SUBMITTAL SUMMARY REPORT
MajorSite-000060-2025

PLAN NAME:	Multi-Family- 8 Units - 351 Marion Oaks Blvd	**LOCATION:**	351 MARION OAKS BLVD OCALA,
APPLICATION DATE:	11/20/2025	**PARCEL:**	8004-0433-18
DESCRIPTION:	New 8-unit residential building		

CONTACTS	NAME	COMPANY
Applicant	ADAN ORDONEZ ORDONEZ	ORDONEZ ORDONEZ CONSTRUCTION, INC
Engineer of Record	CHAD LINN	LINN ENGINEERING

CONDITION	DESCRIPTION	CREATED BY	CREATED ON	COMMENTS	SATISFIED?
Conditional Comment(s)		Chris Zeigler	02/23/2026	The sidewalk fee of $2,400.00 must be paid prior to plan approval.	Yes

SUBMITTAL	STARTED	DUE	COMPLETE	STATUS
OCE: Plan Review (DR) v.5	06/24/2026	07/01/2026	07/06/2026	Approved
OCE: Plan Review (DR) v.4	06/02/2026	06/09/2026	06/09/2026	Requires Re-submit
OCE: Plan Review (DR) v.3	04/24/2026	05/01/2026	05/05/2026	Requires Re-submit
OCE: Plan Review (DR) v.2	02/18/2026	02/25/2026	02/27/2026	Requires Re-submit
OCE: Plan Review (DR) v.1	12/05/2025	12/19/2025	12/24/2025	Requires Re-submit

SUBMITTAL DETAILS

OCE: Plan Review (DR) v.5

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
911 Management (DR) (911 Management)	Jamie Waldron	07/01/2026	06/29/2026	Approved
Corrections	Additional 911 Comments (**Resolved**) - **Corrective Action:** Unit numbers needed on Site Plan. On Sheet C04 - when facing the building the 1st floor will be assigned Units 101-104 from left to right and the 2nd floor will be assigned 201-204 from left to right. These unit numbers need to be added to the site plan when applying for permits. Plan Approved.			
Environmental Health (Plans) (Environmental Health)	Evan Searcy	07/01/2026	06/25/2026	Approved
Fire Marshal (Plans) (Fire)	Jonathan Kenning	07/01/2026	06/25/2026	Approved
Growth Services Planning & Zoning (DR) (GS Planning and Zoning)	Jared Rivera	07/01/2026	06/29/2026	Approved
Corrections	2.12.16/6.5 - EALS or Exemption provided (**Resolved**) - [INFO] EALS submitted and transmitted to FWC on 12/10/25.			
Corrections	2.12.27 - Location & screening of outside storage (**Resolved**) - [INFO] No outdoor storage			
Corrections	2.12.4/6.11.8 - Parking (**Resolved**) - [INFO] Please note that parking lot landscaping will need to be provided consistent with LDC Sec. 6.8.7			
Corrections	2.12.4.L & Article 5 - Overlay zones (**Resolved**) - [INFO] FEMA Flood Zone X, Secondary Springs Protection Zone, No ESOZ			
Corrections	2.12.5/1.8.2.D - Traffic Concurrency Evaluation? (**Resolved**) - [INFO] Please coordinate with OCE regarding improvements based on required traffic impact analysis.			
Comments	For any questions related to this planning/zoning review, please contact jared.rivera@marionfl.org or 352-438-2687.			
Landscape (Plans) (Parks and Recreation)	Susan Heyen	07/01/2026	06/25/2026	Approved
Comments	Landscape plan approved in previous submittal			
OCE Design (Plans) (Office of the County Engineer)	Gerald Koch	07/01/2026	07/01/2026	Approved

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
OCE Property Management (Plans) (Office of the County Engineer)	Delenie Roman	07/01/2026	06/30/2026	Informational

Comments

Map/Sunbiz checked.

IF APPLICABLE:
Sec. 2.18.1.I - Show connections to other phases.
Sec.2.19.2.H – Legal Documents
Legal documents such as Declaration of Covenants and Restrictions, By-Laws, Articles of Incorporation, ordinances, resolutions, etc.
Sec. 6.3.1.B.1 – Required Right of Way Dedication (select as appropriate)
For Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated for the use and benefit of the public."
Sec. 6.3.1.B.2 – Required Right of Way Dedication
For Non-Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated privately to the [entity name]. All public authorities and their personnel providing services to the subdivision are granted an easement for access. The Board of County Commissioners of Marion County, Florida, shall have no responsibility, duty, or liability whatsoever regarding such streets. Marion County is granted an easement for emergency maintenance in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk."
Sec. 6.3.1.D.3 - Cross Access Easements
For Cross Access Easements. "All parallel access easements shown on this plat are hereby dedicated for the use and benefit of the public, and maintenance of said easements is the responsibility of [entity name]."
Sec. 6.3.1.C.1 - Utility Easements (select as appropriate)
"[All utility easements shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction, installation, maintenance, and operation of utilities by any utility provider."
Sec. 6.3.1.C.2 – Utility Easements
"[All utility tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."
Sec.6.3.1.D(c)(1)(2)(3) - Stormwater easements and facilities, select as appropriate:
1. "[All stormwater and drainage easements as shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction and maintenance of such facilities."

2. "[All stormwater management tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."

3. When any stormwater easement and/or management tract is not dedicated to the public or Marion County directly, the following statement shall be added to the dedication language: "Marion County is granted the right to perform emergency maintenance on the [stormwater easement and/or management tract, complete accordingly] in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk."
Sec.6.3.1.D(f) –
If a Conservation Easement is required the following shall be provided: "A conservation easement [as shown or on tract and identify the tract, complete accordingly] is dedicated to [the Board of County Commissioners of Marion County, Florida or entity name, if not Marion County] for the purpose of preservation of [listed species, habitat, Karst feature and/or native vegetation, complete accordingly]."
- DR 6/30/26

OCE Stormwater (Permits & Plans) (Office of the County Engineer)	Alexander Turnipseed	07/01/2026	06/24/2026	Informational

Comments Please provide a copy of the NPDES permit or NOI as well as District permit prior to construction.

OCE Survey (Plans) (Office of the County Engineer)	Theresa Smail	07/01/2026	07/01/2026	Approved

Corrections 2.12.8. - Current boundary and topographic survey (**Resolved**) - 2.12.8. - Current boundary and topographic survey: Current boundary and topographic survey (one foot contour intervals extending 100 feet beyond the project boundary) based upon accepted vertical datum. Surveys will be less than 12 months old and accurately reflect current site conditions, meeting standards set forth in Ch. 5J-17 FAC. Alternate topographic data may be accepted if pre-approved by the Marion County Land Surveyor.

Corrections 6.4.7. Construction Plans - Survey Requirements (**Resolved**) - **Corrective Action:** 6.4.7.B(1) - Show a minimum of two intervisible horizontal control points per site.
6.4.7.B(2) - Horizontal control points shall be monumented and referenced to the Florida State Plane Coordinate System
6.4.7.B(4) - Provide a statement or table detailing horizontal datum, adjustment, and coordinate values - 6.4.7. Construction Plans - Survey Requirements: Survey information to support construction plans, including but not limited to Mass Grading, Improvement, or Major Site plans, shall meet requirements as set forth in Ch. 5J-17 FAC in addition to the following as identified in Section 6.4.7.A. through H. of the LDC.

OCE Traffic (Permits & Plans) (Office of the County Engineer)	Sydney Oberdorfer	07/01/2026	06/25/2026	Approved

Corrections 6.11.4.B - Cross access (**Resolved**) - **Corrective Action:** Provide the executed public parallel access easement. The template for the public easement can be obtained from the Development Review Office at developmentreview@marionfl.org or 352-671-8686. The executed template and recording fees must be returned to the Development Review Office prior to final plan approval. - 6.11.4.B - Cross access: Provide a 24' wide paved cross access easement as specified in 6.11.4.B

Corrections 6.12.12 - Sidewalks (**Resolved**) - **Corrective Action:** Sidewalk is required along Marion Oaks Blvd. Staff supports payment of a fee in-lieu of sidewalk construction. A waiver must be approved by the Development Review Committee to allow the payment of a fee in-lieu of construction. If approved by the DRC the fee comes out to $2,400.00 and must be paid prior to final plan approval. - 6.12.12 - Sidewalks: Show sidewalk on the plans as required in section 6.12.12.

Utilities (OCE Plans) (Utilities)	Heather Proctor	07/01/2026	07/01/2026	Approved

Corrections 6.15.4 - Water Distribution System (**Resolved**) - **Corrective Action:** Tap for hydrant @ hydrant. Do not run water service to it. - 6.15.4 - Water Distribution System:

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
Utilities (OCE Plans) (Utilities)	Heather Proctor	07/01/2026	07/01/2026	Approved

Corrections	6.14.6 - Utilities design to be owned by MCU (**Resolved**) - **Corrective Action:** Informational: A. All utility systems shall be designed for the estimated tributary population. B. All utility systems shall be designed utilizing components with a minimum 30 year life span. C. Systems intended to be owned and maintained by MCU shall be designed for the tributary population and in conformance with the adopted Marion County Utilities Master Plan, as amended. D. Water systems shall be designed to satisfy the domestic water demand and fire protection requirements. E. All systems to be owned, operated, or maintained by MCU shall be subject to a pre-design meeting with MCU .F. All meters shall be located in a meter easement located adjacent to or within the public right-of-way. G. All meters in an MCU maintained system shall be installed and inspected by MCU after receiving payment of applicable fees and charges. H. All pipe shall comply with state standards. I. The engineer shall provide the required lengths of mechanically restrained joints in table form on the plans. - 6.14.6 - Utilities design to be owned by MCU:
Corrections	Parcel numbers match project area (**Resolved**) - **Corrective Action:** Correct Parcel Number(s) or Project Area footprint - YES 8004-0433-18 - Parcel numbers match project area: The parcels(s) shown on the application and/or site plan must match the project area.
Corrections	6.15.6.D - Meter Location (**Resolved**) - **Corrective Action:** Second request C06 - Move meter boxes into the ROW at the property line and label "end of county maintenance". 1" Header is not the appropriate size for 9 meters. Must size appropriately. MCU will install dual checks on residential meters. Backflow is not necessary for the unit meters. Keep the backflow on irrigation and call out on the plans. - 6.15.6.D - Meter Location:
Corrections	6.14.7 - Construction Inspection - PLAN NOTE: (**Resolved**) - **Corrective Action:** Add note to Utility Sheet(s) MCU personnel are to inspect any work performed on or around existing MCU infrastructure. A pre-construction meeting is required to be held a minimum of 48 hours prior to start of any construction. If the pre-construction meeting is not completed, any work may be halted. To schedule, contact MCU's Construction Division, 352) 307-6000, ext. 5 or MCUconstruction@marionfl.org - 6.14.7 - Construction Inspection - PLAN NOTE
Corrections	6.14.5.C - Hydraulic Analysis (**Resolved**) - **Corrective Action:** Second request - we need waste water analysis Submit (or revise if marked up) a hydraulic analysis to support the project. The Hydraulic Analysis has not been provided for this site. (LDC 6.14.5.C) - 6.14.5.C - Hydraulic Analysis: The hydraulic analysis is required to analyze the water or wastewater pressures in this area.
Corrections	6.14.5.A(6) - MH locations, rim & invert elevation (**Resolved**) - **Corrective Action:** N/A - 6.14.5.A(6) - MH locations, rim & invert elevation:
Corrections	Review Fee as applicable (per Resolution) (**Resolved**) - **Corrective Action:** Informational Plan resubmittal 5/1/26: $130.00 - Review Fee as applicable (per Resolution): MCU review fee for this submittal
Corrections	6.15.3 - Fire Protection/Fire Flow Capacity (**Resolved**) - **Corrective Action:** Sheet 06 - Backflow preventer needs to be shown directly after the meter. (2) install a gate valve near on the PWS meter side of the tee from the wet tap, so MCU doesn't have to shut down the fire line if repairs on the potable meters are required (see plan comments) - 6.15.3 - Fire Protection/Fire Flow Capacity:
Corrections	6.14.5.B - Submit permits to MCU (DOT, ROW etc) (**Resolved**) - **Corrective Action:** Informational: Copies of all related permit applications and issued permits must be submitted to the Marion County Utilities Department prior to, or at the time of, the Pre-Construction Meeting. - 6.14.5.B - Submit permits to MCU (DOT, ROW etc): A copy of any permit issued to the contractor shall also be submitted to MCU's Construction Manager, or designee.
Corrections	6.14.5.A(1) - Existing water & sewer mains shown (**Resolved**) - **Corrective Action:** Show all mains. Contractor to field locate. - 6.14.5.A(1) - Existing water & sewer mains shown: The entire utility system shall be shown on the plan, including existing water systems and all proposed components within the project area.
Corrections	6.14.5.B - FDEP PWS and/or WW permits (**Resolved**) - **Corrective Action:** Informational: The Engineer of Record is responsible for requesting and submitting the appropriate FDEP Public Water System (PWS) and/or Wastewater (WW) permit applications, if applicable. All applications must be signed and sealed prior to submission for Marion County Utilities' signature and must be provided before the Utilities Pre-Construction meeting. - 6.14.5.B - FDEP PWS and/or WW permits
Corrections	6.14.5.A(2) - Proposed mains & connections shown (**Resolved**) - **Corrective Action:** C06 - Need plug valve at the FM connection (2) Sheet 6.1 the proposed connection to the FM cannot be a Tee. Must be a wet tap. If this project is forced to extend the sewer from its current location, the correct method of connection will need to be made. - 6.14.5.A(2) - Proposed mains & connections shown:
Corrections	6.15.4 - Water Main Piping Installation (**Resolved**) - **Corrective Action:** C06 – Clearly call out the proposed tap size at the water main connection. The water main located along Marion Oaks Boulevard is a 16-inch main. A 6-inch fire hydrant lead and nine (9) meters cannot be served from a 6-inch tap. Revise to either - Relocate the hydrant to the right-of-way and provide a direct tap to the main, or Install a 6-inch DDC serving a private hydrant. The fire main from the FDC shall be DR-14. Please clarify whether a dedicated fire line connection to the water main is proposed at the single-port Fire Department Connection. - 6.15.4 - Water Main Piping Installation:
Corrections	6.14.9.B - Transfer of Assets to MCU - PLAN NOTE: (**Resolved**) - **Corrective Action:** "This project will require new utility infrastructure outside of the property boundary to be transferred to Marion County Utilities (MCU) through a Bill of Sale. The Bill of Sale package will be provided at the time of the Pre-Construction Meeting and must be completed and returned to MCU prior to FDEP clearance being released. " - 6.14.9.B - Transfer of Assets to MCU - PLAN NOTE::
Corrections	7.1.3 - UT DETAILS - current LDC version (**Resolved**) - **Corrective Action:** C08 - Missing Meter Bank detail (2) Update UT201A and B to the 2023 version 116A and 116B. C09 - Remove UT 205. MCU does not allow butterfly valves. C10 - Remove UT 308 and replace with above-ground ARV UT 316 - 7.1.3 - UT DETAILS - current LDC version: UT details shall be current version based on latest edition of approved LDC
Corrections	6.15.7 - Cross Connection Control/Backflow (**Resolved**) - **Corrective Action:** Informational: A backflow hold will be placed on the building permit. Backflows must be tested and the results reported to crossconnectioncontrol@marionfl.org before the final hold can be released. - 6.15.7 - Cross Connection Control/Backflow:
Corrections	6.14.4 - Capacity charges - domestic water/sewer (**Resolved**) - **Corrective Action:** Informational - 6.14.4 - Capacity charges - domestic water/sewer: Capacity charges to be invoiced and collected by MCU Permitting at time of building permit review - Cap Fee Worksheet and interior floor plan may be required.
Corrections	MCU Contact Info on Project Cover Sheet (**Resolved**) - **Corrective Action:** Correct Contact Info to reflect as provided - MCU Contact Info on Project Cover Sheet: Marion County Utilities, 11800 S US Hwy 441, Belleview FL 34420 - Customer Service 24/7/365 352-307-6000

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
Utilities (OCE Plans) (Utilities)	Heather Proctor	07/01/2026	07/01/2026	Approved

Corrections Additional Utilities Comments (**Resolved**) - **Corrective Action:** Sheet C02 - Water system notes #48 - remove OCPU system and replace with MCU - Additional Utilities Comments

Corrections 6.14.8.A - Completion & Closeout - PLAN NOTE: (**Resolved**) - **Corrective Action:** Marion County Utilities requires a PDF copy of the utility as-builts for the preliminary walkthrough and project closeout. MCU's GIS and Construction teams will review the PDF as-builts and provide comments. Once all comments have been addressed and revisions made, a DWG/CAD file will be requested to complete the final closeout process. - 6.14.8.A - Completion & Closeout - PLAN NOTE:

Corrections 6.15.6.B - Irrigation Water Metering - size (**Resolved**) - **Corrective Action:** 1" as shown on C06 - 6.15.6.B - Irrigation Water Metering - size:

Corrections 6.14.5.A(3) - LS layout, elevations, schedules (**Resolved**) - **Corrective Action:** Second request - No response to comment letter. Need to provide Lift Station detail sheet. Was a sewer force main pressure test completed to have accurate data for sizing of the lift station? - 6.14.5.A(3) - LS layout, elevations, schedules: Lift station details shall be included on a separate page showing general location of LS with details, working elevations & schedules.

Corrections 6.14.2 - Connection Requirements (**Resolved**) - **Corrective Action:** Second request:
The project will be connecting to Marion County Utilities (MCU) water and sewer force main. The existing sewer force main is currently located at the intersection of Marion Oaks Manor and Marion Oaks Boulevard. The site plan must clearly show the off-site connection and any required utility extensions.

Parcel 8004-0433-19 has utility-approved plans to extend the sewer force main to that parcel; however, if that project is not completed, this project will be responsible for extending the sewer force main as necessary to provide service to the site. Plan note can state that extension to parcel 8004-0433-19 is proposed by others. - 6.14.2 - Connection Requirements:

Corrections 6.14.4 - Capacity charges - irrigation (**Resolved**) - **Corrective Action:** 1,275 feet - listed on C06 under Irrigation note - 6.14.4 - Capacity charges

Comments The project is located within the Marion County Utilities service area and will be served by Marion County Utilities (MCU) for both water and sewer. No active building permit is listed on file.

A utility pre-construction meeting is required before any water or wastewater construction may begin. Please contact Development Review Officer Heather Proctor to schedule the meeting.

Heather Proctor
Email: Heather.Proctor@marionfl.org
Direct: (352) 438-2846
Main: (352) 307-6000, Ext. 4

OCE: Plan Review (DR) v.4

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
911 Management (DR) (911 Management)	Jamie Waldron	06/09/2026	06/03/2026	Approved

Corrections Additional 911 Comments (**Resolved**) - **Corrective Action:** Unit numbers needed on Site Plan. On Sheet C04 - when facing the building the 1st floor will be assigned Units 101-104 from left to right and the 2nd floor will be assigned 201-204 from left to right. These unit numbers need to be added to the site plan when applying for permits. Plan Approved.

Environmental Health (Plans) (Environmental Health)	Evan Searcy	06/09/2026	06/05/2026	Approved
Fire Marshal (Plans) (Fire)	Jonathan Kenning	06/09/2026	06/03/2026	Approved
Growth Services Planning & Zoning (DR) (GS Planning and Zoning)	Jared Rivera	06/09/2026	06/03/2026	Approved

Corrections 2.12.4.L & Article 5 - Overlay zones (**Resolved**) - [INFO] FEMA Flood Zone X, Secondary Springs Protection Zone, No ESOZ

Corrections 2.12.5/1.8.2.D - Traffic Concurrency Evaluation? (**Resolved**) - [INFO] Please coordinate with OCE regarding improvements based on required traffic impact analysis.

Corrections 2.12.4/6.11.8 - Parking (**Resolved**) - [INFO] Please note that parking lot landscaping will need to be provided consistent with LDC Sec. 6.8.7

Corrections 2.12.27 - Location & screening of outside storage (**Resolved**) - [INFO] No outdoor storage

Corrections 2.12.16/6.5 - EALS or Exemption provided (**Resolved**) - [INFO] EALS submitted and transmitted to FWC on 12/10/25.

Comments Please see resolved comments for planning/zoning information. If you have any questions related to this planning/zoning review, please contact jared.rivera@marionfl.org or 352-438-2687.

Landscape (Plans) (Parks and Recreation)	Susan Heyen	06/09/2026	06/05/2026	Informational

Comments Landscape plan approved previous submittal

OCE Design (Plans) (Office of the County Engineer)	Gerald Koch	06/09/2026	06/09/2026	Approved

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
OCE Property Management (Plans) (Office of the County Engineer)	Elizabeth Woods	06/09/2026	06/09/2026	Informational

Comments

Owner's Certification Updated and approved. -EMW 06.09.2026

IF APPLICABLE:
Sec. 2.18.1.I - Show connections to other phases.
Sec.2.19.2.H – Legal Documents
Legal documents such as Declaration of Covenants and Restrictions, By-Laws, Articles of Incorporation, ordinances, resolutions, etc.
Sec. 6.3.1.B.1 – Required Right of Way Dedication (select as appropriate)
For Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated for the use and benefit of the public."
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Sec. 6.3.1.D.3 - Cross Access Easements
For Cross Access Easements. "All parallel access easements shown on this plat are hereby dedicated for the use and benefit of the public, and maintenance of said easements is the responsibility of [entity name]."
Sec. 6.3.1.C.1 - Utility Easements (select as appropriate)
"[All utility easements shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction, installation, maintenance, and operation of utilities by any utility provider."
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"[All utility tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."
Sec.6.3.1.D(c)(1)(2)(3) - Stormwater easements and facilities, select as appropriate:
1. "[All stormwater and drainage easements as shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction and maintenance of such facilities."

2. "[All stormwater management tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."

3. When any stormwater easement and/or management tract is not dedicated to the public or Marion County directly, the following statement shall be added to the dedication language: "Marion County is granted the right to perform emergency maintenance on the [stormwater easement and/or management tract, complete accordingly] in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk."
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OCE Stormwater (Permits & Plans) (Office of the County Engineer)	Alexander Turnipseed	06/09/2026	06/03/2026	Informational

Comments

Please provide a copy of the NPDES permit or NOI as well as a copy of the District permit prior to construction.

OCE Survey (Plans) (Office of the County Engineer)	Theresa Smail	06/09/2026	06/03/2026	Approved

Corrections

6.4.7. Construction Plans - Survey Requirements (**Resolved**) - **Corrective Action:** 6.4.7.B(1) - Show a minimum of two intervisible horizontal control points per site.
6.4.7.B(2) - Horizontal control points shall be monumented and referenced to the Florida State Plane Coordinate System
6.4.7.B(4) - Provide a statement or table detailing horizontal datum, adjustment, and coordinate values - 6.4.7. Construction Plans - Survey Requirements: Survey information to support construction plans, including but not limited to Mass Grading, Improvement, or Major Site plans, shall meet requirements as set forth in Ch. 5J-17 FAC in addition to the following as identified in Section 6.4.7.A. through H. of the LDC.

Corrections

2.12.8. - Current boundary and topographic survey (**Resolved**) - 2.12.8. - Current boundary and topographic survey: Current boundary and topographic survey (one foot contour intervals extending 100 feet beyond the project boundary) based upon accepted vertical datum. Surveys will be less than 12 months old and accurately reflect current site conditions, meeting standards set forth in Ch. 5J-17 FAC. Alternate topographic data may be accepted if pre-approved by the Marion County Land Surveyor.

OCE Traffic (Permits & Plans) (Office of the County Engineer)	Chris Zeigler	06/09/2026	06/03/2026	Approved

Corrections

6.12.12 - Sidewalks (**Resolved**) - **Corrective Action:** Sidewalk is required along Marion Oaks Blvd. Staff supports payment of a fee in-lieu of sidewalk construction. A waiver must be approved by the Development Review Committee to allow the payment of a fee in-lieu of construction. If approved by the DRC the fee comes out to $2,400.00 and must be paid prior to final plan approval. - 6.12.12 - Sidewalks: Show sidewalk on the plans as required in section 6.12.12.

Corrections

6.11.4.B - Cross access (**Resolved**) - **Corrective Action:** Provide the executed public parallel access easement. The template for the public easement can be obtained from the Development Review Office at developmentreview@marionfl.org or 352-671-8686. The executed template and recording fees must be returned to the Development Review Office prior to final plan approval. - 6.11.4.B - Cross access: Provide a 24' wide paved cross access easement as specified in 6.11.4.B

Utilities (OCE Plans) (Utilities)	Heather Proctor	06/09/2026	06/08/2026	Requires Re-submit

Corrections

6.14.4 - Capacity charges - domestic water/sewer (**Resolved**) - **Corrective Action:** Informational - 6.14.4 - Capacity charges - domestic water/sewer: Capacity charges to be invoiced and collected by MCU Permitting at time of building permit review - Cap Fee Worksheet and interior floor plan may be required.

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
Utilities (OCE Plans) (Utilities)	Heather Proctor	06/09/2026	06/08/2026	Requires Re-submit

Corrections	6.14.5.A(1) - Existing water & sewer mains shown (**Resolved**) - **Corrective Action:** Show all mains. Contractor to field locate. - 6.14.5.A(1) - Existing water & sewer mains shown: The entire utility system shall be shown on the plan, including existing water systems and all proposed components within the project area.
Corrections	6.14.5.A(6) - MH locations, rim & invert elevation (**Resolved**) - **Corrective Action:** N/A - 6.14.5.A(6) - MH locations, rim & invert elevation:
Corrections	6.14.5.A(2) - Proposed mains & connections shown (**Not Resolved**) - **Corrective Action:** C06 - Need plug valve at the FM connection (2) Sheet 6.1 the proposed connection to the FM cannot be a Tee. Must be a wet tap. If this project is forced to extend the sewer from its current location, the correct method of connection will need to be made. - 6.14.5.A(2) - Proposed mains & connections shown:
Corrections	6.14.6 - Utilities design to be owned by MCU (**Resolved**) - **Corrective Action:** Informational: A. All utility systems shall be designed for the estimated tributary population. B. All utility systems shall be designed utilizing components with a minimum 30 year life span. C. Systems intended to be owned and maintained by MCU shall be designed for the tributary population and in conformance with the adopted Marion County Utilities Master Plan, as amended. D. Water systems shall be designed to satisfy the domestic water demand and fire protection requirements. E. All systems to be owned, operated, or maintained by MCU shall be subject to a pre-design meeting with MCU .F. All meters shall be located in a meter easement located adjacent to or within the public right-of-way. G. All meters in an MCU maintained system shall be installed and inspected by MCU after receiving payment of applicable fees and charges. H. All pipe shall comply with state standards. I. The engineer shall provide the required lengths of mechanically restrained joints in table form on the plans. - 6.14.6 - Utilities design to be owned by MCU:
Corrections	6.14.2 - Connection Requirements (**Resolved**) - **Corrective Action:** Second request: The project will be connecting to Marion County Utilities (MCU) water and sewer force main. The existing sewer force main is currently located at the intersection of Marion Oaks Manor and Marion Oaks Boulevard. The site plan must clearly show the off-site connection and any required utility extensions. Parcel 8004-0433-19 has utility-approved plans to extend the sewer force main to that parcel; however, if that project is not completed, this project will be responsible for extending the sewer force main as necessary to provide service to the site. Plan note can state that extension to parcel 8004-0433-19 is proposed by others. - 6.14.2 - Connection Requirements:
Corrections	Review Fee as applicable (per Resolution) (**Resolved**) - **Corrective Action:** Informational Plan resubmittal 5/1/26: $130.00 - Review Fee as applicable (per Resolution): MCU review fee for this submittal
Corrections	6.14.8.A - Completion & Closeout - PLAN NOTE: (**Resolved**) - **Corrective Action:** Marion County Utilities requires a PDF copy of the utility as-builts for the preliminary walkthrough and project closeout. MCU's GIS and Construction teams will review the PDF as-builts and provide comments. Once all comments have been addressed and revisions made, a DWG/CAD file will be requested to complete the final closeout process. - 6.14.8.A - Completion & Closeout - PLAN NOTE:
Corrections	6.15.3 - Fire Protection/Fire Flow Capacity (**Not Resolved**) - **Corrective Action:** Sheet 06 - Backflow preventer needs to be shown directly after the meter. (2) install a gate valve near on the PWS meter side of the tee from the wet tap, so MCU doesn't have to shut down the fire line if repairs on the potable meters are required (see plan comments) - 6.15.3 - Fire Protection/Fire Flow Capacity:
Corrections	6.14.9.B - Transfer of Assets to MCU - PLAN NOTE: (**Resolved**) - **Corrective Action:** "This project will require new utility infrastructure outside of the property boundary to be transferred to Marion County Utilities (MCU) through a Bill of Sale. The Bill of Sale package will be provided at the time of the Pre-Construction Meeting and must be completed and returned to MCU prior to FDEP clearance being released. " - 6.14.9.B - Transfer of Assets to MCU - PLAN NOTE::
Corrections	6.14.5.C - Hydraulic Analysis (**Resolved**) - **Corrective Action:** Second request - we need waste water analysis Submit (or revise if marked up) a hydraulic analysis to support the project. The Hydraulic Analysis has not been provided for this site. (LDC 6.14.5.C) - 6.14.5.C - Hydraulic Analysis: The hydraulic analysis is required to analyze the water or wastewater pressures in this area.
Corrections	6.15.6.D - Meter Location (**Resolved**) - **Corrective Action:** Second request C06 - Move meter boxes into the ROW at the property line and label "end of county maintenance". 1" Header is not the appropriate size for 9 meters. Must size appropriately. MCU will install dual checks on residential meters. Backflow is not necessary for the unit meters. Keep the backflow on irrigation and call out on the plans. - 6.15.6.D - Meter Location:
Corrections	6.14.4 - Capacity charges - irrigation (**Resolved**) - **Corrective Action:** 1,275 feet - listed on C06 under Irrigation note - 6.14.4 - Capacity charges
Corrections	Parcel numbers match project area (**Resolved**) - **Corrective Action:** Correct Parcel Number(s) or Project Area footprint - YES 8004-0433-18 - Parcel numbers match project area: The parcels(s) shown on the application and/or site plan must match the project area.
Corrections	6.14.5.B - Submit permits to MCU (DOT, ROW etc) (**Resolved**) - **Corrective Action:** Informational: Copies of all related permit applications and issued permits must be submitted to the Marion County Utilities Department prior to, or at the time of, the Pre-Construction Meeting. - 6.14.5.B - Submit permits to MCU (DOT, ROW etc): A copy of any permit issued to the contractor shall also be submitted to MCU's Construction Manager, or designee.
Corrections	6.15.4 - Water Main Piping Installation (**Resolved**) - **Corrective Action:** C06 – Clearly call out the proposed tap size at the water main connection. The water main located along Marion Oaks Boulevard is a 16-inch main. A 6-inch fire hydrant lead and nine (9) meters cannot be served from a 6-inch tap. Revise to either - Relocate the hydrant to the right-of-way and provide a direct tap to the main, or Install a 6-inch DDC serving a private hydrant. The fire main from the FDC shall be DR-14. Please clarify whether a dedicated fire line connection to the water main is proposed at the single-port Fire Department Connection. - 6.15.4 - Water Main Piping Installation:
Corrections	6.14.7 - Construction Inspection - PLAN NOTE: (**Resolved**) - **Corrective Action:** Add note to Utility Sheet(s) MCU personnel are to inspect any work performed on or around existing MCU infrastructure. A pre-construction meeting is required to be held a minimum of 48 hours prior to start of any construction. If the pre-construction meeting is not completed, any work may be halted. To schedule, contact MCU's Construction Division, 352) 307-6000, ext. 5 or MCUconstruction@marionfl.org - 6.14.7 - Construction Inspection - PLAN NOTE
Corrections	6.15.4 - Water Distribution System (**Resolved**) - **Corrective Action:** Tap for hydrant @ hydrant. Do not run water service to it. - 6.15.4 - Water Distribution System:
Corrections	6.15.6.B - Irrigation Water Metering - size (**Resolved**) - **Corrective Action:** 1" as shown on C06 - 6.15.6.B - Irrigation Water Metering - size:

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
Utilities (OCE Plans) (Utilities)	Heather Proctor	06/09/2026	06/08/2026	Requires Re-submit

Corrections 6.14.5.A(3) - LS layout, elevations, schedules (**Resolved**) - **Corrective Action:** Second request - No response to comment letter. Need to provide Lift Station detail sheet. Was a sewer force main pressure test completed to have accurate data for sizing of the lift station? - 6.14.5.A(3) - LS layout, elevations, schedules: Lift station details shall be included on a separate page showing general location of LS with details, working elevations & schedules.

Corrections 6.15.7 - Cross Connection Control/Backflow (**Resolved**) - **Corrective Action:** Informational: A backflow hold will be placed on the building permit. Backflows must be tested and the results reported to crossconnectioncontrol@marionfl.org before the final hold can be released. - 6.15.7 - Cross Connection Control/Backflow:

Corrections MCU Contact Info on Project Cover Sheet (**Resolved**) - **Corrective Action:** Correct Contact Info to reflect as provided - MCU Contact Info on Project Cover Sheet: Marion County Utilities, 11800 S US Hwy 441, Belleview FL 34420 - Customer Service 24/7/365 352-307-6000

Corrections 7.1.3 - UT DETAILS - current LDC version (**Resolved**) - **Corrective Action:** C08 - Missing Meter Bank detail (2) Update UT201A and B to the 2023 version 116A and 116B.
C09 - Remove UT 205. MCU does not allow butterfly valves.
C10 - Remove UT 308 and replace with above-ground ARV UT 316 - 7.1.3 - UT DETAILS - current LDC version: UT details shall be current version based on latest edition of approved LDC

Corrections 6.14.5.B - FDEP PWS and/or WW permits (**Resolved**) - **Corrective Action:** Informational: The Engineer of Record is responsible for requesting and submitting the appropriate FDEP Public Water System (PWS) and/or Wastewater (WW) permit applications, if applicable. All applications must be signed and sealed prior to submission for Marion County Utilities' signature and must be provided before the Utilities Pre-Construction meeting. - 6.14.5.B - FDEP PWS and/or WW permits

Corrections Additional Utilities Comments (**Not Resolved**) - **Corrective Action:** Sheet C02 - Water system notes #48 - remove OCPU system and replace with MCU - Additional Utilities Comments

Comments Please see the corrective comments and plan markups.

Please submit the revised utility plans to Heather.Proctor@Marionfl.org for review prior to your next submittal in Civic Access.

eREVIEW SESSION FILES: 351 Marion Oaks Civil Plans_v2.pdf
O&M.pdf
Proof of Ownership Documentation.pdf

REVIEWER	MARKUP	DATE/TIME	FILE NAME	PG #
Heather Proctor	Add gate valve here	06/08/2026 10:53 AM	351 Marion Oaks Civil Plans_v2.pdf	7
Heather Proctor	RESUBMIT	06/08/2026 10:54 AM	351 Marion Oaks Civil Plans_v2.pdf	1

OCE: Plan Review (DR) v.3

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
911 Management (DR) (911 Management)	Kristie Wright	05/01/2026	04/30/2026	Approved

Corrections Additional 911 Comments (**Resolved**) - **Corrective Action:** Unit numbers needed on Site Plan. On Sheet C04 - when facing the building the 1st floor will be assigned Units 101-104 from left to right and the 2nd floor will be assigned 201-204 from left to right. These unit numbers need to be added to the site plan when applying for permits. Plan Approved.

Environmental Health (Plans) (Environmental Health)	Evan Searcy	05/01/2026	05/01/2026	Approved
Fire Marshal (Plans) (Fire)	Jonathan Kenning	05/01/2026	04/24/2026	Approved
Growth Services Planning & Zoning (DR) (GS Planning and Zoning)	Jared Rivera	05/01/2026	04/27/2026	Informational

Corrections 2.12.4.L & Article 5 - Overlay zones (**Resolved**) - [INFO] FEMA Flood Zone X, Secondary Springs Protection Zone, No ESOZ

Corrections 2.12.4/6.11.8 - Parking (**Resolved**) - [INFO] Please note that parking lot landscaping will need to be provided consistent with LDC Sec. 6.8.7

Corrections 2.12.16/6.5 - EALS or Exemption provided (**Resolved**) - [INFO] EALS submitted and transmitted to FWC on 12/10/25.

Corrections 2.12.27 - Location & screening of outside storage (**Resolved**) - [INFO] No outdoor storage

Corrections 2.12.5/1.8.2.D - Traffic Concurrency Evaluation? (**Resolved**) - [INFO] Please coordinate with OCE regarding improvements based on required traffic impact analysis.

Comments For any questions related to this Planning/Zoning review, please contact jared.rivera@marionfl.org or 352-438-2687.

Landscape (Plans) (Parks and Recreation)	Susan Heyen	05/01/2026	04/30/2026	Approved
OCE Design (Plans) (Office of the County Engineer)	William Poole	05/01/2026	04/28/2026	Approved

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
OCE Property Management (Plans) (Office of the County Engineer)	Delenie Roman	05/01/2026	04/30/2026	Requires Re-submit

Comments

Road Project Map checked. Sunbiz not Active.
Please update Owner's Certification or in the alternative show new ownership documentation.
Please ensure that signer's authority documents are uploaded at time of correction.
IF APPLICABLE:
Sec. 2.18.1.I - Show connections to other phases.
Sec.2.19.2.H – Legal Documents
Legal documents such as Declaration of Covenants and Restrictions, By-Laws, Articles of Incorporation, ordinances, resolutions, etc.
Sec. 6.3.1.B.1 – Required Right of Way Dedication (select as appropriate)
For Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated for the use and benefit of the public."
Sec. 6.3.1.B.2 – Required Right of Way Dedication
For Non-Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated privately to the [entity name]. All public authorities and their personnel providing services to the subdivision are granted an easement for access. The Board of County Commissioners of Marion County, Florida, shall have no responsibility, duty, or liability whatsoever regarding such streets. Marion County is granted an easement for emergency maintenance in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk."
Sec. 6.3.1.D.3 - Cross Access Easements
For Cross Access Easements. "All parallel access easements shown on this plat are hereby dedicated for the use and benefit of the public, and maintenance of said easements is the responsibility of [entity name]."
Sec. 6.3.1.C.1 - Utility Easements (select as appropriate)
"[All utility easements shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction, installation, maintenance, and operation of utilities by any utility provider."
Sec. 6.3.1.C.2 – Utility Easements
"[All utility tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."
Sec.6.3.1.D(c)(1)(2)(3) - Stormwater easements and facilities, select as appropriate:
1. "[All stormwater and drainage easements as shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction and maintenance of such facilities."

2. "[All stormwater management tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."

3. When any stormwater easement and/or management tract is not dedicated to the public or Marion County directly, the following statement shall be added to the dedication language: "Marion County is granted the right to perform emergency maintenance on the [stormwater easement and/or management tract, complete accordingly] in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk."
Sec.6.3.1.D(f) –
If a Conservation Easement is required the following shall be provided: "A conservation easement [as shown or on tract and identify the tract, complete accordingly] is dedicated to [the Board of County Commissioners of Marion County, Florida or entity name, if not Marion County] for the purpose of preservation of [listed species, habitat, Karst feature and/or native vegetation, complete accordingly]."
DR 4/30/26

OCE Stormwater (Permits & Plans) (Office of the County Engineer)	Alexander Turnipseed	05/01/2026	04/28/2026	Requires Re-submit

Corrections

Additional Stormwater comments (**Not Resolved**) - (1) INFO: Please provide a copy of the NPDES permit or NOI as well as a copy of the District permit prior to construction.
(2) INFO: If you have questions or would like to discuss the stormwater review comments, please contact Alexander Turnipseed at (352) 671-8376 or at alexander.turnipseed@marionfl.org.

Corrections

6.13.2.B(8) - Calculation & Plan Consistency (**Not Resolved**) - **Corrective Action:** This item will be reviewed upon resubmittal - 6.13.2.B(8) - Calculation & Plan Consistency: Calculations must be consistent with the plan sheets and other supporting details. Calculations shall use standard methodology recognized in the State of Florida, including hand and/or computerized calculations.

Corrections

6.13.12 - Operation and Maintenance (**Not Resolved**) - The O&M manual a standalone document from the plans and calculations.

OCE Survey (Plans) (Office of the County Engineer)	Theresa Smail	05/01/2026	04/28/2026	Approved

Corrections

2.12.8. - Current boundary and topographic survey (**Resolved**) - 2.12.8. - Current boundary and topographic survey: Current boundary and topographic survey (one foot contour intervals extending 100 feet beyond the project boundary) based upon accepted vertical datum. Surveys will be less than 12 months old and accurately reflect current site conditions, meeting standards set forth in Ch. 5J-17 FAC. Alternate topographic data may be accepted if pre-approved by the Marion County Land Surveyor.

Corrections

6.4.7. Construction Plans - Survey Requirements (**Resolved**) - **Corrective Action:** 6.4.7.B(1) - Show a minimum of two intervisible horizontal control points per site.
6.4.7.B(2) - Horizontal control points shall be monumented and referenced to the Florida State Plane Coordinate System
6.4.7.B(4) - Provide a statement or table detailing horizontal datum, adjustment, and coordinate values - 6.4.7. Construction Plans - Survey Requirements: Survey information to support construction plans, including but not limited to Mass Grading, Improvement, or Major Site plans, shall meet requirements as set forth in Ch. 5J-17 FAC in addition to the following as identified in Section 6.4.7.A. through H. of the LDC.

OCE Traffic (Permits & Plans) (Office of the County Engineer)	Chris Zeigler	05/01/2026	04/26/2026	Approved

Corrections

6.12.12 - Sidewalks (**Resolved**) - **Corrective Action:** Sidewalk is required along Marion Oaks Blvd. Staff supports payment of a fee in-lieu of sidewalk construction. A waiver must be approved by the Development Review Committee to allow the payment of a fee in-lieu of construction. If approved by the DRC the fee comes out to $2,400.00 and must be paid prior to final plan approval. - 6.12.12 - Sidewalks: Show sidewalk on the plans as required in section 6.12.12.

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
OCE Traffic (Permits & Plans) (Office of the County Engineer)	Chris Zeigler	05/01/2026	04/26/2026	Approved
Corrections	6.11.4.B - Cross access (**Resolved**) - **Corrective Action:** Provide the executed public parallel access easement. The template for the public easement can be obtained from the Development Review Office at developmentreview@marionfl.org or 352-671-8686. The executed template and recording fees must be returned to the Development Review Office prior to final plan approval. - 6.11.4.B - Cross access: Provide a 24' wide paved cross access easement as specified in 6.11.4.B			
Utilities (OCE Plans) (Utilities)	Heather Proctor	05/01/2026	05/01/2026	Requires Re-submit
Corrections	7.1.3 - UT DETAILS - current LDC version (**Resolved**) - **Corrective Action:** C08 - Missing Meter Bank detail (2) Update UT201A and B to the 2023 version 116A and 116B. C09 - Remove UT 205. MCU does not allow butterfly valves. C10 - Remove UT 308 and replace with above-ground ARV UT 316 - 7.1.3 - UT DETAILS - current LDC version: UT details shall be current version based on latest edition of approved LDC			
Corrections	6.14.5.B - FDEP PWS and/or WW permits (**Resolved**) - **Corrective Action:** Informational: The Engineer of Record is responsible for requesting and submitting the appropriate FDEP Public Water System (PWS) and/or Wastewater (WW) permit applications, if applicable. All applications must be signed and sealed prior to submission for Marion County Utilities' signature and must be provided before the Utilities Pre-Construction meeting. - 6.14.5.B - FDEP PWS and/or WW permits			
Corrections	6.14.5.A(6) - MH locations, rim & invert elevation (**Resolved**) - **Corrective Action:** N/A - 6.14.5.A(6) - MH locations, rim & invert elevation:			
Corrections	MCU Contact Info on Project Cover Sheet (**Resolved**) - **Corrective Action:** Correct Contact Info to reflect as provided - MCU Contact Info on Project Cover Sheet: Marion County Utilities, 11800 S US Hwy 441, Belleview FL 34420 - Customer Service 24/7/365 352-307-6000			
Corrections	6.14.7 - Construction Inspection - PLAN NOTE: (**Resolved**) - **Corrective Action:** Add note to Utility Sheet(s) MCU personnel are to inspect any work performed on or around existing MCU infrastructure. A pre-construction meeting is required to be held a minimum of 48 hours prior to start of any construction. If the pre-construction meeting is not completed, any work may be halted. To schedule, contact MCU's Construction Division, 352) 307-6000, ext. 5 or MCUconstruction@marionfl.org - 6.14.7 - Construction Inspection - PLAN NOTE			
Corrections	6.14.5.A(3) - LS layout, elevations, schedules (**Resolved**) - **Corrective Action:** Second request - No response to comment letter. Need to provide Lift Station detail sheet. Was a sewer force main pressure test completed to have accurate data for sizing of the lift station? - 6.14.5.A(3) - LS layout, elevations, schedules: Lift station details shall be included on a separate page showing general location of LS with details, working elevations & schedules.			
Corrections	6.15.4 - Water Distribution System (**Resolved**) - **Corrective Action:** Tap for hydrant @ hydrant. Do not run water service to it. - 6.15.4 - Water Distribution System:			
Corrections	6.14.5.A(2) - Proposed mains & connections shown (**Not Resolved**) - **Corrective Action:** Second request: C06 - Show method of connection to force main. (2) install plug valve at property line and label "end of county maintenance" - 6.14.5.A (2) - Proposed mains & connections shown:			
Corrections	Parcel numbers match project area (**Resolved**) - **Corrective Action:** Correct Parcel Number(s) or Project Area footprint - YES 8004-0433-18 - Parcel numbers match project area: The parcels(s) shown on the application and/or site plan must match the project area.			
Corrections	6.14.2 - Connection Requirements (**Resolved**) - **Corrective Action:** Second request: The project will be connecting to Marion County Utilities (MCU) water and sewer force main. The existing sewer force main is currently located at the intersection of Marion Oaks Manor and Marion Oaks Boulevard. The site plan must clearly show the off-site connection and any required utility extensions. Parcel 8004-0433-19 has utility-approved plans to extend the sewer force main to that parcel; however, if that project is not completed, this project will be responsible for extending the sewer force main as necessary to provide service to the site. Plan note can state that extension to parcel 8004-0433-19 is proposed by others. - 6.14.2 - Connection Requirements:			
Corrections	6.15.4 - Water Main Piping Installation (**Resolved**) - **Corrective Action:** C06 – Clearly call out the proposed tap size at the water main connection. The water main located along Marion Oaks Boulevard is a 16-inch main. A 6-inch fire hydrant lead and nine (9) meters cannot be served from a 6-inch tap. Revise to either - Relocate the hydrant to the right-of-way and provide a direct tap to the main, or Install a 6-inch DDC serving a private hydrant. The fire main from the FDC shall be DR-14. Please clarify whether a dedicated fire line connection to the water main is proposed at the single-port Fire Department Connection. - 6.15.4 - Water Main Piping Installation:			
Corrections	6.14.4 - Capacity charges - domestic water/sewer (**Resolved**) - **Corrective Action:** Informational - 6.14.4 - Capacity charges - domestic water/sewer: Capacity charges to be invoiced and collected by MCU Permitting at time of building permit review - Cap Fee Worksheet and interior floor plan may be required.			
Corrections	6.14.5.B - Submit permits to MCU (DOT, ROW etc) (**Resolved**) - **Corrective Action:** Informational: Copies of all related permit applications and issued permits must be submitted to the Marion County Utilities Department prior to, or at the time of, the Pre-Construction Meeting. - 6.14.5.B - Submit permits to MCU (DOT, ROW etc): A copy of any permit issued to the contractor shall also be submitted to MCU's Construction Manager, or designee.			
Corrections	Review Fee as applicable (per Resolution) (**Resolved**) - **Corrective Action:** Informational Plan resubmittal 5/1/26: $130.00 - Review Fee as applicable (per Resolution): MCU review fee for this submittal			
Corrections	6.14.5.A(1) - Existing water & sewer mains shown (**Resolved**) - **Corrective Action:** Show all mains. Contractor to field locate. - 6.14.5.A(1) - Existing water & sewer mains shown: The entire utility system shall be shown on the plan, including existing water systems and all proposed components within the project area.			
Corrections	6.15.6.B - Irrigation Water Metering - size (**Resolved**) - **Corrective Action:** 1" as shown on C06 - 6.15.6.B - Irrigation Water Metering - size:			
Corrections	6.14.8.A - Completion & Closeout - PLAN NOTE: (**Resolved**) - **Corrective Action:** Marion County Utilities requires a PDF copy of the utility as-builts for the preliminary walkthrough and project closeout. MCU's GIS and Construction teams will review the PDF as-builts and provide comments. Once all comments have been addressed and revisions made, a DWG/CAD file will be requested to complete the final closeout process. - 6.14.8.A - Completion & Closeout - PLAN NOTE:			

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
Utilities (OCE Plans) (Utilities)	Heather Proctor	05/01/2026	05/01/2026	Requires Re-submit

Corrections 6.15.3 - Fire Protection/Fire Flow Capacity (**Not Resolved**) - **Corrective Action:** Easement needed on utility plan over fire line for maintenance and inspection (See plan markups). Informational Please see plan notes for potential FDC relocation. (2) Water service will be provided by Marion County Utilities. Please consult with Marion County Fire Rescue for any additional comments or requirements related to fire protection. - 6.15.3 - Fire Protection/Fire Flow Capacity:

Corrections 6.15.7 - Cross Connection Control/Backflow (**Resolved**) - **Corrective Action:** Informational: A backflow hold will be placed on the building permit. Backflows must be tested and the results reported to crossconnectioncontrol@marionfl.org before the final hold can be released. - 6.15.7 - Cross Connection Control/Backflow:

Corrections 6.15.6.D - Meter Location (**Resolved**) - **Corrective Action:** Second request
C06 - Move meter boxes into the ROW at the property line and label "end of county maintenance".
1" Header is not the appropriate size for 9 meters. Must size appropriately.
MCU will install dual checks on residential meters. Backflow is not necessary for the unit meters. Keep the backflow on irrigation and call out on the plans. - 6.15.6.D - Meter Location:

Corrections 6.14.5.C - Hydraulic Analysis (**Resolved**) - **Corrective Action:** Second request - we need waste water analysis
Submit (or revise if marked up) a hydraulic analysis to support the project. The Hydraulic Analysis has not been provided for this site. (LDC 6.14.5.C) - 6.14.5.C - Hydraulic Analysis: The hydraulic analysis is required to analyze the water or wastewater pressures in this area.

Corrections Additional Utilities Comments (**Resolved**) - **Corrective Action:** There are no resubmittal comments uploaded. - Additional Utilities Comments

Corrections 6.14.6 - Utilities design to be owned by MCU (**Resolved**) - **Corrective Action:** Informational: A. All utility systems shall be designed for the estimated tributary population. B. All utility systems shall be designed utilizing components with a minimum 30 year life span. C. Systems intended to be owned and maintained by MCU shall be designed for the tributary population and in conformance with the adopted Marion County Utilities Master Plan, as amended. D. Water systems shall be designed to satisfy the domestic water demand and fire protection requirements. E. All systems to be owned, operated, or maintained by MCU shall be subject to a pre-design meeting with MCU .F. All meters shall be located in a meter easement located adjacent to or within the public right-of-way. G. All meters in an MCU maintained system shall be installed and inspected by MCU after receiving payment of applicable fees and charges. H. All pipe shall comply with state standards. I. The engineer shall provide the required lengths of mechanically restrained joints in table form on the plans. - 6.14.6 - Utilities design to be owned by MCU:

Corrections 6.14.4 - Capacity charges - irrigation (**Resolved**) - **Corrective Action:** 1,275 feet - listed on C06 under Irrigation note - 6.14.4 - Capacity charges

Corrections 6.14.9.B - Transfer of Assets to MCU - PLAN NOTE: (**Resolved**) - **Corrective Action:** "This project will require new utility infrastructure outside of the property boundary to be transferred to Marion County Utilities (MCU) through a Bill of Sale.

The Bill of Sale package will be provided at the time of the Pre-Construction Meeting and must be completed and returned to MCU prior to FDEP clearance being released. " - 6.14.9.B - Transfer of Assets to MCU - PLAN NOTE::

Comments Please see Corrections and Plan Markups

eREVIEW SESSION FILES:
351 Marion Oaks Blvd Lift Station Design Report Rev 041926 SS.pdf
351 Marion Oaks Civil Plans_v2.pdf
Comment Response Letter 2026-04-07.pdf
Drainage Report SS & Hydraulic Analysis SS.pdf
Landscape Plans_v1.pdf
Survey_v2.pdf

REVIEWER	MARKUP	DATE/TIME	FILE NAME	PG #
Heather Proctor	Need Plug valve at connection point as well as at property line.	05/01/2026 4:27 PM	351 Marion Oaks Civil Plans_v2.pdf	7
Heather Proctor	Need easement called out on plan.	05/01/2026 4:28 PM	351 Marion Oaks Civil Plans_v2.pdf	7
Heather Proctor	Meter banks must be 2" tap per UT202. Could do only 1 tap, sized appropriately and make the meter bank for all meters. EoR to determine what the appropriate size should be based on demand.	05/01/2026 4:29 PM	351 Marion Oaks Civil Plans_v2.pdf	7
Heather Proctor	Tap the fire hydrant with a 16x6 seperate. Right at the hydrant location. No need to extend the water service to it.	05/01/2026 4:29 PM	351 Marion Oaks Civil Plans_v2.pdf	7
Heather Proctor	If this is the final CO, it doesn't need to be angled towards the building.	05/01/2026 4:31 PM	351 Marion Oaks Civil Plans_v2.pdf	7
Heather Proctor	Need to make a plan note for the contractor where the proposed FM extension will be for 32203 - so they can bid it with the extension and if the extension gets halted.	05/01/2026 4:36 PM	351 Marion Oaks Civil Plans_v2.pdf	8

OCE: Plan Review (DR) v.2

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
911 Management (DR) (911 Management)	Jamie Waldron	02/25/2026	02/20/2026	Approved

Corrections Additional 911 Comments (**Resolved**) - **Corrective Action:** Unit numbers needed on Site Plan. On Sheet C04 - when facing the building the 1st floor will be assigned Units 101-104 from left to right and the 2nd floor will be assigned 201-204 from left to right. These unit numbers need to be added to the site plan when applying for permits. Plan Approved.

Environmental Health (Plans) (Environmental Health)	Evan Searcy	02/25/2026	02/26/2026	Approved
Fire Marshal (Plans) (Fire)	Jonathan Kenning	02/25/2026	02/18/2026	Approved

Comments Previously Approved

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
Growth Services Planning & Zoning (DR) (GS Planning and Zoning)	Jared Rivera	02/25/2026	02/20/2026	Informational
Corrections	2.12.4.L - DRI/FQD Compliance Note (**Resolved**) - [2/18/26-INFO] Included in cover sheet [INITIAL] Specifically revise the plan to add the following advisory note: "DEVELOPMENT OF THE PROPERTY AS SHOWN ON THIS [SITE PLAN/SUBDIVISION PLAT] IS SUBJECT TO THE TERMS AND CONDITIONS OF THE MARION OAKS VESTED DRI AND ITS CORRESPONDING VESTED RIGHTS DETERMINATIONS, AS MAY BE AMENDED FROM TIME TO TIME, INCLUDING PROVISIONS REGARDING THE CONCURRENCY OF PUBLIC FACILITIES."			
Corrections	2.12 - Rezoning (**Resolved**) - [2/17/26-INFO] Included in cover sheet. [INITIAL] Please indicate Rezoning Case No. 250707ZP on cover sheet.			
Corrections	2.12.5/1.8.2.D - Traffic Concurrency Evaluation? (**Resolved**) - [INFO] Please coordinate with OCE regarding improvements based on required traffic impact analysis.			
Corrections	2.12.27 - Location & screening of outside storage (**Resolved**) - [INFO] No outdoor storage			
Corrections	2.12/4.2 - Building height (**Resolved**) - [2/18/26-INFO] Included. [INITIAL] Building heights are missing. Please provide in the site data table on cover/site plan sheets			
Corrections	2.12.24 - Landscape requirements/6.8.6 - Buffering (**Resolved**) - [INFO] (1) Buffers have been delineated but specific plantings do not seem to have been identified. Please note that in the case that the buffers are cleared, a zoning code violation would exist and the site may be subject to the code enforcement process, at the property owner's risk. (2) Please note that A/C shall be screened consistent with LDC Sec. 6.8.9.			
Corrections	2.12.4.L & Article 5 - Overlay zones (**Resolved**) - [INFO] FEMA Flood Zone X, Secondary Springs Protection Zone, No ESOZ			
Corrections	2.12.16/6.5 - EALS or Exemption provided (**Resolved**) - [INFO] EALS submitted and transmitted to FWC on 12/10/25.			
Corrections	2.12.4/6.11.8 - Parking (**Resolved**) - [INFO] Please note that parking lot landscaping will need to be provided consistent with LDC Sec. 6.8.7			
Comments	See resolved items for informational comments. If you have any questions regarding Planning/Zoning review, please contact jared.rivera@marionfl.org or 352-438-2687.			
Landscape (Plans) (Parks and Recreation)	Susan Heyen	02/25/2026	02/20/2026	Requires Re-submit
Comments	1. waiver for parking islands 2. dumpster and lighting question - see plan for markups			
OCE Design (Plans) (Office of the County Engineer)	Gerald Koch	02/25/2026	02/23/2026	Approved
OCE Property Management (Plans) (Office of the County Engineer)	Elizabeth Woods	02/25/2026	02/26/2026	Requires Re-submit
Comments	Please add owner's certification and signer's information to the cover sheet of the civil plans for review. -EMW 02.26.2026 IF APPLICABLE: Sec. 2.18.1.I - Show connections to other phases. Sec.2.19.2.H – Legal Documents Legal documents such as Declaration of Covenants and Restrictions, By-Laws, Articles of Incorporation, ordinances, resolutions, etc. Sec. 6.3.1.B.1 – Required Right of Way Dedication (select as appropriate) For Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated for the use and benefit of the public." Sec. 6.3.1.B.2 – Required Right of Way Dedication For Non-Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated privately to the [entity name]. All public authorities and their personnel providing services to the subdivision are granted an easement for access. The Board of County Commissioners of Marion County, Florida, shall have no responsibility, duty, or liability whatsoever regarding such streets. Marion County is granted an easement for emergency maintenance in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk." Sec. 6.3.1.D.3 - Cross Access Easements For Cross Access Easements. "All parallel access easements shown on this plat are hereby dedicated for the use and benefit of the public, and maintenance of said easements is the responsibility of [entity name]." Sec. 6.3.1.C.1 - Utility Easements (select as appropriate) "[All utility easements shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction, installation, maintenance, and operation of utilities by any utility provider." Sec. 6.3.1.C.2 – Utility Easements "[All utility tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities." Sec.6.3.1.D(c)(1)(2)(3) - Stormwater easements and facilities, select as appropriate: 1. "[All stormwater and drainage easements as shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction and maintenance of such facilities." 2. "[All stormwater management tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities." 3. When any stormwater easement and/or management tract is not dedicated to the public or Marion County directly, the following statement shall be added to the dedication language: "Marion County is granted the right to perform emergency maintenance on the [stormwater easement and/or management tract, complete accordingly] in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk." Sec.6.3.1.D(f) – If a Conservation Easement is required the following shall be provided: "A conservation easement [as shown or on tract and identify the tract, complete accordingly] is dedicated to [the Board of County Commissioners of Marion County, Florida or entity name, if not Marion County] for the purpose of preservation of [listed species, habitat, Karst feature and/or native vegetation, complete accordingly]."			

