- Coordinating with utility companies.

Other municipal services:

- Solid waste management.
- Asset management assistance.
- Facilities design.
- Site planning and design.
- Condition assessment.
- Community parks.
- Neighborhood improvements.
- Mechanical & electrical systems.

SECTION – B
SCOPE OF SERVICES

- Structural systems.

Selected firm(s) will not be required to have experience in all the areas specified above. Successful firm(s) must be familiar with different agency's permitting regulations and requirements.

It is the intent of the City of Clermont to hold the Engineering firm(s) responsible for their work. Successful firm will be responsible for the professional quality, technical accuracy and coordination of design, drawings, specifications, cost estimates and other services furnished by the Engineering firm(s) and their sub-consultants.

All documents generated as a result of projects will become the property of the City of Clermont. All project documents must be provided in a digital and hard copy format. The project drawings must be prepared in the current version of AutoCAD or in the version current to the City Engineering Division at the time that deliverables are due. Plot files must also be prepared and submitted which meet the City standards.

All reports, cost estimates, calculations, project specifications and documents must be submitted in the Microsoft software format version.

END OF SECTION – B

SECTION – C
RESPONSE FORMAT

1 – PROPOSAL REQUIREMENTS

A response to this solicitation should address the requirements listed below in a clear concise manner in the order stated herein. The response must clearly detail how the services being proposed can best satisfy the City's needs. The submitted proposal must follow the rules and format out lined within this section. Adherence to the rules will ensure a fair and objective analysis of all proposals. Respondents must upload their proposal in BidSync in the format requested below (with each "Tab" clearly identified).

All responses must be submitted and received by the deadline specified in this solicitation unless changed by Addenda. The responsibility for submitting the proposal on or before the stated date and time is solely that of the respondent. The City of Clermont will in no way be responsible for delays in transmittal or delays caused by any other occurrence. **LATE PROPOSALS WILL NOT BE ACCEPTED. Please allow sufficient time to submit the proposals.**

2 – PROPOSAL FORMAT

Proposals must contain the following documents, each fully completed, and signed as required. Proposals must be tabbed as follows and must include the information/documents specified in the applicable tab. All abbreviations and acronyms used in the response must be kept to a minimum and defined upon their first usage. Proposals that do not adhere to the following format or include the requested information/documents may be considered incomplete and therefore non-responsive.

Respondents are limited to a total page count not to exceed sixty (60) pages excluding cover page, tab sheets, addenda(s), and required forms stated in the solicitation. Page size should be 8.5 x 11 inches. The text size should be 11 point or larger using Arial or Times New Roman font only. Use at least one (1) inch margins on the top and bottom and three-quarter (3/4) inch side margins. All response sections must be appropriately separated and tabbed. Hard copy responses must be comb or spiral bound on the left margin to permit the response package to lie flat when opened. Staples and ring binders are not allowed. The City reserves the right to seek additional/supplemental representation on specific issues as needed.

To expedite the evaluation of responses, it is **mandatory** that all respondents follow the format and instructions contained herein. The City retains the option to reject any response that does not conform to the stated format requirements.

Table of Contents

Outline in sequential order (as stated below) the major areas of the response. All pages must be consecutively numbered. Respondents must respond to all minimum requirements listed below. Responses which do not contain such documentation may be deemed non-responsive.

SECTION – C
RESPONSE FORMAT

TAB A – Introduction Letter

Provide an introduction letter outlining the respondent's specialization, location of office that will be responsible for managing the project and a brief summary of past experience intended to support the qualifications of the respondent to perform required professional services. The introduction letter must be signed by an officer of the Company/Corporation submitting the response.

TAB B – License and Insurance

The respondent must provide evidence that its company is currently registered with the State of Florida and holds an unexpired active license. Respondent must provide photo copy of the State of Florida Professional Engineer license indicating it is active in this section. In addition, if the respondent is a corporation, it must be properly chartered with the Florida Department of State and must submit evidence of such in this section. Include a copy of business W-9 certificate.

Submit a current insurance certificate (on Accord Form) showing the firm's insurance coverage requirements or letter from insurer detailing the capability of the firm to obtain coverage requirements. Refer to Section A.10 for insurance coverage requirements and limits.

TAB C – Company Background and Length of Time in Business

The respondent must have been in existence, under its current name, for at least five (5) years as a Florida registered professional engineer, in good standing with a track record of performance and must provide evidence of such in this section. If name changes have occurred in the past twenty (20) years, provide these name changes in chronological order.

Provide a brief narrative of company history, including date the company was formed and/or incorporated, list the officers of the company submitting and its qualifying agents. In addition, include the firm's organizational chart including names, titles and positions of leadership staff.

TAB D – Company Project Experience

Indicate the company's number of years of experience in providing the requested services stated in Section B.

Provide a brief narrative of your most significant projects undertaken in the past five (5) years; limit to no more than ten (10). Describe the scope of each project in physical terms and by cost, dates of service, the respondent's responsibilities, and provide the name and contact telephone number of an individual in a position of responsibility who can attest to respondent's activities in relation to the project.

TAB E – Personnel Experience

Provide the resume of the project team who will be assigned to this project. Resume shall include education, number of years of experience and any other

pertinent information necessary to convey the quality of the individual(s) assigned to this project.

The Project Manager must have a minimum of five (5) years of experience operating in the same capacity (position) working on projects of similar scope and size. The Project Manager must be an employee of the respondent for the last two (2) years.

If available, provide letters of recommendations from owners/customers that identify these individuals as being instrumental in the success of the project they were on.

TAB F – Sub-consultant and References

Provide a list of sub-consultants to be used on the services described in Section B (if applicable) and their qualifications. Respondent must provide a list of proposed of anticipated sub-consultants and three (3) owner references each, who can attest the subcontractor's experience and past performance. A resume of each individual, including education, experience, and any other pertinent information must be included for each team member that may be assigned to the services described in Section B.

TAB G – Claims Disputes

In this section, list all respondent's projects that:

i. Are currently in a claims dispute or have been in a claim dispute within the last ten (10) years and provide reasons for dispute. In addition, provide disposition (pending or settled), the amount of claim and brief description of the claim or dispute.

ii. List all projects that have been completed by respondent's surety in the last ten (10) years.

iii. List all liquidated damages have been assessed to respondent in the last five (5) years including a brief narrative of the circumstances and the amount accessed.

TAB H – Signed Addendum (if applicable) and Requested Forms.

i. Signed addendum.

ii. Conflict of Interest (Section F).

iii. Drug-Free Workplace (Section G).

iv. Supplemental Questionnaire (Section H).

v. Non-Collusion Affidavit (Section I)

vi. Signature Page (Section J).

END OF SECTION – C

SECTION – D
EVALUATION PROCESS

All responses will be reviewed and evaluated by City staff. The City reserves the right to evaluate each response on a separate and individual basis, to invite selected firms to make personal presentations to staff. The City further reserves the right to reject any and all responses submitted, or accept a response deemed most advantageous to the City. The procedure for response evaluation and selection is as follows:

1. Solicitation issued.
2. Receipt of responses.
3. Opening of responses and determination if responses meet the minimum qualification standards.
4. An Evaluation Committee composed of City employees will meet to evaluate each response in accordance with the requirements of this solicitation.
5. The Evaluation Committee shall shortlist the number of respondents to a minimum of three (3) for further discussions by using the following criteria for selection:

    a. Introduction letter identifying the respondent's professional specialization and other items requested in this section of the solicitation.
    [0 to 10 pts.]

    b. License and insurance in the State of Florida. If NO license and insurance is provided accordingly, the respondent will receive a zero score and be disqualified.
    [0 or 5 pts.]

    c. Company background and length of time in business.
    [0 to 15 pts.]

    d. Company project experience.
    [0 to 25 pts.]

    e. Personnel experience.
    [0 to 20 pts.]

    f. The experience and qualifications of the sub-consultants (if any) and references.
    [0 to 10 pts.]

    g. Physical location of business – In order to receive points, the respondent <u>main office</u> must be located in Lake County for at least two (2) years.
    [Respondent is located in Lake County = 5 pts.]
    [All other respondents = 2 pts.]

SECTION – D
EVALUATION PROCESS

h. Quality of submittal – clarity, conciseness and compliance with the requirements of the solicitation.
[0 to 10 pts.]

Criteria		Evaluator Max Score	Weight	Maximum Rating Points
TAB A	Introduction Letter	10	1	10
TAB B	License & Insurance	0 or 5	1	5
TAB C	Company Background	10	1.5	15
TAB D	Company Project Experience	10	2.5	25
TAB E	Personnel Experience	10	2	20
TAB F	Experience of Sub-consultants	10	1	10
TAB G	Business Location	2 or 5	1	5
TAB H	Quality of Submittal	10	1	10
Maximum Points Allowed				**100**

6. The Evaluation Committee will independently review each respondent's technical proposal and award points for the established evaluation criteria stated above, with scoring based on a zero (0) to ten (10) point scale, as identified below. For each criterion, the sum of the evaluator's scores will be multiplied by the designated weight for a total score; the divided by the number of evaluators to provide the overall average for each criteria. The sum of average points will result in the total technical score for each respondent.

Score	Basic Description	Full Description
0 - 1	No Response / Not Addressed or Vaguely Addressed	Answer is No to RFQ requirements; this element of the evaluation criteria was **not addressed or vaguely addressed**.
2 – 3	Poor or Below Expectations / Unsatisfactory	The proposal is inadequate in the most basis requirements, specifications or provisions of the criteria element; respondent's information for this element of the evaluation criteria was **unsatisfactory**.

SECTION – D
EVALUATION PROCESS

4 – 5	Below Average / Meets Some Expectations	The proposal meets some of the basic requirements, specifications or provisions of the criteria element; respondent's information for this element of the evaluation criteria is **below average**.
6 – 7	Average / Meets Most Expectations	The proposal adequately meets the minimum requirements, specifications or provisions of the criteria element; respondent's information for this element of the evaluation criteria is **average**.
8 – 9	Above Average / Meets All Expectations	The proposal more than adequately meets the minimum requirements, specifications or provisions of the criteria element, may exceed some areas; respondent's information for this element of the evaluation criteria is **above average**.
10	Excellent / Exceeds Expectations	The proposal exceed minimum requirements, specifications or provision in most aspects of the criteria element; respondent's information for this element of the evaluation criteria is **excellent**.

7. The Evaluation Committee may require one or more respondents, to conduct an informal presentation prior to preparing their short-list of respondents.
8. The short-listed respondent(s) may be required to provide a brief presentation to the Evaluation Committee for ranking purposes.
9. The Evaluation Committee will rank each respondent based on who will serve the best interest of the City. The respondents will be ranked numerically 1, 2, 3, etc., with 1 being the highest ranking.
10. The Procurement Services Director, assisted by City staff, may proceed to negotiate a contract with the highest evaluated respondent(s). In the event a contract cannot be negotiated with the highest ranked respondent, negotiations will discontinue and the Procurement Services Director will start contract negotiations with the next highest ranked respondent.
11. A contract or contracts are presented to the City Council for award approval.

IMPORTANT NOTE:

By submitting a response, all respondents shall be deemed to understand and agree that no property interest or legal right of any kind shall be created at any point during the aforesaid evaluation/selection process until and unless a contract has been agreed to and signed by both parties.

END OF SECTION D

SECTION – E
TERMS AND CONDITIONS

1 – MODIFICATIONS / WITHDRAWALS OF SUBMITTALS

Prior to the solicitation due date, a respondent may change its response by submitting a new response with a modification letter replacing the original response. The modification letter must be on the company's letter head and signed by an authorized agent of the company. Modifications received after the response due date and time will not be considered. A solicitation may be withdrawn at any time prior to the solicitation due date by issuing a written notice. The written notice must be addressed to and received by the Procurement Services Director, prior to the solicitation due date. A solicitation may also be withdrawn after the solicitation due date but before recommendation of award, by submitting a withdrawal letter to the Procurement Services Director. The withdrawal letter must be on a company letterhead, signed by an authorized agent of the company, and address the reason(s) for the withdrawal after the solicitation due date. The City may, at its sole discretion, accept or deny any modification or withdrawal request.

2 – RESPONSE POSTPONEMENT / CANCELLATION / REJECTION

The City may, at its sole and absolute discretion, reject any and all, or parts of any and all, responses; re-advertise this solicitation; postpone or cancel, at any time, this response process; or waive any irregularities in the solicitation or in any responses received as a result of this solicitation.

3 – EXCEPTIONS TO SOLICITATION

Respondents must clearly indicate any exceptions they wish to make to any of the terms in this solicitation, and outline what alternative is being offered. The City, after completing evaluations, may accept or reject the exceptions. In cases in which the exceptions are rejected, the City may require the respondent to furnish the services or goods originally described, or negotiate an alternative acceptable to the City.

4 – CHANGE ORDERS

No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made on writing by the City of Clermont.

5 – ADDENDA

Any interpretations, corrections, or changes to this solicitation will be made by addenda. Sole issuing authority shall be vested in the City of Clermont Procurement Services Department. Addenda will be sent to all who are known to have received a copy of this solicitation. If the addenda contain changes to the specification or solicitation form, prospective respondents shall acknowledge receipt of all addenda or they will be declared non-responsive.

6 – CONFLICTS WITHIN THE SOLICITATION

Where there appears to be a conflict between documents, the order of precedence shall be as follows:

1. Any agreement or contract resulting from the award of this solicitation (if applicable).
2. Addenda released for this solicitation, with the latest addendum taking precedence.
3. The solicitation.
4. The awardees' response.

It is incumbent upon the vendor to identify such conflicts to the designated procurement representative prior to the response due date.

7 – MISTAKES

Respondents are cautioned to examine all specifications, drawings, delivery instructions, unit prices, extensions, and all other special conditions pertaining to the solicitation. Failure of the respondent to examine all pertinent documents shall not entitle them to any relief from the conditions imposed in the contract. In case of mistakes in extension, the unit price shall govern. Multiplication or addition errors are deemed clerical errors and shall be corrected by the City.

8 – PAYMENT TERMS AND DISCOUNT

Payment will be made by the City after commodities/services have been received, accepted and properly invoiced as indicated in contract and/or purchase order. Invoices must bear the purchase order, contract number, or both when available, and shall be submitted to the ordering department. Payment terms will be considered to be Net-30 days after the date of satisfactory delivery at the place of acceptance and receipt of correct invoice at the office specified. If a

SECTION – E
TERMS AND CONDITIONS

contractor offers a discount, it is understood that the discount time will be computed from the date of satisfactory delivery, at the place of acceptance, and receipt of correct invoice at the office specified.

9 – TAXES

The City of Clermont is exempt from Federal Excise and Florida Sales taxes on direct purchase of tangible property. Successful respondent shall pay all applicable sales, consumer, land use, or other similar taxes required by law. The respondent is responsible for reviewing the pertinent Florida Statutes involving the sales tax and complying with all requirements.

10 – CONTINGENCY FEES

By submitting a response to this solicitation, the respondent certifies that no contingency fees (sometimes known as finder's fee) has been paid to any person or organization other than bona-fide employee working solely for the respondent to secure a contract pursuant to this solicitation. Violation of this policy may result in termination of any resultant contract and/or possible debarment.

11 – PUBLIC RECORDS

Florida law provides that municipal records shall at all times be open for personal inspection by any person. Respondents are hereby notified that all information submitted as part of a response to this solicitation will be subject for public inspection upon award in compliance with Chapter 119.01, Florida Statutes. The respondent should not submit any information in response to this solicitation which the respondent considers proprietary or confidential. The submission of any information to the City, in connection with this solicitation, shall be deemed conclusively to be a waiver of any protection from release of the submitted information unless such information is exempt, or confidential, under Chapter 119.01, Florida Statutes.

12 – APPEALS PROCEDURES

Any prospective respondent may only appeal any determination, decision or recommendation of the Procurement Services Director, in accordance herewith. All appeals must be in writing and sent via certified mail or delivered in person to the City Manager within three (3) business days of issuance of such determination, decision or recommendation. The City Manager shall administer the appeal and shall render a decision within seven (7) business days of receiving the appeal. All appeals must set forth the specific reason and facts concerning the dispute. Any appeal based exclusively on disagreement with the technical judgment of evaluators is subject to summary rejection unless there is clear and convincing evidence of arbitrary or capricious action in that regard. In the event of a timely appeal, the City shall not proceed further with the solicitation or with the award of bid/contract unless the City Manager, after consultation with the Director of the using department(s) or division(s), forwards to the City Council a written request to award the bid/contract without delay in order to protect the public health, safety or general welfare and City Council approves said request.

13 – RULES, REGULATION, LICENSING REQUIREMENTS

Respondents are expected to be familiar with and comply with all Federal, State and local laws, ordinances, codes, and regulations that may in any way affect the services offered. Ignorance on the part of the respondent will in no way relieve it from responsibility for compliance.

14 – DEFAULT

Failure or refusal of a respondent to execute a contract upon award by the City Council, or untimely withdrawal of a response before such award is made and approved, may result in forfeiture of that portion of any surety required as liquidated damages to the City; where surety is not required, such failure may result in a claim for damages by the City and may be grounds for removing the respondent from the City's vendor list.

15 – CONFLICT OF INTEREST

No contract will be awarded to a respondent who has City officials, officers or employees affiliated with it, unless the respondent has fully complied with current Florida Statutes and City Ordinances related to this issue. All respondents must disclose with their response the name(s) of any officer, director, agent, or immediate family member (spouse, parent, sibling, child) who is also an employee of the City. Further, all respondents must disclose the name of any City

SECTION – E
TERMS AND CONDITIONS

employee who owns, either directly or indirectly, an interest of ten (10%) percent or more in the respondent or any of its affiliates. Failure to disclose any such affiliation will result in disqualification of the response and prohibition of engaging in any future business with the City.

16 – RESPONSIBILITY

Before submitting responses, each prospective respondent shall make all investigations and examinations necessary to ascertain all conditions and requirements affecting the full performance of the contract. Ignorance of such conditions and requirements resulting from failure to make such investigations and examinations will not relieve the successful respondent from any obligation to comply with every detail, provisions, and requirements of the solicitation and resulting contract documents. In addition, failure to make such investigations and examinations will not be accepted as a basis for any claims whatsoever, or any monetary consideration on the part of the respondent.

17 – RELATION OF CITY

It is the intent of the parties hereto that the successful respondent be legally considered to be an independent respondent and that neither the respondent nor the respondent's employees and agents shall, under any circumstances, be considered employees or agents of the City.

18 – PRIME CONTRACTOR

The respondent awarded a contract shall act as the prime contractor for all required items and services and shall assume all responsibility for the procurement of such items or services. The contractor shall be considered the sole point of charges and meeting all requirements of this solicitation. All subcontractors will be subject to advance review by the City in regards to competency and security concerns. After the award of the contract, no change in subcontractors will be made without the consent of the City. The contractor shall be responsible for all insurance, permits, licenses, and related matters for any and all subcontractors. Even if the subcontractor is self-insured, the City may require the contractor to provide any insurance certificates required by the work to be performed.

19 – COLLUSION

Where two (2) or more related parties each submit a response for the same solicitation, such response shall be presumed to be collusive. The foregoing presumption may be rebutted by the presentation of evidence as to the extent of ownership, control and management of such related parties in preparation and submittal of such responses. Related parties shall mean respondents or the principals thereof which have a direct or indirect ownership interest in another respondent for the same contract or in which a parent company or the principals thereof of one (1) respondent have a direct or indirect ownership interest in another respondent for the same solicitation. Furthermore, any prior understanding, agreement, or connection between two (2) or more corporations, firms, or persons submitting a response for the same materials, supplies, services, or equipment, shall also be presumed to be collusive. Responses found to be collusive shall be rejected. Respondents which have been found to have engaged in collusion may be considered non-responsible, and may be suspended or debarred, and any contract resulting from collusion may be terminated for default.

20 – PUBLIC ENTITY CRIMES

A person or affiliate who has been placed on the convicted vendor list following a conviction for public entity crimes may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to public entity, may not be awarded or perform work as a contractor, supplier, sub-contractor, or consultant under a contract with a public entity, and may not transact business with any public entity in excess of the threshold amount provided in Sec. 287.017 of the Florida Statutes, for CATEGORY TWO ($25,000.00) for a period of 36 months from the date of being placed on the convicted vendor list. By submitting a response to this solicitation, the respondent is certifying that it is eligible for award under this solicitation pursuant to Chapter 287.132 and 287.133 Florida Statutes.

21 – ASSIGNMENT

Successful respondent shall not enter into any sub contract, retain consultants, or assign, transfer, convey, sublet, or otherwise dispose of this contract, or of any or all of its right, title, or interest therein, or its power to execute such

SECTION – E
TERMS AND CONDITIONS

contract to any person, firm, or corporation without prior written consent of the City. Any unauthorized assignment may constitute a default by the successful respondent.

22 – INDEMNIFICATION

The successful respondent shall be required to agree to indemnify and hold harmless the City and its council, employees, and agents, from and against any and all actions, claims, liabilities, losses and expenses, including but not limited to attorney fees, for personal, economic or bodily injury, wrongful death, loss of or damage to property, in law or in equity, which may arise or be alleged to have arisen from the negligent acts or omissions or other wrongful conduct of the successful consultant, its employees, or agents in connection with the performance of service pursuant to the resultant contract. The successful respondent shall pay all such claims and losses and shall pay all such costs and judgments which may issue from any lawsuit arising from such claims and losses, and shall pay all costs expended by the City in the defense of such claims and losses, including appeals.

23 – TERMINATION FOR DEFAULT

If through any cause within the reasonable control of the successful respondent, it shall fail to fulfill in a timely manner, or otherwise violate any of the covenants, agreements, or stipulations material to the Agreement, the City shall thereupon have the right to terminate the services then remaining to be performed by giving written notice to the successful respondent of such termination which shall become effective upon receipt by the successful respondent of the written termination notice.

In that event, the City shall compensate the successful respondent in accordance with the agreement for all services performed by the respondent prior to termination, net of any costs incurred by the City as a consequence of the default.

Notwithstanding the above, the successful respondent shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of the agreement by the respondent, and the City may reasonably withhold payments to the successful respondent for the purposes of set off until such time as the exact amount of damages due the City from the successful respondent is determined.

24 – TERMINATION FOR CONVENIENCE

The City may, for its convenience, terminate the services then remaining to be performed at any time without cause by giving written notice to successful respondent of such termination, which shall become effective thirty (30) days following receipt by respondent of such notice. In that event, all finished or unfinished documents and other materials shall be properly delivered to the City. If the agreement is terminated by the City as provided in this section, the City shall compensate the successful respondent in accordance with the agreement for all services actually performed by the successful respondent and reasonable direct costs of successful respondent for assembling and delivering to City all documents. No compensation shall be due to the successful respondent for any profits that the successful respondent expected to earn on the balance of the agreement. Such payments shall be the total extent of the City's liability to the successful respondent upon a termination as provided for in this section.

25 – TEMINATION FOR UNAPPROPRIATED FUNDS

The obligation of the City for payment to a contractor is limited to the availability of funds appropriated in a current fiscal period. Continuation of the contract into a subsequent fiscal period is subject to appropriation of funds, unless otherwise authorized by law.

26 – FORCE MAJEURE

The parties will exercise every reasonable effort to meet their respective obligations hereunder, but shall not be liable for delays resulting from force majeure or other causes beyond their reasonable control, including, but not limited to, compliance with any Government law or regulation, acts of nature, acts or omissions of the other party, Government acts or omissions, fires, strikes, national disasters, wars, riots, transportation problems, and/or any other cause whatsoever beyond the reasonable control of the parties. Any such cause will extend the performance of the delayed obligation to the extent of the delay so incurred.

SECTION – E
TERMS AND CONDITIONS

27 – INSURANCE

Successful respondent shall obtain, provide, and maintain during the term of the agreement the following types and amounts of insurance as indicated on the Insurance Requirements in Section A which shall be maintained with insurers licensed to sell insurance in the State of Florida and have a B+ VI or higher rating in the latest edition of AM Best's Insurance Guide. Name the City as an additional insured on all liability policies required as a result of a contract. When naming the City as an additional insured, the insurance company hereby agrees and will endorse the policies to state that the City will not be liable for the payment of any premiums or assessments.

Successful respondent's failure to procure or maintain required insurance program shall constitute a material breach of agreement under which the City may immediately terminate the proposed agreement.

28 – LAWS / ORDINANCES

Respondents are expected to be familiar with and comply with all Federal, State, local and municipal laws, ordinances rules and regulations that may, in any way affect the services offered. Ignorance on the part of the respondent will in no way relieve it from responsibility for compliance.

29 – LITIGATION VENUE

The contractual parties waive the privilege of venue and agree that all litigation between them in the State courts shall take place in Lake County, Florida and that all litigation between them in the federal courts shall take place in Central Florida.

30 – PATENTS AND ROYALTIES

The contractor, without exception, shall indemnify, save harmless, and defend the City and its employees from liability of any nature and kind, including costs and expenses for or on account of any copyrighted or un-patented invention, process, or article manufactured or used in the performance of the contract. If the contractor uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood, without exception, that the response prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.

31 – RECYCLE CONTENT

In addressing environmental concerns, the City of Clermont encourages responses containing items with recycled content. When submitting a response containing items with recycled content, the respondent shall provide documentation adequate for the City to verify the recycled content. The city prefers packaging consisting of materials that are degradable or able to be recycled. When specifically stated in the solicitation, the City may give preference to responses containing items manufactured with recycled material or packaging that is able to be recycled.

32 – OSHA

The respondent warrants that the product supplied to the City of Clermont shall conform in all aspects to the standards set forth in the Occupational Safety and Health Act of 1970, as amended. The failure to comply with this condition will be considered as a breach of contract. Any fines levied because of inadequacies to comply with these requirements shall be borne solely by the respondent.

END OF SECTION E

SECTION – F
CONFLICT OF INTEREST DISCLOSURE

I HEREBY CERTIFY that:

1. I *(printed name)* _____ am the *(title)* _____ and the duly authorized representative of the firm of *(Firm Name)* _____ whose address is _____, and that I possess the legal authority to make this affidavit on behalf of myself and the firm for which I am acting; and,

2. Except as listed below, no employee, officer, or agent of the firm have any conflicts of interest, real or apparent, due to ownership, other clients, contracts, or interests associated with this project; and,

3. This proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a proposal for the same services, and is in all respects fair and without collusion or fraud.

EXCEPTIONS (List if any):

_____

_____

Print Name: _____

Company Name: _____ Date: _____

END OF SECTION F

SECTION – G
DRUG-FREE WORKPLACE CERTIFICATION

The undersigned respondent hereby acknowledges that:

1. _____ the respondent has a drug free workplace policy as identified in the company policy attached to this certification.

AND/OR

2. _____ the respondent has a drug free workplace policy that is in compliance with Chapter 287.087 of the Florida Statutes.

AND/OR

3. _____ the respondent has a drug free workplace policy that is in compliance with the outline below:

a) Publishing a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the respondent's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;

b) Establishing a continuing drug-free awareness program to inform its employees about:

   i. The dangers of drug abuse in the workplace;
   ii. The respondent's policy of maintaining a drug-free workplace;
   iii. Any available drug counseling, rehabilitation, and employee assistance programs; and
   iv. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

c) Giving all employees engaged in performance of the contract a copy of the statement required by subparagraph (a);

d) Notifying all employees, in writing, of the statement required by subparagraph (a), that as a condition of employment on a covered contract, the employee shall:

   i. Abide by the terms of the statement; and
   ii. Notify the employer in writing of the employee's conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893, Florida Statutes, or of any controlled substance law of the United States or of any state, for a violation occurring in the workplace NO later than five (5) days after such conviction.

e) Notifying the City of Clermont in writing within 10 calendar days after receiving notice under subdivision (d) (ii) above, from an employee or otherwise receiving

SECTION – G
DRUG-FREE WORKPLACE CERTIFICATION

actual notice of such conviction. The notice shall include the position title of the employee;

f) Within 30 calendar days after receiving notice under subparagraph (d) of a conviction, taking one of the following actions with respect to an employee who is convicted of a drug abuse violation occurring in the workplace:

   i. Taking appropriate personnel action against such employee, up to and including termination; or
   ii. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency;

g) Making a good faith effort to maintain a drug-free workplace program through implementation of subparagraphs (a) through (f).

OR

4. _____ the respondent does not currently have a drug free workplace policy but is willing to comply with the requirements as specified in no. 3.

_____
(Respondent's Name)

STATE OF _____

COUNTY OF _____

END OF SECTION G

SECTION – H
SUPPLEMENTAL QUESTIONAIRE

Respondent's Name: _____

Official Representative: _____

Principal Office Address: _____

Select one: ____ Individual ____ Partnership ____ Corporation

If a Corporation, answer this:

When Incorporated: _____ In what State:_____

President's Name: _____ Vice-President's Name: _____

Treasurer's Name: _____

Members of Board of Directors

_____

If a Partnership, answer this:

Date of organization: _____

General or Limited Partnership: _____

Name and Address of Each Partner:
NAME / ADDRESS
_____ / _____
_____ / _____
_____ / _____

1. How many years has your organization been in business under the present business name? _____
2. Does your organization have current occupational licenses entitling it to do the work/service contemplated in this solicitation?
   Yes ( ) No ( ) If no, please explain:
   _____
   _____

SECTION – H
SUPPLEMENTAL QUESTIONAIRE

3. Please state license(s) type and number:

   _____

   Include copies of above license and certificates with response.

4. Have you ever had a contract terminated due to failure to comply with contractual specifications?
   Yes ( ) No ( ) If yes, state where and why:

   _____

   _____

5. Person or persons interested in this solicitation have ____ have not ____ been convicted by a Federal, State, County, or Municipal Court of any violation of law, other than traffic violations.
   Explain any convictions:

   _____

   _____

6. Lawsuits (any) pending or completed involving the corporation, partnership or individuals with more than ten percent (10%) interest:
   A. List all pending lawsuits:

   _____

   _____

   B. List all judgments from lawsuits in the last five (5) years:

   _____

   _____

   C. List any criminal violations and/or convictions of the respondent and/or any of its principals:

   _____

   _____

7. **Conflicts of Interest**. The following relationships are the only potential, actual, or perceived conflicts of interest in connection with this proposal: (If none, state same.)

   _____

   _____

SECTION – H
SUPPLEMENTAL QUESTIONAIRE

The respondent understands that information contained in this form will be relied upon by the City in making an award recommendation and such information is warranted by the respondent to be true. The undersigned respondent agrees to furnish such additional information, prior to award recommendation. The respondent further understands that the information contained in this form may be confirmed through a background investigation conducted by the City of Clermont Police Department. By submitting this questionnaire the respondent agrees to cooperate with this investigation, including but not necessarily limited to fingerprinting and providing information for credit check.

IF INDIVIDUAL:

_____ _____
Print Name Date

IF PARTNERSHIP:

_____ _____
Print Name Date

General Partner

_____ _____
Print Name Date

IF CORPORATION:

_____
Print Name of Corporation

_____ _____
Print Name of President Company Address

_____
Date

END OF SECTION H

SECTION – I
NON-COLLUSION AFFIDAVIT

THIS FORM MUST BE COMPLETED, SIGNED AND RETURNED WITH PROPOSAL

I hereby affirm that: I am the _____ (insert title) and the duly authorized representative of _____ (insert organization name) whose address is _____ and, that I possess the legal authority to make this affidavit on behalf of myself and the firm for which I am acting.

I affirm:

1. I am fully informed respecting he preparation and contents of the attached offer/proposal and of all pertinent circumstances respecting such offer/proposal;
2. Such offer/proposal is genuine and is not a collusive or sham offer/proposal;
3. Neither the said proposer nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has any way colluded, conspired, connived or agreed, directly or indirectly with any other proposer, firm or person to submit a collusive or sham offer/proposal in connection with the Contract for which attached offer/proposal has been submitted or to refrain from offering a proposal in connection with Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other proposer, firm or person to fix the price or prices in the attached offer/proposal or of any other proposer, or to fix any overhead, profit or cost element of the offer/proposal or the offer price of any proposer, or to secure though any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Clermont or any person interested in the proposed Contract;
4. The price or prices quoted in the attached offer/proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the proposer or any of its agents, representatives, owners, employees, or parties in interest, including this affiant. I do solemnly declare and affirm under penalties of perjury that the contents of this affidavit are true and correct.

_____ _____
Signature Title

_____ _____
Printed Name Date

END OF SECTION I

SECTION – J
SIGNATURE PAGE

By signing this section the respondent certifies that:

1. It satisfies all legal requirements (as an entity) to do business with the City.
2. The undersigned respondent acknowledges that award of a contract may be contingent upon a determination by the City and that the respondent has the capacity and capability to successfully perform the contract.
3. The proposer hereby certifies that it understands all requirements of this solicitation, and that the undersigned individual is duly authorized to execute this proposal document and any contract(s) and/or other transactions required by award of this solicitation.

By signing below, the respondent agrees to all terms, conditions, and specifications as stated in this solicitation, and is acting in an authorized capacity to execute this response. The respondent also certifies that it can and will provide and make available, at a minimum, the items set forth in this solicitation.

Respondent Information and Signature	
Company Name (print):	
Street Address:	
Mailing Address (if different):	
Telephone:	Fax:
Email:	Payment Terms: ____ % ____ days, net ____
FEIN: ____ - ____	Professional. License No.:
Signature:	Date:
Print Name:	Title:
Does the respondent accept payment using the City's MASTERCARD? ☐ Yes ☐ No	

END OF SECTION J

SECTION – F
CONFLICT OF INTEREST DISCLOSURE

I HEREBY CERTIFY that:

1. I *(printed name)* _____ am the *(title)* _____ and the duly authorized representative of the firm of *(Firm Name)* _____ whose address is _____, and that I possess the legal authority to make this affidavit on behalf of myself and the firm for which I am acting; and,

2. Except as listed below, no employee, officer, or agent of the firm have any conflicts of interest, real or apparent, due to ownership, other clients, contracts, or interests associated with this project; and,

3. This proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a proposal for the same services, and is in all respects fair and without collusion or fraud.

EXCEPTIONS (List if any):

_____

_____

Print Name: _____

Company Name: _____ Date: _____

SECTION – G
DRUG-FREE WORKPLACE

The undersigned respondent hereby acknowledges that:

1. ☐ the respondent has a drug free workplace policy as identified in the company policy attached to this certification.

AND/OR

2. ☐ the respondent has a drug free workplace policy that is in compliance with Chapter 287.087, Florida Statutes.

AND/OR

3. ☐ the respondent has a drug free workplace policy that is in compliance with the outline bellow:

a) Publishing a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the respondent's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;

b) Establishing a continuing drug-free awareness program to inform its employees about:

   i. The dangers of drug abuse in the workplace;
   ii. The respondent's policy of maintaining a drug-free workplace;
   iii. Any available drug counseling, rehabilitation, and employee assistance programs; and
   iv. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

c) Giving all employees engaged in performance of the contract a copy of the statement required by subparagraph (a);

d) Notifying all employees, in writing, of the statement required by subparagraph (a), that as a condition of employment on a covered contract, the employee shall:

   i. Abide by the terms of the statement; and
   ii. Notify the employer in writing of the employee's conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893, Florida Statutes, or of any controlled substance law of the United States or of any state, for a violation occurring in the workplace NO later than five (5) days after such conviction.

e) Notifying the City of Clermont in writing within 10 calendar days after receiving notice under subdivision (d) (ii) above, from an employee or otherwise receiving

SECTION – G
DRUG-FREE WORKPLACE

actual notice of such conviction. The notice shall include the position title of the employee;

f) Within 30 calendar days after receiving notice under subparagraph (d) of a conviction, taking one of the following actions with respect to an employee who is convicted of a drug abuse violation occurring in the workplace:

   i. Taking appropriate personnel action against such employee, up to and including termination; or
   ii. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency;

g) Making a good faith effort to maintain a drug-free workplace program through implementation of subparagraphs (a) through (f).

OR

4. ☐ the respondent does not currently have a drug free workplace policy but is willing to comply with the requirements as specified in no. 3.

_____
(Respondent's Name)

STATE OF _____

COUNTY OF _____

SECTION – H
SUPPLEMENTAL QUESTIONNAIRE

Respondent's Name: _____

Official Representative: _____

Principal Office Address: _____

Select one: ☐ Individual ☐ Partnership ☐ Corporation

If a Corporation, answer this:

When Incorporated: _____ In what State:_____

President's Name: _____ Vice-President's Name: _____

Treasurer's Name: _____

Members of Board of Directors

_____

If a Partnership, answer this:

Date of organization: _____

General or Limited Partnership*: _____

Name and Address of Each Partner:
NAME / ADDRESS

_____ / _____

_____ / _____

_____ / _____

1. How many years has your organization been in business under the present business name? _____
2. Does your organization have current occupational licenses entitling it to do the work/service contemplated in this solicitation?
   Yes ☐ No ☐ If no, please explain:
   _____
   _____

SECTION – H
SUPPLEMENTAL QUESTIONNAIRE

3. Please state license(s) type and number:

   _____

   Include copies of above license and certificates with response.

4. Have you ever had a contract terminated due to failure to comply with contractual specifications?
   Yes ☐ No ☐ If yes, state where and why:

   _____

   _____

5. Person or persons interested in this solicitation have ☐ have not ☐ been convicted by a Federal, State, County, or Municipal Court of any violation of law, other than traffic violations.
   Explain any convictions:

   _____

   _____

6. Lawsuits (any) pending or completed involving the corporation, partnership or individuals with more than ten percent (10%) interest:
   A. List all pending lawsuits:

   _____

   _____

   B. List all judgments from lawsuits in the last five (5) years:

   _____

   _____

   C. List any criminal violations and/or convictions of the respondent and/or any of its principals:

   _____

   _____

7. **Conflicts of Interest**. The following relationships are the only potential, actual, or perceived conflicts of interest in connection with this proposal: (If none, state same.)

   _____

   _____

SECTION – H
SUPPLEMENTAL QUESTIONNAIRE

The respondent understands that information contained in this form will be relied upon by the City in making an award recommendation and such information is warranted by the respondent to be true. The undersigned respondent agrees to furnish such additional information, prior to award recommendation. The respondent further understands that the information contained in this form may be confirmed through a background investigation conducted by the City of Clermont Police Department. By submitting this questionnaire the respondent agrees to cooperate with this investigation, including but not necessarily limited to fingerprinting and providing information for credit check.

IF INDIVIDUAL:

_____ _____
Print Name Date

IF PARTNERSHIP:

_____ _____
Print Name Date

General Partner

_____ _____
Print Name Date

IF CORPORATION:

_____
Print Name of Corporation

_____ _____
Print Name of President Company Address

_____
Date

SECTION – I
NON-COLLUSION AFFIDAVIT

THIS FORM MUST BE COMPLETED, SIGNED AND RETURNED WITH PROPOSAL

I hereby affirm that: I am the _____ (insert title) and the duly authorized representative of _____ (insert organization name) whose address is _____ and, that I possess the legal authority to make this affidavit on behalf of myself and the firm for which I am acting.

I affirm:

1. I am fully informed respecting he preparation and contents of the attached offer/proposal and of all pertinent circumstances respecting such offer/proposal;
2. Such offer/proposal is genuine and is not a collusive or sham offer/proposal;
3. Neither the said proposer nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has any way colluded, conspired, connived or agreed, directly or indirectly with any other proposer, firm or person to submit a collusive or sham offer/proposal in connection with the Contract for which attached offer/proposal has been submitted or to refrain from offering a proposal in connection with Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other proposer, firm or person to fix the price or prices in the attached offer/proposal or of any other proposer, or to fix any overhead, profit or cost element of the offer/proposal or the offer price of any proposer, or to secure though any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Clermont or any person interested in the proposed Contract;
4. The price or prices quoted in the attached offer/proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the proposer or any of its agents, representatives, owners, employees, or parties in interest, including this affiant. I do solemnly declare and affirm under penalties of perjury that the contents of this affidavit are true and correct.

_____ _____
Signature Title

_____ _____
Printed Name Date

SECTION – J
SIGNATURE PAGE

By signing this section the respondent certifies that:

1. It satisfies all legal requirements (as an entity) to do business with the City.
2. The undersigned respondent acknowledges that award of a contract may be contingent upon a determination by the City and that the respondent has the capacity and capability to successfully perform the contract.
3. The proposer hereby certifies that it understands all requirements of this solicitation, and that the undersigned individual is duly authorized to execute this proposal document and any contract(s) and/or other transactions required by award of this solicitation.

Purchasing Agreements with Other Government Agencies

This section is optional and will not affect contract award. If the City of Clermont awarded your company, would your company sell under the same terms and conditions, for the same price, to other governmental agencies in the State of Florida? Each governmental agency desiring to accept to utilize this contract shall be responsible for its own purchases and shall be liable only for materials or services ordered and received by it. ☐ Yes ☐ No (Check one)

By signing below, the respondent agrees to all terms, conditions, and specifications as stated in this solicitation, and is acting in an authorized capacity to execute this response. The respondent also certifies that it can and will provide and make available, at a minimum, the items set forth in this solicitation.

Respondent Information and Signature	
Company Name (print):	
Street Address:	
Mailing Address (if different):	
Telephone:	Fax:
Email:	Payment Terms: ____ % ____ days, net ____
FEIN: ____ - ____	Professional. License No.:
Signature:	Date:
Print Name:	Title:
Does the respondent accept payment using the City's MASTERCARD? ☐ Yes ☐ No	

Question and Answers for Bid #20-032 - On-Call Professional Civil Engineer Services

Overall Bid Questions

Question 1

Question 1

Section B of the RFQ identifies over 50 scope items required under this contract. The narrative in Section B states, in part, “Selected firm(s) will not be required to have experience in all the areas specified above.” Can you give potential proposers a more definite idea regarding the types and number of firms that you intend to hire? For example, are you planning to hire specialty engineering companies (such as Geotechnical Engineers) who provide only one or two of the listed scope items? Conversely, are you looking to hire prime engineering companies who employ a subconsultant on their team to deliver these specialty services?

Question 2

Can the City identify the engineering companies currently under contract? **(Submitted: Aug 13, 2020 9:35:55 AM EDT)**

Answer

- The City of Clermont is looking to hire broad spectrum prime engineering firm or firms that either have the in-house capabilities for the illustrated items or have access to sub-consultants to accomplish the tasks assigned. The 50 or so scope items are examples of what a firm might be involved with during the course of engaging with a Municipal Government. **(Answered: Aug 13, 2020 9:59:13 AM EDT)**

Question Deadline: Sep 10, 2020 3:00:00 PM EDT

WOODARD &CURRAN

COMMITMENT & INTEGRITY DRIVE RESULTS

woodardcurran.com



Qualifications

On-Call Professional Civil Engineer Services
RFQ #20-032

City of Clermont, Florida
September 17, 2020






CONTENTS





Contents

TAB A	Introduction Letter	1
TAB B	License and Insurance	3
TAB C	Company Background and Length of Time in Business	6
TAB D	Company Project Experience	9
TAB E	Personnel Experience	22
TAB F	Sub-consultant and References	47
TAB G	Claims Disputes	53
TAB H	Signed Addendum and Requested Forms	55

Signed Addendum
Section F - Conflict of Interest
Section G - Drug-Free Workplace with Supplemental Materials
Section H - Supplemental Questionnaire
Section I - Non-Collusion Affidavit
Section J - Signature Page

TAB A
Introduction Letter



210 South Florida Avenue | Suite 220
Lakeland, Florida 33801
www.woodardcurran.com

T 800.426.4262
F 207.774.663

WOODARD &CURRAN

September 17, 2020

Mr. Freddy Suarez, MPA, CPPB, Procurement Services Director
City of Clermont, Procurement Services Department
685 West Montrose Street, 2nd Floor
Clermont, Florida 34711

Re: RFQ No. 20-032
On-Call Professional Civil Engineer Services

Dear Mr. Suarez and Members of the Selection Committee:

Your staff at the City of Clermont (City/Clermont) may not all be familiar with Woodard & Curran, as we have yet to work with you directly. Our firm has been operating for over 41 years serving clients across Florida and beyond. We are selective about the clients we work for, pursuing only opportunities where we can provide value beyond our clients' other alternatives.

Our response to this Request for Qualifications (RFQ) is focused on Woodard & Curran's specialization in design and implementation of projects related to Potable Water, Wastewater/ Reclaim Water, and Stormwater. With our subconsultants, we extend these capabilities to address all the potential needs you have identified in the RFQ.

We are currently providing similar services to your neighboring Lake County communities including Tavares, Groveland, Mascotte, Montverde, and Lake County Water Authority. As with each of these clients, we will manage our projects for Clermont from our office in Lakeland. On the strength of this local knowledge and experience, and discussions with your staff, we believe Woodard & Curran offers Clermont a combination of advantages that you are unlikely to find from other proposers. Specifically:

- **Extensive experience with State and Federal funding programs.** Over the last five years, we have secured $1.4 billion in federal and state funding for our clients' municipal infrastructure and economic redevelopment projects. Our staff has a 30-year history with the full breadth of local, state, and federal funding programs administered through Florida agencies. For Florida clients, we have secured nearly $50M in the last 18 months for capital improvements related to water quality, treatment, resiliency, and economic development. *With this record, you can rely on Woodard & Curran to help you maximize state and federal grant funding to ease the financial burden on your citizens and ratepayers.*

- **Fully integrated SCADA capabilities.** Woodard & Curran integrates Supervisory Control and Data Acquisition (SCADA) communications, design, implementation, integration, and service into our engineering practice. Most firms can perform only one or two of those functions, which results in several handoffs in responsibility, increasing cost and complicating the lines of accountability. Our SCADA controls and electrical team remains on the leading edge of technology, and we have successfully implemented numerous innovative solutions that other firms have not yet attempted. *These capabilities help ensure our clients take appropriate advantage of technology to automate and monitor their systems and infrastructure to operate reliably and cost-effectively.*

- **An uncommon, operational mindset.** Unlike most consultants, Woodard & Curran operates and maintains many of the same types of systems that we design. This includes over 60 municipal water, wastewater, and stormwater facilities throughout the United States. Our experience affords us considerable insight into how such facilities need to operate and be maintained by our clients in the long-term. Leveraging this experience, we build into our planning and design mindset considerations such as future O&M costs, the safety of your staff and the public, and ease of maintenance. *This enables us to deliver safe, cost-effective, and practical projects that not only meet your needs on day one, but also operate sustainably for decades.*

Woodard & Curran appreciates the opportunity to present our qualifications to support the City of Clermont. We offer you the full resources of a 1,110+-person privately-owned company who delivers our work with the personal, small firm feel that is the only way we know. **Scott Shannon, PE** will serve as your Project Manager, directing the members of our team and calling upon our firm's entire suite of service professionals, as necessary. Scott has 24 years of experience developing and implementing capital improvements for drinking water, wastewater, reclaimed water, stormwater, and solid waste management systems in Florida.

If you have any questions or require any additional information, please feel free to contact Scott or me directly. We look forward to the opportunity to work in partnership with City of Clermont.

Sincerely,

WOODARD & CURRAN

Justin de Mello, PE
Principal-in-Charge
863.354.4416
jdemello@woodardcurran.com

Scott C. Shannon, PE
Project Manager
407.580.1707
sshannon@woodardcurran.com

TAB B
License and Insurance





TAB B
LICENSE AND INSURANCE

Woodard & Curran is duly licensed, permitted and certified to do business in the State of Florida. A copy of our license, W-9, and Insurance Certificate (sample) are included herein. Woodard & Curran can meet the insurance requirements in the RFQ and will provide a current insurance certificate conforming to these requirements, upon selection.

Ron DeSantis, Governor

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE ENGINEERING BUSINESS HEREIN IS AUTHORIZED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

WOODARD & CURRAN INC

41 HUTCHINS DR
PORTLAND ME 04102

LICENSE NUMBER: CA7479

EXPIRATION DATE: FEBRUARY 28, 2021

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ **Go to *www.irs.gov/FormW9* for instructions and the latest information.**

Give Form to the requester. Do not send to the IRS.

Print or type. See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
Woodard & Curran, Inc.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☑ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.
41 Hutchins Drive

Requester's name and address (optional)

6 City, state, and ZIP code
Portland, ME 04102

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number
[ ][ ][ ] - [ ][ ] - [ ][ ][ ][ ]

or

Employer identification number
0 1 - 0 3 6 3 2 2 2

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here Signature of U.S. person ▶ Andrew Stanley Date ▶ 1-13-20

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*

WOOD&CU-01 VSANTOSUOSSO

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 3/10/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Ames & Gough 859 Willard Street Suite 320 Quincy, MA 02169	PHONE (A/C, No, Ext): (617) 328-6555	FAX (A/C, No): (617) 328-6888
	E-MAIL ADDRESS: boston@amesgough.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Continental Casualty Company (CNA) A, XV	20443
INSURED	INSURER B : Continental Insurance Company A(XV)	35289
Woodard & Curran, Inc. 41 Hutchins Drive Portland, ME 04102	INSURER C : American Casualty Co of Reading, PA A(XV)	20427
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR			6014561812	2/23/2020	2/23/2021	DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 500,000
							MED EXP (Any one person)	$ 15,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	POLICY X PRO-JECT X LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER:							$
A	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS			6014561843	2/23/2020	2/23/2021	BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
B	X UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	$ 1,000,000
	EXCESS LIAB CLAIMS-MADE			6014561826	2/23/2020	2/23/2021	AGGREGATE	$ 1,000,000
	DED X RETENTION $ 0							$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						X PER STATUTE / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: N (Mandatory in NH)	N / A		WC676061262	2/23/2020	2/23/2021	E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
A	Professional Liab			114135520	2/23/2020	2/23/2021	Per Claim/Aggregate	1,000,000
A	Pollution Liab			114135520	2/23/2020	2/23/2021		1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

If AI box is checked, GL Endorsement Form# CNA75079XX, Auto Endt Form# SCA23500D to the extent provided therein applies and all coverages are in accordance with the policy terms and conditions.

Drone Coverage is included under the General Liability Policy #6014561812 with $1M per occ/$2M agg and coverage flows up to Umbrella.

CERTIFICATE HOLDER

Sample Certificate

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Michael Herlihy

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TAB C

Company Background and Length of Time in Business





TAB C

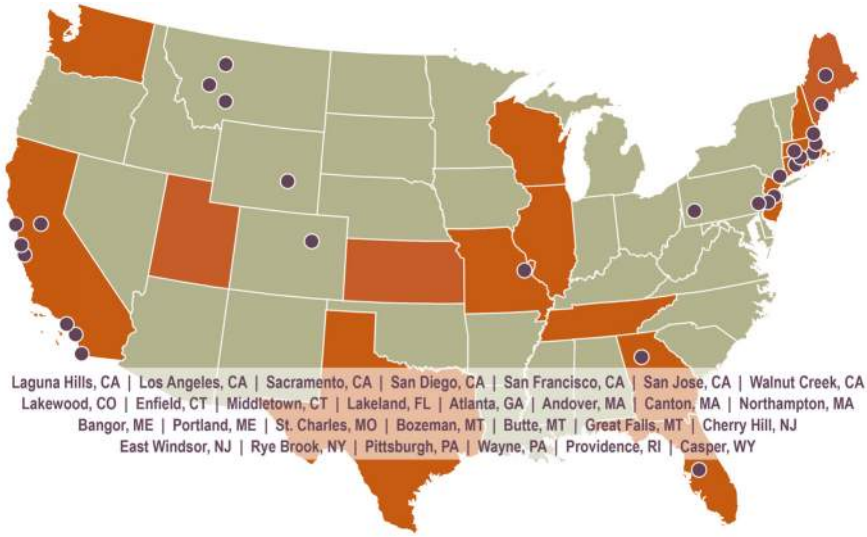
COMPANY BACKGROUND AND LENGTH OF TIME IN BUSINESS

Woodard & Curran has served communities in Florida for over two decades. Our office in nearby Lakeland, supported with technology-integrated offices throughout the U.S., enables Woodard & Curran to serve the City of Clermont cost-effectively. Our Certificate of Good Standing is provided at the end of this section.

Woodard & Curran is an integrated engineering, science, and operations company. Privately-held and steadily growing, we serve public and private clients locally and nationwide. From our environmental roots to the range of consulting, engineering, and operations expertise we provide today, we work for a diverse clientele - including municipalities, the energy industry, food & beverage manufacturers, colleges and universities, and the real estate community.

Talented people are at the heart of our firm. **Our company was founded (incorporated) on May 15, 1979 (41 years)** on a simple business concept: provide an enjoyable place to work with opportunity, integrity, and commitment, and we will attract talented people. It happened. At the heart of our company are people who are experts in their fields and passionate about what they do, showing a level of commitment and integrity that drives results. Our clients experience this through the actions we take, the solutions we provide, and the promises we keep.

Our integrity and commitment are matched only by the depth of our expertise. Our staff are specialists in their fields, offering in-depth understanding of cutting-edge technology, astute problem-solving, multidisciplinary engineering, and expert regulatory guidance. The firm has received numerous honors and awards, and we have ranked among *Engineering News-Record*'s top 100 environmental firms every year since 2000.



Woodard & Curran serves clients locally and nationwide from offices throughout the U.S. The firm operates offices in the locations noted above, as well as treatment facilities in the states that appear in orange.

Water

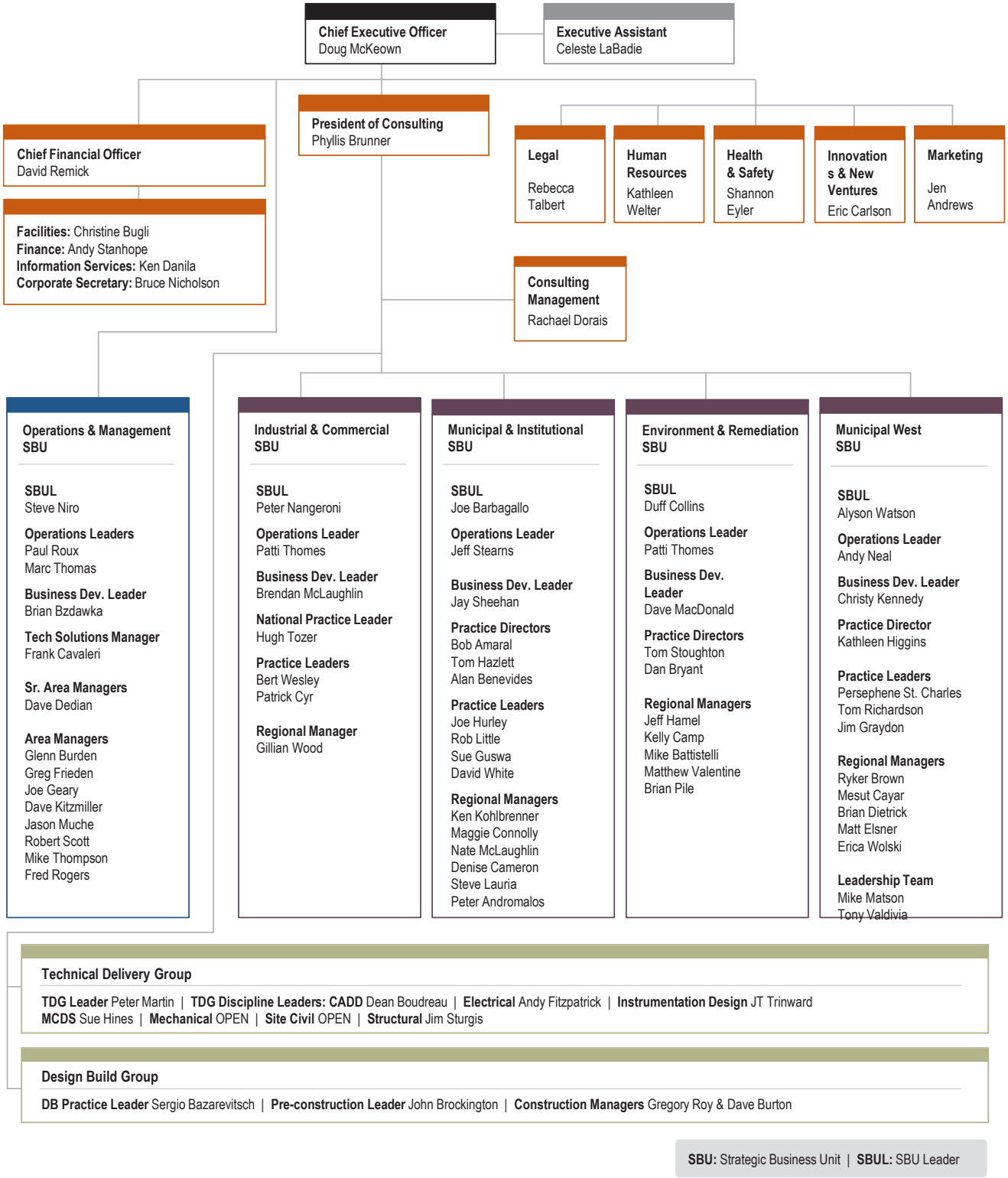
- funding & financing
- water resources planning
- water & wastewater infrastructure engineering
- water reuse & recycling
- stormwater management
- flood protection & resiliency
- urban revitalization
- SCADA
- asset management
- design-build contracting
- operations & management

Environmental

- site investigation and remediation
- ecological assessment, permitting & restoration
- environmental health & safety
- environmental compliance
- sustainable plant engineering services

ORGANIZATIONAL CHART

March 13, 2020



State of Florida
Department of State

I certify from the records of this office that WOODARD & CURRAN, INC. is a Maine corporation authorized to transact business in the State of Florida, qualified on April 16, 1996.

The document number of this corporation is F96000001884.

I further certify that said corporation has paid all fees due this office through December 31, 2019, that its most recent annual report/uniform business report was filed on April 26, 2019, and that its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Ninth day of January, 2020



Secretary of State

Tracking Number: 3379149706CU

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

TAB D
Company Project Experience





TAB D
COMPANY PROJECT EXPERIENCE

For 41 years, Woodard & Curran has provided engineering, science, and operations services to municipalities in Florida and beyond, helping to address and resolve challenges related to water and the environment. For Clermont, we offer a comprehensive range of services including potable water, wastewater, reclaimed water, stormwater, and general civil and environmental engineering. Adding the capabilities of our subconsultants presented in Tab F, we extend these capabilities to address all the potential needs you have identified in the RFQ.

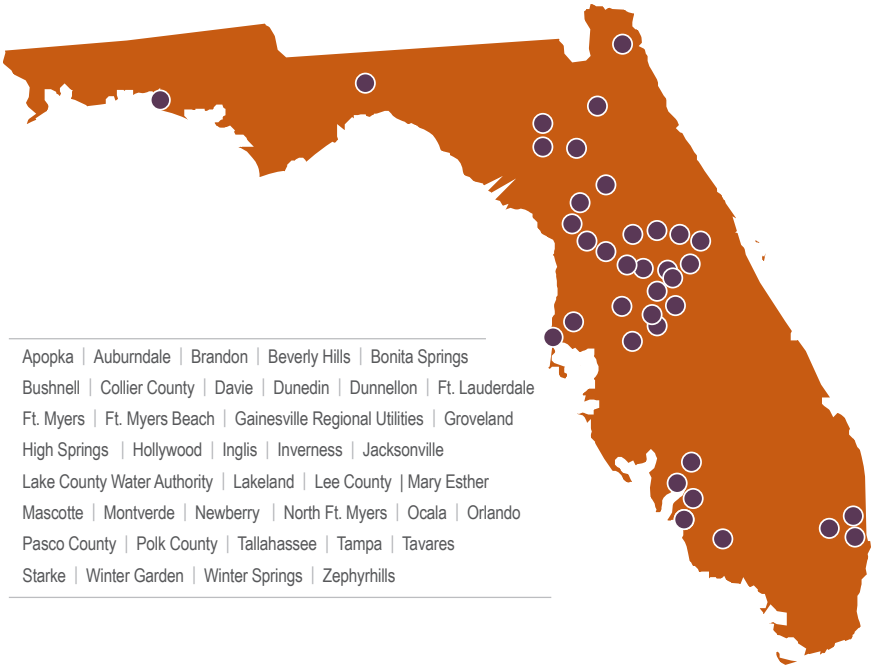
We enhance the engineering services we provide with:

1. **Extensive Grant Funding Experience**
2. **Fully Integrated SCADA Capabilities**
3. **The Mindset of an Operator**

In the delivery of these traditional engineering services, Woodard & Curran offers additional capabilities that you will not find through most other engineering firms. We apply this knowledge and experience to our engineering projects to produce a combination of benefits you are unlikely to find anywhere else.

Extensive Experience with State and Federal Funding Programs

Over the last five years, we have secured $1.4 billion in federal and state funding for our clients' municipal infrastructure and economic redevelopment projects. Our staff has a 30-year history with the full breadth of local, state, and federal funding programs administered through Florida agencies. For Florida clients, we have secured nearly $50M in the last 18 months for capital improvements related to water quality, treatment, resiliency, and economic development. **With this record, you can rely on Woodard & Curran to help you maximize state and federal grant funding to relieve the financial burden on your citizens and ratepayers.**



Apopka | Auburndale | Brandon | Beverly Hills | Bonita Springs
Bushnell | Collier County | Davie | Dunedin | Dunnellon | Ft. Lauderdale
Ft. Myers | Ft. Myers Beach | Gainesville Regional Utilities | Groveland
High Springs | Hollywood | Inglis | Inverness | Jacksonville
Lake County Water Authority | Lakeland | Lee County | Mary Esther
Mascotte | Montverde | Newberry | North Ft. Myers | Ocala | Orlando
Pasco County | Polk County | Tallahassee | Tampa | Tavares
Starke | Winter Garden | Winter Springs | Zephyrhills

Fully-Integrated SCADA Capabilities

Woodard & Curran integrates Supervisory Control and Data Acquisition (SCADA) communications, design, implementation, integration and service into our engineering practice. Most firms can perform only one or two of those functions, which results in several handoffs in responsibility, increasing cost and complicating the lines of accountability. Our SCADA controls and electrical team remains on the leading edge of technology, and we have successfully implemented numerous innovative solutions that other firms still have not yet attempted. **These capabilities help ensure our clients take appropriate advantage of technology to automate and monitor their systems and infrastructure to operate reliably and cost-effectively.**

An Uncommon, Operational Mindset

Unlike most consultants, Woodard & Curran operates and maintains many of the same types of systems that we design. This includes over 60 municipal water, wastewater, and stormwater facilities throughout the U.S. Our experience affords us considerable insight into how such facilities need to operate and be maintained by our clients in the long-term. Leveraging this experience, we build into our planning and design mindset considerations such as future O&M costs, the safety of your staff and the public, and ease of maintenance. **This enables us to deliver safe, cost-effective, and practical projects that not only meet your needs on day one, but also operate sustainably for decades.**

A sample of this experience and the local clients we provide these services to is provided in the following project descriptions. Most of them are for your neighboring Lake County communities or greater Central Florida.

Client	Project	Potable Water	Wastewater/Reclaim	Stormwater	General Engineering Services	SCADA Services	Operations Consulting	Grant Funding
Tavares, FL	On-Call Engineering and SCADA	♦	♦	♦	♦	♦	♦	♦
Groveland, FL	On-Call Engineering, SCADA, and Operations	♦	♦		♦		♦	♦
Mascotte, FL	On-Call Engineering Services	♦	♦		♦			♦
Montverde, FL	Water Treatment Plant Control Upgrades	♦			♦	♦	♦	
Starke, FL	Wastewater Treatment Plant and Collection System Upgrades		♦		♦			♦
Inglis, FL	Wastewater Treatment Plant Study		♦		♦			♦
Newberry, FL	Wastewater Engineering and Operational Assessments		♦		♦		♦	
Pasco County, FL	Duck Slough Stormwater Automation			♦	♦	♦		
Polk County, FL	SCADA Maintenance and Repairs	♦	♦			♦		
Orlando/Orange County, FL	Water Conserv II		♦			♦	♦	

City of Tavares, Florida

On-Call Engineering and SCADA Services



The City of Tavares has partnered with Woodard & Curran since 2004 to provide continuing, on-call engineering and SCADA services. Woodard & Curran has been instrumental in providing technical engineering and SCADA support to many of the City's recent upgrades including the Woodlea Road Wastewater Treatment Facility, all four of the City's water treatment facilities and several of their remote water, wastewater and reclaimed water sites. Additionally, Woodard & Curran has provided planning, design and construction administration for projects such as production well relocations, utility extensions, hydraulic models, asset management programs and secured for the City several grant/loan funding opportunities.

SCADA System Upgrades and On-Call Service Support

Woodard & Curran has supported the City with instrumentation, controls and SCADA support contracts for their water, wastewater, collections and distribution systems. Our team has replaced proprietary and unsupported control and communications equipment at many of the City's water, wastewater and reclaim water remote sites. Woodard & Curran upgraded all of the City's SCADA HMI software, alarming, remote access and cybersecurity concerns, computers and PLC's that control the water and wastewater plants. The City improved their asset management systems with Woodard & Curran by adding DoForms, SEMS and GIS interfaces. These upgrades are the result of a master plan that detailed PLC and radio upgrades to assure continuing compliance and functionality. Additionally, Woodard & Curran provides 24/7/365 SCADA critical operations support services to the City .

Asset Management and CMMS Evaluation

In 2019, the City was awarded a grant from the Florida Department of Environmental Protection (FDEP) to evaluate several CMMS technologies and produce a best practices of Asset Management Plan (AMP). Woodard & Curran was selected to provide services based on its engineers, planners, operations and maintenance, finance, SCADA and GIS/CMMS technology experts. Woodard & Curran not only provides municipal consulting services, but also has more than 60 contract operations and maintenance (O&M) facilities across the country where CMMS technology solutions are continuously being evaluated and implemented. These O&M facilities provide Woodard & Curran with test sites to evaluate CMMS solutions of various sizes and complexities based on the specific utility need, making Woodard & Curran a clear leader in the field of identifying needs, evaluating and implementing CMMS solutions. The goal of the program is to evaluate the needs of mid-size utilities and independently evaluate software solutions that will facilitate in gathering reliable asset data for funding and capital improvement planning.

Peninsula Utility Extension Project

Woodard & Curran is currently providing permitting, design and construction administration services for the Peninsula Utility Extension project that will extend water, wastewater and reclaimed water utilities approximately 4,800 LF to open a new area for development. The project includes extending utilities, upgrading lift stations, providing construction administration, and SCADA design and integration services.

Well 3/4 Relocation Planning and Design

Woodard & Curran is currently providing planning and preliminary design services to relocate an existing production drinking water well. The project includes the hydrogeologic investigations of the proposed new site, site layout, process mechanical well and pump design, structural building layout, HVAC and electrical upgrades.

Water and Wastewater System Hydraulic Models

Woodard & Curran is currently providing City-wide water and wastewater system hydraulic model updates for the City of Tavares. Over the last decade, the City has recognized a substantial revitalization and increase in development. These updates to the water and wastewater system hydraulic model will provide the City with a better understanding of the current wastewater system performance, confidence in predicting system conditions under a range of scenarios and a short- and long-term planning tool for future system performance and upgrades necessary to facilitate growth and expansion. Projects include data collection and review, updating GIS network, estimating future growth, development and subsequent demand and flows, hydraulic model and development, evaluating system performance and improvement needs.

Phil Clark, Utilities Director, 100 N. Disston Avenue, Tavares, FL 32778
352.742.6485
pclark@tavares.org
$ 1,113,000
Project Start: 2015 - Project Completion: Contract Ongoing

City of Groveland, Florida

On-Call Engineering, SCADA and Contract Operation Services



Since 2019, Woodard & Curran has partnered with the City of Groveland to provide continuing on-call engineering, SCADA and full contract operations of the City's utilities. Groveland is the fastest growing city in Lake County. Situated just west of Orlando and north of Disney World, the population grew 44 percent in 2019. The City has two oxidation ditch wastewater treatment facilities (WWTFs) capable of treating 2 MGD, 5 WWTFs with a permitted capacity of nearly 9.5 MGD, a reclaim system supplying 420,000 GPD, nine production wells, several storage tanks, 100 miles of water distribution pipes, 85 miles of sanitary wastewater collection system, 52 lift stations, 30 miles of reclaim pipes, rapid infiltration basins and a sprayfield.

Contract Operations

Woodard & Curran employs 18 full-time staff to provide the City with 24/7/365 operation of the City's public utilities. Woodard & Curran is responsible for delivering safe drinking water, wastewater treatment and reclaimed to the City's customers. After training staff in health and safety, including First Aid/CPR, Confined Space Entry, Qualified Electrical Worker, Hearing Conservation, Respiratory Protection and Hazardous Material Response for Chlorine, our team implemented a mobile asset management program to upload and categorize more than 18,000 assets. Woodard & Curran is also facilitating free emerging sludge dewatering technology pilot studies to reduce O&M costs to the City.

Utilities Master Plan and Facility Planning

Woodard & Curran is under contract to provide the City a Utility Master Plan that will be a roadmap to provide a safe and reliable water supply, wastewater and reclaim water services for customers, while using funds in the most efficient and responsible way possible. System condition assessments and model simulations will be used to identify existing deficiencies and to recommend improvements to mitigate these deficiencies, as well as meet future growth in demands. The improvements necessary to address those deficiencies will be identified in a Capital Improvement Plan (CIP), prioritized and phased over short-term, long-term and build-out conditions.

The project includes the facility planning for a new lower Floridan aquifer well and treatment facility, along with planning for a WWTF upgrade to accommodate future growth. A financial examination of the utility will also be conducted, including recommendations on financial strategies to fund the CIP as well as an examination of operational and maintenance costs of the utility system.

Wastewater Sampling and Sewer Ordinance Development



Woodard & Curran completed a program to sample influent wastewater concentrations at various points in the City's system and develop a revised Sewer Use Ordinance to combat industrial users taxing the wastewater system. The ordinance added an industrial pretreatment program (IPP) component that requires all industrial users to fill out an application, disclose their discharges and evaluate whether an industrial pretreatment permit would be necessary. Our team is managing the aspects of the IPP, including permits, inspections and reporting violations and exceedances to the City for enforcement.

Reclaimed Water Model and Pressure Assistance

Woodard & Curran completed an evaluation of the City's north reclaimed system to provide recommendations for pressure improvement. The project included data gathering and GIS development, model development, running various scenarios, pressure tests, installation of flow metering equipment, pump evaluation, a valve survey, and providing a summary memo of recommendations for immediate, short- and long-term system improvements to accommodate current, planned and future growth.

Sprayfield Permitting

Woodard & Curran is providing hydrogeological and permitting assistance for a non-public access spray field. This includes developing a groundwater monitoring plan, submitting application to FDEP, installing monitoring wells, groundwater sampling and laboratory analysis. The project will provide an alternative to dispose of non-spec, treated effluent water that is unsuitable for reclaim.

Headworks Evaluation

Woodard & Curran completed an evaluation of the City's Sampey and Sunshine Wastewater Treatment Facilities headworks. Our team performed an evaluation of several headworks screening and material handling technologies which considered four technologies, including multi-rake, basket, reciprocating rake and step screen technologies, and assessed each based on hydraulic design, costs, operability and constructability. The evaluation considered material handling technologies including washing and compacting technologies. Also, the evaluation considered historical and projected peak flows and assessed each screening technology's ability to limit hydraulic restrictions. Woodard & Curran also evaluated screenings conveyor, washer/compactor type, volume reduction, mass reduction and the screenings bin. The project made a technology recommendation, cost estimate and projected schedule based on procurement method selected.

Palisades Well Abandonment

Woodard & Curran is under contract to evaluate for abandonment three upper Floridan wells at the Palisades property. The work is part of the City's consumptive use plan with the St. Johns River Water Management District (WMD). Services include field services to remove old pumping equipment, evaluating existing wells for decommissioning, converting one well to a monitoring well, coordination with the WMD and recommendations.

SCADA System Upgrades and On-Call Support

Woodard & Curran has supported the City with instrumentation, controls and SCADA support contracts for their water, wastewater, collections and distribution systems. Woodard & Curran has replaced proprietary and unsupported control and communications equipment at many of the City's water, wastewater and reclaim water remote sites. Additionally, our team provides 24/7/365 SCADA critical operations support services.

Funding

With the City, Woodard & Curran developed a five-year capital improvement plan for the utility system which resulted in nearly $50 million in identified capital projects. Applications were submitted to the FDEP State Revolving Fund program, and the City was awarded a nearly $1 million in commitment to fund the planning of improvements. A portion of the project will be eligible for grant/principal forgiveness, and the remaining will be a low interest loan. Once planning is completed, the City will be eligible for additional funding to support the design and construction of the capital improvements.

TJ Fish, Director of Transportation and Public Works, 156 S. Lake Avenue, Groveland, FL 34736
352.429.2141 x2012
TJ.fish@groveland-Fl.gov
1,492,000 (Engineering Services) and 3,341,000/Per Year (Contract Operations)
Project Start: 2019 - Project Completion: Contract Ongoing

City of Mascotte, Florida

On-Call Engineering Services

Since 2019, Woodard & Curran has partnered with the City of Mascotte to provide continuing, on-call engineering services .To date, services have included funding and planning of water and wastewater treatment system improvements.



Wastewater Facility Plan and Asset Management Program

The City population currently utilizes septic systems for all wastewater treatment and disposal with exception of two commercial facilities. Woodard & Curran is under contract to provide a planning document that will evaluate central sewer for the citizens of Mascotte. Many scenarios will be considered, including collection system operations and maintenance by Mascotte and treatment and disposal by Groveland. The project will be considered in multiple phases, to include the five subdivisions that now have gravity sewer as Phase I, with subsequent phases as demand and feasibility align. The project will also include evaluating treatment and disposal options, SCADA and technology improvements, asset management, a rate study and the development of a capital improvement plan.

Drinking Water Facility Plan

With growth expected to continue in the next several decades, the City of Mascotte has partnered with Woodard & Curran to evaluate and plan for a future water production facility. Our team will evaluate new lower Floridan water sources, treatment options, distribution and storage improvements. The project will also include SCADA and technology improvements, asset management, a rate study and the development of a five-year capital improvement plan.

Funding

Woodard & Curran, in conjunction with the City, identified water and wastewater planning projects that will set the foundation for future community growth. Applications were submitted to the Florida Department of Environmental Protection (FDEP) State Revolving Fund (SRF) program and the City was awarded a nearly $800,000 in commitment from the FDEP-SRF to fund the planning of the infrastructure improvements. A portion of the project will be eligible for grant/principal forgiveness and the remaining will be low interest loan. Once planning is completed, the City will be eligible for additional funding to support the design and construction of the capital improvements.

Larry Walker, Public Services Director, 100 East Myers Boulevard, Mascotte, FL 34753
352.429.4431 x401
larrywalker@cityofmascotte.com
765,000
Project Start: 2019 - Project Completion: Contract Ongoing

Town of Montverde, Florida

Water Treatment Plant (WTP) Controls Upgrade

Woodard & Curran is providing turnkey upgrades to the electrical and control systems at the Town's two WTPs. Our services include design, procurement of components, installation, system integration, and operator training.



These system upgrades encompass the following tasks, providing the Town several operational benefits:

- Removing obsolete controllers and other components that have failed and are no longer supportable
- Incorporating data logging functionality to save operators' time to produce compliance reports, improve troubleshooting, and enhance future system planning
- Replacing soft starters with variable frequency drives to provide increased operational efficiency allowing well pumps to run at variable flow rates, saving energy and maintenance costs by reducing damage and wear on the pumps
- Improving system reliability via an "open-platform" that will enable service when necessary from multiple qualified vendors

Joe Wynkoop, Mayor, 17404 Sixth Street, Montverde, FL 34756
407.496.1673
mayor@mymontverde.com
126,600
Project Start: April 2020 - Project Completion: Ongoing (Completion Scheduled for October 2020)

City of Starke, Florida



The City of Starke, with a population of 6,000, residents is located in Bradford County. Starke sits on the Highway 301 corridor that links Jacksonville with the center of the state to points south such as Gainesville, Ocala and the Villages. The City sits at a critical juncture for future development and investment in the State. As the City of Jacksonville continues to grow, Starke stands to benefit as developers seek new land. In 2019, the State of Florida completed the Route 301 bypass highway connector to alleviate the traffic pressure from the downtown area of Starke and improve emergency evacuation routes. The bypass, which loops Highway 301 around Starke service area, has potential to reshape the community. The open land surrounding the new bypass has already drawn attention from local and national developers. Starke has an opportunity to expand regional municipal utility service to the area to encourage business investment, encourage job creation and diversify the local community.

Wastewater Treatment Plant Upgrade

The City partnered with Woodard & Curran to design and perform construction administration services for an advanced wastewater treatment facility upgrade. The project is scheduled to replace the existing facility and upgrade it to a 1.25 MGD average day capacity and a peak capacity of 3.6 MGD. The system design components include a new influent pump station, screening and grit removal, equalization tanks, 5-stage oxidation ditch biological treatment with phosphorus and nitrogen removal, secondary clarifiers, disk filters, disinfection, sludge handling, effluent pump station, and sprayfield irrigation improvements. The project will improve water quality to the nearby Alligator Creek. Funding for the project has been secured through a grant and loan from the USDA.

Wastewater Collection System Upgrades

The City partnered with Woodard & Curran to design the first of several phases of collection system improvements. The first phase is focused around critical collection system infrastructure that is subject to sanitary sewer overflows during wet weather conditions. The goal of the project is to rehabilitating aging infrastructure, reduce extraneous inflow and infiltration on the system and alleviate sanitary sewer overflows. As part of the project, Woodard & Curran is tasked with rehabilitating and or replacing five miles of gravity sewer and dozens of manholes. The majority of the pipes identified for rehabilitation are the large diameter gravity interceptor lines located adjacent to Alligator Creek. The project also includes the relocation and replacement of a lift station and the redirection of a forcemain. The forcemain redirection will re-distribute flow from an overtaxed area of the gravity collection system and convey it direct to the wastewater treatment facility. Funding for the project has been secured through a grant and loan from the FDEP SRF program.

John Holman, City Manager, 209 North Thompson Street, Starke, FL 32091
Scott Anaheim, Operations Director, 209 North Thompson Street, Starke, FL 32091
904.964.5027 (John Holman)
904.729.7611 (Scott Anaheim)
jholman@cityofstarke.org
sanaheim@cityofstarke.com
$ 2,118,000
Project Start: April 2020 - Project Completion: Contract Ongoing
(Completion scheduled for completion in 2023)

Town of Inglis, Florida

Wastewater Collection and Treatment System Planning







For the last several years Woodard & Curran has partnered with the Town of Inglis, Florida, to fund and conduct a sub-regional wastewater collection and treatment system planning study. Inglis is one of several communities along Florida's Nature Coast, adjacent to the Withlacoochee River, that do not have centralized wastewater collection and treatment.

Woodard & Curran assisted the Town of Inglis in securing more than $1 million in grant funding through the State of Florida General Revenue Fund to complete a pre-design, sub-regional wastewater treatment plan study for the town and the immediate region in the Study Area as identified by the FDEP.

Significant portions of the project are prone to flooding. During flood events, septic systems become inundated and damaged, which can affect public health and negatively impact water quality. Local beaches, coastal rivers, and fishing areas have experienced pollution impacts to the extent that such areas have been intermittently closed to commercial and recreational activities. Under certain conditions these incidents can be directly attributed to septic system leachate contamination. Nutrient and bacteria related problems in the Withlacoochee River and estuarine systems, such as high coliform bacteria counts, have been linked to septic system leachate.

The DEP initiated a Status Monitoring Network, which oversees statewide sampling for surface and groundwater resources. Surface water quality monitoring data, collected over the period of 1999 to 2014, shows an increasing trend in nitrate/nitrite and chlorophyll-a, which could indicate negative impacts from contributing septic systems.

The area studied is 18 square miles, spanning the boundary of south Levy County and north Citrus County, and bordering the Gulf of Mexico. The project encompasses seven Needs Areas identified by the Florida Department of Environmental Protection as areas of a population density that could potentially be phased into a sub-regional wastewater system.

The sub-regional study concluded that a collection system and wastewater treatment facility are feasible for the area. The advantages of this type of system include environmental benefits of removing failing and flood-prone septic systems along the Lower Withlacoochee River. The project continues to move forward with the planning and preliminary design of a pressurized collection system and an advanced wastewater treatment facility that can be expanded in the future to a capacity of 400,000 gallons per day.

Drinda Merritt, Mayor, Town Hall, 135 Higway 40 West, Inglis, FL 34449
352.447.2203 x107
mayordrindamerritt@gmail.com
460,000
Project Start: 2017 - Project Completion: 2018

City of Newberry, Florida

FDEP Permit Renewal & Sprayfield Operational Assessment





The City of Newberry provides water and sewer service to more than 1,500 customers. The City owns and operates a sanitary sewer collection system comprising 22 miles of pipe and a WWTP. The WWTP is a conventional activated sludge facility with a treatment capacity of 0.350 MGD. The City uses two holding ponds prior to discharge to a 39.8-acre spray irrigation system for effluent disposal.

The City hired Woodard & Curran developed an application for renewing their 5-year FDEP discharge permit and to audit wastewater operations and recommend operational efficiency improvement opportunities for the City to consider. An operational assessment of the sprayfield was included in the permit renewal application, which was submitted to FDEP early.

Sanitary Sewer System Optimization

The City of Newberry provides water and sewer service to more than 1,500 customers. The City owns and operates a sanitary sewer collection system comprised of 22 miles of pipe, 21 lift stations, and a Wastewater Treatment Plant (WWTP) with an average daily flow capacity of 0.349 million gallons per day. The City recently determined that several of the current lift stations are over capacity, while other lift stations are underutilized. In addition, with new development occurring in the north of the City, sewer collection system capacity to accommodate future flows is of concern, and the City wishes to proactively address capacity issues before any new development is online. Woodard & Curran designed a sewer reconfiguration concept that improved upon the current system. Because additional flow will be soon be discharged and/or rerouted to and from existing pump stations, we also evaluated and optimized the pumps at several lift stations.

FDEP Biosolids Permit Renewal & Sprayfield Operational Assessment

Newberry is a small city west of Gainesville, that is home to about 6,000 people. The city owns and operates a sanitary sewer collection system with approximately 22 miles of sewer pipe and a conventional activated sludge WWTP. The system provides sewer service to around 1,500 residential, commercial, and industrial clients. The WWTP utilizes two holding ponds prior to discharging treated effluent to a 39.8-acre spray irrigation system.

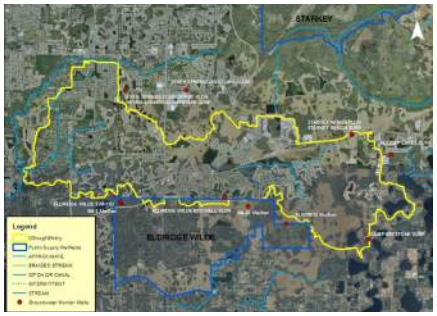
Woodard & Curran was hired to develop an application for renewing the city's five-year FDEP discharge permit, which included an assessment of the sprayfield. The firm also helped develop a biosolids plan, audit wastewater operations, and provide recommendations for operational efficiency improvements for the city to consider.

As part of the biosolids plan, Woodard & Curran compiled land disposal mapping, test data, and biosolids application reports. The firm included verification of Slope of Application Zones and a Nutrient Management Plan. All work was completed and submitted to the FDEP ahead of schedule on behalf of the City.

Jamie Jones, City of Newberry, P.O. Box 369, Newberry, FL 32669
352.472.1537
Jamie.Jones@ci.newberry.fl.us
$ 94,800
Project Start: 2016 - Project Completion: 2019

Pasco County, Florida

Duck Slough Stormwater Automation



The Duck Slough Watershed comprises an area of 14 square miles in southwest Pasco County that includes seven residential communities that have been affected by periodic flooding. The historic drainage flow is from east to west to the Anclote River and then to the Gulf of Mexico.

The watershed contains numerous operable structures designed to manage the flow, and to mitigate historic flooding in the area. The operation of these structures is presently dependent on manual readings of water levels and then manually adjusting the position of the gates to regulate the flow.

Woodard & Curran has recently begun delivering a design-build project to automate eight of the existing flood control gates, which will improve response times to storm events and help Pasco County staff better manage the flow of stormwater through the watershed to alleviate flooding. The project includes the installation of gate actuators, electrical and fiber-optic services and SCADA control and communications to a new Central Control Center within the Stormwater Administration Building. When completed staff will be able to see culvert water levels or open and close gates either from their vehicles or the control center as necessary.

George Thomas, PE, Stormwater Management Engineer, 4454 Grand Blvd., New Port Richey, FL 34652
727.834.3611
gthomas@pascocountyfl.net
1,400,000
Project Start: July 2020 - Project Completion: Contract Ongoing
(Completion Scheduled for February 2021)

Polk County, Florida

Water/Wastewater/Reclaimed Water SCADA System Maintenance Services



Woodard & Curran provides on-demand emergency repair services to Polk County Utilities for their SCADA system. The SCADA system comprises:

- 21 Water Production Plants producing more than 15 MGD
- 6 Wastewater Treatment Plants treating 7 MGD of wastewater and producing over 5 MGD of reclaimed water for irrigation
- 242 Wastewater Lift Stations

The services that Woodard & Curran provides Polk County Utilities help to assure the County that controls systems required to operate their critical utilities infrastructure runs optimally and continues to deliver the expected operational benefits of automation, efficiency, and reliability.

Nick Greives, SCADA Manager, 1011 Jim Keene Blvd., Winter Haven, FL 33880
863.344.2686
NickGreives@polk-county.net
87,500
Project Start: December 2019 - Project Completion: Contract Ongoing
(Completion Scheduled for December 2021)

Orlando/Orange County, Florida (Water Conserv II)

Largest Water Reclamation Project





Water Conserv II, located in Winter Garden, Florida, is jointly owned by the City of Orlando and Orange County. Since 1996, Woodard & Curran has operated the facility, which is the largest water reclamation project of its kind in the world that combines irrigation and rapid infiltration basins (RIBs). The firm employs 24 on-site personnel, including reclaimed water specialists and technicians, mechanics, electricians, instrumentation specialists, equipment operator, grounds maintenance technicians, structure maintenance technician, laborer, administrative assistant, and project, maintenance and operations managers, who provide operational coverage 24 hours a day, 365 days a year.

Benefiting local agriculture and surrounding communities

Water Conserv II is the first water reclamation project for irrigation of crops destined for human consumption permitted by the FDEP. The process starts with reclaimed water pumped from McLeod Road and South Regional Water Reclamation facilities to the Water Conserv II Distribution Center. The reclaimed water is then distributed to customers for irrigation or to the RIBs through a network of distribution pipes. In addition to recharging the Floridian Aquifer through RIBs, the two reclamation facilities provide reclaimed water to 59 agricultural customers, three golf courses, the Mid-Florida Citrus Foundation, residential use in the City of Ocoee, residential use by Orange County Utilities, an animal shelter, a sand mine, a home owners association for green space landscape irrigation, and two landfills. In total, the system covers 30 square miles, irrigating approximately 2,925 acres of citrus groves. The system consists of:

- a distribution center;
- 21-mile transmission main;
- 70-mile distribution system;
- approximately 3,725 acres of RIBs;
- 60 computer-controlled customer turnout connections;
- 25 surge-protection facilities;
- 25 supplemental water wells; and
- a data collection program to protect groundwater and surface water resources.

The entire process is monitored and carefully controlled by a state-of-the-art SCADA system housed at the distribution center. The system is a dependable, long-term source of irrigation, even during periods of drought. Reclaimed water is provided to agricultural customers at a pressure suitable for micro-sprinkler or impact sprinkler irrigation systems. Citrus growers benefit from alerts when the temperature nears freezing level.

Process monitored by state-of-the-art SCADA system

The process starts with reclaimed water that is pumped from the City's McLeod Road and the County's South Regional Water Reclamation facilities to the Water Conserv II Distribution Center. The reclaimed water is then distributed to customers for irrigation or to the RIBs through a network of distribution pipes. The entire process is monitored and carefully controlled by state-of-the-art SCADA computers located at the Distribution Center.

RIB system helps replenish Floridan Aquifer

There is a total of 71 RIBs located at 8 RIB sites. Each RIB consists of one to five cells and is built over a natural sand ridge ranging in thickness from 30 to 200 feet. The total percolation area of all RIBs is approximately 185 acres. Beneath these surficial sands is a dense concentration of semi-permeable clays, known as the Hawthorn formation. Though the reclaimed water is of sufficient quality to meet most state and federal primary and second-

ary drinking water standards, it continues to be polished as it travels through the surficial sands and deeper limestone layers before replenishing the Floridan Aquifer.

Growers benefit from reclaimed water irrigation

Agricultural customers are provided reclaimed water at pressures suitable for microsprinkler or impact sprinkler irrigation. Citrus growers also benefit from enhanced freeze protection capabilities, which include alerts when temperatures near the freezing level. The system also serves as a dependable, long-term source of irrigation water, even during droughts.

Project serves as research site

The City, County and Woodard & Curran are participating with the University of Florida's Institute of Food and Agricultural Sciences in an ongoing research and development program on 185 acres at the Mid-Florida Citrus Foundation. The goals of this program are providing a safe and clean environment, studying the long-term effects of irrigating citrus with reclaimed water, finding solutions to challenges facing citrus growers, evaluating agricultural crops for economic viability, studying the effects of golf course irrigation with reclaimed water, and promoting urban and rural cooperation.

Project recognized worldwide as a leader in reuse

Water Conserv II has been recognized through the following awards: the American Consulting Engineers Council's Grand Conceptor Award in 1989; the 2001 Outstanding Project of the Year Award from the National WateReuse Association for developing and operating an exemplary water reuse program; the 2004 and 2005 Safety Achievement Award, the 2004 and 2005 Gold Level Outstanding Safety Achievement Certificate for 36 months without Lost-Time Incident or Injury and have a lost-time record 51% - 100% below national average, and the 2005 Bronze Fleet Safety Award for outstanding driver performance through Central Florida and the 2006 Silver Outstanding Lost Time Prevention Award from the United Safety Council of Florida; the 2000 Environmental Protection Agency's Region IV Municipal Water Use Efficiency Award for the most innovative and effective reclamation and reuse program in the over 15 MGD category; the Florida Water Environment Association's Dr. David W. York Water Reuse Award in 1994, 2001, and 2007 for the development and operation of an exemplary water reuse program; the Florida Water & Pollution Control Operators Association's Class A Reuse Safety Award for 0 (zero) lost-time incidents or injuries and an exemplary safety program from 1996 through 2007; the 1999, 2000, and 2001 Environmental Excellence Award from the Orange County Environmental Protection Division; the 2007 Award of Merit from the WateReuse Association for continued dedication to the water reuse community by advancing the acceptance of water reuse through outstanding quality projects; and was selected in 2008 for inclusion in the Florida WateReuse Association's Florida Water Reuse Trail. The Trail showcases exemplary water reuse project and programs that offer tours of their facilities. Woodard & Curran continues to work with the City and County to improve and upgrade many of the operational and management systems in order to remain on the cutting edge of technology in water reclamation and reuse.

Vic Godlewski, PE, Wastewater Division Manager, 5100 L.B. McLeod Road, Orlando, FL 32811
407.246.3221
Victor.Godlewski@cityoforlando.net
6,867,000/Per Year
Project Start: 1996 - Project Completion: Contract Ongoing

TAB E

Personnel Experience





TAB E

PERSONNEL EXPERIENCE

Woodard & Curran's project team has been built to deliver to the City of Clermont our engineering experience, **enhanced with the benefits of our expertise in Grant Funding, SCADA Services, and O&M Experience**. Our Project Manager, Scott Shannon, PE has served in similar roles for communities in Lake County for 22 years. Our Principal-in-Charge, Justin deMello, PE serves in similar roles for our general engineering support contracts with the Lake County communities of Groveland, Tavares and Mascotte, among others around Florida. As Utilities Director for the City of Tavares, our Client Manager, Brad Hayes, spent 12 years addressing local water supply and water quality issues in Lake County. The organization of our team is presented below, and the capabilities and experience of the individual professional personnel are provided in the resumes that follow (with the exception of our subconsultants' resumes in TAB F).

CLERMONT
Choice of Champions

Principal-in-Charge	Project Manager	Client Manager
Justin deMello, PE	Scott Shannon, PE	Bradley Hayes

Project Team

Potable Water
Practice Lead
Robert Little, PE

Engineers
Renee Lanza, PE
Todd Prokop, PE

Transportation
CivilSurv Design Group, Inc.
Mark Frederick, PE, ENV SP, CFM
Timothy Morris, PSM

Survey & Subsurface Utilities
CivilSurv Design Group, Inc.
Timothy Morris, PSM

Wastewater/Reclaim Water
Practice Lead
Susan Guswa, PE

Engineers
Kelly Saikkonen, PE
Robert Gaylord, PE, ENV SP
Shawn Buckley, EIT
Romario Jashari

Stormwater
Practice Lead
David White, PE, CFM

Engineers
Joseph Kirby, PE, CFM
Daniel Windsor, AICP
Hernan Peralta, PE

Construction
Brian Martin, PE, CCP

Geotechnical
NADIC Engineering Services, Inc.
Godwin Nnadi, PhD, PE

Value-Added Speciality Services

Grant Funding
Tami Ray
Thomas Bryant, PE

SCADA
Jeffrey Souza
Emily Dunn
Ellie Guadron-Garcia

O&M
Glenn Burden
Gregory Parks

In addition to our staff members (above), Woodard & Curran has in-house resources of over 1,000 professionals who will be available to support the Team if needed.



SCOTT SHANNON, PE
PROJECT MANAGER

Professional Profile

Scott brings over 25 years of experience specializing in the delivery of capital improvement projects and programs for municipal water, wastewater, reclaimed water, stormwater, and solid waste utilities. His experience includes capital improvement planning, design, and construction projects for municipal water and wastewater utilities, securing state and federal funding, and serving as owner's agent for public/private partnership projects.

Related Experience

Lake County Water Authority, FL – General Engineering Support Services

City of Bonita Springs, FL – Grant Writing and Support Services

City of Tavares, FL – Water Supply Well Relocation Study

City of Tavares, FL – Downtown Stormwater System Improvements

Prior to joining Woodard & Curran

City of Tavares, FL – Downtown CRA Water and Wastewater System Improvements

Orange County, FL – Hamlin WRF Design

City of Tavares, FL – Expansion of Reclaimed Water Distribution System

City of Palm Coast, FL (et. al.) – Coquina Coast Seawater Desalination Alternative Water Supply Project

Seminole County, FL – Indian Hills WTP Improvements

City of Alachua, FL – Water and Wastewater Master Plan

City of Tavares, FL – Waterfront Entertainment District Stormwater System Improvements

City of Norfolk, VA – Coastal Resiliency Planning and Design

Various Municipalities, FL – Solid Waste System Engineering

Education

- Masters, Environmental Engineering, University of Florida
- Bachelors, Mechanical Engineering, University of Florida

Registrations

- **Registered Professional Engineer - FL**
- Envision Sustainability Professional - Institute for Sustainable Infrastructure

Professional Associations

- Florida Stormwater Association
- Florida Water Environment Association
- Water Environment Federation (WEF)



JUSTIN DEMELLO, PE
PRINCIPAL-IN-CHARGE

Professional Profile

Justin has 15 years of professional experience working on a wide range of wastewater, water, and water resource projects for municipalities and private sector clients. His municipal infrastructure experience includes planning, permitting, detailed design, bidding, construction oversight, construction administration, start-up and operations of water and wastewater treatment and conveyance systems. As a registered NASSCO PACP/MACP/LACP Trainer, he is an expert in underground infrastructure assessment, design, and rehabilitation using conventional open cut and trenchless technologies.

Related Experience

City of Tavares, FL – Utilities Expansion Support

City of Bushnell, FL – Sumterville Water Treatment Facility

Town of Inglis, FL – Wastewater Planning

City of Groveland, FL – Facility and Master Plans

City of Mascotte, FL – Planning

City of Dunedin, FL – Funding Initiative

City of Gainesville, FL – On-Call SCADA Support

Tampa Bay Water, FL – On-Call Engineering & Operations Consulting Support

City of Punta Gorda, FL – On-Call Engineering Support

City of Flagler Beach, FL – On-Call Engineering Support

City of Minneola, FL – On-Call Engineering Support

City of Apopka, FL – Smart Water Management Assessment/ Audit of the Water Utility

City of Newberry, FL – Wastewater Forcemain Relocation

Lake County, FL – Lake County Nutrient Reduction Facility Operations Support

Education

- Masters, Business Administration, Babson College
- Bachelors, Civil Engineering, University of Massachusetts

Registrations

- **Registered Professional Engineer - FL**, MA
- NASCO Pipeline, Lateral and Manhole Assessment Certification

Professional Associations

- Florida Section of American Water Works Association Member
- Florida Water Environment Association Member
- Water Environment Federation, Member



BRADLEY HAYES
CLIENT MANAGER

Professional Profile

Brad brings over 40 years of experience in the Water/Wastewater/ Stormwater field having worked for both private and municipal organizations, involved in all aspects of project operation and project management. His primary focus include construction field inspection, contract operations management, project fundraising and grant procurement.

Related Experience

Senior Consultant, Woodard & Curran (6/2018 to Present). Brad has nearly 40 years of utility operations and project management experience. He has developed and implemented water, wastewater, stormwater, asset management and SCADA projects involving planning, permitting, design, construction management and operations. Brad is a licensed operator and a highly decorated Public Works Director with dozens of awards for innovation, project and operational excellence, as well as for his personal contributions to industry associations. Brad's career started in the military, he moved to the Northeast as a wastewater operator in both the public and private sectors, and he later migrated to the Southeast where he was Utilities Director for the City of Tavares, Florida for 12 years. Subsequently, Brad joined Woodard & Curran as a Senior Consultant to help develop and implement utilities projects and supports utility operations.

Brad is on the Board of Directors for the Florida Water Environment Association (FWEA), a stormwater trainer with the Florida Water Pollution Control Operators Association, and an active member of Florida Reuse Association, Florida AWWA, Florida Stormwater Association, Florida Rural Water Association, and the Florida League of Cities.

Education

- Bachelors, Management, University of Massachusetts-Dartmouth
- Bachelors, Human Resource Management, University of Massachusetts-Dartmouth
- Water/Wastewater Management, Water Biology, Hazardous Waste Management, Industrial Wastewater, University of Massachusetts-Lowell
- Associate, Business Administration, Bristol Community College

Registrations

- Class "A" Collection Systems - Florida
- Class "B" Water Treatment - Florida
- Class "B" Wastewater Treatment - Florida
- Level 1 Water Distribution - Florida
- Stormwater Erosion Control Inspector- Florida
- Stormwater Class "A" - Florida
- OSHA Hazwoper 40 Hr.
- Backflow Prevention Assembly Tester - Florida

Professional Associations

- Florida Water Pollution Control Operators Association, Member and Stormwater Instructor
- Water Environment Federation, Board of Director Member
- Florida Reuse Association
- Florida Stormwater Association
- Florida Rural Water Association



ROBERT LITTLE, PE
PRACTICE LEADER - POTABLE WATER

Professional Profile

Rob has over 25 years of experience with the evaluation, planning, design, and construction of water works facilities. He has worked on a wide variety of projects ranging from hydraulic modeling, distribution system analysis and infrastructure planning to water treatment facility, pumping station, storage tank and water main design. He is experienced in evaluating water treatment, pumping and storage facilities and has a thorough knowledge of current and known future drinking water regulations. Rob is the Manager of Woodard & Curran's water practice and is a senior technical expert in the area of hydraulics, pumping, treatment and storage.

Related Experience

City of Groveland, FL – Utilities Master Plans

City of Tavares, FL – Utilities Expansion Support

City of Bushnell, FL – Sumterville Water Treatment Facility

Town of Cumberland, RI – Diamond Hill Road Water Main Replacement

Town of Mansfield, MA – Vulnerability Assessment

Southington Water Department, CT – Vulnerability Assessment

University of New Hampshire, Durham, NH – Water Treatment Plant Replacement

City of Lawrence, MA – Distribution System Hydraulic Model

City of Leominster, MA – Water System Improvements

Lowell Regional Water Utility, Lowell, MA

- Water Main Replacement Program
- Water Distribution System Improvements
- Water System Infrastructure Improvements
- WTP and Pumping Station Upgrades

Education

- Bachelors, Civil/Environmental Engineering, University of Vermont

Registrations

- Registered Professional Engineer - MA, MO, NH, NV, RI
- NCEES License - Various

Professional Associations

- American Water Works Association
- New England Water Works Association, Residual Committee



RENEE LANZA, PE
ENGINEER - POTABLE WATER

Professional Profile

Renee has over eight years of experience in water system and treatment process design, and assisting in the operations and management (O&M) of water treatment and wastewater treatment projects for clients in the municipal and private sectors. Projects include the design of distribution system upgrades, pump stations, and water treatment plant upgrades as well as associated environmental and design permitting. In addition, she has worked on a variety of other projects including lead and copper compliance, water audits, utility billing system selection, funding applications, CMMS upgrades, and water quality analysis.

Related Experience

City of Groveland, FL – Facility and Master Plans

City of Fall River, MA – Risk and Resilience Assessment (RRA) in Compliance with America's Water Infrastructure Act

University of New Hampshire, Durham, NH – Water Treatment Plant Replacement

City of Marlborough, MA – Millham Water Treatment Plant Upgrades

Town of Manchester-by-the-Sea, MA – Water System Improvements

Town of Winthrop, MA – Contract 4, Water Main Improvements

City of Lynn, MA – Lead Contamination Control Act (LCCA) Compliance Assistance

City of Lowell, MA

- Risk and Resilience Assessment (RRA) in Compliance with America's Water Infrastructure Act
- Residuals Handling Facility
- Water System Improvements

Town of Cumberland, RI

- Water Supply System Management Plan and Clean Water Infrastructure Replacement Plan
- Fisher Road Water Storage Tank Upgrade
- Water Supply Facilities Emergency Generator Installation

Education

- Masters, Civil/Environmental Engineering, Worcester Polytechnic Institute
- Bachelors, Environmental Engineering, Worcester Polytechnic Institute

Registrations

- Registered Professional Engineer - MA

Professional Associations

- New England Water Works Association (NEWWA)
- American Water Works Association (AWWA)
- American Society of Civil Engineers (ASCE)
- Boston Society of Civil Engineers Section (BSCES)



TODD PROKOP, PE
ENGINEER - POTABLE WATER

Professional Profile

Todd has over 12 years of experience in drinking water distribution system and treatment process design for clients in the municipal and private sectors. Projects include the development of distribution system upgrades, pump stations, chemical feed stations, and chemical comparisons. Todd has developed a comprehensive knowledge of water distribution system engineering.

Related Experience

Town of Andover, MA – High Street Area Water Main Improvements Project

City of Boston, MA – Emergency Water Supply to Long Island, Boston Harbor

City of Lowell, MA

- Phase 1 Transmission Main Extension
- High Pressure Water Main Replacement
- Humphrey Street Water Main Replacement Project
- Redundant Transmission Main Project
- Finished Water Main Improvements
- Hunt Falls Bridge Water Main Replacement Project
- Water System Infrastructure Improvements
- Redundant Raw Water Main

City of Lawrence, MA

- Water Main Replacement
- Distribution System Improvements
- City-wide Hydrant Assessment
- South Lawrence Water Main and Valve Replacement and Assessment

Town of Cumberland, RI

- Diamond Hill Road Water Main Replacement
- Groundwater Supply Design
- Fisher Road Water Storage Tank Upgrade

Dracut Water Supply District, Dracut, MA

- 2016 Undersized Water Main Replacement, Phases 1-3
- State Forest Booster Pump Station Discharge Main Upgrades

Education

- Masters, Environmental Engineering, Worcester Polytechnic Institute
- Bachelors, Civil Engineering, Worcester Polytechnic Institute

Registrations

- Registered Professional Engineer - MA

Professional Associations

- American Water Works Association
- New England Water Works Association

Publications/Presentations

- “Providing Emergency Water Supply to Long Island,” NEWWA Spring 2017 Presentation



SUSAN GUSWA, PE
PRACTICE LEADER - WASTEWATER/RECLAIM

Professional Profile

Susan is a Senior Principal with 24 years of experience and serves as Woodard & Curran's Municipal Wastewater Practice Leader. Her focus is on treatment and nutrient removal for water resource recovery facilities with broad experience encompassing biosolids management, collection systems and pump stations, stormwater, and reuse water. Her role on projects includes setting the technical direction and project reviews as well as detailed design. She effectively coordinates with local governments and utilities, regulatory agencies, and vested stakeholders.

Susan is a WEF Delegate for the New England Water Environment Association and also served a past chair of the Program and Plant Operations Committees. For the Water Environment Federation (WEF), she currently leads the Public Education Workgroup in the House of Delegates.

Related Experience

City of Starke, FL – Wastewater Treatment Facility Upgrades

City of Tavares, FL – Utilities Support

City of Newberry, FL – Biosolids Permit and Nutrient Management Plan

City of Northampton, MA – WWTP Upgrades

City of Westfield, MA – Ammonia-Based Aeration Control Upgrades and Optimization

City of O'Fallon, MO – WWTP Ammonia & High Flow Discharge Upgrades

City of Troy, MO – Southeast WWTF Upgrades

Town of Enfield, CT – WPCF Upgrade Design

South Hadley and Adams, MA – Treatment Plant Upgrades

Town of Suffield, CT – Wastewater Facilities Planning

Town of Southington, CT – Wastewater Facilities Planning

Groton Utilities, CT – Wastewater Treatment Facility Evaluation

Millbrae Water Pollution Control Plant, Millbrae, CA – WPCP Water Reuse Study

Education

- Masters, Civil & Environmental Engineering, Stanford University
- Bachelors, Civil & Environmental Engineering, Duke University

Registrations

- Registered Professional Engineer - CA, CT, MA

Professional Associations

- New England Water Environment Association, Program Committee, Past Chair
- New England Water Environment Association, Plant Operations Committee, Past Chair
- Water Environment Federation
- Connecticut Association of Water Pollution Control Authorities
- Massachusetts Water Environment Association



KELLY SAIKKONEN, PE
ENGINEER - WASTEWATER/RECLAIM

Professional Profile

Kelly is an engineering project manager with 16 years of experience in wastewater, reuse and biosolids industries. She has extensive experience with design, regulatory permitting and coordination, construction, operations and alternative project execution methods, including design-build.

Related Experience

City of Groveland, FL – Utilities Master Plans

City of Mascotte, FL – Planning

City of Newberry, FL – Biosolids Permit and Nutrient Management Plan

City of Bushnell, FL – Sumterville Water Treatment Facility

City of Starke, FL – Facility Support

Prior to joining Woodard & Curran

City of Lake Buena Vista, FL – Anaerobic Digestion, Digestate Thermal Drying and Renewable Energy Facility

City of Mountain View, CA – Design-Build of a Wastewater Treatment and Reuse System

Bucks County, PA – Wastewater Treatment and Effluent Drip Dispersal System

Long Island, NY – New Membrane Bioreactor Wastewater Treatment Plant (WWTP)

Bucks County, PA – Permitting and Design

Lewiston-Auburn, ME – Anaerobic Digestion and Cogeneration Energy Recovery Facility

City of New York, NY – Energy Audits at Wastewater Treatment Plants (WWTPs)

Blue Plains, Washington DC – Thermal Hydrolysis Facility

City of Yonkers, NY – Gas Conditioning System

Orange County, NY

- Water Supply, Treatment and Storage System
- Permitting and Design

Education

- Masters, Biological & Environmental Engineering, Cornell University
- Bachelors, Agricultural and Biological Engineering, Cornell University

Registrations

- Registered Professional Engineer - NY



ROBERT GAYLORD, PE, ENV SP

ENGINEER - WASTEWATER/RECLAIM

Professional Profile

Robert has over 16 years of experience in facility design, piloting, master planning and engineering studies. His academic and professional tenure has produced award-winning projects on regional and international engineering platforms. He has published a variety of environmental engineering subjects.

