APOPKA PLANNING COMMISSION AGENDA

February 11, 2025 5:30 PM
Apopka City Hall Council Chambers

APOPKA PLANNING COMMISSION MEETING WILL BE LIVE-STREAMED ON YOUTUBE. TO WATCH, PLEASE VISIT:
https://www.youtube.com/CityofApopkaFL

CALL TO ORDER

OPENING AND INVOCATION

PUBLIC COMMENT PERIOD

The Public Comment Period is for City-related issues that may or may not be on today's Agenda. If you are here for a matter that requires a public hearing, please wait for that item to come up on the agenda. If you wish to address the Council, you must fill out an Intent to Speak form and provide it to the City Clerk prior to the start of the meeting. If you wish to speak during the Public Comment Period, please fill out a green-colored Intent-to-Speak form. If you wish to speak on a matter that requires a public hearing, please fill out a white-colored Intent-to-Speak form. Speaker forms may be completed up to 48 hours in advance of the Council meeting. Each speaker will have four minutes to give remarks, regardless of the number of items addressed. Please refer to Resolution No. 2016-16 for further information regarding our Public Participation Policy & Procedures for addressing the City Council.

APPROVAL OF MINUTES

1. Meeting Minutes from January 14, 2025

PUBLIC HEARING

1. Quasi-Judicial - Ordinance No. 3093 - Rezoning/KPI Master Plan - Chandler Hills
   Owner(s): Orchid Estate HOA Community, Mega GNG, LLC, Jacob Snavely, 4625 Chandler Road, LLC, Matthew & Deborah Shaw, Daphne Martin, Walter H. Robinson III, Yoo Shik Um Irrevocable Trust, PM-S1 REO, LLC
   Applicant(s): Jonathan Huels, Esq.
   Location: 2350 W. Kelly Park Road
   Project: Chandler Hills
   Density: Maximum of 5 dwelling units per acre
   Project Manager: Bobby Howell, AICP

2. Legislative – Ordinance No. 3095 – Small-Scale Future Land Use Amendment – AdventHealth ED
   Owner(s): Adventist Health System/Sunbelt, Inc.
   Applicant(s): Kimley-Horn & Associates c/o Nathan Milch
   Location: Southeast corner of Kelly Park Road and Plymouth Sorrento Road
   Tract: 5.56 +/- acre(s)
   Current Future Land Use Designation: Residential Very Low Suburban
   Proposed Future Land Use Designation: Mixed-Use
   Intensity: 0.15 floor area ratio minimum
   Project Manager: Jean Sanchez

3. Quasi-Judicial – Ordinance No. 3096 – Change of Zoning – AdventHealth ED
   Owner(s): Adventist Health System/Sunbelt, Inc.
   Applicant(s): Kimley-Horn & Associates c/o Nathan Milch
   Location: Southeast corner of Kelly Park Road and Plymouth Sorrento Road
   Tract: 5.56 +/- acre(s)
   Current Zoning Designation: T (Transitional)
   Proposed Zoning Designation: KPI - MU (Kelly Park Interchange - Mixed-Use)

Intensity: 0.15 floor area ratio minimum
Project Manager: Jean Sanchez

SITE PLANS

1. Shoppes at East Shore - Plat
   Owner(s): Shoppes at East Shore, LLC
   Applicant(s): Jeremy D. Hallick, P.S.M.
   Location: Northeast corner of Ocoee Apopka Road and Keene Road
   Tract Size: 27.99 +/- acres
   Project Manager: Jean Sanchez

OLD BUSINESS

NEW BUSINESS

ADJOURNMENT

Individuals with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk at least two (2) working days in advance of the meeting date and time at (407) 703-1704. F.S. 286.0105 If a person decides to appeal any decision or recommendation made by Planning Commission with respect to any matter considered at this meeting, he will need record of the proceedings, and that for such purposes he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Any opening invocation that is offered before the official start of the Planning Commission meeting shall be the voluntary offering of a private person, to and for the benefit of the Planning Commission. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the Planning Commission or the city staff, and the City is not allowed by law to endorse the religious or non-religious beliefs or views of such speaker. Persons in attendance at the Planning Commission meeting are invited to stand during the opening ceremony. However, such invitation shall not be construed as a demand, order, or any other type of command. No person in attendance at the meeting shall be required to participate in any opening invocation that is offered or to participate in the Pledge of Allegiance. You may remain seated within the City Council Chambers or exit the City Council Chambers and return upon completion of the opening invocation and/or Pledge of Allegiance if you do not wish to participate in or witness the opening invocation and/or the recitation of the Pledge of Allegiance.

MINUTES OF THE PLANNING COMMISSION REGULAR MEETING HELD ON JANUARY 14, 2025 AT 5:30 P.M. IN THE CITY COUNCIL CHAMBERS, APOPKA, FLORIDA.

MEMBERS PRESENT: William Gusler, Howard Washington, Robert Ryan, Eric Mock, Mary Norwood and Wes Dumey

ABSENT: Kirk Dickson and Orange County Public Schools (Non-voting)

STAFF PRESENT: Bobby Howell – Planning Manager, Jean Sanchez – Senior Project Coordinator/Planner, Amer Hamza – Planner I, Jun Sohn, Ph. D – Planner II, Andrew Hand – City Attorney (Cliff Sheppard's Office), Marta Schwarz – Content Specialist and Erin Arnold – Executive Assistant.

OTHERS PRESENT: Rowena Flanders, Julia Najera, Sean Flanders, Emily Pierson, Lonie Patterson, Geoff Summitt, Luke Classon, TJ Moore, Aden Bell, Genevieve Labuda, Lamar Hughley, Jonathan Bell, Randy Gonzalez, Heather Grooms and Demily Santiago.

OPENING AND INVOCATION: Chairperson Gusler called the meeting to order and asked for a moment of silent prayer. The Pledge of Allegiance followed.

PUBLIC COMMENT: Chairperson Gusler asked if anyone from the public wished to speak on a matter that is not on the agenda. With no one wishing to speak, Chairperson Gusler closed the public comment period.

ELECTION OF OFFICERS:

Chairperson:

MOTION: Howard Washington nominated William Gusler as Chairperson of the Planning Commission and seconded by Wes Dumey. Aye votes were cast by William Gusler, Howard Washington, Robert Ryan, Eric Mock, Mary Norwood and Wes Dumey (6-0).

Vice - Chairperson:

MOTION: Wes Dumey nominated Howard Washington as Vice-Chairperson of the Planning Commission and seconded by Robert Ryan. Aye votes were cast by William Gusler, Howard Washington, Robert Ryan, Eric Mock, Mary Norwood and Wes Dumey (6-0).

APPROVAL OF MINUTES: Chairperson Gusler asked if there were any corrections or additions to the regular meeting minutes of December 10, 2024 at 5:30 p.m.

MOTION: Robert Ryan made a motion to approve the Planning Commission minutes from the regular meeting held on December 10, 2024 at 5:30 p.m. and seconded by Howard Washington. Aye votes were cast by William Gusler, Howard Washington, Robert Ryan, Eric Mock, Mary Norwood and Wes Dumey (6-0).

QUASI JUDICIAL – ORDINANCE NUMBER 3091 – CHANGE OF ZONING – PLYMOUTH HARBOR SUBDIVISION

Chairperson Gusler read the item description and asked if anyone had ex-parte communication on this matter. All commissioners responded no.

Staff Presentation: Jun Sohn presented the item based on the staff report.

Chairperson Gusler opened the meeting for public hearing. With no one wishing to speak, Chairperson Gusler closed the public hearing.

MOTION: Howard Washington made a motion to recommend approval of the proposed Change of Zoning from RSF-1A (Residential Single-Family Estate District) to RSF-1B (Residential Single-Family District-Large Lot), finding the proposed change consistent with the Comprehensive Plan and Land Development Code, and compatible with the character of the surrounding areas based on the findings and facts presented in the exhibits and staff report. Motion seconded by Eric Mock. Aye votes were cast by William Gusler, Howard Washington, Robert Ryan, Eric Mock, Mary Norwood and Wes Dumey (6-0).

QUASI JUDICIAL – SPECIAL EXCEPTION – CENTRAL FLORIDA PREPARATORY SCHOOL – 1800 MARDEN ROAD

Chairperson Gusler read the item description and asked if anyone had ex-parte communication on this matter. All commissioners responded no.

Staff Presentation: Amer Hamza presented the item based on the staff report and answered questions.

Commissioner Wes Dumey asked if there are any issues currently with the traffic flow in the drop off and pick up area.

Applicant, Luke Classon with Appian Engineering located at 2221 Lee Road, stated that they initially met with the police chief as well as city staff from public services to address some concerns on Marden Road but they have since handled that by doing phased drop offs.

Commissioner Eric Mock asked Mr. Classon what the ultimate number is that the school would like to get to and if 720 students were a part of the original development plan all along.

Mr. Classon responded that the original development PD did have the school in when it was approved three years ago and it did have the gym as well but it was listed as phase two. That is why they are coming forward with the construction site plan and minor development plan. The only reason they are having to do the special exception is because they want to increase from 600 students to 720 students. It is required because it's a school within the PD and the commercial district. Their ultimate goal build out for the whole site is the 720 students. The original plan was just the gym, but this is the gym and some additional classrooms to serve the additional 120 students maximum.

Commissioner Ryan asked if there will be adequate parking.

Mr. Classon stated that the members of the school have addressed all of the parking concerns with their own staff and some parking will be added to the west side to have the traffic flow work better for drop off.

Chairperson Gusler opened the meeting for public hearing. With no one wishing to speak, Chairperson Gusler closed the public hearing.

MOTION: Wes Dumey made a motion to approve a Special Exception to increase the maximum number of students allowed from 600 students to 720 students at the Central Florida Preparatory School in a PD (Planned Development) Zoning District, subject to the exhibits and findings of the staff report. Motion seconded by Robert Ryan. Aye votes were cast by William Gusler, Howard Washington, Robert Ryan, Eric Mock, Mary Norwood and Wes Dumey (6-0).

QUASI JUDICIAL – SPECIAL EXCEPTION – PAVE A LOT STORAGE WAREHOUSE – 951 S HIGHLAND AVENUE

Chairperson Gusler read the item description and asked if anyone had ex-parte communication on this matter. All commissioners responded no.

Staff Presentation: Amer Hamza presented the item based on the staff report.

Commissioner Washington asked if this was going to be a public storage building.

Amer stated that to his knowledge, that was correct and that is what the owner wants to develop.

Commissioner Ryan asked if any hazard materials will be stored there and he has questions for the applicant.

Commissioner Washington commented that he had some concerns about the staff report for this project.

Mr. Howell responded that some cases that come before the board require a little bit further elaboration and staff does not object but there are some where staff felt it's needed to elaborate further in depth due to the nature of the comment and the question.

Commissioner Ryan asked if this was approved tonight, will it come back to the planning board again or if this is the only time they will see this.

Amer responded that this it will come back for a minor development plan but this is just an application to allow a warehouse on this location.

Mr. Howell said that this is just for approval of the use. It would come back if the building is over 25,000 square feet in area. If it's under 25,000 square feet in area, it's a minor development plan and would be approved by the development review committee.

Commissioner Mock asked what other things could be built on the property if it wasn't going to be a warehouse.

Amer stated that he would have to look into the principal use table in the land development code to see what other uses are permitted in the Mixed-Use Downtown zoning area.

Commissioner Ryan stated that he doesn't know how staff can expect this to be approved when they don't know what's going to be stored there whether it's hazardous material or flammable material.

Attorney Andrew Hand wanted to make a clarification. He stated that since this is quasi-judicial the only consideration that comes down this evening on use consideration is what's listed in the criteria. Any approval of denial needs to be based solely on that criteria and the testimony that is heard this evening. As far as uses, ultimately if it's going to be a warehouse, it has to be a legal use. That would be part of that next process. It cannot be an illegal use or something that doesn't comply with the city code or any of those federal local state regulations. Any information as to what may be stored there is for informational purposes as opposed to something that a decision can be based on.

Lamar Hughley is the general contractor on the project and is available to answer any questions.

Commissioner Ryan asked if any hazardous materials would be stored there.

Mr. Hughley said no.

Commissioner Mock asked if there will be large semi deliveries.

Mr. Hughley said no. This is mainly going to be used as a staging area to load up and go out to do work. There won't be any work conducted on the premises. It will be a place to keep equipment.

Chairperson Gusler opened the meeting for public hearing. With no one wishing to speak, Chairperson Gusler closed the public hearing.

MOTION: Mary Norwood made a motion to approve a Special Exception to allow a warehouse within the MU-D (Mixed Use Downtown) zoning district, subject to the exhibits and finding of the staff report. Motion seconded by Howard Washington. Aye votes were cast by William Gusler, Howard Washington, Robert Ryan, Eric Mock, Mary Norwood and Wes Dumey (6-0).

BRONSON PEAK PHASE 2B - PLAT

Chairperson Gusler read the item description.

Staff Presentation: Jean Sanchez presented the item based on the staff report.

Commissioner Ryan asked if these were all townhouses and if there was any street parking.

Jean Sanchez responded that they aren't all townhouses. They are single family detached and some are bungalows not attached. Street parking is closer to the amenity but she couldn't recall what the site plan showed.

Commissioner Ryan inquired about the setbacks for the garages.

Mrs. Sanchez stated that since this wasn't the site plan and is just the plat, she can't recall that information but would be happy to email Commissioner Ryan that information for this specific phase of Bronson Peak. She also mentioned that this project has been approved for over 3 years and the plat is the final division of these lots and that the setbacks aren't usually addressed during plats. Approval of the setbacks and all site design requirements with the PD was already issued a few years ago. This is just the formality of subdividing the lots.

Mr. Howell mentioned that this is just the recommendation of approval for the plat which is the creation of lots, easements, streets, tracts and alleys so that they can legally sell the lots and obtain building permits.

Commissioner Ryan asked if they could still ask the developer to modify the setbacks so a car could fit there and not block the sidewalks.

Mr. Howell responded that this was a PUD that was approved several years back when The Ridge was approved. When the PUD was adopted by the city council, there was an ordinance that was adopted that dictated all of those standards such as setbacks and parking. There was also a master plan that was approved.

Mrs. Sanchez mentioned that the applicant for the plat is not the same as the one who did the civil site plans for this portion of The Ridge.

Chairperson Gusler opened the meeting for public hearing. With no one wishing to speak, Chairperson Gusler closed the public hearing.

MOTION: Eric Mock made a motion to approve the Bronson Peak Phase 2B Plat based on the findings and facts in the staff report and exhibits. Motion seconded by Wes Dumey. Aye votes were cast by William Gusler, Howard Washington, Robert Ryan, Eric Mock, Mary Norwood and Wes Dumey (6-0).

QUASI-JUDICIAL – INB HOMES – MAJOR DEVELOPMENT PLAN

Chairperson Gusler read the item description and asked if anyone had ex-parte communication on this matter. All commissioners responded no.

Staff Presentation: Bobby Howell presented the item based on the staff report.

Commissioner Washington asked why the staff reports says that the water management tract is supposed to be located around the communications tower. And then later in the report is says that fall zone is provided adjacent to the fall tower instead of around. He asked why the fall zone is only adjacent instead of around.

Mr. Howell stated that it should have stated that the fall zone is adjacent to it which is what he meant to say when he wrote it. The fall zone is within that water retention tract. The whole idea behind the fall zone is so if the tower falls, it doesn't crash into any buildings.

Commissioner Washington asked about the Village Center and where would that be in the development plan.

Mr. Howell stated that he thinks that what is being referred to is a sentence that says the transition character zone is intended to provide a buffer between the high-density intensity village center zone and the low intensity areas outside the form-based code area. This is not in the village center. This is a carryover from when the master plan was approved. It basically provides a buffer from very high intense development to low intense development.

Commissioner Washington asked for clarification about a parcel on the map that is south of the project and according to the staff report it is in progress.

Mr. Howell stated that there have been properties within the city that have been annexed and they were never assigned a future land use or a zoning. They were called zip zoning. When the 2019 code was adopted that became transitional. There was never a future land use assigned to that property so that's why it's in progress. The owner would have to apply for a future land use designation to that.

Commissioner Ryan stated that it will probably take about four years to complete this project and is wondering if there will be enough capacity to handle the wastewater at that time.

Mr. Howell said that the developer would have to answer how long their build out time frame would be. The wastewater question would be better answered by the public services department. Since this has gone through the future land use stage and the zoning, they had indicated that there is capacity, however, the way the comprehensive plan reads is that there has to be capacity prior to the issuance of the development order. This is not the development order. This is just a preliminary plan prior to the development order which would be the construction site plan.

Commissioner Washington asked if anyone is taking responsibility to develop Chandler Road.

Mr. Howell said that Chandler Road is not a road. It's actually private property that would have to worked out between the developers of those properties. It is his understanding that there's some plans in the works for that but it is not public property.

Chairperson Gusler opened the meeting for public hearing. With no one wishing to speak, Chairperson Gusler closed the public hearing.

MOTION: Mary Norwood made a motion to recommend approval of the INB Homes Major Development Plan. Motion seconded by Howard Washington. Aye votes were cast by William Gusler, Howard Washington, Robert Ryan, Eric Mock, Mary Norwood and Wes Dumey (6-0).

OLD BUSINESS: None

NEW BUSINESS: Mr. Howell wanted to remind everyone that next Wednesday at 5:00 pm is the Wyld Oaks Joint Workshop with the City Council to go over their proposed code amendments for the Wyld Oaks project. Part one of that project was in February 2024.

ADJOURNMENT: The meeting adjourned at 6:13 p.m.

_____
William Gusler, Chairperson

_____
Bobby Howell, Planning Manager

City of Apopka
PLANNING COMMISSION STAFF REPORT

Section: PUBLIC HEARING
Item #: 1.
Meeting Date: February 11, 2025
Department: Community Development

SUBJECT:
Quasi-Judicial - Ordinance No. 3093 - Rezoning/KPI Master Plan - Chandler Hills

REQUEST:
Recommend approval of Ordinance No. 3093, rezoning from County A-1 (Citrus Rural District), County A-2 (Farmland Rural District), City T (Transitional), and RSF-1A (Residential Single-Family Estate) to KPI-MU, Neighborhood (Kelly Park Interchange Mixed-Use).

SUMMARY:
Owner(s): Orchid Estate HOA Community, Mega GNG, LLC, Jacob Snavely, 4625 Chandler Road, LLC, Matthew & Deborah Shaw, Daphne Martin, Walter H. Robinson III, Yoo Shik Um Irrevocable Trust, PM-S1 REO, LLC
Applicant: Jonathan Huels, Esq.
Parcel Identification Number(s): 18-20-28-0000-00-132, 18-20-28-0000-00-031, 18-20-28-0000-00-105, 18-20-28-0000-00-050, 18-20-28-0000-00-049, 18-20-28-0000-00-061, 18-20-28-0000-00-048, 18-20-28-0000-00-052, 18-20-28-0000-00-106, 18-20-28-0000-00-035, 18-20-28-0000-00-034, 18-20-28-0000-00-032, 18-20-28-0000-00-033, 18-20-28-0000-00-037, 18-20-28-0000-00-051, 18-20-28-0000-00-080, 18-20-28-0000-00-119, 18-20-28-0000-00-046, 18-20-28-0000-00-047
Location: 2350 W. Kelly Park Road
Future Land Use: Mixed Use
Existing Use(s): Vacant parcel with abandoned agricultural buildings
Existing Zoning: County A-1, County A-2, City T, City RSF-1A
Tract Size: 117.16 +/- Acres

Direction	Future Land Use	Zoning	Present Use
North	Mixed Use	MU-KPI (Neighborhood)	Oaks at Kelly Park subdivision
East	Residential Very Low Suburban	RSF-1A (Residential Single-family - Estate), O (Office)	Agricultural buildings, Jason Dwelly K-8 School
South	In Progress	T (Transitional)	Vacant
West	Mixed-Use, Residential Very Low Suburban	MU-KPI (Transition), RSF-1A (Single-Family Estate)	Vacant

PROJECT SUMMARY:
The subject property, which is approximately 117.16 acres in size, is located at 2350 W. Kelly Park Road and is vacant with abandoned agricultural buildings. A Large-Scale future land use amendment was adopted by the City Council on January 15, 2025, which changed the future land use designation to Mixed-Use. The applicant is requesting a rezoning from County A-1 (Citrus Rural District), County A-2 (Farmland Rural District), City T (Transitional), and RSF-1A (Residential Single-Family Estate) to KPI-MU, Neighborhood (Kelly Park Interchange

Mixed-Use) in order to allow for the construction of a development consisting 392 single-family residences. The applicant is requesting the rezoning to bring the property into the Neighborhood character zone of the Kelly Park Interchange Form Based Code area, which permits a maximum density of 5 dwelling units per acre by right. If a site, or any portion of a site is located within a one mile radius of the interchange of Kelly Park Road and State Road 429, the entire site is subject to the form-based standards contained within the Kelly Park Form-Based Code.

In accordance with the requirements of the Kelly Park Interchange Form Based Code, the owner has submitted a Master Plan detailing the development of the property. The Master Plan proposes development of the property with a total of 392 single-family residential units within the Neighborhood character zone at a maximum density of 3.38 dwelling units per acre. The design consists of front loaded and rear loaded lots. Lot widths range from 34-feet to 60-feet in width. A total of 162 lots are 34-feet in width, of which are all rear loaded, 130 lots are 55-feet in width, and 100 are 60-feet in width. There are no minimum and maximum lot size and living area requirements in the Form Based Code. Building setbacks are as follows: Front loaded lots - front porch, 10-feet, front/street side - 15-foot minimum, 30-foot maximum, rear - 20-feet, side - 5-feet, corner lot - 15-feet. Rear loaded lots - front porch - 10-foot minimum, front/street side - 15-foot minimum, 30-foot maximum, rear - 5-feet, side - 5-feet, rear garage - 20-feet, corner - 15-feet.

The Master Plan details design of the proposed subdivision in accordance with the requirements of the Kelly Park Interchange Form Based Code, and the Neighborhood character zone criteria. The Neighborhood character zone is located at the edge of the study area. The primary intent of this zone is to provide a transition between the medium density residential in the Transition zone and the adjoining lower density neighborhoods outside the study area. The Neighborhood character zone will allow single-family homes designed with front porches and garages located in the back, with access from alleyways.

Access to the site is proposed via W. Kelly Park Road. A dedication of a 30-foot wide strip for future right-of-way needs for W. Kelly Park Road is detailed on the Master Plan. Within this strip, a 12-foot wide multipurpose trail will be constructed by the developer to help facilitate the construction of the regional trail system that is proposed and is currently being constructed within the Kelly Park Form Based Code area. The stormwater ponds are located on the eastern portion of the site adjacent to the Kelly Park School property, and the southern portion of the site. In accordance with the requirements of the Form Based Code, 20-percent of the total site area is required to remain as open space. The Master Plan reserves 32.59-percent of the site as open space. Common recreation elements include amenity and pocket park, green space with internal trail system, passive open space/recreation areas, and the dedication of the bike trail along W. Kelly Park Road. The main internal roadways are street type "E", which is the required street type within the Neighborhood character zone. Rights-of-ways ranging in width from 50 to 70-feet wide are provided. Within this right-of-way 127 on-street parking spaces are provided. The 34-foot wide lots are alley loaded. Per Table 14 of the Form Based Code, the alleyways are required to provide 18-feet of right-of-way. Additionally, the applicant is dedicating a 15-foot wide strip, and 50-foot wide strip for future right-of-way needs for Chandler Road along the portion of property under their ownership. A vehicular point of ingress/egress will be constructed that will allow access onto the future Chandler Road right-of-way.

Land Development Code Section 2.5.1.D.3 requires the Council to weigh the relevance of and consider whether and the extent to which the proposed amendment:

a. Is consistent with and furthers the goals, objectives and policies of the comprehensive plan and other adopted City plans;

- Applicant’s response: The development of the Property under the KPI Code is consistent with and furthers the goals, objectives and policies of the City of Apopka. Based on the initial inclusion of the Property within the Wekiva Parkway Interchange Vision Plan (“Vision Plan”), the entitlement of the Project under the KPI Code is consistent with its stated purpose and intent in Section A (“Purpose and Intent”) that “Sites generally within one (1) mile of the Kelly Park Interchange are subject to the form-based standards contained in this document.” There are at least three (3) other property assemblages similarly situated as the Property that have been permitted to develop under the KPI Code including Oakview, Oaks at Kelly Park Phases 1 and 2 and Park View Preserve. These projects were approved under the same governing regulations that are currently in force and effect. This pattern of development is consistent with furthers the goals, objectives and policies of the City of Apopka with respect to the KPI Code area.
- Staff response: Staff has no objection.

b. Is in conflict with any provisions of the LDC;

- Applicant’s response: There are no conflicts with the provisions of the LDC as it has incorporated the KPI Code, which will control future development of the Property upon approval of the Comprehensive Plan Amendment and rezoning to the KPI-MU zoning designation.

- Staff response: Staff has no objection.

c. Addresses a demonstrated community need;

- Applicant's response: The City's approval of the Comprehensive Plan Amendment will allow the Property to be developed under the Neighborhood District of the KPI Form Based Code. Under such district, the Project will feature a range of housing types that promotes economic growth and diversity with a design that complements the surrounding area and addresses a demonstrated community need for more housing options.
- Staff response: Staff has no objection.

d. Is required by changed conditions;

- Applicant's response: The City's adoption of the KPI Code and plans for future expansion of Kelly Park Road are the catalysts for development of the Project. The project will provide a range of housing types to an area in need for additional residential options.
- Staff response: Staff has no objection.

e. Is compatible with existing and proposed uses surrounding the subject land, and is the appropriate zoning district for the land;

- Applicant's response: The proposed Mixed-Use FLU designation and KPI-MU zoning is appropriate for the Property. The Project is compatible with existing and proposed uses surround the Property, which include existing residential subdivisions, a public school, existing large lot residences and greenhouses. Performance standards that will be placed on the Project during the subsequent rezoning will include substantial perimeter buffering that will ensure compatibility.
- Staff response: Staff has no objection.

f. Would result in a logical and orderly development pattern;

- Applicant's response: The unification of over a dozen separate parcels into a single development project that will be developed under the KPI Code will further the logical and orderly development pattern in this geographic area of the City.
- Staff response: Staff has no objection.

g. Would not result in significant adverse impacts on the natural environment—including, but not limited to, water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment; and

- Applicant's response: The Project will not result in significant adverse impacts on the natural environment. The Property is currently developed for agricultural and residential uses. There are no known wetlands or sensitive environmental located on the Property.
- Staff response: An Environmental Assessment will be required to be provided with the submittal of a development plan.

h. Would result in development that is adequately served by public facilities (e.g., streets, potable water, sewerage, stormwater management, solid waste collection and disposal, schools, parks, police, and fire and emergency medical facilities).

- Applicant's response: The Project will be adequately serviced by Public facilities that are already constructed in the immediate vicinity of the Property.
- Staff response: Staff has no objection. An Environmental Assessment will be required to be provided with the submittal of a development plan.

SCHOOL CAPACITY REPORT:
An inquiry was sent to Orange County Public Schools (OCPS) regarding school capacity requirement for this application. Capacity is not available at the high school level, and is deficient by 20.881 seats. The property is zoned for the following schools: Kelly Park (K-5) elementary, Kelly Park (6-8) Middle School, and Apopka High School.

ORANGE COUNTY NOTIFICATION:
The JPA (Joint Planning Agreement) requires the City to notify the County 30 days before any public hearing or advisory board. The City notified Orange County on January 16, 2024 and July 29, 2024.

PUBLIC HEARING SCHEDULE:
February 11, 2025 – Planning Commission (5:30 P.M.)
February 19, 2025 – City Council (7:00 P.M.), First Reading
March 5, 2025 – City Council (1:30 P.M.), Second Reading and Adoption

DULY ADVERTISED:
January 17, 2025 – Apopka Chief
January 23, 2025 - Mailed notices to adjacent property owners, property posted

Note: This item is considered Quasi-Judicial. The staff report and its findings are to be incorporated into and made a part of the minutes of this meeting.

FUNDING SOURCE:
N/A

RECOMMENDED MOTION:
DEVELOPMENT REVIEW COMMITTEE (DRC):
Recommends approval of the Change in Zoning from County A-1 (Citrus Rural), County A-2 (Farmland Rural District), City T (Transitional), and RSF-1A (Residential Single-Family Estate) to KPI-MU (Kelly Park Interchange–Mixed-Use) finding the proposed amendment consistent with the Comprehensive Plan and Land Development Code, and compatible with the character of the surrounding areas, based on the findings and facts presented in the staff report and exhibits.

PLANNING COMMISSION:
Find the proposed Change in Zoning from County A-1 (Citrus Rural), County A-2 (Farmland Rural District), City T (Transitional), and RSF-1A (Residential Single-Family Estate) to KPI-MU (Kelly Park Interchange–Mixed-Use), consistent with the Comprehensive Plan and Land Development Code, and compatible with the character of the surrounding areas, and recommend approval of the proposed Change of Zoning, based on the findings and facts presented in the staff report and exhibits.

ATTACHMENTS:
1. Ordinance Number 3093
2. Map series
3. MASTER PLAN
4. DEVELOPMENT STANDARDS
5. Color Architectural Elevations
6. Advertisement January 17
7. OCPS School Capacity Determination

ORDINANCE NO. 3093

AN ORDINANCE OF THE CITY OF APOPKA, FLORIDA, CHANGING THE ZONING FROM COUNTY A-1 (CITRUS RURAL DISTRICT), COUNTY A-2 (FARMLAND RURAL DISTRICT), CITY T (TRANSITIONAL), AND RESIDENTIAL SINGLE-FAMILY ESTATE (RSF-1A) TO KPI-MU (KELLY PARK INTERCHANGE MIXED USE) WITH AN ASSIGNMENT OF NEIGHBORHOOD OVERLAY, FOR CERTAIN REAL PROPERTY GENERALLY LOCATED SOUTH OF W. KELLY PARK ROAD AND EAST OF CHANDLER ROAD; OWNED BY KELLY PARK ROAD PROPERTY, LLC; COMPRISING 117.16 ACRES, MORE OR LESS; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.

WHEREAS, to manage the growth, the City of Apopka, Florida, finds it in the best interest of the public health, safety and welfare of its citizens to establish zoning classifications within the City; and

WHEREAS, the applicant, Jonathan Huels, Esq., on behalf of the fee simple owners of the Property, submitted an application for a change in zoning on the Property identified and depicted in Exhibit "A," attached hereto, from County A-1 (Citrus Rural District), County A-2 (Farmland Rural District), City T (Transitional), and RSF-1A (Residential Single-Family Estate) to KPI-MU (Kelly Park Interchange Mixed Use) with a Neighborhood overlay; and

WHEREAS, the proposed KPI-MU (Kelly Park Interchange Mixed-Use) District rezoning of the Property is consistent with the City's Comprehensive Plan and Land Development Code; and

WHEREAS, the City of Apopka Planning Commission, sitting as the Local Planning Agency, recommended approval of the change in the zoning of the Property and found that the rezoning is consistent with the City's Comprehensive Plan; and

WHEREAS, the City of Apopka has followed all statutory and Code requirements for noticing and advertising this rezoning Ordinance and public hearings associated with the rezoning; and

WHEREAS, the City Council has received public input on the rezoning and a recommendation from staff; and

WHEREAS, the City Council of the City of Apopka finds that the applicants have met the necessary criteria for rezoning under City's Land Development Code and that rezoning serves a legitimate public purpose and will not adversely affect the public interest.

NOW THEREFORE, BE IT ORDAINED, by the City Council of the City of Apopka, Florida, as follows:

Section I. Findings and Intent. The City of Apopka has complied with all requirements and procedures of Florida Law in processing this Ordinance. The recitals set forth above are hereby adopted.

Section II. Rezoning. The Property described and shown in Exhibit "A", being situated in the City of Apopka, Florida, is hereby rezoned and assigned the KPI-MU with a Neighborhood overlay Zoning District, as defined in the Apopka Land Development Code.

Section III. Zoning Map. The Official Zoning Map of the City of Apopka shall be amended to conform to the zoning assignment approved in Section 2 of this Ordinance. The Community Development Director, or the Director's designee, is hereby directed to amend, alter, and implement the official zoning maps of the City of Apopka, Florida, to include said designation.

Section IV. Severability. If any section or portion of a section or subsection of this Ordinance proves to be invalid, unlawful, or unconstitutional, it shall not be held to invalidate or impair the validity, force or effect of any other section or portion of section or subsection or part of this ordinance.

Section V. Conflicts. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section VI. Effective Date. This Ordinance shall become effective immediately.

ADOPTED at a regular meeting of the City Council of the City of Apopka, Florida, this ____ day of _____, 2025.

READ FIRST TIME:

READ SECOND TIME AND
ADOPTED:

ATTEST:

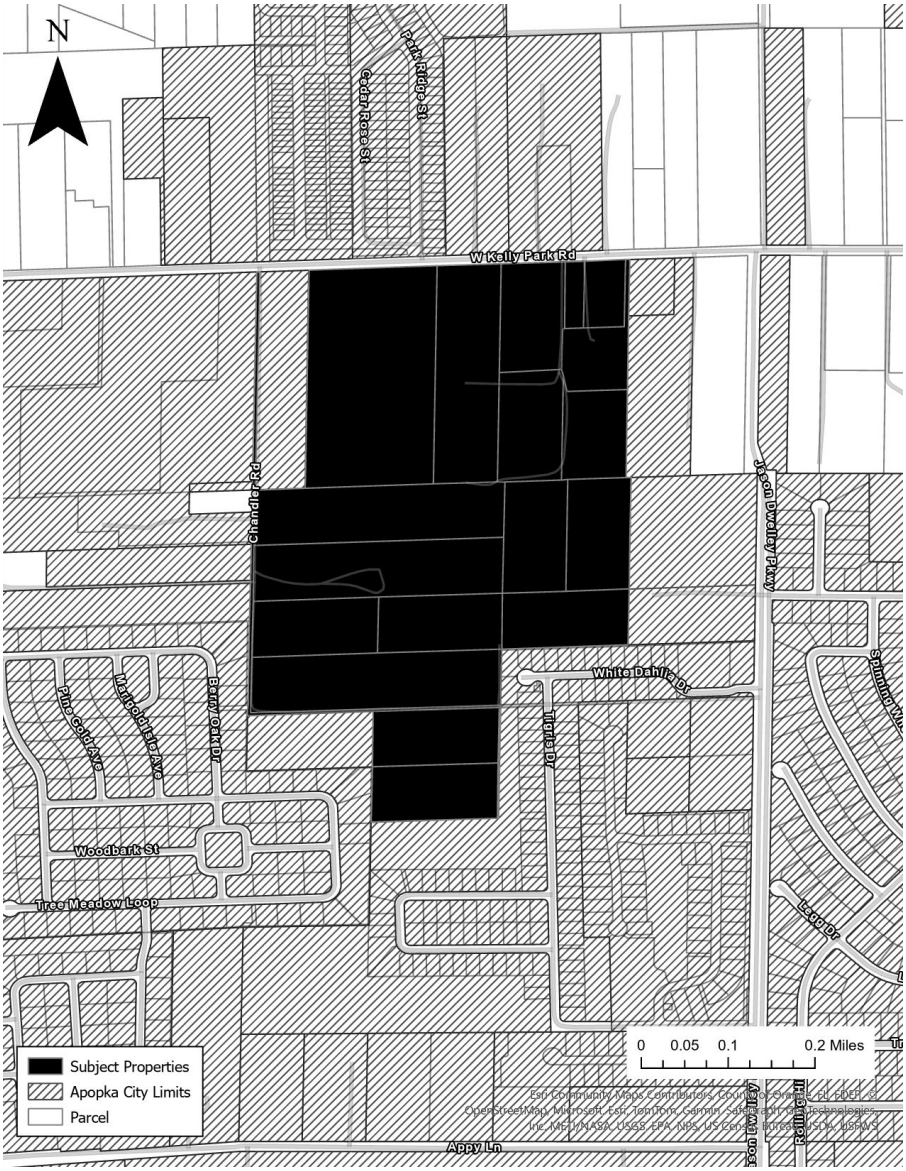
_____ _____
Susan Bone, City Clerk Bryan Nelson, Mayor

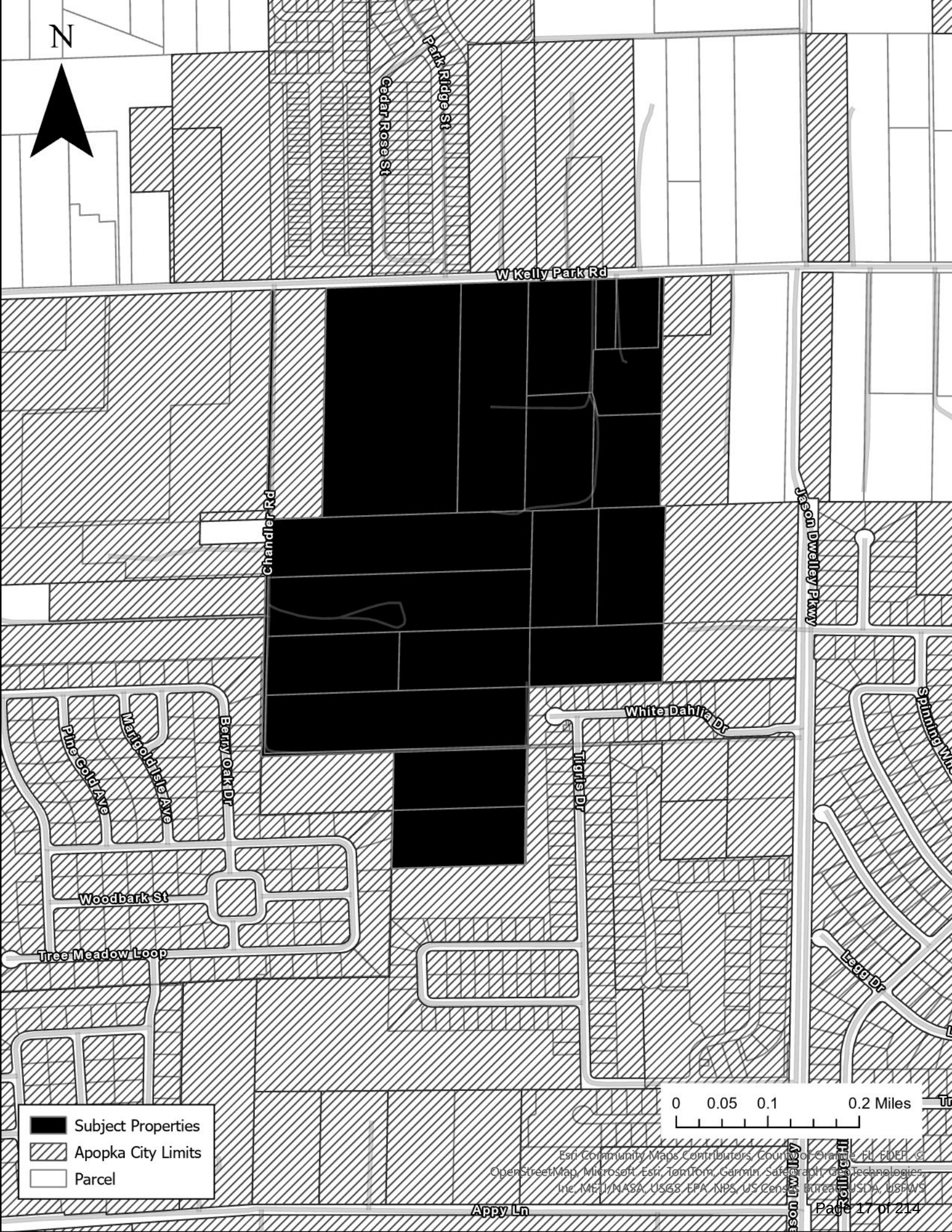
Approved as to form and legal sufficiency:

_____
Clifford B. Shepard, City Attorney
DULY ADVERTISED FOR PUBLIC HEARING: January 17, 2025

EXHIBIT A

Parcel Identification Number(s): 18-20-28-0000-00-132, 18-20-28-0000-00-031, 18-20-28-0000-00-105, 18-20-28-0000-00-050, 18-20-28-0000-00-049, 18-20-28-0000-00-061, 18-20-28-0000-00-048, 18-20-28-0000-00-052, 18-20-28-0000-00-106, 18-20-28-0000-00-035, 18-20-28-0000-00-034, 18-20-28-0000-00-032, 18-20-28-0000-00-033, 18-20-28-0000-00-037, 18-20-28-0000-00-051, 18-20-28-0000-00-080, 18-20-28-0000-00-119, 18-20-28-0000-00-046, 18-20-28-0000-00-047