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
OCE Stormwater (Permits & Plans) (Office of the County Engineer)	Alexander Turnipseed	02/23/2026	02/18/2026	Requires Re-submit
Corrections	Additional Stormwater comments (**Not Resolved**) - (1) INFO: Please provide a copy of the NPDES permit or NOI as well as a copy of the District permit prior to construction. (2) INFO: If you have questions or would like to discuss the stormwater review comments, please contact Alexander Turnipseed at (352) 671-8376 or at alexander.turnipseed@marionfl.org.			
Corrections	6.13.2.B(8) - Calculation & Plan Consistency (**Not Resolved**) - **Corrective Action:** This item will be reviewed upon resubmittal - 6.13.2.B(8) - Calculation & Plan Consistency: Calculations must be consistent with the plan sheets and other supporting details. Calculations shall use standard methodology recognized in the State of Florida, including hand and/or computerized calculations.			
Corrections	6.13.12 - Operation and Maintenance (**Not Resolved**) - **Corrective Action:** An operation and maintenance manual is required for all projects. This is a standalone document from the plans and calculations. If you need an example of O&M documents that have been approved in the past, contact the stormwater department. The O&M manual will need to have the following certification on the cover: "I hereby certify that I, my successors, and assigns shall perpetually operate and maintain the stormwater management system and associated elements in accordance with the specifications shown herein and on the approved plans." This certification must be signed by the current property owner or their authorized representative. We used the State of Florida Sunbiz website to verify agents/member/officers of business entities. If the owner is an out of state organization we will need to see articles of incorporation/organization to verify the authority of the individual signing the certifications. For property ownership, we use the Marion County Property Appraiser's website. If you need an example contact the stormwater department. - 6.13.12 - Operation and Maintenance: Provide an O&M manual detailing the steps for operating and maintaining the proposed private system of DRAs, pipes, inlets, swales, etc. Manual shall be signed by Owner and owner's certification statement shall be on the manual. Owner's certification statement: "I hereby certify that I, my successors, and assigns shall perpetually operate and maintain the stormwater management and associated elements in accordance with the specifications shown herein and on the approved plan".			
OCE Survey (Plans) (Office of the County Engineer)	Theresa Smail	02/25/2026	02/23/2026	Requires Re-submit
Corrections	2.12.8. - Current boundary and topographic survey (**Resolved**) - 2.12.8. - Current boundary and topographic survey: Current boundary and topographic survey (one foot contour intervals extending 100 feet beyond the project boundary) based upon accepted vertical datum. Surveys will be less than 12 months old and accurately reflect current site conditions, meeting standards set forth in Ch. 5J-17 FAC. Alternate topographic data may be accepted if pre-approved by the Marion County Land Surveyor.			
Corrections	6.4.7. Construction Plans - Survey Requirements (**Not Resolved**) - **Corrective Action:** 6.4.7.B(1) - Show a minimum of two intervisible horizontal control points per site. 6.4.7.B(2) - Horizontal control points shall be monumented and referenced to the Florida State Plane Coordinate System 6.4.7.B(4) - Provide a statement or table detailing horizontal datum, adjustment, and coordinate values - 6.4.7. Construction Plans - Survey Requirements: Survey information to support construction plans, including but not limited to Mass Grading, Improvement, or Major Site plans, shall meet requirements as set forth in Ch. 5J-17 FAC in addition to the following as identified in Section 6.4.7.A. through H. of the LDC.			
Comments	Response to Comments Not Provided Public Ingress-Egress Easement (Cross Access) uploaded to this area. 6.4.7. Construction Plans - Survey Requirements: Survey information to support construction plans, including but not limited to Mass Grading, Improvement, or Major Site plans, shall meet requirements as set forth in Ch. 5J-17 FAC in addition to the following as identified in Section 6.4.7.A. through H. of the LDC. Corrective Action 6.4.7.B(1) - Show a minimum of two intervisible horizontal control points per site. 6.4.7.B(2) - Horizontal control points shall be monumented and referenced to the Florida State Plane Coordinate System 6.4.7.B(4) - Provide a statement or table detailing horizontal datum, adjustment, and coordinate values			
OCE Traffic (Permits & Plans) (Office of the County Engineer)	Chris Zeigler	02/25/2026	02/23/2026	Approved
Corrections	6.11.4.B - Cross access (**Resolved**) - **Corrective Action:** Provide the executed public parallel access easement. The template for the public easement can be obtained from the Development Review Office at developmentreview@marionfl.org or 352-671-8686. The executed template and recording fees must be returned to the Development Review Office prior to final plan approval. - 6.11.4.B - Cross access: Provide a 24' wide paved cross access easement as specified in 6.11.4.B			
Corrections	6.12.12 - Sidewalks (**Resolved**) - **Corrective Action:** Sidewalk is required along Marion Oaks Blvd. Staff supports payment of a fee in-lieu of sidewalk construction. A waiver must be approved by the Development Review Committee to allow the payment of a fee in-lieu of construction. If approved by the DRC the fee comes out to $2,400.00 and must be paid prior to final plan approval. - 6.12.12 - Sidewalks: Show sidewalk on the plans as required in section 6.12.12.			
Utilities (OCE Plans) (Utilities)	Heather Proctor	02/25/2026	02/25/2026	Requires Re-submit
Corrections	6.15.6.B - Irrigation Water Metering - size (**Resolved**) - **Corrective Action:** 1" as shown on C06 - 6.15.6.B - Irrigation Water Metering - size:			
Corrections	6.14.4 - Capacity charges - irrigation (**Resolved**) - **Corrective Action:** 1,275 feet - listed on C06 under Irrigation note - 6.14.4 - Capacity charges			
Corrections	6.14.6 - Utilities design to be owned by MCU (**Resolved**) - **Corrective Action:** Informational: A. All utility systems shall be designed for the estimated tributary population. B. All utility systems shall be designed utilizing components with a minimum 30 year life span. C. Systems intended to be owned and maintained by MCU shall be designed for the tributary population and in conformance with the adopted Marion County Utilities Master Plan, as amended. D. Water systems shall be designed to satisfy the domestic water demand and fire protection requirements. E. All systems to be owned, operated, or maintained by MCU shall be subject to a pre-design meeting with MCU .F. All meters shall be located in a meter easement located adjacent to or within the public right-of-way. G. All meters in an MCU maintained system shall be installed and inspected by MCU after receiving payment of applicable fees and charges. H. All pipe shall comply with state standards. I. The engineer shall provide the required lengths of mechanically restrained joints in table form on the plans. - 6.14.6 - Utilities design to be owned by MCU:			
Corrections	7.1.3 - UT DETAILS - current LDC version (**Resolved**) - **Corrective Action:** C08 - Missing Meter Bank detail (2) Update UT201A and B to the 2023 version 116A and 116B. C09 - Remove UT 205. MCU does not allow butterfly valves. C10 - Remove UT 308 and replace with above-ground ARV UT 316 - 7.1.3 - UT DETAILS - current LDC version: UT details shall be current version based on latest edition of approved LDC			

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
Utilities (OCE Plans) (Utilities)	Heather Proctor	02/25/2026	02/25/2026	Requires Re-submit

Corrections	Parcel numbers match project area (**Resolved**) - **Corrective Action:** Correct Parcel Number(s) or Project Area footprint - YES 8004-0433-18 - Parcel numbers match project area: The parcels(s) shown on the application and/or site plan must match the project area.
Corrections	6.14.7 - Construction Inspection - PLAN NOTE: (**Resolved**) - **Corrective Action:** Add note to Utility Sheet(s) MCU personnel are to inspect any work performed on or around existing MCU infrastructure. A pre-construction meeting is required to be held a minimum of 48 hours prior to start of any construction. If the pre-construction meeting is not completed, any work may be halted. To schedule, contact MCU's Construction Division, 352) 307-6000, ext. 5 or MCUconstruction@marionfl.org - 6.14.7 - Construction Inspection - PLAN NOTE
Corrections	6.14.5.A(1) - Existing water & sewer mains shown (**Resolved**) - **Corrective Action:** Show all mains. Contractor to field locate. - 6.14.5.A(1) - Existing water & sewer mains shown: The entire utility system shall be shown on the plan, including existing water systems and all proposed components within the project area.
Corrections	6.15.3 - Fire Protection/Fire Flow Capacity (**Resolved**) - **Corrective Action:** Informational Please see plan notes for potential FDC relocation. (2) Water service will be provided by Marion County Utilities. Please consult with Marion County Fire Rescue for any additional comments or requirements related to fire protection. - 6.15.3 - Fire Protection/Fire Flow Capacity:
Corrections	6.14.5.A(6) - MH locations, rim & invert elevation (**Resolved**) - **Corrective Action:** N/A - 6.14.5.A(6) - MH locations, rim & invert elevation:
Corrections	6.15.6.D - Meter Location (**Not Resolved**) - **Corrective Action:** Second request C06 - Move meter boxes into the ROW at the property line and label "end of county maintenance". 1" Header is not the appropriate size for 9 meters. Must size appropriately. MCU will install dual checks on residential meters. Backflow is not necessary for the unit meters. Keep the backflow on irrigation and call out on the plans. - 6.15.6.D - Meter Location:
Corrections	6.15.4 - Water Main Piping Installation (**Resolved**) - **Corrective Action:** C06 – Clearly call out the proposed tap size at the water main connection. The water main located along Marion Oaks Boulevard is a 16-inch main. A 6-inch fire hydrant lead and nine (9) meters cannot be served from a 6-inch tap. Revise to either - Relocate the hydrant to the right-of-way and provide a direct tap to the main, or Install a 6-inch DDC serving a private hydrant. The fire main from the FDC shall be DR-14. Please clarify whether a dedicated fire line connection to the water main is proposed at the single-port Fire Department Connection. - 6.15.4 - Water Main Piping Installation:
Corrections	6.14.9.B - Transfer of Assets to MCU - PLAN NOTE: (**Resolved**) - **Corrective Action:** "This project will require new utility infrastructure outside of the property boundary to be transferred to Marion County Utilities (MCU) through a Bill of Sale. The Bill of Sale package will be provided at the time of the Pre-Construction Meeting and must be completed and returned to MCU prior to FDEP clearance being released. " - 6.14.9.B - Transfer of Assets to MCU - PLAN NOTE::
Corrections	6.14.5.B - FDEP PWS and/or WW permits (**Resolved**) - **Corrective Action:** Informational: The Engineer of Record is responsible for requesting and submitting the appropriate FDEP Public Water System (PWS) and/or Wastewater (WW) permit applications, if applicable. All applications must be signed and sealed prior to submission for Marion County Utilities' signature and must be provided before the Utilities Pre-Construction meeting. - 6.14.5.B - FDEP PWS and/or WW permits
Corrections	6.14.8.A - Completion & Closeout - PLAN NOTE: (**Resolved**) - **Corrective Action:** Marion County Utilities requires a PDF copy of the utility as-builts for the preliminary walkthrough and project closeout. MCU's GIS and Construction teams will review the PDF as-builts and provide comments. Once all comments have been addressed and revisions made, a DWG/CAD file will be requested to complete the final closeout process. - 6.14.8.A - Completion & Closeout - PLAN NOTE:
Corrections	6.14.5.A(3) - LS layout, elevations, schedules (**Not Resolved**) - **Corrective Action:** Second request - No response to comment letter. Need to provide Lift Station detail sheet. Was a sewer force main pressure test completed to have accurate data for sizing of the lift station? - 6.14.5.A(3) - LS layout, elevations, schedules: Lift station details shall be included on a separate page showing general location of LS with details, working elevations & schedules.
Corrections	6.14.5.A(2) - Proposed mains & connections shown (**Not Resolved**) - **Corrective Action:** Second request: C06 - Show method of connection to force main. (2) install plug valve at property line and label "end of county maintenance" - 6.14.5.A (2) - Proposed mains & connections shown:
Corrections	6.14.5.B - Submit permits to MCU (DOT, ROW etc) (**Resolved**) - **Corrective Action:** Informational: Copies of all related permit applications and issued permits must be submitted to the Marion County Utilities Department prior to, or at the time of, the Pre-Construction Meeting. - 6.14.5.B - Submit permits to MCU (DOT, ROW etc): A copy of any permit issued to the contractor shall also be submitted to MCU's Construction Manager, or designee.
Corrections	6.15.7 - Cross Connection Control/Backflow (**Resolved**) - **Corrective Action:** Informational: A backflow hold will be placed on the building permit. Backflows must be tested and the results reported to crossconnectioncontrol@marionfl.org before the final hold can be released. - 6.15.7 - Cross Connection Control/Backflow:
Corrections	Additional Utilities Comments (**Not Resolved**) - **Corrective Action:** There are no resubmittal comments uploaded. - Additional Utilities Comments
Corrections	6.14.4 - Capacity charges - domestic water/sewer (**Resolved**) - **Corrective Action:** Informational - 6.14.4 - Capacity charges - domestic water/sewer: Capacity charges to be invoiced and collected by MCU Permitting at time of building permit review - Cap Fee Worksheet and interior floor plan may be required.
Corrections	6.14.2 - Connection Requirements (**Not Resolved**) - **Corrective Action:** Second request: The project will be connecting to Marion County Utilities (MCU) water and sewer force main. The existing sewer force main is currently located at the intersection of Marion Oaks Manor and Marion Oaks Boulevard. The site plan must clearly show the off-site connection and any required utility extensions. Parcel 8004-0433-19 has utility-approved plans to extend the sewer force main to that parcel; however, if that project is not completed, this project will be responsible for extending the sewer force main as necessary to provide service to the site. Plan note can state that extension to parcel 8004-0433-19 is proposed by others. - 6.14.2 - Connection Requirements:
Corrections	6.14.5.C - Hydraulic Analysis (**Not Resolved**) - **Corrective Action:** Second request - we need waste water analysis Submit (or revise if marked up) a hydraulic analysis to support the project. The Hydraulic Analysis has not been provided for this site. (LDC 6.14.5.C) - 6.14.5.C - Hydraulic Analysis: The hydraulic analysis is required to analyze the water or wastewater pressures in this area.

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
Utilities (OCE Plans) (Utilities)	Heather Proctor	02/25/2026	02/25/2026	Requires Re-submit
Corrections	Review Fee as applicable (per Resolution) (**Not Resolved**) - **Corrective Action:** Plan resubmittal: $225.00 - Review Fee as applicable (per Resolution): MCU review fee for this submittal			
Corrections	MCU Contact Info on Project Cover Sheet (**Resolved**) - **Corrective Action:** Correct Contact Info to reflect as provided - MCU Contact Info on Project Cover Sheet: Marion County Utilities, 11800 S US Hwy 441, Belleview FL 34420 - Customer Service 24/7/365 352-307-6000			
Corrections	6.15.4 - Water Distribution System (**Not Resolved**) - **Corrective Action:** See plan comments - ARV can be replaced by the hydrant, if you move hydrant to the ROW. C06 – The existing ARV shown on the plans is an above-ground valve and is currently located within the proposed driveway. Please revise the plans to show the removal or relocation of this valve. - 6.15.4 - Water Distribution System:			
Comments	Please see the corrective comments and plan comments.			

OCE: Plan Review (DR) v.1

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
911 Management (DR) (911 Management)	Caroline Dennison	12/19/2025	12/09/2025	Approved
Corrections	Additional 911 Comments (**Resolved**) - **Corrective Action:** Unit numbers needed on Site Plan. On Sheet C04 - when facing the building the 1st floor will be assigned Units 101-104 from left to right and the 2nd floor will be assigned 201-204 from left to right. These unit numbers need to be added to the site plan when applying for permits. Plan Approved.			
Environmental Health (Plans) (Environmental Health)	Evan Searcy	12/19/2025	12/23/2025	Approved
Fire Marshal (Plans) (Fire)	Jonathan Kenning	12/19/2025	12/05/2025	Approved
Growth Services Planning & Zoning (DR) (GS Planning and Zoning)	Jared Rivera	12/19/2025	12/10/2025	Requires Re-submit
Corrections	2.12.4.L & Article 5 - Overlay zones (**Resolved**) - **Corrective Action:** [INFO] FEMA Flood Zone X, Secondary Springs Protection Zone, No ESOZ - 2.12.4.L & Article 5 - Overlay zones: Provide a statement showing all applicable overlay zones on the subject properties such as Airport Overlay Zones (AOZ), Environmentally Sensitive Overlay Zone (ESOZ), Floodplain, Springs Protection Overlay Zone (SPOZ), Military Operating Area (MOA), Scenic Roads Area (SRA), Wellhead/Wellfield Protection Area (WHPA), Silver Springs Community Redevelopment Area (SSCRA), and CR 475A Visual Enhancement Gateway Development Overlay, etc. Refer to LDC Article 5 - OVERLAY ZONES AND SPECIAL AREAS.			
Corrections	2.12.4.L - DRI/FQD Compliance Note (**Not Resolved**) - **Corrective Action:** Specifically revise the plan to add the following advisory note: "DEVELOPMENT OF THE PROPERTY AS SHOWN ON THIS [SITE PLAN/SUBDIVISION PLAT] IS SUBJECT TO THE TERMS AND CONDITIONS OF THE MARION OAKS VESTED DRI AND ITS CORRESPONDING VESTED RIGHTS DETERMINATIONS, AS MAY BE AMENDED FROM TIME TO TIME, INCLUDING PROVISIONS REGARDING THE CONCURRENCY OF PUBLIC FACILITIES." - 2.12.4.L - DRI/FQD Compliance Note?: Revise the plan to add the following advisory note: "DEVELOPMENT OF THE PROPERTY AS SHOWN ON THIS [SITE PLAN/SUBDIVISION PLAT] IS SUBJECT TO THE TERMS AND CONDITIONS OF THE [PROJECT NAME DRI/FQD] DEVELOPMENT ORDER, AS MAY BE AMENDED FROM TIME TO TIME, INCLUDING PROVISIONS REGARDING THE CONCURRENCY OF PUBLIC FACILITIES.			
Corrections	2.12 - Rezoning (**Not Resolved**) - **Corrective Action:** Please indicate Rezoning Case No. 250707ZP on cover sheet - 2.12 - Rezoning: List of approved Rezoning, case numbers, conditions, and the date of approval.			
Corrections	2.12.4/6.11.8 - Parking (**Resolved**) - **Corrective Action:** [INFO] Please note that parking lot landscaping will need to be provided consistent with LDC Sec. 6.8.7 - 2.12.4/6.11.8 - Parking: Provide number and calculation of required and proposed parking spaces in table format, per LDC Sec. 6.11.8. - Parking requirements.			
Corrections	2.12.27 - Location & screening of outside storage (**Resolved**) - **Corrective Action:** [INFO] No outdoor storage - 2.12.27 - Location & screening of outside storage: Provide a statement indicating any outside storage area is proposed. If applicable, show location of outside storage areas on plan. Check special requirements under zoning code sections.			
Corrections	2.12 - Land Use Designation-adjacent properties (**Resolved**) - **Corrective Action:** [INFO] If possible, please also indicate adjacent zoning/FLU designation on sheets C04.1/04 in future submittals. - 2.12 - Land Use Designation-adjacent properties: Show existing land use designation on the adjacent properties.			
Corrections	2.12.6 - Location of water and sewer (**Resolved**) - **Corrective Action:** [INFO] Located within Marion County Utilities service area. Defer to MCU - 2.12.6 - Location of water and sewer: Show location of septic systems and wells. Locations shall be outside setback and clearance.			
Corrections	2.12.24 - Landscape requirements/6.8.6 - Buffering (**Not Resolved**) - **Corrective Action:** [INFO] (1) Buffers have been delineated but specific plantings do not seem to have been identified. Please note that in the case that the buffers are cleared, a zoning code violation would exist and the site may be subject to the code enforcement process, at the property owner's risk. (2) Please note that A/C shall be screened consistent with LDC Sec. 6.8.9 - 2.12.24 - Landscape requirements/6.8.6 - Buffering: Show buffer types, locations, and dimensions of required buffering on plan. Show buffer descriptions and illustrations of each proposed buffer (including longitudinal and transverse cross-sections)			
Corrections	2.12/4.2 - Building height (**Not Resolved**) - **Corrective Action:** Building heights are missing. Please provide in the site data table on cover/site plan sheets - 2.12/4.2 - Building height: Show building height (primary and accessory structures) in the site data table.			
Corrections	2.12.16/6.5 - EALS or Exemption provided (**Resolved**) - **Corrective Action:** [INFO] EALS submitted and transmitted to FWC on 12/10/25. - 2.12.16/6.5 - EALS or Exemption provided?: Provide Environmental Assessment of Listed Species (EALS) or submit an Exemption (EALS-ER). Copy of the EALS/EALS-ER will be forwarded to review agency for comments. Refer to LDC Sec. 6.5 for submittal requirements and review procedures.			
Corrections	2.12 - Waivers (Requested & Approved) (**Resolved**) - **Corrective Action:** [INFO] If applicable, please include in cover sheet in future submittals. - 2.12 - Waivers (Requested & Approved): List of all requested and approved waivers, conditions, and the date of approval.			
Corrections	2.12.5/1.8.2.D - Traffic Concurrency Evaluation? (**Not Resolved**) - **Corrective Action:** [INFO] Please coordinate with OCE regarding improvements based on required traffic impact analysis. - 2.12.5/1.8.2.D - Traffic Concurrency Evaluation?: In order to propose alternative solutions to addressing the lack of roadway capacity, a traffic study will be required and a traffic methodology must be submitted for review and approval prior to the traffic study being completed. Please contact OCE-Traffic Review for further information on completing the necessary methodology and study.			
Comments	See corrections for Planning/Zoning comments.			

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
Landscape (Plans) (Parks and Recreation)	Susan Heyen	12/19/2025	12/12/2025	Requires Re-submit
Comments	Please submit Tree Preservation, signed and sealed Landscape, Irrigation and if necessary, photometric plans for review			
OCE Design (Plans) (Office of the County Engineer)	Gerald Koch	12/19/2025	12/22/2025	Approved
Corrections	6.2.1.B.-F. - Requirements (**Resolved**) - 6.2.1.B.-F. - Requirements: Technical standards and requirements as listed in Section 6.2.1.B. through F. of the LDC			
Corrections	6.2.1.A. - Licensed Professional (**Resolved**) - 6.2.1.A. - Licensed Professional: Plans shall be prepared by a professional licensed by the State of Florida. The name, street address, signature, date, license number, and seal of the responsible professional shall be shown on each plan sheet. The same shall be provided on the cover page of any supporting documents and calculations.			
Corrections	Additional Design Comments (**Resolved**) - Additional Comments:			
OCE Property Management (Plans) (Office of the County Engineer)	Elizabeth Woods	12/19/2025	12/22/2025	Requires Re-submit
Comments	Please upload application and Site Plan for review -EMW 12.22.25			
OCE Stormwater (Permits & Plans) (Office of the County Engineer)	Alexander Turnipseed	12/19/2025	12/10/2025	Requires Re-submit
Corrections	6.13.2.B(4) - Hydrologic Analysis (**Not Resolved**) - **Corrective Action:** Please clarify where you are getting the rainfall amounts from. Based on the site location using NOAA's maps the rainfall amount for the 24 hr,100 year storm & 24 hr, 25 year storm should be 11.1 & 7.95 respectively - 6.13.2.B(4) - Hydrologic Analysis: Hydrologic stormwater model analysis including all input parameters, supporting calculations, assumptions, documentation for design and results.			
Corrections	6.13.2 A(1)/(2) - Contributing Basins/Tc (**Not Resolved**) - **Corrective Action:** Please provide a pre-development drainage basin map - 6.13.2 A(1)/(2) - Contributing Basins/Tc: Plan sheets shall minimally show: All pre-development and post-development basins that contribute runoff to the area proposed for development, including all off-site contributions, and areas that may be impacted by the development fully delineated and quantified. The time of concentration, and travel path, for each watershed shall be shown.			
Corrections	2.12.4.L(9)(b) - Data Block (Impervious Area) (**Not Resolved**) - 2.12.4.L(9)(b) - Data Block (Impervious Area): Provide existing and proposed gross impervious area in SF, ac, and percentage in the data block on the cover sheet. Include any offsite drainage to your site in the data block.			
Corrections	6.13.2.B(6) - Freeboard (**Not Resolved**) - **Corrective Action:** See comment under "6.13.2.B(4) □ Hydrologic Analysis" - 6.13.2.B(6) - Freeboard: A minimum freeboard of six inches shall be provided for all retention/detention areas.			
Corrections	6.13.6 - Stormwater Quality Criteria (**Not Resolved**) - 6.13.6 - Stormwater Quality Criteria: The following systems shall be considered as meeting the County's stormwater quality criteria: a) Systems that demonstrate numerically the post-development stormwater quality is equal to or better than the pre-development stormwater quality using methodology approved by the County Engineer or his designee. b) Dry retention systems that have a depth of four feet or less, measured from top of bank to pond bottom, shall have an appropriate vegetative cover. c) Dry retention systems that have a depth of six feet or less, measured from top of bank to pond bottom, with side slopes that are no steeper than 4:1, shall have sodded bottoms. d) Wet retention/detention systems, including wetlands, shall meet the governing State standards. e) Systems demonstrating distributed volume.			
Corrections	Additional Stormwater comments (**Not Resolved**) - (1) INFO: Please provide a copy of the NPDES permit or NOI as well as a copy of the District permit prior to construction. (2) INFO: If you have questions or would like to discuss the stormwater review comments, please contact Alexander Turnipseed at (352) 671-8376 or at alexander.turnipseed@marionfl.org.			
Corrections	6.13.12 - Operation and Maintenance (**Not Resolved**) - **Corrective Action:** An operation and maintenance manual is required for all projects. This is a standalone document from the plans and calculations. If you need an example of O&M documents that have been approved in the past, contact the stormwater department. The O&M manual will need to have the following certification on the cover: "I hereby certify that I, my successors, and assigns shall perpetually operate and maintain the stormwater management system and associated elements in accordance with the specifications shown herein and on the approved plans." This certification must be signed by the current property owner or their authorized representative. We used the State of Florida Sunbiz website to verify agents/member/officers of business entities. If the owner is an out of state organization we will need to see articles of incorporation/organization to verify the authority of the individual signing the certifications. For property ownership, we use the Marion County Property Appraiser's website. If you need an example contact the stormwater department. - 6.13.12 - Operation and Maintenance: Provide an O&M manual detailing the steps for operating and maintaining the proposed private system of DRAs, pipes, inlets, swales, etc. Manual shall be signed by Owner and owner's certification statement shall be on the manual. Owner's certification statement: "I hereby certify that I, my successors, and assigns shall perpetually operate and maintain the stormwater management and associated elements in accordance with the specifications shown herein and on the approved plan".			
Corrections	2.12.8 - Topographical Contours (**Not Resolved**) - 2.12.8 - Topographical Contours: Current boundary and topographic survey (one foot contour intervals extending 100 feet beyond the project boundary) based upon accepted vertical datum. Surveys will be less than 12 months old and accurately reflect current site conditions, meeting standards set forth in Ch. 5J-17 FAC. Alternate topographic data may be accepted if pre-approved by the Marion County Land Surveyor.			
Corrections	6.13.2.B(8) - Calculation & Plan Consistency (**Not Resolved**) - **Corrective Action:** Notes on pages 56 & 58 of the stormwater report appear to have been cut off - 6.13.2.B(8) - Calculation & Plan Consistency: Calculations must be consistent with the plan sheets and other supporting details. Calculations shall use standard methodology recognized in the State of Florida, including hand and/or computerized calculations.			
Corrections	Final signed and sealed hard copy signature page (**Not Resolved**) - After all stormwater comments are resolved, please upload a scanned copy of the digitally signed and sealed certification page of the stormwater report. Alternatively, a hard copy can be submitted. If you choose to submit a hard copy, you only need to submit the certification page of the report. A full report is not necessary. However, full reports are accepted if desired.			
Corrections	6.13.8 - Stormwater Conveyance Criteria (**Not Resolved**) - **Corrective Action:** Please provide conveyance calculations - 6.13.8 - Stormwater Conveyance Criteria: Conveyance systems shall be sized to accommodate the 25-year 24-hour storm event. The tailwater elevation utilized shall be based on the tailwater elevation of the receiving water body plus 6 inches at the peak discharge time of the design storm. Alternatively, the tailwater elevation utilized can be the design high water elevation of the 25-year 24-hour design storm. All retention/detention areas within subdivision developments shall have direct access to a right-of-way. A drainage right-of-way may be necessary to establish this access. Drainage rights-of-way shall be a minimum of 30 feet in width. All drainage swales to facilities or underground stormwater conveyance systems shall be within drainage easements, except where rights-of-way are provided. Drainage easements shall be a minimum of 20 feet in width.			

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
OCE Stormwater (Permits & Plans) (Office of the County Engineer)	Alexander Turnipseed	12/19/2025	12/10/2025	Requires Re-submit
Corrections	6.13.2.A(9) - Access Accommodates Stormwater (**Not Resolved**) - **Corrective Action:** Identify how the conveyance of runoff in the ROW swale will be maintained - 6.13.2.A(9) - Access Accommodates Stormwater: Site access accounting for stormwater conveyance with a swale, culvert, or curb and gutter driveway.			
Corrections	6.13.4 - Stormwater Quantity Criteria (**Not Resolved**) - **Corrective Action:** See comment under "6.13.2.B(4) Hydrologic Analysis" - 6.13.4 - Stormwater Quantity Criteria: Methodologies, rainfall distribution and intensities shall be consistent with those approved by the governing water management district. Assumed parameters must be supported by conventional methods. Design storms shall consider open or closed basins as provided in Table 6.13-1.			
Corrections	6.13.4.D - Recovery Analysis (**Not Resolved**) - **Corrective Action:** See comment under "6.13.2.B(4) Hydrologic Analysis" - 6.13.4.D - Recovery Analysis: All retention/detention areas shall recover the total volume required to meet the discharge volume limitations within 14 days following the design rainfall event. For retention/detention areas not able to recover the total required volume within 14 days, the stormwater facility volume shall be increased to retain an additional volume from a second design storm.			
Corrections	6.13.4.C - Discharge Conditions (**Not Resolved**) - **Corrective Action:** See comment under "6.13.2.B(4) Hydrologic Analysis" - 6.13.4.C - Discharge Conditions: All stormwater facilities shall be designed to limit discharges considering open or closed basins per Table 6.13-1. A discharge structure shall be required for all retention/detention areas not designed to retain the entire 100-year 24-hour post-development design storm. Discharge structures shall include a skimmer at a minimum.			
OCE Survey (Plans) (Office of the County Engineer)	Theresa Smail	12/19/2025	12/17/2025	Requires Re-submit
Corrections	6.4.7. Construction Plans - Survey Requirements (**Not Resolved**) - **Corrective Action:** 6.4.7.B(1) - Show a minimum of two intervisible horizontal control points per site. 6.4.7.B(2) - Horizontal control points shall be monumented and referenced to the Florida State Plane Coordinate System 6.4.7.B(4) - Provide a statement or table detailing horizontal datum, adjustment, and coordinate values - 6.4.7. Construction Plans - Survey Requirements: Survey information to support construction plans, including but not limited to Mass Grading, Improvement, or Major Site plans, shall meet requirements as set forth in Ch. 5J-17 FAC in addition to the following as identified in Section 6.4.7.A. through H. of the LDC.			
Corrections	2.12.8. - Current boundary and topographic survey (**Not Resolved**) - 2.12.8. - Current boundary and topographic survey: Current boundary and topographic survey (one foot contour intervals extending 100 feet beyond the project boundary) based upon accepted vertical datum. Surveys will be less than 12 months old and accurately reflect current site conditions, meeting standards set forth in Ch. 5J-17 FAC. Alternate topographic data may be accepted if pre-approved by the Marion County Land Surveyor.			
OCE Traffic (Permits & Plans) (Office of the County Engineer)	Chris Zeigler	12/19/2025	12/08/2025	Requires Re-submit
Corrections	6.11.4.B - Cross access (**Not Resolved**) - **Corrective Action:** Provide the executed public parallel access easement. The template for the public easement can be obtained from the Development Review Office at developmentreview@marionfl.org or 352-671-8686. The executed template and recording fees must be returned to the Development Review Office prior to final plan approval. - 6.11.4.B - Cross access: Provide a 24' wide paved cross access easement as specified in 6.11.4.B			
Corrections	6.12.12 - Sidewalks (**Not Resolved**) - **Corrective Action:** Sidewalk is required along Marion Oaks Blvd. Staff supports payment of a fee in-lieu of sidewalk construction. A waiver must be approved by the Development Review Committee to allow the payment of a fee in-lieu of construction. If approved by the DRC the fee comes out to $2,400.00 and must be paid prior to final plan approval. - 6.12.12 - Sidewalks: Show sidewalk on the plans as required in section 6.12.12.			
Utilities (OCE Plans) (Utilities)	Heather Proctor	12/19/2025	12/22/2025	Requires Re-submit
Corrections	6.14.6 - Utilities design to be owned by MCU (**Not Resolved**) - **Corrective Action:** Informational: A. All utility systems shall be designed for the estimated tributary population. B. All utility systems shall be designed utilizing components with a minimum 30 year life span. C. Systems intended to be owned and maintained by MCU shall be designed for the tributary population and in conformance with the adopted Marion County Utilities Master Plan, as amended. D. Water systems shall be designed to satisfy the domestic water demand and fire protection requirements. E. All systems to be owned, operated, or maintained by MCU shall be subject to a pre-design meeting with MCU .F. All meters shall be located in a meter easement located adjacent to or within the public right-of-way. G. All meters in an MCU maintained system shall be installed and inspected by MCU after receiving payment of applicable fees and charges. H. All pipe shall comply with state standards. I. The engineer shall provide the required lengths of mechanically restrained joints in table form on the plans. - 6.14.6 - Utilities design to be owned by MCU:			
Corrections	6.14.4 - Capacity charges - irrigation (**Not Resolved**) - **Corrective Action:** Show irrigated SF on UTILITY PLAN PAGE - 6.14.4 - Capacity charges			
Corrections	MCU Contact Info on Project Cover Sheet (**Resolved**) - **Corrective Action:** Correct Contact Info to reflect as provided - MCU Contact Info on Project Cover Sheet: Marion County Utilities, 11800 S US Hwy 441, Belleview FL 34420 - Customer Service 24/7/365 352-307-6000			
Corrections	6.14.8.A - Completion & Closeout - PLAN NOTE: (**Not Resolved**) - **Corrective Action:** Marion County Utilities requires a PDF copy of the utility as-builts for the preliminary walkthrough and project closeout. MCU's GIS and Construction teams will review the PDF as-builts and provide comments. Once all comments have been addressed and revisions made, a DWG/CAD file will be requested to complete the final closeout process. - 6.14.8.A - Completion & Closeout - PLAN NOTE:			
Corrections	6.14.5.A(2) - Proposed mains & connections shown (**Not Resolved**) - **Corrective Action:** C06 - Show method of connection to force main. (2) install plug valve at property line and label "end of county maintenance" (3) C900 is required for 14 LF force main in ROW. - 6.14.5.A(2) - Proposed mains & connections shown:			
Corrections	6.14.5.A(8) - Connection to existing sanitary (**Not Resolved**) - **Corrective Action:** See previous comment – The plans must show the off-site connection and extension to the sewer force main at its current location. - 6.14.5.A(8) - Connection to existing sanitary:			
Corrections	6.14.9.B - Transfer of Assets to MCU - PLAN NOTE: (**Not Resolved**) - **Corrective Action:** "This project will require new utility infrastructure outside of the property boundary to be transferred to Marion County Utilities (MCU) through a Bill of Sale. The Bill of Sale package will be provided at the time of the Pre-Construction Meeting and must be completed and returned to MCU prior to FDEP clearance being released. " - 6.14.9.B - Transfer of Assets to MCU - PLAN NOTE::			
Corrections	6.14.5.B - FDEP PWS and/or WW permits (**Not Resolved**) - **Corrective Action:** The Engineer of Record is responsible for requesting and submitting the appropriate FDEP Public Water System (PWS) and/or Wastewater (WW) permit applications, if applicable. All applications must be signed and sealed prior to submission for Marion County Utilities' signature and must be provided before the Utilities Pre-Construction meeting. - 6.14.5.B - FDEP PWS and/or WW permits			

SUBMITTAL SUMMARY REPORT (MajorSite-000060-2025)

ITEM REVIEW NAME (DEPARTMENT)	ASSIGNED TO	DUE	COMPLETE	STATUS
Utilities (OCE Plans) (Utilities)	Heather Proctor	12/19/2025	12/22/2025	Requires Re-submit

Corrections	6.15.7 - Cross Connection Control/Backflow (**Not Resolved**) - **Corrective Action:** A backflow hold will be placed on the building permit. Backflows must be tested and the results reported to crossconnectioncontrol@marionfl.org before the final hold can be released. - 6.15.7 - Cross Connection Control/Backflow:
Corrections	6.14.5.C - Hydraulic Analysis (**Not Resolved**) - **Corrective Action:** Submit (or revise if marked up) a hydraulic analysis to support the project. The Hydraulic Analysis has not been provided for this site. (LDC 6.14.5.C) - 6.14.5.C - Hydraulic Analysis: The hydraulic analysis is required to analyze the water or wastewater pressures in this area.
Corrections	6.15.3 - Fire Protection/Fire Flow Capacity (**Not Resolved**) - **Corrective Action:** Water service will be provided by Marion County Utilities. Please consult with Marion County Fire Rescue for any additional comments or requirements related to fire protection. - 6.15.3 - Fire Protection/Fire Flow Capacity:
Corrections	6.14.5.A(1) - Existing water & sewer mains shown (**Not Resolved**) - **Corrective Action:** Show all mains. Contractor to field locate. - 6.14.5.A(1) - Existing water & sewer mains shown: The entire utility system shall be shown on the plan, including existing water systems and all proposed components within the project area.
Corrections	Review Fee as applicable (per Resolution) (**Not Resolved**) - **Corrective Action:** Utilities Plan Review Fee: $510.00 Fee(s) may be paid online through the Civic Access portal. - Review Fee as applicable (per Resolution): MCU review fee for this submittal
Corrections	6.14.5.A(3) - LS layout, elevations, schedules (**Not Resolved**) - **Corrective Action:** Need to provide Lift Station detail sheet. Was a sewer force main pressure test completed to have accurate data for sizing of the lift station? - 6.14.5.A(3) - LS layout, elevations, schedules: Lift station details shall be included on a separate page showing general location of LS with details, working elevations & schedules.
Corrections	Additional Utilities Comments (**Not Resolved**) - **Corrective Action:** C02 - #12 under Sanitary System Notes - Change water main to force main. - Additional Utilities Comments
Corrections	6.15.6.D - Meter Location (**Not Resolved**) - **Corrective Action:** C06 - Move meter boxes into the ROW at the property line and label "end of county maintenance". 1" Header is not the appropriate size for 9 meters. Must size appropriately. MCU will install dual checks on residential meters. Backflow is not necessary for the unit meters. Keep the backflow on irrigation and call out on the plans. - 6.15.6.D - Meter Location:
Corrections	6.14.4 - Capacity charges - domestic water/sewer (**Not Resolved**) - **Corrective Action:** Informational - 6.14.4 - Capacity charges - domestic water/sewer: Capacity charges to be invoiced and collected by MCU Permitting at time of building permit review - Cap Fee Worksheet and interior floor plan may be required.
Corrections	Parcel numbers match project area (**Resolved**) - **Corrective Action:** Correct Parcel Number(s) or Project Area footprint - YES 8004-0433-18 - Parcel numbers match project area: The parcels(s) shown on the application and/or site plan must match the project area.
Corrections	6.15.4 - Water Main Piping Installation (**Not Resolved**) - **Corrective Action:** C06 – Clearly call out the proposed tap size at the water main connection. The water main located along Marion Oaks Boulevard is a 16-inch main. A 6-inch fire hydrant lead and nine (9) meters cannot be served from a 6-inch tap. Revise to either - Relocate the hydrant to the right-of-way and provide a direct tap to the main, or Install a 6-inch DDC serving a private hydrant. The fire main from the FDC shall be DR-14. Please clarify whether a dedicated fire line connection to the water main is proposed at the single-port Fire Department Connection. - 6.15.4 - Water Main Piping Installation:
Corrections	6.14.5.B - Submit permits to MCU (DOT, ROW etc) (**Not Resolved**) - **Corrective Action:** Copies of all related permit applications and issued permits must be submitted to the Marion County Utilities Department prior to, or at the time of, the Pre-Construction Meeting. - 6.14.5.B - Submit permits to MCU (DOT, ROW etc): A copy of any permit issued to the contractor shall also be submitted to MCU's Construction Manager, or designee.
Corrections	6.15.6.B - Irrigation Water Metering - size (**Resolved**) - **Corrective Action:** 1" as shown on C06 - 6.15.6.B - Irrigation Water Metering - size:
Corrections	6.14.7 - Construction Inspection - PLAN NOTE: (**Not Resolved**) - **Corrective Action:** Add note to Utility Sheet(s) MCU personnel are to inspect any work performed on or around existing MCU infrastructure. A pre-construction meeting is required to be held a minimum of 48 hours prior to start of any construction. If the pre-construction meeting is not completed, any work may be halted. To schedule, contact MCU's Construction Division, 352) 307-6000, ext. 5 or MCUconstruction@marionfl.org - 6.14.7 - Construction Inspection - PLAN NOTE
Corrections	7.1.3 - UT DETAILS - current LDC version (**Not Resolved**) - **Corrective Action:** C08 - Missing Meter Bank detail (2) Update UT201A and B to the 2023 version 116A and 116B. C09 - Remove UT 205. MCU does not allow butterfly valves. C10 - Remove UT 308 and replace with above-ground ARV UT 316 - 7.1.3 - UT DETAILS - current LDC version: UT details shall be current version based on latest edition of approved LDC
Corrections	6.15.4 - Water Distribution System (**Not Resolved**) - **Corrective Action:** C06 – The existing ARV shown on the plans is an above-ground valve and is currently located within the proposed driveway. Please revise the plans to show the removal or relocation of this valve. - 6.15.4 - Water Distribution System:
Corrections	6.14.2 - Connection Requirements (**Not Resolved**) - **Corrective Action:** The project will be connecting to Marion County Utilities (MCU) water and sewer force main. The existing sewer force main is currently located at the intersection of Marion Oaks Manor and Marion Oaks Boulevard. The site plan must clearly show the off-site connection and any required utility extensions. Parcel 8004-0433-19 has utility-approved plans to extend the sewer force main to that parcel; however, if that project is not completed, this project will be responsible for extending the sewer force main as necessary to provide service to the site. Plan note can state that extension to parcel 8004-0433-19 is proposed by others. - 6.14.2 - Connection Requirements:
Corrections	6.14.5.A(6) - MH locations, rim & invert elevation (**Resolved**) - **Corrective Action:** N/A - 6.14.5.A(6) - MH locations, rim & invert elevation:
Comments	The parcel will be connecting to Marion County Utilities water and will connect to and extend the sewer force main. Please see the correction comments.

MAJOR SITE PLAN

FOR

MULTIFAMILY DEVELOPMENT
351 MARION OAKS BLVD
OCALA, FL 34473

PARCEL ID: # 8004-0433-18

SECTION 23, TOWNSHIP 17, RANGE 21

LEGAL DESCRIPTION:

LOTS 18, BLOCK "433", MARION OAKS
UNIT NO. 4, ACCORDING TO THE MAP OR PLAT
THEREOF, AS RECORDED IN PLAT BOOK 0, PAGE(S) 53, OF THE
PUBLIC RECORDS OF MARION COUNTY, FLORIDA.

I HEREBY CERTIFY THAT I, MY SUCCESSORS, AND ASSIGNS SHALL PERPETUALLY MAINTAIN THE IMPROVEMENTS AS SHOWN ON THIS PLAN

Beatriz Estela
Signature

Beatriz Estela Rosa
Name

SITE DATA:

SITE AREA–24,000 SF (0.55 AC)
EXISTING IMPERVIOUS AREA– 0 SF (0 AC) 0%
PROPOSED IMPERVIOUS AREA– 13,546 SF (0.311 AC) (57%)
NO OFFSITE DRAINAGE

MULTIFAMILY (APARTMENTS)– INTENDED TO PROVIDE FOR HIGH–DENSITY AND URBAN RESIDENTIAL DEVELOPMENT, INCLUDING MULTI–FAMILY DWELLINGS IN AREAS SERVED BY PUBLIC OR PRIVATE WATER AND SEWER FACILITIES.

PROJECT AREA: 0.55 AC

ZONING: RPUD

FLU: HR

PROPOSE USE: MULTIFAMILY APARTMENTS
3,600 SF/FLOOR

SECONDARY SPRINGS PROTECTION ZONE

BLDG HEIGHT: 26'–0"

ADJACENT PROPERTIES:
NORTH: RPUD; FLU– HR
EAST: R3; FLU– HR
SOUTH: RPUD; FLU– HR
WEST: ROW

SITE REQUIREMENTS:

MIN. LOT WIDTH: 100 FT

MIN. LOT AREA: 12,500 SF

MAX DENSITY: MAX. 8 UNITS/AC
MIN. 4 UNITS/AC

BUILDING SETBACKS:
FRONT (WEST)– 25 FT
SIDE (NORTH)– 8 FT SIDE (SOUTH) 8 FT SIDE
REAR (EAST)– 25 FT

PARKING REQUIREMENTS:
2 SPACE/ DWELLING UNIT
24 FT AISLE LENGTH; TWO WAY TRAFFIC; 90°
MIN. 9FT WIDE BY 18 FT LONG PARKING SPACE

UTILITY PROVIDERS
MARION COUNTY UTILITIES
11800 SE US HIGHWAY 441
BELLEVIEW, FL 34420
CUSTOMER SERVICE 24/7/365
(352)307–6000

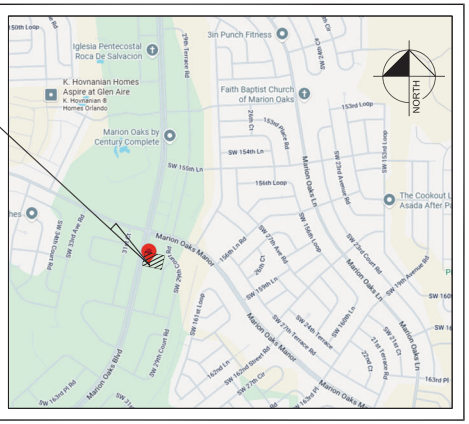
ENGINEER:
LINN ENGINEERING & DESIGN
P.O. BOX 140024
ORLANDO, FL 32814
CONTACT: CHAD S. LINN, P.E.
PHONE: 407–775–5194
EMAIL: CLINN@LINNENGINEERING.COM

SURVEYOR :
LYNX SURVEYORS CORP
302 LAUREL ROAD EAST, UNIT 291
LAUREL, FL 34272
833–721–2907
CONTACT@LYNXSURVEYORS.COM
WWW.LYNXSURVEYORS.COM

OWNER/APPLICANT:
A&B PROPERTIES SERVICES LLC
BEATRIZESTELA2000@YAHOO.COM
ADDRESS: 275 SYCAMORE CT, WIND GAP, PENNSYLVANIA, 18091
CONTACT INFORMATION: BEATRIZ ESTELA ROSA – (908) 343–9077

Digitally signed by Chad S Linn
Date: 2026.06.24 13:16:28 -04'00'

PROJECT LOCATION



LOCATION MAP
SCALE : 1:400

DRAWING INDEX

I HEREBY CERTIFY THAT THESE PLANS AND CALCULATIONS WERE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE MARION COUNTY LAND DEVELOPMENT CODE (LDC), EXCEPT AS WAIVED

CALL48 HOURS BEFORE YOUDIG
IT'S THE LAW! DIAL811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

NOTE:

1. CONSTRUCTION MATERIALS QUALITY AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH MARION COUNTY AND FDOT SPECIFICATIONS AND STANDARDS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. THIS PROJECT IS NOT IN AN ENVIRONMENTALLY SENSITIVE OVERLAY ZONE.
3. THIS PROPERTY IS LOCATED WITHIN FLOOD ZONE X
4. PROJECT IS WITHIN THE SECONDARY SPRING PROTECTION OVERLAY ZONE
5. THIS PROPOSED PROJECT HAS NOT BEEN GRANTED CONCURRENCY APPROVAL AND/OR GRANTED AND/OR RESERVED ANY PUBLIC FACILITY CAPACITIES. FUTURE RIGHTS TO DEVELOP THE PROPERTY ARE SUBJECT TO A DEFERRED CONCURRENCY DETERMINATION, AND FINAL APPROVAL TO DEVELOP THE PROPERTY HAS NOT BEEN OBTAINED. THE COMPLETION OF CONCURRENCY REVIEW AND/OR APPROVAL HAS BEEN DEFERRED TO LATER DEVELOPMENT REVIEW STAGES, SUCH AS, BUT NOT LIMITED TO, MASTER PLAN, PRELIMINARY PLAT, IMPROVEMENT PLAN, FINAL PLAT, SITE PLAN, OR BUILDING PERMIT REVIEW.
6. NO CHANGE TO THE WORK AS SHOWN ON THE APPROVED PLANS SHALL BE MADE WITHOUT NOTIFICATION TO AND APPROVAL BY THE OFFICE OF THE COUNTY ENGINEER.
7. OWNER, A&B PROPERTIES SERVICES L.L.C., WILL BE RESPONSIBLE FOR MAINTENANCE AND MANAGEMENT OF THE COMMON AREAS AND IMPROVEMENTS.
8. DEVELOPMENT OF THE PROPERTY AS SHOWN ON THIS SITE PLAN IS SUBJECT TO THE TERMS AND CONDITIONS OF THE, 351 MARION OAKS BOULEVARD, DEVELOPMENT ORDER, AS MAY BE AMENDED FROM TIME TO TIME, INCLUDING PROVISIONS REGARDING THE CONCURRENCY OF PUBLIC FACILITIES.
9. DEVELOPMENT OF THE PROPERTY AS SHOWN ON THIS MAJOR SITE PLAN IS SUBJECT TO THE TERMS AND CONDITIONS OF THE MARION OAKS VESTED DRI AND ITS CORRESPONDING VESTED RIGHTS DETERMINATIONS, AS MAY BE AMENDED FROM TIME TO TIME, INCLUDING PROVISIONS REGARDING THE CONCURRENCY OF PUBLIC FACILITIES.

22-Oct-25
LINN ENGINEERING & DESIGN
P.O. Box 140024, Orlando, FL 32814
Phone: 407-252-9433 • Fax: 407-392-2776
clinn@linnengineering.com • www.LinnEngineering.com

ITE Trip Generation Rates - 11th Edition
Pass-by rates from ITE Trip Generation Handbook - 2nd Edition

Description/ITE Code	Units	ITE Vehicle Trip Generation Rates (peak hours are for peak hour of adjacent street traffic unless highlighted)								Units	Expected Units
		Weekday	AM	PM	Pass-By	AM In	AM Out	PM In	PM Out	Independent Variable	
Apartment 220	DU	6.74	0.40	0.51		24%	76%	63%	37%	DU	8.0

Total Generated Trips			Total Distribution of Generated Trips					
Daily	AM Hour	PM Hour	AM In	AM Out	Pass-By	PM In	PM Out	Pass-By
54	3	4	1	2	0	3	2	0

THE ITE TRIP GENERATION MANUAL, 11TH EDITION WAS USED TO ESTIMATE THE PROJECTED TRIPS BY THIS DEVELOPMENT.

REZONING PERMIT:
ORDINANCE NO. 25-31

AGENDA ITEM 15.2.3 250707ZC - A&B PROPERTIES SERVICES, LLC
ZONING CHANGE FOR MULTIPLE-FAMILY DWELLINGS (R-3) TO RESIDENTIAL PLANNED UNIT DEVELOPMENT (R-PUD), FOR ALL PERMITTED USES, 0.55 ACRE PARCEL, ON PARCEL ACCOUNT NUMBER 8004-0433-18, SITE ADDRESS 351 MARION OAKS BOULEVARD, OCALA FL 34473

DULY ADOPTED : JULY 15TH, 2025

WAIVERS:

351 MARION OAKS MULTIFAMILY-MAJOR SITE PLAN
WAIVER #000293

LDC 6.12.12.(D) SIDEWALKS

REQUEST FEE IN LIEU OF SIDEWALK CONSTRUCTION

DATE OF APPROVAL : FEBRUARY 2ND, 2026

WAIVERS:

MULTI-FAMILY- 8 UNITS - 351 MARION OAKS BLVD

WAIVER PIR-000528-2026

LDC 6.8.7(D) PARKING AREAS AND VEHICULAR USE AREAS

REQUEST TO USE EVERGREEN UNDERSTORY TREES IN THE PARKING ISLANDS INSTEAD OF SHADE TREES.

DATE OF APPROVAL : APRIL 6TH, 2026

No.	REVISIONS	DATE	BY
1	REVISED PER COUNTY COMMENTS	12/2025	SAT
2	REVISED PER COUNTY COMMENTS	04/2026	SAT
3	REVISED PER COUNTY COMMENTS	05/2026	SAT

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DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

SCALE: AS NOTED
DESIGNED BY: CSL
DRAWN BY: CSL
CHECKED BY: CSL

COVER SHEET

MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL
MARION COUNTY FLORIDA

DATE 07/24
PROJECT NO. 36300–24–700
SHEET NUMBER C01

Drawing name: Z:\Projects\36300–Acton investments\24–700 351 Marion Oaks Rd\Cadd–Civil\C01 Cover.dwg Cover Jun 01, 2026 3:13pm by: Shenika Thomas

Drawing name: Z:\Projects\36300-Adan Investments\24-700 351 Marion Oaks Rd\Cadd-Civil\C02 Notes.dwg C02 Jun 24, 2026 12:55pm by: Shenika Thomas

GENERAL NOTES:

1. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE EXISTING UTILITY INFORMATION SHOWN IS BASED ON THE BOUNDARY SURVEY PROVIDED BY HILL LAND SURVEYORS. ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED AT ALL POINTS OF CONNECTION AND AREAS OF INTEREST.

2. PRIOR TO THE INITIATION OF SITE CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ANY EXISTING UTILITIES INCLUDING GAS, WATER, ELECTRIC, CABLE TV, COMMUNICATIONS, SANITARY SEWERS AND STORM DRAINAGE SYSTEMS, ON AND / OR ADJACENT TO THE SITE. REMOVE OR CAP AS NECESSARY.

3. THE CONTRACTOR SHALL EXERCISE CAUTION IN AREAS OF BURIED UTILITIES AND SHALL CALL "SUNSHINE" AT 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO ARRANGE FOR FIELD LOCATIONS OF BURIED UTILITIES.

4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED, BY THE CONTRACTOR OR SUB-CONTRACTORS, AS CALLED FOR IN THESE CONTRACT DOCUMENTS.

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES AND THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTION/REQUIREMENTS.

6. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, ON ALL PRECAST AND MANUFACTURED ITEMS, TO THE OWNER'S ENGINEER FOR APPROVAL. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

7. ALL UTILITY SERVICE STUB-OUTS (WATER, SANITARY SEWER, etc.) ARE TO BE INSTALLED WITHIN 5' OF BUILDING(S), UNLESS OTHERWISE NOTED ON PLANS.

8. CONTRACTOR TO COORDINATE WITH THE APPLICABLE ELECTRIC UTILITY SUPPLIER REGARDING ANY NECESSARY RELOCATION(S) OF UNDERGROUND AND/OR OVERHEAD ELECTRIC FACILITIES, AND FOR THE LOCATION AND INSTALLATION OF TRANSFORMER PAD(S) AND ASSOCIATED ELECTRIC FACILITIES.

9. SAFETY:

A. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS/HER PERSONNEL.

B. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.

C. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED IN THE DESIGN, APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND CONSTRUCTION PERSONNEL FROM HAZARDS WITHIN THE PROJECT LIMITS.

D. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.

E. ALL SUBSURFACE CONSTRUCTION SHALL COMPLY WITH THE "TRENCH SAFETY ACT". THE CONTRACTOR SHALL INSURE THAT THE METHOD OF TRENCH PROTECTION AND CONSTRUCTION IS IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS.

IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.

10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AN "ON-SITE PIPING PERMIT" (IF REQUIRED) FOR CONSTRUCTION OF THE PROPOSED UTILITIES. THIS PERMIT MUST BE OBTAINED BY A DULY LICENSED PLUMBING CONTRACTOR (OR CLASS A GENERAL CONTRACTOR) PRIOR TO THE START OF CONSTRUCTION. THESE PLANS AND ANY SUBSEQUENT REVISIONS TO THESE PLANS, THAT ARE ISSUED BY THE ENGINEER, WILL BE SUBJECT TO THE APPROVAL CONDITIONS OF THIS PERMIT.

11. THE GRAPHIC INFORMATION DEPICTED ON THESE PLANS HAS BEEN COMPILED TO PROPORTION BY SCALE AS ACCURATELY AS POSSIBLE. HOWEVER, DUE TO REPRODUCTIVE DISTORTION, REDUCTION, AND/OR REVISIONS, INFORMATION CONTAINED HEREIN IS NOT INTENDED TO BE SCALED FOR CONSTRUCTION PURPOSES.

12. ALL SPECIFICATIONS AND DOCUMENTS REFERENCED HEREIN SHALL BE OF THE LATEST REVISION.

13. ALL UNDERGROUND UTILITIES MUST BE IN-PLACE, TESTED AND INSPECTED PRIOR TO BASE AND SURFACE CONSTRUCTION.

14. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH ANY OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS/SUBCONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE GENERAL CONTRACTOR TO COORDINATE AND SCHEDULE HIS/HER ACTIVITIES ACCORDINGLY.

15. ALL DISTURBED AREAS WITHIN THE FDOT R/W SHALL BE SODDED WITH ARGENTINE BAHIA SOD.

16. WHERE APPLICABLE UTILITY TRENCHES CROSSING PAVEMENT AREAS SHALL BE BACKFILLED WITH GRANULAR MATERIAL IN TWELVE INCH (12") LAYERS AND COMPACTED TO NINETY EIGHT PERCENT (98 %) MAXIMUM DENSITY AS DETERMINED BY AASHTO T-19 OR T-238.

17. ALL DIMENSIONS ARE TO FACE OF CURB.

18. ALL CONSTRUCTION SHALL MEET MUNICIPALITY STANDARDS AND SPECIFICATIONS.

AS BUILT:

UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION, CERTIFIED BY A REGISTERED LAND SURVEYOR. THIS "AS-BUILT" INFORMATION SHALL INCLUDE INVERT ELEVATIONS, LOCATIONS OF STRUCTURES FOR ALL UTILITIES INSTALLED, AS WELL AS GRADE BREAK LOCATIONS AND ELEVATIONS FOR PROPOSED CONSTRUCTION. NO ENGINEER'S CERTIFICATIONS FOR CERTIFICATE OF OCCUPANCY (C.O.) PURPOSES WILL BE MADE UNTIL THIS INFORMATION HAS BEEN RECEIVED AND APPROVED BY THE OWNER'S ENGINEER.

AS-BUILTS SHALL COMPLY WITH MUNICIPALITY REQUIREMENTS.

CLEARING AND SITE PREPARATION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION OF THE EROSION CONTROL DEVICES, AS SHOWN ON THE CONSTRUCTION PLANS, PRIOR TO ANY SITE CLEARING AND/OR DEMOLITION. REFER TO THE "EROSION CONTROL NOTES" SECTION CONTAINED HEREIN FOR ADDITIONAL REQUIREMENTS.

2. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN, AS INDICATED ON THE CONSTRUCTION PLANS, SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES, AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREE(S) SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER AND THE LOCAL AGENCY HAVING JURISDICTION OVER THESE ACTIVITIES.

3. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. ALL DISTURBED AREAS MUST BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL, IMMEDIATELY FOLLOWING CONSTRUCTION.

4. THE TOP 4" TO 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING ACTIVITIES SHALL BE STOCKPILED, TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER. REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE, PROVIDED THE MATERIAL IS DEEMED SUITABLE BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO EITHER BE STOCKPILED ON-SITE, AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING ANY EXCESS MATERIAL FROM THE SITE.

5. ALL EXISTING DEBRIS (ABOVE OR BELOW GROUND), CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR, IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS.

6. THE CONTRACTOR IS TO PREPARE THE SITE IN ACCORDANCE WITH THE SOILS REPORT, COPIES OF WHICH ARE AVAILABLE THROUGH THE OWNER OR SOILS TESTING COMPANY DIRECTLY.

7. CONTRACTOR TO BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY CONSTRUCTION FENCE AROUND ENTIRE PERIMETER OF PROPERTY. TYPE OF FENCE TO BE SUBMITTED BY CONTRACTOR TO ENGINEER FOR APPROVAL.

1. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIERS (SILTATION CURTAINS) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.

2. THE CONTRACTOR SHALL LIMIT THE DISCHARGE OF TURBID WATERS OFF-SITE, OR INTO ON-SITE/OFF-SITE WETLANDS (IF APPLICABLE), TO NO MORE THAN 50 JTU's (JACKSON TURBIDITY UNITS) OR 29 NTU's (NEPHELOMETRIC TURBIDITY UNITS), ABOVE BACKGROUND LEVELS.

3. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.

4. CONTRACTOR SHALL INSPECT AND MAINTAIN ON A DAILY BASIS ALL EROSION/SEDIMENTATION CONTROL FACILITIES.

5. THE CONTRACTOR SHALL ENSURE THAT SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS.

6. STAKED HAY BALES WILL NOT BE UTILIZED FOR EROSION, SEDIMENT AND TURBIDITY CONTROL.

PAVING AND GRADING NOTES:

1. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS, ETC.) IS TO BE EXCAVATED AND REPLACED WITH SUITABLE/COMPACTED SOILS, AS DIRECTED BY THE OWNER, THE OWNERS ENGINEERS, OR OWNERS SOILS TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.

3. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOILS TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS.

4. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES, UNLESS OTHERWISE NOTED.

5. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. CONTRACTOR TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES.

6. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.

7. CURBING SHALL BE PLACED AT THE EDGES OF ALL PAVEMENT, UNLESS OTHERWISE NOTED. REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. TYPE CURB AND GUTTERS CALLED FOR IN THESE PLANS.

8. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE SOILS ENGINEER FOR APPROVAL.

9. CONTRACTOR TO PROVIDE A 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIALS (STRUCTURES, OTHER POURED)

10. ALL PAVEMENT MARKINGS SHALL BE MADE IN ACCORDANCE WITH F.D.O.T. STANDARD INDEX #17346.

11. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD, OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE OF MATERIAL, LANDSCAPING AND IRRIGATION REQUIREMENTS.

12. THE CONTRACTOR SHALL RESTORE OFF-SITE CONSTRUCTION AREAS TO EQUAL AND/OR BETTER CONDITION THAN EXISTING PRIOR TO START OF CONSTRUCTION.

13. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.

14. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.

15. FINAL GRADES SHOWN INCLUDE SOD HEIGHT. ALL AREAS SHALL BE GRADED TO DRAIN AWAY FROM THE BUILDINGS.

TESTING AND INSPECTION REQUIREMENTS (PAVING/GRADING):

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE SOILS REPORT. UPON COMPLETION OF WORK THE SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER AND OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

2. A QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN-PLACE MATERIALS AS REQUIRED BY THESE PLANS, THE VARIOUS AGENCIES AND PERMIT CONDITIONS. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING.

STORM DRAINAGE SYSTEM NOTES:

1. STANDARD INDEXES REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."

2. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS.

3. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURES, WITH THE EXCEPTION OF MITERED END AND FLARED END SECTIONS, WHICH ARE NOT INCLUDED IN LENGTHS.

4. ALL DRAINAGE STRUCTURE GRATES AND COVERS, EITHER EXISTING OR PROPOSED SHALL BE TRAFFIC RATED FOR H-20 LOADINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY UPGRADES TO EXISTING DRAINAGE STRUCTURES.

5. CONSTRUCTION OF THE STORMWATER MANAGEMENT SYSTEM MUST BE COMPLETE AND ALL DISTURBED AREAS STABILIZED IN ACCORDANCE WITH THE PERMITTED PLANS AND CONDITIONS PRIOR TO ANY OF THE FOLLOWING: ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY; INITIATION OF INTENDED USE OF THE INFRASTRUCTURE; OR TRANSFER OF RESPONSIBILITY FOR MAINTENANCE OF THE SYSTEM TO A LOCAL GOVERNMENT OR OTHER RESPONSIBLE ENTITY.

6. NON-MUCK GROWN SOD WILL BE UTILIZED FOR STABILIZATION OF THE PROPOSED STORMWATER RETENTION FACILITY. MUCK-GROWN SOD MAY IMPEDE THE PERCOLATION OF RUNOFF INTO THE GROUND AND IS NOT RECOMMENDED FOR THE STABILIZATION OF RETENTION POND BOTTOMS.

TESTING AND INSPECTION REQUIREMENTS (DRAINAGE):

1. THE STORM DRAINAGE PIPING SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.

2. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE STORM SYSTEM WILL BE REINSPECTED BY THE OWNER'S ENGINEER PRIOR TO APPROVAL FOR CERTIFICATE OF OCCUPANCY PURPOSES. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS FOR THESE PURPOSES.

SANITARY SYSTEM NOTES:

1. SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHOULD ALWAYS CROSS UNDERNEATH WATER MAINS. INSTALLATIONS OF SANITARY SEWERS, FORCE MAINS AND STORM SEWERS, AT CROSSINGS OF WATER MAINS, SHALL BE PERFORMED SO AS TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE, WHENEVER POSSIBLE. THE CROSSING SHALL BE ARRANGED TO THAT THE SEWER JOINTS AND WATER JOINTS SHALL BE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE, AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT THE CROSSINGS.

WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER WATER MAINS, THE CRITERIA FOR MINIMUM SEPARATION OF 18 INCHES BETWEEN LINES, AND 10 FEET BETWEEN JOINTS, CENTERED AT THE POINT OF CROSSING SHALL BE REQUIRED. THE WATER MAIN SHALL BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN. ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (i.e. PIPES CENTERED ON THE CROSSING).

2. A MINIMUM 10 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER (INCLUDING FORCE MAINS) AND EXISTING OR PROPOSED WATER MAINS, IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE DISTANCE FOR SEPARATION SHALL BE MEASURED EDGE TO EDGE.

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE INSTALLED IN A SEPARATE TRENCH, OR IN AN UNDISTURBED EARTH SHELF, LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN, AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE, AND WATER AND SEWER JOINTS SHALL BE STAGGERED.

THE WATER MAIN SHOULD ALWAYS BE LOCATED ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (i.e. STAGGERED JOINTS).

3. ALL PVC PIPE SHALL BE SOLID WALL POLYVINYL CHLORIDE PIPE AND COMPLY WITH ASTM D 3034 AND ALL APPLICABLE ASTM DOCUMENTS AS COVERED IN SECTION NO. 2 OF ASTM D 3034. MAIN LINES SHALL BE A MINIMUM OF 8" DIAMETER, AND LATERALS SHALL BE A MINIMUM 6" DIAMETER.

4. ALL SANITARY SEWER MAINS, LATERALS AND FORCE MAINS SHALL HAVE A MINIMUM OF 48 INCHES OF COVER, UNLESS OTHERWISE NOTED ON PLANS.

5. ALL GRAVITY SEWERS MUST BE SDR 26 PVC, EXCEPT FOR PIPE DEEPER THAN 14 FEET, IN WHICH CASE SDR 26 PIPE SHALL BE USED. ELASTOMERIC GASKET JOINTS SHALL BE UTILIZED FOR PVC PIPE, AND SHALL COMPLY WITH ASTM F477, ASTM D3034 & ASTM F679. JOINTS SHALL COMPLY WITH ASTM D3212.

6. ALL SANITARY MANHOLES SHALL BE LOCATED NO MORE THAN 400 FEET APART AND SHALL CONFORM TO THE DETAILS CONTAINED HEREIN, AS WELL AS WITH ASTM C478.

7. ALL SLOPES FOR GRAVITY SEWER MAINS AND SERVICE CONNECTIONS SHALL COMPLY WITH THE FOLLOWING MINIMUM GRADES: 4" @ 1.00%; 6" @ 1.00% ; AND 8" @ 0.40%.

8. ALL SANITARY SEWER WORK SHALL CONFORM WITH APPLICABLE MUNICIPALITY ENGINEERING STANDARDS MANUAL.

9. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING PROPOSED FACILITIES TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION(S) OF EXISTING CONNECTION POINT(S) AND NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.

11. SANITARY SEWER MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE MAIN LINES.

12. FORCE MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE FORCE MAIN.

13. ON SITE WASTEWATER COLLECTION SYSTEM AND PUMP STATION IS PRIVATELY OWNED AND MAINTAINED.

14. PLUG VALVE TO BE INSTALLED VERTICALLY AND TAPPING VALVE TO BE INSTALLED HORIZONTALLY AND ABANDONED IN THE OPEN POSITION.

TESTING AND INSPECTION REQUIREMENTS (SANITARY):

1. ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER AND APPLICABLE MUNICIPALITY/AGENCY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION(S). THE CONTRACTOR SHALL BE RESPONSIBLE FOR COSTS ASSOCIATED WITH A TELEVISED INSPECTION (TV) OF THE PROPOSED GRAVITY SEWER LINE CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE COPIES OF THE TV INSPECTION TAPE TO THE ENGINEER, THE OWNER AND THE APPLICABLE MUNICIPALITY/AGENCY.

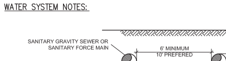
2. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATON TEST ON ALL GRAVITY SEWERS IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. THE SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

3. LEAKAGE TESTS ARE SPECIFIED REQUIRING THAT:
A. THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM.
B. EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.
C. AIR TESTS, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-828 FOR CLAY PIPE, ASTM C 924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE, AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES.

4. CONTRACTOR TO PERFORM APPROPRIATE DEFLECTION TESTS FOR ALL FLEXIBLE PIPE. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM. TESTING REQUIREMENTS SPECIFY:
A. NO PIPE SHALL EXCEED A DEFLECTION OF 5%.
B. USING A RIGID BALL OR MANDREL FOR THE DEFLECTION TEST WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURED.
C. PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES.

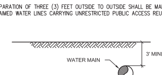
5. CONTRACTOR TO INSPECT & TEST MANHOLE FOR WATERTIGHTNESS OR DAMAGE PRIOR TO PLACING INTO SERVICE. AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, SHALL CONFORM TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244.

WATER SYSTEM NOTES:



1. A MINIMUM HORIZONTAL SEPARATION OF SIX (6) FEET [TEN (10) FEET PREFERRED] OUTSIDE TO OUTSIDE SHALL BE MAINTAINED BETWEEN WATER MAINS AND SANITARY GRAVITY SEWER OR SANITARY FORCE MAINS.

2. A MINIMUM HORIZONTAL SEPARATION OF THREE (3) FEET OUTSIDE TO OUTSIDE SHALL BE MAINTAINED BETWEEN WATER MAINS AND STORM SEWERS OR RECLAIMED WATER LINES CARRYING UNRESTRICTED PUBLIC ACCESS REUSE WATER.



3. IN AREAS WHERE IT IS NOT PRACTICAL TO MAINTAIN THE REQUIRED SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SANITARY GRAVITY SEWER, STORM SEWER OR RECLAIMED WATER LINE AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST SIX (6) INCHES ABOVE THE TOP OF THE OTHER LINE.

4. IF THE MINIMUM ALLOWABLE SIX (6) FOOT HORIZONTAL SEPARATION OR SIX (6) INCHES VERTICAL SEPARATION IN A SEPARATE TRENCH CANNOT BE MAINTAINED. UPGRADE THE WATER MAIN TO DUCTILE IRON IF THE OTHER LINE IS A STORM SEWER.

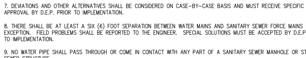
5. IF THE NON-CONFORMING LINE IS A GRAVITY SANITARY SEWER, AND SIX (6) FOOT HORIZONTAL SEPARATION OR SIX (6) INCHES VERTICAL SEPARATION IN A SEPARATE TRENCH CANNOT BE MAINTAINED. UPGRADE THE GRAVITY SANITARY SEWER (IF BEING NEWLY INSTALLED) TO AWWA C-900, D.R. 18 PVC AND HYDROSTATICALLY TEST IT TO 150 PSI.

6. IF THE OTHER LINE IS A RECLAIMED WATER LINE AND THE ABOVE SEPARATION REQUIREMENTS ARE NOT MET, UPGRADE THE RECLAIMED WATER LINE MATERIAL TO DUCTILE IRON OR ENCASED THE PIPE IN CONCRETE.

7. DEVIATIONS AND OTHER ALTERNATIVES SHALL BE CONSIDERED ON CASE-BY-CASE BASIS AND MUST RECEIVE SPECIFIC APPROVAL BY D.E.P. PRIOR TO IMPLEMENTATION.

8. THERE SHALL BE AT LEAST A SIX (6) FOOT SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER FORCE MAINS WITHOUT EXCEPTION. FIELD PROBLEMS SHALL BE REPORTED TO THE ENGINEER. SPECIAL SOLUTIONS MUST BE ACCEPTED BY D.E.P. PRIOR TO IMPLEMENTATION.

9. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE OR STORM SEWER STRUCTURE.



10. A MINIMUM OF VERTICAL SEPARATION OF SIX (6) INCHES [TWELVE (12) INCHES PREFERRED] OUTSIDE TO OUTSIDE SHALL BE MAINTAINED BETWEEN WATER MAIN, SANITARY GRAVITY SEWER, STORM SEWER OR RECLAIMED WATER LINES.

THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS AND WATER JOINTS SHALL BE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TWELVE (12) FEET BETWEEN ANY TWO JOINTS. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 12 FEET BETWEEN ANY TWO (2) JOINTS IN LIEU OF DIP. THE SANITARY SEWER MAY BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE, AND MECHANICALLY RESTRAINED. TWELVE (12) FEET BETWEEN JOINTS CENTERED AT THE POINT OF CROSSING SHALL BE REQUIRED. THE WATER MAIN SHALL BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (i.e. PIPES CENTERED ON THE CROSSING).

11. WHEN THERE IS LESS THAN 6" VERTICAL CLEARANCE BETWEEN THE WATER MAIN AND STORM SEWER. THE WATER MAIN SHALL BE UPGRADED TO DUCTILE IRON. ONE FULL LENGTH OF PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.

12. IF THE NON-CONFORMING LINE IS A SANITARY GRAVITY SEWER WHERE THERE IS LESS THAN SIX (6) INCHES VERTICAL CLEARANCE FROM THE WATER MAIN, UPGRADE THE SANITARY GRAVITY SEWER TO AWWA C-90 D.R. 18 PVC AND HYDROSTATICALLY TEST IT TO 150 PSI. PIPE SHALL BE LOCATED SO THAT JOINTS ARE AS FAR AS POSSIBLE FROM EACH OTHER.

13. IF THE OTHER LINE IS A RECLAIMED WATER LINE AND THE ABOVE MINIMUM SEPARATION IS NOT MET, UPGRADE THE RECLAIMED WATER LINE MATERIAL TO DUCTILE IRON OR ENCASE THE PIPE IN CONCRETE.

14. SPECIAL STRUCTURAL SUPPORT OR CONCRETE SADDLES MAY BE NECESSARY AT THE CROSSING LOCATION.

15. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE CROSSING HAZARD. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM VERTICAL SEPARATION IS TWELVE (12) INCHES.

16. DEVIATIONS AND OTHER ALTERNATIVES SHALL BE CONSIDERED ON CASE- BY-CASE BASIS AND MUST RECEIVE SPECIFIC APPROVAL BY D.E.P. PRIOR TO IMPLEMENTATION.

17. THERE SHALL BE A SIX (6) INCH VERTICAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER FORCE MAINS AT CROSSINGS WITHOUT EXCEPTION. CONFLICTS WITH EXISTING LINES, WHERE IT IS NOT POSSIBLE TO MAINTAIN THE REQUIRED SEPARATION, SHALL BE REPORTED TO THE ENGINEER. SPECIAL SOLUTIONS MUST BE ACCEPTED BY D.E.P. PRIOR TO IMPLEMENTATION.

18. ALL DIP PIPE SHALL BE CLASS 50 OR HIGHER. REFER TO NOTE #24 BELOW FOR ADDITIONAL DIP SPECIFICATIONS. ADEQUATE MEASURES AGAINST CORROSION SHALL BE UTILIZED.

19. ALL WATER MAIN PIPE FITTINGS AND APPURTENANCES SHALL DUCTILE IRON AND BE INSTALLED TO COMPLY WITH MUNICIPALITY STANDARDS AND SPECIFICATIONS.

20. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 36 INCHES OF COVER.

21. ALL WATER SERVICE LINES, VALVES AND METERS SHALL BE INSTALLED TO COMPLY WITH APPLICABLE MUNICIPALITY/AGENCY DEPARTMENT STANDARDS AND SPECIFICATIONS.

22. ALL DUCTILE IRON PIPE, 4" TO 24", SHALL BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C151/A21.51. PIPE SHALL BE FURNISHED IN 18 OR 20 FOOT SECTIONS, PIPE THICKNESS SHALL BE CLASS 50, UNLESS OTHERWISE SPECIFIED.

23. ALL WATER SYSTEM CONSTRUCTION, UP TO AND INCLUDING POINT OF METERING AND BACK FLOW PREVENTION (IF REQUIRED), SHALL BE BUILT ACCORDING TO THE PREVIOUSLY REFERENCED STANDARDS AND SPECIFICATIONS.

24. FIRE HYDRANTS SHALL BE OF A TYPE OR STYLE SHALL COMPLY WITH THE REQUIREMENTS OF THE WATER UTILITY THAT SUPPLIES THE DEVELOPMENT. PRIVATE HYDRANTS SHALL ALSO COMPLY WITH NATIONAL FIRE PROTECTION ASSOCIATION STANDARD NFPA 24, PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES.

25. ALL HYDRANTS SHALL MEET THE CRITERIA SET FORTH BY MUNICIPALITY

26. CONTRACTOR TO INSTALL TEMPORARY BLOWOFFS, AT THE END(S) OF PROPOSED WATER MAINS AND SERVICE LATERALS TO BUILDING(S), TO ASSURE ADEQUATE FLUSHING AND DISINFECTION/CHLORINATION.

27. ALL WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA MANUAL M23, CONCERNING HYDROSTATIC TESTING OF PVC PIPING. OFF-SITE UTILITIES HYDROSTATIC TESTING TO BE WITNESSED BY MUNICIPALITY WATER DEPARTMENT INSPECTOR.

28. ALL WATER MAINS SHALL BE STERILIZED IN ACCORDANCE WITH THE APPLICABLE SECTION OF THE LATEST AWWA SPECIFICATION C651 AND MUNICIPALITY WATER DEPARTMENT SPECIFICATIONS.

29. ALL PVC WATER MAIN, 4" TO 8" DIAMETER PIPING, SHALL CONFORM TO ASTM D2241 AND ASTM 1784. PIPE SHALL BE AWWA C-900 DR-18. JOINTS SHALL BE RUBBER GASKETED PUSH-ON CONFORMING TO ASTM D1869. FOR PIPES LESS THEN 4". THEY SHALL MEET THE REQUIREMENTS OF SECTION 50.5.1 OF THE CITY'S STANDARD SPECIFICATIONS FOR UTILITIES CONSTRUCTION

30. ALL POLYVINYL CHLORIDE PIPE SHALL BE LAID WITH AN INSULATED 10 GAUGE A.W.G. SOLID STRAND COPPER WIRE WOUND AROUND THE PIPE FORMING ONE COMPLETE SPIRAL PER JOINT OF PIPE. THIS WIRE IS TO BE CONTINUOUS WITH SPLICES MADE ONLY BY METHODS APPROVED BY THE ENGINEER. THIS WIRE IS TO BE SECURED TO ALL VALVES, TEES AND ELBOWS.

31. FIRE LINES SHALL BE INSTALLED BY A CONTRACTOR, DULY LICENSED BY THE STATE OF FLORIDA FIRE MARSHALL'S OFFICE. CONTRACTOR TO VERIFY REQUIREMENTS PRIOR TO CONSTRUCTION OF THE FIRE PROTECTION SYSTEM.

32. FIRE PROTECTION SHALL MEET ALL THE REQUIREMENTS OF THE APPLICABLE MUNICIPALITY OR COUNTY.

33. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF WASTEWATER FORCE MAINS AND GRAVITY SEWERS. FORCE MAIN AND SEWER LOCATIONS SHOWN ON PLANS ARE NOT EXACT OR GUARANTEED. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING.

34. THE MUNICIPALITY DISPATCH OPERATOR SHALL BE NOTIFIED OF ANY BREAK OR DAMAGE TO THE GRAVITY SEWER OR WATER MAIN.

35. ALL DAMAGE TO MUNICIPALITY 'S MAINS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. IF THE REPAIR IS NOT MADE IN A TIMELY MANNER, AS DETERMINED BY THE MUNICIPALITY UTILITIES INSPECTOR, MUNICIPALITY MAY PERFORM REPAIRS AND THE CONTRACTOR WILL BE CHARGED FOR REPAIRS.

36. MUNICIPALITY UTILITIES GENERAL TELEPHONE NUMBER: MUNICIPALITY UTILITIES (352) 307-6000

37. THE MUNICIPALITY UTILITIES CONSTRUCTION SECTION SHALL BE NOTIFIED AT LEAST SEVEN (7) DAYS PRIOR TO ANY CONSTRUCTION ACTIVITY.

38. THE MUNICIPALITY WATER DIVISION AND THE MUNICIPALITY WASTEWATER DIVISION SHALL BE NOTIFIED AT LEAST (7) DAYS IN ADVANCE TO SCHEDULE MAIN TIE-INS AND VALVE OPERATIONS.

39. OPERATION OF MUNICIPALITY VALVES WATER, WASTEWATER, AND REUSE VALVES ARE TO BE OPERATED ONLY BY MUNICIPALITY UTILITIES INSPECTOR. ALL VALVES BEING INSTALLED ARE TO REMAIN CLOSED DURING CONSTRUCTION.

40. THE CONTRACTOR SHALL COORDINATE ALL PUMP STATION OPERATION AND SHUT DOWN WITH AN MUNICIPALITY UTILITIES INSPECTOR.

41. N/A

42. ON-SITE WATER DISTRIBUTION SYSTEM IS PRIVATELY OWNED AND MAINTAINED.

WATER SYSTEM NOTES CONTINUED:

43. WHERE APPLICABLE UTILITY TRENCHES CROSSING PAVEMENT AREAS SHALL BE BACKFILLED WITH GRANULAR MATERIAL IN TWELVE INCH (12") LAYERS AND COMPACTED TO NINETY EIGHT PERCENT (98%) MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.

44. ALL UNSUITABLE MATERIALS UNDER WATER PIPES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL COMPACTED TO NINETY-FIVE PERCENT (95%) OF ITS MAXIMUM DENSITY AT TWO PERCENT (2.0%) MORE OR LESS OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D1557).

45. CONTRACTOR IS TO ADJUST ANY UTILITY ELEMENT MEANT TO BE FLUSH WITH GRADE (CLEAN OUT MANHOLES, CATCH BASINS, INLETS, ETC.) THAT IS AFFECTED BY SITE WORK OR GRADE CHANGES, WHETHER SPECIFICALLY NOTED ON PLANS OR NOT.

46. A SIGN SHALL BE PLACED AT IRRIGATED AREAS WITH THE WORDS "IRRIGATION BY REUSE WATER. DO NOT DRINK".

47. CONTRACTOR SHALL NOTIFY THE MUNICIPALITY PUBLIC UTILITIES CONSTRUCTION DEPARTMENT 48 HOURS PRIOR TO ANY UTILITIES CONSTRUCTION. PHONE (352) 307-6000

48. ALL UTILITIES CONSTRUCTION CONNECTING TO THE MCU SYSTEM SHALL CONFORM TO MUNICIPALITY MANUAL OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION.

49. ALL UNDERGROUND MAINS SERVING FIRE HYDRANTS OR FIRE PROTECTION SYSTEMS ON PRIVATE PROPERTY MUST BE PERMITTED PRIOR TO INSTALLATION. THE DRAWING SHALL INDICATE THAT ALL UNDERGROUND FIRE MAINS WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24, 2016 EDITION, "STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES".

DEWATERING NOTES:

1. DURING THE EXCAVATION OF THE STORMWATER PONDS, THE CONTRACTOR MUST CONSTRUCT A SEDIMENT BASIN TO PROVIDE A DISCHARGE POINT FOR DEWATERING. THE SEDIMENT BASIN CAN BE CELL IN THE PROPOSED EXCAVATION AREA OF A POND OR IT CAN BE A BERMED AREA ABOVE GROUND. ALL DEWATERING MUST BE HELD IN THE SEDIMENT AREA UNTILTHE WATER IS CLEAN SUCH THAT THERE WOULD BE NO TURBID DISCHARGE. AFTER THE WATER IN THE SEDIMENT BASIN IS CLEAN, THE WATER MAY BE RELEASED INTO THE ON-SITE WETLANDS PROVIDED THERE IS NO ADVERSE IMPACT TO THE EXISTING WATER QUALITY.

2. UNDER NO CIRCUMSTANCES WILL THE DISCHARGE FROM THE DEWATERING BE DIRECTLY INTO ON-SITE WETLAND.

3. DURING THE EXCAVATION THE CONTRACTOR SHALL NOT PENETRATE AN EXISTING CLAY LAYER. IF THE CONTRACTOR ENCOUNTERS THE CLAY LAYER, HE/SHE IS TO PLACE A MINIMUM OF 2 FEET OF SANDY MATERIAL OVER THE CLAY AND TERMINATE THE DEPTH OF THE EXCAVATION.

4. IF CONTRACTOR ENCOUNTERS SILTY/CLAY SAND, WHICH CAUSE THE WATER TO BECOME TURBID, HE/SHE SHALL TREAT THE SEDIMENT BASIN WITH CHEMICAL ADDITIVE SUCH AS ALLUM IN ORDER TO PROMOTE THE COAGULATION OF THE PARTICLES WHICH ALLOW THE TO SETTLE AND THE WATER TO BECOME LESS TURBID. IF TURBID WATER ENCOUNTERED DURING EXCAVATION OF THE PONDS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY TO DETERMINE THE COURSE OF ACTION THAT IS APPROPRIATE TO ELIMINATE THE TURBITY AND ALLOW DISCHARGE THAT MEET WATER QUALITY STANDARDS.

5. THE CONTRACTOR SHALL SEQUENCE THE EXCAVATION OF THE STORMWATER PONDS SUCH THAT A SEDIMENT BASIN WILL BE AVAILABLE AT ALL TIMES. THE SEDIMENT BASIN CAN BE RELOCATED AS NECESSARY SUBJECT TO THE WATER WITHIN THE SEDIMENT BASIN BEING NON-TURBID AND ACCEPTABLE FOR DISCHARGE OFF-SITE.

BEST MANAGEMENT PRACTICES:

THIS PLAN HAS BEEN PREPARED TO ENSURE COMPLIANCE WITH APPROPRIATE CONDITIONS OF MUNICIPALITY DEVELOPMENT REGULATIONS AND SFWMD. THE PLAN ADDRESSES THE FOLLOWING AREAS:

1. GENERAL EROSION CONTROL.

2. PROTECTION OF SURFACE WATER QUALITY DURING AND AFTER CONSTRUCTION.

3. CONTROL OF WIND EROSION.

THE VARIOUS TECHNIQUES OR ACTIONS IDENTIFIED UNDER EACH SECTION INDICATE THE APPROPRIATE SITUATION WHEN THE TECHNIQUES SHOULD BE EMPLOYED. ALSO IDENTIFIED IS A CROSS-REFERENCE TO A DIAGRAM OR FIGURE REPRESENTING THE TECHNIQUE. IT SHOULD BE NOTED THAT THE MEASURES IDENTIFIED ON THIS PLAN ARE ONLY SUGGESTED BMP(S). THE CONTRACTOR SHALL PROVIDE POLLUTION PREVENTION AND EROSION CONTROL MEASURES AS SPECIFIED IN FDOT INDEX #100 AND AS NECESSARY FOR EACH SPECIFIC APPLICATION.

SECTION 1 GENERAL EROSION CONTROL

1.1 GENERAL EROSION CONTROL BMPS SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND POTENTIAL POND SLOPE CAVE-INS. WHILE THE VARIOUS TECHNIQUES REQUIRED WILL BE SITE AND PLAN SPECIFIC, THEY SHOULD BE EMPLOYED AS SOON AS POSSIBLE DURING CONSTRUCTION ACTIVITIES.

1.2 CLEARED SITE DEVELOPMENT AREAS NOT CONTINUALLY SCHEDULED FOR CONSTRUCTION ACTIVITIES SHALL BE COVERED WITH HAY OR OVER SEEDED AND PERIODICALLY WATERED SUFFICIENTLY TO STABILIZE THE TEMPORARY GROUNDCOVER.

1.3 SLOPES OF BANKS OF RETENTION/DETENTION PONDS SHALL BE CONSTRUCTED NOT STEEPER THAN 5H:1V FROM TOP OF BANK TO TWO FEET BELOW CONTROL ELEVATION.

1.4 SOD SHALL BE PLACED FOR A 2-FOOT WIDE STRIP ADJOINING ALL CURBING AND AROUND ALL INLETS AND SOD SHALL BE PLACED BEFORE SILT BARRIERS ARE REMOVED.

SECTION 2 PROTECTION OF SURFACE WATER QUALITY DURING AND AFTER CONSTRUCTION:

2.1 SURFACE WATER QUALITY SHALL BE MAINTAINED BY EMPLOYING THE FOLLOWING BMPS IN THE CONSTRUCTION PLANNING AND CONSTRUCTION OF ALL IMPROVEMENTS.

2.2 WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY SWALES.

2.3 EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITY. WHILE THE VARIOUS MEASURES REQUIRED WILL BE SITE SPECIFIC, THEY SHALL BE EMPLOYED AS NEEDED IN ACCORDANCE WITH THE FOLLOWING:

A. IN GENERAL, EROSION SHALL BE CONTROLLED AT THE FURTHEST PRACTICAL UPSTREAM LOCATION.

B. STORMWATER INLETS SHALL BE PROTECTED DURING CONSTRUCTION PROTECTION MEASURES SHALL BE EMPLOYED AS SOON AS PRACTICAL DURING THE VARIOUS STAGES OF INLET CONSTRUCTION. SILT BARRIERS SHALL REMAIN IN PLACE UNTIL SODDING AROUND INLETS IS COMPLETE.

TESTING AND INSPECTION REQUIREMENTS (WATER):

1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER. PRESSURE TESTS TO BE IN ACCORDANCE WITH MUNICIPALITY UTILITIES DEPARTMENT SPECIFICATIONS. CONTRACTOR TO NOTIFY THE OWNER'S ENGINEER AND APPLICABLE AGENCY INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.

2. CONTRACTOR TO PERFORM CHLORINATION AND BACTERIOLOGICAL SAMPLING, AND OBTAIN CLEARANCE OF DOMESTIC AND FIRE LINE WATER SYSTEM(S). COPIES OF ALL BACTERIOLOGICAL TEST RESULTS ARE TO BE SUBMITTED TO THE OWNER'S ENGINEER FOR CERTIFICATION PURPOSES.

SECTION 2 PROTECTION OF SURFACE WATER QUALITY DURING AND AFTER CONSTRUCTION:

2.4 HEAVY CONSTRUCTION EQUIPMENT PARKING AND MAINTENANCE AREAS SHALL BE DESIGNED TO PREVENT OIL, GREASE, AND LUBRICANTS FROM ENTERING SITE DRAINAGE FEATURES INCLUDING STORMWATER COLLECTION AND TREATMENT SYSTEMS. CONTRACTORS SHALL PROVIDE BROAD DIKES OR SILT SCREENS AROUND, AND SEDIMENT SUMPS WITHIN, SUCH AREAS AS REQUIRED TO CONTAIN SPILLS OF OIL, GREASE OR LUBRICANTS. CONTRACTORS SHALL HAVE AVAILABLE, AND SHALL USE, ABSORBENT FILTER PADS TO CLEAN UP SPILLS AS SOON AS POSSIBLE AFTER OCCURRENCE.

2.5 SILT BARRIERS, ANY SILT WHICH ACCUMULATES BEHIND THE BARRIERS, AND ANY FILL USED TO ANCHOR THE BARRIERS SHALL BE REMOVED PROMPTLY AFTER THE END OF THE MAINTENANCE PERIOD SPECIFIED FOR THE BARRIERS.

2.6 WHERE REQUIRED TO PREVENT EROSION FROM SHEET FLOW ACROSS BARE GROUND FROM ENTERING A LAKE OR WALE, A TEMPORARY SEDIMENT SUMP SHALL BE CONSTRUCTED. THE TEMPORARY SEDIMENT SUMP SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED ON THE GROUND DRAINING TO THE SUMP.

SECTION 3 CONTROL OF WIND EROSION:

3.1 WIND EROSION SHALL BE CONTROLLED BY EMPLOYING THE FOLLOWING METHODS AS NECESSARY AND APPROPRIATE:

A. BARE EARTH AREAS SHALL BE WATERED DURING CONSTRUCTION AS NECESSARY TO MINIMIZE THE TRANSPORT OF FUGITIVE DUST. IT MAY BE NECESSARY TO LIMIT CONSTRUCTION VEHICLE SPEED IF BARE EARTH HAS NOT BEEN EFFECTIVELY WATERED. IN NO CASE SHALL FUGITIVE DUST BE ALLOWED TO LEAVE THE SITE UNDER CONSTRUCTION.

B. AS SOON AS PRACTICAL AFTER COMPLETION OF CONSTRUCTION, BARE EARTH AREAS SHALL BE VEGETATED.

C. AT ANY TIME BOTH DURING AND AFTER SITE CONSTRUCTION THAT WATERING AND/OR VEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR TRANSPORT OF FUGITIVE DUST, OTHER METHODS AS ARE NECESSARY FOR SUCH CONTROL SHALL BE EMPLOYED. THESE METHODS MAY INCLUDE ERECTION OF DUST CONTROL FENCES. IF REQUIRED, DUST CONTROL FENCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAIL FOR A SILT FENCE EXCEPT THE MINIMUM HEIGHT SHALL BE 4 FEET.

EROSION AND SILTATION CONTROL:

1. GENERAL: ALL EROSION AND SILTATION CONTROL METHODS SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION. DURING CONSTRUCTION, DENUDED AREAS SHALL BE COVERED BY MULCHES SUCH AS STRAW AND FILTER FABRIC. ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS. THESE SHALL BE MAINTAINED AND MODIFIED DURING THE CONSTRUCTION PROCESS TO MINIMIZE DOWNSTREAM SILTATION. WHEN CONSTRUCTION IS COMPLETED, DETENTION AREAS WILL BE RESHAPED, CLEANED OF SILT, MUD AND DEBRIS, AND RE-SODDED TO PROPERLY DETAIN THE INTENDED STORM QUANTITIES.

2. PROTECTION AND STABILIZATION OF ON-SITE SOIL STOCKPILES: FILL MATERIAL STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILES MAY BE REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILES WILL BE PRESENT. IN NO CASE SHALL ANY UNSTOCKPILES MATERIAL REMAIN MORE THAN THIRTY (30) CALENDAR DAYS AFTER SUBSTANTIAL PROJECT COMPLETION.

3. PROTECTION OF EXISTING STORM SEWER SYSTEMS: DURING CONSTRUCTION, ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS, AND WHICH MUST BE APPROVED BY THE ENGINEER BEFORE INSTALLATION.

4. SEDIMENT BASINS AND TRAPS, SEDIMENT TRAPPING MEASURES: PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT ONTO ADJACENT PROPERTIES, OR INTO EXISTING BODIES OF, MUST BE INSTALLED, CONSTRUCTED OR, IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS, SUCH SYSTEMS SHALL BE FULLY OPERATIVE BEFORE ANY OTHER DISTURBANCE OF THE SITE BEGINS. EARTHEN STRUCTURES INCLUDING BUT NOT LIMITED TO BERMS, EARTH FILTERS, DAMS OR DIKES SHALL BE STABILIZED AND PROTECTED FROM DRAINAGE DAMAGE OR EROSION WITHIN ONE WEEK OF INSTALLATION.

5. ALL SWALES, DITCHES AND CHANNELS: CHANNELS LEADING FROM THE SITE SHALL BE SODDED WITH ARGENTINE BAHIA WITHIN THREE (3) DAYS OF EXCAVATION.

6. THE CONSTRUCTION OF UNDERGROUND UTILITY CONSTRUCTION: UNDERGROUND UTILITY LINES AND OTHER STRUCTURES SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:

A. NOT MORE THAN 100 FEET OF TRENCH SHALL BE OPEN AHEAD OF PIPE LAYING OPERATIONS AT ONE TIME UNLESS A GREATER LENGTH OF OPEN TRENCH IS APPROVED BY THE OWNER'S ENGINEER.

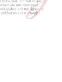
B. WHEREVER CONSISTENT WITH SAFETY AND SPACE CONSIDERATION, EXCAVATED MATERIAL SHALL BE CAST TO THE UPHILL SIDE OF TRENCHES. TRENCH MATERIAL SHALL NOT BE CAST INTO OR ONTO THE SLOPE OF ANY STREAM, CHANNEL, ROAD, DITCH OR WATERWAY.

7. ALL EROSION AND SILTATION CONTROL DEVICES SHALL BE MAINTENANCE: TO REQUIRE DAILY INSPECTIONS BY THE CONTRACTOR TO DETERMINE THE EFFECTIVENESS OF EROSION/SEDIMENT CONTROL EFFORTS. ANY NECESSARY REMEDIES SHALL BE PERFORMED IMMEDIATELY

8. STAKED HAY BALES WILL NOT BE UTILIZED FOR EROSION, SEDIMENT AND TURBIDITY CONTROL.

SOLID WASTE:

1. CONSISTENT WITH ORDINANCE NO. 06-2019 THE CITY HAS GRANTED A WASTE HAULER EXCLUSIVE RIGHTS TO HAUL WASTE AND REFUSE (RESIDENTIAL AND NON-RESIDENTIAL USES) WITHIN THE CITY LIMITS OF OCALA. THEREFORE, ALL WASTE MANAGEMENT, INCLUDING BUT NOT LIMITED TO, DEBRIS AND OTHER REFUSE GENERATED DURING THE LAND CLEARING AND CONSTRUCTION PHASE SHALL BE HAULED BY THE SOLE HAULER GRANTED EXCLUSIVE RIGHTS BY THE CITY



This item has been digitally signed and sealed by Chad S. Linn, PE on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.

Digitally signed by Chad S Linn
Date: 2026.06.24 13:17:00 -04'00'

No.	REVISIONS	DATE	BY
1	REVISED PER COUNTY COMMENTS	12/2025	SAT
2	REVISED PER COUNTY COMMENTS	04/2026	SAT
3	REVISED PER COUNTY COMMENTS	05/2026	SAT
4	REVISED PER COUNTY COMMENTS	06/2026	SAT

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greg@linnengineering.com

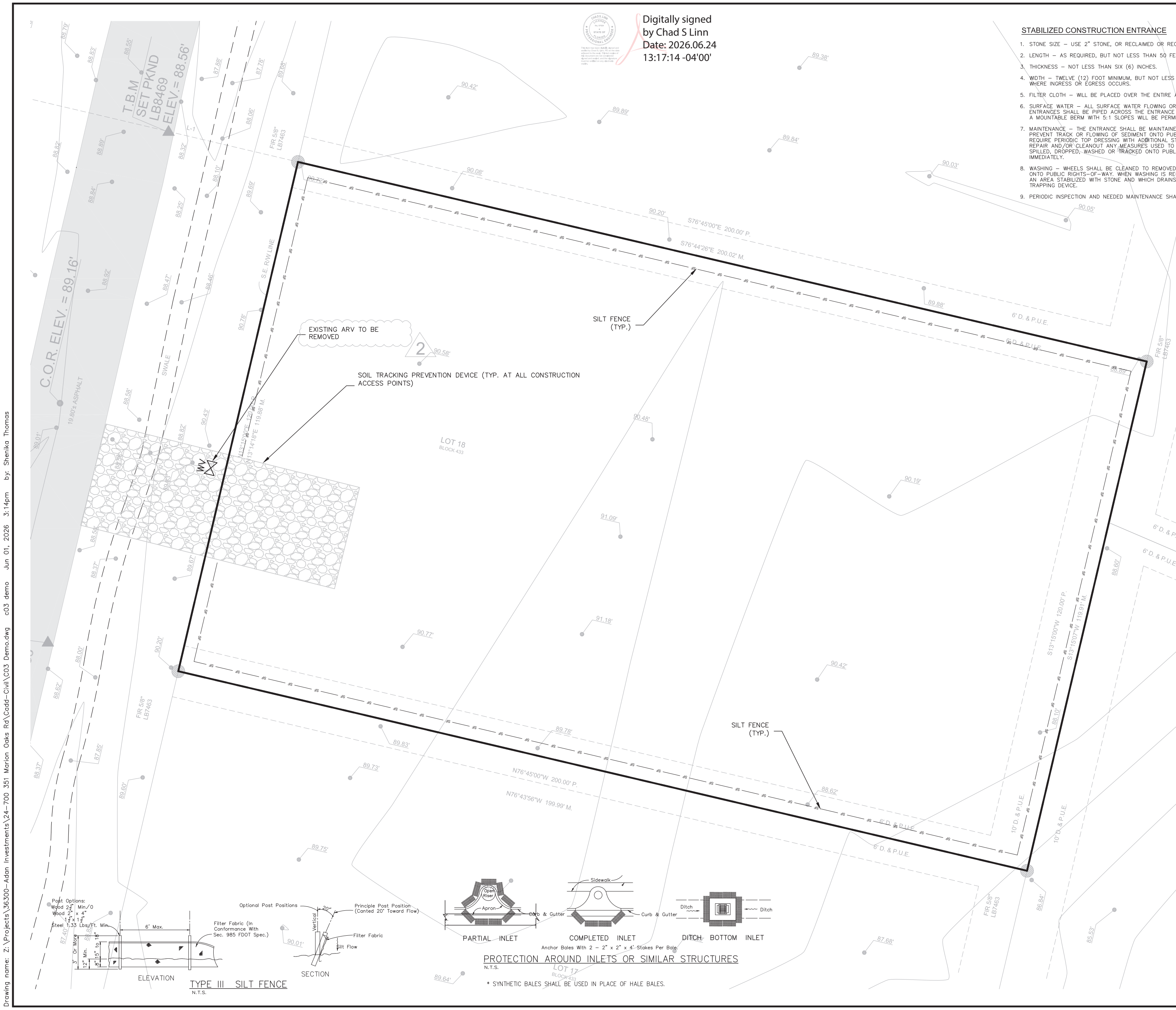
DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

SCALE AS NOTED
DESIGNED BY CSL
DRAWN BY CSL
CHECKED BY CSL

GENERAL NOTES

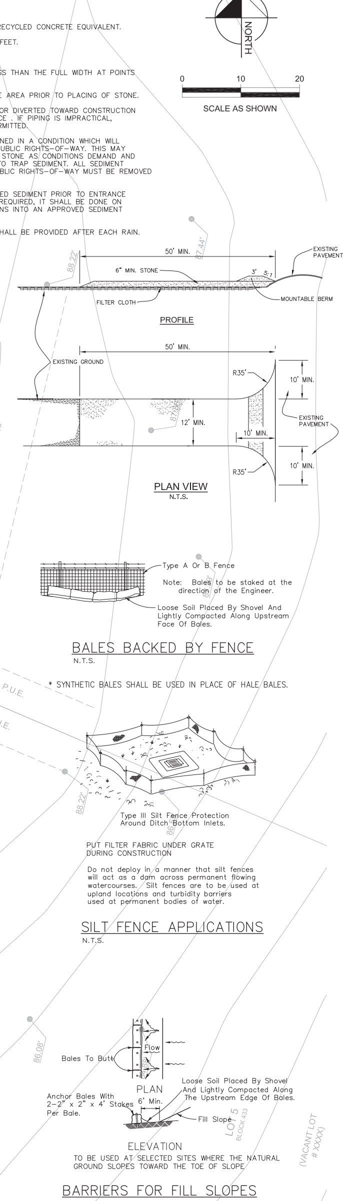
MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL
MARION COUNTY FLORIDA

DATE 07/24
PROJECT NO. 36300-24-700
SHEET NUMBER C02



STABILIZED CONSTRUCTION ENTRANCE

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE . IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVED SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



No.	REVISIONS	DATE	BY
1	REVISED PER COUNTY COMMENTS	12/2025	SAT
2	REVISED PER COUNTY COMMENTS	04/2026	SAT
3	REVISED PER COUNTY COMMENTS	05/2026	SAT

LINN ENGINEERING & DESIGN
P.O. BOX 140024
ORLANDO, FL 32814
PHONE: 407-775-5194
greg@linnengineering.com

DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

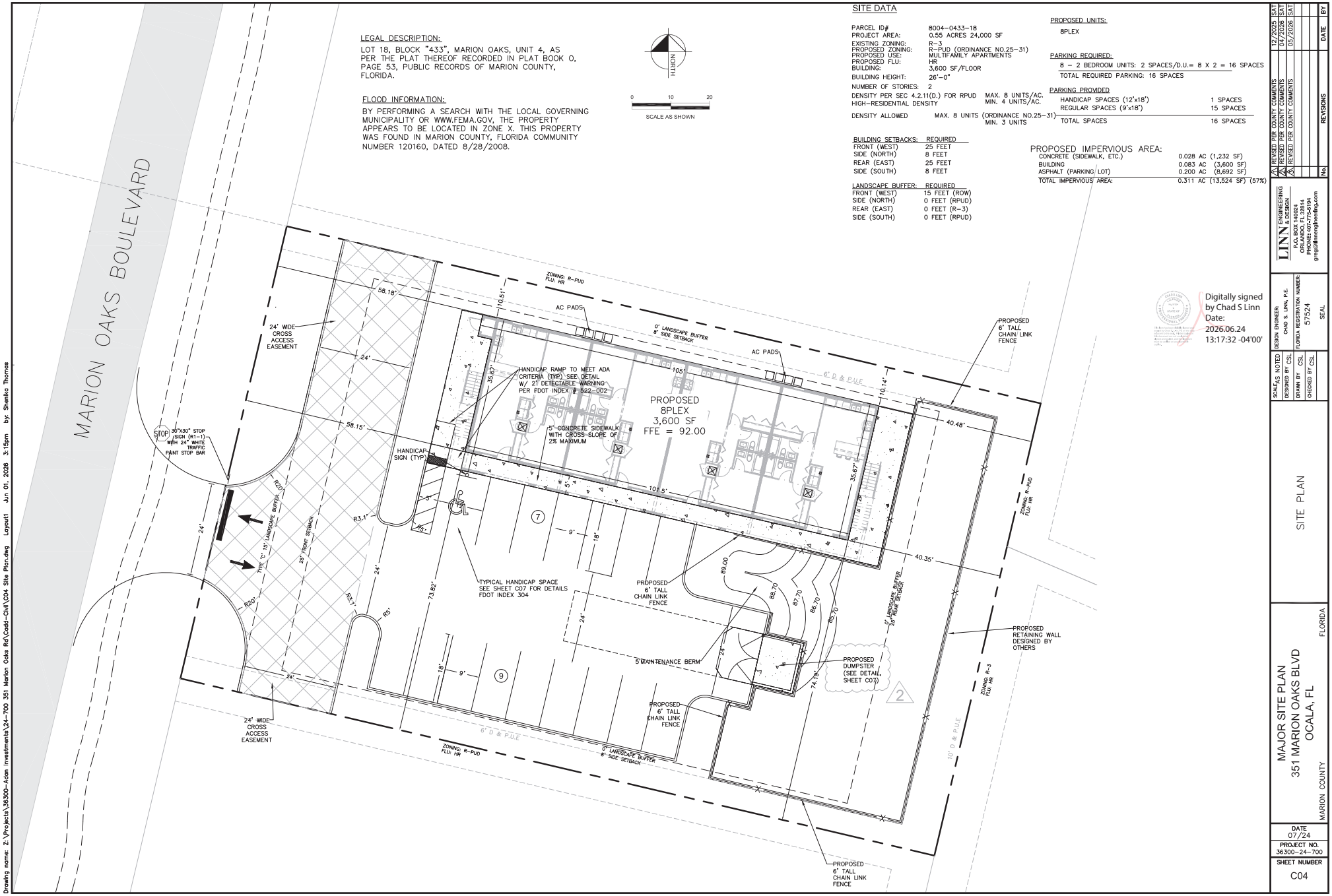
SCALE AS NOTED
DESIGNED BY CSL
DRAWN BY CSL
CHECKED BY CSL

EXISTING CONDITIONS AND DEMOLITION PLAN

MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL

MARION COUNTY FLORIDA

DATE 07/24
PROJECT NO. 36300-24-700
SHEET NUMBER C03



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Date: 2026.06.24 13:17:32 -04'00'

No.	REVISIONS	DATE	BY
A1	REVISED PER COUNTY COMMENTS	12/2025	SAT
A2	REVISED PER COUNTY COMMENTS	04/2026	SAT
A3	REVISED PER COUNTY COMMENTS	05/2026	SAT

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DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

SCALE: AS NOTED
DESIGNED BY: CSL
DRAWN BY: CSL
CHECKED BY: CSL

SITE PLAN

MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL
MARION COUNTY FLORIDA

DATE 07/24
PROJECT NO. 36300-24-700
SHEET NUMBER C04

Drawing name: Z:\Projects\36300-Acon investments\24-700 351 Marion Oaks Rd\Cadd-Civil\C04 Site Plan.dwg Layout1 Jun 01, 2026 3:15pm by: Shenika Thomas

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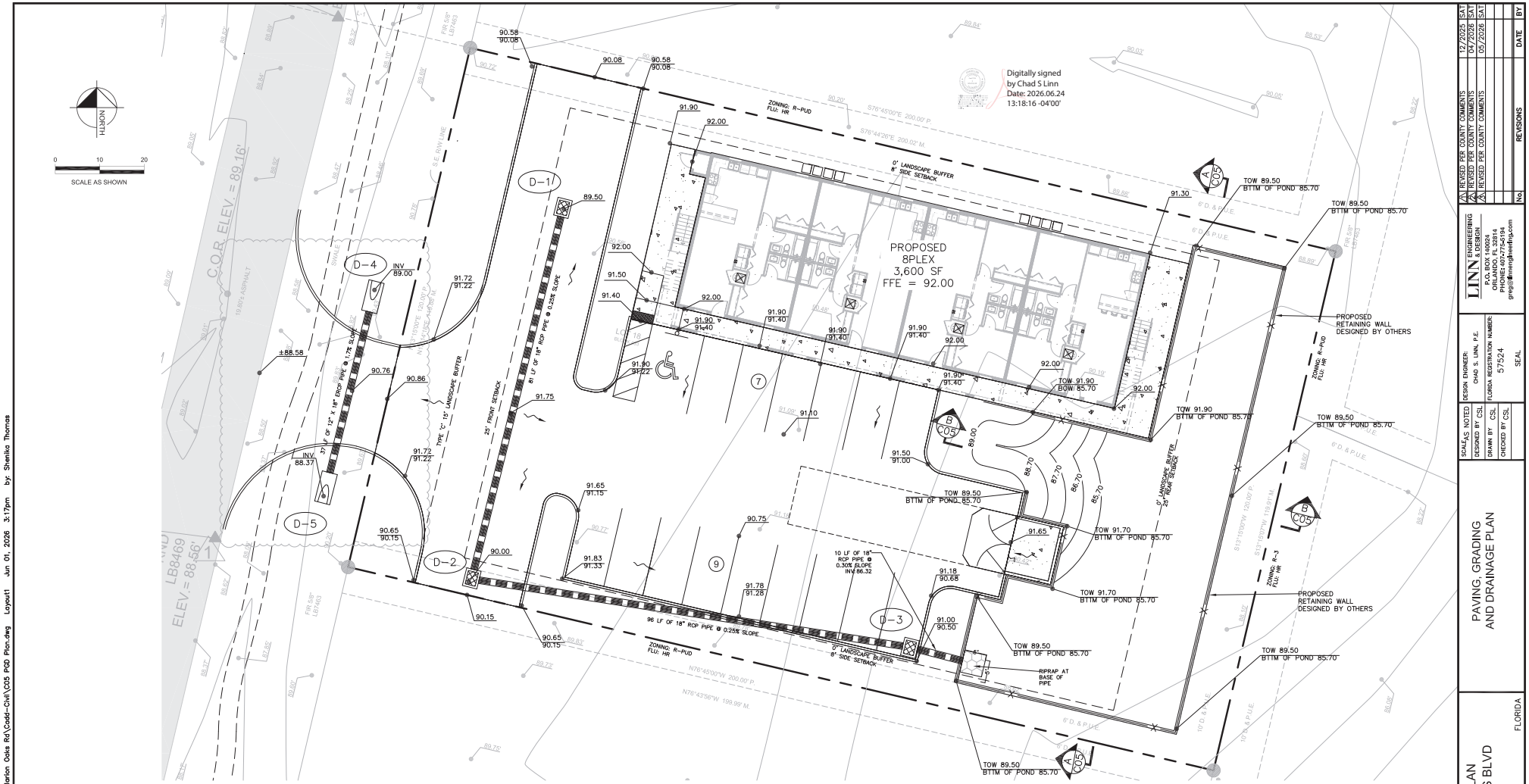
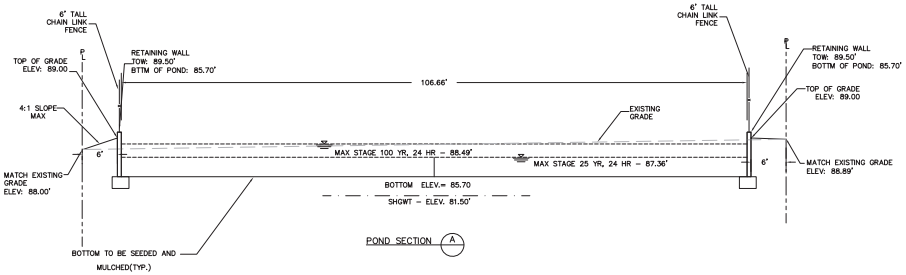
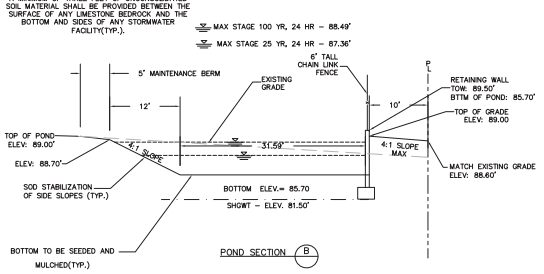
by Chad S Linn
Date: 2026.06.24
13:17:56 -04'00'







D-1 TYPE "C" INLET PER FDOT INDEX NO. 425-052 TOP= 89.50 INV. SW = 86.79

D-2 TYPE "C" INLET PER FDOT INDEX NO. 425-052 TOP= 90.00 INV. NW = 86.59 INV. E = 86.59

D-3 TYPE "C" INLET PER FDOT INDEX NO. 425-052 TOP= 90.50 INV. W =86.35 INV. E = 86.35

D-4 TYPE "MES" 5:1 PER FDOT INDEX # 272 INV= 89.00

D-5 TYPE "MES" 5:1 PER FDOT INDEX # 272 INV= 88.37

No.	REVISIONS	DATE	BY
A	REVISED PER COUNTY COMMENTS	12/2025	SAT
A	REVISED PER COUNTY COMMENTS	04/2026	SAT
A	REVISED PER COUNTY COMMENTS	05/2026	SAT

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PHONE:(407)775-5194
greg@lmmengineering.com

DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

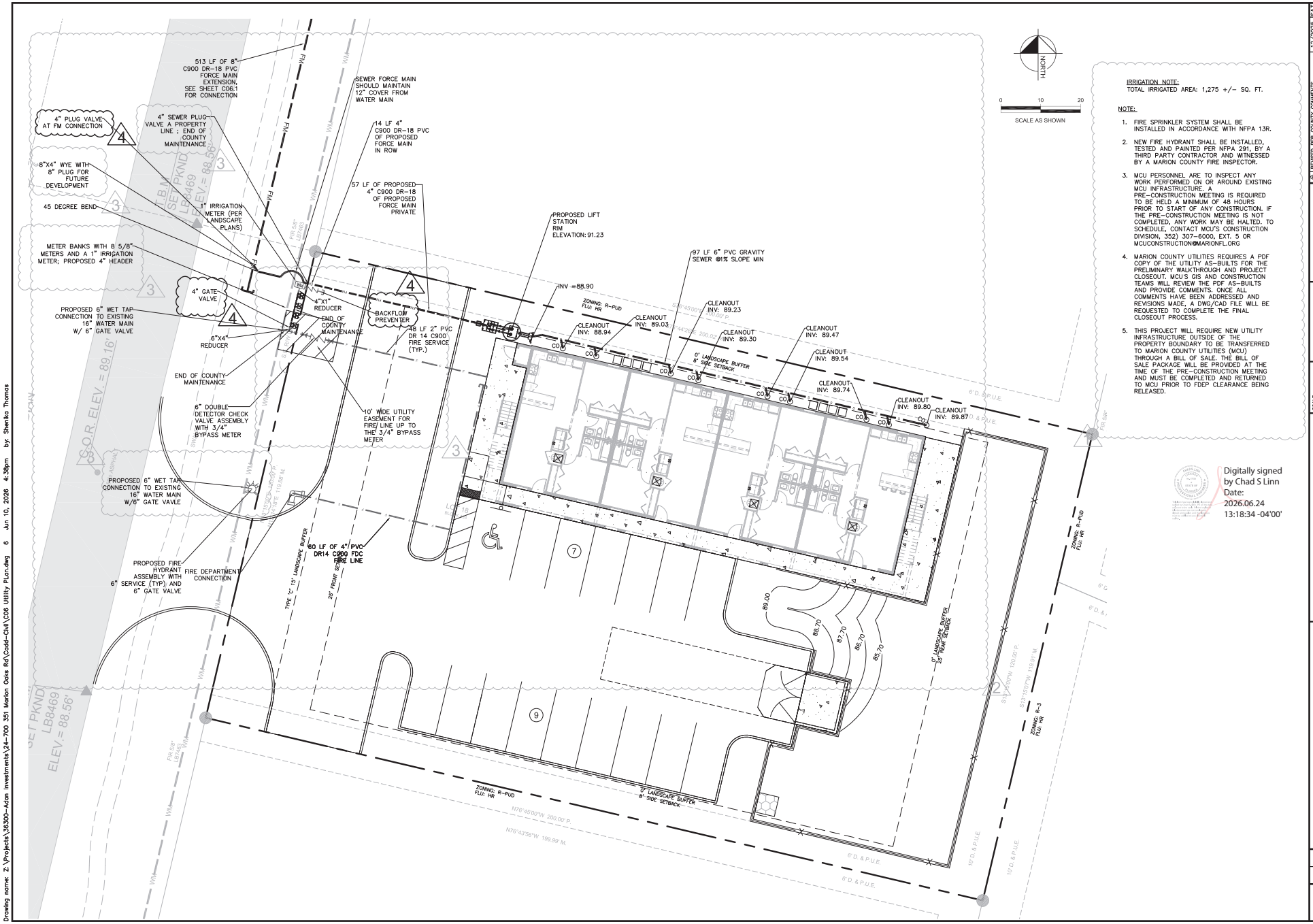
SCALE AS NOTED
DESIGNED BY CSL
DRAWN BY CSL
CHECKED BY CSL

PAVING, GRADING AND DRAINAGE PLAN

MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL
MARION COUNTY FLORIDA

DATE 07/24
PROJECT NO. 36300-24-700
SHEET NUMBER C05

Drawing name: Z:\Projects\36300-Acon investments\24-700 351 Marion Oaks Rd\Cadd-Civil\C05 PGD Plan.dwg Layout1 Jun 01, 2026 3:17pm by: Shenika Thomas



IRRIGATION NOTE:
TOTAL IRRIGATED AREA: 1,275 +/- SQ. FT.

NOTE:

1. FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13R.
2. NEW FIRE HYDRANT SHALL BE INSTALLED, TESTED AND PAINTED PER NFPA 291, BY A THIRD PARTY CONTRACTOR AND WITNESSED BY A MARION COUNTY FIRE INSPECTOR.
3. MCU PERSONNEL ARE TO INSPECT ANY WORK PERFORMED ON OR AROUND EXISTING MCU INFRASTRUCTURE. A PRE-CONSTRUCTION MEETING IS REQUIRED TO BE HELD A MINIMUM OF 48 HOURS PRIOR TO START OF ANY CONSTRUCTION. IF THE PRE-CONSTRUCTION MEETING IS NOT COMPLETED, ANY WORK MAY BE HALTED. TO SCHEDULE, CONTACT MCU'S CONSTRUCTION DIVISION, 352) 307-6000, EXT. 5 OR MCUCONSTRUCTION@MARIONFL.ORG
4. MARION COUNTY UTILITIES REQUIRES A PDF COPY OF THE UTILITY AS-BUILTS FOR THE PRELIMINARY WALKTHROUGH AND PROJECT CLOSEOUT. MCU'S GIS AND CONSTRUCTION TEAMS WILL REVIEW THE PDF AS-BUILTS AND PROVIDE COMMENTS. ONCE ALL COMMENTS HAVE BEEN ADDRESSED AND REVISIONS MADE, A DWG/CAD FILE WILL BE REQUESTED TO COMPLETE THE FINAL CLOSEOUT PROCESS.
5. THIS PROJECT WILL REQUIRE NEW UTILITY INFRASTRUCTURE OUTSIDE OF THE PROPERTY BOUNDARY TO BE TRANSFERRED TO MARION COUNTY UTILITIES (MCU) THROUGH A BILL OF SALE. THE BILL OF SALE PACKAGE WILL BE PROVIDED AT THE TIME OF THE PRE-CONSTRUCTION MEETING AND MUST BE COMPLETED AND RETURNED TO MCU PRIOR TO FDEP CLEARANCE BEING RELEASED.