Related Experience

City of Tavares, FL

- Utilities Extensions
- Well Heads 3 & 4 Relocation

City of Starke, FL

- WWTP Upgrades
- Collection System Upgrades

City of Groveland, FL

- Headworks Evaluation
- Sprayfield Permitting and Well Installation

City of Bushnell, FL – Stormwater Inspections

City of Newberry, FL – NPDES Permit Renewal

Education

- Masters, Business Administration, University of South Florida
- Masters, Environmental Engineering, University of South Florida
- Bachelors, Civil and Environmental Engineering, University of South Florida

Registrations

- **Registered Professional Engineer - FL**
- Envision Sustainability Professional - Institute for Sustainable Infrastructure
- Six Sigma Black Belt
- Utility Management Certification



SHAWN BUCKLEY, EIT
ENGINEER - WASTEWATER/RECLAIM

Professional Profile

Shawn has over four years of experience working in the water and wastewater treatment industry. As an operator, he monitored the daily operation of a 120 MGD surface water treatment facility in Tampa, FL serving more than 6 million customers in the Tampa Bay area. Shawn has also traveled the country, pilot testing leading edge treatment technologies for municipal clients engaged in treatment plant expansion projects.

Related Experience

City of Tavares, FL – Water System Hydraulic and Wastewater Model

City of Starke, FL – Collection and Wastewater Treatment Facility Upgrades

City of Bushnell, FL – Water Treatment Plant Upgrades and CEI Services

Town of Inglis, FL – Collection System Design

City of Groveland, FL – Industrial Pretreatment Program

Prior to joining Woodard & Curran

City of Portsmouth, OH – DEP Water Treatment Approval Project

Town of Vernon, CT – DiscFilter Bid Validation

Tampa Bay, FL – Surface Water Treatment Plant

Education

- Bachelors, Chemical Engineering, University of South Florida

Registrations

- Engineer-in-Training
- FL DEP Drinking Water Operator Class C

Professional Associations

- AIChE

Technical Expertise

- Treatment Plant Operation
- Hydraulic Modeling
- Pilot Studies



ROMARIO JASHARI
ENGINEER - WASTEWATER/RECLAIM

Professional Profile

Romario has over a year of environmental and civil engineering experience working on wastewater, water and stormwater projects for private and municipal clients. After joining the Woodard & Curran team in Lakeland, FL, Romario has focused on projects related to Hydraulic Modeling & Analysis for Water and Wastewater Networks. He has proficient experience in systems analysis in InfoWorks ICM, InfoWater, ArcMap GIS and drafting construction projects in AutoCAD Civil 3D. His project experience is focused on planning, permitting and engineering design.

Related Experience

City of Tavares, FL – Wastewater Hydraulic and Water Model

City of Groveland, FL

- Reclaimed Water Hydraulic Model
- Permit Renewal
- Facility and Master Plans

City of Newberry, FL – Permit Renewal

Prior to joining Woodard & Curran

Tahiti Mobile Village, Inc., Estero, FL – WWTF Capacity Analysis Report

Hillsborough County Schools, Tampa, FL – Potable Water Supply Upgrades

Education

- Bachelors, Chemical Engineering, University of South Florida

Professional Associations

- American Institute of Chemical Engineers

Technical Expertise

- Water & Wastewater System Hydraulic Modeling



DAVID WHITE, PE, CFM
PRACTICE LEADER - STORMWATER

Professional Profile

David is the Leader for Stormwater Engineering and Infrastructure Practice and is a senior technical expert in the area of stormwater/green infrastructure, hydraulic and hydrologic, and flood mitigation. He is a professional civil engineer with over 25 years of technical and project management experience in design, permitting and construction of stormwater related infrastructure projects in both riverine and coast environments throughout the United States. He specializes in directing and managing multidisciplinary project teams of engineers, scientists, and regulatory specialists to obtain entitlements for commercial, residential, industrial, infrastructure, and public works projects from local, state, and federal regulatory agencies. His project experience includes seeing development projects from the conceptual planning phase through permitting, design, and construction; including site layout, roadway and access design, grading, stormwater management, and utility infrastructure assessment and design.

Related Experience

Town of Easton, MA – On-Call Engineering Service

Town of Burlington, MA – Design Review Services

City of Salem, MA

- North River Flood Impact Evaluation
- Canal Street Flood Mitigation Project

City of Quincy, MA

- Spence Avenue Flood Mitigation Project
- Storm Preparation and Damage Assessment

North Quincy, MA – Drainage Rehabilitation, Quincy, MA

City of Fall River, MA – Integrated Master Plan (IMP)

Village of Scarsdale, NY – Cayuga Pond Water Quality Improvement and Flood Mitigation

Town of North Andover, MA – Waverly Road Improvements

Town of Littleton, NH – Grove Street Sanitary Sewer and Infrastructure Improvements Project

Education

- Masters, Civil Engineering, Northeastern University
- Bachelors, Civil Engineering, University of Massachusetts

Registrations

- Registered Professional Engineer - MA, RI
- Certified Floodplain Manager (CFM) - Association of State Floodplain Manager
- Licensed Soil Evaluator - MA
- Licensed Septic System Inspector
- 10-Hour Construction Training

Professional Associations

- American Society of Civil Engineers, Member
- Association of State Floodplain Managers, Member
- BSCE, Governmental Affairs and Professional Practices Committee, Committee Member
- Essex County Highway Association, Member
- Massachusetts Highway Association, Member

Specialized Training

- FM Global - Flood Assessments & Mitigation



JOSEPH KIRBY, PE, CFM
ENGINEER - STORMWATER

Professional Profile

Joseph is a Technical Manager with expertise in hydraulic and hydrologic studies, FEMA Flood Insurance Studies (FIS) and Risk Assessments, floodplain mapping, flood mitigation, NFIP regulatory compliance and permitting, drainage design, system modeling, methods and process development. He has 24 years of diverse engineering experience and has spent the last 18 years in water resource; managing, supporting and performing drainage system and flood hydraulic and hydrologic studies for local, state and federal clients.

Related Experience

Kennebunk Sewer District (KSD), Kennebunk, ME – FEMA Levee Certification and Accreditation

City of Norwalk, CT – City-Wide Storm Drainage System Evaluations to Mitigate Flooding

Town of Newton, MA – Drainage System Analysis

City of White Plains, NY – Citywide Stormwater Mapping and Analysis

Town of Winthrop, MA

- Town Center Site Improvements Phase I
- Ingleside Park Alternative Analysis

City of Quincy, MA

- Miller/Cross/Furnace Ave Flood Control Project
- Brewers Corners Flood Mitigation Alternative Analysis

Education

- Bachelors, Forestry Engineering, University of Maine

Registrations

- Registered Professional Engineer - ME, NC
- 40-Hour HAZWOPER Training - OSHA
- Certified Floodplain Manager

Professional Associations

- Association of State Floodplain Managers
- New England Water Environment Association

Technical Expertise

- H&H Analysis, 1D & 2D Systems
- Drainage Assessment
- Flood Mitigation
- FEMA NFIP & Studies (FIS)
- Floodplain Management
- Flood Mapping
- Project Management
- GIS Data Management & Analysis
- Enterprise GIS Systems
- IT & IS



DANIEL WINDSOR, AICP
ENGINEER - STORMWATER

Professional Profile

Daniel brings over 16 years of experience in Community Planning and Development, Land Use Planning and Policy Alignment for public and private clients. He is a nationally certified planner (AICP), a licensed professional planner in New Jersey (PP) and leads the Urban Revitalization Practice at Woodard & Curran. Daniel has been involved in the collaboration of addressing complex urban challenges and has led the design and project management of urban design and planning projects that look to balance economic revitalization and development potential with responsible growth and the commitment to the environment. Daniel frequently conducts zoning and regulatory reviews and works with clients on various projects such as Redevelopment Initiatives, Master Planning, Place Making Strategies, Community Engagement, Resiliency Planning and Long-term Visioning. Overall, his work aims to promote a triple bottom line approach of social benefit, environmental stewardship and long-term economic sustainability in community planning and design.

Related Experience

City of Quincy, MA – Town Brook Community Revitalization Plan

Long Island University Post Campus – Sports District

Prior to joining Woodard & Curran

AECOM, Senior Planner/Urban Designer and Studio Lead (Selected Projects)

- MTA Site Evaluation and Development Scenarios
- NY Downtown Revitalization Initiative-Amsterdam, NY
- Brooklyn ULURP rezoning

Perkins + Will, S Senior Planner/Urban Designer and Studio Lead (Selected Projects)

- NYCEDC Water Street Visioning and Zoning Study
- NYCEDC Long Island City Assemblage Development Study
- NYCEDC Citywide S&T Zoning Evaluation & Recommendations
- Columbia University On-Call Zoning Analysis
- City of Providence Downtown and Knowledge District Plan

Education

- Masters, Architecture, Columbia University
- Bachelors, Architecture, University of Southern California

Registrations

- American Institute of Certified Planners (AICP)
- Professional Planner - NJ

Professional Associations

- American Planning Association



HERNAN PERALTA, PE
ENGINEER - STORMWATER

Professional Profile

Hernan has over 10 years of civil/site engineering experience specializing in design, from conceptual planning through permitting, and construction services. He provides civil/site design services including site layout, grading, roadway design, earthwork, septic system design, utility design, cost estimate and construction oversight. Hernan also specializes in stormwater design from watershed delineation to hydraulic and hydrological analysis using programs such as HydroCAD, Hydraflow Storm Sewer, and Hydraflow Express.

Related Experience

Town of Westbrook, CT – Town Center Parking Improvements

City of Salem, MA – Canal Street Flood Mitigation Project

City of Salem, MA – Canal Street Drainage, Sewer and Water Improvements

City of Quincy, MA – North Quincy High School Teel Field

City of Melrose, MA – Highlands Streetscape Improvement Project

Confidential Pet Client, Allentown, PA – Stormwater Infrastructure

Brown University, Providence, RI

- Stormwater Master Plan
- Drainage Improvements

Johnson & Wales University, Providence, RI

- Athletic Field Master Planning and Design
- Radisson Airport Hotel Parking Lot
- Center for Culinary Excellence

Education

- Bachelors, Civil Engineering, University of Rhode Island

Registrations

- Registered Professional Engineer - RI
- Licensed Soil Evaluator - MA

Professional Associations

- American Society of Civil Engineers



BRIAN MARTIN, PE, CCP
CONSTRUCTION

Professional Profile

Brian has 28 years of engineering and construction experience for clients in the public and private sectors. He serves as Senior Technical Manager in Woodard & Curran's Water group, providing technical leadership to our municipal infrastructure projects and driving innovation in the firm's municipal water practice. Brian's design project experience includes permitting, designs, quality control/assurance, constructability reviews, cost estimating, construction administration. Brian's construction experience includes estimating, field engineering, foreman, superintendent, and project management. Brian's has worked on projects ranging in size from $0.25M to $153M, including water and wastewater facilities, water distribution systems, wastewater collection systems, roads, landfills, historic building modifications, existing-facility modifications, and communications sites and related foundations.

Related Experience

Town of Inglis, FL – Wastewater Facility Planning

City of Mascotte, FL Clean Water and Drinking Water Facility Plans

Town of Ashland, NH – Headworks and Septage Receiving Facility

Town of Winthrop MA – Centre Business District Infrastructure Improvements

Prior to joining Woodard & Curran

NASA, Kennedy Space Center, Merritt Island, FL – Revitalization of Water and Wastewater Systems, Phases 3 & 4 and Infrastructure Modifications Launch Pad 39

Pinellas County Utilities, Tarpon Springs, FL – Water Blending Facility

Putnam County, FL – East Putnam Regional Water System

On Top of the World Communities, Ocala, FL – Clearwater WWTP and Reclaimed Water System Expansion and WTP No. 3 and South WWTF, Phase II Reclaimed Water System

City of Alachua, FL – Paul O'Dea Advanced Water Reclamation Facility

Education

- Bachelors, Civil Engineering, University of Maine

Registrations

- **Registered Professional Engineer - FL**, ME
- Certified Cost Professional

Professional Associations

- Association for the Advancement of Cost Engineering International (AACEI) Member



TAMI RAY
GRANT FUNDING

Professional Profile

In her 32-year career, Tami has a wide variety of grant and loan experience with a strong emphasis on federal and state program development and multi-discipline project funding and management. Her experience and knowledge come from a diverse background including working for city and county government, serving design firms as a program development specialist, owning and operating a multifaceted Florida-based corporation, and serving as Director of Program Development for a Design/Build-CM@Risk Firm. Tami has proven her ability to provide a comprehensive approach utilizing numerous funding programs to realize the total project potential. Her experience in planning, administration, permitting, engineering, and construction has given her the ability to provide flexibility to local governments working within the boundaries of promulgated rules and requirements.

Related Experience

Tami has led a team of professionals that includes engineers, planners, financial specialists and administration specialists. She has initiated financial planning programs that created over $4B in design and construction. The following are projects she has participated.

City of Mascotte, FL – Funding Initiative

City of Groveland, FL – Funding Initiative

City of Tavares, FL – Funding Initiative

City of Bushnell, FL – Funding Initiative

City of Starke, FL – Funding Initiative

City of Dunedin, FL – Funding Initiative

Town of Inglis, FL – Funding Initiative

Prior to joining Woodard & Curran

City of Largo, FL

City of St. Augustine and St. Johns County, FL

City of North Miami, FL

Hernando County, FL

Education

- Bachelors, Business/Finance, Riley College

Professional Associations

- America Grant Consultants

Technical Expertise

- Grantsmanship
- Intergovernmental Coordination and Agreements
- Public Participation
- Request for Inclusion
- Capital Finance Planning
- Program Draw Requests
- Monitoring and Status Reporting
- Legislative Coordination
- Agency Coordination
- Fiscal Analysis
- Alternative Financial Planning
- Alternative Analysis
- CIP Review
- Program Administration



THOMAS BRYANT, PE
GRANT FUNDING

Professional Profile

Tom provides civil engineering planning services related to water and wastewater systems. He brings over 40 years of experience working with communities to master-plan improvements to existing infrastructure and system expansion for growth. His goal is to provide a common-sense, hands-on approach to problem solving through direct involvement with utility operations, combining the latest technology and processes to create a quality, long-term facility that results in minimal operating and maintenance cost. From concept to completion, he is directly involved in every aspect of a project to ensure that budgets and schedules remain on task and that the end product is as planned. Tom strives to maintain long-term relationships with clients through providing outstanding customer satisfaction.

Related Experience

City of Groveland, FL – Water and Wastewater Facility Planning

City of Tavares, FL – Asset Management

City of Bushnell, FL – Funding Initiative

City of Starke, FL – Collections System Upgrades

City of Dunedin, FL – CW Facility Planning

Town of Inglis, FL – Wastewater Facility Planning

Prior to joining Woodard & Curran

Funding Programs for Clean Water and Drinking Water Projects - Statewide. His total grant funding involvement to date is estimated at $2 billion. Most recent successful SRF program included the City of Largo, Florida which had a cost in excess of $83M for a consent order resolution via FDEP

Master Planning for Clean Water and Drinking Water Studies. He works with communities to master-plan improvements to existing infrastructure and system expansion for growth.

City of Tavares, FL – Reclaimed Water Improvements

Various Small Communities – Utility Master Plan Development/ Florida Panhandle

Education

- Bachelors, Agriculture Engineering, Auburn University

Registrations

- **Registered Professional Engineer - FL**, AL
- General Contractor - FL
- Underground Contractor - FL



JEFFREY SOUZA
SCADA

Professional Profile

Jeff has nine years of experience programming, designing, and implementing Programmable Logic Controllers (PLCs), Operator Interface Terminals (OITs) and Human Machine Interfaces (HMIs) for water and wastewater projects. His responsibilities also include developing automated reports, networking systems through radio/ethernet/fiber optic/DH+/serial/modbus communications, training staff and operators, developing Operations & Maintenance manuals, and field/emergency services to clients.

Related Experience

City of Groveland, FL – Instrumentation and Controls Engineering

City of Starke, FL – Instrumentation and Controls Engineering

City of Tavares, FL – Instrumentation and Controls Engineering

Town of Davie, FL – SCADA Service, Computer and Software Upgrade

Pasco County, FL – SCADA Service

Towno f Montverde, FL – SCADA Service

Polk County, FL – SCADA Service

Town of Warren, RI – Instrumentation and Controls Engineering

Town of Billerica, MA – SCADA System for Wastewater Collection System

Town of Provincetown, MA – Instrumentation and Controls Engineering

Town of South Windsor, CT – Instrumentation and Controls Engineering

Education

- Bachelors, Electronics Engineering Technology, New England Institute of Technology

Technical Expertise

- PLC programming experience includes RSLogix500 and RSLogix5000 for Allen-Bradley controllers.
- OIT/HMI programming experience includes PanelBuilder32, FactoryTalk View Studio SE/ME, RSView32, Proficy iFIX, Microsoft Visual Studio, Subnet Substation Server, and Open Automation OPC systems.
- AutoCAD experience designing control panel drawings.

Specialized Training

- NFPA 70E Electrical Safety Awareness (Arc Flash) training



GLENN BURDEN
O&M

Professional Profile

Glenn has 30 years of experience in the management, operation and maintenance of municipal water, wastewater and reclaimed water treatment and distribution facilities. These facilities were designed for the treatment and distribution of public access reuse and the use of an extensive RIB (Rapid Infiltration Basin) system designed for the recharge of the Floridan aquifer.

His experience also includes providing WWTP troubleshooting, laboratory for process control, training of new personnel, implementation of data collection via tablets and smartphones, interpretation of data and reporting, operation of SCADA systems, groundwater sampling, biosolids handling, lift station operations, meter reading and billing.

Related Experience

Groveland, FL – Contract Operations

Polk City, FL– Contract Operations

Inverness, FL – Utility Contract Operations

Water Conserv II, Orlando, FL – Contract Operations

Confidential Airline, GA – HazWaste and Compliance Safety

Education

- Bachelors, Public Administration, University of Central Florida

Registrations

- Wastewater Treatment Operator Level A - FL
- Reclaimed Water Field Site Inspector - FL
- 40-Hour HAZWOPER Training - OSHA
- Stormwater Technician “C”

Professional Associations

- Florida Rural Water Association
- Florida Water and Pollution Control Operators Association, FW&PCOA Reclaimed Water Field Site Inspector Education Committee
- Daytona Beach State College, Technical Advisory Board for the Environmental Sciences Department
- Water Environment Federation



GREGORY PARKS
O&M

Professional Profile

Greg has over 20 years of experience in the Municipal and Industrial Wastewater Fields. He specializes in identifying, evaluating and implementing innovative technologies and operations practices to maximize a treatment facilities' capabilities while minimizing treatment costs associated with sludge, chemistry, energy and manpower. Over the course of his career, Greg has worked to enhance 100+ Municipal and Industrial WWTPs in North America, South America, Europe, Latin America, the Caribbean, the Middle East and Australia. Today, he works to upgrade and enhance operations at both existing Woodard & Curran's facilities and new potential sites across the United States.

Related Experience

Lakeland, FL – Technical Operations Manager. Leads Innovation and Technology teams to develop BOPs and BATs for new and existing Industrial and Municipal Wastewater Treatment Facilities. Develops capital estimates for upgrades and enhancements as well as 5-20 Year operations and maintenance budget estimates, including power (gas, electric), M&R plus R&R, staffing, lab and safety, chemical, residuals, start-up. Performs financial analysis of potential projects, including life-cycle cost analysis and NPV analysis for new and existing technologies being evaluated for implementation.

City of Starke, FL – Wastewater Treatment Facility Upgrades

City of Groveland, FL – Facility and Master Plans

City of Bushnell, FL – Sumterville Water Treatment Facility

Prior to joining Woodard & Curran

World Water Works, Inc (WWW)., Oklahoma City, OK – Technology Sales

EMC/BOC, O'Fallon, MO – Contract Operations

Mount Holly MUA, Mount Holly, NJ – Municipal WWTP

Education

- Bachelors, Environmental Earth Science, Allegheny College
- Various Courses, Water Resources & Environmental Engineering, Rutgers University-Camden

Professional Associations

- WEFTEC, Member

Technical Expertise

- Septage Treatment
- Wastewater Treatment Technologies

TAVARES
America's Seaplane City™

September 11, 2020

To Whom It May Concern:

Woodard & Curran has served as the Utilities Improvement Program Consultant for the City of Tavares since 2008. The diverse technical abilities of Woodard & Curran's local staff have enabled them to respond quickly to the wide-ranging needs of our Utilities Improvement Program. Combining that with the skills of their funding and finance experts, Woodard & Curran has helped the City secure several multi-million dollar grants and loans that has enabled us to build a more robust utility, even in a challenging economy. Working with Woodard & Curran has been a real asset in the continued pursuit of the City's long-term vision.

Woodard & Curran has provided us with an enhanced SCADA system that has helped us in reducing our required Water and Wastewater staffing. The system also helped us to reduce our energy consumption and to meet all new EPA and FDEP regulations.

We are a small community of approximately 15,000 residents. Our Utility Improvement Program had a 5 year, $32.8M Capital Improvement Rehabilitation Plan that covered water, wastewater, stormwater and reclaim, in which raising rates was not an option. This Utility Improvement Plan is part of the overall City Envisionment Plan for the future.

Sincerely,

Phillip Clark
Utilities Director, City of Tavares

Groveland
FLORIDA

T.J.FISH, AICP
Director of Transportation
& Public Works

352-429-2141 ext. 2604
Tj.fish@groveland-fl.gov

1153 Sampey Road • Groveland, FL 34736 • www.Groveland-FL.gov

September 14, 2020

To Whom It May Concem
City of Clermont
685 W Montrose Street
Clermont, FL 34711

Ladies and Gentlemen,

The Groveland City Council voted unanimously on September 2, 2019 to enter into a contract with Woodard & Curran to provide operations and maintenance services for all of Groveland's water facilities, including potable water, wastewater and reclaimed water. Over time, the scope has expanded and today, Woodard & Curran also provides on-call, utility planning, design engineering, SCADA and funding services to the City.

Since day one, the City of Groveland has experienced numerous benefits, and has made progress on a number of fronts as it relates to water services. Please allow me to share with you the following examples:

- Within a few weeks after assuming responsibility for Groveland's wastewater facilities, Woodard & Curran identified and implemented a process re-design that has since saved Groveland millions of gallons per month of potable water formerly used in the facility's operation.

- With assistance from Woodard & Curran, the Groveland Public Works staff presented to City Council an updated ordinance that strengthened rules for industrial users of the wastewater system. On October 7, 2019, the Council unanimously adopted the ordinance, which has allowed the Public Works staff to successfully address a small number of industrial users whose discharge previously caused upsets at the wastewater facility.

- The City of Groveland's potable water system previously has been the subject of occasional customer complaints related to minor discoloration issues. The Woodard & Curran team identified these issues as related to sediment that can occasionally collect within supply lines. The team implemented a systematic program to manually flush supply lines in selected neighborhoods. The team also assisted the City's public information officer in drafting social media posts and utility-bill notices to help communicate these corrective actions. And the team also has begun installing automatic flushing devices at selected locations to make this part of a routine maintenance program.

- The Woodard & Curran team has further assisted the City of Groveland in obtaining grant funding from the state of Florida that has allowed Groveland to undertake facility planning and master plan study of the City's water, wastewater and reclaim water utility infrastructure. The planning studies focus on upgrading the Sampey Road wastewater treatment facility and a new lower Floridan aquifer well to support Groveland's future growth. The master plan will have a 40-year planning horizon and will provide policymakers and Groveland residents a clear road map regarding the decisions the city must make to adequately plan for the future.

City with Natural Charm

Groveland
FLORIDA

T.J.FISH, AICP
Director of Transportation
& Public Works

352-429-2141 ext. 2604
Tj.fish@groveland-fl.gov

1153 Sampey Road • Groveland, FL 34736 • www.Groveland-FL.gov

- Woodard & Curran has also completed several planning and engineering tasks included under the on-call agreement including re-permitting of the wastewater treatment facilities; a headworks emergency planning and design project; GIS database development;, system-wide hydraulic modeling;, technical CUP assistance, well evaluation and abandonment, and development of a Fats, Oils and Grease ordinance.

- Woodard & Curran also has assisted the City of Groveland with many instrumentation and controls projects over the last year. From 24/7 emergency response to communication failures, to replacement of antiquated equipment, the Woodard & Curran SCADA team has been instrumental in driving operational efficiencies into the department.

- Finally, the collective actions taken by both the City and Woodard & Curran have led Groveland to a more favorable financial position related to water services. For the first time in many years, the 2020-21 budget no longer includes a general-fund subsidy to the Water & Sewer Enterprise Fund. This represents a significant improvement to Groveland's overall financial health.

I can say without reservation that these improvements have been accomplished in large part to the spirit of partnership that exists between the City of Groveland and Woodard & Curran. These accomplishments represent the best of what the term "public-private partnership" is truly all about.

Thank you for allowing me to share this information.

Sincerely

T.J. Fish
Public Works Director
City of Groveland

City with Natural Charm

TAB F

Sub-consultant and References





TAB F
SUB-CONSULTANT AND REFERENCES

For this project, Woodard & Curran will enlist the services of qualified subconsultants to carry specialty services during certain phases of the work. By combining our services with Nadic Engineering Services, Inc. (NADIC) for Geotechnical Services and CivilSURV Design Group Inc. (CivilSURV) for Transportation and Survey & Subsurface Utilities, we provide an experienced team qualified to meet any potential need that you have identified in the RFQ.

NADIC ENGINEERING

NADIC is a client-driven engineering firm providing geotechnical, geo-environmental, and construction materials testing and inspection services. Their dedicated team strives to be the most respected firm providing consulting, design, and construction services through technical excellence, innovative solutions, and devoted client service. NADIC was founded in 2001, with a commitment to provide superior service to our clients.

NADIC is a certified Small Business Enterprise (SBE) and Disadvantaged Business Enterprise (DBE) with the Florida Department of Transportation. NADIC is also certified MWBE with the State of Florida, Orange County, Florida, City of Orlando, Orlando International Airport, Miami-Dade County Public Schools, Central Florida Expressway Authority (CFX) and South Florida Water Management District (SFWMD). NADIC is further certified as a CBE and Micro/SBE with Miami-Dade County, Florida. NADIC is currently serving clients from three locations: Orlando, Kissimmee, and Miami.

The experience of their staff allows to present innovative and superior solutions to engineering, problems. NADIC offers comprehensive geotechnical engineering services with a staff of devoted engineers and consultants. NADIC has established strong policies on quality assurance and quality control for each project. NADIC has assembled a highly qualified and experienced professional, technical and administrative staff work together to satisfy the needs of thier clients. Each project presents unique opportunities through its location, types of engineering required, and economic importance to our clients. Since its founding (September 2001), NADIC has performed over 1,000 projects throughout Florida.

NADIC's experience with water and wastewater related projects include the following: Orange County Northwest Water Reclamation Facility, the Miami-Dade County North District Wastewater Treatment Plant, Central District Wastewater Treatment Plant Oxygen Production Facility, South District Wastewater Treatment Plant Regional Fats, Oils, and Grease Facility, Orlando Eastern Water Reclamation Facility, Miami Northwest Wellfield Facility, City of Orlando Pump Station 85 Electrical Building Replacement, City of Orlando Lift Station 45 Electrical Building, and numerous Force main, Water main, Gravity and Stormwater pipelines ranging from 12-inch to 96-inch in diameters.

NADIC provides the following services:

- **Geotechnical Engineering:** NADIC helps define the construction and long-term performance risk associated with subsurface conditions for all types of wastewater plants, transportation systems, buildings, airport facilities, dams, landfills, and other civil projects. NADIC has in-house three drill rigs and one pavement coring drill.
- **Geoenvironmental Engineering:** For a site suspected to be contaminated, NADIC aptly characterizes the physical features of the site and of existing chemical components; assesses the existing risk; and performs an engineering evaluation of appropriate corrective measures required to reduce risk and meet regulatory compliance.

- **Water Resources:** The need for development, conservation, and management of water as a natural resource has continued to be a challenge. NADIC engineers seek to apply problem control and mitigation as regional water resources are placed on under constant pressure.
- **Construction Material Testing and Inspection:** NADIC offers material engineering testing and inspection services applicable to the governmental, construction and manufacturing industries. Field testing includes verification of material standards and quality, construction quality control and reconstruction quality assurance.

Staff Resume

Resume of Dr. Godwin Nnadi, PhD., PE is included on page 50.

Owner References

City of Kissimmee, Robert T. Masiku, Public Works & Engineering
407.518.2174
rmasiku@kissimmee.org

City of Orlando, c/o GTC Engineering, Claude L. Cassagnol, PE
407.380.0402
ccassagnol@baxterwoodman.com

RS&H, Renato Gonzalez, PE
407.893.5800
Renato.gonzalez@rsandh.com

CIVILSURV
A Tradition of Innovative Engineering

Survey Services

CivilSURV is one of the largest survey firms headquartered in Central Florida. They have approximately eight crews available and a large staff of office professionals to bring the data in, process it, and create functional design surveys. Continuing survey contracts include those for Polk County, Lakeland, Manatee County, Sarasota County, Desoto County, FPL, St. Lucie County, Martin County, and FDOT D1, D7, and the Turnpike – among many others where we have Master Contracts. Their staff is not only capable of the typical surveys; we have LiDAR scanners, SUE designate and soft dig, and drone pilot licensing.

Potable Water and Related Services

CivilSURV and senior staff have been involved in the design, bidding, permitting, and construction of numerous potable water projects. They have numerous Master contracts with various utilities including Polk County, Port St. Lucie, Haines City, Tavares, Lakeland, Frostproof, Sebring, Winter Haven, Lake Wales, Martin County, and St. Lucie County, among other communities. Through those contracts, CivilSURV have performed routine and typical projects, such as water main extensions, water main relocations, new pump stations, or chemical treatment systems. Their team has also been able to work on various design and construction projects, such as water treatment plant improvements for Frostproof, Polk County, and Hillsborough County. Additionally, senior staff was part of the management team, selecting property for locating the initial projects for what became the Polk Regional Water Cooperative's Southeast Wellfield. Their team has worked on various plant projects including aeration and lime softening, DBP precursor removal, chemical treatment and stabilization, and membrane treatment.

Wastewater/Reclaim Water Related Services

CivilSURV and senior staff have been involved in the design, bidding, permitting, and construction of numerous wastewater pumping, piping, and reclaimed water treatment facilities. They have numerous Master contracts with various utilities including Polk County, Port St. Lucie, Haines City, Tavares, Lakeland, Frostproof, Sebring, Winter Haven, Lake Wales, Martin County, and St. Lucie County among other communities. Through those contracts, CivilSURV have performed varied projects from AWT treatment analysis for Polk County and Hernando County to the design of master pump stations and force mains. A recent project was CDBG funded included the replacement of over one mile of gravity sewer, three pump station rehabs, and the replacement of the roadway. All design, permitting, and construction inspection was performed in-house. Their team includes a member of the FWEA Wastewater Process Committee since its inception. The team has been involved in the modifications to over 25 wastewater treatment plants throughout Florida. Their team also worked on various plant projects including aeration, headworks, primary, secondary, and final clarification, tertiary filtration, reclaimed water pumping and system design, various disinfection, and process review and alteration for enhanced treatment. Novel designs by staff include membrane treatment of reclaimed water (800 uS/cm) into boiler feed makeup (10 uS/cm) and membrane treatment of super saturated water to create process water.

Utility Feasibility Studies

CivilSURV has complete various Master Planning, hydraulic modeling, and water supply studies. These studies have been performed for such clients as Haines City, Polk County, St. Lucie County, and Frostproof. They employ both planners and engineers with modeling capabilities, allowing to project populations and water usage, along with modeling the impact to systems that can occur when new developments are added.

Staff Resumes

Resumes of Mark Frederick, PE, ENV SP, CFM and Timothy Morris, PSM are included on pages 51 and 52 respectively.

Owner References

City of Haines City, Linda Fisher
863.421.3695
lfisher@hainescity.com

City of Lakeland, Greg James
863.834.6040
greg.james@lakelandgov.net

City of Indian Rocks Beach, Dean Scharmen
727.595.6889
dscharmen@irbcity.com

GODWIN NNADI, Ph.D., PE



REGISTRATIONS/AFFILIATIONS

Professional Engineer:

LICENSES/CERTIFICATON

PE #50637, Florida 1996;
#90355751, Canada, 1993
Nigeria, 1985

EDUCATION

Ph.D. Civil Engineering (1990)
Queens
University, Kingston, Canada

M.S. Civil Engineering (1980);
Purdue University
Lafayette, Indiana

B.S Mining/Geological Eng., (1979);
University of Nevada
Reno, Nevada

EXPERIENCE

40 years

PUBLICATIONS

Nnadi, G.N., I. Kinnear, J.D. Hussin & S. Flood, 2001. ***A Case Study of Ground Improvement for a Major Power Plant*** in Jacksonville, Florida. Proc. of a Specialty Conference: Foundations and Ground Improv. Blacksburg, Virginia, June 9-13.

PROFESSIONAL PROFILE

Dr. Nnadi directs and manages NADIC's operations throughout Florida. He has more than 40 years of experience from geotechnical and geo-environmental engineering applications to various areas such as civil, transportation, industrial and environmental systems. He has authored and co-authored over 14 publications and was an adjunct professor at University of Central Florida, Civil & Environmental Department.

PROJECT EXPERIENCE

Project: Northwest Water Reclamation Facility Rapid Infiltration Basin, Orange County, FL
Project Description: Project Manager responsible for geotechnical evaluation for project involving investigation and evaluated the soil and groundwater conditions as well as stability of the existing berms.

Project: Lake Davis to Lake Greenwood Drainage Improvements, Orlando, FL **Project Description:** Project manager responsible for geotechnical evaluation for project involving installation of approximately 2600 linear feet of RCP stormwater pipeline ranging from 24- to 42-inch diameter pipe along South Hyer Avenue and Elmwood Street.

Project: West Central Boulevard Streetscape and Utility Upgrade, Orlando, FL **Project Description:** Geotechnical Project Manager responsible for recommendations for site preparation, mast arm signal structures, and roadway soil survey. NADIC explored soil and groundwater conditions along sections of Central Boulevard and side streets associated with this project. Soil survey along Terry Avenue from CR 526 to West Jackson Street, and along West Pine Street from Terry Avenue to South Division Avenue.

ADDITIONAL EXPERIENCE

- Church Street Streetscape, Orlando, FL
- Apopka-Vineland Road @ Conroy-Windermere Road intersection Improve- ments, Orange County, FL
- Old Canoe Creek Road Widening, Osceola County, FL
- West Livingston Road Extension, Orlando, FL
- Wekiva Parkway Sections 1A and 1B, Contracts 419-202 & 429-203, Lake
  County, FL
- Sanford Avenue Streetscape, Sanford, FL
- SR A1A at Coquina Key Drive Drainage Improvements, Volusia County, FL
- John Young Parkway/Sand Lake Road Single Point Interchange, Orange County, FL
- SR 417 Milling and Resurfacing (SR 50 to Seminole County Line)
- Thacker Ave. Widening from Donegan Ave. to Carrol St. Kissimmee, FL

DEDICATED DEVOTED DEPENDABLE

CIVILSURV

Mark J. Frederick, PE, ENV SP, CFM

Stormwater

20 Total Years of Experience | < 1 Years with CivilSurv

Mr. Frederick's experience includes 20 years of diverse engineering experience in stormwater management system design and watershed model development. He is able to incorporate GIS software to streamline development of model parameters for the ICPR computer software for surface water modeling, and is familiar with MODRET and PONDS software for groundwater modeling. Mr. Frederick also has experience with hydrologic and pollutant load modeling, design of retrofits for older stormwater management and collection systems, maintenance and field collection of GIS data, and preparation of water management district environmental resource permit applications. He has successfully permitted projects involving wetlands, surface water impacts, and discharges to TMDL-listed waterbodies.

Project Experience

Project Manager & Engineer of Record, SE 3rd Street - Culvert Replacement, City of Mulberry, Florida, $20,000 (2012): Project involved the replacement of deteriorated corrugated metal culvert pipes conveying Ellis Branch, a tributary to the Alafia River, under SE 3rd Street. Design was completed in accordance with FDOT and City of Mulberry design criteria. Responsibilities included preparation of drainage calculations, alternatives analysis, reports, construction plans, construction administration, and SWFWMD permitting.

Engineer of Record, Jahna Macclenny Sand Mine Entrance Road, E.R. Jahna Industries, Inc., Baker County, Florida, $30,000 (2012 - 2013): This project involved the design of a new 0.9 mile access road to the client's new sand mine as well as intersection improvement at the connection to an existing Baker County road. The project was designed per FDOT and Baker County criteria. Responsibilities included, roadway geometry layout, pre-development drainage conditions evaluation, proposed stormwater management design, roadway culvert design, and construction plan preparation.

Project Engineer, Main Street and Bridgers Avenue Signalization, City of Auburndale, Florida, $5,000 (2012): This project involved construction phase services for the replacement of traffic signals within the City's signature corridor. Responsibilities included conducting the pre-construction meeting, construction observation, contractor coordination, and coordination with FDOT and Polk County for final project acceptance.

Project Manager & Engineer of Record, Hugh Taylor Birch State Park Roadway Widening, Florida Department of Environmental Protection, Ft. Lauderdale, Florida, $50,000 (2015 - 2016): Hugh Taylor Birch State Park includes a 2± mile one-way loop road with an average width of 11± feet. This loop road is used for various modes of transportation including pedestrian and vehicular traffic. This project involved an engineering survey and recommendations to widen the road to a minimum width of 16 feet to improve the overall safety of the roadway for all users. Responsibilities included construction plan preparation and permit coordination.

Project Manager & Engineer of Record, Villages Community Development District 4 Storm Sewer Assessment, District Property Management, The Villages, Florida, $100,000 (2016 - Ongoing): Wood has provided support services to The Villages for the Storm Sewer Management Program. This program has involved CCTV inspections of more than 40,000 linear feet of storm sewer pipes. Wood assists The Villages by reviewing the CCTV videos and inspection reports to prioritize the needed repairs and maintenance actions in accordance with the NASSCO standards. The prioritization is summarized in an assessment report and used as the basis for defining the scope of work for repair and maintenance activities.



Education

- BS / Civil Engineering / Purdue University, 2005
- MS / Civil Engineering / University of Florida, 2014

Licenses / Certifications

- Professional Engineer in FL #70671
- Certified Floodplain Manager # US-07-03155

Training

- FDEP Qualified Stormwater Management Inspector
- FDOT Specification Package Preparation
- Envision Sustainability Professional

Affiliations

- Florida Engineering Society
- National Society of Professional Engineers
- American Society of Civil Engineers

Timothy A. Morris, PSM

Subsurface Utility Engineering- Lead

20 Total Years of Experience | 4 Years with CivilSurv

Mr. Morris has over 20 years of experience surveying, 15 years in responsible charge of accuracy and completeness of boundary surveys, A.L.T.A/A.C.S.M. surveys, topographic surveys, jurisdictional wetland delineation surveys, construction staking / layouts, as-built surveys, record platting, bridge deformation monitoring, Florida Department of Transportation right of way control surveys, right of way maps, and design surveys. He currently is charged with the operation of our Subsurface Utility Services, including the project planning and production of deliverables.



Education

- B.S. Geomatics – University of Florida 2019
- A.A. Engineering – Hillsborough Community College 2014

Licenses / Certifications

- Professional Surveyor & Mapper FL# LS7261 Issued: 9/25/2019
- Mapping with Small Unmanned Aerial Systems Certificate University of Florida, 2020

Project Experience

Subsurface Utility Engineering

City of Lakeland/ Patel & Greene, SR 572 (Drane Field Road) at Don Emerson Drive Roundabout: Provided Subsurface Utility investigations Levels A, B, C and D

State Road 570 (Polk Parkway): Managed all subsurface utility engineering related activities for 8 miles of State Road 570 including designating utilities and vacuum excavation for entire project.

County Road 577 at Evenhouse Road: Directed all utility locating and vacuum excavation activities for signalization project.

Ariana Street, Polk County: Managed all subsurface utility engineering related activities for one mile between Wabash Avenue and Lotus Avenue for sidewalk improvements including designating and vacuum excavation of utilities.

Manatee County I.T.S. Upgrade: Coordinated field efforts for clearing of utilities for camera pole installation in the entire city of Bradenton

Crosstown Connector/ Interstate 4: Construction layout and as-builts for Verizon relocation utilizing utility designation and vacuum excavation.

LiDAR

State Road 597 (Dale Mabry Highway): Assisted in creating project plan and managed all terrestrial LiDAR related activities of the project for 4 miles in Hillsborough and Pasco Counties. Assisted in extracting data and creating a digital terrain model.

State Road 595 (Alternate US 19) From Mohawk Street to Skinner Boulevard: Planned all terrestrial LiDAR related activities. Registered all scan data. Assisted in data extraction to create digital terrain model and final deliverable.

Surveying & Mapping

FDOT District 5 FP 237592-2 SR5 (US-1) from Pine Street to Cidco Road: Mr. Morris was the lead technician in preparation of the Right-of-Way Monumentation Maps for this 6-mile section of US-1 in Brevard County. He was responsible for the calculations and mapping to complete the project to District 5's Right-of-Way Mapping standards.

State Road 91: Created draft control maps for seven miles in Lake County for Florida's Turnpike Authority.

State Road 91: Created control maps for four miles in Osceola County for Florida's Turnpike Authority.

Longboat Key Bridge: Responsible for project coordination and monitoring. Deformation monitoring for bent and pier movement at bridge.

TAB G
Claims Disputes





TAB G

CLAIMS DISPUTES

In this section, list all respondent's projects that:

i. Are currently in a claims dispute or have been in a claim dispute within the last ten (10) years and provide reasons for dispute. In addition, provide disposition (pending or settled), the amount of claim and brief description of the claim or dispute.

See attached listing on the following page.

ii. List all projects that have been completed by respondent's surety in the last ten (10) years.

None.

iii. List all liquidated damages have been assessed to respondent in the last five (5) years including a brief narrative of the circumstances and the amount accessed.

None.

City of Clermont, FL

In this section, list all respondent's projects that: i. Are currently in a claims dispute or have been in a claim dispute within the last ten (10) years and provide reasons for dispute. In addition, provide disposition (pending or settled), the amount of claim and brief description of the claim or dispute.

- Federated Mutual Ins. Co. v. Central Connecticut Cable Co., CT, HHD-CV196117230-S. Federated Mutual Insurance Company brought a first party subrogation action, as subrogee for Schmidt Electric Co., against Schmidt's subcontractor, Central Connecticut Cable, Co. (CCC), seeking recovery of insurance proceeds allegedly paid in connection with an incident that occurred at the City of Waterbury sewage treatment plant. Federated alleged that CCC improperly cut into an energized cable at the facility while performing the replacement of an electrical cable. CCC then brought a third-party complaint against a number of parties, including Woodard & Curran's client and its subcontractors. The matter is pending.
- A.J Virgilio Construction, Inc. v. Town of Easton and Woodard & Curran, MA, 19-056. The contractor to the Town of Easton on a sanitary sewer construction project brought this lawsuit against Woodard & Curran's client, the Town, alleging, inter alia, breach of contract, and W&C. The matter is pending.
- Town of Peterborough. v. Woodard & Curran, NH, Civil No. 16-cv-198-LM. The Town of Peterborough, NH initiated this lawsuit asserting a claim for funding-related damages in connection with an engineering project at the Town's Wastewater Treatment facility. The matter is resolved.
- Lexington Ins. Co. v. C.C. Construction, Inc., et al., MA, Civil No. 16-1992F. Lexington Insurance Company brought a subrogation lawsuit against C.C. Construction and Woodard & Curran, seeking recovery of $50,000 it alleged it paid to its insured, the Pineapple Inn, for damage from a sewer back-up. The matter is resolved.
- HK&S v. Dible et al., RI, 12-14-M. A general contractor initiated this lawsuit against Woodard & Curran's municipal client after it was not awarded a project by the Town. The Rhode Island Superior Court granted in full Woodard & Curran's Motion for Summary Judgment in this case.
- Feliciano et al. v. Cate Street Capital et al., and related action, WY, 13CV162-S. Woodard & Curran was one of four defendants in this lawsuit in connection with a Cate Street Capital project at their Red Desert Reclamation facility in Wyoming. The matter is resolved.
- Town of Swampscott v. Weston & Sampson CMR, Inc., et al., MA, 2012-01996-C. In a subrogation action, the Town's insurance company initiated this lawsuit against several defendants, including the contractor that installed the pipe, in connection with a pipe break that occurred at a pumping station. All parties agreed to dismiss Woodard & Curran from the case via a stipulation of dismissal with prejudice.

TAB H

Signed Addendum and Requested Forms





TAB H

SIGNED ADDENDUM AND REQUESTED FORMS

Included herein are the following forms:

- Signed Addendum
- Section F - Conflict of Interest
- Section G - Drug-Free Workplace with Supplemental Materials
- Section H - Supplemental Questionnaire
- Section I - Non-Collusion Affidavit
- Section J - Signature Page

FREDDY L. SUAREZ
Purchasing Director
Purchasing Department

352-241-7350
fsuarez@clermontfl.org

ADDENDUM 1 – SEPTEMBER 14, 2020
RFP 20-032 – ON-CALL PROFESSIONAL CIVIL ENGINEER SERVICES

The following represents clarification, additions, deletions and/or modifications to the above reference bid. This addendum shall hereafter be regarded as part of the bid.

This addendum is being issued to incorporate all the questions and answers provided in BidSync into the solicitation.

END OF ADDENDUM 1

This addendum must be acknowledged and may be returned with your solicitation. All other terms, conditions and specifications remain unchanged for RFP 20-032.

Woodard & Curran, Inc.
Name of Company

September 16, 2020
Date


Signature

Senior Principal
Title

Justin deMello, PE
Typed/Printed Name

Question and Answers for Bid #20-032 - On-Call Professional Civil Engineer Services

Overall Bid Questions

Question 1

Question 1

Section B of the RFQ identifies over 50 scope items required under this contract. The narrative in Section B states, in part, Selected firm(s) will not be required to have experience in all the areas specified above. Can you give potential proposers a more definite idea regarding the types and number of firms that you intend to hire? For example, are you planning to hire specialty engineering companies (such as Geotechnical Engineers) who provide only one or two of the listed scope items? Conversely, are you looking to hire prime engineering companies who employ a subconsultant on their team to deliver these specialty services?

Question 2

Can the City identify the engineering companies currently under contract? **(Submitted: Aug 13, 2020 9:35:55 AM EDT)**

edit

Answer

- 1.1 The City of Clermont is looking to hire broad spectrum prime engineering firm or firms that either have the in-house capabilities for the illustrated items or have access to sub-consultants to accomplish the tasks assigned. The 50 or so scope items are examples of what a firm might be involved with during the course of engaging with a Municipal Government.

  1.2 The City's current contracts for on-call civil engineer services include firms such as Madrid Engineering Group, Inc. d/b/a Madrid CPWG; Wood Environmental & Infrastructure Solutions, Inc.; Tetra Tech; BESH, Inc.; and GAI Consultants, Inc. **(Answered: Aug 13, 2020 9:59:13 AM EDT)**

Question 2

Is there a size limit to uploading PDFs on BidSync? **(Submitted: Aug 31, 2020 8:37:27 AM EDT)**

edit

Answer

- There is no size limit. **(Answered: Aug 31, 2020 9:01:11 AM EDT)**

Question 3

Will the pre-bid conference also be virtual? **(Submitted: Sep 1, 2020 8:44:17 AM EDT)**

Answer

edit

- No, in person only. The meeting minutes will be posted in BidSync shortly after. **(Answered: Sep 1, 2020 11:54:27 AM EDT)**

Question 4

edit

Do the Florida License, Professional Engineering License, COI, and W-9 count towards the page limit? **(Submitted: Sep 2, 2020 8:29:37 AM EDT)**

Answer

- Yes. **(Answered: Sep 3, 2020 1:50:37 PM EDT)**

Question 5

Do we need to include page 1 of the RFQ in our response? If so, does it count towards the page count? **(Submitted: Sep 9, 2020 12:52:16 PM EDT)**

Answer edit

- It is completely up to the firm. It is not a required form and will count as one page. **(Answered: Sep 9, 2020 2:00:11 PM EDT)**

Print Close

SECTION – F
CONFLICT OF INTEREST DISCLOSURE

I HEREBY CERTIFY that:

1. I *(printed name)* Justin deMello, PE am the *(title)* Senior Principal and the duly authorized representative of the firm of *(Firm Name)* Woodard & Curran, Inc. whose address is 210 South Florida Ave, Suite 220 Lakeland, FL 33801, and that I possess the legal authority to make this affidavit on behalf of myself and the firm for which I am acting; and,

2. Except as listed below, no employee, officer, or agent of the firm have any conflicts of interest, real or apparent, due to ownership, other clients, contracts, or interests associated with this project; and,

3. This proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a proposal for the same services, and is in all respects fair and without collusion or fraud.

EXCEPTIONS (List if any):

_____

_____

Print Name: Justin deMello, PE

Company Name: Woodard & Curran, Inc. Date: September 17, 2020

SECTION – G
DRUG-FREE WORKPLACE

The undersigned respondent hereby acknowledges that:

1. ☑ the respondent has a drug free workplace policy as identified in the company policy attached to this certification.

AND/OR

2. ☐ the respondent has a drug free workplace policy that is in compliance with Chapter 287.087, Florida Statutes.

AND/OR

3. ☐ the respondent has a drug free workplace policy that is in compliance with the outline bellow:

a) Publishing a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the respondent's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;

b) Establishing a continuing drug-free awareness program to inform its employees about:

   i. The dangers of drug abuse in the workplace;
   ii. The respondent's policy of maintaining a drug-free workplace;
   iii. Any available drug counseling, rehabilitation, and employee assistance programs; and
   iv. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

c) Giving all employees engaged in performance of the contract a copy of the statement required by subparagraph (a);

d) Notifying all employees, in writing, of the statement required by subparagraph (a), that as a condition of employment on a covered contract, the employee shall:

   i. Abide by the terms of the statement; and
   ii. Notify the employer in writing of the employee's conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893, Florida Statutes, or of any controlled substance law of the United States or of any state, for a violation occurring in the workplace NO later than five (5) days after such conviction.

e) Notifying the City of Clermont in writing within 10 calendar days after receiving notice under subdivision (d) (ii) above, from an employee or otherwise receiving

SECTION – G
DRUG-FREE WORKPLACE

actual notice of such conviction. The notice shall include the position title of the employee;

f) Within 30 calendar days after receiving notice under subparagraph (d) of a conviction, taking one of the following actions with respect to an employee who is convicted of a drug abuse violation occurring in the workplace:
   i. Taking appropriate personnel action against such employee, up to and including termination; or
   ii. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency;

g) Making a good faith effort to maintain a drug-free workplace program through implementation of subparagraphs (a) through (f).

OR

4. ☐ the respondent does not currently have a drug free workplace policy but is willing to comply with the requirements as specified in no. 3.

Justin deMello
(Respondent's Name)

STATE OF Florida

COUNTY OF Polk

DRUG & ALCOHOL POLICY

Policy Statement

Woodard & Curran is committed to maintaining a safe and healthy work environment free of substance abuse. Our commitment to maintaining a safe and secure workplace requires a clear policy and supportive programs relating to the detection, treatment, and prevention of substance abuse by employees. This policy applies to all employees of Woodard & Curran while on the job or "on-call" and to situations where an employee's off-the-job or off-premises conduct impairs work performance or undermines the public confidence in, or harms the reputation of, Woodard & Curran. It is also intended to apply to employees of firms doing business with Woodard & Curran and Clients while on our premises. Employees are expected to perform their responsibilities in a professional manner and to be free from the adverse effects of illegal drugs, alcohol or other substances that may hinder job performance or judgment. Woodard & Curran policy strictly prohibits the use of illegal drugs and controlled substances on company premises and company-sponsored events. In addition, alcohol is prohibited on company premises except at company-sponsored events. We believe these goals to be in the best interest of our employees and clients.

Alcohol Use

Woodard & Curran does not allow alcohol consumption on premises except at company-sponsored events where there is a *designated* Officer sponsoring the event. It is Woodard & Curran's policy to carefully control and limit the use of alcohol and to encourage and promote responsible behavior where alcohol consumption is involved. Employees who choose to consume alcohol during approved firm functions, after hour business meetings, both on and off site, and client social events should always use good judgment and drink only in moderation. Employees who fail to exercise good judgment or who become impaired at approved company functions may be subjected to disciplinary action, up to and including termination. In addition, it is the responsibility of the employee to know and comply with the policies of our clients while on their premises and adhere to the stricter of the two policies (Company or Client). Employees should reach out to the Project or Client manager if they have any questions regarding Client policies.

Drug Use

Woodard & Curran's policy strictly prohibits the unlawful manufacture, distribution, dispensing, possession, use, ingestion, sale and/or trade of illegal drugs and controlled substances on company premises, while conducting company business off premises, at company events or in any way that may impact your ability to perform your job. Employees who are in violation of the policy are subject to disciplinary action up to and including termination, and/or may be required to satisfactorily complete a drug abuse assistance or rehabilitation program.

In accordance with the Drug-Free Workplace Act of 1988, employees must abide by the drug and alcohol policy as a condition of employment and must report to Woodard & Curran, within five (5) days, if they are convicted any criminal drug violation occurring on or off company premises while conducting company business. Woodard & Curran is required to notify the relevant funding agency, within ten (10) days of receiving such notice, of any applicable conviction.

Prescription and Over-the-Counter Drugs

Prescription and over-the-counter drugs are not prohibited when taken in standard dosage and/or according to a physician's prescription. Any employee taking prescribed or over-the-counter medications is responsible for consulting the prescribing physician and/or pharmacist to ascertain whether the medication may interfere with safe performance of his/her job. If the use of a medication could compromise the safety of the employee, fellow employees, or the public, it is the employee's responsibility to use appropriate procedures (e.g. use leave, request a change of duty, notify manager) to avoid unsafe workplace practices.

The illegal or unauthorized use of prescription drugs is prohibited. It is a violation of our drug-free workplace policy to intentionally misuse and/or abuse prescription medications. Appropriate disciplinary action will be taken if job performance deterioration and/or other accidents occur.

Off Duty Drug and Alcohol Use Limitations

The Drug and Alcohol policy also applies to all employees of Woodard & Curran where an employee's off-the-job or off-premises conduct impairs work performance or harms the public confidence in, or reputation of, Woodard & Curran. It is also intended to apply to employees of firms doing business with Woodard & Curran and Clients while on our premises or when working for Woodard & Curran as a sub-contractor.

Reasonable Accommodation Statement

The company recognizes drug and alcohol dependency as an illness and a major health problem. The company also recognizes drug and alcohol abuse as a potential health, safety and security problem. Employees needing help in dealing with such problems are encouraged to seek professional help through the Woodard & Curran Employee Assistance Program and/or the medical insurance benefit as appropriate. Employees who make conscientious efforts to seek such help prior to any performance issues or incidents of misconduct will not be penalized for doing so and will be accorded reasonable accommodation where that may be accomplished without undue burden to the company.

Drug and Alcohol Testing

The Department of Transportation ("DOT") requires drug and alcohol testing for certain covered employees under 49CFR Part 40. These include, but are not limited to, drivers of commercial motor vehicles, employees in other driver related safety-sensitive positions of Commercial Motor Vehicles, and employees covered under the Pipeline and Hazardous Materials Safety Administration. Employees covered under 49CFR Part 40 should refer to the Drug and Alcohol Testing Policy for DOT Covered Employees for information on required DOT testing.

In addition, Woodard & Curran intends to apply policies similar to those required for its DOT covered employees to employees where such testing is consistent with federal and/or state law. The procedures mandated by this program help improve worker safety, performance and morale, thereby preventing accidents, injuries and production losses.

Woodard & Curran cooperates fully with local, state and federal laws and regulations on drug and alcohol misuse. Consistent with these regulations, Woodard & Curran will conduct, as it deems necessary and where allowed by law, the following:

- Pre-employment testing after a conditional offer of employment is made for all applicants (temporary or regular) for positions deemed safety sensitive by the company. Prospective employees for safety sensitive positions who were previously employed by Woodard & Curran are required to successfully complete a new drug and alcohol test if more than one month has elapsed since prior employment with Woodard & Curran.

- Reasonable suspicion testing for all employees;
- Post-accident testing for all employees;
- Return-to-duty/follow-up testing following a positive drug or alcohol test; and/or
- Client required testing which may include pre-assignment, reasonable suspicion, post-accident, return-to-duty and/or random testing.

These tests will only be performed if consistent with local, state and federal laws. A parent or legal guardian of a candidate under the age of 18 is required to sign a waiver for pre-employment drug testing. Please see the attached Addendum for State specific information.

Reasonable Suspicion Testing

All employees are required to submit to drug and alcohol testing when a Woodard & Curran official or other company representative considered competent in making reasonable cause determinations has reasonable suspicion, based on specific, contemporaneous, factual observations concerning the employee's appearance, behavior, speech, or body odors that the employee is under the influence of drugs or alcohol. Some of the most noticeable signs of drug abuse are drowsiness, respiratory depression, constricted pupils, nausea, slurred speech, excitement, loss of appetite, poor perception of time and distance, relaxed inhibitions, disoriented behavior, watery eyes, runny nose, chills and sweats, convulsions, apathy, depression, and the use of drug paraphernalia. Some signs and symptoms of alcohol misuse are the odor of alcohol, slurred speech, staggering, tremors, vomiting, cramps, delirium, loss of appetite, using arms for balance, leaning against walls and doorways, confusion, and swaying while maintaining balance.

Post-Accident Testing

Post-accident drug and alcohol testing is required to the extent allowed under applicable law. Post-accident testing will be conducted after any work place accident involving the loss of human life or any other circumstances as deemed appropriate by Woodard & Curran management.

When an employee is involved in an accident which results in a fatality or bodily injury to any person who receives in- patient hospitalization away from the accident, the employee must immediately report the incident to Health and Safety. Employees are required to submit to drug and alcohol testing as soon as practicable after an accident resulting in a fatality or bodily injury to any person who receives in-patient hospitalization.

If the accident involves a situation in which the company deems that there may be reasonable suspicion of drugs or alcohol involved, Health and Safety will work with Human Resources and Woodard & Curran Management to determine if testing will be done and will direct the employee to a collection facility where the employee will be required to provide a urine and breath specimen for testing.

Unless the employee has been injured in the accident such that test sample collection is not possible, failure to remain readily available for testing within the required time periods will be construed as a refusal to submit to testing and may result in termination of employment. Wherever possible, employees must submit to alcohol testing within two hours of the accident, but in no case later than eight (8) hours after the accident. Employees must submit to drug testing within 32 hours of the accident. An

employee who fails to immediately report a reportable accident will be subject to disciplinary action, up to and including termination of employment.

Return-to-Duty/Follow-up Testing

Employees that engage in prohibited conduct may be subjected to return to duty or follow-up testing to the extent consistent with federal or state law. Unless required by state or federal law, an employee who has failed a drug or alcohol test or refused to take such a test will be subject to disciplinary action, up to and including termination of employment. An employee that is not terminated after a positive test result generally will not be returned to duty without first being evaluated by a substance abuse professional, participating in an applicable treatment program, and passing a controlled substance and/or alcohol test.

The purpose of the return-to-duty test and the evaluation of the individual's return-to-duty status by a substance abuse professional is to make sure that the employee receives proper care, if needed. It is also to provide some degree of assurance to Woodard & Curran and our clients that the individual is free of alcohol and/or controlled substances and is able to return to work without undue concern about continued substance abuse.

If Woodard & Curran decides to return such an individual to work, once allowed to return to duty, an employee for whom treatment was recommended will be subject to unannounced follow-up testing for at least 12, but not more than, 60 months, to the extent consistent with state law. The frequency and duration of the follow-up testing will be as recommended by the substance abuse professional and will be consistent with state law. Generally, a minimum of six tests will be performed during the first 12 months after the employee has returned to duty. Follow-up testing is separate and in addition to other required testing.

Client Required Testing

If required by Woodard & Curran clients, employees will be subject to pre-assignment, reasonable suspicion, post-accident, return-to-duty and/or random testing, to the extent consistent with applicable local, state, and federal laws. Employees will be notified as soon as possible of any assignment to a client site that requires pre-assignment testing or participation in a random testing program. Employees who receive unacceptable pre-assignment drug or alcohol test results are not allowed to work on the requesting client's site(s) or facility(s).

Refusal to Submit to a Test

An employee who refuses to submit to a test required under the policy will be subject to discipline as outlined below. The following behavior constitutes refusal to submit to a test:

- ☐ Refusing to take the test as requested;

- ☐ Inability to provide sufficient amounts of breath, saliva, or urine to be tested without a valid medical explanation;
- ☐ Tampering with or attempting to adulterate a specimen (to adulterate a specimen is to alter or tamper with specimens taken for drug testing purposes);
- ☐ Interfering with the collection procedure;
- ☐ Not immediately reporting to the collection site;
- ☐ Failing to remain at the collection site until the collection process is complete;
- ☐ Having a test result reported by a Medical Review Officer (MRO) as adulterated or substituted; and/or
- ☐ Leaving the scene of an accident requiring testing without a valid reason before the tests have been conducted.

Consequences of Positive Test/Refused Test

Employees who refuse to submit to a test (as defined above), have a verified positive controlled substances test result, or have an alcohol concentration of .04 or greater will be immediately removed from the safety sensitive function and will face disciplinary action up to and including termination of employment, to the extent consistent with locals, state and federal laws.

An applicant who has a confirmed drug test, alcohol test, or refuses to submit to required testing will no longer be considered for employment and any contingent offer of employment will be withdrawn.

Any other violations of this policy will be subject to discipline, up to and including termination of employment.

Testing Procedures

Drug testing is conducted by analyzing an employee's urine specimen. The analysis is performed at laboratories certified and monitored by the Department of Health and Human Services (DHHS). The urine sample is provided in a location that affords privacy and the "collector" seals and labels the specimen, completes a chain of custody document, and prepares the specimen and accompanying paperwork for shipment to a drug-testing laboratory. Each urine specimen is subdivided into two bottles labeled as a "primary" and a "split" specimen. Both bottles are sent to a laboratory. Only the primary specimen is opened and used for the urinalysis. The split specimen bottle remains sealed and is stored at the laboratory. If the analysis of the primary specimen confirms the presence of illegal, controlled substances, the employee has 72 hours to request the split specimen be sent to another DHHS-certified laboratory for analysis. This split specimen procedure essentially provides the employee with an opportunity for a "second opinion".

All urine specimens are analyzed for the following drugs:

- Marijuana (THC)
- Cocaine
- Amphetamines
    1. Amphetamine
    2. Methamphetamine
    3. MDMA
    4. MDA
- Opioids
    1. Codeine
    2. Morphine
    3. 6-AM (heroin)
    4. Hydrocodone
    5. Hydromorphone
    6. Oxycodone
    7. Oxymorphone
- Phencyclidine (PCP)

The testing is a two-stage process. First, a screening test is performed. If it is positive for one or more of the drugs, then a confirmation test is performed for each identified drug using state-of-the-art gas chromatography/mass spectrometry (GC/MS) analysis. GC/MS confirmation ensures that over-the-counter medications or preparations are not reported as positive results.

Woodard & Curran takes a serious stance on employees or applicants who try to, or succeed in, altering or tampering with samples taken for drug testing purposes. This practice is called adulteration. Testing laboratories have the technology to screen for this purpose. If it is determined that an applicant or employee's urine sample has been adulterated in any fashion, the applicant will not be hired and the employee may be subject to disciplinary action, up to and including discharge.

Alcohol screening tests may be conducted using saliva devices or by breathalyzer. Two tests are required to determine if a person has a prohibited alcohol concentration. A screening test is conducted first. Any result less than 0.02 alcohol concentration is considered a "negative" test. If the alcohol concentration is 0.02 or greater, a second confirmation test must be conducted.

Positive Drug Tests

All drug test results are reviewed and interpreted by a physician (MRO) before they are reported to Woodard & Curran. If the laboratory reports (after a confirmatory test) a positive result to the MRO, the MRO contacts the employee (in person or by telephone) and conducts an interview to determine if there is an alternative medical explanation for the drugs found in the employee's urine specimen. If the employee provides appropriate documentation and the MRO determines that it is legitimate medical use of the prohibited drug, the drug test result is reported as negative to the employer. Woodard & Curran will not be informed of a positive test result until MRO contact procedures have been completed, or the number of required attempts has been made.

It should be noted that some state laws authorize the use of medical marijuana and thus there may be a valid medical explanation for an employee's positive drug test for marijuana. Woodard & Curran will treat the lawful use of medical marijuana the same as any legally prescribed drug and will engage in an interactive dialogue with the employee/applicant. Interactive dialogue is a process where the employee/applicant and Woodard & Curran discuss the limitations resulting from the disability as well

as potential reasonable accommodations that could overcome those limitations in order to determine whether or not such use can be reasonably accommodated by the Company.

Once the MRO has made a final determination, employees who test positive for drug and/or alcohol will be referred to a Substance Abuse Professional – a licensed physician, licensed or certified psychologist, social worker, employee assistance professional, or certified addiction counselor with knowledge of clinical experience in the diagnosis and treatment of alcohol and controlled substances-related disorders. Unless otherwise required under state law, Woodard & Curran is not required to provide or pay for rehabilitation services or treatment programs.

Employees who test positive will be allowed 72 hours following notification of their drug test results to request a re-test of a split sample of the original test sample by a government-approved testing facility. Any re-test will be at the employer's expense. The employee will be suspended without pay until the re-test results are received by the Woodard & Curran location.

If re-test results are negative, initial results will be cancelled. The employee will be fully reinstated with back pay. However, in the event the re-test is positive, or if a re-test is not requested within the designated time period, the employee may be subject to disciplinary action up to and including immediate termination.

Positive Alcohol Tests

If an employee tests positive for alcohol, the employee will be removed from duty. An employee with a positive alcohol test may be subject to disciplinary action up to and including immediate termination.

Diluted Specimen

A negative dilute result is accepted for compliance with this policy.

Confidentiality

All drug and alcohol tests will be conducted to ensure accuracy, reliability, employee privacy and confidentiality. Test results remain the private and confidential property of the testing laboratory, the MRO and the Company. Release of test results to anyone other than the employee, the MRO, the employer and for legal purposes is prohibited unless the employee signs a written release.

Finding Help

The hazards of drug and alcohol misuse extend far beyond the individual user. Impaired employees endanger themselves, fellow workers, and other users of our road and highways. Alcohol and drug abusing employees increase the costs related to lost productivity, absenteeism, accidents, loss of trained personnel, and theft deterrence programs.

Alcohol remains the number one abused drug in this country. Even low doses of alcohol can impair the judgment and coordination required for driving. Very high doses cause respiratory depression and death. If combined with other depressant drugs, much lower doses of alcohol can produce the effects just described.

Multiple substance abuse is abuse of more than one drug, either at the same time or over a period of time. Multiple substance abuse is especially dangerous because different substances interact with each other to produce unexpected effects.

Additional information on the effects of alcohol misuse and controlled substances use on an individual's health, work and personal life, signs and symptoms of alcohol use, and available methods of

intervening when an alcohol and/or substance problem is suspected can be obtained through Woodard & Curran's Employee Assistance Program at 1-877-595-5284 (TDD 800-697-0353) or www.guidanceresources.com (Online Company Web ID: EAPComplete).

Employees can also look in the Yellow Pages under Alcoholism Information or Drug Abuse and Addiction Information. Alcoholics Anonymous or Narcotic Anonymous may also be listed.

Questions

If employees have questions regarding the company's alcohol and drug testing policies and procedures, employees should contact Beth Sweitzer at (207) 558-3728, Krista Marston at (207) 558-3776, or Neha Garg at (781) 613-0606.

ADDENDUM TO DRUG & ALCOHOL TESTING POLICY

California Employees

Woodard & Curran will reasonably accommodate any California based employee who wishes to voluntarily enter and participate in an alcohol or drug rehabilitation program, provided that this reasonable accommodation does not impose an undue hardship on Woodard & Curran.

Post-Accident Testing

Post-accident testing will not be performed in California unless there is a nexus between the testing and the protection of public safety.

Random Testing

Random testing will not be performed, unless the nature of the job is considered hazardous or safety sensitive such that an employee could cause injury or damage to the public or coworkers.

Client Required

Client required pre-access testing is generally not permitted.

San Francisco Based Employees

Testing of current employees is generally prohibited, with the exception of reasonable suspicion and return-to-duty which may be performed when specific conditions are met.

Connecticut Employees

The following policy applies to Woodard & Curran's Connecticut employees only. If there is a conflict between the policies contained in the Drug and Alcohol Testing Policy and in this Addendum, the policy contained in this Addendum controls. If any Connecticut employee has a question regarding the policies contained in this Addendum, or any other matter, they should contact the Human Resources Department.

Post-Accident Testing

Post-accident testing will not be performed in Connecticut unless there are grounds for reasonable suspicion testing, except as required by federal law or regulation.

Return-to-Duty/Follow-up Testing

Return-to-duty/follow-up testing will only be performed for employees in positions designated as safety sensitive by the Connecticut Department of Labor.

Pre-Assignment Testing

Pre-assignment testing will only be performed for employees in positions designated as safety sensitive by the Connecticut Department of Labor.

Confidentiality

All employees and applicants will be provided with a copy of any positive test.

Florida Employees

The following policy applies to Woodard & Curran's Florida employees only. If there is a conflict between the policies contained in the Drug and Alcohol Testing Policy and in this Addendum, the policy contained in this Addendum controls. If any Florida employee has a question regarding the policies contained in this Addendum, or any other matter, they should contact the Human Resources Department.

Preference to Businesses

The unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace. Any employee shall notify Woodard & Curran of any conviction of, or plea of guilty or nolo contendere to, any violation of Florida Chapter 893 or of any controlled substance law of the United States or any state, for a violation by the employee occurring in the workplace no later than 5 days after such conviction. Any employee who is so convicted shall face a sanction or will be required to satisfactorily participate in a drug abuse assistance or rehabilitation program if such is available in the employee's community.

Massachusetts Employees

The following policy applies to Woodard & Curran's Massachusetts employees only. If there is a conflict between the policies contained in the Drug and Alcohol Testing Policy and in this Addendum, the policy contained in this Addendum controls. If any Massachusetts employee has a question regarding the policies contained in this Addendum, or any other matter, they should contact the Human Resources Department.

Post-Accident Testing

Post-accident testing will only be performed on employees working in safety-sensitive positions.

Return-to-Duty/Follow-up Testing

Return-to-duty and follow-up testing will only be performed on employees working in safety sensitive positions.

Pre-Assignment Testing

Pre-assignment testing will only be performed on employees working in safety sensitive positions.

New Jersey Employees

The following policy applies to Woodard & Curran's New Jersey employees only. If there is a conflict between the policies contained in the Drug and Alcohol Testing Policy and in this Addendum, the policy contained in this Addendum controls. If any New Jersey employee has a question regarding the policies contained in this Addendum, or any other matter, they should contact the Human Resources Department.

Post-Accident Testing

Post-accident testing will only be performed on employees working in safety sensitive positions.

Pre-Assignment Testing

Pre-assignment testing will only be performed on employees working in safety sensitive positions.

Rhode Island Employees

The following policy applies to Woodard & Curran's Rhode Island employees only. If there is a conflict between the policies contained in the Drug and Alcohol Testing Policy and in this Addendum, the policy contained in this Addendum controls. If any Rhode Island employee has a question regarding the policies contained in this Addendum, or any other matter, they should contact the Human Resources Department.

Post-Accident Testing

Post-accident testing will not be performed in Rhode Island unless there are grounds for reasonable suspicion testing, except as provided by federal law.

Pre-Assignment Testing

Pre-assignment testing will not be performed in Rhode Island.

Consequence of Positive Test

Any employee that tests positive for drugs or alcohol will be referred to a substance abuse professional (licensed in Rhode Island) for assistance. Additional testing may be performed in accordance with the recommendation of the professional.

Testing Procedures

Any employee testing positive may have the sample tested at an independent testing facility at Woodard & Curran's expense.

DRUG & ALCOHOL TESTING – United States Department of Transportation "DOT" Regulated Employees Covered Under 49CFR Part 40

Background & Overview

The United States Department of Transportation ("DOT") regulates drug and alcohol testing for covered employees under 49 CFR Part 40 and additional DOT agency regulations described below for the federally regulated transportation industry. At Woodard & Curran, these include, but are not limited to the following DOT regulated employees:

- drivers of commercial motor vehicles;
- employees who work on operations, maintenance and emergency response at pipeline or liquefied natural gas (LNG) facilities and/or
- employees who are identified to conduct safety sensitive duties in other DOT regulated industries not common to Woodard & Curran projects (e.g. rail and maritime industries etc.)

DOT testing will take place pursuant to the guidelines of this policy and applicable DOT regulations. The procedures mandated by this program will help improve worker safety, performance and morale, thereby preventing accidents, injuries and production losses. This policy also applies to independent contractors, owner/operators, contract personnel, leased and transfer drivers conducting work regulated under DOT regulations for Woodard & Curran.

Drug-Free Workplace Act Compliance

Woodard & Curran's policy strictly prohibits the unlawful manufacture, distribution, dispensing, possession, use (including ingestion), sale and/or trade of illegal drugs and controlled substances on company premises, while conducting company business off premises, at company events or in any way that may impact your ability to perform your job. Employees who are in violation of the policy are subject to disciplinary action up to and including termination, and/or may be required to satisfactorily complete a drug abuse assistance or rehabilitation program.

In accordance with the Drug-Free Workplace Act of 1988, employees must abide by the drug and alcohol policy as a condition of employment and must report to Woodard & Curran, within five (5) days, if they are convicted any criminal drug violation occurring on or off company premises while conducting company business. Woodard & Curran is required to notify the relevant funding agency, within ten (10) days of receiving such notice, of any applicable conviction.

Federal Motor Carrier Safety Administration Regulated Employees Subject to Drug and Alcohol Testing under 49 CFR Part 382

All drivers who operate commercial motor vehicles in interstate commerce are subject to various prohibitions and testing requirements. Compliance with the drug and alcohol testing policy is a requirement of each driver of a commercial motor vehicle as a condition of employment.

A driver of a Commercial Motor Vehicle who holds a commercial driver's license and performs safety sensitive duties is subject to the testing requirements of this policy and as regulated under the Federal

Motor Carrier Safety Administration 49 CFR Part 382. The Department of Transportation defines a Commercial Motor Vehicle subject to alcohol and drug testing as:

- a vehicle with a gross vehicle weight rating or gross combination rating of 26,001 or more pounds;
- a vehicle designed to transport 15 or more passengers (including the driver);
- a vehicle of any size used to transport hazardous materials requiring placards; or
- a mass transit vehicle used to transport large numbers of passengers. This includes buses, electric buses, vans, automobiles, rail cars, trolley cars, trolley buses or vessels.

The term "DOT regulated employee" for part 382 application of this policy for drivers includes applicants for driver positions, employees who work in full-time or part time driver positions, or others, such as temporary drivers or independent contractors, who may serve as a driver for Woodard & Curran. The designation of a "safety-sensitive" employee includes holders of Commercial Drivers Licenses ("CDL") who operate Commercial Motor Vehicles. A safety sensitive duty includes all time beginning when the Driver begins to work or is required to be in readiness to work until the time he/she is relieved from work and all responsibilities for performing work.

Pipeline and Hazardous Materials Safety Administration Regulated Employees Subject to Drug and Alcohol Testing under 49 CFR Part 199

DOT regulated employees whose work duties include those who work on operations, maintenance and emergency response on a pipeline or LNG facility regulated under 49 CFR part 192, 193, or 195 is subject to the requirements of this policy and as regulated by the Pipeline and Hazardous Materials Safety Administration drug and alcohol regulations 49 CFR Part 199.

Employees Identified to Conduct Safety Sensitive Duties in other DOT Regulated Industries not Common to Woodard & Curran Projects

There is the potential for an employee, independent contractor, owner/operators, or contract personnel to conduct work regulated under DOT regulations for Woodard & Curran which may include safety sensitive duties regulated in transportation industries not common to Woodard & Curran such as the rail or maritime industries, or others. In these unique situations, this policy will be compared and reviewed to applicable DOT agency regulations for compliant implementation to those agency rules.

The following sections describe the implementation requirements of this policy:

Prohibited Use of Drugs and Alcohol

DOT regulated employees covered by this policy **shall not:**

- use a controlled substance without medical authorization and without being advised by a medical practitioner that the substance would not adversely affect the driver's ability to safely operate a commercial motor vehicle;
- test positive for illegal drugs;
- report for or remain on duty performing a safety-sensitive function while having a breath alcohol concentration of 0.02 or greater;
- use alcohol while performing safety-sensitive functions;

- be on duty or operate a commercial motor vehicle or other vehicle while possessing alcohol unless the alcohol is manifested and transported as part of the shipment;
- perform safety-sensitive functions within four hours of using alcohol;
- use alcohol for eight hours following an accident unless the Driver has been given a post-accident test; and
- refuse to take a required drug and alcohol test.

Testing

Woodard & Curran cooperates fully with local, state and federal laws and regulations on drug and alcohol misuse. Consistent with these regulations, Woodard & Curran will conduct, as necessary and where allowed by law, the following:

- urine tests to determine the presence of illegal drugs;
- breath alcohol test for employees in safety-sensitive positions;
- pre-employment tests for drugs for individuals given a conditional offer of employment prior to the individual assuming his or her new position. Prospective employees for safety sensitive positions who were previously employed by Woodard & Curran are required to successfully complete a new drug and alcohol test if more than one month has elapsed since prior employment with Woodard & Curran.

All DOT regulated employees must submit to the above drug and alcohol testing when it is requested by Woodard & Curran. Refusal will result in termination.

Pre-Employment Testing

All applicants who have been offered employment with Woodard & Curran for any DOT regulated positions covered under 49CFR Part 40 will be offered employment conditioned on the passing of a drug and alcohol test. Any applicant who refuses to take a drug test will have his or her offer of employment rescinded.

An exception to this requirement exists for DOT regulated applicants who have participated in a controlled substances testing program meeting the requirements of this policy within the 30 days prior to applying for employment with Woodard & Curran, if the following requirements are met:

- While participating in the program, the DOT regulated applicant either (1) was tested for controlled substances within the past 6 months (from the date of the application with Woodard & Curran) or (2) participated in the random controlled substances testing program for the previous 12 months (from the date of the application with Woodard & Curran);
- The DOT regulated applicant has not violated the DOT (or other federal agency) drug and alcohol requirements during the past 6 months; and
- Woodard & Curran is able to contact the controlled substances testing program(s) in which the DOT regulated applicant participated and obtain certain confirmatory information.

Random Drug and Alcohol Testing

All DOT regulated employees will be required to submit to random drug and alcohol testing.

A DOT regulated employee will only be tested for alcohol when the DOT regulated employee is performing safety sensitive functions, just before the DOT regulated employee is to perform safety-sensitive functions, or just after the DOT regulated employee has ceased performing such functions.

DOT regulated employees will be chosen to be tested by a scientifically valid, random method by the Human Resources Department or its designee. When chosen, a DOT regulated employee will be informed when and where to report for testing. He or she must proceed to the test site immediately, or if the DOT regulated employee is currently performing a safety sensitive function, as soon as possible. DOT regulated employees who are in the field will be provided with instructions on what steps to take to ensure that the DOT regulated employee is tested promptly. Failure to follow those instructions could be deemed a refusal to test and result in the Driver being removed from all safety-sensitive functions until after the DOT regulated employee has complied with the return to duty requirements outlined below.

Due to the nature of the random selection process, a DOT regulated employee could be required to submit to a test for drug and/or alcohol misuse more than once a year.

Reasonable Suspicion Testing

A DOT regulated employee is required to submit to drug and alcohol testing when Woodard & Curran has reasonable suspicion, based on specific, contemporaneous, factual observations concerning the DOT regulated employee's appearance, behavior, speech, or body odors, that the DOT regulated employee is under the influence of drugs or alcohol. Some of the most noticeable signs of drug abuse are drowsiness, respiratory depression, constricted pupils, nausea, slurred speech, excitement, loss of appetite, poor perception of time and distance, relaxed inhibitions, disoriented behavior, watery eyes, runny nose, chills and sweats, convulsions, apathy, depression, and the use of drug paraphernalia. Some signs and symptoms of alcohol misuse are the odor of alcohol, slurred speech, staggering, tremors, vomiting, cramps, delirium, loss of appetite, using arms for balance, leaning against walls and doorways, confusion, and swaying while maintaining balance.

Post-Accident Testing

Post-accident drug testing of DOT regulated employee's is required after:

- ☐ Any accident involving the loss of human life and/or
- ☐ Any accident for which a driver receives a citation within 32 hours of the occurrence for a moving traffic violation under state or local law arising from the accident, if the accident involved:
    - bodily injury to any person (who receives medical treatment away from the scene of the accident) or
    - one or more motor vehicles incurring disabling damage as a result of the accident, requiring the motor vehicles to be transported away from the scene by a tow truck or other vehicle.

Post-accident alcohol testing is required after:

- ☐ Any accident involving the loss of human life and/or

- ☐ Any accident for which a driver received within eight (8) hours of the occurrence a citation under state or local law for a moving traffic violation resulting from the accident if the accident involved:
    - bodily injury to any person (who receives medical treatment away from the scene of the accident) and/or
    - one or more motor vehicles incurring disabling damage as a result of the accident, requiring the motor vehicles to be transported away from the scene by a tow truck or other vehicle.

Woodard & Curran reserves the right to require post-accident testing following less serious accidents or incidents, in accordance with applicable state law.

DOT regulated employee are required to submit to drug and alcohol testing as soon as practicable after a reportable accident. If possible, DOT regulated employee should submit to alcohol testing within two hours of the accident, but in no case later than eight (8) hours after the accident. DOT regulated employee must submit to drug testing within 32 hours of the accident.

Unless the DOT regulated employee has been injured in the accident such that test sample collection is impossible, a failure to remain readily available for testing within the required time periods will be construed as a refusal to submit to testing and will result in discharge.

When a DOT regulated employee is involved in an accident which results in a fatality, or when a DOT regulated employee is issued a citation for moving traffic violation arising from a reportable accident, the DOT regulated employee must immediately report the incident to Health and Safety and Human Resources. In turn, the Company will direct the DOT regulated employee to a collection facility where the employee will be required to provide a urine and breath specimen for testing. A DOT regulated employee who fails to immediately report a reportable accident will be subject to discharge.

Return-to-Duty/Follow-up Testing

DOT regulated employee that engage in prohibited conduct cannot be returned to duty in a safety-sensitive function without first being evaluated by a substance abuse professional, participate in an applicable treatment program, and pass a controlled substance and/or alcohol test.

The purpose of the return-to-duty test and the evaluation of the individual's return-to-duty status by a substance abuse professional is to ensure that the DOT regulated employee receives proper care, if needed. It is also to provide some degree of assurance to the employer that the individual is free of alcohol and/or controlled substances and is able to return to work without undue concern about continued substance abuse.

Woodard & Curran has no obligation under the DOT regulations to return to work a DOT regulated employee who has failed a drug or alcohol test or refused to take such a test. If Woodard & Curran decides to return such an individual to work, once allowed to return to duty, a DOT regulated employee for whom treatment was recommended must be subject to unannounced follow-up testing for at least 12, but not more than, 60 months. The frequency and duration of the follow-up testing will be as recommended by the substance abuse professional, as long as a minimum of six (6) tests are performed during the first 12 months after the DOT regulated employee has returned to duly. Follow-up testing is separate and in addition to the regular random testing program.

Dilute Specimen

If the MRO informs Woodard & Curran that a positive test was dilute, the test is treated as a positive test.

If the MRO informs Woodard & Curran that a negative test was dilute, Woodard & Curran will take the following action depending on guidance provided by the MRO:

(1) If the MRO directs that a recollection take place under direct observation (i.e., because the creatinine concentration of the specimen was equal to or greater than 2mg/dL, but less than or equal to 5 mg/dL), the Company will do so immediately. Failure of the employee or applicant to submit for this re-collection is classified by the DOT as a refusal to test.

(2) Otherwise (i.e., if the creatinine concentration of the negative dilute specimen is greater than 5 mg/dL), the Company will for existing employees and applicants accept the negative dilute result as is.

Refusal to Submit to a Test

A DOT regulated employee who refuses to submit to a test required under the policy will be subject to discipline as outlined below. The following behavior constitutes refusal to submit to a test:

- ☐ refusing to take the test as requested;
- ☐ inability to provide sufficient amounts of breath, saliva, or urine to be tested without a valid medical explanation;
- ☐ tampering with or attempting to adulterate a specimen;
- ☐ interfering with the collection procedure;
- ☐ not immediately reporting to the collection site;
- ☐ failing to remain at the collection site until the collection process is complete;
- ☐ having a test result reported by a Medical Review Officer("MRO") as adulterated or substituted; and/or
- ☐ leaving the scene of an accident without a valid reason before the tests have been conducted.

Consequences of Positive Test/Refused Test

DOT regulated employee who refuse to submit to a test (as defined above), have a verified positive controlled substances test result, or have an alcohol concentration of .04 or greater will be immediately removed from the safety sensitive function and will face disciplinary action up to and including termination.

An applicant who has a confirmed drug test, alcohol test, or refuses to submit to required testing will no longer be considered for employment and any contingent offer of employment will be withdrawn.

A DOT regulated employee with an alcohol concentration of 0.02 or greater but less than 0.04 will not be permitted to perform any safety-sensitive functions until 24 hours following the administration of the test, and will be subject to disciplinary action, up to and including termination of employment.

Any other violations of this policy will be subject to discipline, up to and including termination of employment.

Testing Procedures

Drug testing is conducted by analyzing a DOT regulated employee's urine specimen. The analysis is performed at laboratories certified and monitored by the Department of Health and Human Services (DHHS). The urine sample is provided in a location that affords privacy and the "collector" seals and labels the specimen, completes a chain of custody document, and prepares the specimen and accompanying paperwork for shipment to a drug-testing laboratory. Each urine specimen is subdivided into two bottles labeled as a "primary" and a "split" specimen. Both bottles are sent to a laboratory. Only the primary specimen is opened and used for the urinalysis. The split specimen bottle remains sealed and is stored at the laboratory. If the analysis of the primary specimen confirms the presence of illegal, controlled substances, the DOT regulated employee has 72 hours to request the split specimen be sent to another DHHS-certified laboratory for analysis. This split specimen procedure essentially provides the Driver with an opportunity for a "second opinion".

All urine specimens are analyzed for the following drugs:

- Marijuana (THC)
- Cocaine
- Amphetamines
    1. Amphetamine
    2. Methamphetamine
    3. MDMA
    4. MDA
- Opioids
    1. Codeine
    2. Morphine
    3. 6-AM (heroin)
    4. Hydrocodone
    5. Hydromorphone
    6. Oxycodone
    7. Oxymorphone
- Phencyclidine (PCP)

The testing is a two-stage process. First, a screening test is performed. If it is positive for one or more of the drugs, then a confirmation test is performed for each identified drug using state-of-the-art gas chromatography/mass spectrometry (GC/MS) analysis. GC/MS confirmation ensures that over-the-counter medications or preparations are not reported as positive results.

Woodard & Curran takes a serious stance on employees or applicants who try to or succeed in altering or tampering with samples taken for drug testing purposes. This practice is called adulteration. Testing laboratories have the technology to screen for this purpose. If it is determined that an applicant or employee's urine sample has been adulterated in any fashion, the applicant will not be hired and the employee may be subject to disciplinary action, up to and including termination of employment.

Alcohol screening tests may be conducted using saliva devices or by breathalyzer. Two tests are required to determine if a person has a prohibited alcohol concentration. A screening test is conducted first. Any result less than 0.02 alcohol concentration is considered a "negative" test. If the alcohol concentration is 0.02 or greater, a second confirmation test must be conducted.

Positive Drug Tests

All drug test results are reviewed and interpreted by a physician (Medical Review Officer (MRO)) before they are reported to the employer. If the laboratory reports a positive result to the MRO, the MRO contacts the DOT regulated employee (in person or by telephone) and conducts an interview to determine if there is an alternative medical explanation for the drugs found in the driver's urine specimen. If the DOT regulated employee provides appropriate documentation and the MRO determines that it is legitimate medical use of the prohibited drug, the drug test result is reported as negative to the employer.

Woodard & Curran will not be informed of a positive test result until MRO contact procedures have been completed, or the number of required attempts have been made.

It should be noted that federal law does not authorize the use of medical marijuana even if such use is authorized under State law. Thus, the use of medical marijuana authorized under a State law is not a valid medical explanation for an employee's positive drug test for a test required by federal law. Woodard & Curran will engage in an interactive dialogue with the employee/applicant to determine whether or not such use can be reasonably accommodated by the Company. Interactive dialogue is a process where the employee/applicant and Woodard & Curran discuss the limitations resulting from the disability as well as potential reasonable accommodations that could overcome those limitations in order to determine whether or not such use can be reasonably accommodated by the Company.

Once the MRO has made a final determination, DOT regulated employee who test positive for drug and/or alcohol will be referred to a Substance Abuse Professional – a licensed physician, licensed or certified psychologist, social worker, employee assistance professional, or certified addiction counselor with knowledge of clinical experience in the diagnosis and treatment of alcohol and controlled substances-related disorders. Woodard & Curran is not required to provide, nor to pay for, rehabilitation services or treatment programs.

DOT regulated employee who test positive will be allowed 72 hours following notification of their drug test results to request a re-test of a split sample of the original test sample by a government-approved testing facility. Any re-test will be at the employer's expense. The employee will be suspended without pay until the re-test results are received by the Woodard & Curran location.

If re-test results are negative, initial results will be cancelled. The DOT regulated employee will be fully reinstated with back pay. However, in the event the re-test is positive, or if a re-test is not requested within the designated time period, the DOT regulated employee may be subject to disciplinary action up to and including immediate termination of employment.

Positive Alcohol Test

Depending on the level of alcohol in the DOT regulated employee's system, the Department of Transportation requires Woodard & Curran to act as follows:

- When alcohol test results are 0.02 or greater but less than 0.04, the DOT regulated employee will be prohibited from performing a safety-sensitive function for 24 hours. The Woodard & Curran location supervisor will be notified and the DOT regulated employee will not be allowed to drive any Woodard & Curran-controlled vehicle during this time.

- When alcohol tests are 0.04 or greater, the DOT regulated employee will be removed from performing a safety-sensitive function(s). The Driver will be referred to a Substance Abuse

Professional (SAP). The DOT regulated employee will be prohibited from returning to work until he or she has demonstrated successful compliance with recommended treatment and has submitted to a return to duty alcohol test and has tested below 0.02.

In addition to federal regulations, and at management's discretion, a breath alcohol reading at any level under the conditions outlined in the "Prohibited Use of Drugs and Alcohol" section of this document may subject the DOT regulated employee to disciplinary action, up to and including termination of employment.

Confidentiality

All drug and alcohol tests will be conducted according to Department of Transportation regulations that ensure accuracy, reliability, employee privacy and confidentiality. Test results remain the private and confidential property of the testing laboratory, the MRO and the Company. Release of test results to anyone other than the employee, the MRO, the employer and for legal purposes is prohibited unless the employee signs a written release.

Finding help

The hazards of drug and alcohol misuse extend far beyond the individual user. Impaired employees endanger themselves, fellow workers, and other users of our highways. Alcohol and drug abusing employees increase the costs related to lost productivity, absenteeism, accidents, loss of trained personnel, and theft and deterrence programs.

Alcohol remains the number one abused drug in this country. Even low doses of alcohol can impair the judgment and coordination required for driving. Very high doses cause respiratory depression and death. If combined with other depressant drugs, much lower doses of alcohol can produce the effects just described.

Multiple substance abuse is abuse of more than one drug, either at the same time or over a period of time. Multiple substance abuse is especially dangerous because different substances interact with each other to produce unexpected effects.

Additional information on the effects of alcohol misuse and controlled substances use on an individual's health, work and personal life, signs and symptoms of alcohol use, and available methods of intervening when an alcohol and/or substance problem is suspected can be obtained through Woodard & Curran's EAP at 1-877-595-5284 or www.guidanceresources.com (Online Company Web ID: EAPComplete).

Employees can also look in the Yellow Pages under Alcoholism Information or Drug Abuse and Addiction Information. Alcoholics Anonymous or Narcotic Anonymous may also be listed.

Questions

If employees have questions regarding the company's alcohol and drug testing policies and procedures, employees should contact Beth Sweitzer at (207) 558-3728, Krista Marston at (207) 558-3776, or Neha Garg at (781) 613-0606.

SECTION – H
SUPPLEMENTAL QUESTIONNAIRE

Respondent's Name: Woodard & Curran, Inc.

Official Representative: Justin deMello, PE

Principal Office Address: 210 South Florida Ave., Suite 220 Lakeland, FL 33801

Select one: ☐ Individual ☐ Partnership ☑ Corporation

If a Corporation, answer this:

When Incorporated: 5/15/1979 In what State: Maine

President's Name: Doug McKeown Vice-President's Name: Scott Shannon

Treasurer's Name: David Remick

Members of Board of Directors

Internal Directors: Doug McKeown, Duff Collins, Joe Barbagallo, Tom Hazlett, Dave MacDonald, and Alyson Watson; External Directors: Rebekah Eggers, Steve Guttenplan, and Bruce Wagner

If a Partnership, answer this:

Date of organization: _____

General or Limited Partnership*: _____

Name and Address of Each Partner:
NAME / ADDRESS

_____ / _____

_____ / _____

_____ / _____

1. How many years has your organization been in business under the present business name? 41 (since 1979)
2. Does your organization have current occupational licenses entitling it to do the work/service contemplated in this solicitation?
   Yes ☑ No ☐ If no, please explain:

   _____

   _____

SECTION – H
SUPPLEMENTAL QUESTIONNAIRE

3. Please state license(s) type and number:
   State of Florida Board of Professional Engineers - CA7479
   Include copies of above license and certificates with response.

4. Have you ever had a contract terminated due to failure to comply with contractual specifications?
   Yes ☐ No ☑ If yes, state where and why:

5. Person or persons interested in this solicitation have ☐ have not ☑ been convicted by a Federal, State, County, or Municipal Court of any violation of law, other than traffic violations.
   Explain any convictions:

6. Lawsuits (any) pending or completed involving the corporation, partnership or individuals with more than ten percent (10%) interest:
   A. List all pending lawsuits:
   See 10-Year Disclosure which lists lawsuits involving the Company and is based on the Company's knowledge in Tab G and also attached herein.
   See 10-Year Disclosure which lists lawsuits involving the Company and is based on the Company's knowledge in Tab G and also attached herein.

   B. List all judgments from lawsuits in the last five (5) years:
   None.
   None.

   C. List any criminal violations and/or convictions of the respondent and/or any of its principals:
   None to the Company's knowledge.
   None to the Company's knowledge.

7. **Conflicts of Interest**. The following relationships are the only potential, actual, or perceived conflicts of interest in connection with this proposal: (If none, state same.)
   Woodard & Curran does not have any potential, actual, or perceived conflicts of interest connected to this proposal.
   Woodard & Curran does not have any potential, actual, or perceived conflicts of interest connected to this proposal.

SECTION – H
SUPPLEMENTAL QUESTIONNAIRE

The respondent understands that information contained in this form will be relied upon by the City in making an award recommendation and such information is warranted by the respondent to be true. The undersigned respondent agrees to furnish such additional information, prior to award recommendation. The respondent further understands that the information contained in this form may be confirmed through a background investigation conducted by the City of Clermont Police Department. By submitting this questionnaire the respondent agrees to cooperate with this investigation, including but not necessarily limited to fingerprinting and providing information for credit check.

IF INDIVIDUAL:

_____ _____
Print Name Date

IF PARTNERSHIP:

_____ _____
Print Name Date

General Partner

_____ _____
Print Name Date

IF CORPORATION:

Woodard & Curran, Inc.
Print Name of Corporation

Doug McKeown 41 Hutchins Drive, Portland, Maine 04102
Print Name of President Company Address

September 17, 2020
Date

In this section, list all respondent's projects that: i. Are currently in a claims dispute or have been in a claim dispute within the last ten (10) years and provide reasons for dispute. In addition, provide disposition (pending or settled), the amount of claim and brief description of the claim or dispute.

- Federated Mutual Ins. Co. v. Central Connecticut Cable Co., CT, HHD-CV196117230-S. Federated Mutual Insurance Company brought a first party subrogation action, as subrogee for Schmidt Electric Co., against Schmidt's subcontractor, Central Connecticut Cable, Co. (CCC), seeking recovery of insurance proceeds allegedly paid in connection with an incident that occurred at the City of Waterbury sewage treatment plant. Federated alleged that CCC improperly cut into an energized cable at the facility while performing the replacement of an electrical cable. CCC then brought a third-party complaint against a number of parties, including Woodard & Curran's client and its subcontractors. The matter is pending.
- A.J Virgilio Construction, Inc. v. Town of Easton and Woodard & Curran, MA, 19-056. The contractor to the Town of Easton on a sanitary sewer construction project brought this lawsuit against Woodard & Curran's client, the Town, alleging, inter alia, breach of contract, and W&C. The matter is pending.
- Town of Peterborough. v. Woodard & Curran, NH, Civil No. 16-cv-198-LM. The Town of Peterborough, NH initiated this lawsuit asserting a claim for funding-related damages in connection with an engineering project at the Town's Wastewater Treatment facility. The matter is resolved.
- Lexington Ins. Co. v. C.C. Construction, Inc., et al., MA, Civil No. 16-1992F. Lexington Insurance Company brought a subrogation lawsuit against C.C. Construction and Woodard & Curran, seeking recovery of $50,000 it alleged it paid to its insured, the Pineapple Inn, for damage from a sewer back-up. The matter is resolved.
- HK&S v. Dible et al., RI, 12-14-M. A general contractor initiated this lawsuit against Woodard & Curran's municipal client after it was not awarded a project by the Town. The Rhode Island Superior Court granted in full Woodard & Curran's Motion for Summary Judgment in this case.
- Feliciano et al. v. Cate Street Capital et al., and related action, WY, 13CV162-S. Woodard & Curran was one of four defendants in this lawsuit in connection with a Cate Street Capital project at their Red Desert Reclamation facility in Wyoming. The matter is resolved.
- Town of Swampscott v. Weston & Sampson CMR, Inc., et al., MA, 2012-01996-C. In a subrogation action, the Town's insurance company initiated this lawsuit against several defendants, including the contractor that installed the pipe, in connection with a pipe break that occurred at a pumping station. All parties agreed to dismiss Woodard & Curran from the case via a stipulation of dismissal with prejudice.

SECTION – I
NON-COLLUSION AFFIDAVIT

THIS FORM MUST BE COMPLETED, SIGNED AND RETURNED WITH PROPOSAL

I hereby affirm that: I am the Senior Principal (insert title) and the duly authorized representative of Woodard & Curran, Inc. (insert organization name) whose address is 210 South Florida Avenue, Suite 220, Lakeland, Florida 33801 and, that I possess the legal authority to make this affidavit on behalf of myself and the firm for which I am acting.

I affirm:

1. I am fully informed respecting he preparation and contents of the attached offer/proposal and of all pertinent circumstances respecting such offer/proposal;
2. Such offer/proposal is genuine and is not a collusive or sham offer/proposal;
3. Neither the said proposer nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has any way colluded, conspired, connived or agreed, directly or indirectly with any other proposer, firm or person to submit a collusive or sham offer/proposal in connection with the Contract for which attached offer/proposal has been submitted or to refrain from offering a proposal in connection with Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other proposer, firm or person to fix the price or prices in the attached offer/proposal or of any other proposer, or to fix any overhead, profit or cost element of the offer/proposal or the offer price of any proposer, or to secure though any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Clermont or any person interested in the proposed Contract;
4. The price or prices quoted in the attached offer/proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the proposer or any of its agents, representatives, owners, employees, or parties in interest, including this affiant. I do solemnly declare and affirm under penalties of perjury that the contents of this affidavit are true and correct.

Justin deMello Digitally signed by Justin deMello Date: 2020.09.15 07:59:00 -04'00'
Signature

Senior Principal
Title

Justin deMello, PE
Printed Name

September 15, 2020
Date

SECTION – J
SIGNATURE PAGE

By signing this section the respondent certifies that:

1. It satisfies all legal requirements (as an entity) to do business with the City.
2. The undersigned respondent acknowledges that award of a contract may be contingent upon a determination by the City and that the respondent has the capacity and capability to successfully perform the contract.
3. The proposer hereby certifies that it understands all requirements of this solicitation, and that the undersigned individual is duly authorized to execute this proposal document and any contract(s) and/or other transactions required by award of this solicitation.

Purchasing Agreements with Other Government Agencies

This section is optional and will not affect contract award. If the City of Clermont awarded your company, would your company sell under the same terms and conditions, for the same price, to other governmental agencies in the State of Florida? Each governmental agency desiring to accept to utilize this contract shall be responsible for its own purchases and shall be liable only for materials or services ordered and received by it. ☑ Yes ☐ No (Check one)

By signing below, the respondent agrees to all terms, conditions, and specifications as stated in this solicitation, and is acting in an authorized capacity to execute this response. The respondent also certifies that it can and will provide and make available, at a minimum, the items set forth in this solicitation.

Respondent Information and Signature	
Company Name (print):	Woodard & Curran, Inc.
Street Address:	210 South Florida Avenue, Suite 220, Lakeland, Florida 33801
Mailing Address (if different):	
Telephone:	863.354.4416
Fax:	207.774.6635
Email:	jdemello@woodardcurran.com
Payment Terms:	____ % ____ days, net 30
FEIN:	01 - 0363222
Professional. License No.:	CA7479
Signature:	Justin deMello Digitally signed by Justin deMello Date: 2020.09.15 08:00:44 -04'00'
Date:	September 15, 2020
Print Name:	Justin deMello, PE
Title:	Senior Principal
Does the respondent accept payment using the City's MASTERCARD?	☑ Yes ☐ No

WOODARD &CURRAN

COMMITMENT & INTEGRITY DRIVE RESULTS

woodardcurran.com

FREDDY L. SUAREZ
Purchasing Director
Purchasing Department

352-241-7350
fsuarez@clermontfl.org

AWARD RECOMMENDATION
NOVEMBER 23, 2020
RFQ 20-032 – ON-CALL PROFESSIONAL CIVIL ENGINEER SERVICES

The Evaluation Committee is recommending award to the following seven firms:

Atkins North America, Inc.

BESH Halff Associates, Inc.,

CPH, Inc.

Reiss Engineering, Inc.

Toole Design Group, LLC.

Woodard & Curran, Inc.

Wright-Pierce, Inc.

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CONTINUING SERVICES AGREEMENT NO. 2020-98 FOR ON-CALL PROFESSIONAL CIVIL ENGINEER SERVICES

THIS AGREEMENT is made and entered into as of this 8th day of December 2020, by and between the CITY OF CLERMONT, FLORIDA, a municipal corporation under the laws of the State of Florida whose address is: 685 W. Montrose Street, Clermont, Florida, (hereinafter referred to as "CITY") and WOODARD & CURRAN, INC., whose address is: 210 South Florida Avenue, (hereinafter referred to as "ENGINEER").

WHEREAS, the CITY is in need of qualified and licensed ENGINEER services related to various municipal projects;

WHEREAS, the CITY, in accordance with Section 287.055, Florida Statutes, solicited proposals for professional services as more fully described and set forth in RFQ 20-032 titled On-Call Professional Civil Engineer Services; and

WHEREAS, the ENGINEER submitted a proposal to provide said services and has represented to CITY that it is qualified and desires to perform said services in accordance with the terms and conditions contained herein, and all applicable law and professional standards;

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties covenant and agree as follows:

ARTICLE I – TERM

1. This Agreement is to become effective upon execution by both parties, and shall remain in effect for a three (3) year term, unless terminated as provided for herein. Additionally, the parties agree that the term may be extended upon mutual Agreement for periods of one (1) year, but such option to extend may only be utilized three (3) times unless authorized by the City Council for additional extensions.

2. The term of any task authorization/work order, as described in Section 2 hereof shall be as set forth in such task authorization/work order, and all of the terms and conditions of this Agreement shall survive until completion of all task authorizations/work orders.

ARTICLE II – DESCRIPTION OF SERVICES

1. It is expressly understood and acknowledged that nothing herein shall obligate or guarantee to ENGINEER any Agreement or task authorization and CITY expressly reserves the right to exercise its option to issue any such Agreements to any qualified firm or entity in accordance with all applicable laws, ordinances, policies and/or regulations.

2. The CITY shall make request of ENGINEER to provide professional engineering and other related consulting services on a task basis. The CITY will communicate with ENGINEER, verbally or in writing, a general description of the task to be performed. The ENGINEER

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will generate a detailed Scope of Work document, prepare a Schedule, add a not-to-exceed-budget to accomplish the task, and send the thus developed "Task Proposal" to the CITY. If a site visit by ENGINEER is needed to generate the scope document, ENGINEER shall request approval prior to visiting the site. The CITY will review the proposal, and if the description is mutually acceptable, the parties will enter into a written "task authorization or work order". The Scope of Services generally to be provided by the ENGINEER shall be as provided and contemplated by the CITY in that certain On-Call Professional Civil Engineer Services, RFQ 20-032, and ENGINEER'S response thereto, which are expressly incorporated herein and made a part hereof as if restated.

ENGINEER shall not be authorized to proceed until the CITY has issued a Notice to Proceed to the ENGINEER. Upon receipt of the signed Task Authorization and a Notice to Proceed from the CITY, the ENGINEER shall perform the services set forth in the task authorization/work order.

3. ENGINEER shall provide CITY'S designated project manager with monthly time sheets or labor cost statements for services rendered during the preceding month. Each time sheet shall state the names and classifications of all personnel who performed services during said month under the task authorization, and the number of hours worked by each.

ARTICLE III – CHANGES IN THE SCOPE OF WORK

1. CITY may make changes in the services at any time by giving written notice to ENGINEER. If such changes increase (additional services) or decrease or eliminate any amount of work, CITY and ENGINEER will negotiate any change in total cost or schedule of modifications. If the CITY and ENGINEER approve any change, the task authorization/work order will be modified to reflect the changes; and ENGINEER shall be compensated for said services in accordance with the terms of Article 5.0 herein. All change orders shall be authorized in writing by CITY'S and ENGINEER'S designated representatives.

2. All of CITY'S said task authorizations/work orders and amendments thereto shall be performed in strict accordance with the terms of this Agreement insofar as they are applicable.

ARTICLE IV – SCHEDULE

1. ENGINEER shall perform services in conformance with the mutually agreed upon schedule set forth in the negotiated task authorization. ENGINEER shall complete all of said services in a timely manner and will keep CITY fully informed of the status of work on a reasonable basis in relation to the scope of the project or at least monthly. Should ENGINEER fall behind the agreed upon schedule, it shall employ such resources so as to comply with the agreed upon schedule at no additional cost to the CITY.

2. No extension for completion of services shall be granted to ENGINEER without CITY'S

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prior written consent, except as provided in Sections 3.1 and 20.0 herein.

ARTICLE V – METHOD OF PAYMENT FOR SERVICE AND EXPENSES

1. DEFINITIONS:

(a) The "ENGINEER's Professional Services Fee Schedule" as set forth in Exhibit "A", attached hereto and incorporated herein, are used as a basis for payment for services pursuant to Paragraphs 2.0 and 3.0. These fee schedules shall include wages, salaries, taxes, insurance, overhead and profit. The hourly salary rates set forth in the Fee Schedule are firm for the initial term of the contract (3 years), but are subject to an equitable adjustment that is to be negotiated prior to the renewal of the Agreement. Any adjustments to the Fee Schedule must be mutually agreed to by the CITY and ENGINEER.

(b) The "ENGINEER's Reimbursable Expenses Schedule" as set forth in Exhibit "B", attached hereto and incorporated herein, as provided by the ENGINEER, is used as the basis for payment for actual costs of all reimbursable expenses incurred in connection with the services rendered.

(c) Reimbursable expenses are limited to: printing, travel (not ordinary to the project) and the purchase of specialized software or equipment specific to the task authorization, which are directly in connection with the project and been pre-approved by the City. Said reimbursable expenses shall be passed through at a cost factor of 1.0.

(d) The "Deliverables" are defined as plans, reports, findings, specifications, or anything else that is the end product or work performed by the ENGINEER or the CITY. ENGINEER shall, within such time constraints as may be set forth in the work order, submit to CITY the deliverables as identified in the work order; and ENGINEER shall, upon completion of all work, submit to the CITY all information developed in the course of the consulting services. ENGINEER shall, upon request by CITY and upon completion or termination of this Agreement, deliver to CITY all material furnished to ENGINEER, provided the CITY identifies those materials in writing.