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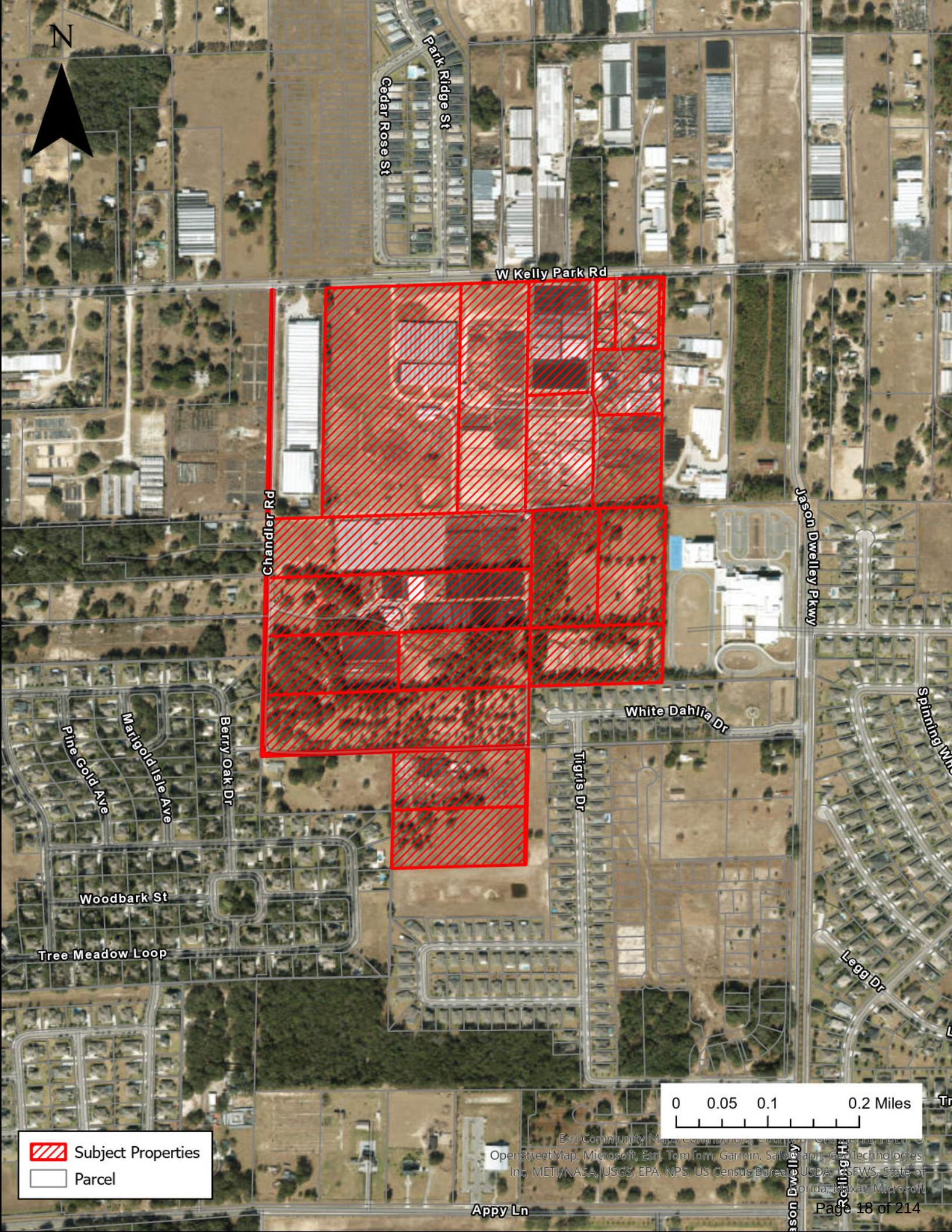
Perk Ridge St
Cedar Rose St
W Kelly Park Rd
Chandler Rd
Jason Dwelley Pkwy
White Dahlia Dr
Tigris Dr
Berry Oak Dr
Marigold Isle Ave
Pine Cold Ave
Woodbark St
Tree Meadow Loop
Legg Dr
Appy Ln
0 0.05 0.1 0.2 Miles
Subject Properties
Apopka City Limits
Parcel
Esri Community Maps Contributors, County of Orange, FL, FDEP, ©
OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies,
Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS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Berry Oak Dr
Woodbark St
Tree Meadow Loop
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Subject Properties
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OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies,
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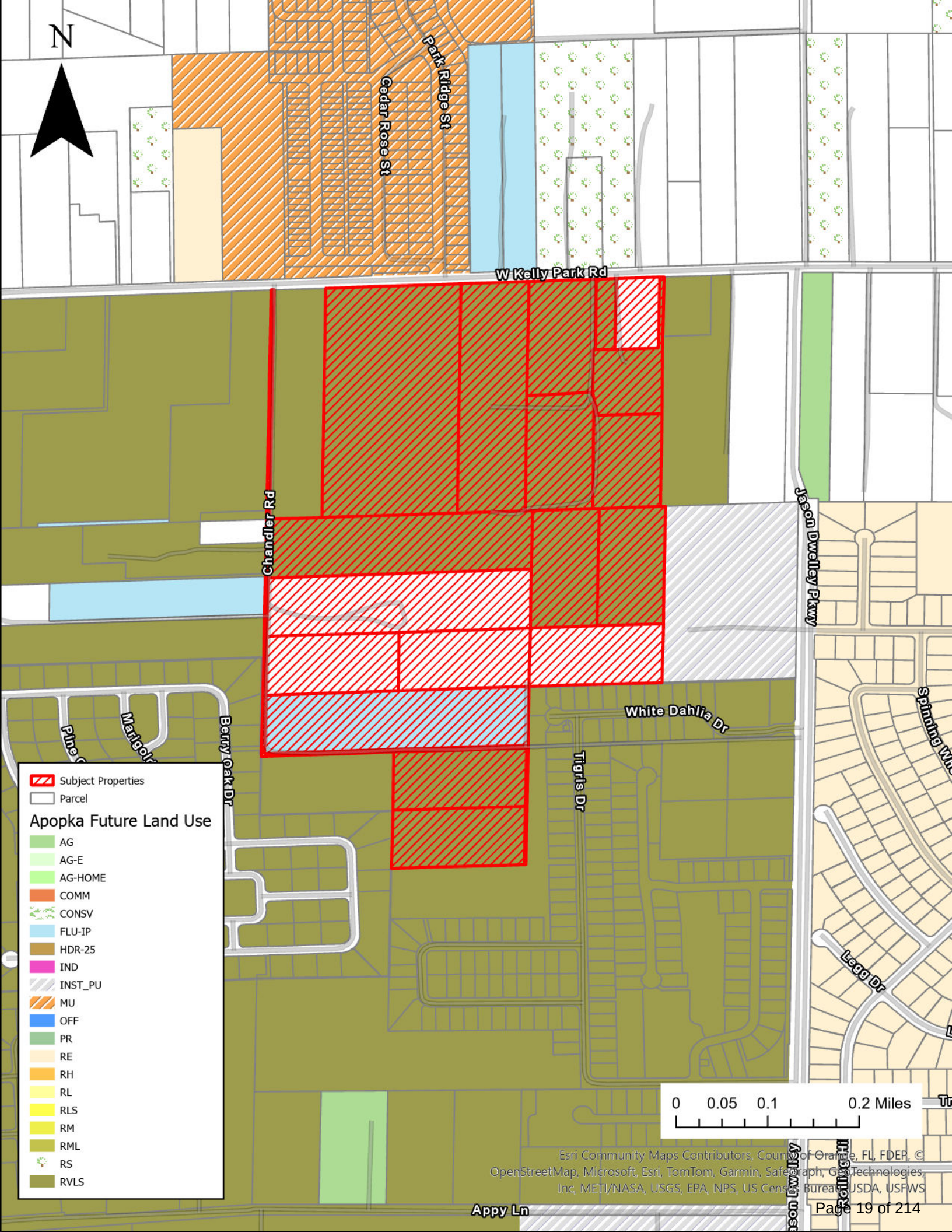
Florida, Maxar, Microsoft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Berry Oak Dr
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Subject Properties
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Apopka Future Land Use
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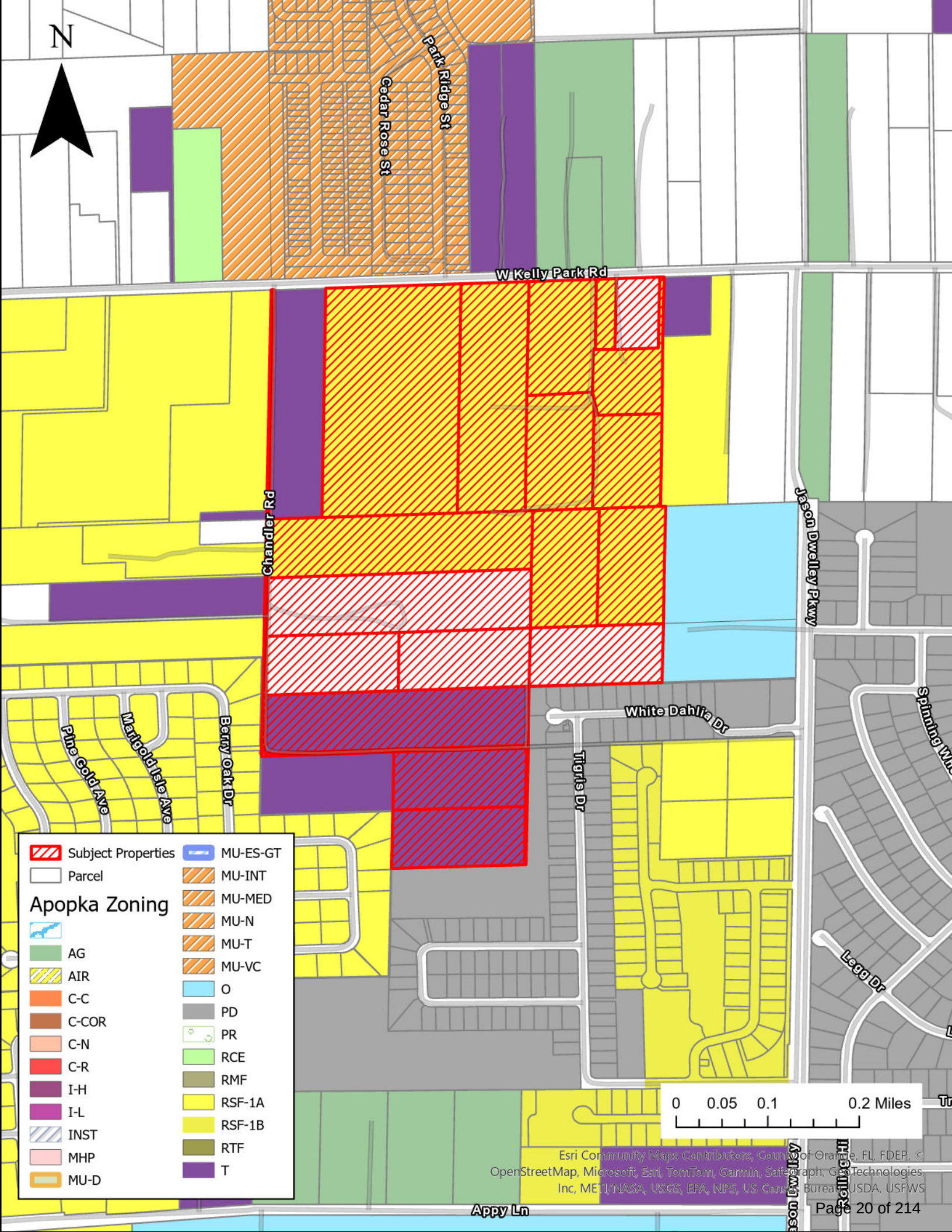
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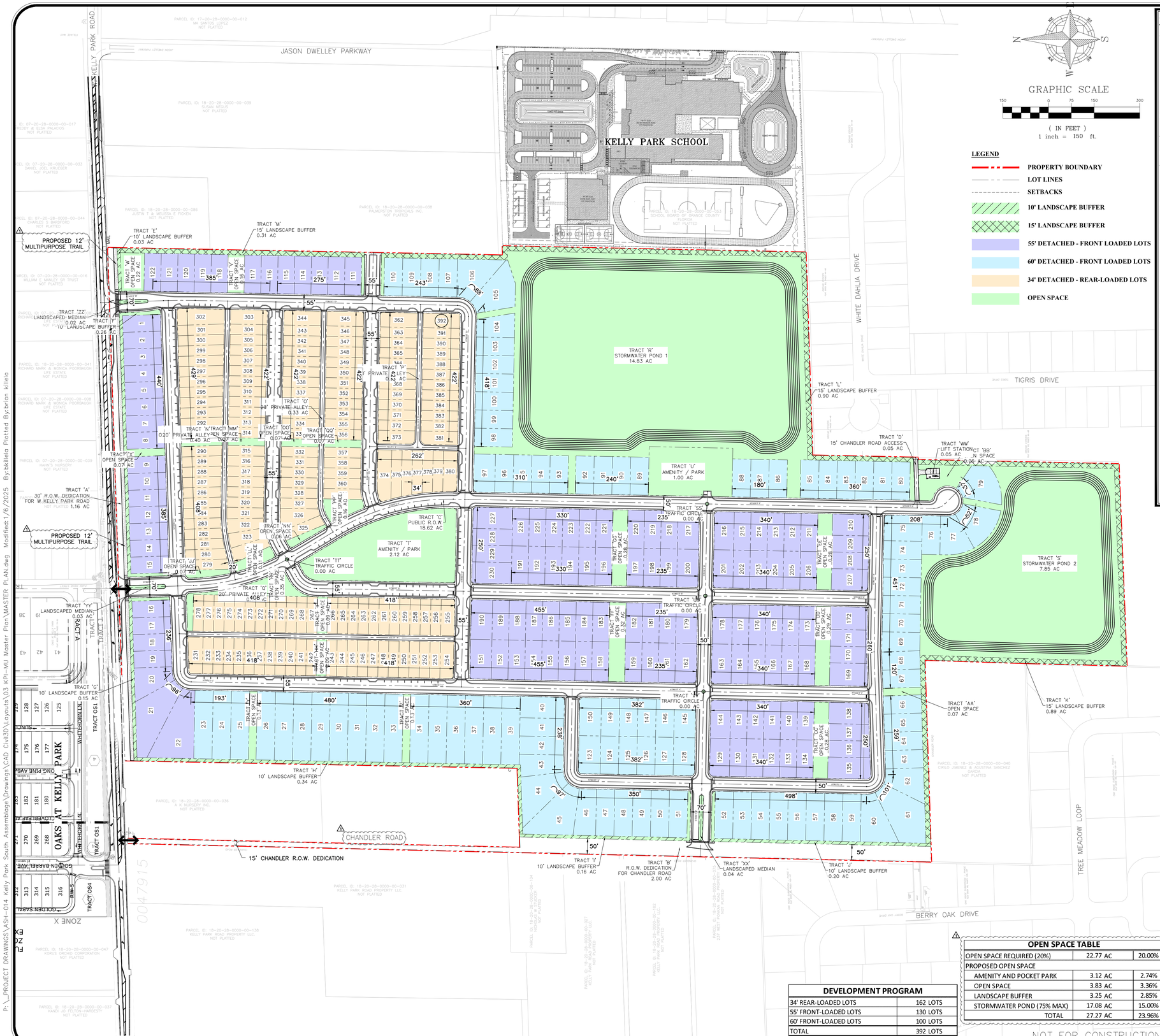


OVERALL SITE DATA:

OCPA - PARCEL ID #:	**18-20-28-0000-00-031, 18-20-28-0000-00-032, 18-20-28-0000-00-033, 18-20-28-0000-00-034, 18-20-28-0000-00-035, 18-20-28-0000-00-037, 18-20-28-0000-00-046, 18-20-28-0000-00-047, 18-20-28-0000-00-048, 18-20-28-0000-00-049, 18-20-28-0000-00-050, 18-20-28-0000-00-051, 18-20-28-0000-00-052, 18-20-28-0000-00-061, 18-20-28-0000-00-080, 18-20-28-0000-00-105, 18-20-28-0000-00-106, 18-20-28-0000-00-119, 18-20-28-0000-00-132**
PROPERTY ADDRESS:	**2350 W KELLY PARK ROAD APOPKA, FLORIDA 32712**
TOTAL PROPERTY AREA:	**117.00 AC**
R.O.W. DEDICATION AREA:	**3.16 AC**
TOTAL DEVELOPABLE AREA:	**113.84 AC**
FEMA FLOOD INSURANCE RATE MAP FLOOD ZONE: FIRM PANEL #12097C0000G DATED JUNE 18, 2013	**ZONE X**
EXISTING FUTURE LAND USE (FLU):	**R (COUNTY) FLU-IP, RVLS (CITY)**
PROPOSED FUTURE LAND USE:	**MIXED USE (CITY)**
ADJACENT FUTURE LAND USED (FLU):	
NORTH	RS, FLU-IP, MU (CITY), R (COUNTY)
SOUTH	RVLS (CITY)
EAST	INST_PU, RE, AG (CITY), R (COUNTY)
WEST	RVLS (CITY), R (COUNTY)
EXISTING ZONING:	**A-1 (COUNTY) T, RSF-1A (CITY)**
REQUESTED OVERLAY ZONING/CHARACTER ZONE:	**NEIGHBORHOOD**
PROPOSED ZONING:	**KPI-MU (CITY)**
ADJACENT ZONING:	
NORTH	PD, AG, MU-N (CITY), A-1 (COUNTY)
SOUTH	PD, RSF-1A
EAST	PD, O, RSF-1A, RSF-1B (CITY), A-1 (COUNTY)
WEST	PD, RSF-1A (CITY), A-1 (COUNTY)
PROPOSED NUMBER OF DWELLING UNITS:	**392 LOTS**
PROPOSED NET DENSITY:	**3.44 DU/Ac.**

PROPOSED MINIMUM LOT REQUIREMENTS:

	FRONT-LOADED	REAR-LOADED
MINIMUM LOT AREA	6,600 SF	3,910 SF
MINIMUM LOT WIDTH	55 ft.	34 ft.
MINIMUM LOT DEPTH	120 ft.	115 ft.
MAXIMUM BUILDING HEIGHT	35 ft.	35 ft.
SETBACKS		
FRONT PORCH	10 ft. min.	10 ft. min.
FRONT/STREET SIDE	15 ft. min./30 ft. max	15 ft. min./30 ft. max
REAR	20 ft.	5 ft.
SIDE	5 ft. min	5 ft. min
REAR GARAGE	N/A	20 ft.
CORNER	15 ft.	15 ft.

TRACT DATA

TRACT	DESCRIPTION	AREA (AC)	AREA (SF)	OWNER
TRACT 'A'	30' R.O.W. DEDICATION FOR W KELLY PARK ROAD	1.16 AC	50,625.18 SF	COUNTY
TRACT 'B'	R.O.W. DEDICATION FOR CHANDLER ROAD	2.00 AC	86,958.75 SF	CITY
TRACT 'C'	PUBLIC R.O.W.	18.62 AC	810,975.89 SF	CITY
TRACT 'D'	15' CHANDLER ROAD ACCESS	0.05 AC	2,112.42 SF	H.O.A.
TRACT 'E'	10' LANDSCAPE BUFFER	0.03 AC	1,428.26 SF	H.O.A.
TRACT 'F'	10' LANDSCAPE BUFFER	0.26 AC	11,347.34 SF	H.O.A.
TRACT 'G'	10' LANDSCAPE BUFFER	0.15 AC	6,566.01 SF	H.O.A.
TRACT 'H'	10' LANDSCAPE BUFFER	0.34 AC	14,788.85 SF	H.O.A.
TRACT 'I'	10' LANDSCAPE BUFFER	0.16 AC	7,112.56 SF	H.O.A.
TRACT 'J'	10' LANDSCAPE BUFFER	0.20 AC	8,741.82 SF	H.O.A.
TRACT 'K'	15' LANDSCAPE BUFFER	0.89 AC	38,671.58 SF	H.O.A.
TRACT 'L'	15' LANDSCAPE BUFFER	0.90 AC	39,410.38 SF	H.O.A.
TRACT 'M'	15' LANDSCAPE BUFFER	0.31 AC	13,301.79 SF	H.O.A.
TRACT 'N'	20' PRIVATE ALLEY	0.40 AC	17,374.58 SF	H.O.A.
TRACT 'O'	20' PRIVATE ALLEY	0.33 AC	14,238.34 SF	H.O.A.
TRACT 'P'	20' PRIVATE ALLEY	0.32 AC	13,989.88 SF	H.O.A.
TRACT 'Q'	20' PRIVATE ALLEY	0.40 AC	17,514.33 SF	H.O.A.
TRACT 'R'	STORMWATER POND 1	14.83 AC	646,186.35 SF	H.O.A.
TRACT 'S'	STORMWATER POND 2	7.85 AC	341,759.85 SF	H.O.A.
TRACT 'T'	AMENITY/PARK	2.12 AC	92,465.04 SF	H.O.A.
TRACT 'U'	AMENITY/PARK	1.00 AC	43,560.00 SF	H.O.A.
TRACT 'V'	OPEN SPACE	0.07 AC	3,125.00 SF	H.O.A.
TRACT 'W'	OPEN SPACE	0.30 AC	13,268.70 SF	H.O.A.
TRACT 'X'	OPEN SPACE	0.07 AC	3,125.00 SF	H.O.A.
TRACT 'Y'	OPEN SPACE	0.13 AC	5,626.78 SF	H.O.A.
TRACT 'Z'	OPEN SPACE	0.13 AC	5,626.78 SF	H.O.A.
TRACT 'AA'	OPEN SPACE	0.07 AC	3,125.00 SF	H.O.A.
TRACT 'BB'	OPEN SPACE	0.26 AC	11,251.65 SF	H.O.A.
TRACT 'CC'	OPEN SPACE	0.28 AC	12,102.10 SF	H.O.A.
TRACT 'DD'	OPEN SPACE	0.29 AC	12,586.19 SF	H.O.A.
TRACT 'EE'	OPEN SPACE	0.28 AC	12,102.10 SF	H.O.A.
TRACT 'FF'	OPEN SPACE	0.32 AC	14,033.94 SF	H.O.A.
TRACT 'GG'	OPEN SPACE	0.28 AC	12,244.18 SF	H.O.A.
TRACT 'HH'	OPEN SPACE	0.09 AC	3,953.22 SF	H.O.A.
TRACT 'II'	OPEN SPACE	0.09 AC	3,953.22 SF	H.O.A.
TRACT 'JJ'	OPEN SPACE	0.07 AC	3,132.95 SF	H.O.A.
TRACT 'KK'	OPEN SPACE	0.08 AC	3,340.63 SF	H.O.A.
TRACT 'LL'	OPEN SPACE	0.11 AC	4,862.33 SF	H.O.A.
TRACT 'MM'	OPEN SPACE	0.07 AC	3,025.00 SF	H.O.A.
TRACT 'NN'	OPEN SPACE	0.06 AC	2,718.85 SF	H.O.A.
TRACT 'OO'	OPEN SPACE	0.07 AC	3,025.00 SF	H.O.A.
TRACT 'PP'	OPEN SPACE	0.16 AC	7,151.95 SF	H.O.A.
TRACT 'QQ'	OPEN SPACE	0.07 AC	3,025.00 SF	H.O.A.
TRACT 'RR'	OPEN SPACE	0.35 AC	15,167.92 SF	H.O.A.
TRACT 'SS'	TRAFFIC CIRCLE	0.00 AC	68.42 SF	H.O.A.
TRACT 'TT'	TRAFFIC CIRCLE	0.00 AC	68.42 SF	H.O.A.
TRACT 'UU'	TRAFFIC CIRCLE	0.00 AC	68.42 SF	H.O.A.
TRACT 'VV'	TRAFFIC CIRCLE	0.00 AC	68.42 SF	H.O.A.
TRACT 'WW'	LIFT STATION	0.05 AC	1,975.00 SF	CITY
TRACT 'XX'	LANDSCAPED MEDIAN	0.04 AC	1,675.48 SF	H.O.A.
TRACT 'YY'	LANDSCAPED MEDIAN	0.03 AC	1,336.30 SF	H.O.A.
TRACT 'ZZ'	LANDSCAPED MEDIAN	0.03 AC	1,089.30 SF	H.O.A.

DEVELOPMENT PROGRAM

34' REAR-LOADED LOTS	162 LOTS
55' FRONT-LOADED LOTS	130 LOTS
60' FRONT-LOADED LOTS	100 LOTS
TOTAL	392 LOTS

OPEN SPACE TABLE

OPEN SPACE REQUIRED (20%)	22.77 AC	20.00%
PROPOSED OPEN SPACE		
AMENITY AND POCKET PARK	3.12 AC	2.74%
OPEN SPACE	3.83 AC	3.36%
LANDSCAPE BUFFER	3.25 AC	2.85%
STORMWATER POND (75% MAX)	17.08 AC	15.00%
TOTAL	27.27 AC	23.96%

NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	BY
1	2024/08/27	CITY OF APOPKA – DRC COMMENTS (COMMENTS DATED 2024/08/27)	OSS

CIVIL ENGINEERING | LAND PLANNING
APPIAN ENGINEERING LLC.
APPIANFL.COM • 407.960.5868
2221 Lee Road, Suite 27, Winter Park, Florida 32789
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32274

KPI-MIXED USE (MU) {MASTER PLAN}

CHANDLER HILLS
CITY OF APOPKA, FLORIDA

DRAWN:	DESIGNED:	CHECKED:	DATE:
B. KILLELA	S. SIERRA-GIL	L. CLASSON	1/6/2025

SCALE	PROJECT	SHEET
1" = 150'	ASH-014	C1.0

1/6/25

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\03 KPI-MU Master Plan\MASTER PLAN.dwg Modified:1/6/2025 By:bkillela Plotted By:brian killela

A. Design Standards (1)

1. LOT CRITERIA (based on KPI Neighborhood Design Criteria):

Description	Single-Family Detached 34' Lots (Rear-Loaded)	Single-Family Detached 55' & 60' Lot (Front-Loaded)
Front Porch Setback (2)	10'	10'
Front Facade Setback	15' min./30' max.	15' min./30' max.
Rear Setback (3)	5' min.	20'
Side Setback	5'	5'
Corner/Side Street Setback	15'	⚠1 15'
Garage Front Setback	N/A	25' min./30' max
Garage Rear Setback	20'	N/A
Min. Average Lot Area	3,910 SF	6,600 SF
Min. Lot Width	34'	55'
Min. Lot Depth	115'	120'
Max. Lot Coverage	75%	75%
Max. Building Height	35'/2 Stories	35'/2 Stories
Min. Living Area	1, 500 SF	1, 600 SF
3 car garage less than 50% of façade	N/A	____
Building foundation 18" above c/l of ROW	Keep at grade level	

(1) See Master Plan sheet for depiction of conceptual typical site plans.
(2) Front porch requirements and setback as allowed per Kelly Park Interchange (KPI) Form-Based Code Section J.1 and K.2(g)(v).
(3) Swimming pools and other structures allowed to encroach within rear setback per KPI Table 10.2.4.B of the Apopka Code.

B. Architectural, Buildings, and Accessory Structures

1. Architectural design shall meet the intent of City of Apopka Kelly Park Interchange Form-Base Code or unless otherwise stated.
2. All lots shall have detached single-family homes.
3. Each individual single-family home shall have a minimum of two (2) bedrooms.
4. All front-loaded lots shall have minimum two (2) car garage.
5. All rear-loaded lots shall have a minimum one (1) car garage.
6. Mail delivery for all lots within Chandler Hills shall occur at cluster mailbox units. Approval from the Postmaster of the location shall be submitted prior to approval of the Construction Site Plan.
7. AC condenser units & similar equipment shall be placed in the side or rear yard area. Units & similar equipment shall be placed with a minimum three (3) feet setback from side property line. Units shall be screened from side streets with landscaping or opaque fencing.
8. Storage sheds or similar storage facilities shall not be allowed.

9. Swimming pools shall be allowed on all front-loaded lots.
10. Swimming pools shall not be allowed on rear-loaded lots.
11. Architectural Design Standards:
    a) Architectural styles shall be determined prior to Construction Site Plan approval, and these shall meet the intent of to the City of Apopka's Kelly Park Interchange Form-Based Code except as noted on these Development Standards. Modification or replacement of the exterior elevations can be approved by the Community Development Director if such changes represent equivalent architectural value. Substantial deviations from architectural rendering must be approved by City Council.
    b) Front facade materials such as cultured stone veneer, stucco, wood plank, and fiber cement siding may be utilized to be consistent with the applicable Architectural Style.
    c) Minimum roof pitch over the main house and garage shall be 5/12. Roof pitch over porches shall be a minimum of 4/12.
    d) Thirty-year asphalt shingle shall be installed on all roofs. Three-tab shingles are prohibited. The shingle color shall compliment the color scheme of the house.
    e) Aluminum and vinyl fascia and soffit shall be standard for all houses. Fascia and soffit color shall compliment the color scheme of the house.
    f) Trim around windows and doors shall be painted a different color from the body of the house. Doors may be painted either the same as the trim or separate accent color.
    g) Concrete or pavers shall be installed in rear yard driveways, lead walks, porches, and porticos.
12. Front Building Entrance Elevation Design Standards:
    a) Front building entrance shall feature a minimum four (4) feet deep (per Kelly Park Interchange Form-Base Code Section J.4 Figure 16) porches & porticos flush or projecting beyond front wall or similar feature. Porches shall be a minimum width of eight (8) feet and a minimum clear height of eight (8) feet.
    b) Front garages shall be attached and recessed from the primary façade (not including porches, bays, or other minor projections) by a minimum of four (4) feet.
    c) Garage frontage shall be limited to 52%. Frontage is determined by garage door width.
    d) Front porches and porticos may be at grade level.
    e) Should any home's front elevation comprise less than the required 10% of windows, the front door shall be predominantly made of glass.
    f) Identical model plan type shall not be constructed on neighboring lots who share a side yard property boundary line or are directly across the street without a different elevation type.
    g) Identical exterior paint schemes shall not be applied on neighboring lots who share a side yard property boundary line or are directly across the street.
    h) Specific elevations style types shall have similar wall finishes, window grid patterns, window banding & trim, roof lines and slopes, etc. Applied to each lot width model plan type front elevations.
    i) Modification or replacement of the exterior elevations can be approved by the Community Development Director if such changes represent equivalent architectural value. Substantial deviations from exterior elevations must be approved by City Council.
13. Individual Lot Front & Rear Yard Fencing Standards:
    a) Maximum height of a fence shall be six (6) feet above final grade or six (6) inches less than the community common wall height, whichever is less. No fence shall exceed the height of an abutting common area wall.
    b) Fencing at rear yards of rear alley loaded lots shall be setback a minimum two (2) feet from the alley and driveway edges.
    c) Fencing at street corner lot side yards shall adhere to LDC Section 5.5.

C. Utilities and Infrastructure

1. Potable water service shall be provided by the City of Apopka. The water system shall be designed to City of Apopka standards.
2. Reclaimed water service shall be provided by the City of Apopka. The reclaimed water system shall be designed to City of Apopka standards.
3. Stormwater management system shall be designed to comply with the design standards of the City of Apopka and the St. Johns River Water Management District.
4. A final drainage report and soils report will be submitted with the Construction Site Plan.
5. Sanitary service shall be provided by the City of Apopka. The sanitary system shall be designed to City of Apopka standards.
6. Utility easements shall be dedicated to the City of Apopka.
7. Drainage easements to be dedicated to the Homeowners' Association unless otherwise required by the City of Apopka.
8. All stormwater and utility pipes may be moved to save existing trees in the right-of-way. Any change in the location of these pipes will be shown on the Construction Site Plan.
9. On-site streets are to be constructed per City of Apopka standards.
10. Stabilized access roadways and fire hydrants must be in place before building construction may begin.
11. Solid waste collection and public safety (police and fire) shall be provided by the City of Apopka.
12. The internal Street Type E (Neighborhood) right-of-way is to be public.
13. The internal Street Type F (Alley) right-of-way is to be private.
14. Five-foot (5') wide sidewalks are to be constructed adjacent to internal roads throughout the entire project in compliance with the City of Apopka Kelly Park Interchange Form-Base Code unless otherwise noted. Sidewalk alignment may be adjusted at Construction Site Plan to preserve existing trees.
15. Garages shall be accessed from the adjacent Street Type F (Alley) at the rear of the lot for all rear-loaded lots.
16. Power service within the development shall be underground. No overhead service will be allowed.
17. Vehicular, Pedestrian and Accent lighting shall substantially conform to the City of Apopka's Kelly Park Interchange Form-Base Code Section P.4(e).
⚠1
18. Lighting shall be required for safety and security in accordance with Sec. 5-6-2.A.3.

D. Recreation and Open Space

1. Required project open space shall be a minimum of 20% of the developed site area in accordance with City of Apopka Kelly Park Interchange Form-Base Code per Section Q Table 13.
2. Required project recreation shall be provided at a rate of 3.6 acres per 1,000 population with 2.6 population per dwelling unit.

E. Buffers and Landscaping

1. A ten-foot (10') buffer will be provided along the northern property boundary. This tract shall be dedicated to and maintained by the H.O.A.
2. A 30' ROW Dedication shall be made in favor of the City of Apopka along the northern property boundary adjacent to Kelly Park Road, to include a 12' community trail.
3. A ten-to-fifteen-five-foot (10' - 15') buffer will be provided along all other property boundaries. This tract shall be dedicated to and maintained by the H.O.A.
4. The design of all buffer tracts shall follow the City of Apopka Kelly Park Interchange Form-Base Code Section M. Landscaping & Hardscape Plans shall be provided at Construction Site Plan.
5. Entrance feature and community sign details will be provided with the Construction Site Plan.
6. Final landscape plans for the buffer areas along the proposed main entrance at Kelly Park Road shall be provided with the Construction Site Plan.
7. Tree Planting Conditions. Minimum of two (2) new trees shall be planted per residential lot. The new trees shall be a minimum of three (3) inches DBH at the time of planting and shall count toward the overall number of required tree replacement inches, if any.
8. Trees within the Street Type E (Neighborhood) shall be medium canopy trees at forty (40) feet minimum spacings, understory trees at twenty (20) feet minimum spacing per City of Apopka Kelly Park Interchange Form-Base Code Section P.3 Table 12.
9. Tree Protection Plan - The Construction Site Plan shall include tree protection techniques to prevent harm to any trees designate to be preserved or encroachment into protected natural areas, including but not limited to tree barricades, silt fencing or other similar techniques accepted by the City Engineer.

F. Maintenance and Plat

1. Chandler Hills Homeowners' Association shall maintain common areas including all fences/walls and landscaping within said common areas.
2. The Construction Site Plan shall include the plat document, and the plat shall be in final form.
3. The City of Apopka shall be responsible for maintenance of Street Type E (Neighborhood), on-street parallel parking spaces, street lighting, stormwater collection systems and utilities (potable water main, reclaimed water main, force main, etc.) within the public rights-of-way of the Chandler Hills.

G. Wetlands and Environmental

1. There are no wetland areas within the site.
2. According to the flood insurance rate map no. 12097C0000 G Dated June 18, 2013, The land and the improvement as shown on ALTA survey are not within a 100-year flood hazard zone. The land is in "X".
3. An erosion control plan will be submitted with the Construction Site Plan.
4. Tree removal, tree replacement, and landscaping shall comply with the City of Apopka Kelly Park Interchange Form-Base Code Section M.
5. Individual lot arbor/clearing permit is required prior to clearing or grading of any lot or issuance of building permit. Placement of the house shall preserve existing trees to the greatest extent practical. Plot plan for each lot shall illustrate tree locations as presented within the Construction Site Plan.

H. Development Condition Continuity

The MU-KPI Development Standards shall be printed within the MU-KPI Master Plan and the Construction Site Plan.

I. Signage

Signage shall comply with the City of Apopka Kelly Park Interchange Form-Base Code.

J. Lighting

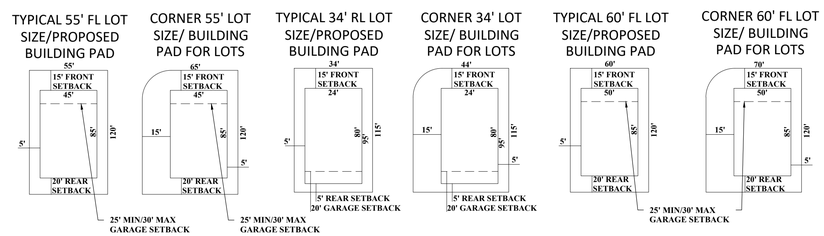
Lighting shall comply with the City of Apopka's Kelly Park Interchange Form-Base Code Section P.4(e). Street and parking area or pedestrian path light poles shall be decorative type. Details will be provided with the Construction Site Plan.

K. Garbage Pickup

1. Garbage of rear-loaded single-family units shall be picked up at the adjacent Street Type F (Alley) along the rear of the lots.

L. Miscellaneous

1. Any existing septic tanks or wells shall be properly abandoned prior to earthwork or construction. Permits shall be applied for and issued by the appropriate agencies.
2. All acreages are subject to change with Construction Site Plan and Preliminary Plat review and approval.
3. Outdoor storage areas (boats, trailers, recreational vehicles, etc.) are not provided within the development and will be prohibited through the H.O.A. documents.
4. All lots with rear alley access shall have uniform address numbers on the front and rear facades of the residence.



REV.	DATE	DESCRIPTION	BY
1	2024/08/27	CITY OF APOPKA – DRC COMMENTS (COMMENTS DATED 2024/08/27)	OSS
2		DEVELOPMENT_STANDARDS {MASTER_PLAN}	

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APPIAN ENGINEERING LLC.

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2221 Lee Road, Suite 27, Winter Park, Florida 32789

STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32674

CHANDLER HILLS
CITY OF APOPKA, FLORIDA

DRAWN:	DESIGNED:	CHECKED:	DATE:
B. KILLELA	S. SIERRA-GIL	L. CLASSON	1/6/2025

SCALE:	PROJECT	SHEET
N.T.S.	ASH-014	C2.0

1/6/25

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\03 KPI-MU Master Plan\MASTER PLAN.dwg Modified:1/6/2025 By:bkillela Plotted By:brian killela

1568-Maynard-V-Gen3 Scheme 1

7/6/2024

1568-Maynard-W-Gen3 Scheme 2 -

7/6/2024

1568-Maynard-X-Gen3 Scheme 8

7/6/2024

1818-Keele-V-Gen3 Scheme 1

7/6/2024

1818-Keele-W-Gen3 Scheme 2

7/6/2024

1818-Keele-X-Gen3 Scheme 8

7/6/2024

1843-Ellis-V-Gen3 Scheme 1

7/6/2024

1843-Ellis-W-Gen3 Scheme 2

7/6/2024

1843-Ellis-X-Gen3 Scheme 8

7/6/2024

2058-Lyon-V-Gen3 Scheme 1

7/6/2024

2058-Lyon-W-Gen3 Scheme 2

7/6/2024

2058-Lyon-X-Gen3 Scheme 8

7/6/2024

Brickell II Elevations 1709 SF

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Douglas II Elevations 2066 SF

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Plant II Elevations 2226 SF

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Plant II Elevations 2226 SF

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ASHTON WOODS

Tuttle II Elevations 2774 SF

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Moseley II Elevations 2791 SF

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Griffin II Elevations 3058 SF

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Griffin II Elevations 3058 SF

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Duval II Elevations 3542 SF

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Duval II Elevations 3542 SF

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ASHTON WOODS

History: Slim shared more of his appreciation and respect in 2011

Continued from page 2A

ing law enforcement officers that persons of Slim's era would certainly have known, regardless of ethnicity, for the cities of Apopka, Miami, and New York, state of New York and a Federal U.S. Marshal, namely, H.D. Miley, Fred Risener, J.S. Parrish, Henry Glover, Norman Betts, L.G. Nolle, George Fiall, Herman "Doc" McQueen and Earl Mott, Jr.

Previously, Slim recognized that so much information pertaining to his black achievements would have to wait until the year 2011 to include many persons of our younger generation that should be written about.

Slim wants to thank numerous reputable white and black individuals, who made time and effort to supply Slim's gray matter with such valuable information regarding Apopka's past and present history. Oh, yes! The Honorable Mayor John H. Land of Apopka, considered the "dean" of mayors throughout this good ole U.S.A., winning his 19th term as mayor, shared invaluable knowledge. Mrs. Annie Belle D. Gilliam, whom Slim calls the "Southern Belle," was reared in the area, thus obtaining a substantial wealth of knowledge through businesses (grocery, citrus grove management) and old timers' oral conversations pertaining to people and incidents occurring in the 20th and 21st century

M. Gladden, Jr., longtime entrepreneur (grocery, citrus grove, laundromat) lived more than 55 consecutive years below the TO&A Railroad tracks. Last, but not least, Ms. Mildred A. Board was the originator and former columnist for "Bits 'n' Tips" in *The Apopka Chief* weekly newspaper.