Digitally signed by Chad S Linn
Date: 2026.06.24 13:18:34 -04'00'

No.	REVISIONS	DATE	BY
1	REVISED PER COUNTY COMMENTS	12/2025	SAT
2	REVISED PER COUNTY COMMENTS	04/2026	SAT
3	REVISED PER COUNTY COMMENTS	05/2026	SAT
4	REVISED PER COUNTY COMMENTS	06/2026	SAT

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greg@linnengineering.com

DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

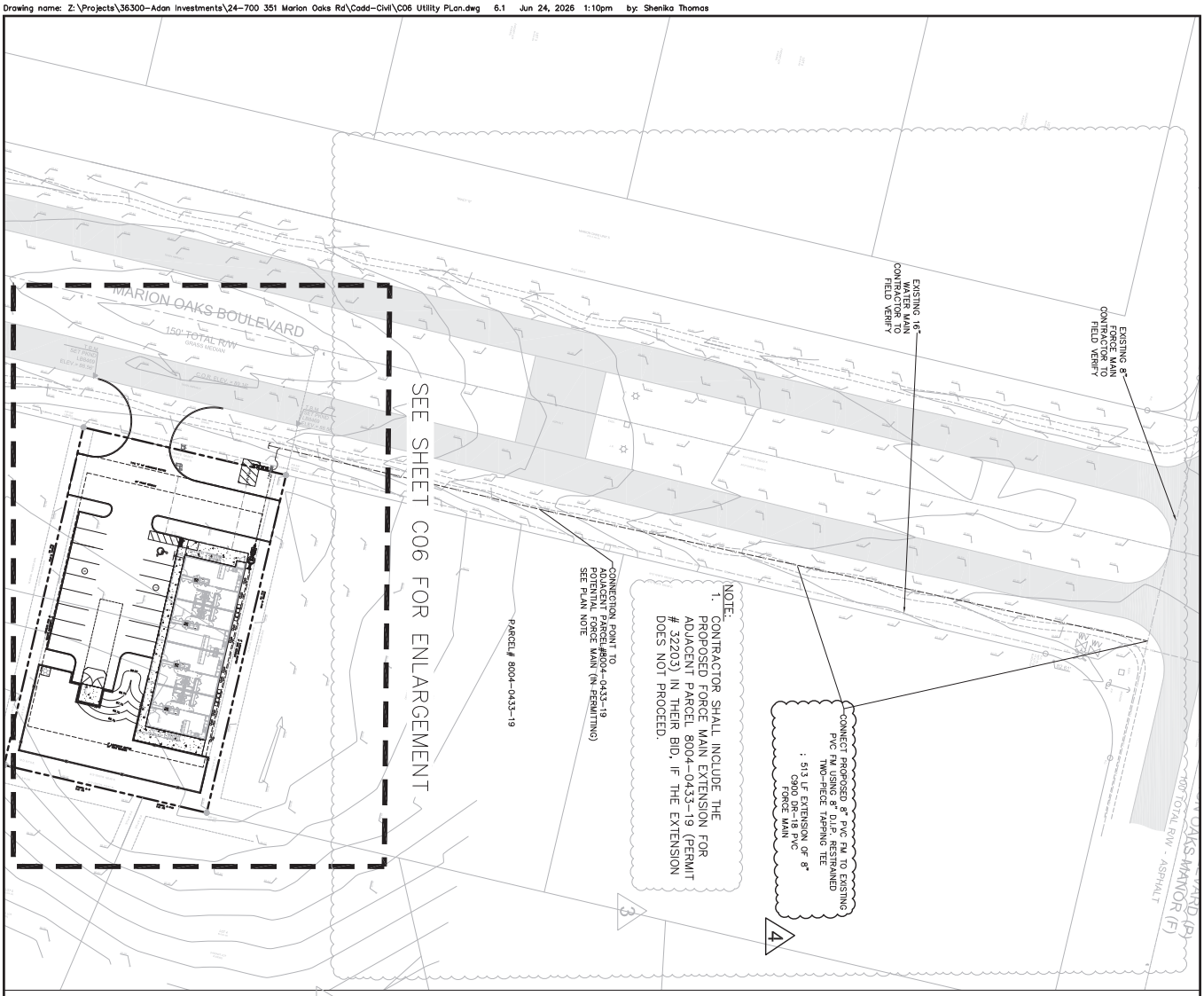
SCALE: AS NOTED
DESIGNED BY: CSL
DRAWN BY: CSL
CHECKED BY: CSL

UTILITY PLAN

MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL
MARION COUNTY FLORIDA

DATE 07/24
PROJECT NO. 36300-24-700
SHEET NUMBER C06

Drawing name: Z:\Projects\36300-Acon investments\24-700 351 Marion Oaks Rd\Cadd-Civil\C06 Utility Plan.dwg 6 Jun 10, 2026 4:38pm by: Shenika Thomas



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Date: 2026.06.24 13:19:55 -04'00'

SCALE AS SHOWN 0 10 20

NORTH

C06.1	SHEET NUMBER	36300-24-700	PROJECT NO.	07/24	DATE	MAJOR SITE PLAN 351 MARION OAKS BLVD OCALA, FL MARION COUNTY FLORIDA	UTILITY PLAN CONNECTION

SCALE	AS NOTED
DESIGNED BY	CSL
DRAWN BY	CSL
CHECKED BY	CSL

DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

LINN ENGINEERING & DESIGN
P.O. BOX 140024
ORLANDO, FL 32814
PHONE: 407-775-5194
greg@linnengineering.com

No.	REVISIONS	DATE	BY
1	REVISED PER COUNTY COMMENTS	12/2025	SAT
2	REVISED PER COUNTY COMMENTS	04/2026	SAT
3	REVISED PER COUNTY COMMENTS	05/2026	SAT
4	REVISED PER COUNTY COMMENTS	06/2026	SAT

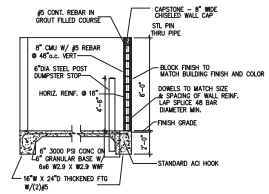
STRUCTURAL NOTES

Foundation & Concrete Notes:

1. Concrete 28 Day Strength shall be as follows:
   a. Footings/Grade Beams 3,000 psi
   b. Slabs on Grade 3,000 psi
2. All footings shall bear on firm undisturbed residual soil and/or engineered earth fill compacted to 100% of its maximum dry density as per ASTM D 698-70 (Standard Proctor), unless noted otherwise. The soil bearing capacity is to be verified by Geotechnical Engineer prior to construction.
3. All concrete and reinforcing steel shall conform to ACI 318 and ACI 301 latest edition, and ASTM A615-60. Contractor to have copies of the ACI documents at the job site during construction.
4. Provide 2'-6" x 2'-6" corner bars at corners of all continuously reinforced elements such as walls, footings, bond beams, etc. Corner bars shall be the same size, spacing, location, and quantity as the continuous reinforcing.
5. All reinforcing steel lap splices shall be Class "B" with 24" minimum, unless otherwise noted.
6. The following minimum concrete cover shall be provided for reinforcing bars (per ACI. 318):
   a. Cast against and permanently exposed earth 3"
   b. Formed and Exposed to Earth or Weather
      1) #6 thru #18 bars 2"
      2) #5 bars, W31 wire, & smaller 1 1/2"
   c. Formed and Not exposed to weather or in contact with the ground
      1) Slabs, walls, and joist (#11 bars and smaller) 3/4"
      2) Beams, girders, and columns (Principle reinf., ties, stirrups, spirals) 1 1/2"
7. Contraction joints shown may be saw cuts 1/8" wide x 1/4 slab thickness or other submitted and approved method unless noted otherwise.

Masonry Notes:

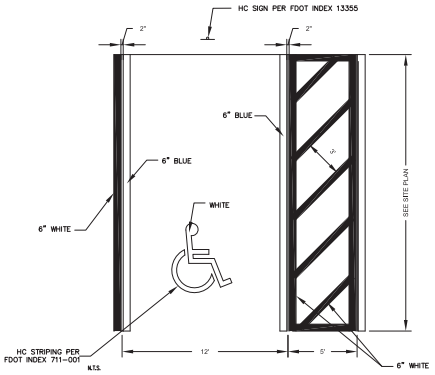
1. CMU to be of lightweight aggregate design per ASTM D90-75. f'm = 1500 psi or greater
2. Mortar shall be: (Type S) for block (Type N) for veneer block and brick
3. Masonry reinforcing for masonry walls shall be Dur-o-wall assembly or approved equal and shall have product approval of governing code. Reinforcing shall be manufactured from cold drawn steel wire conforming to ASTM A82. Cross rods and side rods shall not be less than No. 9 gage wire.
4. Grout hollow masonry units solid as shown on plans. Fine and coarse grouts shall conform to ASTM C476 and shall attain a minimum compressive strength of 2500 psi at 28 days. Grout shall attain 80% of design strength prior to application of service loads.
5. The selection of fine and coarse grouts and the maximum grout pour height shall be in conformance with the grout space requirements set forth in the specification for masonry structures (ACI530/ASCE5/TMS502).
6. Vertical reinforcing shall extend up into the bond beam.
7. Lap reinforcing in cmu 48 bar diameters.
8. Grout shall be consolidated immediately after pouring and reconsolidated.
9. Stop each intermediate grout lift 1 1/2" below the top of the masonry.
10. Anchor into grout block cells only.
11. Locate bars at center of cells.
12. Provide rebar positioners at 4'-0" o.c. min. vertically.
13. Tooth block at intersection or butt intersection wall and provide 1/4" x 1" bar "Z" ties at 48" o.c. vertical.



DUMPSTER ENCLOSURE SECTION

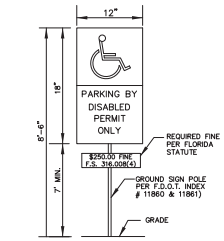
NOTES:

1. THE MASONRY WALL SHALL BE DECORATIVELY FINISHED CONCRETE MASONRY UNIT, BRICK, STUCCO, OR OTHER MATERIAL MATCHING THE EXTERIOR OF THE PRINCIPAL BUILDING.
2. ENTRANCE OF DUMPSTER PAD WILL BE RAISED AND THE OUTSIDE PAVING WILL BE SLOPED AWAY FROM THE PAD TO PREVENT STORM WATER INTRUSION.
3. CHAIN LINK, PAINTED OR UNPAINTED BLOCK WALLS, BARBED WIRE AND WOOD ARE PROHIBITED AS PART OF A WALL.
4. EACH ENCLOSURE SHALL INCLUDE A DECORATIVE OPAQUE GATE EQUAL IN HEIGHT TO THE MASONRY WALL (CHAIN LINK WITH PRIVACY SLATS IS NOT CONSIDERED OPAQUE MATERIAL).



HANDICAP PARKING PAVEMENT MARKING

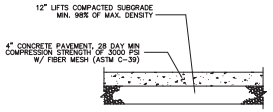
NTS



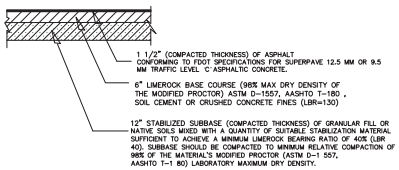
HANDICAP SIGN DETAIL

NOTE:

1. ALL LETTERS ARE 1" SERIES "C" PER MUTCD.
2. TOP PORTION OF SIGN SHALL HAVE (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH WHITE OPAQUE LEGEND AND BORDER.
4. FINE NOTIFICATION SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
5. ONE (1) SIGN REQUIRED FOR EACH PARKING SPACE.
6. INSTALLATION HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD),



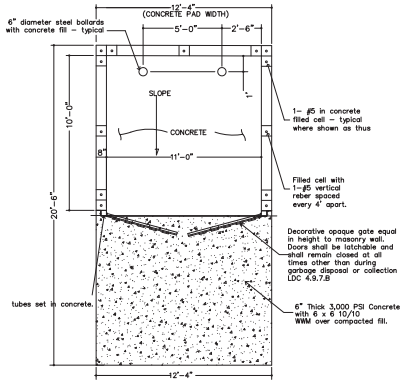
CONCRETE SIDEWALK DETAIL ON SITE



TYPICAL PAVEMENT SECTION

N.T.S.

*REFER TO FDOT STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION) FOR DENSITY REQUIREMENTS OF ABOVE MATERIALS



SINGLE DUMPSTER ENCLOSURE PLAN

N.T.S.

Digitally signed by Chad S Linn
Date: 2026.06.24 13:22:16 -04'00'

No.	REVISIONS	DATE	BY
A	REVISED PER COUNTY COMMENTS	12/2025	SAT
A	REVISED PER COUNTY COMMENTS	04/2026	SAT
A	REVISED PER COUNTY COMMENTS	05/2026	SAT

LINN ENGINEERING & DESIGN
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PHONE: 407-715-5194
greg@linnengineering.com

DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

SCALE: AS NOTED
DESIGNED BY: CSL
DRAWN BY: CSL
CHECKED BY: CSL

CONSTRUCTION DETAILS

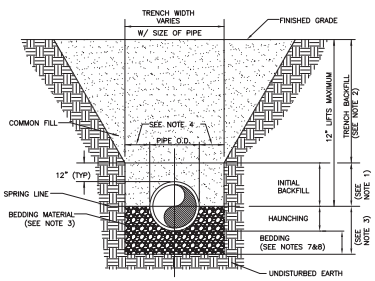
MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL
MARION COUNTY FLORIDA

DATE 07/24

PROJECT NO. 36300-24-700

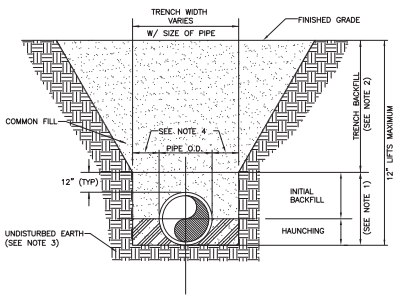
SHEET NUMBER C07

Drawing name: Z:\Projects\36300-Adan investments\24-700 351 Marion Oaks Rd\Cadd-Civil\C07 Details.dwg C07 Jun 01, 2026 3:18pm by: Shenika Thomas



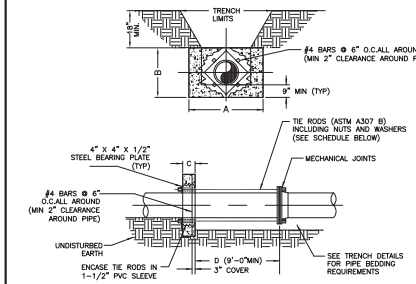
NOTES:
1. INITIAL BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
9. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN MARION COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
10. ONE COMPACTION TEST SHALL BE REQUIRED FOR EACH LIFT NOT TO EXCEED 200'.

Marion County Florida Utilities	MCBCC EFFECTIVE 04/13/2023	BEDDING AND TRENCHING 1	7.3.2
	REVISION # 2		UT 102



NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH BEDDING AND TRENCHING 1 DETAIL MAY BE REQUIRED AS DIRECTED BY MCU.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN MARION COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
8. ONE COMPACTION TEST SHALL BE REQUIRED FOR EACH LIFT NOT TO EXCEED 200'.

Marion County Florida Utilities	MCBCC EFFECTIVE 04/13/2023	BEDDING AND TRENCHING 2	7.3.2
	REVISION # 2		UT 103



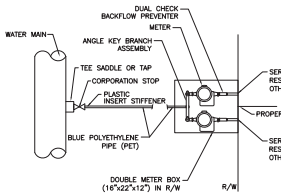
SCHEDULE OF DIMENSIONS AND MATERIALS

PIPE SIZE (INCHES)	DIMENSIONS (FT.) A	B	C	D	TIE RODS REQ'D DIA.	NO.
6	2.0	2.0	1.0		3/4	2
8	2.5	2.5	1.0		3/4	2
10	3.5	3.0	1.0		3/4	4
12	5.0	3.0	1.0		3/4	4
16	6.0	4.0	1.5		3/4	4
20	8.0	5.0	1.5		3/4	6
24	9.0	6.0	1.5		3/4	8

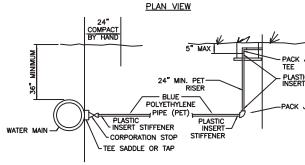
NOTE: THRUST COLLAR AREAS TO BE COMPUTED ON BASIS OF 2000 LBS/SF SOIL RESTRAINT BEARING.

NOTES:
1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
3. BEDDING, BACKFILL AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE LAND DEVELOPMENT CODE.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
6. DESIGN PRESSURE: 150 PSI.

Marion County Florida Utilities	MCBCC EFFECTIVE 04/13/2023	THRUST COLLAR WATER MAINS	7.3.2
	REVISION # NA		UT 201



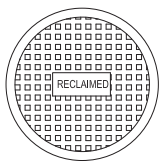
PLAN VIEW



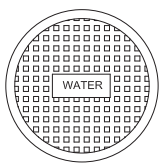
PROFILE VIEW

NOTES:
1. ALL RESIDENTIAL SERVICES SHALL HAVE A MINIMUM SIZE OF 1".
2. CURB STOP SHALL BE INSTALLED ON STREET SIDE OF THE SIDEWALK BETWEEN SIDEWALK AND CURB.
3. SCHEDULE 40 PVC CASING TO BE USED UNDER PAVEMENT, EXTENDING A MINIMUM OF 5' ON EITHER SIDE OF THE PAVEMENT WHERE POSSIBLE. THE INSIDE DIAMETER OF THE CASING PIPE SHALL BE A MINIMUM OF ONE INCH LARGER THAN THE OUTSIDE DIAMETER OF THE SERVICE PIPE.
4. CORP STOPS SHALL BE HORIZONTAL TO WATER MAINS.
5. LOCATE WIRE SHALL BE INSTALLED FROM MAIN TO SERVICE LINE.
6. PIPE AND FITTING SIZES TO BE DETERMINED BY SERVICE TYPE.
7. COMPACTION SHALL BE MADE UNDER AND AROUND THE CONNECTION TO THE SATISFACTION OF THE ENGINEER.
8. POTABLE WATER SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY ETCHING OR STAMPING A "W" IN THE CURB DIRECTLY OVER THE SERVICE LINE.
9. RECLAIMED WATER SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY ETCHING OR STAMPING A "RW" IN THE CURB DIRECTLY OVER THE SERVICE LINE.
10. SERVICE LINES SHALL NOT CONFLICT WITH OTHER UTILITIES. SERVICE LINES SHALL BE SLEEVED WITH SCH40 PVC IF UNDER OTHER UTILITIES.
11. ALL TAPS MUST BE LOCATED A MINIMUM OF 24" AWAY FROM ANY BELL AND/OR FITTING.

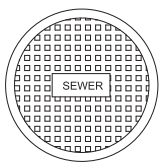
Marion County Florida Utilities	MCBCC EFFECTIVE 04/13/2023	WATER AND RECLAIMED WATER SERVICES (TYPICAL)	7.3.2
	REVISION # 2		UT 107



RECLAIMED WATER

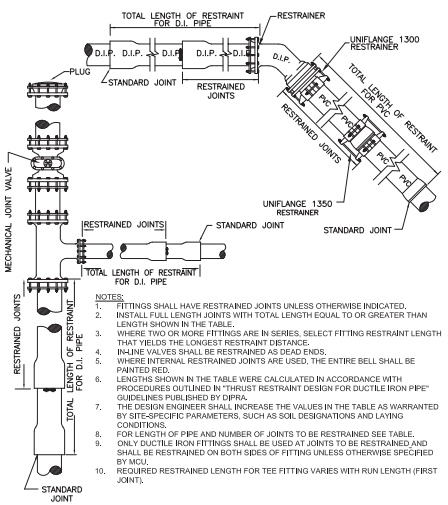


POTABLE WATER



SEWER

Marion County Florida Utilities	MCBCC EFFECTIVE 04/13/2023	TYPICAL VALVE BOX COVER	7.3.2
	REVISION # NA		UT 110



NOTES:
1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. IN-LINE VALVES SHALL BE RESTRAINED AS DEAD ENDS.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA.
7. THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.
8. FOR LENGTH OF PIPE AND NUMBER OF JOINTS TO BE RESTRAINED SEE TABLE.
9. ONLY DUCTILE IRON FITTINGS SHALL BE USED AT JOINTS TO BE RESTRAINED AND SHALL BE RESTRAINED ON BOTH SIDES OF FITTING UNLESS OTHERWISE SPECIFIED BY MCU.
10. REQUIRED RESTRAINED LENGTH FOR TEE FITTING VARIES WITH RUN LENGTH (FIRST JOINT).

Marion County Florida Utilities	MCBCC EFFECTIVE 04/13/2023	RESTRAINED PIPE TABLE	7.3.2
	REVISION # NA		UT 116A

MINIMUM RESTRAINED LENGTH (FT) – EACH SIDE OF FITTING AND VALVE FOR DIP, PE ENCASED DIP OR BARE PVC
H=HORIZONTAL
VU=VERTICAL-UP
VD=VERTICAL-DOWN

WATER MAIN: PRESSURE: 150 PSI, DEPTH OF COVER: 3.0 ft.

REQUIRED RESTRAINED LENGTH ON WATER MAIN

Bend Type		Pipe Length (ft) 4"	6"	8"	10"	12"	16"	20"	24"
Angle	Orientation								
11-1/4°	H	2	3	4	5	5	6	8	9
	VU	2	3	4	5	5	6	8	9
	VD	6	9	11	13	16	20	24	28
22-1/2°	H	4	6	7	9	10	12	15	17
	VU	4	6	7	9	10	12	15	17
	VD	12	17	22	27	31	40	48	56
45°	H	8	11	15	17	20	25	30	35
	VU	8	11	15	17	20	25	30	35
	VD	25	35	46	55	65	82	99	115
90°	H	19	27	35	41	48	61	72	83
	VU	19	27	35	41	48	61	72	83
	VD	61	85	111	132	155	198	238	277
DDD END PLUG AND VALVE		61	85	111	132	155	198	238	277

REQUIRED RESTRAINED LENGTH ON TEE BRANCH

TEE FITTING		Pipe Length (ft) Diameter of Run 4"	6"	8"	10"	12"	16"	20"	24"
Diameter of Branch	4"	39	28	18	6	0	0	0	0
	6"		63	55	48	40	22	4	0
	8"			89	82	77	63	49	34
	10"				110	105	95	84	71
	12"					133	124	115	105
	16"						175	168	161
	20"							215	209
	24"								254

REQUIRED RESTRAINED LENGTH ON LARGER PIPE

REDUCER FITTING		Pipe Length (ft) Diameter of Large Pipe 6"	8"	10"	12"	16"	20"	24"
Diameter of Small Pipe	4"	44	80	108	135	183	226	268
	6"		47	81	113	167	214	257
	8"			65	83	145	196	243
	10"				46	118	175	226
	12"					84	149	205
	16"						84	151
	20"							83

Minimum Design Criteria
Bedding Type: 4
Safety Factor: 1.5
Soil: Sand-Silt
Run Length (First Joint): 10 ft.

REQUIRED RESTRAINED LENGTH ON FORCE MAIN

Bend Type		Pipe Length (ft) 4"	6"	8"	10"	12"	16"	20"	24"
Angle	Orientation								
11-1/4°	H	2	2	3	4	4	5	6	7
	VU	2	2	3	4	4	5	6	7
	VD	5	7	9	11	12	16	19	22
22-1/2°	H	3	5	6	7	8	10	12	14
	VU	3	5	6	7	8	10	12	14
	VD	10	13	17	21	24	31	38	44
45°	H	6	9	11	14	16	20	24	28
	VU	6	9	11	14	16	20	24	28
	VD	20	27	36	43	50	64	78	91
90°	H	15	21	27	32	38	48	57	66
	VU	15	21	27	32	38	48	57	66
	VD	46	65	85	102	121	155	187	219
DDD END PLUG AND VALVE		46	65	85	102	121	155	187	219

REQUIRED RESTRAINED LENGTH ON TEE BRANCH

TEE FITTING		Pipe Length (ft) Diameter of Run 4"	6"	8"	10"	12"	16"	20"	24"
Diameter of Branch	4"	25	14	4	0	0	0	0	0
	6"		63	36	28	21	5	0	0
	8"			63	57	52	39	26	12
	10"				80	75	66	55	44
	12"					98	90	81	72
	16"						132	126	119
	20"							164	159
	24"							196	

REQUIRED RESTRAINED LENGTH ON LARGER PIPE

REDUCER FITTING		Pipe Length (ft) Diameter of Large Pipe 6"	8"	10"	12"	16"	20"	24"
Diameter of Small Pipe	4"	34	61	83	105	143	178	212
	6"		36	63	88	131	168	204
	8"			35	64	113	155	192
	10"				36	92	138	179
	12"					66	118	162
	16"						66	120
	20"							66

FORCE MAIN:
PRESSURE: 100 PSI.
DEPTH OF COVER: 4.0 ft.

Marion County Florida Utilities	MCBCC EFFECTIVE 04/13/2023	RESTRAINED PIPE TABLE	7.3.2
	REVISION # NA		UT 116B

NO.	REVISIONS	DATE	BY
A	REVISED PER COUNTY COMMENTS	12/2025	SAT
A	REVISED PER COUNTY COMMENTS	04/2026	SAT
A	REVISED PER COUNTY COMMENTS	05/2026	SAT

LINN ENGINEERING & DESIGN
P.O. BOX 140024
ORLANDO, FL 32814
PHONE: 407-715-5194
greg@lmmengineering.com

DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

Digitally signed by Chad S Linn
Date: 2026.06.24 13:22:54 -04'00'

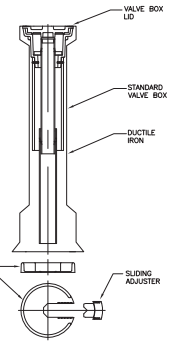
SCALE: AS NOTED
DESIGNED BY: CSL
DRAWN BY: CSL
CHECKED BY: CSL

UTILITY DETAILS

MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL
MARION COUNTY FLORIDA

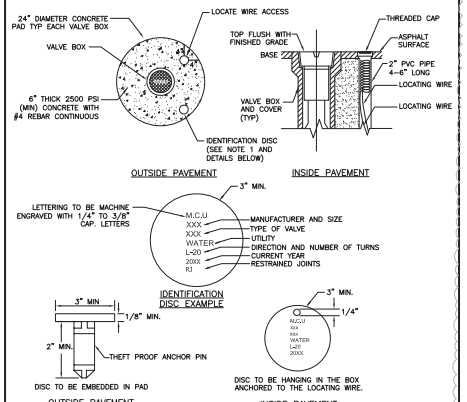
DATE: 07/24
PROJECT NO.: 36300-24-700
SHEET NUMBER: C08

Drawing name: Z:\Projects\36300-Acton investments\24-700 351 Marion Oaks Rd\Cadd-Civil\C08 Details.dwg C08 Jun 01, 2026 3:18pm by: Shenika Thomas



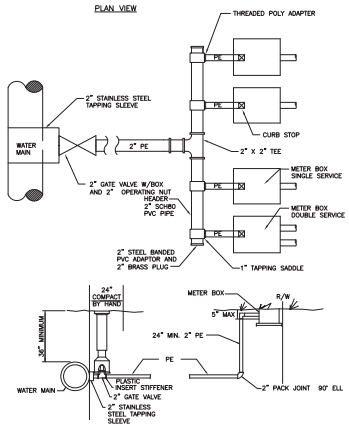
NOTES:
1. FOR ALL MAINS 6.0" DEEP OR GREATER, PVC PIPE EXTENSIONS SHALL BE USED ON VALVE BOX INSTALLATION.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 1 | SEALED VALVE BOX, ADJUSTABLE | 7.3.2 UT 111



NOTES:
1. BRONZE (OR STAINLESS STEEL) IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, EXCEPT HYDRANT VALVES.
2. LOCATING WIRE SHALL TERMINATE AT EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 1 | VALVE BOX PAD | 7.3.2 UT 112



NOTES:
1. MAXIMUM OF 5 5/8" METERS
2. METER BOXES SHALL NOT BE LOCATED WITHIN DRIVING SURFACE. METER BOXES MUST BE LOCATED IN RIGHT-OF-WAY OR PRIVATE PROPERTY WITH A UTILITY EASEMENT.
3. NO MALE ADAPTERS ALLOWED AT VALVE; SHALL BE A BRASS NIPPLE WITH 2" SCH80 FEMALE STEEL BANDED ADAPTER.
4. ALL TAPS MUST BE LOCATED A MINIMUM OF 24" AWAY FROM ANY BELL AND/OR FITTING.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 1 | METER BANK 2" SUPPLY | 7.3.2 UT 202

1

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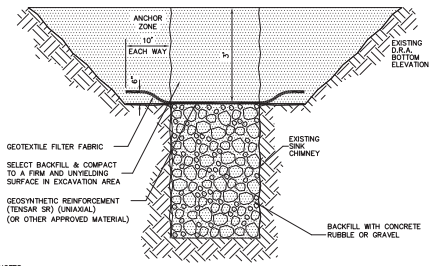
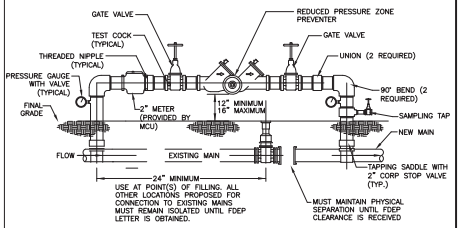
Date: 2026.06.24 13:23:12 -04'00'



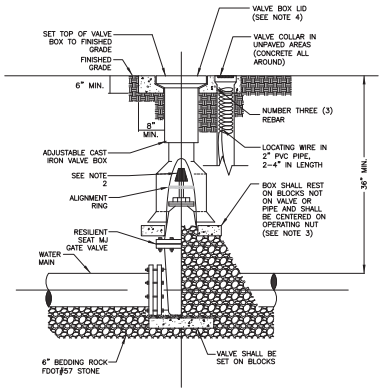
NOTES:
1. IF LIMESTONE IS ENCOUNTERED OR A SINKHOLE OR SOLUTION PIPE FORMS DURING CONSTRUCTION, CONSTRUCTION OF THE BASIN MUST BE HALTED AND THE PROJECT GEOTECHNICAL ENGINEER MUST BE NOTIFIED IMMEDIATELY.
2. THE SINKHOLE OR SOLUTION PIPE MUST BE REPAIRED WITHIN 10 DAYS OF THE DISCOVERY USING A DISTRICT APPROVED METHOD.
3. THE STORMWATER SYSTEM MUST BE INSPECTED MONTHLY FOR THE OCCURANCE OF SINKHOLES OR SOLUTION PIPES.

TYPICAL SINK CHIMNEY REPAIR DETAIL
N.T.S.



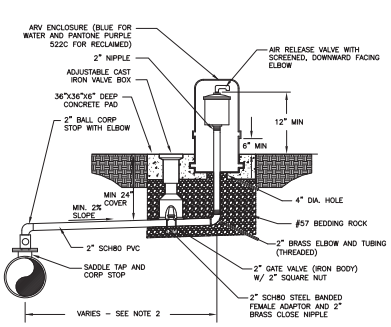
NOTES:
1. A TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE WATER MAINS AND PROPOSED NEW WATER MAIN IMPROVEMENTS. TEMPORARY JUMPER WATER METERS WILL BE SUPPLIED BY MCU.
2. THIS DETAIL IS TO BE USED FOR FILLING ANY NEW WATER MAIN OF ANY SIZE FOR EXISTING ACTIVE WATER MAINS AND FOR FLUSHING OF NEW MAINS, AND FOR PULLING 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 FDEP HAS BEEN RECEIVED. THIS 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. ADEQUATE THRUST BLOCKING AND/OR RESTRAINTS SHALL BE PROVIDED TEMPORARILY, AS REQUIRED. PIPE AND FITTINGS USED FOR CONNECTING THE NEW PIPE TO THE EXISTING PIPE SHALL BE DISINFECTED PRIOR TO INSTALLATION IN ACCORDANCE WITH AWWA C651, LATEST EDITION.
3. THE TAPPING SLEEVE AND THE EXTERIOR OF THE MAIN TO BE TAPPED SHALL BE DISINFECTED BY SPRAYING OR SWABBING PER SECTION II OF AWWA C651, LATEST EDITION.
4. UPON RECEIPT OF CLEARANCE FOR USE FROM FDEP AND MCU, THE CONTRACTOR SHALL REMOVE THE TEMPORARY JUMPER CONNECTION. THE 2" CORP. VALVES ARE TO BE CLOSED AND PLUGGED WITH 2" BRASS PLUGS. THE MAINS CAN NOW BE CONNECTED BY SLEEVE OR FLANGED CONNECTIONS.
5. ALL INSTALLATION AND MAINTENANCE OF THE TEMPORARY JUMPER CONNECTION ASSEMBLY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. WATER FOR TESTING AND DISINFECTION OF THE NEW WATER MAIN AND WATER FOR MAINTENANCE OR OTHER USES SHALL BE AT THE CONTRACTOR'S EXPENSE.
7. ALL PIPING AND APPURTENANCES TO BE 2" FOR 8" AND BELOW WATER MAINS; 4" FOR 12" WATER MAINS; 8" FOR 16" WATER MAINS; 12" FOR 24" WATER MAINS.
8. ALL TAPS MUST BE LOCATED A MINIMUM OF 24" AWAY FROM ANY BELL AND/OR FITTING.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | TEMPORARY JUMPER CONNECTION | 7.3.2 UT 203



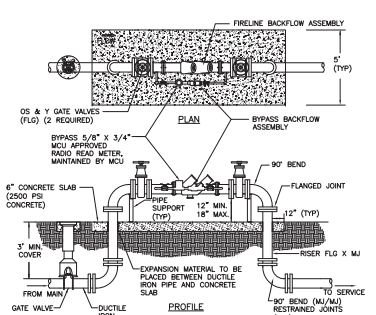
NOTES:
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION (SEE UT111).
2. THE ACTUATING NUT FOR VALVES DEEPER THAN SIX (6) FEET SHALL BE EXTENDED TO COME UP TO 3 FOOT DEPTH BELOW FINISHED GRADE.
3. VALVE BOX SHALL BE SET ON FIVE (5) SOLID COMMON BLOCKS.
4. VALVE BOX LID TO BE LETTERED WITH THE WORD "WATER" OR "RECLAIMED".
5. INSTALL BRASS ID TAG IN CONCRETE.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | GATE VALVE WATER AND RECLAIMED MAINS | 7.3.2 UT 204



NOTES:
1. FOR WATER OR RECLAIM USE ONLY.
2. OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE RIGHT-OF-WAY AS POSSIBLE.
3. ADJUST HORIZONTAL POSITION OF SIDEWALK AS REQUIRED TO AVOID ARV ENCLOSURE.
4. ARV AND CONCRETE PAD SHALL NOT BE INSTALLED DIRECTLY OVER THE WATER MAIN. LOCATE WIRE SHALL TERMINATE AT VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION (SEE UT 112.)
5. NO MALE ADAPTERS ALLOWED AT VALVE; SHALL BE A BRASS NIPPLE WITH 2" SCH80 FEMALE STEEL BANDED ADAPTER.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | ABOVEGROUND OFFSET WATER OR RECLAIM AIR RELEASE VALVE | 7.3.2 UT 206



NOTES:
1. REQUIRED FOR SITES WITH SEPARATE DOMESTIC AND FIRE SYSTEM SUPPLY PIPING.
2. BACKFLOW ASSEMBLY SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.
3. MCU SHALL OWN AND MAINTAIN THE METER.
4. UTILITY EASEMENT REQUIRED FOR BY-PASS METER READING. MINIMUM EASEMENT SIZE IS 10' BY 15'.
5. DETAIL NOT APPLICABLE WHEN AN RPZ IS REQUIRED IN ACCORDANCE WITH THE MARION COUNTY MANUAL OF CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION. SERVICES SMALLER THAN 3" SHALL REQUIRE AN RPZ AND SHALL BE METERED. METER AND TAP SIZE SHALL BE DETERMINED BY A FLORIDA LICENSED SPRINKLER CONTRACTOR, ARCHITECT, OR ENGINEER. METER SHALL BE INSTALLED BY MCU.
6. FREEZE PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE FIRE MARSHALL.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | FIRE LINE DOUBLE DETECTOR CHECK VALVE ASSEMBLY | 7.3.2 UT 208

No.	REVISIONS	DATE	BY
A	REVISED PER COUNTY COMMENTS	12/2025	SAT
A	REVISED PER COUNTY COMMENTS	04/2026	SAT
A	REVISED PER COUNTY COMMENTS	05/2026	SAT

LINN ENGINEERING & DESIGN
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ORLANDO, FL 32814
PHONE: 407-775-5194
greg@lmnengineering.com

DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

SCALE: AS NOTED
DESIGNED BY: CSL
DRAWN BY: CSL
CHECKED BY: CSL

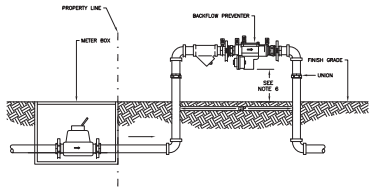
UTILITY DETAILS

MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL
MARION COUNTY FLORIDA

DATE 07/24
PROJECT NO. 36300-24-700
SHEET NUMBER C09

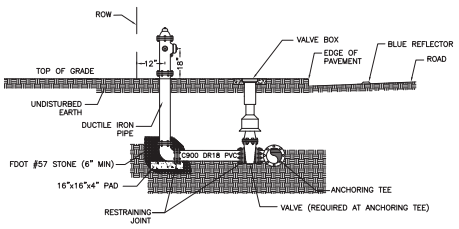
Drawing name: Z:\Projects\36300-Acdon investments\24-700 351 Marion Oaks Rd\Cadd-Civil\C09 Details.dwg Layout1 Jun 01, 2026 3:25pm by: Shenika Thomas

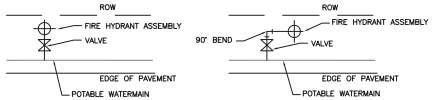
Xref .\XREF-BORDER Midway Lot 27.dwg



NOTES:
1. BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED AND MAINTAINED AS PER MARION COUNTY CROSS CONNECTION CONTROL ORDINANCE AND/OR PLUMBING CODE.
2. BACKFLOW PREVENTION ASSEMBLY TO BE INSTALLED LEVEL AND PLUMB.
3. MINIMUM CLEARANCE OF 24" TO BE MAINTAINED AROUND ASSEMBLY FOR TESTING.
4. ASSEMBLY MUST BE LISTED WITH THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.
5. ALL BACKFLOW PREVENTION ASSEMBLIES MUST BE TESTED FOLLOWING INSTALLATION AND INITIATION OF WATER SERVICE. THE BACKFLOW PREVENTION ASSEMBLY TESTER MUST POSSESS A CURRENT AMERICAN WATER WORKS ASSOCIATION (AWWA) AND/OR AMERICAN BACKFLOW PREVENTION ASSOCIATION (ABPA) BACKFLOW TESTER CERTIFICATE. A COPY OF THE BACKFLOW PREVENTION ASSEMBLY TEST REPORT MUST BE SUBMITTED TO THE BACKFLOW & CCC COORDINATOR AT MCU WITHIN 14 DAYS FROM THE DATE OF INSTALLATION.
6. MIN. 12" MAX. 18" ABOVE FINISHED GRADE AND FLOODPLAIN.
7. METERS LARGER THAN 2" WILL REQUIRE DISCUSSION WITH MCU.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 1 | 2" AND SMALLER REDUCED PRESSURE AND/OR DOUBLE CHECK BACKFLOW ASSEMBLY | 7.3.2 UT 209

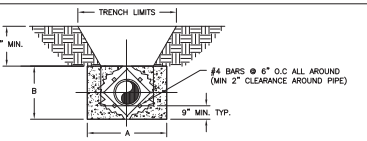


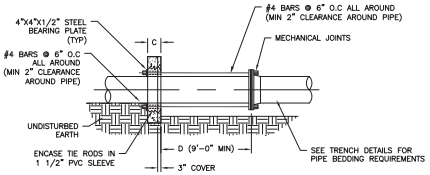


STANDARD CONFIGURATION | ALTERNATE CONFIGURATION

NOTES:
1. BONNET COLORS SHALL BE IN ACCORDANCE WITH SEC. 6.18.2-G.
2. HYDRANT SHALL BE 1' INSIDE OF RIGHT-OF-WAY, WHEN POSSIBLE.
3. BLUE REFLECTOR SHALL BE PLACED IN THE MIDDLE OF THE ADJACENT TRAVEL LANE.
4. RADIUS OF CLEAR SPACE AROUND THE FIRE HYDRANT SHALL BE IN ACCORDANCE WITH NFPA STANDARDS (NFPA 1 SEC. 18.5.7, AS AMENDED).

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | FIRE HYDRANT ASSEMBLY | 7.3.2 UT 210

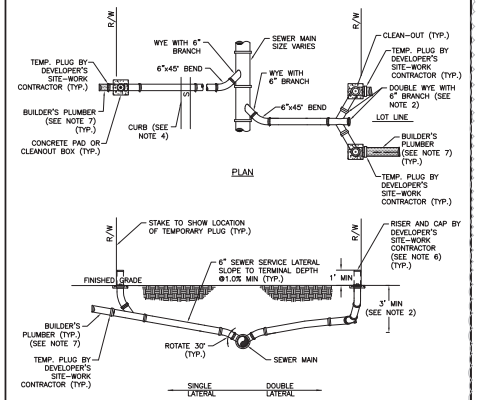




SCHEDULE OF DIMENSIONS AND MATERIALS						
PIPE SIZE (INCHES)	DIMENSIONS (FT.)				TIE RODS REQ'D	
	A	B	C	D	DIA.	NO.
6	2.0	2.0	1.0		3/4	2
8	2.5	2.5	1.0		3/4	2
10	3.0	2.5	1.0		3/4	4
12	4.0	3.0	1.0		3/4	4
16	5.5	3.5	1.5		3/4	4
20	7.5	4.0	1.5		3/4	4
24	8.5	5.0	1.5		3/4	6
NOTE: THRUST COLLAR AREAS TO BE COMPUTED ON BASIS OF 2000 LBS/SF SOIL RESTRAINT BEARING.						

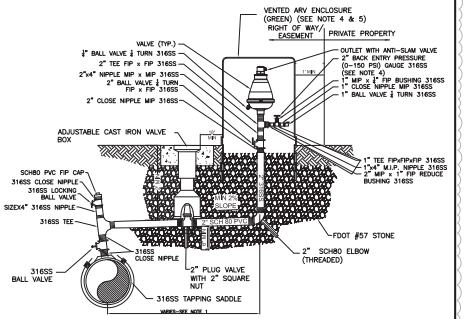
NOTES:
1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
3. BEDDING, BACKFILL, AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
6. DESIGN PRESSURE: 100 PSI.
7. REQUIRED FOR LINE STOPS, AS DETERMINED BY MCU.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 1 | THRUST COLLAR WASTEWATER FORCE MAINS | 7.3.2 UT 301



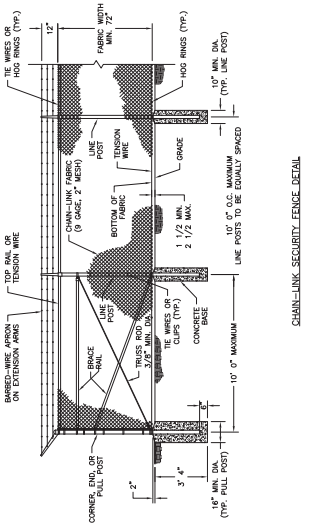
NOTES:
1. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
2. WYE TO BE NO SHALLOWER THAN 3' AND NO DEEPER THAN 5'.
3. ALL FITTINGS SHOWN ARE TO BE INSTALLED.
4. SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY ETCHING OR STAMPING AN "S" IN THE CURB DIRECTLY OVER THE LATERAL WHERE NO CURB EXISTS, LOCATION SHALL BE MARKED BY PLACEMENT OF ADHESIVE REFLECTIVE MARKERS AS SPECIFIED BY MCU.
5. CLEANOUT CAP SHALL BE SET A MINIMUM OF 2" ABOVE THE FINISHED GRADE. CLEANOUTS IN RV PARKS SHALL BE SET 6" ABOVE FINISHED GRADE WITH A CONCRETE COLLAR.
6. DURING CONSTRUCTION, SERVICE LATERAL AND CLEANOUTS SHALL BE STUBBED OUT A MINIMUM OF 1' ABOVE FINISHED GRADE AND SHALL BE CAPPED BY DEVELOPER'S SITE-WORK CONTRACTOR UNTIL PROPERTY IS DEVELOPED AND CONNECTION TO CENTRAL SEWER IS MADE BY PLUMBER.
7. BUILDER'S PLUMBER SHALL CUT RISER, INSTALL CLEANOUT CAP, REMOVE TEMPORARY PLUG, CONNECT SERVICE LATERAL TO HOUSE PLUMBING AND GROUT VOID BETWEEN CLEANOUT AND PAD.
8. ALL DEVELOPMENT SHALL BE DESIGNED AND BUILT IN A MANNER WHERE THE LOWEST WASTEWATER SERVICE LATERAL DOES NOT DROP BELOW THE GRAVITY SEWER GRADE LINE.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | SEWER SERVICE LATERAL | 7.3.2 UT 312



NOTES:
1. OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE RIGHT OF WAY AS POSSIBLE AND CLEAR OF PEDESTRIAN WALKWAYS. IF PIPE IS AT RIGHT OF WAY LINE, NO OFFSET IS REQUIRED.
2. ABOVE DETAIL APPLIES TO A 2" ARV. FOR LARGER ARVS, PIPE DIAMETER AND VALVES SHALL BE EQUAL TO THE SIZE OF THE ARV. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY MCU PRIOR TO INSTALLATION. ENGINEER SHALL PROVIDE ARV SIZING CALCULATIONS.
3. ALL PIPING, VALVES AND APPURTENANCES TO BE 316SS EXCEPT WHERE SPECIFIED OTHERWISE.
4. THE ENCLOSURE VENTS MUST BE CAPABLE OF ALLOWING AT LEAST THE SAME AMOUNT OF AIRFLOW AS THE VALVE AND SHALL BE SIZED PER THE ENGINEER.
5. PROVIDE DOOR CONTROL ENCLOSURE AS REQUIRED BY MCU.
6. ARV INLET AND OUTLET SHALL BE SAME SIZE.
7. FOR FORCEMAINS 10" AND LARGER, A 4" TAPPING SADDLE AND PLUG VALVE SHALL BE USED.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # NA | ABOVE GROUND AIR OR COMBINATION AIR RELEASE VALVE AND ENCLOSURE ASSEMBLY | 7.3.2 UT 316



Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # NA | CHAIN LINK FENCE | 7.3.2 UT 100

No.	REVISIONS	DATE	BY
A1	REVISED PER COUNTY COMMENTS	12/2025	SAT
A2	REVISED PER COUNTY COMMENTS	04/2026	SAT
A3	REVISED PER COUNTY COMMENTS	05/2026	SAT

LINN ENGINEERING & DESIGN
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PHONE: 407-715-5194
greg@lmmengineering.com

DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

Digitally signed by Chad S Linn
Date: 2026.06.24 13:23:33 -04'00'

SCALE: AS NOTED
DESIGNED BY: CSL
DRAWN BY: CSL
CHECKED BY: CSL

UTILITY DETAILS

MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL
MARION COUNTY FLORIDA

DATE 07/24
PROJECT NO. 36300-24-700
SHEET NUMBER C10

Drawing name: Z:\Projects\36300-Acton investments\24-700 351 Marion Oaks Rd\Codd-Civil\C10 Details.dwg Jun 01, 2026 3:25pm by: Shenika Thomas

RILEY & Company, Inc. (H-20 GP)©

w/ BATTERY BACK-UP FOR AUDIO AND VISUAL ALARMS & RILEY & COMPANY GUARD PRO IV MONITORING SYSTEM

(No Substitutions - No Alternates)

RILEY & COMPANY, INC. / GUARD PRO IV MONITORING SYSTEM:
GUARD PRO IV offers a remote control and maintenance solution which allows you to create a decentralized system to monitor and control devices. Up to eight (8) different lift station inputs can be monitored and up to eight (8) outputs can be controlled remotely. The GUARD PRO IV can also notify up to eight (8) different recipients via sms text and/or email.

PUMPS: **SPECIFICATION**

Submersible grinder pumps shall be installed in the H-20 FRP wet well utilizing a dual slide rail system.

The pumps shall be capable of pumping materials normally found in domestic and commercial wastewater.

Stator winding shall be open type with Class H insulation and shall be heat -shrink fitted into the stator housing. The use of pins, bolts and other fastening devices is not acceptable.

A heat sensor thermostat shall be attached to the top end of the motor winding and shall be connected in series with a magnectic contactor coil in the control panel. If the winding temperature exceeds 140° C, the motor shall shut off but shall automtically reset when the temperature drops below the threshhold. Two heat sensors shall be used on 3 phase motors. Upper & lower mechanical seals shall have Silicon Carbide vs Silicon Carbide.

CONTROL PANEL: **SPECIFICATION**

The Enclosure shall be NEMA 4X, minimum 30" high x 20" wide x 10" deep with a 3 point latching system.

The enclosure shall have external mounting feet to allow for wall mounting.
The following components shall be mounted through the enclosure:
1- ea. Red Alarm Beacon (Light) LED 360 Degree viewable range, NEMA 4X
1- ea. Alarm Horn (minimum 95 DCB), ROHS 3 Compliant, NEMA 4X
1- ea. Generator Receptacle w/ weatherproof cover 60A Minimum. Shall meet UL 1682, UL 1686 and UL486E Compliance.

The back panel shall be fabricated from .125, 5052-H32 marine alloy aluminum. All components shall be mounted by machined stainless steel screws.
The following components shall be mounted to back panel:
1- ea. Guard Pro IV Monitoring Unit
2- ea. IEC Style Motor Contactors
1- ea. Volt Monitor (1 Ph) Phase Monitor (3 Ph) w/2 N/O & 1 N/C Contacts
1- ea. Alternator w/ Pump Lead Switch
1- ea. Control Transformer (480 Volt Only) (Min. 500VA)
1- ea. Model RCBB5AH Battery Back-Up w/ Smart Charger (UPS) - 24 Hr Min.
20- ea. Terminals For Field Connections
6- ea. Terminals For Motor Connections (Single Phase Only)
7- ea. Grounding Lugs
1-ea. Lightning and Surge Protection shall meet the UL 1449 2nd Edition

The inner door shall have a continuous aluminum piano hinge.
The following components shall be mounted through the inner door:
1- ea. Main Circuit Breaker - UL489
1- ea. Emergency Circuit Breaker - UL 489
1- ea. Mechanical Interlock For Emergency And Main Breakers (UL Listed)
2- ea. Short Circuit Protectors w/ Auxiliary Contacts
1- ea. Control Circuit Breaker & GFCI Circuit Breaker - UL 489
1- ea. GFI Duplex Convenience Outlet - NEMA 5-15R
2- ea. Elapsed Time Meter, Non-Resettable

MISCELLANEOUS: All wiring on the back panel shall be contained within the wiring duct. All wiring between the inner door and the back panel shall be contained with in a plastic spiral wrap. Each wire shall have a wire number at each end to correspond to the as built drawing for field troubleshooting. The control panel must be manufactured in-house by the lift station supplier and be a TUV (UL508A Certified) facility.

WET WELL: **SPECIFICATION**

Wet Well FRP Wall Laminate must be designed to withstand wall collapse or buckling based on third party specifications and the assumptions below.

**Hydrostatic Pressure: 62.4 lbs. Per SQ Ft.*
**Saturated Soil Weight: 120 lbs. Per Cubic Ft.*
**Soil Modulus: 700 lbs Per SQ Ft.*
**Pipe Stiffness as Specified in ASTM D 3753*

The wet well FRP laminate must be constructed to withstand or exceed two times the assumed loading for the complete depth of the structure.

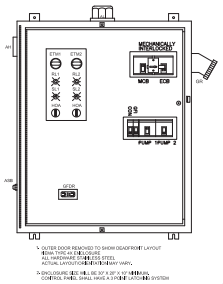
The cover shall be constructed of ¼ inch thick finished aluminum, diamond plate pattern with 300 series stainless steel hardware. The hatch shall have a positive means of locking the door open in the vertical position via a hold open arm and shall be made of a non-corrosive material. The cover shall be mounted with minimum of six 300 series stainless steel fasteners. The access hatch cover shall have a lift handle and a means of locking.

The prefabricated FRP lift station manufacturer shall guarantee the prefabricated lift station per approved drawings for a period of one year from the date of delivery.

INSPECTION & TESTING:
A factory representative shall be provided for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance of the complete system. The pump motors shall be megged out prior to the start-up to ensure that the insulation of the pump motor and cable is intact. The pumps and the controls shall be checked for mechanical reliability and proper operation.

EXECUTION:
Installation shall be in strict accordance with the manufacturer's recommendations in the locations shown on the engineered drawings.

04/19/26 SR

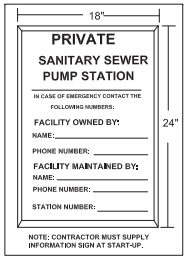


STATION DESIGN CONDITIONS		
PRIMARY PUMP CAPACITY	85	GPM
PRIMARY TDH	47	'TDH
RUN-OUT PUMP CAPACITY	90	GPM
RUN-OUT TDH	18	'TDH
PUMP MODEL #	HOMA RC30087	
R.P.M.	3450	
HORSEPOWER	4.1	
ELECTRICAL VOLTS / PHASE	230V/3Ø	
PUMP DISCHARGE SIZE	2"	
STATION ELEVATIONS AND DIMENSIONS		
100 YEAR FLOOD ELEVATION	xxx.xx'	
WET WELL DIAMETER (A)	48"	
INVERT DIAMETER (B)	PER EOR	
TOP OF WET WELL (C)	91.23'	
INLET / INVERT (D)	88.90'	
HIGH LEVEL ALARM (HLA) (E)	88.40'	
2nd PUMP ON (LAG) (F)	87.90'	
1st PUMP ON (LEAD) (G)	87.40'	
PUMPS OFF (OFF) (H)	86.51'	
BOTTOM OF WET WELL (I)	84.23'	
GUIDE RAIL DIAMETER (J)	½"	
DISCHARGE PIPE DIAMETER (K)	2"	
F.M. PIPE DIAMETER (L)	4"	
REDUCER (If Required) (M)	4" x 2"	
STATION MANUFACTURING MATERIALS		
DISCHARGE/RISER PIPE	HDPE	
INLET PIPE	PVC	
GUIDE RAIL	304 SS	
WET WELL	FRP ASTM D-3753	
WET WELL HATCH COVER	300 LBS PSF ALUM	
CABLE BRACKET	304 SS	
LIFTING CHAIN	304 SS	
PLUG VALVE	CAST IRON	
SWING CHECK VALVE	CAST IRON	
VALVE BOX	FRP	
VALVE BOX HATCH COVER	300 LBS PSF ALUM	

STATION VALVE BOX SIZES	
(36" x 36" x 36" DEEP)	FOR 2" DISCHARGE
(48" x 48" x 36" DEEP)	FOR 3" DISCHARGE
(48" x 48" x 36" DEEP)	FOR 4" DISCHARGE

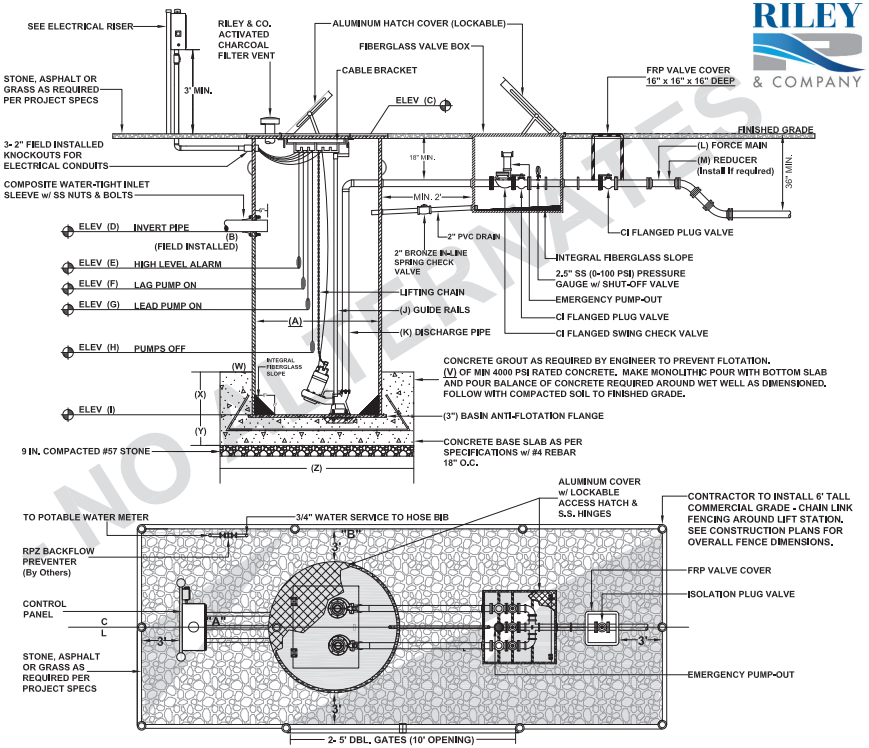
STATION HATCH OPENINGS			
WET WELL DIA.	36"	48"	60"
	27" x 20"	36" x 24"	36" x 30"

CONCRETE BALLAST REQUIREMENTS		
CUBIC YARDS OF CONCRETE REQUIRED	(V)	1.91 yds³
CIRCUMFERENCE DIMENSION - WIDTH	(W)	12.0"
CIRCUMFERENCE DIMENSION - HEIGHT	(X)	12.0"
BASE SLAB DIMENSION - HEIGHT	(Y)	12.0"
BASE SLAB DIMENSION - LENGTH & WIDTH	(Z)	72.0"



LIFT STATION WILL BE PRIVATELY OWNED AND MAINTAINED

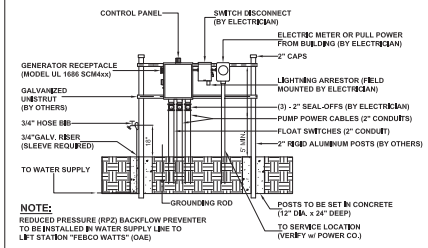
PRIOR TO START-UP, OWNER MUST HAVE A MINIMUM 1 YR. PREVENTIVE MAINTENANCE CONTRACT WITH A REPUTABLE LIFT STATION MAINTENANCE COMPANY.



NOTE: PUMP CONTROL PANEL SHALL BE LOCATED A MIN. OF 3 FEET FROM WET WELL PERIMETER AT POINT "A" OR "B"

ELECTRICIAN NOTES:

1. DRAWING NOT TO SCALE
2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES
3. ELECTRICIAN TO INSTALL SWITCH DISCONNECT & LIGHTNING ARRESTOR
4. CONTRACTOR SHALL VERIFY POWER SUPPLY PRIOR TO ORDERING EQUIPMENT
5. NEUTRAL TO BE SUPPLIED FOR 3Ø/208-230V OR 1Ø/208-230V
6. EXCEPT FOR THE CONTROL PANEL, ALL EQUIPMENT AND COMPONENTS BY OTHERS



NOTE:
REDUCED PRESSURE (RPZ) BACKFLOW PREVENTER TO BE INSTALLED IN WATER SUPPLY LINE TO LIFT STATION "FEBCO WATTS" (OAE)

ELECTRICAL RISER FOR ILLUSTRATION PURPOSES ONLY

Digitally signed by Chad S Linn
Date: 2026.06.24 13:23:54 -04'00'

For Lift Station Proposal:
Please Contact Chase Rachal
(407) 265-9963
c.rachal@rileyandco.com

RILEY & COMPANY, INC.
5491 BENCHMARK LANE
SANFORD, FL. 32773
PH. 407-265-9963

351 MARION OAKS BLVD

REVISIONS		BY

DRAWN BY
CHECKED BY
DATE
SCALE
JOB NO.
DRAWING NO.
SHEET NO.