2. PAYMENT/COMPENSATION – CITY agrees to pay or compensate the ENGINEER for the professional services performed on each task authorization/work order in accordance with one of the following methods, unless otherwise provided herein or in the task authorization/work order.

(a) Not to exceed cost based upon the "ENGINEER's Professional Services Fee Schedule."

(b) Lump sum cost based upon the "ENGINEER's Professional Services Fee Schedule."

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3. SERVICES-ADDITIONAL – CITY shall pay ENGINEER as follows:

   (a) Professional Associates, ENGINEERs and/or Subcontractors: For services and expenses of independent associates, ENGINEERs and/or subcontractors employed by ENGINEER, the amount invoiced to ENGINEER times a factor of 1.0 for invoices to the CITY.

   (b) Expert Witness: For any litigation, arbitration or other legal or administrative proceeding for any time spent in preparation for such litigation, for on the same basis as set forth in Article V.1.(a) and V.3.(a).

4. Times of Payments: At monthly intervals, ENGINEER shall submit statements for services, additional services rendered and for reimbursable expenses incurred. The statements will be based upon ENGINEER'S actual manpower expended and actual expenses incurred within the billing period.

   (a) As a condition precedent to receiving payment, ENGINEER shall have been authorized to proceed by CITY, shall not be in default of any of the terms and conditions of this Agreement and shall provide to CITY an invoice. The invoice shall be forwarded to CITY, no more frequently than once per month, and signed by an authorized representative of ENGINEER related to the applicable monthly installment payment. The invoice shall include a statement identifying the period for which it applies and the sub-tasks or portions thereof, completed by the specific task authorization/work order, and specifically set forth the percent of completion of each sub-task for which compensation is being requested.

   (b) All invoices submitted for compensation shall include a statement by ENGINEER that states as follows:

   "This statement sets forth only actual time spent by the firm's employees and does not contain any unit billing, multipliers, or other devices that permit payment for more than actual time spent."

   (c) CITY shall pay all valid, approved, and undisputed invoices within thirty (30) days of receipt from ENGINEER. In the event that CITY disputes any invoice submitted, it shall advise ENGINEER, in writing, and said invoice shall not be deemed due and payable under this Agreement. Neither the CITY'S review, approval or acceptance of, nor payment for, any services provided hereunder shall be construed to operate as a waiver of any rights under this Agreement and the ENGINEER shall be liable to CITY for any and all damages to CITY caused by the ENGINEER'S negligent or wrongful performance of any of the services furnished under this Agreement.

5. Other Provisions Concerning Payments:

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(a) In the event of termination by CITY under Article XIX during the performance of the services, payments due ENGINEER up to the point of termination, including payments for services rendered, and all costs incurred shall constitute total payment for such services.

(b) Records of ENGINEER's Salary Costs and Expenses pertinent to ENGINEER'S compensation under this Agreement will be kept in accordance with generally accepted accounting principles. These records will be made available to CITY for audit upon request by CITY. Copies will be made available to CITY on request prior to final payment for ENGINEER'S services.

(c) A separate invoice must be submitted for each individual task authorization. Invoices must show a breakdown of the number of hours worked by each person charging time to the task authorization, hourly salary cost and any reimbursable expenses.

ARTICLE VI – RIGHT TO INSPECTION

1. CITY or its agents shall at all times have the right to review or observe the services performed by ENGINEER.

2. No inspection, review, or observation shall relieve ENGINEER of its responsibility under this Agreement.

ARTICLE VII – PROGRESS MEETING

CITY'S designated Project Manager may hold periodic progress meetings on a monthly basis, or more frequently, if required, during the term of any task authorization entered into under this Agreement. ENGINEER'S Project Manager and all other appropriate personnel shall attend such meetings as designated by CITY'S Project Manager, and ENGINEER shall be compensated at the billing rates set forth in Article V.

ARTICLE VIII – SAFETY

1. ENGINEER agrees to comply with CITY'S published safety standards while on the property of CITY. A copy of these standards is provided in Exhibit "C", attached hereto and incorporated herein.

2. ENGINEER shall have full responsibility and assume all liability for the safety and supervision of its employees while performing services provided hereunder.

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ARTICLE IX – REASONABLE ACCCESS

During the term of this Agreement, CITY shall grant ENGINEER reasonable access to the CITY'S premises for purposes of fulfilling its obligations under this Agreement.

ARTICLE X – INSURANCE AND HOLD HARMLESS/INDEMNIFICATION

ENGINEER and/or any CITY approved subcontractors or sub ENGINEERs shall maintain in force during the term of this Agreement, at its own expense, insurance as set forth below and shall be bound by the terms of the Hold Harmless/Indemnification provisions expressed therein.

1. Worker's Compensation – as required by applicable state statute.

2. Commercial General Liability – $1,000,000 per occurrence for bodily injury, including death and property damage and $2,000,000 in the aggregate. The General Liability policy shall include the commercial form, contractual liability and independent contractor's coverage.

3. Automobile Liability – $1,000,000 combined single limit for bodily injury and property damage. The Automobile Liability policy shall include the business form, owned, hired and non-owned coverage.

4. Professional Liability (E&O) – $1,000,000 each claim and in the aggregate.

5. Property Coverage – Property coverage in limits sufficient to remedy the loss, and/or loss of use of, valuable papers and records, and any other property of the party utilized in connection with the City.

The General Liability and Automobile Liability shall each contain an endorsement naming the City as an additional insured as to any liability arising out of insured party's performance pursuant to this Agreement. The Worker's Compensation and Employer's Liability coverage shall contain an endorsement waiving subrogation as against the City.

6. Indemnification – ENGINEER shall indemnify and hold harmless the City and its employees from any liability, settlements, losses or costs (including reasonable attorney's fees and cost of defense) to the extent caused by the negligent act, error or omission of ENGINEER in the performance of services under this Agreement. Neither party shall be responsible or liable to the other for special, indirect, or consequential damages. The total aggregate liability of the ENGINEER to City or anyone claiming through City for any and all claims whatsoever arising out of this Agreement shall not exceed the total applicable insurance proceeds paid to Consultant by its insurers up to the amount of the specified insurance policy limits set forth in this Agreement, or $1,000,000 (one-million dollars) whichever is greater.

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ARTICLE XI – COMPLIANCE WITH LAWS AND REGULATIONS

ENGINEER shall comply with all requirements of federal, state and local laws, rules, regulations, standards, and/or ordinances applicable to the performance of this Agreement.

ARTICLE XII – REPRESENTATIONS

1. ENGINEER represents that the services provided hereunder shall conform to all requirements of this Agreement, RFQ 20-032 and ENGINEER'S response thereto; shall be consistent with recognized and sound professional engineer practices and procedures; and shall conform to the customary standards of care, skill, and diligence appropriate to the nature of the services rendered.

2. ENGINEER represents that the personnel furnishing such services shall be qualified and competent to perform the services assigned to them and that such guidance given by and the recommendations and performance of such personnel shall conform to the customary standards of care, skill, and diligence appropriate to the nature of the services rendered.

3. Subject to the provisions of this Section, should ENGINEER breach the warranties set forth herein, CITY shall have such remedies as may be provided at law or equity.

4. Without limiting the generality of the foregoing, if the ENGINEER completes its services under any task authorization entered into hereunder, and the ENGINEER'S services are non-complying, defective, or otherwise improperly performed and CITY notifies ENGINEER in writing within thirty (30) days of completion of the services that a defect, error, omission or noncompliance has been discovered in ENGINEER'S services, ENGINEER shall, at the option of CITY: a) correctly re-perform such non-complying, defective, or otherwise improperly performed services at no additional cost to CITY; b) refund the amount paid by CITY attributable to such non-complying, defective or otherwise improperly performed services; or c) if ENGINEER fails to take action under a) above, at ENGINEER'S sole expense, otherwise cure or have cured any such non-complying, defective, or otherwise improperly performed services.

5. The only representations made by ENGINEER are those expressly enumerated in this provision. Any other statements of fact or descriptions expressed in the Agreement or any attachments thereto, shall not be deemed to constitute a warranty of the work or any part thereof.

ARTICLE XIII – GUARANTEE AGAINST INFRINGEMENT

ENGINEER guarantees that all services provided under this Agreement shall be free from claims of patent, copyright, and trademark infringement. Notwithstanding any other provision of this Agreement, ENGINEER shall indemnify and hold harmless CITY, its officers, directors, employees, agents, assigns, and servants from and against any and all liability, including expenses, legal or otherwise, for actual infringement of any patent, copyright, or trademark resulting from

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the use of any goods, services, or other items provided under this Agreement. Notwithstanding the foregoing, ENGINEER may elect to provide non-infringing services.

ARTICLE XIV – DOCUMENTS

1. Upon CITY'S or its designated Project Manager's request, at any time during the term of this Agreement or upon completion or termination of this Agreement, ENGINEER shall provide CITY or its designated Project Manager with a copy of all documents and electronic files prepared by ENGINEER under this Agreement or any Task Authorization hereunder. CITY understands that re-use of any documents for any other purposes, shall be at the CITY'S own risk.

2. The parties acknowledge that the CITY is a Florida municipal corporation and subject to the Florida Public Records Law, therefore, to the extent applicable to it, ENGINEER agrees to comply with the terms thereof with regard to any and all documents related to the CITY.

3. Drawings, specifications, reports, program, manuals, calculations, supporting design documentation or other documents, including all documents on electronic media, provided by the ENGINEER or their sub-ENGINEERs, prepared under this Agreement shall be come property of the CITY. Conformed documents, record documents and final written documents shall be provided electronically in a form specified by the CITY. The CITY agrees to release ENGINEER from any liability that may result from the re-use of documents or modifications thereof, by the CITY of its representatives for any other purpose other than the original intent of this Agreement, without written authorization by the ENGINEER. ENGINEER will retain all common law, statutory, and other reserved rights, including the copyright thereto.

ARTICLE XV – ASSIGNMENT

1. ENGINEER shall not assign or subcontract this Agreement, any task authorization hereunder, or any rights or any monies due or to become due hereunder without the prior, written consent of CITY.

2. If, upon receiving written approval from CITY, any part of this Agreement is subcontracted by ENGINEER, ENGINEER shall be fully responsible to CITY for all acts and/or omissions performed by the subcontractor as if no subcontract had been made.

3. If CITY determines that any subcontractor is not performing in accordance with this Agreement, CITY shall so notify ENGINEER who shall take immediate steps to remedy the situation.

4. If any part of this Agreement is subcontracted by ENGINEER, prior to commencement of any work by the subcontractor, ENGINEER shall require the subcontractor to provide CITY and its affiliates with insurance coverage as set forth by the CITY'S Risk Management.

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ARTICLE XVI – INDEPENDENT ENGINEER

At all times during the term of this Agreement, ENGINEER shall be considered an independent ENGINEER.

ARTICLE XVII – CONFLICT OF INTEREST

ENGINEER shall not undertake any task on behalf of the CITY where ENGINEER has a conflict of interest arising out of a part or present professional relationship with another client. The ENGINEER shall notify the CITY in writing of any conflict of interest or potential conflict of interest should arise.

ARTICLE XVIII – DEFAULT

If during the term of this Agreement, ENGINEER shall be in default of any of the material provisions of this Agreement, CITY may suspend its performance hereunder until such delinquency or default has been corrected; provided, however that no suspension shall be effective unless and until CITY gives written notice of the default to ENGINEER with at least ten (10) days to cure such default. If ENGINEER fails to correct such delinquency or default within thirty (30) days of suspension by CITY, CITY may terminate this Agreement.

ARTICLE XIX – TERMINATION

Notwithstanding any other provision of this Agreement, CITY may, upon written notice to ENGINEER, terminate this Agreement if: a) without cause and for convenience upon thirty (30) days written notice to ENGINEER b) ENGINEER is adjudged to be bankrupt; c) ENGINEER makes a general assignment for the benefit of its creditors; d) ENGINEER fails to comply with any of the conditions of provisions of this Agreement; or e) ENGINEER is experiencing a labor dispute, which threatens to have a substantial, adverse impact upon performance of this Agreement, without prejudice to any other right or remedy CITY may have under this Agreement. In the event of such termination, CITY shall be liable only for the payment of all unpaid charges, determined in accordance with the provisions of this Agreement, for work, properly performed and accepted prior to the effective date of termination.

ARTICLE XX – FORCE MAJEURE

Any delay or failure of either party in the performance of its required obligations hereunder shall be excused if and to the extent caused by acts of God: fire; flood; windstorm; explosion; riot; war; sabotage; strikes; extraordinary breakdown of or damage to CITY'S affiliates' generating plants, their equipment, or facilities; court injunction or order; federal and/or state law or regulation; order by any regulatory agency; or cause or causes beyond the reasonable control of the party affected;

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provided that prompt notice of such delay is given by such party to the other and each of the parties hereunto shall be diligent in attempting to remove such cause or causes. If any circumstances of Force Majeure remain in effect for sixty (60) days, either party may terminate this Agreement.

ARTICLE XXI – GOVERNING LAW & VENUE

This Agreement is made and shall be interpreted, construed, governed, and enforced in accordance with the laws of the State of Florida. Venue shall be Lake County, Florida, or the United States District Court in and for the Middle District of Florida.

ARTICLE XXII – HEADINGS

Paragraph headings are for the convenience of the parties only and are not to be construed as part of this Agreement.

ARTICLE XXIII – SEVERABILITY

In the event any portion or part of this Agreement is deemed invalid, against public policy, void, or otherwise unenforceable by a court of law, the parties shall negotiate an equitable adjustment in the affected provision of this Agreement. The validity and enforceability of the remaining parts thereof shall otherwise be fully enforceable.

ARTICLE XXIV – WAIVER AND ELECTION OF REMEDIES

1. Waiver by either party of any terms, condition, or provision of this Agreement shall not be considered a waiver of that term, condition, or provision in the future.

2. No waiver, consent, or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by a duly authorized representative of each party hereto.

ARTICLE XXV – THIRD PARTY RIGHTS

Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than CITY and ENGINEER.

ARTICLE XXVI – PROHIBITION AGAINST CONTINGENT FEES

ENGINEER warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this Agreement, and that it has not paid or agreed to pay any person, company, corporation, individual, or firm, other

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than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement.

ARTICLE XXVII – ENTIRE AGREEMENT

Except as otherwise state, this Agreement, including the schedules, attachments, appendixes and exhibits attached hereto, constitutes the entire Agreement between CITY and ENGINEER with respect to the services specified and all previous representations relative thereto, either written or oral, are hereby annulled and superseded.

ARTICLE XXVIII – SOVEREIGN IMMUNITY

Nothing contained in the Agreement shall be construed as a waiver of the CITY'S rights to sovereign immunity under Section 768.28, ***Florida Statutes***, or other limitations imposed on the CITY'S potential liability under state or federal law.

ARTICLE XXIX – NOTICE

Any notices required to be given by the terms of this Agreement shall be delivered by hand or mailed, postage prepaid to:

ENGINEER:	Woodard & Curran, Inc. 210 South Florida Avenue, Suite 220 Lakeland, FL 33801 Attn: Justin de Mello, PE, Senior Principal
CITY:	City of Clermont Attn: Darren S. Gray, City Manager 685 W. Montrose Street Clermont, FL 34711

Either party may change the name of the person receiving notices and the address at which notices are received by so advising the other party in writing.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement on this 8th day of December, 2020.

CITY OF CLERMONT

DocuSigned by:
2BA7692F758C492...

Timothy Murry, Mayor

ATTEST:

DS

DocuSigned by:
Tracy Ackroyd Howe
3AD7F34905B344A...

Tracy Ackroyd Howe, City Clerk

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Woodard & Curran, Inc.

By: 

(Signature)

Print Name: Justin de Mello

Title: Senior Principal

Date: 12/14/2020

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EXHIBIT "A & B"

Municipal & Institutional Standard

2020 Rate Schedule

Consultant Personnel	
Labor Category	Hourly Rate
I. Support Services	
- Administrative	$73
- Drafter	$83
- Project Assistant	$97
- Procurement Specialist	$102
II. Professional Services	
- Designer	$91
- Technician	$94
- Inspector / Technician 2	$97
- GIS Analyst / Operations Specialist	$98
- Staff Engineer 1	$105
- Designer 2 / Geologist 1 / GIS Developer	$112
- Scientist 1	$113
- Staff Engineer 2 / Technical Service Specialist 1	$120
- Scientist 2 / Resident Engineer	$123
- Geologist 2	$125
- Designer 3	$126
- Geologist 3	$129
- Engineer 1 / GIS Analyst 2 / Scientist 3	$130
- Senior Designer / Technical Service Specialist 2	$136
- GIS Solutions Analyst / Planner	$137
- Engineer 2	$140
- Project Geologist / Project Scientist	$143
- GIS App Developer / Project Management Professional	$150
- Construction Manager / Engineer 3 / Project Geologist 2 / Project Technical Specialist 1	$154
- Project Engineer / GIS Manager	$164
- Project Scientist 2 / Project Technical Specialist 2	$170
- Senior Planner	$173
- Project Engineer 2	$177
- Senior Engineer / Senior Geologist / Senior Project Engineer / Service Manager	$179
- Project Manager / Technical Expert 1 / Technical Leader / Technical Manager 1	$182
- Principal Project Manager / Project Manager 2 / Technical Expert 2 / Technical Manager 2	$195
- Practice Leader / Senior Project Manager / Senior Technical Manager	$215
- Director of Practice / Licensed Site Professional	$220
- Chief Technologist / Principal	$225

This Rate Schedule is confidential and for customer internal use only.
W&C reserves the right to adjust billing rates annually.

Expense Category

Travel[1]	.575/mile
Expenses	At Cost Plus 10%

1. Mileage rate will change as the federal allowable rate is modified.

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EXHIBIT "C"

City of Clermont, Florida
Safety Program Policy

(Replaces Safety Policy dated November 24, 1998)

A. Purpose

The City of Clermont (City) is committed to ensuring that employees have safe and healthy conditions in which to work. This obligation is owed to each employee and citizen of Clermont, since there is a direct relationship between the personnel and monetary cost of accidents and the ability to provide reliable cost-effective services.

B. Scope

The provision set forth in this safety policy shall apply equally to all City employees, and for the purpose of this policy volunteers shall be considered employees.

C. Directive

Identification and correction of all safety hazards and issues must have immediate and decisive action. Effective implementation of a comprehensive safety program depends upon the commitment of all City employees to reduce occurrences of preventable accidents and injuries. Through education and the promotion of safe work habits, all employees will understand what is expected. Safety must be an ongoing and essential part of all employees' work day.

D. Guidelines

The City's Safety Program consists of several key elements:

1. Responsibilities of Management, Supervisors, and Employees – Safety responsibilities at every level of the City must be clearly defined in writing and relayed through training.

2. Written Practices and Training Programs – Specific written safety practices and training programs clearly define safety expectations that are necessary to prevent exposures, fatalities and serious injuries.

3. Safety Meetings – Safety meetings are held and provide an opportunity to discuss a variety of safety topics.

4. Safety Action Team (SAT) – The Safety Action Team's main function is to facilitate and improve the safety of all City Employees.

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5. Corrective Action/Disciplinary Policy – The Personnel Policy, Employee Disciplinary Procedure defines how safety rules will be fairly and consistently administered when not adhered to.

The City Manager shall establish procedures to implement this policy.

Approved and adopted by the Clermont City Council by resolution number 2013-29 on October 8, 2013.

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Safety Program Procedure

Effective March 15, 2019

(Replaces Safety Program Procedure dated 9/14/17)

A. Purpose

The purpose of this document is to provide an overall written description of the City of Clermont's (City) Safety Program.

B. Scope

The provision set forth in this safety procedure shall apply equally to all City employees, and for the purpose of this procedure volunteers shall be considered employees.

C. Employee Duties and Responsibilities

Employees must participate in, abide by, and be accountable for the City's safety program. There are many ways in which employees can be involved and remain informed.

1. Safety Action Team (SAT) – The SAT is comprised of a variety of talents of employees and representation from all the departments. The periodic forum allows for employee input on safety matters including the presentation of concerns and recommendations for improving overall employee safety, review of injuries/accidents, development of preventative corrective measures, and evaluation and promotion of safety training programs.

2. Correction/reporting of safety hazards – Employees are empowered to correct unsafe conditions within his/her power and/or report other safety concerns to a supervisor/manager immediately.

3. Reporting injuries/illnesses and accidents – The reporting of all injuries/illnesses and accidents to the supervisor, regardless whether medical attention is sought is required. Near miss injuries and accidents should also be reported.

4. Participation in safety training – Employees must receive the proper safety training required by his/her job assignment. Supervisors/managers are directly responsible for ensuring that employees receive the required training

5. Conducting safety meetings – Supervisors/managers are responsible for conducting safety meetings or "just in time" training topics, topics discussed or presented in SAT meetings, or topics pertinent to the respective work area. Employees are encouraged to volunteer to present safety topics (topics provided by the supervisor/manager) to fellow co-workers.

6. Conducting safety training for new/current employees – Supervisors/managers are required to conduct or coordinate the facilitation of safety training for all new and current employees prior to the commencement of their duties. Employees may be asked to conduct specific safety training pertinent to the respective work area by the supervisor/manager.

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D. Management/Supervisory Duties and Responsibilities

1. Policy – The City has established a Safety Program Policy, which has been approved by the City Council.

2. Involvement – Management involvement consists of management showing a hands-on involvement in the City's Safety Program. This is accomplished by numerous means including, support of the SAT, conducting/ensuring investigations be conducted into injuries/illnesses and property damage, and discussing safety topics at meetings. Observing management involvement encourages employees to become more personally involved in safety and fosters a caring, trusting relationship between employees and management.

3. Role and Responsibility – Managers/supervisors are directly responsible for the safety of employees and must empower employees to take action on safety issues. Empowerment allows employees to take ownership of safety issues and follow issues through to completion. The role and responsibility of managers/supervisors includes the following:

    a. Being well versed in the content and application of the City's Safety Policy, Procedure and departmental specific safety requirements and guidelines.

    b. Monitoring employee workplace safety compliance including the use of personal protective equipment (PPE) and other issued safety equipment.

    c. Encouraging employees to report unsafe work conditions and practices, and empowering employees to have the authority to identify and correct safety issues when immediately necessary.

    d. Encouraging employees to be involved in the City's safety program(s). Allotting time for employees to work on safety issues and volunteer as members on the SAT.

    e. Lead by example while performing as a safety mentor to employees.

    f. Providing specific safety training to employees, including area specific.

    g. Attending supervisor safety training courses when offered.

4. Corrective Actions/Discipline – Department Directors will ensure enforcement of safety requirements and respond to non-compliance with progressive or non-progressive corrective action/discipline dependent upon the severity of the infraction and other pertinent factors.

E. Work Area Safety and Maintenance

1. All employees are responsible for the safety of his/her work area. Employees must practice safe work habits, as work-related accidents can be avoided. Employees should report all safety matters (e.g., trip hazards, broken equipment, etc.) to his/her supervisor immediately so that the issues can be corrected.

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2. Managers/supervisors continually observe workplace conditions and correct unsafe conditions and work practices.

3. The Public Works Department conducts maintenance and repair of buildings, building systems, facility sites, and vehicles and equipment. Preventative maintenance services are conducted at intervals specified in maintenance procedures, manuals, and as determined by Public Works. Repairs are completed on an "as needed" basis. Facilities are surveyed to determine and schedule predictable maintenance and repairs. Public Works schedules, tracks and records all maintenance and repairs, including re-occurring preventative maintenance items.

F. Injury/Accident Reporting and Supervisor Investigation

All injuries/illnesses and accidents involving City property, vehicles, or equipment must be reported to a supervisor immediately, no later than the same workday. This includes non-employee injuries occurring on City property. Medical assistance should be summoned without delay in all instances, should immediate care be necessary.

The employee and supervisor injury/illness and/or accident form(s) shall be completed. All reported injuries/illnesses and accidents must be investigated by a supervisor as soon as possible, within twenty-four (24) hours of the supervisor being informed of the injury/accident.

Supervisors shall make a thorough report concerning all details involved. The information gained from investigation reports can be utilized to identify and correct unsafe conditions and work practices.

The Department Director should be made aware of all injuries/illnesses and accidents, and he/she should ensure all required paperwork is completed. The Police Department will investigate accidents where damage to private vehicles/property involves City employees, vehicles, and/or equipment.

Employees must not admit or offer a settlement in situations involving non-employees and/or non-City property. Employees will only discuss the circumstances surrounding an incident with a supervisor, manager, department director, and/or investigating law enforcement officer.

All investigation reports are reviewed by the SAT. The SAT discusses the preventability of injuries/illnesses and accidents, whether appropriate action has been taken to prevent future incidences, and makes recommendations of additional action if necessary.

G. Trend Analysis

Part of the process of minimizing injuries/illnesses and accidents involves reviewing causes determined by reports and investigations to identify trends. If a trend is detected, a plan of action will be determined and acted upon. The plan of action may consist of specific training, personal protective equipment, and/or other safety initiatives.

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H. Safety Training

Safety training is the responsibility of the City, management, and employees.

1. All employees are required to participate in general safety training delivered to all employees through New Employee Orientation, Area Specific Orientation and departmental specific safety topics.

2. Supervisors, managers, and directors are required to attend the programs above, and supervisors may also be required to attend specialty training programs depending on the requirements for the respective work areas.

3. Managers/supervisors will conduct or coordinate the facilitation of other specialty training programs which may be required of employees depending on the specific work area, e.g., Hazard Communication, Hearing Conservation, Bloodborne Pathogen, Respiratory Protection, Lockout/Tagout, Confined Space Entry, Ladder Safety, Proper Lifting, Respiratory Protection, and Powered Industrial Vehicle Operation.

I. Contractor Safety

The City's vendor selection process for the purchase of commercial goods and services typically includes documentation that specifies minimum contractor qualifications, contractor selection criteria, Insurance requirements and specific information about the contract work to be performed. Contractors are required to meet the Federal, State, Local and/or any other safety-related requirements stated in this documentation and provide confirming information to the contract administrator, Purchasing Manager, or Human Resources upon request. Contractors are responsible for training employees in all safety program requirements.

J. Record Keeping

Records will be maintained by the responsible department in accordance with the Florida Public Records Law, for example Finance/Purchasing will maintain vendor selection records, Public Works will maintain facility maintenance records, Human Resources will maintain New Employee Orientation and Area Specific Orientation training records, and each department shall maintain employee specific work area training records (e.g. Powered Industrial Vehicle training documents for each employee within the department).

K. Authority

The authority to issue or revise this Procedure is reserved to the City Manager. The City Manager may authorize exceptions to this procedure when deemed appropriate.

Darren Gray, City Manager

3/15/2019
Date

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Appendix A

Common Safety Rules/Guidelines

The following safety rules or guidelines are generic in nature and apply to all City employees. Department specific safety rules and/or guidelines may be developed by the departments as necessary.

Lifting Safety

- Most City employees will be required to lift or move materials or equipment as part of his/her assigned work.
- Material storage will be arranged to permit safe handling, heavier materials will be stored at or near floor level. Other materials should not be stored above eye level to reduce the need for a ladder or reaching above the employee's head.
- Employees should only lift an object or material that is well within the employee's physical capability. Employees should solicit the help of another employee or use a material handling device.
- Lifting technique is important in preventing an injury.
    - Position feet close to the object being lifted
    - Center body over the object
    - Bend knees and grasp the object firmly
    - Lift straight up and smoothly, and let legs (not back) do the work
    - Do not twist or turn body once the lift has been made
    - Object should be carried steady and close to the body
    - Sudden twisting or turning could result in a back injury

Electrical Safety

- Employees working with or around electrical equipment must practice safe work habits.
- Malfunctioning electrical appliances and power tools shall be tagged and removed from use until repairs are made. If appliance/tool cannot be repaired, the unit may be replaced.
- Extension cords are intended for temporary use, and shall not substitute permanent wiring.
- Electrical outlets and circuits must not be overloaded. The use of cube taps or multi-plug adapters is not permitted.
- Grounding plugs will be used as intended, and must not be altered by the removal of the grounding prong. Grounding adapters will not be used in place of grounding receptacles.

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- Electrical cords that are defective, frayed or otherwise considered unsafe must be replaced. Employees must not consider makeshift repairs with splices and electrical tape as sufficient enough to allow the continued use of a damaged electrical cord.
- Ground Fault Circuit Interrupters will be used for all portable tools. Emergency generators will be installed and grounded per manufacturer's guidelines.
- Most electrical work will be performed by a licensed industrial electrician or appropriately trained employee. Employees involved in performing minor electrical repair work will ensure that the circuit involved is de-energized and that the switch or circuit breaker controlling the circuit is tagged or locked out while the repair is conducted.

Fire Safety and Prevention

- The absolute best defense against any fire is prevention. Employees must be aware of the many potential causes for fire in the workplace and must report any possible problem areas to a supervisor for corrective action.
- Good housekeeping is important in any fire prevention effort. Allowing combustible debris and clutter to accumulate will increase the opportunity for a fire to occur and spread rapidly. Employees must keep their workplace free of debris and other unnecessary combustible storage.
- The storage of flammable and combustible liquids shall be in a manner approved by the Fire Department. Approved safety cans, flammable liquid cabinets and specially designed storage rooms are generally acceptable for the storage of flammable and combustible liquids. Supervisors will ensure that the storage and handling of flammable and combustible liquids within his/her work area complies with fire regulations.
- Smoking by employees or the general public is prohibited in many locations by fire and/or health regulations. Employees shall not smoke in any City buildings, vehicles, or in any areas where "No Smoking" signs are posted. Supervisors will monitor employees for compliance in "No Smoking" areas.
- Fire extinguishers will be provided where needed in City buildings and vehicles. Employees will become familiar with the locations of fire extinguishers in the work area. Training will be provided on the proper use of fire extinguishers by the supervisor or the Fire Department.
- In case of a fire, the employee must immediately dial 911 and report the fire to the Fire Department. After reporting the fire, the employee must ensure that all affected persons are evacuated to a safe area. Doors should be closed where available to isolate the fire area from the remainder of the structure.
- If caught in smoke, individuals should crawl and stay low. Cleaner, cooler air will be nearer to the floor, and heat, smoke and noxious gases will rise toward the ceiling.
- Employees should always keep an unobstructed exit path when attempting to extinguish a fire. It is important to remember that fire extinguishers are only intended to be used on small fires in their beginning stages. In the event of a large fire, or if a

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small fire is not able to be extinguished, the area should be evacuated and allow the fire department to handle the situation.

First Aid

First aid kits are available in City buildings and vehicles. Employees should familiarize themselves with the location and content of first aid kits in the work area.
Well stocked First-Aid kit(s) for employee use will be maintained.

- The basic inventory of each first aid kit is reviewed and renewed as needed at periodic SAT meetings. Records of reviews and replenishments shall be maintained by the respective departments.

- These kits will be located so as to allow easy and quick access. First-aid kits and required contents are to be maintained in a serviceable condition.

- All items which must be kept sterile must be individually wrapped and sealed. Items such as scissors, tweezers, tubes of ointments with caps, or rolls of adhesive tape, need not be individually wrapped, sealed, or disposed of after a single use or application.

Employees are not required to perform first aid as part of their job duties. Any employee can voluntarily assist another employee with open wounds, after taking personal protective precautions.

Aids/HIV and Hepatitis B are the primary infectious diseases of concern in blood. All blood should be assumed to be infectious. These diseases can be deadly. In the event of a bleeding injury where first aid is needed, use gloves if possible to prevent exposure to blood or other potentially infectious materials. The injured person can often help by applying pressure to the wound. Gloves are available in the first aid kits. Employees exposed to blood while giving first aid should wash immediately with soap and water and report the incident to a supervisor.

Immediate professional emergency medical assistance shall be summoned by dialing 911 for any employee or citizen suspected to be seriously injured or ill.

DocuSign Envelope ID: 99BE25D1-989B-45BB-AC9E-9B2296828DF6

Appendix B

Safety Inspections

Workplace Inspections

- Supervisors will monitor workplace safety conditions daily, and ensure that work areas are maintained free of clutter, improper storage and other trip/fall hazards. Flammable and combustible liquids are to be stored in safety containers, in flammable liquid cabinets or as otherwise approved by the Fire Department. Supervisors will monitor employee use of all provided safety equipment to ensure that employees are wearing or using safety equipment as directed.

- A supervisor, or designated employee, from each department will conduct a formal monthly safety inspection of all work areas within his/her department. Each inspection will be documented on a form provided by the department. Upon completion, the safety inspection form will be forwarded to the Manager and Department Director for review. Areas needing corrective action taken will be addressed. Management will ensure that corrective actions have been taken and may make additional recommendations as necessary.

Equipment Inspections

- Departments which utilize fixed/portable power equipment will establish an inspection program for such equipment. The inspection program and frequency of inspections will be based upon manufacturer's recommendations and recognized good work practices.

- Inspection forms will be developed and utilized by each department for conducting equipment safety inspections.

- Employees shall not operate equipment when an inspection deems the equipment to be unsafe for operation. A supervisor will be notified and the unsafe equipment will be tagged and placed out of service pending equipment repair.

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Appendix C

Training

Virtually every task performed by an employee requires some level of training. Supervisors shall adequately emphasize safety when instructing an employee on the performance of a certain task.

Job Orientation

- Each department must provide new employees with comprehensive job orientation training that addresses job safety hazards and provides new employees with adequate training to work safely around such hazards.

- Supervisors will explain/demonstrate how a job is to be conducted step-by-step. The supervisor will have the employee demonstrate his/her ability to correctly and safely perform the job while the supervisor evaluates the employee. The supervisor will make corrections as needed.*

Department/Area Specific Safety Training

- Area Specific Safety Orientation must be given to employees entering a work area during the first week of hire or new assignment. The supervisor may designate a qualified instructor from the area to provide this training. The Area Specific Safety Orientation form shall be completed and forwarded to Human Resources. The form will be filed in the employee's personnel file

- Each department/area may require additional specific safety training, and employees will comply with the requirements of the department as if it were part of this procedure.*

Additional Training

- Supervisors will ensure that all employees receive adequate training whenever new processes or equipment are introduced into the workplace.

- Additional comprehensive training may be required when an employee is promoted or reclassified to a different position or when a job description is revised to include additional responsibilities or hazards.*

- Safety training must be ongoing, and supervisors must monitor employees for compliance after training or retraining.

** Documentation of employee training will be completed and kept on file at the department.*

DocuSign Envelope ID: 99BE25D1-989B-45BB-AC9E-9B2296828DF6

Appendix D

Area/Function Specific Programs

Hazard Communication Standard

- An employee whose job requires that he/she work with regulated materials or work where such materials are handled or stored in accordance if the requirements of OSHA (Occupational Safety and Health Administration) Hazard Communication Standard. Most City employees fall under the requirements of the Standard to some degree.

- An employee must receive the initial training after beginning work and must receive refresher training on an annual basis.*

Bloodborne Pathogens

- The Bloodborne Pathogens Standard applies to any employee who could reasonably be expected to be exposed to blood or body fluids in the course of his/her normal work. This typically applies to emergency service workers such as firefighters and police officers. Wastewater collection and treatment system workers (and lifeguards, when applicable) have been identified as being at a low to moderate risk.

- Employees covered by the Bloodbome Pathogens Standard must receive initial training upon beginning work and must receive refresher training on an annual basis.*

- The City offers a Hepatitis B (HBV) vaccination series at no charge to any employee identified as being at risk under this Standard.

Permit Required Confined Space Entry

- A confined space is "a space that is large enough for an employee to enter, has restricted means of entry or exit and is not designed for continuous employee occupancy." This generally applies to utilities and drainage system workers.

- Initial Confined Space Entry training is-required for all affected employees. Refresher training is required on an annual basis.*

** Documentation of employee training will be completed and kept on file at the department.*

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Appendix E

Personal Protective Equipment (PPE)

The type and use of PPE will vary by department, and each department will develop guidelines concerning employee use of PPE.

Eye Protection

- Eye protection is provided for all employees performing a task or working in an area where the possibility of an eye injury exists. The employee must wear the provided eye protection.

- Supervisors will instruct employees as to when eye and face protection is necessary. Employees will also receive instructions concerning selecting the proper protective eyewear, wearing it properly, limits of protection and proper care and maintenance of protective eyewear.*

- Protective eyewear included safety glasses, goggles and face shields. Some tasks will require that the employee wears safety glasses/goggles in conjunction with a full-face safety shield. Supervisors will ensure that employees have selected the proper type of eye protection for the task being performed.

- Prescription safety eyewear will be provided to employees who must wear eye protection but have the need for corrective lenses. Department Directors have the necessary information to obtain the proper prescription safety eyewear for an employee. All Safety Eyewear needs to meet ANSI (American National Standards Institute) Standards.

Hearing Protection

- Directors/managers will evaluate work areas and equipment use to determine noise exposure levels and the need for employee hearing protection. Hearing protection is required for employees exposed to a noise level in excess of 85 decibels (dB) averaged over an eight-hour period. Higher noise levels over a shorter time period would require employee hearing protection as well.

- The type of hearing protection provided is usually in the form of earplugs or earmuffs. Supervisors will assist employees in choosing the proper type of hearing protection. Supervisors will instruct employees concerning the use and limitations of the hearing protection provided.*

- Employees will utilize hearing protection at all times when exposed to noise levels in excess of the permissible guidelines.

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Respiratory Protection

- Employees who are exposed to respiratory hazards will be provided with proper respiratory protection equipment. Protective equipment may consist of filtration masks, hazard-specific canister masks, supplied air masks, or self- contained breathing apparatus (SCBA).

- Employees wearing respiratory protection other than simple filter masks must be fit tested on an annual basis. Employees who wear self-contained breathing apparatus must undergo and pass an annual medical examination including a pulmonary function test.

- Supervisors will instruct employees in the selection, use and maintenance of respiratory protection equipment. Supervisors will ensure that employees understand the hazards of the various environments requiring the use of respiratory protection equipment and the limitations of the equipment itself.*

- Employees will utilize protective equipment at all times when exposed to respiratory hazards.

Foot Protection

- Employees who are exposed to falling/rolling objects or puncture hazards are required to wear safety footwear or equivalent protection.

- All safety shoes worn by employees shall be classed according to ANSI Z.41.1991-1999 Standard as prescribed by OSHA (Regulation 29, CFR Part 1910-136), or shall be determined by the City to be equally effective.

- Each Department Director shall be responsible for the identification of positions which require safety footwear.

- Purchase of Footwear shall comply with the City's Safety Footwear Purchase Program.

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Appendix F

Fleet Safety Program

It is the policy of the City to provide and maintain a safe working environment to protect its employees and citizens from injury and property loss. The City considers the use of motor vehicles as part of the working environment to assist employees in completing their assigned job duties, and is committed to promoting a heightened level of safety awareness and responsible driving behavior in its employees. The City's combined commitment and efforts will be directed toward the implementation and execution of an effective Fleet Safety Program.

The Fleet Safety Program consists of seven components:

- Motor Vehicle Record Checks;
- Safe Driving Practices;
- Training;
- Preventive Maintenance;
- Accident Investigation;
- Personal Use of City Vehicles; and
- Non-City Vehicles Used for City Purposes.

The program includes all motor vehicles, equipment licensed for on the road operation, and large equipment such as mowers, tractors, and backhoes. This procedure applies to all candidates for employment as well as all current employees and volunteers who are operating a vehicle/equipment for City purposes. Nothing herein shall authorize volunteers to operate City vehicles.

A. Motor Vehicle Record Checks

In accordance with the City's Employment Policies Manual, all operators of City vehicles and equipment are required to have a valid State of Florida operator's or commercial license, as applicable, and to keep Supervisors informed of any change of status in their license.

The City's Background Check Procedure outlines the City's initial efforts on applicant selection through a variety of resources, beginning with the job application. Applicant selection is made upon completion of a formal interview, background check, reference verification, review of the individual's motor vehicle record (MVR), a negative drug screen result if applicable, as well as a skills demonstration for certain vehicles.

Once a candidate has been identified for hire and made a conditional offer of employment, Human Resources will conduct a background check including MVR in accordance with the City's Background Check Procedure. MVRs are also periodically reviewed thereafter as determined by the City and at a minimum of at least once per year for all employees who are authorized to drive a City vehicle or their own vehicle while conducting City business. The MVR is reviewed for adverse conditions as defined in the City's Background Check Procedure.

DocuSign Envelope ID: 99BE25D1-989B-45BB-AC9E-9B2296828DF6

If an employee's annual MVR reveals an adverse condition as defined by the Background Check procedure, the employee will not be allowed to drive a vehicle while conducting City business. If these restrictions create a hardship for the City, the employee will be transferred or demoted to a position which does not require driving and for which the employee is otherwise qualified. If no position is available, the employee will be terminated. In addition, Human Resources will identify employees considered "high risk drivers" based upon established criteria and monitor the employees driving record every six (6) months for a period of two years from the date of the most recent violation.

Employees who operate City vehicles and equipment are required to immediately notify their supervisor of any change in status in their license, convictions involving motor vehicle operation, and/or use of substances that would interfere with safely driving a motor vehicle.

B. Safe Driving Practices

In accordance with the City's Employment Policies Manual, the City attempts to provide each employee with adequate tools, equipment and vehicles for the job being performed and expects each employee to observe courteous and safe operation of vehicles and equipment in compliance with all municipal, county and state vehicular regulations. Employees shall wear a seatbelt at all times and drive with courtesy and respect for other motorists.

Employees are expected to treat City vehicles and equipment with respect and care, and adhere to basic vehicle and equipment operation principles:

- Always wear seatbelt.
- Drive defensively and always anticipate what other drivers on the road might do and plan accordingly.
- Never move through traffic aggressively.
- Adhere to speed limits, traffic signs, and follow all traffic signals.
- Always lock the vehicle/equipment, even if it remains in sight.
- Avoid driving in dangerous conditions, including inclement weather and when drowsy.
- Any employee backing a large truck or other sight-restricted vehicle/equipment in which the vehicle/equipment is not equipped with functioning rearview cameras shall enlist the assistance of another employee in backing the vehicle/equipment. The assisting employee will act as a spotter to aid the driver in safely backing the vehicle/equipment.

DocuSign Envelope ID: 99BE25D1-989B-45BB-AC9E-9B2296828DF6

- Employees shall not operate a vehicle while wearing a headset, headphone, or other listening device, other than a hearing aid or instrument for the improvement of defective hearing. The only exception to using a headset is when the employee is communicating as described below, and the sound is provided through one ear and allows surrounding sounds to be heard with the other ear.

- Employees are prohibited from using any telephonic or communication device without a blue tooth or other hands-free technology, unless specifically approved by the City Manager or designee while operating any vehicle, apparatus, machinery, or equipment for City purposes. In addition, employees are responsible for ensuring that use of any electronic device does not cause distraction (i.e., texting, fiddling with the device, taking eyes off the road, and participating in conversations that may interfere with the driver's ability to drive safely).

- Whenever possible, the employee should park the vehicle in a safe location to use a telephonic or communication device.

C. Training

Training programs will consist of classroom and/or on-the-road scenarios. All incoming employees are required to receive training on the City's Fleet Safety Program, as well as any applicable department specific training on City vehicles/equipment.

Employees will also be provided with periodic training, such as safety posters, emails, and toolbox talks to reinforce best practices.

Remedial training will be provided to employees who have had at least one infraction or were involved in a preventable incident (as defined by the National Safety Council). Such training will focus on, but will not be limited to, defensive driving techniques and behavior modifications. The City will use ride-along training combined with statistical data focusing on accident types and frequency to identify areas of improvement. Employees who have had at least one preventable accident or moving violation in a calendar year period will be required to participate in a collision avoidance course conducted by the Clermont Police Department.

Refresher training will be provided for all employees at least every other year. Supervisors will receive refresher training on Accident Investigation and Preventability at least every other year or as needed.

D. Preventive Maintenance

In accordance with the City's Employment Policies Manual, employees who are assigned equipment or vehicles by their departments are responsible for them and their proper use and maintenance. Additionally, the City will provide the necessary resources to ensure all vehicles are operating properly.

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- Public Works will perform and track all routine fleet maintenance for non-Commercial Motor Vehicles (CMV) every six (6) months or every 3000 miles, whichever comes first. Critical components that must always be controlled, maintained and promptly repaired are: brakes, tires, suspension, steering, lights, mirrors, windows and windshield wipers. Public Works performs and tracks all routine maintenance on CMVs every 600 hours.

- Pre-trip Inspections - Each department will establish and maintain regular pre-trip inspections. The frequency and type of vehicle/equipment inspection may vary, however a basic pre-trip safety inspection should be conducted daily or prior to driving it. For non CMV, areas to be inspected include tires, lighting systems, brakes, windshield wipers, glass/mirrors, seat belts, fire extinguisher(s), backup alarm, warning devices and interior/exterior cleanliness. Minor problems will be corrected during the inspection if feasible. Problems beyond the inspecting employee's ability to correct should be referred to Public Works/Fleet Maintenance as soon as possible.

- Employees shall not operate a City vehicle/equipment when an inspection deems that the vehicle/equipment may be unsafe for operation. A supervisor will be notified and the unsafe vehicle/equipment will be placed out of service until corrective action can be taken.

- Refueling – Vehicles/equipment should be refueled when the meter reads ¼ full and turned off while refueling.

- Employees should never smoke, light matches or use lighters while refueling, nor enter the vehicle/equipment during refueling, as this presents a flash fire hazard.

- Employees should not overfill or top off the vehicle's/equipment's fuel tank.

- Upon return of the vehicle to Public Works/Fleet Maintenance, the vehicle shall be in the same condition as when provided to the employee, reasonable wear and tear excepted.

E. Incident Investigation

All incidents involving a City vehicle, equipment, or personal vehicle being operated for City purposes must be reported **immediately** to law enforcement and the employee's immediate supervisor.

Law enforcement will not be required to be notified for incidents when all of the following criteria are met:

- there is damage on City property, and
- the incident involves ONLY City property, and
- the estimated damage is less than $500, and
- no personal injury has resulted.

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Examples of damage that is less than $500 include but are not limited to the following:

- Small dent, 3 inches or less in diameter
- Broken tail light
- Broken headlight
- Minor surface scratch
- Damage to one wheel/rim and/or tire
- Damage to one window
- Damage to windshield
- Any combination of more than one of these items is very likely to be above $500 and law enforcement should be contacted.

Supervisors who are unsure/unclear if damage is over $500 should report the incident to law enforcement.

Supervisors and employees will be trained in post-incident procedures to secure the details of the incident and document the damage. Providing detailed facts of the incident will help the City's insurance carrier deter fraudulent third-party insurance schemes.

All vehicles/equipment will be supplied with an incident reporting kit to include the Supervisor and Employee Investigation Forms, insurance card, a pen, drug-testing matrix, and a post-incident checklist. A pre-trip inspection should also be included in every vehicle/equipment, if applicable.

Supervisors are responsible for determining whether an employee should receive disciplinary action in accordance with the City's Employment Policies Manual. Supervisors are also responsible for making a determination as to whether or not the incident was preventable based on the National Safety Council's definitions and record this determination in the Supervisor Investigation Form.

Human Resources along with the Safety Action Team will review all incident reporting forms and ensure compliance with the City's Fleet Safety Program.

The City has implemented a separate Drug Free Workplace Procedure that requires pre-employment and periodic random drug and alcohol testing for employees in mandatory testing positions. Additionally, the Drug Free Workplace Procedure has set forth criteria requiring employees be tested for the presence of drugs and alcohol under certain circumstances. Any positive results are grounds for termination.

F. Personal Use of City Vehicles/Equipment

In accordance with the City's Employment Policies Manual, the use of City property, material, supplies, tools, equipment or vehicles for personal or private business use is prohibited, unless approved by employment agreement or by the City Manager and incidental and as a minor deviation to the assigned use of the vehicle. Violations may result in termination and possible prosecution.

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Persons who are not City employees are not allowed in City vehicles/equipment as passengers, unless the travel involves City business purposes or is authorized by the City Manager.

G. Non-City Vehicles/Equipment Used for City Purposes

Employees are strongly encouraged to utilize City vehicles/equipment to conduct official City business. Employees who choose to drive non-City vehicles or operate non-City equipment to conduct official City business must obtain Department Director approval to do so, are subject to all the provisions and standards of this program, must maintain state required automobile insurance limits, ensure that their personal auto insurance carrier provides coverage for use of their personal vehicle for business purposes, and maintain their vehicle in a safe operating condition.

** Documentation of employee training will be completed and kept on file at the department in accordance with the State of Florida General Records Schedule.*

RFQ 20-032 Evaluation Summary for On-Call Professional Civil Engineer Services
Evaluation Closing Date: October 16, 2020 at 5:00 P.M.

Booth, Ern, Straughan & Hiott, Inc.	Total Average				Evaluator 1			Evaluator 2			Evaluator 3			Evaluator 4			Evaluator 5		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	9 of 10	9%	9 of 10 pts	6 of 10	6%	6 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	9 of 10	9%	9 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	8.8 of 10	13.20%	13.2 of 15 pts	9 of 10	13.50%	13.5 of 15 pts	9 of 10	13.50%	13.5 of 15 pts	8 of 10	12%	12 of 15 pts	10 of 10	15%	15 of 15 pts	8 of 10	12%	12 of 15 pts
TAB D - Company Project Experience	25%	9.4 of 10	23.50%	23.5 of 25 pts	10 of 10	25%	25 of 25 pts	10 of 10	25%	25 of 25 pts	8 of 10	20%	20 of 25 pts	10 of 10	25%	25 of 25 pts	9 of 10	22.50%	22.5 of 25 pts
TAB E - Personnel Experience	20%	9.4 of 10	18.80%	18.8 of 20 pts	10 of 10	20%	20 of 20 pts	10 of 10	20%	20 of 20 pts	9 of 10	18%	18 of 20 pts	10 of 10	20%	20 of 20 pts	8 of 10	16%	16 of 20 pts
TAB F - Experience of Sub-Consultants	10%	8.8 of 10	8.80%	8.8 of 10 pts	8 of 10	8%	8 of 10 pts	9 of 10	9%	9 of 10 pts	9 of 10	9%	9 of 10 pts	10 of 10	10%	10 of 10 pts	8 of 10	8%	8 of 10 pts
TAB G - Business Location	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB H - Quality of Submittal	10%	8.4 of 10	8.40%	8.4 of 10 pts	6 of 10	6%	6 of 10 pts	9 of 10	9%	9 of 10 pts	10 of 10	10%	10 of 10 pts	8 of 10	8%	8 of 10 pts	9 of 10	9%	9 of 10 pts
		63.8 of 70	**92%**	**91.7 of 100 pts**	59 of 70	89%	88.5 of 100 pts	67 of 70	97%	96.5 of 100 pts	64 of 70	89%	89 of 100 pts	68 of 70	98%	98 of 100 pts	61 of 70	87%	86.5 of 100 pts

Atkins North America, Inc.	Total Average				Evaluator 1			Evaluator 2			Evaluator 3			Evaluator 4			Evaluator 5		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	8.6 of 10	8.60%	8.6 of 10 pts	5 of 10	5%	5 of 10 pts	10 of 10	10%	10 of 10 pts	9 of 10	9%	9 of 10 pts	10 of 10	10%	10 of 10 pts	9 of 10	9%	9 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	8.6 of 10	12.90%	12.9 of 15 pts	8 of 10	12%	12 of 15 pts	9 of 10	13.50%	13.5 of 15 pts	8 of 10	12%	12 of 15 pts	10 of 10	15%	15 of 15 pts	8 of 10	12%	12 of 15 pts
TAB D - Company Project Experience	25%	9.4 of 10	23.50%	23.5 of 25 pts	10 of 10	25%	25 of 25 pts	10 of 10	25%	25 of 25 pts	9 of 10	22.50%	22.5 of 25 pts	10 of 10	25%	25 of 25 pts	8 of 10	20%	20 of 25 pts
TAB E - Personnel Experience	20%	9 of 10	18%	18 of 20 pts	8 of 10	16%	16 of 20 pts	9 of 10	18%	18 of 20 pts	9 of 10	18%	18 of 20 pts	10 of 10	20%	20 of 20 pts	9 of 10	18%	18 of 20 pts
TAB F - Experience of Sub-Consultants	10%	8.6 of 10	8.60%	8.6 of 10 pts	8 of 10	8%	8 of 10 pts	8 of 10	8%	8 of 10 pts	9 of 10	9%	9 of 10 pts	10 of 10	10%	10 of 10 pts	8 of 10	8%	8 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	8.8 of 10	8.80%	8.8 of 10 pts	5 of 10	5%	5 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	9 of 10	9%	9 of 10 pts
		60 of 70	**87%**	**87.4 of 100 pts**	51 of 70	78%	78 of 100 pts	63 of 70	92%	91.5 of 100 pts	61 of 70	88%	87.5 of 100 pts	67 of 70	97%	97 of 100 pts	58 of 70	83%	83 of 100 pts

CPH, Inc.	Total Average				Evaluator 1			Evaluator 2			Evaluator 3			Evaluator 4			Evaluator 5		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	8.02 of 10	8.02%	8.02 of 10 pts	6 of 10	6%	6 of 10 pts	9.1 of 10	9.10%	9.1 of 10 pts	9 of 10	9%	9 of 10 pts	8 of 10	8%	8 of 10 pts	8 of 10	8%	8 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	8.6 of 10	12.90%	12.9 of 15 pts	8 of 10	12%	12 of 15 pts	9 of 10	13.50%	13.5 of 15 pts	8 of 10	12%	12 of 15 pts	10 of 10	15%	15 of 15 pts	8 of 10	12%	12 of 15 pts
TAB D - Company Project Experience	25%	9.2 of 10	23%	23 of 25 pts	10 of 10	25%	25 of 25 pts	10 of 10	25%	25 of 25 pts	8 of 10	20%	20 of 25 pts	10 of 10	25%	25 of 25 pts	8 of 10	20%	20 of 25 pts
TAB E - Personnel Experience	20%	8.8 of 10	17.60%	17.6 of 20 pts	7 of 10	14%	14 of 20 pts	10 of 10	20%	20 of 20 pts	9 of 10	18%	18 of 20 pts	10 of 10	20%	20 of 20 pts	8 of 10	16%	16 of 20 pts
TAB F - Experience of Sub-Consultants	10%	9 of 10	9%	9 of 10 pts	8 of 10	8%	8 of 10 pts	9 of 10	9%	9 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	8 of 10	8%	8 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	9.2 of 10	9.20%	9.2 of 10 pts	8 of 10	8%	8 of 10 pts	9 of 10	9%	9 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	9 of 10	9%	9 of 10 pts
		59.82 of 70	**87%**	**86.72 of 100 pts**	54 of 70	80%	80 of 100 pts	63.1 of 70	93%	92.6 of 100 pts	61 of 70	86%	86 of 100 pts	65 of 70	95%	95 of 100 pts	56 of 70	80%	80 of 100 pts

Reiss Engineering, Inc.	Total Average				Evaluator 1			Evaluator 2			Evaluator 3			Evaluator 4			Evaluator 5		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	8.2 of 10	8.20%	8.2 of 10 pts	6 of 10	6%	6 of 10 pts	7 of 10	7.00%	7 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	8 of 10	8%	8 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	8.4 of 10	12.60%	12.6 of 15 pts	8 of 10	12%	12 of 15 pts	7 of 10	10.50%	10.5 of 15 pts	9 of 10	14%	13.5 of 15 pts	10 of 10	15%	15 of 15 pts	8 of 10	12%	12 of 15 pts
TAB D - Company Project Experience	25%	8.8 of 10	22%	22 of 25 pts	10 of 10	25%	25 of 25 pts	8 of 10	20%	20 of 25 pts	8 of 10	20%	20 of 25 pts	10 of 10	25%	25 of 25 pts	8 of 10	20%	20 of 25 pts
TAB E - Personnel Experience	20%	9.2 of 10	18.40%	18.4 of 20 pts	10 of 10	20%	20 of 20 pts	9 of 10	18%	18 of 20 pts	9 of 10	18%	18 of 20 pts	10 of 10	20%	20 of 20 pts	8 of 10	16%	16 of 20 pts
TAB F - Experience of Sub-Consultants	10%	8.4 of 10	8%	8.4 of 10 pts	8 of 10	8%	8 of 10 pts	7 of 10	7%	7 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	7 of 10	7%	7 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	8.6 of 10	8.60%	8.6 of 10 pts	5 of 10	5%	5 of 10 pts	9 of 10	9%	9 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	9 of 10	9%	9 of 10 pts
		58.6 of 70	**85%**	**85.2 of 100 pts**	54 of 70	83%	83 of 100 pts	54 of 70	79%	78.5 of 100 pts	63 of 70	89%	88.5 of 100 pts	67 of 70	97%	97 of 100 pts	55 of 70	79%	79 of 100 pts

Woodard & Curran, Inc.	Total Average				Evaluator 1			Evaluator 2			Evaluator 3			Evaluator 4			Evaluator 5		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	8 of 10	8.00%	8 of 10 pts	5 of 10	5%	5 of 10 pts	8 of 10	8.00%	8 of 10 pts	9 of 10	9%	9 of 10 pts	10 of 10	10%	10 of 10 pts	8 of 10	8%	8 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	8.4 of 10	12.60%	12.6 of 15 pts	8 of 10	12%	12 of 15 pts	8 of 10	12.00%	12 of 15 pts	8 of 10	12%	12 of 15 pts	10 of 10	15%	15 of 15 pts	8 of 10	12%	12 of 15 pts
TAB D - Company Project Experience	25%	8.8 of 10	22%	22 of 25 pts	9 of 10	23%	22.5 of 25 pts	8 of 10	20%	20 of 25 pts	8 of 10	20%	20 of 25 pts	10 of 10	25%	25 of 25 pts	9 of 10	23%	22.5 of 25 pts
TAB E - Personnel Experience	20%	8.8 of 10	17.60%	17.6 of 20 pts	8 of 10	16%	16 of 20 pts	9 of 10	18%	18 of 20 pts	9 of 10	18%	18 of 20 pts	10 of 10	20%	20 of 20 pts	8 of 10	16%	16 of 20 pts

TAB F - Experience of Sub-Consultants	10%	5.8 of 10	6%	5.8 of 10 pts	5 of 10	5%	5 of 10 pts	7 of 10	7%	7 of 10 pts	9 of 10	9%	9 of 10 pts	0 of 10	0%	0 of 10 pts	8 of 10	8%	8 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	8.2 of 10	8.20%	8.2 of 10 pts	5 of 10	5%	5 of 10 pts	8 of 10	8%	8 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	8 of 10	8%	8 of 10 pts
		55 of 70	**81%**	**81.2 of 100 pts**	47 of 70	73%	72.5 of 100 pts	55 of 70	80%	80 of 100 pts	60 of 70	85%	85 of 100 pts	57 of 70	87%	87 of 100 pts	56 of 70	82%	81.5 of 100 pts

Toole Design Group, LLC	**Total Average**				**Evaluator 1**			**Evaluator 2**			**Evaluator 3**			**Evaluator 4**			**Evaluator 5**		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	8.2 of 10	8.20%	8.2 of 10 pts	6 of 10	6%	6 of 10 pts	8 of 10	8.00%	8 of 10 pts	9 of 10	9%	9 of 10 pts	10 of 10	10%	10 of 10 pts	8 of 10	8%	8 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	8.6 of 10	12.90%	12.9 of 15 pts	8 of 10	12%	12 of 15 pts	9 of 10	13.50%	13.5 of 15 pts	8 of 10	12%	12 of 15 pts	10 of 10	15%	15 of 15 pts	8 of 10	12%	12 of 15 pts
TAB D - Company Project Experience	25%	8.6 of 10	22%	21.5 of 25 pts	10 of 10	25%	25 of 25 pts	8 of 10	20%	20 of 25 pts	9 of 10	23%	22.5 of 25 pts	8 of 10	20%	20 of 25 pts	8 of 10	20%	20 of 25 pts
TAB E - Personnel Experience	20%	8.4 of 10	16.80%	16.8 of 20 pts	9 of 10	18%	18 of 20 pts	8 of 10	16%	16 of 20 pts	9 of 10	18%	18 of 20 pts	8 of 10	16%	16 of 20 pts	8 of 10	16%	16 of 20 pts
TAB F - Experience of Sub-Consultants	10%	6.2 of 10	6%	6.2 of 10 pts	0 of 10	0%	0 of 10 pts	7 of 10	7%	7 of 10 pts	9 of 10	9%	9 of 10 pts	8 of 10	8%	8 of 10 pts	7 of 10	7%	7 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	8.4 of 10	8.40%	8.4 of 10 pts	6 of 10	6%	6 of 10 pts	8 of 10	8%	8 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	8 of 10	8%	8 of 10 pts
		55.4 of 70	**81%**	**81 of 100 pts**	46 of 70	74%	74 of 100 pts	55 of 70	80%	79.5 of 100 pts	61 of 70	88%	87.5 of 100 pts	61 of 70	86%	86 of 100 pts	54 of 70	78%	78 of 100 pts

Wright-Pierce	**Total Average**				**Evaluator 1**			**Evaluator 2**			**Evaluator 3**			**Evaluator 4**			**Evaluator 5**		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	8.2 of 10	8.20%	8.2 of 10 pts	4 of 10	4%	4 of 10 pts	9 of 10	9.00%	9 of 10 pts	10 of 10	10%	10 of 10 pts	10 of 10	10%	10 of 10 pts	8 of 10	8%	8 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	8.6 of 10	12.90%	12.9 of 15 pts	7 of 10	11%	10.5 of 15 pts	9 of 10	13.50%	13.5 of 15 pts	9 of 10	14%	13.5 of 15 pts	10 of 10	15%	15 of 15 pts	8 of 10	12%	12 of 15 pts
TAB D - Company Project Experience	25%	8.4 of 10	21%	21 of 25 pts	8 of 10	20%	20 of 25 pts	8 of 10	20%	20 of 25 pts	8 of 10	20%	20 of 25 pts	10 of 10	25%	25 of 25 pts	8 of 10	20%	20 of 25 pts
TAB E - Personnel Experience	20%	8 of 10	16.00%	16 of 20 pts	7 of 10	14%	14 of 20 pts	7 of 10	14%	14 of 20 pts	9 of 10	18%	18 of 20 pts	10 of 10	20%	20 of 20 pts	7 of 10	14%	14 of 20 pts
TAB F - Experience of Sub-Consultants	10%	7.6 of 10	8%	7.6 of 10 pts	5 of 10	5%	5 of 10 pts	7 of 10	7%	7 of 10 pts	9 of 10	9%	9 of 10 pts	10 of 10	10%	10 of 10 pts	7 of 10	7%	7 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	7.6 of 10	7.60%	7.6 of 10 pts	5 of 10	5%	5 of 10 pts	8 of 10	8%	8 of 10 pts	10 of 10	10%	10 of 10 pts	7 of 10	7%	7 of 10 pts	8 of 10	8%	8 of 10 pts
		55.4 of 70	**80%**	**80.3 of 100 pts**	43 of 70	66%	65.5 of 100 pts	55 of 70	79%	78.5 of 100 pts	62 of 70	88%	87.5 of 100 pts	64 of 70	94%	94 of 100 pts	53 of 70	76%	76 of 100 pts

Woolpert, Inc.	**Total Average**				**Evaluator 1**			**Evaluator 2**			**Evaluator 3**			**Evaluator 4**			**Evaluator 5**		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	7.2 of 10	7.20%	7.2 of 10 pts	6 of 10	6%	6 of 10 pts	7 of 10	7.00%	7 of 10 pts	6 of 10	6%	6 of 10 pts	10 of 10	10%	10 of 10 pts	7 of 10	7%	7 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	7.6 of 10	11.40%	11.4 of 15 pts	8 of 10	12%	12 of 15 pts	7 of 10	10.50%	10.5 of 15 pts	5 of 10	8%	7.5 of 15 pts	10 of 10	15%	15 of 15 pts	8 of 10	12%	12 of 15 pts
TAB D - Company Project Experience	25%	7.6 of 10	19%	19 of 25 pts	8 of 10	20%	20 of 25 pts	6 of 10	15%	15 of 25 pts	6 of 10	15%	15 of 25 pts	10 of 10	25%	25 of 25 pts	8 of 10	20%	20 of 25 pts
TAB E - Personnel Experience	20%	7.8 of 10	15.60%	15.6 of 20 pts	8 of 10	16%	16 of 20 pts	8 of 10	16%	16 of 20 pts	6 of 10	12%	12 of 20 pts	10 of 10	20%	20 of 20 pts	7 of 10	14%	14 of 20 pts
TAB F - Experience of Sub-Consultants	10%	7.4 of 10	7%	7.4 of 10 pts	5 of 10	5%	5 of 10 pts	8 of 10	8%	8 of 10 pts	6 of 10	6%	6 of 10 pts	10 of 10	10%	10 of 10 pts	8 of 10	8%	8 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	7.6 of 10	7.60%	7.6 of 10 pts	6 of 10	6%	6 of 10 pts	8 of 10	8%	8 of 10 pts	7 of 10	7%	7 of 10 pts	10 of 10	10%	10 of 10 pts	7 of 10	7%	7 of 10 pts
		52.2 of 70	**75%**	**75.2 of 100 pts**	48 of 70	72%	72 of 100 pts	51 of 70	72%	71.5 of 100 pts	43 of 70	61%	60.5 of 100 pts	67 of 70	97%	97 of 100 pts	52 of 70	75%	75 of 100 pts

OM Engineering Services, Inc.	**Total Average**				**Evaluator 1**			**Evaluator 2**			**Evaluator 3**			**Evaluator 4**			**Evaluator 5**		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	6.6 of 10	6.60%	6.6 of 10 pts	6 of 10	6%	6 of 10 pts	5 of 10	5.00%	5 of 10 pts	7 of 10	7%	7 of 10 pts	10 of 10	10%	10 of 10 pts	5 of 10	5%	5 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	6.8 of 10	10.20%	10.2 of 15 pts	6 of 10	9%	9 of 15 pts	8 of 10	12.00%	12 of 15 pts	6 of 10	9%	9 of 15 pts	6 of 10	9%	9 of 15 pts	8 of 10	12%	12 of 15 pts
TAB D - Company Project Experience	25%	7 of 10	18%	17.5 of 25 pts	9 of 10	23%	22.5 of 25 pts	5 of 10	13%	12.5 of 25 pts	7 of 10	18%	17.5 of 25 pts	10 of 10	25%	25 of 25 pts	4 of 10	10%	10 of 25 pts
TAB E - Personnel Experience	20%	6.6 of 10	13.20%	13.2 of 20 pts	7 of 10	14%	14 of 20 pts	6 of 10	12%	12 of 20 pts	6 of 10	12%	12 of 20 pts	8 of 10	16%	16 of 20 pts	6 of 10	12%	12 of 20 pts
TAB F - Experience of Sub-Consultants	10%	7 of 10	7%	7 of 10 pts	7 of 10	7%	7 of 10 pts	6 of 10	6%	6 of 10 pts	6 of 10	6%	6 of 10 pts	10 of 10	10%	10 of 10 pts	6 of 10	6%	6 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	7.2 of 10	7.20%	7.2 of 10 pts	6 of 10	6%	6 of 10 pts	7 of 10	7%	7 of 10 pts	7 of 10	7%	7 of 10 pts	10 of 10	10%	10 of 10 pts	6 of 10	6%	6 of 10 pts
		48.2 of 70	**69%**	**68.7 of 100 pts**	48 of 70	72%	71.5 of 100 pts	44 of 70	62%	61.5 of 100 pts	46 of 70	66%	65.5 of 100 pts	61 of 70	87%	87 of 100 pts	42 of 70	58%	58 of 100 pts

GAI Consultants, Inc.	**Total Average**				**Evaluator 1**			**Evaluator 2**			**Evaluator 3**			**Evaluator 4**			**Evaluator 5**		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	5.6 of 10	5.60%	5.6 of 10 pts	4 of 10	4%	4 of 10 pts	7 of 10	7.00%	7 of 10 pts	6 of 10	6%	6 of 10 pts	8 of 10	8%	8 of 10 pts	3 of 10	3%	3 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts

TAB C - Company Background	15%	6.8 of 10	10.20%	10.2 of 15 pts	7 of 10	11%	10.5 of 15 pts	6 of 10	9.00%	9 of 15 pts	5 of 10	8%	7.5 of 15 pts	10 of 10	15%	15 of 15 pts	6 of 10	9%	9 of 15 pts
TAB D - Company Project Experience	25%	6.4 of 10	16%	16 of 25 pts	6 of 10	15%	15 of 25 pts	7 of 10	18%	17.5 of 25 pts	6 of 10	15%	15 of 25 pts	10 of 10	25%	25 of 25 pts	3 of 10	8%	7.5 of 25 pts
TAB E - Personnel Experience	20%	7 of 10	14.00%	14 of 20 pts	7 of 10	14%	14 of 20 pts	7 of 10	14%	14 of 20 pts	5 of 10	10%	10 of 20 pts	10 of 10	20%	20 of 20 pts	6 of 10	12%	12 of 20 pts
TAB F - Experience of Sub-Consultants	10%	7.6 of 10	8%	7.6 of 10 pts	8 of 10	8%	8 of 10 pts	7 of 10	7%	7 of 10 pts	7 of 10	7%	7 of 10 pts	10 of 10	10%	10 of 10 pts	6 of 10	6%	6 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	6.6 of 10	6.60%	6.6 of 10 pts	5 of 10	5%	5 of 10 pts	8 of 10	8%	8 of 10 pts	6 of 10	6%	6 of 10 pts	8 of 10	8%	8 of 10 pts	6 of 10	6%	6 of 10 pts
		47 of 70	**67%**	**67 of 100 pts**	44 of 70	64%	63.5 of 100 pts	49 of 70	70%	69.5 of 100 pts	42 of 70	59%	58.5 of 100 pts	63 of 70	93%	93 of 100 pts	37 of 70	51%	50.5 of 100 pts

Harris Civil Engineers	**Total Average**				**Evaluator 1**			**Evaluator 2**			**Evaluator 3**			**Evaluator 4**			**Evaluator 5**		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	5.2 of 10	5.20%	5.2 of 10 pts	4 of 10	4%	4 of 10 pts	4 of 10	4.00%	4 of 10 pts	6 of 10	6%	6 of 10 pts	8 of 10	8%	8 of 10 pts	4 of 10	4%	4 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	6.8 of 10	10.20%	10.2 of 15 pts	8 of 10	12%	12 of 15 pts	5 of 10	7.50%	7.5 of 15 pts	5 of 10	8%	7.5 of 15 pts	10 of 10	15%	15 of 15 pts	6 of 10	9%	9 of 15 pts
TAB D - Company Project Experience	25%	6 of 10	15%	15 of 25 pts	7 of 10	18%	17.5 of 25 pts	4 of 10	10%	10 of 25 pts	5 of 10	13%	12.5 of 25 pts	10 of 10	25%	25 of 25 pts	4 of 10	10%	10 of 25 pts
TAB E - Personnel Experience	20%	7.2 of 10	14.40%	14.4 of 20 pts	9 of 10	18%	18 of 20 pts	5 of 10	10%	10 of 20 pts	6 of 10	12%	12 of 20 pts	10 of 10	20%	20 of 20 pts	6 of 10	12%	12 of 20 pts
TAB F - Experience of Sub-Consultants	10%	7 of 10	7%	7 of 10 pts	7 of 10	7%	7 of 10 pts	6 of 10	6%	6 of 10 pts	6 of 10	6%	6 of 10 pts	10 of 10	10%	10 of 10 pts	6 of 10	6%	6 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	6.6 of 10	6.60%	6.6 of 10 pts	5 of 10	5%	5 of 10 pts	5 of 10	5%	5 of 10 pts	6 of 10	6%	6 of 10 pts	10 of 10	10%	10 of 10 pts	7 of 10	7%	7 of 10 pts
		45.8 of 70	**65%**	**65.4 of 100 pts**	47 of 70	71%	70.5 of 100 pts	36 of 70	50%	49.5 of 100 pts	41 of 70	57%	57 of 100 pts	65 of 70	95%	95 of 100 pts	40 of 70	55%	55 of 100 pts

Heery Design a SLAM Collaborative Studio	**Total Average**				**Evaluator 1**			**Evaluator 2**			**Evaluator 3**			**Evaluator 4**			**Evaluator 5**		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	5.6 of 10	5.60%	5.6 of 10 pts	5 of 10	5%	5 of 10 pts	4 of 10	4.00%	4 of 10 pts	5 of 10	5%	5 of 10 pts	10 of 10	10%	10 of 10 pts	4 of 10	4%	4 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	7.2 of 10	10.80%	10.8 of 15 pts	8 of 10	12%	12 of 15 pts	5 of 10	7.50%	7.5 of 15 pts	6 of 10	9%	9 of 15 pts	10 of 10	15%	15 of 15 pts	7 of 10	11%	10.5 of 15 pts
TAB D - Company Project Experience	25%	6 of 10	15%	15 of 25 pts	9 of 10	23%	22.5 of 25 pts	4 of 10	10%	10 of 25 pts	5 of 10	13%	12.5 of 25 pts	10 of 10	25%	25 of 25 pts	2 of 10	5%	5 of 25 pts
TAB E - Personnel Experience	20%	6.8 of 10	13.60%	13.6 of 20 pts	8 of 10	16%	16 of 20 pts	5 of 10	10%	10 of 20 pts	6 of 10	12%	12 of 20 pts	10 of 10	20%	20 of 20 pts	5 of 10	10%	10 of 20 pts
TAB F - Experience of Sub-Consultants	10%	6 of 10	6%	6 of 10 pts	5 of 10	5%	5 of 10 pts	5 of 10	5%	5 of 10 pts	5 of 10	5%	5 of 10 pts	10 of 10	10%	10 of 10 pts	5 of 10	5%	5 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	5.8 of 10	5.80%	5.8 of 10 pts	4 of 10	4%	4 of 10 pts	5 of 10	5%	5 of 10 pts	6 of 10	6%	6 of 10 pts	9 of 10	9%	9 of 10 pts	5 of 10	5%	5 of 10 pts
		44.4 of 70	**64%**	**63.8 of 100 pts**	46 of 70	72%	71.5 of 100 pts	35 of 70	49%	48.5 of 100 pts	40 of 70	57%	56.5 of 100 pts	66 of 70	96%	96 of 100 pts	35 of 70	47%	46.5 of 100 pts

Patel, Greene and Associates, LLC	**Total Average**				**Evaluator 1**			**Evaluator 2**			**Evaluator 3**			**Evaluator 4**			**Evaluator 5**		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	6.4 of 10	6.40%	6.4 of 10 pts	5 of 10	5%	5 of 10 pts	7 of 10	7.00%	7 of 10 pts	5 of 10	5%	5 of 10 pts	8 of 10	8%	8 of 10 pts	7 of 10	7%	7 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	6.2 of 10	9.30%	9.3 of 15 pts	7 of 10	11%	10.5 of 15 pts	6 of 10	9.00%	9 of 15 pts	5 of 10	8%	7.5 of 15 pts	6 of 10	9%	9 of 15 pts	7 of 10	11%	10.5 of 15 pts
TAB D - Company Project Experience	25%	5.6 of 10	14%	14 of 25 pts	7 of 10	18%	17.5 of 25 pts	4 of 10	10%	10 of 25 pts	6 of 10	15%	15 of 25 pts	8 of 10	20%	20 of 25 pts	3 of 10	8%	7.5 of 25 pts
TAB E - Personnel Experience	20%	6.2 of 10	12.40%	12.4 of 20 pts	7 of 10	14%	14 of 20 pts	5 of 10	10%	10 of 20 pts	5 of 10	10%	10 of 20 pts	8 of 10	16%	16 of 20 pts	6 of 10	12%	12 of 20 pts
TAB F - Experience of Sub-Consultants	10%	6.6 of 10	7%	6.6 of 10 pts	8 of 10	8%	8 of 10 pts	5 of 10	5%	5 of 10 pts	5 of 10	5%	5 of 10 pts	10 of 10	10%	10 of 10 pts	5 of 10	5%	5 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	6.4 of 10	6.40%	6.4 of 10 pts	5 of 10	5%	5 of 10 pts	5 of 10	5%	5 of 10 pts	6 of 10	6%	6 of 10 pts	10 of 10	10%	10 of 10 pts	6 of 10	6%	6 of 10 pts
		44.4 of 70	**62%**	**62.1 of 100 pts**	46 of 70	67%	67 of 100 pts	39 of 70	53%	53 of 100 pts	39 of 70	56%	55.5 of 100 pts	57 of 70	80%	80 of 100 pts	41 of 70	55%	55 of 100 pts

Absolute Civil Engineering Solutions	**Total Average**				**Evaluator 1**			**Evaluator 2**			**Evaluator 3**			**Evaluator 4**			**Evaluator 5**		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	5.8 of 10	5.80%	5.8 of 10 pts	4 of 10	4%	4 of 10 pts	7 of 10	7.00%	7 of 10 pts	6 of 10	6%	6 of 10 pts	8 of 10	8%	8 of 10 pts	4 of 10	4%	4 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	5.4 of 10	8.10%	8.1 of 15 pts	5 of 10	8%	7.5 of 15 pts	6 of 10	9.00%	9 of 15 pts	5 of 10	8%	7.5 of 15 pts	6 of 10	9%	9 of 15 pts	5 of 10	8%	7.5 of 15 pts
TAB D - Company Project Experience	25%	5.8 of 10	15%	14.5 of 25 pts	4 of 10	10%	10 of 25 pts	6 of 10	15%	15 of 25 pts	5 of 10	13%	12.5 of 25 pts	10 of 10	25%	25 of 25 pts	4 of 10	10%	10 of 25 pts
TAB E - Personnel Experience	20%	6.2 of 10	12.40%	12.4 of 20 pts	5 of 10	10%	10 of 20 pts	8 of 10	16%	16 of 20 pts	6 of 10	12%	12 of 20 pts	7 of 10	14%	14 of 20 pts	5 of 10	10%	10 of 20 pts
TAB F - Experience of Sub-Consultants	10%	6 of 10	6%	6 of 10 pts	5 of 10	5%	5 of 10 pts	6 of 10	6%	6 of 10 pts	6 of 10	6%	6 of 10 pts	8 of 10	8%	8 of 10 pts	5 of 10	5%	5 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	5.6 of 10	5.60%	5.6 of 10 pts	4 of 10	4%	4 of 10 pts	7 of 10	7%	7 of 10 pts	6 of 10	6%	6 of 10 pts	6 of 10	6%	6 of 10 pts	5 of 10	5%	5 of 10 pts
		41.8 of 70	**59%**	**59.4 of 100 pts**	34 of 70	48%	47.5 of 100 pts	47 of 70	67%	67 of 100 pts	41 of 70	57%	57 of 100 pts	52 of 70	77%	77 of 100 pts	35 of 70	49%	48.5 of 100 pts

Arminius Consultants	**Total Average**				**Evaluator 1**			**Evaluator 2**			**Evaluator 3**			**Evaluator 4**			**Evaluator 5**		

Criteria	Weight	Score	Percent	Points	Score	Percent	Points	Score	Percent	Points	Score	Percent	Points	Score	Percent	Points	Score	Percent	Points
TAB A - Introduction Letter	10%	5.8 of 10	5.80%	5.8 of 10 pts	4 of 10	4%	4 of 10 pts	6 of 10	6.00%	6 of 10 pts	7 of 10	7%	7 of 10 pts	8 of 10	8%	8 of 10 pts	4 of 10	4%	4 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	5 of 10	7.50%	7.5 of 15 pts	5 of 10	8%	7.5 of 15 pts	4 of 10	6.00%	6 of 15 pts	6 of 10	9%	9 of 15 pts	6 of 10	9%	9 of 15 pts	4 of 10	6%	6 of 15 pts
TAB D - Company Project Experience	25%	5.4 of 10	14%	13.5 of 25 pts	5 of 10	13%	12.5 of 25 pts	4 of 10	10%	10 of 25 pts	7 of 10	18%	17.5 of 25 pts	8 of 10	20%	20 of 25 pts	3 of 10	8%	7.5 of 25 pts
TAB E - Personnel Experience	20%	5.6 of 10	11.20%	11.2 of 20 pts	5 of 10	10%	10 of 20 pts	5 of 10	10%	10 of 20 pts	6 of 10	12%	12 of 20 pts	7 of 10	14%	14 of 20 pts	5 of 10	10%	10 of 20 pts
TAB F - Experience of Sub-Consultants	10%	5.6 of 10	6%	5.6 of 10 pts	4 of 10	4%	4 of 10 pts	5 of 10	5%	5 of 10 pts	5 of 10	5%	5 of 10 pts	10 of 10	10%	10 of 10 pts	4 of 10	4%	4 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	5.8 of 10	5.80%	5.8 of 10 pts	4 of 10	4%	4 of 10 pts	7 of 10	7%	7 of 10 pts	6 of 10	6%	6 of 10 pts	6 of 10	6%	6 of 10 pts	6 of 10	6%	6 of 10 pts
		40.2 of 70	**56%**	**56.4 of 100 pts**	34 of 70	49%	49 of 100 pts	38 of 70	51%	51 of 100 pts	44 of 70	64%	63.5 of 100 pts	52 of 70	74%	74 of 100 pts	33 of 70	45%	44.5 of 100 pts

Enercon Services Kennesaw	**Total Average**				**Evaluator 1**			**Evaluator 2**			**Evaluator 3**			**Evaluator 4**			**Evaluator 5**		
Criteria	**Weight**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**	**Score**	**Percent**	**Points**
TAB A - Introduction Letter	10%	4.6 of 10	4.60%	4.6 of 10 pts	4 of 10	4%	4 of 10 pts	4 of 10	4.00%	4 of 10 pts	5 of 10	5%	5 of 10 pts	7 of 10	7%	7 of 10 pts	3 of 10	3%	3 of 10 pts
TAB B - License and Insurance	5%	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts	5 of 5	5%	5 of 5 pts
TAB C - Company Background	15%	6.6 of 10	9.90%	9.9 of 15 pts	8 of 10	12%	12 of 15 pts	5 of 10	7.50%	7.5 of 15 pts	5 of 10	8%	7.5 of 15 pts	10 of 10	15%	15 of 15 pts	5 of 10	8%	7.5 of 15 pts
TAB D - Company Project Experience	25%	5.4 of 10	14%	13.5 of 25 pts	6 of 10	15%	15 of 25 pts	4 of 10	10%	10 of 25 pts	6 of 10	15%	15 of 25 pts	8 of 10	20%	20 of 25 pts	3 of 10	8%	7.5 of 25 pts
TAB E - Personnel Experience	20%	6.2 of 10	12.40%	12.4 of 20 pts	8 of 10	16%	16 of 20 pts	5 of 10	10%	10 of 20 pts	5 of 10	10%	10 of 20 pts	8 of 10	16%	16 of 20 pts	5 of 10	10%	10 of 20 pts
TAB F - Experience of Sub-Consultants	10%	3.8 of 10	4%	3.8 of 10 pts	0 of 10	0%	0 of 10 pts	0 of 10	0%	0 of 10 pts	5 of 10	5%	5 of 10 pts	8 of 10	8%	8 of 10 pts	6 of 10	6%	6 of 10 pts
TAB G - Business Location	5%	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts	2 of 5	2%	2 of 5 pts
TAB H - Quality of Submittal	10%	5 of 10	5.00%	5 of 10 pts	4 of 10	4%	4 of 10 pts	4 of 10	4%	4 of 10 pts	7 of 10	7%	7 of 10 pts	6 of 10	6%	6 of 10 pts	4 of 10	4%	4 of 10 pts
		38.6 of 70	**56%**	**56.2 of 100 pts**	37 of 70	58%	58 of 100 pts	29 of 70	43%	42.5 of 100 pts	40 of 70	57%	56.5 of 100 pts	54 of 70	79%	79 of 100 pts	33 of 70	45%	45 of 100 pts

Evaluation Committee Members:

Stoney Brunson, Public Services Director
James Mauworm, Public Services Assistant Director
Lee VanDever, Public Services Assistant Director
Joe McMahon, Public Services Manager
Mark Griffin, Public Services Plans Reviewer
Freddy Suarez, Procurement Services Director (non-voting)
Ramsey Gross, Senior Procurement Agent (non-voting)

Meeting Summary:

The Evaluation Committee met on October 27, 2020 at 2:00 P.M. in a virtual Zoom meeting to discuss the proposals and score summary. The scoring was done individually by each evaluator, electronically through BidSync. At the time of the meeting the Procurement Services Director provided the score summary to the committee and proceeded to review the scores.

The Evaluation Committee agreed on the score summary and chose to rank the proposals accordingly. The Committee agreed on short listing the top seven (7) companies. Interviews will be scheduled for the following companies Booth, Ern, Straughan & Hiott, Inc., Atkins North America, Inc., CPH, Inc., Reiss Engineering, Inc., Woodard & Curran, Inc., Toole Design Group, LLC, and Wright-Pierce. The shorlisted companies will be contacted with the meetings date and time.

Sean O'Keefe

From: Jim Chastain <jrchastain@chastainskillman.com>
Sent: Thursday, February 10, 2022 1:32 PM
To: Sean O'Keefe
Cc: Edward Conroy; whhenterprises@earthlink.net
Subject: Wastewater Treatment Facility Need Exploration
Attachments: JRC22001 HoweyInTheHills Document_Data Request 02 10 2022.pdf

Good afternoon, Sean! In our telephone conversation last week, you mentioned the Town's interest in considering an option to develop its own wastewater treatment system versus continuing to transfer flow to the Mission Inn CDD. Wastewater system master planning is something that I have done for most of my career, so if authorized, I'm comfortable assisting you in an evaluation of options. Neither the planning nor project execution are trivial tasks, so I suggested that it might be worth dividing the process into a few smaller tasks to map the process and discern Commission interest before moving into more substantial work.

A first step is to gather pertinent background data and organize it into what I will call a 'project statement'. My understanding is that the Commission has some level of interest in pursuing this option but has limited working data with which to ask questions or make decisions. If interested I believe I can use data that you have available to frame the major issues that the Town must face and outline a path forward...should it decide to proceed with a feasibility study and/or implementation. I can do this for the $3000 budget that you referenced as your first authorization category. The deliverable would be in the form of a Technical Memorandum, not a report. Also, it would not provide quantitative data analyses, feasibility evaluations or conceptual layouts. If you do move forward with a more comprehensive evaluation at a later date, that work will require an RFP. This work product would be quite useful when developing the RFP.

I have attached a list of questions/information that are desirable in developing this work. It is not comprehensive but should be adequate to characterize the situation. You may or may not have all elements. I have provided blanks to indicate what form (media) the information is in.

If you wish to proceed, please advise as to what form the authorization needs to take. It is well under CCNA thresholds so the engagement will be based on your local procurement policies. Also, if you will gather the information requested, once received, I'll work to organize and structure it in a set of topics to be addressed in the decision process. If you prefer not to move forward, that is perfectly fine as well. I just wanted to get something in your hands as a response to your request in our phone conversation.

Kind regards,

Jim

Dr. Jim Chastain, PE, BCEE, MPH

Principal/Senior Consultant

CHASTAIN SKILLMAN

desk 888-646-1402 x1607 **mobile** 863-838-6607
Lakeland | Orlando | Nashville

TMH CONSULTING, INC.
Community Planning Services

TMHConsulting@cfl.rr.com
97 N. Saint Andrews Dr.
Ormond Beach, FL 32174
PH: 386.316.8426

MEMORANDUM

TO: Howey-in-the-Hills Town Council
CC: J. Brock, Town Clerk; S. O'Keefe, Town Administrator
FROM: Thomas Harowski, AICP, Planning Consultant
SUBJECT: Venezia Townhomes Final Subdivision Plan
DATE: January 28, 2022

The last residential component of the original Venezia South development has been presented for final subdivision approval. The project consists of 113 townhouse units distributed in five (seven buildings) and six-unit buildings (13 buildings.). The project is located on an 11.83-acre tract accessed from Venezia Boulevard and located between Calabria Way and one of the two proposed commercial development parcels. The applicant is seeking final subdivision approval to allow development of the 113 townhouse lots, common area and supporting infrastructure including roads and utilities.

The package of plans being presented to the Town Council includes the engineering plans, landscape plans, and proposed unit designs. The unit designs include two models; the Glen model which is the interior unit in the proposed building and the Vale model which is the end unit. The buildings will have the same exterior design and finish with the only variation being the length of the building depending on whether the building includes five or six units. All units are three bedroom, 2.5 bath units with a one-car garage and driveway space for two cars parked off-street. The project includes an additional 30 designated on-street parking spaces at three locations, with one location being adjacent to lots 75 through 90. Two on-street spaces are located near lot 24, and the balance of the spaces are located near lots 62 and 63 at the north end of the project.

Roads will be public as is done in the rest of Venezia, and the Town will own and maintain the sewer system and potable water system. The re-use/irrigation system will be owned by the homeowners' association as will the landscaping and common areas. Stormwater retention will be accommodated in the existing adjacent retention area that was designed to accommodate stormwater from the multi-family and commercial parcels and was constructed with the original subdivision improvements. The stormwater retention area will be maintained by the master association for Venezia, while the other maintenance responsibilities for the proposed project will fall to a sub-association comprised of the 113 lot owners. The SJRWMD has issued an amended the stormwater permit.

The landscape plans provide for a buffer along Venezia Boulevard which includes trees and understory plantings. The buffer runs along Venezia Boulevard for a depth of 10-feet and then some portions of the frontage include a retaining wall with the development side of the wall being lower than the Venezia Boulevard side. Street trees are provided throughout the subdivision along the street frontage and additional landscaping is provided in common areas and along the rear of the units. The project edge abutting the single-family lots on Calabria Way consists of the vinyl fence constructed along the single-family portion of the project and a row of street trees planted along the project side of the fence. This section of the project includes a sidewalk along the length of the fence. No proposed townhouse units back up to the lots on Calabria Way, so in addition to the fence and trees the proposed units will be 80 to 90 feet into the project from the edge of property in this area. The plan includes an irrigation system that covers the common area landscaping and landscape on the individual lots.

At the January 27, 2022 regular meeting the Planning Board recommended a conditional approval of the final subdivision plan. The conditions established by the Planning Board are as follows:

1. The mail kiosk location will be moved to the north portion of the project in the common area opposite lots 62 and 63. The Board made this recommendation to minimize impacts such as noise to nearby residences while still locating the mail kiosk where parallel on-street parking is available.

2. The trees located between lot 81 and the perimeter fence will be moved further away from the fence to provide additional clearance while maintaining the landscaping.

3. The magnolia trees near lot 81 and the magnolia street trees along the perimeter fence will be changed from Southern Magnolias to Sweet Bay Magnolias as the Sweet Bay Magnolia has a less extensive root system. This tree will be more compatible with the narrower planting strip and help with concerns about impacts to the single-family units to the east along Calabria Way.

4. The deed restrictions to be supplied with the final plat will include a provision obligating the homeowners' association for the project to maintain the side of the fence facing the townhouse project. (Pressure cleaning, etc.) If damage occurs due to the actions of townhouse units, the townhouse association will be obligated to replace any affected sections of fence.

5. The deed restrictions to be supplied with the final plat will require architectural review for approval of any television satellite dishes. The goal of the review is to prevent views of satellite dishes from Venezia Boulevard to the maximum extent possible.

6. The builder, DR Horton was required to upgrade the rear side of the buildings along the Venezia Boulevard frontage. The rear of these units will be clearly visible from Venezia Boulevard, and the Planning Board determined that the

façade on the rear of these buildings needed to give more of the appearance of the building front. Specific recommendations include:

a. Adding shutters to the windows as is done on the front
b. Adding additional architectural detailing such as trim
c. Adding gable ends to the roof of the units projecting toward Venezia Boulevard to match the building frontage. (Current design is a shallow sloped roof only.)
d. Modifying the painting plan to provide more contrast between the units in the building.
e. Other design improvements that may be proposed by the applicant.

7. Revised plans are to be submitted to the Town by the close of business on February 4, 2022 so the Planning Board members, the public and staff have adequate time to verify the modification the plan have been made and to determine if the building revisions accomplish the intended task.

On February 4, 2022 the applicant resubmitted plans in response to the Planning Board comments. A review of the submittal identified revisions to the civil engineering plans and the landscape plans which implemented the Planning Board conditions of approval for items one, two and three. However, additional clarity on how the three alternative paint combinations are to be applied should be provided. The applicant committed to including items in the deed restrictions for the project for maintenance of the fence and using the architectural review process to control the location of satellite dishes if proposed by individual unit owners. The proper place for verifying the compliance with these items is when the proposed deed restrictions are presented with the final plat documents.

The last item recommended by the Planning Board as a condition of approval regarding the architectural detail on the rear of the building along Venezia Boulevard was essentially ignored by the applicant. The Planning Board thought this item was critical as these buildings will be viewed by everyone driving along Venezia Boulevard. Essentially these buildings would have two front facades. The revised plans offer a modified painting scheme but did not specify how the paint scheme will be applied.. Many of the other suggested modifications are low-cost items.

- The Board suggested adding shutters to the rear windows as are shown of the front façade. Subsequent to the submittal of the revised package on February 4, 2022 a design detail showing the addition of shutters and some window trim on the rear of the units was submitted. An upgraded detail of the rear façade similar to the one included in the plans versus the clip page provided as a late supplement would help visualize the overall impact to the rear façade look.

- The Board suggested adding trim detail like the detail shown on the front façade adding some decorative detail in addition to the windows and adding some trim detail in the eave areas. Essentially the Planning Board was asking to upgrade the rear façade to include elements already included on the building fronts.

- The other item suggested by the Planning Board was to use a roof line on the rear of these buildings that is identical to the roof line proposed on the front of the building. While this is not an inexpensive item, for a company well versed in flipping house plans, the “flipping of the roof design” should be a simple architectural modification. No change is proposed by the applicant. The plans call for 5-unit and 6-unit buildings along the Venezia Boulevard frontage. The roof lines for both buildings include a hip roof projection at each end of the building with the second-floor areas for the interior units recessed from the end units. This may be the original design submitted to the Planning Board, but the Board did not have a rear façade design available to it. Nevertheless, the Board requested the projecting areas use a gable design like the front façade for the projecting areas, and this design is not proposed.

Essentially the applicant’s resubmittal falls short of meeting the conditions proposed by the Planning Board when they recommended conditional approval of the project. How this response would affect the Planning Board’s recommendation is unknown. A simple comparison of the front façade view and the rear façade view for both the 5-unit and 6-unit buildings clearly shows the difference in the visible detail. In their recommendation the Planning Board was trying to achieve a similar level of detail along the Venezia Boulevard frontage. The relevant code sections are as follows:

- Section 4.06.04 states that townhome development shall follow the same architectural standards as single-family development except for Section 4.06.02. (Section 4.06.02 deals with exterior buffer requirements for single-family subdivisions and the variation in floor plans for single-family homes.)

- Of particular note the applicable design requirements (Section 4.06.03A) include a requirement for variation in roof lines to add interest to the design. The Council can determine if the minimal elevation change shown in the 5-unit and 6-unit buildings meets this requirement.

- Also, Section 4.06.03 C requires a minimum of for architectural details be incorporated into the façade design. Because the rear of the buildings in question front on Venezia Boulevard, this façade is considered a primary façade by our code requiring a minimum of four design elements. The proposed design fails to meet this requirement. Upgrading the rear façade design to mirror the front façade design proposal would add additional design elements sufficient to meet the requirement.

- The design package submitted by the applicant includes 4-unit, 7-unit and 8-unit building designs which are not included in this project. These can be deleted from the project submittal.

Final Note:

The Planning Board meeting included extensive discussion about the specific requirements for townhouses in the Town code. The Planning Board felt that townhouses should be required to provide two-car garages as we require for single-family units. The Board also felt the code would benefit from clearer design standards for the exterior of townhouse units as the rules for single-family units may not fully translate to multi-family buildings. The Planning Board is seeking direction from the Town Council regarding development of townhouse regulations to strengthen these areas.

Planning & Zoning Board Meeting

January 27, 2022 at 6:00 PM

In Person and via Zoom

MINUTES

CALL TO ORDER
ROLL CALL

MEMBERS PRESENT:
Tina St. Clair - Chairperson | Ron Francis III – Vice Chairperson | Berniece Hower | John Manning | Richard Mulvany (via Zoom) | Frances O'Keefe Wagler (via Zoom)

STAFF PRESENT:
Sean O'Keefe - Town Administrator | John Brock - Town Clerk | Victoria Elfers - Building Services Clerk | Tom Harowski - Town Planner (Via Zoom) | Morgan Cates - Public Works Director

Ron Francis III explained that board members Richard Mulvany and Frances O'Keefe Wagler were both sick and unable to attend the meeting in person. Both members were attending virtually via Zoom.

Ron Francis III made a motion for both Richard Mulvany and Frances O'Keefe Wagler to be able participate and vote during the meeting via Zoom; John Manning seconded the motion. The motion passed unanimously by voice vote.

CONSENT AGENDA

Routine items are placed on the Consent Agenda to expedite the meeting. If Town Council/Staff wish to discuss any item, the procedure is as follows: (1) Pull the item(s) from the Consent Agenda; (2) Vote on the remaining item(s); and (3) Discuss each pulled item and vote.

1. Consideration and Approval of the November 18, 2021, Planning and Zoning Board Meeting minutes.

Motion made by Ron Frances III to approve of the Consent Agenda; Seconded by John Manning. Motion was approved unanimously by voice vote.

PUBLIC HEARING

None

OLD BUSINESS

None

NEW BUSINESS

DRAFT

2. Consideration and Approval: **Venezia Townhomes Final Subdivision Plan Review**

Chairperson, Tina St. Clair, asked Town Planner Tom Harowski to present this item to the Board. Mr. Harowski introduced the matter to the board and explained that the Board would be reviewing the engineering and landscaping plans. Mr. Harowski reviewed the overall layout of the townhome project.

Chairperson, Tina St. Clair, allowed the developer group to present their project and respond to concerns. Ben Beckham, Engineer of Record for the project, presented the developer's presentation. Laurie Elder, Landscape Architect for the project, responded to concerns about landscaping issues with the project. Ron Roberts, developer for the project, also responded to issues about the project.

Chairperson, Tina St. Clair, opened up public comment on this issue.

Carmen Khaleel, 721 Calabria Way – Mrs. Khaleel explained she was a board member for the Venezia HOA and explained concerns and questions she had about the project.

Chairperson, Tina St. Clair, closed public comment on this issue and allowed further board discussion on this topic.

Town Planner, Tom Harowski, summarized the issues and conditions that the board had laid out during their discussions. Those issues were:

1) The mail kiosk location will be moved to the north portion of the project in the common area opposite lots 62 and 63. The Board made this recommendation to minimize impacts such as noise to nearby residences while still locating the mail kiosk where parallel on-street parking is available.
2) The trees located between lot 81 and the perimeter fence will be moved further away from the fence to provide additional clearance while maintaining the landscaping.
3) The magnolia trees near lot 81 and the magnolia street trees along the perimeter fence will be changed from Southern Magnolias to Sweet Bay Magnolias as the Sweet Bay Magnolia has a less extensive root system. This tree will be more compatible with the narrower planting strip and help with concerns about impacts to the single-family units to the east along Calabria Way.
4) The deed restrictions to be supplied with the final plat will include a provision obligating the homeowners' association for the project to maintain the side of the fence facing the townhouse project. (Pressure cleaning, etc.) If damage occurs due to the actions of townhouse units, the townhouse association will be obligated to replace any affected sections of fence.
5) The deed restrictions to be supplied with the final plat will require architectural review for approval of any television satellite dishes. The goal of the review is to prevent views of satellite dishes from Venezia Boulevard to the maximum extent possible.
6) The builder, DR Horton was required to upgrade the rear side of the buildings along the Venezia Boulevard frontage. The rear of these units will be clearly visible from Venezia Boulevard, and the Planning Board determined that the façade on the rear of these buildings needed to give more of the appearance of the building front. Specific recommendations include:
    a. Adding shutters to the windows as is done on the front
    b. Adding additional architectural detailing such as trim
    c. Adding gable ends to the roof of the units projecting toward Venezia Boulevard to match the building frontage. (Current design is a shallow sloped roof only.)
    d. Modifying the painting plan to provide more contrast between the units in the building.
    e. Other design improvements that may be proposed by the applicant.
7) Revised plans are to be submitted to the Town by the close of business on February 4, 2022 so the Planning Board members, the public and staff have adequate time to verify the modification the plan have been made and to determine if the building revisions accomplish the intended task.

DRAFT

John Manning made a motion to conditionally recommend the project to Town Council with the seven aforementioned conditions that were summarized by Town Planner, Tom Harowski; Seconded by Berniece Hower. Motion passes with a roll call vote.

Voting
Yea: John Manning, Berniece Hower, Tina St. Clair, Richard Mulvany
Nay: Ron Francis III, Fran O'Keefe Wagler

CITIZEN COMMENTS

Any person wishing to address the Planning and Zoning Board and who is not on the agenda is asked to speak their name and address. Three (3) minutes is allocated per speaker.

Tom Harowski, Town Planner – Mr. Harowski stated that he was going to ask for clarification from the Town Attorney as to the ability of the Board to table motions.

ADJOURNMENT

There being no further business to discuss, a motion was made by Berniece Hower to adjourn the meeting; Frances O'Keefe Wagler seconded the motion. Motion was approved unanimously by voice vote.

The Meeting adjourned at 8:11 p.m. | **Attendees: 22**

_____
Tina St. Clair Chairperson

ATTEST:

_____
John Brock, Town Clerk

DRAFT

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS

February 4, 2022

Town of Howey-in-the-Hills
Attn: John Brock, Town Clerk
P.O. Box 128
101 N. Palm Avenue
Howey-in-the-Hills, FL 34737

Re: Venezia Townhomes

Dear John:

At a January 27, 2022 regular meeting, the Planning Board recommended a conditional approval of the final subdivision plans for the above project. The Planning Board established several conditions. Those conditions, and our proposed accommodations are summarized below:

1. The mail kiosk location will be moved to the north portion of the project in the common area opposite lots 62 and 63. The Board made this recommendation to minimize impacts such as noise to nearby residences while still locating the mail kiosk where parallel on-street parking is available.
   Response: The mail kiosk has been relocated as requested. Please see revised landscape and engineering plans.

2. The trees located between lot 81 and the perimeter fence will be moved further away from the fence to provide additional clearance while maintaining the landscaping.
   Response: The tree locations have been adjusted as requested. Please see revised landscape plans.

3. The magnolia trees near lot 81 and the magnolia street trees along the perimeter fence will be changed from Southern Magnolias to Sweet Bay Magnolias as the Sweet Bay Magnolia has a less extensive root system. This tree will be more compatible with the narrower planting strip and help with concerns about impacts to the single-family units to the east along Calabria Way.
   Response: The southern magnolias have been changed to sweet bay magnolias as requested. Please see revised landscape plans.

4. The deed restrictions to be supplied with the final plat will include a provision obligating the homeowners' association for the project to maintain the side of the fence facing the townhouse project. (Pressure cleaning, etc.) If damage occurs due to the actions of townhouse units, the townhouse association will be obligated to replace any affected sections of fence.

Response: The Developer agrees to include language within the deed restrictions to be supplied with the final plat to address maintenance of the project side of existing fences as requested.

5. The deed restrictions to be supplied with the final plat will require architectural review for approval of any television satellite dishes. The goal of the review is to prevent views of satellite dishes from Venezia Boulevard to the maximum extent possible.
   Response: The Developer agrees to include language within the deed restrictions to be supplied with the final plat requiring architectural review for approval of any television satellite dishes. Any architectural review will be restricted by existing Florida state statutes regarding homeowner's rights related to television satellite dishes and equipment.

6. The builder, DR Horton was required to upgrade the rear side of the buildings along the Venezia Boulevard frontage. The rear of these units will be clearly visible from Venezia Boulevard, and the Planning Board determined that the façade on the rear of these buildings needed to give more of the appearance of the building front. Specific recommendations include:
   a. Adding shutters to the windows as is done on the front
   b. Adding additional architectural detailing such as trim
   c. Adding gable ends to the roof of the units projecting toward Venezia Boulevard to match the building frontage. (Current design is a shallow sloped roof only.)
   d. Modifying the painting plan to provide more contrast between the units in the building.
   e. Other design improvements that may be proposed by the applicant.

   Response: The Developer has given careful thought and consideration to the Planning Board's recommendations. The Developer has provided product comments for the proposed buildings to include additional details on color schemes and architectural details to be provided. He respectfully requests Town Council approval of the project as proposed therein.

In accordance with recommendations set forth by the Planning Board, we are submitting revised plans and supporting documents today, February 4, 2022, so the Planning Board members, the public and staff have adequate time to verify the modification the plan have been made and to determine if the building revisions accomplish the intended task.

Sincerely,



Benjamin Beckham, P.E., CFM
Senior Project Manager

Bb:lfm
H:\Data\21052\Cor\Town Response -3.doc

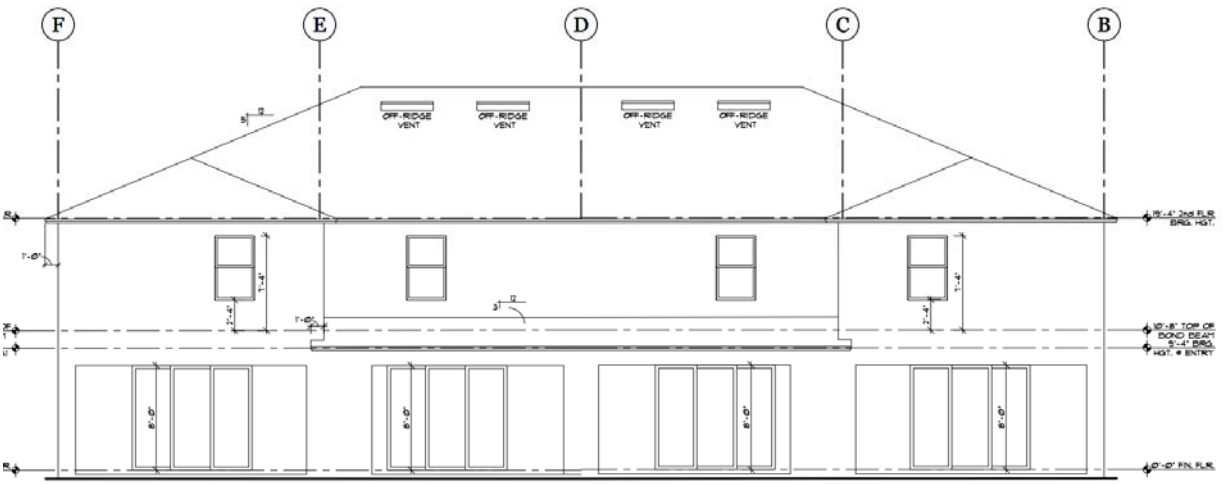
To the attention of the Town Council of Howey In The Hills

We have thoughtfully considered the suggestions of the advisory board regarding our Townhome product.

As a part of this submittal we have added a series of color schemes for our townhomes. These will be submitted to the Architectural Review Board to ensure our designs conform to the existing design standards of the HOA.

Concern was expressed regarding the dimensions of the rear of our buildings. A member of the board wanted to ensure that there would not be a simple flat surface visible from the street.

The rear of our Townhome product has a break in volume every 20ft of mass. The ground level has a covered lanai as depicted in the exhibit below.



REAR ELEVATION

SCALE: 3/16" = 1'-0" TEXTURED FINISH

Venezia Townhomes

Exterior Color Schemes

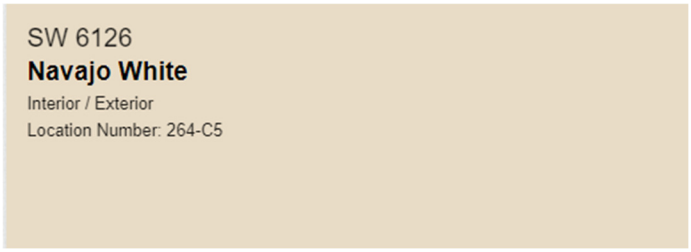
Actual color may vary from on-screen representation. To confirm color choices prior to purchase, please view a physical color chip, color card, or painted sample, per Sherwin-Williams.com.