They are definitely some of those individuals aforementioned Slim credits with an enormous appreciation and respect for their care, concern and knowledge of Northwest Orange County (Clarcona, Piedmont, Lakeville, Apopka, Plymouth, Tangerine, Zellwood and Rock Springs).In 2011, folks, Slim will see yah!

Slim's book, The Pennings of Perrine Slim, is sold in the Museum of Apopkans at 122 E. 5th Street , Apopka 32703.

Byrd: Five artists create graphics

Continued from page 2A

expand that vision.

Shaunte then reached out to the Creative Hub of Apopka, a non-profit art studio in Apopka that allows community members to foster their creativity in a warm setting. She also reached out to Delia Miller, a local Apopka artist who has painted beautiful community artwork around town.

They leveraged their resources and connected with another community member representing Apopka, Murals and Downtown Barbers Apopka, to issue a call to action. And, the community artists answered the call! Five, yes five, local artists joined in to help.

Each of the five artists poured their heart into creating something truly special, transforming not just the media center, but several spaces within the school into works of art.

Delia Miller took on the main stairwell, designing a stunning feature wall with the school's panther mascot.

This gorgeous wall quickly became a centerpiece of pride when the students returned. Several other spaces were just as amazing including an inspiring wall mural in the gym. And they are not done yet. There are more murals to come!

Shaunte said it best, "What these artists accomplished wasn't just painting walls - they created a legacy. Their work not only reimagined the physical space but also uplifted the spirit and morale of the entire school community. Now Phillis Wheatley's students have something beautiful and inspiring they can cherish for years to come."

Most important to me is the message it sends to these students. A message of hope, that they are loved by their community. There really is no other message more important for our young people.

Thank you to our community, to Shaunte, and to all of these artists who came together to show these students just how loved they are!

Moore: Phases are near completion

Continued from page 2A

Wekiwa Springs Septic to Sewer Program. The project has seven phases with some completed, and others nearing completion. On the website you will find:

· Construction status of each phase

· General project information answered in an easy-to-use FAQ format

· What to do if you have a broken irrigation pipe or sprinkler head, landscape/hardscape damage, or plumbing issues as a result of construction

· Answers on how to pay for your portion of the conversion

· Contact names, numbers, and email addresses for project leaders

The website is a helpful tool for those wanting to learn more about or if there are questions regarding the Wekiwa Springs Septic to Sewer project. You may visit the web page here: Septic 2 Sewer, or feel free to contact my office at 407.836.5850 as well, if you have any questions.

Hayden: Americans stand together

Continued from page 2A

policemen and all first responders need to know we support them, and we do not want to live in a community without them. I have been pleasantly surprised to see an individual jump in to help protect an Officer of the Law when that officer was being overpowered by a criminal.

Where are the men that used to be the protectors of justice?

Have we given up the privilege of being the daddy (a little girl's first love, and a boy's first hero), the provider, the family uniter, and the example of leadership for daily living?

It is time to promote the General Welfare by standing up to those who will disparage policemen and first responders and then we will insure domestic tranquility." Let all of us be lovers of the "Blessings of Liberty to ourselves and our posterity." Love is not the tingling that comes from an emotional encounter, but a solid, unconditional commitment that is a choice we make. Once made, that commitment may waiver, but it should never fail.

Are emotions involved with a commitment? Ask me that when I see "Old Glory" being raised to the "Star Spangled Banner" and the tears start flowing when I think of the men and women who have sacrificed their lives in defense of what that banner stands for.

Is our love of nation being tried? You bet it is! Look at today's headlines and listen to the newscasts that promote progressive ideals and woke attitudes that will bring our nation to its knees.

We must be ready to stand in the gap and not back down when we are faced with those forces.

The Marine motto, "Semper Fidelis" (Always Faithful), should be the beat of our hearts. Our national motto, "In GOD we trust" should sustain us when we feel we cannot do this by ourselves. As I said in the beginning, it is not the "flash in the pan" that makes a difference, but the one who, when being tested, holds his or her head up and stands solid in the freedoms given to us by our Creator.

Keep on keepin' on. Start with your neighbors. Let them know you are concerned for them and you are willing to defend them and your neighborhood.

Race or different nationalities should have nothing to do with our decisions if we stand together as Americans, blessed to be together in the greatest nation the world has ever experienced, the United States of America.

CITY OF APOPKA
PUBLIC HEARING NOTICE
CHANGE OF ZONING

NOTICE is hereby given pursuant to Sec. 166.041(3)(a), Florida Statutes and the Apopka Code of Ordinances, Part III, Land Development Code, Article II, Section 2.4.7.B, that **Jonathan Huels, Esq.** has made application relating to the following described property.

ORDINANCE NO. 3093

AN ORDINANCE OF THE CITY OF APOPKA, FLORIDA, CHANGING THE ZONING FROM COUNTY A-1 (CITRUS RURAL DISTRICT), COUNTY A-2 (FARMLAND RURAL DISTRICT), CITY T (TRANSITIONAL), AND RESIDENTIAL SINGLE-FAMILY ESTATE (RSF-1A) TO KPI-MU (KELLY PARK INTERCHANGE MIXED USE) WITH AN ASSIGNMENT OF NEIGHBORHOOD OVERLAY, FOR CERTAIN REAL PROPERTY GENERALLY LOCATED SOUTH OF W. KELLY PARK ROAD AND EAST OF CHANDLER ROAD; OWNED BY KELLY PARK ROAD PROPERTY, LLC; COMPRISING 117.16 ACRES, MORE OR LESS; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.

Parcel Identification Number(s): 18-20-28-0000-00-132, 18-20-28-0000-00-031, 18-20-28-0000-00-105, 18-20-28-0000-00-050, 18-20-28-0000-00-049, 18-20-28-0000-00-061, 18-20-28-0000-00-048, 18-20-28-0000-00-052, 18-20-28-0000-00-106, 18-20-28-0000-00-035, 18-20-28-0000-00-034, 18-20-28-0000-00-032, 18-20-28-0000-00-033, 18-20-28-0000-00-037, 18-20-28-0000-00-051, 18-20-28-0000-00-080, 18-20-28-0000-00-119, 18-20-28-0000-00-046, 18-20-28-00000-00-047
Contains: 117.16 +/- acres

Notice is given that the **City of Apopka Planning Commission** will hold a public hearing at its regularly scheduled meeting in the City Council Chambers of the Apopka City Hall, 120 E. Main Street, Apopka, Florida on **Tuesday, February 11, 2025 beginning at 5:30 P.M.**, or as soon thereafter as possible.

FURTHER NOTICE is given that a public hearing will be held by the **City of Apopka City Council** at its regularly scheduled meeting in the City Council Chambers of the Apopka City Hall, 120 E. Main Street, Apopka, Florida on **Wednesday, February 19, 2025 beginning at 7:00 P.M. AND Wednesday, March 5, 2025 at 1:30 P.M.**

Affected parties and the public may appear at the above listed hearings to speak. The proposed Rezoning Application can be inspected at the Apopka Community Development Department located at Apopka City Hall on weekdays between the hours of 8:00 a.m. and 4:30 p.m. City Hall address shown below. Please be advised that, under State law, if you decide to appeal a decision made with respect to this matter, you will need a record of the proceedings and may need to ensure that a verbatim record is made, which record includes the testimony and evidence upon which the appeal is to be based. In accordance with the Americans with Disabilities Act (ADA), persons with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk's Office at 120 East Main Street, Apopka, Florida 32703, Telephone: 407-703-1704, no less than 48 hours prior to the proceeding.

Apopka City Council
Apopka Planning Commission
Community Development Department

January 17, 2025

Publish: The Apopka Chief **177840**

Got EVENTS? PUBLICIZE THEM...
Use Our Online Forms: theapopkachief.com
Call The Apopka Chief at 407-886-2777,
fax 407-889-4121
or email news@theapopkachief.com

ALL ABOUT APOPKA

The Apopka Chief
Established 1923
(USPS 545-440)

The Apopka Chief is published every Friday and entered as Periodicals, postage paid at Apopka Post Office, under the Act of Congress of March 3, 1879. The Apopka Chief newspaper is published by Foliage Enterprises, Inc., every Friday at 400 North Park Avenue, Apopka, Fla., 32712-3417. An annual subscription is $25 in Orange County and $30 outside Orange County. Phone 407-886-2777. Postmaster: Send address changes to The Apopka Chief, P.O. Box 880, Apopka, Fla., 32704-0880.

The Apopka Chief is a consistent award-winning community weekly newspaper and a member of the Florida Press Association. The newspaper won the group's award as its best newspaper in 1982, 1987, and 1988, the only three-time winner. Letters to the editor are welcome, but must be signed and include a daytime telephone number, address,, or email address for verification. Management reserves the right to edit letters.

www.theapopkachief.com, news@theapopkachief.com

City of Apopka Telephone Numbers

City Hall	407-703-1700
Mayor's Office	407-703-1701
City Administrator	407-703-1649
City Clerk	407-703-1704
Community Devel.	407-703-1712
Code Enforcement	407-703-1738
Finance Dept.	407-703-1725
Fire (non-emerg.)	407-703-1756
Parks and Rec. Dept.	407-703-1741
Police Chief	407-703-1769
Police (non-emerg.)	407-703-1771
Job Line	407-703-1743
Solid Waste Collect.	407-703-1731
Street Maintenance	407-703-1731
Utility Billing	407-703-1727
Medical, fire emergency	911

The city of Apopka was chartered in 1882. It is located at 28'30 north latitude and is 150 feet above sea level. Its population is about 48,000 and its total area is more than 30 sq. mi. **www.apopka.net**

Orange County Telephone Numbers

Animal Services	407-836-3111
Auto/Boat Tags	850-617-2000
Building Dept.	407-836-8550
County Mayor	407-836-7370
County Commission	407-836-7350
County Attorney	407-836-7320
Clerk of the Court	407-836-2065
Elections Supervisor	407-836-2070
Fire/Rescue	407-836-3111
Solid Waste	407-836-6601
Garbage Collection	407-703-1731
Health Dept.	407-836-2600
Hunting/Fishing Lic	888-347-4356
Parks and Rec. Dept.	407-836-6200
Property Appraiser	407-836-5044
Sheriff Administrative	407-254-7000
Non-Emerg. Complaint	407-836-4357
Utilities	407-836-5515
All other departments	407-836-3111
Medical, fire emergency	911

www.orangecountyfl.net

Other Area Numbers of Note

U.S. Senators	
Rick Scott (Rep.)	202-224-5274
Marco Rubio (Rep.)	407-254-2573
U.S. Representative	
Daniel Webster (Dist. 11)	352-241-9220
State Representatives	
Doug Bankson	407-476-6787
Carolina Amesty (Dist. 45)	unknown
State Senators	
Geraldine Thompson (Dist.11)	407-297-2045
Orange County Commissioner	
Christine Moore	407-836-7350
Orange County Public Schools	
Pupil assignment	407-317-3233
Bus routes	407-317-3800
Superintendent	407-317-3200
School Board	407-317-3200
Miscellaneous	
The Apopka Chief	407-886-2777
Museum of the Apopkans	407-703-1707
Chamber of Commerce	407-886-1441

Orange County Public Schools

6501 Magic Way · Building 200 · Orlando, Florida 32809 · (407) 317-3700 · www.ocps.net

FORMAL SCHOOL CAPACITY DETERMINATION
CAPACITY LETTER-EXTENSION

January 28, 2025

E-MAIL: jonathan.huels@lowndes-law.com
Jonathan Huels
Lowndes, Drosdick, Doster, Kantor & Reed, P.A.
215 N. Eola Drive
Orlando, FL 32801

Application APK-24-012 Chandler Hills

This letter serves as the official certification by Orange County Public Schools that school capacity for the following development is **NOT AVAILABLE**:

Type of Development Application	☒ FLUM ☒ Rezoning ☐ Amendment or Extension		
Development Application #:	TBD		
Project Name:	Chandler Hills		
OCPS Completed Application Date:	08/01/24		
Parcel #(s):	28-20-18-0000-00-132, -031, -105, -050, -049, -061, -035, -034, -032, -033, -037, -051, -080, -119, -052, -106, -048, -046, -047		
Requested New Units (#):	SF: 157	MF:	TH: 193
Vested Unit(s):	SF: 235	MF:	TH:
Total Project Units:	392		
School Board District:	#7		

In accordance with Section 8 of the Amended and Restated Interlocal Agreement for Public School Facility Planning and Implementation of Concurrency ("Interlocal Agreement"), a detailed Capacity Analysis is provided in **Attachment A.**

In accordance with Section 704(B) of the Orange County Charter and Section 30-742 of the Orange County Code, an analysis of significantly affected local governments impacted by the proposed development can be found below:

	Kelly Park School K-8 ES	Kelly Park School K-8 MS	Apopka HS
Jurisdictional Analysis	N/A	N/A	Apopka-61.11% Unincorporated-37.74%

Given the above analysis, this project does not meet the minimum criteria established by the Orange County Charter and Code to proceed through the joint approval process with the identified significantly affected local government(s). Additional information on the joint approval process can be obtained from City of Apopka.

This determination expires on July 28, 2025 OCPS is not required to extend the expiration date of this determination letter. In the event this project does not possess Development Application approval from City of Apopka by the expiration date, but still intends to move forward in the development process, the applicant must resubmit the application and application fee to be reevaluated by OCPS. In addition, should the scope of the project change (e.g., modification of unit count and/or unit type), a new determination will be required.

Unless otherwise vested, the Development is still required to submit for concurrency review and, if necessary, enter into a Concurrency Mitigation Agreement.

This determination is governed by the Interlocal Agreement, the provisions of City of Apopka's adopted Comprehensive Plan, and the Orange County Charter and Code.

Please contact me at 407-317-3700 ext. 2022139 or Tamara.Pelc@ocps.net, if you have any questions or comments regarding this matter.

Sincerely,

Tamara Pelc

Tamara L. Pelc
Administrator, Facilities Planning

SK/tp

Attachments – Attachment A: Detailed Capacity Analysis

CC: Bobby Howell, City of Apopka (via e-mail)
Thomas Moore, OCPS (via e-mail)
Project File

Attachment A

Orange County Public Schools
Facilities Planning

School Capacity Determination

User ID SV

Project ID: **CEA – APK – 24 – 012**

Project Name:					
			CHANDLER HILLS		
Unvested Units	Single Family Units:	157	Vested Units	Single Family Units:	235
	Multi Family Units:	0		Multi Family Units:	0
	Multi Family High Rise Units:	0		Multi Family High Rise Units:	0
	Town Homes Units:	0		Town Homes Units:	0
	Mobile Home Units:	0		Mobile Home Units:	0

Capacity Enhancement				
	School Level	Elementary	Middle	High
	CSA:	DD		
	School:	KELLY PARK (K-5) ES	KELLY PARK (6-8) MS	APOPKA HS
	Analysis of Existing Conditions			
	School Capacity (2023-2024)	810	390	3,396
	Enrollment (2023-2024)	644	290	3,443
	Utilization (2023-2024)	0.0%	0.0%	110.0%
	LOS Standard	110.0%	100.0%	100.0%
	Available Seats	247	100	0
	Analysis of Reserved Capacity			
	School Level	Elementary	Middle	
	Encumbered Capacity	120	0	241
	Reserved Capacity	0	0	20
	Adjusted Utilization	94.3%	74.4%	109.1%
	Adjusted Available Seats	127	100	0
	Analysis of Proposed Development			
	Students Generated	27.946	14.758	20.881
	Adjusted Utilization	97.8%	78.1%	109.7%
	AVAILABLE/NOT AVAILABLE	AVAILABLE	AVAILABLE	NOT AVAILABLE
	Number of Seats to Mitigate	0.000	0.000	20.881

KELLY PARK (K-5) ES	
KELLY PARK (6-8) MS	
APOPKA HS	

City of Apopka
PLANNING COMMISSION STAFF REPORT

Section: PUBLIC HEARING
Item #: 2.
Meeting Date: February 11, 2025
Department: Community Development

SUBJECT:
Legislative – Ordinance No. 3095 – Small-Scale Future Land Use Amendment – AdventHealth ED

REQUEST:
Recommend approval of the change in Future Land Use from Residential Very Low Suburban to Mixed-Use for AdventHealth ED.

SUMMARY:
Owner(s): Adventist Health System/Sunbelt, Inc.
Applicant(s): Kimley-Horn & Associates c/o Nathan Milch
Parcel Identification Number(s): 18-20-28-0000-00-101,18-20-28-0000-00-120 and 18-20-28-0000-00-107
Location: Southeast corner of Kelly Park Road and Plymouth Sorrento Road
Tract: 5.56 +/- acre(s)
Current Future Land Use Designation: Residential Very Low Suburban
Proposed Future Land Use Designation: Mixed-Use
Intensity: 0.15 floor area ratio minimum
Project Manager: Jean Sanchez

Direction	Future Land Use	Zoning	Present Use
North	County Rural	County A-1 (Citrus Rural)	Agricultural facility
East	County Rural	County A-1 (Citrus Rural)	Single-family residence
South	Residential Very Low Suburban	T (Transitional)	Single-family residence
West	Mixed-Use	KPI-MU	Publix Grocery multi-tenant center

PROJECT SUMMARY:
The applicant seeks approval for a small-scale future land use amendment application to designate a 5.56-acre site from Residential Very Low Suburban to Mixed-Use future land use. The properties are located on the southeast corner of Kelly Park Road and Plymouth Sorrento Road, within the Wekiva Parkway Interchange Vision Plan Area. The City's Comprehensive Plan, Future Land Use Element Policy 20.9 and the Kelly Park Interchange (KPI) Form-Based Code require the subject properties to have a Mixed-Use future land use designation.

Land Development Code Section 2.5.1.D.3 requires the Council to weigh the relevance of and consider whether and the extent to which the proposed amendment:

a. Is consistent with and furthers the goals, objectives and policies of the comprehensive plan and other adopted City plans;
Applicant response: The proposed Rezoning and Future Land Use Amendment is consistent with the Kelly Park

Interchange Form based Code and Vision Plan. The Property is located within the area designated as Village Center and is therefore subject to the Mixed Use Kelly Park Interchange (MU-KPI) Form Based Code. The purpose of the KPI Village Center is to create a pedestrian-orientated center that supports a variety of commercial and residential uses. Given the proposed development has varying uses, its role in the KPI Village Center area is consistent with the Mixed Use Kelly Park interchange (MU KPI) form-based code.
Staff response: Staff has no objection or comments.

b. Is in conflict with any provisions of the LDC;
Applicant response: The Kelly Park Interchange Form Based code was prepared in 2009 and the subject property was designated within the Village Center character area. The Village Center character area is the "heart" of the Interchange study area and is intended to "create a safe, vibrant and pedestrian-oriented village center that can support a variety of residential, retail, commercial, office and entertainment uses." It should be noted that single-family dwellings are not a permitted use within the Village Center character area, therefore conditions have changed as such to necessitate this rezoning and land use amendment. The proposed rezoning and land use amendment will bring the Property into compliance with the LDC, as the existing use in inconsistent with the LDC. Further compliance with LDC provisions will be demonstrated during Final Master Plan approval.
Staff response: If the future land use amendment is approved, a development plan will be required to be submitted to and approved by the Development Review Committee (DRC) for the development of the property. As part of the submittal requirements for the development plan, a Traffic Impact Analysis (TIA) will be required to be submitted which will outline what transportation impact mitigation measures, if any, will be required. The development plan will be reviewed against all applicable Land Development Code (LDC) requirements and will be evaluated by the DRC during the development review process.

c. Addresses a demonstrated community need;
Applicant response: Approval of the development not only ensures accessible emergency care for residents but also aligns with the vision outlined in the KPI Village Center. The nearest existing medical facility is approximately 10 miles away. The KPI Village Center aims to establish a pedestrian-friendly location accommodating diverse commercial and residential activities. Hence, a blend of commercial uses as proposed would greatly enhance this area and satisfies a community need.
Staff response: Staff has no objection or comments.

d. Is required by changed conditions;
Applicant response: Prior to the adoption of the KPI form based code, the existing use on the Property consisted of single-family uses (2 detached single-family homes and a trailer home). The subject Properties were purchased in 2023 by the applicant and in order to redevelop in a consistent manner with the Kelly Park Form Based Code, will require a Rezoning and Future Land Use Amendment. It can also be noted that single-family dwellings are not a permitted use within the Village Center area, therefore conditions have changed as such to necessitate this Rezoning and Land Use Amendment.
Staff response: Staff has no objection or comments.

e. Is compatible with existing and proposed uses surrounding the subject land, and is the appropriate zoning district for the land;
Applicant response: The proposed Future Land Use Amendment and Rezoning are compatible and consistent with both the existing and proposed uses in the Village Center area. The Property is currently surrounded by a mix of commercial and residential properties, and other development applications are in review that are compliant with the LDC. A higher density mix of these uses is anticipated for future developments. The uses proposed are permitted within the Village Center Character area and the existing use of single-family on the property is not consistent, which demonstrates the need for this request.
Staff response: Staff has no objection or comments.

f. Would result in a logical and orderly development pattern;
Applicant response: Despite considerable construction in transition and neighborhood zones across the KPI, development in the Village Center area remains relatively limited. Granting approval for the Future Land Use Amendment and Rezoning application would allow for the construction of a new commercial development, which would effectively bring more of a balance to the continuous residential construction within the Kelly Park interchange area. Considering the intended purpose of the KPI Form-Based Code Area to implement the regulations of the districts, this modification to the Future Land Use and Zoning is necessary to allow for development consistent with the Village Center.
Staff response: Staff has no objection or comments.

g. Would not result in significant adverse impacts on the natural environment—including, but not limited to, water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment;
Applicant response: No significant adverse impacts are expected as a result of the land uses associated with the proposed Zoning and Future Land Use Amendments. Provisions of the land development code will be met to help in mitigating potential adverse impacts on the natural environment.
Staff response: Staff has no objection or comments.

h. Would result in development that is adequately served by public facilities (e.g., streets, potable water, sewage, stormwater management, solid waste collection and disposal, schools, parks, police, and fire and emergency medical facilities).
Applicant response: The proposed Rezoning and Land Use Amendment would not have a negative impact on public facilities. The amendment would facilitate the development of multiple commercial uses that are consistent with the LDC and would require the enhancement of public facilities within the project area.
Staff response: Staff has no objection or comments.

ORANGE COUNTY NOTIFICATION:
The JPA (Joint Planning Agreement) requires the City to notify the County 30 days before any public hearing or advisory board. The City notified Orange County on December 10, 2024.

PUBLIC HEARING SCHEDULE:
February 11, 2025 – Planning Commission (5:00 P.M.)
March 5, 2025 – City Council (1:30 P.M.), First Reading
March 19, 2025 – City Council (7:00 P.M.), Second Reading/Adoption

DULY ADVERTISED:
January 10, 2025 – Apopka Chief
January 23, 2025 – Mailed notices to adjacent property owners and placards placed on property

FUNDING SOURCE:
N/A

RECOMMENDED MOTION:
Development Review Committee:

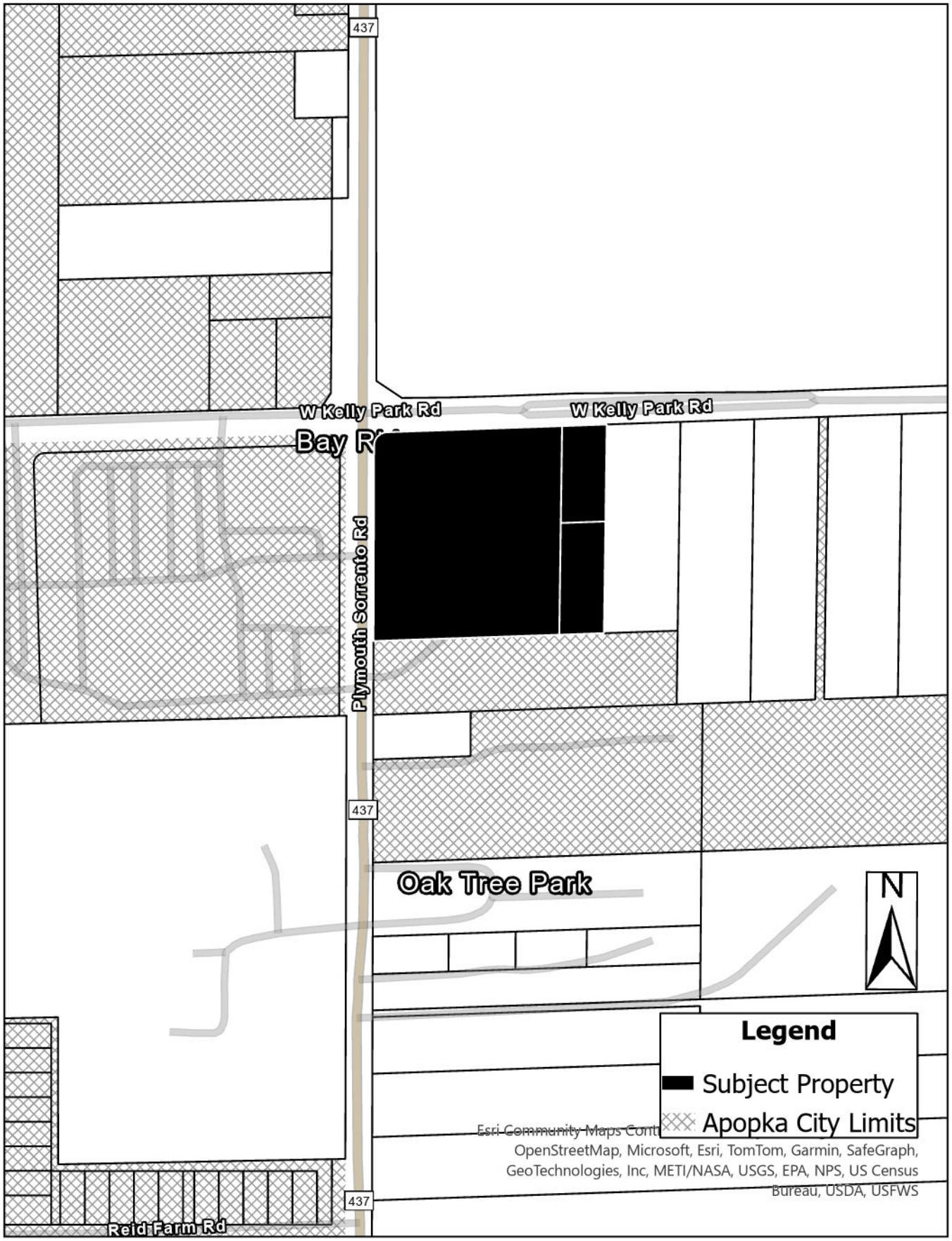
Finds the proposed amendment consistent with the Comprehensive Plan and compatible with the character of the surrounding area, and recommends approval of the change in Future Land Use designation from Residential Very Low Suburban to Mixed-Use.

Recommended Motion - Planning Commission:

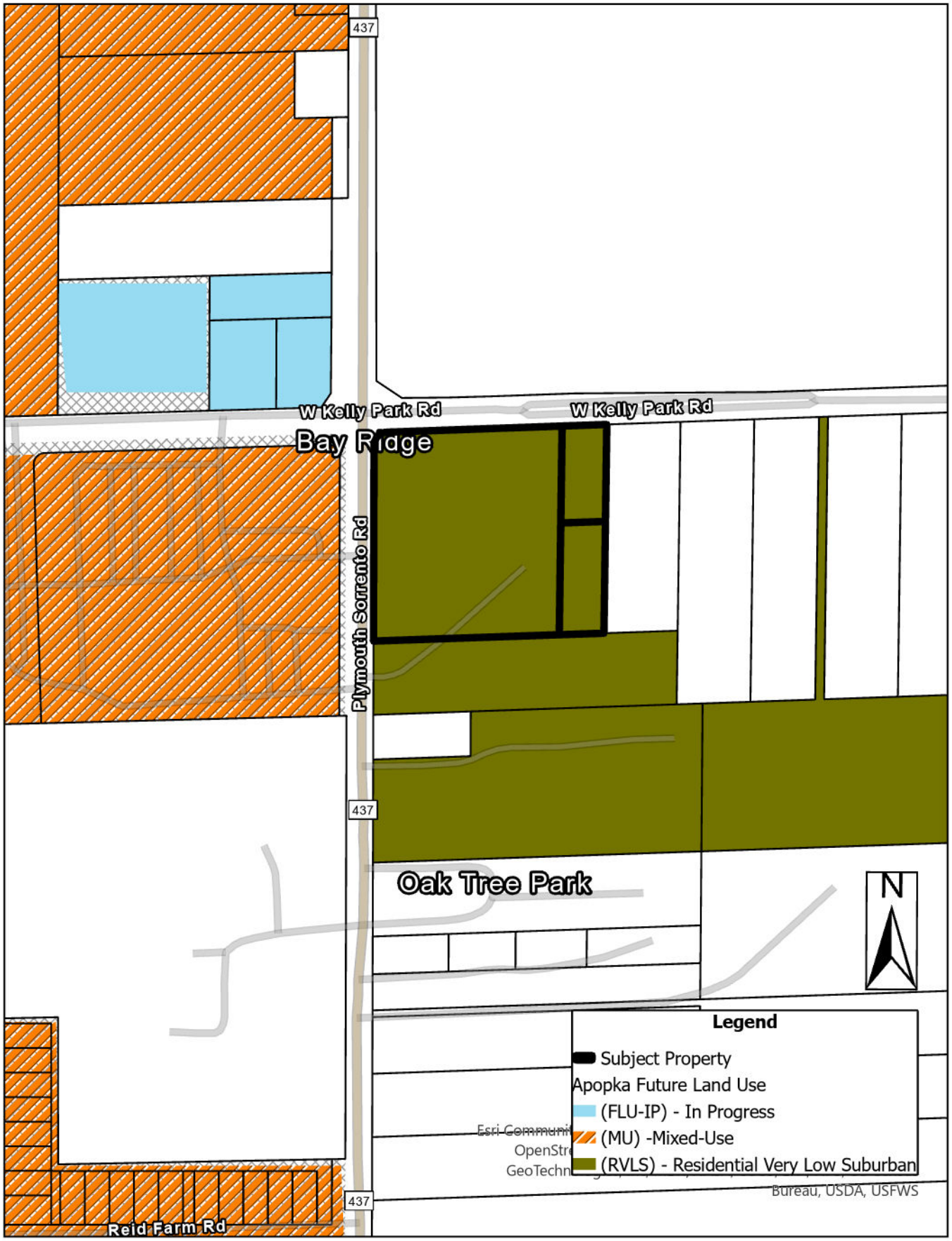
Find the proposed amendment consistent with the Comprehensive Plan and compatible with the character of the surrounding area, and recommend approval of the change in Future Land Use designation from Residential Very Low Suburban to Mixed-Use.

ATTACHMENTS:
1. Maps
2. Ordinance No. 3095
3. AdventHealth ED - Ad 011025

Vicinity


437
W Kelly Park Rd
W Kelly Park Rd
Bay R
Plymouth Sorrento Rd
437
Oak Tree Park
N
Legend
Subject Property
Apopka City Limits
Esri Community Maps Contr
OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph,
GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census
Bureau, USDA, USFWS
437
Reid Farm Rd

Future Land Use



Zoning

437
W Kelly Park Rd
W Kelly Park Rd
Bay Ridge
Plymouth Sorrento Rd
437
Oak Tree Park
N
Legend
Subject Property
Apopka Zoning
(MU-INT) - KPI - Interchange
(MU-N) - KPI - Neighborhood
(MU-VC) - KPI - Village Center
(T) - Transitional
Esri Community Maps Co
OpenStreetMap, Mic
GeoTechnologies, Inc,
437
Reid Farm Rd

Aerial

437
W Kelly Park Rd
W Kelly Park Rd
Bay Ridge
Plymouth Sorrento Rd
437
Oak Tree Park
N
Legend
Subject Property
437
Reid Farm Rd
Esri Community Maps Contributors, County of Orange, FL, FDEP, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, State of Florida, Maxar, Microsoft

ORDINANCE NO. 3095

AN ORDINANCE OF THE CITY OF APOPKA, FLORIDA, AMENDING THE FUTURE LAND USE ELEMENT OF THE APOPKA COMPREHENSIVE PLAN OF THE CITY OF APOPKA; CHANGING THE FUTURE LAND USE DESIGNATION FROM RESIDENTIAL VERY LOW SUBURBAN TO MIXED-USE FOR CERTAIN REAL PROPERTY OWNED BY ADVENTIST HEALTH SYSTEM/SUNBELT, INC.; GENERALLY LOCATED ON THE SOUTHEAST CORNER OF KELLY PARK ROAD AND PLYMOUTH SORRENTO ROAD; COMPRISING 5.56 ACRES, MORE OR LESS; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE

WHEREAS, to manage the growth, the City of Apopka, Florida, finds it in the best interest of the public health, safety and welfare of its citizens to establish zoning classifications within the City; and

WHEREAS, the applicant, Nathan Milch on behalf of the fee simple owners of the Properties, submitted an application for a future land use amendment on the Properties identified and depicted in Exhibit "A," attached hereto, from Residential Very Low Suburban to Mixed-Use and

WHEREAS, the proposed Mixed-Use future land use designation of the Property is consistent with the City's Comprehensive Plan and Land Development Code; and

WHEREAS, the City of Apopka Planning Commission held a public hearing on February 11, 2025 to consider this small-scale amendment to the Future Land Use Map of the Comprehensive Plan and determined that this amendment is internally consistent with the City's Comprehensive Plan; and

WHEREAS, the City of Apopka has followed all statutory and Code requirements for noticing and advertising this future land use amendment Ordinance and public hearings associated with the amendment; and

WHEREAS, the City Council has received public input on the future land use amendment and a recommendation from Staff; and

WHEREAS, the City Council of the City of Apopka finds that the applicants have met the necessary criteria for rezoning under City's Land Development Code and that rezoning serves a legitimate public purpose and will not adversely affect the public interest.

NOW THEREFORE, BE IT ORDAINED, by the City Council of the City of Apopka, Florida, as follows:

Section I. Findings and Intent. The City of Apopka has complied with all requirements and procedures of Florida Law in processing this Ordinance. The recitals set forth above are hereby adopted.

Section II. Future Land Use Amendment. The Property described and shown in Exhibit "A", being situated in the City of Apopka, Florida, is hereby assigned the Mixed-Use future land use designation, as defined in the Comprehensive Plan.

Section III. Future Land Use Map. The Official Future Land Use Map of the City of Apopka shall be amended to conform to the future land use designation assignment approved in Section 2 of this Ordinance. The Community Development Director, or the Director's designee, is hereby directed to amend, alter, and implement the official future land use maps of the City of Apopka, Florida, to include said designation.

Section IV. Severability. If any section or portion of a section or subsection of this Ordinance proves to be invalid, unlawful, or unconstitutional, it shall not be held to invalidate or impair the validity, force or effect of any other section or portion of section or subsection or part of this ordinance.

Section V. Conflicts. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section VI. Effective Date. This Ordinance shall become effective thirty-one (31) days after adoption. If challenged within thirty (30) days after adoption, the Ordinance shall become effective after the state land planning agency or the Administration Commission, respectively, issues a final order determining that the adopted small-scale development amendment is in compliance with applicable law.

ADOPTED at a regular meeting of the City Council of the City of Apopka, Florida, this ____ day of _____, 2025.

READ FIRST TIME: _____

READ SECOND TIME AND
ADOPTED: _____

ATTEST:

_____ _____

Susan Bone, City Clerk Bryan Nelson, Mayor

Approved as to form and legal sufficiency:

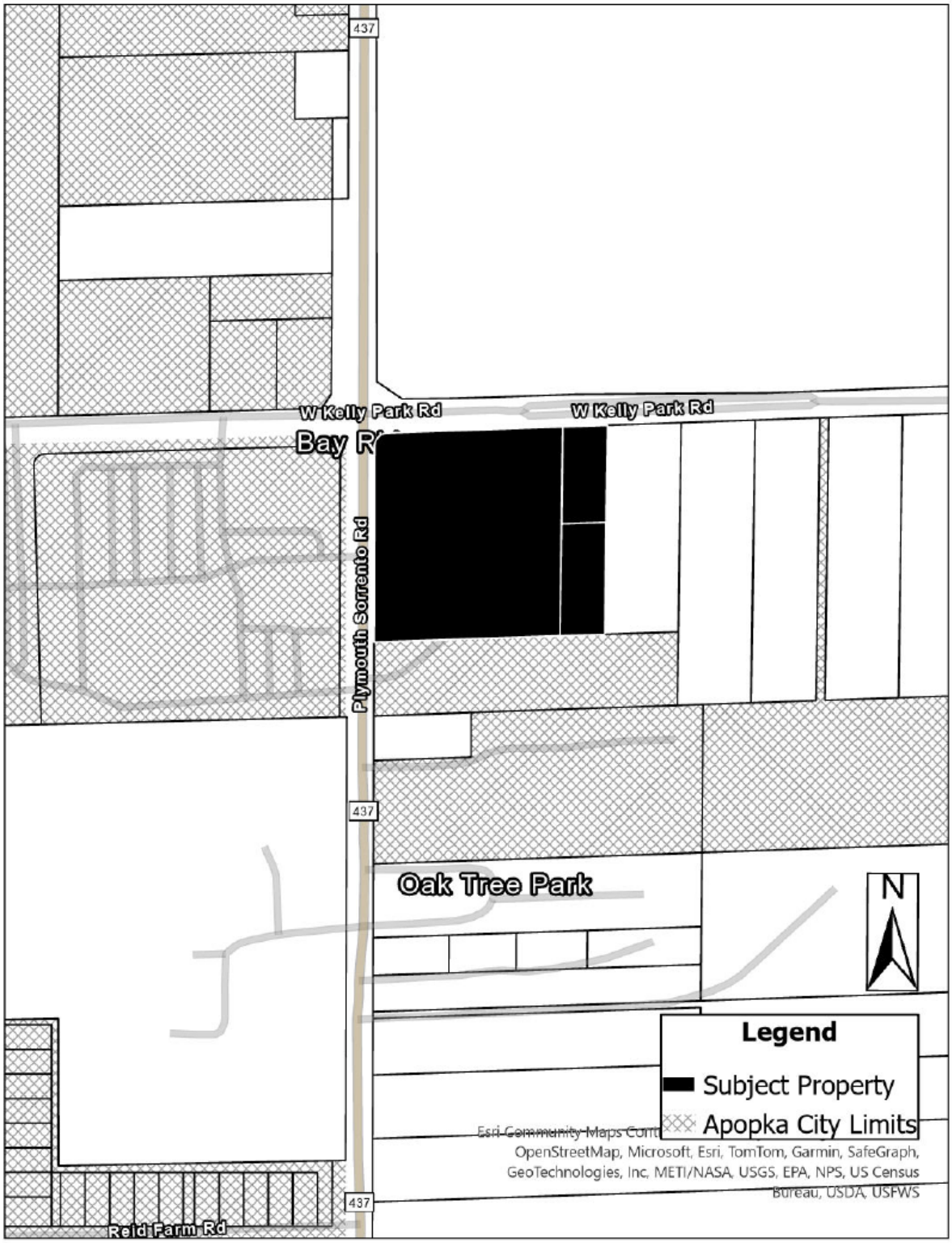
_____
Clifford B. Shepard, City Attorney

DULY ADVERTISED FOR PUBLIC HEARING: January 10, 2025

75

EXHIBIT A

Parcel Identification Number(s): 18-20-28-0000-00-101,18-20-28-0000-00-120 and 18-20-28-0000-00-107



Police Beat

If a law enforcement agency charges you with a crime and this paper reports that information, please notify us within 90 days if the charge is dropped, or if you are found not guilty by the court. After verifying the information, we will be happy to publish it. Please send notification to *The Apopka Chief,* P.O. Box 880, Apopka, 32704-0880.

In the period from December 29-January 4, 2025, the Apopka Police Department received 1,505 calls for service, responded to 25 crashes, issued 43 citations, and made 9 arrests. Juveniles were charged with loitering or prowling; resist officer-obstruct without violence; intimidation written/electronic threat mass shooting/terrorism act; probation violation-child in violation of imposed conditions.

The following adults were arrested and charged:

Ivan Nicholas Barakoff, 39, Apopka, battery-touch or strike.

Rebecca Victoria Bower, 33, 720 Mason Ave., Apopka, information only-other agency warrant.