No.	REVISIONS	DATE	BY
A	REVISED PER COUNTY COMMENTS	12/2025	SAT
A	REVISED PER COUNTY COMMENTS	04/2026	SAT
A	REVISED PER COUNTY COMMENTS	05/2026	SAT

LINN ENGINEERING & DESIGN
P.O. BOX 140024
ORLANDO, FL 32814
PHONE: 407-715-5194
greg@linnengineering.com

DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

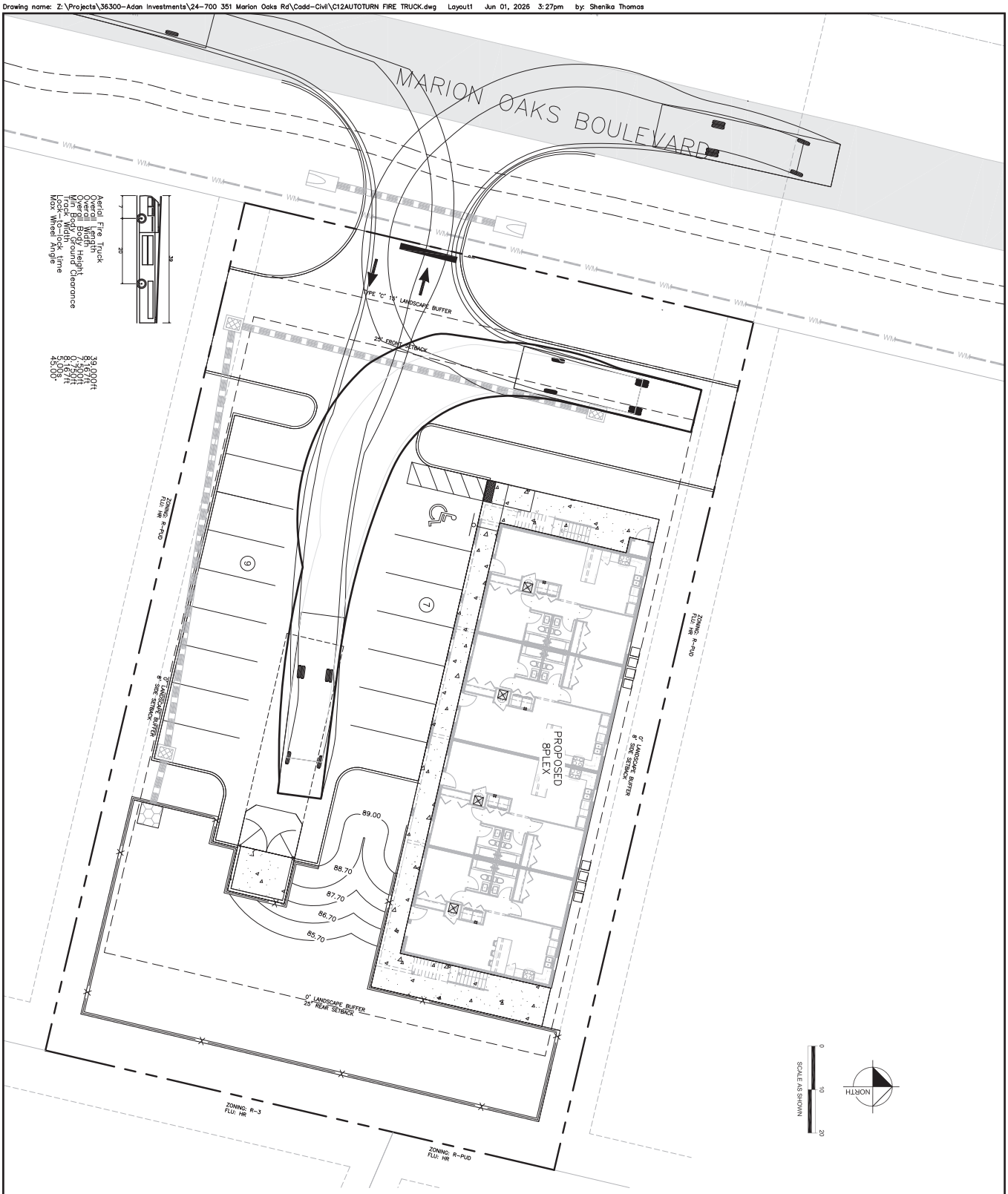
SCALE: AS NOTED
DESIGNED BY: CSL
DRAWN BY: CSL
CHECKED BY: CSL

LIFT STATION DETAIL

MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL
MARION COUNTY FLORIDA

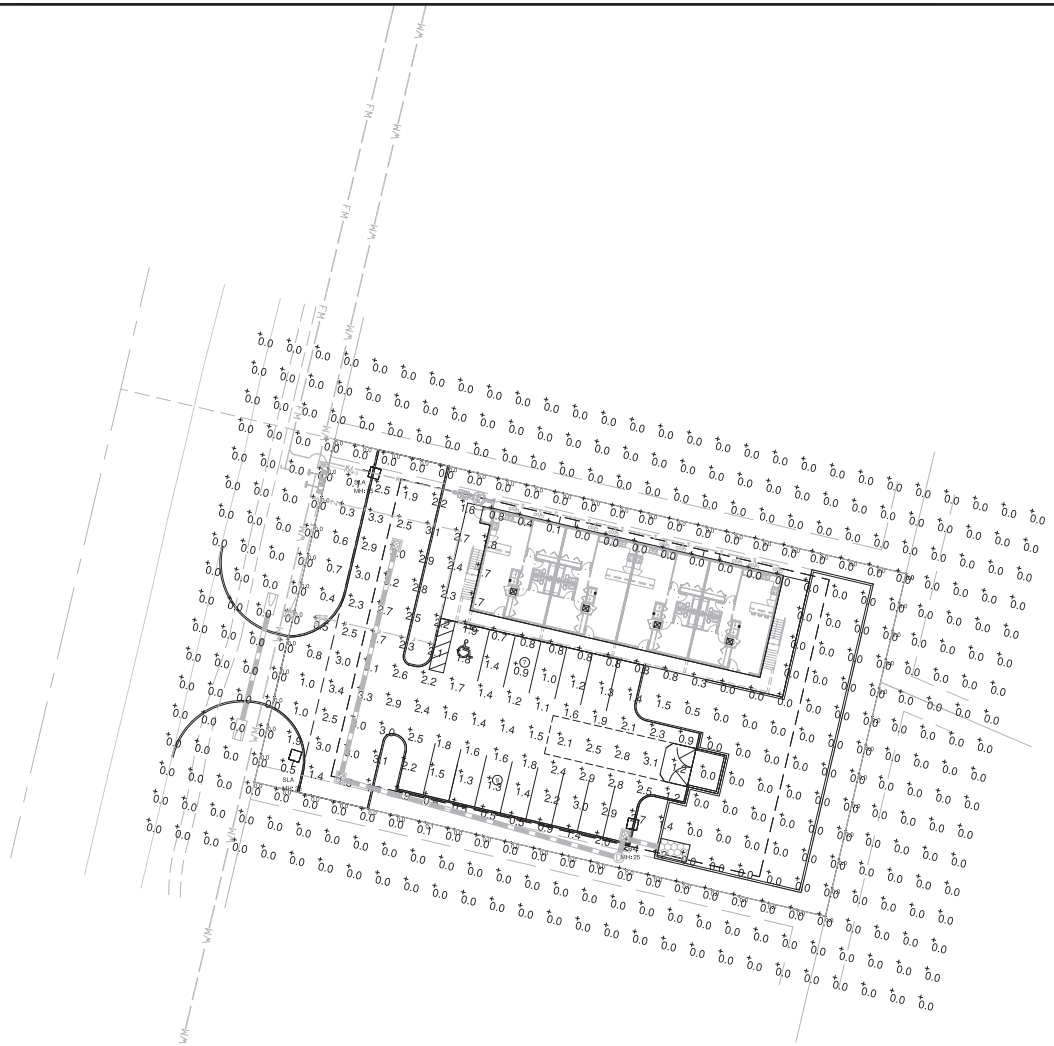
DATE 07/24
PROJECT NO. 36300-24-700
SHEET NUMBER C11

Drawing name: Z:\Projects\36300-Acon investments\24-700 351 Marion Oaks Rd\Cadd-Civil\C11 LS Details.dwg C11 Jun 01, 2026 3:26pm by: Shenika Thomas



Digitally signed by Chad S Linn
Date: 2026.06.24 13:24:17 -04'00'

C12	SHEET NUMBER	MAJOR SITE PLAN 351 MARION OAKS BLVD OCALA, FL MARION COUNTY FLORIDA	AUTOTURN ANALYSIS FIRE TRUCK	SCALE AS NOTED DESIGNED BY CSL DRAWN BY CSL CHECKED BY CSL	DESIGN ENGINEER: CHAD S. LINN, P.E. FLORIDA REGISTRATION NUMBER: 57524 SEAL	LINN ENGINEERING & DESIGN P.O. BOX 140024 ORLANDO, FL 32814 PHONE: 407-775-5194 greg@linnengineering.com	1 REVISED PER COUNTY COMMENTS 12/2025 SAT 2 REVISED PER COUNTY COMMENTS 04/2026 SAT 3 REVISED PER COUNTY COMMENTS 05/2026 SAT
		07/24 DATE 36300-24-700 PROJECT NO.					No. REVISIONS DATE BY



Landreth Lighting Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Property Line	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.
Lot Summary	Illuminance	Fc	1.73	3.1	0.5	3.46	6.20

Landreth Lighting Luminaire Schedule									
Symbol	[MANUFAC]	Qty	Label	Arrangement	Description	LLF	Lum. Watts	Lum. Lumens	BUG Rating
	Lithonia Lighting	2	SLA	Single	DSX0 LED P4 40K 70CRI LCCO MVOLT RPA NLTAIR2 XX (Finish) To be mounted to a 25' RTA direct burial pole	1.000	93.04	8170	B1-U0-G2
	Lithonia Lighting	1	SLB	Single	DSX0 LED P4 40K 70CRI RCCO MVOLT RPA NLTAIR2 XX (Finish) To be mounted to a 25' RTA direct burial pole	1.000	93.04	8170	B1-U0-G2

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Date: 2026.06.24 13:24:39 -04'00'

No.	REVISIONS	DATE	BY
1	REVISED PER COUNTY COMMENTS	12/2025	SAT
2	REVISED PER COUNTY COMMENTS	04/2026	SAT
3	REVISED PER COUNTY COMMENTS	05/2026	SAT

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DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

SCALE: AS NOTED
DESIGNED BY: CSL
DRAWN BY: CSL
CHECKED BY: CSL

PHOTOMETRICS

MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL
MARION COUNTY FLORIDA

DATE: 07/24
PROJECT NO.: 36300-24-700
SHEET NUMBER: C13

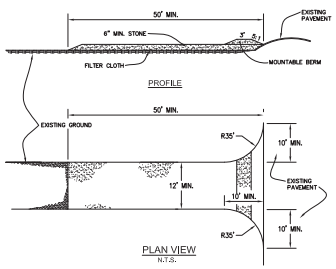
Drawing name: Z:\Projects\36300-Acton investments\24-700 351 Marion Oaks Rd\Cadd-Civil\Photometrics.dwg Layout1 Jun 01, 2026 3:27pm by Shenika Thomas

Type III Silt Fence Protection
Around Ditch Bottom Inlets.

PUT FILTER FABRIC UNDER GRATE

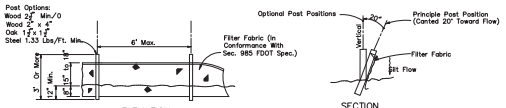
Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS



STABILIZED CONSTRUCTION ENTRANCE

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE . IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVED SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



TYPE III SILT FENCE
N.T.S.

BEST MANAGEMENT PRACTICES:

THIS PLAN HAS BEEN PREPARED TO ENSURE COMPLIANCE WITH APPROPRIATE CONDITIONS OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), THE MUNICIPALITY LAND DEVELOPMENT REGULATIONS AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD). THE PLAN ADDRESSES THE FOLLOWING AREAS:

1. GENERAL EROSION CONTROL.
2. PROTECTION OF SURFACE WATER QUALITY DURING AND AFTER CONSTRUCTION.
3. CONTROL OF WIND EROSION.

THE VARIOUS TECHNIQUES OR ACTIONS IDENTIFIED UNDER EACH SECTION INDICATE THE APPROPRIATE SITUATION WHEN THE TECHNIQUES SHOULD BE EMPLOYED. IT SHOULD BE NOTED THAT THE MEASURES IDENTIFIED ON THIS PLAN ARE ONLY SUGGESTED BMP(S). THE CONTRACTOR SHALL PROVIDE POLLUTION PREVENTION AND EROSION CONTROL MEASURES AS SPECIFIED IN FDOT INDEX #100 AND AS NECESSARY FOR EACH SPECIFIC APPLICATION

SECTION 1 GENERAL EROSION CONTROL:

1.1 GENERAL EROSION CONTROL BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND POTENTIAL POND SLOPE CAVE–INS. WHILE THE VARIOUS TECHNIQUES REQUIRED WILL BE SITE AND PLAN SPECIFIC, THEY SHOULD BE EMPLOYED AS SOON AS POSSIBLE DURING CONSTRUCTION ACTIVITIES.

1.2 SLOPES OF BANKS OF RETENTION/DETENTION PONDS SHALL BE CONSTRUCTED NOT STEEPER THAN 3H:1V FROM TOP OF BANK TO POND BOTTOM.

1.3 SOD SHALL BE PLACED FOR A MIN. 2–FOOT WIDE STRIP ADJOINING ALL CURBING AND AROUND ALL INLETS SOD SHALL BE PLACED BEFORE SILT BARRIERS ARE REMOVED.

SECTION 2 PROTECTION OF SURFACE WATER QUALITY DURING AND AFTER CONSTRUCTION:

2.1 SURFACE WATER QUALITY SHALL BE MAINTAINED BY EMPLOYING THE FOLLOWING BEST MANAGEMENT PRACTICES IN THE CONSTRUCTION PLANNING AND CONSTRUCTION OF ALL IMPROVEMENTS.

2.2 WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY SWALES.

2.3 EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITY. WHILE THE VARIOUS MEASURES REQUIRED WILL BE SITE SPECIFIC, THEY SHALL BE EMPLOYED AS NEEDED IN ACCORDANCE WITH THE FOLLOWING

A. IN GENERAL, EROSION SHALL BE CONTROLLED AT THE FURTHEST PRACTICAL UPSTREAM LOCATION.
B. STORMWATER INLETS SHALL BE PROTECTED DURING CONSTRUCTION AS SHOWN ON THIS SHEET. PROTECTION MEASURES SHALL BE EMPLOYED AS SOON AS PRACTICAL DURING THE VARIOUS STAGES OF INLET CONSTRUCTION. SILT BARRIERS SHALL REMAIN IN PLACE UNTIL SODDING AROUND INLETS IS COMPLETE.

2.4 HEAVY CONSTRUCTION EQUIPMENT PARKING AND MAINTENANCE AREAS SHALL BE DESIGNED TO PREVENT OIL, GREASE, AND LUBRICANTS FROM ENTERING SITE DRAINAGE FEATURES INCLUDING STORMWATER COLLECTION AND TREATMENT SYSTEMS. CONTRACTORS SHALL PROVIDE BROAD DIKES, HAY BALES OR SILT SCREENS AROUND, AND SEDIMENT SUMPS WITHIN, SUCH AREAS AS REQUIRED TO CONTAIN SPILLS OF OIL, GREASE OR LUBRICANTS. CONTRACTORS SHALL HAVE AVAILABLE, AND SHALL USE, ABSORBENT FILTER PADS TO CLEAN UP SPILLS AS SOON AS POSSIBLE AFTER OCCURRENCE.

2.5 SILT BARRIERS, ANY SILT WHICH ACCUMULATES BEHIND THE BARRIERS, AND ANY FILL USED TO ANCHOR THE BARRIERS SHALL BE REMOVED PROMPTLY AFTER THE END OF THE MAINTENANCE PERIOD SPECIFIED FOR THE BARRIERS.

2.6 WHERE REQUIRED TO PREVENT EROSION FROM SHEET FLOW ACROSS BARE GROUND FROM ENTERING A LAKE OR SWALE, A TEMPORARY SEDIMENT SUMP SHALL BE CONSTRUCTED. THE TEMPORARY SEDIMENT SUMP SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED ON THE GROUND DRAINING TO THE SUMP.

2.7 ALL PAINT(S) AND OTHER HAZARDOUS MATERIALS SHALL BE CONTAINED WITHIN A SINGLE ON–SITE AREA WITHIN SEALED CONTAINERS.

2.8 INSPECTION AND MAINTENANCE PROCEDURES FOR CONTROL MEASURES IDENTIFIED IN THE PLAN:

A. THE CONTRACTOR IS REQUIRED TO PROVIDE A QUALIFIED INSPECTOR TO PERFORM AND DOCUMENT REQUIRED INSPECTIONS.
B. ALL DISTURBED AREAS, STORAGE AREAS, AND CONSTRUCTION EXITS MUST BE INSPECTED. THIS INCLUDES OFF–SITE CONSTRUCTION AREAS.
C. INSPECTIONS MUST BE COMPLETED ONCE EVERY SEVEN DAYS AND/OR WITHIN 24 HOURS OF A STORM EVENT OF 0.5 INCHES OR GREATER (CONTRACTOR TO PROVIDE AN ON–SITE RAIN GAUGE AND PROVIDE DAILY RECORDING OF RAIN EVENTS).
D. ALL AREAS OF UNSATISFACTORY CONTROLS (INCLUDING EXISTING CONTROL MEASURES OR AREAS REQUIRING ADDITIONAL CONTROL MEASURES) SHALL BE REPAIRED/MAINTAINED/INSTALLED WITHIN 24 HOURS OF THE OBSERVANCE OR PRIOR TO AN ANTICIPATED RAIN EVENT IF FORECAST SOONER THAN 24 HOURS.

2.9 ALL WATER RUNOFF RESULTING FROM SOURCES OTHER THAN RAINFALL EVENTS (I.E. BLOW–OFF FROM HYDRO–STATIC TESTING, PROCESS WATER FROM VEHICLE WASHDOWN, ETC.) SHALL BE DIRECTED TOWARDS THE ON–SITE SURFACE WATER MANAGEMENT SYSTEM, WHETHER IN TEMPORARY OR FINAL CONDITION, SO THAT IT HAS NO ADVERSE IMPACTS TO DOWNSTREAM WATER QUALITY CONDITIONS.

SECTION 3 CONTROL OF WIND EROSION:

3.1 WIND EROSION SHALL BE CONTROLLED BY EMPLOYING THE FOLLOWING METHODS AS NECESSARY AND APPROPRIATE:

A. BARE EARTH AREAS SHALL BE WATERED DURING CONSTRUCTION AS NECESSARY TO MINIMIZE THE TRANSPORT OF FUGITIVE DUST. IT MAY BE NECESSARY TO LIMIT CONSTRUCTION VEHICLE SPEED IF BARE EARTH HAS NOT BEEN EFFECTIVELY WATERED. IN NO CASE SHALL FUGITIVE DUST BE ALLOWED TO LEAVE THE SITE UNDER CONSTRUCTION.

B. AS SOON AS PRACTICAL AFTER COMPLETION OF CONSTRUCTION, BARE EARTH AREAS SHALL BE VEGETATED.

C. AT ANY TIME BOTH DURING AND AFTER SITE CONSTRUCTION THAT WATERING AND/OR VEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR TRANSPORT OF FUGITIVE DUST, OTHER METHODS AS ARE NECESSARY FOR SUCH CONTROL SHALL BE EMPLOYED. THESE METHODS MAY INCLUDE ERECTION OF DUST CONTROL FENCES. IF REQUIRED, DUST CONTROL FENCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE STANDARDS.

CLEARING AND SITE PREPARATION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION OF THE EROSION CONTROL DEVICES, AS SHOWN ON THE CONSTRUCTION PLANS, PRIOR TO ANY SITE CLEARING AND/OR DEMOLITION. REFER TO THE "EROSION CONTROL NOTES" SECTION CONTAINED HEREIN FOR ADDITIONAL REQUIREMENTS.

2. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN, AS INDICATED ON THE CONSTRUCTION PLANS, SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES, AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREE(S) SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER AND THE LOCAL AGENCY HAVING JURISDICTION OVER THESE ACTIVITIES.

3. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. ALL DISTURBED AREAS MUST BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL, IMMEDIATELY FOLLOWING CONSTRUCTION.

4. THE TOP 4" TO 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING ACTIVITIES SHALL BE STOCKPILED, TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER. REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON–SITE, PROVIDED THE MATERIAL IS DEEMED SUITABLE BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO EITHER BE STOCKPILED ON–SITE, AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING ANY EXCESS MATERIAL FROM THE SITE.

5. ALL EXISTING DEBRIS (ABOVE OR BELOW GROUND), CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF–SITE BY THE CONTRACTOR, IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS.

6. THE CONTRACTOR IS TO PREPARE THE SITE IN ACCORDANCE WITH THE SOILS REPORT, COPIES OF WHICH ARE AVAILABLE THROUGH THE OWNER OR SOILS TESTING COMPANY DIRECTLY.

7. CONTRACTOR TO BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY CONSTRUCTION FENCE AROUND ENTIRE PERIMETER OF PROPERTY. TYPE OF FENCE TO BE SUBMITTED BY CONTRACTOR TO ENGINEER FOR APPROVAL.

8. CONTRACTOR SHALL MAINTAIN STORMWATER MANAGEMENT SYSTEM TO INSURE NO DAMAGE TO ADJACENT PROPERTIES OCCURS DURING STORM EVENTS.

9. DISTURBED AREA(S) WITHIN THE ROW WILL COMPACTED TO 98% OF MAXIMUM DENSITY AND SODDED.

10. DO NOT DISTRUB EXISTING UNDERDRAIN OR STORM SYSTEMS.

11. NO STOCKPILING OF MATERIAL IN ROADWAY OR ON SIDEWALK; ALL DIRT AND DEBRIS WILL BE REMOVED FROM JOB SITE DAILY. ROADS AND SIDEWALK TO BE SWEPT DAILY AS PART OF DAILY CLEAN–UP.

12. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS OR BETTER. CONTRACTOR SHALL PROVIDE TO ENGINEER PHOTOGRAPH OF PRE–CONSTRUCTION CONDITIONS AND POST–CONSTRUCTION CONDITIONS AS REQUESTED BY ENGINEER.

13. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY THE DEMOLITION OPERATION.

14. REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF SITE IN A LEGAL MANNER.

15. DURING PREPARATION OF THE SUB GRADE AND UNTIL THE PAVING IS IN PLACE, THE CONTRACTOR SHALL PROMPTLY TAKE REASONABLE MEASURES TO OBTAIN AND MAINTAIN A DRY SITE CONDITION. SUCH MEASURES SHALL INCLUDE PUMPING OF FREE SURFACE WATER, MINOR HAND AND/OR MACHINE SHAPING OF FACILITATE WATER REMOVAL, AND OTHER OPERATIONS TO SPEED DRYING.

16. ALL DELETERIOUS SURSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS, ETC.) IS TO BE EXCAVATED AND REPLACED WITH SUITABLE/COMPACTED SOILS, AS DIRECTED BY THE OWNER, THE OWNERS ENGINEERS, OR OWNERS SOILS TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.

18. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD, OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE OF MATERIAL, LANDSCAPING AND IRRIGATION REQUIREMENTS.

EROSION AND SILTATION CONTROL:

1. GENERAL – ALL EROSION AND SILTATION CONTROL METHODS SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION. DURING CONSTRUCTION, DENUDED AREAS SHALL BE COVERED BY MULCHES SUCH AS STRAW, HAY AND FILTER FABRIC. ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS OR HAY BALES. THESE SHALL BE MAINTAINED AND MODIFIED DURING THE CONSTRUCTION PROCESS TO MINIMIZE DOWNSTREAM SILTATION. WHEN CONSTRUCTION IS COMPLETED, DETENTION AREAS WILL BE RESHAPED, CLEANED OF SILT, MUD AND DEBRIS, AND RE–SODDED TO PROPERLY DETAIN THE INTENDED STORM QUANTITIES.

2. PROTECTION AND STABILIZATION OF ON–SITE SOIL STOCKPILES – FILL MATERIAL STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON–SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILES MAY BE REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILES WILL BE PRESENT. IN NO CASE SHALL ANY UNSTOCKPILED MATERIAL REMAIN MORE THAN THIRTY (30) CALENDAR DAYS AFTER SUBSTANTIAL PROJECT COMPLETION.

3. PROTECTION OF EXISTING STORM SEWER SYSTEMS: DURING CONSTRUCTION, ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS, AND WHICH MUST BE APPROVED BY THE ENGINEER BEFORE INSTALLATION.

4. SEDIMENT BASINS AND TRAPS, SEDIMENT TRAPPING MEASURES: PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT ONTO ADJACENT PROPERTIES, OR INTO EXISTING BODIES OF, MUST BE INSTALLED, CONSTRUCTED OR, IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS. SUCH SYSTEMS SHALL BE FULLY OPERATIVE BEFORE ANY OTHER DISTURBANCE OF THE SITE BEGINS. EARTHEN STRUCTURES INCLUDING BUT NOT LIMITED TO BERMS, EARTH FILTERS, DAMS OR DIKES SHALL BE STABILIZED AND PROTECTED FROM DRAINAGE DAMAGE OR EROSION WITHIN ONE WEEK OF INSTALLATION.

5. ALL SWALES, DITCHES AND CHANNELS: CHANNELS LEADING FROM THE SITE SHALL BE SODDED WITH ARGENTINE BAHIA WITHIN THREE (3) DAYS OF EXCAVATION.

6. THE CONSTRUCTION OF UNDERGROUND UTILITY CONSTRUCTION: UNDERGROUND UTILITY LINES AND OTHER STRUCTURES SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:

A. NO MORE THAN 500 LINEAR FEET OF TRENCH SHALL BE OPEN AT ANY ONE TIME;
B. WHEREVER CONSISTENT WITH SAFETY AND SPACE CONSIDERATION, EXCAVATED MATERIAL SHALL BE CAST TO THE UPHILL SIDE OF TRENCHES. TRENCH MATERIAL SHALL NOT BE CAST INTO OR ONTO THE SLOPE OF ANY STREAM, CHANNEL, ROAD, DITCH OR WATERWAY.

7. ALL EROSION AND SILTATION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND WILL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.

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No.	REVISIONS	DATE	BY
A	REVISED PER COUNTY COMMENTS	12/2025	SAT
A	REVISED PER COUNTY COMMENTS	04/2026	SAT
A	REVISED PER COUNTY COMMENTS	05/2026	SAT

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DESIGN ENGINEER: CHAD S. LINN, P.E.
FLORIDA REGISTRATION NUMBER: 57524
SEAL

SCALE: AS NOTED
DESIGNED BY: CSL
DRAWN BY: CSL
CHECKED BY: CSL

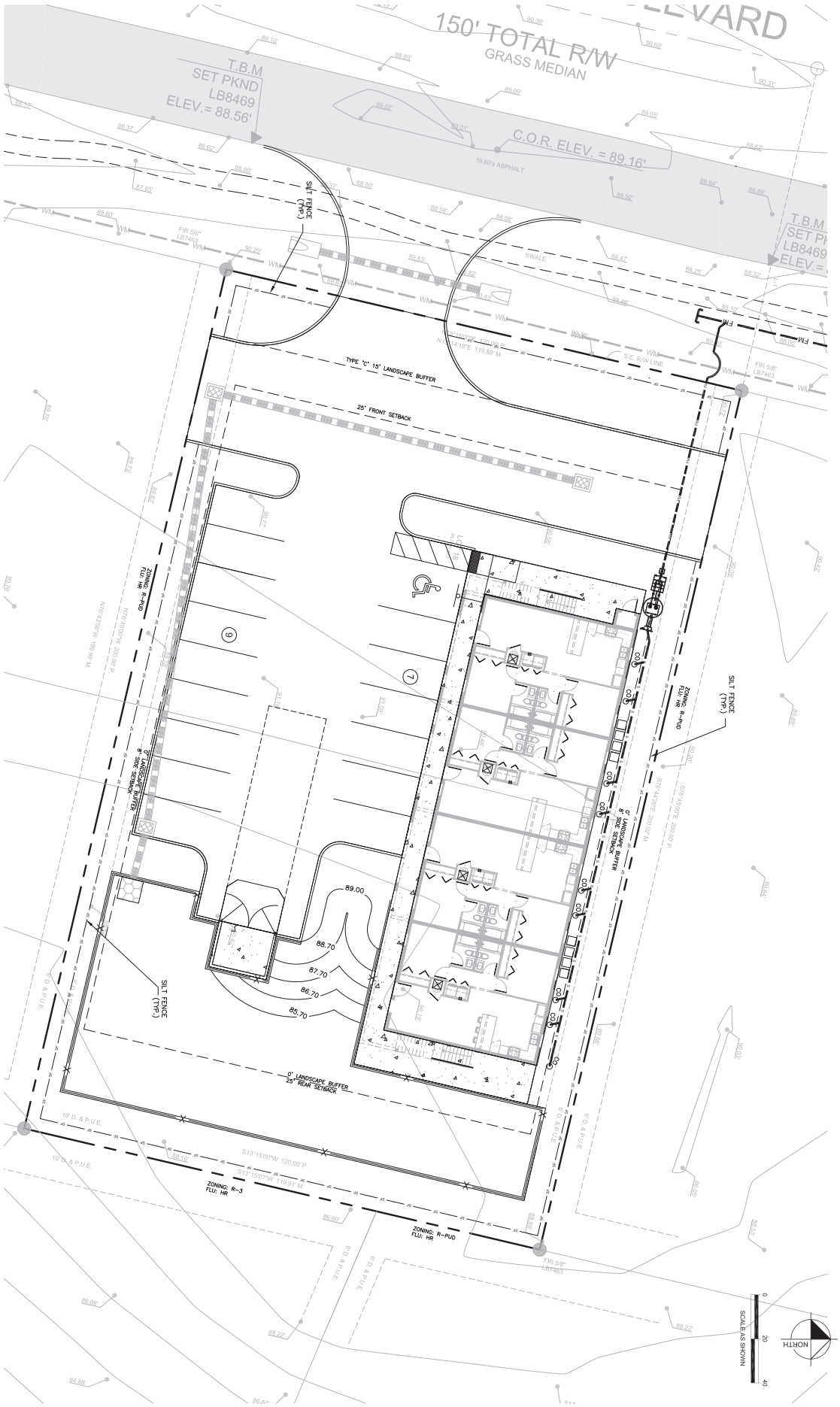
EROSION CONTROL & STORMWATER POLLUTION PREVENTION PLAN

MAJOR SITE PLAN
351 MARION OAKS BLVD
OCALA, FL

MARION COUNTY FLORIDA

DATE 07/24
PROJECT NO. 36300–24–700
SHEET NUMBER SWPPP 1

Drawing name: Z:\Projects\36300-Adan investments\24-700 351 Marion Oaks Rd\Cadd-Civil\C13 351 MARION OAKS - SWPPP.dwg SWPPP1 Jun 01, 2026 3:29pm by: Shenika Thomas



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SWPPP 2	DATE 07/24 PROJECT NO. 36300-24-700	MAJOR SITE PLAN 351 MARION OAKS BLVD OCALA, FL MARION COUNTY FLORIDA	EROSION CONTROL & STORMWATER POLLUTION PREVENTION PLAN	SCALE AS NOTED DESIGNED BY CSL DRAWN BY CSL CHECKED BY CSL	DESIGN ENGINEER: CHAD S. LINN, P.E. FLORIDA REGISTRATION NUMBER: 57524 SEAL	LINN ENGINEERING & DESIGN P.O. BOX 140024 ORLANDO, FL 32814 PHONE: 407-775-5194 greg@linnengineering.com	1 REVISED PER COUNTY COMMENTS 12/2025 SAT 2 REVISED PER COUNTY COMMENTS 04/2026 SAT 3 REVISED PER COUNTY COMMENTS 05/2026 SAT No. REVISIONS DATE BY

GENERAL NOTES

1. SEE CIVIL ENGINEERING DRAWINGS FOR GENERAL GRADING OF THE SITE, INCLUDING FINISH GRADES FOR PARKING LOTS, ROADWAYS, SIDEWALKS, AND PLANTING AREAS.
2. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PROJECT SITE PRIOR TO BIDDING THE WORK. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND LOCATION OF PROPOSED IMPROVEMENTS PRIOR TO INITIATING ANY CONSTRUCTION.
3. LOCATION OF ALL UTILITIES AND BASE INFORMATION IS APPROXIMATE. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES AND OBSTRUCTIONS PRIOR TO INITIATING WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY DAMAGE TO EXISTING ELEMENTS ABOVE OR BELOW GROUND TO ITS ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
4. THE OWNER'S REPRESENTATIVE SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATIONS, TO REJECT ANY AND ALL WORK AND MATERIAL WHICH, IN HIS OPINION, DO NOT MEET WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
5. ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON-SITE BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB SITE PRIOR TO START OF CONSTRUCTION AND/OR FABRICATION. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS.
7. REPORT ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE OWNER'S REPRESENTATIVE.
8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION OPERATIONS TO PROTECT THE PUBLIC ACCORDING TO ALL APPLICABLE CODES AND RECOGNIZED LOCAL PRACTICES.
9. THE CONTRACTOR SHALL COORDINATE ACCESS AND STAGING AREAS WITH THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION. PROVIDE ADDITIONAL MEASURES AS NECESSARY TO MINIMIZE ADVERSE IMPACTS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
10. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER'S REPRESENTATIVE. DURING THE COURSE OF THIS WORK, EXCESS WASTE MATERIAL SHALL BE REMOVED DAILY FROM THE SITE.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATION OF WORK WITH OTHER TRADES AND THE OWNER'S REPRESENTATIVE.
12. "FLORIDA LAW (F.S. 556) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT MANDATES THAT EXCAVATOR/CONTRACTORS SHALL CONTACT SUNSHINE 811 (fka: SUNSHINE STATE ONE-CALL OF FLORIDA) BY CALLING 800-432-4770 OR 811 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO THE BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW MEMBER OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE POSITIVE RESPONSE SYSTEM.
13. ALL EXISTING SITE ROADS, PARKING LOTS, CURBS, UTILITIES, SEWERS, AND OTHER ELEMENTS TO REMAIN SHALL BE FULLY PROTECTED FROM ANY DAMAGE UNLESS OTHERWISE NOTED.
14. CONTRACTOR IS RESPONSIBLE TO INCLUDE ALL NECESSARY ITEMS TO FULLY COMPLETE AN ASSEMBLY, SYSTEM, OR ITEM OF WORK AS SHOWN IN THE DRAWINGS. ANY ITEMS NOT IDENTIFIED OR SPECIFIED IN THESE DRAWINGS, BUT REQUIRED TO COMPLETE THE WORK SHALL BE PROVIDED BY THE CONTRACTOR.
15. CONTRACTOR IS RESPONSIBLE FOR PLACING ALL ITEMS OF WORK IN THE CORRECT LOCATIONS PER THE DRAWINGS. THIS MAY INCLUDE SURVEYING THE PROJECT SITE. DIGITAL DRAWING INFORMATION AND/ OR NORTHING AND EASTING COORDINATES FOR USE BY THE CONTRACTOR CAN BE PROVIDED BY THE LANDSCAPE ARCHITECT UPON REQUEST.
   THE LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR INACCURACIES IN THE BASE INFORMATION AND PROJECT COORDINATES PROVIDED BY THE CIVIL ENGINEER OR PROPERTY SURVEYOR THAT IS INCORPORATED BY REFERENCE IN THESE DRAWINGS.

LANDSCAPE NOTES

1. THE CONTRACTOR SHALL REVIEW ARCHITECTURE/ENGINEERING PLANS TO BECOME THOROUGHLY FAMILIAR WITH SURFACE AND SUBSURFACE UTILITIES.
2. THE PLANT QUANTITIES SHOWN ON THE LANDSCAPE CONTRACT DOCUMENTS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND REPORTING ANY DISCREPANCIES IN WRITING TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION WITHIN TWO WEEKS OF CONTRACT AWARD AND PRIOR TO THE COMMENCEMENT OF WORK. ALL REQUESTS FOR SUBSTITUTION DUE TO LACK OF AVAILABILITY MUST BE MADE TO THE OWNER'S REPRESENTATIVE IN WRITING WITHIN THIS PERIOD. NO SUBSTITUTION SHALL BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE. THE CONTRACTOR IS RESPONSIBLE FOR EXHAUSTING ALL MEANS POSSIBLE TO OBTAIN THE MATERIALS AS SPECIFIED PRIOR TO REQUESTING SUBSTITUTION. IN ORDER TO BE CONSIDERED BY THE OWNER'S REPRESENTATIVE AS VIABLE ALTERNATES PLANTS MUST SHARE THE SAME GENERAL APPEARANCE/ FORM, INSTALLATION SIZE, MATURE SIZE, COLOR, QUALITY AND GROWTH HABIT. MATERIALS MUST BE OFFERED AT NO ADDITIONAL COSTS TO THE OWNER.
3. ALL INSTALLATION OF PLANT MATERIAL SHALL COMPLY WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THIS WORK. CONTRACTOR SHALL ENSURE A MAINTAINED CLEARANCE OF ALL UTILITIES & FIRE HYDRANTS IN ACCORDANCE WITH THE FLORIDA FIRE PREVENTION CODE 18.5.7.1. CONTRACTOR SHALL ENSURE SIGHT TRIANGLE VISIBILITY IN ALL APPLICABLE ROADWAYS PER FDOT STANDARDS.
4. PRIOR TO PLANTING INSTALLATION, THE CONTRACTOR SHALL CONFIRM THE AVAILABILITY OF ALL THE SPECIFIED PLANT MATERIALS. SUBMIT DATED PHOTOGRAPHS OF TREE MATERIAL AND SPECIMEN PLANT MATERIAL TO THE OWNER'S REPRESENTATIVE FOR REVIEW.
5. ALL PLANT MATERIAL SIZES SPECIFIED ARE MINIMUM SIZES. CONTAINER SIZE SHALL BE INCREASED IF NECESSARY TO PROVIDE OVERALL PLANT SIZE SPECIFIED.
6. IF PLANT MATERIAL DOES NOT COMPLY WITH THE REQUIREMENTS AS SPECIFIED HEREIN, THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT SUCH PLANTS AND REQUIRE THE CONTRACTOR TO REPLACE REJECTED WORK AT NO ADDED COST TO THE OWNER AND CONTINUE SPECIFIED MAINTENANCE UNTIL REINSPECTED AND FOUND TO BE ACCEPTABLE.
7. THE CONTRACTOR SHALL PROVIDE AN APPROVED PLANTING SOIL MIXTURE FOR ALL PLANT MATERIAL. SEE SPECIFICATIONS FOR REQUIREMENTS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STABILITY AND PLUMB CONDITION OF ALL TREES AND SHRUBS, AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS. STAKING OF TREES OR SHRUBS SHALL BE DONE IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.
9. THE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS. IF INADEQUATE VERTICAL DRAINAGE IS ENCOUNTERED, THE CONTRACTOR SHALL SUBMIT RECOMMENDATIONS FOR PROVIDING ADEQUATE DRAINAGE TO THE OWNER'S REPRESENTATIVE. IN WET OR POORLY DRAINING SOILS THE CONTRACTOR SHALL INSTALL ALL PLANTS TO MAXIMIZE DRAINAGE AND MINIMIZE POOLING OF WATER AROUND PLANTINGS. THIS MAY INCLUDE LOOSENING OF EXISTING SOILS AND PROVIDING SOIL AMENDMENTS TO ENSURE ADEQUATE DRAINAGE.
10. PEG SOD ON SLOPES GREATER THAN 1:3 (33% SLOPE).
11. THE CONTRACTOR SHALL ENGAGE A QUALIFIED ARBORIST WHO HAS SUCCESSFULLY COMPLETED TREE PROTECTION AND TREE TRIMMING WITH FIVE YEARS OR MORE EXPERIENCE, TO PERFORM THE FOLLOWING WORK:
    A. REMOVE BRANCHES FROM TREES THAT ARE TO REMAIN, IF REQUIRED, AS DIRECTED BY OWNER'S REPRESENTATIVE.
    B. PERFORM INITIAL PRUNING OF BRANCHES TO ACCOMMODATE NEW CONSTRUCTION.
    C. PERFORM TREE REPAIR WORK FOR DAMAGE INCURRED BY NEW CONSTRUCTION.
12. CONTRACTOR SHALL PROVIDE TEMPORARY IRRIGATION SYSTEM FOR RELOCATED TREES.
13. CONTRACTOR SHALL PROTECT EXISTING VEGETATION TO REMAIN AS SHOWN ON DRAWINGS OR BY MEANS APPROVED BY THE OWNER'S REPRESENTATIVE. ALL EXISTING PLANT BEDS TO REMAIN WITHIN THE CONSTRUCTION LIMIT LINE SHALL BE LEFT UNDISTURBED. EXISTING TREES TO REMAIN, AS NOTED ON THE DRAWINGS, SHALL BE LEFT UNDISTURBED AND PROTECTED BY WOODEN BARRICADES ERECTED AT THE PERIMETER OF THE TREE DRIP-LINE (S). NO VEHICLE SHALL TRAVERSE THIS AREA NOR SHALL ANY STORAGE OF MATERIALS OR EQUIPMENT BE PERMITTED WITHIN THE AREA OF THE TREE DRIP-LINE(S). ANY EXISTING PLANT BEDS OR TREES DAMAGED BY CONSTRUCTION ACTIVITY SHALL BE REPLACED BY THE RESPONSIBLE PARTY AT THEIR OWN EXPENSE.
14. CONTRACTOR TO CLEAN, PRUNE, AND SHAPE EDGES OF EXISTING VEGETATION AS DIRECTED BY OWNER'S REPRESENTATIVE. CREATE SMOOTH BED LINES AROUND EXISTING VEGETATION.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING EXISTING VEGETATION AS REQUIRED AND PREPARING PLANTING AREAS PRIOR TO INSTALLATION OF PLANT MATERIALS.
16. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ERADICATING WEEDS AND UNWANTED PERENNIAL VEGETATION WITHIN THE LIMITS OF ALL PLANTING AREAS PRIOR TO BEGINNING LANDSCAPE INSTALLATION. PERENNIAL WEEDS AND GRASSES TO BE REMOVED INCLUDE, BUT ARE NOT LIMITED TO, NUT GRASS, PUNCTURE VINE, MORNING GLORY, DOG FENNEL, TORPEDO GRASS, BERMUDA GRASS, BAHIA GRASS, KIKUYU GRASS, CRAB GRASS, CARPET GRASS, SEDGE AND OTHER NOXIOUS AND/OR INVASIVE WEEDS. THE SITE IS TO BE MAINTAINED WEED FREE THROUGHOUT PLANTING OPERATIONS.
17. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PRE-TILLAGE TO SCARIFY SOILS IN ALL PLANTING AREAS TO A MINIMUM DEPTH OF 4". DENSELY COMPACTED AREAS BETWEEN 85% AND 90% ARE TO BE CROSS RIPPED TO A MINIMUM 8" DEPTH. IN THE PROCESS OF TILLING ARE UNACCEPTABLE MATERIALS INCLUDING, BUT NOT LIMITED TO, FOREIGN DEBRIS, CONSTRUCTION WASTE, ROOTS, CONCRETE, ASPHALT AND ROCKS GREATER THAN 1/2" DIAMETER ON AVERAGE. IN AREAS TO RECEIVE SOD TILL IN FERTILIZER TO A DEPTH OF 2" AT A RATE OF 12 POUNDS PER CUBIC FT.
18. ALL PLANTING BEDS SHALL BE STAKED IN ACCORDANCE WITH THE PLANS AND APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO PLANTING. THE LANDSCAPE CONTRACTOR SHALL PROVIDE STAKES OR IRRIGATION FLAGS TO LOCATE THE EDGES OF ALL SHRUB AND GROUNDCOVER PLANT BEDS AND INDIVIDUAL TREES AND PALMS. ALL SHRUB AND GROUNDCOVER MATERIALS MUST BE LAID OUT IN THEIR CONTAINERS WITH THE APPROPRIATE SPACING FOR OWNER'S REPRESENTATIVE REVIEW AND APPROVAL. THE OWNER RESERVES THE RIGHT TO MAKE FIELD ADJUSTMENTS TO PLANT LAYOUT AS PART OF THIS REVIEW. FAILURE BY THE LANDSCAPE CONTRACTOR TO OBTAIN LAYOUT APPROVAL FROM THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION MAY RESULT IN THE REMOVAL AND REINSTALLATION OF MATERIALS BY THE CONTRACTOR AT NO ADDITIONAL COSTS TO THE OWNER. IF EXISTING CONDITIONS DO NOT ALLOW THE DESIGN TO BE LAID OUT AS SHOWN, NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY
19. UNLESS EXPLICITLY SHOWN ON DRAWINGS, NO TREES SHALL BE PLANTED WITHIN DESIGNATED UTILITY CORRIDORS, PUBLIC RIGHTS OF WAY NOR LOCATED WITHIN FOUR FEET (4') OF ANY SWALE CENTERLINE, BUILDING, OR STRUCTURE IDENTIFIED ON THE DRAWINGS OR EXISTING IN THE FIELD. NO CANOPY TREES SHALL BE PLANTED WITHIN 5 FEET OF UNDERGROUND UTILITIES, 20 FEET OF EXISTING OVERHEAD POWER LINES, WITHIN 4 FEET OF ANY PAVED SURFACE, OR UNDER CANOPY TREES THAT LIMIT ACCESS TO LIGHT AND ROOM TO GROW. FIELD ADJUST AS NECESSARY AND REVIEW ADJUSTMENTS WITH THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. TREES SHALL BE MAINTAINED AT A MINIMUM OF 13'-6" VERTICAL CLEARANCE OVER ROADWAYS OR OTHER FIRE DEPARTMENT ACCESS ROADS.
20. ALL PROPOSED TREES SHALL BE INSTALLED EITHER ENTIRELY IN OR ENTIRELY OUT OF PLANTING BEDS. PLANTING BED OUTLINES SHALL NOT BE OBSTRUCTED AND SHALL BE SMOOTH AND FLOWING. IF TREES ARE LOCATED OUTSIDE PLANTING BEDS IN GRASS AREAS, MAINTAIN A MINIMUM THREE FEET 3' WIDE OFFSET TO ALLOW FOR MOWERS TO MANEUVER.
21. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE EXTENT OF SOD & TURF WORK IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SOD & TURF IN THE AREAS SHOWN ON THE PLAN IN SUFFICIENT QUANTITY TO PROVIDE FULL COVERAGE. ADDITIONAL GRASS REQUIRED WILL BE ADJUSTED BASED ON A SQUARE FOOTAGE UNIT PRICE. AREAS TO BE SODDED SHALL BE AMENDED PER SOILS REPORT TO PROVIDE REQUIRED NUTRIENTS AND SOIL PH OF BETWEEN 6.0 AND 7.0.
    ALL SOD SHALL BE ONLY NURSERY GROWN, NON PASTURE RAISED, MACHINE CUT SOD RECTANGLES OF THE TYPE INDICATED ON THE DRAWINGS. SOD SHALL BE WELL-MATTED WITH ROOTS, FREE OF EXCESSIVE WEEDS & DEBRIS, AND SHALL BE GREEN, FRESH AND UNINJURED AT THE TIME OF PLANTING.
22. CONTRACTOR SHALL FIELD-ADJUST LOCATION OF PLANT MATERIAL FOR THE REVIEW AND APPROVAL OF THE OWNER'S REPRESENTATIVE PRIOR TO INITIATING INSTALLATION.
23. ALL PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE WITH FLORIDA NO. 1 GRADE, ACCORDING TO THE "GRADES AND STANDARDS FOR NURSERY PLANTS" PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
24. ALL PLANTING BEDS SHALL BE TOP-DRESSED WITH A 3" LAYER OF MULCH AS SPECIFIED. ALL TREES SHALL HAVE A 1" DEEP, 24" RADIUS (FROM THE TRUNK) MULCH RING PLACED AROUND THE BASE OF THE TRUNK. ON WELL DRAINED SOIL,THE MULCH RING SHALL BE MOUNDED AT ITS EDGES TO RETAIN WATER WITHIN THE TREE RING. ON POORLY DRAINED SOIL, THE MULCH RING SHALL BE MOUNDED AT THE TRUNK TO SHED WATER AWAY FROM THE TREE.
25. SHRUB AND GROUND COVER BED QUANTITIES ARE INDICATED ON THE PLANT LIST. PLANT ACCENT SHRUBS AND TREES AS SHOWN ON THE LANDSCAPE PLANTING PLANS WHEN INDIVIDUAL PLANTS ARE DELINEATED.
26. PALM HEIGHTS, AS INDICATED ON THE PLANS, REFER TO CLEAR TRUNK (C.T.), GRAY WOOD (G.W.), OR OVERALL HEIGHT (O.A.) AS SPECIFIED ON THE PLANT LIST.
27. CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.
29. CONTRACTOR SHALL REGRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION, AND/OR INSTALLATION WORK.
30. CONTRACTOR SHALL REPLACE (BY EQUAL SIZE AND QUALITY) ANY AND ALL EXISTING PLANT MATERIAL DISTURBED OR DAMAGED BY PLANT REMOVAL, RELOCATION, AND/OR INSTALLATION WORK. ALL WIRE BASKETS OR BURLAP SHALL BE REMOVED FROM ROOTBALLS PRIOR TO INSTALLATION.
31. MAINTENANCE SHALL BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE UNTIL THE DATE OF SUBSTANTIAL COMPLETION. MAINTENANCE INCLUDES WATERING, PRUNING, WEEDING, MULCHING, REPLACEMENTS OF SICK OR DEAD PLANTS, AND ANY OTHER CARE NECESSARY FOR THE PROPER GROWTH OF THE PLANT MATERIAL.
32. UPON COMPLETION OF ALL LANDSCAPING, AN INSPECTION FOR SUBSTANTIAL COMPLETION OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR SCHEDULING THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE.
33. CONTRACTOR SHALL SUBMIT WRITTEN GUARANTEE OF SURVIVABILITY OF ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION.
34. CONTRACTOR MUST APPROVE ALL GRADED AREAS PRIOR TO THE COMMENCEMENT OF PLANTING.
35. THE CONTRACTOR SHALL BEAR ALL COSTS OF TESTING OF SOILS, AMENDMENTS, ETC. ASSOCIATED WITH THE WORK. SEE SPECIFICATIONS FOR ADDITIONAL TESTING REQUIREMENTS.
36. THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER'S REPRESENTATIVE WITH RECORD COPIES OF ALL RECEIPTS, INVOICES, AND/ OR SHIPPING MANIFESTS FOR ALL MATERIALS, INCLUDING PLANTS AND SOD, DELIVERED TO THE PROJECT SITE BY THE CONTRACTOR OR A SUPPLIER TO THE CONTRACTOR. DELIVERY OF ALL FERTILIZER AND SOIL AMENDMENT MATERIALS MUST BE IN ORIGINAL, UNOPENED CONTAINER'S BEARING MANUFACTURER'S GUARANTEED CHEMICAL ANALYSIS, NAME, TRADE MARK AND CONFORMANCE WITH STATE LAW.

HARDSCAPE NOTES

1. SEE CIVIL ENGINEERING DRAWINGS FOR GENERAL GRADING OF THE SITE, INCLUDING SIDEWALK AND FINISH GRADES FOR PARKING LOTS, ROADWAYS, SIDEWALKS, AND PLANTING AREAS.
2. ALL PAVEMENT SHALL BE STAKED IN THE FIELD FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. ALIGNMENT MAY BE ADJUSTED UPON APPROVAL TO ACCOMMODATE EXISTING SITE ELEMENTS.
3. SLOPES OF WALKS TO BE NO GREATER THAN FIVE PERCENT, UNLESS EXPRESSLY NOTED OTHERWISE. CROSS-SLOPE OF WALKS NOT TO EXCEED TWO PERCENT. SEE CIVIL DRAWINGS FOR ADDITIONAL LAYOUT AND INSTALLATION DETAILS. SEE HARDSCAPE DRAWINGS FOR FINISH PATTERNS.
4. ALL COLORS AND MATERIALS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. FOR THIS PURPOSE, THE CONTRACTOR SHALL CONSTRUCT OR SUBMIT AS DIRECTED BY THE OWNER'S REPRESENTATIVE PANELS DEPICTING PROPOSED FINISHES AND COLORS FOR REVIEW AND APPROVAL.
5. ALL NAILS, LAG SCREWS, BOLTS AND MISCELLANEOUS FASTENERS SHALL BE HOT DIPPED GALVANIZED OR A CORROSION RESISTANT ALLOY.

FOUNDATIONS

6. FOOTINGS HAVE BEEN DESIGNED FOR A MAXIMUM ALLOWABLE SOIL BEARING VALUE OF 2000 PSF. IN-PLACE SOILS TO BE UNIFORMLY COMPACTED AND TESTED TO ENSURE MINIMUM SOIL BEARING PRESSURE CAPACITY OF 2,000 PSF.
7. PREPARATION FOR AND CONSTRUCTION OF WALL/COLUMN FOOTING(S) TO BE IN COMPLIANCE WITH THE APPLICABLE CHAPTERS AND SECTIONS OF ACI 332R
8. ANY ADDITIONAL FILL MATERIAL REQUIRED SHALL CONSIST OF SOILS THAT CONTAIN NOT MORE THAN 12% OF FINES (SILT OR CLAY PARTICLES) PASSING A NO. 200 SIEVE AND SHALL BE PLACED IN UNIFORM LAYERS NOT EXCEEDING 12.0 INCHES LOOSE. EACH LAYER SHALL BE SYSTEMATICALLY AND UNIFORMLY COMPACTED IN THE MANNER AND TO THE DEGREE SPECIFIED FOR THE IN-PLACE SOILS.

CONCRETE

9. STRUCTURAL CONCRETE, INCLUDING FOOTINGS, SHALL CONFORM TO THE REQUIREMENTS OF ACI 301 AND SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS OF 3000 PSI UNLESS OTHERWISE NOTED. CONCRETE FOR SLABS ON-GRADE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS OF 2500 PSI.
10. CONCRETE, WHEN PLACED, SHALL HAVE A MAXIMUM SLUMP OF 5 INCHES AND A MINIMUM OF 3 INCHES.
11. ALL REINFORCING SHALL CONFORM TO ASTM 615 FOR GRADE 60 STEEL; WELDED WIRE MESH TO ASTM A-185.
12. CHECK ALL DRAWINGS AND APPLICABLE MANUFACTURER'S SHOP DRAWINGS FOR LOCATION OF ALL EMBEDDED ITEMS SUCH AS PIPE SLEEVES, ANCHOR BOLTS, ETC., PRIOR TO PLACING CONCRETE.
13. #5 REINFORCEMENT FOR CONTINUOUS FOOTINGS SHALL BE CONTINUOUS AND SPLICED WITH A FULL 30-INCH LAP.
14. PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. START INITIAL CURING AS SOON AS FREE WATER HAS DISAPPEARED FROM THE CONCRETE SURFACE AFTER PLACING AND FINISHING. KEEP CONTINUOUSLY MOIST FOR NOT LESS THAN 7 DAYS IN ACCORDANCE WITH ACI 301 PROCEDURES. PERFORM CURING OF THE CONCRETE BY CURING AND SEALING COMPOUND, BY MOIST CURING, BY MOISTURE RETAINING COVER CURING OR BY COMBINATION THEREOF.
15. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR THE REINFORCEMENT:
    A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH; 3 INCHES.
    B. FORMED CONCRETE EXPOSED TO EARTH OR WEATHER; #5 BARS AND SMALLER, 1 1/2 INCHES; #6 BARS AND LARGER, 2 INCHES.

MASONRY

16. CONCRETE MASONRY UNITS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C90 FOR LOAD BEARING MASONRY WITH A MINIMUM F'M OF 1500 PSI. BRICK MASONRY UNITS SHALL CONFORM TO ASTM C-62 FOR STRUCTURAL AND NON-STRUCTURAL MASONRY. REFER TO DRAWINGS FOR SPECIFIC TYPE OF BRICK MASONRY LAYOUT PATTERNS.
17. MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM WITH ALL THE REQUIREMENTS OF THE "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1-95/ASCE 6-96/TMS 602-02), AS PUBLISHED BY THE MASONRY STANDARDS JOINT COMMITTEE.
18. MASONRY CONSTRUCTION SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A "CERTIFIED STRUCTURAL MASONRY CONTRACTOR" OR "CERTIFIED STRUCTURAL MASON" AS RECOGNIZED BY THE FLORIDA CONCRETE AND PRODUCTS ASSOCIATION (FC&PA). THE SENIOR MASONRY SUPERVISOR WILL BE RESPONSIBLE TO ASSURE THAT THE WORK IS ACCOMPLISHED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
19. ALL MORTAR SHALL BE TYPE M OR S IN ACCORDANCE WITH ASTM C 270.
20. GROUT SHALL HAVE A MINIMUM SLUMP OF 8 INCHES AND A MAXIMUM SLUMP OF 11 INCHES, BE IN CONFORMANCE WITH ASTM C 476, AND ATTAIN A COMPRESSIVE STRENGTH OF 1800 PSI.
21. CONCRETE MASONRY UNITS SHALL BE PLUMB, TRUE TO LINE, WITH LEVEL COURSES ACCURATELY SPACED AND BUILT TO THE THICKNESS AND IN A RUNNING BOND AS INDICATED AND CONFORMING TO THE TOLERANCES SPECIFIED IN ACI 531.1 AND 530.1. CONCRETE UNITS SHALL BE STORED OFF OF THE GROUND SURFACE AND COVERED TO PROTECT THEM FROM ABSORBING RAIN OR BEING CONTAMINATED WITH OTHER FOREIGN MATTER. CONCRETE UNITS SHALL BE DRY WHEN LAID. EACH UNIT SHALL BE ADJUSTED TO FINAL POSITION IN THE WALL WHILE THE MORTAR IS STILL SOFT AND PLASTIC. ANY UNIT DISTURBED AFTER THE MORTAR HAS STIFFENED SHALL BE REMOVED AND RE-LAID WITH FRESH MORTAR. VERTICAL CELLS SHALL BE ALIGNED TO PROVIDE A CONTINUOUS, UNOBSTRUCTED OPENING. ALL ANCHORS, ACCESSORIES, FLASHING AND OTHER ITEMS TO BE BUILT-IN SHALL BE INSTALLED AS THE MASONRY WORK PROGRESSES. ALL CUTTING AND FITTING OF MASONRY, INCLUDING THAT REQUIRED TO ACCOMMODATE THE WORK OF OTHERS SHALL BE DONE BY MASONRY CRAFTSMEN WITH MASONRY SAWS. LOCATE CONTROL JOINTS AT 20 FEET ON CENTER MAXIMUM, AT ALL COLUMNS, AND AT CHANGES IN DIRECTION. CAULK THE EXPOSED SIDE OF ALL JOINTS WITH BACKER ROD AND SEALANT. COLOR OF SEALANT TO MATCH WALL COLOR.
22. HOLLOW UNITS SHALL BE LAID WITH FULL HEAD AND BED JOINTS TO THE THICKNESS OF THE FACE SHELL AS A MINIMUM. THE WEBS SHALL ALSO BE BEDDED IN ALL COURSES, STARTING AT THE FOUNDATION, ADJACENT TO CELLS TO BE REINFORCED AND/OR FILLED WITH GROUT OR CONCRETE. MORTAR JOINTS SHALL BE TOOLED WHEN THE MORTAR IS "THUMBPRINT" HARD, BOTH ON THE INSIDE AND OUTSIDE SURFACES OF THE BUILDING WALL, WITH A TOOL PRODUCING A CONCAVE SURFACE. BED JOINTS SHALL BE 3/8 " + 1/8" IN THICKNESS; HEAD JOINTS SHALL BE 3/8" (-1/4", +3/8").
23. ALL REINFORCING STEEL TO BE GRADE 60 PER ASTM A-615. REINFORCING BARS SHALL BE PLACED IN THE MIDDLE OF THE CELLS AND TIED OR OTHERWISE SECURELY SUPPORTED AT THE TOP AND BOTTOM TO ENSURE THAT THE BAR DOES NOT MOVE DURING GROUTING. MINIMUM LAP AT ALL SPLICES OR DOWELS SHALL BE 30 INCHES UNLESS OTHERWISE NOTED ON THE DRAWINGS.
24. GROUTING SHALL BE ACCOMPLISHED IN 4 FOOT LIFTS FOR CONCRETE MASONRY AND 2 FOOT LIFTS FOR BRICK MASONRY. EACH LIFT SHALL BE MECHANICALLY CONSOLIDATED INTO THE PREVIOUS LIFT, WHEN PLACED, SO AS TO PREVENT COLD JOINTS. RECONSOLIDATE AS REQUIRED. FOR CONCRETE MASONRY, A 12 SQUARE INCH CLEANOUT OPENING SHALL BE PLACED AT THE BOTTOM OF EACH CELL TO BE FILLED AND IT SHALL BE THOROUGHLY CLEANED OUT PRIOR TO FILLING OF THE CELL. FOR BRICK MASONRY, PUDDLE GROUT DURING AND AFTER PLACEMENT TO ENSURE COMPLETE FILLING OF GROUT SPACE. GROUT PLACEMENT STOPPED FOR MORE THAN ONE HOUR SHALL BE STOPPED BELOW THE TOP OF THE MASONRY UNIT 1-1/2" TO PROVIDE A KEY FOR SUBSEQUENT GROUTING.
25. THE MINIMUM CONTINUOUS UNOBSTRUCTED CELL AREA IN CELL TO RECEIVE GROUT MUST NOT BE LESS THAN 2" X 3". MORTAR FINS MUST BE REMOVED AS BLOCK PLACEMENT PROCEEDS. MORTAR DROPPINGS MUST BE KEPT OUT OF CELLS WHICH ARE TO BE GROUTED.
26. UNLESS SPECIFICALLY SHOWN OTHERWISE, PROVIDE #9 GA. "DUR-O-WALL" TRUSS TYPE REINFORCING IN EVERY OTHER COURSE OF CONTINUOUS WALLS FOR CONCRETE MASONRY, AND EVERY FOURTH COURSE FOR BRICK MASONRY. DO NOT LAY JOINT REINFORCEMENT ACROSS EXPANSION JOINTS.
27. TEMPORARY BRACING AND SHORING OF ALL CONCRETE MASONRY CONSTRUCTION, TO PROVIDE STABILITY DURING CONSTRUCTION, UNTIL CONSTRUCTION ACHIEVES IT'S PROPER STRENGTH, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

STRUCTURAL STEEL

28. ALL STRUCTURAL STEEL SHAPES AND PLATE SHALL CONFORM TO ASTM A-36 AND THE "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION. ALL TUBE STEEL SHALL CONFORM TO ASTM A-500, GRADE B (FY = 46 KSI).
29. ALL SHOP CONNECTIONS TO BE WELDED (UTILIZING E70XX LOW HYDROGEN ELECTRODES) AND FIELD CONNECTIONS TO BE BOLTED UNLESS OTHERWISE SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS. ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF "THE STANDARD CODE FOR WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY.
30. ALL STEEL TO RECEIVE ONE SHOP COAT AND ONE FIELD TOUCHUP COAT OF APPROVED PAINT.
31. ALL BOLTED CONNECTIONS SHALL CONSIST OF ASTM A325 HIGH STRENGTH BOLTS AND HARDENED WASHERS AS SHOWN ON THE STRUCTURAL DRAWINGS. ALL BOLTED CONNECTIONS SHALL CONFORM TO THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
32. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM A36 OR A307 (THREADED ROD).
33. ERECT ALL STEEL TO CONFORM TO "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND "QUALITY CRITERIA AND INSPECTION STANDARDS". FRAME TO BE PLUMB, SQUARE AND TRUE TO LINE AND LEVEL, CHECKED BY SURVEYING INSTRUMENTS.
34. LOCATE FINISH HOLES PRECISELY TO INSURE PASSAGE THROUGH ASSEMBLED MATERIALS WITHOUT DRIFTING. ENLARGE HOLES BY REAMING IF NECESSARY. POOR MATCHING OF HOLES IS SUFFICIENT CAUSE FOR REJECTION.
35. GROUT FOR COLUMN BASE PLATES SHALL BE NON-SHRINK GROUT BY "EMBECO" OR APPROVED EQUAL, 5000 PSI MINIMUM.