Scheme 1:

Main Body: SW 6072 Versatile Gray



Trim: SW 6126 Navajo White



Doors/Shutters: SW VS 419 Gray October



End Units ONLY: SW 9169 Chatura Gray

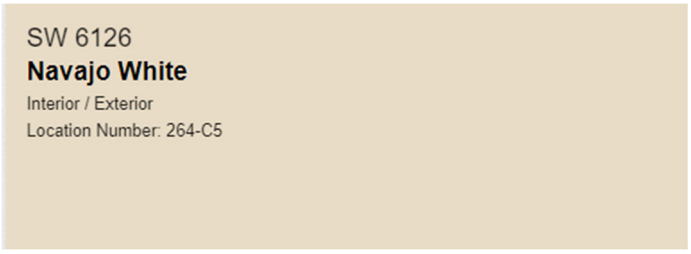


Scheme 2:

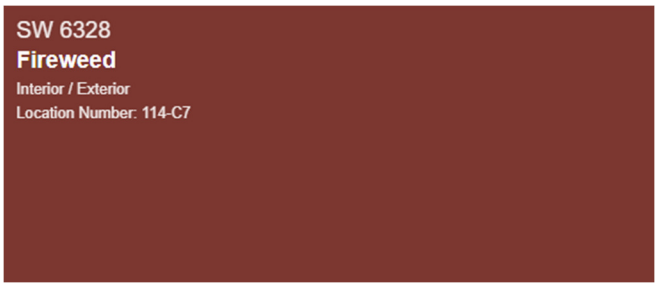
Main Body: SW 7689 Row House Tan



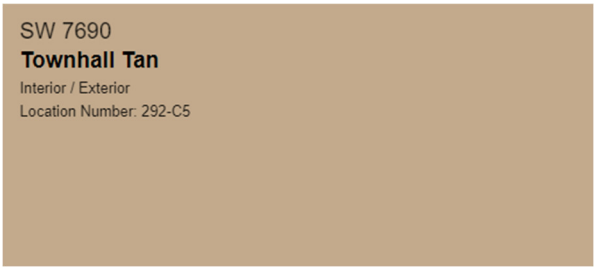
Trim: SW 6126 Navajo White



Doors/Shutters: SW 6328 Fireweed



End Units ONLY: SW 7690 Townhall Tan

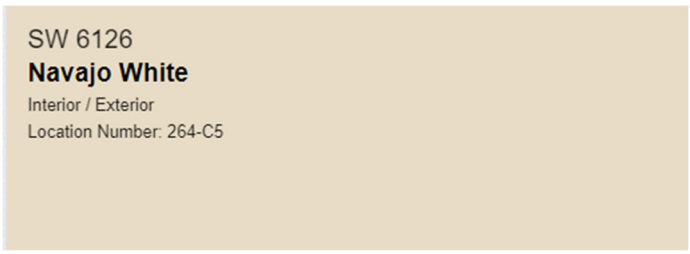


Scheme 3:

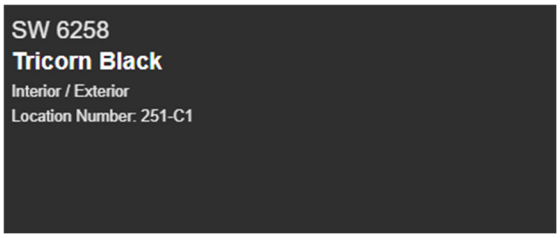
Main Body: SW 7732 Lemongrass



Trim: SW 6126 Navajo White



Doors/Shutters: SW 6258 TRICORN BLACK



End Units ONLY: SW 7736 Garden Sage





FRONT ELEVATION

SCALE: 3/16 = 1'-0" TEXTURED FINISH

NOTE: WALL FENESTRATION FLASHING AS PER FBCR 703.4

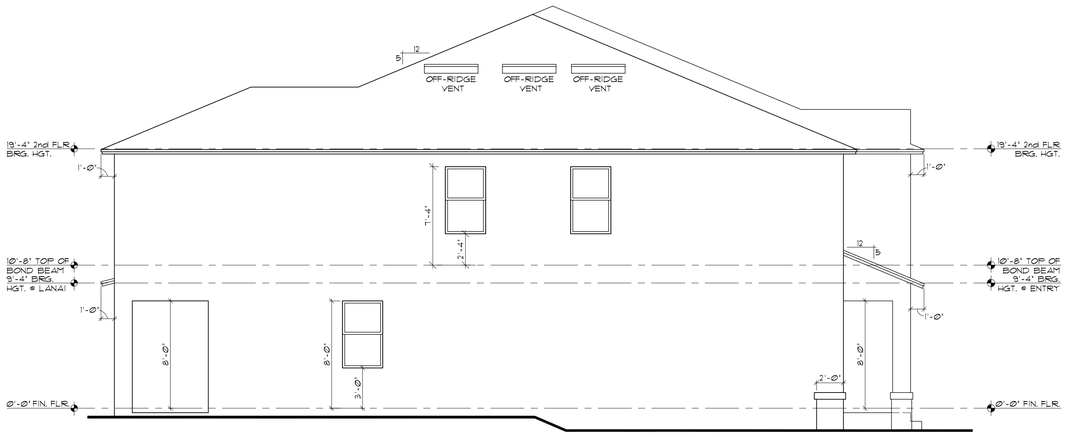
COLOR SCHEME A

4 UNIT BLDG



REAR ELEVATION

SCALE: 3/16 = 1'-0" TEXTURED FINISH

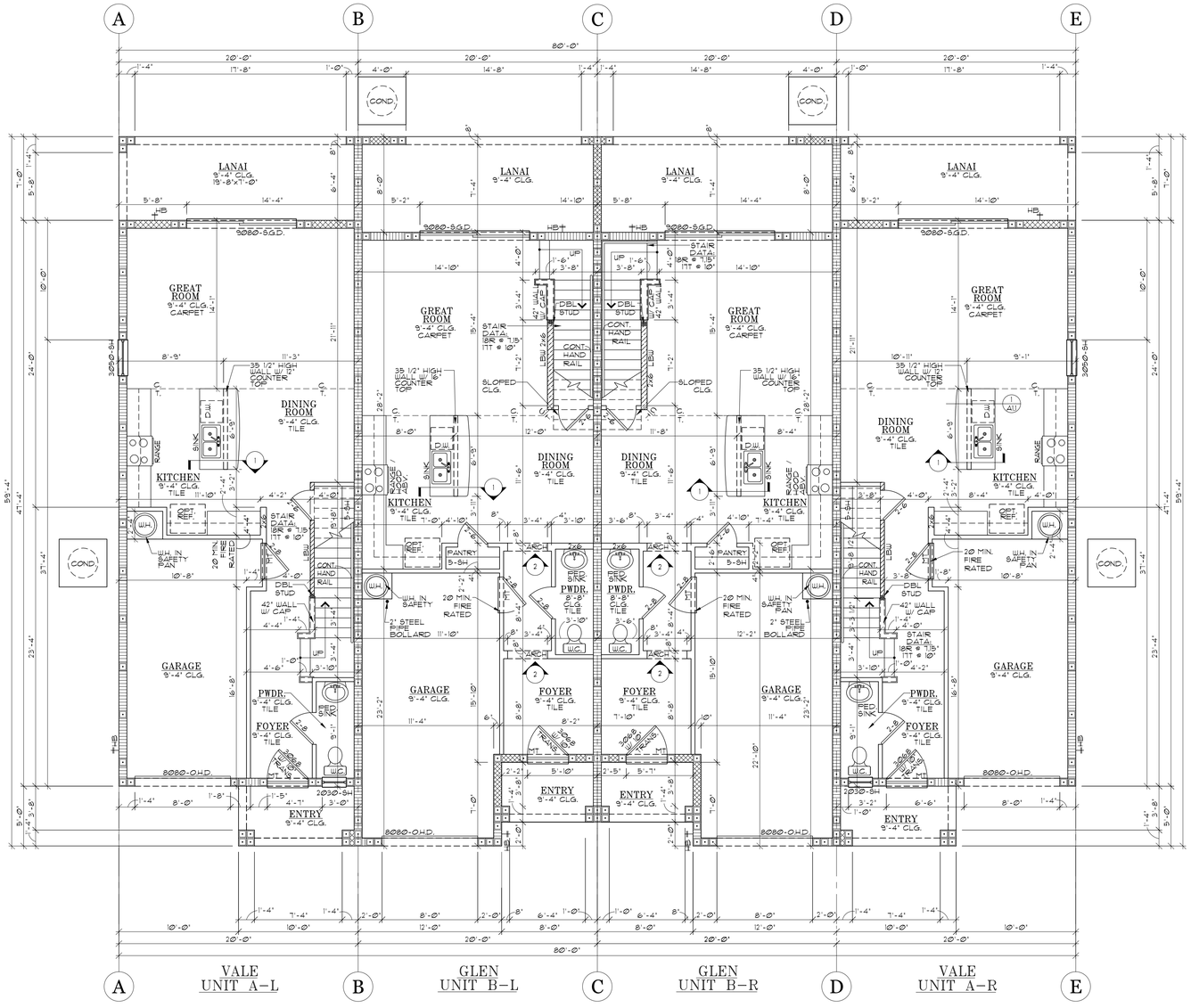


LEFT ELEVATION

SCALE: 3/16 = 1'-0" TEXTURED FINISH

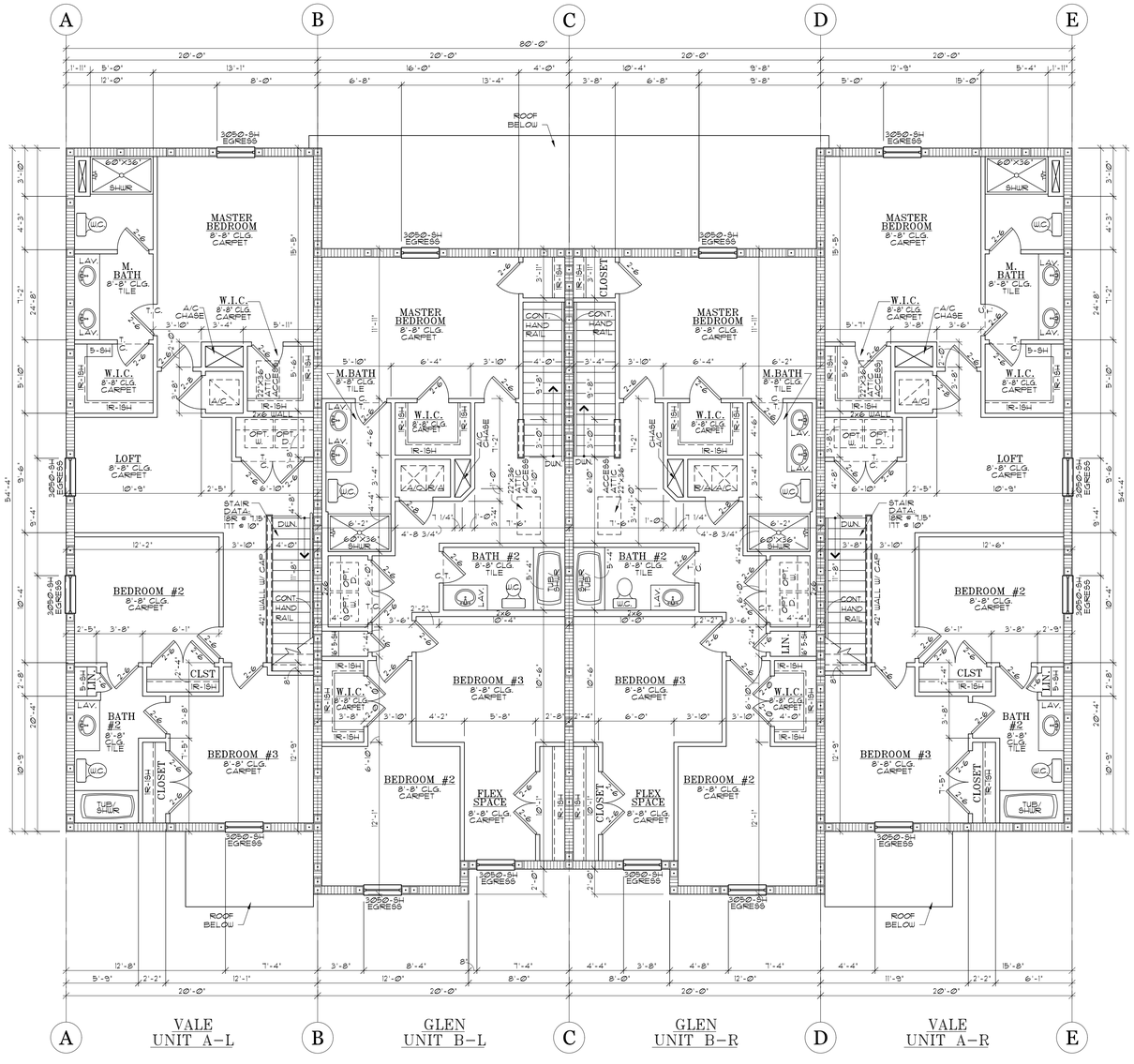
TYPICAL FOR ALL UNIT COUNT BUILDINGS

4 UNIT BLDG FLOOR PLANS



FIRST FLOOR PLAN

4 UNIT BLDG FLOOR PLANS



SECOND FLOOR PLAN

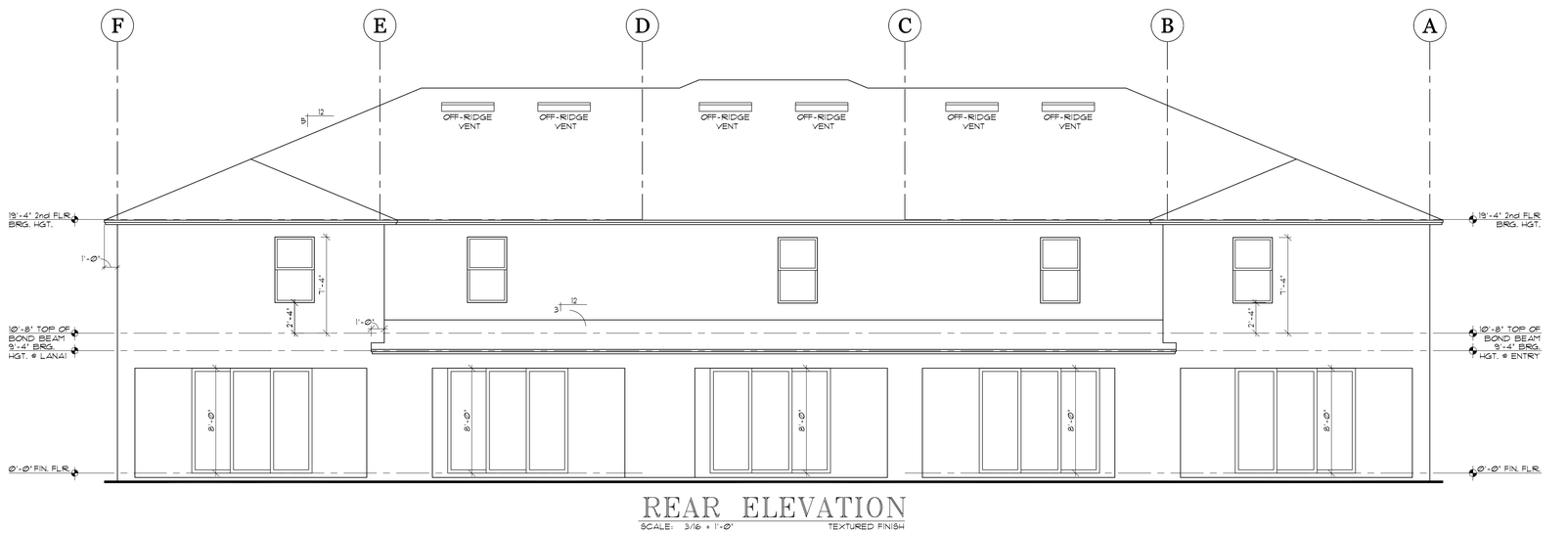


FRONT ELEVATION

SCALE: 3/16 = 1'-0" TEXTURED FINISH

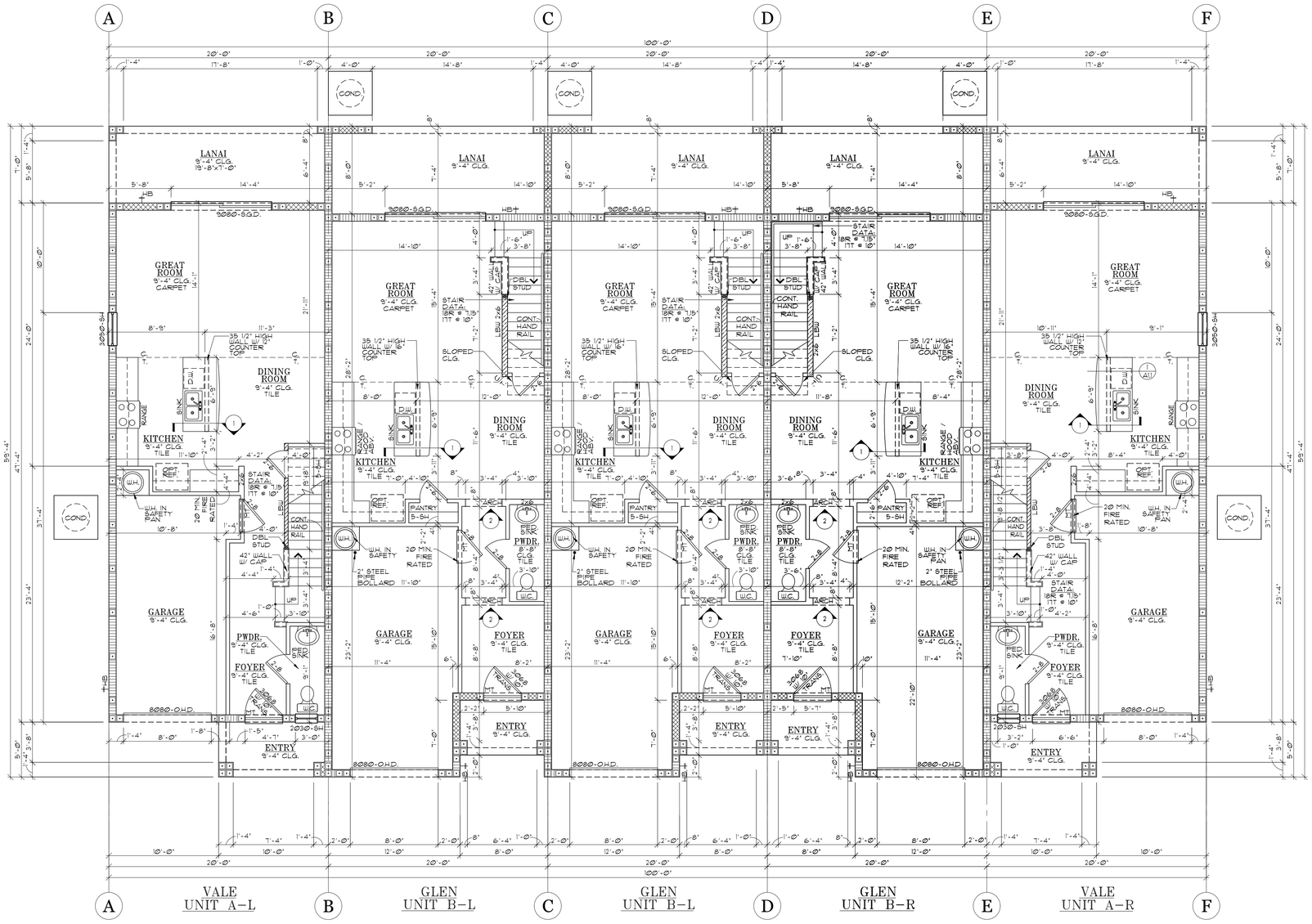
NOTE: WALL FENESTRATION FLASHING AS PER FBCR 703.4

5 UNIT BLDG

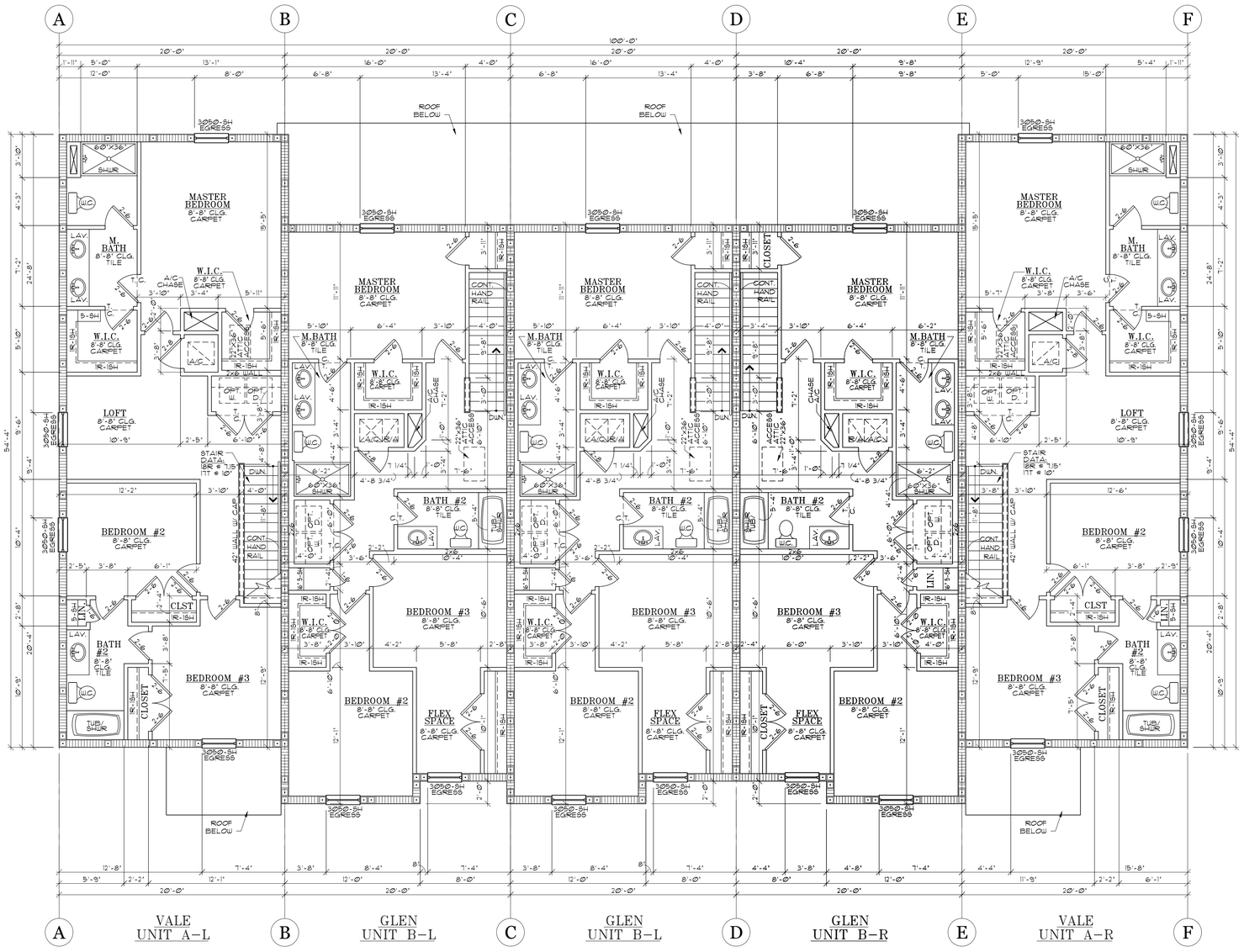


REAR ELEVATION

SCALE: 3/16 = 1'-0" TEXTURED FINISH



FIRST FLOOR PLAN



SECOND FLOOR PLAN

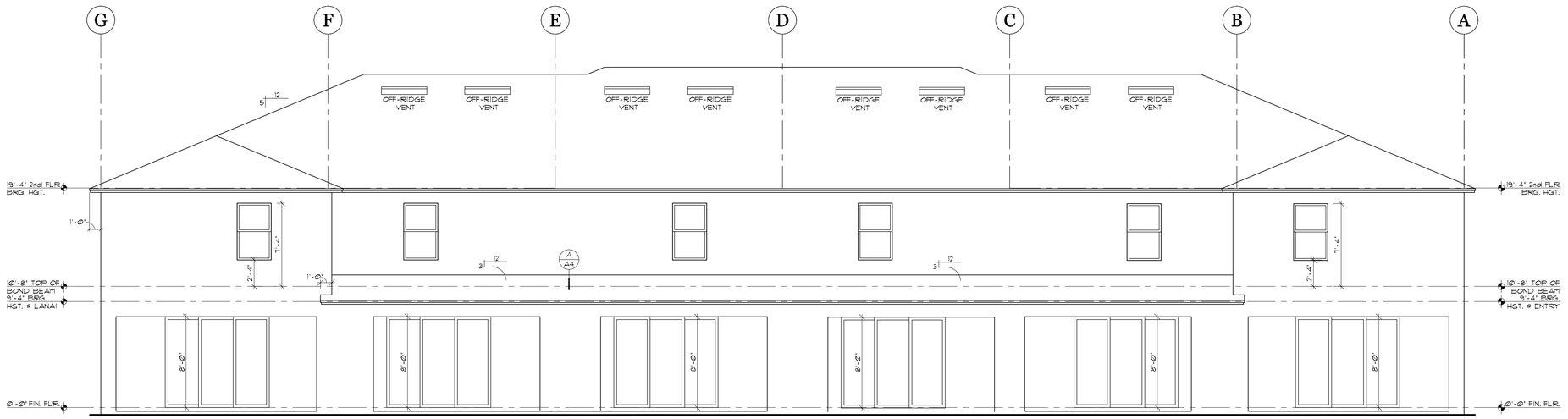


FRONT ELEVATION

SCALE: 3/16" = 1'-0" TEXTURED FINISH

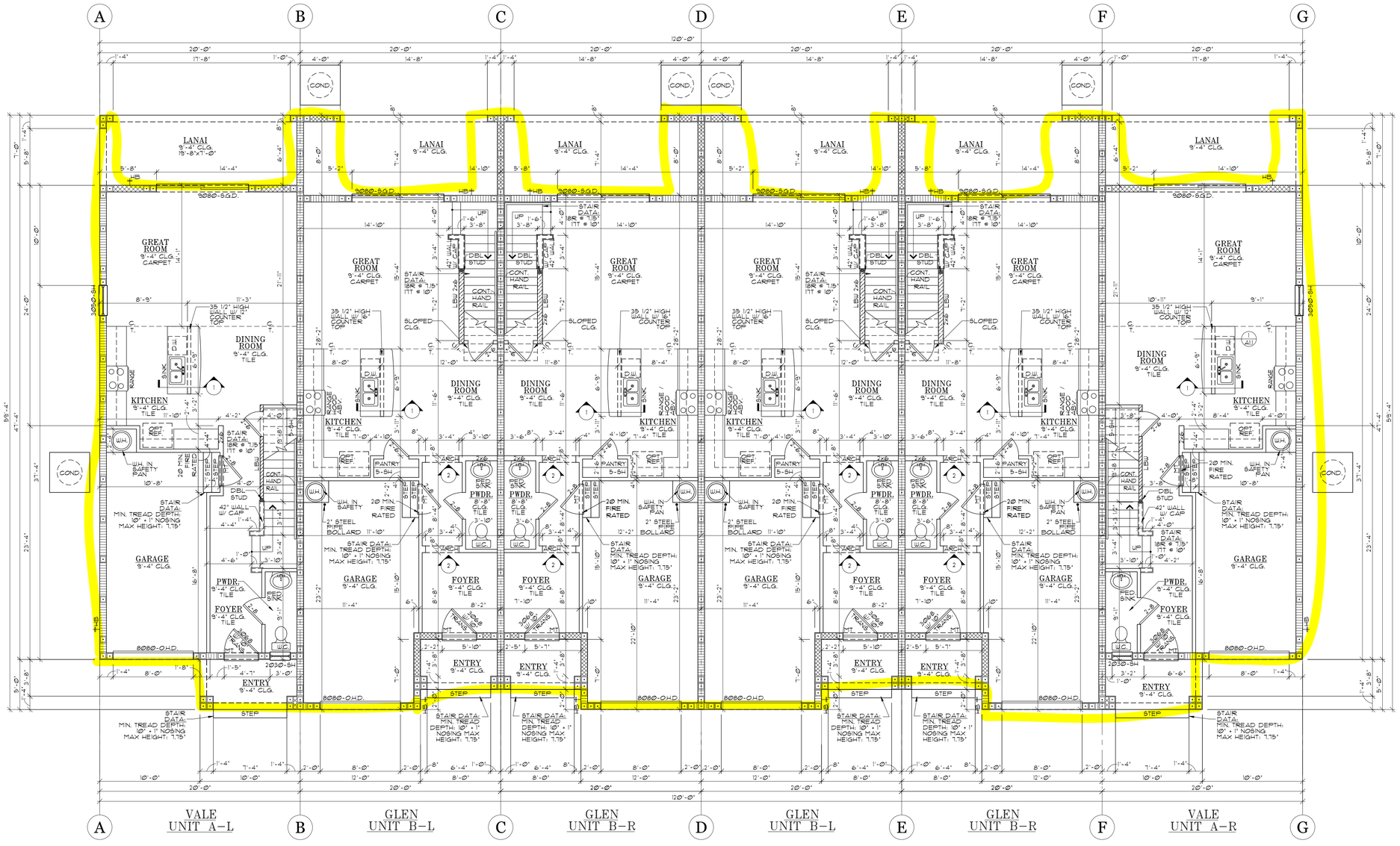
NOTE: WALL FENESTRATION FLASHING AS PER FBCR 703.4

6 UNIT BLDG

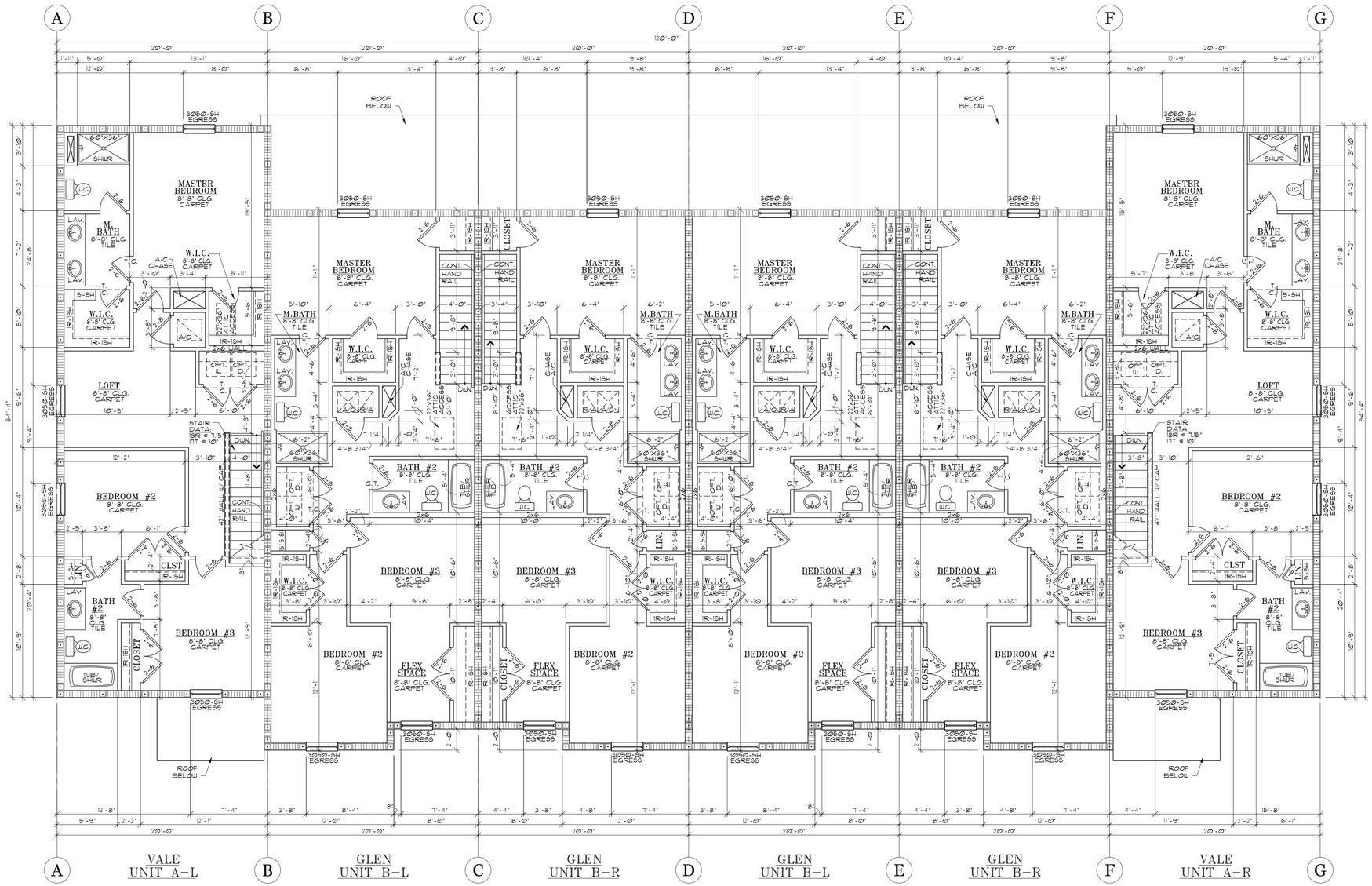


REAR ELEVATION

SCALE: 3/16" = 1'-0" TEXTURED FINISH



FIRST FLOOR PLAN



SECOND FLOOR PLAN

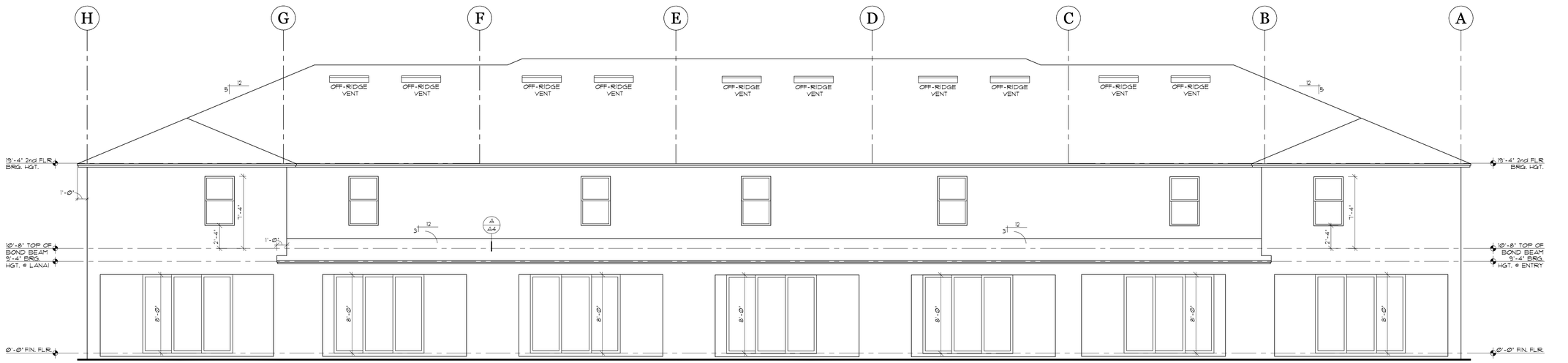


FRONT ELEVATION

SCALE: 3/16" = 1'-Ø" TEXTURED FINISH

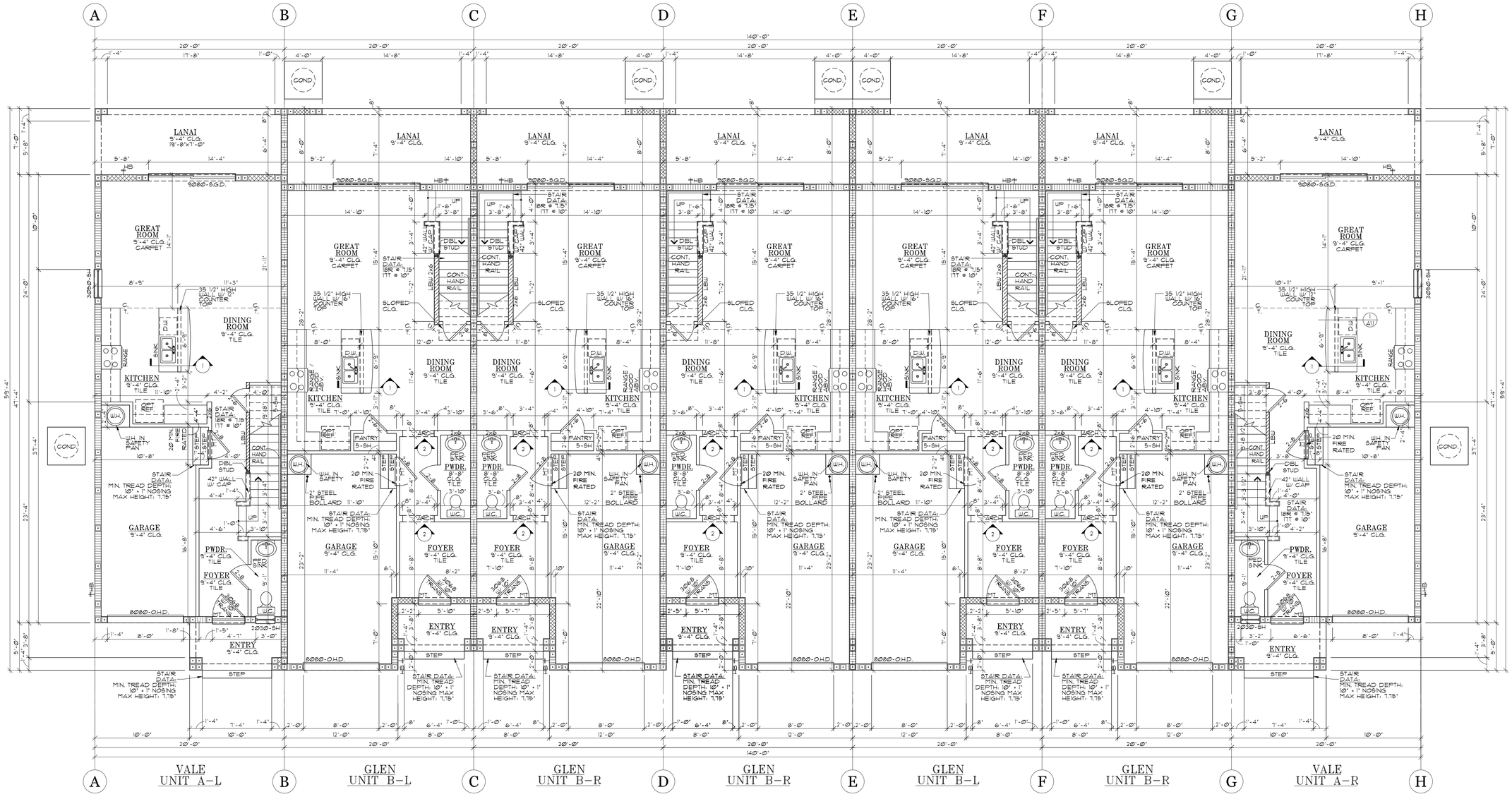
NOTE: WALL FENESTRATION FLASHING AS PER FBCR 703.4

7 UNIT BLDG

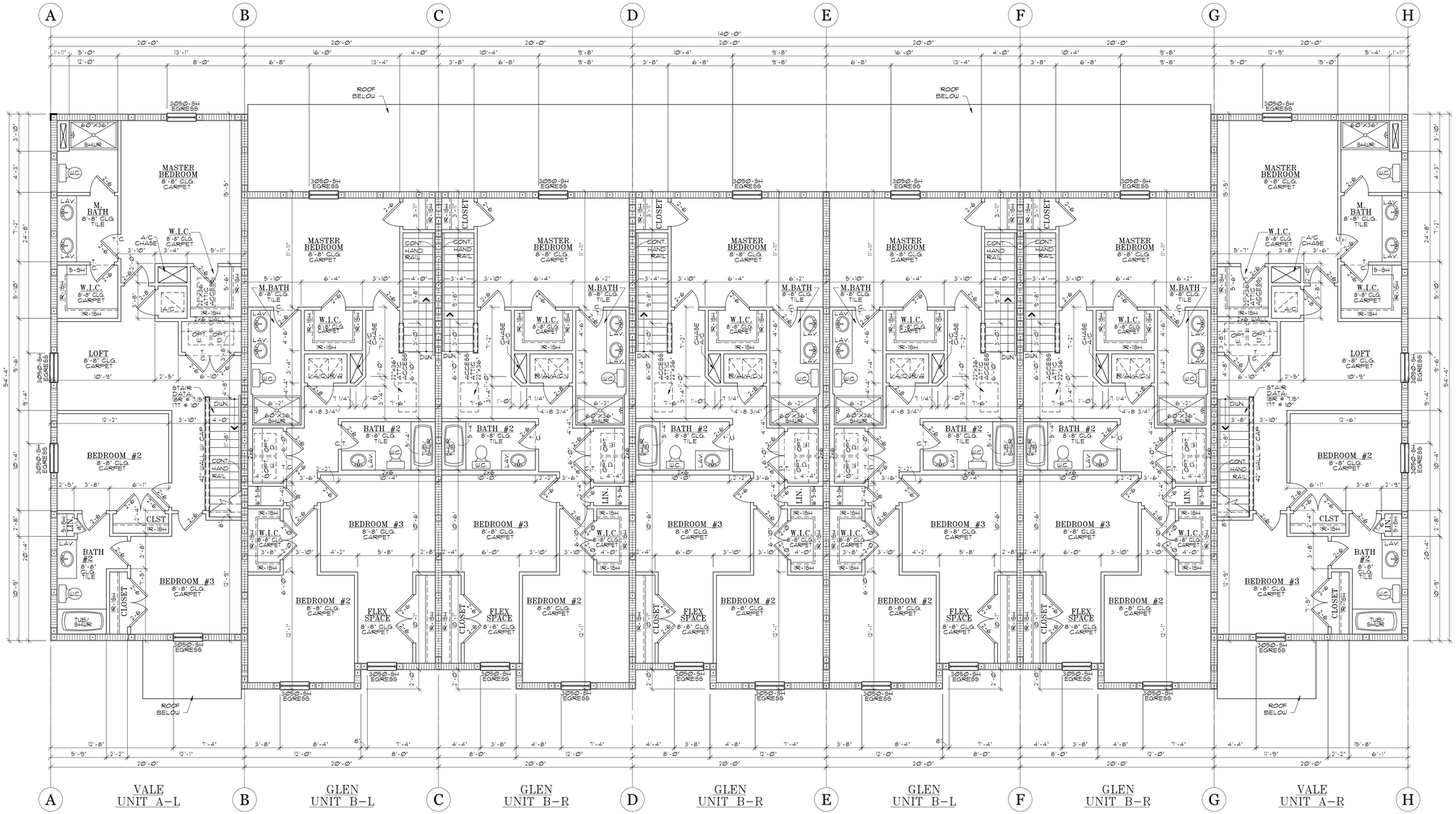


REAR ELEVATION

SCALE: 3/16" = 1'-Ø" TEXTURED FINISH



FIRST FLOOR PLAN



SECOND FLOOR PLAN

COMPONENT AND CLADDING WIND LOADS



FRONT ELEVATION (LEFT)

SCALE: 3/16 = 1'-0" TEXTURED FINISH

NOTE: WALL FENESTRATION FLASHING AS PER FBCR 1703.4

FRONT ELEVATION (RIGHT)

SCALE: 3/16 = 1'-0" TEXTURED FINISH

NOTE: WALL FENESTRATION FLASHING AS PER FBCR 1703.4

8 UNIT BLDG

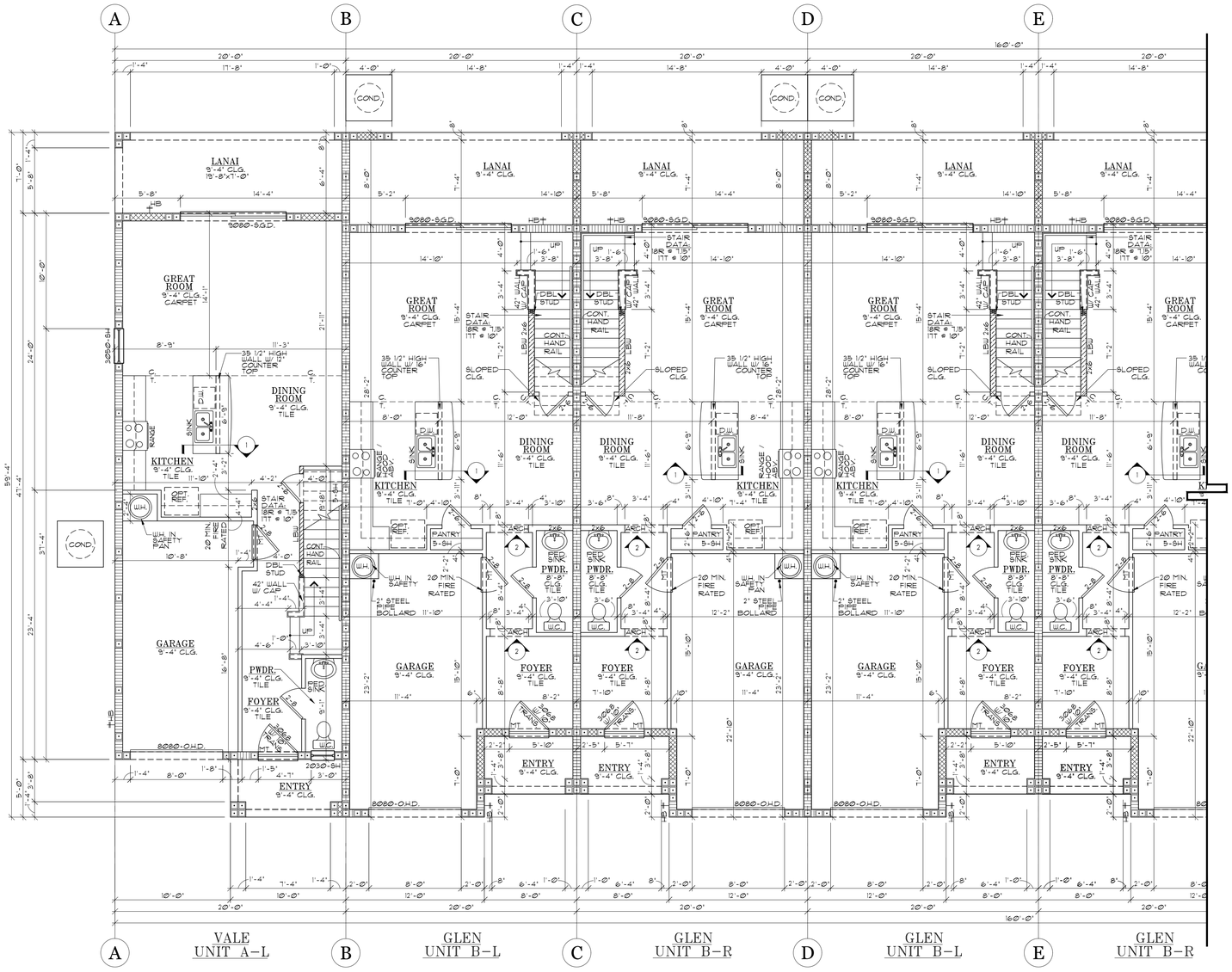


REAR ELEVATION

SCALE: 3/16 = 1'-0" TEXTURED FINISH

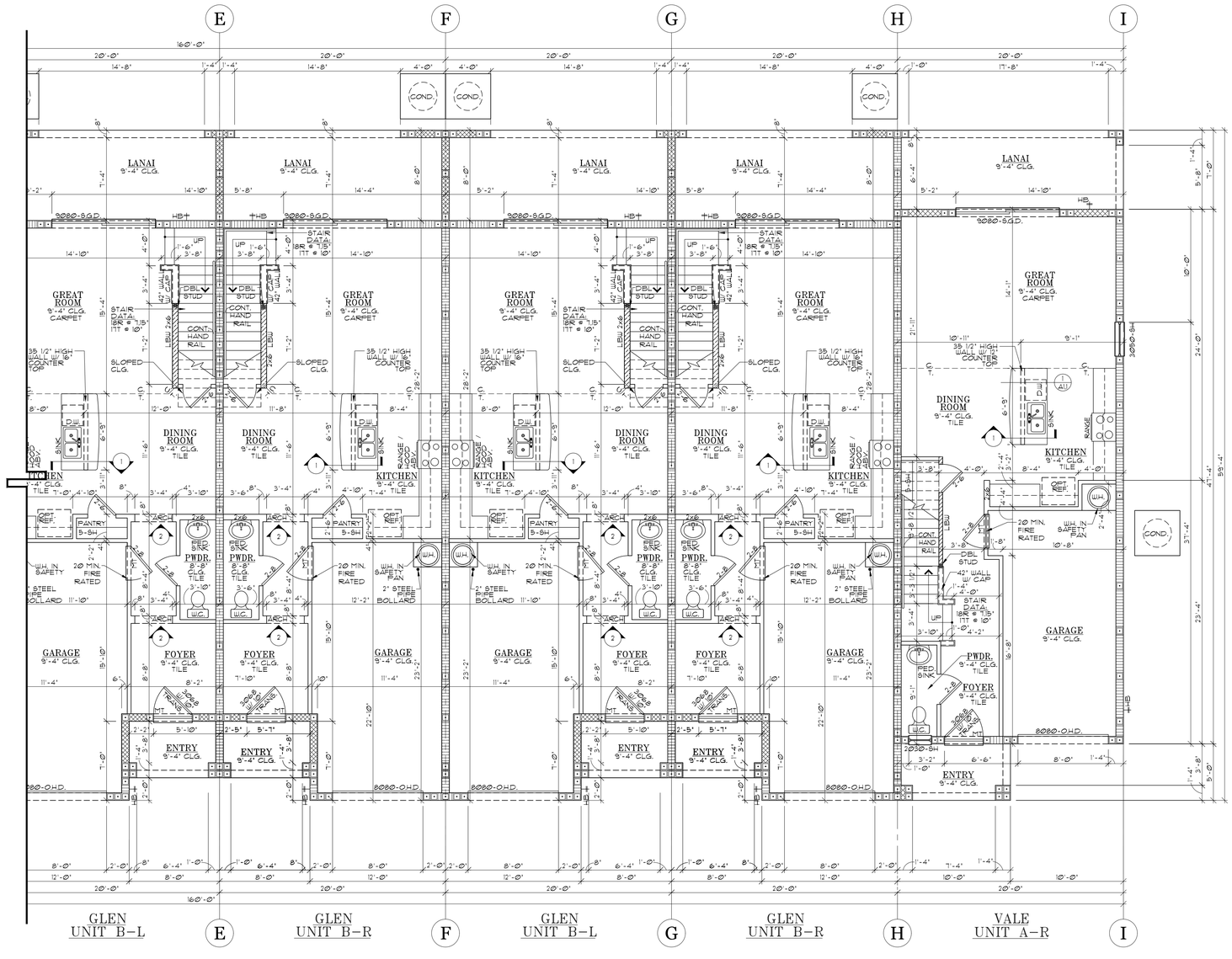
REAR ELEVATION

SCALE: 3/16 = 1'-0" TEXTURED FINISH



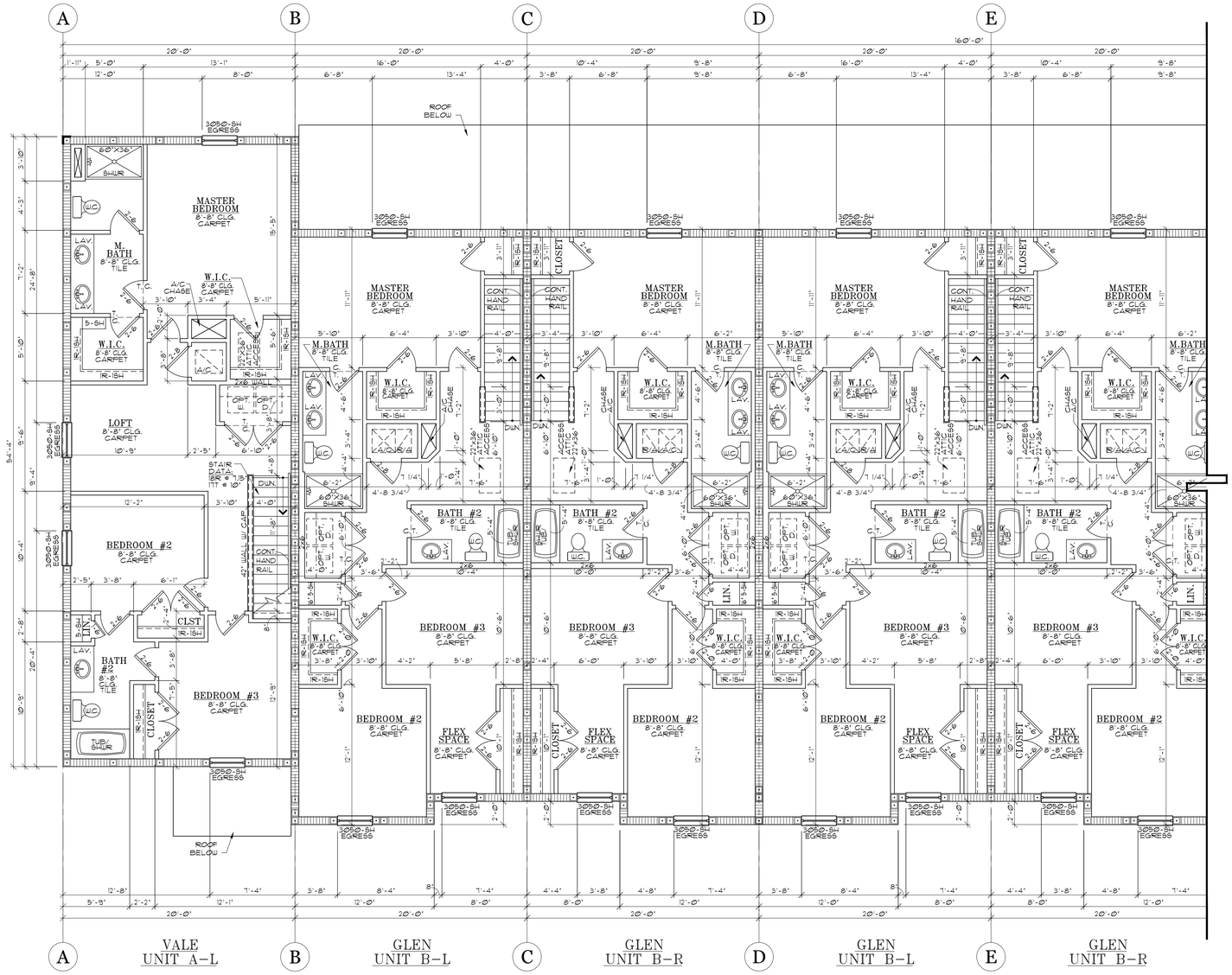
COMPONENT AND CLADDING WIND LOADS BASIC WIND EXPOSURE FOR 3 SECOND GUSTS				
OPENINGS AND TYPE	SQUARE FOOTAGE	ZONE	140 MPH WIND (Vult)	REMARKS

FIRST FLOOR PLAN (LEFT)

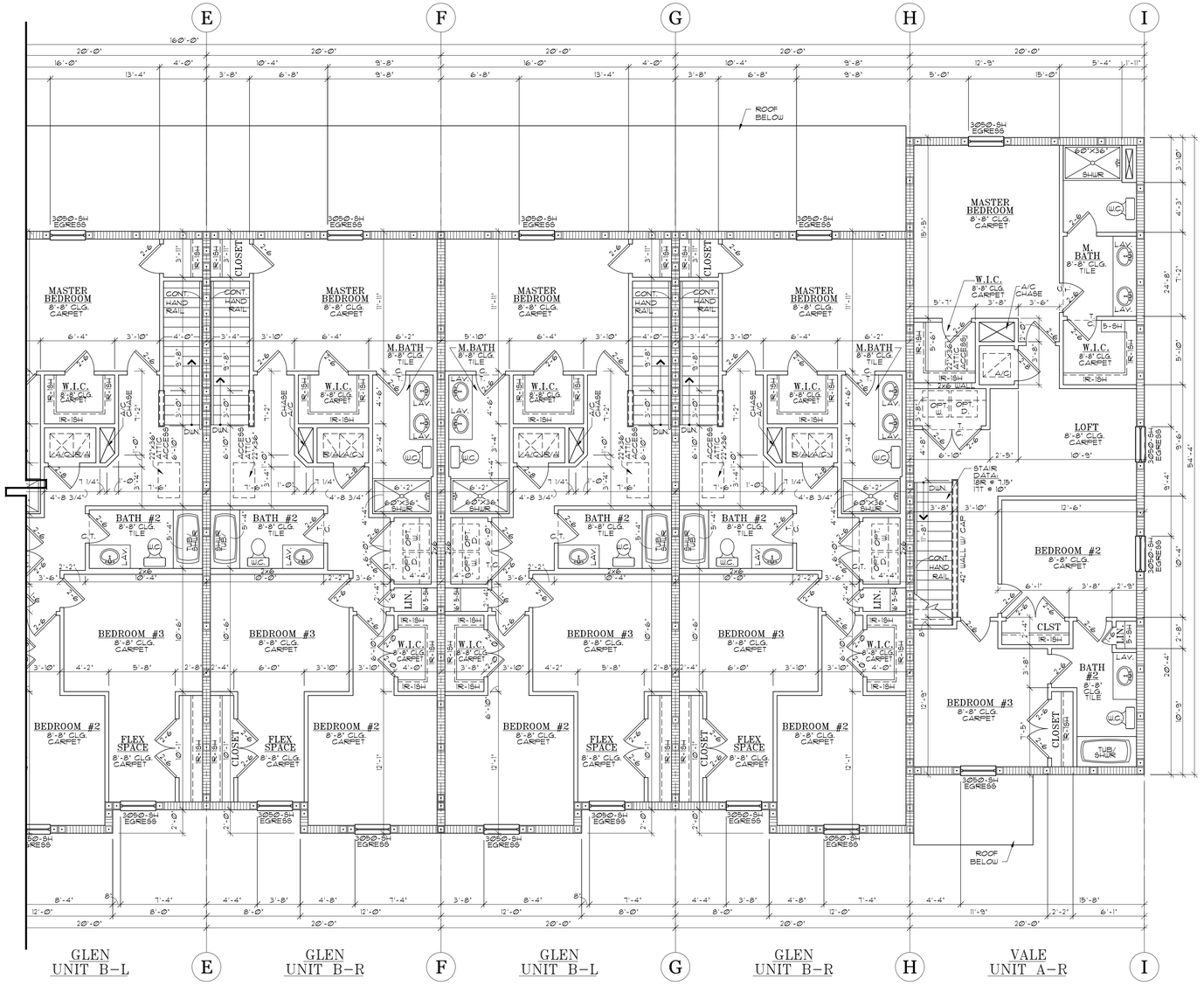


COMPONENT AND CLADDING WIND LOADS BASIC WIND EXPOSURE FOR 3 SECOND GUSTS				
OPENINGS AND TYPE	SQUARE FOOTAGE	ZONE	140 MPH WIND (Vult)	REMARKS

FIRST FLOOR PLAN (RIGHT)



SECOND FLOOR PLAN (LEFT)



SECOND FLOOR PLAN (RIGHT)

To the Attenion of the Town Council of Howey In The Hills, the below exhibits depict the rear of our product and the shutters that will be added to the rear windows.

Exhibit A



Exhibt B



LEGAL DESCRIPTION:

TRACT MM OF VENEZIA SOUTH, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 65, PAGE(S) 92 THROUGH 97, INCLUSIVE, OF THE PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.

FINAL ENGINEERING PLANS FOR VENEZIA TOWNHOMES

PARCEL ID: 35-20-25-0200-0MM-00000
SECTION 36, TOWNSHIP 20 SOUTH, RANGE 25 EAST
HOWEY-IN-THE-HILLS, LAKE COUNTY, FLORIDA

FOR

D. R. HORTON

10192 DOWDEN ROAD
ORLANDO, FL 32832
(407) 850-5245

PROJECT TEAM MEMBERS:

OWNER:
VENEZIA PARTNERS, LLC
1190 BUSINESS CENTER DR., SUITE 2000
LAKE MARY, FL 32746

ENVIRONMENTAL:
MODICA & ASSOCIATES, INC.
302 MOHAWK ROAD
CLERMONT, FL 34711
PHONE: (352) 394-2000

DEVELOPER:
D. R. HORTON
10192 DOWDEN ROAD
ORLANDO, FL 32832
PHONE: (407) 850-5245

SURVEYOR:
AMERICAN SURVEYING & MAPPING, INC.
3191 MAGUIRE BLVD., SUITE 200
ORLANDO, FL 32803
PHONE: (407) 426-7979

ENGINEER:
MADDEN, MOORHEAD, & STOKES, LLC
431 E HORATIO AVE, STE 260
MAITLAND, FL 32751
PHONE: (407) 629-8330

GEOTECHNICAL:
UNIVERSAL ENGINEERING SCIENCES, LLC
3532 MAGGIE BLVD.
ORLANDO, FL 32811
PHONE: (407) 423-0504

UTILITY PROVIDERS:

WATER & WASTE WATER:
HOWEY IN THE HILLS
316 W. CENTRAL AVENUE
HOWEY-IN-THE-HILLS, FL 34737
PHONE: (352) 324-2290

CABLE:
COMCAST
8130 CR 44 LEG A
LEESBURG, FL 34788
(352) 315-8527

PHONE
LUMEN TECHNOLOGIES
33 N. MAIN ST.
WINTER GARDEN, FL 34778
PHONE: (407) 553-7111

GAS:
TECO ENERGY
600 W. ROBINSON ST.
ORLANDO, FL 32801
PHONE: (407) 420-6663

POWER:
DUKE ENERGY
3250 BONNETT CREEK RD.
P.O. BOX 10000
LAKE BUENA VISTA, FL 32830
PHONE: (407) 938-6611

INDEX OF SHEETS

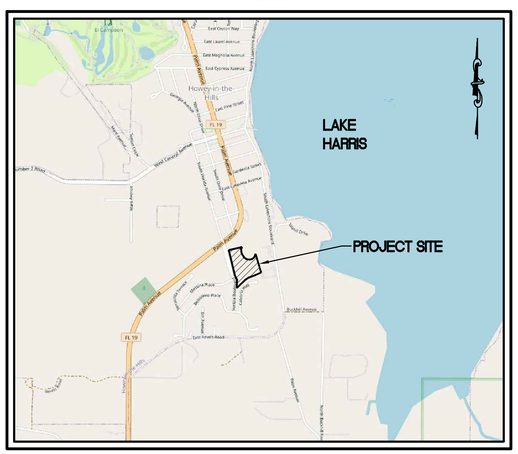
	C001	COVER SHEET
	C002	SYMBOLS AND ABBREVIATIONS
	C003	GENERAL NOTES
1	C005	EXISTING CONDITIONS AND DEMOLITION PLAN
	C100	OVERALL SITE PLAN
	C101	SITE PLAN
	C201	UTILITY PLAN
	C301	DRAINAGE PLAN
1	C302	DRAINAGE PLAN
	C401	GRADING PLAN
	C601	PLAN AND PROFILE
	C602	PLAN AND PROFILE
	C603	PLAN AND PROFILE
	C701	EROSION CONTROL PLAN
	C901 – C903	CONSTRUCTION DETAILS
	C911 – C914	TOWN STANDARD DETAILS
	INFORMATION PROVIDED BY OTHERS:	
		BOUNDARY AND TOPOGRAPHIC SURVEY
		LANDSCAPE PLANS

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. HORATIO AVENUE, SUITE 260
MAITLAND, FLORIDA 32751
PHONE (407) 629-8330
FAX (407) 629-8336

BENJAMIN S. BECKHAM ★ LICENSE No. 79452 ★ STATE OF FLORIDA ★ PROFESSIONAL ENGINEER
BENJAMIN S. BECKHAM, P.E. #79452
CERTIFICATE OF AUTHORIZATION NO. 0A-0007723

VICINITY MAP

1" = 2,000'



ABBREVIATIONS

A	
A	AREA
AB	ANCHOR BOLT
ABD	ABANDON(ED)
AC	ACRE(S)
AC-FT	ACRE FOOT/FEET
ACP	ASBESTOS CEMENT PIPE
ADDL	ADDITIONAL
ADT	AVERAGE DAILY TRAFFIC
AL	ALUMINUM
ALT	ALTERNATE
AM	BEFORE NOON
AMP	AMPERE(S)
APPROX	APPROXIMATE
ARV	AIR RELEASE VALVE
ARVV	AIR RELEASE VACUUM VALVE
ASPH	ASPHALT
ASSY	ASSEMBLY
AVE	AVENUE
AVG	AVERAGE
AZ	AZIMUTH
B	
BFP	BACKFLOW PREVENTER
BL	BASELINE
BLDG	BUILDING
BLVD	BOULEVARD
BM	BENCH MARK
BND	BOUNDARY
BO	BLOWOFF
BOC	BACK OF CURB
BOT	BOTTOM
BRG	BEARING
BS	BOTTOM OF SLOPE
BV	BUTTERFLY VALVE
C	
CAP	CAPACITY
CB	CATCH BASIN
CC	CENTER TO CENTER
CEM	CEMENT
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
C&G	CURB AND GUTTER
CI	CAST IRON
CIP	CAST IRON PIPE
CJ	CONSTRUCTION JOINT
C/L	CENTER LINE
CLP	CONCRETE LIGHT POLE
CLR	CLEAR/CLEARANCE
CLS	CLASS
CM	CONCRETE MONUMENT
CMP	CORRUGATED METAL PIPE
CMPA	CORRUGATED METAL PIPE ARCH
CND	CONDUIT
CO.	COUNTY
CO	CLEANOUT
COL	COLUMN
COMP	COMPLETE
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCT(ION)
CONT	CONTINUOUS
COORD	COORDINATE(S)
COR	CORNER
CPLG	COUPLING
CPP	CONCRETE POWER POLE
CS	CONTROL STRUCTURE
CTG	COATING
CTR	CENTER
CTV	CABLE TELEVISION
CULV	CULVERT
CY	CUBIC YARD
CYL	CYLINDER
D	
DBL	DOUBLE
DEG OR °	DEGREE
DEFL	DEFLECT(ION)
DEPT	DEPARTMENT
DET	DETAIL
DHWL	DESIGN HIGH WATER LEVEL
DI	DUCTILE IRON
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DISCH	DISCHARGE
DIST	DISTANCE
DMH	DROP MANHOLE
DN	DOWN
DRN	DRAIN
DWG	DRAWING
DWY	DRIVEWAY
E	
E	EAST
EA	EACH
EC	EDGE OF CONCRETE
ED	ENERGY DISSIPATOR
EF	EACH FACE
EFF	EFFLUENT
EG	EXISTING GRADE
E/L	EASEMENT LINE
ELB	ELBOW
ELEC	ELECTRIC
ELEV	ELEVATION
ELLIP	ELLIPSE/ELLIPTICAL
ENC	ENCASEMENT
ENG	ENGINEER(ING)
EOP	EDGE OF PAVEMENT
EQ	EQUAL/EQUATION
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
ESMT	EASEMENT
EST	ESTIMATE
EW	EACH WAY
EWL	ENDWALL
EXC	EXCAVATE/EXCAVATION
EXIST	EXISTING
EXP	EXPAND/EXPANSION
EXT	EXTEND/EXTENSION

F	
F&C	FRAME AND COVER
FD	FLOOR DRAIN
FDN	FOUNDATION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
F&I	FURNISH AND INSTALL
FIG	FIGURE
FIN	FINISHED
FIT	FITTING
FL	FENCE LINE
FLR	FLOOR
FLEX	FLEXIBLE
FLG	FLANGE
FM	FORCE MAIN
FND	FOUND
FPH	FEET PER HOUR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET/FOOT
FTG	FOOTING
G	
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GM	GAS MAIN
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GPS	GALLONS PER SECOND
GR	GUARD RAIL
GRD	GROUND/GRADE
GSP	GALVANIZED STEEL PIPE
GV	GATE VALVE
GV&B	GATE VALVE AND BOX
GW	GUY WIRE
GWT	GROUND WATER TABLE
H	
HB	HOSE BIBB
HDPE	HIGH DENSITY POLYETHYLENE
HDW	HARDWARE
HOA	HOME OWNERS ASSOCIATION
HORIZ	HORIZONTAL
HP	HORSEPOWER
HR	HOUR
HT	HEIGHT
HW	HEADWALL
HWL	HIGH WATER LEVEL
HWY	HIGHWAY
HYD	HYDRAULIC
I	
I-4	INTERSTATE HIGHWAY
IA	INTERSECTION ANGLE
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCHES
INL	INLET
INS	INSERT
INST	INSTALL
IP	IRON PIPE
IR	IRON ROD
INT	INTERSECT/INTERSECTION
INV	INVERT
J	
JB	JUNCTION BOX
JCT	JUNCTION
JST	JOIST
JT	JOINT
L	
L	LENGTH
LAT	LATITUDE
LATL	LATERAL
LB	POUND
LF	LINEAR FEET/FOOT
LG	LONG
LIM	LIMIT(S)
LP	LIGHT POLE
LONG	LONG
LT	LEFT
LWL	LOW WATER LEVEL
M	
MAINT	MAINTENANCE
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
ME	MITERED END
MFR	MANUFACTURER
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MHC	MANHOLE COVER
MHWL	MEAN HIGH WATER LEVEL
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MLP	METAL LIGHT POLE
MLWL	MEAN LOW WATER LEVEL
MON	MONUMENT
MPH	MILES PER HOUR
MSL	MEAN SEA LEVEL
MTG	MOUNTING
N	
NAWTH	NORTH
N	NORTH
NA	NOT APPLICABLE
N&C	NAIL AND CAP
NE	NORTHEAST
NG	NATURAL GROUND
NIC	NOT IN CONTRACT
NO OR #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
NW	NORTHWEST
NWL	NORMAL WATER LEVEL
O	
OC	ON CENTER
OD	OUTSIDE DIAMETER
OE	OR EQUAL
OPNG	OPENING
OPP	OPPOSITE
ORCP	OVAL REINFORCED CONCRETE PIPE
OS	OUTFALL STRUCTURE
OVFL	OVERFLOW
OVHD	OVERHEAD

P	
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PEP	POLYETHYLENE PIPE
PFGP	PROFILE GRADE POINT
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
POB	POINT OF BEGINNING
POJ	PUSH ON JOINT
PP	POWER POLE
PR	PHONE RISER
PRC	POINT OF REVERSE CURVATURE
PRESS	PRESSURE
PROJ	PROJECT
PROP	PROPOSED
PRVC	POINT OF REVERSE VERTICAL CURVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PWR	POWER
Q	
Q	FLOW RATE
R	
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RCPA	REINFORCED CONCRETE PIPE ARCH
RD	ROAD
RDY	ROADWAY
RED	REDUCER
REF	REFERENCE
REINF	REINFORCE(D)
REQD	REQUIRED
REV	REVISE/REVISION
RPM	REVOLUTIONS PER MINUTE
RR	RAILROAD
RT	RIGHT
RV	RELIEF VALVE
R/W	RIGHT-OF-WAY
RWM	REUSE WATER MAIN
S	
S	SOUTH
SAN	SANITARY SEWER
SB	SPLASH BLOCK
SCH	SCHEDULE
SD	SIDE DRAIN
SDN	SHELF DRAIN
SE	SOUTHEAST
SEC	SECONDS
SECT	SECTION
SH	SHEET
SHGWT	SEASONAL HIGH GROUND WATER TABLE
SIM	SIMILAR
S/L	SETBACK LINE
SL	SLOPE
SM	SHEET METAL
SPEC	SPECIFICATION(S)
SQ	SQUARE
SQ IN	SQUARE INCH(ES)
SQ FT	SQUARE FOOT/FEET
SQ YD	SQUARE YARD(S)
SR	STATE ROAD
SS	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
STR	STRUCTURE
STS	STORM SEWER
SUP	SUPPORT
SUSP	SUSPEND/SUSPENSION
SVC	SERVICE
SW	SOUTHWEST
SWK	SIDEWALK
SYM	SYMBOL(S)
SYMM	SYMMETRICAL
SYS	SYSTEM
T	
T	TANGENT
TB	TURFBLOCK
T&B	TOP AND BOTTOM
TBM	TEMPORARY BENCH MARK
TC	TIME OF CONCENTRATION
TD	TRENCH DRAIN
TDH	TOTAL DYNAMIC HEAD
TECH	TECHNICIAN/TECHNICAL
TEMP	TEMPORARY
TL	TERMINAL LAMPHOLE
TOB	TOP OF BANK
TOC	TOP OF CURB
TOS	TOE OF SLOPE
TOT	TOTAL
TS	TOP OF SLOPE
TWP	TOWNSHIP
TYP	TYPICAL
U	
UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UTC	UNDERGROUND TELEPHONE CABLE
V	
VB	VALVE BOX
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VPC	VERTICAL POINT OF CURVE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	
W	WEST
W/	WITH
WM	WATER MAIN
W/O	WITHOUT
WP	WATER/WEATHER PROOF
WPP	WOOD POWER POLE
WS	WATER SURFACE
WSWT	WET SEASON WATER TABLE
WT	WEIGHT
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
Y	
YD	YARD
YR	YEAR
MISC	
&	AND
@	AT
△	DELTA

EXISTING SYMBOLS

LINES

- CENTER LINE
- WIRE FENCE
- CHAIN LINK FENCE
- WOOD FENCE
- GUARDRAIL
- EXISTING PLATS
- RETAINING WALL
- RIGHT-OF-WAY LINE (R/W)
- SHORELINE
- SWALE
- BUILDING LINE
- CONTOURS (81 / 80)
- RAILROAD TRACKS
- GAS MAIN (GAS)
- UNDERGROUND ELECTRIC (UE)
- UNDERGROUND TELEPHONE (UGT)
- OVERHEAD ELECTRIC
- OVERHEAD TELEPHONE
- UNDERGROUND CABLE TELEVISION (CTV)
- EASEMENT

SANITARY

- SANITARY SEWER LINE (S)
- CLEANOUT
- FORCE MAIN (EX. FM)
- MANHOLE (S)

WATER & REUSE WATER

- WATER MAIN DIP PIPE (EX. WM)
- REUSE WATER MAIN (EX. RM)
- BACKFLOW PREVENTOR (BFP)
- WATER VALVE (WV)
- FIRE HYDRANT
- WATER METER

STORM DRAIN

- STORM SEWER
- MANHOLE
- MITERED END
- STORM INLET
- FDOT TYPE 6 INLET
- FDOT TYPE 1 INLET
- FDOT TYPE 2 INLET
- FDOT TYPE 3 INLET
- FDOT TYPE 4 INLET
- FDOT TYPE 5 INLET

HIGHWAY & UTILITIES

- BENCHMARK
- RECOVERED 4x4 CM
- SET 4x4 CM
- SET IRON ROD
- RECOVERED IRON ROD
- CONCRETE
- COUNTY ROADS (520)
- INTERSTATE ROADS (95)
- STATE ROADS (50)
- WOOD AND/OR METAL LIGHT POLE
- CONCRETE LIGHT POLE
- YARD LIGHT
- MISCELLANEOUS SIGN
- SECTION CORNER (16 / 15 / 21 / 22)
- EDGE OF PAVEMENT W/O CURB
- EDGE OF PAVEMENT W/CURB
- GUY POLE
- WOOD UTILITY POLE
- CONCRETE UTILITY POLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- TELEPHONE RISER
- ELECTRIC BOX / TRANSFORMER
- WELL
- MONITORING WELL
- DUMPSTER
- RR CROSSING SIGN
- RR CROSSING GATE
- TRAFFIC SIGNAL POLE
- SATELLITE DISH
- GUY WIRE
- HANDICAP PARKING
- SPOT ELEVATION (99.50)
- BRICK PAVERS
- DIRT ROAD
- 8" MAPLE TREE
- 8" OAK TREE
- 8" PINE TREE
- 8" PALM TREE
- 8" MISC. TREE

PROPOSED SYMBOLS

LINES

- BOUNDARY
- CONSERVATION SETBACK
- CENTER LINE
- CHAIN LINK FENCE
- CONTOUR (81 / 80)
- EASEMENT
- FENCE
- GUARDRAIL
- LOT LINE
- PROPERTY LINE (P/L)
- RETAINING WALL
- RIGHT-OF-WAY LINE (R/W)
- SETBACK LINE
- SHORELINE
- SWALE
- TREE LINE

SANITARY

- 100 LF SAN 8 PVC 0.40% — 100 LINEAR FEET SANITARY 8" PVC PIPE @ 0.40% SLOPE
- CLEANOUT
- DOUBLE SANITARY SERVICE
- FORCE MAIN PVC PIPE
- MANHOLE

WATER & REUSE WATER

- WATER MAIN DIP PIPE
- 11 1/2° BEND
- 22 1/2° BEND
- 45° BEND
- 90° BEND
- TEE
- CROSS
- CHECK VALVE
- DOUBLE DETECTOR CHECK VALVE
- DOUBLE WATER SERVICE
- GATE VALVE
- FIRE HYDRANT
- METER (M)
- REDUCER
- BLOWOFF
- BACKFLOW PREVENTER (BFP)
- SAMPLE POINT (SP 2)
- UNDERDRAIN CEANOUT
- RECLAIM WATER MAIN
- DOUBLE REUSE WATER SERVICE

STORM DRAIN

- 100 LF STS 24 HP @ 0.20% — 100 LINEAR FEET STORM PIPE 24" HIGH DENSITY POLYPROPYLENE PIPE @ 0.20%
- UNDERDRAIN 6" HDPE PIPE
- DRAINAGE FLOW DIRECTION
- FDOT INLET TYPE 1
- FDOT INLET TYPE 2
- FDOT INLET TYPE 3
- FDOT INLET TYPE 4
- FDOT INLET TYPE 5
- FDOT INLET TYPE 6
- MANHOLE
- MITERED END SECTION
- SLOPE DIRECTION ARROW FOR POND SIDE SLOPE
- 000.00 — SPOT ELEVATION
- STORM INLET

HIGHWAY & UTILITIES

- BOUND CORNER
- CONCRETE
- COUNTY ROADS (520)
- DETAIL REFERENCE (901 / 24)
- DUMPSTER PAD
- FINISHED FLOOR ELEVATION W/ FHA LOT TYPE (FF=98.76, TYPE A)
- GUY POLE
- HANDICAP PARKING
- INTERSTATE ROADS (95)
- LIGHT POLE
- SIGNS
- SECTION CORNER (16 / 15 / 21 / 22)
- STATE ROADS (50)
- SILT FENCE
- TRAFFIC FLOW PAVEMENT MARKING
- UTILITY POLE
- BLDG OR STRUCTURE
- TYPE F CURB & GUTTER
- MIAMI CURB
- CROSS SECTION DETAIL (901 / 24)

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

SYMBOLS + ABBREVIATIONS
FOR
VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

D. R. HORTON
10192 DOWDEN RD., SUITE 150
ORLANDO, FL 32832
(407) 850-5245

ENGINEER: BENJAMIN S. BECKHAM (LICENSE) No. 79452 STATE OF FLORIDA PROFESSIONAL ENGINEER
BENJAMIN SHANE BECKHAM LICENSE NUMBER 79452
DATE: 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

#	DATE	REVISIONS
1		
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JOB # 21052
DATE: 10/22/2021
SCALE: N.T.S.
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C002

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GENERAL NOTES

1. ALL CONSTRUCTION WORK SHALL BE IN ACCORDANCE WITH THE LATEST LOCAL AGENCY DETAILS, THE FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED IN 1991 BY THE STATE OF FLORIDA, AND ALL SUPPLEMENTS THERETO, AND THE FDOT "DESIGN STANDARDS", WHICHEVER IS MORE STRINGENT.
2. ALL FDOT DESIGN INDICES ARE HEREBY INCORPORATED AS PLAN REFERENCES HEREIN. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COMPLETE COPIES OF ALL APPLICABLE INDEX DRAWINGS AND CONSTRUCTING ALL WORKS IN CONFORMANCE WITH THE FDOT DESIGN STANDARDS, LATEST EDITION.
3. THE LOCATIONS OF EXISTING UTILITIES SUCH AS WATER MAINS, SEWER MAINS, GAS LINES, ETC., AS SHOWN ON THE PLANS, WERE OBTAINED WITH THE EXCEPTION OF THE LOCATIONS OF EXISTING UTILITIES AT ALL POINTS OF CONNECTION TO AND AT ALL AREAS OF CONFLICT WITH UTILITY PROVIDER MAINS, WHICH HAVE BEEN FIELD VERIFIED, HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. HOWEVER, THE ENGINEER AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE SIZES AND LOCATIONS SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF THE SIZE AND LOCATION OF ALL EXISTING UTILITIES SHOWN AND NOT SHOWN ON THESE PLANS.
4. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND ARE IN HAND AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL ABIDE BY ALL CONDITIONS CONTAINED THEREIN. PERMITS INCLUDED (BUT NOT NECESSARILY LIMITED TO) ARE:
   - ACOE NATIONWIDE OR INDIVIDUAL DREDGE AND FILL
   - FDEP WATER DISTRIBUTION
   - FDEP SANITARY SEWER COLLECTION AND TRANSMISSION
   - FDEP REUSE
   - FDEP DREDGE AND FILL
   - FDEP NPDES GENERIC PERMIT FOR STORMWATERDISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES
   - FDOT DRIVEWAY CONNECTION
   - FDOT UTILITY
   - FDOT STORMWATER DISCHARGE CONNECTION
   - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION PERMIT FOR IMPACTS TO PROTECTED SPECIES
   - LOCAL RIGHT OF WAY USE
   - LOCAL UNDERGROUND UTILITIES
   - WATER MANAGEMENT DISTRICT CONSUMPTIVE USE FOR CONSTRUCTION DEWATERING (CUP)
   - WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMIT (ERP)
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SETBACKS AND EASEMENTS BEFORE BEGINNING CONSTRUCTION.
5. BENCHMARKS AND OTHER REFERENCE POINTS SHALL BE CAREFULLY MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. IF DISTURBED OR DESTROYED, THESE POINTS SHALL BE REPLACED BY A LICENSED FLORIDA PROFESSIONAL LAND SURVEYOR (P.L.S.) AT CONTRACTOR'S EXPENSE.
6. DIFFERING SITE CONDITIONS FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON, OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND OWNER IN WRITING. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO DIFFERING SITE CONDITIONS WILL BE ALLOWED IF CONTRACTOR FAILS TO PROVIDE THE REQUIRED WRITTEN NOTIFICATION OF SUCH CONDITIONS TO THE ENGINEER AND OWNER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND REMOVAL OF ALL EXISTING STRUCTURES, ETC., UNLESS OTHERWISE NOTED. ALL SOIL STRIPPINGS AND ANY UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR UNLESS OTHERWISE DIRECTED BY THE OWNER.
8. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES AND UTILITIES NOTED TO REMAIN FROM DAMAGE OR DISPLACEMENT DURING CONSTRUCTION. IN THE EVENT OBSTRUCTIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER AND THE UTILITY COMPANY. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS INCURRED TO REPAIR DAMAGE OR CORRECT DISPLACEMENT.
9. CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING NEAR TREES WHICH ARE TO BE SAVED, WHETHER SHOWN IN THE PLANS OR DESIGNATED IN THE FIELD. CONTRACTOR SHALL BECOME FAMILIAR WITH AND CONFORM WITH ALL TREE PROTECTION/PRESERVATION PROVISIONS OF THE PRELIMINARY SUBDIVISION PLAN / DEVELOPMENT PLAN AND LOCAL GOVERNMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT AND MITIGATION COSTS FOR ANY TREES REMOVED THAT WERE DESIGNATED TO BE PRESERVED.
10. WHEN DETAILS ARE PROVIDED, CONTRACTOR SHALL CONSTRUCT JOB PER SPECIFIC DETAILS, AND NOT BY SCALING FROM THESE PLANS.
11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY REQUIRED TRAFFIC CONTROL PLANS. ALL WORK SHALL BE EXECUTED UNDER THE ESTABLISHED PLAN AND FDOT, AND LOCAL AGENCY APPROVED PROCEDURES.
12. THE CONTRACTOR SHALL RESTORE OFF SITE CONSTRUCTION AREAS TO EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
13. AS-BUILT DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE PROJECT ENGINEER UPON PROJECT COMPLETION.
14. CONTRACTOR SHALL COMPLY WITH ALL LOCAL AGENCY REQUIREMENTS FOR INSPECTION AND TESTING.
15. ALL NEW UTILITIES AND UPGRADED UTILITIES PROVIDED TO OR ON THE SITE MUST BE INSTALLED UNDERGROUND.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY TRAFFIC SIGNAL EQUIPMENT INCLUDING BUT NOT LIMITED TO FIBER LOOP SENSORS PULL BOXES, CONDUIT TRAFFIC SIGNALS, AND CABINETS. ANY ITEMS DAMAGED BY THE CONTRACTOR WILL BE RESTORED TO THEIR ORIGINAL CONDITIONS UNLESS OTHERWISE AGREED UPON BY THE COUNTY TRAFFIC ENGINEER.
17. ALL CONSTRUCTION MUST BE IN ACCORDANCE WITH UTILITY PROVIDER'S STANDARDS AND CONSTRUCTION SPECIFICATIONS, LATEST EDITION.
18. CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS; INCLUDING BUT NOT LIMITED TO, WATER, RECLAIMED WATER, SEWER, POWER, TELEPHONE, GAS AND CABLE TV COMPANIES.
19. PRIOR TO COMMENCEMENT, CONTRACTOR SHALL PROVIDE ENGINEER WITH CONSTRUCTION SCHEDULE FOR VARIOUS SITE WORK ELEMENTS SO THAT PERIODIC SITE VISITS MAY BE COORDINATED TO ENSURE TIMELY CERTIFICATION OF COMPLETION TO AGENCIES AND AVOID DELAYS IN ISSUANCE OF CERTIFICATES OF OCCUPANCY/COMPLETION.
20. ALL RECOMMENDATIONS AND REQUIREMENTS OF INSPECTION PERSONNEL OTHER THAN OWNER/OWNER'S REPRESENTATIVE SHALL BE REPORTED TO ENGINEER/OWNER/OWNER'S REPRESENTATIVE PRIOR TO IMPLEMENTATION. COMPENSATION WILL NOT BE ALLOWED FOR WORK THAT IS NOT AUTHORIZED BY ENGINEER/OWNER/OWNER'S REPRESENTATIVE.
21. CONTRACTOR SHALL CONFIRM COMPATIBILITY OF PIPE SLOPES AND INVERTS DURING SHOP DRAWING AND MATERIALS ORDERING PHASE OF PROJECT AND ADVISE ENGINEER OF ANY DISCREPANCIES.
22. NO EXISTING MATERIAL SHALL BE USED IN NEW CONSTRUCTION UNLESS APPROVED DURING THE SHOP DRAWING APPROVAL PROCESS BY ENGINEER/OWNER/OWNER'S REPRESENTATIVE IN WRITING.
23. CONTRACTOR SHALL STAKE ALL IMPROVEMENTS USING THE PLAT(S), ROAD CENTERLINE GEOMETRY, AND BUILDING COORDINATES PROVIDED IN THESE PLANS. CONTRACTOR SHALL CONFIRM WITH THE ENGINEER THAT THE PLAT IS CURRENT PRIOR TO CONSTRUCTION.
24. CONTRACTOR SHALL CONFIRM THE BUILDING DIMENSIONS SHOWN HEREIN WITH THOSE IN THE FINAL ARCHITECTURAL DRAWINGS PRIOR TO STAKEOUT. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND VERTICAL, INCLUDING MINIMUM BUILDING SETBACKS PRIOR TO THE INSTALLATION OF ANY IMPROVEMENT.

PAVING AND DRAINAGE

1. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH TYPICAL PAVEMENT SECTIONS AND LOCAL AGENCY SPECIFICATIONS. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE GRADING PLAN.
2. FLORIDA LAW (F.S. 553.851) PROTECTION OF UNDERGROUND PIPELINES MANDATES THAT "NO EXCAVATOR SHALL COMMENCE OR PERFORM ANY EXCAVATION IN ANY PUBLIC OR PRIVATE STREET, ALLEY, RIGHT-OF-WAY DEDICATED TO THE PUBLIC USE, OR GAS UTILITY EASEMENT WITHOUT FIRST OBTAINING INFORMATION CONCERNING THE POSSIBLE LOCATION OF GAS PIPELINES IN THE AREA OF THE PROPOSED EXCAVATION." THIS INCLUDES ANY OPERATION UTILIZING HAND TOOLS OR POWER TOOLS WHICH MOVES OR REMOVES ANY STRUCTURE, EARTH, ROCK, OR OTHER MASS OF MATERIAL BY SUCH METHODS AS DIGGING, BACKFILLING, DEMOLITION, GRADING, DITCHING, DRILLING, BORING AND CABLE PLOWING. THE EXCAVATOR MUST NOTIFY THE GAS UTILITY A MINIMUM OF 48 HOURS AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATING (EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS).
3. EXCAVATION, PAVING, AND STORM SEWER WORK SHALL BE DONE IN ACCORDANCE WITH FDOT "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, AND LOCAL AGENCY SPECIFICATIONS.
4. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATIONS AT PROPERTY LINES. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE OF THE SITE TO THE RETENTION PONDS AS SHOWN BY PROPOSED GRADES AND FLOW ARROWS.
5. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE AND PROPER SOIL EROSION CONTROL MEASURES FOR PROTECTION OF ALL DRAINAGE AND SEWER STRUCTURES AND AT ALL ADJACENT LANDS AND ROADS.
6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL GEOTECHNICAL REPORTS PREPARED FOR THE SITE. GEOTECHNICAL RECOMMENDATIONS ARE NOT THE RESPONSIBILITY OF ENGINEER. ENGINEER HAS RELIED ON THE GEOTECHNICAL REPORT(S) IN PREPARATION OF THE DRAWINGS. ANY CONFLICT BETWEEN INFORMATION WITHIN THE REPORT AND THESE DRAWINGS SHALL BE REPORTED TO ENGINEER/OWNER /OWNER'S REPRESENTATIVE. ENGINEER ASSUMES NO RESPONSIBILITY FOR THE CORRECTNESS, COMPLETENESS, OR ACCURACY OF GEOTECHNICAL INFORMATION.
7. THE SITE SHALL BE CLEARED OF ALL TREES EXCEPT THOSE WHICH ARE DESIGNATED TO BE SAVED OR RELOCATED. BEFORE CONSTRUCTION, THE CONTRACTOR SHALL MEET AT THE SITE WITH THE OWNER. AT THIS TIME, ANY TREES TO BE SAVED SHALL BE POINTED OUT AND TAGGED. THESE TREES SHALL BE PROTECTED FROM DAMAGE.
8. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE SUPERVISING ENGINEER IF A PAVEMENT OR FOUNDATION SOIL IS DISTURBED.
9. THE CONTRACTOR SHALL INSTALL DROP CURBS AND HANDICAP RAMPS AT ALL INTERSECTIONS OF THE SIDEWALK WITH THE PROPOSED PAVEMENT, UNLESS OTHERWISE SPECIFIED.
10. FOR HORIZONTAL AND VERTICAL CLEARANCES BETWEEN STORM PIPES AND WATER MAINS/SERVICES, SEE WATER NOTES ON THIS SHEET AND FDEP SEPARATION TABLE ON UTILITY PLAN.
11. ALL PUBLIC STORM PIPE MATERIALS SHALL BE REINFORCED CONCRETE PIPE (RCP) ASTM C-76 CLASS III, OR HIGH PERFORMANCE POLYPROPYLENE (HP) IF PERMITTED, UNLESS OTHERWISE SPECIFIED. LITTING HOLES SHALL BE PROHIBITED.
12. ALL PRIVATE STORM PIPE MATERIALS SHALL BE AS FOLLOWS:
    12.1. DIAMETERS LESS THAN OR EQUAL TO 12-INCH SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) PIPE FROM AN FDOT APPROVED SUPPLIES LIST.
    12.2. DIAMETERS GREATER THAN OR EQUAL TO 15-INCH SHALL BE HIGH PERFORMANCE POLYPROPYLENE (HP) PIPE FROM AN FDOT APPROVED SUPPLIES LIST.
13. MINIMUM COVER OVER ALL PIPE SHALL BE 36-INCHES FROM TOP OF PIPE TO FINISHED GRADE, UNLESS OTHERWISE NOTED.
14. ALL STORM SYSTEM MANHOLE AND INLET STRUCTURES SHALL BE PRECAST CONCRETE.
15. THE CONTRACTOR SHALL USE CONCRETE WITH A MINIMUM 28 DAY STRENGTH OF 3,000 P.S.I..
16. ALL SIDEWALK WIDTHS SHALL BE AS NOTED ON THE SITE PLAN AND SHALL HAVE 1-INCH DEEP CONTRACTION JOINTS EVERY 5-FEET AND AN EXPANSION JOINT EVERY 20-FEET (MINIMUM). MAXIMUM SIDEWALK CROSS SLOPES SHALL BE 2.00% AND MAXIMUM SIDEWALK RUNNING SLOPES SHALL BE 5.00% EXCEPT AT RAMP LOCATIONS. MAXIMUM RAMP SLOPES SHALL BE 8.33%.
17. PROVIDE FDOT TYPE III SILT FENCE ALONG THE PROPERTY LINES AND PHASE LINES AS WELL AS ANY CONSTRUCTION WITHIN THE OTHER PHASES THAT IS DEEMED NECESSARY.
18. ALL TEST REPORTS GENERATED BY A TESTING FIRM ARE TO HAVE COPIES SENT DIRECTLY TO THE LOCAL AGENCY AS SOON AS THEY ARE GENERATED. CLEARANCE FROM THE LOCAL AGENCY SHALL BE RECEIVED PRIOR TO PAVING.
19. THE BASE COURSE SHALL NOT BE CONSTRUCTED UNTIL AFTER SUBGRADE CONSTRUCTION HAS BEEN COMPLETED AND REQUIRED SUBGRADE TEST RESULTS HAVE BEEN SUBMITTED TO AND APPROVED BY THE LOCAL AGENCY'S ENGINEER.
20. THE FINISHED BASE COURSE SHALL BE PRIMED WITHOUT DELAY, PROTECTED FROM HEAVY TRAFFIC, AND CONTINUOUSLY MAINTAINED FREE OF DAMAGE UNTIL THE WEARING SURFACE IS APPLIED. ALL BAD AREAS SHALL BE CUT OUT AND REPLACED PRIOR TO APPLYING WEARING SURFACE.
21. ASSUMING ACCEPTABLE CURING, THE WEARING SURFACE SHALL BE APPLIED NO SOONER THAN SEVEN (7) DAYS AND NO LATER THAN THIRTY (30) DAYS AFTER BASE COMPLETION.
22. ALL CONCRETE PIPE JOINTS SHALL BE WRAPPED IN FILTER FABRIC.
23. ROADWAY MARKING, STRIPING, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (MUTCD), INCLUDING SUBSEQUENT REVISIONS AND ADDENDUMS, AS PUBLISHED BY THE USDOT FEDERAL HIGHWAY ADMINISTRATION AS WELL AS FDOT AND LOCAL AGENCY STANDARDS AND SPECIFICATIONS.
24. REGULATORY SIGNS AND MARKINGS SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS.
25. PAVEMENT RETURN RADII SHALL BE MEASURED TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
26. POND SLOPES AND BERMS SHALL BE SODDED TO TWO (2) FEET BELOW THE NORMAL WATER LINE (N.W.L.). IN THE CASE OF DRY BOTTOM PONDS, THE BOTTOM WILL BE SEEDED AND MULCHED UNLESS OTHERWISE SPECIFIED.
27. ALL PRECAST DRAINAGE STRUCTURES TO HAVE STEEL FRAME, ALL STRUCTURES IN PAVED AREAS TO HAVE STEEL RECTILINEAR GRATES WITH H-20 LOADING.
28. CONTRACTOR SHALL NOT COMPACT, STABILIZE, OR CONSTRUCT BASE COURSE WITHIN LANDSCAPE ISLANDS, TRACTS OR MEDIANS, WHERE SUCH TREATMENT DOES OCCUR, IT SHALL BE REMOVED AND REPLACED WITH SUITABLE PLANTING SOILS ACCEPTABLE TO LANDSCAPE ARCHITECT.
29. YARD DRAINS SHALL BE NYOPLAST INLINE DRAINS AND DRAIN BASINS, OR APPROVED EQUAL, WITH CAST IRON GRATES AND WATERTIGHT ADAPTER CONNECTIONS. DOMED GRATES SHALL BE PROVIDED IN NON-SODDED AREAS.
30. ALL FIRE HYDRANT LOCATIONS SHALL BE MARKED BY PLACING BLUE REFLECTIVE PAVEMENT MARKERS IN THE CENTER OF THE NEAREST TRAVEL LANE.
31. MINIMUM LONGITUDINAL SLOPE OF CURB SHALL BE 0.30% UNLESS SPECIFIED OTHERWISE.
32. FINISHED FLOOR ELEVATION IS TYPICALLY 8" INCHES ABOVE DESIGN FINISHED GRADE AT OUTSIDE PERIMETER OF BUILDINGS EXCEPT AT ENTRIES AND WHERE OTHERWISE SHOWN.
33. CONTRACTOR SHALL REMOVE ALL MUCK DEPOSITS IN CONSTRUCTION AREAS AND AREAS TO BE FILLED. SEE GEOTECHNICAL REPORT.
34. DRAINAGE MANHOLES AND INLETS (NOT INCLUDING CONTROL STRUCTURES) IN THE PLANS ARE IDENTIFIED BY TOP TYPE ONLY. CONTRACTOR SHALL PROVIDE STANDARD DITCH BOTTOM INLET TOPS AND TYPE 'J' OR 'P' STRUCTURE BOTTOMS, SIZED AS REQUIRED TO ACCOMMODATE PIPE SIZES AND ORIENTATIONS SHOWN. SHOP DRAWINGS SHALL BE SUBMITTED WHICH CLEARLY REPRESENT SUCH DATA.
35. CONTRACTOR SHALL STABILIZE AND PROTECT ALL END WALL, MITERED END SECTION, FLARED END SECTION, ETC. STRUCTURES THROUGHOUT THE PROJECT UNTIL THE BANK SLOPES OF THE RECEIVING WATER BODY ARE STABILIZED AND ACCEPTED BY OWNER.

SANITARY SEWER

1. ROOF DRAINS, FOUNDATION DRAINS OR OTHER STORM WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
2. GRAVITY SEWER PIPE SHALL BE SDR26 PVC AND SHALL MEET ASTM D3034, UNLESS OTHERWISE SPECIFIED.
3. ALL SANITARY SERVICE LATERALS SHALL BE 6-INCH DIAMETER PVC AND SHALL END WITH A CLEAN OUT.
4. ALL SANITARY SEWER PIPE SHALL BE COLORED GREEN.
5. ALL SANITARY SEWER MANHOLES SHALL HAVE A MINIMUM DIAMETER OF 48-INCHES AND A MINIMUM ACCESS DIAMETER OF 22-INCHES.
6. MINIMUM COVER OVER ALL PIPE SHALL BE 36-INCHES FROM TOP OF PIPE TO FINISHED GRADE, UNLESS OTHERWISE NOTED.
7. FOR HORIZONTAL AND VERTICAL CLEARANCES BETWEEN SANITARY SEWER MAINS/ LATERALS AND WATER MAINS/SERVICES, SEE WATER NOTES ON THIS SHEET AND FDEP SEPARATION TABLE ON UTILITY PLAN.
8. WHERE SOIL REPORT INDICATES THE POSSIBILITY OF UNSUITABLE MATERIAL IN THE VICINITY OF SANITARY LINES, THE CONTRACTOR SHALL DETERMINE THE NATURE AND EXTENT OF THIS UNSUITABLE MATERIAL, PREPARE TRENCH, AND INSTALL THE SEWER LINE IN ACCORDANCE WITH ASTM D-2321. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER OF THIS UNSUITABLE MATERIAL.
9. THE CONTRACTOR SHALL BE REQUIRED TO PERFORM INFILTRATION OR EXFILTRATION TEST, WHICHEVER IS APPLICABLE. INFILTRATION SHALL NOT EXCEED 50 GALLONS PER DAY PER INCH OF DIAMETER PER MILE OF LENGTH, OR THE COMPUTED EQUIVALENT FOR SHORTER LENGTHS OF TIME. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS, CODES, AND ORDINANCES OF THE WASTEWATER TRANSMISSION AUTHORITY INCLUDING ADVANCED NOTIFICATION PRIOR TO CONSTRUCTION AND TESTING.
10. MADDEN, MOORHEAD & STOKES, INC. SHALL BE NOTIFIED A MINIMUM OF FIVE (5) FULL WORKING DAYS PRIOR TO CONSTRUCTION AND TESTING OF THE SANITARY SEWER, PHONE (407)-629-8330.
11. THE CONTRACTOR SHALL SUPPLY COMPLETE "AS BUILT" INFORMATION RELATIVE TO INVERTS, RIM ELEVATIONS, AND MANHOLES AND LATERALS AND FITTINGS. LATERALS SHALL BE LOCATED FROM THE CENTERLINE OF THE NEAREST DOWNSTREAM MANHOLE. THE INFORMATION SHALL BE SUBMITTED ON LEGIBLY MARKED-UP PRINTS TO THE ENGINEER WITHIN TWO (2) WEEKS OF COMPLETION OF SEWER CONSTRUCTION.
12. CONTRACTOR SHALL RECEIVE SEWER CERTIFICATION PRIOR TO PLACEMENT OF BASE COURSE.
13. MINIMUM SLOPE ON ALL SANITARY SEWER GRAVITY MAINS SHALL BE IN ACCORDANCE WITH UTILITY PROVIDER'S STANDARDS AND CONSTRUCTION SPECIFICATIONS, LATEST EDITION.
14. ALL SANITARY SERVICE LOCATIONS SHALL BE MARKED BY CUTTING AN "S" INTO THE CURB.
15. MARK RESIDENTIAL LATERALS WITH 6-FOOT HIGH PIECE OF 2"x4" PLANK PAINTED GREEN WITH LOT NUMBER CLEARLY MARKED AND AN 'S' IMPRESSED IN THE CURB.
16. AIR RELEASE VALVES SHALL BE REQUIRED AT ALL HIGH POINTS ALONG THE FORCE MAIN.
17. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT AN EVEN TRANSITION IS MAINTAINED WHERE ASPHALT PAVING ABUTS MANHOLE/VALVE COVERS IN PAVED AREAS. AT EACH OF THESE LOCATIONS THE CONTRACTOR SHALL POUR AN 8-INCH THICK CONCRETE APRON AROUND THE MANHOLE/VALVE COVER A MINIMUM OF 4'x4' AT MANHOLES, AND 2'x2' AT VALVE COVERS LEVEL WITH THE FINAL LIFT OF ASPHALT.
18. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN MANHOLE CENTERLINE.
19. INVERTS OF SANITARY SERVICE LATERALS AT THEIR CONNECTION TO SANITARY MANHOLES SHALL BE NO MORE THAN ONE (1) FOOT ABOVE THE MANHOLE INVERT.
20. PRIOR TO PAVING, CONTRACTOR SHALL VERIFY THE AS-BUILT SANITARY SEWER PIPE SLOPES. MINIMUM SLOPES SHALL BE IN ACCORDANCE WITH THE GREATER OF FDEP OR THE UTILITY PROVIDER'S MINIMUM CRITERIA. ANY LINE NOT MEETING MINIMUM SLOPES SHALL BE RELAYED BY CONTRACTOR TO MEET THE MINIMUM SLOPE REQUIREMENT AT NO ADDITIONAL COST.
21. MANHOLE LIFT HOLES AND GRADE ADJUSTMENT RINGS SHALL BE SEALED WITH NON-SHRINKING MORTAR OR OTHER APPROPRIATE MATERIAL.
22. INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED FLEXIBLE WATER-TIGHT CONNECTION OR ANOTHER WATER-TIGHT CONNECTION ARRANGEMENT THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL.
23. WATER-TIGHT MANHOLE COVERS SHALL BE USED WHEREVER THE MANHOLE TOPS MAY BE FLOODED BY STREET RUNOFF OF HIGH WATER.

WATER

1. ALL MATERIALS AND CONSTRUCTION REQUIREMENTS FOR THE FIRE SERVICE, WATER LINES, CHECK VALVES, BACKFLOW PREVENTERS, GATE VALVES, ETC., SHALL BE IN ACCORDANCE WITH LOCAL AGENCY STANDARD DETAILS AND SPECIFICATIONS, LATEST EDITION.
2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH AWWA STANDARDS AND IN ACCORDANCE WITH LOCAL AGENCY STANDARDS.
3. ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL COME INTO CONTACT WITH DRINKING WATER WILL CONFORM TO NSF INTERNATIONAL STANDARD 61 AND WILL BE MARKED WITH THE NSF SEAL OF APPROVAL.
4. CONTRACTOR SHALL VERIFY SIZE AND TYPE OF EXISTING MAIN PRIOR TO ORDERING TAPPING MATERIALS FOR TIE-INS.
5. SITE CONTRACTOR SHALL COORDINATE AND VERIFY ALL UTILITY SERVICES WITH FINAL ARCHITECTURAL DRAWINGS AND BUILDING CONTRACTOR.
6. THE CONTRACTOR SHALL TERMINATE 5-FEET FROM BUILDINGS UNLESS OTHERWISE STATED.
7. MINIMUM COVER OVER ALL PIPE SHALL BE 36-INCHES FROM TOP OF PIPE TO FINISHED GRADE, UNLESS OTHERWISE NOTED.
8. THE WATER MAIN SHALL BE LOCATED ABOVE THE STORMWATER AND SANITARY MAINS AT CONFLICTS, WHERE POSSIBLE.
9. VERTICAL SEPARATION BETWEEN UNDERGROUND POTABLE WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES:
   9.1. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
   9.2. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
10. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
   10.1. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
   10.2. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
   10.3. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
   10.4. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.
11. AT THE UTILITY CROSSINGS DESCRIBED IN NOTES 8 AND 9 ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY-OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
12. WATER LINES 2-INCHES, OR LESS, IN DIAMETER SHALL BE POLYETHYLENE TUBING.
13. WATER LINES 4-INCH TO 12-INCH IN DIAMETER SHALL BE NSF LOGO PVC PIPE CONFORMING TO AWWA C-900 AND BE DR-18.
14. ALL FITTINGS SHALL BE DUCTILE IRON (D.I.) OR GRAY IRON MECHANICAL JOINTS WITH A MINIMUM PRESSURE RATING OF 250 P.S.I. CONFORMING TO ANSI A-21.10 / AWWA C-110, OR D.I. COMPACT FITTINGS FOR DIAMETERS 4-INCH TO 12-INCH CONFORMING TO ANSI A-21.53 / AWWA C-153.
15. FROM THE POINT OF SERVICE (P.O.S.) FORWARD AS DESIGNATED BY F.S. 633, FIRE SUPPLY PIPE SHALL BE DR-14 AND TESTED AT 200 PSI FOR TWO HOURS.
16. GATE VALVES SHALL CONFORM TO AWWA C-509-87, WITH WRENCH NUT EXTENSION STEMS AND OTHER APPURTENANCES AS REQUIRED AND SHALL BE IRON BODY, FULL BRONZE MOUNTED, DOUBLE DISK, PARALLEL SEAT, NON-RISING STEM VALVES WITH O-RING SEALS AND END CONNECTIONS AS CALLED FOR ON THE PLANS. ALL TEES, CAPS, PLUGS, BENDS, VALVES, ETC., SHALL BE PROVIDED WITH GRIP RING RESTRAINTS.
17. ALL NON-METALLIC WATER MAINS SH

PROPERTY BOUNDARY TYP.

S16°21'18"E 538.45'(C)

EXISTING RETAINING WALL AND FENCE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. CONTRACTOR TO EXERCISE CAUTION WHEN EXCAVATING NEAR EXISTING RETAINING WALL TIE-BACK MATERIAL.