DeMario Clady, 40, 251 E. 3rd Street, Apopka, out-of-county warrant; resist officer-obstruct without violence.

Linda Bowman Driggers, 67, Apopka, battery-touch or strike.

Anthony James Love, 42, general delivery, Apopka, trespassing-failure to leave property on order of owner.

Neftali Alexander Miranda Matias, 30, 2265 Mayflower Ave., Apopka, moving traffic violation-operate motor vehicle without valid license 1st conviction.

Larry Antonioi Stanley, 45, Eatonville, damage property-criminal mischief over $200 under $1,000; larceny-other theft; burglary with assault or battery; battery-touch or strike.

Courtney Marquis Steadman, 35, 7137 Holly Street, Mount Dora, DUI-unlawful blood alcohol 0.15 or higher or with person under 18 in vehicle.

Raynisha Antoinette Whittaker, 33, 12536 Bohannon Blvd., Orlando, information only-other agency warrant.

Fishing was starting to ramp up before cold front

Jim Keck
Goin' Fishin'

Hello Folks,

I hope everyone is havin' a great start to the new year. We are startin' the new year off right with some cold weather, and more cold weather is comin' our way. The good news is we don't have to deal with any snow.

Before this latest cold front came to town, the fishin' wasn't too bad. Kyle at Bitter's Bait & Tackle reports that lots of folks were catchin' some specks in Lake Monroe and Lake Jesup.

Folks have been catchin' some specks in the Kissimmee Chain as well. Most of the specks are bein' caught on minners driftin' open water in Lake Monroe. Folks are still catchin' most of their specks under the 417 bridge in Lake Jesup. Most of the specks in the Kissimmee chain are bein' caught around the pads. We have a full moon on Monday the 13th. If the weather settles down a little and we don't get too much wind, the specks should be bitin' this weekend.

The bass fishin' was doin' really good until this cold front came to town. Some bass were goin' on the beds to spawn, but I'm afraid these cold fronts will pull them off the beds. I'm sure there is goin' to be some beddin' goin' on, but usually our Florida bass are very susceptible to the weather. When those ole bass get on the beds and when these cold fronts come to town, they will pull off their beds in a heartbeat. So, don't be afraid to see if they are on the beds while you are fishin'.

Folks were catchin' some bass in the Butler Chain and the Maitland Chain before these cold fronts. Most folks are draggin' shiners out the back of the boat over the submerged hydrilla and eelgrass beds. The bass fishin' has been hit or miss on the Harris Chain.

Folks are catchin' a few bass on shiners, but due to a fish kill on Lake Eustis, the bass fishin' has slowed down a little in there. Some folks are reportin' that the fish kill is due to the sprayin' in the chain, and the FWC is claimin' the fish kill is due to the cold weather. The FWC is reportin' that the cold weather may be depleting the oxygen out the water, and that is causing the fish kill. Also, the FWC is reportin' that the fish kill may be due to algae blooms, extreme weather, or herbicides in the water.

If you want more information about what's goin' on in the Harris Chain, you can go to the FWC's website and see how the investigation is goin'. If you want to report dead fish sightings, the FWC has a Fish Kill Hotline that allows the public to submit reports by calling 1-800-636-0511. You can also go to myfwc.com and fill out a report on the fish kills in your area.

Well, folks I don't know how these fronts are goin' to affect your fishin', but hopefully we can get a few days of good weather so we can get out there and catch a few fish.

See ya next week.

Tip of the week: Full Moon on Monday.

Save a few and good luck!

CITY OF APOPKA
PUBLIC HEARING NOTICE
SMALL-SCALE FUTURE LAND USE AMENDMENT AND CHANGE OF ZONING

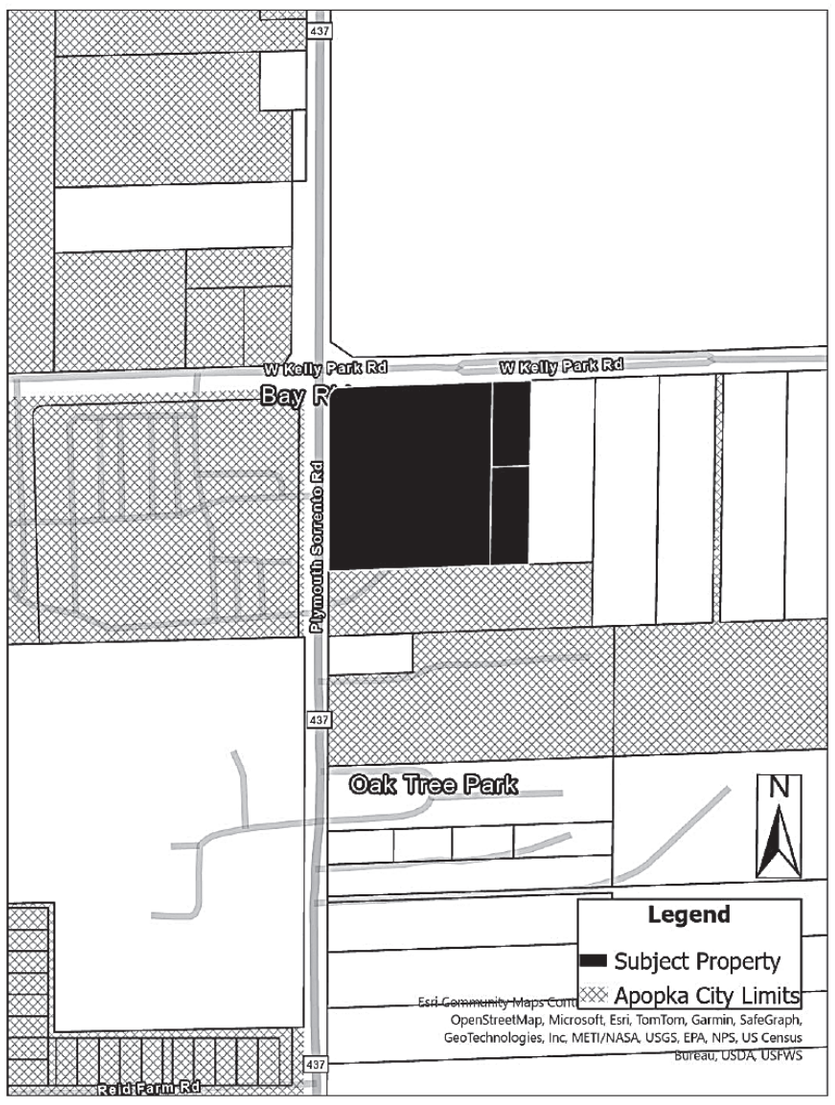
NOTICE is hereby given pursuant to Secs. 163.3184 and 166.041(3)(a), Florida Statutes and the Apopka Code of Ordinances, Part III, Land Development Code, Article II, Section 2.4.7.B, that **Nathan Milch** has made application, on behalf of the property owner, relating to the following described property.

ORDINANCE NO. 3095

AN ORDINANCE OF THE CITY OF APOPKA, FLORIDA, AMENDING THE FUTURE LAND USE ELEMENT OF THE APOPKA COMPREHENSIVE PLAN OF THE CITY OF APOPKA; CHANGING THE FUTURE LAND USE DESIGNATION FROM RESIDENTIAL VERY LOW SUBURBAN TO MIXED-USE FOR CERTAIN REAL PROPERTY OWNED BY ROSEVILLE FARMS, LLC; GENERALLY LOCATED ON THE SOUTHEAST CORNER OF KELLY PARK ROAD AND PLYMOUTH SORRENTO ROAD; COMPRISING 5.56 ACRES, MORE OR LESS; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.

ORDINANCE NO. 3096

AN ORDINANCE OF THE CITY OF APOPKA, FLORIDA, CHANGING THE ZONING FROM T (TRANSITION) TO KPI-MU (KELLY PARK INTERCHANGE – MIXED-USE) FOR CERTAIN REAL PROPERTY OWNED BY ROSEVILLE FARMS, LLC; GENERALLY LOCATED ON THE SOUTHEAST CORNER OF KELLY PARK ROAD AND PLYMOUTH SORRENTO ROAD; COMPRISING 5.56 ACRES, MORE OR LESS; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.



Parcel Identification Number(s): 18-20-28-0000-00-101, 18-20-28-0000-00-107 and 18-20-28-0000-00-120
Contains: 5.56 +/- Acres

NOTICE is given that a public hearing for Ordinance Numbers 3095 and 3096 will be held by the **City of Apopka City Council** at its regularly scheduled meeting in the City Council Chambers of the Apopka City Hall, 120 E. Main Street, Apopka, Florida on **Wednesday, February 11, 2025 beginning at 5:30 P.M. and March 5, 2025 at 1:30 P.M.**

Affected parties and the public may appear at the above listed hearings to speak. The proposed Future Land Use and Rezoning Applications can be inspected at the Apopka Community Development Department located at Apopka City Hall on weekdays between the hours of 8:00 A.M. and 4:30 P.M. City Hall address shown below. Please be advised that, under State law, if you decide to appeal a decision made with respect to this matter, you will need a record of the proceedings and may need to ensure that a verbatim record is made, which record includes the testimony and evidence upon which the appeal is to be based. In accordance with the Americans with Disabilities Act (ADA), persons with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk's Office at 120 East Main Street, Apopka, FL 32703, Telephone: 407-703-1704, no less than 48 hours prior to the proceeding.

Apopka City Council
Apopka Planning Commission
Community Development Department

January 10, 2025

Publish: The Apopka Chief **177810**

TTO: APK's 20-point victory

OCPS METRO CONFERENCE

METRO WEST	MASCOT		METRO EAST	MASCOT	
APOPKA	Blue Darters		BOONE	Braves	
DR. PHILLIPS	Panthers		CYPRESS CREEK	Bears	
EDGEWATER	Eagles		COLONIAL	Grenadiers	
EVANS	Trojans		EAST RIVER	FalconS	
HORIZON	Hawks		FREEDOM	PatriotS	
LAKE BUENA VISTA	Vipers		JONES	Tigers	
OCOEE	Knights		LAKE NONA	Lions	
OLYMPIA	Titans		OAK RIDGE	Pioneers	
WEKIVA	Mustangs		TIMBER CREEK	Wolves	
WEST ORANGE	Warriors		UNIVERSITY	Cougars	
WINDERMERE	Wolverines		WINTER PARK	Wildcats	

Above is the collection of teams in the OCPS Metro Conference separated into Western and Eastern divisions.

Continued from page 1B

still huge as Apopka scored 68 points which is tied for the most points they have scored all season with another 68-point victory over BEST in a tournament in Gainesville. Apopka started with the lead and never gave it up outscoring Dr. Phillips in every quarter except the last one where Apopka cleared the bench (21-14, 14-9, 22-7, 11-18).

The Blue Darters outplayed the Panthers on both sides of the ball. Apopka shot better, shooting 45.3 percent as a team compared to Dr. Phillips' 35 percent. Apopka had more transition points (9-5), more second-chance points (13-4), more points in the paint (22-10), more offensive rebounds (14-7), more defensive rebounds (20-16), more assists (18-10), more steals (14-7), and more blocks (2-0).

The team was led to victory by Jermichael Johnson, Noah Ferrer, and Jude Angervil. Johnson scored 15 points shooting 55.6 percent from the field, collected eight rebounds, two assists, two deflections, three steals, and one block. Angervil scored 13 points shooting 71.4 percent from the field, collected five rebounds, two deflections, two steals, and one block. Ferrer scored 11 points shooting 60 percent from the field, collected three rebounds, one assist, and two steals. Guards Jahi Bowden and Rafael Betancourt also helped bring in the win combining for 11 points, 10 assists, six rebounds, three deflections, and four steals.

On Thursday in the western semifinals, Edgewater faced Evans and Apopka faced Windermere.

Windermere is a very strong program that defeated Ocoee 67-25. In early December of last year, Apopka beat Ocoee by just one point 57-56 so this was bound to be a tough game for Apopka. The game against Windermere happened after press time.

As of Tuesday, January 7, Windermere is 14-3, ranked 6th in Florida, ac-

See TTO Page 4B

Advertise your legal notice in
The Apopka Chief
Call 407-886-2777 or visit www.theapopkachief.com
Deadline for Friday's publication: Tuesday, 5 p.m.
Mail to
PO Box 880, Apopka, Fl 32704
or bring the notice to
400 N. Park Avenue, Apopka,
or fax 407-889-4121 **or Email:**
legals@the apopkachief.com
Notices are also published online at www.theapopkachief.com and statewide on floridapublicnotices.com

City of Apopka
PLANNING COMMISSION STAFF REPORT

Section: PUBLIC HEARING
Item #: 3.
Meeting Date: February 11, 2025
Department: Community Development

SUBJECT:
Quasi-Judicial – Ordinance No. 3096 – Change of Zoning – AdventHealth ED

REQUEST:
Recommend approval of the Change of Zoning from T (Transitional) to KPI - MU (Kelly Park Interchange - Mixed-Use) and the Master Plan.

SUMMARY:
Owner(s): Adventist Health System/Sunbelt, Inc.
Applicant(s): Kimley-Horn & Associates c/o Nathan Milch
Parcel Identification Number(s): 18-20-28-0000-00-101,18-20-28-0000-00-120 and 18-20-28-0000-00-107
Location: Southeast corner of Kelly Park Road and Plymouth Sorrento Road
Tract: 5.56 +/- acre(s)
Current Zoning Designation: T (Transitional)
Proposed Zoning Designation: KPI - MU (Kelly Park Interchange - Mixed-Use)
Intensity: 0.15 floor area ratio minimum
Project Manager: Jean Sanchez

Direction	Future Land Use	Zoning	Present Use
North	County Rural	County A-1 (Citrus Rural)	Agricultural facility
East	County Rural	County A-1 (Citrus Rural)	Single-family residence
South	Residential Very Low Suburban	T (Transitional)	Single-family residence
West	Mixed-Use	KPI-MU	Publix Grocery multi-tenant center

PROJECT SUMMARY:
The applicant seeks approval for a rezoning of the subject properties, designating a 5.56-acre site, on the southeast corner of Kelly Park Road and Plymouth Sorrento Road, in the City of Apopka as KPI-MU (Kelly Park Interchange – Mixed Use). The Master Plan details a conceptual plan for an Off-Site Emergency Department (OSED), alongside medical office space and retail uses on approximately 5.56 acres. The applicant sets aside 10% of the area as open space for a plaza; 228 off-street parking spaces, as well as, 30-foot wide right-of-way (ROW) dedications and 12-foot wide trails along both ROW frontages. The Master Plan also shows approximate access points on Kelly Park Road and Plymouth Sorrento Road, as well as, connections on the eastern and southern adjacent properties. Finite details of the site layout and access points will be provided at the time of Major Development Plan and Construction Site Plan processes.

Land Development Code Section 2.5.1.D.3 requires the Council to weigh the relevance of and consider whether and the extent to which the proposed amendment:

a. Is consistent with and furthers the goals, objectives and policies of the comprehensive plan and other adopted City plans;
Applicant response: The proposed Rezoning and Future Land Use Amendment is consistent with the Kelly Park Interchange Form based Code and Vision Plan. The Property is located within the area designated as Village Center and is therefore subject to the Mixed Use Kelly Park Interchange (MU-KPI) Form Based Code. The purpose of the KPI Village Center is to create a pedestrian-orientated center that supports a variety of commercial and residential uses. Given the proposed development has varying uses, its role in the KPI Village Center area is consistent with the Mixed Use Kelly Park interchange (MU KPI) form-based code.
Staff response: Staff has no objection or comments.

b. Is in conflict with any provisions of the LDC;
Applicant response: The Kelly Park Interchange Form Based code was prepared in 2009 and the subject property was designated within the Village Center character area. The Village Center character area is the “heart” of the Interchange study area and is intended to “create a safe, vibrant and pedestrian-oriented village center that can support a variety of residential, retail, commercial, office and entertainment uses.” It should be noted that single-family dwellings are not a permitted use within the Village Center character area, therefore conditions have changed as such to necessitate this rezoning and land use amendment. The proposed rezoning and land use amendment will bring the Property into compliance with the LDC, as the existing use in inconsistent with the LDC. Further compliance with LDC provisions will be demonstrated during Final Master Plan approval.
Staff response: If the future land use amendment is approved, a development plan will be required to be submitted to and approved by the Development Review Committee (DRC) for the development of the property. As part of the submittal requirements for the development plan, a Traffic Impact Analysis (TIA) will be required to be submitted which will outline what transportation impact mitigation measures, if any, will be required. The development plan will be reviewed against all applicable Land Development Code (LDC) requirements and will be evaluated by the DRC during the development review process.

c. Addresses a demonstrated community need;
Applicant response: Approval of the development not only ensures accessible emergency care for residents but also aligns with the vision outlined in the KPI Village Center. The nearest existing medical facility is approximately 10 miles away. The KPI Village Center aims to establish a pedestrian-friendly location accommodating diverse commercial and residential activities. Hence, a blend of commercial uses as proposed would greatly enhance this area and satifies a community need.
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d. Is required by changed conditions;
Applicant response: Prior to the adoption of the KPI form based code, the existing use on the Property consisted of single-family uses (2 detached single-family homes and a trailer home). The subject Properties were purchased in 2023 by the applicant and in order to redevelop in a consistent manner with the Kelly Park Form Based Code, will require a Rezoning and Future Land Use Amendment. It can also be noted that single-family dwellings are not a permitted use within the Village Center area, therefore conditions have changed as such to necessitate this Rezoning and Land Use Amendment.
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e. Is compatible with existing and proposed uses surrounding the subject land, and is the appropriate zoning district for the land;
Applicant response: The proposed Future Land Use Amendment and Rezoning are compatibile and consistent with both the existing and proposed uses in the Village Center area. The Property is currently surrounded by a mix of commercial and residential properties, and other development applications are in review that are compliant with the LDC. A higher density mix of these uses is anticipated for future developments. The uses proposed are permitted within the Village Center Character area and the existing use of single-family on the property is not consistent, which demonstrates the need for this request.
Staff response: Staff has no objection or comments.

f. Would result in a logical and orderly development pattern;
Applicant response: Despite considerable construction in transition and neighborhood zones across the KPI, development in the Village Center area remains relatively limited. Granting approval for the Future Land Use Amendment and Rezoning application would allow for the construction of a new commercial development, which would effectively bring more of a balance to the continuous residential construction within the Kelly Park

interchange area. Considering the intended purpose of the KPI Form-Based Code Area to implement the regulations of the districts, this modification to the Future Land Use and Zoning is necessary to allow for development consistent with the Village Center.
Staff response: Staff has no objection or comments.

g. Would not result in significant adverse impacts on the natural environment—including, but not limited to, water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment;
Applicant response: No significant adverse impacts are expected as a result of the land uses associated with the proposed Zoning and Future Land Use Amendments. Provisions of the land development code will be met to help in mitigating potential adverse impacts on the natural environment.
Staff response: Staff has no objection or comments.

h. Would result in development that is adequately served by public facilities (e.g., streets, potable water, sewage, stormwater management, solid waste collection and disposal, schools, parks, police, and fire and emergency medical facilities).
Applicant response: The proposed Rezoning and Land Use Amendment would not have a negative impact on public facilities. The amendment would facilitate the development of multiple commercial uses that are consistent with the LDC and would require the enhancement of public facilities within the project area.
Staff response: Staff has no objection or comments.

ORANGE COUNTY NOTIFICATION:
The JPA (Joint Planning Agreement) requires the City to notify the County 30 days before any public hearing or advisory board. The City notified Orange County on December 10, 2024.

PUBLIC HEARING SCHEDULE:
February 11, 2025 – Planning Commission (5:00 P.M.)
March 5, 2025 – City Council (1:30 P.M.), First Reading
March 19, 2025 – City Council (7:00 P.M.), Second Reading/Adoption

DULY ADVERTISED:
January 10, 2025 – Apopka Chief
January 23, 2025 – Mailed notices to adjacent property owners and placards placed on property

FUNDING SOURCE:
N/A

RECOMMENDED MOTION:

Development Review Committee:

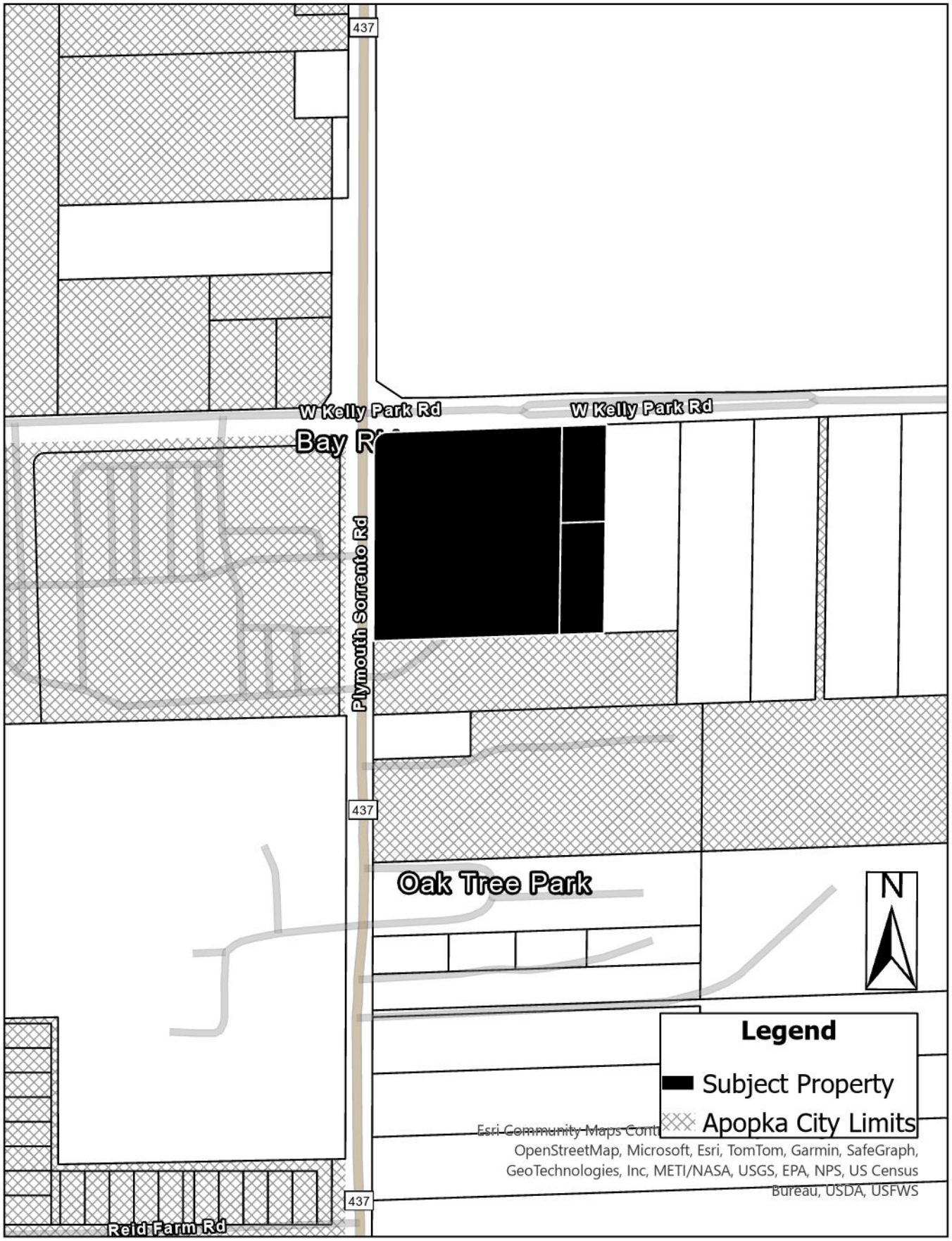
Finds the proposed amendment consistent with the Comprehensive Plan and compatible with the character of the surrounding area, and recommends approval of the Change of Zoning from T (Transitional) to KPI - MU (Kelly Park Interchange - Mixed-Use) and the Master Plan.

Recommended Motion - Planning Commission:

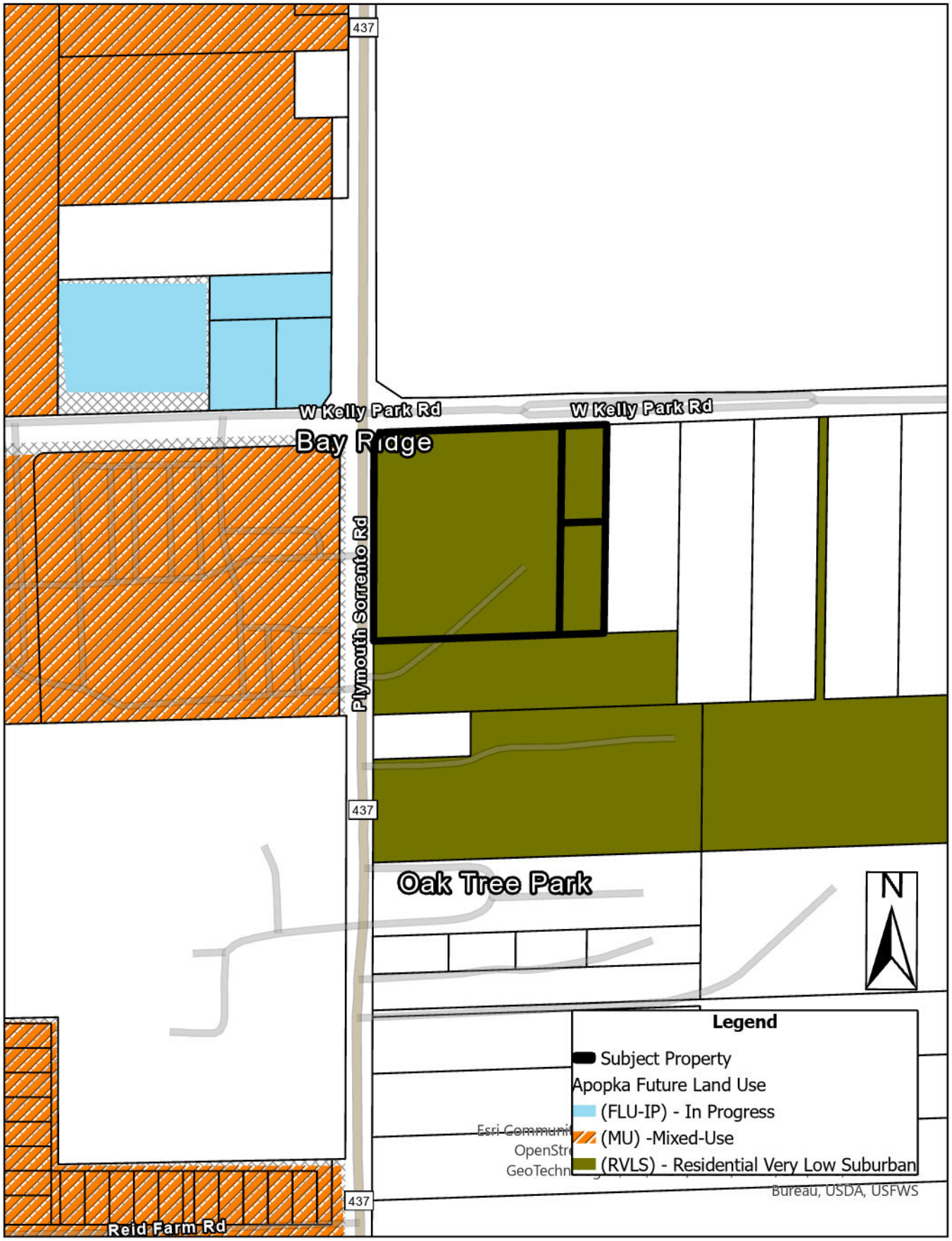
Find the proposed amendment consistent with the Comprehensive Plan and compatible with the character of the surrounding area, and recommend approval of the Change of Zoning from T (Transitional) to KPI - MU (Kelly Park Interchange - Mixed-Use) and the Master Plan.

ATTACHMENTS:
1. Maps
2. Ordinance No. 3096
3. AdventHealth ED - Master Plan
4. AdventHealth ED - Ad 011025

Vicinity


437
W Kelly Park Rd
W Kelly Park Rd
Bay R
Plymouth Sorrento Rd
437
Oak Tree Park
N
Legend
Subject Property
Apopka City Limits
Esri Community Maps Contr
OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph,
GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census
Bureau, USDA, USFWS
437
Reid Farm Rd

Future Land Use



Zoning

437
W Kelly Park Rd
W Kelly Park Rd
Bay Ridge
Plymouth Sorrento Rd
437
Oak Tree Park
N
Legend
Subject Property
Apopka Zoning
(MU-INT) - KPI - Interchange
(MU-N) - KPI - Neighborhood
(MU-VC) - KPI - Village Center
(T) - Transitional
Esri Community Maps Co
OpenStreetMap, Mic
GeoTechnologies, Inc,
437
Reid Farm Rd

Aerial

437
W Kelly Park Rd
W Kelly Park Rd
Bay Ridge
Plymouth Sorrento Rd
437
Oak Tree Park
N
Legend
Subject Property
Esri Community Maps Contributors, County of Orange, FL, FDEP, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, State of Florida, Maxar, Microsoft
437
Reid Farm Rd

ORDINANCE NO. 3096

AN ORDINANCE OF THE CITY OF APOPKA, FLORIDA, CHANGING THE ZONING FROM T (TRANSITION) TO KPI-MU (KELLY PARK INTERCHANGE – MIXED-USE) FOR CERTAIN REAL PROPERTY OWNED BY ADVENTIST HEALTH SYSTEM/SUNBELT, INC.; GENERALLY LOCATED ON THE SOUTHEAST CORNER OF KELLY PARK ROAD AND PLYMOUTH SORRENTO ROAD; COMPRISING 5.56 ACRES, MORE OR LESS; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.

WHEREAS, to manage the growth, the City of Apopka, Florida, finds it in the best interest of the public health, safety and welfare of its citizens to establish zoning classifications within the City; and

WHEREAS, the applicant, Nathan Milch on behalf of the fee simple owners of the Properties, submitted an application for a future land use amendment on the Properties identified and depicted in Exhibit "A," attached hereto, from Residential Very Low Suburban to Mixed-Use and

WHEREAS, the proposed KPI-MU (Kelly Park Interchange – Mixed-Use) zoning, as well as, Village Center District Overlay of the Properties are consistent with the City's Comprehensive Plan and Land Development Code; and

WHEREAS, the City of Apopka Planning Commission, sitting as the Local Planning Agency, recommended approval of the change in the zoning of the Properties and found that the rezoning is consistent with the City's Comprehensive Plan; and

WHEREAS, the City of Apopka has followed all statutory and Code requirements for noticing and advertising this rezoning Ordinance and public hearings associated with the rezoning; and

WHEREAS, the City Council has received public input on the rezoning and a recommendation from staff; and

WHEREAS, the City Council of the City of Apopka finds that the applicants have met the necessary criteria for rezoning under City's Land Development Code and that rezoning serves a legitimate public purpose and will not adversely affect the public interest.

NOW THEREFORE, BE IT ORDAINED, by the City Council of the City of Apopka, Florida, as follows:

Section I. Findings and Intent. The City of Apopka has complied with all requirements and procedures of Florida Law in processing this Ordinance. The recitals set forth above are hereby adopted.

Section II. Rezoning. The Property described and shown in Exhibit "A", being situated in the City of Apopka, Florida, is hereby rezoned and assigned the KPI-MU (Kelly Park Interchange – Mixed-Use (Residential Single-Family – Large Lot) Zoning District, as defined in the Apopka Land Development Code.

Section III. Zoning Map. The Official Zoning Map of the City of Apopka shall be amended to conform to the zoning assignment approved in Section 2 of this Ordinance. The Community Development Director, or the Director's designee, is hereby directed to amend, alter, and implement the official zoning maps of the City of Apopka, Florida, to include said designation.

Section IV. Severability. If any section or portion of a section or subsection of this Ordinance proves to be invalid, unlawful, or unconstitutional, it shall not be held to invalidate or impair the validity, force or effect of any other section or portion of section or subsection or part of this ordinance.

Section V. Conflicts. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section VI. Effective Date. This Ordinance shall become effective immediately following such time that its companion future land use map amendment ordinance (Ordinance 3067) takes effect.

ADOPTED at a regular meeting of the City Council of the City of Apopka, Florida, this ____ day of _____, 2025.

READ FIRST TIME: _____

READ SECOND TIME AND ADOPTED: _____

ATTEST:

_____ _____

Susan Bone, City Clerk Bryan Nelson, Mayor

Approved as to form and legal sufficiency:

_____

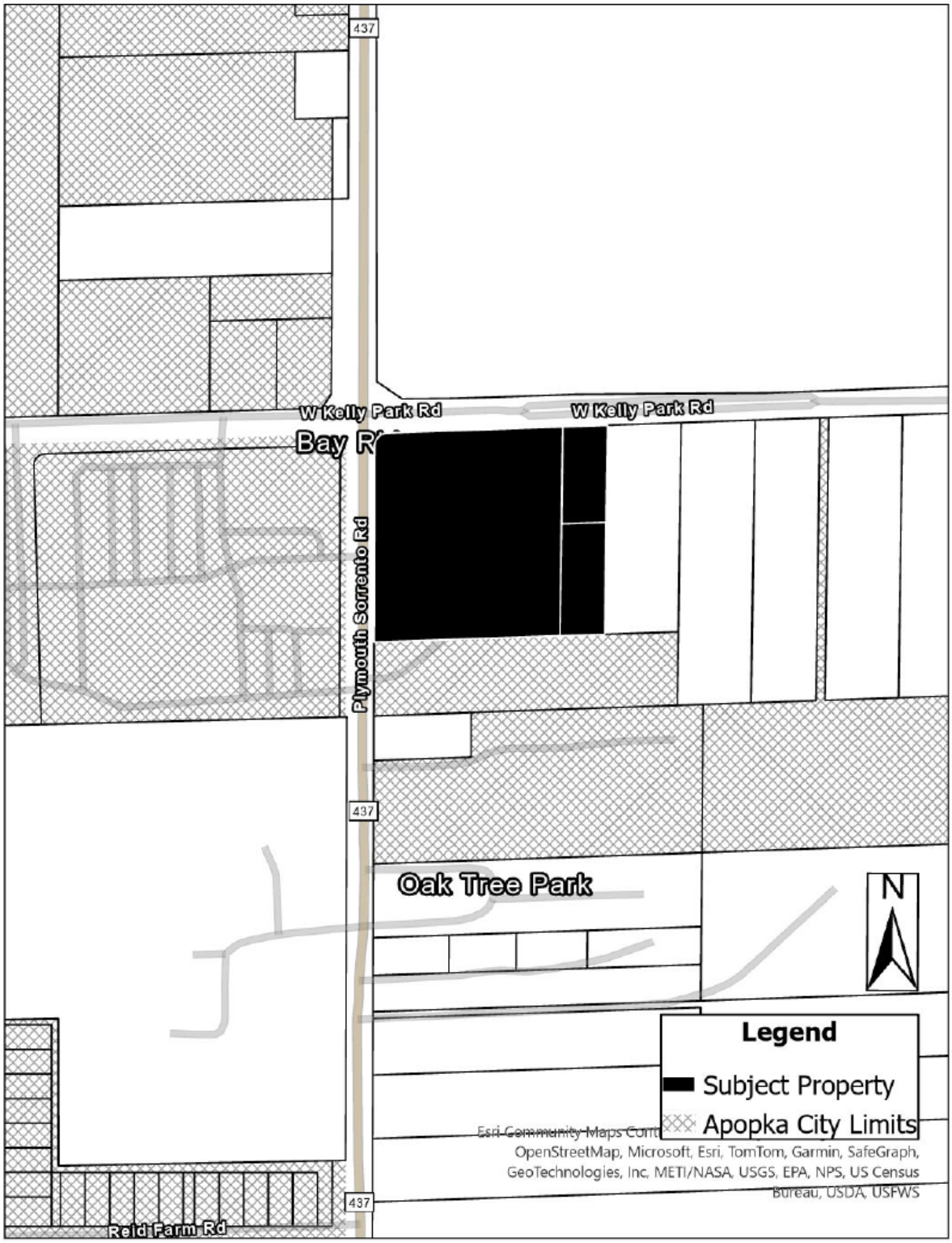
Clifford B. Shepard, City Attorney

DULY ADVERTISED FOR PUBLIC HEARING: January 10, 2025

72

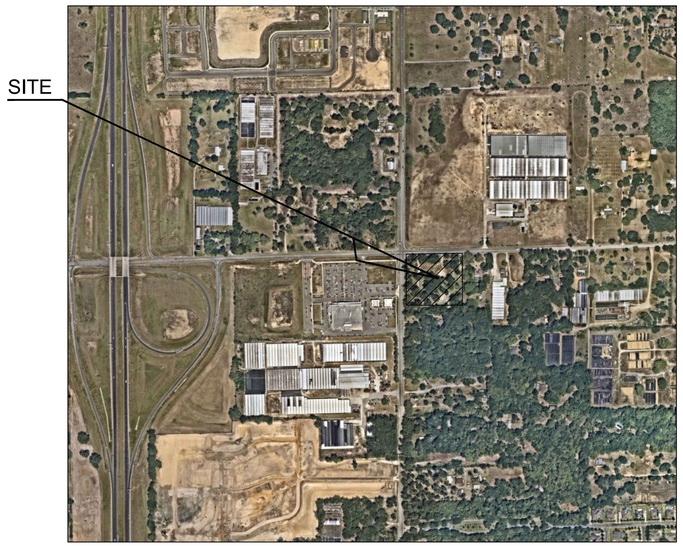
EXHIBIT A

Parcel Identification Number(s): 18-20-28-0000-00-101,18-20-28-0000-00-120 and 18-20-28-0000-00-107



ADVENTHEALTH
KELLY PARK OSED
MASTER PLAN
CITY OF APOPKA, FLORIDA
NOVEMBER 22, 2024

PARCEL #'s 18-20-28-0000-00-120
18-20-28-0000-00-107
18-20-28-0000-00-101



VICINITY MAP

LEGAL DESCRIPTION:

PARCEL NO. 1:

BEGIN 30 FEET SOUTH OF THE NORTHWEST CORNER OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST; RUN EAST 452.5 FEET; RUN SOUTH 467.15 FEET; RUN WEST TO A POINT SOUTH OF THE POINT OF BEGINNING; THENCE RUN NORTH 466.77 FEET TO THE POINT OF BEGINNING. LESS ALL THAT PART LYING WITHIN THE RIGHT OF WAY OF PLYMOUTH SORRENTO ROAD.) ALL OF SAID LANDS LYING AND BEING IN ORANGE COUNTY, FLORIDA.

PARCEL NO. 2:

BEGIN 30 FEET SOUTH AND 452.5 FEET EAST OF THE NORTHWEST CORNER OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST; THENCE RUN EAST 100.00 FEET; THENCE RUN SOUTH 217.00 FEET; THENCE RUN WEST PARALLEL WITH THE NORTH LINE OF SAID SECTION 18, A DISTANCE OF 100 FEET; THENCE RUN NORTH 217.00 FEET TO THE POINT OF BEGINNING. LAND LYING AND BEING SITUATE IN ORANGE COUNTY, FLORIDA.

PARCEL NO. 3:

FROM A POINT THAT IS 30.0 FEET SOUTH AND 452.5 FEET EAST OF THE NORTHWEST CORNER OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, RUN SOUTH 217 FEET FOR A POINT OF BEGINNING; THENCE RUN EAST 100.0 FEET; THENCE RUN SOUTH 250.15 FEET; THENCE RUN WEST PARALLEL WITH THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 18, A DISTANCE OF 100.00 FEET; THENCE RUN NORTH 250.08 FEET TO THE POINT OF BEGINNING. LAND LYING AND BEING SITUATE IN ORANGE COUNTY, FLORIDA.

CONTAINING 5.563 ACRES MORE OR LESS AND BEING SUBJECT TO ANY RIGHTS-OF-WAY, RESTRICTIONS AND EASEMENTS OF RECORD.