LUMBER

36. ALL LUMBER SHALL BE SOUTHERN YELLOW PINE, GRADE NO.2 OR BETTER OR AS SPECIFIED ON THE DRAWINGS, KD19 (FB FOR LUMBER SIZES NOTED TO BE IN CONFORMANCE WITH VALUES LISTED IN THE NATIONAL FOREST PRODUCTS ASSOCIATION NATIONAL DESIGN STANDARD SUPPLEMENT), AND SHALL CONFORM TO THE NATIONAL GRADING RULE FOR DIMENSION LUMBER, THE SOUTHERN PINE INSPECTION BUREAU AND THE SOUTHERN FOREST PRODUCTS ASSOCIATION.
37. DO NOT LOCATE ANY HOLES CLOSER THAN FIVE (5) BOLT DIAMETERS FROM THE END OF ANY WOOD FRAMING MEMBER.
38. EXPOSED WOOD MEMBERS SHALL BE PRESSURE-TREATED WITH TYPE WATERBORNE PRESERVATIVE IN ACCORDANCE WITH THE AMERICAN WOOD-PRESERVERS STANDARD U1-03 FOR THE FOLLOWING APPLICATIONS:

	APPLICATION	AWPA USE CATEGORY	TREATMENT (LBS/CU.F.T)
A.	ABOVE-GROUND USE	UC3B	ACQ 0.25
B.	CONCRETE- OR GROUND-CONTACT, OR IN-GROUND USE	UC4A	ACQ 0.40
C.	FRESHWATER USE	UC4A	ACQ 0.40
D.	IN-GROUND OR FRESHWATER PILES	UC4C	CCA 0.80 (NOTE 1)
E.	SALTWATER USE, MARINE PILES	UC5C	CCA 2.50 (NOTE 2)

NOTE 1: CREOSOTE (12 LBS/CU.FT.) MAY BE USED IF APPROVED BY OWNER'S REPRESENTATIVE
NOTE 2: CREOSOTE (25 LBS/CU.FT.) MAY BE USED IF APPROVED BY OWNER'S REPRESENTATIVE

39. FASTENERS:
    A. ABOVE-GROUND METAL CONNECTORS IN CONTACT WITH ACQ:
       1) G185 HOT DIPPED GALVANIZED MEETING ASTM A653
       2) ASTM A123
       3) STAINLESS STEEL TYPE 304 OR 316
    B. ABOVE-GROUND SCREWS, NUTS, BOLTS & WASHERS IN CONTACT WITH ACQ:
       1) CLASS 55 MECHANICALLY DEPOSITED ZINC MEETING ASTM B695
       2) POST HOT DIPPED GALVANIZED MEETING ASTM A153
       3) STAINLESS STEEL TYPE 304 OR 316
    C. ABOVE-GROUND COMMON NAILS & GUN NAILS IN CONTACT WITH ACQ:
       1) G185 HOT DIPPED GALVANIZED MEETING ASTM A153
       2) STAINLESS STEEL TYPE 304 OR 316
    D. ALL FASTENERS FOR IN-GROUND, UNDERWATER OR MARINE APPLICATIONS
       1) STAINLESS STEEL TYPE 304 OR 316

ALUMINUM

40. ALUMINUM TUBING, PLATES, BARS, AND ANGLES SHALL BE 6061-T6 UNLESS NOTED OTHERWISE.
41. ALL WELDING TO BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY'S STANDARD AWS D1.2, STRUCTURAL WELDING CODE - ALUMINUM.
42. ISOLATE ALL ALUMINUM FROM STEEL AND CONCRETE BY THE USE OF NEOPRENE WASHERS, BUSHINGS, AND SHEET AS REQUIRED IN ORDER TO PREVENT GALVANIC ACTION OR CORROSION.
43. ALL FASTENERS, BOLTS, NUTS, ETC. IN CONTACT WITH ALUMINUM SHALL BE STAINLESS STEEL.

POOL/SPA/FOUNTAIN

44. THE POOL/SPA/FOUNTAIN CONTRACTOR WILL STAKE OUT THE POOL/SPA/FOUNTAIN AND SET THE FINISHED GRADE. THE OWNER'S REPRESENTATIVE WILL BE NOTIFIED FOR APPROVAL OF THIS WORK PRIOR TO INSTALLATION.
45. POOL/SPA/FOUNTAIN CONTRACTOR IS RESPONSIBLE FOR ALL POOL/SPA/FOUNTAIN EQUIPMENT, PIPING, POOL/SPA SHELL, FOUNTAIN WALLS, TILE, COPING, ELECTRICAL TO JUNCTION BOXES, PERMITS, AND CODE COMPLIANCE. SUBMIT SHOP DRAWINGS AND FINISH SAMPLES FOR REVIEW AND APPROVAL OF THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
46. REQUIRED UTILITIES AT THE FILTER/PUMP LOCATION TO BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.
47. FINISH PATTERN ON THE POOL DECK TO BE LAID OUT EXACTLY AS SHOWN. EXPANSION JOINTS, DECK DRAINS, ETC. TO COINCIDE WITH THE GRID. EXPANSION JOINT FILLER AND ANY DECK DRAIN MATERIALS ARE TO MATCH THE COLOR OF THE DECK.

PRECAST/EIFS

48. PRECAST/EIFS MANUFACTURER IS RESPONSIBLE FOR DESIGN OF INDIVIDUAL COMPONENTS, INCLUDING VERIFICATION OF FIELD CONDITIONS AND DESIGN OF CONNECTIONS.
49. DESIGN, FABRICATION, AND INSTALLATION OF PRECAST/EIFS COMPONENTS SHALL COMPLY WITH APPLICABLE ACI, PCI, & ASTM STANDARDS.
50. MANUFACTURER SHALL SUBMIT SHOP DRAWINGS AND FINISH SAMPLES FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO FABRICATION AND INSTALLATION
51. ALL CAST STONE PRODUCTS SHALL CONFORM WITH ALL REQUIREMENTS OF ASTM C1364.

FURNISHINGS

52. THE CONTRACTOR TO PROVIDE THE FOLLOWING SUBMITTALS,
    - ALL MANUFACTURER'S DATA INCLUDING DIRECTIONS OR RECOMMENDATIONS FOR INSTALLATION, METHODS, PROCEDURES AND MAINTENANCE.
    - COMPLETE SHOP DRAWINGS FOR ALL SITE FURNISHINGS INDICATING ALL DETAILS OF FABRICATION AND INSTALLATION INCLUDING SIZES, SHAPES, FINISHES, COLORS, THICKNESS, MATERIAL QUALITY AND ALL OTHER RELATED WORK APPLICABLE TO THE SITE FURNISHINGS.
    - SUBMIT COLOR SAMPLES FOR APPROVAL BY THE OWNER.
53. DELIVER ALL MATERIALS WITH MANUFACTURER'S TAGS AND LABELS INTACT IN CLEAN, DRY AND PROTECTED LOCATIONS.
54. STORE AND HANDLE ALL SITE FURNISHINGS SO AS TO AVOID DAMAGE. ALL SITE FURNISHINGS SHALL BE GUARANTEED BY THE CONTRACTOR FREE OF DEFECTS, CRACKS, CHIPS, STAINS AND SHALL BE COMPLETELY CLEAN AND FREE OF DAMAGES UPON FINAL PLACEMENT AND APPROVAL
55. ALL SITE FURNISHINGS SHALL BE PROVIDED BY THE CONTRACTOR INCLUDING ORDERING, SHIPPING, DELIVERY, UNPACKING, AND INSTALLING ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND AS DETAILED ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY INSTALLATION PROCEDURE WITH THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLING.
56. ALL SITE FURNISHINGS LOCATIONS ARE TO BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO BEING PLACED ON SITE. FAILURE TO SECURE OWNER'S APPROVAL MAY REQUIRE THE CONTRACTOR TO MOVE AND/ OR REINSTALL THE FURNISHINGS AT THE CONTRACTORS EXPENSE.

STANDARD DRAWING SYMBOLS

Symbol labels	Reference
	ELEVATION DETAIL REFERENCE DETAIL NUMBER SHEET NUMBER
	SECTION DETAIL REFERENCE DETAIL NUMBER SHEET NUMBER
PLAN ENLARGEMENT	PLAN ENLARGEMENT REFERENCE
DETAIL NAME	GENERAL DETAIL REFERENCE DETAIL NUMBER SHEET NUMBER
DETAIL ENLARGEMENT	DETAIL ENLARGEMENT REFERENCE
SHEET NUMBER SHEET NUMBER	MATCHLINE
X FINISH ITEM	FINISH REFERENCE SEE FINISH SCHEDULE
	PLANT TAG SYMBOL QUANTITY
100	EXISTING CONTOUR
100	PROPOSED CONTOUR
	STORMWATER FLOW DIRECTION
X%	SLOPE DIRECTION PERCENTAGE OR RATIO
100.0	SPOT ELEVATION
N 1493681.5115 E 447607.7445	COORDINATE REFERENCE

CONTRACTOR NOTES

NOT ALL ITEMS SHOWN ON THIS SHEET APPEAR IN THE CONSTRUCTION DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS RELATED TO CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, BUILDING, LANDSCAPE, IRRIGATION & RIGHT OF WAY UTILIZATION PERMITS.

CODE COMPLIANCE NOTES

1. IT IS THE INTENT OF THIS DESIGN TO COMPLY WITH ALL APPLICABLE LOCAL AND STATE BUILDING CODES.
   ALL EDITIONS OF THE FLORIDA BUILDING CODE 2023 (8TH ED)
   NATIONAL ELECTRIC CODE 2023

WINDLOAD NOTES

1. WIND DESIGN LOAD INFORMATION (TO BE CONFIRMED BY ENGINEER OF RECORD):
   (PER FBC 2020 7th EDITION CHAPTER 16, REF. ASCE 7-16)

   BASIC WIND SPEED (Vult) = 140 MPH (3 SECOND GUST)
   (Vasd) = 108 MPH (3 SECOND GUST)
   STRUCTURE CATEGORY = II (ASCE 7-16)
   WIND EXPOSURE(ALL SIDES) =C (ASCE 7-16)
   Cf = 1.4

tdc DESIGN STUDIO
LANDSCAPE ARCHITECTURE
COMMUNITY PLANNING
URBAN DESIGN
1516 E. HILLCREST STREET STE. 105
ORLANDO, FL 32803 PH: 407-256-2625

PROJECT
351 MARION OAKS BLVD
MARION COUNTY, FL
Prepared For:
A&B PROPERTIES SERVICES

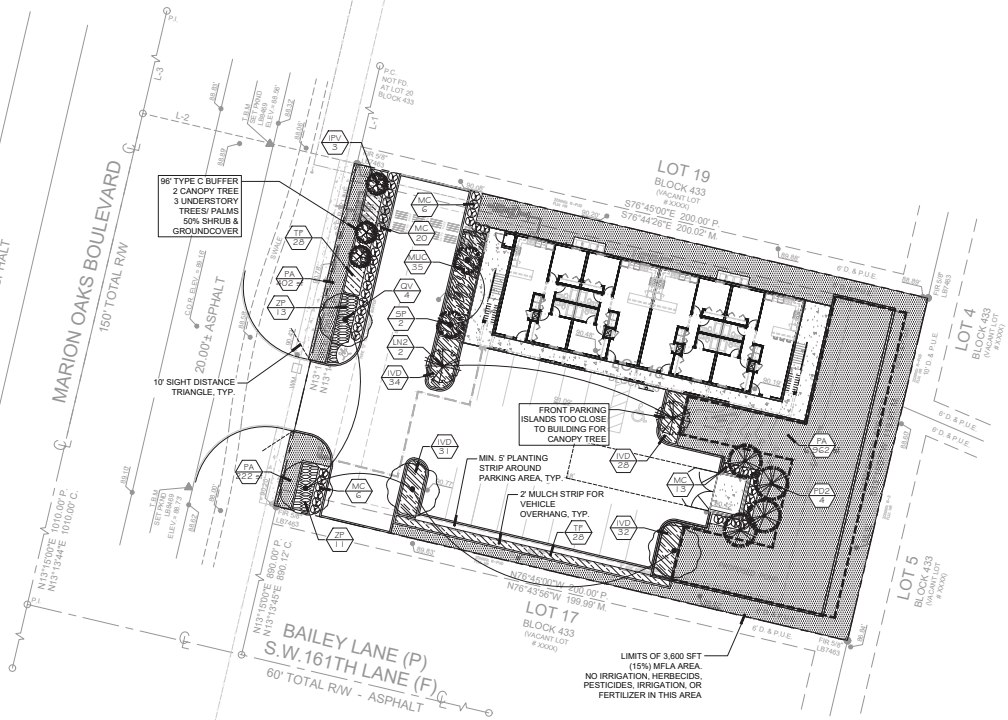
SEAL

CONSULTANTS

ISSUED FOR:
10/104/2025 PERMIT

PROJECT NO.	2025-05
DESIGNED BY	TDC/TFW
DRAWN BY	TFW
CHECKED BY	TDC/TFW
DATE	8/26/2025
DRAWING SCALE	
DRAWING TITLE	INDEX SHEET
DRAWING NUMBER	ID-01

SHEET 1 OF 1



TREE REMOVAL SUMMARY:

NO TREES ON SITE

LANDSCAPE AREA CALCULATIONS:

TOTAL SITE AREA: 24,000 +/- SQ. FT.
TOTAL UPLAND LANDSCAPED AREA: 10,250 +/- SQ. FT.
IRRIGATED PLANTING AREAS: 2,500 +/- SQ. FT
UNIRRIGATED/ BAHIA TURF AREA: 7,750 +/- SQ. FT.

15% MFLA REQUIRED= 24,000 X 15% = 3,600 SQ. FT

SHADE TREE CALCULATIONS:

TOTAL SITE AREA: 24,000 +/- SQ. FT.
SHADE TREES PRESERVED: 0
SHADE TREES PROVIDED: 8
24,000 SQ. FT/ 8 TREES= 1 TREE PER 3,000 SQ. FT.
(MINIMUM 1 PER 3,000 SQ. FT.)

TREE PROTECTION NOTE:

PER SEC. 7.6.3. E

TREE PROTECTION SHALL CONTINUE DURING THE COURSE OF CONSTRUCTION. THE FOLLOWING REQUIREMENTS SHALL BE CONDITIONS OF TREE REMOVAL PERMITS, ALL PERMITS FOR CONSTRUCTION IN PUBLIC RIGHTS-OF-WAY, AND ALL DEVELOPMENT PERMITS ISSUED UNDER AND PURSUANT TO THIS CODE:

(1) THE CLEANING OF CONSTRUCTION EQUIPMENT OR MATERIAL OR THE DISPOSAL OF WASTE MATERIALS INCLUDING BUT NOT LIMITED TO, PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, AND MORTAR WITHIN THE TPZ OF ANY TREE WHICH IS BEING PROTECTED IS NOT ALLOWED.

(2) THE MOVEMENT OF EQUIPMENT OR THE STORAGE OF EQUIPMENT, MATERIALS, DEBRIS, OR FILL WITHIN THE TPZ OF ANY TREE WHICH IS BEING PROTECTED IS NOT ALLOWED.

(3) THE CONTRACTOR SHALL INSPECT ALL TREE PROTECTION BARRICADES AND SIGNS ON A WEEKLY BASIS DURING THE COURSE OF CONSTRUCTION. ANY BARRICADE OR SIGN WHICH HAS BEEN DAMAGED OR IS MISSING SHALL BE REPLACED IMMEDIATELY.

(4) IF ANY TREE WHICH HAS NOT BEEN APPROVED TO BE REMOVED IS DESTROYED, OR RECEIVES MAJOR DAMAGE DURING CONSTRUCTION, WITH THE EXCEPTION OF NATURAL EVENTS, SO AS TO PLACE ITS LONG TERM SURVIVAL IN QUESTION, THE TREE(S) MUST BE REPLACED AT AN INCH-TO-INCH BASIS OF THE TOTAL (COMBINED) DBH OF THE TREE(S) SO DESTROYED OR DAMAGED. THE REPLACEMENT TREE(S) SHALL BE OF COMPARABLE SPECIES OF THE DESTROYED OR DAMAGED TREE(S) WITH A MINIMUM REPLACEMENT SIZE OF 3.5-INCH CALIPER. THE COUNTY RESERVES THE RIGHT TO ESTABLISH A REPLACEMENT VALUE FOR SUCH TREES AND PAYMENT INTO THE TREE MITIGATION FUND MAY BE AUTHORIZED BY THE COUNTY'S LANDSCAPE ARCHITECT.

SEC. 6.8.12. - LANDSCAPE COMPLETION INSPECTION REQUIREMENTS.

UPON COMPLETION OF THE INSTALLATION, THE CONTRACTOR SHALL REQUEST AN INSPECTION BY THE DESIGN PROFESSIONAL. A LANDSCAPE AND IRRIGATION AS-BUILT CERTIFICATION SHALL BE SIGNED AND SEALED BY THE DESIGN PROFESSIONAL AND SUBMITTED TO THE COUNTY LANDSCAPE ARCHITECT PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

PLANT SCHEDULE

98% NATIVE

THIS IS A "FLORIDA FRIENDLY LANSCAPE PLAN"

NATIVE	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	TREES					
Y	IPV	Ilex vomitoria `Pendula` / Weeping Yaupon Holly	30 gal	2-3" STD	8'-10` H x 4'-5` W	3
N	LN2	Lagerstroemia indica x faurei `Natchez` / Natchez Crape Myrtle	65 gal	3.5"Cal	12'-14` x 6'-8'	2
Y	PD2	Pinus elliotti var. Densa / Densa Slash Pine	45 gal	3.5"Cal	10'-12`H X 5'-6'W	4
Y	QV	Quercus virginiana / Southern Live Oak	65 gal	3.5"Cal	12'-14` x 6'-8'	4
Y	SP	Sabal palmetto / Cabbage Palmetto	B & B		12'-18` CT	2

NATIVE	CODE	BOTANICAL / COMMON NAME	CONT	SIZE	SPACING	QTY
	SHRUBS				36" o.c.	
Y	MC	Myrcianthes fragrans / Simpson`s Stopper	3 gal	30"-36"		45

NATIVE	CODE	BOTANICAL / COMMON NAME	CONT	SIZE	SPACING	QTY
	SHRUB AREAS					
Y	IVD	Ilex vomitoria `Schillings Dwarf` / ` Schillings Dwarf` Holly	3 gal@	10-12" x 10-12"	24" o.c.	125
Y	MUC	Muhlenbergia capillaris / Pink Muhly	1 gal	18"-24" x 18"-24"	36" o.c.	35
	GROUND COVERS					
	PA	Paspalum notatum `Argentine` / Bahia Grass	sod			7,586 sf
Y	TF	Tripsacum floridanum / Dwarf Fakahatchee Grass	1 gal	18" height; full	36" o.c.	56
Y	ZP	Zamia pumila / Coontie	3 gal	18"-24" spd.	36" o.c.	24

MITIGATION INCHES PROVIDED	
	14
	14
TOTAL INCHES	28

PLANTING NOTES:

1. ALL PLANT MATERIAL SIZES ARE MINIMUM SIZES. CONTAINER SIZES SHALL BE INCREASED IF NECESSARY TO PROVIDE OVERALL PLANT SIZED SPECIFIED.
2. FINAL ARRANGEMENT OF PLANT MATERIAL SHALL BE STAKED BY THE CONTRACTOR FOR THE APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLMENT.
3. THE PLANT QUANTITIES SHOWN ON THE LANDSCAPE CONTRACT DOCUMENTS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND REPORTING ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO CONTRACT AWARD AND COMMENCEMENT OF WORK.
4. ALL MULCH SHALL BE MEDIUM PINE BARK NUGGETS MULCH 3 INCHES THICK WHEN COMPACTED.
5. CONTRACTOR RESPONSIBLE TO REMOVING ALL INVASIVE OR PROHIBITED PLANT SPECIES ONSITE.
6. ALL LANDSCAPING SHALL CONFORM TO CITY OF MARION COUNTY LANDSCAPE, BUFFER, AND TREE REQUIREMENTS.

SOD NOTE:

1. ALL SOD SHALL BE ARGENTINE BAHIA GRASS (paspalum notatum 'Argentine'). FINAL QUANITITU TO BE DETERMINED IN FIELD BY CONTRACTOR.

SIGHT DISTANCE NOTE:

1. ALL LANDSCAPING WITHIN SIGHT TRIANGLES SHALL CONFORM TO FDOT STANDARDS.
2. SHRUBS AND GROUNDCOVERS WITHIN SIGHT TRIANGLES SHALL NOT EXCEED 36" IN HIEGHT ABOVE PAVEMENT.
3. TREES IN SIGHT TRIANGLE SHALL HAVE A MINIMUM OF 6 FEET OF CLEAR TRUNK AT INSTALLATION, AND SHALL BE MAINTAINED AT 8 FEET AFTER ESTABLISHMENT.

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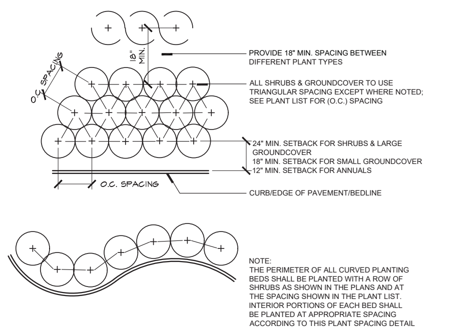
CHECKED BY	TDC/TFW
DATE	2/18/2025
DRAWING SCALE	1"=20'

0 FT 10 20 North

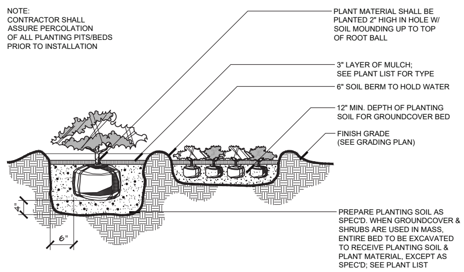
DRAWING TITLE
LANDSCAPE PLAN

DRAWING NUMBER
LS-01

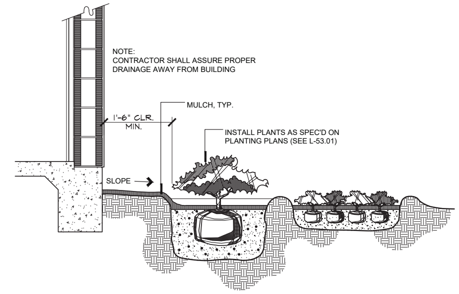
SHEET 1 OF 2



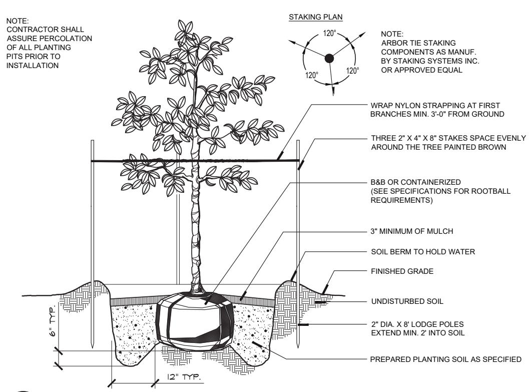
1 SHRUB & GROUNDCOVER SPACING
1/2" = 1'-0"
P-LA-01



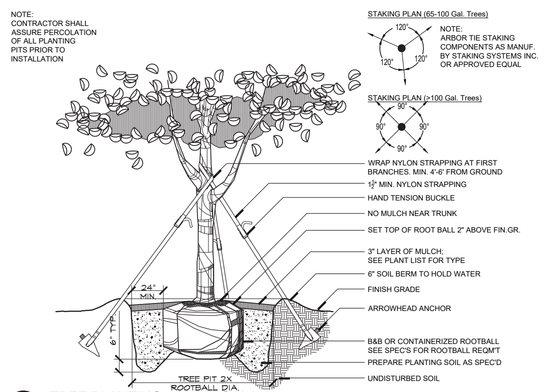
2 SHRUB & GROUNDCOVER PLANTING
1/2" = 1'-0"
P-LA-02



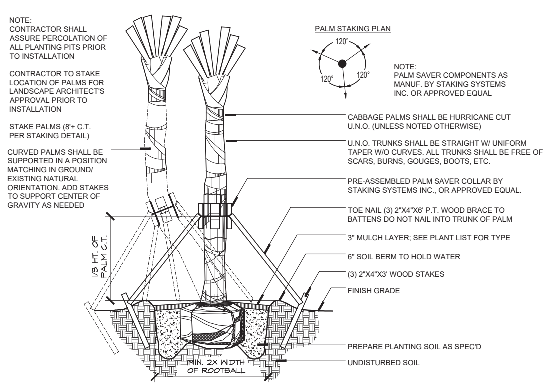
3 FOUNDATION PLANTING
1/2" = 1'-0"
P-LA-03



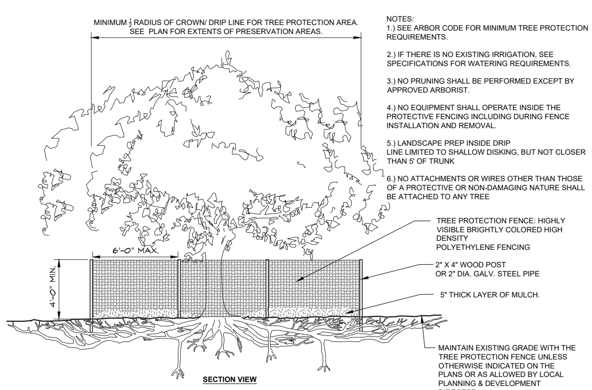
4 TREE PLANTING (15-45 GAL.)
1/2" = 1'-0"
P-LA-05



5 TREE PLANTING (65-100 GAL.)
1/2" = 1'-0"
P-LA-06



6 PALM PLANTING DETAIL
1/2" = 1'-0"
P-LA-07



7 TREE PROTECTION
N.T.S.
P-CO1-WAT-W2C-30

LANDSCAPE SPECIFICATIONS:

PART 1 - GENERAL

1.01 WORK INCLUDED
- A. INSTALLATION OF TREES, PALMS, SHRUBS, GROUNDCOVERS, AND GRASS SOD.
- B. APPLICATION AND PAYMENT FOR REQUIRED REVIEWS.

1.02 REFERENCES
- A. "GRADES AND STANDARDS FOR NURSERY PLANTS," FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
- B. "AMERICAN STANDARD FOR NURSERY STOCK," ANSI Z60.1-2004, AMERICAN NURSERY & LANDSCAPE ASSOCIATION.

1.03 SUBMITTALS
- A. RECORD DRAWINGS: FURNISH ONE SET OF REPRODUCIBLE RECORD DRAWINGS, CLEARLY SHOWING ALL CHANGED MADE TO THE ORIGINAL CONTRACT DRAWINGS DURING THE COURSE OF WORK.
- B. SOIL ANALYSIS: SUBMIT SOIL TEST RESULTS FROM AN INDEPENDENT SOIL TESTING LABORATORY PRIOR TO PLANTING.

1.04 DELIVERY, STORAGE, AND HANDLING
- A. INSPECTION: UPON DELIVERY TO THE SITE, INSPECT ALL PLANT MATERIALS FOR CONFORMITY TO THE SPECIFICATIONS AND FOR HANDLING DAMAGE. REMOVE FROM THE SITE ALL NON-CONFORMING AND DAMAGED PANT MATERIALS.
- B. ON-SITE STORAGE: PROTECT ALL STORED PLANT MATERIALS FROM SUN AND WIND. WATER ALL STORED PLANT MATERIAL DAILY. OWNER TO INDICATE APPROPRIATE LOCATION FOR MATERIAL(S) AND EQUIPMENT STORAGE.

1.05 GUARANTEE
- A. GUARANTEE ALL PLANTING WORK FOR A PERIOD OF ONE YEAR AFTER THE DATE OF FINAL APPROVAL AND ACCEPTANCE.
- B. REPLACE AT NO COST TO THE OWNER ALL PLANT MATERIALS WHICH DIE OF ARE DETERMINED BY THE LANDSCAPE ARCHITECT , OR OWNERS REPRESENTATIVE TO BE UNACCEPTABLE, UNLESS THE DEATH OR UNACCEPTABLE CONDITION IS CLEARLY BEYOND THE CONTROL OF THE CONTRACTOR, AS DETERMINED BY THE OWNER. SUCH CIRCUMSTANCES MAY INCLUDE ACTS OF MOTHER NATURE, THEFT AFTER FINAL INSPECTION, OR VANDALISM. UNACCEPTABLE PLANTS SHALL INCLUDE THOSE THAT SHOW SIGNIFICANT DIE-BACK OR FAILURE TO EXHIBIT THE HEALTHY CHARACTERISTICS INDICATIVE OF THE SPECIES.

1.06 MAINTENANCE
- A. MAINTAIN ALL LANDSCAPING UNTIL ONE YEAR AFTER FINAL APPROVAL AND ACCEPTANCE.
- B. MAINTENANCE TO INCLUDE:
  1. CULTIVATING AND WEEDING PLANT BEDS AND TREE PITS.
  2. APPLICATION OF HERBICIDES AND PESTICIDES
  3. IRRIGATION SUFFICIENT TO SATURATE ROOT SYSTEMS APPLIED DAILY.
  4. TRIMMING AND PRUNING, INCLUDING REMOVAL OF CLIPPINGS AND DEAD OR BROKEN BRANCHES, AND TREATMENT OF PRUNED AREAS OR OTHER WOUNDS.
  5. DISEASE CONTROL.
  6. MAINTAINING GUYS AND STAKES IN A TIGHT CONDITION.
  7. MAINTAINING TREES IN A PLUMB CONDITION.
  8. WEEKLY MOWING AFTER SOD IS SUFFICIENTLY ROOTED.

PART 2 - PRODUCTS

2.01 PLANT MATERIALS
- A. TREES AND SHRUBS. ALL PLANT MATERIALS SHALL BE FLORIDA #1 AS OUTLINED IN "GRADES AND STANDARDS FOR NURSERY PLANTS."
- B. SOD: PROVIDE ONLY NURSERY GROWN, MACHINE CUT SOD OF THE TYPE INDICATED ON THE DRAWINGS. SOD SHALL BE WELL-MATTED WITH ROOTS, FREE OF EXCESSIVE WEEDS, AND SHALL BE GREEN, FRESH AND UNINJURED AT THE TIME OF PLANTING.

2.02 SOIL MATERIALS
- A. TOPSOIL: FERTILE, AGRICULTURAL TOPSOIL, TYPICAL FOR PROJECT LOCALITY, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, TAKEN FROM DRAINED SITE, FREE OF SUBSOIL, CLAY, PLANTS, WEEDS AND ROOTS, pH RANGE OF 5.5 TO 7.0, MINIMUM 4 PERCENT, MAXIMUM 20 PERCENT ORGANIC MATTER.
- B. PEAT MOSS: SHREDDED, LOOSE, SPHAGNUM MOSS, FREE OF LUMPS, ROOTS, INORGANIC MATERIAL, MINIMUM 85 PERCENT ORGANIC MATERIAL MEASURED BY OVEN DRY WEIGHT, 4 TO 5 pH RANGE, MOISTURE CONTENT OF 30 PERCENT.
- C. SAND: COARSE, WASHED, BUILDERS SAND
- D. PLANTING SOIL MIXTURE: PROVIDE MIXTURE OF IMPORTED TOPSOIL OR APPROVED TOPSOIL FROM SITE, PEAT, SAND, AND OTHER AMENDMENTS AS RECOMMENDED BY THE INDEPENDENT SOIL TESTING LABORATORY FOR THE SPECIFIED PLANTS.

2.03 OTHER MATERIALS
- A. MULCH: PINE BARK MINI NUGGETS OR PINE STRAW 3" THICK COMPACTED UNDER ALL TREES, PALMS, SHRUBS, & GROUNDCOVER.
- B. FERTILIZER:
  1. FLOWERING ANNUALS AND BEDDING PLANTS: SIERRABLEN 18-7-10 (+IRON), RATE OF APPLICATION 2LBS PER 100 SQ.FT.
  2. CONTAINER GROWN TREES, SHRUBS, AND GROUNDCOVER: AGRIFORM 21 GRAM TABLES, RATE OF APPLICATION AS FOLLOWS:
     (1-2 GALLON PLANTS:1 TABLET) (30 GALLON PLANTS:6 TABLETS)
     (3-5 GALLON PLANTS: 2 TABLETS) (65 GALLON PLANTS:8 TABLETS)
     (7-10 GALLON PLANTS: 3 TABLETS) (100 GALLON PLANTS:10 TABLETS)
     (15 GALLON PLANTS: 4 TABLETS) (200 GALLON PLANTS:15 TABLETS)
  3. FIELD GROWN AND COLLECTED TREES: AGRIFORM 21 GRAM TABLETS, ONE TABLET PER ½" OF CALIPER FOR STANDARD TREES; ONE TABLET PER FOOT SPREAD FOR MULTI-TRUNK TREES.
  4. NEWLY PLANTED SOD: 6-6-6 APPLIED PER MANUFACTURER'S INSTRUCTIONS.

2.04 TESTS
- A. PROVIDE ANALYSIS OF IMPORTED TOPSOIL INDICATING pH VALUE AND PERCENTAGE OF NITROGEN, PHOSPORUS, POTASH, SOLUBLE SALT, AND ORGANIC MATTER.

PROVIDE ANALYSIS OF EXISTING SOIL IN REPRESENTATIVE PLANTING AREAS, INDICATING REPRESENTATIVE PLANTING AREAS, INCLUDING LABORATORY RECOMMENDATIONS FOR SOIL AMENDMENTS NECESSARY FOR OPTIMAL PLANT GROWTH.

PART 3 - EXECUTION

3.01 PREPARATION
- A. FINE GRADING: FINE GRADE PLANTING AREA, AS INDICATED ON THE DRAWINGS, ELIMINATING LOW OR ROUGH AREAS, AND BUILDING DEBRIS, STONES AND RUBBLE. FINISH GRADES SHALL BE SLOPED IN THE SAME DIRECTION AS EXISTING DRAINAGE; NEW GRADES SHALL NOT REVIEW PONDING OR STANDING WATER.
- B. ALERT THE OWNER OF POTENTIAL GRADING AND DRAINAGE PROBLEMS, INCLUDING DEPRESSED PLANTING AREAS WITH NO OUTFALL, SATURATED PLANTING AREAS, PLANTING PITS THAT HOLD WATER FOR PROLONGED PERIODS, AND ANY OTHER CONDITION DETRIMENTAL TO OPTIMUM PLANT GROWTH.

3.02 PLANTING
- A. TAKE LOCATIONS OF ALL TREES AND SHRUBS. ALIGN WITH ARCHITECTURAL OR ENGINEERING REFERENCES FEATHERS AS INDICATED ON THE DRAWINGS. INFORM LANDSCAPE ARCHITECT OF UNFORESEEN OBSTACLES WHICH MAY AFFECT THE LOCATIONS AS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR APPROVAL OF ALL STAKED PLATINGS PRIOR TO INSTALLATION.
- B. PLANT TREES AND SHRUBS, ROTATING AS NECESSARY FOR BEST APPEARANCE FROM THE PREDOMINANT VIEWPOINT.
- C. LAY OUT SHRUB BEDS, SCALING THE LOCATIONS AND DIMENSIONS OF EACH BED, FOLLOWING THE CONFIGURATIONS INDICATED ON THE DRAWINGS. ADJUST THE BED DIMENSIONS TO THE QUANTITY AND SPACING OF PLANTS SHOWN ON THE PLANT LIST OR SCALED FROM THE DRAWINGS. INFORM THE LANDSCAPE ARCHITECT OF SIGNIFICANT DISCREPANCIES BETWEEN PLAN BED DIMENSIONS AND PLANT QUANTITIES.
- D. PLANT SHRUBS AND ANNUALS, MAINTAINING UNIFORM SPACING AS INDICATED ON THE PLANT LIST OR SCALED FROM THE DRAWINGS.
- E. DISTRIBUTE OR DISPOSE OF EXCAVATED SOIL FROM PLANTING HOLES, MAINTAINING THE DESIRED FINISH GRADES.
- F. LAY SOD ON FINE-GRADED, MOISTENED SOIL, WITHOUT GAPS OR OVERLAPS. TAMP OR ROLL TO PROVIDE FIRM CONTACT WITH SOIL. SOD LINE AT PLANT BEDS SHALL BE CUT TO THE CONFIGURATION AND DIMENSIONS SHOWN ON THE DRAWINGS. A MINIMUM DIMENSION SHALL BE MAINTAINED BETWEEN PLANTS AND SOD EQUAL TO ONE-HALF THE PLANT SPACING, MEASURED FROM THE CENTER OF THE PLANT TO THE EDGE OF THE SOD. A CIRCULAR RING OF 12 INCH RADIUS SHALL BE MAINTAINED FREE OF GRASS AROUND TREES WITHIN SODDED AREAS.
- G. APPLY FERTILIZER TABLETS, EQUALLY DISTRIBUTED AROUND ROOTBALL AT A DEPTH EQUAL TO ONE-HALF THE ROOTBALL DEPTH. APPLY GRANULAR FERTILIZERS TO SOD AND BEDDING PLANTS. SWEEP FERTILIZERS FROM WALKWAYS TO AVOID STAINING.
- H. SATURATE SOIL THOROUGHLY DURING AND AFTER BACKFILLING OF PLANTS, AND AFTER LAYING OF SOD.
- I. APPLY A LAYER OF MULCH, MINIMUM 3 INCHES AFTER SETTLEMENT, TO ALL PLANT BEDS AND TREE RINGS.
- J. STAKE AND GUY ALL TREES SECURELY. ATTACH WHITE SURVEYOR'S RIBBON TO ALL GUY WIRES ADJACENT TO PEDESTRIAN AREAS.

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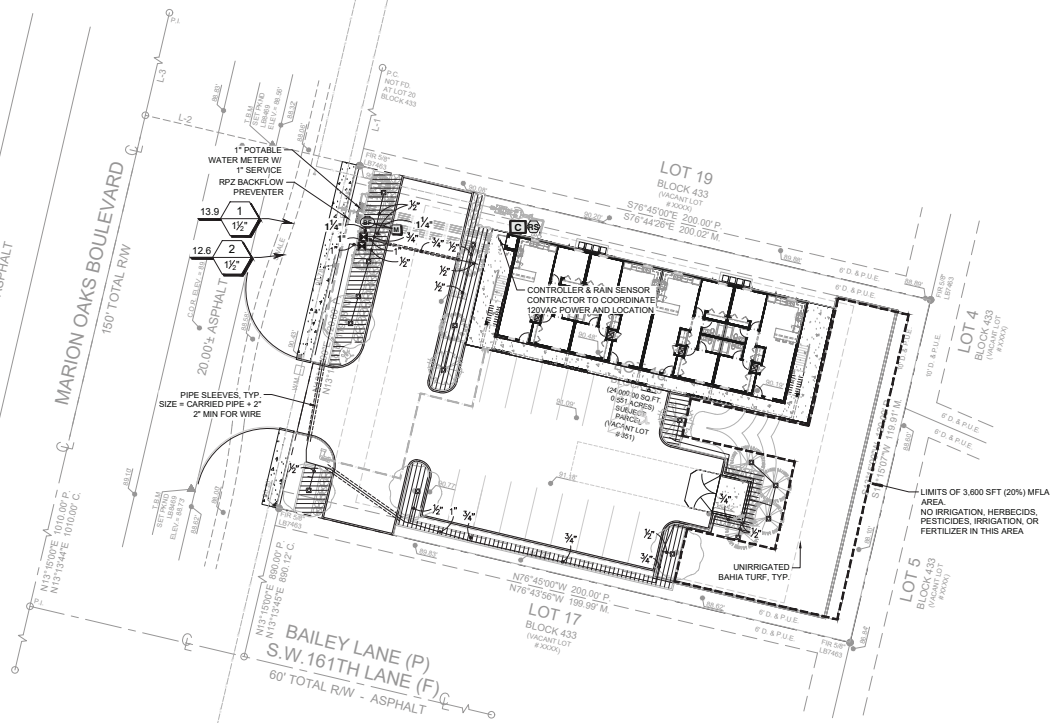
DRAWING SCALE	AS SHOWN

DRAWING TITLE
LANDSCAPE DETAILS & SPECIFICATIONS

DRAWING NUMBER
LS-02
SHEET 2 OF 2

MAINLINE AND LATERAL LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING FDEP GUIDELINES AND TO IRRIGATION SPECIFICATIONS AND DETAILS.

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast, it's free, it's the law.



LANDSCAPE AREA CALCULATIONS:
TOTAL SITE AREA: 24,000 +/- SQ. FT.
TOTAL UPLAND LANDSCAPED AREA: 16,345 +/- SQ. FT.
IRRIGATED PLANTING AREAS: 1,257 +/- SQ. FT
UNIRRIGATED/ BAHIA TURF AREA: 15,088 +/- SQ. FT.

15% MFLA REQUIRED= 24,000 X 15% = 3,600 SQ. FT

IRRIGATED AREAS:
TOTAL IRRIGATED AREA: 1,275 +/- SQ. FT.
HIGH FLOW/ SPRAY AREA: 0 +/- SQ. FT.
LOW FLOW/ DRIP AREA: 1,275 +/- SQ. FT. (100%)

NOTE: IRRIGATION SHALL BE IN ACCORDANCE WITH MARION COUNTY CODE. THE SYSTEM IS PROPOSED AS PERMANENT.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	GPM	RADIUS
	Rain Bird 1800-1400 Flood 1402	15	360	30	0.5	3'
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.	2				
	Area to Receive Dripline Netafim TLCV-09-12 Techline Pressure Compensating Landscape Dripline with Check Valve. 0.9 GPH emitters at 12" O.C. Dripline laterals spaced at 18" apart, with emitters offset for triangular pattern. 17mm.	1,266 lf				
SYMBOL	**MANUFACTURER/MODEL/DESCRIPTION**	**QTY**				
BF	Febco 825Y 1-1/4" Reduced Pressure Backflow Preventer	1				
M	Water Meter 1"	1				
	Irrigation Lateral Line: PVC Class 200 SDR 21	514.1 lf				
	Irrigation Mainline: PVC Schedule 40	18.6 lf				
	Pipe Sleeve: PVC Schedule 40	85.4 lf				

Valve Callout
Valve Number
Valve Flow
Valve Size

VALVE SCHEDULE (ALL ZONES SHALL RUN INDIVIDUALLY)

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP
1	Rain Bird XCZ-150-LCDR	1-1/2"	Bubbler	13.87	58.4	37.0	47.2	0.96 in/h
2	Rain Bird XCZ-150-LCDR	1-1/2"	Bubbler	12.63	61.6	41.3	51.5	0.96 in/h
	Common Wire				18.6			

Sec. 6.9.6. - Completion inspection requirements.

A. Irrigation installation professionals shall be accountable for the proper installation and compliance with the conditions of the irrigation permit and approved plans.

B. Upon completion of the installation, the contractor or owner shall request an inspection by the irrigation design professional. Prior to the inspection, the irrigation installation professional shall produce a clear and legible as-built diagram which accurately represents the irrigation system was installed. The diagram shall be presented and reviewed during the final inspection. The diagram may be a marked-up copy of the approved irrigation plan and shall include at a minimum:
(1) Locations of all mainlines and mainline valves;
(2) Locations of all remote control valves;
(3) Water demand per zone in GPM, and
(4) Total water demand per operating cycle.

C. The irrigation installation professional shall also provide to the owner:
(1) Irrigation system scheduling information;
(2) A copy of the irrigation controller owner's manual;
(3) Irrigation system maintenance schedule, which includes:
(a) Instructions for seasonal adjustments of controller and sensors.
(b) Instructions covering how and when to check for leaks.
(c) A schedule for checking for proper irrigation distribution coverage.

D. Within 60 days after installation the irrigation controller shall be adjusted to be set in accordance with the applicable irrigation schedule set forth in this Code.

E. Upon completion of the irrigation system installation and the acceptance of the as-built diagram and operational information, a Final Inspection and Landscape/Irrigation Release shall be signed and sealed by the irrigation design professional and submitted to the County's Landscape Architect.

CRITICAL ANALYSIS

Generated:	2025-10-15 11:05
P.O.C. NUMBER: 01	
Water Source Information:	
FLOW AVAILABLE	
Water Meter Size:	1"
Flow Available	20.27 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	60 PSI
Elevation Change:	5.00 ft
Service Line Size:	1"
Length of Service Line:	20 ft
Pressure Available:	56 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	13.87 GPM
Flow Available at POC:	20.27 GPM
Residual Flow Available:	6.41 GPM
Critical Station:	2
Design Pressure:	30 PSI
Friction Loss:	4.78 PSI
Fittings Loss:	0.48 PSI
Elevation Loss:	0 PSI
Loss through Valve:	6 PSI
Pressure Req. at Critical Station:	41.3 PSI
Loss for Fittings:	0.03 PSI
Loss for Main Line:	0.29 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	8.98 PSI
Loss for Water Meter:	0.96 PSI
Critical Station Pressure at POC:	51.5 PSI
Pressure Available:	56 PSI
Residual Pressure Available:	4.49 PSI

tdc DESIGN STUDIO
LANDSCAPE ARCHITECTURE
COMMUNITY PLANNING
URBAN DESIGN
1516 E. HILLCREST STREET STE. 105
ORLANDO, FL 32803 PH: 407-254-2625

PROJECT
351 MARION OAKS BLVD
MARION COUNTY, FL
Prepared For:
A&B PROPERTIES SERVICES

SEAL

CONSULTANTS

ISSUED FOR:
10/10/2025 PERMIT

PROJECT NO.	2025-05
DESIGNED BY	TFW
DRAWN BY	TFW
CHECKED BY	TDC/TFW
DATE	2/18/2025
DRAWING SCALE	1"=20'

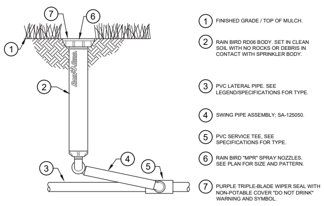
0 FT 10 20 North

DRAWING TITLE
IRRIGATION PLAN

DRAWING NUMBER
IR-01

SHEET 1 OF 3

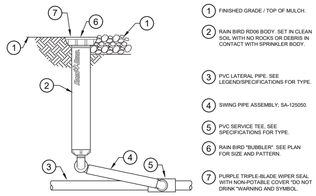
TURF SPRAY HEAD



NOTES:
1. COMPACT SOIL AROUND POP-UP HEAD TO 95% OF SURROUNDING SOIL DENSITY.
2. INSTALL POP-UP HEAD PERPENDICULAR AND FLUSH TO FINISHED GRADE.
3. PLACE POP-UP HEAD MINIMUM 12-INCHES OFF BUILDING STRUCTURES, 4" OFF SIDE WALKS AND 6-INCHES OFF FENCES.

A Rain Bird RD1800 Series-RD06-S-P-45-NP-NSI
NTS Pop-Up Sprinkler W/ SA-125050 and MPR NOZZLES

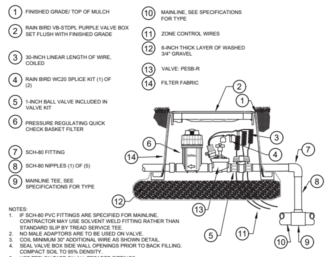
TREE SPRAY HEAD



NOTES:
1. COMPACT SOIL AROUND POP-UP HEAD TO 95% OF SURROUNDING SOIL DENSITY.
2. INSTALL POP-UP HEAD PERPENDICULAR AND FLUSH TO FINISHED GRADE.
3. PLACE POP-UP HEAD MINIMUM 6-INCHES OFF TREE ROOT BALL.

B Rain Bird RD1800 Series-RD06-S-P-45-NP-NSI
NTS Pop-Up Sprinkler W/ SA-125050 and Bubbler

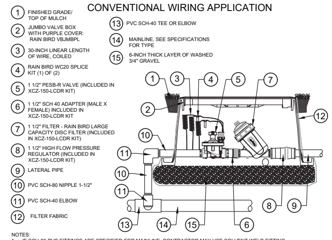
CONVENTIONAL WIRING APPLICATION



NOTES:
1. IF SCH-80 PVC FITTINGS ARE SPECIFIED FOR MAINLINE, CONTRACTOR MAY USE SOLVENT WELD FITTING RATHER THAN STANDARD SLIP BY TREAD SERVICE TEE.
2. NO MALE ADAPTORS ARE TO BE USED ON VALVE.
3. COIL MINIMUM 30" ADDITIONAL WIRE AS SHOWN DETAIL.
4. SEAL VALVE BOX SIDE WALL OPENINGS PRIOR TO BACK FILLING. COMPACT SOIL TO 95% DENSITY.
5. USE TEFLON TAPE ON ALL TREADED FITTINGS.
6. FLUSH MAINLINE PRIOR TO INSTALLING VALVES.
7. MAXIMUM FLOW; 20 GPM

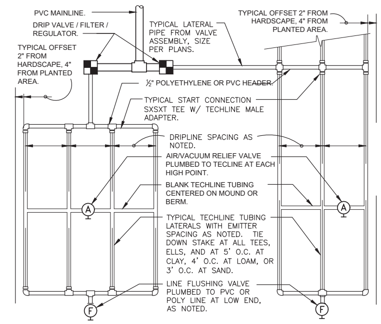
D RAIN BIRD XCZ-100-PRBR-COM
NTS

CONVENTIONAL WIRING APPLICATION



NOTES:
1. IF SCH-80 PVC FITTINGS ARE SPECIFIED FOR MAINLINE, CONTRACTOR MAY USE SOLVENT WELD FITTING RATHER THAN STANDARD SLIP BY TREAD SERVICE TEE.
2. NO MALE ADAPTORS ARE TO BE USED ON VALVE.
3. COIL MINIMUM 30" ADDITIONAL WIRE AS SHOWN DETAIL.
4. SEAL VALVE BOX SIDE WALL OPENINGS PRIOR TO BACK FILLING. COMPACT SOIL TO 95% DENSITY.
5. USE TEFLON TAPE ON ALL TREADED FITTINGS.
6. FLUSH MAINLINE PRIOR TO INSTALLING VALVES.
7. MAXIMUM FLOW; 60 GPM

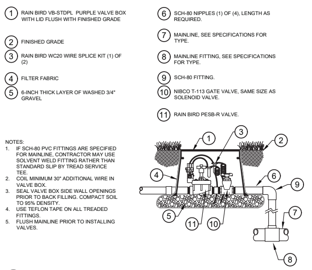
G RAIN BIRD XCZ-150-LCDR
NTS



END FEED EXAMPLE

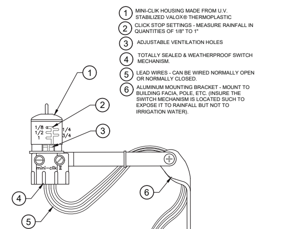
CENTER FEED EXAMPLE

CONVENTIONAL WIRING APPLICATIONS

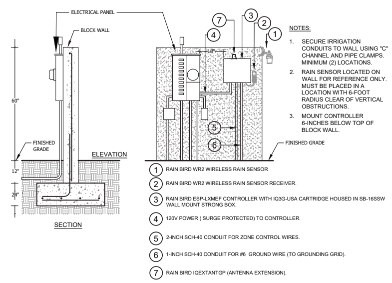


NOTES:
1. IF SCH-80 PVC FITTINGS ARE SPECIFIED FOR MAINLINE, CONTRACTOR MAY USE SOLVENT WELD FITTING RATHER THAN STANDARD SLIP BY TREAD SERVICE TEE.
2. COIL MINIMUM 30" ADDITIONAL WIRE IN VALVE BOX.
3. SEAL VALVE BOX SIDE WALL OPENINGS PRIOR TO BACK FILLING. COMPACT SOIL TO 95% DENSITY.
4. USE TEFLON TAPE ON ALL TREADED FITTINGS.
5. FLUSH MAINLINE PRIOR TO INSTALLING VALVES.

H RAIN BIRD 100/150/200-PESB-R PRS-D
NTS WITH GATE VALVE

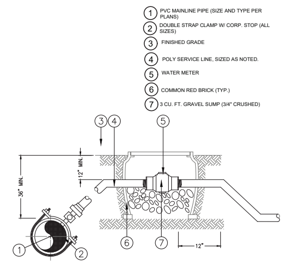


L MINI-CLIK II RAIN SENSOR
NTS

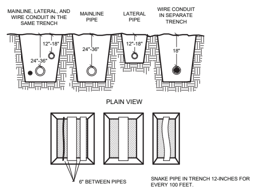


NOTES:
1. SECURE IRRIGATION CONDUITS TO WALL USING "C" CHANNEL AND PIPE CLAMPS. MINIMUM (2) LOCATIONS.
2. RAIN SENSOR LOCATED ON WALL FOR REFERENCE ONLY. MUST BE PLACED IN A LOCATION WITH 6-FOOT RADIUS CLEAR OF VERTICAL OBSTRUCTIONS.
3. MOUNT CONTROLLER 6-INCHES BELOW TOP OF BLOCK WALL.

I RAIN BIRD ESP-LXMEF WALL MOUNT CONTROLLER
NTS IN HEAVY DUTY SB-16SSW STRONG BOX

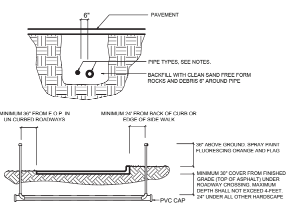


L METER CONNECTION
NTS



NOTE;
1. MINIMUM PIPE DEPTH SHALL BE PER DETAIL / LOCAL / STATE CODES, FROSTLINE, WITCH EVER IS MOST STRINGENT.
2. MAINLINE AND LATERAL PIPE, TYPE AND DEPTH UNLESS OTHERWISE NOTED IN SPECIFICATIONS.
3. PIPE IN THE SAME TRENCH SHALL HAVE MINIMUM 6" HORIZONTAL & VERTICAL SEPARATION.
4. IF ROCK OR OTHER DEBRIS IS ENCOUNTERED, CONTRACTOR SHALL SHALL HAVE MINIMUM IMBED PIPE 3/4"-2" IN 4" OF SAND, AND 3"- 4" IN 6" OF SAND. FOR LARGER PIPE. SEE SPECIFICATIONS
5. COMPACT BACKFILL TO 95% DENSITY.
6. CONTRACTOR TO REPAIR ALL SINK HOLES AND DEPRESSIONS UNDER WARRANTY PERIOD AT NO COST TO OWNER.
7. LATERAL PIPE IN R.O.W. SHALL HAVE MINIMUM 18" COVER.

M PIPE TRENCH DETAIL
NTS



NOTE;
1. UNDER ROADWAY; ALL PVC SLEEVING SHALL BE SCH-40 PIPE FOR SIZES UP TO 4". SLEEVING 6" OR LARGER SHALL BE CL200. UNDER COUNTY AND STATE ROADWAY, ALL SLEEVES TO BE SCH-80.
2. UNDER SIDEWALK AND OTHER HARDSCAPE; ALL SLEEVING TO BE SCH-40.
3. SLEEVING TO BE TWO PIPE SIZES LARGER THAN OF CARRYING PIPE. ONLY ONE PIPE PER SLEEVE.
4. ALL JOINTS TO BE SOLVENT WELD.
5. WHERE THERE IS MORE THAN ONE SLEEVE IN TRENCH, EXTEND THE SMALLER SLEEVE TO 36" ABOVE FINISHED GRADE.
6. WHEN MULTIPLE PIPES ARE LAID IN THE SAME TRENCH, MAINTAIN MINIMUM 6" SEPARATION BETWEEN PIPE BELL JOINTS.
7. MECHANICALLY TAMP TO 95% PROCTOR.

N ROADWAY / HARDSCAPE SLEEVING
NTS

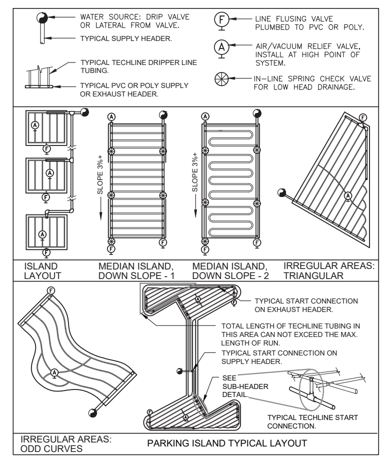
SLOPED CONDITION NOTES:
1. DRIPLINE LATERALS SHOULD FOLLOW THE CONTOURS OF THE SLOPE WHENEVER POSSIBLE.
2. INSTALL AIR RELIEF VALVE AT HIGHEST POINT.
3. TECHLINE NORMAL SPACING WITHIN THE TOP ⅔ OF SLOPE,
4. INSTALL TECHLINE AT NORMAL SPACING PLUS 25% AT THE BOTTOM ⅓ OF THE SLOPE.
5. WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZONE THE BOTTOM ⅓ ON A SEPARATE VALVE.

TECHLINE MAXIMUM LENGTH OF SINGLE LATERAL (FEET)

DRIPPER SPACING		12"			18"			24"	
DRIPPER FLOW RATE (GPH)		0.4	0.6	0.9	0.4	0.6	0.9	0.6	0.9
INLET PRESSURE (PSI)	15	292	233	175	410	322	247	405	308
	25	397	321	238	558	438	335	553	423
	35	486	365	279	656	514	394	649	497
	45	520	407	311	732	574	439	725	555

TECHLINE FLOW PER 100 FEET

DRIPPER SPACING	0.4 GPH DRIPPER		0.6 GPH DRIPPER		0.9 GPH DRIPPER	
DRIPPER SPACING	GPH	GPM	GPH	GPM	GPH	GPM
12"	40.00	0.67	61.00	1.02	92.00	1.53
18"	26.67	0.44	41.00	0.68	61.00	1.02
24"	N/A	N/A	31.00	0.51	46.00	0.77



1 TYPICAL NETAFIM TECHLINE REQUIREMENTS
3" = 1'-0" FX-IR-NETA-DRIP-05

GENERAL NOTES

1. THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, AS IT MAY NOT HAVE BEEN POSSIBLE TO ACCURATELY DEPICT THE EXACT LOCATIONS FOR ALL MATERIAL, OR ALL JOBSITE ELEMENTS. THE INSTALLER SHALL BE EXPECTED TO MAKE MINOR ADJUSTMENTS ON THE SITE AS NEEDED, IN ORDER TO MAINTAIN COMPLETE AND ACCURATE COVERAGE, AND MAINTAIN THE INTENT OF THE DESIGN. MODIFICATIONS WHICH INCREASE THE SPACING OF HEADS, OR DECREASE THE SIZING OF PIPE, SHALL NOT BE MADE WITHOUT PRIOR CONSENT OF THE PROJECT MANAGER. THE FINAL LOCATIONS FOR ALL MAJOR EQUIPMENT, INCLUDING CONTROLLERS, VALVES, SUPPLY CONNECTIONS, MAINLINES, ETC. SHALL BE DETERMINED IN THE FIELD, STAKED OUT BY THE CONTRACTOR, USING THE DRAWINGS AS A GUIDE, AND APPROVED PRIOR TO INSTALLATION.