S66°22'24"W 184.64'(C)

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

PROPERTY BOUNDARY TYP.

WETLAND

CONTRACTOR TO CLEAN AND CLEAR THE EXISTING CONCRETE WEIR

76.59 INVERT 18" R.C.P.

CONTRACTOR TO MOW AND CLEAR EXISTING POND SLOPES

CONTRACTOR TO REMOVE ALL EXISTING VEGETATION FROM POND BOTTOM. SCRAPE BOTTOM AS NEEDED TO REMOVE ORGANICS, RESTORE EXISTING POND BOTTOM ELEVATION, AND SEED/MULCH.

EXISTING RETENTION POND

EXISTING RETAINING WALL AND FENCE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. CONTRACTOR TO EXERCISE CAUTION WHEN EXCAVATING NEAR EXISTING RETAINING WALL TIE-BACK MATERIAL.

76.46 INVERT 24" R.C.P.

76.66 INVERT 24" R.C.P.

PROPERTY BOUNDARY TYP.

S70°02'35"W 191.93'(C)

PROPERTY BOUNDARY TYP.

S56°46'35"W 94.38'(C)

CALABRIA WA...

GATE

SANITARY MANHOLE
TOP ELEVATION = 93.23'
INVERT ELEV. = (8" P.V.C.) 84.33'
S INVERT ELEV. = (8" P.V.C.) 84.28'

SEARCH SMH

N76°48'44"E 378.11'(C)

EXISTING GRAVITY SEWER TO REMAIN

6" P.V.C. STAND PIPE

PROTECT EXISTING MANHOLE, TYP.

EXISTING STREET TREE

EXISTING WATER METER TO BE RELOCATED

N24°05'...
141...

N02°31'41"E
195.76'(C)

N13°11'16"W 686.25'(C)

PROPERTY BOUNDARY TYP.

EXISTING CONCRETE DRIVEWAY AND SLAB TO BE REMOVED

VENEZIA BOULEVARD

VENEZIA BOULEVARD
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY
VARIABLE WIDTH ASPHALT PAVED ROAD

MESSINA PLACE

MADDEN
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EXISTING CONDITIONS AND DEMOLITION PLAN
FOR
VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

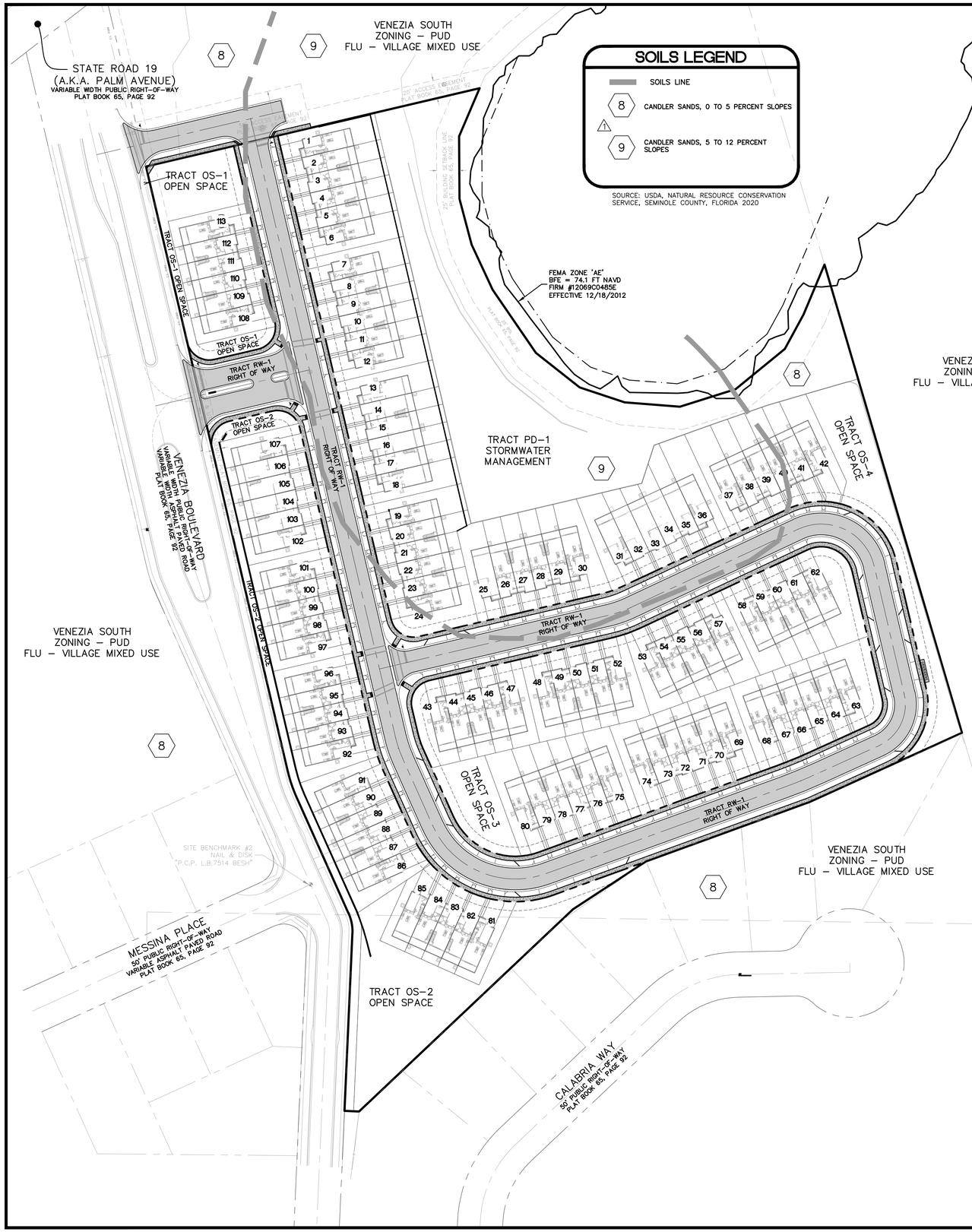
D. R. HORTON
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(407) 850-5245

ENGINEER: BENJAMIN S. BECKHAM
LICENSE No. 79452
STATE OF FLORIDA
PROFESSIONAL ENGINEER
BENJAMIN S. BECKHAM
DATE: 10/22/2021
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

	DATE	REVISIONS
1	12/10/21	ADDED SHEET
2		
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JOB # 21052
DATE: 10/22/2021
SCALE: 1" = 40'
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C005



SITE DATA:

1. PARCEL ID: 35–20–25–0200–0MM–00000
2. EXISTING ZONING: (PUD)
3. EXISTING FUTURE LAND USE: (VMU) VILLAGE MIXED USE
4. EXISTING USE: VACANT LAND (MASS–GRADED)
5. PROJECT IS LOCATED IN ZONE X PER FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 12069C0485E FOR LAKE COUNTY DATED DECEMBER 18, 2012. ZONE X IS DESCRIBED AS AREAS OUTSIDE OF 0.2% ANNUAL CHANCE FLOODPLAIN AND ALSO DESCRIBED AS AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT.
6. THE PARCEL DOES NOT CONTAIN ANY WETLANDS.
7. STORMWATER GENERATED BY THE PROJECT SITE WILL BE TREATED USING THE EXISTING ON–SITE STORMWATER MANAGEMENT SYSTEM. THE EXISTING ON–SITE SYSTEM WAS PREVIOUSLY PERMITTED BY SJRWMD BY PERMIT NO. 18971–3.
8. ALL LANDSCAPING WILL BE UNDER SINGLE MAINTENANCE ENTITY, NOT CARED FOR BY HOMEOWNERS.
9. WATER AND SEWER TO BE PROVIDED BY TOWN OF HOWEY–IN–THE–HILLS.
10. ALL PROPOSED UTILITIES (ELECTRICAL, CABLE TV, GAS, TELEPHONE, ETC.) SHALL BE INSTALLED UNDERGROUND.
11. ALL CONSTRUCTION MATERIALS AND OTHER PROPOSED IMPROVEMENTS SHALL MEET THE APPLICABLE CODES OF TOWN OF HOWEY–IN–THE–HILLS.
12. ALL SIGNAGE AND STRIPING TO BE INSTALLED IN ACCORDANCE WITH MUTCD (LATEST EDITION) STANDARDS AND SPECIFICATIONS.
13. STREET LIGHTING SHALL BE PROVIDED PER TOWN OF HOWEY–IN–THE–HILLS LAND DEVELOPMENT CODE. A SEPARATE PERMIT WILL BE REQUIRED.

PROJECT DATA:

1. GROSS PROJECT AREA: 11.83 ACRES ±
2. EXISTING USE: VACANT LAND (MASS–GRADED)
3. FUTURE USE: TOWNHOUSES
4. MAX. PROPOSED UNITS: 113 UNITS
5. MIN. LOT AREA 1,800 SF
6. MIN. LOT WIDTH 18'
7. MIN. LOT DEPTH 100'
8. MIN. LIVING AREA 1,200 SF
9. MAX. BUILDING HEIGHT 35' (TWO STORIES)
10. RESIDENTIAL USE DENSITY:
    ALLOWED: 11.83 ACRES x 20 DU/AC = 236 UNITS
    PROPOSED: 113 UNITS / 11.83 ACRES = 9.55 DU/AC
11. TOWNHOUSE BUILDING SETBACKS:
    - FRONT: 20'
    - SIDE (INTERNAL UNIT): 0'
    - SIDE (END UNIT): 10'
    - STREET SIDE: 10'
    - REAR: 10', 4' ACCESSORY STRUCTURES
    - BUILDING SEPARATION: 20' (TWO STORIES)
12. SCHOOL AGE CHILDREN:
    ELEMENTARY: (113 DU) x (0.115 CHILD/DU) = 13 CHILDREN
    (113 DU) x (0.053 CHILD/DU) = 6 CHILDREN
    (113 DU) x (0.057 CHILD/DU) = 7 CHILDREN
    26 CHILDREN
13. REQUIRED MIN. PARKING SPACES:
    (2 SPACES PER TOWNHOUSE) + (1 OVERFLOW SPACE / 4 TOWNHOUSE)
    226 + 29 = 255 PARKING SPACES REQUIRED
14. WATER CAPACITY DEMAND:
    113 DU X 350 GPD/DU = 39,350 GPD
15. WASTEWATER CAPACITY DEMAND:
    113 DU X 300 GPD/DU = 33,900 GPD
16. OPEN SPACE REQUIRED: 20% OPEN SPACE MIN
17. OPEN SPACE PROPOSED: 2.94 AC (24.8%)

TRACT TABLE:

ID	DESCRIPTION	OWNER	MAINTENANCE	AREA (AC/%)	
RW–1	RIGHT OF WAY	PUBLIC	PUBLIC	2.60	21.97%
OS–1	OPEN SPACE / LANDSCAPE BUFFER	H.O.A.	H.O.A.	0.22	1.85%
OS–2	OPEN SPACE / LANDSCAPE BUFFER	H.O.A.	H.O.A.	0.70	5.94%
OS–3	OPEN SPACE	H.O.A.	H.O.A.	0.13	1.13%
OS–4	OPEN SPACE	H.O.A.	H.O.A.	0.32	2.70%
PD–1	STORMWATER MANAGEMENT	H.O.A.	H.O.A.	1.56	13.21%
SINGLE FAMILY LOTS		PRIVATE	PRIVATE	6.29	53.20%
TOTAL				11.83	100.00%

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OVERALL SITE PLAN FOR VENEZIA TOWNHOMES

HOWEY–IN–THE–HILLS, FLORIDA
LAKE COUNTY

D. R. HORTON
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(407) 850–5245

ENGINEER: BENJAMIN S. BECKHAM
LICENSE No. 79452
STATE OF FLORIDA
PROFESSIONAL ENGINEER
BENJAMIN S. BECKHAM
DATE: 10/22/2021
CERTIFICATE OF AUTHORIZATION NO. CA–0007723

	DATE	REVISIONS
1	12/10/21	REVISED PER TOWN OF HOWEY–IN–THE–HILLS COMMENTS
2		
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JOB # 21052
DATE: 10/22/2021
SCALE: 1" = 60'
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C100

NOTE:

1. PEDESTRIAN RAMPS SHALL HAVE CAST-IN-PLACE ADA MATS, BRICK RED IN COLOR
2. ALL COMMON AREAS AND TRACTS SHALL BE SODDED WITH SITE WORK.
3. ALL COMMON AREA SIDEWALKS TO BE INSTALLED WITH SITE WORK.

LEGEND:

- BOUNDARY / PROPERTY LINE
- WETLAND LINE
- WETLAND BUFFER LINE
- CENTER LINE
- EDGE OF PAVEMENT / MIAMI CURB
- RIGHT-OF-WAY LINE
- EASEMENT
- LOT LINE
- BUILDING SETBACK LINE
- 100 YR FLOOD LINE (FEMA)
- WETLAND
- DETAIL REFERENCE
- CROSS SECTION DETAIL

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

WETLAND

EXISTING RETENTION POND

PROPERTY BOUNDARY TYP.

EXISTING WALL TYP.

LOCATION OF GROUP MAILBOXES 4 SEE LANDSCAPE PLANS FOR DETAILS

25' BUILDING SETBACK

PROPERTY AND CONSERVATION EASEMENT BOUNDARY TYP.

WETLAND LIMITS -PER CONSERVATION EASEMENT #3 ORB 4492, PAGE 723

25' UPLAND BUFFER

20' ACCESS EASEMENT

50' ACCESS EASEMENT PLAT BOOK 65, PAGE 92

25' BUILDING SETBACK LINE PLAT BOOK 65, PAGE 92

STOP

R1-1

E MAIN ST

D3-1

CALABRIA WAY

LIDO LOOP

PALAZZO PLACE

MURANO WAY

VENEZIA BOULEVARD

MESSINA PLACE

10' UTILITY EASEMENT

5' CONC. SIDEWALK, TYP.

STREET SIGNS TO BE INSTALLED WITH STOP SIGNS -PLEASE SEE HOWEY-IN-THE-HILLS DETAIL ON SHEET C914 TYP.

DRIVEWAY APRON, TYP.

1' RIBBON CURB

STOP SIGN STOP BAR CROSSWALK

50' ACCESS EASEMENT

50' ROW

3' FDOT VALLEY GUTTER

SPILLOUT DROP CURB

DROP CURB

RETAINING WALL, TYP.

MIAMI CURB, TYP.

5' CONC. SIDEWALK, TYP.

R100'

R125'

R525'

R35'

R25'

ADA CURB RAMP

STOP SIGN, STOP BAR, CROSSWALK, TYP.

COMBINED D3-1 STREET NAME SIGN AND R1-1 STOP SIGN (TYP.)

VENEZIA ENTRANCE SIGNAGE SEE LANDSCAPE PLANS FOR DETAILS

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SITE PLAN FOR VENEZIA TOWNHOMES

HOWEY-IN-THE-HILLS, FLORIDA

LAKE COUNTY

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(407) 850-5245

ENGINEER: BENJAMIN S. BECKHAM LICENSE No. 79452 STATE OF FLORIDA PROFESSIONAL ENGINEER
DATE: 10/22/2021
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

	DATE	REVISIONS
1	12/10/21	REVISED PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
2	12/16/21	REVISED PER SJRWMD COMMENTS
3	01/18/22	REVISED PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
4	01/31/22	REVISED PER PLANNING BOARD COMMENT
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JOB # 21052
DATE: 10/22/2021
SCALE: 1" = 40'
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C101

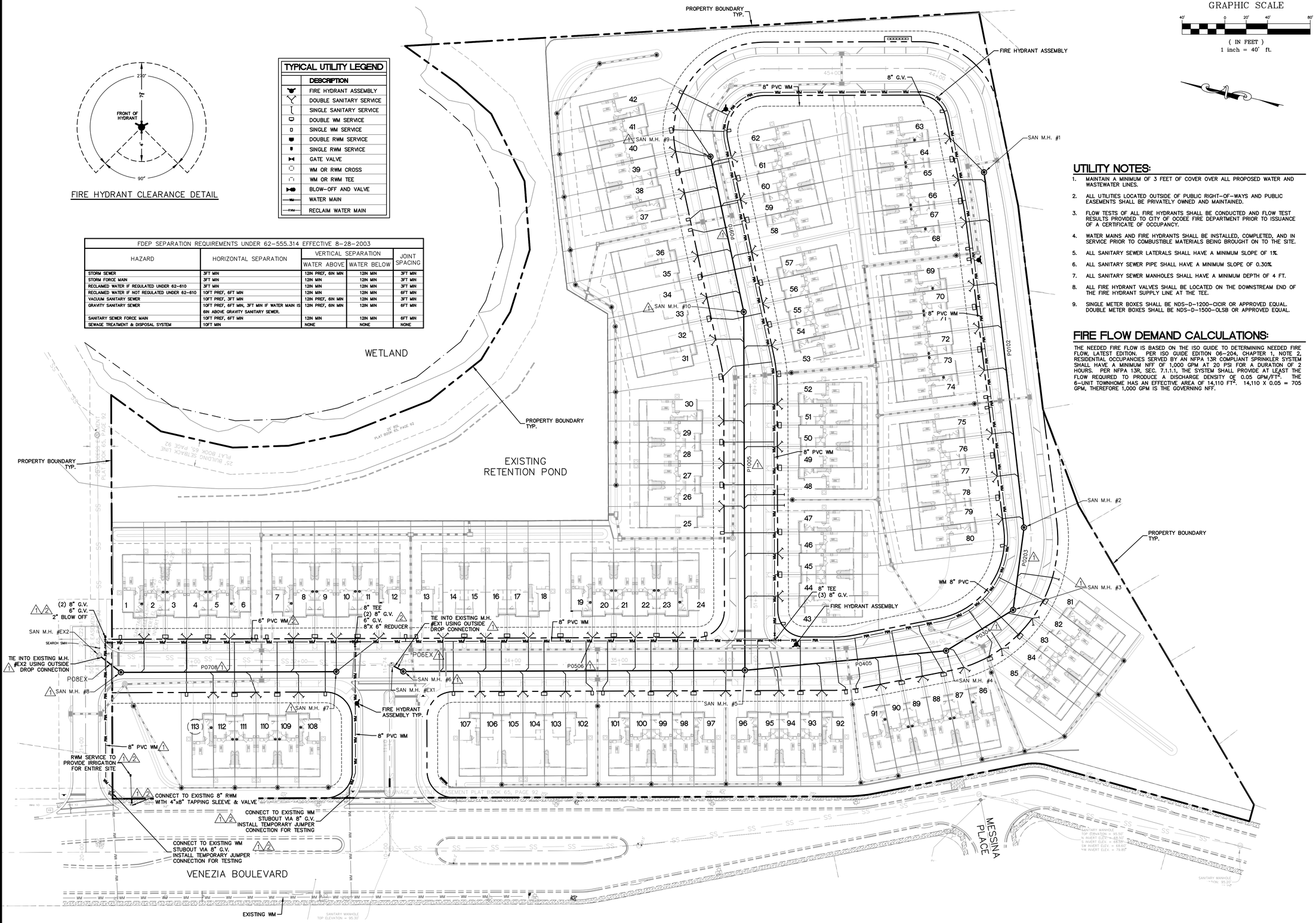
FIRE HYDRANT CLEARANCE DETAIL

TYPICAL UTILITY LEGEND

	DESCRIPTION
	FIRE HYDRANT ASSEMBLY
	DOUBLE SANITARY SERVICE
	SINGLE SANITARY SERVICE
	DOUBLE WM SERVICE
	SINGLE WM SERVICE
	DOUBLE RWM SERVICE
	SINGLE RWM SERVICE
	GATE VALVE
	WM OR RWM CROSS
	WM OR RWM TEE
	BLOW-OFF AND VALVE
WM	WATER MAIN
RWM	RECLAIM WATER MAIN

FDEP SEPARATION REQUIREMENTS UNDER 62-555.314 EFFECTIVE 8-28-2003

HAZARD	HORIZONTAL SEPARATION	VERTICAL SEPARATION		JOINT SPACING
		WATER ABOVE	WATER BELOW	
STORM SEWER	3FT MIN	12IN PREF, 6IN MIN	12IN MIN	3FT MIN
STORM FORCE MAIN	3FT MIN	12IN MIN	12IN MIN	3FT MIN
RECLAIMED WATER IF REGULATED UNDER 62-610	3FT MIN	12IN MIN	12IN MIN	3FT MIN
RECLAIMED WATER IF NOT REGULATED UNDER 62-610	10FT PREF, 6FT MIN	12IN MIN	12IN MIN	6FT MIN
VACUUM SANITARY SEWER	10FT PREF, 3FT MIN	12IN PREF, 6IN MIN	12IN MIN	3FT MIN
GRAVITY SANITARY SEWER	10FT PREF, 6FT MIN, 3FT MIN IF WATER MAIN IS 6IN ABOVE GRAVITY SANITARY SEWER.	12IN PREF, 6IN MIN	12IN MIN	6FT MIN
SANITARY SEWER FORCE MAIN	10FT PREF, 6FT MIN	12IN MIN	12IN MIN	6FT MIN
SEWAGE TREATMENT & DISPOSAL SYSTEM	10FT MIN	NONE	NONE	NONE



GRAPHIC SCALE

40' 0 20' 40' 80'

(IN FEET)
1 inch = 40' ft.

UTILITY NOTES:

1. MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER AND WASTEWATER LINES.
2. ALL UTILITIES LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
3. FLOW TESTS OF ALL FIRE HYDRANTS SHALL BE CONDUCTED AND FLOW TEST RESULTS PROVIDED TO CITY OF OCOEE FIRE DEPARTMENT PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
4. WATER MAINS AND FIRE HYDRANTS SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO COMBUSTIBLE MATERIALS BEING BROUGHT ON TO THE SITE.
5. ALL SANITARY SEWER LATERALS SHALL HAVE A MINIMUM SLOPE OF 1%.
6. ALL SANITARY SEWER PIPE SHALL HAVE A MINIMUM SLOPE OF 0.30%.
7. ALL SANITARY SEWER MANHOLES SHALL HAVE A MINIMUM DEPTH OF 4 FT.
8. ALL FIRE HYDRANT VALVES SHALL BE LOCATED ON THE DOWNSTREAM END OF THE FIRE HYDRANT SUPPLY LINE AT THE TEE.
9. SINGLE METER BOXES SHALL BE NDS-D-1200-CICIR OR APPROVED EQUAL. DOUBLE METER BOXES SHALL BE NDS-D-1500-OLSB OR APPROVED EQUAL.

FIRE FLOW DEMAND CALCULATIONS:

THE NEEDED FIRE FLOW IS BASED ON THE ISO GUIDE TO DETERMINING NEEDED FIRE FLOW, LATEST EDITION. PER ISO GUIDE EDITION 06-204, CHAPTER 1, NOTE 2, RESIDENTIAL OCCUPANCIES SERVED BY AN NFPA 13R COMPLIANT SPRINKLER SYSTEM SHALL HAVE A MINIMUM NFF OF 1,000 GPM AT 20 PSI FOR A DURATION OF 2 HOURS. PER NFPA 13R, SEC. 7.1.1.1, THE SYSTEM SHALL PROVIDE AT LEAST THE FLOW REQUIRED TO PRODUCE A DISCHARGE DENSITY OF 0.05 GPM/FT^2. THE 6-UNIT TOWNHOME HAS AN EFFECTIVE AREA OF 14,110 FT^2. 14,110 X 0.05 = 705 GPM, THEREFORE 1,000 GPM IS THE GOVERNING NFF.

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UTILITY PLAN
FOR
VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

D. R. HORTON
10192 DOWDEN RD., SUITE 150
ORLANDO, FL 32832
(407) 850-5245

ENGINEER: BENJAMIN S. BECKHAM * LICENSE NUMBER 79452 * STATE OF FLORIDA * PROFESSIONAL ENGINEER
BENJAMIN S. BECKHAM, P.E. No. 79452
DATE: 10/22/2021
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

	DATE	REVISIONS
1	12/10/21	REVISED PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
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JOB # 21052
DATE: 10/22/2021
SCALE: 1" = 40'
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C201

H:\Data\21052\Eng\Final\21052_C201 Utility Plan.dwg February 4, 2022 9:43 AM

GRAPHIC SCALE

40' 0 20' 40' 80'

(IN FEET)
1 inch = 40' ft.

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DRAINAGE PLAN
FOR
VENEZIA TOWNHOMES

HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

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ENGINEER: BENJAMIN S. BLOCKHAM
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DATE: 10/22/2021
CERTIFICATE OF AUTHORIZATION NO. CA-0007725

	DATE	REVISIONS
1	12/10/21	REVISED PER TOWN OF HOWEY-IN-THE-HILS COMMENTS
2	01/20/22	REVISED PER OC
3		
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JOB # 21052
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DRAWN BY: JAS
APPROVED BY: BSB

C301

⚠1 REVISED OVERALL STORM LAYOUT AND NAMES

YARD DRAIN STRUCTURE TABLE			
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
YD-01	12" RIM = 88.12 INV OUT = 85.12		YP-01, 12" HP INV OUT =85.12
YD-02	12" RIM = 88.22 INV IN = 84.76 INV OUT = 84.76	YP-01, 12" HP INV IN =84.76	YP-02, 12" HP INV OUT =84.76
YD-03	12" RIM = 87.56 INV IN = 84.03 INV OUT = 83.97	YP-02, 12" HP INV IN =84.03	YP-03, 12" HP INV OUT =83.97
YD-04	12" RIM = 88.27 INV OUT = 84.76		YP-04, 12" HP INV OUT =84.76
YD-05	12" RIM = 88.77 INV IN = 83.97 INV IN = 83.97 INV OUT = 83.97	YP-04, 12" HP INV IN =83.97 YP-05, 12" HP INV IN =83.97	YP-06, 12" HP INV OUT =83.97
YD-06	12" RIM = 87.50 INV OUT = 84.70		YP-05, 12" HP INV OUT =84.70
YD-07	12" RIM = 89.25 INV IN = 83.27 INV OUT = 83.27	YP-06, 12" HP INV IN =83.27	YP-07, 12" HP INV OUT =83.27
2 YD-08	12" RIM = 89.75 INV IN = 82.77 INV IN = 82.77 INV OUT = 82.77	YP-10, 12" HP INV IN =82.77 YP-07, 12" HP INV IN =82.77	YP-08, 12" HP INV OUT =82.77
2 YD-09	12" RIM = 89.00 INV IN = 82.04 INV OUT = 82.04	YP-08, 12" HP INV IN =82.04	YP-09, 12" HP INV OUT =82.04
YD-10	12" RIM = 90.55 INV OUT = 83.67		YP-10, 12" HP INV OUT =83.67
YD-11	12" RIM = 87.63 INV OUT = 84.83		YP-11, 12" HP INV OUT =84.83
YD-12	12" RIM = 87.63 INV IN = 84.43 INV OUT = 84.43	YP-11, 12" HP INV IN =84.43	YP-12, 12" HP INV OUT =84.43
YD-13	12" RIM = 87.63 INV IN = 83.93 INV OUT = 83.93	YP-12, 12" HP INV IN =83.93	YP-13, 12" HP INV OUT =83.93
YD-14	12" RIM = 87.23 INV IN = 83.53 INV IN = 83.53 INV OUT = 83.53	YP-13, 12" HP INV IN =83.53 YP-16, 12" HP INV IN =83.53	YP-14, 12" HP INV OUT =83.53
YD-15	12" RIM = 87.00 INV IN = 82.73 INV OUT = 82.73	YP-14, 12" HP INV IN =82.73	YP-15, 12" HP INV OUT =82.73
YD-16	12" RIM = 88.12 INV OUT = 83.94		YP-16, 12" HP INV OUT =83.94
2 YD-17	12" RIM = 88.30 INV OUT = 85.50		YP-17, 12" HP INV OUT =85.50
YD-18	12" RIM = 88.58 INV IN = 81.53 INV OUT = 81.53	P-28, 18" HP INV IN =81.53	P-29, 18" HP INV OUT =81.53
YD-19	12" RIM = 88.35 INV IN = 80.72 INV OUT = 80.72	P-19, 24" HP INV IN =80.72	P-20, 24" HP INV OUT =80.72

YARD DRAIN STRUCTURE TABLE			
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
YD-20	12" RIM = 87.79 INV IN = 81.24 INV OUT = 81.24	P-32, 24" HP INV IN =81.24	P-33, 24" HP INV OUT =81.24
2 YD-21	12" RIM = 85.08 INV IN = 82.28 INV OUT = 82.28	YP-19, 12" HP INV IN =82.28	YP-18, 12" HP INV OUT =82.28
2 YD-22	12" RIM = 89.05 INV IN = 82.46 INV OUT = 82.46	YP-20, 12" HP INV IN =82.46	YP-19, 12" HP INV OUT =82.46
2 YD-23	12" RIM = 86.34 INV IN = 83.07 INV OUT = 83.07	YP-21, 12" HP INV IN =83.07	YP-20, 12" HP INV OUT =83.07
2 YD-24	12" RIM = 86.74 INV IN = 83.54 INV OUT = 83.54	YP-22, 12" HP INV IN =83.54	YP-21, 12" HP INV OUT =83.54
2 YD-25	12" RIM = 86.75 INV OUT = 83.94		YP-22, 12" HP INV OUT =83.94
YD-26	12" RIM = 86.52 INV OUT = 83.82		YP-23, 12" HP INV OUT =83.82
YD-27	12" RIM = 86.52 INV IN = 83.28 INV OUT = 83.28	YP-23, 12" HP INV IN =83.28	YP-24, 12" HP INV OUT =83.28
YD-28	12" RIM = 87.02 INV IN = 82.73 INV OUT = 82.73	YP-24, 12" HP INV IN =82.73	YP-25, 12" HP INV OUT =82.73
YD-29	12" RIM = 85.14 INV IN = 82.34 INV OUT = 82.34	YP-25, 12" HP INV IN =82.34	YP-26, 12" HP INV OUT =82.34
YD-30	12" RIM = 84.74 INV IN = 81.94 INV OUT = 81.94	YP-26, 12" HP INV IN =81.94	YP-27, 12" HP INV OUT =81.94
YD-31	12" RIM = 83.41 INV IN = 81.44 INV OUT = 81.44	YP-27, 12" HP INV IN =81.44	YP-28, 12" HP INV OUT =81.44
YD-32	12" RIM = 83.08 INV IN = 81.11 INV OUT = 81.11	YP-28, 12" HP INV IN =81.11	YP-29, 12" HP INV OUT =81.11
YD-33	12" RIM = 93.75 INV OUT = 90.95		YP-30, 12" HP INV OUT =90.95
YD-34	12" RIM = 93.28 INV IN = 90.48 INV OUT = 90.48	YP-30, 12" HP INV IN =90.48	YP-31, 12" HP INV OUT =90.48
YD-35	12" RIM = 92.88 INV IN = 90.08 INV OUT = 90.08	YP-31, 12" HP INV IN =90.08	YP-32, 12" HP INV OUT =90.08
YD-36	12" RIM = 92.38 INV IN = 89.58 INV OUT = 89.58	YP-32, 12" HP INV IN =89.58	YP-33, 12" HP INV OUT =89.58
YD-37	12" RIM = 91.49 INV IN = 88.69 INV OUT = 88.69	YP-33, 12" HP INV IN =88.69	YP-34, 12" HP INV OUT =88.69

YARD DRAIN PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
YP-01	12"	35.53'	1.00%	HP
YP-02	12"	73.79'	1.00%	HP
YP-03	12"	24.87'	0.80%	HP
YP-04	12"	50.00'	1.58%	HP
YP-05	12"	73.33'	1.00%	HP
YP-06	12"	70.00'	1.00%	HP
YP-07	12"	50.00'	1.00%	HP
YP-08	12"	73.33'	1.00%	HP
YP-09	12"	24.87'	1.00%	HP
YP-10	12"	90.00'	1.00%	HP
YP-11	12"	39.66'	1.00%	HP
YP-12	12"	50.43'	1.00%	HP
YP-13	12"	39.82'	1.00%	HP
YP-14	12"	79.94'	1.00%	HP
YP-15	12"	25.57'	1.00%	HP
YP-16	12"	40.62'	1.00%	HP
2 YP-17	12"	80.33'	1.00%	HP
2 YP-18	12"	26.49'	1.00%	HP
2 YP-19	12"	18.46'	1.00%	HP
2 YP-20	12"	61.32'	1.00%	HP
2 YP-21	12"	47.26'	1.00%	HP
2 YP-22	12"	40.00'	1.00%	HP
YP-23	12"	54.00'	1.00%	HP
2 YP-24	12"	61.36'	0.90%	HP
2 YP-25	12"	38.27'	1.00%	HP
YP-26	12"	40.21'	0.99%	HP
YP-27	12"	50.23'	1.00%	HP
2 YP-28	12"	32.80'	1.00%	HP
2 YP-29	12"	13.13'	1.00%	HP
YP-30	12"	47.50'	1.00%	HP
YP-31	12"	40.00'	1.00%	HP
YP-32	12"	50.00'	1.00%	HP
YP-33	12"	88.82'	1.00%	HP
YP-34	12"	22.02'	1.00%	HP

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(407) 629-8330

DRAINAGE PLAN
FOR
VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

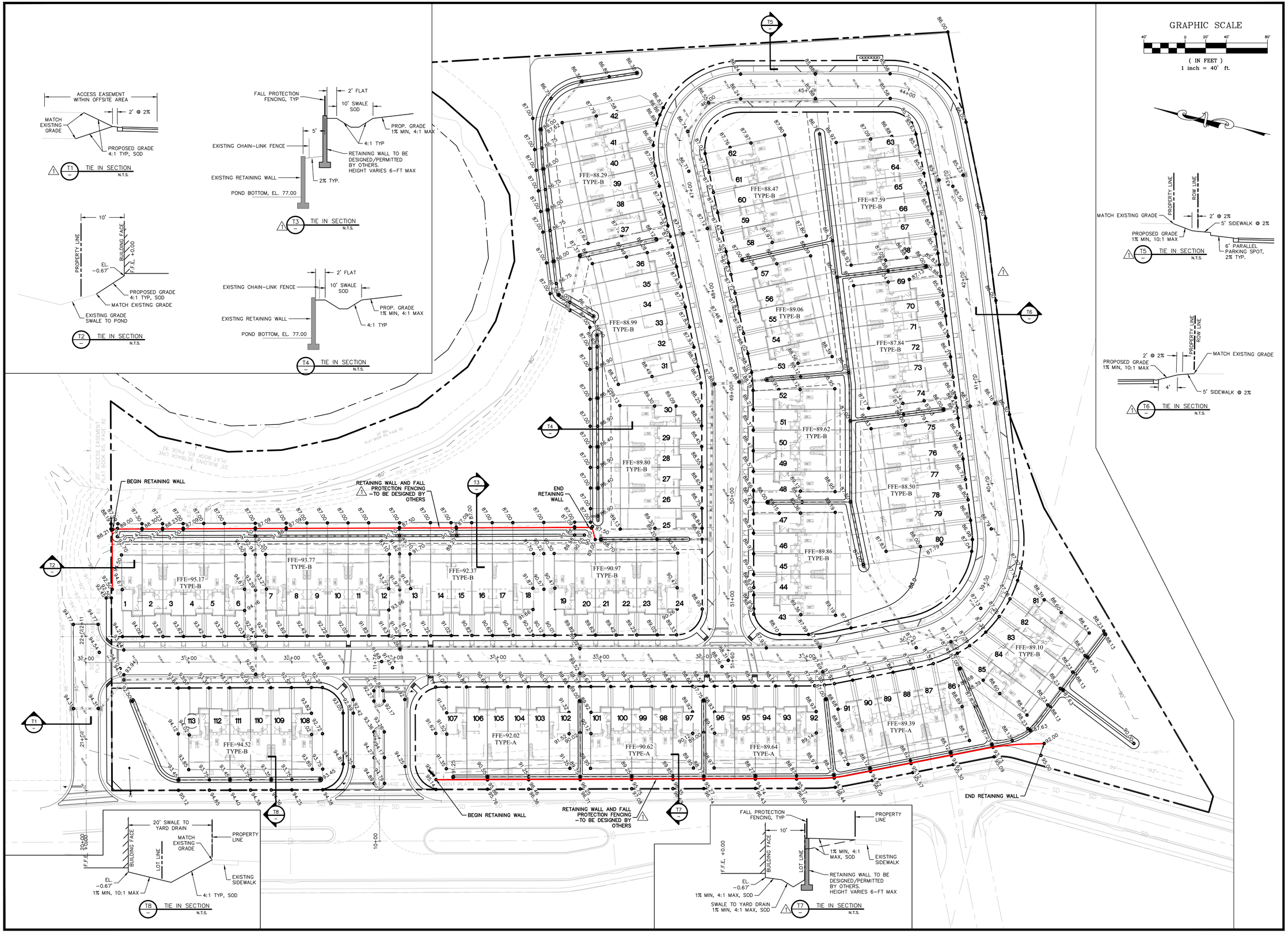
D. R. HORTON
10192 DOWDEN RD., SUITE 150
ORLANDO, FL 32832
(407) 850-5245

ENGINEER: BENJAMIN S. BECKHAM
LICENSE No. 79452
STATE OF FLORIDA
PROFESSIONAL ENGINEER
BENJAMIN S. BECKHAM
DATE: 10/22/2021
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

	DATE	REVISIONS
1	12/10/21	ADDED SHEET PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
2	01/20/22	REVISED PER QC
3		
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JOB # 21052
DATE: 10/22/2021
SCALE: N.T.S.
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C302



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MOORHEAD & STOKES, LLC
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(407) 629-8330

GRADING PLAN
FOR
VENEZIA TOWNHOMES

HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

D. R. HORTON
10192 DOWDEN RD., SUITE 150
ORLANDO, FL 32832
(407) 855-5245

ENGINEER: BENJAMIN S. BECKHAM
LICENSE No. 79452
STATE OF FLORIDA
PROFESSIONAL ENGINEER
BENJAMIN S. BECKHAM
DATE: 2022.01.07 15:09:22
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

NO.	DATE	REVISIONS
1	12/10/21	REVISED PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
2		
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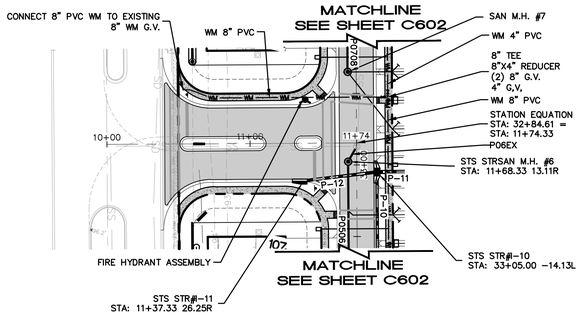
JOB #	21052
DATE:	10/22/2021
SCALE:	1" = 40'
DESIGNED BY:	BSB
DRAWN BY:	JAS
APPROVED BY:	BSB

C401

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50 ft.

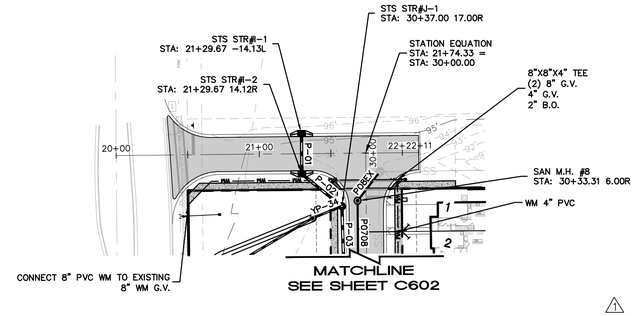


STREET "A"

GRAPHIC SCALE

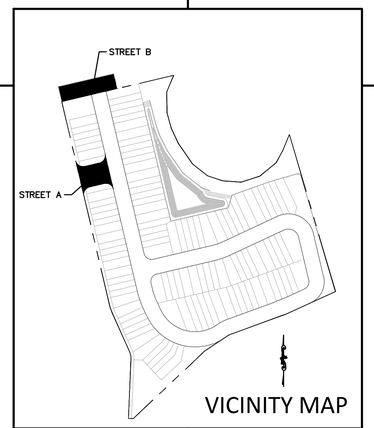
50 0 25 50 100

(IN FEET)
1 inch = 50 ft.

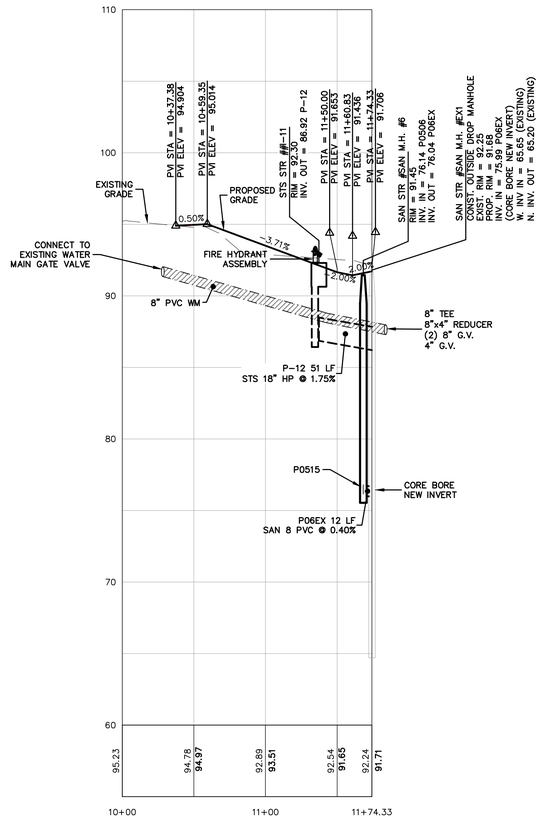


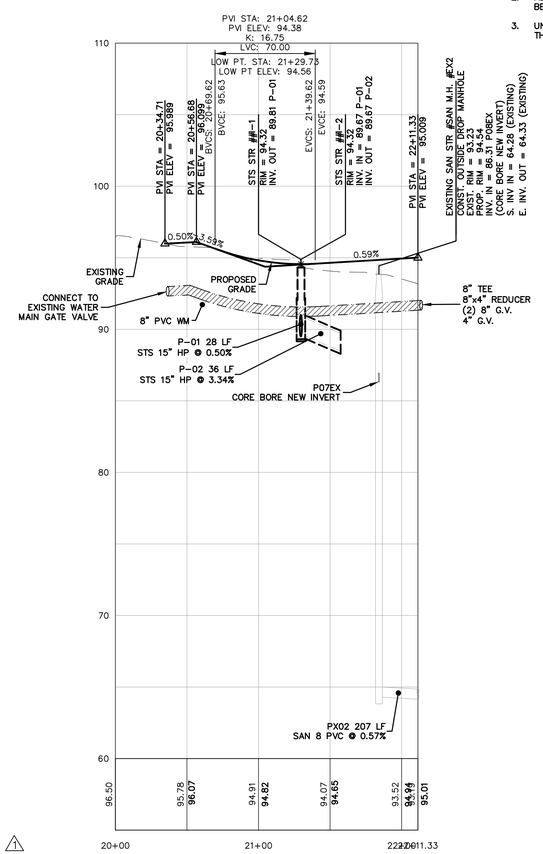
STREET "B"

	TYPICAL UTILITY LEGEND
	DESCRIPTION
	FIRE HYDRANT ASSEMBLY
	DOUBLE SANITARY SERVICE
	SINGLE SANITARY SERVICE
	DOUBLE WM SERVICE
	SINGLE WM SERVICE
	DOUBLE RWM SERVICE
	SINGLE RWM SERVICE
	GATE VALVE
	WM OR RWM CROSS
	WM OR RWM TEE
	BLOW-OFF AND VALVE



VICINITY MAP



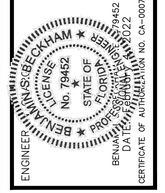


NOTE:
1. ELEVATONS AND GRADES ARE BASED ON THE NAVD 88 SITE DATUM
2. ALL PRESSURE MAINS ARE TO BE LOCATED 3' BELOW GRADE UNLESS OTHERWISE NOTED.
3. UNLESS NOTED OTHERWISE, THE ESHGWT IS BELOW THE LIMITS OF THE PROFILE VIEW.

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PLAN AND PROFILE
FOR
VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

D. R. HORTON
10192 DOMDEN RD., SUITE 150
ORLANDO, FL 32832
(407) 850-5245

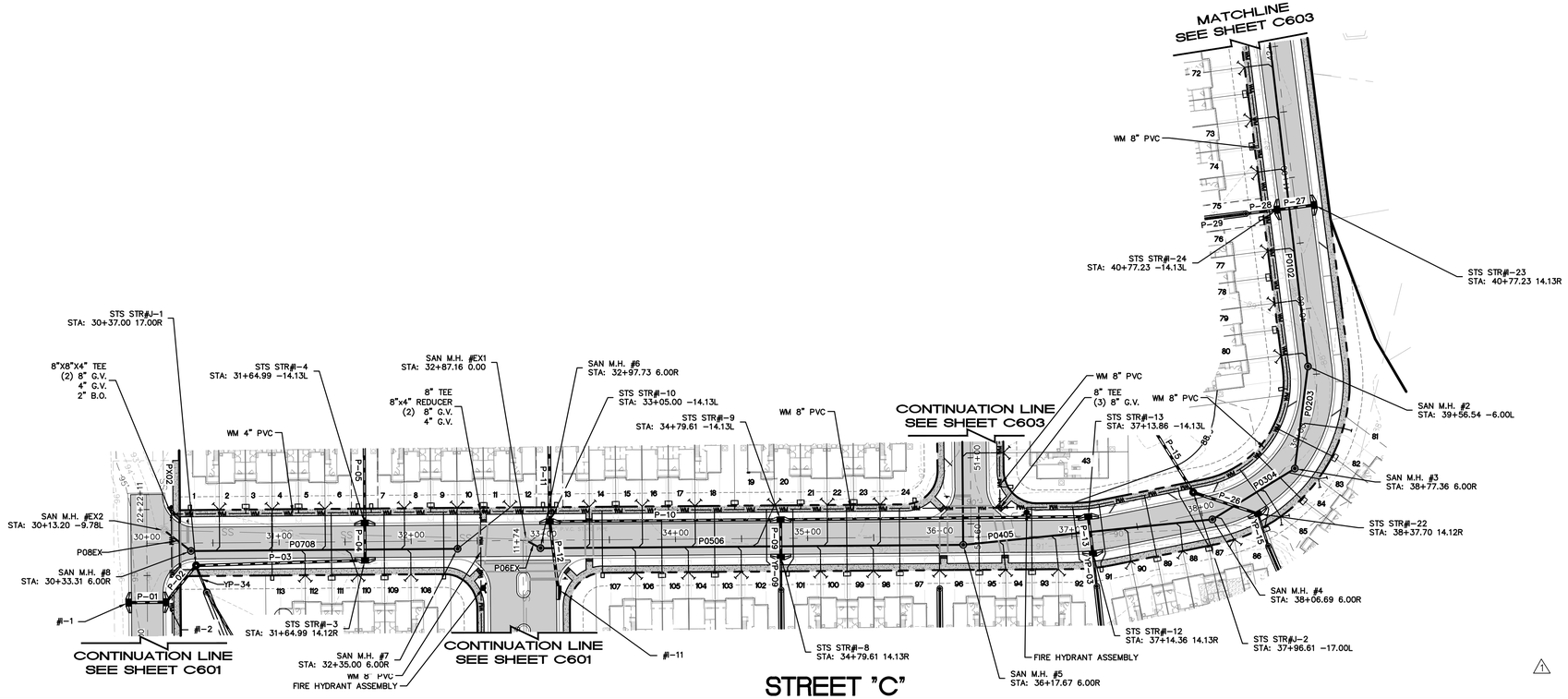


	DATE	REVISIONS
1	12/10/21	REVISED PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
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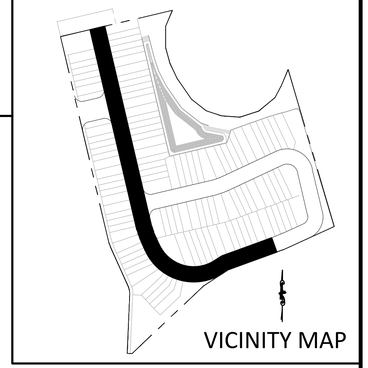
JOB # 21052
DATE: 10/22/2021
SCALE: 1" = 50'
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C601

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STREET "C"

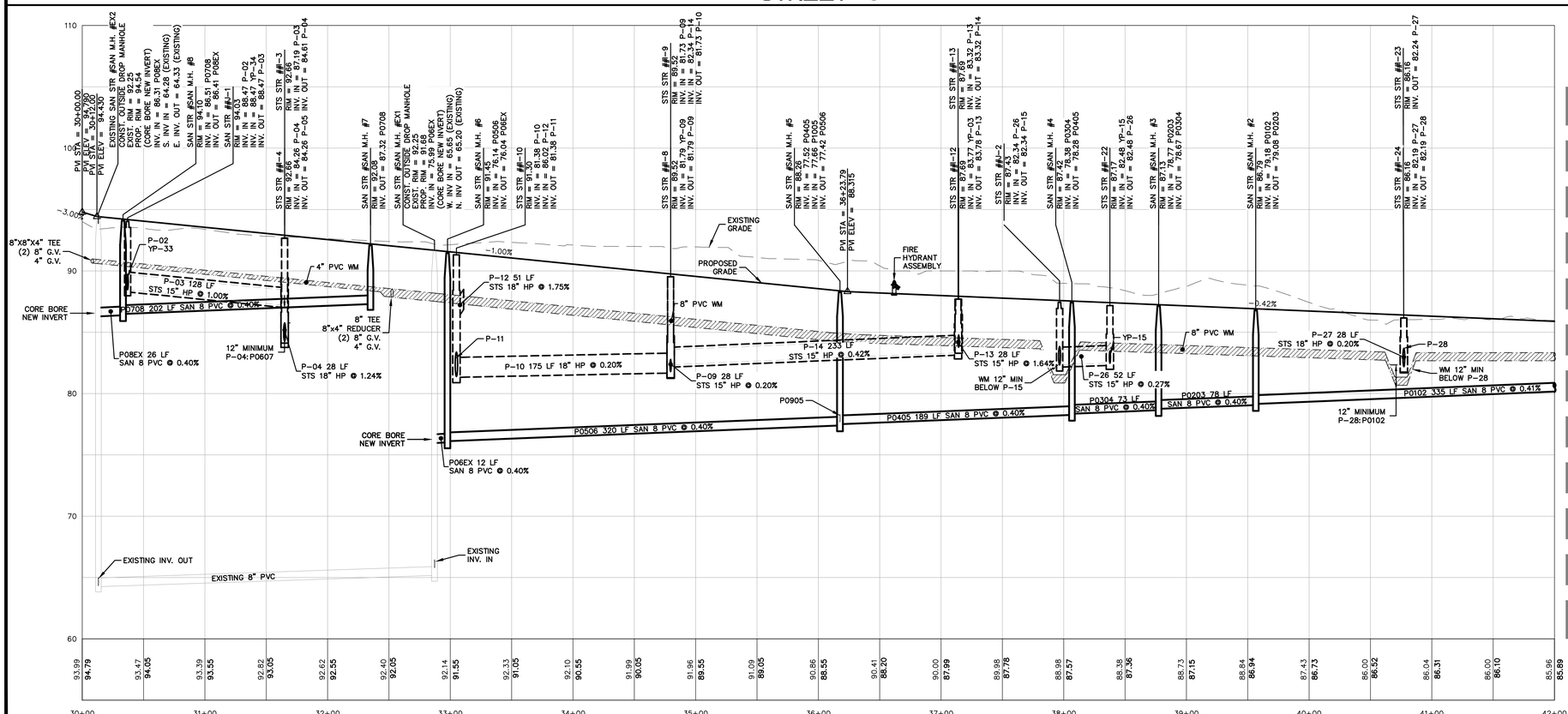


GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50 ft.

NOTE:
1. ELEVATONS AND GRADES ARE BASED ON THE NAVD 88 SITE DATUM
2. ALL PRESSURE MAINS ARE TO BE LOCATED 3' BELOW GRADE UNLESS OTHERWISE NOTED.
3. UNLESS NOTED OTHERWISE, THE ESHGWT IS BELOW THE LIMITS OF THE PROFILE VIEW.



MATCHLINE – SHEET C603

MADDEN
MOORHEAD & STOKES, LLC
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PLAN AND PROFILE
FOR
VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

D. R. HORTON
10192 DOWDEN RD., SUITE 150
ORLANDO, FL. 32832
(407) 850-3245

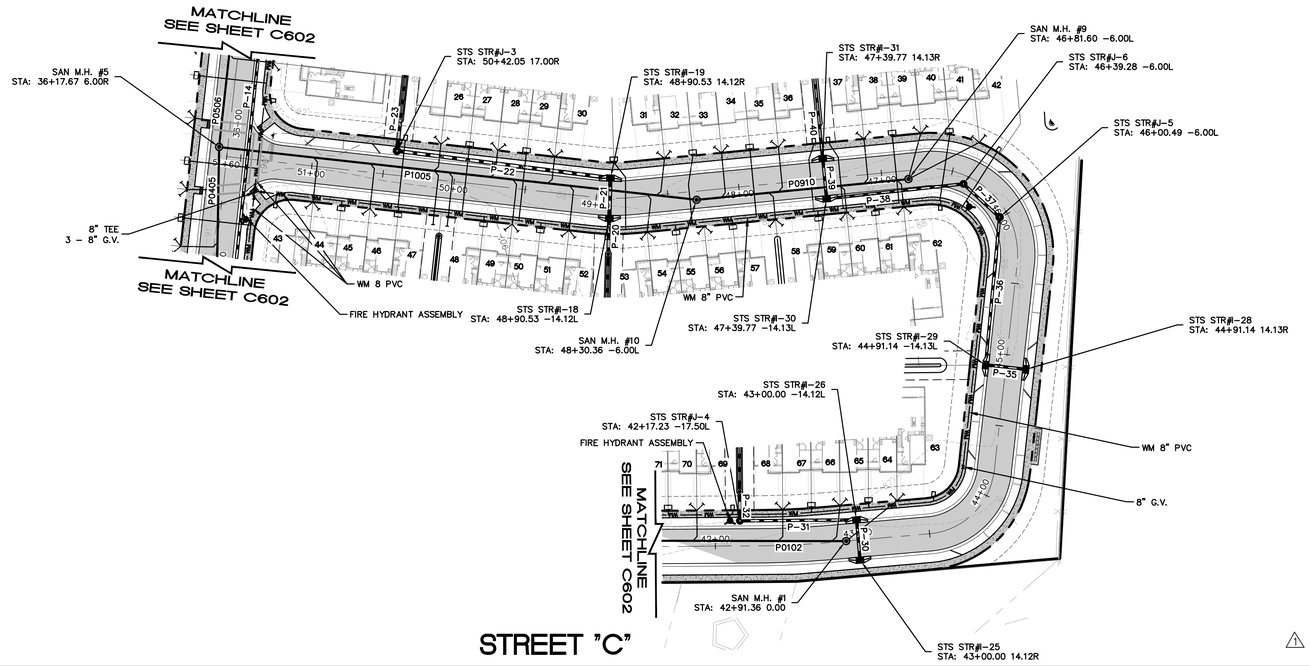
ENGINEER BENJAMIN S. BECKHAM LICENSE No. 79452 STATE OF FLORIDA PROFESSIONAL ENGINEER
BENJAMIN S. BECKHAM
DATE: 2022.02.22 10:54:22 -05'00'
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

NO.	DATE	REVISIONS
1	12/10/21	REVISED PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
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JOB # 21052
DATE: 10/22/2021
SCALE: 1" = 50'
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C602

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STREET "C"

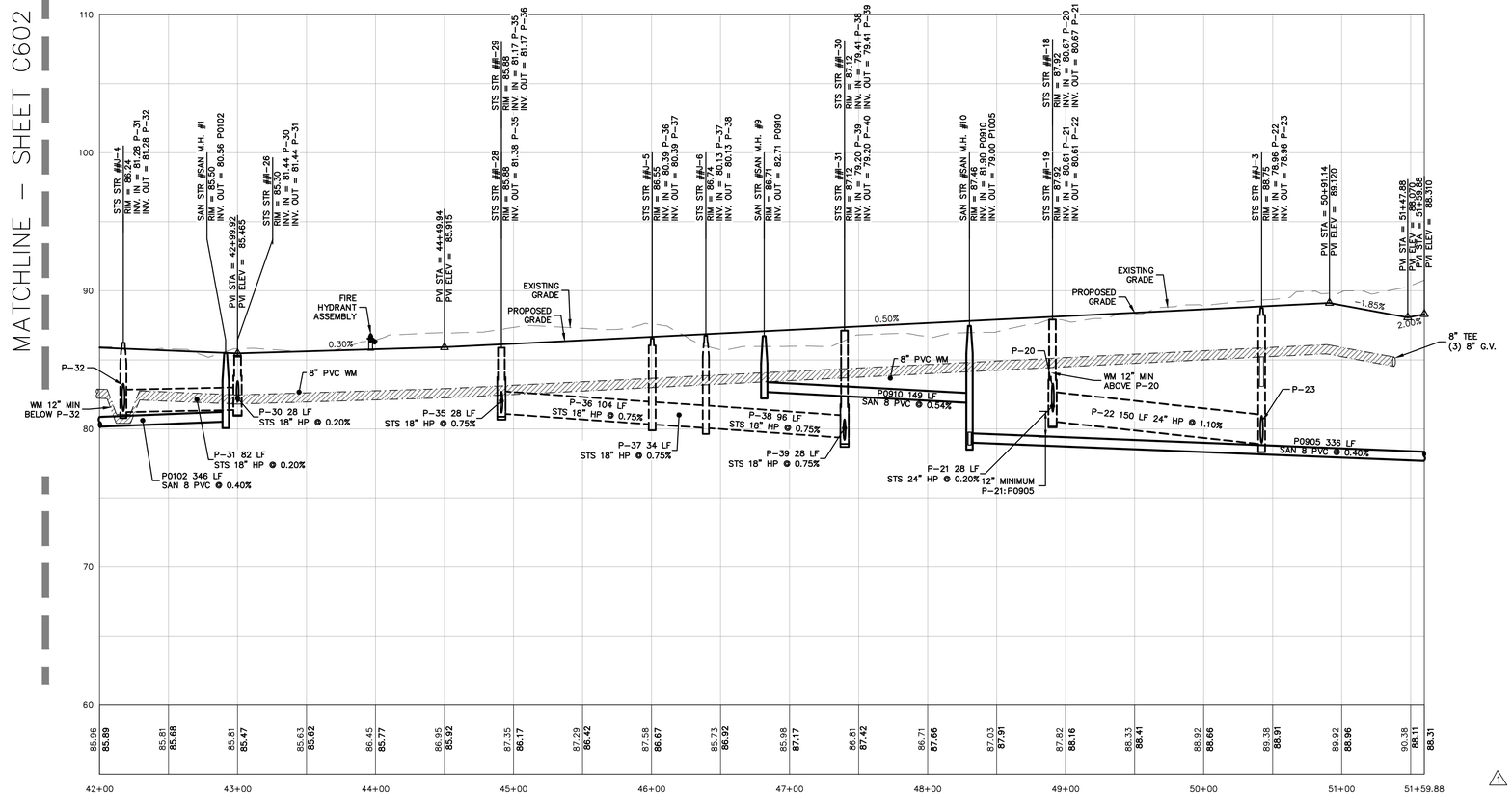
GRAPHIC SCALE

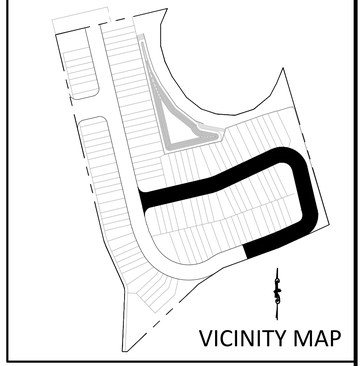
50 0 25 50 100

(IN FEET)
1 inch = 50 ft.

TYPICAL UTILITY LEGEND	
	DESCRIPTION
	FIRE HYDRANT ASSEMBLY
	DOUBLE SANITARY SERVICE
	SINGLE SANITARY SERVICE
	DOUBLE WM SERVICE
	SINGLE WM SERVICE
	DOUBLE RWM SERVICE
	SINGLE RWM SERVICE
	GATE VALVE
	WM OR RWM CROSS
	WM OR RWM TEE
	BLOW-OFF AND VALVE

NOTE:
1. ELEVATONS AND GRADES ARE BASED ON THE NAVD 88 SITE DATUM
2. ALL PRESSURE MAINS ARE TO BE LOCATED 3' BELOW GRADE UNLESS OTHERWISE NOTED.
3. UNLESS NOTED OTHERWISE, THE ESHGWT IS BELOW THE LIMITS OF THE PROFILE VIEW.





VICINITY MAP

MADDEN
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PLAN AND PROFILE
FOR
VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

D. R. HORTON
10192 DOWDEN RD., SUITE 150
ORLANDO, FL. 32832
(407) 850-5245

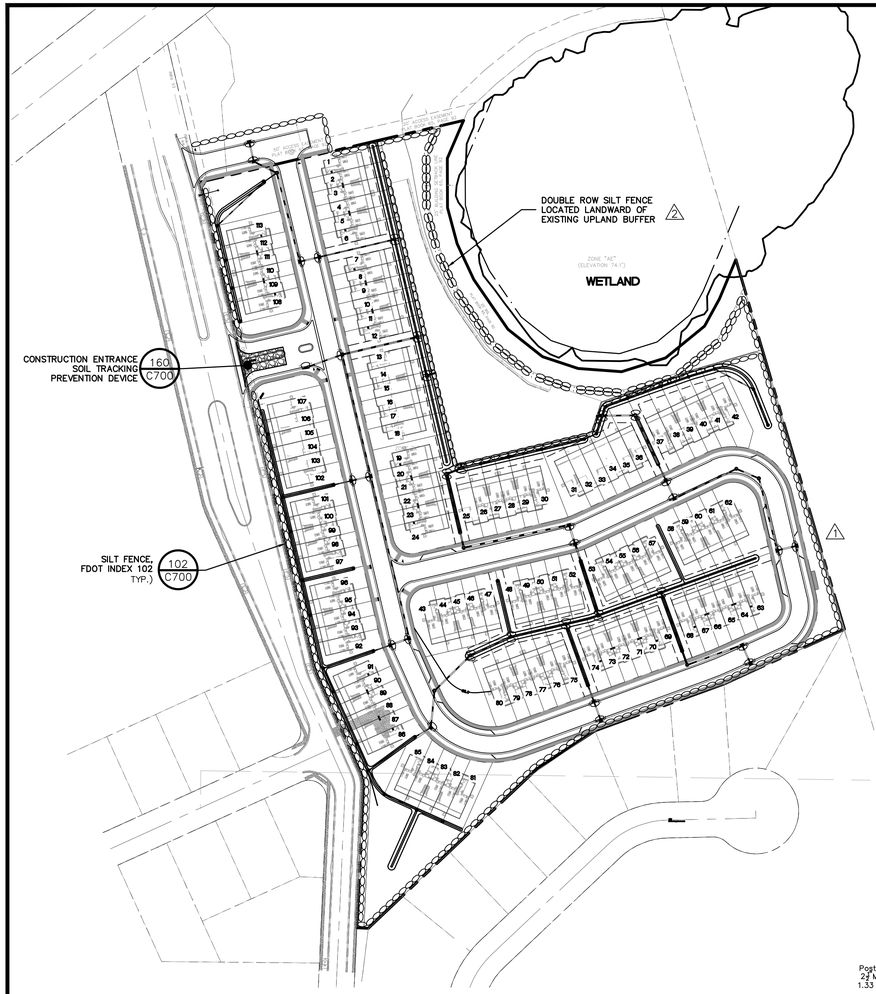
ENGINEER: BENJAMIN S. BECKHAM
LICENSE No. 79452
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: 10/22/2021
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

NO.	DATE	REVISIONS
1	12/10/21	REVISED PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
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JOB # 21052
DATE: 10/22/2021
SCALE: 1" = 50'
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C603

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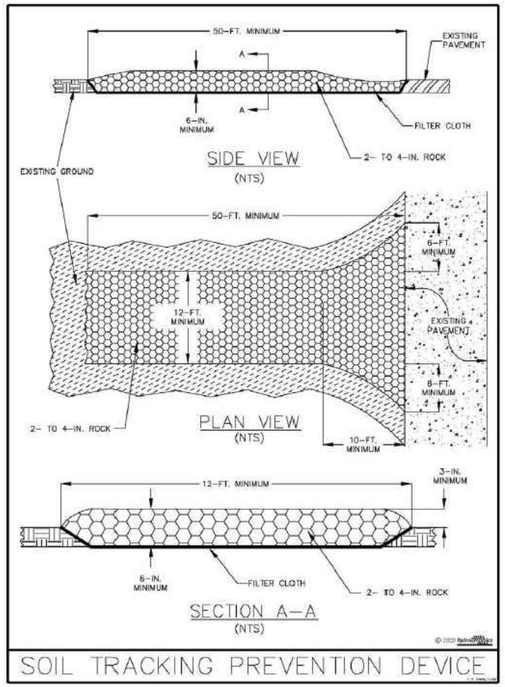


GRAPHIC SCALE

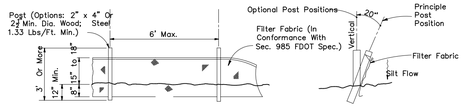
100' 0 50' 100' 200'

(IN FEET)
1 inch = 100' ft.

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013



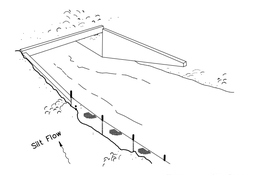
160 – SOIL TRACKING PREVENTION DEVICE



ELEVATION SECTION

Notes
1. Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF).
2. Double silt fence shall be installed as two rows with a 3' min. clearance between rows.

TYPE III SILT FENCE



NOTES:
1. HAY OR STRAW BALES ARE PROHIBITED.



Type III Silt Fence Protection Around Ditch Bottom Inlets.



Note: Spacing for Type III Fence to be in accordance with Chart 1, Sheet 1 of 3 and ditch installations at drainage structures Sheet 2 of 3.

Type III Silt Fence

Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS

102 – SILT FENCE APPLICATIONS – FDOT INDEX 102

N.T.S.

DEWATERING NOTE:

CONTRACTOR SHALL ACQUIRE A DEWATERING PERMIT THROUGH SJWRMD IF NECESSARY.

STORMWATER POLLUTION PREVENTION NOTES:

1. THE CONTRACTOR SHALL EXECUTE ALL MEASURES NECESSARY TO LIMIT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT TO THE VOLUME AND AMOUNT THAT ARE EXISTING PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THIS CONDITION WILL BE SATISFIED FOR THE TOTAL ANTICIPATED CONSTRUCTION PERIOD. PROVISION MUST BE MADE TO PRESERVE THE INTEGRITY GRADING PATTERNS, ETC. REQUIRED TO MEET THIS PROVISION THROUGHOUT THE LIFE OF THE CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE SILT BARRIERS, TEMPORARY GRASSING, ETC. AS REQUIRED TO FULLY COMPLY WITH THE INTENT OF THIS SPECIFICATION.
2. NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
3. THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL BE CONTROLLED, SO THAT THIS OPERATION WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.
4. INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT LADEN STORMWATER RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
5. AREAS OPENED BY CONSTRUCTION OPERATIONS THAT ARE NOT ANTICIPATED TO BE DRESSED OR RECEIVE FINAL GRASSING TREATMENT WITH IN THIRTY DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER, DURING THE SEASON IN WHICH IT IS PLANTED. TEMPORARY SEEDING SHALL BE CONTROLLED SO AS TO NOT ALTER OR COMPETE WITH PERMANENT GRASSING. THE RATE OF SEEDING SHALL BE 30 POUNDS PER ACRE.
6. THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED AS REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.
7. IF AFTER 14 DAYS, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75% GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED TO ESTABLISH THE DESIRED VEGETATION COVER.
8. ALL FEATURES OF THE PROJECT SHALL BE CONSTRUCTED TO PREVENT EROSION AND SEDIMENT AND SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION PROPERLY WITHOUT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT.
9. ALL DISTURBED AREAS OUTSIDE THE EXCAVATION AND FILL LIMITS WILL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THEIR CONDITION PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL NEWLY PLANTED GRASSES OR VEGETATION AND RETENTION/DETENTION FACILITIES UNTIL THE WORK HAS BEEN ACCEPTED BY THE COUNTY.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF EMBANKMENTS AND SHALL REPLACE ANY PORTION, WHICH IN THE OPINION OF THE ENGINEER, HAS BECOME DISPLACED DUE TO EROSION OR DUE TO CARELESSNESS OR NEGLIGENCE ON THE PART OF THE CONTRACTOR.
12. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS CONTROLLING POLLUTION OF THE ENVIRONMENT. MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO CONTROL EROSION AND SEDIMENT RUNOFF FROM THE SITE DURING CONSTRUCTION. SUCH METHODS SHALL BE IN ACCORDANCE WITH THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
13. ABSOLUTELY NO WORK WILL BE ALLOWED WITHIN ANY CONSERVATION AREA, BUFFER AREA, MITIGATION AREA OR DESIGNATED WETLAND AREA UNLESS SO SPECIFICALLY DESCRIBED BY THE PLANS AND GRANTED BY REASON OF PERMIT FROM THE GOVERNMENTAL ENTITY HAVING JURISDICTION OVER SAID AREA.
14. PRIOR TO CLEARING AND GRUBBING, THE LIMITS OF WETLANDS, BUFFERS WETLANDS, BUFFERS AND MITIGATION AREAS SHALL BE CLEARLY MARKED ALONG THE PROPOSED RIGHT OF WAY LINE TO PROTECT THESE AREAS FROM ENCROACHMENT FROM CONSTRUCTION ACTIVITIES.
15. ALL FILL EMBANKMENT AND GRADED AREAS SHALL BE PROTECTED AGAINST EROSION BY METHODS STATED IN SECTION 104, F.D.O.T. STANDARD SPECIFICATIONS FOR BRIDGE AND ROAD CONSTRUCTION. SIDE SLOPE MAY BE SEED AND MULCHED, PROVIDED THAT THE MULCH MATERIAL IS DISC HARROWED AND THE SIDE SLOPES ARE NEITHER GREATER THAN 3:1 NOR PART OF A DRAINAGE CONVEYANCE.
16. EROSION CONTROL AT ALL INLET DRAINAGE STRUCTURES DURING CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CITY OF ORLANDO ENGINEERING STANDARDS MANUAL (5TH ED.) AND THE F.D.O.T. EROSION AND SEDIMENT CONTROL MANUAL (2013 ED.).
17. INSPECTIONS ON EROSION CONTROL MEASURES WILL BE PERFORMED BY THE CONTRACTOR ONCE PER WEEK AND WITHIN 24 HOURS AFTER 1/2 INCH OF RAINFALL. THE INSPECTIONS MUST BE LOGGED BY THE CONTRACTOR AND KEPT WITH THE APPROVED PLANS AND SWPPP.
18. GRAVEL CONSTRUCTION ENTRANCES SHALL BE PROVIDED TO MINIMIZE EXPORT OF ONSITE DIRT. IF GRAVEL IS NOT ALLOWED, THE CONSTRUCTION ENTRANCES SHALL BE SWEPT PERIODICALLY AND LOGGED BY THE CONTRACTOR.
19. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PREVENT DUST FROM POLLUTING ADJACENT PROPERTIES.

EROSION CONTROL:

THE CONTRACTOR SHALL PERFORM EROSION CONTROL MEASURES IN ACCORDANCE WITH TO LAKE COUNTY AND THE S.J.R.W.M.D., DETAILS CONTAINED IN THE PLANS, THE FOLLOWING NOTES AND AS DIRECTED BY THE ENGINEER.

A. TEMPORARY EROSION CONTROL

1. STOCKPILING MATERIAL. NO EXCAVATING MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATERBODY OR STORMWATER COLLECTION FACILITY.
2. INLET PROTECTION – INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATERBODY OR STORMWATER COLLECTION FACILITY.
3. TEMPORARY SEEDING / STRIP SODDING – AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN THIRTY DAYS SHALL BE STRIP-SODDED ALONG ALL DEDICATED ROW'S. THIS WILL PREVENT SEDIMENT RUNOFF FROM INDIVIDUAL LOTS INTO THE ROW AND DRAINAGE SYSTEMS, AND WILL NOT LATER COMPETE WITH THE PERMANENT LOT GRASSING.
4. TEMPORARY SEEDING AND MULCHING – SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN NOTE 3 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA TO A DEPTH OF 4 INCHES.
5. TEMPORARY GRASSING – THE SEEDED OR THE SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED AS REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.
6. TEMPORARY REGRASSING – IF AFTER FOURTEEN DAYS, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75% GOOD GRASS COVER THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATION COVER.
7. THE CONTRACTOR SHALL PLACE HAY BALES AROUND ALL EXISTING AND NEWLY CONSTRUCTED INLETS TO CONTROL EROSION DURING CONSTRUCTION.
8. MAINTENANCE – ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED. DICTIONAL REQUIREMENTS.

B. PERMANENT EROSION CONTROL

THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON OFF-SITE FACILITIES. ALL STORMWATER DISCHARGE FROM THE PROJECT LIMITS SHALL BE ROUTED THROUGH DETENTION BASINS TO TRAP SUSPENDED SEDIMENTS AND DISCHARGE FACILITIES FROM THESE BASINS SHALL BE PROVIDED WITH A SKIMMER DEVICE TO TRAP FLOATABLE DEBRIS.

1. PERMANENT SEEDING – ALL AREAS WHICH HAVE BEEN DISTURBED BY THE CONSTRUCTION WILL, AS A MINIMUM, BE FERTILIZED AND SEEDED.
2. PERMANENT SEEDING AND MULCHING – SLOPES OF 6:1 TO 4:1 INCLUSIVE WILL BE MULCHED WITH A UNIFORM THICKNESS OF APPROXIMATELY TWO INCHES, LOOSE MEASURE, OF MULCH MATERIAL INCORPORATED INTO THE SOIL BY MIXING TO A DEPTH OF FOUR INCHES.
3. PERMANENT SODDING – ALL RETENTION/DETENTION BASINS SHALL BE SODDED WITHIN THEIR LIMITS. ALL EXPOSED AREAS WITHIN PUBLIC RIGHT-OF-WAYS WILL BE SOLID SODDED. OTHER AREAS WITH AREAS WITH SLOPES STEEPER THAN 4:1 WILL BE SODDED.
4. STRIP SODDING – STRIP SOD SHALL BE PLACED ADJACENT TO ALL CURBS, WALKS AND PAVEMENTS.
5. REGRASSING – ALL GRASSED AREAS WILL BE MAINTAINED TO ASSURE A GOOD STAND AND SUFFICIENT GROUND COVER TO MINIMIZE EROSION. IF, AFTER 60 DAYS AN ADEQUATE GROUND COVER HAS NOT BEEN ESTABLISHED, THE AREA WILL BE REGRASSED.
6. ADDITIONAL FERTILIZATION – GRASSED AREAS NOT ACCEPTED WITHIN 90 DAYS OF THEIR COMPLETION SHALL BE FERTILIZED.
7. FOR ADDITIONAL SODDING REQUIREMENTS, REFER TO THE LANDSCAPE PLANS.
8. FERTILIZATION TO COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS.

CERTIFICATION FOR CONTRACTORS AND SUB-CONTRACTORS

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND TERMS AND CONDITIONS OF THE GENERIC STORMWATER PERMIT ISSUED PURSUANT TO SECTION 403.0885, F.S., THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

NAME: _____ SIGNATURE: _____ DATE: _____

ADDRESS: _____ TELEPHONE: _____

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND TERMS AND CONDITIONS OF THE GENERIC STORMWATER PERMIT ISSUED PURSUANT TO SECTION 403.0885, F.S., THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

NAME: _____ SIGNATURE: _____ DATE: _____

ADDRESS: _____ TELEPHONE: _____

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NAME: _____ SIGNATURE: _____ DATE: _____

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NAME: _____ SIGNATURE: _____ DATE: _____

ADDRESS: _____ TELEPHONE: _____

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

EROSION CONTROL PLAN
FOR
VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

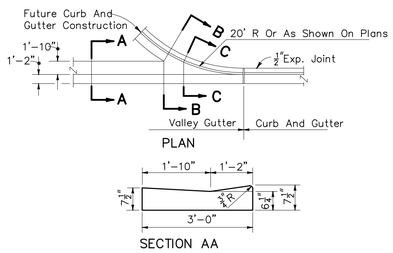
D. R. HORTON
10192 DOWDEN RD., SUITE 150
ORLANDO, FL. 32832
(407) 855-5245

ENGINEER: BENJAMIN S. BECKHAM
LICENSE NO. 79452
STATE OF FLORIDA
BENJAMIN S. BECKHAM
PROFESSIONAL ENGINEER
DATE: 10/22/2021
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

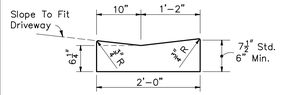
	DATE	REVISIONS
1	12/10/21	REVISED PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
2	01/11/22	REVISED PER SJRWMD COMMENT
3		
4		
5		
6		
7		
8		
9		
10		
11		

JOB # 21052
DATE: 10/22/2021
SCALE: 1" = 100'
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C700

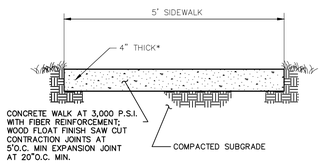


300V — VALLEY GUTTER DETAIL
N.T.S.



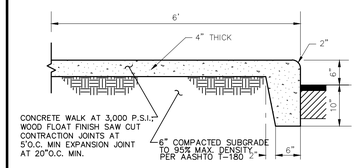
For curb, gutter, curb and gutter and traffic separators provide 1"-1½" contraction joints at 10' centers (max.). Contraction joints adjacent to concrete pavement on tangents and flat curves are to match the pavement joints, with intermediate joints not to exceed 10' centers.

1 300M — MIAMI CURB
N.T.S.

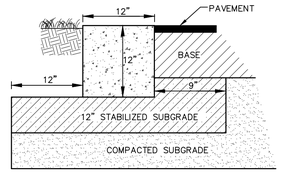


*NOTE: SIDEWALK WITHIN CONCRETE DRIVEWAYS IS TO BE 6" THICK

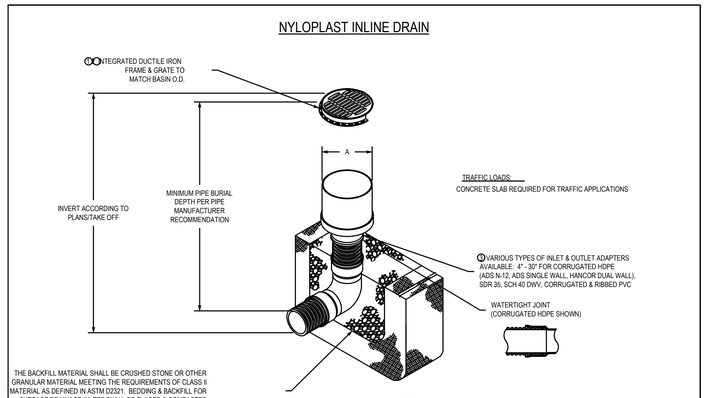
2 907 — CONCRETE WALK
N.T.S.



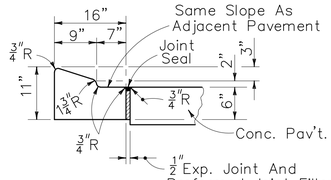
904 — CONC WALK & CURB
N.T.S.



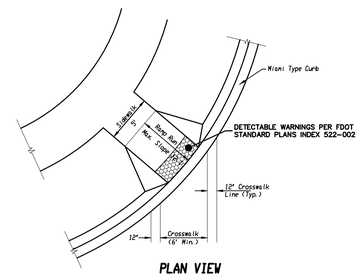
2 300R — CONCRETE RIBBON CURB
N.T.S.



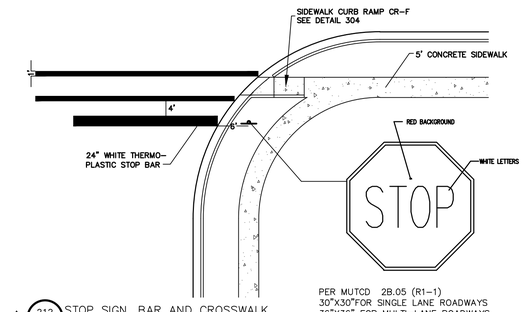
985 — YARD DRAIN DETAIL



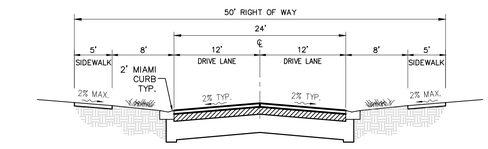
300A — TYPE A CURB
N.T.S.



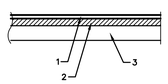
2 304 — RAMPS FOR PEDESTRIAN TRAFFIC
N.T.S.



1 212 — STOP SIGN, BAR AND CROSSWALK
N.T.S.

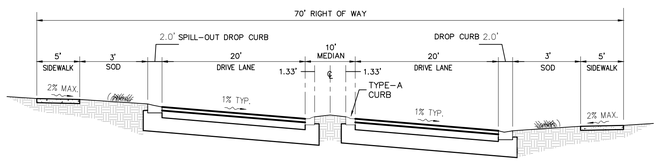


1 A — TYPICAL ROAD SECTION
N.T.S.

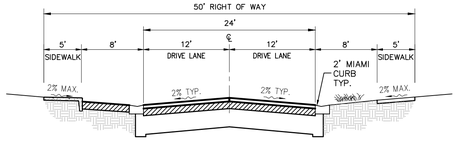


1. 1.5" TYPE ASPHALTIC CONCRETE SURFACE COURSE SP-9.5 (2 LIFTS)
2. 6" CRUSHED CONCRETE BASE COMPACTED TO 98% MODIFIED PROCTOR MAX DRY DENSITY (TYP.) LBR 100.
3. 12" STABILIZED SUBGRADE, COMPACTED TO 95% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180, ASTM D-1557 (TYP.)

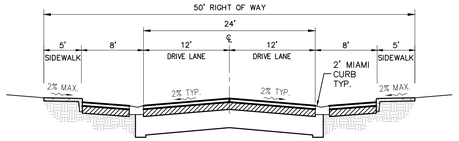
TYP. — TYPICAL PAVEMENT SECTION
N.T.S.



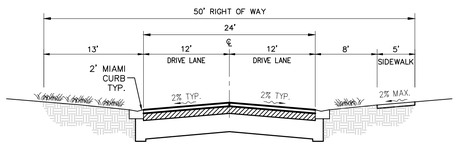
1 B — ENTRANCE SECTION
N.T.S.



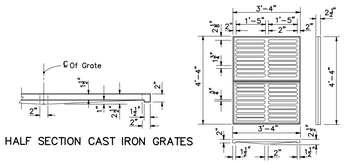
1 C — SINGLE-SIDED PARKING SECTION
N.T.S.



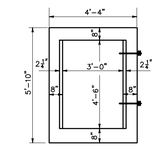
1 D — DOUBLE-SIDED PARKING SECTION
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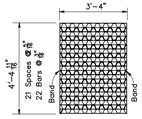


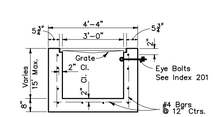
1 E — TYPICAL ROAD SECTION
N.T.S.



TYPE E
Approx. Weight 465 Lbs.
CAST IRON GRATE

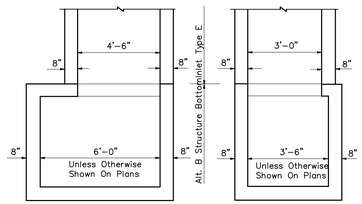






GENERAL NOTES

1. These inlets are suitable for bicycle and pedestrian areas and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to any heavy wheel loads.
2. Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and in areas accessible to pedestrians shall have traversable slots. The traversable slot modification is not adaptable to inlet Type H. Slots may be constructed at either or both ends as shown on plans.
3. Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternate G grate is specified in the plans, either the steel grate, hot dipped galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
4. Recommended maximum pipe sizes shown are for concrete pipe. Pipe sizes larger than those recommended must be checked for fit.
5. All exposed corners and edges of concrete are to be chamfered ¾".
6. Pavement to be used on inlets without slots and inlets with non-traversable slots only when called for in the plans; but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.
7. Traversable slots constructed in existing inlets shall be paid for as inlets partial, and shall include the cost for slot openings, paving and any required replacement grates.
8. Sodding to be used on all inlets not located in paved areas and paid for under contract unit price for Sodding SY.
9. For supplementary details see Detail No. 201.



NOTE: Alt. B Structure Bottom Only. See Detail No. 200

STRUCTURE BOTTOM FOR INLET TYPE E

232E — F.D.O.T. TYPE E INLET
N.T.S.

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

CONSTRUCTION DETAILS
FOR
VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

D. R. HORTON
10192 DOWDEN RD., SUITE 150
ORLANDO, FL 32832
(407) 850-5245

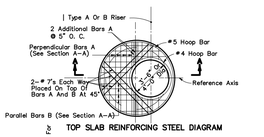
ENGINEER: BENJAMIN S. BECKHAM LICENSE No. 79452 STATE OF FLORIDA PROFESSIONAL ENGINEER
BENJAMIN S. BECKHAM
DATE: 10/22/2021
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

	DATE	REVISIONS
1	12/10/21	REVISED PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
2	01/18/22	REVISED PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
3		
4		
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10		
11		

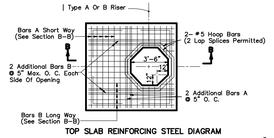
JOB # 21052
DATE: 10/22/2021
SCALE: N.T.S.
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C901

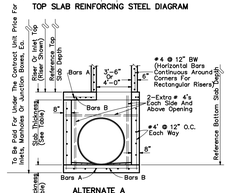
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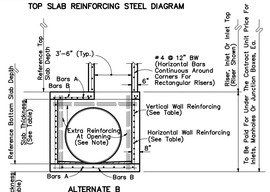
TOP SLAB REINFORCING STEEL DIAGRAM



TOP SLAB REINFORCING STEEL DIAGRAM



ALTERNATE A
SECTION A-A



ALTERNATE B
SECTION B-B

* NOTE: When the inside diameter of a round structure is not more than 1'-6" larger than the opening in the riser or top slab, the top of the structure or riser shall be constructed according to the "Special Top Slab" details on this sheet.

NOTE: Provide extra reinforcing each side of each opening at 3" maximum spacing equal to half the area of vertical reinforcement removed by the opening and provide the same area of reinforcement above each opening at 3" maximum spacing as removed by the opening.

GENERAL NOTES

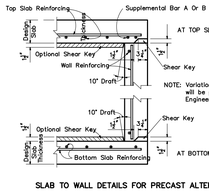
1. Standard structure bottoms 4'-0" diameter and smaller (Alt. A) and 6'-0" square (Alt. B) are designated Type P. Larger standard structure bottoms are designated Type J. Risers are permitted for all structures.
2. Walls of circular structures (Alternate A) constructed in place may be of non-reinforced concrete or brick or reinforced concrete. Precast and rectangular structures (Alternate B) shall be constructed of reinforced concrete only.
3. Wall thickness and reinforcement are for either reinforced cast-in-place or precast concrete units except that precast circular units may be furnished with walls in accordance with either A.S.T.M. C-478 (up to 96" diameter) or A.S.T.M. C-76, Class ~~~, B Wall, modified where the elliptical steel area is placed in the center one-third of the wall.
4. Top and floor slab thickness and reinforcement are for precast and cast place construction. Top and floor slabs shall be of Class ~~~ concrete. Concrete as specified in A.S.T.M. C-478 (4000 psi) may be used in lieu of Class ~~ and Class ~~~ concrete in precast items manufactured in plants which are under the "Standard Operating Procedures" for the inspection of precast drainage products.
5. All reinforcement shall be A.S.T.M. A615, Grade 60 or 65 KSI welded wire fabric, either smooth or deformed.
6. Structure bottoms may be used in conjunction with curb inlet Apron Types 1, 2, 3, 4, 5, 6, 9, and 10, and any manhole or junction box unless otherwise shown in the plans or other standard drawings. Alt. B structure bottoms may be used in conjunction with curb inlet Types 7 & 8, or any ditch bottom inlet unless otherwise shown in the plans or other standard drawings.
7. Rectangular structures may be rotated as directed by the Engineer in order to facilitate connections between the structure walls and storm sewer pipes.
8. Except when ACI hooks are specifically required, embedment hooks in the top and bottom slabs may be replaced with straight embedments or peripheral reinforcement in accordance with the reinforcement detail shown under "Rebar Straight End Embedment Or Peripheral Reinforcement In Lieu of ACI Standard Hooks For Top And Bottom Slabs", Index No. 201, Sheet 3 of 6.
9. All steel bars shall have 2" minimum cover unless otherwise shown. Horizontal steel in rectangular structures shall be lapped a minimum of 24 bar diameters at corners.
10. The corner fillets shown are necessary for rectangular structures used with circular and inlet throats and used on skew with rectangular risers, inlet and inlet throats. Fillets will be required in lieu of the bottom slab of the Alt. B riser when used with the Alt. A box. Each fillet shall be reinforced with 2- #5 bars.
11. Inlet throats, riser or manhole tops shall be secured to structures as shown on Index No. 201.
12. Structures with depths over 14' are to be checked for floatation by designer of project drainage.

Units larger than specified standard may be substituted at the contractor's option when these units will not cause or increase the severity of utility conflicts. Such larger units shall be furnished at no additional cost to the Department. Larger Alternate A units cannot replace Alternate B units without approval of the Engineer. This note applies to this Index only.

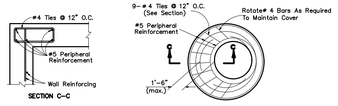
For manhole and junction box tops, for frames and covers, and, for supplementary details see Index No. 201.

NOTE ALL INLET GRATES SHALL BE CHAINED DOWN

200 — STRUCTURE BOTTOMS TYPE J AND P
N.T.S.



SLAB TO WALL DETAILS FOR PRECAST ALTERNATE



SPECIAL TOP SLAB*

SLAB DESIGNS – SQUARE AND RECTANGULAR STRUCTURES
(ALL SLABS 8" THICK – REINFORCING PARALLEL TO SHORT WAY AND LONG WAY)

SHORT–WAY SLAB DEPTH	SHORT–WAY SCHEDULE	LONG–WAY SLAB DEPTH	LONG–WAY SCHEDULE
SIZE: 3'-6"UNLIMITED			
≥0.5"< 29"	B	≥0.5"–40'	B
29"–40'	C		
SIZE: 4'-0"UNLIMITED			
≥0.5"< 19"	B	≥0.5"< 34"	B
19"< 29"	C	34"–40'	C
29"–40'	D		
SIZE: 5'6"			
≥0.5"< 3"	C	≥0.5"< 3"	C
3"< 19"	B	3"< 19"	B
19"< 28"	C	19"< 28"	C
28"< 38"	D	28"< 38"	D
38"–40"	F	38"–40"	F
SIZE: 5'10"			
≥0.5"< 3"	C	≥0.5"< 3"	C
3"< 16"	B	3"< 20"	B
16"< 24"	C	20"< 29"	C
24"< 34"	D	29"–40'	D
34"–40'	F		
SIZE: 5'11"			
≥0.5"< 3"	C	≥0.5"< 3"	C
3"< 14"	B	3"< 22"	B
14"< 21"	C	22"< 33"	C
21"< 39"	D	33"–40'	D
39"–40'	F		
SIZE: 6'10"			
≥0.5"< 3"	C	≥0.5"< 39"	B
3"< 8"	B	39"–40'	C
8"< 17"	C		
17"< 23"	D		
23"–40'	F		
SIZE: 6'11"			
≥0.5"< 3"	C	≥0.5"< 32"	B
3"< 8"	B	32"–40'	C
8"< 17"	C		
17"< 23"	D		
23"–40'	F		

SHORT–WAY SLAB DEPTH	SHORT–WAY SCHEDULE	LONG–WAY SLAB DEPTH	LONG–WAY SCHEDULE
SIZE: 6'16"			
≥0.5"< 3"	D	≥0.5"< 3"	D
3"< 4"	C	3"< 4"	C
4"< 14"	B	4"< 14"	B
14"< 21"	C	14"< 21"	C
21"< 28"	D	21"< 28"	D
28"–40'	F	28"–40'	F
SIZE: 6'17"			
≥0.5"< 3"	D	≥0.5"< 3"	D
3"< 4"	C	3"< 4"	C
4"< 12"	B	4"< 15"	B
12"< 19"	C	15"< 21"	C
19"< 26"	D	21"< 30"	D
26"–40'	F	30"–40'	F
SIZE: 6'18"			
≥0.5"< 3"	D	≥0.5"< 3"	D
3"< 4"	C	3"< 4"	C
4"< 7"	B	4"< 16"	B
7"< 16"	C	16"< 23"	C
16"< 23"	D	23"< 32"	D
23"–40'	F	32"–40'	F
SIZE: 6'19"			
≥0.5"< 3"	D	≥0.5"< 3"	D
3"< 15"	C	3"< 4"	C
15"< 21"	D	4"< 18"	B
21"< 27"	E	18"< 27"	C
27"–40'	G	27"< 37"	D
		37"–40'	F
SIZE: 7'17"			
≥0.5"< 3"	E	≥0.5"< 3"	E
3"< 4"	D	3"< 4"	D
4"< 16"	C	4"< 16"	C
16"< 22"	D	16"< 22"	D
22"< 28"	E	22"< 28"	E
28"–40'	G	28"–40'	G
SIZE: 7'18"			
≥0.5"< 3"	E	≥0.5"< 3"	E
3"< 4"	D	3"< 4"	D
4"< 15"	C	4"< 17"	C
15"< 21"	D	17"< 23"	D
21"< 27"	E	23"< 29"	E
27"–40'	G	29"–40'	G
SIZE: 7'19"			
≥0.5"< 3"	E	≥0.5"< 3"	E
3"< 4"	D	3"< 4"	D
4"< 12"	C	4"< 18"	C
12"< 18"	D	18"< 24"	D
18"< 24"	E	24"< 32"	E
24"–40'	G	32"–40'	G

SHORT–WAY SLAB DEPTH	SHORT–WAY SCHEDULE	LONG–WAY SLAB DEPTH	LONG–WAY SCHEDULE
SIZE: 8'16"			
≥0.5"< 3"	D	≥0.5"< 3"	D
3"< 4"	C	3"< 4"	C
4"< 12"	B	4"< 15"	B
12"< 19"	C	15"< 21"	C
19"< 26"	D	21"< 30"	D
26"–40'	F	30"–40'	F
SIZE: 8'17"			
≥0.5"< 3"	D	≥0.5"< 3"	D
3"< 4"	C	3"< 4"	C
4"< 7"	B	4"< 16"	B
7"< 16"	C	16"< 23"	C
16"< 23"	D	23"< 32"	D
23"–40'	F	32"–40'	F
SIZE: 8'18"			
≥0.5"< 3"	D	≥0.5"< 3"	D
3"< 4"	C	3"< 4"	C
4"< 15"	B	4"< 18"	B
15"< 21"	C	18"< 25"	D
21"< 27"	D	25"< 32"	F
27"–40'	F	32"–40'	G
SIZE: 8'19"			
≥0.5"< 3"	F	≥0.5"< 3"	F
3"< 14"	C	3"< 14"	C
14"< 20"	D	14"< 20"	D
20"< 26"	E	20"< 26"	E
26"–40'	G	26"–40'	G

GENERAL NOTES

1. Slab reinforcement is appropriate for top, intermediate, and bottom slabs.
2. Slab depth is measured from finished grade to top of slab.
3. Wall design depth is measured to the top of the bottom slab for boxes and to the top of the intermediate slab for risers.
4. Wall height is the distance between top of lower slab to bottom of upper slab.

REINFORCING SCHEDULE

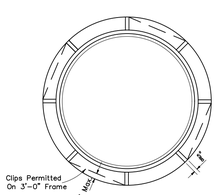
SCHEDULE	GRADE 60 STEEL OR 65 KSI (WWF FABRIC) In²/Ft.
A	0.20
B	0.24
C	0.37
D	0.53
E	0.73
F	1.06
G	1.45

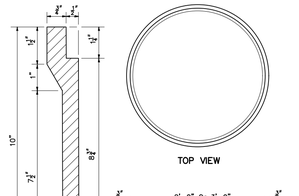
WALL DESIGNS – RECTANGULAR STRUCTURES

VERTICAL REINFORCING WALL DEPTH	VERTICAL REINFORCING SCHEDULE	HORIZONTAL REINFORCING WALL DEPTH	HORIZONTAL REINFORCING SCHEDULE
SIZE: 3'-6"			
≥1.17"–40'	A	≥1.17"–40'	B
SIZE: 4'-0"			
≥1.17"–40'	A	≥1.17"–40'	B
SIZE: 5'-0"			
≥1.17"–40'	A	≥1.17"< 33"	B
		33"–40'	C
SIZE: 6'-0"			
≥1.17"–40'	A	≥1.17"< 22"	B
		22"–40'	C
SIZE: 7'-0"			
≥1.17"–40'	A	≥1.17"< 15"	B
		15"< 25"	C
		25"–40'	D
SIZE: 8'-0"			
≥1.17"–40'	A	≥1.17"< 11"	B
		11"< 19"	C
		19"< 29"	D
		29"–40'	F
SIZE: 9'-0"			
≥1.17"–40'	A	≥1.17"< 15"	C
		15"< 22"	D
		22"–40'	F

SLAB DESIGNS – ROUND STRUCTURES

SLAB DEPTH	SLAB THICKNESS	REINFORCING (2 WAYS) SCHEDULE
SIZE: 3'-6"		
≥0.5"–40'	8"	C
SIZE: 4'-0"		
≥0.5"–40'	8"	C
SIZE: 5'-0"		
≥0.5"< 38"	8"	C
38"–40'	8"	D
SIZE: 6'-0"		
≥0.5"< 8"	8"	B
8"< 18"	8"	C
18"< 30"	8"	D
30"< 37"	8"	E
37"–40'	8"	G
SIZE: 8'-0"		
≥0.5"< 9"	10"	C
9"< 15"	10"	D
15"< 23"	10"	E
23"< 33"	12"	E
33"–40'	12"	G
SIZE: 10'-0"		
≥0.5"< 6"	10"	C
6"< 11"	10"	D
11"< 17"	10"	E
17"< 23"	12"	E
23"–40'	12"	G
SIZE: 12'-0"		
≥0.5"< 6"	12"	C
6"< 11"	12"	D
11"< 16"	12"	E
16"< 20"	14"	E
20"–40'	14"	G



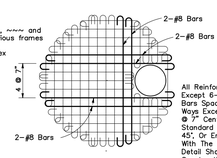


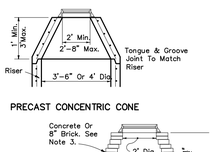
NOTES (FRAMES, AND COVER)

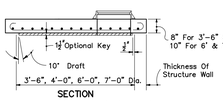
1. The 212 lb. cover is to be used for all frames Types ~, ~~, ~~~ and the 2-Piece Cover, and is the replacement cover for all previous frames with 4" deep seats (traffic type). The 185 lb. cover (non-traffic type), 1984 Roadway and Traffic Design Standards Index No. 201, is the replacement cover for existing frames with deep seats. Installation of frames with deep seats is not permitted. The 185 lb. covers are to be placed in existing deep seated frames only when specifically called for in the plans or as specifically directed by the Engineer.

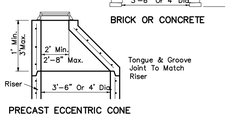
NOTES (TOPS)

1. Manhole top Type 7 slabs shall be of Class ~~ concrete. Concrete as specified in ASTM C-478 may be used for precast units; see General Note No. 3.
2. Manhole top Type 7 slabs may be of cast-in-place or precast construction. The optional key is for precast tops and in lieu of dowels. Frame and slab openings are to be omitted when top is used over a junction box. Frames can be adjusted with from one to six courses of brick.
3. Manhole top Type 8 may be of cast-in-place or precast concrete construction or brick construction. For concrete construction, the concrete and steel reinforcement shall be the same as the supporting wall unit. An eccentric cone may be used.
4. Manhole tops shall be secured to structures by optional construction joints as shown on Sheet 3 of 6.

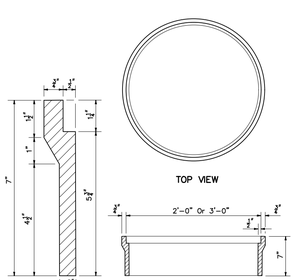




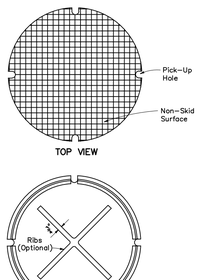


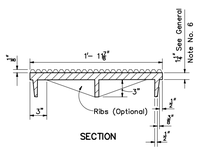


MANHOLE TOPS



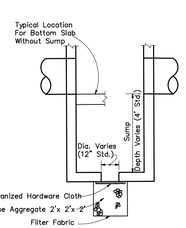
CAST IRON FRAMES





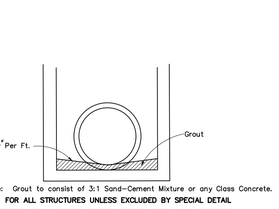
COVER FOR ALL FRAMES

WEIGHT OF CASTINGS							
Frame Type	2' OPENING Frame	2' OPENING Cover (Std.)	3' OPENING Frame	3' OPENING 2-Piece Cover Cover	3' OPENING 2-Piece Cover Ring	3' OPENING 2-Piece Cover Total
~	126 Lbs.	212 Lbs.	220 Lbs.	212 Lbs.	250 Lbs.	462 Lbs.
~~	134 Lbs.	212 Lbs.	260 Lbs.	212 Lbs.	250 Lbs.	462 Lbs.
~~	98 Lbs.	212 Lbs.	220 Lbs.	212 Lbs.	250 Lbs.	462 Lbs.



NOTE: Sump bottom appropriate for all manhole and inlet types. Cost for sump bottom to be included in the contract unit price for inlet or manhole.

SUMP BOTTOM



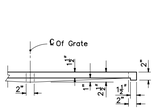
Note: Grout to consist of 3:1 Sand-Cement Mixture or any Class Concrete.
FOR ALL STRUCTURES UNLESS EXCLUDED BY SPECIAL DETAIL

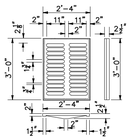
DRAINAGE STRUCTURE INVERT

NOTE ALL INLET GRATES SHALL BE CHAINED DOWN

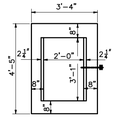
201 — SUPPLEMENTARY DETAILS FOR MANHOLES AND INLETS
N.T.S.

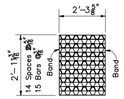
NOTE:
A 4' X 4' CONCRETE PAD 8" THICK SHALL BE INSTALLED AROUND ALL MANHOLE RIMS LOCATED JUST BELOW THE ASPHALT SURFACE

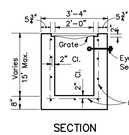




NOTE ALL INLET GRATES SHALL BE CHAINED DOWN

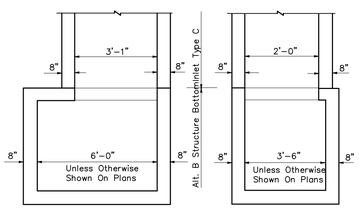






GENERAL NOTES

1. These inlets are suitable for bicycle and pedestrian areas and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to any heavy wheel loads.
2. Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and in areas accessible to pedestrians shall have traversable slots. The traversable slot modification is not adaptable to Inlet Type H. Slots may be constructed at either or both ends as shown on plans.
3. Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non–traversable slots. Subject to the selection described above, when Alternate G grate is specified in the plans, either the steel grate, hot dipped galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
4. Recommended maximum pipe sizes shown are for concrete pipe. Pipe sizes larger than those recommended must be checked for fit.
5. All exposed corners and edges of concrete are to be chamfered .
6. Pavement to be used on inlets without slots and inlets with non–traversable slots only when called for in the plans; but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.
7. Traversable slots constructed in existing inlets shall be paid for as inlets partial, and shall include the cost for slot openings, paving and any required replacement grates.
8. Sodding to be used on all inlets not located in paved areas and paid for under contract unit price for Sodding SY.
9. For supplementary details see Detail No. 201.
10. When used in traffic areas use four sided bearing grate. U.S. Foundry#6450 or equal.



NOTE: Alt. B Structure Bottom Only. See Detail No. 200

STRUCTURE BOTTOM FOR INLETS TYPE C

232C — F.D.O.T. TYPE C INLET
N.T.S.

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629–8330

CONSTRUCTION DETAILS
FOR
VENEZIA TOWNHOMES
HOWEY–IN–THE–HILLS, FLORIDA
LAKE COUNTY

D - R - HORTON
10192 DOWDEN RD., SUITE 150
ORLANDO, FL 32832
(407) 850–5245

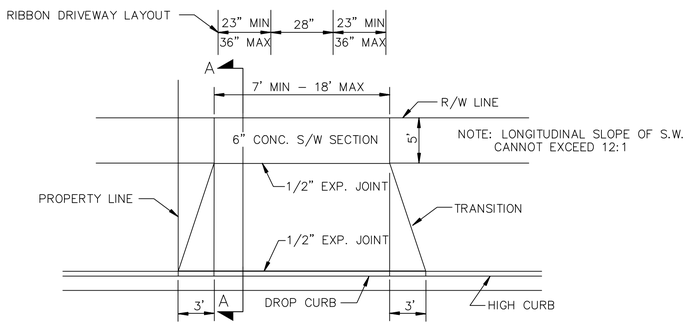


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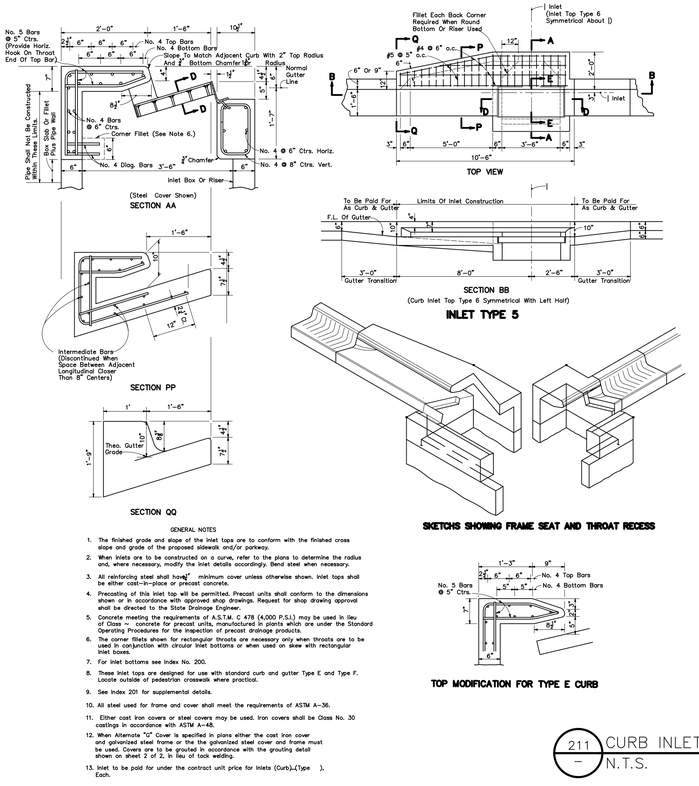
JOB # 21052
DATE: 10/22/2021
SCALE: N.T.S.
DESIGNED BY: BSB
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APPROVED BY: BSB

C902

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2 DRV – RESIDENTIAL DRIVEWAY APPRON
N.T.S.