PROJECT TEAM:

APPLICANT/PRIMARY CONTACT
ADVENTHEALTH
1919 NORTH ORANGE AVE, SUITE D
ORLANDO, FL 32804
CONTACT: CHRISTINA DOIDIC
PHONE: (407)303-1166
EMAIL: CHRISTINA.DOIDIC@ADVENTHEALTH.COM

PLANNER:
KIMLEY-HORN AND ASSOCIATES, INC.
200 S. ORANGE AVE., SUITE 600
ORLANDO, FL 32801
CONTACT: NATHAN MILCH, AICP
PHONE: (689) 244-5509
EMAIL: NATHAN.MILCH@KIMLEY-HORN.COM

Kimley»Horn

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200 S. ORANGE AVE., SUITE 600, ORLANDO, FL 32801
PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 696

NOTES:

1. THIS PLAN IS SUBJECT TO FINAL SURVEY, ENVIRONMENTAL, GEOTECHNICAL, STORMWATER/ENGINEERING EVALUATION AND AGENCY REVIEW.
2. ALL STRUCTURES AND SIGNAGE SHALL COMPLY WITH THE KELLY PARK INTERCHANGE FORM BASED CODE, SECTION K.
3. WHERE FEASIBLE, EXISTING TREES SHALL BE PRESERVED IN ACCORDANCE WITH THE LAND DEVELOPMENT CODE.
4. LOCATION OF BUILDINGS ARE PRELIMINARY AND WILL BE FINALIZED WITH FINAL MASTER PLAN.
5. LOCATION OF UTILITIES WILL BE PROVIDED WITH FINAL MASTER PLAN.
6. THIS PROJECT MAY BE DEVELOPED IN MULTIPLE PHASES, WITH EACH RESPECTIVE PHASE DETERMINED AT FINAL MASTER PLAN.
7. THE MASTER PLAN IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE DURING FINAL MASTER PLAN REVIEW. PROPOSED BUILDINGS LOCATIONS AND THEIR TOTAL SQUARE FOOTAGE MAY VARY AT FINAL MASTER PLAN TO THE EXTENT THAT THE PROPOSED DEVELOPMENT REMAINS COMPLIANT WITH THE INTENT OF THE KELLY PARK FORM BASED CODE.

PROJECT SCOPE:

THE INTENT OF THIS PROJECT IS FOR A SMALL-SCALE FUTURE LAND USE AMENDMENT AND REZONING/MASTER PLAN TO DESIGNATE A 5.56-ACRE SITE IN THE CITY OF APOPKA AS KELLY PARK INTERCHANGE - MIXED USE (KPI-MU) WITH A CORRESPONDING MIXED-USE KELLY PARK INTERCHANGE (MU-KPI) ZONING. THE OBJECTIVE OF THIS APPLICATION IS TO ESTABLISH A NEW OFF-SITE EMERGENCY DEPARTMENT (OSED), ALONGSIDE MEDICAL OFFICE SPACE AND RETAIL USES WITHIN THE VILLAGE CENTER DISTRICT.

SHEET INDEX

LUP-01	COVER SHEET
LUP-02	EXISTING CONDITIONS
LUP-03	LAND USE PLAN
LUP-04	SURVEY

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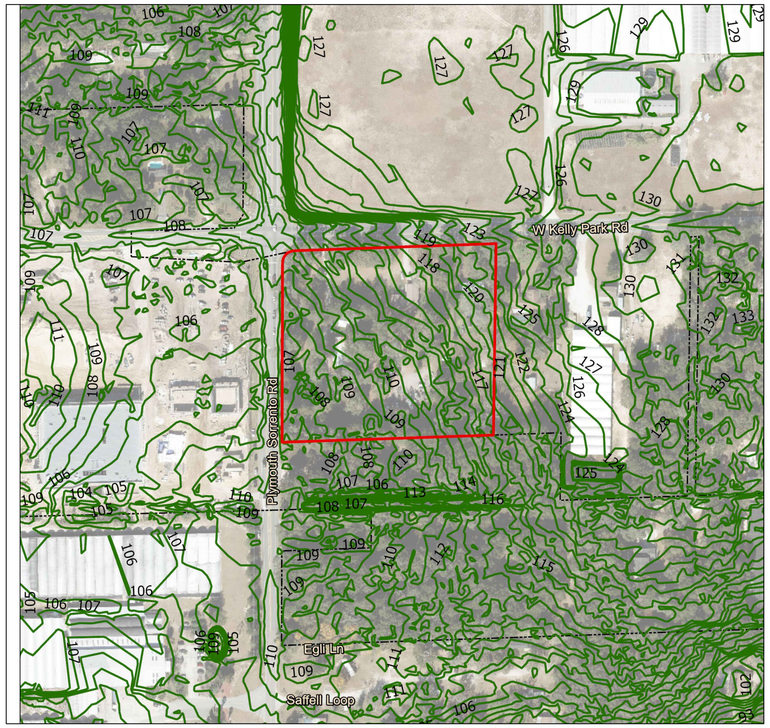


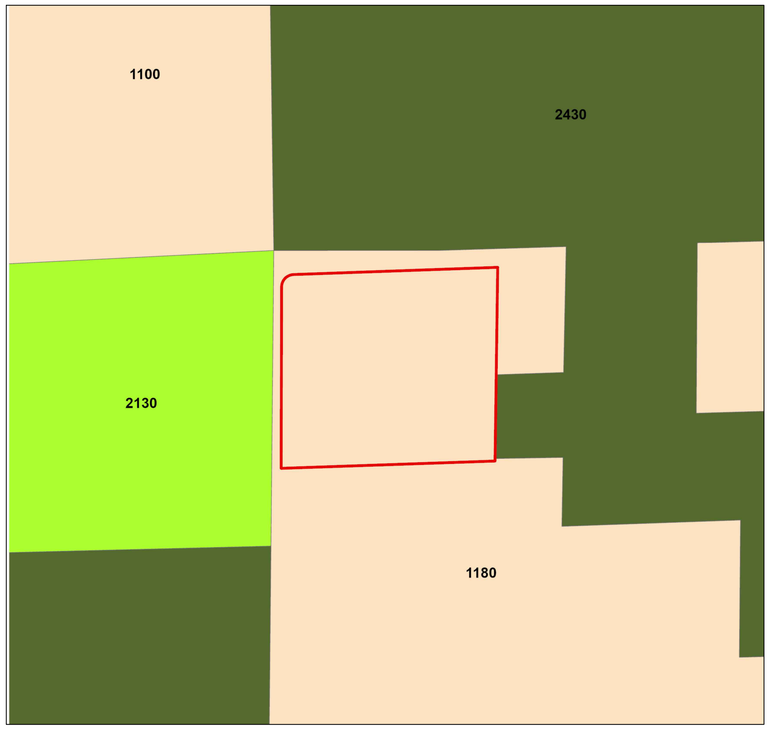
TOPOGRAPHY

SOURCE:
TOPO: ORANGE COUNTY LIDAR DATA
1 FT CONTOURS

SOILS

4 - CANDLER FINE SAND, 0 TO 5 PERCENT SLOPES

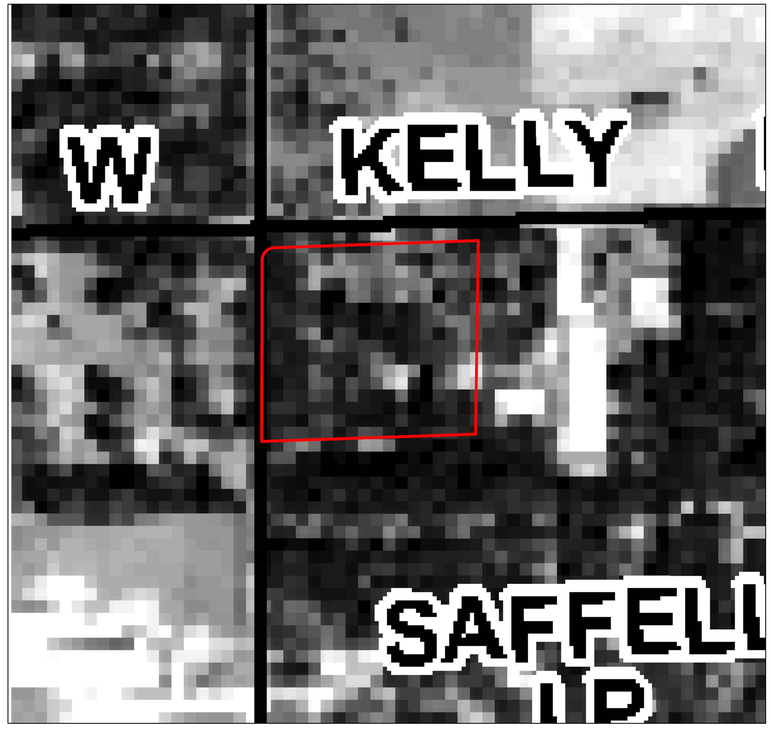
SOURCE:
NRCS



FLUCCS

- 1180 - Residential Low Density
- 2130 - Cropland and Pastureland
- 2430 - Nurseries and Vineyards
- 8370 - Utilities

SOURCE:
FLUCCS: FDEP GEOSPATIAL OPEN DATA



FLOOD ZONE

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

NO FLOODPLAIN IS LOCATED ON THE SUBJECT PROPERTY.

ZONE A: NO BASE FLOOD ELEVATIONS DETERMINED
ZONE AE: BASE FLOOD ELEVATIONS DETERMINED

SOURCE:
FLOOD INSURANCE RATE MAP, ORANGE COUNTY, FLORIDA PANEL 12095C0050F
MAP REVISED DATE: SEPTEMBER 25, 2009

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PHONE: 407-898-1511
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Drawing name: \\kimley-horn.com\FL_ORL02\ORL_Civil\149684017-Kelly Park OSED\CAD\LUP\LUP-01.dwg LUP-02 Jul 01, 2024 7:55pm
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SITE DATA:

GENERAL INFORMATION:

LOCATION:	SOUTHEAST CORNER OF W KELLY PARK ROAD AND PLYMOUTH SORRENTO ROAD
PARCEL I.D:	18-20-28-0000-00-120, 18-20-28-0000-00-107, AND 18-20-28-0000-00-101
PROPERTY ADDRESS:	2896, 2902, 2928 W KELLY PARK RD APOPKA, FL 32712
EXISTING USE:	VACANT
PROPOSED USE:	FREE STANDING EMERGENCY DEPARTMENT, MEDICAL CLINIC, RETAIL BUILDING, MEDICAL OFFICE
EXISTING ZONING:	TRANSITION
PROPOSED ZONING:	MIXED-USE KELLY PARK INTERCHANGE (MU-KPI)
KPI CHARACTER ZONE:	VILLAGE CENTER
CURRENT FLU:	RVLS
PROPOSED FLU:	MU

ACREAGE:

GROSS ACREAGE:	±5.56 ACRES
WETLAND/CONSERVATION AREA:	0 ACRES
WETLAND/CONSERVATION IMPACT:	0 ACRES
NET DEVELOPABLE:	±5.56 ACRES

PROPOSED LAND USES:

MINIMUM FAR:	0.15
MAXIMUM FAR:	1.00
PROPOSED FAR:	0.26
PROPOSED COMMERCIAL SQFT:	±62,600
PERMITTED USES:	FREE STANDING EMERGENCY DEPARTMENT MEDICAL OFFICE MEDICAL LABORATORY MEDICAL CLINIC GENERAL & NEIGHBORHOOD RETAIL

VILLAGE CENTER DISTRICT DEVELOPMENT STANDARDS:

	REQUIRED:
OPEN SPACE REQUIREMENT	10%
MAX. BUILDING HEIGHT	5 STORIES
BLOCK LENGTH (MAX.)	400 FT

BUILDING SETBACKS:

	REQUIRED:
FRONT (NORTH - W KELLY PARK RD)	8 - 20 FT
FRONT (WEST - PLYMOUTH SORRENTO RD)	8 - 20 FT
SIDE (EAST)	0 FT MIN.
REAR (SOUTH)	10 FT MIN.

LANDSCAPE BUFFERS:

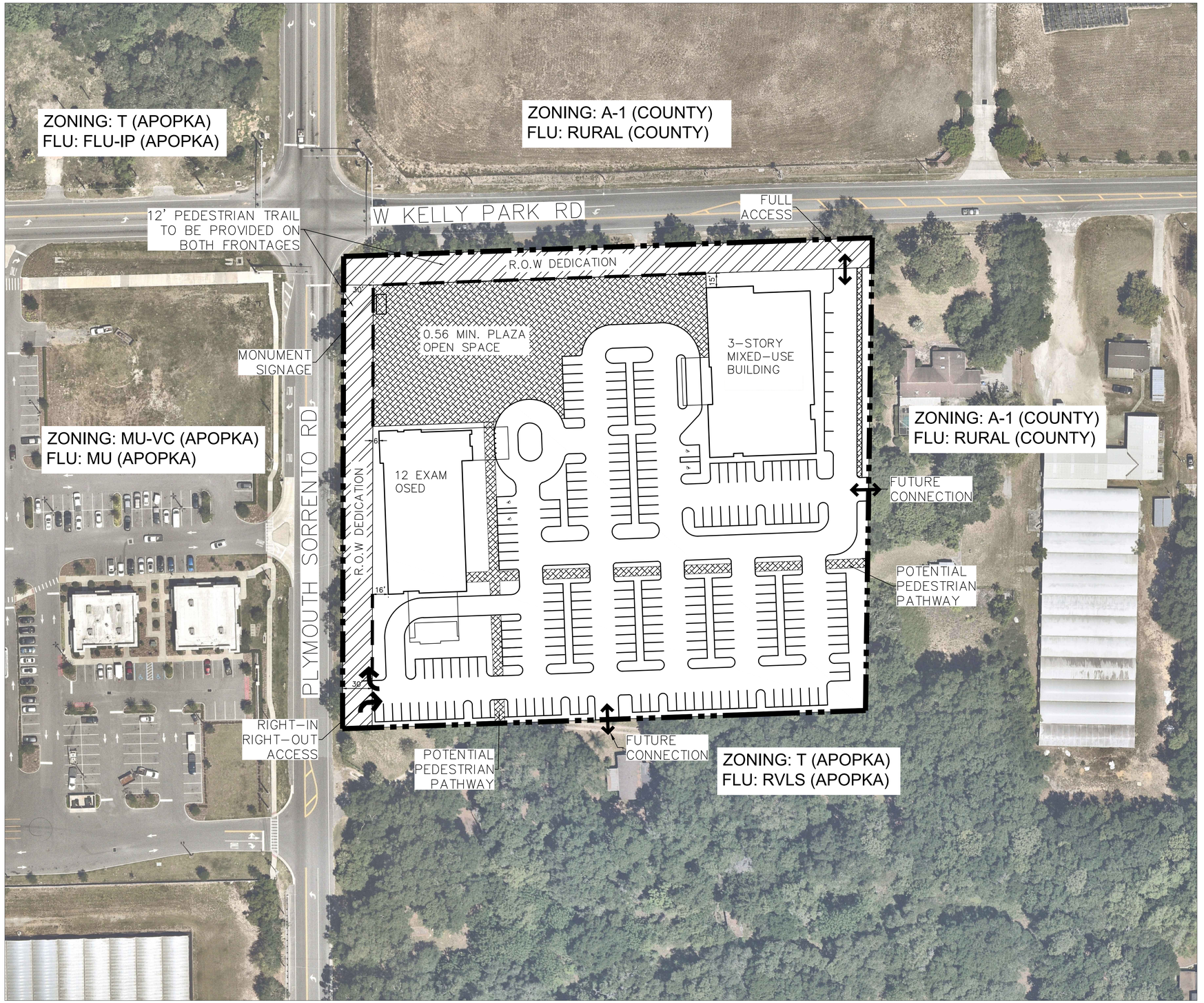
	REQUIRED:
FRONT (NORTH - W KELLY PARK RD)	PER KPI CODE SEC. M
FRONT (WEST - PLYMOUTH SORRENTO RD)	PER KPI CODE SEC. M
SIDE (EAST)	PER LDC SEC. 5.01.00
REAR (SOUTH)	PER LDC SEC. 5.01.00

REQUIRED PARKING:

COMMERCIAL RETAIL	3.5 SPACES / 1,000 GLA
OFFICE (ALL TYPES)	4 SPACES / 1,000 GLA
CLINIC	1 SPACE / 250 SF

PROVIDED PARKING:

TOTAL PROVIDED	228 SPACES



LEGEND

- PROPERTY BOUNDARY
- RIGHT-IN/RIGHT-OUT ACCESS LOCATION
- FULL ACCESS LOCATION
- GARDEN WALL

GRAPHIC SCALE IN FEET
0 25 50 100

NORTH

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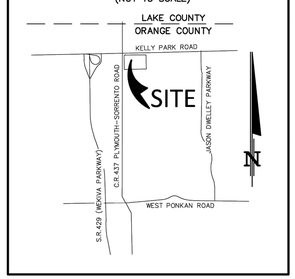
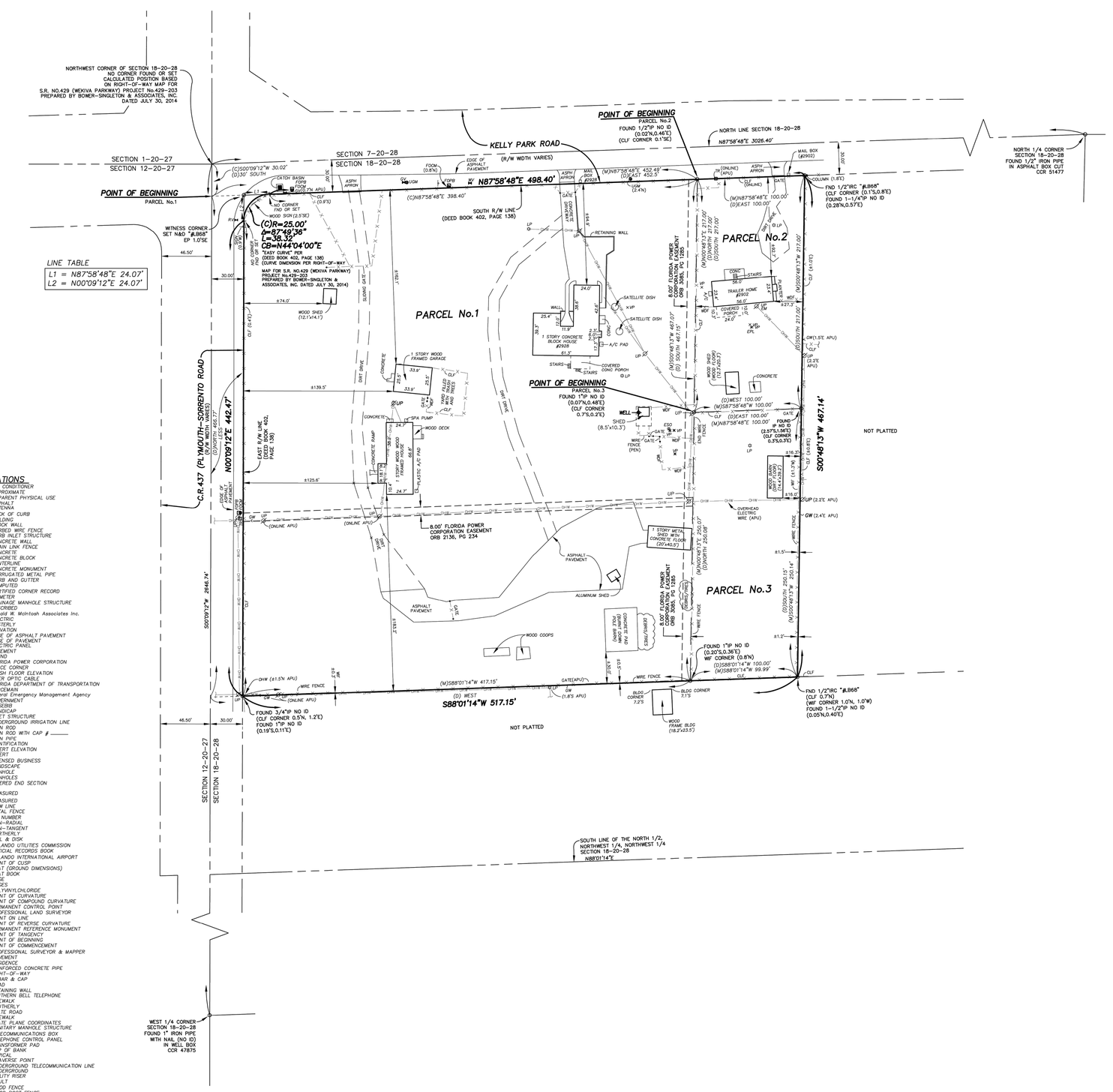
BOUNDARY SURVEY

LOCATION MAP
(NOT TO SCALE)





1"=50'

N

50' 0 50' 100' 150'

Scale: 1" = 50'

DESCRIPTION: (PROVIDED BY CLIENT)

Parcel No. 1:

Begin 30 feet South of the Northwest corner of Section 18, Township 20 South, Range 28 East; run East 452.5 feet; run South 467.15 feet; run West to a point South of the Point of Beginning; thence run North 466.77 feet to the Point of Beginning. (Less all that part lying within the right of way of Plymouth Sorrento Road.) All of said lands lying and being in Orange County, Florida.

Parcel No. 2:

Begin 30 feet South and 452.5 feet East of the Northwest corner of Section 18, Township 20 South, Range 28 East; thence run East 100.00 feet; thence run South 217.00 feet; thence run West parallel with the North line of said Section 18, a distance of 100 feet; thence run North 217.00 feet to the Point of Beginning. Land lying and being situate in Orange County, Florida.

Parcel No. 3:

From a point that is 30.0 feet South and 452.5 feet East of the Northwest corner of Section 18, Township 20 South, Range 28 East, run South 217 feet for a Point of Beginning; thence run East 100.0 feet; thence run South 250.15 feet; thence run West parallel with the South line of the North 1/2 of the Northwest 1/4 of the Northwest 1/4 of said Section 18, a distance of 100.00 feet; thence run North 250.08 feet to the Point of Beginning. Land lying and being situate in Orange County, Florida.

Containing 5.563 acres more or less and being subject to any rights-of-way, restrictions and easements of record.

SURVEYOR'S NOTES:

1. Not valid without the original signature and seal, or an electronic signature of a Florida licensed professional surveyor and mapper.
2. Apparent Physical Use onto or from adjoining property or abutting streets is shown hereon as "APU". Apparent Physical Use (APU) may indicate the existence of written or unwritten property rights between adjoining owners.
3. Bearings and distances are based on Florida State Plane Coordinate System- East Zone (NAD 83/2007 Datum), as established from the right-of-way map for S.R. No.429 (Wekiva Parkway) Project No.429-203, prepared by Bower-Singleton & Associates, Inc., dated July 30, 2014, deriving a bearing of N87°58'48"E on the North line of the Northwest 1/4 of Section 18, Township 20 South, Range 28 East.
4. No underground utilities, improvements, installations or foundations located. All underground utility locations shown hereon, if any, are approximate and were determined from surface features indicating underground lines such as manholes, valves, catch basins, water meters, etc.
5. No attempt to locate jurisdictional wetlands or state sovereignty lands, if any, has been made this date.
6. No environmental issues have been addressed by this survey.
7. Lands shown hereon were not abstracted for rights-of-way, easements, ownership or other instruments of record by this firm.
8. According to Flood Insurance Rate Map Community Panel No. 120179050F, Orange County, Florida, Map Revised September 25, 2009, the lands described hereon lie in Zone "X" (unshaded).
9. All adjoining rights-of-way, subdivisions and information on adjoining properties shown hereon are from information shown on County Tax Assessor Maps. The undersigned surveyor and Donald W. McIntosh Associates, Inc. did not attempt, nor were required to do a title search regarding such information. Users of this survey are placed on notice that reliance on such information is at their own peril, in this regard.
10. All boundary line bearings, distances and curve data are described and measured unless shown as (D) = Described, (C) = Calculated, and/or (M) = Measured.
11. The words "certify" or "certification", as shown and used hereon, mean an expression of professional opinion regarding the facts of the survey and does not constitute a warranty or guarantee, expressed or implied.
12. Monument offset directions and distances are computed in cardinal directions from boundary corners relative to the bearing basis (i.e., N 0.25' = North 0.25').
13. Fence ownership not determined unless otherwise noted.
14. All measurements are in feet in accordance with the United States standard. All horizontal control measurements achieve a closure of 1 foot in 10,000 feet or better.
15. This survey does not reflect or determine ownership.
16. The description shown hereon was provided by client.
17. Measurements to fences are to center of fence. Measurements to utility poles are to the center of the pole. Drawing distance between walls and/or fences and property lines may be exaggerated for clarity.
18. Surveyor has reviewed the following items listed in Schedule B, Part II of Fidelity National Title Insurance Company Commitment for Title Insurance, Commitment Number 10872375, effectively dated June 23, 2023 for easements and rights-of-way and finds the following:

ITEM	COMMENT
4. Easement in favor of Florida Power Corporation recorded Novermber 1, 1971 in Official Records Book 2136, Page 234, Public Records of Orange County, Florida. (As to Parcel 1)	.....Shown.
5. Distribution Easement in favor of Florida Power Corporation recorded January 15, 1980 in Official Records Book 3085, Page 1285, Public Records of Orange County, Florida. (As to Parcel 1)	.....Shown.

The property may also be subject to other matters set forth in said Title Commitment.

SURVEY DATE: 12/16/2022

I hereby certify that this survey, subject to the surveyor's notes contained hereon, meets the applicable "Standards of Practice" set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17.05, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.

DONALD W. McINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

Rocky L Carson — Digitally signed by Rocky L Carson Date: 2023.07.17 11:44:30 -04'00'

Rocky L. Carson — Signature Date
Florida Registered Surveyor and Mapper
Certificate No. 4285

NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL, OR AN ELECTRONIC SIGNATURE (5J-17.062(3) F.A.C.), OF A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER.

LEGEND

SYMBOLS

L1	LINE NUMBER (SEE LINE TABLE)
C1	CURVE NUMBER (SEE CURVE TABLE)
Δ=	CENTRAL ANGLE
R=	RADIUS
L=	ARC LENGTH
CB=	CHORD BEARING
C=	CHORD
TB=	TANGENT BEARING
T=	TANGENT
x 999	SPOT ELEVATION (EXISTING)
NCA	SIGN "NATURE CONSERVATION AREA"
	SIGN
SECTION 18-20-28	SECTION, TOWNSHIP, RANGE
CS ■	CONTROL STRUCTURE
DMH ●	DRAINAGE MANHOLE
DM ◢	DRAINAGE MANHOLE NUMBER
MES ■	MITERED END SECTION
INLET ▼	CURB INLET
CMH ▼	CURB INLET WITH MANHOLE
CB ■	CATCH BASIN
UD •	UNDERDRAIN
YD □	YARD DRAIN
WELL	WELL
USM ⊠	UNDERGROUND SANITARY MARKER
SSO ⊗	SANITARY SEWER STUB-OUT
SMH ●	SANITARY MANHOLE
SM ◢	SANITARY MANHOLE NUMBER
RV ⋈	REUSE VALVE
CO •	UTILITY CLEAN OUT
FMV ⋈	FORCEMAIN VALVE
FMAV ⋈	FORCEMAIN AIR RELEASE VALVE
WP ●	WOOD POST
BOL ●	BOLLARD
TMH ●	TELEPHONE MANHOLE
UTM ⊠	UNDERGROUND TELEPHONE MARKER
TR □	TELEPHONE RISER
TVR □	TELEVISION RISER
CATV □	CABLE TELEVISION MARKER
TPB □	TELEPHONE PULLBOX
FOPB □	FIBER OPTICS PULL BOX
FOCM ⊠	FIBER OPTICS CABLE MARKER
VP ✕	VERTICAL PIPE
FDC	FIRE DEPARTMENT CONNECTION
FH ●	FIRE HYDRANT
WV ⋈	WATER VALVE
WM □	WATER METER
WSO ⊗	WATER STUB OUT
BFP ⊠	BACKFLOW PREVENTER
BOV ○	BLOW OFF VALVE
WVB □	WATER VALVE BOX
UWM ⊗	UNDERGROUND WATER MARKER
IRV ⋈	IRRIGATION VALVE
IRR □	IRRIGATION RISER
RM □	REUSE WATER METER
RSO ⊗	REUSE WATER STUB OUT
ESO ⊗	ELECTRIC STUB-OUT
EMH ●	ELECTRIC MANHOLE
CUP ◢	CONCRETE UTILITY POLE
UP ◢	UTILITY POLE
EM □	ELECTRIC METER
ER □	ELECTRIC RISER
EPB □	ELECTRIC PULL BOX
EB □	ELECTRIC PULL BOX
UEM ⊗	UNDERGROUND ELECTRIC MARKER
LP ☼	LIGHT POLE
GW ←	GUY WIRE
OHW	OVERHEAD WIRE
GL ☼	GROUND LIGHT
CWP ◢	CROSS WALK POLE
TSB □	TRAFFIC SIGNAL BOX
TSP ◢	TRAFFIC SIGNAL POLE
SP ◢	SIGNAL POLE (MAST ARM)
GM □	GAS METER
GSO ⊗	GAS STUB-OUT
GV ⋈	GAS VALVE
GVT ⋈	GAS VENT
UGM ⊗	UNDERGROUND GAS MARKER
	SITE BENCHMARK
	CONSTRUCTION SILT FENCE
D	UNDERGROUND STORM SEWER
S	UNDERGROUND SANITARY SEWER
(10"S)	UNDERGROUND SANITARY SEWER PIPE SIZE
(24"D)	UNDERGROUND STORM SEWER PIPE SIZE
	SET 1/2" IRON ROD WITH CAP "LB#68" UNLESS OTHERWISE NOTED

ABBREVIATIONS

A/C	AIR CONDITIONER
APPROX	APPROXIMATE
(APU)	APPARENT PHYSICAL USE
ASPH	ASPHALT
ANT	ANTENNA
BC	BACK OF CURB
BLDG	BUILDING
BLW	BLOCK WALL
BWF	BARBED WIRE FENCE
CI	CURB INLET STRUCTURE
CW	CONCRETE WALL
CLF	CHAIN LINK FENCE
CONC	CONCRETE
CB	CONCRETE BLOCK
℄	CENTERLINE
CM	CONCRETE MONUMENT
CMP	CORRUGATED METAL PIPE
C&G	CURB AND GUTTER
(C)	COMPUTED
CCR	CERTIFIED CORNER RECORD
DIA	DIAMETER
DM	DRAINAGE MANHOLE STRUCTURE
(D)	DESCRIBED
DMMA	Donald W. McIntosh Associates Inc.
ELEC	ELECTRIC
ELY	EASTERLY
ELEV	ELEVATION
EAP	EDGE OF ASPHALT PAVEMENT
EP	EDGE OF PAVEMENT
EPL	ELECTRIC PANEL
ESMT	EASEMENT
FND	FOUND
FPC	FLORIDA POWER CORPORATION
FC	FENCE CORNER
FF	FINISH FLOOR ELEVATION
FOC	FIBER OPTIC CABLE
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FM	FORCEMAIN
FEMA	Federal Emergency Management Agency
GOVT	GOVERNMENT
HB	HOSEBIB
HC	HANDICAP
I	INLET STRUCTURE
IRR	UNDERGROUND IRRIGATION LINE
IR	IRON ROD
IRC	IRON ROD WITH CAP # ———
IP	IRON PIPE
ID	IDENTIFICATION
IE	INVERT ELEVATION
INV	INVERT
LB	LICENSED BUSINESS
LNDSCP	LANDSCAPE
MH	MANHOLE
MH'S	MANHOLES
MES	MITERED END SECTION
MEAS	MEASURED
(M)	MEASURED
ML	MDW LINE
MF	METAL FENCE
NO #	NO NUMBER
NR	NON-RADIAL
NT	NON-TANGENT
NLY	NORTHERLY
N&D	NAIL & DISK
OUC	ORLANDO UTILITIES COMMISSION
ORB	OFFICIAL RECORDS BOOK
OIA	ORLANDO INTERNATIONAL AIRPORT
P.O.C.	POINT OF CUSP
(P)	PLAT (GROUND DIMENSIONS)
PB	PLAT BOOK
PG	PAGE
PGS	PAGES
PVC	POLYVINYLCHLORIDE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCP	PERMANENT CONTROL POINT
PLS	PROFESSIONAL LAND SURVEYOR
POL	POINT ON LINE
PRC	POINT OF REVERSE CURVATURE
PRM	PERMANENT REFERENCE MONUMENT
PT	POINT OF TANGENCY
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
PSM	PROFESSIONAL SURVEYOR & MAPPER
PVMT	PAVEMENT
RES	RESIDENCE
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT-OF-WAY
R&C	REBAR & CAP
RD	ROAD
RTW	RETAINING WALL
SBT	SOUTHERN BELL TELEPHONE
SDW	SIDEWALK
SLY	SOUTHERLY
SR	STATE ROAD
SW	SIDEWALK
SPC	STATE PLANE COORDINATES
SM	SANITARY MANHOLE STRUCTURE
TCB	TELECOMMUNICATIONS BOX
TCP	TELEPHONE CONTROL PANEL
TFP	TRANSFORMER PAD
TOB	TOP OF BANK
TYP	TYPICAL
TRAV PT	TRAVERSE POINT
UT	UNDERGROUND TELECOMMUNICATION LINE
UG	UNDERGROUND
UR	UTILITY RISER
VLT	VAULT
WDF	WOOD FENCE
WPF	WOOD POST FENCE
WLY	WESTERLY
WF	WIRE FENCE
NGVD29	National Geodetic Vertical Datum of 1929
NAVD88	North American Vertical Datum of 1988
OIA	ORLANDO INTERNATIONAL AIRPORT

NOTE: THERE MAY BE ITEMS ABOVE THAT WERE NOT WITHIN THE SCOPE OF THIS DRAWING TO BE LOCATED.

NO.	DATE	REVISIONS	
02	07/12/23	REVISED TITLE COMMITMENT REVIEW & NOTE	JJP
01	01/09/23	UPDATE SURVEY AND UPDATE TITLE COMMITMENT	CHK

DONALD W. McINTOSH ASSOCIATES, INC.

DONALD W. McINTOSH ASSOCIATES, INC.
ENGINEERS PLANNERS SURVEYORS
2200 PARK AVENUE NORTH, WINTER PARK, FLORIDA 32789 (407) 644-4068
CERTIFICATE OF AUTHORIZATION NO. LB68

DRAWN BY: PH — CHECKED BY: RC
DATE: 5/1/2018
FIELD BOOKS: 1567 & 1498
SCALE: 1"=50'
JOB NUMBER: 18046.001

PREPARED FOR:
ADVENTHEALTH - KELLY PARK ROAD - BOUNDARY SURVEY

DRAWING CS# 18-121
SHEET 1 OF 1

Drawing name: \\kimley-horn.com\FL_ORL02\ORL_Civil\149684017-Kelly Park OSED\CAD\LUP\LUP-01.dwg LUP-04 Jul 01, 2024 7:55pm
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Printed: Mon 17-Jul-2023 - 09:32AM
P:\Proj\2018\18046\Survey\VA\18046 Boundary Survey.dwg

Police Beat

If a law enforcement agency charges you with a crime and this paper reports that information, please notify us within 90 days if the charge is dropped, or if you are found not guilty by the court. After verifying the information, we will be happy to publish it. Please send notification to *The Apopka Chief,* P.O. Box 880, Apopka, 32704-0880.

In the period from December 29-January 4, 2025, the Apopka Police Department received 1,505 calls for service, responded to 25 crashes, issued 43 citations, and made 9 arrests. Juveniles were charged with loitering or prowling; resist officer-obstruct without violence; intimidation written/electronic threat mass shooting/terrorism act; probation violation-child in violation of imposed conditions.

The following adults were arrested and charged:

Ivan Nicholas Barakoff, 39, Apopka, battery-touch or strike.

Rebecca Victoria Bower, 33, 720 Mason Ave., Apopka, information only-other agency warrant.

DeMario Clady, 40, 251 E. 3rd Street, Apopka, out-of-county warrant; resist officer-obstruct without violence.

Linda Bowman Driggers, 67, Apopka, battery-touch or strike.

Anthony James Love, 42, general delivery, Apopka, trespassing-failure to leave property on order of owner.

Neftali Alexander Miranda Matias, 30, 2265 Mayflower Ave., Apopka, moving traffic violation-operate motor vehicle without valid license 1st conviction.

Larry Antonioi Stanley, 45, Eatonville, damage property-criminal mischief over $200 under $1,000; larceny-other theft; burglary with assault or battery; battery-touch or strike.

Courtney Marquis Steadman, 35, 7137 Holly Street, Mount Dora, DUI-unlawful blood alcohol 0.15 or higher or with person under 18 in vehicle.

Raynisha Antoinette Whittaker, 33, 12536 Bohannon Blvd., Orlando, information only-other agency warrant.

Fishing was starting to ramp up before cold front

Jim Keck
Goin' Fishin'

Hello Folks,

I hope everyone is havin' a great start to the new year. We are startin' the new year off right with some cold weather, and more cold weather is comin' our way. The good news is we don't have to deal with any snow.

Before this latest cold front came to town, the fishin' wasn't too bad. Kyle at Bitter's Bait & Tackle reports that lots of folks were catchin' some specks in Lake Monroe and Lake Jesup.

Folks have been catchin' some specks in the Kissimmee Chain as well. Most of the specks are bein' caught on minners driftin' open water in Lake Monroe. Folks are still catchin' most of their specks under the 417 bridge in Lake Jesup. Most of the specks in the Kissimmee chain are bein' caught around the pads. We have a full moon on Monday the 13th. If the weather settles down a little and we don't get too much wind, the specks should be bitin' this weekend.

The bass fishin' was doin' really good until this cold front came to town. Some bass were goin' on the beds to spawn, but I'm afraid these cold fronts will pull them off the beds. I'm sure there is goin' to be some beddin' goin' on, but usually our Florida bass are very susceptible to the weather. When those ole bass get on the beds and when these cold fronts come to town, they will pull off their beds in a heartbeat. So, don't be afraid to see if they are on the beds while you are fishin'.

Folks were catchin' some bass in the Butler Chain and the Maitland Chain before these cold fronts. Most folks are draggin' shiners out the back of the boat over the submerged hydrilla and eelgrass beds. The bass fishin' has been hit or miss on the Harris Chain.

Folks are catchin' a few bass on shiners, but due to a fish kill on Lake Eustis, the bass fishin' has slowed down a little in there. Some folks are reportin' that the fish kill is due to the sprayin' in the chain, and the FWC is claimin' the fish kill is due to the cold weather. The FWC is reportin' that the cold weather may be depleting the oxygen out the water, and that is causing the fish kill. Also, the FWC is reportin' that the fish kill may be due to algae blooms, extreme weather, or herbicides in the water.

If you want more information about what's goin' on in the Harris Chain, you can go to the FWC's website and see how the investigation is goin'. If you want to report dead fish sightings, the FWC has a Fish Kill Hotline that allows the public to submit reports by calling 1-800-636-0511. You can also go to myfwc.com and fill out a report on the fish kills in your area.

Well, folks I don't know how these fronts are goin' to affect your fishin', but hopefully we can get a few days of good weather so we can get out there and catch a few fish.

See ya next week.

Tip of the week: Full Moon on Monday.

Save a few and good luck!

CITY OF APOPKA
PUBLIC HEARING NOTICE
SMALL-SCALE FUTURE LAND USE AMENDMENT AND CHANGE OF ZONING

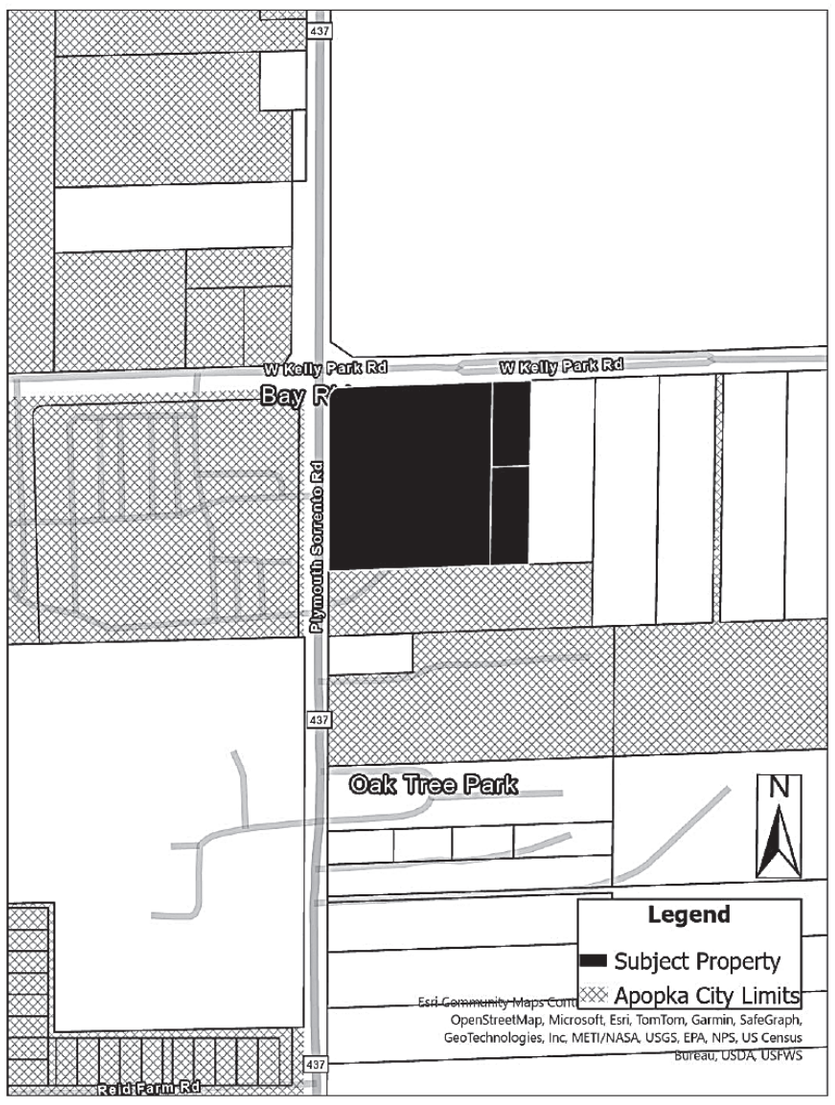
NOTICE is hereby given pursuant to Secs. 163.3184 and 166.041(3)(a), Florida Statutes and the Apopka Code of Ordinances, Part III, Land Development Code, Article II, Section 2.4.7.B, that **Nathan Milch** has made application, on behalf of the property owner, relating to the following described property.