2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH PREVAILING CODES AND REGULATIONS. ALTHOUGH DUE DILIGENCE HAS BEEN EXERCISED IN THE PREPARATION OF THE DOCUMENTS TO AVOID CONFLICTS, IT SHALL REMAIN THE RESPONSIBILITY OF THE INSTALLER FOR VERIFICATION AND CONFORMANCE TO THE PARTICULAR CODES FOR THIS LOCATION. THE INSTALLER SHALL OBTAIN ANY NECESSARY PERMITS, LOCATES, AND INSPECTIONS.

3. ALL WORK SHALL BE CLOSELY COORDINATED WITH THAT OF OTHER TRADES, IN ORDER TO AVOID CONFLICTS. THE INSTALLATION SHALL BE COORDINATED WITH ALL NEW AND EXISTING IMPROVEMENTS, AND WITH THE ACTUAL INSTALLED BEDLINES, SOD LIMITS, AND PLANT LOCATIONS.

4. THE INSTALLER SHALL BE FAMILIAR WITH ALL APPLICABLE DOCUMENTS, INCLUDING ANY WRITTEN SPECIFICATIONS THAT MAY HAVE BEEN ISSUED. ANY CONFLICT FOUND BETWEEN THE VARIOUS DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE PROJECT MANAGER FOR DETERMINATION.

5. ALL MATERIAL AND LABOR NECESSARY TO PROVIDE A COMPLETE, FULLY OPERATIONAL, AND GUARANTEED SYSTEM SHALL BE CONSIDERED PART OF THE WORK, WHETHER OR NOT THEY ARE SPECIFICALLY INDICATED IN THE DOCUMENTS. THIS SHALL INCLUDE CONFORMANCE TO THE REQUIREMENTS AND RECOMMENDATIONS OF THE VARIOUS MANUFACTURERS OF THE EQUIPMENT, AND TO APPLICABLE TRAINING AND CERTIFICATION OF INSTALLATION PERSONNEL.

6. UNLESS SPECIFICALLY STATED TO THE CONTRARY, PIPING AND WIRING PASSING UNDER PAVED OR OTHER IMPERVIOUS SURFACES SHALL BE INSTALLED IN SLEEVING OF ADEQUATE SIZE AND STRENGTH. SIDEWALKS AND DECKS AND TURF PAVERS SHALL REQUIRE SLEEVING, EVEN IF NOT SHOWN ON THE DRAWINGS. CONTROL WIRING MAY BE RUN WITHIN A LARGER SLEEVE WITH MAINLINE PIPING, BUT ONLY IF PROTECTED BY A SMALLER CONDUIT. WIRE MAY NOT BE TAPED TO THE MAINLINE IN LIEU OF THIS CONDUIT, AS ABRASION OF THE WIRE JACKET IS LIKELY TO OCCUR.

7. SLEEVES UNDER PARKING AND DRIVEWAYS MAY BE THE RESPONSIBILITY OF OTHER THAN THE IRRIGATION CONTRACTOR (SUCH AS THE PAVING OR SITE CIVIL CONTRACTOR). CONSULT OTHER DOCUMENTS FOR ADDITIONAL INFORMATION. ANY NEEDED SLEEVE WHICH EITHER CANNOT BE FOUND OR IS DAMAGED BEYOND PRACTICAL USE SHALL BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY, ALONG WITH RECOMMENDATIONS FOR CORRECTIVE ACTION. SLEEVES UNDER SIDEWALKS, DECKS, ETC. ARE NORMALLY INSTALLED BY THE IRRIGATION CONTRACTOR.

8. CONTROL WIRING SHALL BE ROUTED WITH THE MAINLINE WHENEVER POSSIBLE. WIRE SHALL DIRECT BURIAL PE 14-GAUGE.

9. ALL SPRINKLER HEADS SHALL BE OF THE PROPER SIZE AND TYPE FOR THE LOCATION AND PLANT MATERIAL. HEADS SHALL BE INSTALLED IN THE PRESCRIBED MANNER, PLUMB, AND WITH THE PROPER HEIGHT WITH RESPECT TO GRADE AND/OR PLANT MATERIAL. ALL HEADS AND OTHER EQUIPMENT SHALL BE INSTALLED WITH ADEQUATE AND UNIFORM CLEARANCES FROM ALL PAVING, CURBS, SIDEWALKS, WALLS, AND OTHER OBSTACLES, SO THAT DAMAGE TO EQUIPMENT DOES NOT OCCUR DURING NORMAL LANDSCAPE MAINTENANCE OPERATIONS. ALL SPRINKLERS SHALL BE ADJUSTED TO OBTAIN OPTIMAL COVERAGE OF PLANT MATERIAL, WHILE MINIMIZING OVERSPRAY ONTO WINDOWS, WALLS PAVING OR OTHER IMPERVIOUS SURFACES, PARTICULARLY WOODWORK AND/OR TRIM. THE INSTALLER SHALL UTILIZE THE PROPER SPRAY NOZZLE PATTERN FOR THE LOCATION, AS WELL AS PRESSURE-COMPENSATING HEADS OR SCREENS, AND ADJUSTABLE-PATTERN NOZZLES WHERE A FIXED PATTERN IS NOT SUITABLE TO CONTROL COVERAGE OR OVERSPRAY.

10. RISER-MOUNTED HEADS SHALL BE INSTALLED WITHIN THE FIRST ROW OF PLANT MATERIAL, SO THAT THE HEAD IS PROTECTED AND CONCEALED BY THE MATERIAL. IT MAY BE REQUIRED TO RELOCATE HEADS NOT CONFORMING TO THIS STIPULATION AFTER PLANTS ARE INSTALLED. THIS SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER. RISERS SHALL BE STAKED AS SHOWN IN THE DETAILS, AND PAINTED A DURABLE FLAT COLOR, TO BE AGREED UPON BY THE PARTIES.

11. TREE BUBBLER HEADS SHALL BE CONSIDERED TEMPORARY, AND WILL BE CAPPED OFF ONCE MATERIAL IS ESTABLISHED.

12. THE CONTROLLER SHALL REQUIRE A STANDARD 120-VAC POWER FEED, WHICH SHALL BE COORDINATED BY THE INSTALLER, AND HOOKED UP BY A LICENSED ELECTRICIAN. IT IS PREFERRED THAT A DEDICATED CIRCUIT BE PROVIDED FOR THIS CONNECTION. A 3-WIRE POWER INPUT SURGE ARRESTOR SHALL BE PROVIDED ON THE POWER FEED, AND A DEDICATED GROUND ROD/PLATE NETWORK (SEE DETAIL) SHALL BE INSTALLED, HAVING A MEASURED EARTH GROUND RESISTANCE OF NOT GREATER THAN TEN (10) OHMS.

13. THE CONTROL SYSTEM IS A RAIN BIRD SYSTEM. THE INSTALLER SHALL UTILIZE PERSONNEL WHO ARE SPECIFICALLY TRAINED AND CERTIFIED IN THE PROPER INSTALLATION OF THIS SYSTEM. THE INSTALLER SHALL ENLIST THE SERVICES OF THE FIELD SERVICE REPRESENTATIVE FOR ANY REQUIRED COORDINATION. ALL RELEVANT MATERIAL AND LABOR TO INSTALL THIS SYSTEM IN ACCORDANCE WITH RAIN BIRD GUIDELINES SHALL BE CONSIDERED PART OF THE WORK, WHETHER OR NOT SPECIFICALLY CALLED OUT IN THESE DOCUMENTS.

14. THE CONTROLLER SHALL BE EQUIPPED WITH A PROPERLY LOCATED AND INSTALLED RAIN SENSOR. THE SENSOR SHALL BE LOCATED IN SUCH A MANNER SO THAT IT IS UNOBSTRUCTED AND DIRECTLY EXPOSED TO NATURAL RAINFALL FROM ALL DIRECTIONS, BUT NOT TO RUNOFF WATER FROM ROOFS, ETC.

15. THE MINIMUM SUPPLY REQUIREMENT FOR THE SYSTEM AS DESIGNED IS:
SEE POC CRITICAL ANALYSIS

16. THE INSTALLER SHALL BE EXPECTED TO BE FAMILIAR WITH ALL REQUIREMENTS FOR THE WORK, AND TO CONDUCT HIS WORK IN A CLEAN, SAFE, AND WORKMANLIKE MANNER. THE OWNER RESERVES THE RIGHT TO ACT TO PROTECT HIS PROPERTY AND THE OTHER PERSONNEL AT WORK THERE, AND TO MAKE EMERGENCY REPAIRS OR TAKE CORRECTIVE ACTION IF THE INSTALLER DOES NOT FULFILL HIS OBLIGATIONS IN A TIMELY MANNER. THE OWNER FURTHER RESERVES THE RIGHT TO BACK-CHARGE THE INSTALLER TO COVER SUCH EXPENSES, TO THE EXTENT ALLOWED UNDER APPLICABLE LAW.

tdc DESIGN STUDIO
LANDSCAPE ARCHITECTURE
COMMUNITY PLANNING
URBAN DESIGN
1516 E. HILLCREST STREET STE. 105
ORLANDO, FL 32803 PH: 407-256-2625

PROJECT
351 MARION OAKS BLVD
MARION COUNTY, FL
Prepared For:
A&B PROPERTIES SERVICES

SEAL

CONSULTANTS

ISSUED FOR:
10/104/2025 PERMIT

PROJECT NO.	2025-05
DESIGNED BY	TFW
DRAWN BY	TFW
CHECKED BY	TDC/TFW
DATE	2/18/2025
DRAWING SCALE	AS SHOWN

DRAWING TITLE
IRRIGATION DETAILS

DRAWING NUMBER
IR-02
SHEET 2 OF 3

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the TDC Design Studio Landscape Plan dated 7/19/2021. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

The system has been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material if applicable (pump(s), backflows, pipes, valves, fittings, controllers, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain (and freeze as appropriate) shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

These plans have been designed to satisfy/exceed the Florida Irrigation Society Standards and Specifications for Turf and Landscape Irrigation Systems, fourth edition. All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

There is ONE P.O.C.('s)

#1-P.O.C. is a new 1" potable meter & RPZ Backflow (by others) with a 1" service line by others. The P.O.C. must be capable of delivering a minimum of 20.3 GPM at 60 PSI downstream of the water meter.

Contractor to verify these minimum conditions can be met prior to ordering of materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside project property's boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved using Class 200 PVC with the sleeve diameter being twice the size of the pipe it is carrying with a minimum sleeve size of 2".

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

Mainline shall be Pantone Purple Sch 40 solvent-weld (sized per plan) PVC with Sch 40 PVC solvent-weld fittings.

Contractor to ensure all mainline piping is properly restrained using mechanical joint fittings, restraining collars, threaded rods, thrust blocks, etc.., as and where required. Contractor shall refer to pipe manufacturers recommended installation practices for further direction.

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (grey, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for irrigation pumps, controllers, sensors, relaysto be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supplies for required electrical components as set forth in the irrigation plans.

All electrical work is to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for each controller/CCU shall be a dedicated 120 volt, 20 amp circuit unless otherwise specified in the plans. Power for each pump to be according to pump specifications indicated in these plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2' coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3MDBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:
#14 white for common
#14 spare black common
#14 individual color coded hot wire
#14 spare yellow hot wire

Spare wires
Leaving each controller, run six spare wires in both directions (twelve spare wires total). Install as 2 common spares (4 total) and 4 hot wires (8 total). Loop these wires into each RCV along their path and terminate in the last valve box controlled by the wires respective controller. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

Controller and Pump station Control Panel grounding - Contractor to utilize 4"X8'X5/8" copper grounding plates, 5/8"X10' copper clad grounding rods, 'One Strike' CAD wells at all connection points, #6 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways, 12" from building foundations, and 36" from uncurbed roadways.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, building foundations, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of 4" below maintained height of plants and shall be installed a minimum of 6" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black or forest green paint, unless irrigation system will utilize reuse water; in this case the risers shall be purple PVC and shall not be painted.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer - only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

Using an electric branding iron, brand the valve I.D. letter/number on the lid of each valve box. This brand must be 2"-3" tall and easily legible.

EQUIPMENT

All pop-up heads and shrub risers shall be pressure compensating. All pop-up heads shall be mounted on flex-type swing joints. All rotors shall be installed with PVC triple swing joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent Weld Pipe: Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

Gasketed Pipe: With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe, if not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell end of adjacent pipe until the bevel is fully seated into the bell. Restrain pipe as required.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.

Main line pipe depth measured to the top of pipe shall be:
24" minimum for 3/4"-2 1/2" PVC with a 30" minimum at vehicular crossings;
30" minimum for 3" & 4" PVC with a 36" minimum at vehicular crossings.
36" minimum for 6" PVC with a 36" minimum at vehicular crossings;

Lateral line depths measured to top of pipe shall be:
18" minimum for 3/4"-3" PVC with a 30" minimum at vehicular crossings;
24" minimum for 4" PVC and above with a 30" minimum at vehicular crossings.

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (bell fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

TESTING

Soil: At a minimum of 2 locations on the site, soil tests for Infiltration and texture shall be performed according to the USDA Soil Quality Test Kit Guide. The tests shall be documented in a USDA Soil Worksheet. (All of the above is available at http://soils.usda.gov/sqi/assessment/test_kit.html) The completed worksheet shall be submitted to the owners representative for review/approval. Do not proceed without written direction from the owner/owner's representative.

Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours. There can be no loss in pressure at either gauge for solvent-welded pipe. For HDPE pipe, see HDPE notes. For gasketed pipe, testing requires measurement of the water pumped into the mainline system, using a hydrostatic pump, to maintain 125 PSI - this water volume shall be no more than the result of the following formula:

L=(ND√P)/7400

where L=Allowable leakage in gallons per hour
N=Number of joints in pipe tested
D=Nominal diameter of pipe (in inches)
P=Average Test Pressure (in PSI)

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral Lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing -Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

Pre-Construction: The contractor must submit for written approval, prior to installation, five (5) copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system.

After project completion:
As a condition of final acceptance, the irrigation contractor shall provide the owner with:
1. Irrigations As-builts - shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, high voltage supply sources/conduit path, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the owner on a compact disk (CD).

2. Controller charts - Upon completion of "as-built" prepare controller charts; one per controller. Indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2ml pieces of clear plastic.

3. Grounding Certification - Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED - Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting - Designer and contractor to review entire install process and schedule with owner/general contractor.
2. Mainline installation inspection(s) - all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill. and installation method
3. Mainline pressure test - All mainline shall be pressure tested according to this designs requirements
4. Flow Meter calibration - All flow meters must be calibrated, provide certified calibration report for all flow meters.
5. USDA Soil Quality Tests for infiltration/texture
6. Coverage and operational test
7. Final inspection
8. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of `as-built' drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. All other submittals have be made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED
IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:

A. Turn on each zone from the controller to verify automatic operation.
B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
C. Check remote control valve to ensure proper operation.
D. Check setting on pressure regulator to verify proper setting, if present.
E. Check flow control and adjust as needed; ensure valve closure within 10-15 seconds after deactivation by controller.
F. Check for leaks - mainline, lateral lines, valves, heads, etc.
G. Check all heads as follows:

1. Proper set height (top of sprinkler is 1" below mow height)
2. Verify head pop-up height - 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
3. Check wiper seal for leaks - if leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
4. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. - replace as needed
5. Check for proper alignment - perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
6. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
7. verify the pop-up riser retracts after operation. If not, repair/replace as needed.

2. Check controller/C.C.U. grounds for resistance (10 ohms or less) once per year. Submit written reports.

3. Check rain shut-off device monthly to ensure it functions properly.

4. Inspect all filters monthly and clean/repair/replace as needed.

5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.

6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.

7. Check pump stations for proper operation, pressures, filtration, settings, etc. - refer to pump station operations manual.

8. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.

9. Winterize, if applicable, as weather in your area dictates. Follow manufacturer recommendations and blow out all lines and equipment using compressed air. Perform seasonal startup of system as per manufacturer recommendations.

10. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

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LANDSCAPE ARCHITECTURE
COMMUNITY PLANNING
URBAN DESIGN
1516 E. HILLCREST STREET STE. 105
ORLANDO, FL 32803 PH: 407-254-2625

PROJECT
351 MARION OAKS BLVD
MARION COUNTY, FL
Prepared For:
A&B PROPERTIES SERVICES

SEAL

CONSULTANTS

ISSUED FOR:
10/13/2025 PERMIT

PROJECT NO.	2025-05
DESIGNED BY	TFW
DRAWN BY	TFW
CHECKED BY	TDC/TFW
DATE	2/18/2025
DRAWING SCALE	AS SHOWN

DRAWING TITLE
IRRIGATION NOTES

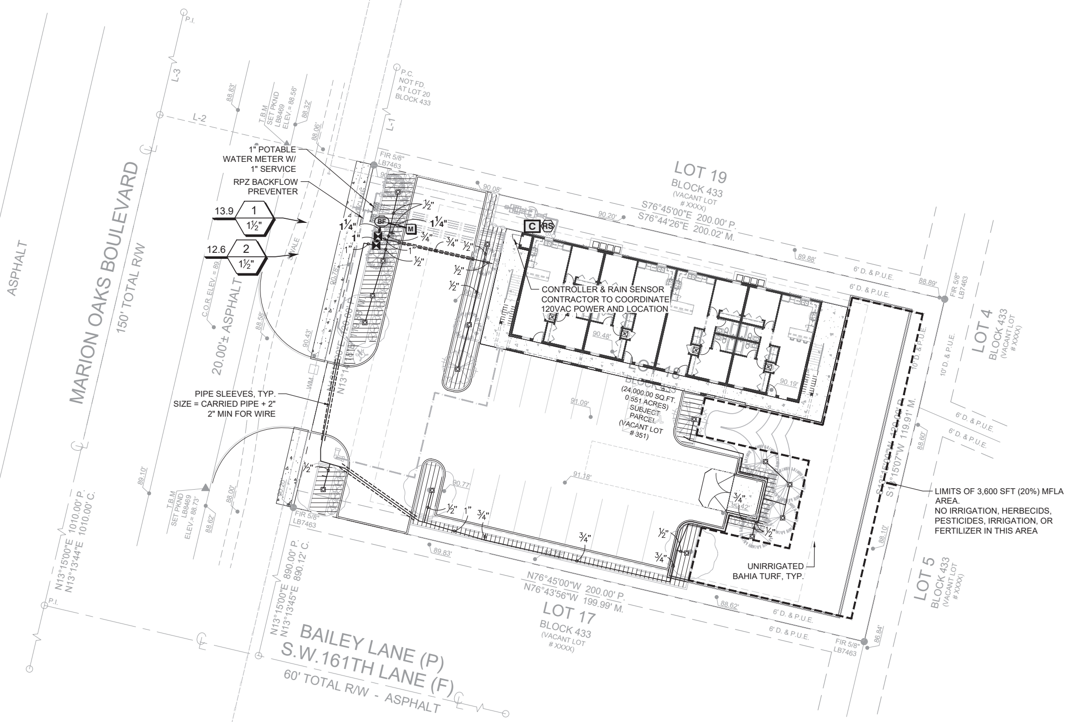
DRAWING NUMBER
IR-03

SHEET 3 OF 3

MAINLINE AND LATERAL LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING FDEP GUIDELINES AND TO IRRIGATION SPECIFICATIONS AND DETAILS.

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG

It's fast, it's free, it's the law.



LANDSCAPE AREA CALCULATIONS:

TOTAL SITE AREA: 24,000 +/- SQ. FT.
TOTAL UPLAND LANDSCAPED AREA: 16,345 +/- SQ. FT.
IRRIGATED PLANTING AREAS: 1,257 +/- SQ. FT
UNIRRIGATED/ BAHIA TURF AREA: 15,088 +/- SQ. FT.

15% MFLA REQUIRED= 24,000 X 15% = 3,600 SQ. FT

IRRIGATED AREAS:

TOTAL IRRIGATED AREA: 1,275 +/- SQ. FT.
HIGH FLOW/ SPRAY AREA: 0 +/- SQ. FT.
LOW FLOW/ DRIP AREA: 1,275 +/- SQ. FT. (100%)

NOTE: IRRIGATION SHALL BE IN ACCORDANCE WITH MARION COUNTY CODE. THE SYSTEM IS PROPOSED AS PERMANENT.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	GPM	RADIUS
◘	Rain Bird 1800-1400 Flood 1402	15	360	30	0.5	3'
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.	2				
(hatched area)	Area to Receive Dripline Netafim TLCV-09-12 Techline Pressure Compensating Landscape Dripline with Check Valve. 0.9 GPH emitters at 12" O.C. Dripline laterals spaced at 18" apart, with emitters offset for triangular pattern. 17mm.	1,266 lf				
SYMBOL	**MANUFACTURER/MODEL/DESCRIPTION**	**QTY**				
BF	Febco 825Y 1-1/4" Reduced Pressure Backflow Preventer	1				
M	Water Meter 1"	1				
———	Irrigation Lateral Line: PVC Class 200 SDR 21	514.1 lf				
— — —	Irrigation Mainline: PVC Schedule 40	18.6 lf				
======	Pipe Sleeve: PVC Schedule 40	85.4 lf				

Valve Callout
Valve Number
Valve Flow
Valve Size

VALVE SCHEDULE (ALL ZONES SHALL RUN INDIVIDUALLY)

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP
1	Rain Bird XCZ-150-LCDR	1-1/2"	Bubbler	13.87	58.4	37.0	47.2	0.96 in/h
2	Rain Bird XCZ-150-LCDR	1-1/2"	Bubbler	12.63	61.6	41.3	51.5	0.96 in/h
	Common Wire				18.6			

Sec. 6.9.6. - Completion inspection requirements.

A. Irrigation installation professionals shall be accountable for the proper installation and compliance with the conditions of the irrigation permit and approved plans.

B. Upon completion of the installation, the contractor or owner shall request an inspection by the irrigation design professional. Prior to the inspection, the irrigation installation professional shall produce a clear and legible as-built diagram which accurately represents the irrigation system was installed. The diagram shall be presented and reviewed during the final inspection. The diagram may be a marked-up copy of the approved irrigation plan and shall include at a minimum:
  (1) Locations of all mainlines and mainline valves;
  (2) Locations of all remote control valves;
  (3) Water demand per zone in GPM, and
  (4) Total water demand per operating cycle.

C. The irrigation installation professional shall also provide to the owner:
  (1) Irrigation system scheduling information;
  (2) A copy of the irrigation controller owner's manual;
  (3) Irrigation system maintenance schedule, which includes:
    (a) Instructions for seasonal adjustments of controller and sensors.
    (b) Instructions covering how and when to check for leaks.
    (c) A schedule for checking for proper irrigation distribution coverage.

D. Within 60 days after installation the irrigation controller shall be adjusted to be set in accordance with the applicable irrigation schedule set forth in this Code.

E. Upon completion of the irrigation system installation and the acceptance of the as-built diagram and operational information, a Final Inspection and Landscape/Irrigation Release shall be signed and sealed by the irrigation design professional and submitted to the County's Landscape Architect.

CRITICAL ANALYSIS

Generated:	2025-10-15 11:05
P.O.C. NUMBER: 01	
Water Source Information:	
FLOW AVAILABLE	
Water Meter Size:	1"
Flow Available	20.27 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	60 PSI
Elevation Change:	5.00 ft
Service Line Size:	1"
Length of Service Line:	20 ft
Pressure Available:	56 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	13.87 GPM
Flow Available at POC:	20.27 GPM
Residual Flow Available:	6.41 GPM
Critical Station:	2
Design Pressure:	30 PSI
Friction Loss:	4.78 PSI
Fittings Loss:	0.48 PSI
Elevation Loss:	0 PSI
Loss through Valve:	6 PSI
Pressure Req. at Critical Station:	41.3 PSI
Loss for Fittings:	0.03 PSI
Loss for Main Line:	0.29 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	8.98 PSI
Loss for Water Meter:	0.96 PSI
Critical Station Pressure at POC:	51.5 PSI
Pressure Available:	56 PSI
Residual Pressure Available:	4.49 PSI

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PROJECT
351 MARION OAKS BLVD
MARION COUNTY, FL
Prepared For:
A&B PROPERTIES SERVICES

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

CONSULTANTS

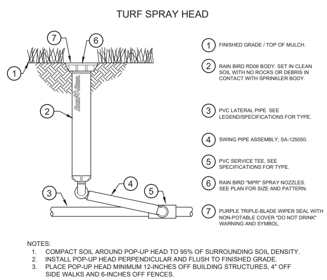
ISSUED FOR:
10/104/2025 PERMIT

PROJECT NO.	2025-05
DESIGNED BY	TFW
DRAWN BY	TFW
CHECKED BY	TDC/TFW
DATE	2/18/2025
DRAWING SCALE	1"=20'

0 FT 10 20 North

DRAWING TITLE
IRRIGATION PLAN

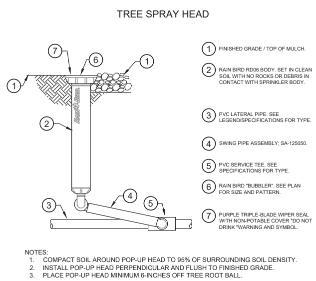
DRAWING NUMBER
IR-01
SHEET 1 OF 3



NOTES:
1. COMPACT SOIL AROUND POP-UP HEAD TO 95% OF SURROUNDING SOIL DENSITY.
2. INSTALL POP-UP HEAD PERPENDICULAR AND FLUSH TO FINISHED GRADE.
3. PLACE POP-UP HEAD MINIMUM 12-INCHES OFF BUILDING STRUCTURES, 4" OFF SIDE WALKS AND 6-INCHES OFF FENCES.

(A) Rain Bird RD1800 Series-RD06-S-P-45-NP-NSI

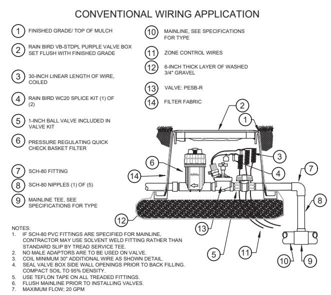
NTS Pop-Up Sprinkler W/ SA-125050 and MPR NOZZLES



NOTES:
1. COMPACT SOIL AROUND POP-UP HEAD TO 95% OF SURROUNDING SOIL DENSITY.
2. INSTALL POP-UP HEAD PERPENDICULAR AND FLUSH TO FINISHED GRADE.
3. PLACE POP-UP HEAD MINIMUM 6-INCHES OFF TREE ROOT BALL.

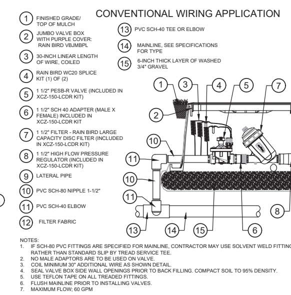
(B) Rain Bird RD1800 Series-RD06-S-P-45-NP-NSI

NTS Pop-Up Sprinkler W/ SA-125050 and Bubbler



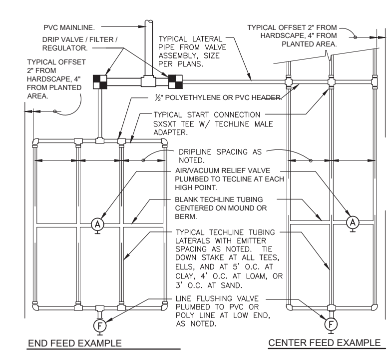
(D) RAIN BIRD XCZ-100-PRBR-COM

NTS



(G) RAIN BIRD XCZ-150-LCDR

NTS



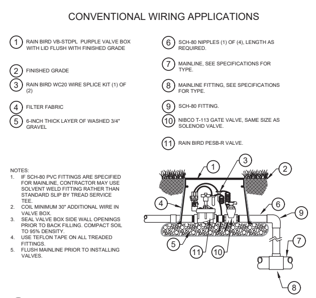
SLOPED CONDITION NOTES:
1. DRIPLINE LATERALS SHOULD FOLLOW THE CONTOURS OF THE SLOPE WHENEVER POSSIBLE.
2. INSTALL AIR RELIEF VALVE AT HIGHEST POINT.
3. TECHLINE NORMAL SPACING WITHIN THE TOP ⅔ OF SLOPE,
4. INSTALL TECHLINE AT NORMAL SPACING PLUS 25% AT THE BOTTOM ⅓ OF THE SLOPE.
5. WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZONE THE BOTTOM ⅓ ON A SEPARATE VALVE.

TECHLINE MAXIMUM LENGTH OF SINGLE LATERAL (FEET)

DRIPPER SPACING		12"			18"			24"	
DRIPPER FLOW RATE (GPH)		0.4	0.6	0.9	0.4	0.6	0.9	0.6	0.9
INLET PRESSURE (PSI)	15	292	233	175	410	322	247	405	308
	25	397	321	238	558	438	335	553	423
	35	486	365	279	656	514	394	649	497
	45	520	407	311	732	574	439	725	555

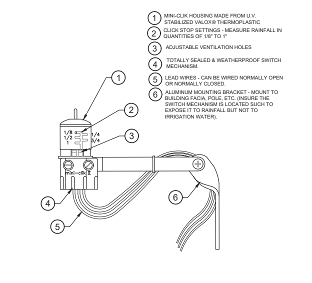
TECHLINE FLOW PER 100 FEET

DRIPPER SPACING	0.4 GPH DRIPPER		0.6 GPH DRIPPER		0.9 GPH DRIPPER	
DRIPPER SPACING	GPH	GPM	GPH	GPM	GPH	GPM
12"	40.00	0.67	61.00	1.02	92.00	1.53
18"	26.67	0.44	41.00	0.68	61.00	1.02
24"	N/A	N/A	31.00	0.51	46.00	0.77



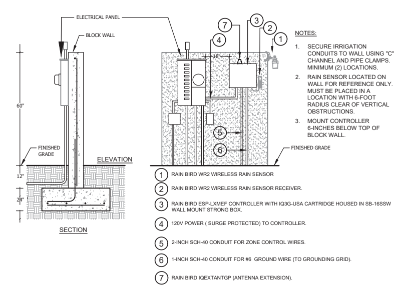
(H) RAIN BIRD 100/150/200-PESB PRS-D

NTS WITH GATE VALVE



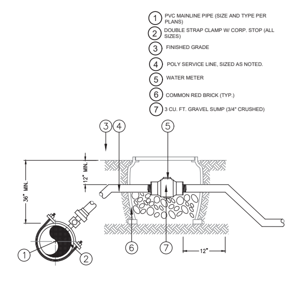
(L) MINI-CLIK II RAIN SENSOR

NTS



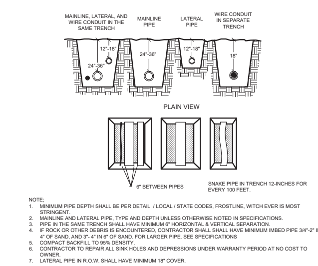
(I) RAIN BIRD ESP-LXMEF WALL MOUNT CONTROLLER

NTS IN HEAVY DUTY SB-16SSW STRONG BOX



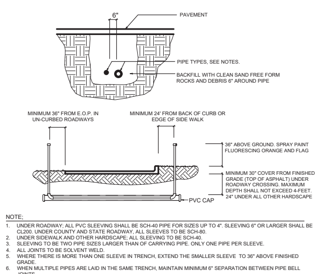
(L) METER CONNECTION

NTS



(M) PIPE TRENCH DETAIL

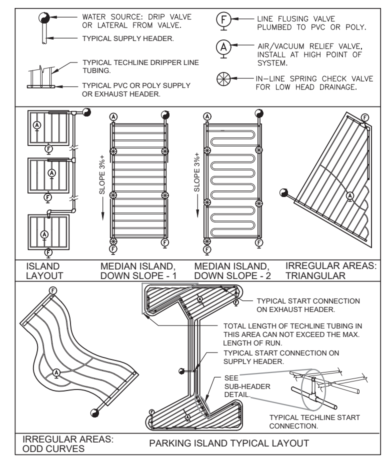
NTS



7. MECHANICALLY TAMP TO 95% PROCTOR.

(N) ROADWAY / HARDSCAPE SLEEVING

NTS



(1) TYPICAL NETAFIM TECHLINE REQUIREMENTS

3" = 1'-0" FX-IR-NETA-DRIP-05

GENERAL NOTES

1. THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, AS IT MAY NOT HAVE BEEN POSSIBLE TO ACCURATELY DEPICT THE EXACT LOCATIONS FOR ALL MATERIAL, OR ALL JOBSITE ELEMENTS. THE INSTALLER SHALL BE EXPECTED TO MAKE MINOR ADJUSTMENTS ON THE SITE AS NEEDED, IN ORDER TO MAINTAIN COMPLETE AND ACCURATE COVERAGE, AND MAINTAIN THE INTENT OF THE DESIGN. MODIFICATIONS WHICH INCREASE THE SPACING OF HEADS, OR DECREASE THE SIZING OF PIPE, SHALL NOT BE MADE WITHOUT PRIOR CONSENT OF THE PROJECT MANAGER. THE FINAL LOCATIONS FOR ALL MAJOR EQUIPMENT, INCLUDING CONTROLLERS, VALVES, SUPPLY CONNECTIONS, MAINLINES, ETC. SHALL BE DETERMINED IN THE FIELD, STAKED OUT BY THE CONTRACTOR, USING THE DRAWINGS AS A GUIDE, AND APPROVED PRIOR TO INSTALLATION.

2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH PREVAILING CODES AND REGULATIONS. ALTHOUGH DUE DILIGENCE HAS BEEN EXERCISED IN THE PREPARATION OF THE DOCUMENTS TO AVOID CONFLICTS, IT SHALL REMAIN THE RESPONSIBILITY OF THE INSTALLER FOR VERIFICATION AND CONFORMANCE TO THE PARTICULAR CODES FOR THIS LOCATION. THE INSTALLER SHALL OBTAIN ANY NECESSARY PERMITS, LOCATES, AND INSPECTIONS.

3. ALL WORK SHALL BE CLOSELY COORDINATED WITH THAT OF OTHER TRADES, IN ORDER TO AVOID CONFLICTS. THE INSTALLATION SHALL BE COORDINATED WITH ALL NEW AND EXISTING IMPROVEMENTS, AND WITH THE ACTUAL INSTALLED BEDLINES, SOD LIMITS, AND PLANT LOCATIONS.

4. THE INSTALLER SHALL BE FAMILIAR WITH ALL APPLICABLE DOCUMENTS, INCLUDING ANY WRITTEN SPECIFICATIONS THAT MAY HAVE BEEN ISSUED. ANY CONFLICT FOUND BETWEEN THE VARIOUS DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE PROJECT MANAGER FOR DETERMINATION.

5. ALL MATERIAL AND LABOR NECESSARY TO PROVIDE A COMPLETE, FULLY OPERATIONAL, AND GUARANTEED SYSTEM SHALL BE CONSIDERED PART OF THE WORK, WHETHER OR NOT THEY ARE SPECIFICALLY INDICATED IN THE DOCUMENTS. THIS SHALL INCLUDE CONFORMANCE TO THE REQUIREMENTS AND RECOMMENDATIONS OF THE VARIOUS MANUFACTURERS OF THE EQUIPMENT, AND TO APPLICABLE TRAINING AND CERTIFICATION OF INSTALLATION PERSONNEL.

6. UNLESS SPECIFICALLY STATED TO THE CONTRARY, PIPING AND WIRING PASSING UNDER PAVED OR OTHER IMPERVIOUS SURFACES SHALL BE INSTALLED IN SLEEVING OF ADEQUATE SIZE AND STRENGTH. SIDEWALKS AND DECKS AND TURF PAVERS SHALL REQUIRE SLEEVING, EVEN IF NOT SHOWN ON THE DRAWINGS. CONTROL WIRING MAY BE RUN WITHIN A LARGER SLEEVE WITH MAINLINE PIPING, BUT ONLY IF PROTECTED BY A SMALLER CONDUIT. WIRE MAY NOT BE TAPED TO THE MAINLINE IN LIEU OF THIS CONDUIT, AS ABRASION OF THE WIRE JACKET IS LIKELY TO OCCUR.

7. SLEEVES UNDER PARKING AND DRIVEWAYS MAY BE THE RESPONSIBILITY OF OTHER THAN THE IRRIGATION CONTRACTOR (SUCH AS THE PAVING OR SITE CIVIL CONTRACTOR). CONSULT OTHER DOCUMENTS FOR ADDITIONAL INFORMATION. ANY NEEDED SLEEVE WHICH EITHER CANNOT BE FOUND OR IS DAMAGED BEYOND PRACTICAL USE SHALL BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY, ALONG WITH RECOMMENDATIONS FOR CORRECTIVE ACTION. SLEEVES UNDER SIDEWALKS, DECKS, ETC. ARE NORMALLY INSTALLED BY THE IRRIGATION CONTRACTOR.

8. CONTROL WIRING SHALL BE ROUTED WITH THE MAINLINE WHENEVER POSSIBLE. WIRE SHALL DIRECT BURIAL PE 14-GAUGE.

9. ALL SPRINKLER HEADS SHALL BE OF THE PROPER SIZE AND TYPE FOR THE LOCATION AND PLANT MATERIAL. HEADS SHALL BE INSTALLED IN THE PRESCRIBED MANNER, PLUMB, AND WITH THE PROPER HEIGHT WITH RESPECT TO GRADE AND/OR PLANT MATERIAL. ALL HEADS AND OTHER EQUIPMENT SHALL BE INSTALLED WITH ADEQUATE AND UNIFORM CLEARANCES FROM ALL PAVING, CURBS, SIDEWALKS, WALLS, AND OTHER OBSTACLES, SO THAT DAMAGE TO EQUIPMENT DOES NOT OCCUR DURING NORMAL LANDSCAPE MAINTENANCE OPERATIONS. ALL SPRINKLERS SHALL BE ADJUSTED TO OBTAIN OPTIMAL COVERAGE OF PLANT MATERIAL, WHILE MINIMIZING OVERSPRAY ONTO WINDOWS, WALLS PAVING OR OTHER IMPERVIOUS SURFACES, PARTICULARLY WOODWORK AND/OR TRIM. THE INSTALLER SHALL UTILIZE THE PROPER SPRAY NOZZLE PATTERN FOR THE LOCATION, AS WELL AS PRESSURE-COMPENSATING HEADS OR SCREENS, AND ADJUSTABLE-PATTERN NOZZLES WHERE A FIXED PATTERN IS NOT SUITABLE TO CONTROL COVERAGE OR OVERSPRAY.

10. RISER-MOUNTED HEADS SHALL BE INSTALLED WITHIN THE FIRST ROW OF PLANT MATERIAL, SO THAT THE HEAD IS PROTECTED AND CONCEALED BY THE MATERIAL. IT MAY BE REQUIRED TO RELOCATE HEADS NOT CONFORMING TO THIS STIPULATION AFTER PLANTS ARE INSTALLED. THIS SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER. RISERS SHALL BE STAKED AS SHOWN IN THE DETAILS, AND PAINTED A DURABLE FLAT COLOR, TO BE AGREED UPON BY THE PARTIES.

11. TREE BUBBLER HEADS SHALL BE CONSIDERED TEMPORARY, AND WILL BE CAPPED OFF ONCE MATERIAL IS ESTABLISHED.

12. THE CONTROLLER SHALL REQUIRE A STANDARD 120-VAC POWER FEED, WHICH SHALL BE COORDINATED BY THE INSTALLER, AND HOOKED UP BY A LICENSED ELECTRICIAN. IT IS PREFERRED THAT A DEDICATED CIRCUIT BE PROVIDED FOR THIS CONNECTION. A 3-WIRE POWER INPUT SURGE ARRESTOR SHALL BE PROVIDED ON THE POWER FEED, AND A DEDICATED GROUND ROD/PLATE NETWORK (SEE DETAIL) SHALL BE INSTALLED, HAVING A MEASURED EARTH GROUND RESISTANCE OF NOT GREATER THAN TEN (10) OHMS.

13. THE CONTROL SYSTEM IS A RAIN BIRD SYSTEM. THE INSTALLER SHALL UTILIZE PERSONNEL WHO ARE SPECIFICALLY TRAINED AND CERTIFIED IN THE PROPER INSTALLATION OF THIS SYSTEM. THE INSTALLER SHALL ENLIST THE SERVICES OF THE FIELD SERVICE REPRESENTATIVE FOR ANY REQUIRED COORDINATION. ALL RELEVANT MATERIAL AND LABOR TO INSTALL THIS SYSTEM IN ACCORDANCE WITH RAIN BIRD GUIDELINES SHALL BE CONSIDERED PART OF THE WORK, WHETHER OR NOT SPECIFICALLY CALLED OUT IN THESE DOCUMENTS.

14. THE CONTROLLER SHALL BE EQUIPPED WITH A PROPERLY LOCATED AND INSTALLED RAIN SENSOR. THE SENSOR SHALL BE LOCATED IN SUCH A MANNER SO THAT IT IS UNOBSTRUCTED AND DIRECTLY EXPOSED TO NATURAL RAINFALL FROM ALL DIRECTIONS, BUT NOT TO RUNOFF WATER FROM ROOFS, ETC.

15. THE MINIMUM SUPPLY REQUIREMENT FOR THE SYSTEM AS DESIGNED IS:
SEE POC CRITICAL ANALYSIS

16. THE INSTALLER SHALL BE EXPECTED TO BE FAMILIAR WITH ALL REQUIREMENTS FOR THE WORK, AND TO CONDUCT HIS WORK IN A CLEAN, SAFE, AND WORKMANLIKE MANNER. THE OWNER RESERVES THE RIGHT TO ACT TO PROTECT HIS PROPERTY AND THE OTHER PERSONNEL AT WORK THERE, AND TO MAKE EMERGENCY REPAIRS OR TAKE CORRECTIVE ACTION IF THE INSTALLER DOES NOT FULFILL HIS OBLIGATIONS IN A TIMELY MANNER. THE OWNER FURTHER RESERVES THE RIGHT TO BACK-CHARGE THE INSTALLER TO COVER SUCH EXPENSES, TO THE EXTENT ALLOWED UNDER APPLICABLE LAW.

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PROJECT
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MARION COUNTY, FL
Prepared For:
A&B PROPERTIES SERVICES

SEAL

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CONSULTANTS

ISSUED FOR:
10/104/2025 PERMIT

PROJECT NO.	2025-05
DESIGNED BY	TFW
DRAWN BY	TFW
CHECKED BY	TDC/TFW
DATE	2/18/2025
DRAWING SCALE	AS SHOWN

DRAWING TITLE
IRRIGATION DETAILS

DRAWING NUMBER
IR-02

SHEET 2 OF 3

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the TDC Design Studio Landscape Plan dated 7/19/2021. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

The system has been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material if applicable (pump(s), backflows, pipes, valves, fittings, controllers, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain (and freeze as appropriate) shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

These plans have been designed to satisfy/exceed the Florida Irrigation Society Standards and Specifications for Turf and Landscape Irrigation Systems, fourth edition. All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

There is ONE P.O.C.('s)

#1-P.O.C. is a new 1" potable meter & RPZ Backflow (by others) with a 1" service line by others. The P.O.C. must be capable of delivering a minimum of 20.3 GPM at 60 PSI downstream of the water meter.

Contractor to verify these minimum conditions can be met prior to ordering of materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside project property's boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved using Class 200 PVC with the sleeve diameter being twice the size of the pipe it is carrying with a minimum sleeve size of 2".

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

Mainline shall be Pantone Purple Sch 40 solvent-weld (sized per plan) PVC with Sch 40 PVC solvent-weld fittings.

Contractor to ensure all mainline piping is properly restrained using mechanical joint fittings, restraining collars, threaded rods, thrust blocks, etc.., as and where required. Contractor shall refer to pipe manufacturers recommended installation practices for further direction.

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (grey, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for irrigation pumps, controllers, sensors, relaysto be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supplies for required electrical components as set forth in the irrigation plans.

All electrical work is to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for each controller/CCU shall be a dedicated 120 volt, 20 amp circuit unless otherwise specified in the plans. Power for each pump to be according to pump specifications indicated in these plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2' coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3MDBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:
#14 white for common
#14 spare black common
#14 individual color coded hot wire
#14 spare yellow hot wire

Spare wires
Leaving each controller, run six spare wires in both directions (twelve spare wires total). Install as 2 common spares (4 total) and 4 hot wires (8 total). Loop these wires into each RCV along their path and terminate in the last valve box controlled by the wires respective controller. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

Controller and Pump station Control Panel grounding - Contractor to utilize 4"X8'X5/8" copper grounding plates, 5/8"X10' copper clad grounding rods, 'One Strike' CAD wells at all connection points, #6 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways, 12" from building foundations, and 36" from uncurbed roadways.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, building foundations, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of 4" below maintained height of plants and shall be installed a minimum of 6" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black or forest green paint, unless irrigation system will utilize reuse water; in this case the risers shall be purple PVC and shall not be painted.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer - only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

Using an electric branding iron, brand the valve I.D. letter/number on the lid of each valve box. This brand must be 2"-3" tall and easily legible.

EQUIPMENT

All pop-up heads and shrub risers shall be pressure compensating. All pop-up heads shall be mounted on flex-type swing joints. All rotors shall be installed with PVC triple swing joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent Weld Pipe: Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

Gasketed Pipe: With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe, if not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell end of adjacent pipe until the bevel is fully seated into the bell. Restrain pipe as required.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.

Main line pipe depth measured to the top of pipe shall be:
24" minimum for 3/4"-2 1/2" PVC with a 30" minimum at vehicular crossings;
30" minimum for 3" & 4" PVC with a 36" minimum at vehicular crossings.
36" minimum for 6" PVC with a 36" minimum at vehicular crossings;

Lateral line depths measured to top of pipe shall be:
18" minimum for 3/4"-3" PVC with a 30" minimum at vehicular crossings;
24" minimum for 4" PVC and above with a 30" minimum at vehicular crossings.

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (bell fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

TESTING

Soil: At a minimum of 2 locations on the site, soil tests for Infiltration and texture shall be performed according to the USDA Soil Quality Test Kit Guide. The tests shall be documented in a USDA Soil Worksheet. (All of the above is available at http://soils.usda.gov/sqi/assessment/test_kit.html) The completed worksheet shall be submitted to the owners representative for review/approval. Do not proceed without written direction from the owner/owner's representative.

Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours. There can be no loss in pressure at either gauge for solvent-welded pipe. For HDPE pipe, see HDPE notes. For gasketed pipe, testing requires measurement of the water pumped into the mainline system, using a hydrostatic pump, to maintain 125 PSI - this water volume shall be no more than the result of the following formula:

L=(ND·\sqrt{P})/7400

where L=Allowable leakage in gallons per hour
N=Number of joints in pipe tested
D=Nominal diameter of pipe (in inches)
P=Average Test Pressure (in PSI)

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral Lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing -Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

Pre-Construction: The contractor must submit for written approval, prior to installation, five (5) copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system.

After project completion:
As a condition of final acceptance, the irrigation contractor shall provide the owner with:
1. Irrigations As-builts - shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, high voltage supply sources/conduit path, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the owner on a compact disk (CD).

2. Controller charts - Upon completion of "as-built" prepare controller charts; one per controller. Indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2ml pieces of clear plastic.

3. Grounding Certification - Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED - Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting - Designer and contractor to review entire install process and schedule with owner/general contractor.
2. Mainline installation inspection(s) - all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill. and installation method
3. Mainline pressure test - All mainline shall be pressure tested according to this designs requirements
4. Flow Meter calibration - All flow meters must be calibrated, provide certified calibration report for all flow meters.
5. USDA Soil Quality Tests for infiltration/texture
6. Coverage and operational test
7. Final inspection
8. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of `as-built' drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. All other submittals have be made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED
IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:

A. Turn on each zone from the controller to verify automatic operation.
B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
C. Check remote control valve to ensure proper operation.
D. Check setting on pressure regulator to verify proper setting, if present.
E. Check flow control and adjust as needed; ensure valve closure within 10-15 seconds after deactivation by controller.
F. Check for leaks - mainline, lateral lines, valves, heads, etc.
G. Check all heads as follows:

1. Proper set height (top of sprinkler is 1" below mow height)
2. Verify head pop-up height - 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
3. Check wiper seal for leaks - if leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
4. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. - replace as needed
5. Check for proper alignment - perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
6. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
7. verify the pop-up riser retracts after operation. If not, repair/replace as needed.

2. Check controller/C.C.U. grounds for resistance (10 ohms or less) once per year. Submit written reports.

3. Check rain shut-off device monthly to ensure it functions properly.

4. Inspect all filters monthly and clean/repair/replace as needed.

5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.

6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.

7. Check pump stations for proper operation, pressures, filtration, settings, etc. - refer to pump station operations manual.

8. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.

9. Winterize, if applicable, as weather in your area dictates. Follow manufacturer recommendations and blow out all lines and equipment using compressed air. Perform seasonal startup of system as per manufacturer recommendations.

10. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

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Prepared For:
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SEAL
REGISTERED LANDSCAPE ARCHITECT TODD S. SUMMERS FLORIDA
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CONSULTANTS

ISSUED FOR:
10/13/2025 PERMIT

PROJECT NO.	2025-05
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DATE	2/18/2025
DRAWING SCALE	AS SHOWN

DRAWING TITLE
IRRIGATION NOTES

DRAWING NUMBER
IR-03

SHEET 3 OF 3

GENERAL NOTES

1. SEE CIVIL ENGINEERING DRAWINGS FOR GENERAL GRADING OF THE SITE, INCLUDING FINISH GRADES FOR PARKING LOTS, ROADWAYS, SIDEWALKS, AND PLANTING AREAS.
2. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PROJECT SITE PRIOR TO BIDDING THE WORK. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND LOCATION OF PROPOSED IMPROVEMENTS PRIOR TO INITIATING ANY CONSTRUCTION.
3. LOCATION OF ALL UTILITIES AND BASE INFORMATION IS APPROXIMATE. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES AND OBSTRUCTIONS PRIOR TO INITIATING WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY DAMAGE TO EXISTING ELEMENTS ABOVE OR BELOW GROUND TO ITS ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
4. THE OWNER'S REPRESENTATIVE SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATIONS, TO REJECT ANY AND ALL WORK AND MATERIAL WHICH, IN HIS OPINION, DO NOT MEET WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
5. ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON-SITE BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB SITE PRIOR TO START OF CONSTRUCTION AND/OR FABRICATION. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS.
7. REPORT ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE OWNER'S REPRESENTATIVE.
8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION OPERATIONS TO PROTECT THE PUBLIC ACCORDING TO ALL APPLICABLE CODES AND RECOGNIZED LOCAL PRACTICES.
9. THE CONTRACTOR SHALL COORDINATE ACCESS AND STAGING AREAS WITH THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION. PROVIDE ADDITIONAL MEASURES AS NECESSARY TO MINIMIZE ADVERSE IMPACTS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
10. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER'S REPRESENTATIVE. DURING THE COURSE OF THIS WORK, EXCESS WASTE MATERIAL SHALL BE REMOVED DAILY FROM THE SITE.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATION OF WORK WITH OTHER TRADES AND THE OWNER'S REPRESENTATIVE.
12. "FLORIDA LAW (F.S. 556) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT MANDATES THAT EXCAVATOR/CONTRACTORS SHALL CONTACT SUNSHINE 811 (fka: SUNSHINE STATE ONE-CALL OF FLORIDA) BY CALLING 800-432-4770 OR 811 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO THE BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW MEMBER OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE POSITIVE RESPONSE SYSTEM.
13. ALL EXISTING SITE ROADS, PARKING LOTS, CURBS, UTILITIES, SEWERS, AND OTHER ELEMENTS TO REMAIN SHALL BE FULLY PROTECTED FROM ANY DAMAGE UNLESS OTHERWISE NOTED.
14. CONTRACTOR IS RESPONSIBLE TO INCLUDE ALL NECESSARY ITEMS TO FULLY COMPLETE AN ASSEMBLY, SYSTEM, OR ITEM OF WORK AS SHOWN IN THE DRAWINGS. ANY ITEMS NOT IDENTIFIED OR SPECIFIED IN THESE DRAWINGS, BUT REQUIRED TO COMPLETE THE WORK SHALL BE PROVIDED BY THE CONTRACTOR.
15. CONTRACTOR IS RESPONSIBLE FOR PLACING ALL ITEMS OF WORK IN THE CORRECT LOCATIONS PER THE DRAWINGS. THIS MAY INCLUDE SURVEYING THE PROJECT SITE. DIGITAL DRAWING INFORMATION AND/ OR NORTHING AND EASTING COORDINATES FOR USE BY THE CONTRACTOR CAN BE PROVIDED BY THE LANDSCAPE ARCHITECT UPON REQUEST.
THE LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR INACCURACIES IN THE BASE INFORMATION AND PROJECT COORDINATES PROVIDED BY THE CIVIL ENGINEER OR PROPERTY SURVEYOR THAT IS INCORPORATED BY REFERENCE IN THESE DRAWINGS.