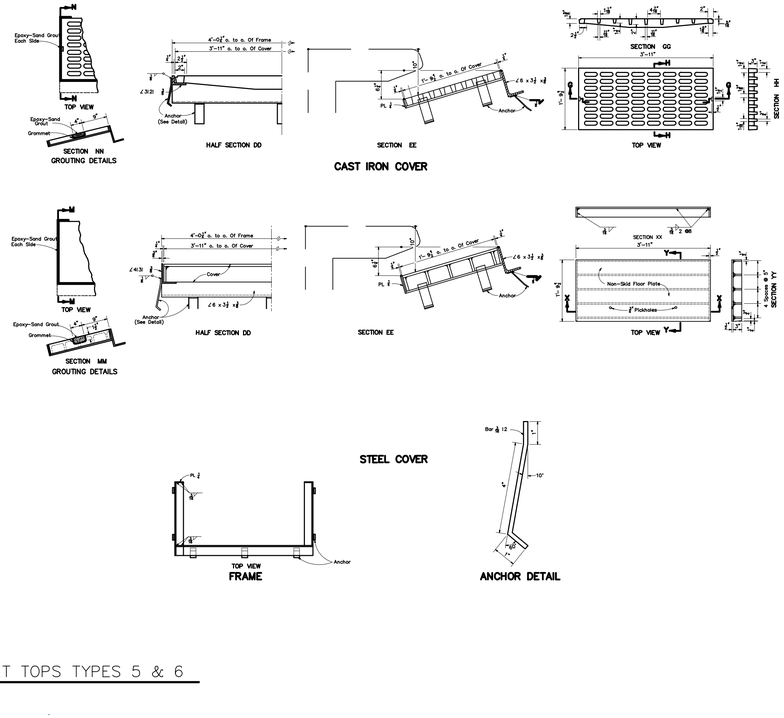


SKETCHS SHOWING FRAME SEAT AND THROAT RECESS

TOP MODIFICATION FOR TYPE E CURB

GENERAL NOTES

1. The finished grade and slope of the inlet tops are to conform with the finished cross slope and grade of the proposed sidewalk and/or parkway.
2. When inlets are to be constructed on a curve, refer to the plans to determine the radius and, where necessary, modify the inlet details accordingly. Bend steel where necessary.
3. All reinforcing steel shall have 2" minimum cover unless otherwise shown. Inlet tops shall be either cast-in-place or precast concrete.
4. Precasting of this inlet top will be permitted. Precast units shall conform to the dimensions shown or in accordance with approved shop drawings. Request for shop drawing approval shall be directed to the State Drainage Engineer.
5. Concrete meeting the requirements of A.S.T.M. C 478 (4,000 P.S.I.) may be used in lieu of Class — concrete for precast units, manufactured in plants which are under the Standard Operating Procedures for the inspection of precast drainage products.
6. The corner fillets shown for rectangular throats are necessary only when throats are to be used in conjunction with circular inlet bottoms or when used on skew with rectangular inlet bases.
7. For inlet bottoms see Index No. 200.
8. These inlet tops are designed for use with standard curb and gutter Type E and Type F. Locate outside of pedestrian crosswalk where practical.
9. See Index 201 for supplemental details.
10. All steel used for frame and cover shall meet the requirements of ASTM A–36.
11. Either cast iron covers or steel covers may be used. Iron covers shall be Class No. 30 castings in accordance with ASTM A–48.
12. When Alternate "C" Cover is specified in plans either the cast iron cover and galvanized steel frame or the the galvanized steel cover and frame must be used. Covers are to be grouted in accordance with the grouting detail shown on sheet 2 of 2, in lieu of tack welding.
13. Inlet to be paid for under the contract unit price for Inlets (Curb)–(Type), Each.

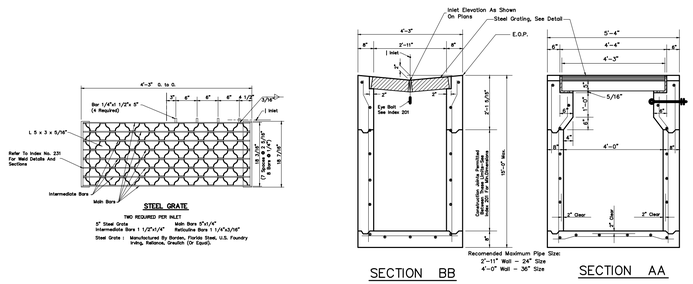


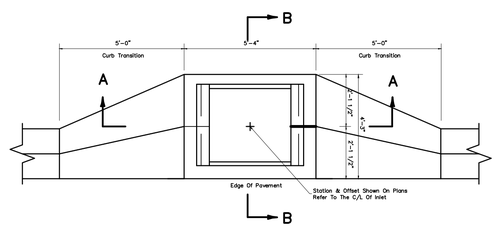
211 – CURB INLET TOPS TYPES 5 & 6
N.T.S.



NOTE: THE ABOVE IMAGE REPRESENTS THE INTENT FOR THE AESTHETIC DESIGN OF THE PROPOSED RETAINING WALLS. THE WALL SHALL HAVE A VISUALLY VARIATED SURFACE LOOK AND TEXTURE. ALL RETAINING WALL SHALL BE PERMITTED SEPARATELY BY OTHERS.

2 MSE – RETAINING WALL DESIGN INTENT
N.T.S.





1 221M – TYPE V INLET – MODIFIED
N.T.S.

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CONSTRUCTION DETAILS
FOR
VENEZIA TOWNHOMES
HOWEY–IN–THE–HILLS, FLORIDA
LAKE COUNTY

D - R - HORTON
10192 DOWGEN RD., SUITE 150
ORLANDO, FL 32832
(407) 850–5245

ENGINEER: BENJAMIN S. BECKHAM
LICENSE No. 79452
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: 10/22/2022
BENJAMIN S. BECKHAM
CERTIFICATE OF AUTHORIZATION NO. CA–0007723

NO.	DATE	REVISIONS
1	12/06/21	REVISED PER TOWN OF HOWEY–IN–THE–HILLS COMMENTS
2	01/18/22	REVISED PER TOWN OF HOWEY–IN–THE–HILLS COMMENTS
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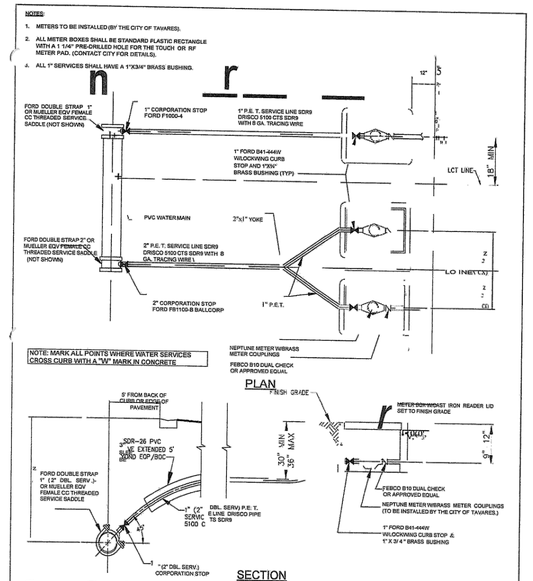
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DATE: 10/22/2021
SCALE: N.T.S.
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

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NOTES:

1. METERS TO BE INSTALLED (BY THE CITY OF TAVARES).
2. ALL METER BOXES SHALL BE STANDARD PLASTIC RECTANGLE WITH A 1 1/4" PRE-DRILLED HOLE FOR THE TOUCH OR RF METER PAD. (CONTACT CITY FOR DETAILS).
3. ALL 1" SERVICES SHALL HAVE A 1"X3/4" BRASS BUSHING.

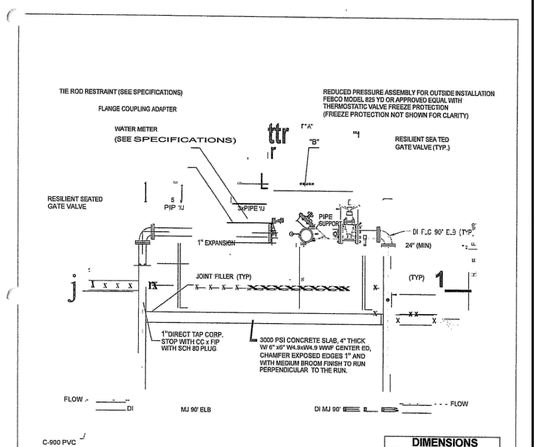


SERVICE CONNECTION DETAILS SINGLE FAMILY

SECTION

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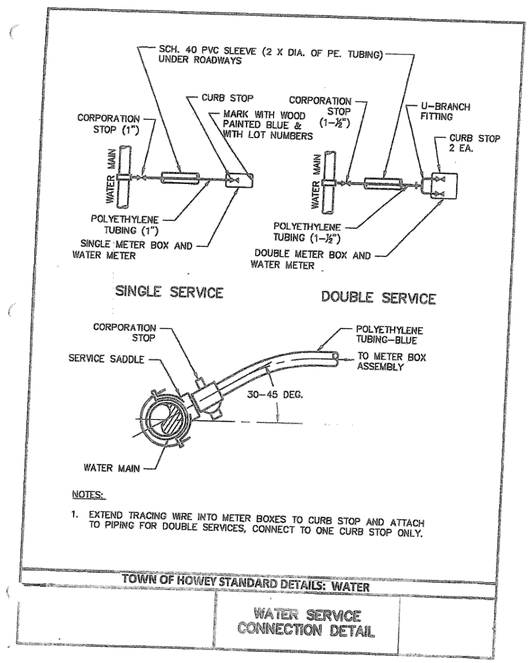
(NOTE : METERS TO BE INSTALLED BY CITY OF TAVARES .)



DIMENSIONS			
PIPE SIZE	A	B	WT
	IN		LBS
3	41 11/16	25 9/16	213
4	50 7/16	32 5/16	360
6	59 11/16	39 9/16	601
8	69 3/16	46 1/16	692
10	84 3/16	58 1/16	1593

NOTES:
1 ALL ABOVE GROUND PIPE TO BE PAINTED WITH 2 COATS OF APPROVED BLUE PAINT.

PRESSURE BACKFLOW PREVENTER W/ WATER METER DETAIL



NOTES:

1. EXTEND TRACING WIRE INTO METER BOXES TO CURB STOP AND ATTACH TO PIPING FOR DOUBLE SERVICES, CONNECT TO ONE CURB STOP ONLY.

TOWN OF HOWEY STANDARD DETAILS: WATER

WATER SERVICE CONNECTION DETAIL

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
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Suite 260
Maitland, Florida 32751
(407) 629-8330

TOWN STANDARD DETAILS
FOR
VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

D. R. HORTON
10192 DOWDEN RD., SUITE 150
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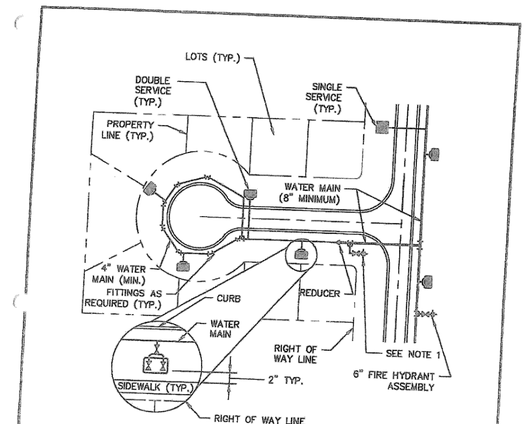
ENGINEER: BENJAMIN S. BECKHAM, P.E. LICENSE No. 79452 STATE OF FLORIDA PROFESSIONAL ENGINEER
BENJAMIN S. BECKHAM LICENSE NUMBER 79452
DATE: 10/22/2021
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

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NOTES:

1. THIS ARRANGEMENT SHALL ONLY BE USED WHERE RIGHT-OF-WAY CONSTRICTIONS WILL NOT ALLOW INSTALLATION OF A STRAIGHT ASSEMBLY.
2. METER BOX TO BE PROVIDED BY CONTRACTOR.
3. SERVICES BE LOCATED ON LOT LINES.

TOWN OF HOWEY STANDARD DETAILS: WATER

TYPICAL RESIDENTIAL DISTRIBUTION SYSTEM AND SERVICE LAYOUT

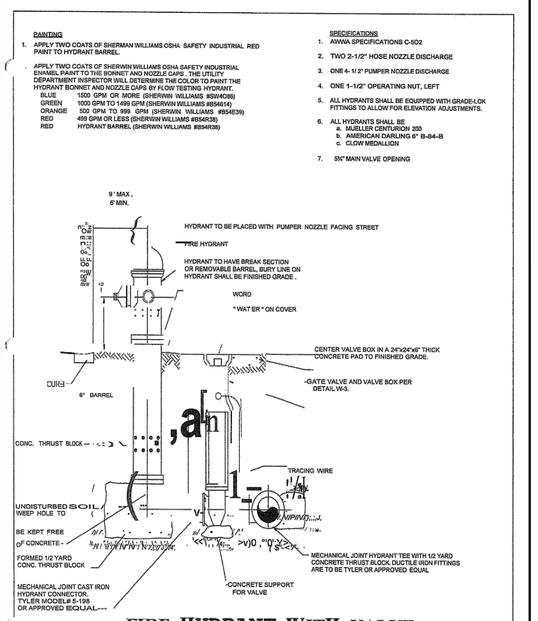
PAINTING

1. APPLY TWO COATS OF SHERWIN WILLIAMS OSHA SAFETY INDUSTRIAL RED PAINT TO HYDRANT BARREL.
2. APPLY TWO COATS OF SHERWIN WILLIAMS OSHA SAFETY INDUSTRIAL ENAMEL PAINT TO THE BONNET AND NOZZLE CAPS . THE UTILITY DEPARTMENT INSPECTOR WILL DETERMINE THE COLOR TO PAINT THE HYDRANT BONNET AND NOZZLE CAPS BY FLOW TESTING HYDRANT.

BLUE	1500 GPM OR MORE (SHERWIN WILLIAMS #B94C26)
GREEN	1000 GPM TO 1499 GPM (SHERWIN WILLIAMS #B94614)
ORANGE	500 GPM TO 999 GPM (SHERWIN WILLIAMS #B54E39)
RED	499 GPM OR LESS (SHERWIN WILLIAMS #B54R36)
RED	HYDRANT BARREL (SHERWIN WILLIAMS #B54R39)

SPECIFICATIONS

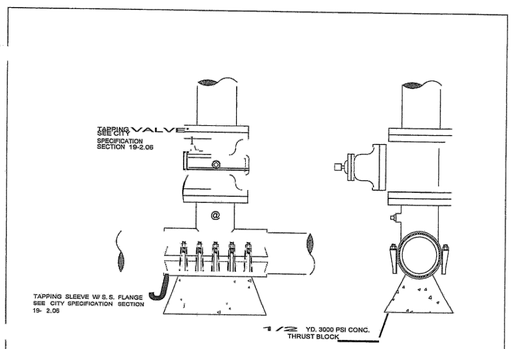
1. AWWA SPECIFICATIONS C-502
2. TWO 2-1/2" HOSE NOZZLE DISCHARGE
3. ONE 4- 1/ 2" PUMPER NOZZLE DISCHARGE
4. ONE 1-1/2" OPERATING NUT, LEFT
5. ALL HYDRANTS SHALL BE EQUIPPED WITH GRADE-LOK FITTINGS TO ALLOW FOR ELEVATION ADJUSTMENTS.
6. ALL HYDRANTS SHALL BE
   a. MUELLER CENTURION 250
   b. AMERICAN DARLING 6" B-84-B
   c. CLOW MEDALLION
7. 5¼" MAIN VALVE OPENING



FIRE HYDRANT WITH VALVE

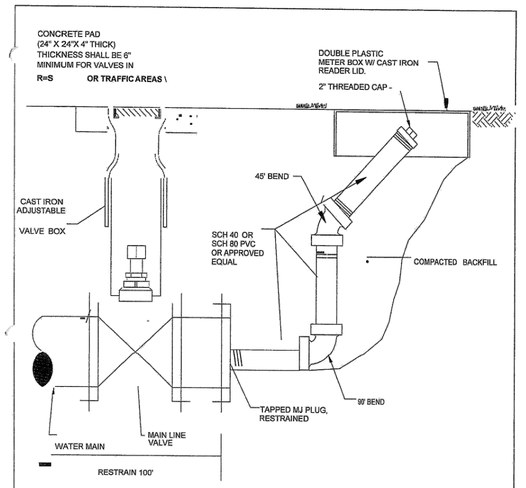
NOT TO SCALE

(STANDARD FIRE HYDRANT ASSEMBLY)



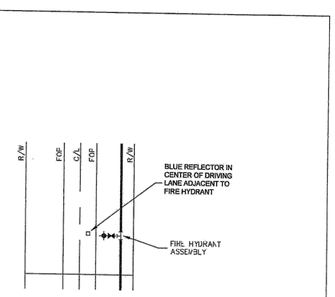
WET TAP SLEEVE & TAPPING VALVE

NOT TO SCALE



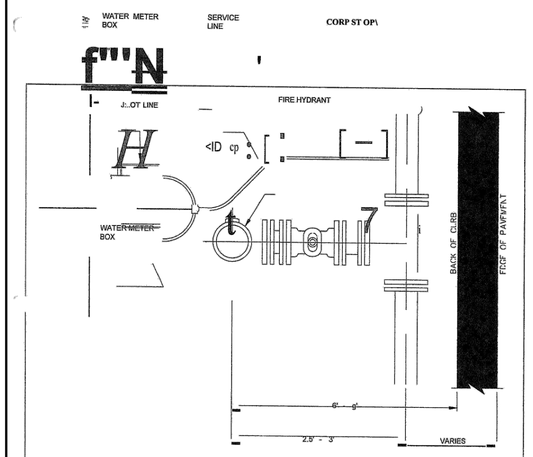
BLOWOFF VALVE DETAIL

NOT TO SCALE



FIRE HYDRANT REFLECTOR DETAIL

NOT TO SCALE

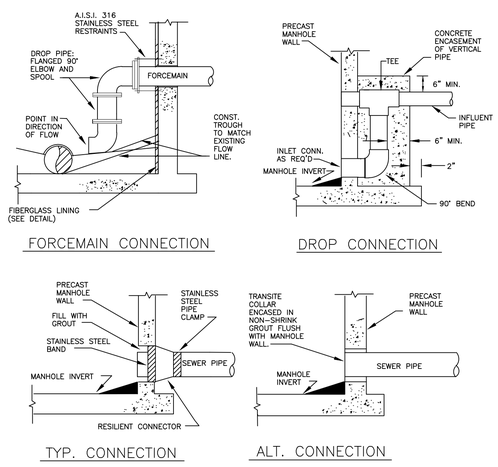


NOTES:

1. ALL METER BOXES TO BE LOCATED INSIDE ROAD R/W LINE
2. DETAIL TO BE USED WHERE FIRE HYDRANTS AND WATER SERVICES ARE LOCATED ON PLANS AND CONFLICT APPEARS APPARENT.

TYPICAL WATER SERVICE AND HYDRANT LOCATION DETAIL

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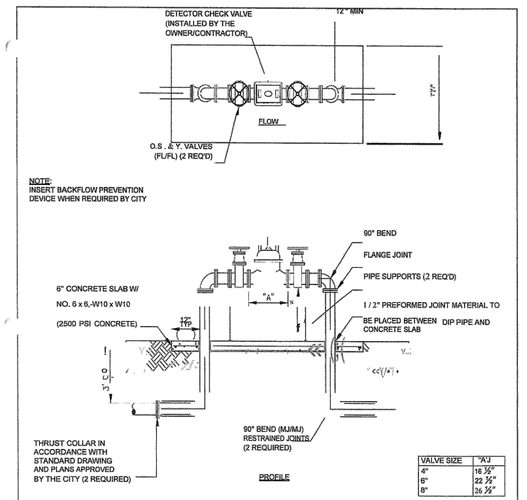


NOTES:

1. PENETRATIONS TO EXISTING MANHOLES SHALL BE CORE BORED.
2. DROP CONNECTION SHALL BE REQUIRED WHENEVER THE INVERT OF AN INFLUENT SEWER IS LOCATED TWO (2) OR MORE FEET ABOVE THE MAIN CHANNEL.
3. DROP PIPE SHALL BE OF EQUAL SIZE AS THE INFLUENT SEWER. DROP PIPE SHALL BE PVC OR FIBERGLASS WITH NON CORROSIVE OR STAINLESS STEEL FITTINGS. IF A TRANSITION TO OTHER TYPE OF PIPE, THE TRANSITION SHALL BE OUTSIDE OF MANHOLE.
4. DURING PLACEMENT OF THE FIBERGLASS LINING, IF THE BENCH IS NOT REMOVED TO ALLOW THE LINING TO EXTEND TO THE BOTTOM OF THE MANHOLE, THE EXISTING BENCH SHALL BE NOTCHED AGAINST THE MANHOLE WALL FOR THE ENTIRE CIRCUMFERENCE TO A MINIMUM DEPTH OF TWO (2) INCHES AND THE FIBERGLASS LINING SHALL BE PLACED AND SEALED INTO THE NOTCH, ANY NEW CONCRETE/GROUT TO BE PLACED OVER THE EXISTING BENCH SHALL BE BONDED TO THE EXISTING BENCH USING AN APPROVED EPOXY BASE ADHESIVE TO PREVENT COLD JOINTS AND TO PROVIDE FOR PROPER BONDING.

⚠ MANHOLE CONNECTION DETAILS

NTS



VALVE SIZE	"A"
4"	16 ½"
6"	22 ½"
8"	26 ½"

NOTES:

1. ALL ABOVE GROUND PIPE JOINTS SHALL BE FLANGED.
2. DETECTOR CHECK VALVE SHALL BE INSTALLED BY THE CONTRACTOR .

DETECTOR CHECK VALVE ASSEMBLY

NOT TO SCALE

MADDEN
MOORHEAD & STOKES, LLC
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Maitland, Florida 32751
(407) 629-8330

TOWN STANDARD DETAILS FOR VENEZIA TOWNHOMES

HOWEY-IN-THE-HILLS, FLORIDA

LAKE COUNTY

D. R. HORTON
10192 DOWGEN RD., SUITE 150
ORLANDO, FL 32832
(407) 850-5245

ENGINEER: BENJAMIN S. BECKHAM
LICENSE: No. 79452
STATE OF FLORIDA
BENJAMIN S. BECKHAM
No. 79452
PROFESSIONAL ENGINEER
DATE: 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

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APPROVED BY: BSB

C912

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GENERAL WATER NOTES

(5) EXCEPTIONS. WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THE REQUIREMENTS IN SUBSECTION (1) OR (2) ABOVE, THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THESE REQUIREMENTS IF SUPPLIERS OF WATER OR CONSTRUCTION PERMIT APPLICANTS PROVIDE TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH EXCEPTION AND PROVIDE ALTERNATIVE CONSTRUCTION FEATURES THAT AFFORD A SIMILAR LEVEL OF RELIABILITY AND PUBLIC HEALTH PROTECTION.

(A) WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE:
1. USE OF PRESSURE-RATED PIPE CONFORMING TO THE AMERICAN WATER WORKS ASSOCIATION STANDARDS INCORPORATED INTO RULE 62-555.330, F.A.C., FOR THE OTHER PIPELINE IF IT IS A GRAVITY- OR VACUUM-TYPEPIPELINE;
2. USE OF WELDED, FUSED, OR OTHERWISE RESTRAINED JOINTS FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE; OR
3. USE OF WATERTIGHT CASING PIPE OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE.

(B) WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THREE FEET HORIZONTALLY FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND IS BEING LAID LESS THAN THE REQUIRED MINIMUM VERTICAL DISTANCE FROM THE OTHER PIPELINE:
1. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE WATER MAIN; AND
2. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE OTHER PIPELINE IF IT IS NEW AND IS CONVEYING WASTEWATER OR RECLAIMED WATER.

MISCELLANEOUS WATER NOTES

1. WATER SYSTEM SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS, CLEANED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND CHAPTER 62-555 AND CHAPTER 62-555 FLORIDA ADMINISTRATIVE CODE.
2. ALL PIPING SHALL BEAR THE "NSF" SEAL FOR POTABLE WATER.
3. WATER MAINS SHALL BE PVC CONFORMING TO AWWA C-900, DR 18 FOR PIPE SIZES 4"-12". PIPES 14" OR LARGER SHALL BE AWWA C-905, DR 18. ALL COUPLINGS COMPOUNDS, SOLVENTS, LUBRICANTS AND PIPE PREPARATION, FOR LAYING, SHALL IN ACCORDANCE WITH THE PIPE MANUFACTURERS LATEST RECOMMENDATIONS.
4.
5. DEPTH OF WATER LINES TO BE MINIMUM 36" BELOW FINISHED GRADE.
6. WATER MAINS TO BE LOCATED 5' FROM BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
7. ALL WATER MAINS UNDER PAVEMENT SHALL BE DUCTILE IRON AND SHALL EXTEND 5' BEYOND THE BACK OF CURB.
8. ALL SLEEVES UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE BACK OF CURB.

GENERAL WATER NOTES

(D) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.008, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS AND RECLAIMED WATER PIPELINES.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(3) SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES.

(A) NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.

(B) EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE. WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THIS REQUIREMENT (I.E., WHERE THERE IS A CONFLICT IN THE ROUTING OF A WATER MAIN AND A STORM SEWER AND WHERE ALTERNATIVE ROUTING OF THE WATER MAIN OR THE STORM SEWER IS NOT TECHNICALLY FEASIBLE OR IS NOT ECONOMICALLY SENSIBLE), THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THIS REQUIREMENT (I.E., THE DEPARTMENT SHALL ALLOW CONSTRUCTION OF CONFLICT MANHOLES), BUT SUPPLIERS OF WATER OR PERSONS PROPOSING TO CONSTRUCT CONFLICT MANHOLES MUST FIRST OBTAIN A SPECIFIC PERMIT FROM THE DEPARTMENT IN ACCORDANCE WITH PART V OF THIS CHAPTER AND MUST PROVIDE IN THE PRELIMINARY DESIGN REPORT OR DRAWINGS, SPECIFICATIONS, AND DESIGN DATA ACCOMPANYING THEIR PERMIT APPLICATION THE FOLLOWING INFORMATION:
1. TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH CONFLICT MANHOLE.
2. A STATEMENT IDENTIFYING THE PARTY RESPONSIBLE FOR MAINTAINING EACH CONFLICT MANHOLE.
3. ASSURANCE OF COMPLIANCE WITH THE DESIGN AND CONSTRUCTION REQUIREMENTS IN SUB-SUBPARAGRAPHS A. THROUGH D. BELOW. - 351
   A. EACH WATER MAIN PASSING THROUGH A CONFLICT MANHOLE SHALL HAVE A FLEXIBLE, WATERTIGHT JOINT ON EACH SIDE OF THE MANHOLE TO ACCOMMODATE DIFFERENTIAL SETTLING BETWEEN THE MAIN AND THE MANHOLE.
   B. WITHIN EACH CONFLICT MANHOLE, THE WATER MAIN PASSING THROUGH THE MANHOLE SHALL BE INSTALLED IN A WATERTIGHT CASING PIPE HAVING HIGH IMPACT STRENGTH (I.E., HAVING IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE).
   C. EACH CONFLICT MANHOLE SHALL HAVE AN ACCESS OPENING, AND SHALL BE SIZED, TO ALLOW FOR EASY CLEANING OF THE MANHOLE.
   D. GRATINGS SHALL BE INSTALLED AT ALL STORM SEWER INLETS UPSTREAM OF EACH CONFLICT MANHOLE TO PREVENT LARGE OBJECTS FROM ENTERING THE MANHOLE.

(4) SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

GENERAL WATER NOTES

1. WATER SYSTEM COMPONENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS, CLEANED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND CHAPTER 62-555 FLORIDA ADMINISTRATIVE CODE.
2. ALL PIPING SHALL BEAR THE "NSF" SEAL FOR POTABLE WATER.
3. WATER MAINS SHALL BE PVC CONFORMING TO AWWA C-900, DR 18 FOR PIPE SIZES 4"-12". PIPES 14" OR LARGER SHALL BE AWWA C-905, DR 18. ALL COUPLINGS, CLEANING COMPOUNDS, SOLVENTS, LUBRICANTS, AND PIPE PREPARATION, FOR LAYING, SHALL BE IN ACCORDANCE WITHTHE PIPE MANUFACTURER'S LATEST RECOMMENDATIONS.
4. DEPTH OF WATER LINES TO BE 36" MINIMUM COVER FROM FINISH GRADE.
5. WATER MAINS TO BE LOCATED 5' FROM BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISENOTED.
6. ALL SLEEVES UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE BACK OF CURB.
7. DISINFECTING: FOLLOWING THE PRESSURE TESTING, THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM. DISINFECTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF AWWA STANDARD C651 "DISINFECTING WATER MAINS", AND ALL APPROPRIATE AGENCY APPROVAL.
8. ALL HYDROSTATIC TESTS SHALL BE IN ACCORDANCE WITH AWWA C600 FOR DUCTILE IRON PIPE AND C605AND3 FOR PVC PIPE.
9. ALL WATER MAINS SHALL BE INSTALLED, PRESSURE AND LEAK TESTED IN ACCORDANCE WITH AWWA C600, (62-555.320(2)(f)1 AND 62-555.330, F.A.C. ALL INSTALLATION, TESTING AND FIELD PROCEDURES MUST BE PROVIDED AND MUST CONFORM TO THE APPLICABLE AWWA STANDARDS.
10. ALL PIPING MATERIALS AND SPECIFICATIONS COVERING PIPES, JOINTS AND PACKING MATERIALS, INTERNAL COATING AND LININGS, FITTINGS, SPECIALS AND APPURTENANCES SHALL ALL BE IN ACCORDANCE WITH THE CORRESPONDING AWWA STANDARDS AND BE CONFORMING TO NSF REQUIREMENTS, AS MAY BE APPLICABLE, WITH EXCEPTIONS ALLOWED ONLY IF DOCUMENTATION AND ASSURANCES ARE PROVIDED IN COMPLIANCE WITH PARAGRAPHS 62-555.320(2) (D), 622-555.320 (3) (B), AND 62-555.320 (21) (C), F.A.C. THE LEAD USE PROHIBITION IN RULE 62-555.322, F.A.C. SHALL ALSO APPLY. POLYETHYLENE TUBING SHALL BE PER AWWA C901. UNDERGROUND SERVICE LINES AND VALVES SHALL BE PER AWWA C800.

COLOR CODING

ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(B)3, F.A.C., USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE PIPE WALL. PIPE STRIPED DURING GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.) [FAC 62CLL 555.320(21)(B)3]

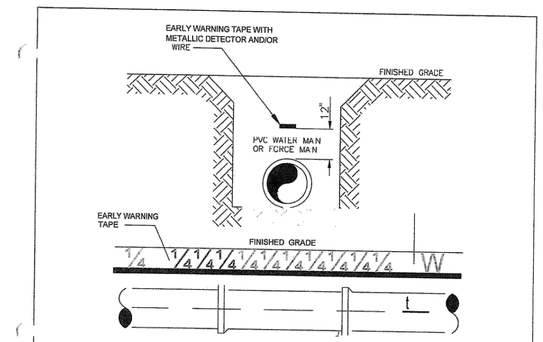
ALL WATER MAINS SHALL BE INSTALLED IN ACCORDANCE WITH **CHAPTER 62-555.314, F.A.C.,** AND ANY UPDATES TO THE F.A.C., AND IN CONFORMANCE WITH ALL SEPARATION REQUIREMENTS AS FOUND THEREIN.

62-555.314 LOCATION OF PUBLIC WATER SYSTEM MAINS.

FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS; AND SERVICE LINES THAT ARE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER.

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C
(B) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
(C) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.



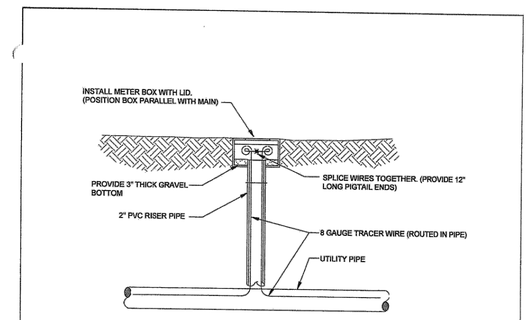
NOTES:

1. ALL MAINS INSTALLED BY OPEN CUT SHALL HAVE A "EARLY WARNING" PROTECTION TAPE AND WIRE INSTALLED CONTINUOUSLY ALONG THE ALIGNMENT. THE PROTECTION TAPE SHALL BE TERRA-TAPE OR EQUAL. TAPE SHALL BE INSTALLED DURING BACKFILLING 12" ABOVE THE PIPE AND SHALL BE CONTINUOUSLY MARKED FOR THE TYPE OF PIPE (EXAMPLE: CAUTION , WATER MAIN BURIED BELOW") . THE TAPE SHALL HAVE A METALLIC DETECTABLE STRIP INCLUDED AND COLOR CODED AS

   FOLLOWS :
   BLUE - POTABLE WATER
   GREEN - SANITARY FORCE MAIN, GRAVITY SEWER, LOW PRESSURE MAIN
   PURPLE - EFFLUENT REUSE
   RED - DEDICATED FIRE LINE

2. ALL PVC MAINS SHALL BE A SOLID COLOR AS DESCRIBED ABOVE.
   ALL DUCTILE IRON MAINS SHALL BE WRAPPED WITH COLOR CODED BAGS.
   ALL PVC POTABLE WATER PIPE SHALL BEAR THE NATIONAL SANITATION FOUNDATION (NSL) SEAL OF APPROVAL .

UTILITY PIPE L OCATI ON MATERIAL

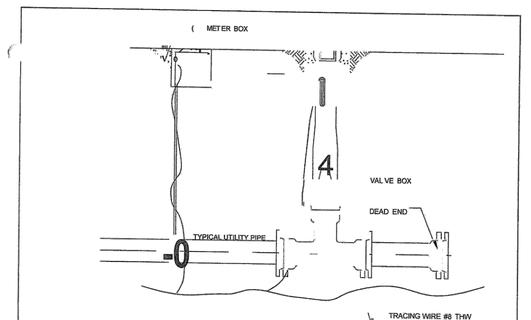


TRACER WIRE BOX UTILIZING METER BOX

NOTES:

1. TRACER WIRE STATION BOX TO BE INSTALLED WHERE THE WIRE CANNOT BE BROUGHT TO GRADE IN A VALVE BOX WITHIN THE MANDATORY 500 FOOT INTERVAL OR WHERE A SPLICE MUST MUST BE MADE ON THE TRACER WIRING. NO UNDERGROUND SPLICES.
2. BOXES SHALL NOT BE LOCATED IN ROADWAYS OR DRIVEWAYS.
3. BOX AND LID PER DETAIL W-19.
4. TRAFFIC RATED LID (STANDARD-NON BOLT DOWN)
5. LID COLOR SHALL BE PRE-MANUFACTURED OR PAINTED TO MATCH SERVICE (BLUE= WATER, GREEN=SEWER, PURPLE=RECLAIM)

TRACER WIRE BOX



ALL PIPE INSTALLED VIA OPEN CUT SHALL BE INSTALLED WITH #8 THW SOLID COPPER COATED TRACING WIRE. ALL PIPE INSTALLED VIA HDD SHALL BE INSTALLED WITH TWO #12 COPPER CLAD STEEL WIRES.

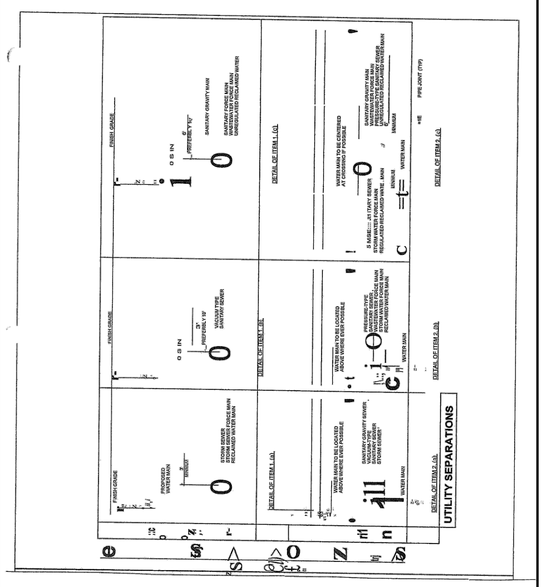
THE TRACING WIRE MUST BE INSTALLED DIRECTLY BELOW THE PIPE AND BROUGHT TO THE SURFACE AT 500' MINIMUM INTERVALS. WIRE SHALL EXTEND A MINIMUM OF 12" ABOVE GRADE AT EACH INTERVAL AND BE COILED AND PLACED IN A VALVE BOX, METER BOX , MANHOLE, CLEANOUT, LOCATE WIRE BOX, OR OTHER APPLICABLE STRUC TURE .

COLOR CODING:

POTABLE WATER SYSTEM: BLUE
REUSE WATER SYSTEM: PURPLE
SANITARY SEWER , FORCE MAINS AND LOW PRESSURE SEWER SYSTEMS: GREEN

1. FOR LOW PRESSURE SEWER, POTABLE WATER AND REUSE WATER SYSTEMS: WIRE SHALL BE INSTALLED BELOW ALL MAINS AND SERVICE LINES AND ATTACHED TO VALVES , HYDRANTS AND FITTINGS. WIRE INSTALLED WITH SERVICE LINES SHALL CONNECT TO THE WIRE INSTALLED BELOW THE MAIN AND EXTEND TO THE CURB STOP .
2. FIRE SPRINKLER LINES: WIRE SHALL CONNECT TO THE WIRE INSTALLED BELOW THE MAIN AND EXTEND TO THE RISER CONNECTION .
3. SANITARY SEWER FORCE MAINS: WIRE SHALL BE INSTALLED BELOW THE FORCE MAIN AND ATTACHED TO ALL VALVES AND FITTINGS AND BROUGHT TO THE SURFACE AND PLACED IN A METAL , FLORIDA WATER SERVICE APPROVED , VALVE BOX.
4. DEAD END MAINS: WIRE SHALL BE PLACED IN A PROPERLY IDENTIFIED METAL VALVE BOX AT THE END OF THE RUN .
5. WIRE SHALL NOT BE FASTENED OR COILED TO VALVE OPERATING NU T.

UTILITY PIPE LOCATION MATERIALS



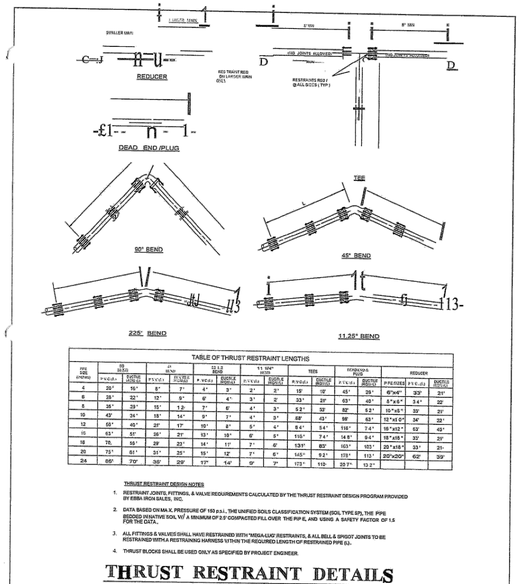


TABLE OF THRUST RESTRAINT LENGTHS

PIPE SIZE (INCHES)	90 BEND		45 BEND		22.5 BEND		11.25 BEND		TEE		REDUCER		
	A (FEET)	B (WITH TIE RODS)	A (FEET)	B (WITH TIE RODS)	A (FEET)	B (WITH TIE RODS)	A (FEET)	B (WITH TIE RODS)	A (FEET)	B (WITH TIE RODS)	A (FEET)	B (WITH TIE RODS)	REDUCER
4	29'	15'	8'	7'	4'	3'	2'	3'	12'	10'	45'	38'	8"x4"
6	38'	32'	13'	8'	6'	4'	3'	2'	23'	21'	63'	45'	8"x6"
8	38'	29'	15'	12'	7'	6'	4'	3'	8.2'	32'	82'	53'	10"x6"
10	43'	34'	15'	14'	9'	7'	4'	3'	69'	43'	99'	63'	10"x8"
12	55'	45'	20'	17'	10'	8'	5'	4'	8.4'	34'	116'	74'	16"x10"
16	63'	51'	26'	21'	13'	10'	6'	5'	9.5'	7.4'	149'	84'	16"x12"
18	76.	56'	29'	23'	14'	11'	7'	6'	13.9'	85'	165'	105'	20"x16"
20	73'	61'	31'	25'	15'	12'	7'	6'	145'	9.2'	175'	113'	20"x20"
24	88'	70'	39'	29'	17'	14'	9'	7'	17.1'	110'	22.7'	13.8'	

THRUST RESTRAINT DESIGN NOTES

1. RESTRAINT JOINTS, FITTINGS, & VALVE REQUIREMENTS CALCULATED BY THE THRUST RESTRAINT DESIGN PROGRAM PROVIDED BY EBBA IRON SALES, INC.
2. DATA BASED ON A W. PRESSURE OF 150 p.s.i., THE UNIFIED SOILS CLASSIFICATION SYSTEM (SOIL TYPE 5/5), THE PIPE BEDDED IN NATIVE SOIL W/ A MINIMUM OF 3.5' COMPACTED FILL OVER THE PIP E, AND USING A SAFETY FACTOR OF 1.5 FOR THE DATA.
3. ALL FITTINGS & VALVES SHALL HAVE RESTRAINED WITH "MEGA-LUG" RESTRAINTS, & ALL BELL & SPIGOT JOINTS TO BE RESTRAINED WITH A RESTRAINING HARNESS WITHIN THE REQUIRED LENGTH OF RESTRAINED PIPE (L).
4. THRUST BLOCKS SHALL BE USED ONLY AS SPECIFIED BY PROJECT ENGINEER.

THRUST RESTRAINT DETAILS

NOT TO SCALE

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

TOWN STANDARD DETAILS
FOR
VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

D - R - HORTON
10192 DOWGEN RD., SUITE 150
ORLANDO, FL 32832
(407) 850-5245

ENGINEER: BENJAMIN S. BECKHAM
LICENSE No. 79452
STATE OF FLORIDA
PROFESSIONAL ENGINEER
BENJAMIN SCOTT BECKHAM
No. 79452
DATE: 10/22/2021
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

#	DATE	REVISIONS
1		
2		
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11		

JOB # 21052
DATE: 10/22/2021
SCALE: N.T.S.
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C913

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TEMPORARY JUMPER CONNECTION NOTES

1. A TEMPOR AR Y JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE WATER MAINS AND PROPOSED NEW WATER MAIN IMPROVEMENTS.
2. THE DETAILS TO BE USED FOR FILLING ANY WATER MAIN OF ANY SIZE FROM EXISTING ACTIVE WATER MAINS AND FOR FLUSHING OF NEW MAINS UP TO 8 " DIAMETER (2. 5 FPS MINIMUM VELOCITY) AND FOR FILLING BACTERIOLOGICAL SAMPLES FROM ANY NEW WATER MAIN OF ANY SIZE. THE JUMPER CONNECTION SHALL BE MAINTAINED UNTIL AFTER FILLING, FLUSHING , TESTING AND DISINFECTION OF THE NEW MAIN HAS BEEN SUCCESSFULLY COMPLETED AND CLEARANCE FOR USE FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND OTHER PERTINENT AGENCIES HAS BEEN REC EIVED. THE JUMPER CONNECTION SHALL ALSO BE USED TO MAINTAIN A MINIMUM PRESSURE OF 20 psi IN THE NEW MAINS ALL THE TIME AFTER DISINFECTION AND UNTIL THE FDEP CLEARANCE LETTER IS OBTAINED. ADEQUA TE THRUST BLOCKING AND /OR RESTRAINTS SHALL BE PROVIDED TEMPORARILY , AS REQUIR ED. PIPE AND FITTINGS USED FOR CONNECTING THE NEW PIPE TO THE EXISTING PIPE SHALL BE DISINFECTED PRIOR TO INSTALLATION IN ACCORDANCE WITH AWWA C9 51 , LATEST EDITION. THIS TAPPING SLEEVE AND THE EXTERIOR OF THE MAIN TO BE TAPPED SHALL BE DISINFECTED BY SPRAYING OR SWABBING PER SECTION H OF AWWA C09 1, LATEST EDITION .
3. FLUSHING OF 10" DIAMETER AND LARGE WATER MAINS MAY BE DONE THROUGH THE TIE-IN VALVE , IN THE PRESENCE OF THE UTILITY DIRECTOR OR HIS DESIGNEE. THE UTILITY DEPARTMENT WILL NOTIFIED IN WRITING 48 HOURS PRIOR TO THE FLUSHING OF SAID MAINS .

   THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:

   A. THE TIE-IN VALVES SHALL BE OPERATED AND PRESSURE TESTED IN THE PRESENCE OF THE UTILITY COMPANY AND ENGINEER TO VERIFY WATER TIGHTNESS PRIOR TO THE TIE- IN. VALVES WHICH ARE NOT WATERTIGHT SHALL BE REPLACED OR A NEW VALVE INSTALLED IMMEDIATELY ADJACENT TO THE LEAKING VALVE .

   B. THE TEMPORARY JUMPER CONNECTION SHALL BE CONSTRUCTED AS DETAIL ED. THE JUMPER CONNECTION SHALL BE USED TO FILL THE NEW WATER MAIN AND FOR PROVIDING WATER FOR BACTERIOLOGICAL SAMPLING OF THE NEW MAIN AS REQUIRED BY THE FDEP PERMIT .

      FLUSHING SHALL NOT BE ATTEMPTED DURING PEAK DEMAND HOURS OF THE EXISTING WATER MAIN .

      ALL DOWNSTREAM VALVES IN THE NEW SYSTEM MUST BE OPEN PRIOR TO OPENING THE TIE-IN VALVE .

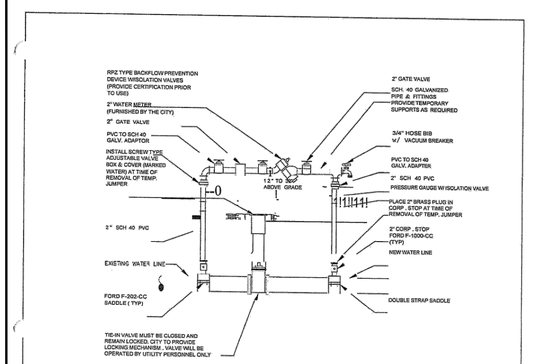
      PROVIDE FOR AND MONITOR THE PRESSURE AT THE TIE-IN POINT, THE PRESSURE IN THE EXISTING MAIN MUST NOT DROP BELOW 35 psi.

      TIE-IN VALVE SHALL BE OPENED A FEW TURNS ONLY , ENSURING A PRESSURE DROP ACROSS THE VALE IS ALWAYS GRATER THAN 10 psi.

   C. THE TIE-IN VALVE SHALL BE LOCKED CLOSED BY THE CITY UNTIL FLUSHING BEGINS.

   D. THE TIE-IN VALVE SHALL BE OPENED ONLY A FEW TURNS FOR FLUSHING OF THE NEW MAIN , THE PROCEDURE SHALL BE DIRECTED BY THE CITY AND OBSERVED BY THE ENGINEER.

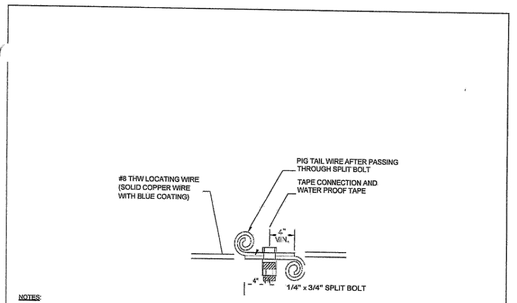
   E. AFTER FLUSHING, THE TIE-IN VALVE SHALL BE CLOSED AND LOCKED IN THE CLOSED POSITION BY THE CITY .
4. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION DEMONSTRATING THAT THE RPZ BACKFLOW PREVENTION DEVICE HAS BEEN TESTED WITHIN ONE YEAR AT THE TIME OF INSTALLATION AND IS IN GOOD WOR K ING ORDER AT THE TIME OF INSTALLATION . THE TEST SHALL BE PERFORMED BY A QUALIFIED BACKFLOW PREVENTION TECHNICIAN .
5. EXCEPT AS REQUIRED TO FLUSH LINES OF GREATER THAN 8 " IN DIAMET ER, THE TIE-IN VALVE SHALL REMAIN CLOSED AND SHALL BE LOCKED IN THE CLOSED POSITION BY THE CITY , THE TIE-IN VALVE SHALL REMAIN LOCKED CLOSED UNTIL THE NEW SYSTEM HAS BEEN CLEARED FOR USE BY FDEP AND ALL OTHER PERTINENT AGENCIES .
6. UPON RECEIPT OF CLEARANCE FOR USE FROM FDEP AND ALL OTHER PERTINENT AGENCIES , THE CONTRACTOR SHALL REMOVE THE JUMPER CONNECTION. THE CORPORATION STOPS ARE TO BE CLOSED AND PLUGGED WITH 2" BRASS PLUGS.
7. ALL INSTALLATION AND MAINTENANCE OF THE TEMPORARY JUMPER CONNECTION AND ASSOCIATED BACKFLOW PREVENTION DEVICE FITTINGS, VALVE , ETC., SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.



TEMPORARY JUMPER CONNECTION DETAIL

NOT TO SCALE

NOTE: LOCATION TO BE DETERMINED AT TIME OF PRECONSTRUCTION CONFERENCE W CITY.

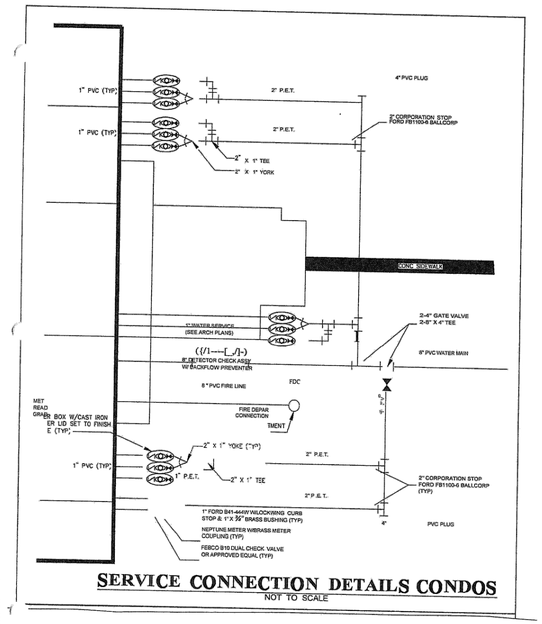


NOTES:

1. THE ENDS OF ALL LOCATING WIRES, WHETHER THEY ARE SPLICED, CONNECTED, OR TERMINATED, SHALL HAVE THE LAST THREE INCHES PIG TAILED AS DETAILED HEREON.
2. AFTER INSTALLATION OF THE LOCATING WIRE THE SYSTEM SHALL BE SUBJECTED TO TESTING, IN THE PRESENCE OF CITY UTILITY DIRECTOR OR HIS DESIGNEE PRIOR TO BACKFILL, IN ORDER TO CONFIRM THAT THE SYSTEM IS FUNCTIONAL.

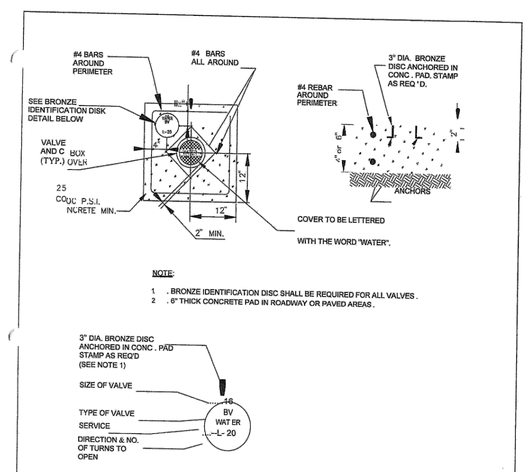
LOCATING WIRE SPLICING

NOT TO SCALE



SERVICE CONNECTION DETAILS CONDOS

NOT TO SCALE



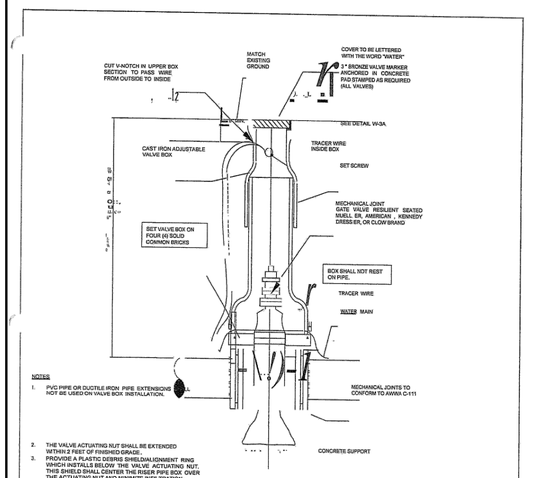
NOTE:

1. . BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES .
2. . 6" THICK CONCRETE PAD IN ROADWAY OR PAVED AREAS .

BRONZE IDENTIFICATION DISC DETAIL

VALVE COLLAR DETAIL

NOT TO SCALE

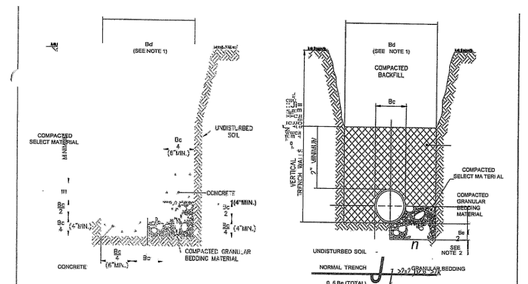


NOTES

1. PVC PIPE OR DUCTILE IRON PIPE EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE VALVE ACTUATING NUT SHALL RE EXTENDED WITHIN 2 FEET OF FINISHED GRADE .
3. PROVIDE A PLASTIC DEBRIS SHIELD/ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION . FOR NEW CONS TRUCTION , THE VALVE BOX SHALL BE ADJUSTED TO MIGRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS .
4. VALVE BOX IS TYLER UNION NO. 6850, OR APPROVED EQUAL, TWO PIECE SCREW TYPE.
5. .

GATE VALVE & BOX DETAIL

NOT TO SCALE



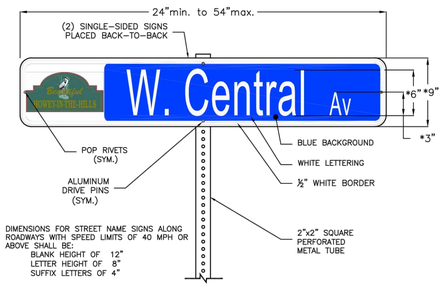
CLASS "A" BEDDING SPECIAL CONDITIONS

CLASS " B" BEDDING NORMA L CONDI TIONS

NOTES: FOR BEDDING AND TRENCHING

1. DIMENSION Be = OUTSIDE PIPE DIAMETER
   DIMENSION Bc = MINIMUM TRENCH WIDTH AT TOP OF PIPE
   MAXIMUM Bd = Be + 30"
   MINIMUM Bd = MAXIMUM DIMENSION OF BELL + 8" (UNSHEETED TRENCH)
2. DEPTH FOR REMOVAL FOR UNSUITABLE MATERIAL SHALL BE AS REQUIRED TO REACH SUITABLE FOUNDATION. FOR ROCK OR OTHER NON-CUSHIONING MATERIAL, DEPTH SHALL BE 6" BELOW BOTTOM OF UTILITY.
3. . ALL BACKFILL AND SELECT MA TERI AL UNDER ALL ROADWAYS, DRIVES ENCLOSING DIRT DRIVES , AND PARKING AREAS SHALL BE COMPACTED TO 98% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY, (AASHTO T-180). BACKFILL AND SELECT MATERIAL UNDER ALL OTHERR AREAS SHALL BE COMPACTED AS FOLLOWS: FROM BOTTOM OF TRENCH TO 12" ABOVE TOP OF PIPE - 85% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180), FROM 12 " ABOVE TOP OF PIPE TO TOP OF BACKFILL - 90% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180)

TRENCHING AND BEDDING DETAILS



*NOTE

DIMENSIONS FOR STREET NAME SIGNS ALONG ROADWAYS WITH SPEED LIMITS OF 40 MPH OR ABOVE SHALL BE:
BLANK HEIGHT OF 12"
LETTER HEIGHT OF 8"
SUFFIX LETTERS OF 4"

SIGN BLANKS:
- .063" ALUMINUM
- ALUMINUM CHEMICALLY TREATED TO MEET ATSM B449 STANDARD (PRE-TREATMENT FOR PAINT OR REFLECTIVE SHEETING)
- DIMENSIONS ARE TO BE 9" or 12" HEIGHT X 24" MINIMUM TO 54" MAXIMUM LENGTH. BLANK LENGTH TO BE DETERMINED BY ROAD NAME LENGTH AND BE ESTABLISHED IN 6" INCREMENTS, I.E. (24",30",36",42",48" OR 54")

COLOR:
- THE BACKGROUND SHALL BE HIGH INTENSITY PRISMATIC GREATER WHITE SHEETING WITH BLUE TRANSPARENT FILM OVERLAY.

LEGEND/LETTERING:
- ONE-HALF INCH (1/2") WHITE BORDER, 1/2" FROM THE EDGE.
- STREET NAMES SHALL BE 6" or 8" SERIES B LETTERS.
- THE ABBREVIATED SUFFIX "Rd", "Ave", "Dr", ETC., SHALL BE 3" or 4" SERIES B.

MOUNTING:
- MOUNTING SHALL BE TWO SINGLE-SIDED SIGNS WITH ATTRIBUTES ABOVE, MOUNTED BACK TO BACK, WITH ENDS POP RIVETED TOGETHER ON 2"x2" METAL POST, ATTACHED WITH ALUMINUM DRIVE PINS. NO EDGE-CLAMPING STYLE MOUNTING BLOCKS ARE TO BE USED.

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

TOWN STANDARD DETAILS FOR VENEZIA TOWNHOMES
HOWEY-IN-THE-HILLS, FLORIDA
LAKE COUNTY

D. R. HORTON
10192 DOWDEN RD., SUITE 150
ORLANDO, FL 32832
(407) 850-5245

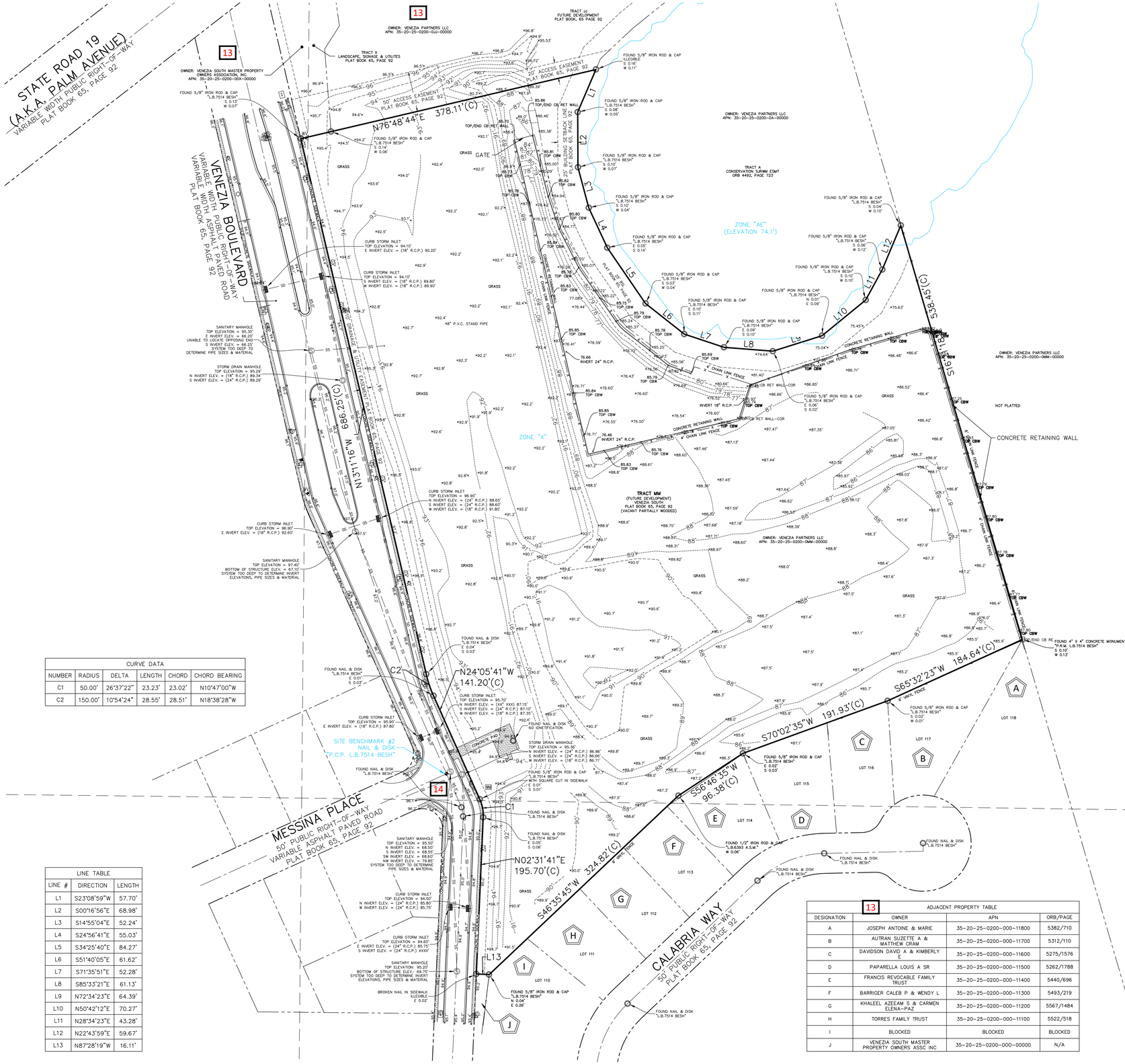
ENGINEER'S SEAL/SIGNATURE (BENJAMIN S. BECKHAM) LICENSE No. 79452 STATE OF FLORIDA PROFESSIONAL ENGINEER
BENJAMIN S. BECKHAM, P.E. No. 79452
DATE: 10/22/2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

	DATE	REVISIONS
1	01/18/22	REVISED PER TOWN OF HOWEY-IN-THE-HILLS COMMENTS
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		

JOB # 21052
DATE: 10/22/2021
SCALE: N.T.S.
DESIGNED BY: BSB
DRAWN BY: JAS
APPROVED BY: BSB

C914

H:\Data\21052_Eng\Final\21052_C910 County Details.dwg February 4, 2022 9:45 AM



CURVE DATA					
NUMBER	RADIUS	DELTA	LENGTH	CHORD	CHORD BEARING
C1	50.00'	26°37'22"	23.23'	23.02'	N10°47'00"W
C2	150.00'	10°54'24"	28.55'	28.51'	N18°38'28"W

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S23°08'59"W	57.70'
L2	S00°16'56"E	68.98'
L3	S14°55'04"E	52.24'
L4	S24°56'41"E	55.03'
L5	S34°25'40"E	84.27'
L6	S51°40'05"E	61.62'
L7	S71°35'51"E	52.28'
L8	S85°33'21"E	61.13'
L9	N72°34'23"E	64.39'
L10	N50°42'12"E	70.27'
L11	N28°34'23"E	43.28'
L12	N22°43'59"E	59.67'
L13	N87°28'19"W	16.11'

13 ADJACENT PROPERTY TABLE

DESIGNATION	OWNER	APN	ORB/PAGE
A	JOSEPH ANTOINE & MARIE	35-20-25-0200-000-11800	5382/710
B	AUTRAN SUZETTE A & MATTHEW CRAM	35-20-25-0200-000-11700	5312/110
C	DAVIDSON DAVID A & KIMBERLY E	35-20-25-0200-000-11600	5275/1576
D	PAPARELLA LOUIS A SR	35-20-25-0200-000-11500	5262/1788
E	FRANCIS REVOCABLE FAMILY TRUST	35-20-25-0200-000-11400	5440/696
F	BARRIGER CALEB P & WENDY L	35-20-25-0200-000-11300	5493/219
G	KHALEEL AZEEAM S & CARMEN ELENA-PAZ	35-20-25-0200-000-11200	5567/1484
H	TORRES FAMILY TRUST	35-20-25-0200-000-11100	5522/518
I	BLOCKED	BLOCKED	BLOCKED
J	VENEZIA SOUTH MASTER PROPERTY OWNERS ASSC INC	35-20-25-0200-000-00000	N/A

1" = 60'
GRAPHIC SCALE
0 30' 60' 120'

LEGAL DESCRIPTION

TRACT MM OF VENEZIA SOUTH, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 65, PAGE(S) 92 THROUGH 97, INCLUSIVE, OF THE PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.

SURVEYOR'S NOTES

1. BEARINGS SHOWN HEREON ARE BASED ON EAST RIGHT-OF-WAY LINE OF VENEZIA BOULEVARD, WHICH BEARS NORTH 13 DEGREES 11 MINUTES 16 SECONDS WEST, PER PLAT BOOK 65 PAGE 92.

2. ALL STATEMENTS WITHIN THE CERTIFICATION, AND OTHER REFERENCES LOCATED ELSEWHERE HEREON, RELATED TO: UTILITIES, IMPROVEMENTS, STRUCTURES, BUILDINGS, PARTY WALLS, PARKING, EASEMENTS, SERVITUDES, AND ENCROACHMENTS ARE BASED SOLELY ON ABOVE GROUND, VISIBLE EVIDENCE, UNLESS ANOTHER SOURCE OF INFORMATION IS SPECIFICALLY REFERENCED HEREON.

3. THE SURVEYOR HAS NOT ABSTRACTED THE LAND SHOWN HEREON FOR EASEMENTS, RIGHT-OF-WAY OR RESTRICTIONS OF RECORD WHICH MAY AFFECT THE TITLE OR USE OF LAND, NOR WAS ANY TITLE WORK PROVIDED TO THIS SURVEYOR BY THE CLIENT.

4. NOT VALID WITHOUT THE ELECTRONIC SEAL OF A FLORIDA LICENSED PROFESSIONAL SURVEYOR & MAPPER.

5. ALL RECORDING INFORMATION CITED HEREON REFERS TO THE PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.

6. VERTICAL INFORMATION BASED ON: BENCHMARK A-431 HAVING A PUBLISHED ELEVATION OF 99.32 (NAVD 88).
DESCRIBED AS: A STAINLESS STEEL ROD WITHOUT SLEEVE

7. THIS IS NOT A BOUNDARY SURVEY, IT IS INTENDED TO BE USE FOR TOPOGRAPHY PURPOSES ONLY.

UNDERGROUND UTILITIES

UNDERGROUND UTILITIES ARE NOT SHOWN. NO SUB-SURFACE EXCAVATION OR EXPLORATION WAS PERFORMED FOR THE PURPOSE OF PREPARING THIS SURVEY, ONLY VISIBLE SURFACE EVIDENCE OF UTILITIES IS SHOWN.

FLOOD INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN ZONE "X" AND ZONE "AE", AS SHOWN ON THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 120585 0485 E (MAP NO. 12069C0485E), WHICH BEARS AN EFFECTIVE DATE OF 12/18/2012, AND NOT IN A SPECIAL FLOOD HAZARD AREA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE. ZONE "X" DENOTES AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. ZONE "AE" DENOTES AREAS DETERMINED TO BE SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT, BASE FLOOD ELEVATIONS DETERMINED.

LEGEND AND ABBREVIATIONS

- BENCHMARK
- CONCRETE MONUMENT AS NOTED
- CURB STORM INLET
- FIRE HYDRANT
- IRRIGATION CONTROL VALVE
- LIGHT POLE
- RECOVERED MONUMENT AS NOTED
- SANITARY SEWER MANHOLE
- SIGN
- STORM MANHOLE
- UTILITY PULL BOX
- WATER METER
- WATER VALVE

- L.B. LICENSED BUSINESS
- R.C.P. REINFORCED CONCRETE PIPE
- P.C.P. PERMANENT CONTROL POINT
- P.R.M. PERMANENT REFERENCE MONUMENT
- P.V.C. POLYVINYL CHLORIDE PIPE
- (R) RECORD DATA
- (C) CALCULATED DATA
- (M) FIELD MEASURED DATA
- CONCRETE SURFACE
- x — CHAIN LINK FENCE
- — VINYL FENCE
- SS — SANITARY SEWER LINE
- SD — STORM DRAIN LINE

SHEET 1
OF 1

I HEREBY CERTIFY THAT THIS SURVEY, SUBJECT TO THE SURVEYOR'S NOTES CONTAINED HEREON, MEETS THE APPLICABLE "STANDARDS OF PRACTICE" AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

E. GLENN TURNER PSM #5643 — DATE
FOR FIRM

DATE	REVISIONS	TECH

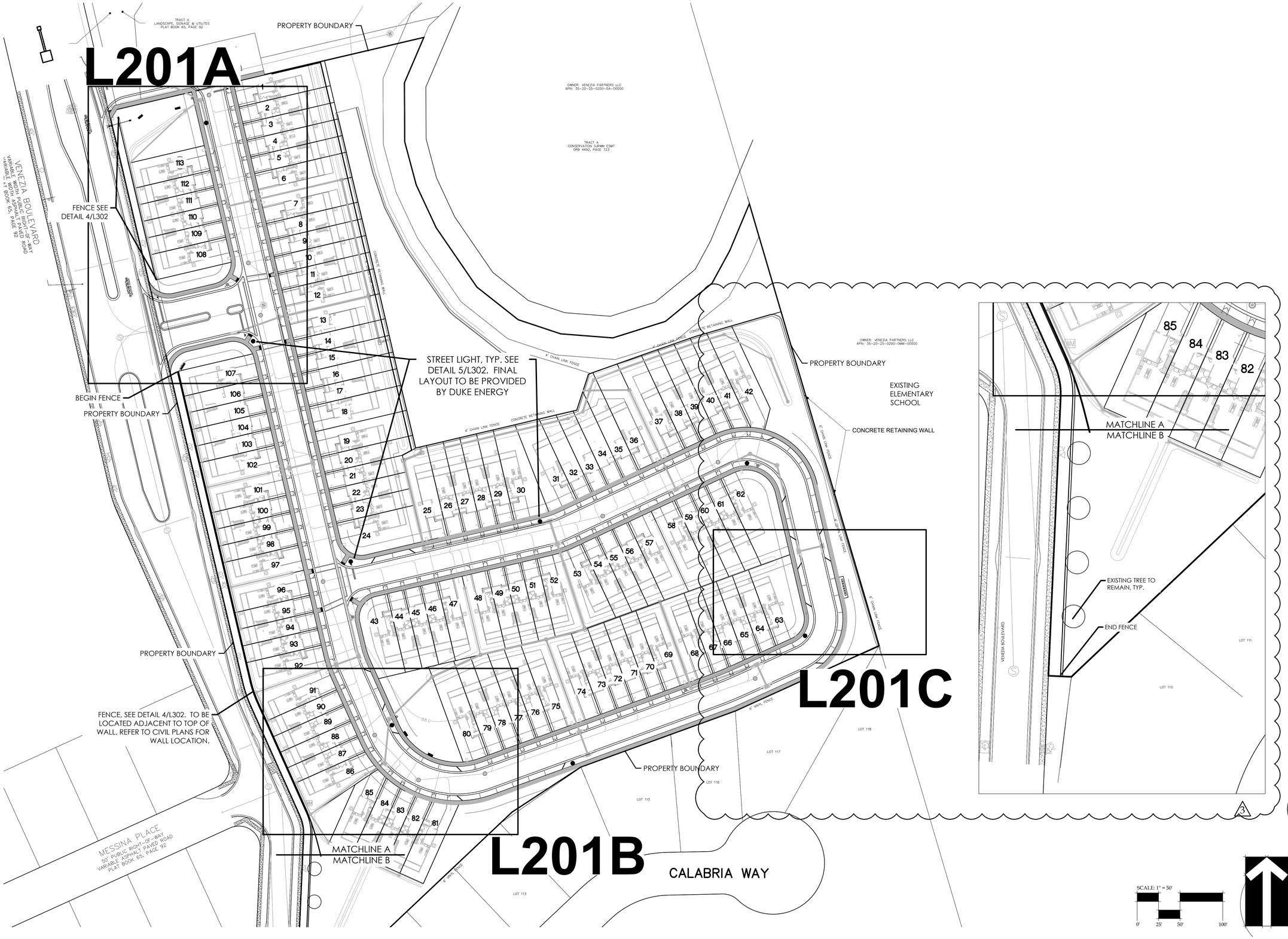
TOPOGRAPHIC SURVEY OF
VENEZIA
HOWEY IN THE HILLS, FLORIDA
SECTION 35, TOWNSHIP 20 SOUTH, RANGE 25 EAST
LAKE COUNTY

AMERICAN SURVEYING & MAPPING, INC.
NDDS NATIONAL DUE DILIGENCE SERVICES
A Nationwide Land Surveying Company
3191 Maguire Blvd. Suite 257 Orlando, FL 32803
407-426-7979
americansurveyingandmapping.com

JOB NO.: 210570
SCALE: 1"= 60'
FIELD DATE: 06/30/21
FIELD BY: JW
DRAWN BY: KLKL
APPROVED BY: GT
DRAWING FILE #: 21570 - VENEZIA ALTA.DWG

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L201A



L201C

L201B

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FL LC 26000341

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Maitland, FL. 32751
407.622.1588 voice

Venezia
Landscape Architecture
D.R. Horton
Howey-in-the-Hills, Florida
OVERALL LAYOUT PLAN

DATE: JANUARY 19, 2022
DRAWN BY: JFB/LAE
CHECKED BY: TWB
JOB NUMBER: 2021.182
FILE NAME: 2021.182_DRH-VENEZIA THS_LSBASE

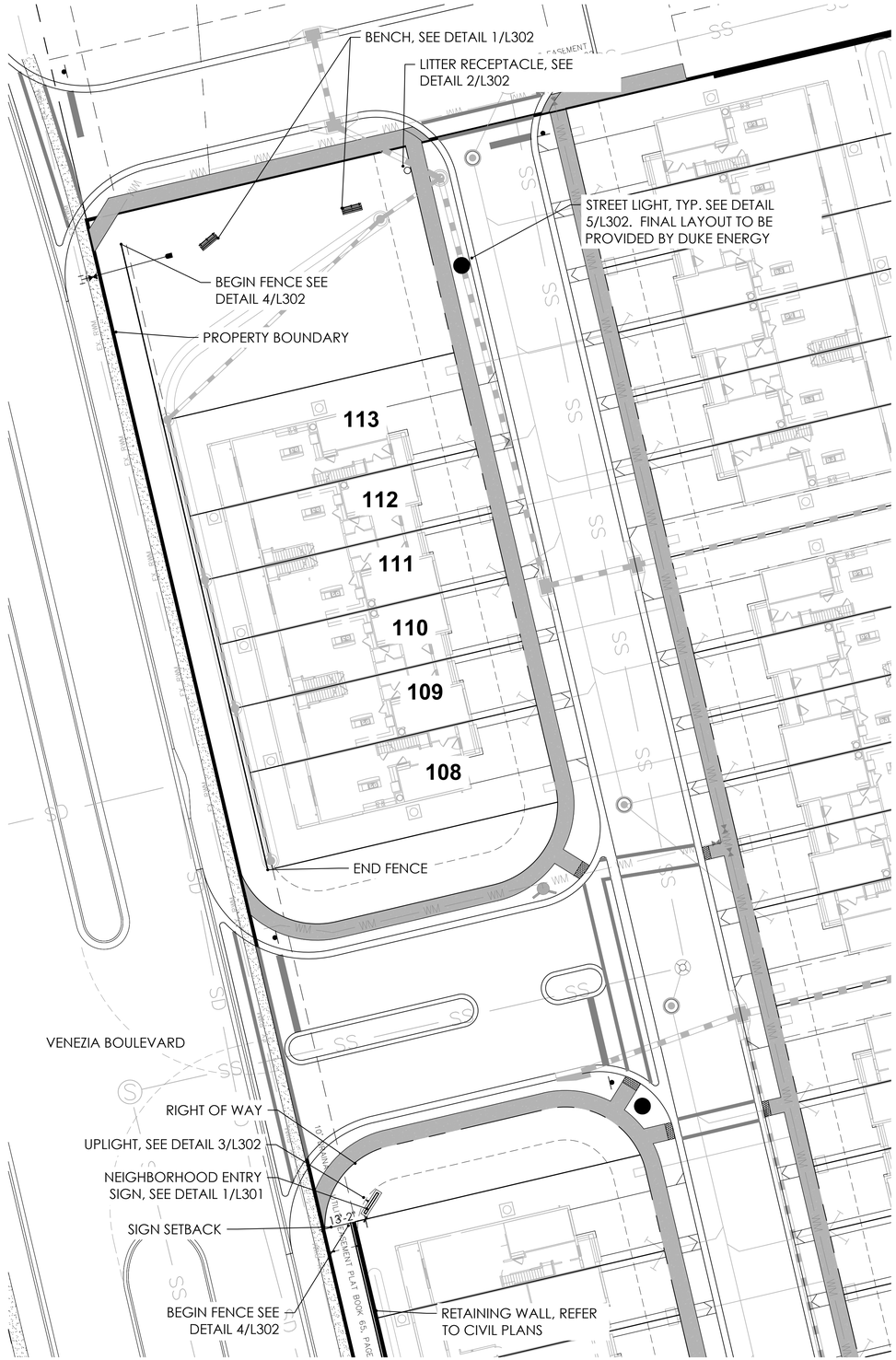
REVISIONS:
1 Town Comments 01-19-2022
2 Town Comments 02-04-2022
3

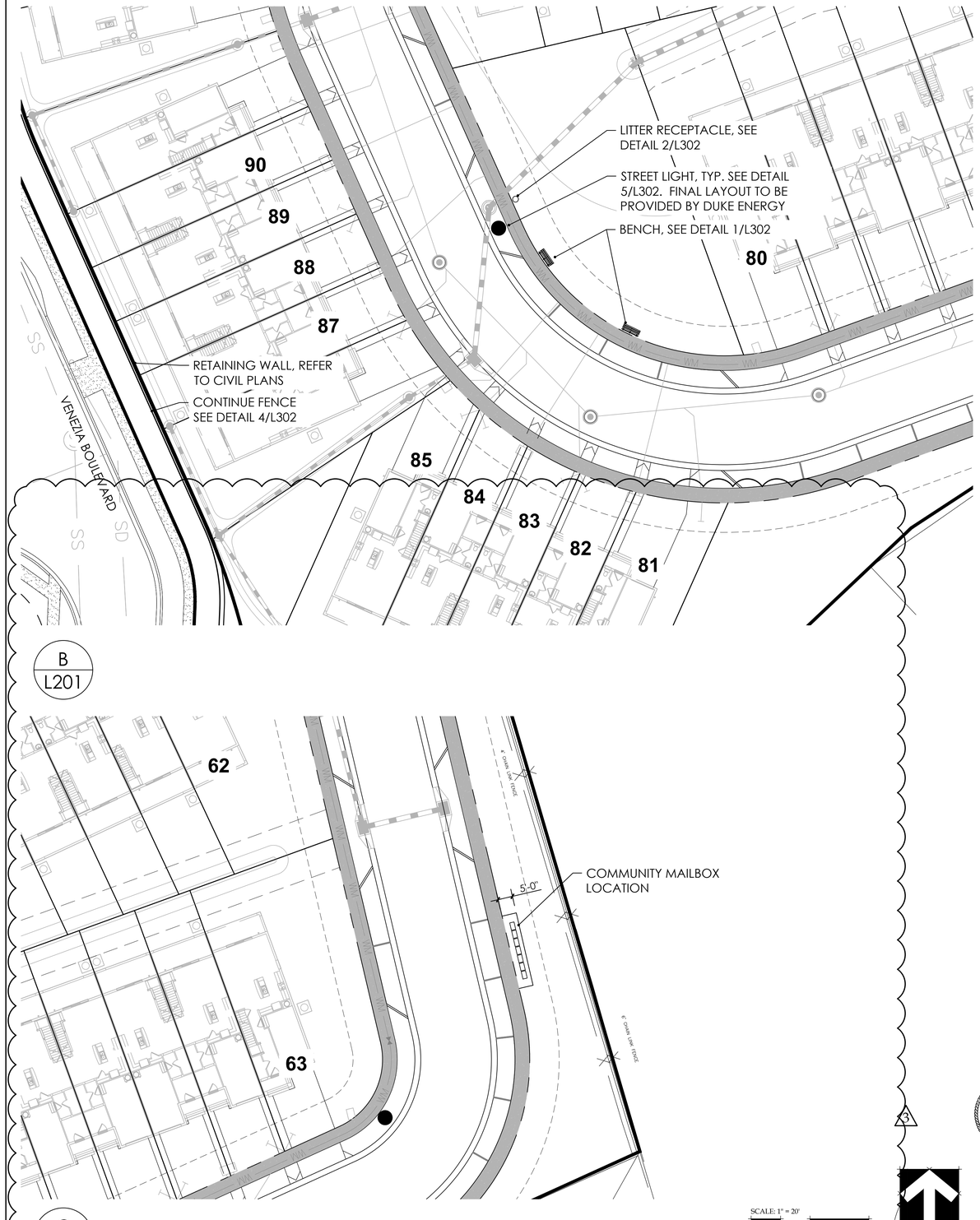
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Date: 2022.02.03 13:53:33 -05'00'
Todd W. Bonnett, RLA # FL6001778

L200

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407.622.1588 voice

Venezia
Landscape Architecture
D.R. Horton
Howey-in-the-Hills, Florida
LAYOUT PLAN

DATE: JANUARY 19, 2022
DRAWN BY: JFB/LAE
CHECKED BY: TWB
JOB NUMBER: 2021.182
FILE NAME: 2021.182_DRH-VENEZIA THS_LSBASE

REVISIONS:
1 Town Comments 01-19-2022
2 Town Comments 02-04-2022

FLORIDA LANDSCAPE ARCHITECT TODD W. BONNETT LA1718 STATE OF FLORIDA

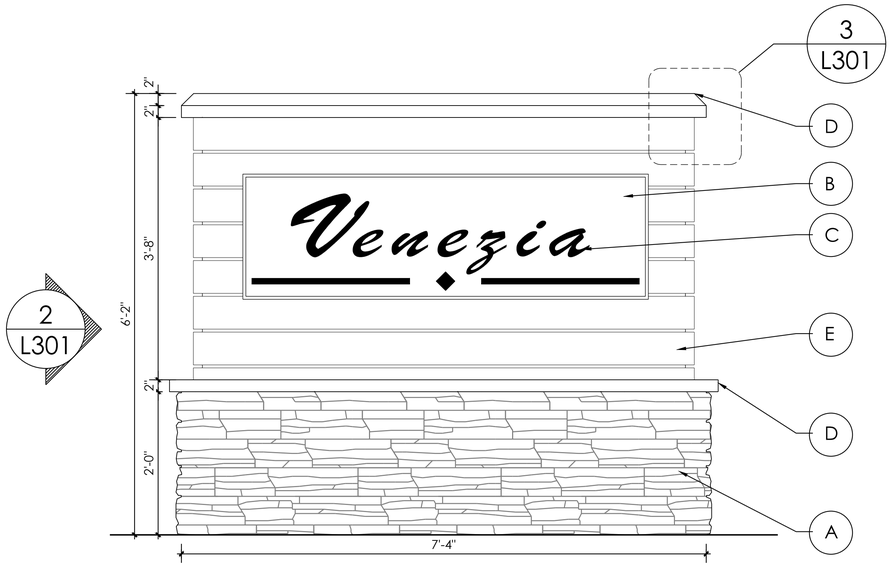
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Todd W. Bonnett, FLA # FL0001778

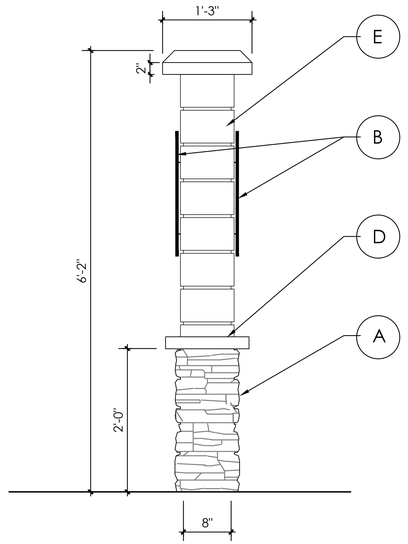
L201

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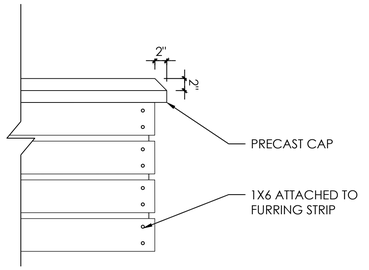
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1 L301 COMMUNITY SIGN FRONT ELEVATION
SCALE: 1" = 1'-0"



2 L301 COMMUNITY SIGN SIDE ELEVATION
SCALE: 1" = 1'-0"



3 L301 COMMUNITY COLUMN FRONT ELEVATION
SCALE: 1" = 1'-0"

MATERIAL SCHEDULE

A STONE VENEER
J&N STONE: LAYTITE
COLOR: IRON
SOURCE: WWW.JNSTONEVENEER.COM

B SIGN FACE
1/4" THICK ALUMINUM PANEL POWDER COATED
COLOR: RAL 7010

C COMMUNITY NAME IN SIGN
8"-10" HT., 1/4" THICK ALUMINUM LETTERS
PINNED 1/8" OFF SIGN PANEL
COLOR: RAL 9010

D PRECAST CAP
COLOR: SW 7003 TOQUE WHITE

E 1X6 WOOD SLATS:
COLOR: SW 9090 CARAIBE

NOTES:
1. FINAL NAME TO BE PROVIDE AT TIME OF PERMIT APPLICATION.
2. FINAL COLORS TO BE APPROVED BY OWNER AND SUBMITTED WITH CONSTRUCTION PERMIT PLANS.

NOTE: HARDSCAPE DESIGN PLANS PROVIDED TO DEMONSTRATE DESIGN INTENT ONLY AND ARE NOT VALID FOR CONSTRUCTION WITHOUT FINAL STRUCTURAL & REINFORCEMENT DESIGN.

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Maitland, FL 32751
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Venezia
Landscape Architecture
D.R. Horton
Howey-in-the-Hills, Florida
HARDSCAPE DESIGN PLAN

DATE: JANUARY 19, 2022
DRAWN BY: JFB/LAE
CHECKED BY: TWB
JOB NUMBER: 2021.182
FILE NAME: 2021.182_DRH-VENEZIA THS_HSBASE

REVISIONS:
1 Town Comments 01-19-2022

LICENSED LANDSCAPE ARCHITECT TODD W. BONNETT LA1718 STATE OF FLORIDA

Digitally signed by Todd W Bonnett
Date: 2022.02.03 13:54:16 -05'00'
Todd W. Bonnett, RLA # FLI0001778

L301

2

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https://www.byoplayground.com/products/commercial-park-bench-with-curved-back

*OR OWNER APPROVED EQUAL

1 L302 BENCH N.T.S.



https://www.byoplayground.com/products/trash-receptacle-ribbed-steel-22-gallon.html

*OR OWNER APPROVED EQUAL

2 L302 TRASH RECEPTACLE N.T.S.

HYDREL

CATALOG NUMBER
NOTES
TYPE



Specifications
Weight: 3.0 lbs.

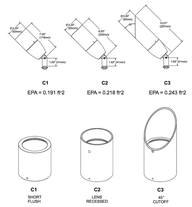
H:	7" (178mm) w/C1
	8" (203mm) w/C2
	10.51" (267mm) w/C3

PALM
12V/120V LED

HIGHLIGHTS
- The Palm Series accent lights are suitable for a variety of mounting applications including ground, wall, tree, sign and architectural accents
- Suitable for wet locations
- Integral driver for 120V
- Dimmable using standard TRIAC (forward-phase or leading-edge) and ELV (reverse phase or trailing-edge) dimmer for 120V and dimmable using standard MLV dimmer and magnetic transformer for 12V
- Tapered-sure lock
- Available in 80CRI and 90CRI
- 1,600lm

LED
5 YEAR warranty
66 IP RATED
DLC LISTED
Buy American

DIMENSIONS



AIMING DETAILS

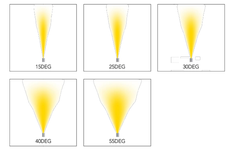


LUMEN PACKAGES

	150EG	200EG	250EG	300EG	350EG	400EG	410EG	500EG	550EG
Delivered Lumens	1,314	1,433	1,466	1450	1515	1491	1440	1450	1465
Watts	18	18	18	18	18	18	18	18	18
LPW	84	80	81	81	84	83	80	81	81
Peak Candela	12,941	6,031	4,156	3986	3441	2761	2208	1681	1495

Note: Information based on 4000K @ Pf, 80CRI, 120 Volt with C1 cap and PLC lens

STANDARD DISTRIBUTION

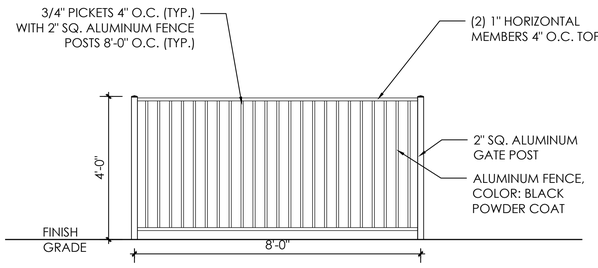


© 2014-2021 Acuity Brands Lighting, Inc. • One Lithonia Way Conyers GA 30012
Phone: 800-705-SERV (7378) • www.hydrel.com
PALM_LED | Rev. 09/08/21
Page 1 of 10

https://hydrel.acuitybrands.com/products/detail/346431/hydrel/palm/accent-and-landscape-family

*OR OWNER APPROVED EQUAL

3 L302 UPLIGHT N.T.S.



*OR OWNER APPROVED EQUAL

4 L302 ALUMINUM RAIL FENCE SCALE ½" = 1'-0"



*LIGHT FIXTURE SHALL MEET TOWN OF HOWEY IN THE HILL'S REQUIRMENTS OR TOWN/OWNER APPROVED EQUAL

5 L302 STREET LIGHT N.T.S.

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400 South Orlando Ave. Suite 201
Maitland, FL 32751
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Venezia
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HARDSCAPE DESIGN PLAN

DATE: JANUARY 19, 2022
DRAWN BY: JFB/LAE
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JOB NUMBER: 2021.182
FILE NAME: 2021.182_DRH-VENEZIA THS_HSRASE

REVISIONS:
1 Town Comments 01-19-2022

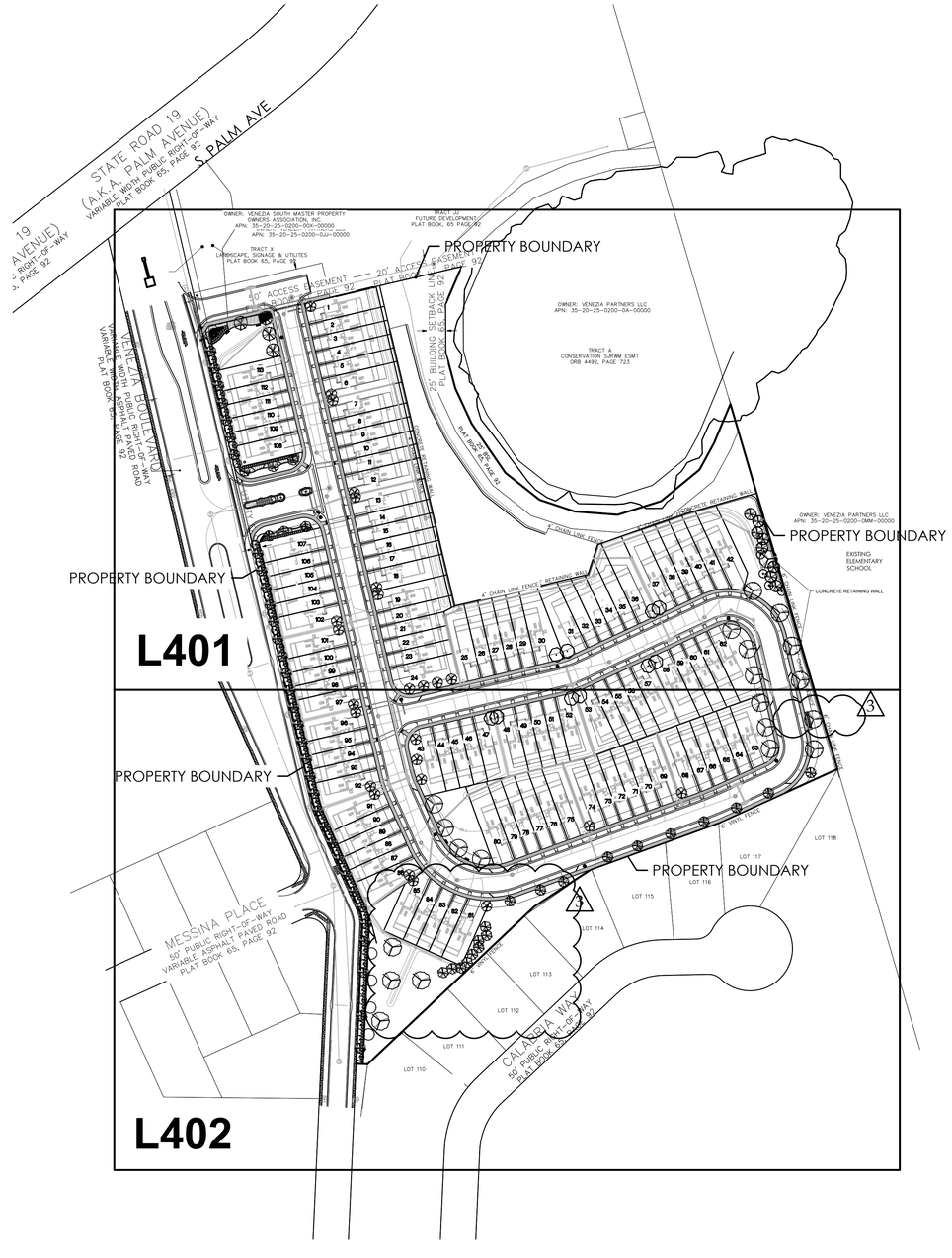
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Date: 2022.02.03 13:54:30 -05'00'
Todd W. Bonnett, RLA # FL0001718

L302
2

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I HEREBY CERTIFY THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF FLORIDA, AND THAT I HOLD CERTIFICATE NO. LA1718. THIS FIRM IS LICENSED AND REGULATED BY THE FLORIDA BOARD OF LANDSCAPE ARCHITECTURE, 2507 CALLAWAY ROAD, SUITE 180, TALLAHASSEE, FLORIDA 32303, (850) 487-1395.

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NOTE:

THE LANDSCAPE PROVIDED FOLLOWS THE WATERWISE FLORIDA LANDSCAPES AND IS COMPLIANT WITH THE FLORIDA WATER STAR PROGRAM PER SEC. 7.04.01 STANDARDS.

Sec. 7.02.01 Residential buffers

Total Linear Feet		Hundreds of Linear Feet	Quantity	Plant Type	Total Plants Required	Total Plants Provided
North of entrance						
226.58	Divide by 50 =	4.5	2	Canopy Tree =	9	9
			2	Ornamental=	9	9
			10	Shrubs =	45	45
South of entrance						
784.70	Divide by 50 =	15.7	2	Canopy Tree =	31	28
				Existing Trees		3
			2	Ornamental=	31	31
			10	Shrubs =	157	190

The shrubs shall be at least 30" in height at time of planting

SCALE: 1" = 100'

0' 50' 100' 200'

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407.622.1588 voice

Venezia
Landscape Architecture
D.R. Horton
Howey-in-the-Hills, Florida
OVERALL LANDSCAPE PLAN

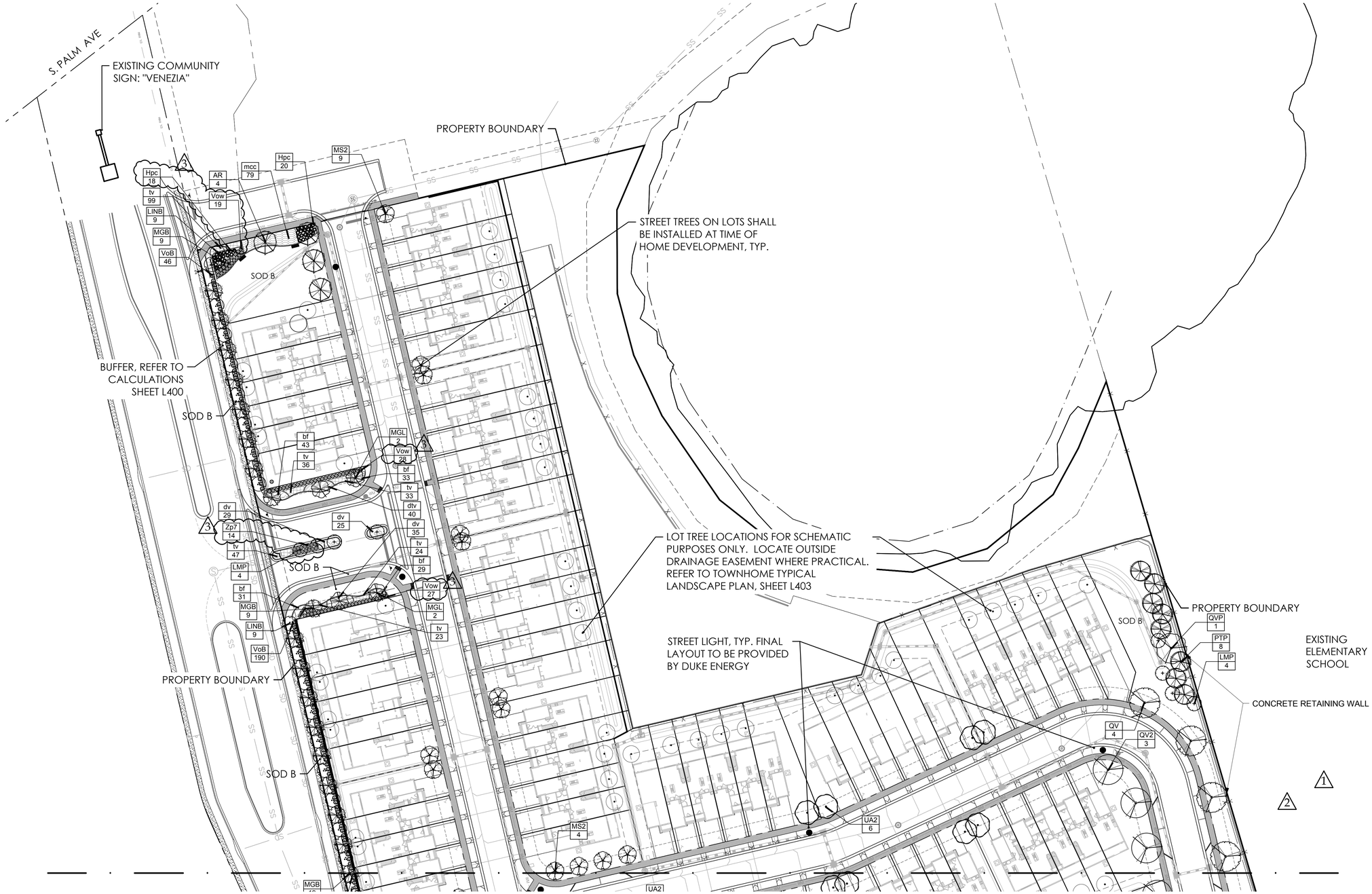
DATE: OCTOBER 22, 2021
DRAWN BY: JFB/LAE
CHECKED BY: TWB
JOB NUMBER: 2021.182
FILE NAME: 2021.182_DRH-VENEZIA THS_LSBASE

REVISIONS:
1 Base update 12-10-2021
2 Town Comments 01-19-2022
3 Town Comments 02-04-2022

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* REFER TO SHEET L402 FOR PLANT SCHEDULE

SCALE: 1" = 40'

0' 20' 40' 80'

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REGISTERED LANDSCAPE ARCHITECT TODD W. BONNETT LA1718 STATE OF FLORIDA

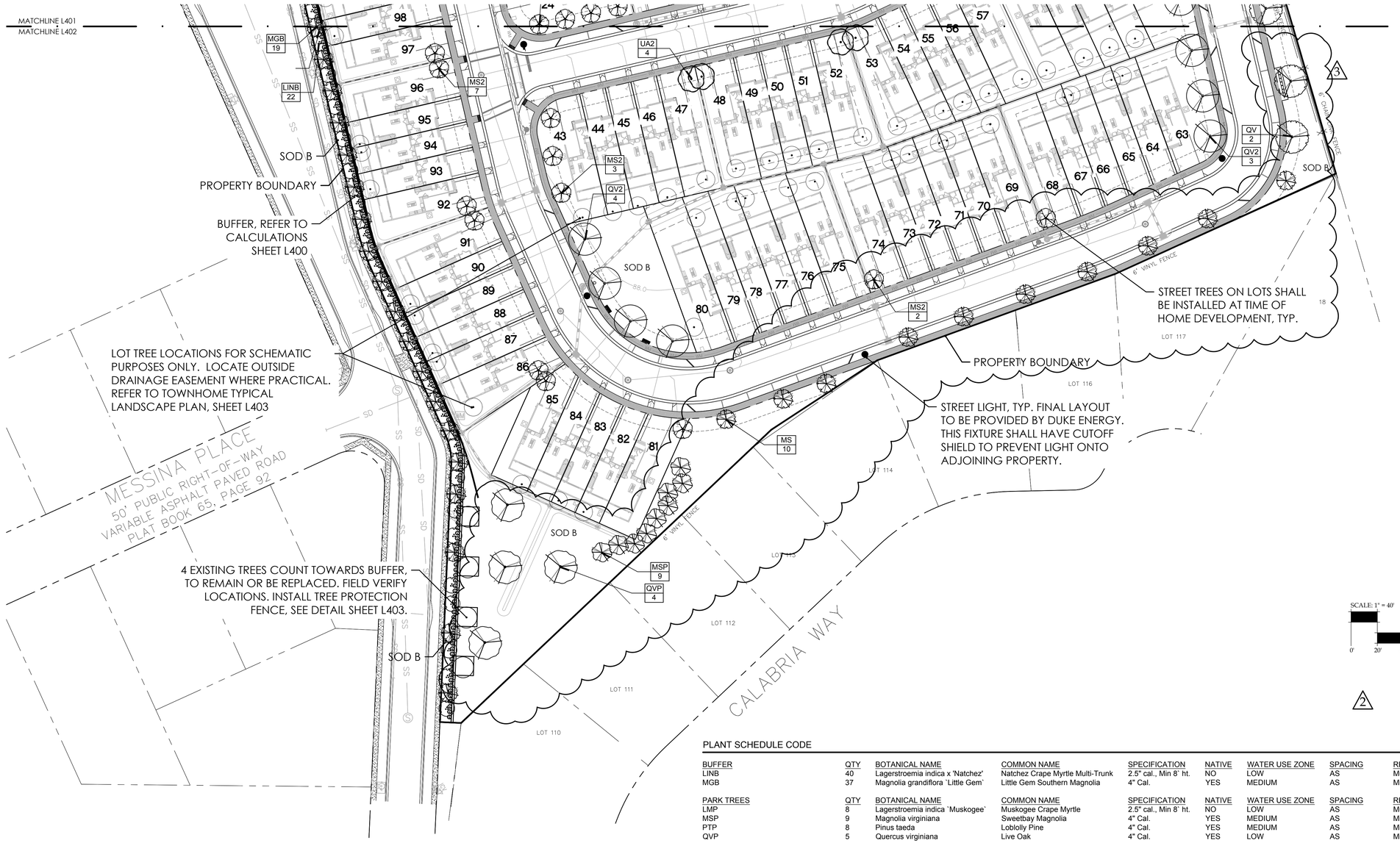
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Todd W. Bonnett, FLA # FLA001718

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PLANT SCHEDULE CODE

BUFFER	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATION	NATIVE	WATER USE ZONE	SPACING	REMARKS
LINB	40	Lagerstroemia indica x 'Natchez'	Natchez Crape Myrtle Multi-Trunk	2.5" cal., Min 8` ht.	NO	LOW	AS	Multi trunk with 1 1/2" canes
MGB	37	Magnolia grandiflora `Little Gem`	Little Gem Southern Magnolia	4" Cal.	YES	MEDIUM	AS	Min. 10' height
PARK TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SPECIFICATION**	**NATIVE**	**WATER USE ZONE**	**SPACING**	**REMARKS**
LMP	8	Lagerstroemia indica `Muskogee`	Muskogee Crape Myrtle	2.5" cal., Min 8` ht.	NO	LOW	AS	Multi trunk with 1 1/2" canes
MSP	9	Magnolia virginiana	Sweetbay Magnolia	4" Cal.	YES	MEDIUM	AS	Min. 10' height
PTP	8	Pinus taeda	Loblolly Pine	4" Cal.	YES	MEDIUM	AS	Min. 10' height
QVP	5	Quercus virginiana	Live Oak	4" Cal.	YES	LOW	AS	Min. 10' height
STREET TREES: COMMON TRACTS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SPECIFICATION**	**NATIVE**	**WATER USE ZONE**	**SPACING**	**REMARKS**
AR	4	Acer rubrum	Red Maple	4" Cal.	YES	HIGH	AS	Min. 10' height
MGL	4	Magnolia grandiflora `Little Gem`	Little Gem Southern Magnolia	4" Cal.	YES	MEDIUM	AS	Min. 10' height
MS	10	Magnolia virginiana	Sweetbay Magnolia	4" Cal.	YES	MEDIUM	AS	Min. 10' height
QV	6	Quercus virginiana	Live Oak	4" Cal.	YES	LOW	AS	Min. 10' height
STREET TREES: LOTS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SPECIFICATION**	**NATIVE**	**WATER USE ZONE**	**SPACING**	**REMARKS**
MS2	25	Magnolia virginiana	Sweetbay Magnolia	4" Cal.	YES	MEDIUM	AS	Min. 10' height
QV2	10	Quercus virginiana	Live Oak	4" Cal.	YES	LOW	AS	Min. 10' height
UA2	10	Ulmus alata	Winged Elm	4" Cal.	YES	LOW	AS	Min. 10' height
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SPECIFICATION**	**NATIVE**	**WATER USE ZONE**	**SPACING**	**REMARKS**
Hpc	38	Hamelia patens `Compacta`	Dwarf Firebush	3 gal., full	YES	LOW	36" o.c.	
Vow	75	Viburnum obovatum	Walter`s Viburnum	3 gal., 18" o.a.	YES	LOW	36" o.c.	
Zp7	14	Zamia pumila	Coontie	7 gal.	YES	LOW	36" o.c.	
BUFFERYARD SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SPECIFICATION**	**NATIVE**	**WATER USE ZONE**	**SPACING**	**REMARKS**
VoB	236	Viburnum odoratissumum	Sweet Viburnum	7 gal., full	YES	LOW	48" o.c.	30" Height
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SPECIFICATION**	**NATIVE**	**WATER USE ZONE**	**SPACING**	**REMARKS**
bf	136	Bulbine frutescens	Bulbine	1 gal., full	NO	LOW	18" o.c.	
dtv	40	Dianella tasmanica `Variegata`	Varigated Flax Lily	3 gal.	NO	LOW	24" o.c.	
dv	89	Dietes vegeta	African Iris	3 gal.	NO	LOW	24" o.c.	
mcc	79	Muhlenbergia capillaris	Muhly Grass	3 gal., full	YES	LOW	30" o.c.	
tv	262	Tulbaghia violacea	Society Garlic	1 gal., full	NO	LOW	18" o.c.	

SOD/SEED	BOTANICAL NAME	COMMON NAME	SPECIFICATION	NATIVE	WATER USE ZONE
sodb	Paspalum notatum `Argentine`	Argentine Bahia Grass	sod	NO	LOW

*STREET TREES ADJACENT TO INDIVIDUAL LOTS TO BE INSTALLED, BY HOME DEVELOPER, SUBSEQUENT TO HOME CONSTRUCTION, TYP

No street trees within sight triangles per FDOT 212.