ORDINANCE NO. 3095

AN ORDINANCE OF THE CITY OF APOPKA, FLORIDA, AMENDING THE FUTURE LAND USE ELEMENT OF THE APOPKA COMPREHENSIVE PLAN OF THE CITY OF APOPKA; CHANGING THE FUTURE LAND USE DESIGNATION FROM RESIDENTIAL VERY LOW SUBURBAN TO MIXED-USE FOR CERTAIN REAL PROPERTY OWNED BY ROSEVILLE FARMS, LLC; GENERALLY LOCATED ON THE SOUTHEAST CORNER OF KELLY PARK ROAD AND PLYMOUTH SORRENTO ROAD; COMPRISING 5.56 ACRES, MORE OR LESS; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.

ORDINANCE NO. 3096

AN ORDINANCE OF THE CITY OF APOPKA, FLORIDA, CHANGING THE ZONING FROM T (TRANSITION) TO KPI-MU (KELLY PARK INTERCHANGE – MIXED-USE) FOR CERTAIN REAL PROPERTY OWNED BY ROSEVILLE FARMS, LLC; GENERALLY LOCATED ON THE SOUTHEAST CORNER OF KELLY PARK ROAD AND PLYMOUTH SORRENTO ROAD; COMPRISING 5.56 ACRES, MORE OR LESS; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.



Parcel Identification Number(s): 18-20-28-0000-00-101, 18-20-28-0000-00-107 and 18-20-28-0000-00-120
Contains: 5.56 +/- Acres

NOTICE is given that a public hearing for Ordinance Numbers 3095 and 3096 will be held by the **City of Apopka City Council** at its regularly scheduled meeting in the City Council Chambers of the Apopka City Hall, 120 E. Main Street, Apopka, Florida on **Wednesday, February 11, 2025 beginning at 5:30 P.M. and March 5, 2025 at 1:30 P.M.**

Affected parties and the public may appear at the above listed hearings to speak. The proposed Future Land Use and Rezoning Applications can be inspected at the Apopka Community Development Department located at Apopka City Hall on weekdays between the hours of 8:00 A.M. and 4:30 P.M. City Hall address shown below. Please be advised that, under State law, if you decide to appeal a decision made with respect to this matter, you will need a record of the proceedings and may need to ensure that a verbatim record is made, which record includes the testimony and evidence upon which the appeal is to be based. In accordance with the Americans with Disabilities Act (ADA), persons with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk's Office at 120 East Main Street, Apopka, FL 32703, Telephone: 407-703-1704, no less than 48 hours prior to the proceeding.

Apopka City Council
Apopka Planning Commission
Community Development Department

January 10, 2025

Publish: The Apopka Chief **177810**

TTO: APK's 20-point victory

OCPS METRO CONFERENCE

METRO WEST	MASCOT		METRO EAST	MASCOT	
APOPKA	Blue Darters		BOONE	Braves	
DR. PHILLIPS	Panthers		CYPRESS CREEK	Bears	
EDGEWATER	Eagles		COLONIAL	Grenadiers	
EVANS	Trojans		EAST RIVER	FalconS	
HORIZON	Hawks		FREEDOM	PatriotS	
LAKE BUENA VISTA	Vipers		JONES	Tigers	
OCOEE	Knights		LAKE NONA	Lions	
OLYMPIA	Titans		OAK RIDGE	Pioneers	
WEKIVA	Mustangs		TIMBER CREEK	Wolves	
WEST ORANGE	Warriors		UNIVERSITY	Cougars	
WINDERMERE	Wolverines		WINTER PARK	Wildcats	

Above is the collection of teams in the OCPS Metro Conference separated into Western and Eastern divisions.

Continued from page 1B

still huge as Apopka scored 68 points which is tied for the most points they have scored all season with another 68-point victory over BEST in a tournament in Gainesville. Apopka started with the lead and never gave it up outscoring Dr. Phillips in every quarter except the last one where Apopka cleared the bench (21-14, 14-9, 22-7, 11-18).

The Blue Darters outplayed the Panthers on both sides of the ball. Apopka shot better, shooting 45.3 percent as a team compared to Dr. Phillips' 35 percent. Apopka had more transition points (9-5), more second-chance points (13-4), more points in the paint (22-10), more offensive rebounds (14-7), more defensive rebounds (20-16), more assists (18-10), more steals (14-7), and more blocks (2-0).

The team was led to victory by Jermichael Johnson, Noah Ferrer, and Jude Angervil. Johnson scored 15 points shooting 55.6 percent from the field, collected eight rebounds, two assists, two deflections, three steals, and one block. Angervil scored 13 points shooting 71.4 percent from the field, collected five rebounds, two deflections, two steals, and one block. Ferrer scored 11 points shooting 60 percent from the field, collected three rebounds, one assist, and two steals. Guards Jahi Bowden and Rafael Betancourt also helped bring in the win combining for 11 points, 10 assists, six rebounds, three deflections, and four steals.

On Thursday in the western semifinals, Edgewater faced Evans and Apopka faced Windermere.

Windermere is a very strong program that defeated Ocoee 67-25. In early December of last year, Apopka beat Ocoee by just one point 57-56 so this was bound to be a tough game for Apopka. The game against Windermere happened after press time.

As of Tuesday, January 7, Windermere is 14-3, ranked 6th in Florida, ac-

See TTO Page 4B

Advertise your legal notice in
The Apopka Chief
Call 407-886-2777 or visit www.theapopkachief.com
Deadline for Friday's publication: Tuesday, 5 p.m.
Mail to
PO Box 880, Apopka, Fl 32704
or bring the notice to
400 N. Park Avenue, Apopka,
or fax 407-889-4121 **or Email:**
legals@the apopkachief.com
Notices are also published online at www.theapopkachief.com and statewide on floridapublicnotices.com

City of Apopka
PLANNING COMMISSION STAFF REPORT

Section: SITE PLANS
Item #: 1.
Meeting Date: February 11, 2025
Department: Community Development

SUBJECT:
Shoppes at East Shore - Plat

REQUEST:
Recommend approval of the Shoppes at East Shore – Plat.

SUMMARY:
Owner(s): Shoppes at East Shore, LLC
Applicant(s): Jeremy D. Hallick, P.S.M.
Tract Size: 27.99 +/- acres
Parcel Identification Number(s): 20-21-28-0000-00-025, 20-21-28-0000-00-021, 20-21-28-0000-00-024 and 20-21-28-0000-00-028
Location: Northeast corner of Ocoee Apopka Road and Keene Road
Future Land Use: Mixed-Use
Zoning: PD (Planned Development)
Project Manager: Jean Sanchez

Zoning Report:

Direction	Future Land Use	Zoning	Present Use
North	Mixed-Use	T (Transitional)	Single-Family Residences
South	Commercial and County Institutional	C-C (Community Commercial) and County A-1 (Citrus Rural)	Proposed Commercial Multi-Tenant Center and Orange County Northwest Water Reclamation Facility
East	County Rural	County A-1 (Citrus Rural)	Single-Family Residences and Horse Farm
West	High Density Residential – 25	PD (Planned Development)	Multi-Family Development

PROJECT SUMMARY:

Florida Statutes Section 177.031 defines Plat or replat as "a map or delineated representation of the subdivision of lands, being a complete exact representation of the subdivision and other information in compliance with the requirement of all applicable sections of this part and of any local ordinances". The Land Development Code describes platting as the division of land (whether improved or unimproved) into three or more lots, parcels, tracts, tiers, blocks, sites, units, or any other division of land. As such, the applicant has submitted the Shoppes at East Shore – Plat to create six lots, a stormwater tract and 30-foot wide right-of-way tract. Lot 1 is intended for an age-restricted multifamily development and Lot 5 is slated as the anchor grocer. The Plat is consistent with the Shoppes at East Shore - Major Development Plan (MDP approved by the City Council on March 1, 2023, as well as. the Shoppes at East Shore Multi-family – Construction Site Plan (CSP) and the Shoppes at East Shore Phase I - CSP approved by the Development Review Committee (DRC) on November 6, 2023 and and August 6, 2024, respectively.

The Development Review Committee (DRC) has found that the applicant demonstrates there is competent substantial evidence in the record that all of the following standards are met:

- The plat and its general layout and design comply with all applicable standards in Article 5: Development Standards, and Article 6: Environmental Standards;
- The plat complies with all conditions of approval in any development approval or permit to which it is subject;
- The plat conforms to the requirements of Chapter 177, Florida Statutes before recordation and per the review and determination of the City Surveyor;
- The plat conforms to any development plan (major or minor) to which it is a part; and
- The plat complies with all other applicable standards in this LDC and all other City regulations.

ACCESS:

The access points are on Ocoee Apopka Road and Keene Road.

PUBLIC HEARING SCHEDULE:

February 11, 2025 - Planning Commission (5:30 P.M.)
March 5, 2025 - City Council (1:30 P.M.)

FUNDING SOURCE:
Not applicable.

RECOMMENDED MOTION:
Development Review Committee (DRC):

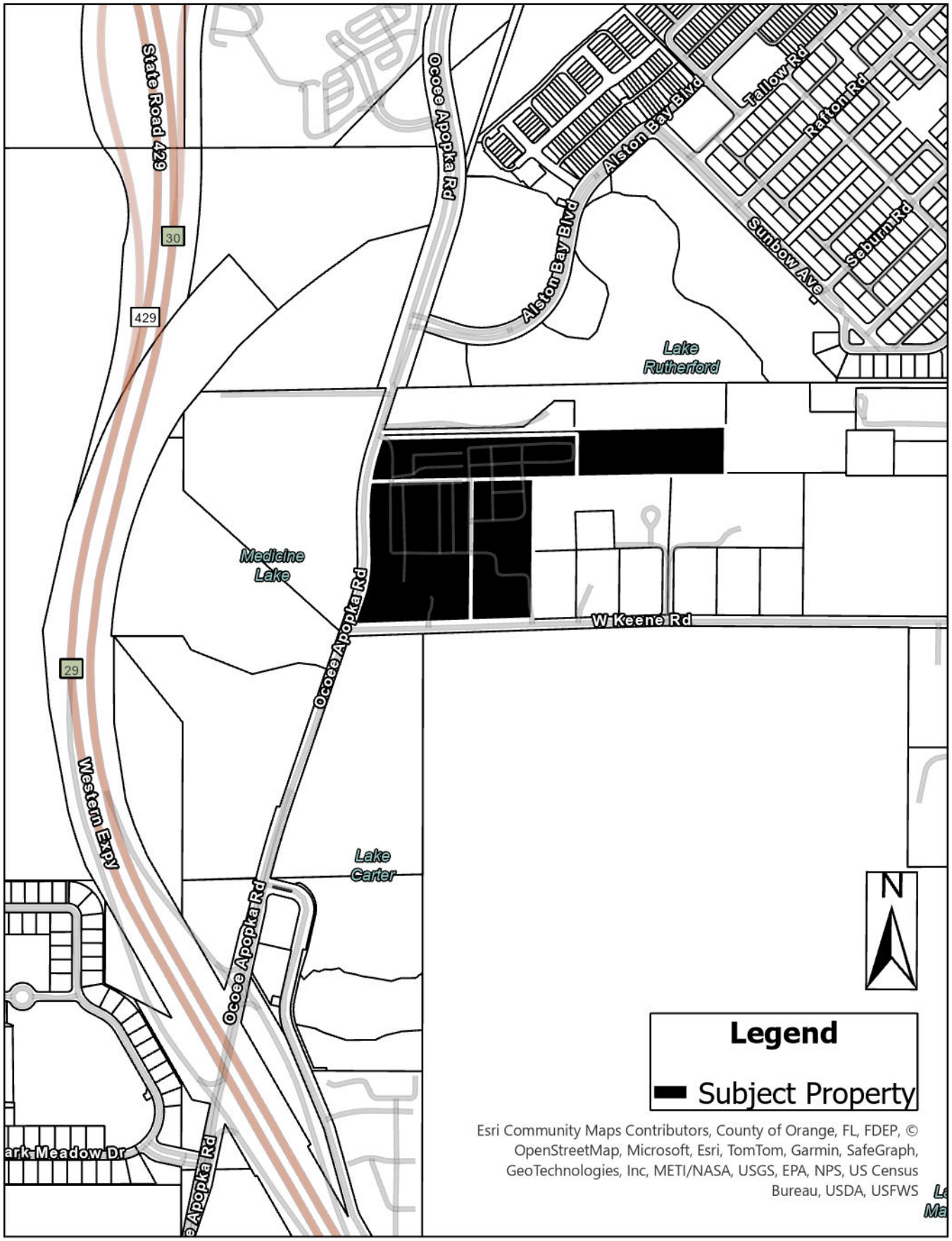
Recommends approval of the Shoppes at East Shore – Plat.

Recommended Motion - Planning Commission:

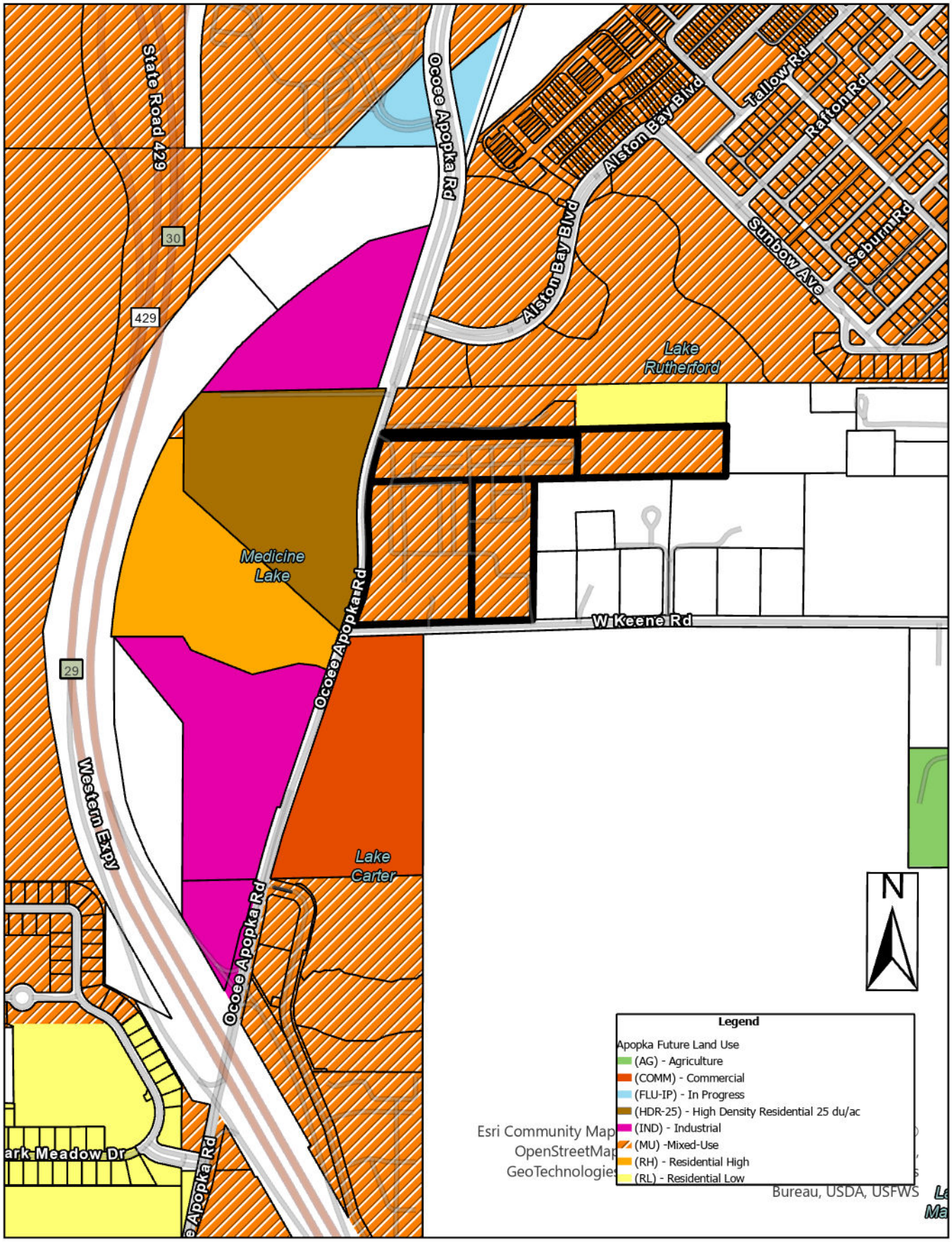
Recommend approval of the Shoppes at East Shore – Plat.

ATTACHMENTS:
1. Maps
2. Shoppes at East Shore - Plat
3. Shoppes at East Shore Phase I - CSP (for reference)
4. Shoppes at East Shore Multifamily - CSP (for reference)

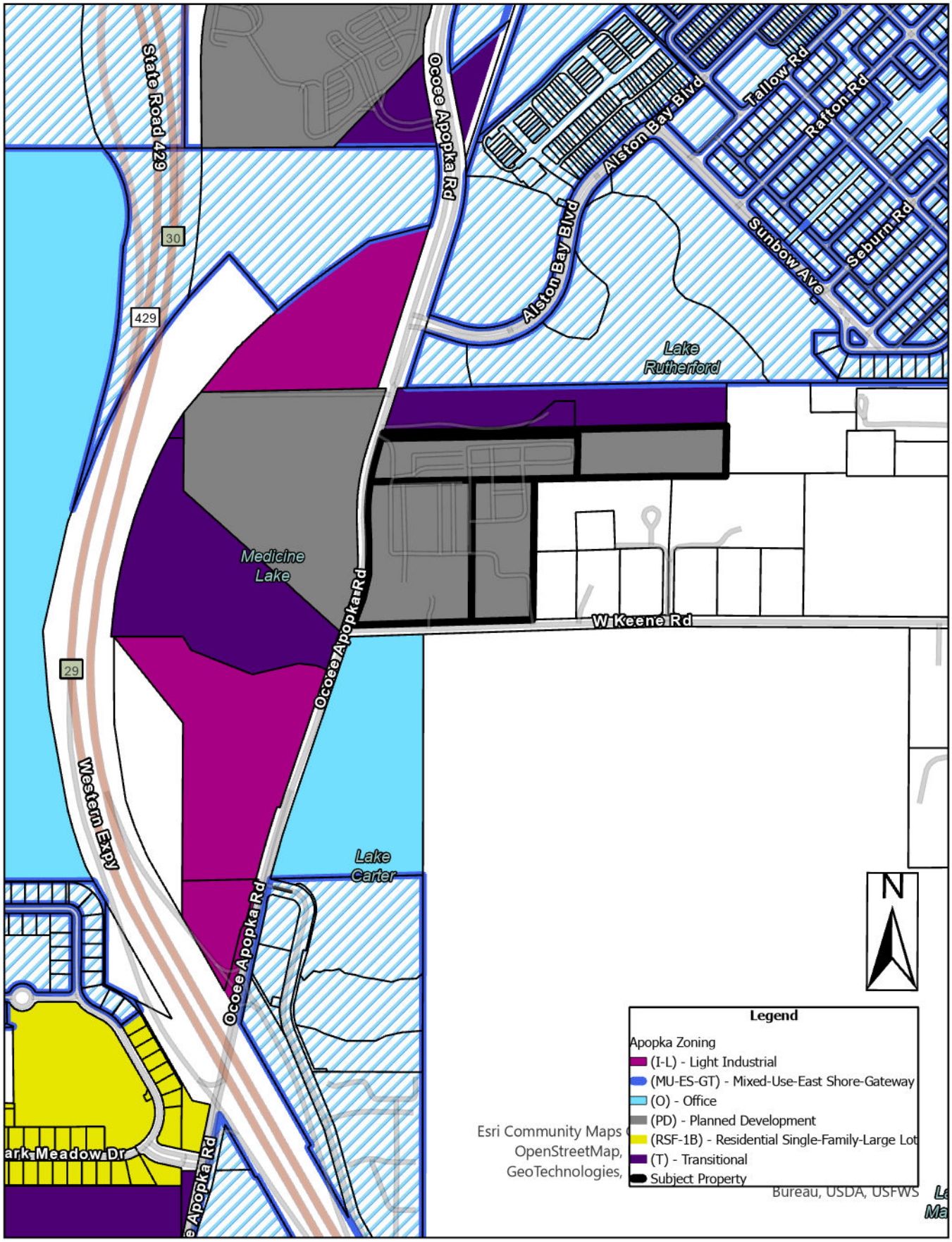
Vicinity


State Road 429
30
429
29
Western Expy
Ocoee Apopka Rd
Alston Bay Blvd
Tallow Rd
Raflon Rd
Sunbow Ave
Seburn Rd
Lake Rutherford
Medicine Lake
W Keene Rd
Lake Carter
ark Meadow Dr
N
Legend
Subject Property
Esri Community Maps Contributors, County of Orange, FL, FDEP, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

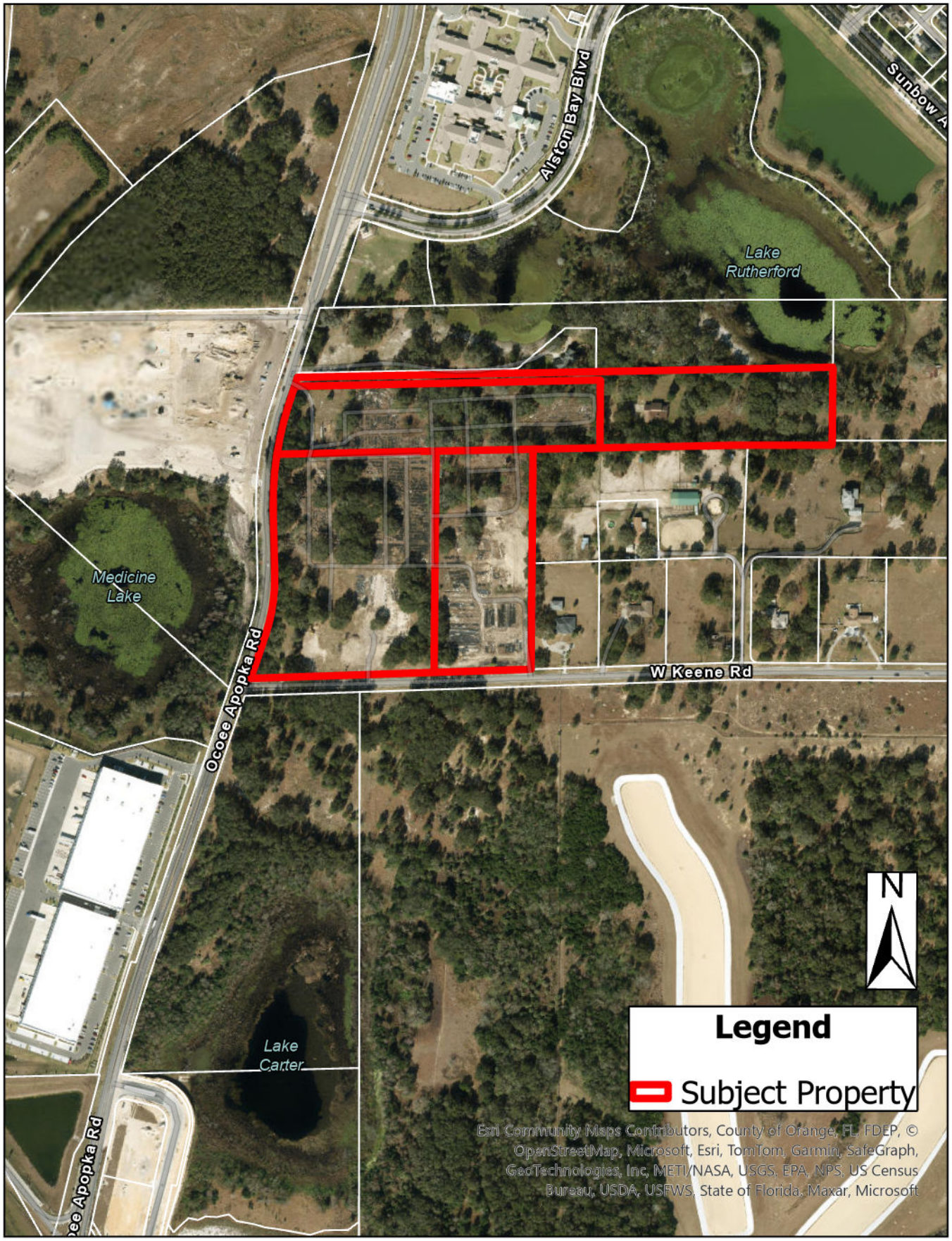
Future Land Use



Zoning


State Road 429
Ocoee Apopka Rd
Alston Bay Blvd
Tallow Rd
Rafton Rd
Seburn Rd
Sunbow Ave
30
429
Lake Rutherford
Medicine Lake
W Keene Rd
29
Western Expy
Lake Carter
N
Legend
Apopka Zoning
(I-L) - Light Industrial
(MU-ES-GT) - Mixed-Use-East Shore-Gateway
(O) - Office
(PD) - Planned Development
(RSF-1B) - Residential Single-Family-Large Lot
(T) - Transitional
Subject Property
Esri Community Maps
OpenStreetMap,
GeoTechnologies,
Bureau, USDA, USFWS

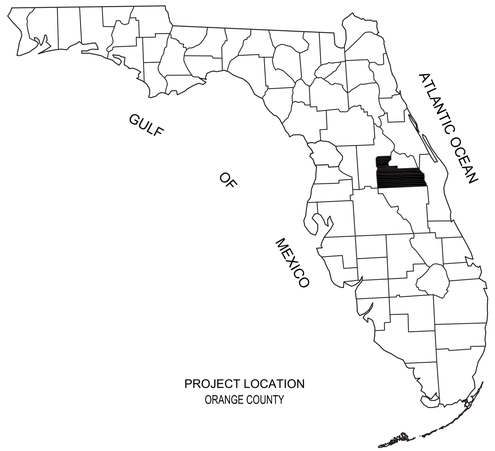
Aerial


Alston Bay Blvd
Sunbow A
Lake
Rutherford
Medicine
Lake
Ocoee Apopka Rd
W Keene Rd
Lake
Carter
N
Legend
Subject Property
Esri Community Maps Contributors, County of Orange, FL, FDEP, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, State of Florida, Maxar, Microsoft

SHOPPES AT EAST SHORE

BEING A PORTION OF SECTION 20, TOWNSHIP 21 SOUTH, RANGE 28 EAST
CITY OF APOPKA
ORANGE COUNTY, FLORIDA

PLAT BOOK ___ PAGE ___



LEGAL DESCRIPTION:

A PORTION OF SECTION 20, TOWNSHIP 21 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTH 1/4 CORNER OF SAID SECTION 20; THENCE RUN NORTH 00°31'31" EAST, ALONG THE EAST LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 20, A DISTANCE OF 30.03 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF WEST KEENE ROAD (A 60.00 FOOT WIDE PUBLIC RIGHT-OF-WAY PER OFFICIAL RECORDS BOOK 536, PAGES 680 AND 681, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA); THENCE DEPARTING SAID EAST LINE, RUN ALONG SAID NORTH RIGHT-OF-WAY LINE THE FOLLOWING TWO (2) COURSES AND DISTANCES: 1) THENCE RUN SOUTH 88°07'21" WEST, A DISTANCE OF 713.24 FEET TO THE POINT OF BEGINNING; 2) THENCE CONTINUE SOUTH 88°07'21" WEST, A DISTANCE OF 980.83 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF OCOEE-APOPKA ROAD (COUNTY ROAD 437A, A VARIABLE WIDTH PUBLIC RIGHT-OF-WAY); THENCE DEPARTING SAID NORTH RIGHT-OF-WAY LINE, RUN ALONG SAID EAST RIGHT-OF-WAY LINE THE FOLLOWING FIVE (5) COURSES AND DISTANCES: 1) THENCE RUN NORTH 18°51'04" EAST, A DISTANCE OF 160.47 FEET TO A POINT OF CURVATURE OF A 602.96 FOOT RADIUS CURVE, CONCAVE TO THE WEST, BEING SUBTENDED BY A CHORD BEARING OF NORTH 08°44'34" EAST AND A CHORD LENGTH OF 211.65 FEET; 2) THENCE RUN NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 20°13'00", AN ARC DISTANCE OF 212.75 FEET TO A POINT OF TANGENCY; 3) THENCE RUN NORTH 01°21'56" WEST, A DISTANCE OF 224.57 FEET TO A POINT OF CURVATURE OF A 1115.92 FOOT RADIUS CURVE, CONCAVE TO THE EAST, BEING SUBTENDED BY A CHORD BEARING OF NORTH 08°12'56" EAST AND A CHORD LENGTH OF 371.48 FEET; 4) THENCE RUN NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 19°09'45", AN ARC DISTANCE OF 373.22 FEET TO A POINT OF TANGENCY; 5) THENCE RUN NORTH 17°47'49" EAST, A DISTANCE OF 103.95 FEET TO A POINT ON THE SOUTH LINE OF THE LANDS DESCRIBED IN INSTRUMENT #20140486742, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID EAST RIGHT-OF-WAY LINE, RUN NORTH 88°54'46" EAST, ALONG SAID SOUTH LINE, A DISTANCE OF 1872.34 FEET TO A POINT ON THE EAST LINE OF THE LANDS DESCRIBED IN INSTRUMENT #20220679927, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID SOUTH LINE, RUN SOUTH 00°34'25" WEST, ALONG SAID EAST LINE, A DISTANCE OF 272.54 FEET TO A POINT ON THE NORTH LINE OF HILLTOP STABLE SUBDIVISION, AS RECORDED IN PLAT BOOK 17, PAGE 129, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID EAST LINE, RUN ALONG THE NORTH AND WEST LINE OF SAID LANDS THE FOLLOWING THREE (3) COURSES AND DISTANCES: 1) THENCE RUN SOUTH 89°58'58" WEST, A DISTANCE OF 332.67 FEET; 2) THENCE RUN SOUTH 88°52'51" WEST, A DISTANCE OF 713.20 FEET; 3) THENCE RUN SOUTH 00°30'13" WEST, A DISTANCE OF 769.07 FEET TO THE POINT OF BEGINNING.

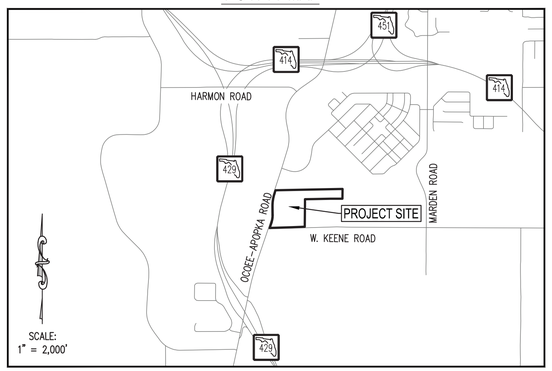
SAID LANDS CONTAINING 27.991 ACRES, MORE OR LESS.

PLAT NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON GRID NORTH AS ESTABLISHED BY THE NATIONAL OCEAN SERVICE (NOS) THROUGH ITS PROGRAM OFFICE NATIONAL GEODETIC SURVEY (NGS). AS A REFERENCE FOR THIS SURVEY, THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SECTION 20, TOWNSHIP 21 SOUTH, RANGE 28 EAST HAS A BEARING OF SOUTH 88°07'21" WEST.
2. COORDINATES SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM (NAD) OF 1983 WITH 2011 ADJUSTMENT.
3. ALL PLATTED UTILITY EASEMENTS SHALL PROVIDE THAT SUCH EASEMENTS SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY.
4. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (FIRM) NUMBER 12095C0120H, ORANGE COUNTY, FLORIDA, EFFECTIVE DATE OF SEPTEMBER 24, 2021, THE PROPERTY DESCRIBED HEREON LIES WITHIN ZONE "X".
5. LOT LINES ARE RADIAL UNLESS OTHERWISE NOTED.
6. ALL LOT CORNERS AND CHANGES IN DIRECTION OF LOTS AND TRACTS SHALL BE MONUMENTED WITH A 5/8" IRON ROD AND CAP STAMPED "CFB LB8498" SET IN ACCORDANCE WITH CHAPTER 177.091(9), FLORIDA STATUTES UNLESS OTHERWISE SHOWN.
7. ALL PERMANENT REFERENCE MONUMENTS HAVE BEEN SET IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES.
8. TRACT A IS HEREBY DEDICATED FOR PUBLIC RIGHT-OF-WAY PURPOSES.
9. TRACT B IS HEREBY RESERVED BY DEVELOPER FOR STORMWATER RETENTION.
10. THIS SUBDIVISION CONTAINS SIX (6) LOTS AND TWO (2) TRACTS.
11. THE ALIGNMENT FOR OCOEE-APOPKA ROAD DEPICTED HEREON IS BASED ON AN ALIGNMENT DEPICTED ON AN ORANGE COUNTY RIGHT-OF-WAY MAP PREPARED BY BOWYER-SINGLETON & ASSOCIATES FOR STATE ROAD NO. 429, PROJECT 75320-6460-604 AND FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAP, SECTION 75520-2601.
12. AT THE TIME OF RECORDING, THIS PLAT IS AFFECTED BY THE FOLLOWING RECORDED INSTRUMENTS FOUND IN THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA:

- GENERAL PERMIT AND EASEMENT IN FAVOR OF SOUTHERN BELL TELEPHONE & TELEGRAPH COMPANY RECORDED IN DEED BOOK 582, PAGE 348, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. AFFECTS – BLANKET EASEMENT ACROSS SECTION 20, TOWNSHIP 21 SOUTH, RANGE 28 EAST
- EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN OFFICIAL RECORD BOOK 2181, PAGE 308, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. SHOWN HEREON – SEE DETAIL SHEET 3 OF 3
- EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN OFFICIAL RECORDS BOOK 2234, PAGE 198, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. SHOWN HEREON – SEE DETAIL SHEET 3 OF 3
- EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN OFFICIAL RECORDS BOOK 2733, PAGE 874, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. SHOWN HEREON – SEE DETAIL SHEET 3 OF 3
- EASEMENTS CONTEMPLATED BY THAT CERTAIN TRANSPORTATION IMPROVEMENTS DEVELOPMENT AGREEMENT WITH THE CITY OF APOPKA RECORDED IN OFFICIAL RECORDS INSTRUMENT NO. 20240362206, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
- EASEMENTS CONTAINED IN THE DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS FOR THE SHOPPES AT EAST SHORE RECORDED IN OFFICIAL RECORDS BOOK _____ , PAGE _____. (AFFECTS PROPERTY-BLANKET IN NATURE-NOT PLOTTABLE)

VICINITY MAP



NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

CERTIFICATE OF SURVEYOR AND MAPPER:

I, THE UNDERSIGNED SURVEYOR, HEREBY CERTIFY THAT THIS PLATTED SUBDIVISION IS A CORRECT REPRESENTATION OF THE HEREON DESCRIBED LAND WHICH WAS RECENTLY SURVEYED AND PLATTED UNDER MY DIRECTION AND SUPERVISION, THAT PERMANENT REFERENCE MONUMENTS HAVE BEEN SET IN ACCORDANCE WITH CHAPTER 177, FLORIDA STATUTES, AND THAT THIS PLAT COMPLIES WITH ALL THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUES.

_____ DATE: _____

JEREMY D. HALLICK, FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER FLORIDA REGISTRATION NO. 6715
CLYMER FARNER BARLEY SURVEYING, LLC. – LICENSED BUSINESS NO. 8498
4450 NE 83RD ROAD, WILDWOOD, FLORIDA 34785

SEAL

CERTIFICATE OF REVIEW BY CITY SURVEYOR

PURSUANT TO SECTION 177.081, FLORIDA STATUTES, I HAVE REVIEWED THIS PLAT FOR CONFORMITY TO CHAPTER 177, PART 1 OF THE FLORIDA STATUTES AND THAT SAID PLAT COMPLIES WITH THE TECHNICAL REQUIREMENTS OF THAT CHAPTER; PROVIDED HOWEVER, THAT MY REVIEW DOES NOT INCLUDE FIELD VERIFICATION OF ANY OF THE COORDINATES, POINTS, OR MEASUREMENTS SHOWN ON THIS PLAT.

SIGNATURE: _____ DATE: _____

EDWIN MUNOZ JR., PSM
FLORIDA PROFESSIONAL SURVEYOR
AND MAPPER # 7288

SEAL

DEDICATION

KNOW ALL MEN BY THESE PRESENTS, THAT THE UNDERSIGNED, AS OWNER OF THE LAND DESCRIBED IN THE LEGAL DESCRIPTION HEREON, HEREBY DEDICATES THIS PLAT OF SHOPPES AT EAST SHORE FOR RECORD, DOES HEREBY STATE AND DECLARE THE FOLLOWING:

OWNER HEREBY DEDICATES THE FOLLOWING:

TRACT A TO THE PUBLIC FOR ADDITIONAL RIGHT-OF-WAY PURPOSES.

THE UTILITY EASEMENTS SHOWN HEREON ARE DEDICATED TO THE PROVIDERS OF PUBLIC UTILITIES FOREVER FOR THE PURPOSES OF INSTALLATION, OPERATION, REPAIR, AND MAINTENANCE OF PUBLIC UTILITIES.

SHOPPES AT EAST SHORE, LLC

WITNESS:

(1) _____
SIGNATURE

_____
PRINT NAME

(2) _____
SIGNATURE

_____
PRINT NAME

BY: _____

PRINT NAME CRAIG KOPKO

TITLE VICE PRESIDENT

ACKNOWLEDGEMENT:

STATE OF FLORIDA
COUNTY OF _____

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME, BY MEANS OF PHYSICAL PRESENCE OR ☐ ONLINE NOTARIZATION, THIS ____ DAY OF_____, 20 ____ , BY _____, AS _____ OF AND ON BEHALF OF SHOPPES AT EAST SHORE, LLC, FOR THE PURPOSES EXPRESSED HEREIN, WHO IS PERSONALLY KNOWN TO ME AND WHO DID NOT TAKE AN OATH.

_____
NOTARY PUBLIC – STATE OF FLORIDA

PRINT NAME: _____
COMMISSION NO.: _____
COMMISSION EXPIRES: _____

SEAL

CERTIFICATE OF APPROVAL: PLANNING COMMISSION
CITY OF APOPKA, STATE OF FLORIDA

THIS IS TO CERTIFY THAT ON _____, 2024, THE FOREGOING PLAT WAS APPROVED BY THE APOPKA PLANNING COMMISSION OF THE CITY OF APOPKA.

BY: _____ _____
CHAIRMAN DATE

CERTIFICATE OF APPROVAL: MUNICIPALITY
CITY OF APOPKA, STATE OF FLORIDA

THIS IS TO CERTIFY THAT ON _____, 2024, THE FOREGOING PLAT WAS APPROVED BY THE CITY COUNCIL OF THE CITY OF APOPKA.

BY: _____
BRYAN NELSON, MAYOR

ATTEST: _____
SUSAN M. BONE

CERTIFICATE OF APPROVAL: CITY ENGINEER
CITY OF APOPKA, STATE OF FLORIDA

EXAMINED AND APPROVED: _____ _____
CITY ENGINEER, RICHARD EARP, PE DATE

CERTIFICATE OF COUNTY COMPTROLLER
ORANGE COUNTY, STATE OF FLORIDA

I HEREBY CERTIFY THAT THE FOREGOING PLAT WAS RECORDED IN THE ORANGE COUNTY OFFICIAL RECORDS ON _____, 2024.