LANDSCAPE NOTES

1. THE CONTRACTOR SHALL REVIEW ARCHITECTURE/ENGINEERING PLANS TO BECOME THOROUGHLY FAMILIAR WITH SURFACE AND SUBSURFACE UTILITIES.
2. THE PLANT QUANTITIES SHOWN ON THE LANDSCAPE CONTRACT DOCUMENTS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND REPORTING ANY DISCREPANCIES IN WRITING TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION WITHIN TWO WEEKS OF CONTRACT AWARD AND PRIOR TO THE COMMENCEMENT OF WORK. ALL REQUESTS FOR SUBSTITUTION DUE TO LACK OF AVAILABILITY MUST BE MADE TO THE OWNER'S REPRESENTATIVE IN WRITING WITHIN THIS PERIOD. NO SUBSTITUTION SHALL BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE. THE CONTRACTOR IS RESPONSIBLE FOR EXHAUSTING ALL MEANS POSSIBLE TO OBTAIN THE MATERIALS AS SPECIFIED PRIOR TO REQUESTING SUBSTITUTION. IN ORDER TO BE CONSIDERED BY THE OWNER'S REPRESENTATIVE AS VIABLE ALTERNATES PLANTS MUST SHARE THE SAME GENERAL APPEARANCE/ FORM, INSTALLATION SIZE, MATURE SIZE, COLOR, QUALITY AND GROWTH HABIT. MATERIALS MUST BE OFFERED AT NO ADDITIONAL COSTS TO THE OWNER.
3. ALL INSTALLATION OF PLANT MATERIAL SHALL COMPLY WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THIS WORK. CONTRACTOR SHALL ENSURE A MAINTAINED CLEARANCE OF ALL UTILITIES & FIRE HYDRANTS IN ACCORDANCE WITH THE FLORIDA FIRE PREVENTION CODE 18.5.7.1. CONTRACTOR SHALL ENSURE SIGHT TRIANGLE VISIBILITY IN ALL APPLICABLE ROADWAYS PER FDOT STANDARDS.
4. PRIOR TO PLANTING INSTALLATION, THE CONTRACTOR SHALL CONFIRM THE AVAILABILITY OF ALL THE SPECIFIED PLANT MATERIALS. SUBMIT DATED PHOTOGRAPHS OF TREE MATERIAL AND SPECIMEN PLANT MATERIAL TO THE OWNER'S REPRESENTATIVE FOR REVIEW.
5. ALL PLANT MATERIAL SIZES SPECIFIED ARE MINIMUM SIZES. CONTAINER SIZE SHALL BE INCREASED IF NECESSARY TO PROVIDE OVERALL PLANT SIZE SPECIFIED.
6. IF PLANT MATERIAL DOES NOT COMPLY WITH THE REQUIREMENTS AS SPECIFIED HEREIN, THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT SUCH PLANTS AND REQUIRE THE CONTRACTOR TO REPLACE REJECTED WORK AT NO ADDED COST TO THE OWNER AND CONTINUE SPECIFIED MAINTENANCE UNTIL REINSPECTED AND FOUND TO BE ACCEPTABLE.
7. THE CONTRACTOR SHALL PROVIDE AN APPROVED PLANTING SOIL MIXTURE FOR ALL PLANT MATERIAL. SEE SPECIFICATIONS FOR REQUIREMENTS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STABILITY AND PLUMB CONDITION OF ALL TREES AND SHRUBS, AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS. STAKING OF TREES OR SHRUBS SHALL BE DONE IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.
9. THE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS. IF INADEQUATE VERTICAL DRAINAGE IS ENCOUNTERED, THE CONTRACTOR SHALL SUBMIT RECOMMENDATIONS FOR PROVIDING ADEQUATE DRAINAGE TO THE OWNER'S REPRESENTATIVE. IN WET OR POORLY DRAINING SOILS THE CONTRACTOR SHALL INSTALL ALL PLANTS TO MAXIMIZE DRAINAGE AND MINIMIZE POOLING OF WATER AROUND PLANTINGS. THIS MAY INCLUDE LOOSENING OF EXISTING SOILS AND PROVIDING SOIL AMENDMENTS TO ENSURE ADEQUATE DRAINAGE.
10. PEG SOD ON SLOPES GREATER THAN 1:3 (33% SLOPE).
11. THE CONTRACTOR SHALL ENGAGE A QUALIFIED ARBORIST WHO HAS SUCCESSFULLY COMPLETED TREE PROTECTION AND TREE TRIMMING WITH FIVE YEARS OR MORE EXPERIENCE, TO PERFORM THE FOLLOWING WORK:
    A. REMOVE BRANCHES FROM TREES THAT ARE TO REMAIN, IF REQUIRED, AS DIRECTED BY OWNER'S REPRESENTATIVE.
    B. PERFORM INITIAL PRUNING OF BRANCHES TO ACCOMMODATE NEW CONSTRUCTION.
    C. PERFORM TREE REPAIR WORK FOR DAMAGE INCURRED BY NEW CONSTRUCTION.
12. CONTRACTOR SHALL PROVIDE TEMPORARY IRRIGATION SYSTEM FOR RELOCATED TREES.
13. CONTRACTOR SHALL PROTECT EXISTING VEGETATION TO REMAIN AS SHOWN ON DRAWINGS OR BY MEANS APPROVED BY THE OWNER'S REPRESENTATIVE. ALL EXISTING PLANT BEDS TO REMAIN WITHIN THE CONSTRUCTION LIMIT LINE SHALL BE LEFT UNDISTURBED. EXISTING TREES TO REMAIN, AS NOTED ON THE DRAWINGS, SHALL BE LEFT UNDISTURBED AND PROTECTED BY WOODEN BARRICADES ERECTED AT THE PERIMETER OF THE TREE DRIP-LINE (S). NO VEHICLE SHALL TRAVERSE THIS AREA NOR SHALL ANY STORAGE OF MATERIALS OR EQUIPMENT BE PERMITTED WITHIN THE AREA OF THE TREE DRIP-LINE(S). ANY EXISTING PLANT BEDS OR TREES DAMAGED BY CONSTRUCTION ACTIVITY SHALL BE REPLACED BY THE RESPONSIBLE PARTY AT THEIR OWN EXPENSE.
14. CONTRACTOR TO CLEAN, PRUNE, AND SHAPE EDGES OF EXISTING VEGETATION AS DIRECTED BY OWNER'S REPRESENTATIVE. CREATE SMOOTH BED LINES AROUND EXISTING VEGETATION.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING EXISTING VEGETATION AS REQUIRED AND PREPARING PLANTING AREAS PRIOR TO INSTALLATION OF PLANT MATERIALS.
16. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ERADICATING WEEDS AND UNWANTED PERENNIAL VEGETATION WITHIN THE LIMITS OF ALL PLANTING AREAS PRIOR TO BEGINNING LANDSCAPE INSTALLATION. PERENNIAL WEEDS AND GRASSES TO BE REMOVED INCLUDE, BUT ARE NOT LIMITED TO, NUT GRASS, PUNCTURE VINE, MORNING GLORY, DOG FENNEL, TORPEDO GRASS, BERMUDA GRASS, BAHIA GRASS, KIKUYU GRASS, CRAB GRASS, CARPET GRASS, SEDGE AND OTHER NOXIOUS AND/OR INVASIVE WEEDS. THE SITE IS TO BE MAINTAINED WEED FREE THROUGHOUT PLANTING OPERATIONS.
17. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PRE-TILLAGE TO SCARIFY SOILS IN ALL PLANTING AREAS TO A MINIMUM DEPTH OF 4". DENSELY COMPACTED AREAS BETWEEN 85% AND 90% ARE TO BE CROSS RIPPED TO A MINIMUM 8" DEPTH. IN THE PROCESS OF TILLING ARE UNACCEPTABLE MATERIALS INCLUDING, BUT NOT LIMITED TO, FOREIGN DEBRIS, CONSTRUCTION WASTE, ROOTS, CONCRETE, ASPHALT AND ROCKS GREATER THAN 1/2" DIAMETER ON AVERAGE. IN AREAS TO RECEIVE SOD TILL IN FERTILIZER TO A DEPTH OF 2" AT A RATE OF 12 POUNDS PER CUBIC FT.
18. ALL PLANTING BEDS SHALL BE STAKED IN ACCORDANCE WITH THE PLANS AND APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO PLANTING. THE LANDSCAPE CONTRACTOR SHALL PROVIDE STAKES OR IRRIGATION FLAGS TO LOCATE THE EDGES OF ALL SHRUB AND GROUNDCOVER PLANT BEDS AND INDIVIDUAL TREES AND PALMS. ALL SHRUB AND GROUNDCOVER MATERIALS MUST BE LAID OUT IN THEIR CONTAINERS WITH THE APPROPRIATE SPACING FOR OWNER'S REPRESENTATIVE REVIEW AND APPROVAL. THE OWNER RESERVES THE RIGHT TO MAKE FIELD ADJUSTMENTS TO PLANT LAYOUT AS PART OF THIS REVIEW. FAILURE BY THE LANDSCAPE CONTRACTOR TO OBTAIN LAYOUT APPROVAL FROM THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION MAY RESULT IN THE REMOVAL AND REINSTALLATION OF MATERIALS BY THE CONTRACTOR AT NO ADDITIONAL COSTS TO THE OWNER. IF EXISTING CONDITIONS DO NOT ALLOW THE DESIGN TO BE LAID OUT AS SHOWN, NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY
19. UNLESS EXPLICITLY SHOWN ON DRAWINGS, NO TREES SHALL BE PLANTED WITHIN DESIGNATED UTILITY CORRIDORS, PUBLIC RIGHTS OF WAY NOR LOCATED WITHIN FOUR FEET (4') OF ANY SWALE CENTERLINE, BUILDING, OR STRUCTURE IDENTIFIED ON THE DRAWINGS OR EXISTING IN THE FIELD. NO CANOPY TREES SHALL BE PLANTED WITHIN 5 FEET OF UNDERGROUND UTILITIES, 20 FEET OF EXISTING OVERHEAD POWER LINES, WITHIN 4 FEET OF ANY PAVED SURFACE, OR UNDER CANOPY TREES THAT LIMIT ACCESS TO LIGHT AND ROOM TO GROW. FIELD ADJUST AS NECESSARY AND REVIEW ADJUSTMENTS WITH THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. TREES SHALL BE MAINTAINED AT A MINIMUM OF 13'-6" VERTICAL CLEARANCE OVER ROADWAYS OR OTHER FIRE DEPARTMENT ACCESS ROADS.
20. ALL PROPOSED TREES SHALL BE INSTALLED EITHER ENTIRELY IN OR ENTIRELY OUT OF PLANTING BEDS. PLANTING BED OUTLINES SHALL NOT BE OBSTRUCTED AND SHALL BE SMOOTH AND FLOWING. IF TREES ARE LOCATED OUTSIDE PLANTING BEDS IN GRASS AREAS, MAINTAIN A MINIMUM THREE FEET 3' WIDE OFFSET TO ALLOW FOR MOWERS TO MANEUVER.
21. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE EXTENT OF SOD & TURF WORK IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SOD & TURF IN THE AREAS SHOWN ON THE PLAN IN SUFFICIENT QUANTITY TO PROVIDE FULL COVERAGE. ADDITIONAL GRASS REQUIRED WILL BE ADJUSTED BASED ON A SQUARE FOOTAGE UNIT PRICE. AREAS TO BE SODDED SHALL BE AMENDED PER SOILS REPORT TO PROVIDE REQUIRED NUTRIENTS AND SOIL PH OF BETWEEN 6.0 AND 7.0.
ALL SOD SHALL BE ONLY NURSERY GROWN, NON PASTURE RAISED, MACHINE CUT SOD RECTANGLES OF THE TYPE INDICATED ON THE DRAWINGS. SOD SHALL BE WELL-MATTED WITH ROOTS, FREE OF EXCESSIVE WEEDS & DEBRIS, AND SHALL BE GREEN, FRESH AND UNINJURED AT THE TIME OF PLANTING.
22. CONTRACTOR SHALL FIELD-ADJUST LOCATION OF PLANT MATERIAL FOR THE REVIEW AND APPROVAL OF THE OWNER'S REPRESENTATIVE PRIOR TO INITIATING INSTALLATION.
23. ALL PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE WITH FLORIDA NO. 1 GRADE, ACCORDING TO THE "GRADES AND STANDARDS FOR NURSERY PLANTS" PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
24. ALL PLANTING BEDS SHALL BE TOP-DRESSED WITH A 3" LAYER OF MULCH AS SPECIFIED. ALL TREES SHALL HAVE A 1" DEEP, 24" RADIUS (FROM THE TRUNK) MULCH RING PLACED AROUND THE BASE OF THE TRUNK. ON WELL DRAINED SOIL,THE MULCH RING SHALL BE MOUNDED AT ITS EDGES TO RETAIN WATER WITHIN THE TREE RING. ON POORLY DRAINED SOIL, THE MULCH RING SHALL BE MOUNDED AT THE TRUNK TO SHED WATER AWAY FROM THE TREE.
25. SHRUB AND GROUND COVER BED QUANTITIES ARE INDICATED ON THE PLANT LIST. PLANT ACCENT SHRUBS AND TREES AS SHOWN ON THE LANDSCAPE PLANTING PLANS WHEN INDIVIDUAL PLANTS ARE DELINEATED.
26. PALM HEIGHTS, AS INDICATED ON THE PLANS, REFER TO CLEAR TRUNK (C.T.), GRAY WOOD (G.W.), OR OVERALL HEIGHT (O.A.) AS SPECIFIED ON THE PLANT LIST.
27. CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.
29. CONTRACTOR SHALL REGRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION, AND/OR INSTALLATION WORK.
30. CONTRACTOR SHALL REPLACE (BY EQUAL SIZE AND QUALITY) ANY AND ALL EXISTING PLANT MATERIAL DISTURBED OR DAMAGED BY PLANT REMOVAL, RELOCATION, AND/OR INSTALLATION WORK. ALL WIRE BASKETS OR BURLAP SHALL BE REMOVED FROM ROOTBALLS PRIOR TO INSTALLATION.
31. MAINTENANCE SHALL BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE UNTIL THE DATE OF SUBSTANTIAL COMPLETION. MAINTENANCE INCLUDES WATERING, PRUNING, WEEDING, MULCHING, REPLACEMENTS OF SICK OR DEAD PLANTS, AND ANY OTHER CARE NECESSARY FOR THE PROPER GROWTH OF THE PLANT MATERIAL.
32. UPON COMPLETION OF ALL LANDSCAPING, AN INSPECTION FOR SUBSTANTIAL COMPLETION OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR SCHEDULING THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE.
33. CONTRACTOR SHALL SUBMIT WRITTEN GUARANTEE OF SURVIVABILITY OF ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION.
34. CONTRACTOR MUST APPROVE ALL GRADED AREAS PRIOR TO THE COMMENCEMENT OF PLANTING.
35. THE CONTRACTOR SHALL BEAR ALL COSTS OF TESTING OF SOILS, AMENDMENTS, ETC. ASSOCIATED WITH THE WORK. SEE SPECIFICATIONS FOR ADDITIONAL TESTING REQUIREMENTS.
36. THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER'S REPRESENTATIVE WITH RECORD COPIES OF ALL RECEIPTS, INVOICES, AND/ OR SHIPPING MANIFESTS FOR ALL MATERIALS, INCLUDING PLANTS AND SOD, DELIVERED TO THE PROJECT SITE BY THE CONTRACTOR OR A SUPPLIER TO THE CONTRACTOR. DELIVERY OF ALL FERTILIZER AND SOIL AMENDMENT MATERIALS MUST BE IN ORIGINAL, UNOPENED CONTAINER'S BEARING MANUFACTURER'S GUARANTEED CHEMICAL ANALYSIS, NAME, TRADE MARK AND CONFORMANCE WITH STATE LAW.

HARDSCAPE NOTES

1. SEE CIVIL ENGINEERING DRAWINGS FOR GENERAL GRADING OF THE SITE, INCLUDING SIDEWALK AND FINISH GRADES FOR PARKING LOTS, ROADWAYS, SIDEWALKS, AND PLANTING AREAS.
2. ALL PAVEMENT SHALL BE STAKED IN THE FIELD FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. ALIGNMENT MAY BE ADJUSTED UPON APPROVAL TO ACCOMMODATE EXISTING SITE ELEMENTS.
3. SLOPES OF WALKS TO BE NO GREATER THAN FIVE PERCENT, UNLESS EXPRESSLY NOTED OTHERWISE. CROSS-SLOPE OF WALKS NOT TO EXCEED TWO PERCENT. SEE CIVIL DRAWINGS FOR ADDITIONAL LAYOUT AND INSTALLATION DETAILS. SEE HARDSCAPE DRAWINGS FOR FINISH PATTERNS.
4. ALL COLORS AND MATERIALS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. FOR THIS PURPOSE, THE CONTRACTOR SHALL CONSTRUCT OR SUBMIT AS DIRECTED BY THE OWNER'S REPRESENTATIVE PANELS DEPICTING PROPOSED FINISHES AND COLORS FOR REVIEW AND APPROVAL.
5. ALL NAILS, LAG SCREWS, BOLTS AND MISCELLANEOUS FASTENERS SHALL BE HOT DIPPED GALVANIZED OR A CORROSION RESISTANT ALLOY.

FOUNDATIONS

6. FOOTINGS HAVE BEEN DESIGNED FOR A MAXIMUM ALLOWABLE SOIL BEARING VALUE OF 2000 PSF. IN-PLACE SOILS TO BE UNIFORMLY COMPACTED AND TESTED TO ENSURE MINIMUM SOIL BEARING PRESSURE CAPACITY OF 2,000 PSF.
7. PREPARATION FOR AND CONSTRUCTION OF WALL/COLUMN FOOTING(S) TO BE IN COMPLIANCE WITH THE APPLICABLE CHAPTERS AND SECTIONS OF ACI 332R
8. ANY ADDITIONAL FILL MATERIAL REQUIRED SHALL CONSIST OF SOILS THAT CONTAIN NOT MORE THAN 12% OF FINES (SILT OR CLAY PARTICLES) PASSING A NO. 200 SIEVE AND SHALL BE PLACED IN UNIFORM LAYERS NOT EXCEEDING 12.0 INCHES LOOSE. EACH LAYER SHALL BE SYSTEMATICALLY AND UNIFORMLY COMPACTED IN THE MANNER AND TO THE DEGREE SPECIFIED FOR THE IN-PLACE SOILS.

CONCRETE

9. STRUCTURAL CONCRETE, INCLUDING FOOTINGS, SHALL CONFORM TO THE REQUIREMENTS OF ACI 301 AND SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS OF 3000 PSI UNLESS OTHERWISE NOTED. CONCRETE FOR SLABS ON-GRADE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS OF 2500 PSI.
10. CONCRETE, WHEN PLACED, SHALL HAVE A MAXIMUM SLUMP OF 5 INCHES AND A MINIMUM OF 3 INCHES.
11. ALL REINFORCING SHALL CONFORM TO ASTM 615 FOR GRADE 60 STEEL; WELDED WIRE MESH TO ASTM A-185.
12. CHECK ALL DRAWINGS AND APPLICABLE MANUFACTURER'S SHOP DRAWINGS FOR LOCATION OF ALL EMBEDDED ITEMS SUCH AS PIPE SLEEVES, ANCHOR BOLTS, ETC., PRIOR TO PLACING CONCRETE.
13. #5 REINFORCEMENT FOR CONTINUOUS FOOTINGS SHALL BE CONTINUOUS AND SPLICED WITH A FULL 30-INCH LAP.
14. PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. START INITIAL CURING AS SOON AS FREE WATER HAS DISAPPEARED FROM THE CONCRETE SURFACE AFTER PLACING AND FINISHING. KEEP CONTINUOUSLY MOIST FOR NOT LESS THAN 7 DAYS IN ACCORDANCE WITH ACI 301 PROCEDURES. PERFORM CURING OF THE CONCRETE BY CURING AND SEALING COMPOUND, BY MOIST CURING, BY MOISTURE RETAINING COVER CURING OR BY COMBINATION THEREOF.
15. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR THE REINFORCEMENT:
    A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH; 3 INCHES.
    B. FORMED CONCRETE EXPOSED TO EARTH OR WEATHER; #5 BARS AND SMALLER, 1 1/2 INCHES; #6 BARS AND LARGER, 2 INCHES.

MASONRY

16. CONCRETE MASONRY UNITS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C90 FOR LOAD BEARING MASONRY WITH A MINIMUM F'M OF 1500 PSI. BRICK MASONRY UNITS SHALL CONFORM TO ASTM C-62 FOR STRUCTURAL AND NON-STRUCTURAL MASONRY. REFER TO DRAWINGS FOR SPECIFIC TYPE OF BRICK MASONRY LAYOUT PATTERNS.
17. MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM WITH ALL THE REQUIREMENTS OF THE "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1-95/ASCE 6-96/TMS 602-02), AS PUBLISHED BY THE MASONRY STANDARDS JOINT COMMITTEE.
18. MASONRY CONSTRUCTION SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A "CERTIFIED STRUCTURAL MASONRY CONTRACTOR" OR "CERTIFIED STRUCTURAL MASON" AS RECOGNIZED BY THE FLORIDA CONCRETE AND PRODUCTS ASSOCIATION (FC&PA). THE SENIOR MASONRY SUPERVISOR WILL BE RESPONSIBLE TO ASSURE THAT THE WORK IS ACCOMPLISHED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
19. ALL MORTAR SHALL BE TYPE M OR S IN ACCORDANCE WITH ASTM C 270.
20. GROUT SHALL HAVE A MINIMUM SLUMP OF 8 INCHES AND A MAXIMUM SLUMP OF 11 INCHES, BE IN CONFORMANCE WITH ASTM C 476, AND ATTAIN A COMPRESSIVE STRENGTH OF 1800 PSI.
21. CONCRETE MASONRY UNITS SHALL BE PLUMB, TRUE TO LINE, WITH LEVEL COURSES ACCURATELY SPACED AND BUILT TO THE THICKNESS AND IN A RUNNING BOND AS INDICATED AND CONFORMING TO THE TOLERANCES SPECIFIED IN ACI 531.1 AND 530.1. CONCRETE UNITS SHALL BE STORED OFF OF THE GROUND SURFACE AND COVERED TO PROTECT THEM FROM ABSORBING RAIN OR BEING CONTAMINATED WITH OTHER FOREIGN MATTER. CONCRETE UNITS SHALL BE DRY WHEN LAID. EACH UNIT SHALL BE ADJUSTED TO FINAL POSITION IN THE WALL WHILE THE MORTAR IS STILL SOFT AND PLASTIC. ANY UNIT DISTURBED AFTER THE MORTAR HAS STIFFENED SHALL BE REMOVED AND RE-LAID WITH FRESH MORTAR. VERTICAL CELLS SHALL BE ALIGNED TO PROVIDE A CONTINUOUS, UNOBSTRUCTED OPENING. ALL ANCHORS, ACCESSORIES, FLASHING AND OTHER ITEMS TO BE BUILT-IN SHALL BE INSTALLED AS THE MASONRY WORK PROGRESSES. ALL CUTTING AND FITTING OF MASONRY, INCLUDING THAT REQUIRED TO ACCOMMODATE THE WORK OF OTHERS SHALL BE DONE BY MASONRY CRAFTSMEN WITH MASONRY SAWS. LOCATE CONTROL JOINTS AT 20 FEET ON CENTER MAXIMUM, AT ALL COLUMNS, AND AT CHANGES IN DIRECTION. CAULK THE EXPOSED SIDE OF ALL JOINTS WITH BACKER ROD AND SEALANT. COLOR OF SEALANT TO MATCH WALL COLOR.
22. HOLLOW UNITS SHALL BE LAID WITH FULL HEAD AND BED JOINTS TO THE THICKNESS OF THE FACE SHELL AS A MINIMUM. THE WEBS SHALL ALSO BE BEDDED IN ALL COURSES, STARTING AT THE FOUNDATION, ADJACENT TO CELLS TO BE REINFORCED AND/OR FILLED WITH GROUT OR CONCRETE. MORTAR JOINTS SHALL BE TOOLED WHEN THE MORTAR IS "THUMBPRINT" HARD, BOTH ON THE INSIDE AND OUTSIDE SURFACES OF THE BUILDING WALL, WITH A TOOL PRODUCING A CONCAVE SURFACE. BED JOINTS SHALL BE 3/8 " + 1/8" IN THICKNESS; HEAD JOINTS SHALL BE 3/8" (-1/4", +3/8").
23. ALL REINFORCING STEEL TO BE GRADE 60 PER ASTM A-615. REINFORCING BARS SHALL BE PLACED IN THE MIDDLE OF THE CELLS AND TIED OR OTHERWISE SECURELY SUPPORTED AT THE TOP AND BOTTOM TO ENSURE THAT THE BAR DOES NOT MOVE DURING GROUTING. MINIMUM LAP AT ALL SPLICES OR DOWELS SHALL BE 30 INCHES UNLESS OTHERWISE NOTED ON THE DRAWINGS.
24. GROUTING SHALL BE ACCOMPLISHED IN 4 FOOT LIFTS FOR CONCRETE MASONRY AND 2 FOOT LIFTS FOR BRICK MASONRY. EACH LIFT SHALL BE MECHANICALLY CONSOLIDATED INTO THE PREVIOUS LIFT, WHEN PLACED, SO AS TO PREVENT COLD JOINTS. RECONSOLIDATE AS REQUIRED. FOR CONCRETE MASONRY, A 12 SQUARE INCH CLEANOUT OPENING SHALL BE PLACED AT THE BOTTOM OF EACH CELL TO BE FILLED AND IT SHALL BE THOROUGHLY CLEANED OUT PRIOR TO FILLING OF THE CELL. FOR BRICK MASONRY, PUDDLE GROUT DURING AND AFTER PLACEMENT TO ENSURE COMPLETE FILLING OF GROUT SPACE. GROUT PLACEMENT STOPPED FOR MORE THAN ONE HOUR SHALL BE STOPPED BELOW THE TOP OF THE MASONRY UNIT 1-1/2" TO PROVIDE A KEY FOR SUBSEQUENT GROUTING.
25. THE MINIMUM CONTINUOUS UNOBSTRUCTED CELL AREA IN CELL TO RECEIVE GROUT MUST NOT BE LESS THAN 2" X 3". MORTAR FINS MUST BE REMOVED AS BLOCK PLACEMENT PROCEEDS. MORTAR DROPPINGS MUST BE KEPT OUT OF CELLS WHICH ARE TO BE GROUTED.
26. UNLESS SPECIFICALLY SHOWN OTHERWISE, PROVIDE #9 GA. "DUR-O-WALL" TRUSS TYPE REINFORCING IN EVERY OTHER COURSE OF CONTINUOUS WALLS FOR CONCRETE MASONRY, AND EVERY FOURTH COURSE FOR BRICK MASONRY. DO NOT LAY JOINT REINFORCEMENT ACROSS EXPANSION JOINTS.
27. TEMPORARY BRACING AND SHORING OF ALL CONCRETE MASONRY CONSTRUCTION, TO PROVIDE STABILITY DURING CONSTRUCTION, UNTIL CONSTRUCTION ACHIEVES IT'S PROPER STRENGTH, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

STRUCTURAL STEEL

28. ALL STRUCTURAL STEEL SHAPES AND PLATE SHALL CONFORM TO ASTM A-36 AND THE "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION. ALL TUBE STEEL SHALL CONFORM TO ASTM A-500, GRADE B (FY = 46 KSI).
29. ALL SHOP CONNECTIONS TO BE WELDED (UTILIZING E70XX LOW HYDROGEN ELECTRODES) AND FIELD CONNECTIONS TO BE BOLTED UNLESS OTHERWISE SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS. ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF "THE STANDARD CODE FOR WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY.
30. ALL STEEL TO RECEIVE ONE SHOP COAT AND ONE FIELD TOUCHUP COAT OF APPROVED PAINT.
31. ALL BOLTED CONNECTIONS SHALL CONSIST OF ASTM A325 HIGH STRENGTH BOLTS AND HARDENED WASHERS AS SHOWN ON THE STRUCTURAL DRAWINGS. ALL BOLTED CONNECTIONS SHALL CONFORM TO THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
32. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM A36 OR A307 (THREADED ROD).
33. ERECT ALL STEEL TO CONFORM TO "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND "QUALITY CRITERIA AND INSPECTION STANDARDS". FRAME TO BE PLUMB, SQUARE AND TRUE TO LINE AND LEVEL, CHECKED BY SURVEYING INSTRUMENTS.
34. LOCATE FINISH HOLES PRECISELY TO INSURE PASSAGE THROUGH ASSEMBLED MATERIALS WITHOUT DRIFTING. ENLARGE HOLES BY REAMING IF NECESSARY. POOR MATCHING OF HOLES IS SUFFICIENT CAUSE FOR REJECTION.
35. GROUT FOR COLUMN BASE PLATES SHALL BE NON-SHRINK GROUT BY "EMBECO" OR APPROVED EQUAL, 5000 PSI MINIMUM.

LUMBER

36. ALL LUMBER SHALL BE SOUTHERN YELLOW PINE, GRADE NO.2 OR BETTER OR AS SPECIFIED ON THE DRAWINGS, KD19 (FB FOR LUMBER SIZES NOTED TO BE IN CONFORMANCE WITH VALUES LISTED IN THE NATIONAL FOREST PRODUCTS ASSOCIATION NATIONAL DESIGN STANDARD SUPPLEMENT), AND SHALL CONFORM TO THE NATIONAL GRADING RULE FOR DIMENSION LUMBER, THE SOUTHERN PINE INSPECTION BUREAU AND THE SOUTHERN FOREST PRODUCTS ASSOCIATION.
37. DO NOT LOCATE ANY HOLES CLOSER THAN FIVE (5) BOLT DIAMETERS FROM THE END OF ANY WOOD FRAMING MEMBER.
38. EXPOSED WOOD MEMBERS SHALL BE PRESSURE-TREATED WITH TYPE WATERBORNE PRESERVATIVE IN ACCORDANCE WITH THE AMERICAN WOOD-PRESERVERS STANDARD U1-03 FOR THE FOLLOWING APPLICATIONS:

	APPLICATION	AWPA USE CATEGORY	TREATMENT (LBS/CU.F.T)
A.	ABOVE-GROUND USE	UC3B	ACQ 0.25
B.	CONCRETE- OR GROUND-CONTACT, OR IN-GROUND USE	UC4A	ACQ 0.40
C.	FRESHWATER USE	UC4A	ACQ 0.40
D.	IN-GROUND OR FRESHWATER PILES	UC4C	CCA 0.80 (NOTE 1)
E.	SALTWATER USE, MARINE PILES	UC5C	CCA 2.50 (NOTE 2)

NOTE 1: CREOSOTE (12 LBS/CU.FT.) MAY BE USED IF APPROVED BY OWNER'S REPRESENTATIVE
NOTE 2: CREOSOTE (25 LBS/CU.FT.) MAY BE USED IF APPROVED BY OWNER'S REPRESENTATIVE

39. FASTENERS:
    A. ABOVE-GROUND METAL CONNECTORS IN CONTACT WITH ACQ:
        1) G185 HOT DIPPED GALVANIZED MEETING ASTM A653
        2) ASTM A123
        3) STAINLESS STEEL TYPE 304 OR 316
    B. ABOVE-GROUND SCREWS, NUTS, BOLTS & WASHERS IN CONTACT WITH ACQ:
        1) CLASS 55 MECHANICALLY DEPOSITED ZINC MEETING ASTM B695
        2) POST HOT DIPPED GALVANIZED MEETING ASTM A153
        3) STAINLESS STEEL TYPE 304 OR 316
    C. ABOVE-GROUND COMMON NAILS & GUN NAILS IN CONTACT WITH ACQ:
        1) G185 HOT DIPPED GALVANIZED MEETING ASTM A153
        2) STAINLESS STEEL TYPE 304 OR 316
    D. ALL FASTENERS FOR IN-GROUND, UNDERWATER OR MARINE APPLICATIONS
        1) STAINLESS STEEL TYPE 304 OR 316

ALUMINUM

40. ALUMINUM TUBING, PLATES, BARS, AND ANGLES SHALL BE 6061-T6 UNLESS NOTED OTHERWISE.
41. ALL WELDING TO BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY'S STANDARD AWS D1.2, STRUCTURAL WELDING CODE - ALUMINUM.
42. ISOLATE ALL ALUMINUM FROM STEEL AND CONCRETE BY THE USE OF NEOPRENE WASHERS, BUSHINGS, AND SHEET AS REQUIRED IN ORDER TO PREVENT GALVANIC ACTION OR CORROSION.
43. ALL FASTENERS, BOLTS, NUTS, ETC. IN CONTACT WITH ALUMINUM SHALL BE STAINLESS STEEL.

POOL/SPA/FOUNTAIN

44. THE POOL/SPA/FOUNTAIN CONTRACTOR WILL STAKE OUT THE POOL/SPA/FOUNTAIN AND SET THE FINISHED GRADE. THE OWNER'S REPRESENTATIVE WILL BE NOTIFIED FOR APPROVAL OF THIS WORK PRIOR TO INSTALLATION.
45. POOL/SPA/FOUNTAIN CONTRACTOR IS RESPONSIBLE FOR ALL POOL/SPA/FOUNTAIN EQUIPMENT, PIPING, POOL/SPA SHELL, FOUNTAIN WALLS, TILE, COPING, ELECTRICAL TO JUNCTION BOXES, PERMITS, AND CODE COMPLIANCE. SUBMIT SHOP DRAWINGS AND FINISH SAMPLES FOR REVIEW AND APPROVAL OF THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
46. REQUIRED UTILITIES AT THE FILTER/PUMP LOCATION TO BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.
47. FINISH PATTERN ON THE POOL DECK TO BE LAID OUT EXACTLY AS SHOWN. EXPANSION JOINTS, DECK DRAINS, ETC. TO COINCIDE WITH THE GRID. EXPANSION JOINT FILLER AND ANY DECK DRAIN MATERIALS ARE TO MATCH THE COLOR OF THE DECK.

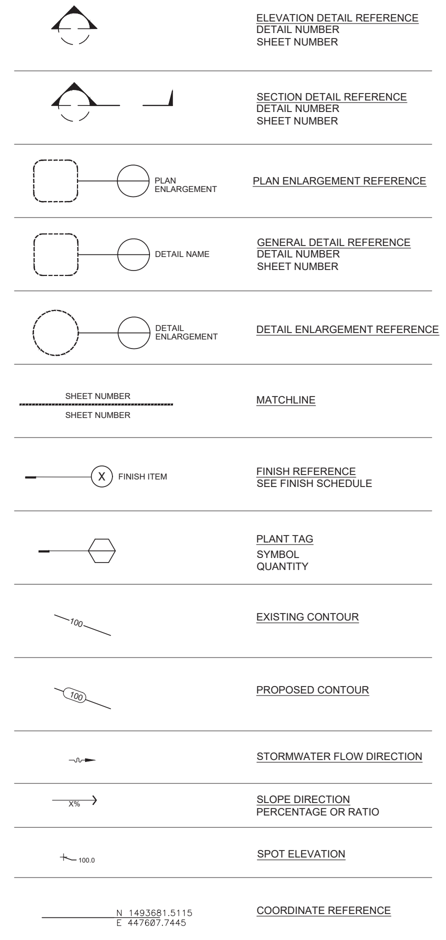
PRECAST/EIFS

48. PRECAST/EIFS MANUFACTURER IS RESPONSIBLE FOR DESIGN OF INDIVIDUAL COMPONENTS, INCLUDING VERIFICATION OF FIELD CONDITIONS AND DESIGN OF CONNECTIONS.
49. DESIGN, FABRICATION, AND INSTALLATION OF PRECAST/EIFS COMPONENTS SHALL COMPLY WITH APPLICABLE ACI, PCI, & ASTM STANDARDS.
50. MANUFACTURER SHALL SUBMIT SHOP DRAWINGS AND FINISH SAMPLES FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO FABRICATION AND INSTALLATION
51. ALL CAST STONE PRODUCTS SHALL CONFORM WITH ALL REQUIREMENTS OF ASTM C1364.

FURNISHINGS

52. THE CONTRACTOR TO PROVIDE THE FOLLOWING SUBMITTALS,
    - ALL MANUFACTURER'S DATA INCLUDING DIRECTIONS OR RECOMMENDATIONS FOR INSTALLATION, METHODS, PROCEDURES AND MAINTENANCE.
    - COMPLETE SHOP DRAWINGS FOR ALL SITE FURNISHINGS INDICATING ALL DETAILS OF FABRICATION AND INSTALLATION INCLUDING SIZES, SHAPES, FINISHES, COLORS, THICKNESS, MATERIAL QUALITY AND ALL OTHER RELATED WORK APPLICABLE TO THE SITE FURNISHINGS.
    - SUBMIT COLOR SAMPLES FOR APPROVAL BY THE OWNER.
53. DELIVER ALL MATERIALS WITH MANUFACTURER'S TAGS AND LABELS INTACT IN CLEAN, DRY AND PROTECTED LOCATIONS.
54. STORE AND HANDLE ALL SITE FURNISHINGS SO AS TO AVOID DAMAGE. ALL SITE FURNISHINGS SHALL BE GUARANTEED BY THE CONTRACTOR FREE OF DEFECTS, CRACKS, CHIPS, STAINS AND SHALL BE COMPLETELY CLEAN AND FREE OF DAMAGES UPON FINAL PLACEMENT AND APPROVAL
55. ALL SITE FURNISHINGS SHALL BE PROVIDED BY THE CONTRACTOR INCLUDING ORDERING, SHIPPING, DELIVERY, UNPACKING, AND INSTALLING ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND AS DETAILED ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY INSTALLATION PROCEDURE WITH THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLING.
56. ALL SITE FURNISHINGS LOCATIONS ARE TO BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO BEING PLACED ON SITE. FAILURE TO SECURE OWNER'S APPROVAL MAY REQUIRE THE CONTRACTOR TO MOVE AND/ OR REINSTALL THE FURNISHINGS AT THE CONTRACTORS EXPENSE.

STANDARD DRAWING SYMBOLS



CONTRACTOR NOTES

NOT ALL ITEMS SHOWN ON THIS SHEET APPEAR IN THE CONSTRUCTION DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS RELATED TO CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, BUILDING, LANDSCAPE, IRRIGATION & RIGHT OF WAY UTILIZATION PERMITS.

CODE COMPLIANCE NOTES

1. IT IS THE INTENT OF THIS DESIGN TO COMPLY WITH ALL APPLICABLE LOCAL AND STATE BUILDING CODES.
ALL EDITIONS OF THE FLORIDA BUILDING CODE 2023 (8TH ED)
NATIONAL ELECTRIC CODE 2023

WINDLOAD NOTES

1. WIND DESIGN LOAD INFORMATION (TO BE CONFIRMED BY ENGINEER OF RECORD):
(PER FBC 2020 7th EDITION CHAPTER 16, REF. ASCE 7-16)

BASIC WIND SPEED (Vult) = 140 MPH (3 SECOND GUST)
(Vasd) = 108 MPH (3 SECOND GUST)
STRUCTURE CATEGORY = II (ASCE 7-16)
WIND EXPOSURE(ALL SIDES) =C (ASCE 7-16)
Cf = 1.4

tdc DESIGN STUDIO
LANDSCAPE ARCHITECTURE
COMMUNITY PLANNING
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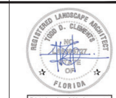
1516 E. HILLCREST STREET STE. 105
ORLANDO, FL 32803 PH: 407-256-2625

PROJECT
351 MARION OAKS BLVD
MARION COUNTY, FL
Prepared For:
A&B PROPERTIES SERVICES

SEAL



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

CONSULTANTS

ISSUED FOR:
10/104/2025 PERMIT

PROJECT NO.	2025-05
DESIGNED BY	TDC/TFW
DRAWN BY	TFW
CHECKED BY	TDC/TFW
DATE	8/26/2025

DRAWING SCALE

DRAWING TITLE
INDEX SHEET

DRAWING NUMBER
ID-01
SHEET 1 OF 1

TREE REMOVAL SUMMARY:

NO TREES ON SITE

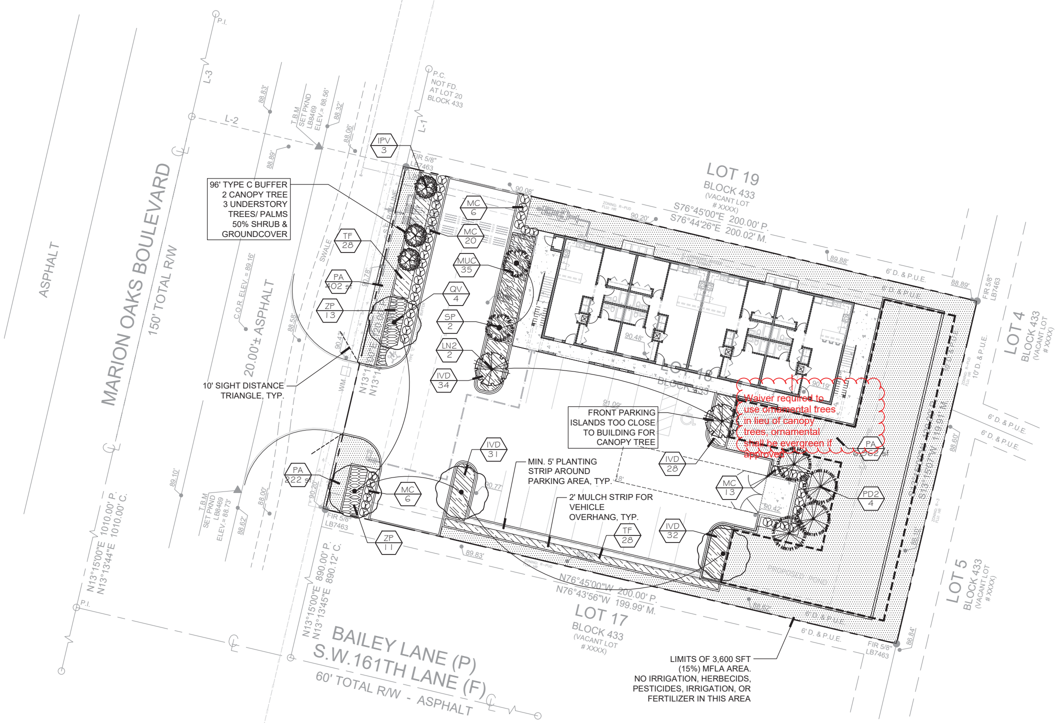
LANDSCAPE AREA CALCULATIONS:

TOTAL SITE AREA: 24,000 +/- SQ. FT.
TOTAL UPLAND LANDSCAPED AREA: 10,250 +/- SQ. FT.
IRRIGATED PLANTING AREAS: 2,500 +/- SQ. FT
UNIRRIGATED/ BAHIA TURF AREA: 7,750 +/- SQ. FT.

15% MFLA REQUIRED= 24,000 X 15% = 3,600 SQ. FT

SHADE TREE CALCULATIONS:

TOTAL SITE AREA: 24,000 +/- SQ. FT.
SHADE TREES PRESERVED: 0
SHADE TREES PROVIDED: 8
24,000 SQ. FT/ 8 TREES= 1 TREE PER 3,000 SQ. FT.
(MINIMUM 1 PER 3,000 SQ. FT.)



1. Will there be a dumpster? If so show location and screening
2. Will there be outdoor lighting? If so, a signed and sealed photometric plan is required

TREE PROTECTION NOTE:

PER SEC. 7.6.3. E

TREE PROTECTION SHALL CONTINUE DURING THE COURSE OF CONSTRUCTION. THE FOLLOWING REQUIREMENTS SHALL BE CONDITIONS OF TREE REMOVAL PERMITS, ALL PERMITS FOR CONSTRUCTION IN PUBLIC RIGHTS-OF-WAY, AND ALL DEVELOPMENT PERMITS ISSUED UNDER AND PURSUANT TO THIS CODE:

(1) THE CLEANING OF CONSTRUCTION EQUIPMENT OR MATERIAL OR THE DISPOSAL OF WASTE MATERIALS INCLUDING BUT NOT LIMITED TO, PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, AND MORTAR WITHIN THE TPZ OF ANY TREE WHICH IS BEING PROTECTED IS NOT ALLOWED.

(2) THE MOVEMENT OF EQUIPMENT OR THE STORAGE OF EQUIPMENT, MATERIALS, DEBRIS, OR FILL WITHIN THE TPZ OF ANY TREE WHICH IS BEING PROTECTED IS NOT ALLOWED.

(3) THE CONTRACTOR SHALL INSPECT ALL TREE PROTECTION BARRICADES AND SIGNS ON A WEEKLY BASIS DURING THE COURSE OF CONSTRUCTION. ANY BARRICADE OR SIGN WHICH HAS BEEN DAMAGED OR IS MISSING SHALL BE REPLACED IMMEDIATELY.

(4) IF ANY TREE WHICH HAS NOT BEEN APPROVED TO BE REMOVED IS DESTROYED, OR RECEIVES MAJOR DAMAGE DURING CONSTRUCTION, WITH THE EXCEPTION OF NATURAL EVENTS, SO AS TO PLACE ITS LONG TERM SURVIVAL IN QUESTION, THE TREE(S) MUST BE REPLACED AT AN INCH-TO-INCH BASIS OF THE TOTAL (COMBINED) DBH OF THE TREE(S) SO DESTROYED OR DAMAGED. THE REPLACEMENT TREE(S) SHALL BE OF COMPARABLE SPECIES OF THE DESTROYED OR DAMAGED TREE(S) WITH A MINIMUM REPLACEMENT SIZE OF 3.5-INCH CALIPER. THE COUNTY RESERVES THE RIGHT TO ESTABLISH A REPLACEMENT VALUE FOR SUCH TREES AND PAYMENT INTO THE TREE MITIGATION FUND MAY BE AUTHORIZED BY THE COUNTY'S LANDSCAPE ARCHITECT.

SEC. 6.8.12. - LANDSCAPE COMPLETION INSPECTION REQUIREMENTS.

UPON COMPLETION OF THE INSTALLATION, THE CONTRACTOR SHALL REQUEST AN INSPECTION BY THE DESIGN PROFESSIONAL. A LANDSCAPE AND IRRIGATION AS-BUILT CERTIFICATION SHALL BE SIGNED AND SEALED BY THE DESIGN PROFESSIONAL AND SUBMITTED TO THE COUNTY LANDSCAPE ARCHITECT PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

PLANT SCHEDULE

98% NATIVE   THIS IS A "FLORIDA FRIENDLY LANSCAPE PLAN"

NATIVE	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	SPACING	QTY
	TREES						
Y	IPV	Ilex vomitoria `Pendula` / Weeping Yaupon Holly	30 gal	2-3" STD	8`-10` H x 4`-5` W		3
N	LN2	Lagerstroemia indica x faurei `Natchez` / Natchez Crape Myrtle	65 gal	3.5"Cal	12`-14` x 6`-8`		2
Y	PD2	Pinus elliotti var. Densa / Densa Slash Pine	45 gal	3.5"Cal	10`-12`H X 5`-6`W		4
Y	QV	Quercus virginiana / Southern Live Oak	65 gal	3.5"Cal	12`-14` x 6`-8`		4
Y	SP	Sabal palmetto / Cabbage Palmetto	B & B		12`-18` CT		2
	CODE	**BOTANICAL / COMMON NAME**	**CONT**	**SIZE**		**SPACING**	**QTY**
	SHRUBS					36" o.c.	
Y	MC	Myrcianthes fragrans / Simpson`s Stopper	3 gal	30"-36"			45
	CODE	**BOTANICAL / COMMON NAME**	**CONT**	**SIZE**		**SPACING**	**QTY**
	SHRUB AREAS						
Y	IVD	Ilex vomitoria `Schillings Dwarf` / `Schillings Dwarf` Holly	3 gal@	10-12" x 10-12"		24" o.c.	125
Y	MUC	Muhlenbergia capillaris / Pink Muhly	1 gal	18"-24" x 18"-24"		36" o.c.	35
	GROUND COVERS						
	PA	Paspalum notatum `Argentine` / Bahia Grass	sod				7,586 sf
Y	TF	Tripsacum floridanum / Dwarf Fakahatchee Grass	1 gal	18" height; full		36" o.c.	56
Y	ZP	Zamia pumila / Coontie	3 gal	18"-24" spd.		36" o.c.	24

MITIGATION INCHES PROVIDED
14
14
TOTAL INCHES
28

PLANTING NOTES:

1. ALL PLANT MATERIAL SIZES ARE MINIMUM SIZES. CONTAINER SIZES SHALL BE INCREASED IF NECESSARY TO PROVIDE OVERALL PLANT SIZED SPECIFIED.
2. FINAL ARRANGEMENT OF PLANT MATERIAL SHALL BE STAKED BY THE CONTRACTOR FOR THE APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLMENT.
3. THE PLANT QUANTITIES SHOWN ON THE LANDSCAPE CONTRACT DOCUMENTS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND REPORTING ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO CONTRACT AWARD AND COMMENCEMENT OF WORK.
4. ALL MULCH SHALL BE MEDIUM PINE BARK NUGGETS MULCH 3 INCHES THICK WHEN COMPACTED.
5. CONTRACTOR RESPONSIBLE TO REMOVING ALL INVASIVE OR PROHIBITED PLANT SPECIES ONSITE.
6. ALL LANDSCAPING SHALL CONFORM TO CITY OF MARION COUNTY LANDSCAPE, BUFFER, AND TREE REQUIREMENTS.

SOD NOTE:

1. ALL SOD SHALL BE ARGENTINE BAHIA GRASS (paspalum notatum 'Argentine'). FINAL QUANITITU TO BE DETERMINED IN FIELD BY CONTRACTOR.

SIGHT DISTANCE NOTE:

1. ALL LANDSCAPING WITHIN SIGHT TRIANGLES SHALL CONFORM TO FDOT STANDARDS.
2. SHRUBS AND GROUNDCOVERS WITHIN SIGHT TRIANGLES SHALL NOT EXCEED 36" IN HIEGHT ABOVE PAVEMENT.
3. TREES IN SIGHT TRIANGLE SHALL HAVE A MINIMUM OF 6 FEET OF CLEAR TRUNK AT INSTALLATION, AND SHALL BE MAINTAINED AT 8 FEET AFTER ESTABLISHMENT.

tdc DESIGN STUDIO
LANDSCAPE ARCHITECTURE
COMMUNITY PLANNING
URBAN DESIGN
1516 E. HILLCREST STREET STE. 105
ORLANDO, FL 32803 PH: 407-256-2625

PROJECT
351 MARION OAKS BLVD
MARION COUNTY, FL
Prepared For:
A&B PROPERTIES SERVICES

SEAL
REGISTERED LANDSCAPE ARCHITECT TODD D. CLEMENTS STATE OF FLORIDA
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

CONSULTANTS

ISSUED FOR:
10/104/2025 PERMIT

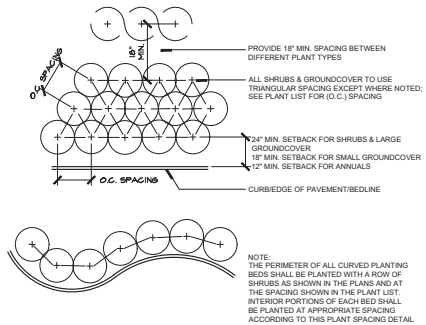
PROJECT NO.	2025-05
DESIGNED BY	TFW
DRAWN BY	TFW
CHECKED BY	TDC/TFW
DATE	2/18/2025
DRAWING SCALE	1"=20'

0 FT 10 20 North

DRAWING TITLE
LANDSCAPE PLAN

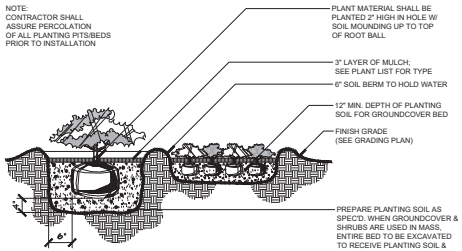
DRAWING NUMBER
LS-01

SHEET 1 OF 2



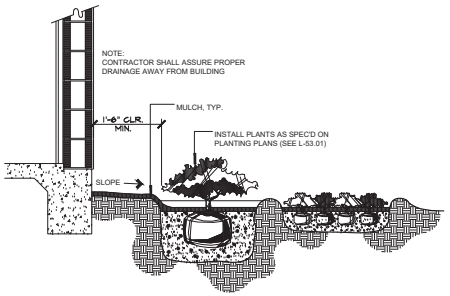
1 SHRUB & GROUNDCOVER SPACING

1/2" = 1'-0" P-LA-01



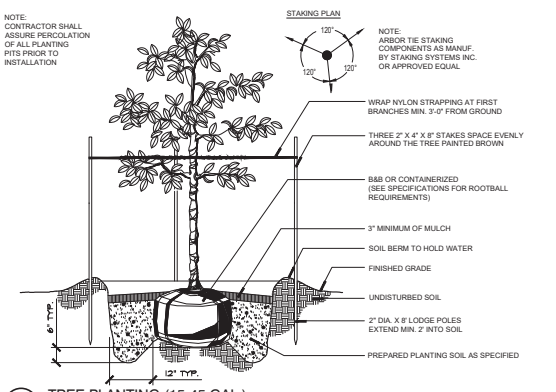
2 SHRUB & GROUNDCOVER PLANTING

1/2" = 1'-0" P-LA-02



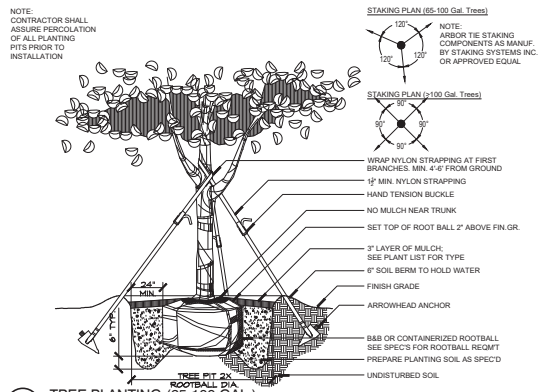
3 FOUNDATION PLANTING

1/2" = 1'-0" P-LA-03



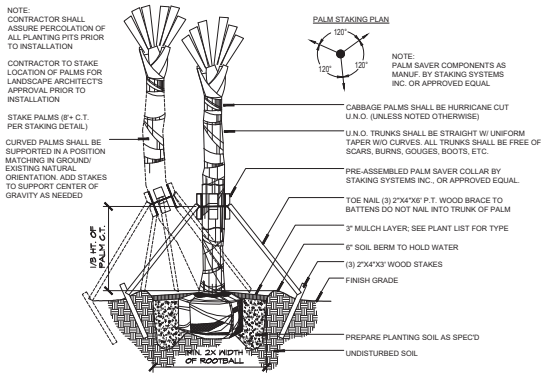
4 TREE PLANTING (15-45 GAL.)

1/2" = 1'-0" P-LA-05



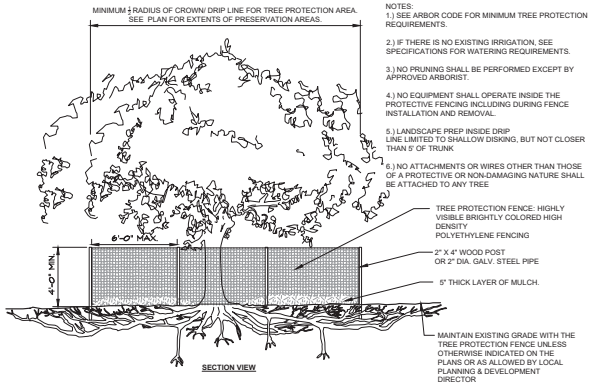
5 TREE PLANTING (65-100 GAL.)

1/2" = 1'-0" P-LA-06



6 PALM PLANTING DETAIL

1/2" = 1'-0" P-LA-07



7 TREE PROTECTION

N.T.S. P-CO1-WAT-W2C-30

LANDSCAPE SPECIFICATIONS:

PART 1 - GENERAL

1.01 WORK INCLUDED
A. INSTALLATION OF TREES, PALMS, SHRUBS, GROUNDCOVERS, AND GRASS SOD.
B. APPLICATION AND PAYMENT FOR REQUIRED REVIEWS.

1.02 REFERENCES
A. "GRADES AND STANDARDS FOR NURSERY PLANTS," FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
B. "AMERICAN STANDARD FOR NURSERY STOCK," ANSI Z60.1-2004, AMERICAN NURSERY & LANDSCAPE ASSOCIATION.

1.03 SUBMITTALS
A. RECORD DRAWINGS: FURNISH ONE SET OF REPRODUCIBLE RECORD DRAWINGS, CLEARLY SHOWING ALL CHANGED MADE TO THE ORIGINAL CONTRACT DRAWINGS DURING THE COURSE OF WORK.
B. SOIL ANALYSIS: SUBMIT SOIL TEST RESULTS FROM AN INDEPENDENT SOIL TESTING LABORATORY PRIOR TO PLANTING.

1.04 DELIVERY, STORAGE, AND HANDLING
A. INSPECTION: UPON DELIVERY TO THE SITE, INSPECT ALL PLANT MATERIALS FOR CONFORMITY TO THE SPECIFICATIONS AND FOR HANDLING DAMAGE. REMOVE FROM THE SITE ALL NON-CONFORMING AND DAMAGED PANT MATERIALS.
B. ON-SITE STORAGE: PROTECT ALL STORED PLANT MATERIALS FROM SUN AND WIND. WATER ALL STORED PLANT MATERIAL DAILY. OWNER TO INDICATE APPROPRIATE LOCATION FOR MATERIAL(S) AND EQUIPMENT STORAGE.

1.05 GUARANTEE
A. GUARANTEE ALL PLANTING WORK FOR A PERIOD OF ONE YEAR AFTER THE DATE OF FINAL APPROVAL AND ACCEPTANCE.
B. REPLACE AT NO COST TO THE OWNER ALL PLANT MATERIALS WHICH DIE OF ARE DETERMINED BY THE LANDSCAPE ARCHITECT , OR OWNERS REPRESENTATIVE TO BE UNACCEPTABLE, UNLESS THE DEATH OR UNACCEPTABLE CONDITION IS CLEARLY BEYOND THE CONTROL OF THE CONTRACTOR, AS DETERMINED BY THE OWNER. SUCH CIRCUMSTANCES MAY INCLUDE ACTS OF MOTHER NATURE, THEFT AFTER FINAL INSPECTION, OR VANDALISM. UNACCEPTABLE PLANTS SHALL INCLUDE THOSE THAT SHOW SIGNIFICANT DIE-BACK OR FAILURE TO EXHIBIT THE HEALTHY CHARACTERISTICS INDICATIVE OF THE SPECIES.

1.06 MAINTENANCE
A. MAINTAIN ALL LANDSCAPING UNTIL ONE YEAR AFTER FINAL APPROVAL AND ACCEPTANCE.
B. MAINTENANCE TO INCLUDE:
1. CULTIVATING AND WEEDING PLANT BEDS AND TREE PITS.
2. APPLICATION OF HERBICIDES AND PESTICIDES
3. IRRIGATION SUFFICIENT TO SATURATE ROOT SYSTEMS APPLIED DAILY.
4. TRIMMING AND PRUNING, INCLUDING REMOVAL OF CLIPPINGS AND DEAD OR BROKEN BRANCHES, AND TREATMENT OF PRUNED AREAS OR OTHER WOUNDS.
5. DISEASE CONTROL.
6. MAINTAINING GUYS AND STAKES IN A TIGHT CONDITION.
7. MAINTAINING TREES IN A PLUMB CONDITION.
8. WEEKLY MOWING AFTER SOD IS SUFFICIENTLY ROOTED.

PART 2 - PRODUCTS

2.01 PLANT MATERIALS
A. TREES AND SHRUBS: ALL PLANT MATERIALS SHALL BE FLORIDA #1 AS OUTLINED IN "GRADES AND STANDARDS FOR NURSERY PLANTS."
B. SOD: PROVIDE ONLY NURSERY GROWN, MACHINE CUT SOD OF THE TYPE INDICATED ON THE DRAWINGS. SOD SHALL BE WELL-MATTED WITH ROOTS, FREE OF EXCESSIVE WEEDS, AND SHALL BE GREEN, FRESH AND UNINJURED AT THE TIME OF PLANTING.

2.02 SOIL MATERIALS
A. TOPSOIL: FERTILE, AGRICULTURAL TOPSOIL, TYPICAL FOR PROJECT LOCALITY, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, TAKEN FROM DRAINED SITE, FREE OF SUBSOIL, CLAY, PLANTS, WEEDS AND ROOTS, pH RANGE OF 5.5 TO 7.0, MINIMUM 4 PERCENT, MAXIMUM 20 PERCENT ORGANIC MATTER.
B. PEAT MOSS: SHREDDED, LOOSE, SPHAGNUM MOSS, FREE OF LUMPS, ROOTS, INORGANIC MATERIAL, MINIMUM 85 PERCENT ORGANIC MATERIAL MEASURED BY OVEN DRY WEIGHT, 4 TO 5 pH RANGE, MOISTURE CONTENT OF 30 PERCENT.
C. SAND: COARSE, WASHED, BUILDERS SAND
D. PLANTING SOIL MIXTURE: PROVIDE MIXTURE OF IMPORTED TOPSOIL OR APPROVED TOPSOIL FROM SITE, PEAT, SAND, AND OTHER AMENDMENTS AS RECOMMENDED BY THE INDEPENDENT SOIL TESTING LABORATORY FOR THE SPECIFIED PLANTS.

2.03 OTHER MATERIALS
A. MULCH: PINE BARK MINI NUGGETS OR PINE STRAW 3" THICK COMPACTED UNDER ALL TREES, PALMS, SHRUBS, & GROUNDCOVER.
B. FERTILIZER:
1. FLOWERING ANNUALS AND BEDDING PLANTS: SIERRABLEN 18-7-10 (+IRON), RATE OF APPLICATION 2LBS PER 100 SQ.FT.
2. CONTAINER GROWN TREES, SHRUBS, AND GROUNDCOVER: AGRIFORM 21 GRAM TABLES, RATE OF APPLICATION AS FOLLOWS:
(1-2 GALLON PLANTS:1 TABLET) (30 GALLON PLANTS:6 TABLETS)
(3-5 GALLON PLANTS: 2 TABLETS) (65 GALLON PLANTS:8 TABLETS)
(7-10 GALLON PLANTS: 3 TABLETS) (100 GALLON PLANTS:10 TABLETS)
(15 GALLON PLANTS: 4 TABLETS) (200 GALLON PLANTS:15 TABLETS)
3. FIELD GROWN AND COLLECTED TREES: AGRIFORM 21 GRAM TABLETS, ONE TABLET PER ½" OF CALIPER FOR STANDARD TREES; ONE TABLET PER FOOT SPREAD FOR MULTI-TRUNK TREES.
4. NEWLY PLANTED SOD: 6-6-6 APPLIED PER MANUFACTURER'S INSTRUCTIONS.

2.04 TESTS
A. PROVIDE ANALYSIS OF IMPORTED TOPSOIL INDICATING pH VALUE AND PERCENTAGE OF NITROGEN, PHOSPORUS, POTASH, SOLUBLE SALT, AND ORGANIC MATTER.
PROVIDE ANALYSIS OF EXISTING SOIL IN REPRESENTATIVE PLANTING AREAS, INDICATING REPRESENTATIVE PLANTING AREAS, INCLUDING LABORATORY RECOMMENDATIONS FOR SOIL AMENDMENTS NECESSARY FOR OPTIMAL PLANT GROWTH.

PART 3 - EXECUTION

3.01 PREPARATION
A. FINE GRADING: FINE GRADE PLANTING AREA, AS INDICATED ON THE DRAWINGS, ELIMINATING LOW OR ROUGH AREAS, AND BUILDING DEBRIS, STONES AND RUBBLE. FINISH GRADES SHALL BE SLOPED IN THE SAME DIRECTION AS EXISTING DRAINAGE; NEW GRADES SHALL NOT REVIEW PONDING OR STANDING WATER.
B. ALERT THE OWNER OF POTENTIAL GRADING AND DRAINAGE PROBLEMS, INCLUDING DEPRESSED PLANTING AREAS WITH NO OUTFALL, SATURATED PLANTING AREAS, PLANTING PITS THAT HOLD WATER FOR PROLONGED PERIODS, AND ANY OTHER CONDITION DETRIMENTAL TO OPTIMUM PLANT GROWTH.

3.02 PLANTING
A. TAKE LOCATIONS OF ALL TREES AND SHRUBS. ALIGN WITH ARCHITECTURAL OR ENGINEERING REFERENCES FEATHERS AS INDICATED ON THE DRAWINGS. INFORM LANDSCAPE ARCHITECT OF UNFORESEEN OBSTACLES WHICH MAY AFFECT THE LOCATIONS AS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR APPROVAL OF ALL STAKED PLATINGS PRIOR TO INSTALLATION.
B. PLANT TREES AND SHRUBS, ROTATING AS NECESSARY FOR BEST APPEARANCE FROM THE PREDOMINANT VIEWPOINT.
C. LAY OUT SHRUB BEDS, SCALING THE LOCATIONS AND DIMENSIONS OF EACH BED, FOLLOWING THE CONFIGURATIONS INDICATED ON THE DRAWINGS. ADJUST THE BED DIMENSIONS TO THE QUANTITY AND SPACING OF PLANTS SHOWN ON THE PLANT LIST OR SCALED FROM THE DRAWINGS. INFORM THE LANDSCAPE ARCHITECT OF SIGNIFICANT DISCREPANCIES BETWEEN PLAN BED DIMENSIONS AND PLANT QUANTITIES.
D. PLANT SHRUBS AND ANNUALS, MAINTAINING UNIFORM SPACING AS INDICATED ON THE PLANT LIST OR SCALED FROM THE DRAWINGS.
E. DISTRIBUTE OR DISPOSE OF EXCAVATED SOIL FROM PLANTING HOLES, MAINTAINING THE DESIRED FINISH GRADES.
F. LAY SOD ON FINE-GRADED, MOISTENED SOIL, WITHOUT GAPS OR OVERLAPS. TAMP OR ROLL TO PROVIDE FIRM CONTACT WITH SOIL. SOD LINE AT PLANT BEDS SHALL BE CUT TO THE CONFIGURATION AND DIMENSIONS SHOWN ON THE DRAWINGS. A MINIMUM DIMENSION SHALL BE MAINTAINED BETWEEN PLANTS AND SOD EQUAL TO ONE-HALF THE PLANT SPACING, MEASURED FROM THE CENTER OF THE PLANT TO THE EDGE OF THE SOD. A CIRCULAR RING OF 12 INCH RADIUS SHALL BE MAINTAINED FREE OF GRASS AROUND TREES WITHIN SODDED AREAS.
G. APPLY FERTILIZER TABLETS, EQUALLY DISTRIBUTED AROUND ROOTBALL AT A DEPTH EQUAL TO ONE-HALF THE ROOTBALL DEPTH. APPLY GRANULAR FERTILIZERS TO SOD AND BEDDING PLANTS. SWEEP FERTILIZERS FROM WALKWAYS TO AVOID STAINING.
H. SATURATE SOIL THOROUGHLY DURING AND AFTER BACKFILLING OF PLANTS, AND AFTER LAYING OF SOD.
I. APPLY A LAYER OF MULCH, MINIMUM 3 INCHES AFTER SETTLEMENT, TO ALL PLANT BEDS AND TREE RINGS.
J. STAKE AND GUY ALL TREES SECURELY. ATTACH WHITE SURVEYOR'S RIBBON TO ALL GUY WIRES ADJACENT TO PEDESTRIAN AREAS.

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CONSULTANTS

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