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LANDSCAPE PLAN

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Todd W. Bonnett, RLA # FL6001778

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GENERAL REQUIREMENTS

The Landscape Contractor shall be responsible for all materials and all work as called for on the landscape plans. The list of plant quantities accompanying the plans shall be used as guide only. If a discrepancy occurs between the plans and the plant list, the plans shall control.

The Landscape Contractor shall warranty all trees for a period of one (1) year and shrubs and ground covers for a period of six (6) months from the time of final acceptance by Owner and Landscape Architect.

The Landscape Contractor shall be wholly responsible for the stability and plumb condition of all trees and shall be legally liable for any damage caused by the instability of any plant material. Staking of trees and palms, if required, shall be done utilizing a method agreed upon by the Landscape Architect.

The Landscape Contractor shall research plans and contact appropriate agencies to determine the location of any utilities and obstructions prior to commencing work. Any utilities or unanticipated obstructions shall be reported to Landscape Architect or Owner immediately.

All plant material and sodded areas shall have an automatic underground irrigation system providing 100% coverage.

Positive drainage shall be maintained away from all structures on the site.

PLANT SPECIFICATIONS

All nursery stock plant material shall be Florida #1 or better in accordance with Grades and Standards for Nursery Plants Parts I & II, latest edition as published by the Florida Department of Agriculture and Consumer Services- Division of Plant Industry.

All plant material shall be planted, fertilized and mulched as per the plant details and planting specifications noted on the plans.

All container grown material shall be healthy, vigorous, well rooted plants, and established in the container in which they are delivered to the site. The plants shall have tops which are good quality and in a healthy growing condition. Established container grown plant material shall be grown in that container sufficiently long enough for the new fibrous roots to have developed enabling the root mass to retain it's shape when removed the container. Plants which have become root bound in the container are unacceptable.

All plant material that is not container grown shall be freshly dug, sound, healthy, vigorous, well branched, and free of disease and insect eggs and larvae, and shall have adequate root systems. Where any requirements are omitted from the plant list, the plants furnished shall be normal for the variety. Plants may be pruned prior to delivery only upon the approval of the Landscape Architect.

FERTILIZER

Two fertilizers shall be used on all types of plantings, except palms. Granular fertilizer shall be uniform in composition, dry and free flowing. This fertilizer shall be delivered to the site in the original unopened bags bearing the manufacturer's statement of analysis. Granular fertilizer shall be a controlled release variety meeting the following requirements; sixteen percent (16%) nitrogen, four percent (4%) phosphorus, eight percent (8%) potassium, plus iron. tablet fertilizer ("Agriform" or approved equal) in 21 gram size shall meet the following requirements: twenty percent (20%) nitrogen, ten percent (10%) phosphorus, five percent (5%) potassium.

Application Rates:

Plant size	16-4-8	"Agriform" tablet (21 grams)
1 gallon	1/4 lb.	1 tablet
3 gallon	1/3 lb.	2 tablets
7-15 gallon	1/2 lb.	4 tablets
1" - 6" caliper	2 lbs. per 1" caliper	2 tablets per 1" caliper
6" + caliper	3 lbs. per 1" caliper	2 tablets per 1" caliper

Sodded areas shall receive an application of the granular fertilizer (16-4-8) at a rate of 1/2 lb. of Nitrogen per 1,000 square feet of sod area.

"Palm Special" fertilizer shall be applied to all palms at installation at a rate of 1 1/2 lbs. per 100 square feet of canopy area. Palm fertilizer shall be a controlled release variety containing chelated micro nutrients and a ratio of N-P-K-Mg of 2:1:3:1.

SOIL

Planting soil for use in preparing the backfill material for planting pits shall be added a rate of fifty percent (50%) planting soil to fifty percent (50%) existing soil. This soil mix shall be used in all plant pits except Sabal Palms which shall be backfilled with clean sand. Planting soil shall be a fertile, friable natural topsoil of loamy character. It shall contain forty (40) to fifty (50) percent decomposed organic matter and be free of heavy clay, stones larger than 1" in diameter, noxious weeds and plants, sod, partially disintegrated debris, insects or any other undesirable material, plants or seeds that would be toxic or harmful to plant growth.

MULCH

All plant beds and tree watering basins shall be top dressed with three inches (3") of pine bark mini-nuggets mulch.

SOD

Refer to Landscape Plan for limits of sod.

All areas disturbed by construction (including material staging, equipment storage, temporary facilities, site access, construction staff parking, etc.) beyond the minimum limits of sod as shown on the Landscape Plan shall be sodded as needed.

All lawn areas to receive sod shall be disked four (4) to six (6) inches and graded to establish a level finished grade ensuring positive drainage from all structures. All debris shall be removed from the site.

Sod shall be free of weeds and pests. It shall be laid evenly with tight fitting joints and rolled. The sod shall contain moist soil which does not fall apart or tear when lifted.

See plant list for specific sod species and locations.

See 'Fertilizer' for requirements of all sodded areas.

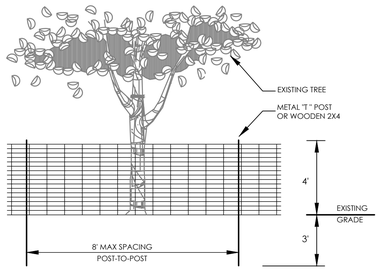
PLANT SCHEDULE TOWNHOME

TREES
TO BE SELECTED FROM TABLE 7.10 APPROVED TREE AND PLANT LIST: UNDERSTORY TREES CATEGORY

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATION	NATIVE	WATER USE ZONE	SPACING	REMARKS
Vow	17	Viburnum obovatum	Walter`s Viburnum	3 gal., 18" o.a.	YES	LOW	36" o.c.	
Vo	26	Viburnum odoratissumum	Sweet Viburnum	3 gal., 18" o.a.	YES	LOW	36" o.c.	

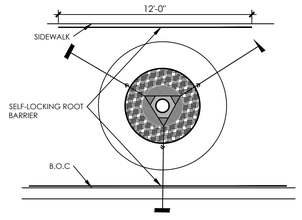
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATION	NATIVE	WATER USE ZONE	SPACING	REMARKS
jc	52	Juniperus conferta	Shore Juniper	1 gal., full	NO	LOW		
lmb	21	Liriope muscari `Big Blue`	Big Blue Lilyturf	1 gal., 12"-15" spd., full pot	NO	LOW	18" o.c.	18" o.c.

SOD/SEED	BOTANICAL NAME	COMMON NAME	SPECIFICATION	NATIVE	WATER USE ZONE
sodb	Paspalum notatum `Argentine`	Argentine Bahia Grass	sod	NO	LOW

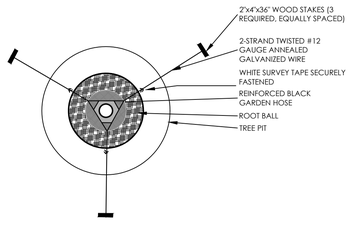


1. PLACE CONTINUOUS RUN OF FENCE MATERIAL ON BOTH SIDES OF IMMEDIATE WORK ZONE AS SHOWN ON THE PLANS. DO NOT ATTACH FENCE MATERIAL TO TREES.
2. TREE PROTECTION FENCING FABRIC TO BE PLACED AT THE DRIP LINE OF THE TREES THAT ARE TO BE PROTECTED.
3. TREE PROTECTION FENCE: HIGH DENSITY POLYETHYLENE FENCING WITH 3.5" X 1.5" OPENINGS; COLOR: ORANGE.

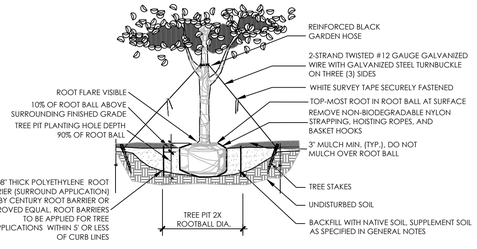
TREE PROTECTION DETAIL
N.T.S.



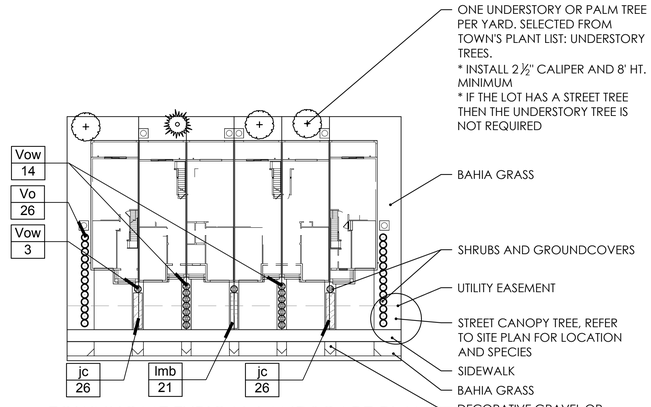
ROOT BARRIER



LARGE CANOPY TREE STAKING PLAN

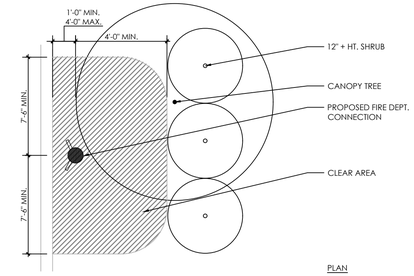


LARGE CANOPY TREE PLANTING DETAIL
N.T.S.

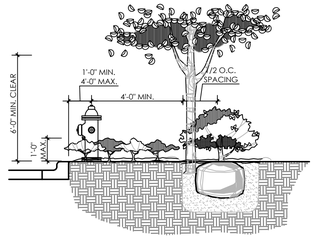


TOWNHOME TYPICAL LANDSCAPE PLAN

SCALE: 1" = 30'
0' 15' 30' 60'



PLAN



TREES AND SHRUBS TALLER THAN 12" SHALL NOT BE PLANTED ANY CLOSER THAN 4'-0" FROM THE BACK OR 7'-6" FROM EACH SIDE OF A FIRE HYDRANT OR FIRE DEPT. CONNECTION.

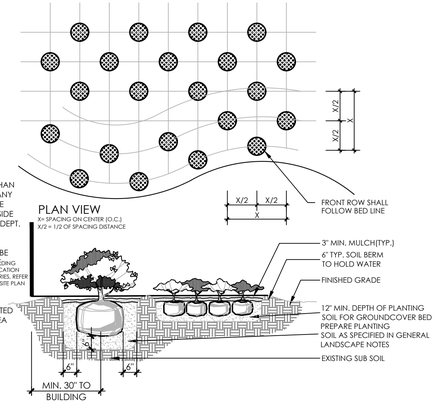
NO TREES OR SHRUBS SHALL BE PLANTED IN FRONT OF A FIRE HYDRANT OR FIRE DEPT. CONNECTION.

TURF AND GROUNDCOVER SHORTER THAN 12" IS PERMITTED WITHIN THE CLEARANCE AREA

SECTION

TYPICAL PLANTING AT FIRE HYDRANT
N.T.S.

NOTE: TREE SUPPORT MATERIALS SHALL BE REMOVED FROM EACH TREE ONCE IT IS ESTABLISHED. THIS IS USUALLY DONE AFTER 6 MONTHS FOR SHADE TREES AND 1 YEAR FOR PALM TREES.



PLAN VIEW
X= SPACING ON-CENTER (O.C.)
X/2 = 1/2 OF SPACING DISTANCE

SHRUB AND GROUNDCOVER PLANTING DETAIL
N.T.S.

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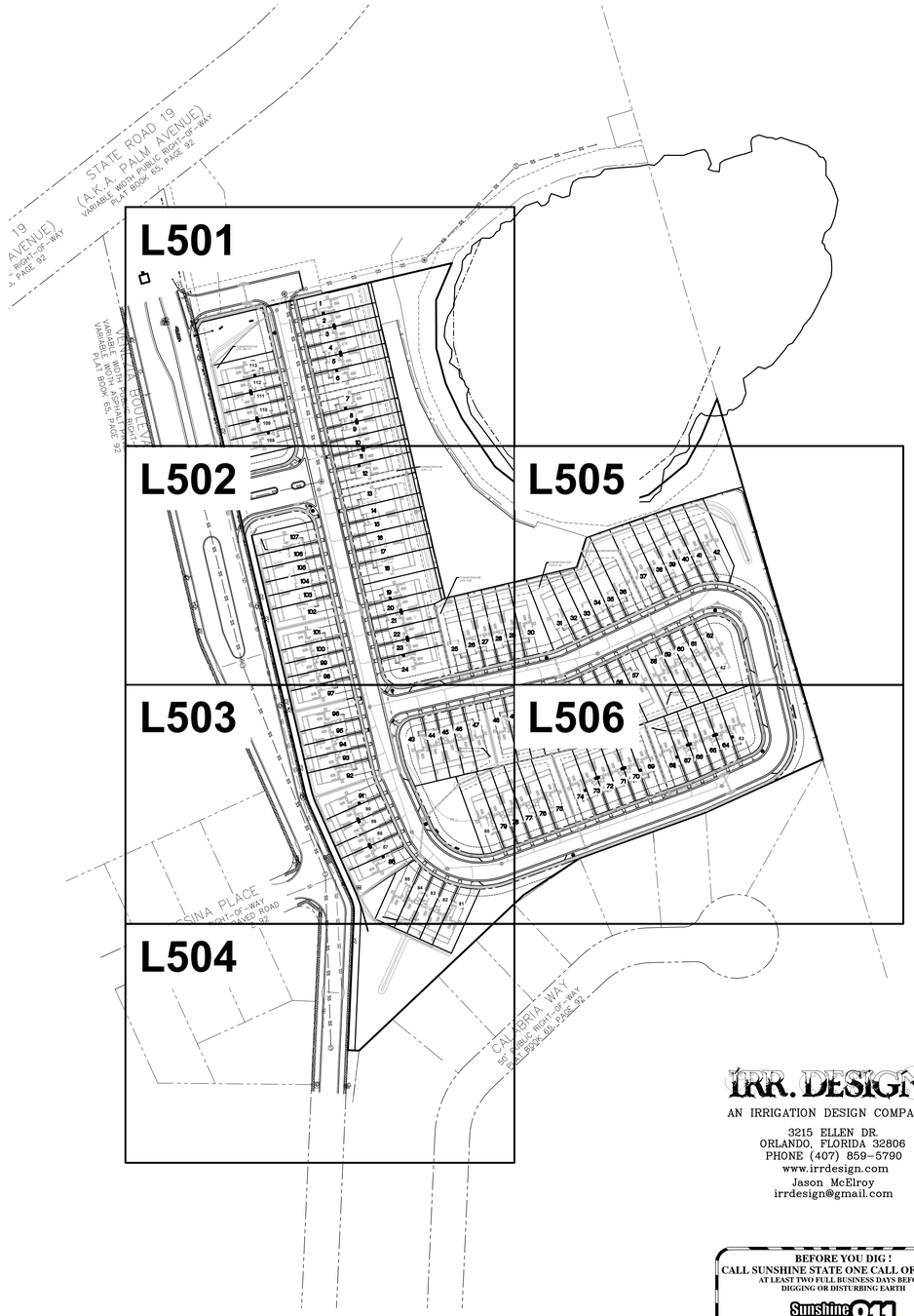
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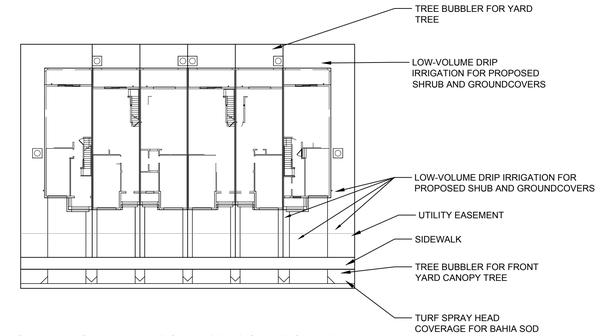
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Todd W. Bonnett, FLLA # FL0001718

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TOWNHOME TYPICAL IRRIGATION PLAN

NOTES

1. THIS SPRINKLER SYSTEM USES RECLAIMED WATER, THE IRRIGATION CONTRACTOR WILL INSTALL ALL SPRINKLER EQUIPMENT WITH PURPLE CAPS, TAGS,VALVE BOX LIDS, ETC. THE CONTRACTOR WILL POST "RECLAIMED WATER" SIGNAGE PER LOCAL CODES
2. CONTRACTOR TO INSTALL RECLAIM IRRIGATION WATER NOTICE POC SIGNAGE, PER LAKE COUNTY SPECIFICATIONS.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird PESBR 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, and Purple Flow Control Handle.	9
	Nibco T-113-K Class 125 bronze gate shut off valve with cross handle, same size as mainline pipe diameter at valve location. Size Range - 1/4" - 3"	14
MV	Hunter ICV-G-FS-R 3" 1", 1-1/2", 2", and 3" Plastic Electric Master Valve, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use. With Filter Sentry Factory Installed Option, and Reclaimed Water ID, Purple Handle.	1
C	Hunter A2C-75D-PP 75-Station Decoder controller on a Plastic Pedestal.	1
XX	Hunter ICD-100 Single Station Decoder w/Surge Suppression and Ground Wire. To be installed on Universal Decoder Stake Kit (DECSTAKE10).	9
XX	Hunter ICD-200 2-Station Decoder with Surge Suppression and Ground Wire. To be installed on Universal Decoder Stake Kit (DECSTAKE10).	2
S	Hunter ICD-SEN 2-input sensor decoder with surge suppression and ground wire. To be installed on Universal Decoder Stake Kit (DECSTAKE10).	1
RS	Hunter Solar-Sync-Sen Solar, rain freeze sensor with outdoor interface, connects to Hunter X-Core and ACC Controllers, install as noted. Includes gutter mount bracket. Wired. Module not included.	1
FS	Hunter HFS-300 Flow Sensor for use with ACC controller, 3" Schedule 40 Sensor Body, 24 VAC, 2 amp.	1
X X	Cap for future use Cap at the mainline or lateral line for future use. The pressure and flow provided to that location are indicated next to the cap symbol.	10
M	Water Meter 2" Reclaimed water meter requires 72 GPM @ 65 PSI. Irrigation contractor shall be responsible to verify the sources ability to service the systems requirements at site before starting construction.	1
	Irrigation Lateral Line: PVC Class 200 SDR 21-NP Only lateral transition pipe sizes 1" and above are indicated on the plan, with all others being 3/4" in size.Install 12" below final grade.	5,932 l.f.
	Irrigation Mainline: PVC Class 200 SDR 21-NP Pipe sizes 3" inch or smaller shall have bell and socket joints. Pipe sizes larger then than 3" inch shall have snap connections w/ rubber gasket joints, thrust blocked. Install 18" below grade.	2,673 l.f.
	Pipe Sleeve: PVC Class 200 SDR 21 Sizes shall be twice the diameter of the pipe or wire bundle carried. Place below all paving, hardscape etc. and as directed by the Owners representative.	212.2 l.f.
	Pipe Sleeve: PVC Schedule 40 Sizes shall be twice the diameter of the pipe or wire bundle carried. Place below all paving, hardscape etc. and as directed by the Owners representative.	407.4 l.f.

Valve Callout
— Valve Number
— Valve Flow
#" — Valve Size

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
08 08HE-VAN 12 12HE-VAN 10 10HE-VAN 15 15HE-VAN	Rain Bird RD-06-P30-F-NP-U HE-VAN Series Turf Spray, 6.0" Pop-Up, with 30 psi in-stem pressure regulation, Flow-Shield Technology, and Non-Potable Cover (purple cap). 1/2" NPT female threaded inlet.	156	30
25 50 10 20	Hunter AFB 10 Adjustable Flow Bubbler, 1/2" FIPT, stainless steel screw adjustment.	270	20

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	RADIUS
30	Rain Bird 5006-NP-PC,FC-MPR Turf Rotor, 6" Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle). Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Non-Potable Purple Cover.	18	35	30'
35	Rain Bird 5006-NP-PC,FC-MPR Turf Rotor, 6" Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle). Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Non-Potable Purple Cover.	3	35	34'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird XCZ-150-LCDR High Flow Control Zone Kit, for Large Commercial Drip Zones. 1-1/2" PESB-R Scrubber Globe Valve with single 1-1/2" Pressure Regulating (40psi) Quick-Check Basket Filters. Flow range: 15-62gpm.	3
F	Rain Bird MDCFPCAP Dripline Flush Valve purple cap in compression fitting coupler. For non-potable water use.	6
I	Rain Bird OPERIND Drip System Operation Indicator, stem rises 6" for clear visibility when drip system is charged to a minimum of 20psi. Includes 16" of 1/4" distribution tubing with connection fitting pre-installed.	3
	Area to Receive Dripline Rain Bird XFD-09-12-NP XFD On-Surface Pressure Compensating Landscape Dripline. 0.9 GPH emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. UV Resistant. Specify XF insert fittings.	5,022 s.f.

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D.R. Horton
Howey-in-the-Hills, Florida
OVERALL IRRIGATION PLAN

DATE: December 10, 2021
DRAWN BY: JM
CHECKED BY: TWB
JOB NUMBER: 2021.182
FILE NAME: 2021.182_DRH-VENEZIA THS_JRBASE

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1 Irrigation 12-10-2021
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2. CONTRACTOR TO INSTALL RECLAIM IRRIGATION WATER NOTICE POC SIGNAGE, PER LAKE COUNTY SPECIFICATIONS.

APPROXIMATE IRRIGATION CONTROLLER AND SENSOR LOCATION. OWNERS REPRESENTATIVE SHALL PINPOINT EXACT LOCATION AT SITE. IRRIGATION CONTRACTOR SHALL HARDWIRE 120 VAC POWER TO CONTROLLER. RAIN SENSOR DEVICE IS TO BE MOUNTED WHERE IT WILL BE EXPOSED TO UNOBSTRUCTED RAINFALL, BUT NOT IN THE PATH OF SPRINKLER SPRAY.

2" IRRIGATION RECLAIMED WATER METER SYSTEM REQUIRES 72 GPM @ 65 PSI. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE SOURCES ABILITY TO SERVICE THE SYSTEMS REQUIREMENTS AT SITE BEFORE STARTING CONSTRUCTION. COORDINATE WITH CIVIL DRAWINGS AND AT SITE TO DETERMINE ACTUAL METER LOCATION.

CONNECTION FOR LOTS 108-113

65GPM 50PSI

9-12 DRIPLINE, INSTALLED IN 12" ROWS (TYP).

DUE TO LACK OF SPACE ON PLANS THE MAINLINE IS SHOWN FOR GRAPHICAL PURPOSES ONLY OUTSIDE OF THE PROJECTS BOUNDARIES. THE CONTRACTOR WILL INSTALL ALL PIPING AND EQUIPMENT INSIDE THE PROJECTS LANDSCAPED AREAS AND SLEEVE ALL OTHER MAINLINE. SPRINKLER LOCATIONS ARE TO SCALE. PIPING LOCATIONS ARE DIAGRAMATIC.

VENEZIA BOULEVARD
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY
WITH ASPHALT PAVED ROAD
PLAT BOOK 65, PAGE 92

MATCHLINE L501
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IRRIGATION PLAN

DATE: December 10, 2021
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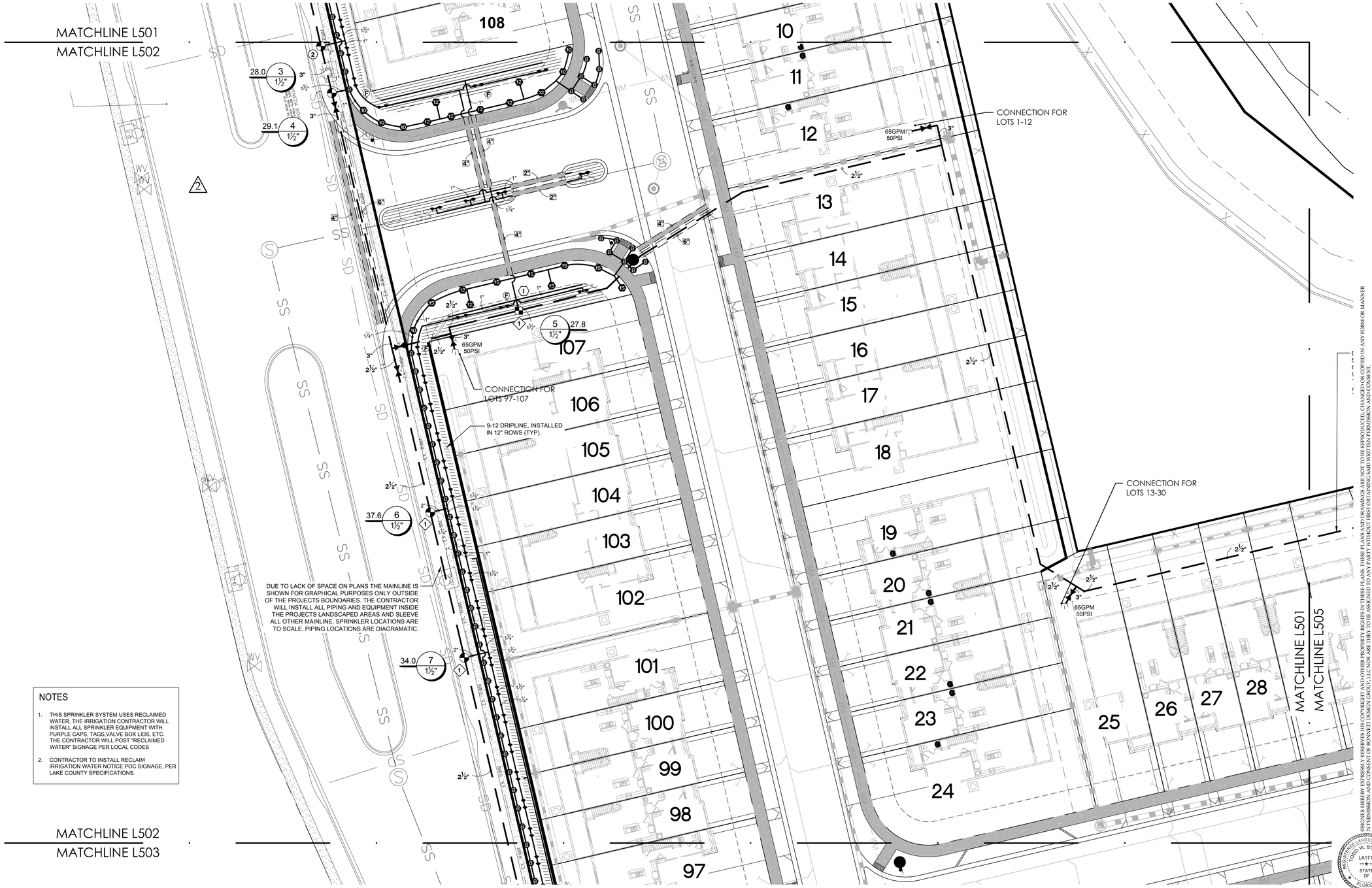
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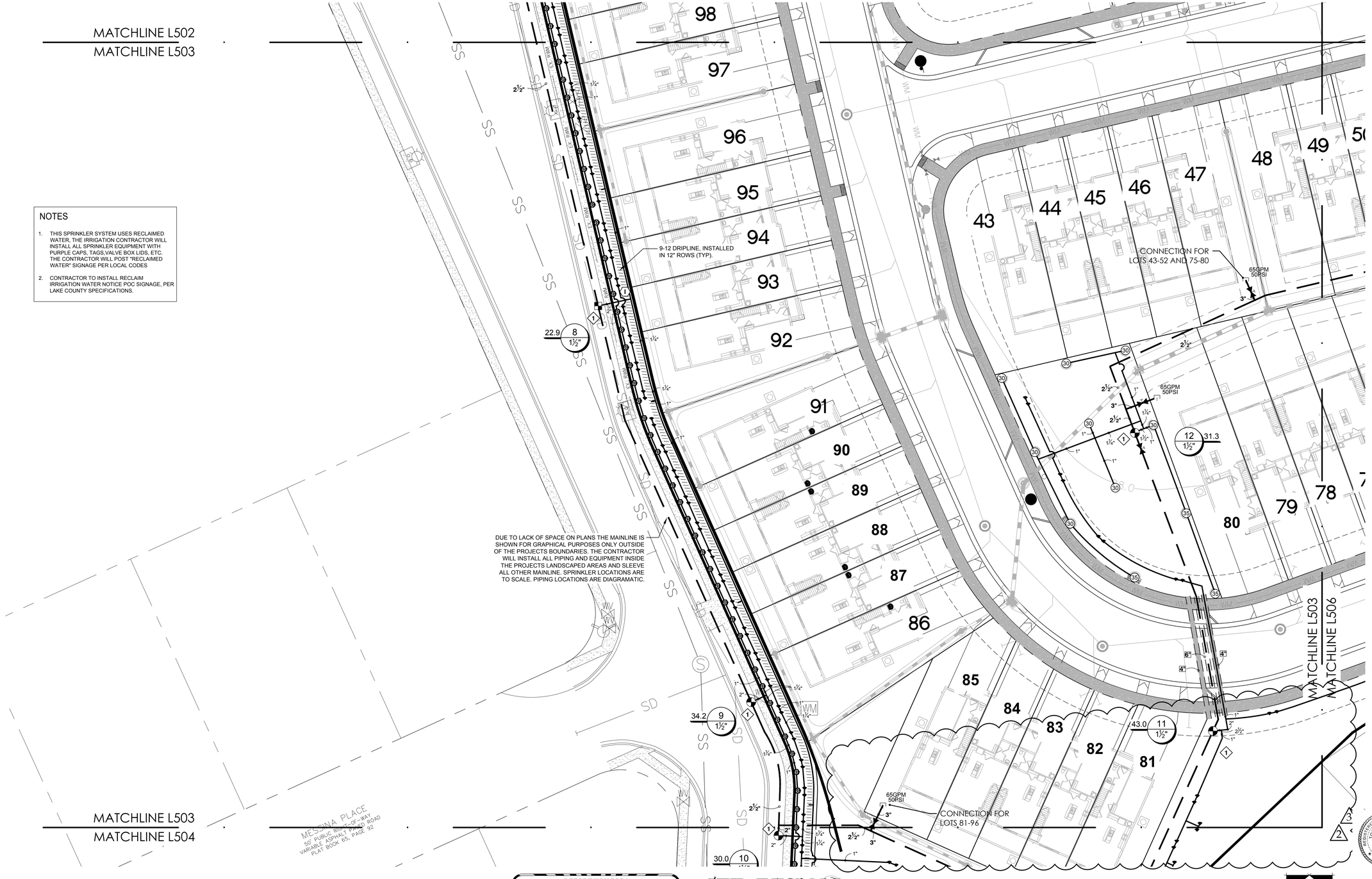
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MATCHLINE L503

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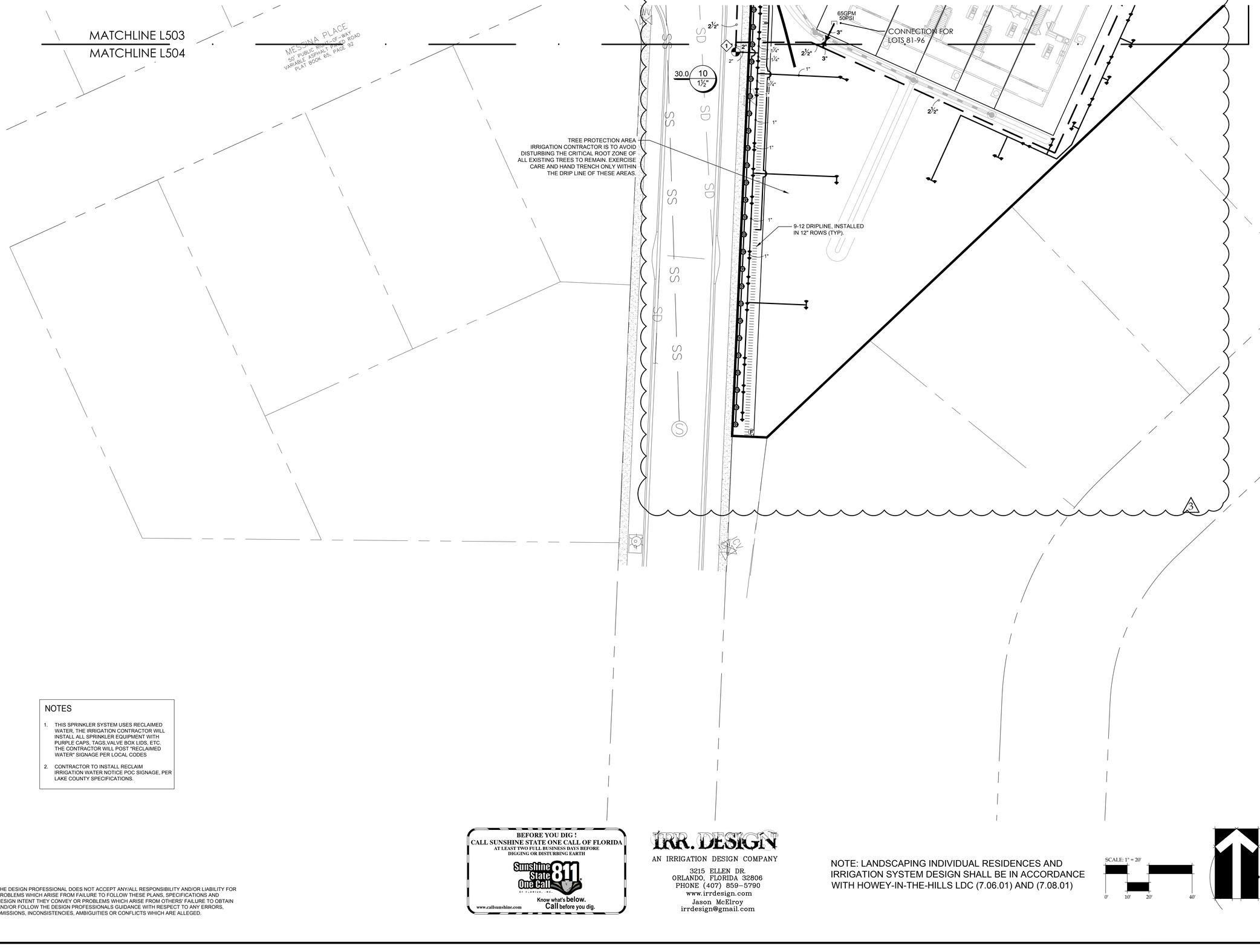
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MESSINA PLACE
50' PUBLIC RIGHT-OF-WAY
VARIABLE ASPHALT PAVED ROAD
PLAT BOOK 65, PAGE 32



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IRRIGATION PLAN

DATE: December 10, 2021
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JOB NUMBER: 2021.182
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FILE NAME: 2021.182_DRH-VENEZIA THS_IRBASE

REVISIONS:
1 Irrigation 12-10-2021

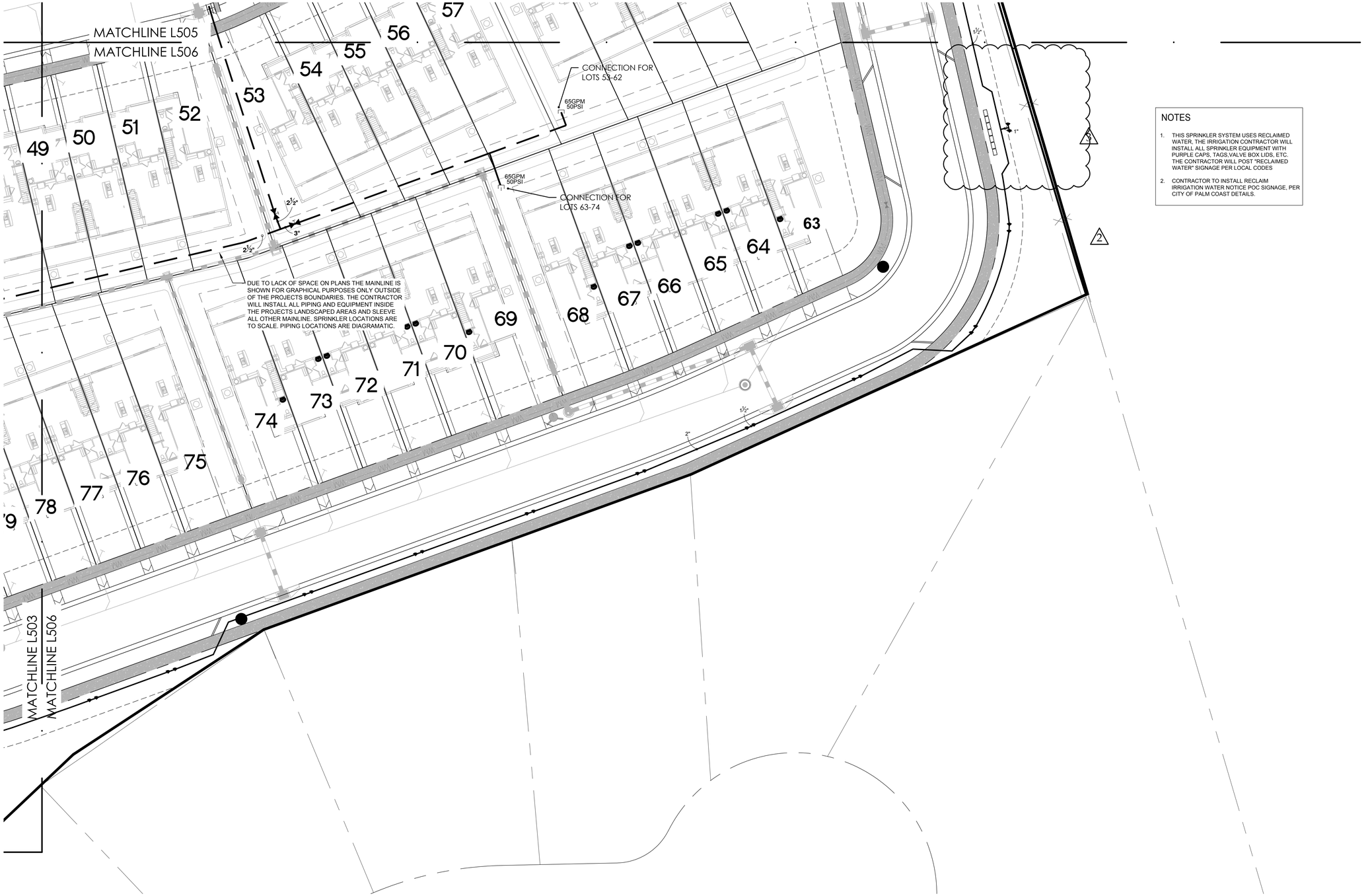
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1. THIS SPRINKLER SYSTEM USES RECLAIMED WATER, THE IRRIGATION CONTRACTOR WILL INSTALL ALL SPRINKLER EQUIPMENT WITH PURPLE CAPS, TAGS,VALVE BOX LIDS, ETC. THE CONTRACTOR WILL POST "RECLAIMED WATER" SIGNAGE PER LOCAL CODES
2. CONTRACTOR TO INSTALL RECLAIM IRRIGATION WATER NOTICE POC SIGNAGE, PER CITY OF PALM COAST DETAILS.

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PHONE (407) 859-5790
www.irrdesign.com
Jason McElroy
irrdesign@gmail.com

NOTE: LANDSCAPING INDIVIDUAL RESIDENCES AND IRRIGATION SYSTEM DESIGN SHALL BE IN ACCORDANCE WITH HOWEY-IN-THE-HILLS LDC (7.06.01) AND (7.08.01)

SCALE: 1" = 20'
0' 10' 20' 40'

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D.R. Horton
Howey-in-the-Hills, Florida
IRRIGATION PLAN

DATE: December 10, 2021
DRAWN BY: JM
CHECKED BY: TWB
JOB NUMBER: 2021.182
FILE NAME: 2021.182_DRH-VENEZIA THS_IRBASE

REVISIONS:
1 Irrigation 12-10-2021
1 Town Comments 02-04-2022

REGISTERED LANDSCAPE ARCHITECT TODD W. BONNETT LA1718 STATE OF FLORIDA

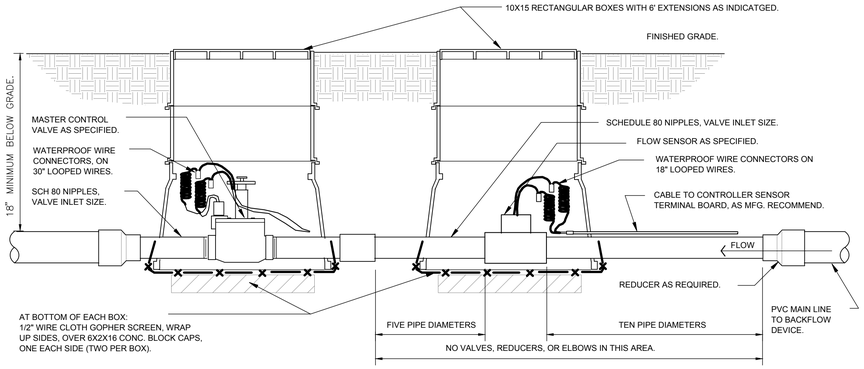
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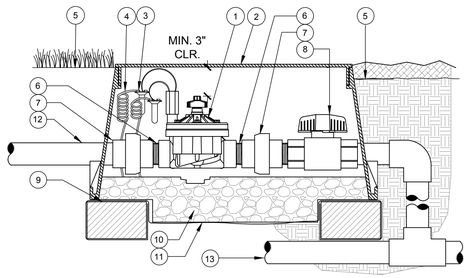
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MASTER VALVE / FLOW SENSOR ASSEMBLY



1. REMOTE CONTROL VALVE WITH FLOW CONTROL - PER PLAN
2. IRRIGATION VALVE BOX: HEAT STAMP LID WITH 'RCV' IN 2" LETTERS
3. WATERPROOF CONNECTORS (2)
4. 18"-24" COILED WIRE TO CONTROLLER
5. FINISH GRADE AT ADJACENT SURFACE (TURF OR MULCH)
6. SCH. 80 CLOSE NIPPLE, SIZE PER RCV
7. PVC SLIP (OR FPT) X FPT UNION
8. ISOLATION VALVE, LINE SIZE
9. BRICK SUPPORTS (4)
10. FILTER FABRIC - WRAP TWICE AROUND BRICK SUPPORTS
11. 3/4" WASHED GRAVEL - 4" MIN. DEPTH
12. IRRIGATION LATERAL
13. MAINLINE AND FITTINGS

ELECTRIC REMOTE CONTROL VALVE

IRRIGATION SYSTEM PERFORMANCE NOTES

1. IRRIGATION SYSTEM IS DESIGNED TO OPERATE OFF A RECLAIMED WATER METER PROVIDING A MINIMUM FLOW OF 72 GPM AND A MINIMUM PRESSURE OF 65 PSI.

   CONTRACTOR MUST CONTACT THE LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION IF THE AVAILABLE FLOW AND PRESSURE DEVIATES MORE THEN 5% OR WILL AFFECT THE PERFORMANCE OF THE SYSTEM.

   MINIMUM PRESSURE REQUIREMENTS - 65 PSI AT THE POINT OF CONNECTION
   A. 35 PSI AT THE BASE OF THE POP-UP ROTOR/ROTATOR HEADS
   B. 30 PSI AT THE BASE OF THE POP-UP SPRAY HEADS

2. HEAD LAYOUT IS BASED ON BASE INFORMATION PROVIDED. HEADS SHALL BE ADJUSTED TO ACCOMMODATE FIELD VARIATIONS WHILE MAINTAINING 100% COVERAGE AND MINIMIZING OVER-SPRAY ONTO PAVED AREAS AND BUILDINGS.

3. ¾" PIPE SHALL NOT BE USED FOR LATERAL PIPING

DRIP TUBING NOTES

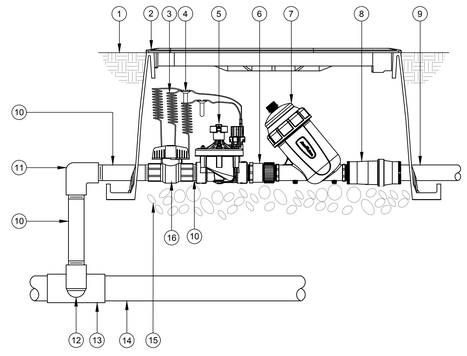
1. INSTALL DRIP TUBING AT GRADE AND COVER WITH MULCH. TYPICAL SPACING FOR DRIP TUBING IS 12" TO 18" ON CENTER. SPACING TO BE DETERMINED BY PLANT LAYOUT. REFER TO LANDSCAPE PLAN. ANCHOR TUBING EVERY 10' WITH 12" LONG PLASTIC TUBING STAKES. INSTALL FLUSH VALVE ASSEMBLIES AT ALL TUBING "DEAD ENDS". INSTALL AIR/VACUUM RELIEF VALVES AT "HIGH POINTS" OF EVERY SECTION.
2. GRID LAYOUT SHALL BE USED ON THIS PROJECT. USE CENTER GRID LAYOUT WHERE POSSIBLE.
3. WHEN SLEEVING DRIPLINE, USE BLANK DRIPLINE IN SLEEVE. SLEEVE SHALL BE 2X DRIPLINE DIAMETER. NO EMITTER DRIPLINE SHALL BE PLACED IN SLEEVE.
4. THE LENGTH OF ANY DRIPLINE LATERAL SHALL NOT BE LONGER THAN:
   12" EMITTERS @ 0.9 GPH
   a) @ 15 PSI = 155 FEET
   b) @ 20 PSI = 169 FEET
   c) @ 30 PSI = 230 FEET
   d) @ 40 PSI = 255 FEET
   LATERAL DISTANCE DOUBLED WHEN CENTER FEED LAYOUT USED (SEE CENTER FEED LAYOUT DETAIL.
5. MANUAL FLUSH VALVE SHALL BE USED & PLACED WITH A 6" X 6" SUMP. VALVES SHALL BE OPENED EVERY WATERING DAY FOR 2 WEEKS AND THEN A MINIMUM OF 2 TIMES A YEAR TO CLEAR DRIPLINE OF DEBRIS.
6. AIR/VACUUM RELIEF SHALL BE INSTALLED WHEN THE CHANGE IN SLOPE OCCURS 3% OR GREATER.
7. STAPLES SHALL BE USED AT 5' O.C. AND 2 STAPLES 'X'ED OVER EACH OTHER WITH ANY CHANGE IN DIRECTION, ELBOWS, OR CROSSES.
8. SUPPLY, EXHAUST HEADERS AND DRIPLINE SHALL BE PLACED 2"- 4" FROM PLANTS AND PAVEMENT EDGES.
9. BLANK DRIPLINE SHALL BE USED FOR ALL SUPPLY AND EXHAUST HEADERS, UNLESS OTHERWISE NOTED ON PLANS.
10. PRIOR TO COVERING DRIPLINE, DRIPLINE CIRCUIT WILL BE PRESSURIZED AND TESTED FOR PROPER OPERATION.
11. DRIP LINE LATERALS SHALL BE LAID IN THE LONGEST RUN, WHETHER IT BE THE WIDTH OR LENGTH OF THE ZONE.

RECLAIMED WATER NOTES

1. ALL PIPE SHALL BE PURPLE WATER TYPE.
2. ALL MAINLINE SHALL HAVE MAGNETIC MARKER TAPE PLACED IN THE TRENCH 6" ABOVE THE PIPE.
3. ALL SPRINKLER HEADS SHALL HAVE PURPLE RECLAIMED IDENTIFICATION.
4. ALL MANUAL AND ELECTRIC VALVES SHALL HAVE TAGS TO INDICATE RECLAIMED WATER.
5. ALL VALVE BOXES SHALL HAVE PURPLE LIDS TO INDICATE THE PRESENCE OF RE-USE WATER.
6. ALL CROSSINGS OF IRRIGATION PIPING AND POTABLE WATER LINES SHALL HAVE THE VERTICAL CLEARANCE VISUALLY VERIFIED AND THE VERIFICATION MUST BE SHOWN ON THE AS-BUILT DRAWING BY DOCUMENTING THE VERTICAL MEASUREMENTS SEPARATING THE PIPES.
7. THE VERTICAL SEPARATION BETWEEN THE POTABLE AND RECLAIMED WATER LINES SHALL BE A MINIMUM OF 18". THIS SEPARATION SHALL BE VERIFIED AND DOCUMENTED IN A SET OF AS-BUILTS DRAWINGS AS PER SPECIFICATIONS. THE HORIZONTAL SEPARATION SHALL BE 5' CENTER TO CENTER AND 3' OUTSIDE TO OUTSIDE IF VERTICAL MINIMUM OF 18" IS NOT MET. REFER TO THE SPECIFIC CODE IF THESE SEPARATIONS CANNOT BE MET.

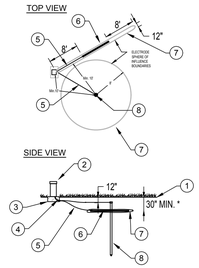
GENERAL IRRIGATION NOTES

1. ALL MAINLINES TO HAVE A MINIMUM OF 18" OF COVER. (CLASS 200 PVC PIPE).
2. ALL LATERAL AND SUB-MAIN PIPE TO HAVE A MINIMUM OF 12" OF COVER (CLASS 200 PVC PIPE).
3. NO ROCKS, BOULDER, OR OTHER EXTRANEOUS MATERIALS TO BE USED IN BACKFILLING OF TRENCH.
4. ALL PIPE TO BE INSTALLED AS PER MANUFACTURERS' SPECIFICATIONS.
5. ALL THREADED JOINTS TO BE COATED WITH TEFLON TAPE OR LIQUID TEFLON.
6. ALL LINES TO BE THOROUGHLY FLUSHED BEFORE INSTALLATION OF SPRINKLER HEADS.
7. SPRINKLER AND RELATED EQUIPMENT TO BE INSTALLED AS PER DETAILS.
8. ALL ELECTRICAL JOINTS TO BE MADE USING WATERPROOF CONNECTIONS AS SHOWN ON DETAILS.
9. ALL EQUIPMENT NOT SPECIFIED IN THE LEGEND SHALL BE DETERMINED AND FURNISHED BY THE CONTRACTOR.
10. NO ELECTRICAL CONNECTIONS SHALL BE MADE IN THE FIELD EXCEPT AT A VALVE CONTROL BOX OR ANOTHER VALVE BOX SPECIFICALLY FOR CONNECTIONS.
11. ANY DISCREPANCY BETWEEN THIS SHEET AND OTHERS IN THIS SET MUST BE REFERRED TO THE IRRIGATION CONSULTANT BY THE CONTRACTOR FOR CLARIFICATION BEFORE PRECEDING WITH THE WORK.
12. ALL 24 VOLT WIRE SHALL BE #12 UF/UL FOR COMMON WIRE, AND #14 UF/UL FOR CONTROL WIRES, DIRECT BURIAL, SOLID COPPER.
13. CONTRACTOR TO BE RESPONSIBLE FOR PROPER COVERAGE OF AREAS TO BE WATERED. i.e ADJUST HEADS WITH INSUFFICIENT COVERAGE DUE TO BLOCKAGE BY EXISTING OR PROPOSED SITE FEATURES.
14. CONTRACTOR TO REFER TO LANDSCAPE PLAN TO KEEP SPRINKLER EQUIPMENT AND ACCESSORY MATERIAL FROM INTERFERING WITH PROPER PLANTING, i.e VERIFY ROOT BALL SIZE FOR PLANTING
15. CONTRACTOR SHALL PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN A VALVE BOX (WRAP AROUND 3/4" PIPE 12 TIMES.
16. SPRINKLERS IN LOW-LYING AREAS SHALL HAVE CHECK VALVES
17. ALL SPRINKLERS TO BE MOUNTED ON FLEX PIPE - REFER TO DETAILS.
18. INSTALL DRIP LINE TUBING AND NON-PRESSURE LATERAL LEAD LINE PIPING IN LANDSCAPE AREAS AND ADJACENT TO SELECTED PLANT MATERIAL AS SHOWN IN DETAILS.
19. CONTRACTOR SHALL UTILIZE VALVE I.D. TAGS ON ALL REMOTE CONTROL VALVES.
20. 24 VOLT WIRE SHALL BE COLOR CODE: COMMON-WHITE, CONTROL-RED.
21. CONTRACTOR SHALL INSTALL MANUFACTURERS' RECOMMENDED GROUNDING EQUIPMENT FOR POWER SUPPLY AND VALVE OUTPUT WITH (2) 5/8" COPPER CLAD GROUND RODS.
22. CONTRACTOR SHALL INSTALL MANUFACTURERS' RECOMMENDATION ON FAULT GROUND AND LIGHTNING PROTECTION.
23. CONTROLLER GROUNDING MUST BE PER ASIC REQUIREMENTS.
24. ALL MATERIAL TO BE SUPPLIED BY CONTRACTOR TO OWNER:
    A. TWO WRENCHES FOR DISASSEMBLING AND ADJUSTING EACH TYPE OF SPRINKLER HEAD AND VALVE SUPPLIED.
    B. TWO KEYS FOR EACH OF THE AUTOMATIC CONTROLLERS.
    C. TWO QUICK COUPLER KEYS WITH MATCHING HOSE SWIVELS.
26. SYSTEM IS DIAGRAMMATIC TO IMPROVE CLARITY. ALL MAINLINE PIPING, ELECTRIC VALVES AND WIRING ARE TO BE INSTALLED IN LANDSCAPED AREAS AND REFERENCE THE LANDSCAPE PLAN PRIOR TO THE INSTALLATION OF PIPING TO AVOID CONTACT WITH PLANT MATERIALS EXISTING OR NEW.
27. CONTRACTOR TO ADD EXTENSION RISERS TO POP-UP HEADS WHEN NEEDED TO PROVIDE PROPER COVERAGE.
28. CONTRACTOR SHALL INSTALL SPRINKLER EQUIPMENT 18" FROM FOUNDATIONS, ALSO INSTALL SPRINKLERS 4" FROM CURBS OR WALKS.
29. PRIOR TO BID IRRIGATION CONTRACTOR SHALL VERIFY RIGHT-OF-WAY AND BACKFLOW REQUIREMENTS NO LATER THAN FIVE DAYS BEFORE BID SUBMITTALS. CONTRACTOR SHALL NOTIFY CONSULTANT OF ANY CHANGES FROM PLANS OR SPECIFICATIONS.
30. IRRIGATION CONTRACTOR SHALL PROVIDE THE OWNER AND LANDSCAPE ARCHITECT WITH A REPRODUCIBLE AS-BUILT DRAWING OF THE INSTALLED IRRIGATION SYSTEM IN A PDF FILE FORMAT BEFORE FINAL ACCEPTANCE. PROVIDE CROSS-MEASURED LOCATIONS OF ALL VALVE LOCATIONS, CONTROLLER, WATER SOURCE, WIRE SPLICES, SLEEVE LOCATIONS, ETC.
31. A 1-YEAR WARRANTY PERIOD SHALL BE PROVIDED FOR SYSTEM AFTER SUBSTANTIAL COMPLETION IS ACCEPTED. START UP AND ADJUSTING OF SYSTEM IN SPRING TIME SHALL BE INCLUDED IN WARRANTY.
32. PRIOR TO BID, CONTRACTOR SHALL VERIFY THAT ALL MATERIAL, INSTALLATION PARAMETERS AND OPERATIONS CONFORM TO ALL APPLICABLE CODES AND ORDINANCES NO LATER THAN FIVE DAYS BEFORE BID SUBMITTALS. CONTRACTOR SHALL NOTIFY IRRIGATION CONSULTANT/DESIGNER OF ANY CHANGES REQUIRED DUE TO CURRENT CODE OR ORDINANCE DISCREPANCIES. IF CONTRACTOR DOES NOT COMPLY TO THIS NOTIFICATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY INSTALLATION CHANGE AND REDESIGN COSTS FOR NON-COMPLIANCE.
33. UNLESS OTHERWISE NOTED, THE CONTRACTOR MUST COMPLETE TWO PRESSURE TESTS OF THE IRRIGATION SYSTEM MAINLINE(BOTH TO SHOW NO DROP IN PRESSURE DURING DURATION OF THE TEST).
    A. 2-HOUR PRESSURE TEST AT 1.5 TIMES THE SYSTEM STATIC PRESSURE
    B. 24-HOUR PRESSURE TEST AT THE SYSTEM STATIC PRESSURE
34. IRRIGATION INSTALLATION CONTRACTOR SHALL PROVIDE THE OWNER WITH A COLOR-CODED ZONE DIAGRAM PLAN, 8-1/2"X11" LAMINATED SHEET(S) WITH AN ELECTRONIC FILE COPY TO IDENTIFY CONTROLLER STATION TO THE CONTROL VALVE NUMBER FOR EACH CONTROLLER. THE LAMINATED CHART IS TO BE LOCATED IN AN ADHESIVE POUCH ATTACHED TO THE INSIDE OF CONTROLLER(S).
35. THE CONTROLLER(S) SHALL SCHEDULE PROGRAM "A" TO A REGULAR RUN-TIME SETTINGS FOR AFTER THE ESTABLISHMENT PERIOD OF THE PLANT MATERIAL. PROGRAM "B" SHALL BE USED DURING THE ESTABLISHMENT PERIOD AND TURNED OFF AFTER THE 30-60 DAYS OF PLANT INSTALLATION.
36. THE IRRIGATION CONTRACTOR WILL READ ALL SPECIFICATIONS AND REVIEW ALL DETAILS AND EXAMINE THESE PLANS CAREFULLY PRIOR TO BIDDING THIS PROJECT. FAILURE TO READ THIS INFORMATION IS NOT AN ACCEPTABLE REASON IF THE JOB IS UNDERBID.
37. THE PLAN MAY NOT INCLUDE ALL MATERIALS. THIS DOESN'T RELIEVE THE CONTRACTOR FROM BEING RESPONSIBLE TO PROVIDE A COMPLETE SYSTEM IN PERFECT WORKING ORDER.



1. FINISH GRADE/TOP OF MULCH
2. JUMBO VALVE BOX WITH PURPLE COVER: RAIN BIRD VBJMBPL
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
5. 1 1/2" PESB-R VALVE (INCLUDED IN XCZ-150-LCDR KIT)
6. 1 1/2" SCH 40 ADAPTER (MALE X FEMALE) INCLUDED IN XCZ-150-LCDR KIT
7. 1 1/2" FILTER - RAIN BIRD LARGE CAPACITY DISC FILTER (INCLUDED IN XCZ-150-LCDR KIT)
8. 1 1/2" HIGH FLOW PRESSURE REGULATOR (INCLUDED IN XCZ-150-LCDR KIT)
9. LATERAL PIPE
10. PVC SCH 80 NIPPLE 1 1/2"
11. PVC SCH 40 ELBOW
12. PVC SCH 80 NIPPLE (2" LENGTH, HIDDEN) AND PVC 40 ELBOW
13. PVC SCH 40 TEE OR ELBOW
14. MAINLINE PIPE
15. 4" MINIMUM DEPTH OF 3/4" WASHED GRAVEL
16. ISOLATION VALVE, LINE SIZE

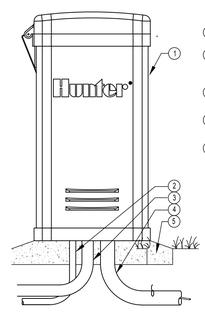
RAIN BIRD XCZ-150-LCDCR 1.5" COMMERCIAL CONTROL ZONE KIT IN JUMBO VALVE BOX



1. FINISH GRADE
2. CONTROLLER OR CONTROLLER MOUNTED IN PUMP STATION
3. CONCRETE PAD
4. 1.5" SCH-40 PVC SWEEP ELL FOR WIRE
5. RUN 6 AWG SOLID COPPER WIRES CONTINUOUSLY FROM GROUND ROD/PLATE TO CONTROLLER BUS BAR.
6. COPPER GROUND PLATE (4"x96"x.0625") WITH 25-FEET OF #6 AWG INSULATED GREEN WIRE WITH YELLOW STRIPE PRE-WELDED TO GROUND PLATE, (PAIGE ELECTRIC 18299IC). PROVIDE MINIMUM OF (2) 50LB BAGS OF EARTH CONTACT MATERIAL (POWER SET BY PAIGE ELECTRIC 1821991C).
7. SPHERE OF INFLUENCE KEEP ELECTRIC EQUIPMENT OUTSIDE SPHERE OF INFLUENCE.
8. 5/8"X8' COPPER CLAD GROUND ROD WITH 15-FEET OF #6 AWG INSULATED GREEN WIRE. PRE-WELDED TO GROUND ROD PAIGE ELECTRIC 182000IC6).

NOTE:
1. DO NOT INSTALL ANY OTHER WIRE OR CABLE WITHIN THE SPHERE OF INFLUENCE.
2. INSTALL GROUNDING PLATE MINIMUM 30" BELOW FINISHED GRADE, OR BELOW FROSTLINE, WHICHEVER IS DEEPER.
3. MEGGAR TEST GROUNDING GRID, MINIMUM 10 OHMS OR LESS REQUIRED, CONTRACTOR TO PROVIDE ON HIS LETTER HEAD, TIME, DATE, AND TEST RESULT. SUBMIT A COPY TO OWNER OR OWNERS REP. PRIOR TO FINAL WALK THROUGH

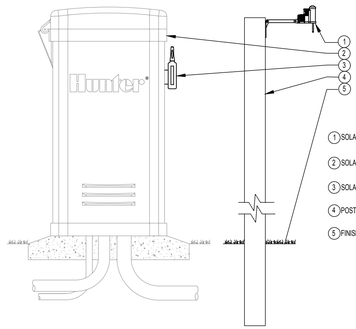
CONTROLLER GROUNDING DETAIL



1. IRRIGATION CONTROLLER (ACC-PP) PER PLAN
2. ELECTRICAL SUPPLY CONDUIT CONNECT TO POWER SOURCE, J-BOX INSIDE CONTROLLER
3. GROUND WIRE CONDUIT GROUND PER ASIC GUIDELINES
4. IRRIGATION CONTROL WIRE IN CONDUIT SIZE AND TYPE PER LOCAL CODES
5. PEDESTAL BASE PER PLAN INSURE POSITIVE DRAINAGE AWAY FROM PEDESTAL

NOTE
CONTROLLER SHALL BE HARD-WIRED TO GROUNDED 110 VAC POWER SOURCE

ACC - PLASTIC PEDESTAL



1. SOLAR SYNC WIRELESS SENSOR
2. SOLAR SYNC COMPATIBLE CONTROLLER
3. SOLAR SYNC WIRELESS RECEI
4. POST OR SUITABLE MOUNTING
5. FINISHED GRADE

SOLAR SYNC WIRELESS WITH PEDESTAL CONTROLLER

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D.R. Horton
Howey-in-the-Hills, Florida
IRRIGATION DETAILS & NOTES

DATE: December 10, 2021
DRAWN BY: JM
CHECKED BY: TWB
JOB NUMBER: 2021.182
FILE NAME: 2021.182_DRH-VENEZIA THS_IRBASE

REVISIONS:
1 Irrigation 12-10-2021

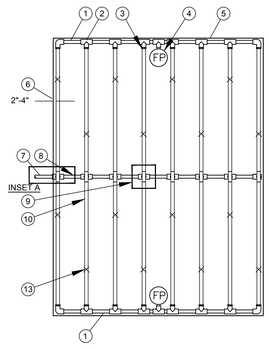
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Todd W. Bonnett, RLA # FL0001778

REGISTERED LANDSCAPE ARCHITECT TODD W. BONNETT LA1718 STATE OF FLORIDA

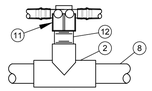
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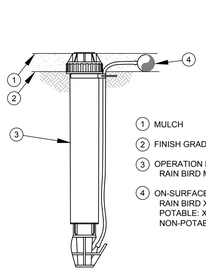


1. PVC EXHAUST HEADER
2. PVC SCH 40 TEE OR EL (TYPICAL)
3. BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
4. FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL "XFD FLUSH POINT"
5. PERIMETER OF AREA
6. PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
7. PVC SUPPLY PIPE FROM RAIN BIRD CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
8. PVC SUPPLY MANIFOLD
9. CONNECTION FROM SUPPLY MANIFOLD TO DRIPLINE (TYPICAL)- SEE INSET A
10. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE(TYPICAL) POTABLE: XFD DRIPLINE NON-POTABLE: XFDP DRIPLINE
11. BARB X FEMALE FITTING: RAIN BIRD XFD-TFA-075 FITTING
12. 3/4" PVC NIPPLE, LENGTH AS NECESSARY
13. RAINBIRD TDS-050 TIE DOWN STAKE, STAGGER 3' APART ALONG DRIP LINE AND AT AND AT FITTINGS. (TYPICAL)



NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
3. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

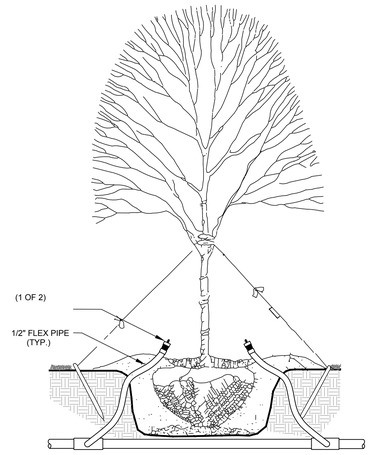
XFD ON-SURFACE DRIPLINE - CENTER FEED LAYOUT



1. MULCH
2. FINISH GRADE
3. OPERATION INDICATOR RAIN BIRD MODEL: OPERIND
4. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFD SERIES NON-POTABLE: XFDP SERIES

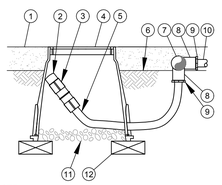
NOTE:
1. INSERT BARB TRANSFER FITTING DIRECTLY INTO DRIPLINE TUBING.
2. VAN NOZZLE MAY BE SET TO CLOSED, OR IF IT IS DESIRED TO SEE SPRAY FROM THE NOZZLE, SET THE ARC TO ¼ PATTERN.

ON-SURFACE DRIPLINE OPERATIONAL INDICATOR



IRRIGATION CONTRACTOR IS TO AVOID ANY CONTACT WITH THE ROOT BALL OF THE TREE

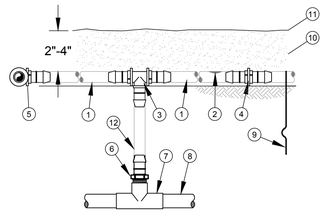
TREE BUBBLER DETAIL



1. TOP OF MULCH LAYER
2. FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS: POTABLE:RAIN BIRD MDCFCAP NON-POTABLE: RAIN BIRD MDCFPCAP
3. EASY FIT COUPLING: RAIN BIRD MDCFCOUP
4. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
5. RAIN BIRD XF BLANK TUBING
6. FINISH GRADE
7. PVC EXHAUST HEADER
8. PVC SCH 40 TEE OR EL
9. BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
10. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFD DRIPLINE NON-POTABLE: XFDP DRIPLINE
11. 3-INCH MINIMUM DEPTH OF 3/4" WASHED GRAVEL
12. BRICK (1 OF 2)

NOTE:
1. ALLOW A MINIMUM OF 6-INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

XFD ON-SURFACE DRIPLINE FLUSH POINT



1. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFD DRIPLINE NON-POTABLE: XFDP DRIPLINE
2. INLINE DRIP EMITTER OUTLET, SEE PLANS FOR DRIPLINE OUTLET SPACING.
3. BARB TEE 17x17x17mm RAIN BIRD XFF-TEE
4. BARB COUPLING 17x17mm RAIN BIRD XFF-COUP
5. BARB ELBOW 17x17mm RAIN BIRD XFF-ELBOW
6. BARB MALE ADAPTER 17mm X 1/2" MPT RAIN BIRD XFF-MA-050 17mm X 3/4" MPT RAIN BIRD XFF-MA-075
7. PVC TEE SxSxT
8. PVC LATERAL SUPPLY HEADER
9. TIE DOWN STAKE: RAIN BIRD TDS-050 WITH BEND (TYP)
10. MULCH
11. FINISH GRADE
12. RAIN BIRD XF SERIES BLANK TUBING LENGTH AS REQUIRED

NOTES:
1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

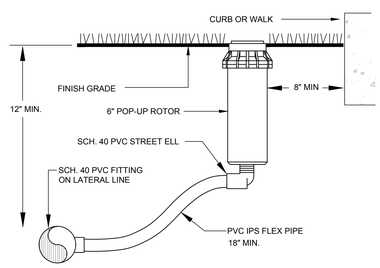
XFD ON-SURFACE DRIPLINE RISER ASSEMBLY

TREE IRRIGATION AFTER PLANTING DURING ESTABLISHMENT

SIZE OF NURSERY STOCK	IRRIGATION SCHEDULE FOR VITALITY
LESS THAN 2" CALIPER	DAILY FOR TWO WEEKS, EVERY OTHER DAY FOR TWO MONTHS, WEEKLY UNTIL ESTABLISHED
2"-4" CALIPER	DAILY FOR ONE MONTH, EVERY OTHER DAY FOR THREE MONTHS, WEEKLY UNTIL ESTABLISHED.
2"-4" CALIPER	DAILY FOR THREE MONTHS, WEEKLY UNTIL ESTABLISHED.
GREATER THAN 4" CALIPER	DAILY FOR SIX WEEKS, EVERY OTHER DAY FOR FIVE MONTHS, WEEKLY UNTIL ESTABLISHED

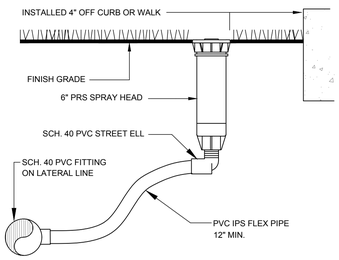
1. AT EACH IRRIGATION, APPLY TWO TO THREE GALLONS PER INCH TRUNK CALIPER AT THE ROOT BALL SURFACE. APPLY IT IN A MANNER SO ALL WATER SOAKS THE ENTIRE ROOT BALL. DO NOT WATER IF THE ROOT BALL IS WET/SATURATED ON THE IRRIGATION DAY

2. DELETE DAILY IRRIGATION WHEN PLANTING IN WINTER. ESTABLISHMENT TAKES THREE (HARDINESS ZONE 10-11) TO FOUR (HARDINESS ZONE 8-9) MONTHS PER INCH TRUNK CALIPER. NEVER APPLY IRRIGATION IF THE SOIL IS SATURATED.

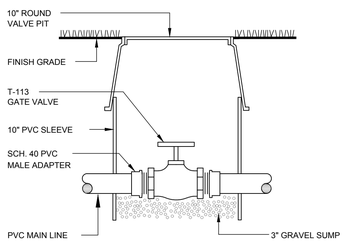


TURF ROTOR HEAD

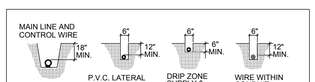
SPRINKLERS IN LOW-LYING AREAS SHALL HAVE CHECK VALVES



6" POP-UP SPRAY HEAD DETAIL

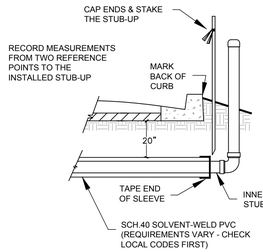


ISOLATION GATE VALVE

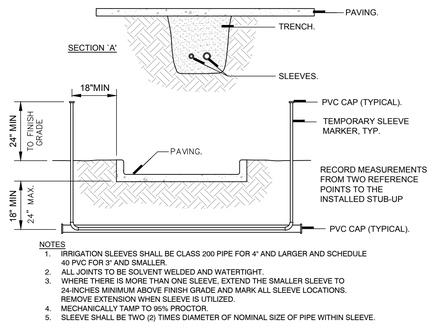


DETAIL NOTES:
1. ALL P.V.C. PIPING SHALL BE SNAKED IN TRENCHES.
2. ALL WIRING TO BE BUNDLED AND TAPED AT 20' INTERVALS.
3. ALL MAIN SUPPLY LINES TO BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS.
4. PROVIDE PIPE AND WIRE SLEEVES UNDER ALL PAVED SURFACES. WIRE SHALL BE WITHIN SEPARATE 2" ELECTRICAL CHASE.
5. CONTRACTOR TO COMPLY WITH ALL LOCAL CODES AND ORDINANCES IN REFERENCE TO THE INSTALLATION OF PVC PIPING
6. TIE A LOOSE 20' LOOP IN WIRING AT ALL CHANGES OF DIRECTION GREATER THAN 30° UNTIE ALL LOOPS AFTER ALL CONNECTIONS HAVE BEEN COMPLETED
7. INSTALL #14-1 TRACKING WIRE NEXT TO MAINLINE

TRENCHING DETAIL



ROUGH IN SLEEVING DETAIL



NOTES:
1. IRRIGATION SLEEVES SHALL BE CLASS 200 PIPE FOR 4" AND LARGER AND SCHEDULE 40 PVC FOR 3" AND SMALLER.
2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.
3. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO 24-INCHES MINIMUM ABOVE FINISH GRADE AND MARK ALL SLEEVE LOCATIONS. REMOVE EXTENSION WHEN SLEEVE IS UTILIZED.
4. MECHANICALLY TAMP TO 95% PROCTOR.
5. SLEEVE SHALL BE TWO (2) TIMES DIAMETER OF NOMINAL SIZE OF PIPE WITHIN SLEEVE.

IRRIGATION SLEEVE DETAIL

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Venezia
Landscape Architecture
D.R. Horton
Howey-in-the-Hills, Florida
IRRIGATION DETAILS & NOTES

DATE: December 10, 2021
DRAWN BY: JM
CHECKED BY: TWB
JOB NUMBER: 2021.182
FILE NAME: 2021.182_DRH-VENEZIA THS_IRBASE

REVISIONS:
1 Irrigation 12-10-2021

Digitally signed by Todd W Bonnett
Date: 2022.02.03 13:58:24 -05'00'

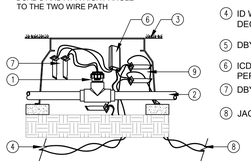
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Todd W. Bonnett, FLA # FL0017736

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NOTE
EARTH GROUND TO BE A MINIMUM OF 8' AWAY FROM DUAL-S AND AT A RIGHT ANGLE TO THE TWO WIRE PATH



1. FLOW SENSER PER PLAN
2. PVC MAINLINE
3. FINISHED GRADE
4. ID WIRE PATH TO NEXT DECODER AS NEEDED
5. DBY (2)
6. ICD SENSOR DECODER PER PLAN
7. DBY-6 (3)
8. JACKETED ID WIRE PATH

ICD SENSOR DECODER

TWO-WIRE DECODER CONTROL SYSTEM NOTES

1. THE DECODERS MAY BE LABELED AND PROGRAMMED AT THE CONTROLLER PRIOR TO INSTALLATION.
2. DO NOT CREATE DUPLICATE STATION ADDRESSES FOR DECODERS.
3. A ICD-SEN SENSOR DECODER SHALL BE USED TO ACCEPT INPUTS FROM SENSORS. EACH ICD-SEN ALSO HAS 2 COLOR-CODED LOOPS CALLED "PORTS".
4. HFS FLOW SENSORS CAN ONLY BE CONNECTED TO "PORT A" OF THE ICD-SEN.
5. THE TWO WIRE CABLE SHALL BE A SOLID-CORE, COLOR-CODED, TWISTED-PAIR CABLE.
6. GROUND ONE DECODER AT THE END OF THE WIRE PATH AND ONE DECODER GROUNDED EVERY 500' OR 8TH DECODER WHICHEVER IS SHORTER.
7. BOTH THE CONTROLLER AND DECODER ARE TO BE GROUNDED TO GROUND RODS OR PLATES WITH LESS THAN 10 OHMS RESISTANCE.
8. ALL TWO-WIRE SYSTEM COMPONENTS ARE TO BE INSTALLED PER THE HUNTER ACC/ACC DECODER SPECIFICATIONS.
9. ALL CONNECTIONS AND SPLICES IN THE TWO-WIRE PATH MUST BE MADE WITH DBRY-6 OR EQUAL WATERPROOF CONNECTORS.
10. ALL T-SPLICES MUST BE MADE IN VALVE BOXES WITH DBRY-6 OR EQUAL WATERPROOF CONNECTIONS.
11. INSTALL THE GROUNDING WIRE AND EARTH GROUND HARDWARE AT RIGHT ANGLES TO THE RUN OF THE TWO-WIRE PATH.
12. FROM THE DECODER OUTPUTS TO INDIVIDUAL SOLENOIDS, USE STANDARD IRRIGATION WIRE SIZED FOR THE LENGTH OF THE RUN.
13. WIRING FROM THE DECODER TO THE SOLENOID SHOULD NOT EXCEED 150 FT.
14. WHEN DOUBLING SOLENOIDS ON A DECODER OUTPUT, WIRE THE SOLENOIDS IN PARALLEL RATHER THAN IN SERIES.
15. TWO-WIRE DECODER CABLE SHALL BE INSTALLED WITHIN A 1" CONDUIT UTILIZING SWEEPS INSTEAD OF 90'S.

PLAN NOTES: HUNTER ACC2 DECODER CONTROLLER

DECODERS: The controller shall interface to Hunter ICD decoders capable of controlling 1, 2, 4 or 6 valves per unit (ICD-100, ICD0200, ICD400 and ICD-600). Provide an ICD-SEN sensor decoder for the flow sensors and Clik sensors. Maximum distance from decoder output to solenoid under normal conditions is 150 ft. Integrated surge protection shall eliminate the need for extra surge protection devices.

WIRE: The Hunter ACC2 Decoder Controller requires twisted wire meeting their specification on all paths of the ACC2 Decoder Controller (Hunter IDWIRE, Paige Electric P7354D or equal). IDWIRE1 (14 AWG) is recommended for wire path length up to 10,000 ft and IDWIRE2 (12 AWG) for wire path length up to 15,000 ft. The controller allows up to 3 two-wire paths per output module. The jacket colors shall be such to facilitate the identification of various wire path zones. Looping a two-wire path from one output to another (back to the controller) is not recommended. Provide an additional 36-inch of loose wire (measured from top of valve box), rolled up to the side in all splice boxes and valve boxes. All connections and splices in the red/blue two-wire path must be made with DBRY-6 or equal waterproof connectors and installed in a valve box. IT IS ESSENTIAL THAT ALL CONNECTIONS BE ABSOLUTELY WATERTIGHT WITH NO LEAKAGE TO GROUND NOR SHORTING BETWEEN CONDUCTORS.

GROUNDING: All grounding and installation of equipment specified, shall be installed in strict compliance with the Manufacturer's recommendations and in accordance with Local, State and Federal requirements. Both the controller and the decoders shall be grounded to ground rods or plates with less than 10 Ohms resistance. At a minimum, earth ground should be connected at the first decoder, every 12th valve/decoder, or 1,000 ft of wire run (whichever is shorter) and at the last valve/decoder in any wire run. The solid copper grounding plate shall have a pre-welded #6 AWG insulated green-yellow wire, and Power Set Earth Contact Material. The ground plates are to be installed to a minimum depth of 30". Keep electronic equipment, underground wires, and cables outside of the sphere of influence. Ground plates shall be made of a copper alloy intended for grounding applications and have minimum dimensions as follows:

a. For grounding controllers - 4" x 8' x 0.0625" solid copper grounding plate, a 25-foot continuous length of 6 AWG, green insulated, with extruded yellow stripe, solid bare copper wire welded to the plate (Paige Electric 182199IC) and two 50lb bags of Power Set Earth Contact Material.

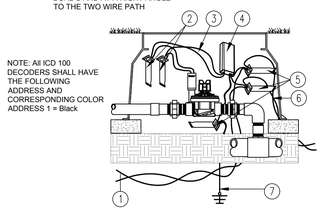
b. For grounding decoders - 4" x 3' x 0.0625" solid copper grounding plate, a 15-foot continuous length of 10 AWG, green insulated, with extruded yellow stripe, solid bare copper wire is welded to the plate (Paige Electric 182201IC) and one 50lb bag of Power Set Earth Contact Material.

When using ground rods, provide 5/8" diameter x 8' long copper clad steel ground rods with 15' pre-welded #6 AWG insulated green-yellow wire (Paige Electric part # 1820007IC6). The rods are to be driven into the ground in a vertical position or an oblique angle not to exceed 45 degrees at a location 10 feet from the electronic equipment, the ground plate, or the wires and cables connected to said equipment. The grounding rods shall be covered by a valve box. Install all grounding circuit components in straight lines. Reference the Grounding Details and/or Paige Electric Wiring Guide https://www.paigewire.com

LIGHTNING ARRESTOR: Protect the controller from surges coming from the 120 or 240 Vac wires by installing Paige Electric 250090LED lightening arrestor. This arrester incorporates a visible green LED to indicate that the unit is ready to fire in case of a power or lightning surge. Reference Paige Electric Wiring Guide https://www.paigewire.com

NOTE
EARTH GROUND TO BE A MINIMUM OF 8' AWAY FROM DUAL-S AND AT A RIGHT ANGLE TO THE TWO WIRE PATH

NOTE: All ICD 100 DECODERS SHALL HAVE THE FOLLOWING ADDRESS AND CORRESPONDING COLOR
ADDRESS 1 = Black

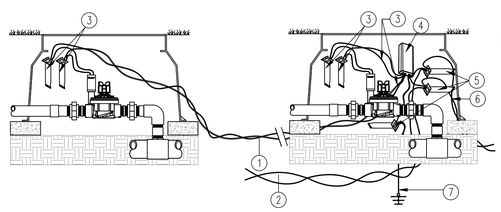


1. ID WIRE PATH TWISTED TO NEXT DECODER
2. DBY (2)
3. TWO BLACK WIRES TO SOLENOID/UP TO 150FT
4. ICD-100 DECODER
5. DBRY-6 (3)
6. JACKETED ID WIRE PATH FROM CONTROLLER ALLOW 5 ft SLACK PER DECODER 1/2 ON EITHER SIDE OF DECODER
7. TO EARTH GROUND INSTALLED PER ASIC GUIDELINES. 1 PER 8 DECODERS OR EVERY 500ft.

ICD-100 DECODER

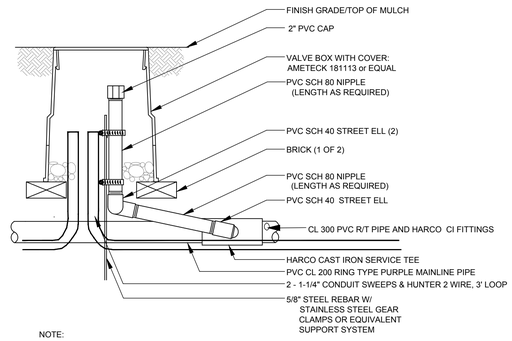
NOTE
EARTH GROUND TO BE A MINIMUM OF 8' AWAY FROM DUAL-S AND AT A RIGHT ANGLE TO THE TWO WIRE PATH

NOTE: All ICD-200 DECODERS SHALL HAVE THE FOLLOWING ADDRESS AND CORRESPONDING COLOR
ADDRESS 1 = Black
ADDRESS 2 = Yellow



1. DECODER TO SOLENOID MAX RUN 150 ft.
2. ID WIRE PATH TWISTED TO NEXT DECODER
3. DBY (4)
3. COLOR CODED VALVE WIRES. SEE LEGEND FOR COLOR AND VALVE #
4. ICD-200 DECODER
5. DBRY-6 (3)
6. JACKETED ID WIRE PATH FROM CONTROLLER ALLOW 5 ft SLACK PER DECODER - 1/2 ON EITHER SIDE OF DECODER
7. TO EARTH GROUND INSTALLED PER ASIC GUIDELINES. 1 PER 8 DECODERS OR EVERY 500ft.

ICD-200 DECODER



NOTE:
1. FURNISH FITTINGS AND PIPING NOMINALLY SIZED IDENTICAL TO NOMINAL STUB SIZE.

3" STUB FOR FUTURE CONNECTION

2

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	HEADS	PIPE 1"	PIPE 1 1/4"	PIPE 1 1/2"	PIPE 2"	PIPE 2 1/2"	DESIGN PSI	VALVE LOSS	PSI	PSI @ POC	PRECIP
1	Rain Bird PESBR	1-1/2"	Turf Rotor	25.83	10	254.5	21.1				35	3.27	40.29	46.94	0.61 in/h
2	Rain Bird XCZ-150-LCDR	1-1/2"	Area for Dripline	24.65	1,643 l.f.	92.6	15.1				20	4.79	26.76	33.45	1.44 in/h
3	Rain Bird PESBR	1-1/2"	Bubbler	28.00	56	456.6	84.6	21.6	10.5		20	3.18	25.02	32.35	2.1 in/h
4	Rain Bird PESBR	1-1/2"	Turf Spray	29.14	44	390.0		6.4			30	3.13	35.16	42.58	0.99 in/h
5	Rain Bird XCZ-150-LCDR	1-1/2"	Area for Dripline	27.83	1,855 l.f.	234.3	47.6	4.7			20	5.13	26.96	35.64	1.44 in/h
6	Rain Bird PESBR	1-1/2"	Turf Spray	38.08	54	386.2	91.8		7.6		30	2.45	35.34	44.06	0.96 in/h
7	Rain Bird PESBR	1-1/2"	Bubbler	34.00	68	321.9	121.4	18.7	10.6		20	2.78	24.77	33.78	2.1 in/h
8	Rain Bird XCZ-150-LCDR	1-1/2"	Area for Dripline	22.86	1,524 l.f.	539.4	45.6		14.5		20	4.26	26.77	36.96	1.44 in/h
9	Rain Bird PESBR	1-1/2"	Turf Spray	34.24	58	424.0	32.4		7.3		30	2.76	35.59	46.46	0.92 in/h
10	Rain Bird PESBR	1-1/2"	Bubbler	30.00	60	406.8	72.8		10.5		20	3.1	24.6	35.64	2.1 in/h
11	Rain Bird PESBR	1-1/2"	Bubbler	43.00	86	641.0	152.0	254.8	385.9	3.7	20	2.24	27.97	39.28	2.12 in/h
12	Rain Bird PESBR	1-1/2"	Turf Rotor	31.31	11	314.3	25.0	4.2			35	3	39.12	50.36	0.57 in/h

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL./WEEK
1	Rain Bird PESBR	Turf Rotor	0.61 in/h	1	98	2,531
2	Rain Bird XCZ-150-LCDR	Area for Dripline	1.44 in/h	1	42	1,035
3	Rain Bird PESBR	Bubbler	2.1 in/h	1	29	812
4	Rain Bird PESBR	Turf Spray	0.99 in/h	1	61	1,778
5	Rain Bird XCZ-150-LCDR	Area for Dripline	1.44 in/h	1	42	1,169
6	Rain Bird PESBR	Turf Spray	0.96 in/h	1	63	2,399
7	Rain Bird PESBR	Bubbler	2.1 in/h	1	29	986
8	Rain Bird XCZ-150-LCDR	Area for Dripline	1.44 in/h	1	42	960.1
9	Rain Bird PESBR	Turf Spray	0.92 in/h	1	66	2,260
10	Rain Bird PESBR	Bubbler	2.1 in/h	1	29	870
11	Rain Bird PESBR	Bubbler	2.12 in/h	1	29	1,247
12	Rain Bird PESBR	Turf Rotor	0.57 in/h	1	105	3,288
TOTALS:					635	19,335

- WATER APPLICATION(S) TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND/OR WATER MANAGEMENT DISTRICT RULES & REGULATIONS.
- WATERING SCHEDULE IS BASED ON A ONE (1) DAY APPLICATION TO PROVIDE A ONE (1) ACRE INCH VOLUME OF WATER PER WEEK.
- DURATION OF WATERING TIMES SHALL BE ADJUSTED FOR MULTIPLE WATERING DAYS, IF ALLOWED. (I.E. ONE-HALF OF THE RECOMMENDED TIME IS REQUIRED FOR A TWO (2) DAY PER WEEK SCHEDULE.
- WATERING SCHEDULE IS PROVIDED FOR PURPOSES OF ASCERTAINING WATER VOLUME REQUIREMENTS FROM AVAILABLE WATER SOURCE ONLY AND SHALL NOT CONSTRUCTED AS PRESCRIPTION FOR WATERING APPLICATION FOR SPECIFIC TREES, SHRUBS, GROUND COVERS OR SOD. FINAL WATER APPLICATION AS NEEDED FOR PLANTS, TREES, AND SOD SHALL BE RESPONSIBILITY OF THE OWNER.

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BONNETT design group, llc
landscape architecture
community planning
FL LC 26000341
400 South Orlando Ave. Suite 201
Maitland, FL. 32751
407.622.1588 voice

Venezia
Landscape Architecture
D.R. Horton
Howey-in-the-Hills, Florida
IRRIGATION DETAILS & NOTES

DATE: December 10, 2021
DRAWN BY: JM
CHECKED BY: TWB
JOB NUMBER: 2021.182
FILE NAME: 2021.182_DRH-VENEZIA THS_IRBASE

REVISIONS:
1 Irrigation 12-10-2021
2 Town Comments 1-19-2022

Digitally signed by Todd W Bonnett
Date: 2022.02.03 13:58:48 -05'00'

1

L509

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I HEREBY CERTIFY THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF FLORIDA, AND THAT I HOLD CERTIFICATE NO. LA1718. I FURTHER CERTIFY THAT THE PLANS, SPECIFICATIONS AND DESIGNS HEREIN EXPRESSED, RESERVES HIS COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS, THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF BONNETT DESIGN GROUP, LLC. ANY UNAUTHORIZED USE SHALL BE FULLY PROSECUTED TO THE FULLEST EXTENT OF THE LAW.
REGISTERED LANDSCAPE ARCHITECT TODD W. BONNETT LA1718 STATE OF FLORIDA
Todd W. Bonnett, FLA # FLA001718

DRAWING PLOTTED: 2/2/2022 5:16:54 PM
Z:\SHARED\BONNETT DESIGN\2021\182_DRH-VENEZIA THS\DESIGN\2021.182_DRH-VENEZIA THS_IRBASE.DWG

LAKE COUNTY SCHOOLS

201 West Burleigh Boulevard · Tavares · FL 32778-2496
(352) 253-6500 · Fax: (352) 253-6503 · *www.lake.k12.fl.us*

Superintendent:
Diane S. Kornegay, M.Ed.

School Board Members:
District 1
Bill Mathias
District 2
Kristi Burns, Ph.D.
District 3
Marc Dodd
District 4
Mollie Cunningham
District 5
Stephanie Luke

November 12, 2021

DR Horton
Attn: Bennett Ruedas
10192 Dowden Road, #150
Orlando, FL 32832

RE: Venezia Townhomes – Howey in the Hills
School Concurrency Capacity Reservation (District Project #LCS2021-39)

Dear Mr. Ruedas:

The School Board of Lake County has reviewed the application information for the above referenced residential development. The application indicates 113 single family attached dwelling units. The proposed development is estimated to generate approximately forty (40) students.

Based on the information provided in the application the property is located within Concurrency Service Area (CSA) 10. The analysis performed indicates the level of service standards for each school level will **not** be exceeded by the students generated from this residential development.

It has been determined at this time that school capacity is available and will be reserved for your project. **This capacity reservation is valid for one year from date of issuance.** In the event, a final development order is obtained within the year this capacity reservation will be valid for the life of the project. Please notify the school district when the final development order is obtained in order to update the project records.

If you should require additional time to obtain the final development order approval, please notify District staff prior to the expiration date to discuss time extension options. Once the reservation expires, the capacity will be released and a new completed application and fee will be required. If you have any questions, please contact me at (352) 253-6694 or at lavalleyh@lake.k12.fl.us.

Sincerely,

Helen LaValley
Growth Planning Department

Encl: School Concurrency Availability Determination

Lake County Florida School Board CIP

School Concurrency Availability Determination

Project Name: Venezia Townhomes
Date Received: 10/25/2021
Case Number: LCS2021-39
Builder Name: DR Horton
Location: SEC of Venezia and S. Palm Avenue

Project Planned Units:

 # Single Family: 113 **# Multi-Family:** 0
 # Townhomes: 0 **# Apartments:** 0

Additional Information: 10/26/21 Recd SC application

Project Unit Yield By Type of School

	Yield	Elem	Mid	High
Single Family	0.157	18		
Single Family	0.114			13
Single Family	0.079		9	

Service Area Analysis

Concurrency Service Area (CSA)	Current Capacity	Programmed Capacity	Total Capacity	Current Enrollment	Reserved Demand	Total Demand	Available Capacity	Project Demand
CSA #12 - Elementary	4806	966	5772	4702	486	5188	584	18
CSA #10 - Middle	1427	0	1427	1087	118	1205	222	9
CSA #13 - High	2412	0	2412	2008	389	2397	15	13

Project Demand may differ from Project Yield by Type of School due to rounding

Venezia Townhomes

Stormwater Calculations
Letter Modification to SJRWMD Permit No. 18971-3

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS

Prepared for:

D. R. Horton
10192 Dowden Road, Suite 150
Orlando, FL 32832

Prepared by:

Madden, Moorhead and Stokes, LLC
431 East Horatio Avenue, Suite 260
Maitland, Florida 32751
(407) 629-8330

Issue Date	Comment
October 22, 2021	Original Issue
December 10, 2021	Revised Per Town of Howey-In-The-Hills Comments

BENJAMIN S. BECKHAM LICENSE No. 79452 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Benjamin S. Beckham, P.E. using a digital signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Digitally signed by Benjamin S Beckham:A01410C00000177CA2F2882000124BC
DN: c=US, o=Unaffiliated, cn=Benjamin S Beckham:A01410C00000177CA2F2882000124BC
Date: 2021.12.10 12:31:25 -05'00'

Benjamin S. Beckham, P.E. #79452
Certificate of Authorization No. EB-0007723

Documents included herein which have been prepared by professionals other than Madden, Moorhead, and Stokes, Inc. are not covered under the above registered engineer's signature and seal

Project Description

The project site is 11.33 acres of vacant, cleared, and mass-graded land located in south Howey-in-the-Hills, Lake County, Florida, southeast of the intersection of Venezia Boulevard and State Road 19. The project includes construction of 113 townhome units as well as associated parking, utilities, and amenities. The site is Tract MM of the Venezia South PD. An existing dry retention pond on site was designed and constructed to serve the site under SJRWMD permit no. 18971-3. Water quality treatment and attenuation is provided 10.27 acres of impervious cover, which includes 0.24 acres for Venezia South and 10.03 acres for future townhomes and commercial. As demonstrated below, the proposed development meets the design criteria previously established for the master stormwater management system.

Summary of Design Criteria

Land Use:

Impervious:	5.62 acres	48%
Pervious:	6.21 acres	52%
Total:	11.83 acres	100%

Impervious area remaining for future development: 10.27 ac – 5.62 ac – 4.65 ac

Existing Design Elevations [ft, NGVD 88] for Pond DRA-J:

Top of Pond	86.00
25yr / 96hr Peak Stage	85.86
25yr/24hr Peak Stage	85.60
10yr / 24hr Peak Stage	85.28
Basin Floor	77.00

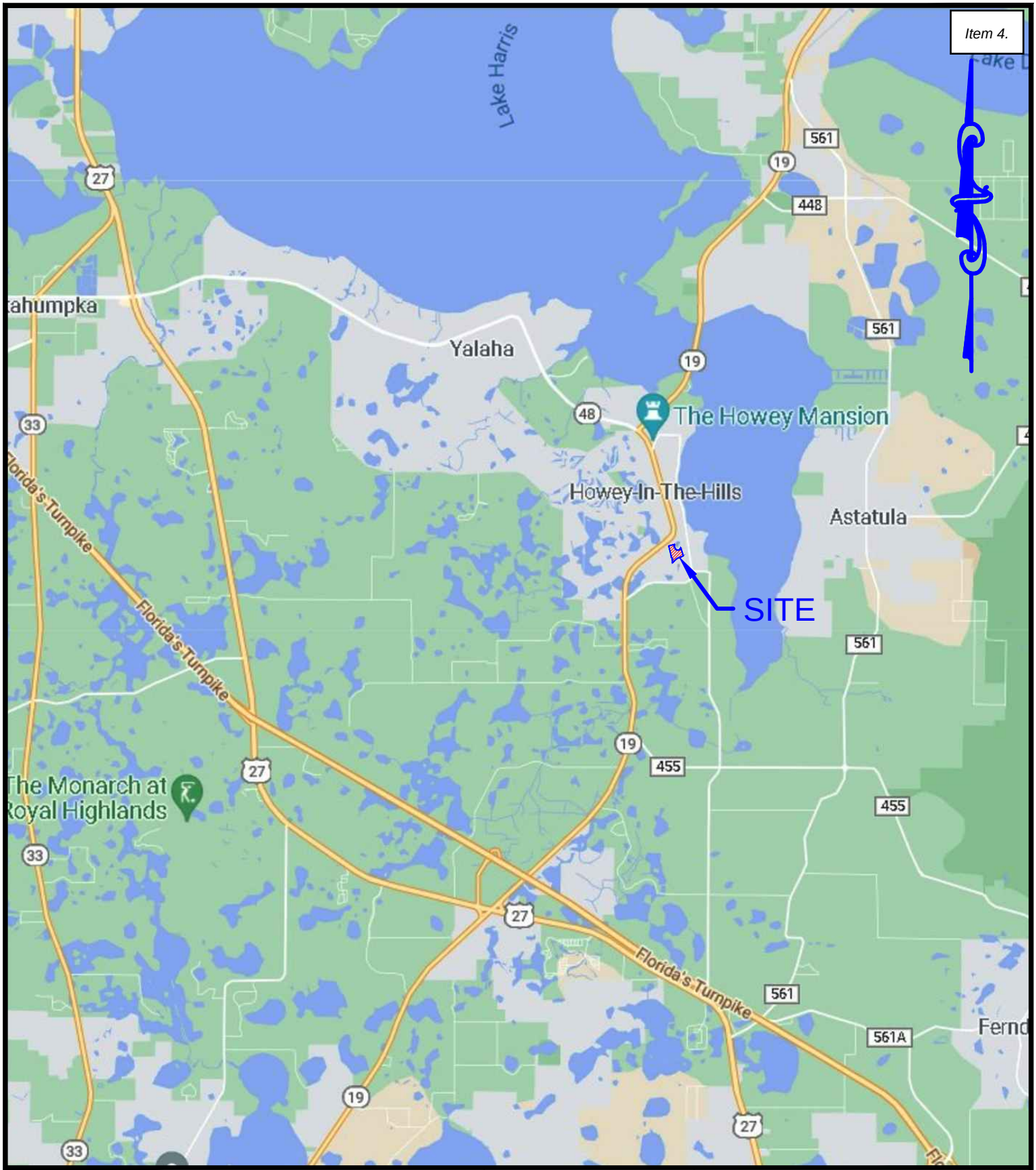
Minimum Design Elevations [ft, NAVD 88] for project:

Minimum Finished Floor	88.06
Minimum Street	85.44

Tailwater Discussion:

The secondary drainage system is modeled using StormCAD by Haestad Methods. The tailwater elevation was estimated using the average of the peak stage for the 25yr/24hr storm event and the bottom of pond: (85.60 + 77.00) / 2 = 81.30 ft NAVD.

Exhibits



MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. HORATIO AVE., STE. 260, MAITLAND, FL 32751 * (407) 629-8330

JOB NO.	21052
SEC. 35, TWP. 20S, RANGE 25E	
DRAWN BY:	FM
APPROVED BY:	CHM
DATE:	09/07/2021
Scale:	1" = 5000'

VENEZIA TOWNHOMES

LOCATION MAP

GOOGLE MAPS



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JOB NO.	21052
SEC. 35, TWP. 20S, RANGE 25E	
DRAWN BY:	FM
APPROVED BY:	CHM
DATE:	09/07/2021
Scale:	1" = 300'

VENEZIA TOWNHOMES

AERIAL MAP

GOOGLE MAPS



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JOB NO.	21052
SEC. 35, TWP. 20S, RANGE 25E	
DRAWN BY:	FM
APPROVED BY:	CHM
DATE:	09/07/2021
Scale:	1" = 500'

VENEZIA TOWNHOMES

SOILS MAP

USGS SOILS SURVEY

Report—Water Features

Map unit symbol and soil name	Hydrologic group	Surface runoff	Most likely months	Water table			Ponding			Flood	
				Upper limit	Lower limit	Kind	Surface depth	Duration	Frequency	Duration	
				Ft	*Ft*		*Ft*				
8—Candler sand, 0 to 5 percent slopes											
Candler	A	Negligible	Jan-Dec	—	—	—	—	—	None	—	
9—Candler sand, 5 to 12 percent slopes											
Candler	A	Very low	Jan-Dec	—	—	—	—	—	None	—	

Data Source Information

Soil Survey Area: Lake County Area, Florida
Survey Area Data: Version 20, Jun 8, 2020

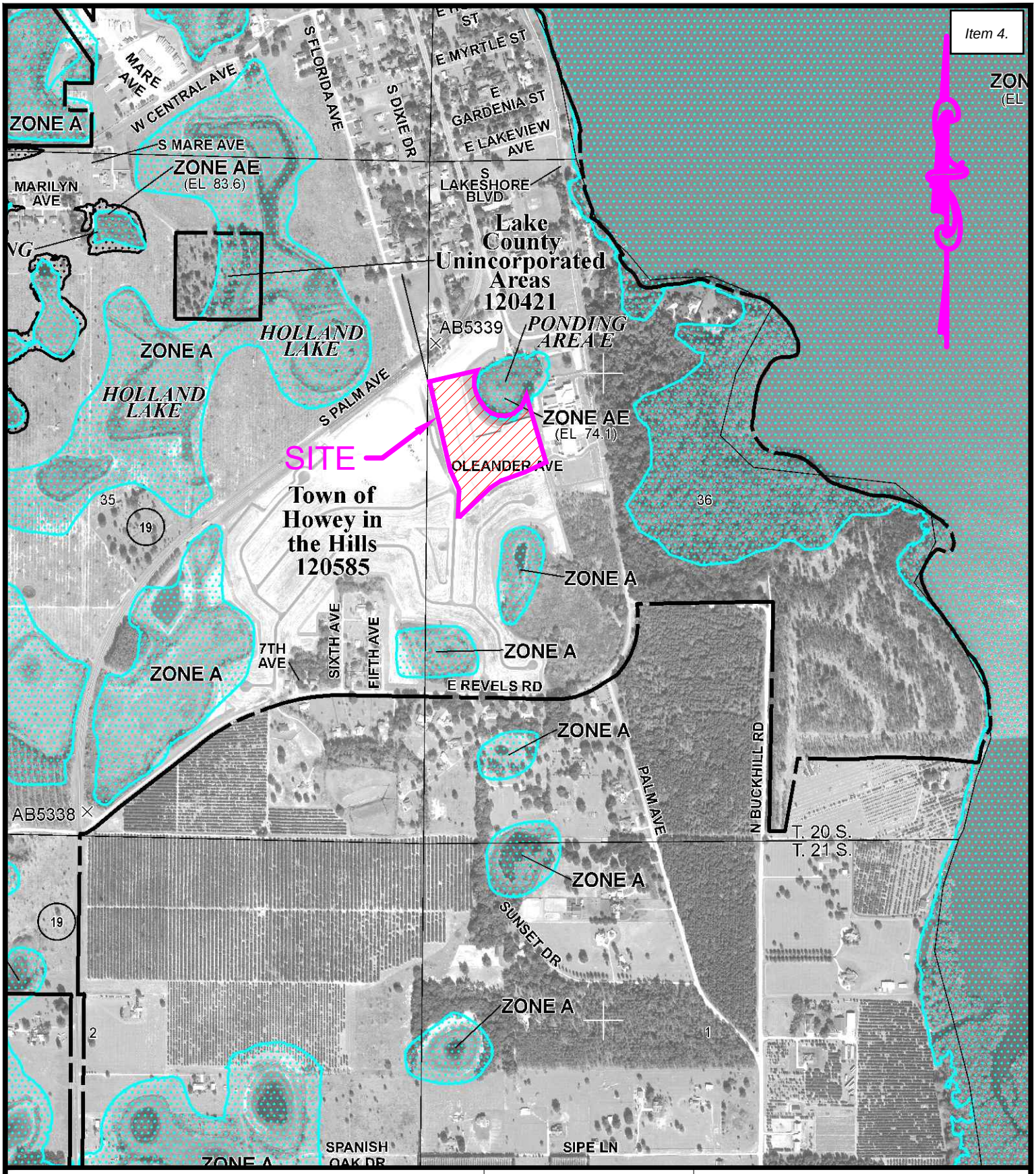
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JOB NO.	21052
SEC. 35, TWP. 20S, RANGE 25E	
DRAWN BY:	FM
APPROVED BY:	CHM
DATE:	09/07/2021
Scale:	N.T.S.

VENEZIA TOWNHOMES

SOILS LEGEND

USGS SOILS SURVEY



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JOB NO.	21052
SEC. 35, TWP. 20S, RANGE 25E	
DRAWN BY:	FM
APPROVED BY:	CHM
DATE:	09/07/2021
Scale:	1" = 1000'

VENEZIA TOWNHOMES

FLOOD INSURANCE RATE MAP
LAKE COUNTY, FLORIDA
MAP #12069C0485E
EFFECTIVE DATE DEC. 18,

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0485E

FIRM

FLOOD INSURANCE RATE MAP

LAKE COUNTY, FLORIDA

AND INCORPORATED AREAS

PANEL 485 OF 750

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ASTATULA, TOWN OF	120581	0485	E
HOWEY IN THE HILLS, TOWN OF	120585	0485	E
LAKE COUNTY	120421	0485	E
TAVARES, CITY OF	120138	0485	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
12069C0485E

MAP REVISED
DECEMBER 18, 2012

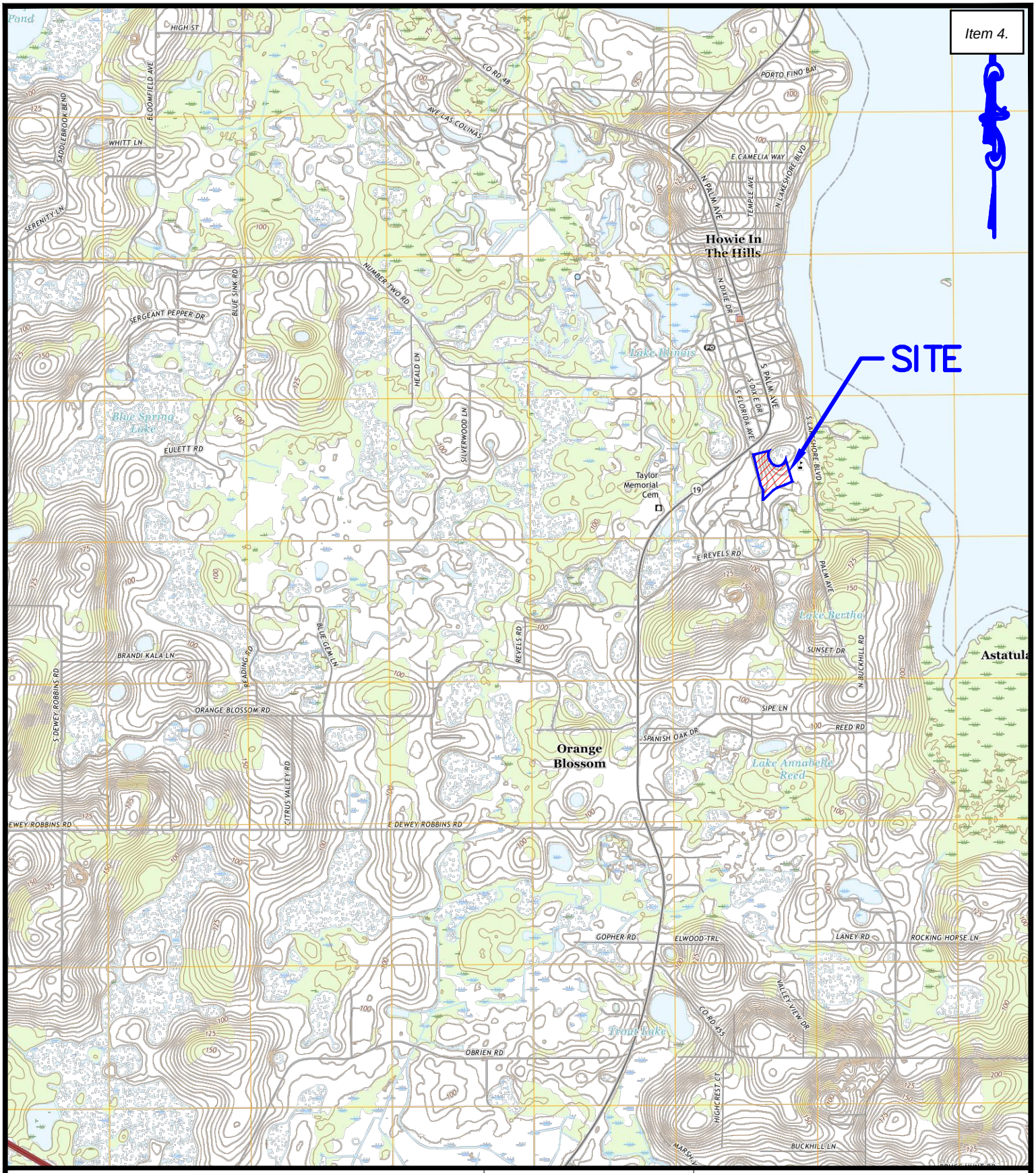
Federal Emergency Management Agency

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
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JOB NO.	21052
SEC. 35, TWP. 20S, RANGE 25E	
DRAWN BY:	FM
APPROVED BY:	CHM
DATE:	09/07/2021
Scale:	N.T.S.