DOCUMENT NUMBER_____

BY: _____
COUNTY COMPTROLLER IN AND FOR ORANGE COUNTY, FLORIDA

SHEET 1 OF 3

CFB | CLYMER FARNER BARLEY SURVEYING
4450 NE 83RD ROAD
WILDWOOD FLORIDA 34785
(352) 748-3126 LB8498

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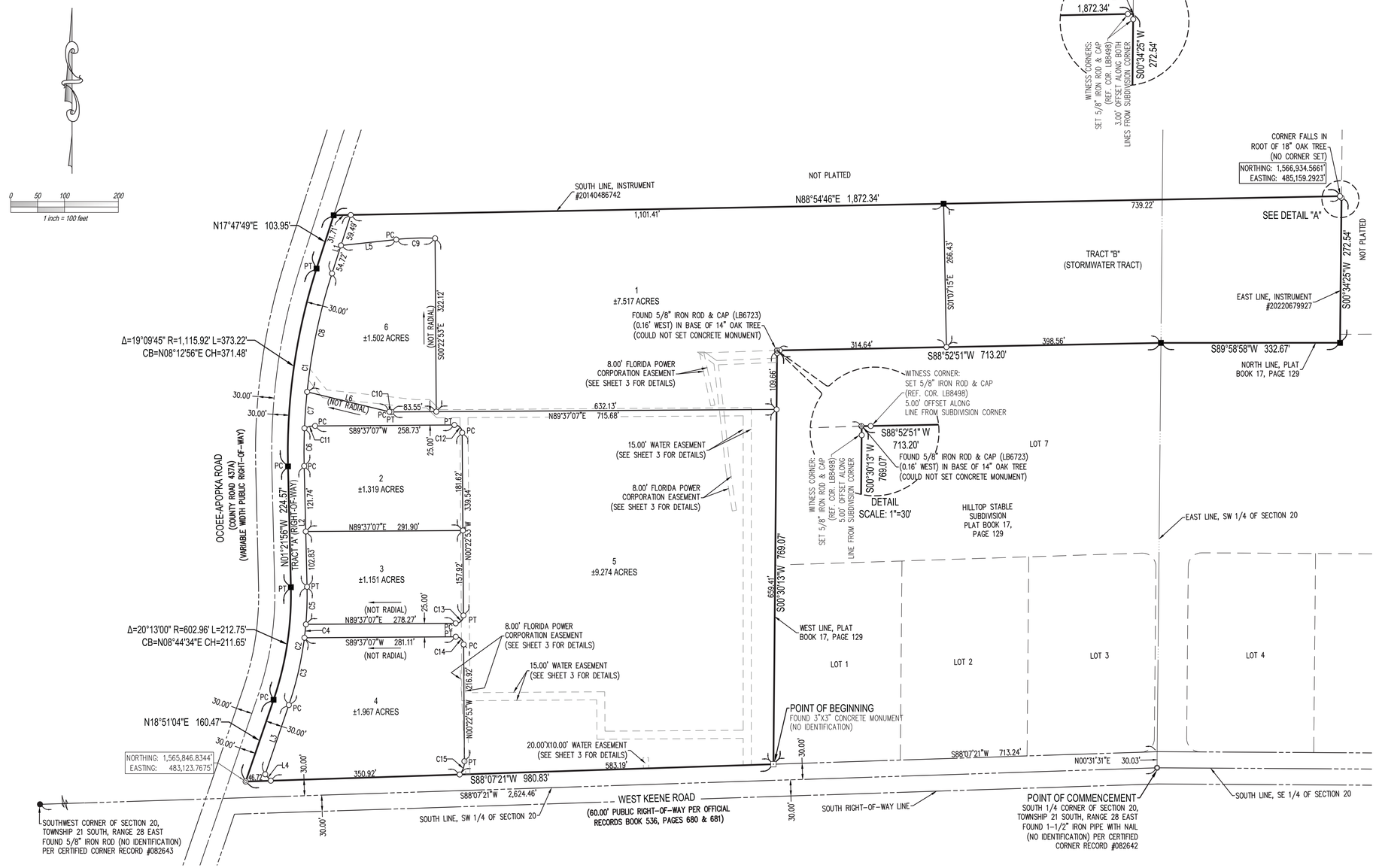
PLAT BOOK ___ PAGE ___

SHOPPES AT EAST SHORE

BEING A PORTION OF SECTION 20, TOWNSHIP 21 SOUTH, RANGE 28 EAST
CITY OF APOPKA
ORANGE COUNTY, FLORIDA



LEGEND

- ⊡ = EXISTING CONCRETE MONUMENT (SIZE & TYPE AS NOTED)
- ◎ = EXISTING IRON ROD (SIZE & TYPE AS NOTED)
- ◉ = SET DISK (LB 8498)
- ○ = SET 5/8" IRON ROD & CAP (CFB LB 8498)
- ■ = SET 4"x4" CONCRETE MONUMENT (CFB-LB8498 PRM)

FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
LB = LICENSED BUSINESS
LS = LAND SURVEYOR
PRM=PERMANENT REFERENCE MONUMENT
ID = IDENTIFICATION
C1 = CURVE TAG LABEL (SEE CURVE TABLE)
L1 = LINE TAG LABEL (SEE LINE TABLE)
L LENGTH
R RADIUS
Δ CENTRAL ANGLE (DELTA)
CH CHORD LENGTH
CB CHORD BEARING
LINE BREAK

CURVE TABLE

CURVE TAG	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C1	1085.92'	19°09'45"	363.18'	S08°12'56"W	361.49'
C2	632.96'	20°13'00"	223.34'	S08°44'34"W	222.18'
C3	632.96'	11°37'54"	128.50'	S13°02'07"W	128.28'
C4	632.96'	2°16'39"	25.16'	S06°04'50"W	25.16'
C5	632.96'	6°18'27"	69.68'	S01°47'17"W	69.64'
C6	1085.92'	3°42'12"	70.19'	S00°29'10"W	70.18'
C7	1085.92'	3°34'46"	67.84'	S04°07'39"W	67.83'
C8	1085.92'	11°52'46"	225.15'	S11°51'25"W	224.75'

CURVE TABLE

CURVE TAG	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C9	475.50'	8°41'51"	72.18'	N88°13'17"E	72.11'
C10	14.50'	13°58'24"	3.54'	S83°23'41"E	3.53'
C11	48.00'	24°14'23"	20.31'	S77°29'56"W	20.16'
C12	14.50'	90°00'00"	22.78'	N45°22'53"W	20.51'
C13	14.50'	90°00'00"	22.78'	N44°37'07"E	20.51'
C14	14.50'	90°00'00"	22.78'	N45°22'53"W	20.51'
C15	38.00'	40°21'41"	26.77'	N19°47'58"E	26.22'

LINE TABLE

LINE TAG	BEARING	DISTANCE
L1	S17°47'49"W	114.21'
L2	S01°21'56"E	224.57'
L3	S18°51'04"W	136.02'
L4	S41°08'56"E	15.82'
L5	N83°52'22"E	103.32'
L6	S76°24'29"E	157.20'

NOTE: SEE SHEET 3 FOR EASEMENT DIMENSIONS

SHEET 2 OF 3

CFB CLYMER FARNER BARLEY SURVEYING
4450 NE 83RD ROAD
WILDWOOD FLORIDA 34785
(352) 748-3126 LB8498

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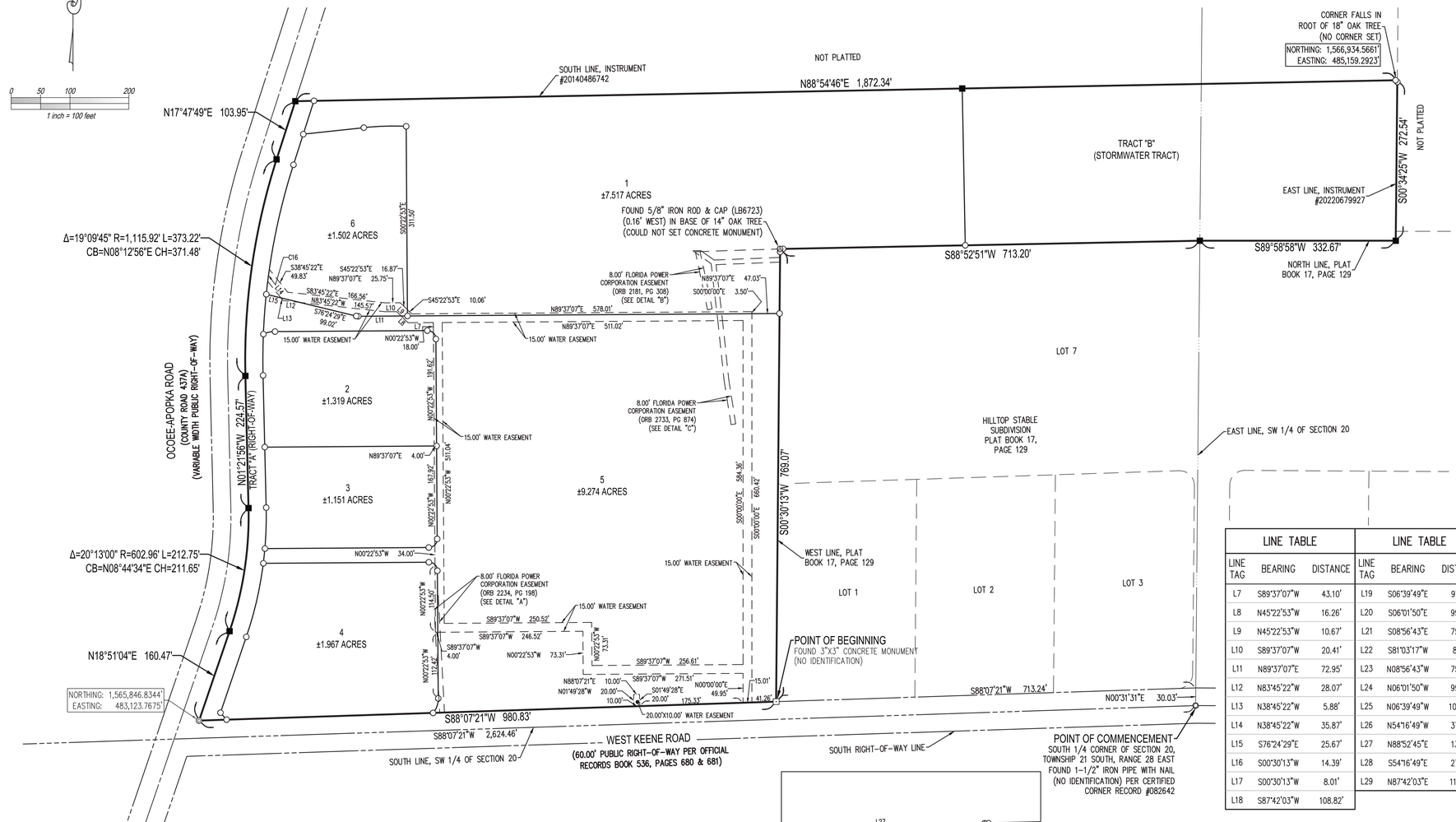
SHOPPES AT EAST SHORE

BEING A PORTION OF SECTION 20, TOWNSHIP 21 SOUTH, RANGE 28 EAST
CITY OF APOPKA
ORANGE COUNTY, FLORIDA

PLAT BOOK ___ PAGE ___

CURVE TABLE					
CURVE TAG	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C16	1085.92'	1°05'35"	20.72'	N07°37'44"E	20.72'

0 50 100 200
1 inch = 100 feet



LINE TABLE			LINE TABLE		
LINE TAG	BEARING	DISTANCE	LINE TAG	BEARING	DISTANCE
L7	S89°37'07"W	43.10'	L19	S06°39'49"E	97.91'
L8	N45°22'53"W	16.26'	L20	S06°01'50"E	99.04'
L9	N45°22'53"W	10.67'	L21	S08°56'43"E	75.54'
L10	S89°37'07"W	20.41'	L22	S81°03'17"W	8.00'
L11	N89°37'07"E	72.95'	L23	N08°56'43"W	75.74'
L12	N83°45'22"W	28.07'	L24	N06°01'50"W	99.20'
L13	N38°45'22"W	5.88'	L25	N06°39'49"W	100.42'
L14	N38°45'22"W	35.87'	L26	N54°16'49"W	37.83'
L15	S76°24'29"E	25.67'	L27	N88°52'45"E	13.34'
L16	S00°30'13"W	14.39'	L28	S54°16'49"E	27.53'
L17	S00°30'13"W	8.01'	L29	N87°42'03"E	112.15'
L18	S87°42'03"W	108.82'			

LEGEND

- ○ = SET 5/8" IRON ROD & CAP (CFB LB 8498)
- ■ = SET 4"x4" CONCRETE MONUMENT (CFB-LB8498 PRM)
- FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
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- L LENGTH
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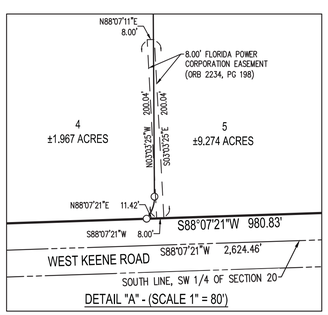
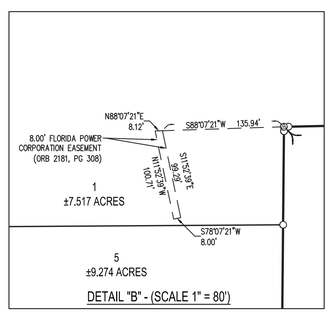
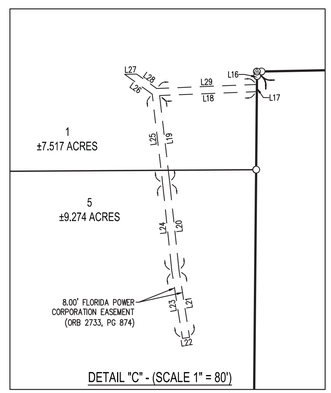


DETAIL "A" - (SCALE 1" = 80')



DETAIL "B" - (SCALE 1" = 80')



DETAIL "C" - (SCALE 1" = 80')

NOTE: SEE SHEET 2 FOR LOT DIMENSIONS

SHEET 3 OF 3

CFB CLYMER FARNER BARLEY SURVEYING
4450 NE 83RD ROAD
WILDWOOD FLORIDA 34785
(352) 748-3126 LB8498

CONSTRUCTION PLANS

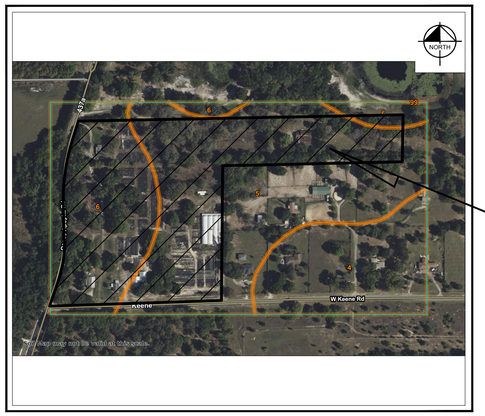
FOR

THE SHOPPES AT EAST SHORE-PHASE 1

ORANGE COUNTY PARCEL ID NO.
20-21-28-0000-00-021
20-21-28-0000-00-024
20-21-28-0000-00-025
20-21-28-0000-00-028

CITY OF APOPKA, FLORIDA

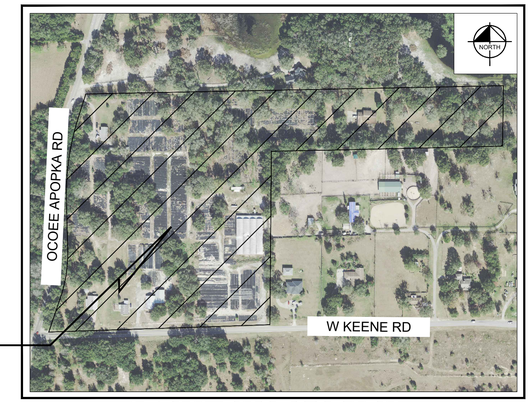
July 22, 2024



SOILS MAP

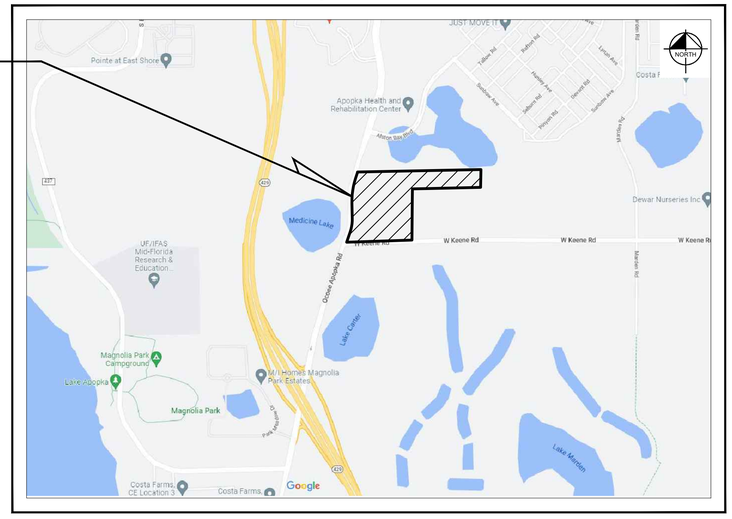
N.T.S.

4 CANDLER FINE SAND 0-5% SLOPES
5 CANDLER FINE SAND 5-12% SLOPES
6 CANDLER-APOPKA FINE SANDS
99 WATER



AERIAL PHOTOGRAPH

N.T.S.



SECTION 20, TOWNSHIP 21, RANGE 28

LOCATION MAP

N.T.S.

INDEX OF SHEETS

C0.0	COVER SHEET
C1.0 - C1.1	GENERAL NOTES
C2.0	STORMWATER POLLUTION PREVENTION PLAN
C2.1	EROSION CONTROL DETAILS
C3.0 - C3.1	EXISTING CONDITIONS AND DEMOLITION PLAN
C4.0	OVERALL SITE PLAN
C4.1 - C4.5	SITE PLAN
C5.0 - C5.4	PAVING GRADING AND DRAINAGE PLAN
C5.5	DETAILED GRADING PLAN
C5.6 - C5.7	CROSS SECTIONS
C5.8	ACCESSIBILITY PLAN
C5.9	OVER EXCAVATION PLAN
C6.0 - C6.3	UTILITY PLAN
C7.0 - C7.2	TRUCK ROUTING PLAN
C8.0 - C8.3	CITY OF APOPKA DETAILS
C8.4	ORANGE COUNTY DETAILS
C9.0 - C9.3	GENERAL CONSTRUCTION DETAILS
C9.4 - C9.5	PUBLIX CONSTRUCTION DETAILS
C9.6	LIFT STATION DETAIL
L0.50	OVERALL TREE MITIGATION PLAN
L0.51 - L0.54	TREE MITIGATION PLAN
L0.55	TREE MITIGATION
L0.56	TREE MITIGATION DATA
L1.00	OVERALL LANDSCAPE PLAN
L1.01 - L1.05	LANDSCAPE PLAN
L1.50	LANDSCAPE DETAILS
L1.51	LANDSCAPE SPECIFICATIONS
L2.00	OVERALL IRRIGATION PLAN
L2.01 - L2.05	IRRIGATION PLAN
L2.50	IRRIGATION DETAILS
L2.51	IRRIGATION NOTES
L3.00	PRELIMINARY PHOTOMETRIC PLAN

RETAINING WALLS

SEGMENTAL BLOCK WALLS 1-7	
S-1	GENERAL NOTES
S-1A - S-1D	TYPICAL SECTION AND STANDARD DETAILS
S-2 - S-9	SEGMENTAL WALL SECTION
SEGMENTAL BLOCK WALLS 8-11	
S-1	GENERAL NOTES
S-1A - S-1D	TYPICAL SECTION AND STANDARD DETAILS
S-2 - S-7	SEGMENTAL WALL SECTION
CAST-IN-PLACE WALLS 12-13	
ST-01 - ST-02	CIP WALL PLAN, ELEVATION, AND SECTIONS

Digitally signed by Mike McKinley
DN: C=US, E=mmckinley@apopka.net, O=Apopka Police Department, OU=Chief's Office, CN=Mike McKinley
Reason: I have reviewed this doclument
Date: 2024.08.08 10:28:15-04'00'

Mike McKinley

Digitally signed by Jean Sanchez
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Reason: I agree to the terms defined by the placement of my signature on this document
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Jean Sanchez

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Richard Earp

LEGAL DESCRIPTION:

(AS PER SURVEY)

PARCEL 1

Begin 1 052.44 feet West and 30 feet North of South east corner of South west Quarter (SW 1/4) of Section 20, Town ship 21 South , Range 28 East, said point being g on the e Northerly right-- of-- way of Keene road; Run North 770 feet to a point being 508.3 feet South of the North line of Southeast Quarter (SE 1 /4) of Southwest Quarter (SW 1/4), Section 20, Township 21 South, Range 28 East; Thence run West 536.8 feet to the Easterly right-- of-- w y of Ocoee-- Ap op ka Road; Thence Southwesterly at on g said right-- of-- way 797 feet to the Northerly right-- of-- way of Keen e Road; Thence East 630.8 feet to POIN T OF BECINNIN C, Orange County, Florida.

PARCEL 2

From the South 1/4 corner of Section 20, Town ship 21 South, Range 28 East, run North 00 degrees 00 minutes 00 sec on ds East,786.70 feet along the North -- South Quarter Section Line of said Section 20, thence run South 88 degrees 31 minutes 11 seconds West, 479.15 feet for the Point of Beginning of this description; run thence North 00 degrees 00 minutes 00 seconds East 237.23 feet, thence South 88 degrees 31 minutes 11 sec on ds West, 1 046.71 feet to an iron pin in the present Easterly right-of-way line of State Road S-- 437 A, thence run South 17 degrees 26 minutes 07 seconds West, 44.70 feet of on g the a fore mentioned Easterly right-of-way line to the point of curvature of o curve con cave to the Southeasterly y and having g a radius of 1421. 95 feet thence run Southwesterly along the arc of said curve and the present Easterly right-of-way line of State Ro d S-- 437 A, an arc distance of 201.77 feet and through a central angle of 08 degrees 07 minutes 47 seconds to an iron pipe in the present Easterly right-of-way line of State Rood S--437 A, thence leaving said Easterly right-of-way line run North 88 degrees 31 minutes 11 seconds East, 1106.75 feet to the Point of Beginning.

PARCEL 3

Beginning 713.24 feet West and 30 feet North of the Southeast corner of the Southwest Quarter of Section 20, Town ship 21 South, Range 28 East, run 770 feet to a point being 508. 3 feet South of the North line of Southeast Quarter of the Southwest Quarter, Section 20, Township 21 South, Range 28 East; run thence West 339.2 feet, thence South 770 feet to the Northerly right-of-way of Keen e Road; thence East along said right-of-way of Keen e Road 339.2 feet to the Point of Beginning.

PARCEL 4

From the South 1/4 Corner of Section 20, Township 21 South, Ronge 28 East, run North OO'00'00" East 786.70 feet along the North -- South Quarter Sect Ion Line of said Section 20 for the point of beginning of this description: Thence run North 89°26'00" East 331.67 feet, thence North 00°03'00" East 272. 54 feet, thence South 88°31 '11 " Wes1 1849. 36 feet to an iron pin in the present Easterly right--of--way line of State Road 8--437 A, thence run South 17°26'07" West 31.70 feet of on g the aforementioned Easterly right -- of-- way line, thence leaving said Easterly right-- of-- way line run North 88'31'11" East 1 046.71 feet, thence South OO'00'00" West 237.23 feet thence North 88°31 '11 " East 479.15 feet to the point of beginning. Orange County, Florida.

Total land area is 1,220,497 square feet, 28.02 acres more or less.

PROJECT NARRATIVE:

THE SHOPPES AT EAST SHORE IS A 28.02 ACRE MIXED-USE PROJECT LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF OCOEE APOPKA RD AND WEST KEENE RD IN APOPKA, FL. THE PROJECT PROPOSES MULTIPLE RETAIL BUILDINGS, A MEDICAL OFFICE AND OUT-PARCELS FOR FUTURE DEVELOPMENT ALONG WITH ASSOCIATED INFRASTRUCTURE. THE PROPOSED FIRST PHASE OF THIS PROJECT IS INCLUDED WITHIN THIS APPLICATION FOR CSP AND INCLUDES A GROCER AND IN-LINE RETAIL, A MEDICAL OFFICE BUILDING, MASTER UTILITY INFRASTRUCTURE AND MASTER DRAINAGE FOR THE OVERALL DEVELOPMENT.

UTILITY PROVIDERS

WATER/SEWER:
CITY OF APOPKA
748 EAST CLEVLAND STREET
APOPKA, FL 32703
CONTACT: VLADIMIR SIMONOVSKI
PHONE: (407) 703-1731

CABLE:
CHARTER COMMUNICATIONS
3767 ALL AMERICAN BLVD.
ORLANDO, FL 32810
CONTACT: RAMON NUNEZ
PHONE: (407) 215-5870

GAS:
LAKE APOPKA NATURAL GAS DISTRICT
1320 WINTER GARDEN VINELAND ROAD
WINTER PARK, FL 34787
CONTACT: PATRICK NGUYEN
PHONE: (407) 656-2734

ELECTRIC :
DUKE ENERGY
452 EAST CROWN POINT ROAD
WINTER GARDEN, FL 34787
CONTACT: STEPHANIE OLMO
PHONE: (407) 905-3376

TELEPHONE:
CENTURYLINK
1325 BLAIRSTONE ROAD, ROOM 113
TALLAHASSEE, FL 32301
CONTACT: BILL MCCLOUD
PHONE: (850) 599-1444

PROJECT TEAM

OWNER:
SHOPPES AT EAST SHORE LLC
270 WEST PLANT STREET, SUITE 210
WINTER GARDEN, FL 34787

DEVELOPER:
WMG DEVELOPMENT
270 WEST PLANT STREET, SUITE 210
WINTER GARDEN, FL 34787
CONTACT: LEAH FITZPATRICK
EMAIL: LFITZPATRICK@WMGDEVELOPMENT.COM

CIVIL ENGINEER:
KIMLEY-HORN AND ASSOCIATES, INC.
200 SOUTH ORANGE AVENUE, SUITE 600
ORLANDO, FL 32801
CONTACT: JORDAN DRAPER, P.E.
PHONE: (407) 412-7741
EMAIL: JORDAN.DRAPER@KIMLEY-HORN.COM

SURVEYOR:
ALLEN & COMPANY
16 EAST PLANT STREET
WINTER GARDEN, FL 34787
CONTACT: JAMES RICKMAN
PHONE: (407) 654-5355

LANDSCAPE ARCHITECT:
KIMLEY-HORN AND ASSOCIATES, INC.
200 SOUTH ORANGE AVENUE, SUITE 600
ORLANDO, FL 32801
CONTACT: MATTHEW FRANKO, PLA
PHONE: (407) 898-1511
EMAIL: MATT.FRANKO@KIMLEY-HORN.COM

Digitally signed by John L. Hanson
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John L. Hanson

Digitally signed by Jeremy Holderfield
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Jeremy Holderfield

PREPARED BY

Kimley»Horn

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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

L. JORDAN DRAPER LICENSE No. 81928 STATE OF FLORIDA PROFESSIONAL ENGINEER

L. JORDAN DRAPER, P.E.
FLORIDA LICENSE NUMBER 81928
7/22/2024

REVISIONS:

No.	DESCRIPTION	DATE
3.	ORANGE COUNTY COMMENTS #2	05/29/24
2.	CITY OF APOPKA COMMENTS #1	05/29/24
1.	CITY OF APOPKA COMMENTS	05/29/24

THE SHOPPES AT EAST SHORE-PHASE 1
7/22/2024
ENGINEER'S PROJECT No. 049335015

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C0.0 - COVER.dwg C0.0 - COVER SHEET Jul 22, 2024 4:44pm by: griffin.bolley
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GENERAL

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING (HORIZONTALLY AND VERTICALLY) ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND FOR NOTIFYING THE VARIOUS UTILITY COMPANIES TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION, TEMPORARY DISTRIBUTION SERVICE, OR CLARIFICATION OF ACTIVITY REGARDING SAID UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THESE PLANS OR FIELD LOCATED. ALL OTHER UTILITIES WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANIES AND THE CONTRACTOR SHALL COOPERATE WITH THEM DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE OF THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED. CONTRACTOR SHALL CALL "SUNSHINE ONE" AT 811 TO HAVE EXISTING UTILITIES LOCATED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
2. THE LOCATIONS OF ALL EXISTING UTILITIES, STORM DRAINAGE SYSTEMS, AND TOPOGRAPHIC FEATURES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. SHOULD A DISCREPANCY ARISE BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, WHICH WOULD APPRECIABLY AFFECT THE EXECUTION OF THESE PLANS, THE CONTRACTOR SHALL HALT CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY.
3. 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.
4. THE CONTRACTOR SHALL EXERCISE CAUTION IN AREAS OF BURIED UTILITIES AND SHALL CALL "SUNSHINE 811" AT 811 OR 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO ARRANGE FOR FIELD LOCATIONS OF BURIED UTILITIES.
5. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED, BY THE CONTRACTOR OR SUB-CONTRACTORS, AS CALLED FOR IN THESE CONTRACT DOCUMENTS.
6. 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, SUCH AS RIGHT OF WAY PERMIT(S), EXCAVATION/FILL PERMIT(S), FIRE PROTECTION PERMIT(S), OR UNDERGROUND UTILITY PERMIT(S), PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL INSPECTION CRITERIA OF APPLICABLE AGENCIES, SCHEDULING OF INSPECTIONS, AND OBTAINING REQUIRED INSPECTIONS FROM AGENCY.
7. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, ON ALL PRECAST AND MANUFACTURED ITEMS, TO THE OWNER'S ENGINEER FOR REVIEW. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. ALL UTILITY SERVICE STUB-OUTS (WATER, SANITARY SEWER, etc.) ARE TO BE INSTALLED WITHIN 5' OF BUILDING(S), UNLESS OTHERWISE NOTED ON PLANS.
9. 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.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AN R-O-W UTILIZATION 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 DIMENSIONS ARE TO FACE OF CURB.
16. ALL SIGNAGE MUST COMPLY WITH THE LAND DEVELOPMENT CODE OF THE CITY OF APOPKA, FLORIDA.
17. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING ACTIVITIES NECESSARY TO PERFORM THE WORK WITHIN THESE PLANS.
18. THE CONTRACTOR SHALL RESTORE OFF-SITE CONSTRUCTION AREAS TO EQUAL AND/OR BETTER CONDITION THAN EXISTING PRIOR TO START OF CONSTRUCTION.
19. THE CONTRACTOR SHALL COMPLY WITH THE LEGAL LOAD RESTRICTIONS IN HAULING OF MATERIALS IN PUBLIC ROADS BEYOND THE LIMITS OF WORK. A SPECIAL PERMIT WILL NOT RELIEVE THE CONTRACTOR OF LIABILITY FOR THE DAMAGE WHICH MAY RESULT FROM THE MOVING OF MATERIAL AND EQUIPMENT.
20. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A A LICENSED LAND SURVEYOR CURRENTLY REGISTERED IN THE STATE OF FLORIDA.
21. 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.
22. ALL WORK PERFORMED WITHIN THE FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF FDOT STANDARD PLANS, SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE LATEST UTILITY ACCOMMODATION MANUAL.

TREES AND VEGETATION

1. THE CONTRACTOR IS TO MINIMIZE THE REMOVAL OF VEGETATION TO THE GREATEST EXTENT PRACTICAL. SEE DEMOLITION PLAN FOR TREES TO BE REMOVED. TREES IN CLOSE PROXIMITY TO CONSTRUCTION SHALL BE PROTECTED BY WOOD FENCING PER DETAIL ON TREE PROTECTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE BUFFERS AND RETENTION AND DETENTION FACILITIES UNTIL THE WORK HAS BEEN ACCEPTED BY THE OWNER. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.

DEMOLITION

1. CONTRACTOR SHALL SUBMIT DEMOLITION SCHEDULE TO OWNER PRIOR TO PROCEEDING WITH DEMOLITION ACTIVITIES.
2. EXTENT OF SITE CLEARING IS SHOWN ON DRAWINGS.
3. CONTRACTOR SHALL CONDUCT SITE DEMOLITION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
4. CONTRACTOR SHALL PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED ON PLAN "EXISTING TO REMAIN".
5. CONTRACTOR SHALL RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
6. CONTRACTOR SHALL REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF-SITE IN A LEGAL MANNER.
7. CONTRACTOR SHALL DEMOLISH AND COMPLETELY REMOVE FROM SITE MATERIAL INDICATED ON PLAN OR NOTES "TO BE REMOVED".
8. CONTRACTOR SHALL 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.

STORM DRAINAGE SYSTEM

1. STANDARD INDEXES REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
2. THE LATEST EDITION OF F.D.O.T. "DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM" IS REFERRED TO FOR THE STRUCTURAL DESIGN OF DRAINAGE STRUCTURES SPECIFIED IN THESE PLANS, AS REFERENCED BY STANDARD INDEX. ALL SPECIALTY DRAINAGE STRUCTURES REQUIRE SEPARATE STRUCTURAL DESIGN, WHICH IS NOT INCLUDED IN THESE PLANS. STATION OFFSETS ARE TO THE CENTERLINE OF THE STRUCTURE TOP (I.E. DITCH BOTTOM INLET OR CURB INLET TOP), AS OPPOSED TO THE STRUCTURE BASE.
3. 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.
4. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURES, WITH THE EXCEPTION OF MITERED END AND FLARED END SECTIONS. LENGTHS OF PIPE SHOWN WHICH TERMINATE WITH MITERED END OR FLARED END SECTIONS ARE MEASURED TO THE DOWNSTREAM INVERT OF THE MITERED END OR FLARED END SECTION.
5. 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.
6. 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.
7. STORM WATER PIPES, STRUCTURES, MINIMUM COVER, AND INSTALLATION PROCEDURES TO BE IN ACCORDANCE WITH THE LAND DEVELOPMENT CODE OF THE CITY OF APOPKA, FLORIDA.
8. DURING CONSTRUCTION, NO DIRECT DISCHARGE OF WATER TO DOWNSTREAM RECEIVING WATERS WILL BE ALLOWED. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING WATER QUALITY AND SHALL ROUTE DISCHARGE WATER IN SUCH A MANNER AS TO ADEQUATELY REMOVE SILT PRIOR TO RUNOFF FROM THE SITE.

DRAINAGE SYSTEM TESTING AND INSPECTION

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 AT THE CONTRACTORS EXPENSE AND PRIOR TO FINAL ACCEPTANCE.

SAFETY

1. 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.
2. 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. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION. 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. CONTRACTOR SHALL PROVIDE FOR THE SAFETY AND CONTROL OF LOCAL TRAFFIC DURING CONSTRUCTION. ADDITIONAL INFORMATION MAY BE REQUIRED IF LANE CLOSURE DURATIONS ARE LONGER THAN DAYTIME OPERATIONS.

PAVING, GRADING AND DRAINAGE

1. ALL PAVING SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES, UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.
4. CURBING SHALL BE PLACED AT THE EDGES OF ALL PAVEMENT, UNLESS OTHERWISE NOTED. REFER TO THE LATEST EDITION OF F.D.O.T. "DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. TYPE CURB AND GUTTERS CALLED FOR IN THESE PLANS.
5. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE SOILS ENGINEER FOR APPROVAL.
6. CONTRACTOR TO PROVIDE A 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIALS (STRUCTURES, OTHER POURED)
7. ALL PAVEMENT MARKINGS SHALL BE MADE IN ACCORDANCE WITH F.D.O.T. DESIGN STANDARDS.
8. 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.
9. THE CONTRACTOR SHALL RESTORE OFF-SITE CONSTRUCTION AREAS TO EQUAL AND/OR BETTER CONDITION THAN EXISTING PRIOR TO START OF CONSTRUCTION.
10. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
11. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR AT CONTRACTORS EXPENSE.
12. FINAL GRADES SHOWN INCLUDE SOD HEIGHT. ALL AREAS SHALL BE GRADED TO DRAIN AWAY FROM THE BUILDINGS.
13. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH ALL LOCAL, STATE AND JURISDICTIONAL PERMITTING AGENCIES.
14. ALL WORK SHALL COMPLY WITH THE GEOTECHNICAL REPORT BY UNIVERSAL ENGINEERING SCIENCES ON MARCH 25, 2021.
15. CONTRACTOR SHALL SOD ALL DISTURBED AREAS WITH BAHIA UNLESS OTHERWISE NOTED.

PAVING/GRADING TESTING AND INSPECTION

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 AND GEOTECHNICAL REPORT, THE VARIOUS AGENCIES AND PERMIT CONDITIONS. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THESE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING.

PAVEMENT MARKING AND SIGNAGE

1. THE INSTALLATION, SHAPE, AND SIZE OF ALL SIGNS AND THEIR LETTERING SHALL COMPLY WITH THE LATEST EDITIONS OF THE U.S. DEPARTMENT OF TRANSPORTATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE F.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND THE F.D.O.T. "DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM". WHERE CONFLICTS EXIST BETWEEN THE PLANS AND THE ABOVE MENTIONED SPECIFICATIONS, THE MORE STRINGENT CRITERIA SHALL PREVAIL.

TEST, INSPECTION AND CLOSEOUT REQUIREMENTS

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. TV INSPECTION SHALL BE IN ACCORDANCE TO THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL. 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 LEAKAGE TESTS ON ALL GRAVITY SEWERS PER THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.
3. AN AS-BUILT SURVEY SHALL BE PREPARED IN ACCORDANCE WITH CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE (F.A.C.), PURSAUNT TO CHAPTER 472, FLORIDA STATUTES (F.S.) SHALL BE REQUIRED.
4. THE CONTRACTOR SHALL PROVIDE UTILITY AS-BUILT AND GRADING/DRAINAGE AS-BUILT RECORD DRAWINGS BASED ON THE CIVIL DESIGN PLAN SHEETS. ALL AS-BUILTS SHALL BE OVERLAID ON THE CIVIL DESIGN PLANS WITH THE DESIGN SHADED BACK AND THE AS-BUILT BOLD. THE AS-BUILTS SHALL BE SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR.
5. THE UTILITY AS-BUILT SHALL INCLUDE ALL SANITARY SEWERS AND FORCE MAIN SYSTEMS, POTABLE AND RECLAIMED WATER MAIN SYSTEMS, METERS, VALVES, FORCE MAINS, GAS MAINS, AND IRRIGATION LINES (2-INCH AND LARGER). CONTRACTOR TO PROVIDE ALL UTILITY CROSSING INFORMATION ON THE AS-BUILT. THE UTILITY AS-BUILTS SHALL IDENTIFY ALL WATER MAIN CROSSINGS WITH STORM AND SANITARY LINES INDICATING TOP OF PIPE AND INVERTS OF THE ABOVE CROSSING PIPE ALONG WITH CLEARANCE DIMENSIONS. THIS SHALL ALSO BE DONE FOR SANITARY/STORM CROSSINGS. ALL TEMPORARY SAMPLE POINT NUMBER (TSP#) LOCATIONS SHALL ALSO BE NOTED ON THE AS-BUILT. CONTRACTOR TO ALSO PROVIDE AN AS-BUILT ASSET TABLE IDENTIFYING SIZE OF PIPE OR FITTING AS WELL AS DEPTH TO TOP OF PIPE AND NORTHING AND EASTING OF EACH FITTING/VALVE, ETC. AS-BUILT DRAWINGS SHALL PROVIDE GPS COORDINATES FOR SANITARY STRUCTURES.
6. THE GRADING/DRAINAGE AS-BUILT SHALL INCLUDE ALL CONSTRUCTED IMPROVEMENTS THAT HAVE LOCATION AND/OR ELEVATION INFORMATION CALLED-OUT ON THE PLANS. THE AS-BUILT SHALL CLEARLY PROVIDE THE SAME INFORMATION IDENTIFIED ON THE DESIGN DOCUMENTS AND ALSO THE CONSTRUCTED LOCATIONS AND ELEVATIONS AS-BUILT INFORMATION.
7. THE CONTRACTOR SHALL PROVIDE A SIGNED AND SEALED LETTER FROM THE INDEPENDENT TESTING AGENCY THAT STATES CONFORMANCE WITH THE CONTRACT DOCUMENT REQUIREMENTS FOR COMPACTION TESTING. THE CONTRACTOR IS TO PROMPTLY NOTIFY THE OWNER AND ENGINEER OF RECORD WHEN ANY TESTING OR INSPECTIONS ARE DEFICIENT OR IRREGULAR.