VENEZIA TOWNHOMES

FLOOD INSURANCE RATE MAP
LAKE COUNTY, FLORIDA
MAP #12069C0485E
EFFECTIVE DATE DEC. 18,



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CIVIL ENGINEERS
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JOB NO.	21052
SEC. 35, TWP. 20S, RANGE 25E	
DRAWN BY:	FM
APPROVED BY:	CHM
DATE:	09/07/2021
Scale:	1" = 3000'

VENEZIA TOWNHOMES

QUAD MAP

STORE.USGS.GOV

Excerpts from SJRWMD Permit No. 18971-3

Advanced Interconnected Channel & Pond Routing (adICPR Ver 1.40)
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PROPOSED 10 YEAR 24 HOUR STORM EVENT (P1024)
10-28-07

BASIN NAME NODE NAME	BASINA BASINA	BASINB BASINB	BASINC BASINC	BASIND BASIND	BASINE BASINE
TIME INCREMENT (min)	5.00	5.00	5.00	5.00	5.00
RAINFALL FILE	SCSII-24	SCSII-24	SCSII-24	SCSII-24	SCSII-24
RAIN AMOUNT (in)	7.40	7.40	7.40	7.40	7.40
STORM DURATION (hrs)	24.00	24.00	24.00	24.00	24.00
AREA (ac)	13.11	12.52	11.00	8.64	25.64
CURVE NUMBER	69.24	63.69	70.32	59.49	56.42
DCIA (%)	.00	.00	.00	.00	.00
TC (mins)	10.00	10.00	10.00	10.00	10.00
LAG TIME (hrs)	.00	.00	.00	.00	.00
BASIN STATUS	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE

BASIN	QMX (cfs)	TMX (hrs)	VOL (in)	NOTES
BASINA	54.18	11.92	3.87	
BASINB	43.32	11.92	3.27	
BASINC	46.88	11.92	3.98	
BASIND	25.44	11.92	2.83	
BASINE	65.78	11.92	2.52	

BASIN NAME NODE NAME	BASINF BASINF	BASINH BASINH	BASINI BASINI	BASINJ BASINJ	BASINAB BASINAB
TIME INCREMENT (min)	5.00	5.00	5.00	5.00	5.00
RAINFALL FILE	SCSII-24	SCSII-24	SCSII-24	SCSII-24	SCSII-24
RAIN AMOUNT (in)	7.40	7.40	7.40	7.40	7.40
STORM DURATION (hrs)	24.00	24.00	24.00	24.00	24.00
AREA (ac)	17.47	7.99	2.78	18.40	3.75
CURVE NUMBER	72.03	57.30	55.13	71.93	75.82
DCIA (%)	.00	.00	.00	.00	.00
TC (mins)	10.00	10.00	10.00	10.00	10.00
LAG TIME (hrs)	.00	.00	.00	.00	.00
BASIN STATUS	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE

BASIN	QMX (cfs)	TMX (hrs)	VOL (in)	NOTES
BASINF	77.99	11.92	4.17	
BASINH	21.37	11.92	2.61	
BASINI	6.69	11.92	2.39	
BASINJ	81.92	11.92	4.16	
BASINAB	18.38	11.92	4.59	

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PROPOSED 10 YEAR 24 HOUR STORM EVENT (P1024)
10-28-07

CONTROL PARAMETERS

START TIME: .00
END TIME: 24.00

TO TIME (hours)	SIMULATION INC (secs)	PRINT INC (mins)
4.00	2.00	30.00
7.00	2.00	15.00
12.00	2.00	5.00
17.00	2.00	15.00
24.00	2.00	30.00

RUNOFF HYDROGRAPH FILE: DEFAULT
OFFSITE HYDROGRAPH FILE: DEFAULT
BOUNDARY DATABASE FILE: NONE

NOTE:

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PROPOSED 10 YEAR 24 HOUR STORM EVENT (P1024)
10-28-07

NODE NAME	NODE TYPE	INI STAGE (ft)	X-COOR (ft)	Y-COOR (ft)	LENGTH (ft)	STAGE (ft)	AR/TM/STR (ac/hr/af)
BASINA	AREA	84.000	.000	.000	.000	84.000	1.150
						85.000	1.340
						86.000	1.540
						87.000	1.740
						88.000	1.940
BASINB	AREA	80.000	.000	.000	.000	80.000	.900
						81.000	.980
						82.000	1.080
						83.000	1.320
BASINC	AREA	82.000	.000	.000	.000	82.000	.470
						83.000	.570
						84.000	.670
						85.000	.790
						85.500	.860
BASIND	AREA	86.000	.000	.000	.000	86.000	.610
						87.000	.700
						88.000	.790
						89.000	.880
						90.000	.970
BASINE	AREA	79.000	.000	.000	.000	79.000	1.880
						80.000	2.280
						81.000	2.640
						82.000	3.000
BASINF	AREA	92.000	.000	.000	.000	92.000	.920
						93.000	1.020
						94.000	1.120
						95.000	1.230
BASINH	AREA	79.000	.000	.000	.000	79.000	.737
						80.000	.957
						81.000	1.220
						82.000	1.490
BASINI	AREA	76.000	.000	.000	.000	76.000	.180
						77.000	.280
						78.000	.380

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PROPOSED 10 YEAR 24 HOUR STORM EVENT (P1024)
10-28-07

NODE NAME	NODE TYPE	INI STAGE (ft)	X-COOR (ft)	Y-COOR (ft)	LENGTH (ft)	STAGE (ft)	AR/TM/STR (ac/hr/af)
BASINJ	AREA	77.000	.000	.000	.000	77.000	.650
						78.000	.690
						79.000	.730
						80.000	.770
						81.000	.810
						82.000	.830
						83.000	.840
						84.000	.840
						85.000	.840
						85.600	.850
97	TIME	78.000	.000	.000	.000	78.000	.000
						79.000	12.000
						78.000	24.000
98	TIME	60.000	.000	.000	.000	60.000	.000
						62.000	12.000
						60.000	24.000
99	TIME	62.000	.000	.000	.000	62.000	.000
						63.000	12.000
						62.000	24.000
100	TIME	69.000	.000	.000	.000	72.500	.000
						73.000	12.000
						72.500	24.000
BASINE2	AREA	78.000	.000	.000	.000	78.000	4.170
						79.000	4.290
						80.000	4.410
						81.000	4.530
						82.000	5.160
BASINAB	AREA	81.250	.000	.000	.000	81.250	2.130
						82.000	2.220
						83.000	2.340

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PROPOSED 10 YEAR 24 HOUR STORM EVENT (P1024)
10-28-07

```
>>REACH NAME       : RA
  FROM NODE        : BASINA
  TO NODE          : 97
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 87.500 BTM. WIDTH (ft): 25.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:

>>REACH NAME       : RB
  FROM NODE        : BASINB
  TO NODE          : 97
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 82.750 BTM. WIDTH (ft): 25.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:

>>REACH NAME       : RC
  FROM NODE        : BASINC
  TO NODE          : 97
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 85.000 BTM. WIDTH (ft): 15.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:

>>REACH NAME       : RE
  FROM NODE        : BASINE
  TO NODE          : BASINE2
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 80.500 BTM. WIDTH (ft): 25.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:

>>REACH NAME       : RF
  FROM NODE        : BASINF
  TO NODE          : BASINE2
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 94.000 BTM. WIDTH (ft): 25.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:
```

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PROPOSED 10 YEAR 24 HOUR STORM EVENT (P1024)
10-28-07

```
>>REACH NAME       : RH
  FROM NODE        : BASINH
  TO NODE          : 98
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft):  80.500 BTM. WIDTH (ft):  25.000  LEFT SS (h/v):   4.000
     RGHT SS (h/v):   4.000    OPENING (ft): 999.000     WEIR COEF.:   3.000
        GATE COEF.:    .600 NUMBER OF ELEM.:   1.000
              NOTE:

>>REACH NAME       : RI
  FROM NODE        : BASINI
  TO NODE          : 98
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft):  77.750 BTM. WIDTH (ft):  25.000  LEFT SS (h/v):   4.000
     RGHT SS (h/v):   4.000    OPENING (ft): 999.000     WEIR COEF.:   3.000
        GATE COEF.:    .600 NUMBER OF ELEM.:   1.000
              NOTE:

>>REACH NAME       : RJ
  FROM NODE        : BASINJ
  TO NODE          : 99
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft):  85.500 BTM. WIDTH (ft):  25.000  LEFT SS (h/v):   4.000
     RGHT SS (h/v):   4.000    OPENING (ft): 999.000     WEIR COEF.:   3.000
        GATE COEF.:    .600 NUMBER OF ELEM.:   1.000
              NOTE:
```

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PROPOSED 10 YEAR 24 HOUR STORM EVENT (P1024)
10-28-07

```
>>REACH NAME       : RD
  FROM NODE        : BASIND
  TO NODE          : 97
  REACH TYPE       : DROP STRUCTURE w/ CIRC. CULVERT
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
  TURBO SWITCH     : OFF

  CULVERT DATA     :
        SPAN (in):  18.000       RISE (in):  18.000     LENGTH (ft): 361.000
   U/S INVERT (ft): 82.000 D/S INVERT (ft):  79.000       MANNING N:    .013
      ENTRNC LOSS:    .500   # OF CULVERTS:   1.000

  POSITION A       : RECTANGULAR RISER SLOT
    CREST EL. (ft): 89.500  CREST LN. (ft):  10.160    OPENING (ft): 999.000
       WEIR COEF.:   3.200      GATE COEF.:    .600 NUMBER OF ELEM.:   1.000

  POSITION B       : NOT USED

             NOTE:

>>REACH NAME       : RAB
  FROM NODE        : BASINAB
  TO NODE          : 97
  REACH TYPE       : DROP STRUCTURE w/ CIRC. CULVERT
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
  TURBO SWITCH     : OFF

  CULVERT DATA     :
        SPAN (in):  12.000       RISE (in):  12.000     LENGTH (ft):  90.000
   U/S INVERT (ft): 79.250 D/S INVERT (ft):  79.000       MANNING N:    .013
      ENTRNC LOSS:    .500   # OF CULVERTS:   1.000

  POSITION A       : RECTANGULAR RISER SLOT
    CREST EL. (ft): 82.500  CREST LN. (ft):  10.160    OPENING (ft): 999.000
       WEIR COEF.:   3.200      GATE COEF.:    .600 NUMBER OF ELEM.:   1.000

  POSITION B       : CIRCULAR RISER SLOT
   INVERT EL. (ft): 81.250       SPAN (in):   4.000       RISE (in):   4.000
       WEIR COEF.:   3.200      GATE COEF.:    .600 NUMBER OF ELEM.:   1.000

             NOTE:
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PROPOSED 10 YEAR 24 HOUR STORM EVENT (P1024)
10-28-07

REACH SUMMARY

INDEX	RCHNAME	FRMNODE	TONODE	REACH TYPE
1	RA	BASINA	97	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
2	RB	BASINB	97	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
3	RC	BASINC	97	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
4	RE	BASINE	BASINE2	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
5	RF	BASINF	BASINE2	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
6	RH	BASINH	98	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
7	RI	BASINI	98	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
8	RJ	BASINJ	99	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
9	RD	BASIND	97	DROP STRUCTURE w/ CIRC. CULVERT
10	RAB	BASINAB	97	DROP STRUCTURE w/ CIRC. CULVERT

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PROPOSED 10 YEAR 24 HOUR STORM EVENT (P1024)
10-28-07

NODAL MIN/MAX/TIME CONDITIONS REPORT

NODE ID	PARAMETER	MINIMUMS VALUE	MINIMUMS TIME (hr)	MAXIMUMS VALUE	MAXIMUMS TIME (hr)
BASINA	STAGE (ft):	84.00	7.92	86.98	24.00
	VOLUME (af):	.00	7.75	4.30	24.00
	RUNOFF (cfs):	.00	7.75	54.18	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	24.00	.00	24.00
BASINB	STAGE (ft):	80.00	9.17	82.81	18.00
	VOLUME (af):	.00	9.08	2.94	18.00
	RUNOFF (cfs):	.00	9.08	43.32	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	16.50	1.15	18.00
BASINC	STAGE (ft):	82.00	7.67	85.28	12.75
	VOLUME (af):	.00	7.50	2.10	12.75
	RUNOFF (cfs):	.00	7.50	46.88	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	12.00	7.01	12.75
BASIND	STAGE (ft):	86.00	10.00	88.81	24.00
	VOLUME (af):	.00	9.92	2.07	24.00
	RUNOFF (cfs):	.00	9.92	25.44	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	24.00	.00	24.00
BASINE	STAGE (ft):	79.00	10.50	80.63	14.75
	VOLUME (af):	.00	10.50	3.62	14.75
	RUNOFF (cfs):	.00	10.50	65.78	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	13.00	3.48	14.75

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PROPOSED 10 YEAR 24 HOUR STORM EVENT (P1024)
10-28-07

NODAL MIN/MAX/TIME CONDITIONS REPORT

NODE ID	PARAMETER	MINIMUMS VALUE	MINIMUMS TIME (hr)	MAXIMUMS VALUE	MAXIMUMS TIME (hr)
BASINF	STAGE (ft):	92.00	7.17	94.56	12.25
	VOLUME (af):	.00	7.00	2.69	12.25
	RUNOFF (cfs):	.00	7.00	77.99	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	11.92	33.89	12.25
BASINH	STAGE (ft):	79.00	10.42	80.54	18.00
	VOLUME (af):	.00	10.25	1.44	18.00
	RUNOFF (cfs):	.00	10.25	21.37	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	16.00	.70	18.00
BASINI	STAGE (ft):	76.00	10.67	77.77	19.50
	VOLUME (af):	.00	10.67	.48	19.50
	RUNOFF (cfs):	.00	10.67	6.69	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	17.50	.20	19.50
BASINJ	STAGE (ft):	77.00	7.17	85.28	24.00
	VOLUME (af):	.00	7.08	6.49	24.00
	RUNOFF (cfs):	.00	7.08	81.92	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	24.00	.00	24.00
97	STAGE (ft):	78.00	24.00	79.00	12.00
	VOLUME (af):	.00	6.25	2.60	24.00
	RUNOFF (cfs):	.00	24.00	.00	24.00
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	6.25	7.22	12.75
	OUTFLOW (cfs):	.00	24.00	.00	24.00

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PROPOSED 10 YEAR 24 HOUR STORM EVENT (P1024)
10-28-07

NODAL MIN/MAX/TIME CONDITIONS REPORT

NODE ID	PARAMETER	MINIMUMS VALUE	MINIMUMS TIME (hr)	MAXIMUMS VALUE	MAXIMUMS TIME (hr)
98	STAGE (ft):	60.00	24.00	62.00	12.00
	VOLUME (af):	.00	16.00	.42	24.00
	RUNOFF (cfs):	.00	24.00	.00	24.00
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	16.00	.84	19.00
	OUTFLOW (cfs):	.00	24.00	.00	24.00
99	STAGE (ft):	62.00	24.00	63.00	12.00
	VOLUME (af):	.00	24.00	.00	24.00
	RUNOFF (cfs):	.00	24.00	.00	24.00
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	24.00	.00	24.00
100	STAGE (ft):	69.00	.00	73.00	12.00
	VOLUME (af):	.00	24.00	.00	24.00
	RUNOFF (cfs):	.00	24.00	.00	24.00
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	24.00	.00	24.00
BASINE2	STAGE (ft):	78.00	11.92	79.42	24.00
	VOLUME (af):	.00	11.92	6.07	24.00
	RUNOFF (cfs):	.00	24.00	.00	24.00
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	11.92	33.89	12.25
	OUTFLOW (cfs):	.00	24.00	.00	24.00
BASINAB	STAGE (ft):	81.25	6.25	81.81	23.50
	VOLUME (af):	.00	6.00	1.21	23.50
	RUNOFF (cfs):	.00	6.00	18.38	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	6.25	.26	23.50

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PROPOSED 25 YEAR 24 HOUR STORM EVENT (P2524)
10-28-07

BASIN NAME NODE NAME	BASINA BASINA	BASINB BASINB	BASINC BASINC	BASIND BASIND	BASINE BASINE
TIME INCREMENT (min)	5.00	5.00	5.00	5.00	5.00
RAINFALL FILE	SCSII-24	SCSII-24	SCSII-24	SCSII-24	SCSII-24
RAIN AMOUNT (in)	8.40	8.40	8.40	8.40	8.40
STORM DURATION (hrs)	24.00	24.00	24.00	24.00	24.00
AREA (ac)	13.11	12.52	11.00	8.64	25.64
CURVE NUMBER	69.24	63.69	70.32	59.49	56.42
DCIA (%)	.00	.00	.00	.00	.00
TC (mins)	10.00	10.00	10.00	10.00	10.00
LAG TIME (hrs)	.00	.00	.00	.00	.00
BASIN STATUS	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE

BASIN	QMX (cfs)	TMX (hrs)	VOL (in)	NOTES
BASINA	66.16	11.92	4.71	
BASINB	54.16	11.92	4.06	
BASINC	57.00	11.92	4.84	
BASIND	32.51	11.92	3.57	
BASINE	85.74	11.92	3.22	

BASIN NAME NODE NAME	BASINF BASINF	BASINH BASINH	BASINI BASINI	BASINJ BASINJ	BASINAB BASINAB
TIME INCREMENT (min)	5.00	5.00	5.00	5.00	5.00
RAINFALL FILE	SCSII-24	SCSII-24	SCSII-24	SCSII-24	SCSII-24
RAIN AMOUNT (in)	8.40	8.40	8.40	8.40	8.40
STORM DURATION (hrs)	24.00	24.00	24.00	24.00	24.00
AREA (ac)	17.47	7.99	2.78	18.40	3.75
CURVE NUMBER	72.03	57.30	55.13	71.93	75.82
DCIA (%)	.00	.00	.00	.00	.00
TC (mins)	10.00	10.00	10.00	10.00	10.00
LAG TIME (hrs)	.00	.00	.00	.00	.00
BASIN STATUS	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE

BASIN	QMX (cfs)	TMX (hrs)	VOL (in)	NOTES
BASINF	94.24	11.92	5.05	
BASINH	27.68	11.92	3.32	
BASINI	8.80	11.92	3.07	
BASINJ	99.03	11.92	5.03	
BASINAB	21.93	11.92	5.50	

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PROPOSED 25 YEAR 24 HOUR STORM EVENT (P2524)
10-28-07

CONTROL PARAMETERS

START TIME: .00
END TIME: 24.00

TO TIME (hours)	SIMULATION INC (secs)	PRINT INC (mins)
4.00	2.00	30.00
7.00	2.00	15.00
12.00	2.00	5.00
17.00	2.00	15.00
24.00	2.00	30.00

RUNOFF HYDROGRAPH FILE: DEFAULT
OFFSITE HYDROGRAPH FILE: DEFAULT
BOUNDARY DATABASE FILE: NONE

NOTE:

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10-28-07

NODE NAME	NODE TYPE	INI STAGE (ft)	X-COOR (ft)	Y-COOR (ft)	LENGTH (ft)	STAGE (ft)	AR/TM/STR (ac/hr/af)
BASINA	AREA	84.000	.000	.000	.000	84.000	1.150
						85.000	1.340
						86.000	1.540
						87.000	1.740
						88.000	1.940
BASINB	AREA	80.000	.000	.000	.000	80.000	.900
						81.000	.980
						82.000	1.080
						83.000	1.320
BASINC	AREA	82.000	.000	.000	.000	82.000	.470
						83.000	.570
						84.000	.670
						85.000	.790
BASIND	AREA	86.000	.000	.000	.000	86.000	.610
						87.000	.700
						88.000	.790
						89.000	.880
						90.000	.970
BASINE	AREA	79.000	.000	.000	.000	79.000	1.880
						80.000	2.280
						81.000	2.640
						82.000	3.000
BASINF	AREA	92.000	.000	.000	.000	92.000	.920
						93.000	1.020
						94.000	1.120
						95.000	1.230
BASINH	AREA	79.000	.000	.000	.000	79.000	.737
						80.000	.957
						81.000	1.220
						82.000	1.490
BASINI	AREA	76.000	.000	.000	.000	76.000	.180
						77.000	.280
						78.000	.380

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PROPOSED 25 YEAR 24 HOUR STORM EVENT (P2524)
10-28-07

NODE NAME	NODE TYPE	INI STAGE (ft)	X-COOR (ft)	Y-COOR (ft)	LENGTH (ft)	STAGE (ft)	AR/TM/STR (ac/hr/af)
BASINJ	AREA	77.000	.000	.000	.000	77.000	.650
						78.000	.690
						79.000	.730
						80.000	.770
						81.000	.810
						82.000	.830
						83.000	.840
						84.000	.840
						85.000	.840
						86.000	.850
97	TIME	78.000	.000	.000	.000	78.000	.000
						79.000	12.000
						78.000	24.000
98	TIME	60.000	.000	.000	.000	60.000	.000
						62.000	12.000
						60.000	24.000
99	TIME	62.000	.000	.000	.000	62.000	.000
						63.000	12.000
						62.000	24.000
100	TIME	69.000	.000	.000	.000	72.500	.000
						73.000	12.000
						72.500	24.000
BASINE2	AREA	78.000	.000	.000	.000	78.000	4.170
						79.000	4.290
						80.000	4.410
						81.000	4.530
						82.000	5.160
BASINAB	AREA	81.250	.000	.000	.000	81.250	2.130
						82.000	2.220
						83.000	2.340

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PROPOSED 25 YEAR 24 HOUR STORM EVENT (P2524)
10-28-07

```
>>REACH NAME       : RA
  FROM NODE        : BASINA
  TO NODE          : 97
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 87.500 BTM. WIDTH (ft): 25.000 LEFT SS (h/v): 4.000
     RGHT SS (h/v): 4.000 OPENING (ft): 999.000 WEIR COEF.: 3.000
        GATE COEF.: .600 NUMBER OF ELEM.: 1.000
              NOTE:

>>REACH NAME       : RB
  FROM NODE        : BASINB
  TO NODE          : 97
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 82.750 BTM. WIDTH (ft): 25.000 LEFT SS (h/v): 4.000
     RGHT SS (h/v): 4.000 OPENING (ft): 999.000 WEIR COEF.: 3.000
        GATE COEF.: .600 NUMBER OF ELEM.: 1.000
              NOTE:

>>REACH NAME       : RC
  FROM NODE        : BASINC
  TO NODE          : 97
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 85.000 BTM. WIDTH (ft): 15.000 LEFT SS (h/v): 4.000
     RGHT SS (h/v): 4.000 OPENING (ft): 999.000 WEIR COEF.: 3.000
        GATE COEF.: .600 NUMBER OF ELEM.: 1.000
              NOTE:

>>REACH NAME       : RE
  FROM NODE        : BASINE
  TO NODE          : BASINE2
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 80.500 BTM. WIDTH (ft): 25.000 LEFT SS (h/v): 4.000
     RGHT SS (h/v): 4.000 OPENING (ft): 999.000 WEIR COEF.: 3.000
        GATE COEF.: .600 NUMBER OF ELEM.: 1.000
              NOTE:

>>REACH NAME       : RF
  FROM NODE        : BASINF
  TO NODE          : BASINE2
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 94.000 BTM. WIDTH (ft): 25.000 LEFT SS (h/v): 4.000
     RGHT SS (h/v): 4.000 OPENING (ft): 999.000 WEIR COEF.: 3.000
        GATE COEF.: .600 NUMBER OF ELEM.: 1.000
              NOTE:
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PROPOSED 25 YEAR 24 HOUR STORM EVENT (P2524)
10-28-07

```
>>REACH NAME       : RH
  FROM NODE        : BASINH
  TO NODE          : 98
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft):  80.500 BTM. WIDTH (ft):  25.000   LEFT SS (h/v):   4.000
     RGHT SS (h/v):   4.000    OPENING (ft): 999.000     WEIR COEF.:   3.000
        GATE COEF.:    .600 NUMBER OF ELEM.:   1.000
              NOTE:

>>REACH NAME       : RI
  FROM NODE        : BASINI
  TO NODE          : 98
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft):  77.750 BTM. WIDTH (ft):  25.000   LEFT SS (h/v):   4.000
     RGHT SS (h/v):   4.000    OPENING (ft): 999.000     WEIR COEF.:   3.000
        GATE COEF.:    .600 NUMBER OF ELEM.:   1.000
              NOTE:

>>REACH NAME       : RJ
  FROM NODE        : BASINJ
  TO NODE          : 99
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft):  85.500 BTM. WIDTH (ft):  25.000   LEFT SS (h/v):   4.000
     RGHT SS (h/v):   4.000    OPENING (ft): 999.000     WEIR COEF.:   3.000
        GATE COEF.:    .600 NUMBER OF ELEM.:   1.000
              NOTE:
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PROPOSED 25 YEAR 24 HOUR STORM EVENT (P2524)
10-28-07

```
>>REACH NAME       : RD
  FROM NODE        : BASIND
  TO NODE          : 97
  REACH TYPE       : DROP STRUCTURE w/ CIRC. CULVERT
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
  TURBO SWITCH     : OFF

  CULVERT DATA     :
        SPAN (in):  18.000       RISE (in):  18.000     LENGTH (ft): 361.000
   U/S INVERT (ft): 82.000 D/S INVERT (ft):  79.000       MANNING N:    .013
      ENTRNC LOSS:    .500   # OF CULVERTS:   1.000

  POSITION A       : RECTANGULAR RISER SLOT
    CREST EL. (ft): 89.500  CREST LN. (ft):  10.160    OPENING (ft): 999.000
       WEIR COEF.:   3.200      GATE COEF.:    .600 NUMBER OF ELEM.:   1.000

  POSITION B       : NOT USED

             NOTE:

>>REACH NAME       : RAB
  FROM NODE        : BASINAB
  TO NODE          : 97
  REACH TYPE       : DROP STRUCTURE w/ CIRC. CULVERT
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
  TURBO SWITCH     : OFF

  CULVERT DATA     :
        SPAN (in):  12.000       RISE (in):  12.000     LENGTH (ft):  90.000
   U/S INVERT (ft): 79.250 D/S INVERT (ft):  79.000       MANNING N:    .013
      ENTRNC LOSS:    .500   # OF CULVERTS:   1.000

  POSITION A       : RECTANGULAR RISER SLOT
    CREST EL. (ft): 82.500  CREST LN. (ft):  10.160    OPENING (ft): 999.000
       WEIR COEF.:   3.200      GATE COEF.:    .600 NUMBER OF ELEM.:   1.000

  POSITION B       : CIRCULAR RISER SLOT
    INVERT EL. (ft): 81.250       SPAN (in):   4.000       RISE (in):   4.000
       WEIR COEF.:   3.200      GATE COEF.:    .600 NUMBER OF ELEM.:   1.000

             NOTE:
```

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10-28-07

REACH SUMMARY

INDEX	RCHNAME	FRMNODE	TONODE	REACH TYPE
1	RA	BASINA	97	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
2	RB	BASINB	97	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
3	RC	BASINC	97	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
4	RE	BASINE	BASINE2	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
5	RF	BASINF	BASINE2	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
6	RH	BASINH	98	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
7	RI	BASINI	98	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
8	RJ	BASINJ	99	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
9	RD	BASIND	97	DROP STRUCTURE w/ CIRC. CULVERT
10	RAB	BASINAB	97	DROP STRUCTURE w/ CIRC. CULVERT

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PROPOSED 25 YEAR 24 HOUR STORM EVENT (P2524)
10-28-07

NODAL MIN/MAX/TIME CONDITIONS REPORT

NODE ID	PARAMETER	<-- MINIMUMS --> VALUE	TIME (hr)	<-- MAXIMUMS --> VALUE	TIME (hr)
BASINA	STAGE (ft):	84.00	7.25	87.50	24.00
	VOLUME (af):	.00	7.08	5.24	24.00
	RUNOFF (cfs):	.00	7.08	66.16	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	24.00	.00	24.00
BASINB	STAGE (ft):	80.00	8.50	82.86	14.25
	VOLUME (af):	.00	8.50	3.01	14.25
	RUNOFF (cfs):	.00	8.50	54.16	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	13.25	2.91	14.25
BASINC	STAGE (ft):	82.00	6.75	85.48	12.25
	VOLUME (af):	.00	6.75	2.22	12.25
	RUNOFF (cfs):	.00	6.75	57.00	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	12.00	16.92	12.25
BASIND	STAGE (ft):	86.00	9.42	89.41	24.00
	VOLUME (af):	.00	9.33	2.62	24.00
	RUNOFF (cfs):	.00	9.33	32.51	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	24.00	.00	24.00
BASINE	STAGE (ft):	79.00	10.00	80.74	13.25
	VOLUME (af):	.00	9.92	3.89	13.25
	RUNOFF (cfs):	.00	9.92	85.74	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	12.25	8.95	13.25

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PROPOSED 25 YEAR 24 HOUR STORM EVENT (P2524)
10-28-07

NODAL MIN/MAX/TIME CONDITIONS REPORT

NODE ID	PARAMETER	MINIMUMS VALUE	MINIMUMS TIME (hr)	MAXIMUMS VALUE	MAXIMUMS TIME (hr)
BASINF	STAGE (ft):	92.00	6.50	94.70	12.25
	VOLUME (af):	.00	6.50	2.86	12.25
	RUNOFF (cfs):	.00	6.50	94.24	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	11.83	48.74	12.25
BASINH	STAGE (ft):	79.00	9.83	80.58	14.00
	VOLUME (af):	.00	9.75	1.48	14.00
	RUNOFF (cfs):	.00	9.75	27.68	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	13.00	1.71	14.00
BASINI	STAGE (ft):	76.00	10.25	77.79	14.25
	VOLUME (af):	.00	10.17	.49	14.25
	RUNOFF (cfs):	.00	10.17	8.80	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	13.50	.52	14.25
BASINJ	STAGE (ft):	77.00	6.50	85.60	17.50
	VOLUME (af):	.00	6.50	6.76	17.50
	RUNOFF (cfs):	.00	6.50	99.03	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	16.50	2.53	17.50
97	STAGE (ft):	78.00	24.00	79.00	12.00
	VOLUME (af):	.00	5.75	4.27	24.00
	RUNOFF (cfs):	.00	24.00	.00	24.00
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	5.75	17.14	12.25
	OUTFLOW (cfs):	.00	24.00	.00	24.00

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PROPOSED 25 YEAR 24 HOUR STORM EVENT (P2524)
10-28-07

NODAL MIN/MAX/TIME CONDITIONS REPORT

NODE ID	PARAMETER	MINIMUMS VALUE	MINIMUMS TIME (hr)	MAXIMUMS VALUE	MAXIMUMS TIME (hr)
98	STAGE (ft):	60.00	24.00	62.00	12.00
	VOLUME (af):	.00	13.00	1.06	24.00
	RUNOFF (cfs):	.00	24.00	.00	24.00
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	13.00	2.23	14.25
	OUTFLOW (cfs):	.00	24.00	.00	24.00
99	STAGE (ft):	62.00	24.00	63.00	12.00
	VOLUME (af):	.00	16.50	1.13	24.00
	RUNOFF (cfs):	.00	24.00	.00	24.00
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	16.50	2.53	17.50
	OUTFLOW (cfs):	.00	24.00	.00	24.00
100	STAGE (ft):	69.00	.00	73.00	12.00
	VOLUME (af):	.00	24.00	.00	24.00
	RUNOFF (cfs):	.00	24.00	.00	24.00
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	24.00	.00	24.00
BASINE2	STAGE (ft):	78.00	11.83	80.06	24.00
	VOLUME (af):	.00	11.83	8.86	24.00
	RUNOFF (cfs):	.00	24.00	.00	24.00
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	11.83	48.74	12.25
	OUTFLOW (cfs):	.00	24.00	.00	24.00
BASINAB	STAGE (ft):	81.25	5.75	81.92	23.50
	VOLUME (af):	.00	5.50	1.47	23.50
	RUNOFF (cfs):	.00	5.50	21.93	11.92
	OFFSITE (cfs):	.00	24.00	.00	24.00
	OTHER (cfs):	.00	24.00	.00	24.00
	OUTFLOW (cfs):	.00	5.75	.30	23.50

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PROPOSED 25 YEAR 96 HOUR STORM EVENT (P2596)
10-28-07

BASIN NAME	BASINA	BASINB	BASINC	BASIND	BASINE
NODE NAME	BASINA	BASINB	BASINC	BASIND	BASINE
TIME INCREMENT (min)	5.00	5.00	5.00	5.00	5.00
RAINFALL FILE	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96
RAIN AMOUNT (in)	11.40	11.40	11.40	11.40	11.40
STORM DURATION (hrs)	96.00	96.00	96.00	96.00	96.00
AREA (ac)	13.11	12.52	11.00	8.64	25.64
CURVE NUMBER	69.24	63.69	70.32	59.49	56.42
DCIA (%)	.00	.00	.00	.00	.00
TC (mins)	10.00	10.00	10.00	10.00	10.00
LAG TIME (hrs)	.00	.00	.00	.00	.00
BASIN STATUS	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE

BASIN	QMX (cfs)	TMX (hrs)	VOL (in)	NOTES
BASINA	60.38	59.92	7.39	
BASINB	52.51	59.92	6.59	
BASINC	51.48	59.92	7.54	
BASIND	33.26	59.92	5.98	
BASINE	91.81	59.92	5.52	

BASIN NAME	BASINF	BASINH	BASINI	BASINJ	BASINAB
NODE NAME	BASINF	BASINH	BASINI	BASINJ	BASINAB
TIME INCREMENT (min)	5.00	5.00	5.00	5.00	5.00
RAINFALL FILE	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96
RAIN AMOUNT (in)	11.40	11.40	11.40	11.40	11.40
STORM DURATION (hrs)	96.00	96.00	96.00	96.00	96.00
AREA (ac)	17.47	7.99	2.78	18.40	3.75
CURVE NUMBER	72.03	57.30	55.13	71.93	75.82
DCIA (%)	.00	.00	.00	.00	.00
TC (mins)	10.00	10.00	10.00	10.00	10.00
LAG TIME (hrs)	.00	.00	.00	.00	.00
BASIN STATUS	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE

BASIN	QMX (cfs)	TMX (hrs)	VOL (in)	NOTES
BASINF	83.73	59.92	7.78	
BASINH	29.24	59.92	5.65	
BASINI	9.63	59.92	5.33	
BASINJ	88.07	59.92	7.76	
BASINAB	18.84	59.92	8.30	

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PROPOSED 25 YEAR 96 HOUR STORM EVENT (P2596)
10-28-07

CONTROL PARAMETERS
==================

START TIME: .00
END TIME: 96.00

TO TIME (hours)	SIMULATION INC (secs)	PRINT INC (mins)
24.00	2.00	30.00
48.00	2.00	15.00
60.00	2.00	5.00
72.00	2.00	15.00
96.00	2.00	30.00

RUNOFF HYDROGRAPH FILE: DEFAULT
OFFSITE HYDROGRAPH FILE: DEFAULT
BOUNDARY DATABASE FILE: NONE

NOTE:

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PROPOSED 25 YEAR 96 HOUR STORM EVENT (P2596)
10-28-07

NODE NAME	NODE TYPE	INI STAGE (ft)	X-COOR (ft)	Y-COOR (ft)	LENGTH (ft)	STAGE (ft)	AR/TM/STR (ac/hr/af)
BASINA	AREA	84.000	.000	.000	.000	84.000	1.150
						85.000	1.340
						86.000	1.540
						87.000	1.740
						88.000	1.940
BASINB	AREA	80.000	.000	.000	.000	80.000	.900
						81.000	.980
						82.000	1.080
						83.000	1.320
BASINC	AREA	82.000	.000	.000	.000	82.000	.470
						83.000	.570
						84.000	.670
						85.000	.790
						85.500	.860
BASIND	AREA	86.000	.000	.000	.000	86.000	.610
						87.000	.700
						88.000	.790
						89.000	.880
						90.000	.970
BASINE	AREA	79.000	.000	.000	.000	79.000	1.880
						80.000	2.280
						81.000	2.640
						82.000	3.000
BASINF	AREA	92.000	.000	.000	.000	92.000	.920
						93.000	1.020
						94.000	1.120
						95.000	1.230
BASINH	AREA	79.000	.000	.000	.000	79.000	.737
						80.000	.957
						81.000	1.220
						82.000	1.490
BASINI	AREA	76.000	.000	.000	.000	76.000	.180
						77.000	.280
						78.000	.380

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PROPOSED 25 YEAR 96 HOUR STORM EVENT (P2596)
10-28-07

NODE NAME	NODE TYPE	INI STAGE (ft)	X-COOR (ft)	Y-COOR (ft)	LENGTH (ft)	STAGE (ft)	AR/TM/STR (ac/hr/af)
BASINJ	AREA	77.000	.000	.000	.000	77.000	.650
						78.000	.690
						79.000	.730
						80.000	.770
						81.000	.810
						82.000	.830
						83.000	.840
						84.000	.840
						85.000	.840
						86.000	.850
97	TIME	78.000	.000	.000	.000	78.000	.000
						79.000	48.000
						78.000	96.000
98	TIME	60.000	.000	.000	.000	60.000	.000
						62.000	48.000
						60.000	96.000
99	TIME	62.000	.000	.000	.000	62.000	.000
						63.000	48.000
						62.000	96.000
100	TIME	69.000	.000	.000	.000	72.500	.000
						73.000	48.000
						72.500	96.000
BASINE2	AREA	78.000	.000	.000	.000	78.000	4.170
						79.000	4.290
						80.000	4.410
						81.000	4.530
						82.000	5.160
BASINAB	AREA	81.250	.000	.000	.000	81.250	2.130
						82.000	2.220
						83.000	2.340

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PROPOSED 25 YEAR 96 HOUR STORM EVENT (P2596)
10-28-07

```
>>REACH NAME       : RA
  FROM NODE        : BASINA
  TO NODE          : 97
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 87.500 BTM. WIDTH (ft): 25.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:

>>REACH NAME       : RB
  FROM NODE        : BASINB
  TO NODE          : 97
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 82.750 BTM. WIDTH (ft): 25.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:

>>REACH NAME       : RC
  FROM NODE        : BASINC
  TO NODE          : 97
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 85.000 BTM. WIDTH (ft): 15.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:

>>REACH NAME       : RE
  FROM NODE        : BASINE
  TO NODE          : BASINE2
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 80.500 BTM. WIDTH (ft): 25.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:

>>REACH NAME       : RF
  FROM NODE        : BASINF
  TO NODE          : BASINE2
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 94.000 BTM. WIDTH (ft): 25.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:
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PROPOSED 25 YEAR 96 HOUR STORM EVENT (P2596)
10-28-07

```
>>REACH NAME       : RH
  FROM NODE        : BASINH
  TO NODE          : 98
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 80.500 BTM. WIDTH (ft): 25.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:

>>REACH NAME       : RI
  FROM NODE        : BASINI
  TO NODE          : 98
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 77.750 BTM. WIDTH (ft): 25.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:

>>REACH NAME       : RJ
  FROM NODE        : BASINJ
  TO NODE          : 99
  REACH TYPE       : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 85.500 BTM. WIDTH (ft): 25.000  LEFT SS (h/v):  4.000
     RGHT SS (h/v):  4.000   OPENING (ft): 999.000    WEIR COEF.:  3.000
        GATE COEF.:   .600 NUMBER OF ELEM.:  1.000
              NOTE:
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PROPOSED 25 YEAR 96 HOUR STORM EVENT (P2596)
10-28-07

```
>>REACH NAME       : RD
  FROM NODE        : BASIND
  TO NODE          : 97
  REACH TYPE       : DROP STRUCTURE w/ CIRC. CULVERT
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
  TURBO SWITCH     : OFF

  CULVERT DATA     :
        SPAN (in):  18.000       RISE (in):  18.000     LENGTH (ft): 361.000
   U/S INVERT (ft): 82.000 D/S INVERT (ft):  79.000       MANNING N:    .013
      ENTRNC LOSS:    .500   # OF CULVERTS:   1.000

  POSITION A       : RECTANGULAR RISER SLOT
    CREST EL. (ft): 89.500  CREST LN. (ft): 10.160    OPENING (ft): 999.000
       WEIR COEF.:  3.200      GATE COEF.:    .600 NUMBER OF ELEM.:   1.000

  POSITION B       : NOT USED

             NOTE:

>>REACH NAME       : RAB
  FROM NODE        : BASINAB
  TO NODE          : 97
  REACH TYPE       : DROP STRUCTURE w/ CIRC. CULVERT
  FLOW DIRECTION   : POSITIVE AND NEGATIVE FLOWS ALLOWED
  TURBO SWITCH     : OFF

  CULVERT DATA     :
        SPAN (in):  12.000       RISE (in):  12.000     LENGTH (ft):  90.000
   U/S INVERT (ft): 79.250 D/S INVERT (ft):  79.000       MANNING N:    .013
      ENTRNC LOSS:    .500   # OF CULVERTS:   1.000

  POSITION A       : RECTANGULAR RISER SLOT
    CREST EL. (ft): 82.500  CREST LN. (ft): 10.160    OPENING (ft): 999.000
       WEIR COEF.:  3.200      GATE COEF.:    .600 NUMBER OF ELEM.:   1.000

  POSITION B       : CIRCULAR RISER SLOT
   INVERT EL. (ft): 81.250       SPAN (in):   4.000       RISE (in):   4.000
       WEIR COEF.:  3.200      GATE COEF.:    .600 NUMBER OF ELEM.:   1.000

             NOTE:
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PROPOSED 25 YEAR 96 HOUR STORM EVENT (P2596)
10-28-07

REACH SUMMARY

INDEX	RCHNAME	FRMNODE	TONODE	REACH TYPE
1	RA	BASINA	97	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
2	RB	BASINB	97	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
3	RC	BASINC	97	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
4	RE	BASINE	BASINE2	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
5	RF	BASINF	BASINE2	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
6	RH	BASINH	98	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
7	RI	BASINI	98	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
8	RJ	BASINJ	99	TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
9	RD	BASIND	97	DROP STRUCTURE w/ CIRC. CULVERT
10	RAB	BASINAB	97	DROP STRUCTURE w/ CIRC. CULVERT

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PROPOSED 25 YEAR 96 HOUR STORM EVENT (P2596)
10-28-07

NODAL MIN/MAX/TIME CONDITIONS REPORT

NODE ID	PARAMETER	<-- MINIMUMS --> VALUE	TIME (hr)	<-- MAXIMUMS --> VALUE	TIME (hr)
BASINA	STAGE (ft):	84.00	27.25	87.62	62.25
	VOLUME (af):	.00	27.25	5.46	62.25
	RUNOFF (cfs):	.00	27.25	60.38	59.92
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	96.00	.00	96.00
	OUTFLOW (cfs):	.00	61.00	3.11	62.25
BASINB	STAGE (ft):	80.00	31.00	83.14	60.25
	VOLUME (af):	.00	31.00	3.33	60.25
	RUNOFF (cfs):	.00	31.00	52.51	59.92
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	96.00	.00	96.00
	OUTFLOW (cfs):	.00	59.92	19.21	60.25
BASINC	STAGE (ft):	82.00	26.50	85.83	60.00
	VOLUME (af):	.00	26.50	2.56	60.00
	RUNOFF (cfs):	.00	26.50	51.48	59.92
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	96.00	.00	96.00
	OUTFLOW (cfs):	.00	59.58	41.62	60.00
BASIND	STAGE (ft):	86.00	34.50	89.63	63.75
	VOLUME (af):	.00	34.25	2.82	63.75
	RUNOFF (cfs):	.00	34.25	33.26	59.92
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	96.00	.00	96.00
	OUTFLOW (cfs):	.00	61.25	1.59	63.75
BASINE	STAGE (ft):	79.00	37.25	81.48	96.00
	VOLUME (af):	.00	37.00	5.90	96.00
	RUNOFF (cfs):	.00	37.00	91.81	59.92
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	96.00	.00	96.00
	OUTFLOW (cfs):	.00	59.75	39.21	60.25

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PROPOSED 25 YEAR 96 HOUR STORM EVENT (P2596)
10-28-07

NODAL MIN/MAX/TIME CONDITIONS REPORT

NODE ID	PARAMETER	MINIMUMS VALUE	MINIMUMS TIME (hr)	MAXIMUMS VALUE	MAXIMUMS TIME (hr)
BASINF	STAGE (ft):	92.00	25.50	94.91	60.00
	VOLUME (af):	.00	25.50	3.11	60.00
	RUNOFF (cfs):	.00	25.50	83.73	59.92
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	96.00	.00	96.00
	OUTFLOW (cfs):	.00	58.58	75.11	60.00
BASINH	STAGE (ft):	79.00	36.25	80.77	60.25
	VOLUME (af):	.00	36.25	1.68	60.25
	RUNOFF (cfs):	.00	36.25	29.24	59.92
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	96.00	.00	96.00
	OUTFLOW (cfs):	.00	59.92	10.89	60.25
BASINI	STAGE (ft):	76.00	38.50	77.90	60.25
	VOLUME (af):	.00	38.25	.53	60.25
	RUNOFF (cfs):	.00	38.25	9.63	59.92
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	96.00	.00	96.00
	OUTFLOW (cfs):	.00	60.00	4.32	60.25
BASINJ	STAGE (ft):	77.00	25.50	85.86	60.50
	VOLUME (af):	.00	25.50	6.99	60.50
	RUNOFF (cfs):	.00	25.50	88.07	59.92
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	96.00	.00	96.00
	OUTFLOW (cfs):	.00	60.25	17.48	60.50
97	STAGE (ft):	78.00	96.00	79.00	48.00
	VOLUME (af):	.00	23.00	14.62	96.00
	RUNOFF (cfs):	.00	96.00	.00	96.00
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	23.00	48.88	60.25
	OUTFLOW (cfs):	.00	96.00	.00	96.00

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PROPOSED 25 YEAR 96 HOUR STORM EVENT (P2596)
10-28-07

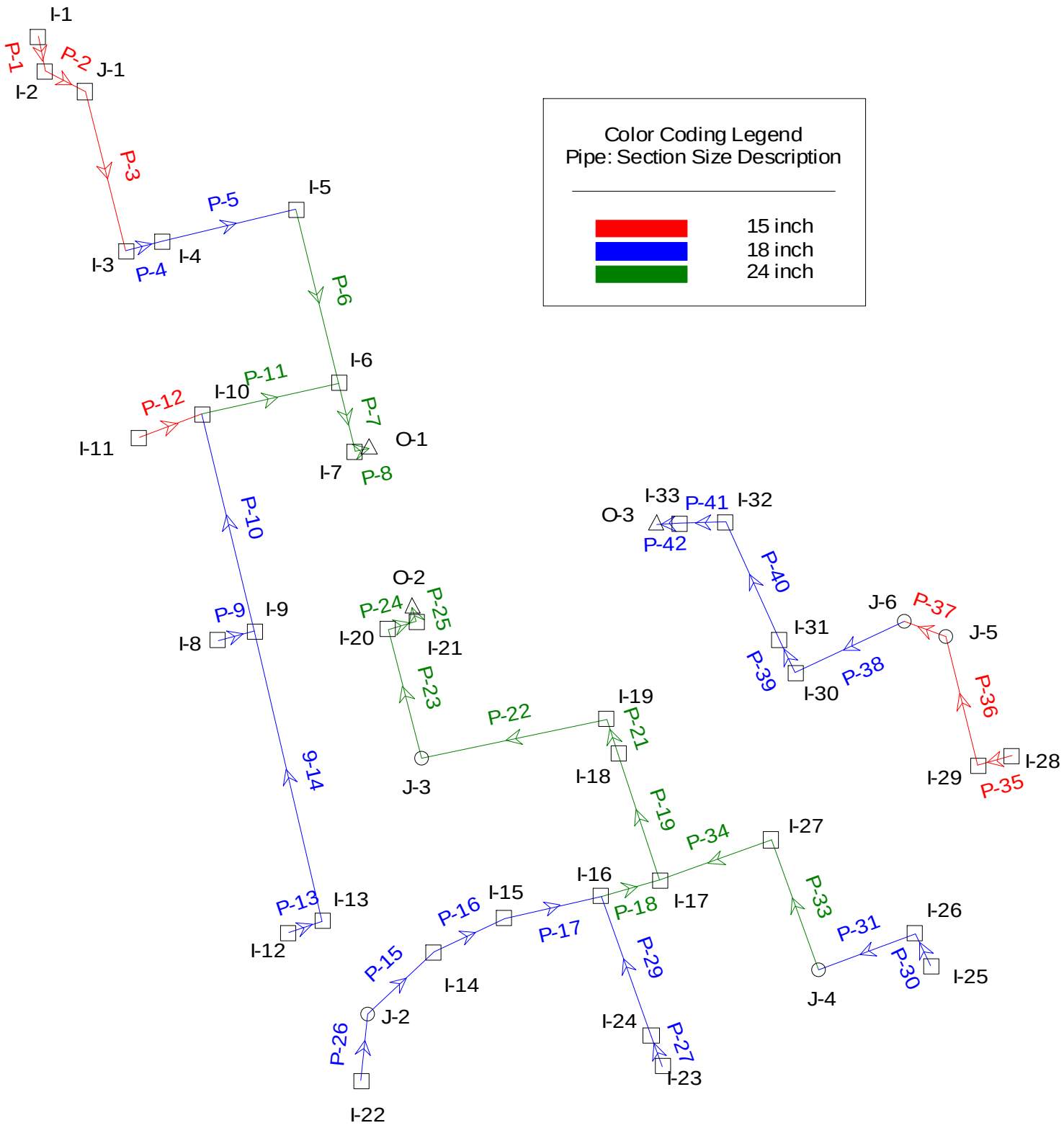
NODAL MIN/MAX/TIME CONDITIONS REPORT

NODE ID	PARAMETER	MINIMUMS VALUE	MINIMUMS TIME (hr)	MAXIMUMS VALUE	MAXIMUMS TIME (hr)
98	STAGE (ft):	60.00	96.00	62.00	48.00
	VOLUME (af):	.00	59.92	3.15	96.00
	RUNOFF (cfs):	.00	96.00	.00	96.00
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	59.92	15.20	60.25
	OUTFLOW (cfs):	.00	96.00	.00	96.00
99	STAGE (ft):	62.00	96.00	63.00	48.00
	VOLUME (af):	.00	60.25	5.32	96.00
	RUNOFF (cfs):	.00	96.00	.00	96.00
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	60.25	17.48	60.50
	OUTFLOW (cfs):	.00	96.00	.00	96.00
100	STAGE (ft):	69.00	.00	73.00	48.00
	VOLUME (af):	.00	96.00	.00	96.00
	RUNOFF (cfs):	.00	96.00	.00	96.00
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	96.00	.00	96.00
	OUTFLOW (cfs):	.00	96.00	.00	96.00
BASINE2	STAGE (ft):	78.00	58.58	81.48	96.00
	VOLUME (af):	.00	58.58	15.38	96.00
	RUNOFF (cfs):	.00	96.00	.00	96.00
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	58.58	98.84	60.00
	OUTFLOW (cfs):	.00	96.00	.00	96.00
BASINAB	STAGE (ft):	81.25	23.00	82.11	68.50
	VOLUME (af):	.00	22.50	1.88	68.50
	RUNOFF (cfs):	.00	22.50	18.84	59.92
	OFFSITE (cfs):	.00	96.00	.00	96.00
	OTHER (cfs):	.00	96.00	.00	96.00
	OUTFLOW (cfs):	.00	23.00	.35	68.50

18971-3
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ALTAMONTE SVC. CTR

Secondary Drainage System Calculations (StormCAD)

Scenario: Base



Scenario: Base

Pipe Report

Label	Up. Invert (ft)	Dn. Invert (ft)	User L?	L (ft)	S (ft/ft)	Up. Node	Dn. Node	Size	Mannings n	Q Full (cfs)	HGL In (ft)	Avg. v (ft/s)	HGL Out (ft)	Material
P-1	89.81	89.67	false	28.00	0.005000	I-1	I-2	15 inch	0.012	4.95	90.03	2.18	90.04	HDPE
P-2	89.67	88.47	false	36.00	0.033333	I-2	J-1	15 inch	0.012	12.78	89.98	5.42	89.12	HDPE
P-3	88.47	84.61	false	129.00	0.029922	J-1	I-3	15 inch	0.012	12.10	89.01	7.14	85.41	HDPE
P-4	84.61	84.26	false	30.00	0.011667	I-3	I-4	18 inch	0.012	12.29	85.28	5.80	85.22	HDPE
P-5	84.26	82.90	false	108.00	0.012593	I-4	I-5	18 inch	0.012	12.77	85.06	6.54	83.87	HDPE
P-6	82.90	81.16	false	140.00	0.012429	I-5	I-6	24 inch	0.012	27.32	83.71	6.74	83.35	HDPE
P-7	81.16	81.05	false	55.00	0.002000	I-6	I-7	24 inch	0.012	10.96	83.08	5.73	82.58	HDPE
P-8	77.05	77.00	false	11.00	0.004545	I-7	O-1	24 inch	0.012	16.52	81.00	6.05	80.93	HDPE
P-9	81.79	81.73	false	29.00	0.002069	I-8	I-9	18 inch	0.012	5.18	85.38	2.56	85.34	HDPE
P-10	81.73	81.38	false	175.00	0.002000	I-9	I-10	18 inch	0.012	5.09	85.09	5.69	83.72	HDPE
P-11	81.38	81.16	false	110.00	0.002000	I-10	I-6	24 inch	0.012	10.96	83.61	3.80	83.35	HDPE
P-12	86.92	86.02	false	53.00	0.016981	I-11	I-10	15 inch	0.012	9.12	87.29	4.74	86.29	HDPE
P-13	83.78	83.32	false	28.00	0.016429	I-12	I-13	18 inch	0.012	14.59	85.76	1.41	85.75	HDPE
P-14	83.32	81.73	false	233.00	0.006824	I-13	I-9	18 inch	0.012	9.40	85.70	2.53	85.34	HDPE
P-15	82.34	82.15	false	71.00	0.002676	J-2	I-14	18 inch	0.012	5.89	85.07	2.34	84.97	HDPE
P-16	82.15	81.98	false	61.00	0.002787	I-14	I-15	18 inch	0.012	6.01	84.91	2.91	84.78	HDPE
P-17	81.98	81.76	false	78.00	0.002821	I-15	I-16	18 inch	0.012	6.04	84.72	2.92	84.56	HDPE
P-18	81.76	80.88	false	48.00	0.018333	I-16	I-17	24 inch	0.012	33.18	84.48	3.17	84.40	HDPE
P-19	80.88	80.67	false	105.00	0.002000	I-17	I-18	24 inch	0.012	10.96	84.22	4.80	83.82	HDPE
P-21	80.67	80.61	false	28.00	0.002143	I-18	I-19	24 inch	0.012	11.34	83.60	5.28	83.48	HDPE
P-22	80.61	78.96	false	148.00	0.011149	I-19	J-3	24 inch	0.012	25.88	83.22	5.75	82.42	HDPE
P-23	78.96	77.45	false	105.00	0.014381	J-3	I-20	24 inch	0.012	29.39	82.17	5.67	81.61	HDPE
P-24	77.45	77.12	false	23.00	0.014348	I-20	I-21	24 inch	0.012	29.35	81.36	5.67	81.24	HDPE
P-25	77.12	77.00	false	11.00	0.010909	I-21	O-2	24 inch	0.012	25.60	80.99	5.69	80.93	HDPE
P-26	82.48	82.34	false	53.00	0.002642	I-22	J-2	18 inch	0.012	5.85	85.18	2.37	85.11	HDPE
P-27	82.24	82.19	false	25.00	0.002000	I-24	I-23	18 inch	0.012	5.09	84.77	1.36	84.76	HDPE
P-29	82.19	81.76	false	116.00	0.003707	I-23	I-16	18 inch	0.012	6.93	84.71	2.37	84.56	HDPE
P-30	81.50	81.44	false	28.00	0.002143	I-25	I-26	18 inch	0.012	5.27	84.71	0.92	84.70	HDPE
P-31	81.44	81.28	false	81.00	0.001975	I-26	J-4	18 inch	0.012	5.06	84.65	2.60	84.52	HDPE
P-33	81.28	81.07	false	109.00	0.001927	J-4	I-27	24 inch	0.012	10.76	84.50	1.44	84.46	HDPE
P-34	81.07	80.88	false	93.00	0.002043	I-27	I-17	24 inch	0.012	11.08	84.44	1.69	84.40	HDPE
P-35	81.38	81.17	false	27.00	0.007778	I-28	I-29	15 inch	0.012	6.17	84.03	1.81	84.00	HDPE
P-36	81.17	80.39	false	104.00	0.007500	I-29	J-5	15 inch	0.012	6.06	83.84	4.48	83.20	HDPE
P-37	80.39	80.13	false	34.00	0.007647	J-5	J-6	15 inch	0.012	6.12	83.05	4.44	82.84	HDPE
P-38	80.13	79.41	false	94.00	0.007660	J-6	I-30	18 inch	0.012	9.96	82.77	3.07	82.55	HDPE
P-39	79.41	79.20	false	29.00	0.007241	I-30	I-31	18 inch	0.012	9.68	82.44	3.79	82.34	HDPE
P-40	79.20	78.45	false	101.00	0.007426	I-31	I-32	18 inch	0.012	9.81	82.19	4.48	81.70	HDPE
P-41	78.45	78.10	false	36.00	0.009722	I-32	I-33	18 inch	0.012	11.22	81.54	4.49	81.36	HDPE
P-42	78.10	77.00	false	18.00	0.061111	I-33	O-3	18 inch	0.012	28.13	81.09	5.99	80.93	HDPE

Scenario: Base

Inlet Report

Label	Inlet C	Area (acres)	Ground Elev. (ft)	Rim Elev. (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Inv. In Elev. (ft)	Inv. Out Elev. (ft)	Inlet CA (acres)	Time of Concentration (min)	Total Intercepted Flow (cfs)	Bypassed Additional Flow (cfs)	Desired Sump Depth (ft)	Sump Elevation (ft)
I-1	0.75	0.05	94.32	94.32	90.06	90.03	N/A	89.81	0.04	10.00	0.28	0.00	0.00	89.81
I-2	0.75	0.06	94.32	94.32	90.04	89.98	89.67	89.67	0.05	10.00	0.36	0.00	0.00	89.67
I-3	0.55	0.31	92.66	92.66	85.41	85.28	84.61	84.61	0.17	10.00	1.28	0.00	0.00	84.61
I-4	0.55	0.31	92.66	92.66	85.22	85.06	84.26	84.26	0.17	10.00	1.28	0.00	0.00	84.26
I-5	0.75	0.18	91.20	91.20	83.87	83.71	82.90	82.90	0.14	10.00	1.03	0.00	0.00	82.90
I-6	0.75	0.23	89.70	89.70	83.35	83.08	81.16	81.16	0.17	10.00	1.28	0.00	0.00	81.16
I-7	0.75	0.21	89.20	89.20	81.28	81.00	81.05	77.05	0.16	10.00	1.19	0.00	0.00	77.05
I-8	0.65	0.93	89.52	89.52	85.43	85.38	N/A	81.79	0.61	10.00	4.52	0.00	0.00	81.79
I-9	0.75	0.28	89.52	89.52	85.34	85.09	81.73	81.73	0.21	10.00	1.56	0.00	0.00	81.73
I-10	0.75	0.23	91.30	91.30	83.72	83.61	81.38	81.38	0.17	10.00	1.27	0.00	0.00	81.38
I-11	0.75	0.16	92.30	92.68	87.36	87.29	N/A	86.92	0.12	10.00	0.90	0.00	0.00	86.92
I-12	0.65	0.51	87.69	87.69	85.78	85.76	N/A	83.78	0.33	10.00	2.49	0.00	0.00	83.78
I-13	0.75	0.36	89.67	89.67	85.75	85.70	83.32	83.32	0.27	10.00	2.02	0.00	0.00	83.32
I-14	0.55	0.27	87.00	87.00	84.97	84.91	82.15	82.15	0.15	10.00	1.09	0.00	0.00	82.15
I-15	0.25	0.04	87.50	87.50	84.78	84.72	81.98	81.98	0.01	10.00	0.07	0.00	0.00	81.98
I-16	0.55	0.21	87.00	87.00	84.56	84.48	81.76	81.76	0.12	10.00	0.87	0.00	0.00	81.76
I-17	0.55	0.11	86.50	86.50	84.40	84.22	80.88	80.88	0.06	10.00	0.44	0.00	0.00	80.88
I-18	0.75	0.33	87.92	87.92	83.82	83.60	80.67	80.67	0.25	10.00	1.85	0.00	0.00	80.67
I-19	0.75	0.30	87.92	87.92	83.48	83.22	80.61	80.61	0.22	10.00	1.67	0.00	0.00	80.61
I-20	0.25	0.09	88.70	88.70	81.61	81.36	77.45	77.45	0.02	10.00	0.16	0.00	0.00	77.45
I-21	0.55	0.03	86.92	86.92	81.24	80.99	77.12	77.12	0.02	10.00	0.12	0.00	0.00	77.12
I-22	0.65	0.86	87.17	87.17	85.23	85.18	N/A	82.48	0.56	10.00	4.18	0.00	0.00	82.48
I-23	0.65	0.38	86.16	86.16	84.76	84.71	82.19	82.19	0.24	10.00	1.82	0.00	0.00	82.24
I-24	0.75	0.43	86.16	86.16	84.78	84.77	N/A	82.24	0.32	10.00	2.40	0.00	0.00	82.19
I-25	0.65	0.33	85.23	85.23	84.71	84.71	N/A	81.50	0.22	10.00	1.62	0.00	0.00	81.50
I-26	0.75	0.54	85.23	85.23	84.70	84.65	81.44	81.44	0.41	10.00	3.03	0.00	0.00	81.44
I-27	0.55	0.24	86.05	86.05	84.46	84.44	81.07	81.07	0.13	10.00	1.00	0.00	0.00	81.07
I-28	0.65	0.46	85.88	85.88	84.05	84.03	N/A	81.38	0.30	10.00	2.22	0.00	0.00	81.38
I-29	0.75	0.59	85.88	85.88	84.00	83.84	81.17	81.17	0.44	10.00	3.32	0.00	0.00	81.17
I-30	0.75	0.25	87.12	87.12	82.55	82.44	79.41	79.41	0.19	10.00	1.39	0.00	0.00	79.41
I-31	0.75	0.23	87.12	87.12	82.34	82.19	79.20	79.20	0.17	10.00	1.30	0.00	0.00	79.20
I-32	0.55	0.03	87.37	87.37	81.70	81.54	78.45	78.45	0.01	10.00	0.10	0.00	0.00	78.45
I-33	0.55	0.69	86.00	86.00	81.36	81.09	78.10	78.10	0.38	10.00	2.83	0.00	0.00	78.10
J-1	0.55	0.30	94.03	94.03	89.12	89.01	88.47	88.47	0.17	10.00	1.24	0.00	0.00	88.47

Scenario: Base

Outlet Report

Label	Station (ft)	Ground Elevation (ft)	System CA (acres)	Rim Elevation (ft)	Tailwater Elevation (ft)	Description
O-1	0+00	91.00	2.77	91.00	80.93	50% 25/24 PEAK FROM 18971-3
O-2	0+00	87.00	2.72	87.00	80.93	50% 25/24 PEAK FROM 18971-3
O-3	0+00	87.00	1.50	87.00	80.93	50% 25/24 PEAK FROM 18971-3

Scenario: Base

Junction Report

Label	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Structure Diameter (ft)	Sump Elevation (ft)
J-2	87.43	85.11	85.07	4.00	82.34
J-3	88.75	82.42	82.17	4.00	78.96
J-4	85.73	84.52	84.50	4.00	81.28
J-5	86.55	83.20	83.05	4.00	80.39
J-6	86.74	82.84	82.77	4.00	80.13

Scenario: Base

DOT Report

Label	-Node- Up. Dn.	L (ft)	-Invert- Up. Dn. (ft)	S (ft/ft)	Section Shape Size	Up. Inlet Area (acres)	-Ground- Up. Dn. (ft)	-HGL- Up. Dn. (ft)	Up. Calc. Sys. CA (acres)	-Cover- Up. Dn. (ft)	Avg. v (ft/s)	Mannings n	Excess Full Cap. (cfs)
P-1	I-1	28.00	89.81	0.005000	Circular	0.05	94.32	90.03	0.04	3.26	2.18	0.012	4.67
	I-2		89.67		15 inch		94.32	90.04		3.40			
P-2	I-2	36.00	89.67	0.033333	Circular	0.06	94.32	89.98	0.09	3.40	5.42	0.012	12.14
	J-1		88.47		15 inch		94.03	89.12		4.31			
P-4	I-3	30.00	84.61	0.011667	Circular	0.31	92.66	85.28	0.42	6.55	5.80	0.012	9.19
	I-4		84.26		18 inch		92.66	85.22		6.90			
P-5	I-4	108.00	84.26	0.012593	Circular	0.31	92.66	85.06	0.59	6.90	6.54	0.012	8.42
	I-5		82.90		18 inch		91.20	83.87		6.80			
P-6	I-5	140.00	82.90	0.012429	Circular	0.18	91.20	83.71	0.73	6.30	6.74	0.012	22.00
	I-6		81.16		24 inch		89.70	83.35		6.54			
P-7	I-6	55.00	81.16	0.002000	Circular	0.23	89.70	83.08	2.61	6.54	5.73	0.012	-7.04
	I-7		81.05		24 inch		89.20	82.58		6.15			
P-8	I-7	11.00	77.05	0.004545	Circular	0.21	89.20	81.00	2.77	10.15	6.05	0.012	-2.48
	O-1		77.00		24 inch		91.00	80.93		12.00			
P-9	I-8	29.00	81.79	0.002069	Circular	0.93	89.52	85.38	0.61	6.23	2.56	0.012	0.65
	I-9		81.73		18 inch		89.52	85.34		6.29			
P-10	I-9	175.00	81.73	0.002000	Circular	0.28	89.52	85.09	1.42	6.29	5.69	0.012	-4.97
	I-10		81.38		18 inch		91.30	83.72		8.42			
P-11	I-10	110.00	81.38	0.002000	Circular	0.23	91.30	83.61	1.71	7.92	3.80	0.012	-0.98
	I-6		81.16		24 inch		89.70	83.35		6.54			
P-12	I-11	53.00	86.92	0.016981	Circular	0.16	92.30	87.29	0.12	4.13	4.74	0.012	8.22
	I-10		86.02		15 inch		91.30	86.29		4.03			
P-13	I-12	28.00	83.78	0.016429	Circular	0.51	87.69	85.76	0.33	2.41	1.41	0.012	12.10
	I-13		83.32		18 inch		89.67	85.75		4.85			
P-14	I-13	233.00	83.32	0.006824	Circular	0.36	89.67	85.70	0.60	4.85	2.53	0.012	4.93
	I-9		81.73		18 inch		89.52	85.34		6.29			
P-16	I-14	61.00	82.15	0.002787	Circular	0.27	87.00	84.91	0.71	3.35	2.91	0.012	0.86
	I-15		81.98		18 inch		87.50	84.78		4.02			
P-17	I-15	78.00	81.98	0.002821	Circular	0.04	87.50	84.72	0.71	4.02	2.92	0.012	0.88
	I-16		81.76		18 inch		87.00	84.56		3.74			
P-18	I-16	48.00	81.76	0.018333	Circular	0.21	87.00	84.48	1.40	3.24	3.17	0.012	23.22
	I-17		80.88		24 inch		86.50	84.40		3.62			
P-19	I-17	105.00	80.88	0.002000	Circular	0.11	86.50	84.22	2.21	3.62	4.80	0.012	-4.13
	I-18		80.67		24 inch		87.92	83.82		5.25			
P-21	I-18	28.00	80.67	0.002143	Circular	0.33	87.92	83.60	2.46	5.25	5.28	0.012	-5.25
	I-19		80.61		24 inch		87.92	83.48		5.31			
P-22	I-19	148.00	80.61	0.011149	Circular	0.30	87.92	83.22	2.68	5.31	5.75	0.012	7.82
	J-3		78.96		24 inch		88.75	82.42		7.79			
P-24	I-20	23.00	77.45	0.014348	Circular	0.09	88.70	81.36	2.71	9.25	5.67	0.012	11.56
	I-21		77.12		24 inch		86.92	81.24		7.80			
P-25	I-21	11.00	77.12	0.010909	Circular	0.03	86.92	80.99	2.72	7.80	5.69	0.012	7.73
	O-2		77.00		24 inch		87.00	80.93		8.00			
P-26	I-22	53.00	82.48	0.002642	Circular	0.86	87.17	85.18	0.56	3.19	2.37	0.012	1.66
	J-2		82.34		18 inch		87.43	85.11		3.59			
P-29	I-23	116.00	82.19	0.003707	Circular	0.38	86.16	84.71	0.56	2.47	2.37	0.012	2.75
	I-16		81.76		18 inch		87.00	84.56		3.74			
P-27	I-24	25.00	82.24	0.002000	Circular	0.43	86.16	84.77	0.32	2.42	1.36	0.012	2.69
	I-23		82.19		18 inch		86.16	84.76		2.47			
P-30	I-25	28.00	81.50	0.002143	Circular	0.33	85.23	84.71	0.22	2.23	0.92	0.012	3.65
	I-26		81.44		18 inch		85.23	84.70		2.29			
P-31	I-26	81.00	81.44	0.001975	Circular	0.54	85.23	84.65	0.62	2.29	2.60	0.012	0.47
	J-4		81.28		18 inch		85.73	84.52		2.95			
P-34	I-27	93.00	81.07	0.002043	Circular	0.24	86.05	84.44	0.76	2.98	1.69	0.012	5.77

Scenario: Base

DOT Report

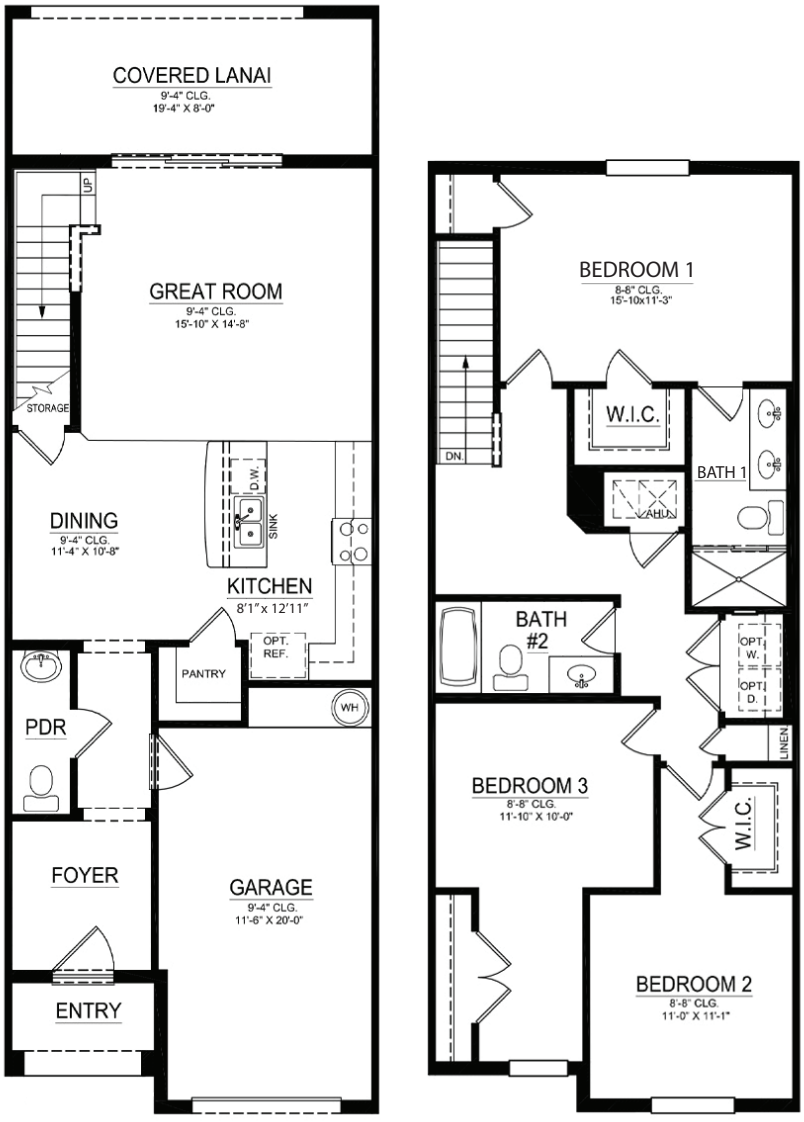
Label	-Node- Up. Dn.	L (ft)	-Invert- Up. Dn. (ft)	S (ft/ft)	Section Shape Size	Up. Inlet Area (acres)	-Ground- Up. Dn. (ft)	-HGL- Up. Dn. (ft)	Up. Calc. Sys. CA (acres)	-Cover- Up. Dn. (ft)	Avg. v (ft/s)	Mannings n	Excess Full Cap. (cfs)
	I-17		80.88		24 inch		86.50	84.40		3.62			
P-35	I-28	27.00	81.38	0.007778	Circular	0.46	85.88	84.03	0.30	3.25	1.81	0.012	3.95
	I-29		81.17		15 inch		85.88	84.00		3.46			
P-36	I-29	104.00	81.17	0.007500	Circular	0.59	85.88	83.84	0.74	3.46	4.48	0.012	0.56
	J-5		80.39		15 inch		86.55	83.20		4.91			
P-39	I-30	29.00	79.41	0.007241	Circular	0.25	87.12	82.44	0.93	6.21	3.79	0.012	2.99
	I-31		79.20		18 inch		87.12	82.34		6.42			
P-40	I-31	101.00	79.20	0.007426	Circular	0.23	87.12	82.19	1.10	6.42	4.48	0.012	1.89
	I-32		78.45		18 inch		87.37	81.70		7.42			
P-41	I-32	36.00	78.45	0.009722	Circular	0.03	87.37	81.54	1.12	7.42	4.49	0.012	3.29
	I-33		78.10		18 inch		86.00	81.36		6.40			
P-42	I-33	18.00	78.10	0.061111	Circular	0.69	86.00	81.09	1.50	6.40	5.99	0.012	17.54
	O-3		77.00		18 inch		87.00	80.93		8.50			
P-3	J-1	129.00	88.47	0.029922	Circular	0.30	94.03	89.01	0.25	4.31	7.14	0.012	10.25
	I-3		84.61		15 inch		92.66	85.41		6.80			
P-15	J-2	71.00	82.34	0.002676	Circular	N/A	87.43	85.07	0.56	3.59	2.34	0.012	1.74
	I-14		82.15		18 inch		87.00	84.97		3.35			
P-23	J-3	105.00	78.96	0.014381	Circular	N/A	88.75	82.17	2.68	7.79	5.67	0.012	11.57
	I-20		77.45		24 inch		88.70	81.61		9.25			
P-33	J-4	109.00	81.28	0.001927	Circular	N/A	85.73	84.50	0.62	2.45	1.44	0.012	6.23
	I-27		81.07		24 inch		86.05	84.46		2.98			
P-37	J-5	34.00	80.39	0.007647	Circular	N/A	86.55	83.05	0.74	4.91	4.44	0.012	0.67
	J-6		80.13		15 inch		86.74	82.84		5.36			
P-38	J-6	94.00	80.13	0.007660	Circular	N/A	86.74	82.77	0.74	5.11	3.07	0.012	4.53
	I-30		79.41		18 inch		87.12	82.55		6.21			

D·R·HORTON
America's Builder

GLEN

3 Beds, 2.5 Baths, 1-Car Garage, 1,67[illegible]t.





First Floor Second Floor

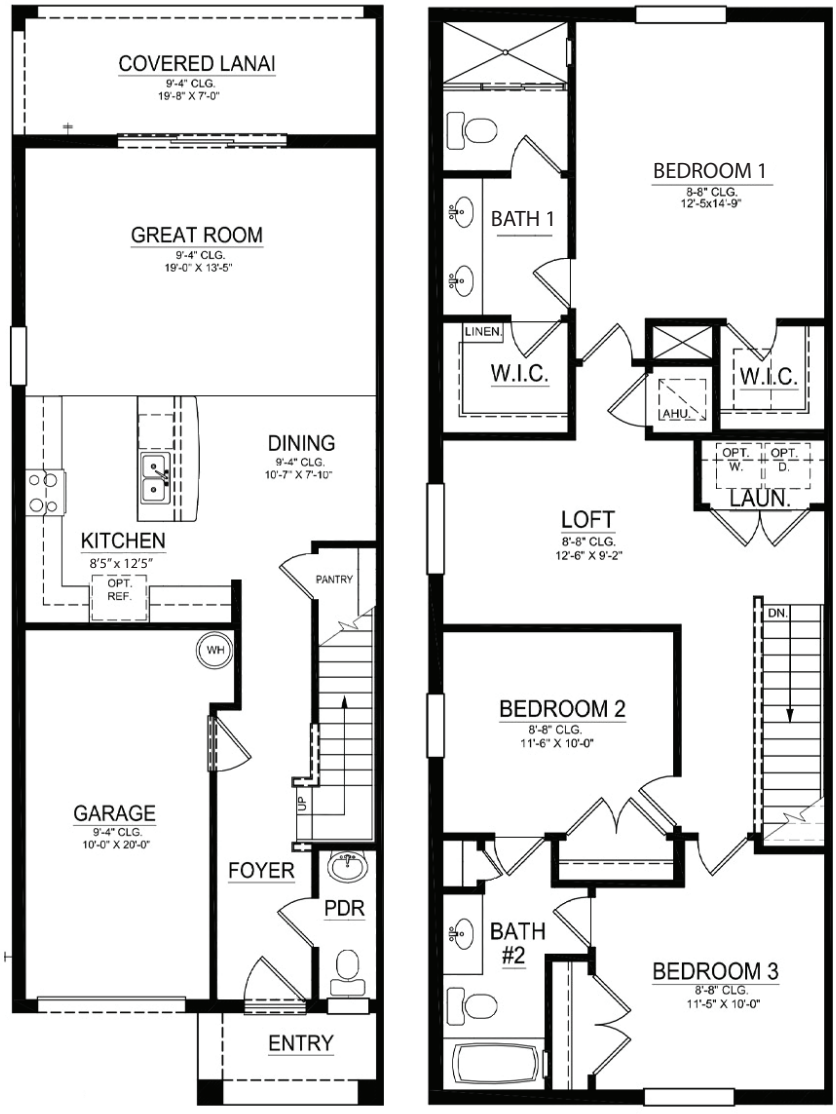
D.R. Horton is equal housing opportunity builder. Floorplans and elevations are artist's renderings for illustration purposes only. Features, sizes and details are approximate and will vary from the homes as built. Square footage dimensions are approximate. Builder reserves the right to change and/or alter materials, specifications, features, dimensions, designs and price without prior notice or obligation. # CBC1252212

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VALE

3 Beds, 2.5 Baths, 1-Car Garage, 1,75[illegible]t.





First Floor Second Floor

D.R. Horton is equal housing opportunity builder. Floorplans and elevations are artist's renderings for illustration purposes only. Features, sizes and details are approximate and will vary from the homes as built. Square footage dimensions are approximate. Builder reserves the right to change and/or alter materials, specifications, features, dimensions, designs and price without prior notice or obligation. # CBC1252212

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MEMO

To: Town Council

CC:

From: John Brock, Town Clerk

RE: January 2022 Month-End Town Hall Report

Date: 02/11/2022

Permitting:

Permits	Jan-22	Dec-21	Nov-22	Oct-22	Sep-22	FYTD
Talichet - SFR	0	0	0	2	8	61
Talichet - Revision	1	0	0		2	
Independent -SFR	0	1	2		1	5
Building	1	3	5	3	9	
Building Commercial	0	1				
Re-Roof	2	3	9	5	4	
Screen Enclosure	4	1	5	3	2	
Sheds	0	1	2			
Fence	10	4	11	2	3	
Electrical/Solar	2	3	3	8	9	
Pool/Decks	1	0	3			
HVAC/Mechanical	2	1	1	1	4	
Plumbing	0	1	1	1		
Gas	0	0	0			
Commercial Fence	0	0	0	2	1	
Commercial Pool	0	0	0	0	0	
Talichet CO's	5	4	6	2	2	20

Utility Billing:

Top Utility Bill Bad Debt for January 2022

Service address	Action	Total balance	Current charges	Past due amount
488 AVILA PLACE-IRRIGATION		4092.84	51.12	4041.72
107 E MYRTLE ST	Lien - Turned Off	3117.72	25.65	3092.07
702 CALABRIA WAY-IRRIGATION	Payment Plan	2315.27	51.12	2264.15
702 CALABRIA WAY-POTABLE	Payment Plan	1691.08	87.13	1603.95
503 CAMINO REAL	Lien - Turned Off	1324.00	25.65	1298.35
406 S PALM AVE		1218.80	90.85	1127.95
122 W MAGNOLIA AVE		849.59	115.86	733.73
213 MESSINA PLACE - IRRIGATION		650.85	58.61	592.24
103 SIXTH AVE		579.45	25.65	553.80
205 E LAUREL AVE	Payment Plan - Notice Sent	490.11	41.13	448.98
213 MESSINA PLACE - POTABLE		495.47	89.63	405.84
311 E ORCHID WAY	Notice Sent	437.15	51.12	386.03
325 TERACOTTA TERRACE - POTABLE	Payment Plan	435.50	87.13	348.37
111 N DIXIE DR		330.94	41.13	289.81
504 E MISSION LANE	Notice Sent	302.82	25.65	277.17

.

Activity Log Event Summary (Cumulative Totals)

Howey-in-the-Hills PD

(01/01/2022 - 01/31/2022)

<No Event Type Specified>	1	Abandoned 911	4
Alarm Activation	3	Animal Complaint	1
Anti-Social Behavior	40	Arrest	1
Assault & Battery	3	Assist other Agency- Alarms	2
Assist other Agency- Back-up	8	Assist other Agency- In Progress calls	5
Assist other Agency- Other	12	Assist other Agency- Traffic	6
Attempt to Contact	1	Baker Act-Juvenile	1
Be on the look-out- BOLO	5	Citizen Assist	5
Civil Complaint-Legal Advice	3	Code Enforcement	5
Disabled Vehicle (DAV)	14	Drunk Person	1
Fraud Investigation	3	Golf Cart Registration	3
Juvenile Complaint	2	Patrol	234
Patrol-School	125	Property Check-Boat Ramp	43
Property Check-Business	66	Property Check-Residence	13
Property Check-Schools/Govt. Bldg.	62	Property Check-Town Property	201
Property Damage	1	Property Damage - Business	1
Public Relations	1	Reckless Driver	5
Road Hazard	4	School Threat	1
Security Check Request	1	Sick/Injured Person	1
Solicitor Complaint	1	Special Detail	1
SRO School Meeting	2	Suspicious Person	5
Suspicious Vehicle	4	Traffic Complaint	1
Traffic Crash	2	Traffic Stop-Civil Citation	127
Traffic Stop-Criminal Citation	3	Traffic Stop-warning	121
Traffic Watch	97	Training-	1
Trespassing Complaint	1	VIN Verification	1
Warrant	1		

Total Number Of Events: 1,256

ADVANCED SEARCH RESULTS

Select View

Selected	Case Date	Parcel	Property Address	Owner	Code Case #	Description	Assigned To	Status	Edit/View
☐	02/02/2022	2620250400D1302500	HOWEY IN THE HILLS FL 34737	RAUCH MEGAN B & AUSTIN B CLARK	CE-22-02-0025	boat in driveway	Azure Botts	Open	✎
☐	02/01/2022	352025020000013700	402 BELLISSIMO PL HOWEY IN THE HILLS FL 34737	LOPEZ-CEPERO CHARLIE A B & MELISA M DE LEON	CE-22-02-0024	watering on wrong day	Azure Botts	Open	✎
☐	02/01/2022	352025020000000600	541 BELLISSIMO PL HOWEY IN THE HILLS FL 34737	ELDEMIRE COLIN	CE-22-02-0023	trailer in driveway	Azure Botts	Open	✎
☐	02/01/2022	352025020000003000	326 TERRACOTTA TER HOWEY IN THE HILLS FL 34737	CASADO WILFREDO & EVERLYN R KIRMANI	CE-22-02-0022	watering on wrong day	Azure Botts	Open	✎
☐	02/01/2022	2520250500C0402700	111 EAST MYRTLE ST HOWEY IN THE HILLS FL 34737	MEDINA ELSIE	CE-22-02-0021	unlicensed/inoperable vehicle	Azure Botts	Open	✎
☐	02/01/2022	2620250100D2701300	103 SIXTH AVE HOWEY IN THE HILLS FL 34737	HAUSS SHERRY	CE-22-02-0020	excessive weeds/grass	Azure Botts	Open	✎
☐	01/31/2022	2520250100B0601900	110 EAST CYPRESS AVE HOWEY IN THE HILLS FL 34737	DE GEORGE WAYNE P & AMBER E	CE-22-01-0019	inoperable/unlicensed ford truck white	Azure Botts	Open	✎

1

Records 1 to 28 (of 28)

Selected	Case Date	Parcel	Property Address	Owner	Code Case #	Description	Assigned To	Status	Edit/View
☐	01/31/2022	2520250300B1001100	308 NORTH PALM AVE HOWEY IN THE HILLS FL 34737	SMITH EDWARD JR & CYNTHIA	CE-22-01-0018	two trailers illegally parked	Azure Botts	Open	✎
☐	01/31/2022	2520250300B1101800	202 NORTH PALM AVE HOWEY IN THE HILLS FL 34737	HAYNOR THOMAS W	CE-22-01-0017	political sign	Azure Botts	Open	✎
☐	01/31/2022	2520250300B1100200	207 NORTH LAKESHORE BLVD HOWEY IN THE HILLS FL 34737	HARTMAN RONALD C & SUSAN	CE-22-01-0016	watering on wrong day	Azure Botts	Open	✎
☐	01/31/2022	2520250300B1200800	105 EAST OAK ST HOWEY IN THE HILLS FL 34737	JONES MICHELLE R & AUSTIN T BURKE	CE-22-01-0015	inoperable/unlicensed vehicle	Azure Botts	Open	✎
☐	01/28/2022	2520250300B1100700	121 EAST PINE ST HOWEY IN THE HILLS FL 34737	CLOUD COREY A & CHRISTINE M	CE-22-01-0014	unpermitted alteration/repair to fence	Azure Botts	Open	✎
☐	01/26/2022	2520250300B1102700	114 EAST OAK ST HOWEY IN THE HILLS FL 34737	WINNE NORMAN F II	CE-22-01-0013	junk and rubbish	Azure Botts	Open	✎
☐	01/24/2022	2520250300B1102700	114 EAST OAK ST HOWEY IN THE HILLS FL 34737	WINNE NORMAN F II	CE-22-01-0012	PODS over 14 days	Azure Botts	Open	✎
☐	01/24/2022	2520250200A0800600	909 NORTH VALENCIA AVE HOWEY IN THE HILLS FL 34737	BENOIT EDWARD W JR & JILL A	CE-22-01-0011	trailer in side yard unscreened	Azure Botts	Open	✎

1

Records 1 to 28 (of 28)

Selected	Case Date	Parcel	Property Address	Owner	Code Case #	Description	Assigned To	Status	Edit/View
☐	01/20/2022	2620250400D0201100	204 WEST HOLLY ST HOWEY IN THE HILLS FL 34737	CRISP KYLE & WILLIAM WALL	CE-22-01-0010	trailer in side yard	Azure Botts	Open	✎
☐	01/20/2022	262025001000007800	568 AVILA PL HOWEY IN THE HILLS FL 34737	DREAM FINDERS HOMES LLC	CE-22-01-0009	unpermitted shed	Azure Botts	Open	✎
☐	01/13/2022	2520250200A0600100	1009 NORTH HAMLIN AVE HOWEY IN THE HILLS FL 34737	SPANGLER JOEL & JAYNE S	CE-22-01-0006	traffic reflectors pointing into the roadway	Azure Botts	Open	✎
☐	01/13/2022	2620250100D2601600	600 EAST REVELS RD HOWEY IN THE HILLS FL 34737	ST JEAN JOHNNY	CE-22-01-0004	rubbish and weeds	Azure Botts	Open	✎
☐	12/08/2021	2520250200B0202900	201 EAST CROTON WAY HOWEY IN THE HILLS FL 34737	ALEXANDER MARY L LIFE ESTATE	CE-21-12-0054	unpermitted remodel	Azure Botts	Open	✎
☐	11/17/2021	352025020000004900	219 MESSINA PL HOWEY IN THE HILLS FL 34737	COSSOM DENISE M	CE-21-11-0050	unlicensed vehicle/junk	Azure Botts	Open	✎
☐	11/02/2021	2620250300E1500101	109 NORTH DIXIE DR HOWEY IN THE HILLS FL 34737	SENDNER BRENDA	CE-21-11-0042	unlicensed van	Azure Botts	Open	✎
☐	10/28/2021	352025020000004200	233 MESSINA PL HOWEY IN THE HILLS FL 34737	QUINN CATHERINE N & THOMAS K QUINN	CE-21-10-0040	unpermitted fence	Azure Botts	Open	✎

1

Records 1 to 28 (of 28)

Selected	Case Date	Parcel	Property Address	Owner	Code Case #	Description	Assigned To	Status	Edit/View
☐	10/28/2021	352025020000004300	231 MESSINA PL HOWEY IN THE HILLS FL 34737	ATWOOD CHRISTINE E	CE-21-10-0039	unpermitted fence	Azure Botts	Open	✎
☐	10/21/2021	262025001000007800	568 AVILA PL HOWEY IN THE HILLS FL 34737	DREAM FINDERS HOMES LLC	CE-21-10-0029	Weeds exceed 12 inches	Azure Botts	Open	✎
☐	10/15/2021	2520250200A1100700	1000 NORTH LAKE SHORE BLVD HOWEY IN THE HILLS FL 34737	PASHA ELIZABETH S LIFE ESTATE	CE-21-10-0024	possible unpermitted window replacement	Azure Botts	Open	✎
☐	09/14/2021	2520250500C0403000	1257221	CARRENO VICTOR	CE-21-09-0012	grass exceeds 12 inches in height	Azure Botts	Open	✎
☐	08/11/2021	1255317	510 East Revel Rd	Breder, Fernando	CE-21-08-0005	building without permits	Azure Botts	Open	✎

1

Records 1 to 28 (of 28)

Code Case #	Case Date	Main Statu	Parcel Address	Violation Name	Violation Date
CE-22-01-0015	1/31/2022	Open	105 EAST OAK ST HOWEY IN THE HILLS FL 34737	Accumulation of Junk Sec. 127-4	1/31/2022
CE-22-01-0016	1/31/2022	Open	207 NORTH LAKESHORE BLVD HOWEY IN THE HILLS FL 34737	Water Restriction Sec. 171-123	1/31/2022
CE-22-01-0017	1/31/2022	Open	202 NORTH PALM AVE HOWEY IN THE HILLS FL 34737	Political Signs 5.03.05(K)	1/31/2022
CE-22-01-0018	1/31/2022	Open	308 NORTH PALM AVE HOWEY IN THE HILLS FL 34737	Prohibited Parking (C) Sec. 166-13	1/31/2022
CE-22-01-0019	1/31/2022	Open	110 EAST CYPRESS AVE HOWEY IN THE HILLS FL 34737	Accumulation of Junk Sec. 127-4	1/31/2022
CE-22-01-0014	1/28/2022	Open	121 EAST PINE ST HOWEY IN THE HILLS FL 34737	Florida Building Code 105.1	1/28/2022
CE-22-01-0013	1/26/2022	Open	114 EAST OAK ST HOWEY IN THE HILLS FL 34737	Accumulation of Refuse Sec. 127-2	1/26/2022
CE-22-01-0013	1/26/2022	Open	114 EAST OAK ST HOWEY IN THE HILLS FL 34737	Accumulation of Junk Sec. 127-4	1/26/2022
CE-22-01-0011	1/24/2022	Open	909 NORTH VALENCIA AVE HOWEY IN THE HILLS FL 34737	Parking-Boats and RVs (C) Article I, Sec. 166-3	1/26/2022
CE-22-01-0012	1/24/2022	Open	114 EAST OAK ST HOWEY IN THE HILLS FL 34737	Movable Module Storage Units LDC 5.02.06	1/26/2022
CE-22-01-0009	1/20/2022	Open	568 AVILA PL HOWEY IN THE HILLS FL 34737	Florida Building Code 105.1	1/20/2022
CE-22-01-0010	1/20/2022	Open	204 WEST HOLLY ST HOWEY IN THE HILLS FL 34737	Parking-Boats and RVs (C) Article I, Sec. 166-3	1/20/2022
CE-22-01-0004	1/13/2022	Open	600 EAST REVELS RD HOWEY IN THE HILLS FL 34737	Accumulation of Refuse Sec. 127-2	1/13/2022
CE-22-01-0005	1/13/2022	Abated	600 EAST REVELS RD HOWEY IN THE HILLS FL 34737	Excessive or Untended Growth of Vegetation Sec. 127-3	1/13/2022
CE-22-01-0007	1/13/2022	Abated	107 EAST LAUREL HOWEY IN THE HILLS FL 34737	Accumulation of Junk Sec. 127-4	1/13/2022
CE-22-01-0007	1/13/2022	Abated	107 EAST LAUREL HOWEY IN THE HILLS FL 34737	Accumulation of Refuse Sec. 127-2	1/13/2022
CE-22-01-0008	1/13/2022	Abated	201 EAST LAUREL AVE HOWEY IN THE HILLS FL 34737	Accumulation of Refuse Sec. 127-2	1/13/2022
CE-22-01-0001	1/12/2022	Abated	121 EAST MAGNOLIA AVE HOWEY IN THE HILLS FL 34737	Political Signs 5.03.05(K)	1/12/2022
CE-22-01-0002	1/12/2022	Abated	109 EAST MAGNOLIA AVE HOWEY IN THE HILLS FL 34737	Political Signs 5.03.05(K)	1/12/2022
CE-22-01-0003	1/12/2022	Abated	126 EAST LAUREL AVE HOWEY IN THE HILLS FL 34737	Political Signs 5.03.05(K)	1/12/2022

Public Works

January 2022 – Monthly Report

Activity	Location/ Address	Notes
Road Maintenance / Potholes/Signs	SR 19 at Central Ave	Golf Cart Crossing Signs Installed
Stormwater/Drainage		
Sidewalk Maintenance	Talichet Phase 1	Performed sidewalk inspections in Talichet Phase 1
Building Maintenance	Modular Building	Finished power and signage for final inspections and C.O.
Grounds Maintenance	Town Hall	GFI Receptacles replaced at Town Hall fountain
Tree Trimming		
Mowing/Weed Eating	Main Plant, Well #3, Griffin Park, Lakeshore	Monthly mowing and weed eating
Boardwalk Repairs	Sara Maude Griffin Park Fishing Pier	Multiple walk boards replaced at Sara Maude New RFB finished for fishing pier
Landscape/Irrigation Inspections	Talichet Phase 1	2 Inspections in Talichet Phase 1
Lot Grading Inspections	Talichet Phase 1 Bellissimo Pl Lots	5 Inspections in Talichet 3 Inspection on Bellissimo Pl

Public Utilities

January 2022 – Monthly Report

Activity	Location/ Address	Notes
Electrical repair	Main Plant	Replaced faulty timer in VFD for HSP1
CL2 maintenance	Well 3	Replace CL2 tubing at Well 3
Service Orders	Throughout Town	28 service orders completed for various Utility work

Library Director's Report
Marianne Beck Memorial Library
For the Month of January 2022

Statistics for January 2022

Total attendance for programming in January: children: 99, adults: 263, teens: 12 for a total of 374 patrons. KOHA circulation: 1361, digital circulation 166, for a total circulation of 1,527. Total borrowed items from other libraries: 442, total loaned items to other libraries: 397 and total sessions on the public computers totaled 93.

Funds collected for January:

Copies/Fax: $181.85 Fines: $52.45 Total**:** $ 234.30 **FOL:** $78.75

Activities during the month of January:

With plans to enhance the children's section**,** I had the county remove three of our public computers, which left 22 feet of usable space. I am looking at new fixtures to increase storage, make the area more child friendly, while building a home school collection. It is my intention to fund this project through the use of county impact fees. A blueprint for the space has been drafted. Once completed I will send a copy to the town council for review.

I am in contact with Lake Success School about the school accepting several boxes of nonfiction books that have been removed from our collection. Once they have been picked up, Morgan has agreed to have Public services build shelving which will increase storage.

Two members of the Library Board terms are ending this spring. We are on the lookout for residents that would be interested in contributing time to the library and the community by volunteering.

We had a very successful Meet the Artist this month. Approximately 39 residents came and spoke with Erin Fox about her art. Ten pieces were sold. Our monthly programs continue to hold steady and in some cases, increase.

Respectively submitted by
Tara Hall, Library Director

HOWEY-IN-THE-HILLS FINANCIAL REPORT

Jan-22

REVENUES		FYE 2021	RECEIVED SINCE LAST REP.	RECEIVED YEAR-TO-DATE	ESTIMATED REVENUE	REVENUE TO BE RECEIVED	PERCENT RECEIVED	DIFFERENCE FROM LAST REP.
GENERAL		$ 2,490,840.72	$ 45,329.56	$ 161,829.89	$ 2,074,421.00	$ 1,912,591.11	8%	2%
POLICE ADV TRAINING		$ 3,318.28	$ 150.18	$ 755.47	$ 3,000.00	$ 2,244.53	25%	5%
WATER IMPACT FEES*		$ 201,671.56	$ 6,301.64	$ 31,508.20	$ 50,000.00	$ 18,491.80	63%	13%
PARK IMPACT FEES*		$ 93,591.14	$ 2,277.92	$ 15,821.24	$ 40,000.00	$ 24,178.76	40%	6%
POLICE IMPACT FEES*		$ 101,152.17	$ 2,426.48	$ 16,853.06	$ 90,000.00	$ 73,146.94	19%	3%
INFRASTRUCTURE FUND		$ 216,889.55	$ 15,984.75	$ 33,740.71	$ 219,707.00	$ 185,966.29	15%	7%
BUILDING FUND			$ 21,103.19	$ 85,652.34	$ -	$ (85,652.34)	#DIV/0!	
WATER/SANITATION FUND		$ 1,067,854.09	$ 81,040.11	$ 688,936.40	$ 1,126,500.00	$ 437,563.60	61%	7%
POLICE RETIREMENT		$ 486,776.74	$ 100,476.26	$ 153,711.14	$ 214,653.00	$ 60,941.86	72%	47%
	TOTALS	$ 4,662,094.25	$ 275,090.09	$ 1,188,808.45	$ 3,818,281.00	$ 2,629,472.55	31%	7%

*Subtotal for Impact Fees Revenues $ 64,182.50

EXPENDITURES		FYE 2021	COMMITTED SINCE LAST REP.	COMMITTED YEAR-TO-DATE	CURRENT APPROPRIATION	AVAILABLE APPROPRIATION	PERCENT COMMITTED	DIFFERENCE FROM LAST REP.
GENERAL		$ 1,963,604.45	$ 102,580.95	$ 676,482.78	$ 2,074,421.00	$ 1,397,938.22	33%	5%
POLICE ADV TRAINING		$ 1,950.82	$ -	$ -	$ 3,100.00	$ 3,100.00	0%	0%
WATER IMPACT FEES*		$ 2,598.45	$ -	$ -	$ 54,000.00	$ 54,000.00		
PARK IMPACT FEES*		$ 11,675.00	$ -	$ -	$ 29,456.00	$ 29,456.00		
POLICE IMPACT FEES*		$ 31,022.45	$ 6,625.00	$ 44,699.71	$ 78,600.00	$ 33,900.29		
INFRASTRUCTURE FUND		$ 108,974.72	$ 6,510.17	$ 13,053.42	$ 178,523.00	$ 178,523.00	7%	4%
BUILDING FUND				$ 13,798.22	$ -	$ -	#DIV/0!	#DIV/0!
WATER/SANITATION FUND		$ 921,015.41	$ 76,482.62	$ 359,917.73	$ 1,125,769.00	$ 765,851.27	32%	7%
POLICE RETIREMENT		$ 93,290.98	$ 6,248.74	$ 19,480.19	$ 79,438.00	$ 59,957.81	25%	8%
	TOTALS	$ 3,134,132.28	$ 198,447.48	$ 1,127,432.05	$ 3,623,307.00	$ 2,522,726.59	31%	6%

*Subtotal for Impact Fees Expenditures $ 44,699.71

HOWEY IN THE HILLS
FINANCIAL REPORT
Jan-22

ACCOUNTS

151200

Florida Prime Account

STATE BOARD ADMINISTRATION BALANCE (usually comes in 2nd week of month)

SBA FUND A	$	19,087.43
INTEREST RECEIVED (APY 0.10%)	$	1.38
TOTAL	$	19,088.81

101076

SEACOAST MONEY MARKET ACCOUNT

(RESERVES)

BEGINNING BALANCE	$	658,371.17
TRANSFERS IN (OUT)		
INTEREST RECEIVED (APY 0.05%)	$	27.95
ENDING BALANCE	$	658,399.12

101080

SEACOAST #2 MONEY MARKET ACCOUNT

(BISHOPS GATE)

Sinking Fund

BEGINNING BALANCE		2,925.87
TRANSFERS IN (OUT)		
INTEREST RECEIVED (APY 0.01%)	$	0.03
ENDING BALANCE	$	2,925.90

101005

SEACOAST CHECKING ACCOUNT (Operating)

Operating Checking

BEGINNING BALANCE	$	2,873,545.11
REVENUES DEPOSITED	$	561,976.85
TRANSFERS IN (OUT)		
EXPENDITURES CLEARED	$	(378,065.69)
ENDING BALANCE	$	3,057,456.27

101160

SEASIDE MONEY MARKET ACCOUNT

BEGINNING BALANCE	$	406,260.76
TRANSFERS IN (OUT)		
INTEREST RECEIVED (APY 0.10%)	$	34.50
ENDING BALANCE	$	406,295.26

101110

SEASIDE CHECKING ACCOUNT (Pays to Loan)

BEGINNING BALANCE	$	24,078.16
TRANSFERS IN (OUT)	$	(2,997.30)
DEPOSITED	$	-
ENDING BALANCE	$	21,080.86

101120

SEASIDE SRF LOAN SWEEP ACCOUNT

BEGINNING BALANCE	$	2,490.97
TRANSFERS IN (OUT)	$	-
EXPENDITURES CLEARED	$	-
ENDING BALANCE	$	2,490.97

TOTAL	**$**	**4,167,737.19**

United Community Bank (renamed from Seaside)

LOANS

SEASIDE SMALL BUSINESS LOAN (4.75% interest)

BEGINNING BALANCE	$	71,389.07
TRANSFERS IN (OUT)	$	(2,997.30)
ALLOCATED TO PRINCIPAL	$	2,641.53
ALLOCATED TO INTEREST	$	(355.77)
ENDING BALANCE	$	68,747.54

FDEP SRF LOAN (2.71%/2.12% interest)*

BEGINNING BALANCE	$	1,377,278.39
TRANSFERS IN (OUT)		
ALLOCATED TO PRINCIPAL		
ALLOCATED TO INTEREST		
ENDING BALANCE	$	1,377,278.39

*payments of $72,314.68 are made in April and Oct. and will continue until 2032

TOTAL	**$**	**1,446,025.93**

HOWEY-IN-THE-HILLS FINANCIAL REPORT (Previous Month)

Dec-21

(revenues and expenditures updated one month after initial report completion)

REVENUES	Carry Forward	FYE 2021	RECEIVED SINCE LAST REP.	RECEIVED YEAR-TO-DATE	ESTIMATED REVENUE	REVENUE TO BE RECEIVED	PERCENT RECEIVED	DIFFERENCE LAST REP.
GENERAL		$ 2,490,840.72	$ -	$ 116,500.33	$ 2,074,421.00	$ 1,957,920.67	6%	0%
POLICE ADV TRAINING		$ 3,318.28	$ -	$ 605.29	$ 3,000.00	$ 2,394.71	20%	0%
WATER IMPACT FEES*	$ 523,134	$ 201,671.56	$ -	$ 25,206.56	$ 50,000.00	$ 24,793.44	50%	0%
PARK IMPACT FEES*	$ 199,067	$ 93,591.14	$ -	$ 13,543.32	$ 40,000.00	$ 26,456.68	34%	0%
POLICE IMPACT FEES*	$ 199,161	$ 101,152.17	$ -	$ 14,426.58	$ 90,000.00	$ 75,573.42	16%	0%
INFRASTRUCTURE FUND		$ 216,889.55	$ -	$ 17,755.96	$ 219,707.00	$ 201,951.04	8%	0%
BUILDING FUND				$ 64,549.15	$ -			
WATER/SANITATION FUND		$ 1,067,854.09	$ -	$ 607,896.29	$ 1,126,500.00	$ 518,603.71	54%	0%
POLICE RETIREMENT		$ 486,776.74	$ -	$ 53,234.88	$ 214,653.00	$ 161,418.12	25%	0%
	TOTALS	$ 4,662,094.25	$ -	$ 913,718.36	$ 3,818,281.00	$ 2,969,111.79	24%	0%

*Subtotal for Impact Fees Revenues $ 53,176.46

EXPENDITURES	FYE 2021	COMMITTED SINCE LAST REP.	COMMITTED YEAR-TO-DATE	CURRENT APPROPRIATION	AVAILABLE APPROPRIATION	PERCENT COMMITTED	DIFFERENCE LAST REP.
GENERAL	$ 1,963,604.45	$ -	$ 573,901.83	$ 2,074,421.00	$ 1,500,519.17	28%	0%
POLICE ADV TRAINING	$ 1,950.82	$ -	$ -	$ 3,100.00	$ 3,100.00	0%	0%
WATER IMPACT FEES*	$ 2,598.45	$ -	$ -	$ 54,000.00	$ 54,000.00		
PARK IMPACT FEES*	$ 11,675.00	$ -	$ -	$ 29,456.00	$ 29,456.00		
POLICE IMPACT FEES*	$ 31,022.45		$ 38,074.71	$ 78,600.00	$ 40,525.29		
INFRASTRUCTURE FUND	$ 108,974.72	$ -	$ 6,543.25	$ 178,523.00	$ 171,979.75	4%	0%
BUILDING FUND			$ 8,555.34	$ -	$ (8,555.34)	#DIV/0!	#DIV/0!
WATER/SANITATION FUND	$ 921,015.41	$ -	$ 283,435.11	$ 1,125,769.00	$ 842,333.89	25%	0%
POLICE RETIREMENT	$ 93,290.98	$ -	$ 13,231.45	$ 79,438.00	$ 66,206.55	17%	0%
TOTALS	$ 3,134,132.28	$ -	$ 923,741.69	$ 3,623,307.00	$ 2,699,565.31	25%	0%

*Subtotal for Impact Fees Expenditures $ 38,074.71