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No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
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PHONE: 407-898-1511
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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
JORDAN DRAPER
LICENSE NO. 7
STATE OF FLORIDA
PROFESSIONAL LANDSCAPE ARCHITECT
DATE: 7/22/2024

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

GENERAL NOTES

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C1.0

Plotted By: Bailey Griffin Sheet Set: THE SHOPPES AT EAST SHORE CDS Layout: C1.0 - GENERAL NOTES July 22, 2024 04:45:32pm K:\ORL_Civil\049335015-Keene Rd\CAD\CONST\Revised Const. Plans\Plansheets\C1.0 - GENERAL NOTES.dwg
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Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Planshеets\C1.0 – NOTES.dwg C1.1 – GENERAL NOTES Jul 22, 2024 4:45pm by griffin.bailey
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POTABLE WATER SYSTEM

1. ALL DIP PIPE SHALL BE CLASS 50 OR HIGHER. REFER TO NOTE #4 BELOW FOR ADDITIONAL DIP SPECIFICATIONS. ADEQUATE MEASURES AGAINST CORROSION SHALL BE UTILIZED.
2. ALL WATER MAIN PIPE FITTINGS AND APPURTENANCES SHALL BE INSTALLED TO COMPLY WITH THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.
3. ALL WATER SERVICE LINES, VALVES AND METERS SHALL BE INSTALLED TO COMPLY WITH APPLICABLE MUNICIPALITY/AGENCY DEPARTMENT STANDARDS AND SPECIFICATIONS.
4. 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.
5. ALL WATER SYSTEM CONSTRUCTION, UP TO AND INCLUDING POINT OF METERING AND BACK FLOW PREVENTION (IF REQUIRED), SHALL BE BUILT ACCORDING TO THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.
6. 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.
7. ALL WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA MANUAL M23, CONCERNING HYDROSTATIC TESTING OF PVC PIPING, OR AWWA MANUAL M41, CONCERNING HYDROSTATIC TESTING OF DUCTILE IRON PIPING. OFF-SITE UTILITIES HYDROSTATIC TESTING TO BE WITNESSED BY THE CITY OF APOPKA.
8. ALL WATER MAINS SHALL BE STERILIZED IN ACCORDANCE WITH THE APPLICABLE SECTION OF THE LATEST AWWA SPECIFICATION C651 AND THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.
9. 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.
10. ALL POLYVINYL CHLORIDE PIPE SHALL BE LAID WITH AN INSULATED 12 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.
11. ALL POTABLE WATER MATERIALS AND INSTALLATION SHALL CONFORM WITH THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.

POTABLE WATER TESTING AND INSPECTION

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 THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL. 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.

SANITARY SYSTEM

1. 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.
2. ALL GRAVITY SEWER MAINS AND FITTINGS MUST BE SDR 26 PVC. 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.
3. ALL ON-SITE PVC FORCE MAINS (IF REQUIRED) SHALL BE CLASS 200, DR 14 FOR 4" DIAMETER, AND CLASS 150 DR 18 FOR 6" TO 12" DIAMETER PIPE, IN ACCORDANCE WITH AWWA C900 STANDARDS. PVC FORCE MAIN PIPE SMALLER THAN 4" DIAMETER SHALL BE CLASS 200, SDR 21, IN ACCORDANCE WITH ASTM D 2241. FORCE MAIN SHALL BE SPIRAL WRAPPED WITH 2 INCH WIDE DARK GREEN STICK-ON VINYL TAPE. FORCE MAINS WITHIN THE RIGHT-OF-WAY SHALL BE CLASS 52 DIP, MINIMUM 4" DIAMETER.
4. 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.
5. ALL SLOPES FOR GRAVITY SEWER MAINS AND SERVICE CONNECTIONS SHALL COMPLY WITH THE FOLLOWING MINIMUM GRADES: 4" @ 2.00% ; 6" @ 1.00% ; 8" @ 0.40% ; and 10" @ 0.30%.
6. ALL SANITARY SEWER WORK SHALL CONFORM WITH APPLICABLE THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.
7. 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.
8. SANITARY SEWER MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE MAIN LINES.
9. ONSITE WASTEWATER COLLECTION SYSTEM, LIFTSTATION, AND FORCEMAIN ARE TO BE PRIVATELY OWNED AND MAINTAINED.

SANITARY TESTING AND INSPECTION

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 ISSPECIFIED 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.

CITY OF APOPKA FIRE DEPARTMENT NOTES

1. ROADWAYS, WATER LINE INFRASTRUCTURE, AND FIRE HYDRANTS SHALL BE IN PLACE BEFORE BUILDING CONSTRUCTION MAY BEGIN.
2. FIRE HYDRANTS SHALL BE MARKED WITH A BLUE REFLECTIVE PAVEMENT MARKER.

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LORRAINE D. JORDAN PROFESSIONAL LANDSCAPE ARCHITECT LICENSE 7 STATE OF FLORIDA
JORDAN DRAPER PE LICENSE NUMBER 86001 STATE OF FLORIDA PROFESSIONAL ENGINEER
DATE:

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

GENERAL NOTES

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C1.1

STORMWATER POLLUTION PREVENTION PLAN

SITE DESCRIPTION

PROJECT NAME AND LOCATION

THE SHOPPES AT EAST SHORE-PHASE 1
TAX PARCEL: 20-21-28-0000-00-021, 20-21-28-0000-00-024, 20-21-28-0000-00-025
20-21-28-0000-00-028
NE CORNER OF OCOEE-APOPKA ROAD AND W. KEENE ROAD
APOPKA, FLORIDA 32703

*SEE COVER SHEET FOR LOCATION MAP

DEVELOPER NAME AND ADDRESS

WMG DEVELOPMENT
270 W PLANT STREET, SUITE 210
WINTER GARDEN, FL 34787
CONTACT: LEAH FITZPATRICK
EMAIL: LFITZPATRICK@WMGDEVELOPMENT.COM

PROJECT DESCRIPTION

THE SHOPPES AT EAST SHORE PROJECT IS A COMMERCIAL DEVELOPMENT ON 28.02 AC SITE. THE SITE IS LOCATED ON THE NE CORNER OF OCOEE-APOPKA ROAD AND W. KEENE ROAD IN APOPKA, FLORIDA.

PROJECT AREA: ±28.02 ACRES
CONTRIBUTING DRAINAGE AREA: ±28.02 ACRES

ULTIMATE RECEIVING WATERS: MEDICINE LAKE / LAKE RUTHERFORD

ACTIVITIES THAT REQUIRE EROSION CONTROL

SITE CLEARING AND GRUBBING; PROVIDING A STABILIZED CONSTRUCTION ENTRANCE, PERIMETER, AND OTHER EROSION AND SEDIMENT CONTROLS; EXCAVATION FOR THE RETENTION POND; SITE GRADING; INSTALLATION OF STORM WATER, SANITARY SEWER, AND WATER STRUCTURES; CURB, ROADWAYS, AND PARKING FACILITIES.

*SEE PLANS FOR THE LOCATION OF TEMPORARY SEDIMENT BARRIERS AND OTHER EROSION CONTROL METHODS.

SOIL PARAMETERS

SOIL TYPES:

HYDROLOGIC SOIL GROUP SUMMARY		
SOIL TYPE	SOIL NAME	SOIL RATING
5	CHANDLER FINE SAND, 0-5% SLOPES	A
6	CHANDLER FINE SAND, 5-12% SLOPES	A

SEQUENCE OF MAJOR ACTIVITIES

THE ORDER OF CONSTRUCTION IS AS FOLLOWS:

1. PROVIDE STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND OTHER EROSION CONTROL METHODS
3. CLEAR AND GRUB FOR SEDIMENT BASIN AND EARTH DIKE
4. CONSTRUCT EARTH DIKE AND SEDIMENT BASIN
5. FINISH CLEARING AND GRUBBING
6. REMOVE AND STORE TOPSOIL
7. PROVIDE INITIAL GRADING AS REQUIRED
8. STABILIZE ALL DISTURBED AREAS AS SOON AS POSSIBLE
9. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER
10. INSTALL BASE TO ROAD AND PARKING AREAS
11. FINISH GRADING ENTIRE SITE
12. CONSTRUCT FINAL PAVING
13. REMOVE ACCUMULATED SEDIMENT
14. REMOVE ANY ITEMS THAT ARE NOT REQUIRED
15. THE SEQUENCE OF CONSTRUCTION SHOWN ABOVE IS A GENERAL OVERVIEW AND IS INTENDED TO CONVEY THE GENERAL CONCEPTS OF THE EROSION CONTROL DESIGN AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES.THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONSTRUCTION SEQUENCING INCLUDED IN THESE PLANS. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IMMEDIATELY, PRIOR TO AND/OR DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE IS NECESSARY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND ALL OTHER APPLICABLE LAWS.

TIMING OF CONTROL MEASURES

THE INSTALLATION OF SILT FENCE (AND OTHER EROSION CONTROL MEASURES), A STABILIZED ENTRANCE AND SEDIMENT BASIN SHALL OCCUR PRIOR TO CLEARING AND GRUBBING ACTIVITY. AFTER CONSTRUCTION IS COMPLETE, THE ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE AREAS SHALL BE REGRADED AND PERMANENTLY STABILIZED AS SHOWN ON THE PLANS.

EROSION AND SEDIMENT CONTROLS

BEST MANAGEMENT PRACTICES SHALL BE USED FOR THIS PROJECT TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN-OFF. THE LOCATION AND DETAILS OF EROSION CONTROL METHODS ARE SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING THESE CONTROL METHODS AS SHOWN ON THE PLANS OR AS REQUIRED. HE/SHE SHALL ALSO PROVIDE THE REQUIRED EROSION PROTECTION AS REQUIRED BY LOCAL, STATE AND FEDERAL LAW.

STORM WATER MANAGEMENT

STORM WATER COLLECTION SHALL BE PROVIDED BY CATCH BASINS. THE SITE WILL DISCHARGE TO THE PROPOSED STORMWATER MANAGEMENT POND FOR TREATMENT AND ATTENUATION.

STABILIZATION PRACTICES:

TEMPORARY STABILIZATION - TOPSOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE, SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH WITHIN 7 DAYS OF THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED REQUIRED CAN BE FOUND IN TABLE 1.65 A OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, WHERE SOILS ARE ACIDIC 2 TONS OF PULVERIZED AGRICULTURAL LIMESTONE SHOULD BE ADDED PER ACRE AND 450 POUNDS OF 10-20-20 FERTILIZER SHALL BE APPLIED TO EACH ACRE. AFTER SEEDING, EACH AREA SHALL BE IMMEDIATELY MULCHED WITH STRAW OR EQUIVALENT EQUAL. AREAS OF THE SITE WHICH ARE TO BE PAVED SHALL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILE AND STONE SUB-BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED.

PERMANENT STABILIZATION - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE APPROPRIATE PERMANENT SEED MIX CAN BE FOUND IN TABLES 1.66A, 1.66B AND 1.66C OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, 2 TONS/ACRE OF FINELY GROUND AGRICULTURAL LIMESTONE AND THE PROPER FERTILIZER BASED ON THE TYPE OF SEEDING SHALL BE APPLIED TO EACH ACRE TO PROVIDE PLANT NUTRIENTS. AFTER SEEDING, EACH AREA SHALL BE MULCHED IMMEDIATELY. ALL RETENTION/DETENTION BASINS SHALL BE SODDED AT LEAST TO THE NORMAL WATER LINE. ALL EXPOSED AREAS WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE SOLID SODDED, OTHER AREAS WITH SLOPES STEEPER THAN 4:1 SHALL BE SODDED.

STRUCTURAL PRACTICES:

EARTH DIKE - IF REQUIRED, AN EARTH DIKE SHALL BE CONSTRUCTED ALONG THE SITE PERIMETER. A PORTION OF THE DIKE SHALL DIVERT RUN-ON AROUND THE CONSTRUCTION SITE. THE REMAINING PORTION OF THE DIKE SHALL COLLECT RUNOFF FROM THE DISTURBED AREA AND DIRECT THE RUNOFF TO THE SEDIMENT BASIN.

SEDIMENT BASIN - A SEDIMENT BASIN SHALL BE CONSTRUCTED IN THE COMMON DRAINAGE AREA FOR THE SITE. ALL SEDIMENT COLLECTED IN THE BASIN MUST BE REMOVED FROM THE BASIN UPON COMPLETION OF CONSTRUCTION. SEDIMENT FROM THE BASIN MAY BE USED AS FILL ON THE SITE IF IT IS SUITABLE SOIL.

WASTE DISPOSAL

WASTE MATERIALS - ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A METAL DUMPSTER WITH A SECURE LID IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITIES TO HAVE THE DUMPSTER EMPTIED AT LEAST TWICE A WEEK AND THE WASTE TAKEN TO AN APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE. THE SUPERINTENDENT SHALL ORGANIZE TRAINING FOR THE EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH WASTE MATERIALS. THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR POSTING AND ENFORCING WASTE MATERIAL PROCEDURES.

HAZARDOUS WASTE - HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS OR AS DIRECTED BY THE MANUFACTURER. THE SUPERINTENDENT SHALL ORGANIZE THE PROPER TRAINING FOR EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH HAZARDOUS WASTE MATERIALS. THESE PROCEDURES SHALL BE POSTED ON THE SITE. THE PERSON WHO MANAGES THE SITE SHALL BE RESPONSIBLE FOR ENFORCING THE PROCEDURES.

SANITARY WASTE - SANITARY WASTE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITY FOR COLLECTION OF THE SANITARY WASTE AT LEAST THREE TIMES A WEEK TO PREVENT SPILLAGE ONTO THE SITE.

OFF-SITE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO REDUCE SEDIMENT TRACKING OFFSITE. THE CONTRACTOR SHALL PROMPTLY REMOVE ALL MUD, DIRT, OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING PUBLIC ROADS AND FACILITIES, DUE TO CONSTRUCTION. ALL TRUCKS HAULING MATERIALS OFFSITE SHALL BE COVERED WITH A TARPAULIN.

DUST & DEBRIS CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL WITHIN THE CONSTRUCTION LIMITS AS WELL AS ALONG HAUL ROUTES AND ROADWAYS USED BY THE EQUIPMENT AND VEHICLES. THE CONTRACTOR SHALL ENSURE THAT EXCESSIVE DUST IS NOT TRANSPORTED BEYOND THE LIMITS OF CONSTRUCTION IN POPULATED AREAS. THE CONTRACTOR MAY CONTROL DUST FOR EMBANKMENTS OR OTHER CLEARED OR UNSURFACED AREAS BY APPLYING WATER. INSTALL MULCH, SEED, SOD, OR TEMPORARY PAVING AS EARLY AS PRACTICAL. CONTROL DUST DURING STORAGE AND HANDLING OF DUSTY MATERIALS BY WETTING, COVERING, OR OTHER MEANS AS APPROVED BY THE ENGINEER.
DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE ON THE PROJECT SITE.

ITEMS REQUIRING POLLUTION PREVENTION

THE FOLLOWING ITEMS ARE EXPECTED TO BE PRESENT ON THE PROJECT SITE:

-ASPHALT
-CONCRETE
-FERTILIZERS
-METAL PIECES
-PETROLEUM BASED PRODUCTS
-TAR
-CLEANING SUPPLIES
-DETERGENTS
-MASONARY BLOCK/BRICKS
-PAINT
-WOOD

THE FOLLOWING ARE NON-STORM WATER SOURCES THAT WILL BE ENCOUNTERED AT THE SITE AND SHOULD BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE:

-UNCONTAMINATED GROUNDWATER EXPOSED DURING EXCAVATION
-WATER FROM WATER LINE FLUSHING
-PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

SPILL PREVENTION AND CONTROL

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

-SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.

-STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION.

-ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.

-ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR PROTECTIVE COVER.

-PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER.

-ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

HAZARDOUS PRODUCTS

-MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINER WITH LABELS UNLESS THE ORIGINAL CONTAINERS CANNOT BE RESEALED. IF ORIGINAL CONTAINERS CANNOT BE USED, LABELS AND PRODUCT INFORMATION SHALL BE SAVED.

-PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.

PRODUCT SPECIFIC PRACTICES

-PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELED. VEHICLES CONTAINING PETROLEUM PRODUCTS SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.

-THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND MIXED INTO THE SOIL IN ORDER TO LIMIT EXPOSURE TO STORM WATER. FERTILIZERS SHALL BE STORED IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

-PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.

-CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

-SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.

-THE FOLLOWING CLEAN-UP EQUIPMENT MUST BE KEPT ON-SITE NEAR THE MATERIAL STORAGE AREA: GLOVES, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS.

-ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.

-WHEN CLEANING A SPILL, THE AREA SHOULD BE WELL VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY.

-TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.

-AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SIMILAR SPILLS FROM OCCURRING. THE CAUSE OF THE SPILL, MEASURES TO PREVENT IT, AND HOW TO CLEAN THE SPILL UP SHALL BE RECORDED.

-THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. THE SUPERINTENDENT ALSO OVERSEES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

MAINTENANCE AND INSPECTION PRACTICES

THE FOLLOWING ARE MAINTENANCE AND INSPECTION PRACTICES THAT SHALL BE COMPLETED BY THE CONTRACTOR:

-ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE CHECKED DAILY AND AFTER EACH 0.5 INCH OR GREATER RAINFALL BY THE SUPERINTENDENT OR SOMEONE UNDER HIS/HER DIRECT SUPERVISION.

-ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE KEPT IN GOOD CONDITION. REPAIRS MUST BE MADE WITHIN 24 HOURS OF REPORT.

-THE SILT FENCE SHALL BE INSPECTED PERIODICALLY FOR HEIGHT OF SEDIMENT AND CONDITION OF FENCE.

-THE SILT FENCE SHALL BE CLEARED OF SEDIMENT WHEN SEDIMENT MEASURES ONE-THIRD THE HEIGHT OF THE FENCE.

-THE SEDIMENT BASINS/DITCHES SHALL BE CHECKED MONTHLY FOR DEPTH OF SEDIMENT. THEY SHALL BE CLEANED WHEN SEDIMENT REACHES 10% OF TOTAL CAPACITY AND AFTER CONSTRUCTION IS COMPLETE.

-DIVERSION DIKES SHALL BE INSPECTED MONTHLY. ANY BREACHES SHALL BE PROMPTLY REPAIRED.

-ALL SEEDING SHALL BE CHECKED FOR PROPER GROWTH AND UNIFORMITY. UNSTABALIZED AREAS SHALL BE RE-SODDED.

-A MAINTENANCE REPORT SHALL BE COMPLETED DAILY AFTER EACH INSPECTION OF THE SEDIMENT AND EROSION CONTROL METHODS. THE REPORTS SHALL BE FILED IN AN ORGANIZED MANNER AND RETAINED ON-SITE DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETED, THE REPORTS SHALL BE SAVED FOR AT LEAST THREE YEARS. THE REPORTS SHALL BE AVAILABLE FOR ANY AGENCY THAT HAS JURISDICTION OVER EROSION CONTROL.

-THE SUPERINTENDENT SHALL ORGANIZE THE TRAINING FOR INSPECTION PROCEDURES AND PROPER EROSION CONTROL METHODS FOR EMPLOYEES THAT COMPLETE INSPECTIONS AND REPORTS.

POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNED: _____ DATE:_____

L. JORDAN DRAPER, P.E.
FLORIDA REGISTRATION NUMBER: 81928
PROFESSIONAL ENGINEER

CONTRACTOR'S CERTIFICATION

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

SIGNATURE AND DATE	NAME AND TITLE, COMPANY / ADDRESS AND TELEPHONE NUMBER	RESPONSIBILITY

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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PHONE: 407-898-1511
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LICENSED PROFESSIONAL ENGINEER
L. JORDAN DRAPER
LICENSE NO. 81928
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

STORMWATER POLLUTION PREVENTION PLAN

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C2.0

Drawing name: K:\ORL_Civil\049335015--Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C2.0 - SWPPP C2.0 - SWPPP.dwg Jul 22, 2024 4:45pm by: griffin.bailey
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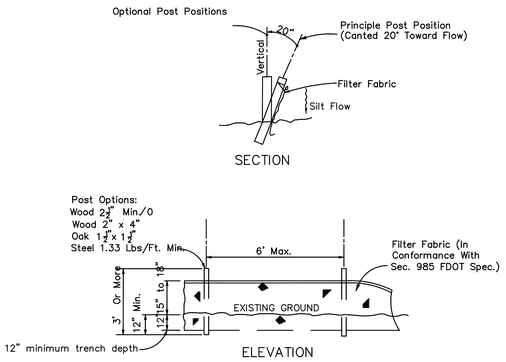
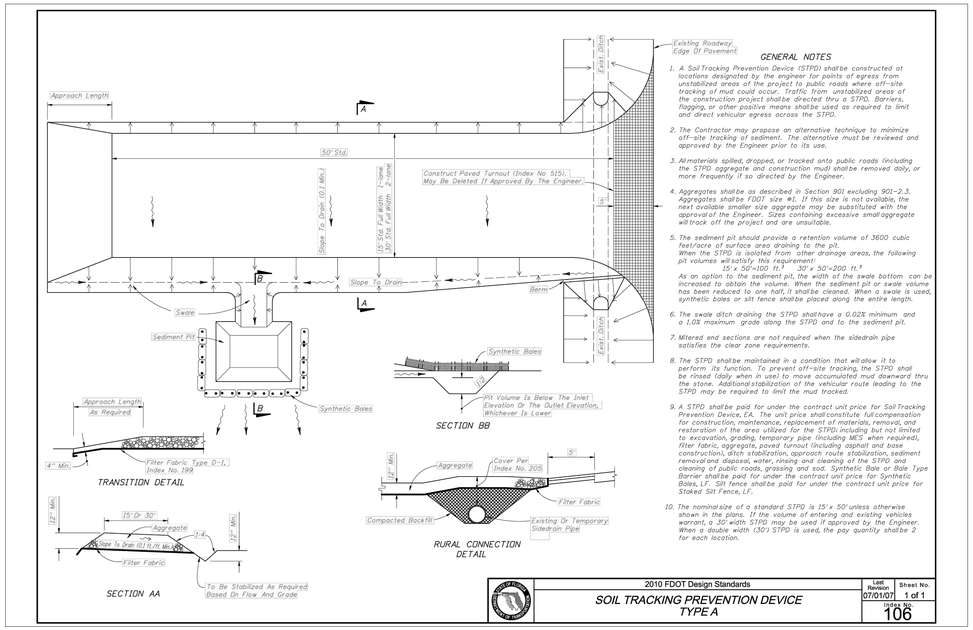
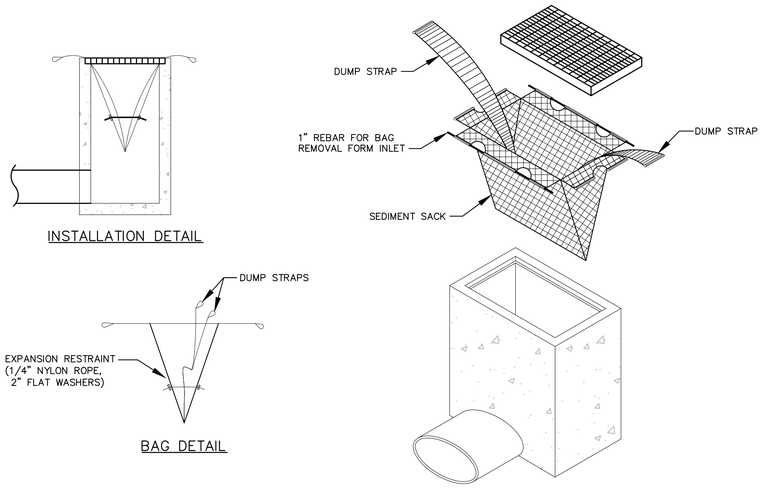
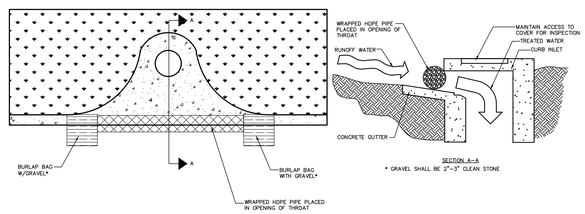


TYPE III SILT FENCE
NTS





STANDARD INLET SEDIMENT CONTROL DEVICE
NTS



SOCK DRAIN INLET SEDIMENT FILTER
NTS

NOTE: THE PERFORATED PIPE MUST EXTEND AT LEAST 1' BEYOND THE CURB OPENING ON EACH SIDE AND BE ANCHORED WITH GRAVEL BAGS, OR SIMILAR, ON EACH END. A SPACER MUST BE PROVIDED FOR BETWEEN THE INLET OPENING AND THE PIPE TO ALLOW FOR OVERFLOW, PREVENT FLOODING AND TO PREVENT THE PIPE FROM FALLING INTO THE INLET.

Always call 811 two full business days before you dig to have underground utilities located and marked.

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No.	REVISIONS	DATE	BY
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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
JORDAN D. RAPER
LICENSE NO. 6667015
STATE OF FLORIDA
PROFESSIONAL ENGINEER
JORDAN D. RAPER
LICENSE NUMBER 84602
PROFESSIONAL ENGINEER
DATE:

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

EROSION CONTROL DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C2.1

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C2.1 – EROSION CONTROL DETAILS.dwg C2.1 – EROSION CONTROL DETAILS Jul 22, 2024 4:45pm by: griffin.bailey
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Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C3.0 - EXISTING CONDITIONS PLAN.dwg C3.0 - EXISTING CONDITIONS AND DEMOLITION PLAN Jul 22, 2024 4:46pm by: griffin.bailey
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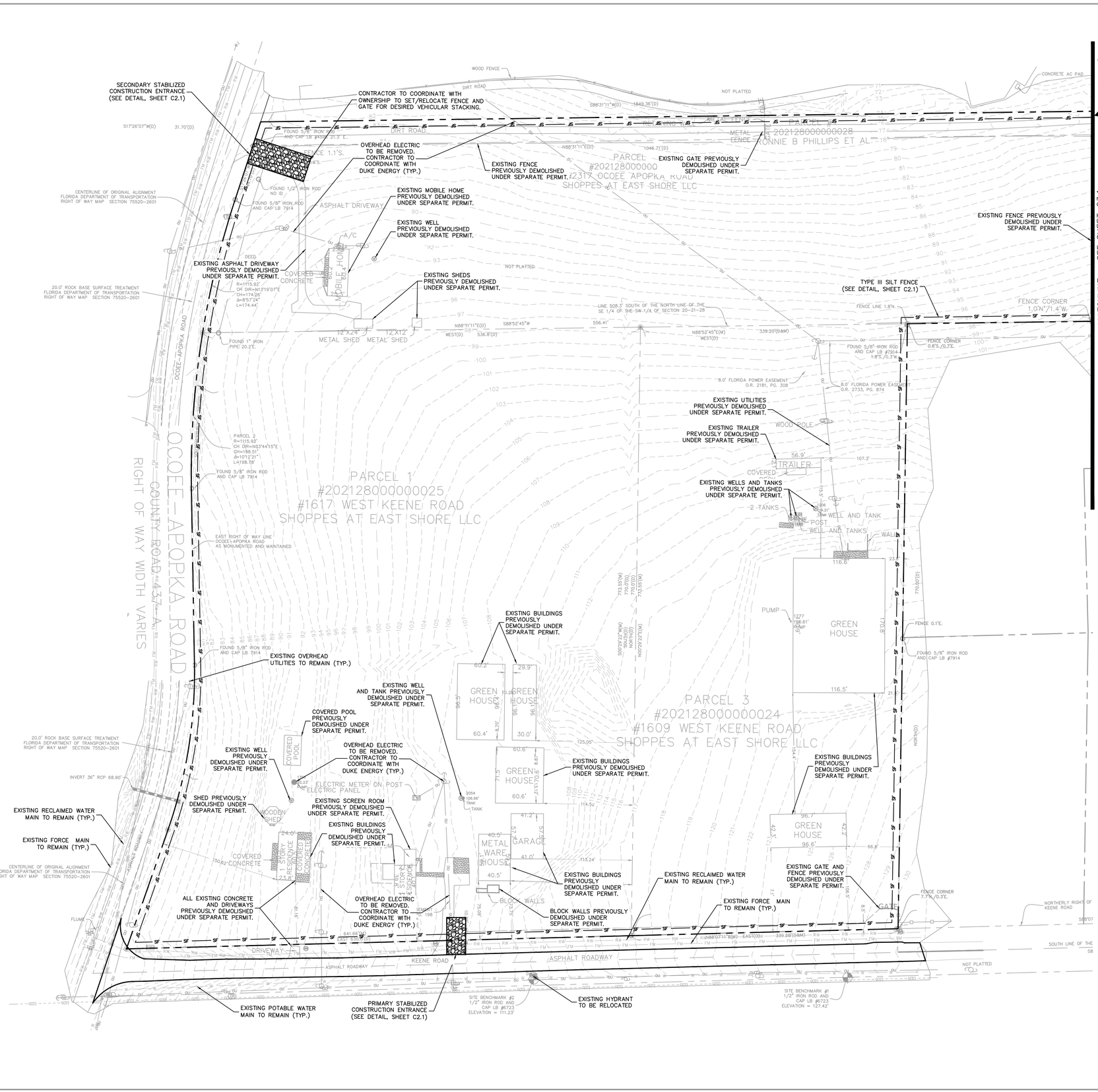

FLOOD ZONE:

BASED ON FEMA FLOOD MAP 12095C0120F, DATED SEPTEMBER 25, 2009 SHOWS THE SUBJECT PROPERTY IS LOCATED WITHIN ZONE X AREAS OUTSIDE THE FLOODPLAIN WITH A PORTION LYING IN ZONE AE (EL 70.1–NAVD88) AT LAKE RUTHERFORD.

LEGEND

- PROPERTY LINE
- EXISTING WETLAND BOUNDARY
- EXISTING FEMA FLOOD PLAIN
- EXISTING POTABLE WATER MAIN
- EXISTING RECLAIMED WATER MAIN
- EXISTING FORCE MAIN
- EXISTING OVERHEAD UTILITIES
- EXISTING WETLAND
- TYPE III SILT FENCE (SEE DETAIL, SHEET C2.1)
- STABILIZED CONSTRUCTION ENTRANCE (SEE DETAIL, SHEET C2.1)

NOTES:

1. CONTRACTOR SHALL UTILIZE BEST MANAGEMENT PRACTICES AS NEEDED TO PREVENT SYSTEM POLLUTION DURING TIME OF CONSTRUCTION.
2. REFER TO SWPPP SHEET C2.0 FOR ADDITIONAL NOTES AND DETAILS.
3. PROVIDE A 6 FOOT HIGH SCREEN FENCE FOR DUST ABATEMENT ON ALL PROPERTY LINES ADJACENT TO ROADS.
4. FUGITIVE DUST – NO PERSON SHALL CAUSE, LET, SUFFER, ALLOW, OR PERMIT THE EMISSIONS OF UNCONFINED PARTICULATE MATTER FROM ANY ACTIVITY, INCLUDING VEHICULAR MOVEMENT; TRANSPORTATION OF MATERIALS; CONSTRUCTION, ALTERATION, DEMOLITION OR WRECKING; OR INDUSTRIALLY RELATED ACTIVITIES, SUCH AS LOADING, UNLOADING, STORING, OR HANDLING; WITHOUT TAKING REASONABLE PRECAUTIONS TO PREVENT SUCH EMISSIONS INCLUDING BUT NOT LIMITED TO APPLICATION OF WATER, DUST SUPPRESSANTS, PLANTING OF VEGETATION, POINT OF ACTIVITY CONTROLS (HOODS, FILTERS, ETC) AND OTHER MEASURES.
5. USE CAUTION TO PREVENT EROSION DURING CONSTRUCTION ALONG THE BOUNDARY OF THE PROPERTY, INTO WETLANDS AND BUFFERS, AND INTO ALL DRAINAGE FACILITIES AND DITCHES. CONSTRUCTION WILL REQUIRE BEST MANAGEMENT PRACTICES (BMPS) FOR EROSION CONTROL.
6. INSTALL AND MAINTAIN SILT FENCE AT LIMITS OF CONSTRUCTION. SEE DETAIL SHEET C2.1.
7. PROVIDE SOIL TRACKING PREVENTION DEVICE AT ALL CONSTRUCTION ACCESS POINTS. SEE DETAIL SHEET C2.1.
8. THE SITE SHALL BE STABILIZED FOLLOWING CLEARING, GRUBBING, EARTH WORK OR MASS GRADING TO ESTABLISH A DENSE STAND OF GRASS, OR SHALL INCORPORATE OTHER APPROVED BEST MANAGEMENT PRACTICES, ON ALL DISTURBED AREAS IF DEVELOPMENT DOES NOT BEGIN WITHIN 7 DAYS. FINAL STABILIZATION SHALL ACHIEVE 100% COVERAGE AND A MINIMUM OF 70% DENSITY OF THE DISTURBED LAND AREA AND SHALL INCLUDE A MAINTENANCE PROGRAM TO ENSURE MINIMUM COVERAGE SURVIVAL AND OVERALL SITE STABILIZATION UNTIL SITE DEVELOPMENT.
9. UTILIZE PERFORATED SOCK DRAIN (OR EQUIVALENT) IN FRONT OF EXISTING/PROPOSED CURB INLETS ADJACENT TO CONSTRUCTION ACTIVITIES. SEE DETAIL SHEETS C2.1.
10. INSTALL AND MAINTAIN FILTER FABRIC UNDER GRATES OF EXISTING/PROPOSED INLETS, SEE SHEET SHEETS C2.1.
11. PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT ALL CONSTRUCTION ACCESS POINTS.
12. THE RIGHT-OF-WAY AND ADJACENT PROPERTIES SHALL BE RESTORED TO EQUAL OR BETTER CONDITIONS.
13. CONTRACTOR TO VERIFY EXISTING COVER OVER ALL UTILITIES BEFORE START OF CONSTRUCTION AND TO COORDINATE WITH THE ENGINEER OF RECORD PRIOR TO START OF CONSTRUCTION IF DESIGN DOES NOT PROVIDE 36" COVER.
14. ALL EXISTING STRUCTURES HAVE BEEN DEMOLISHED UNDER DEMOLITION PERMIT NO. 22004301 AND NO. 22004694, EXCEPT FOR THE NURSERY IRRIGATION LINES, NURSERY FABRIC, AND A PORTION OF THE PAVED AREAS.

VERTICAL DATUM:

ELEVATIONS BASED ON ORANGE COUNTY DATUM BENCHMARK B 082–033, ELEVATION BEING 90.23 (NAVD88)

Always call 811 two full business days before you dig to have underground utilities located and marked.

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No.	REVISIONS	DATE	BY
1	CITY OF APOPKA COMMENTS	05/25/23	JAC
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB

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JORDAN DRAPER LICENSE NUMBER 93335 STATE OF FLORIDA PROFESSIONAL ENGINEER

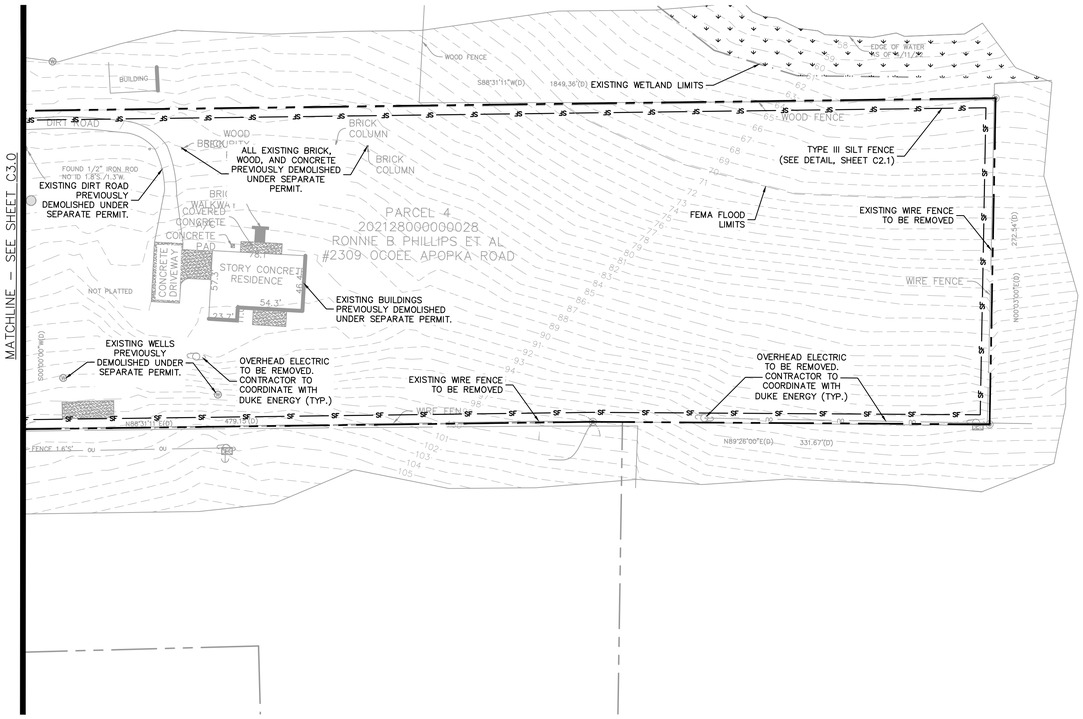
KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

EXISTING CONDITIONS AND DEMOLITION PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER C3.0



EXISTING STRUCTURES DEMOLISHED UNDER SEPARATE PERMIT. CONTRACTOR TO FIELD VERIFY REMAINING INFRASTRUCTURE TO BE DEMOLISHED.

NORTH

GRAPHIC SCALE IN FEET
0 30 60 120

FLOOD ZONE:

BASED ON FEMA FLOOD MAP 12095C0120F, DATED SEPTEMBER 25, 2009 SHOWS THE SUBJECT PROPERTY IS LOCATED WITHIN ZONE X AREAS OUTSIDE THE FLOODPLAIN WITH A PORTION LYING IN ZONE AE (EL 70.1) AT LAKE RUTHERFORD.

LEGEND

- PROPERTY LINE
- EXISTING WETLAND BOUNDARY
- EXISTING FEMA FLOOD PLAIN
- EXISTING POTABLE WATER MAIN
- EXISTING RECLAIMED WATER MAIN
- EXISTING FORCE MAIN
- EXISTING OVERHEAD UTILITIES
- EXISTING WETLAND
- TYPE III SILT FENCE (SEE DETAIL, SHEET C2.1)
- STABILIZED CONSTRUCTION ENTRANCE (SEE DETAIL, SHEET C2.1)

NOTES:

1. CONTRACTOR SHALL UTILIZE BEST MANAGEMENT PRACTICES AS NEEDED TO PREVENT SYSTEM POLLUTION DURING TIME OF CONSTRUCTION.
2. REFER TO SWPPP SHEET C2.0 FOR ADDITIONAL NOTES AND DETAILS.
3. INSTALL AND MAINTAIN SILT FENCE AT LIMITS OF CONSTRUCTION. SEE DETAIL SHEET C2.1.
4. PROVIDE SOIL TRACKING PREVENTION DEVICE AT ALL CONSTRUCTION ACCESS POINTS. SEE DETAIL SHEET C2.1.
5. UTILIZE PERFORATED SOCK DRAIN (OR EQUIVALENT) IN FRONT OF EXISTING/PROPOSED CURB INLETS ADJACENT TO CONSTRUCTION ACTIVITIES. SEE DETAIL SHEETS C2.1.
6. INSTALL AND MAINTAIN FILTER FABRIC UNDER GRATES OF EXISTING/PROPOSED INLETS, SEE SHEET SHEETS C2.1.
7. PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT ALL CONSTRUCTION ACCESS POINTS.
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VERTICAL DATUM:

ELEVATIONS BASED ON ORANGE COUNTY DATUM BENCHMARK B 082–033, ELEVATION BEING 90.23 (NAVD88)

THIS PLAN AND THE EXISTING CONDITIONS SHOWN ON THIS PLAN DO NOT SUPERSEDE OR SUBSTITUTE ANY SURVEYED INFORMATION. PLEASE REFERENCE SURVEY FOR OFFICIAL LOCATIONS AND INFORMATION OF THE EXISTING CONDITIONS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

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No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
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JORDAN DRAPER LICENSE NUMBER 71777 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

EXISTING CONDITIONS AND DEMOLITION PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C3.1

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C3.0 – EXISTING CONDITIONS PLAN.dwg C3.1 – EXISTING CONDITIONS AND DEMOLITION PLAN Jul 22, 2024 4:46pm by: griffin.bailey
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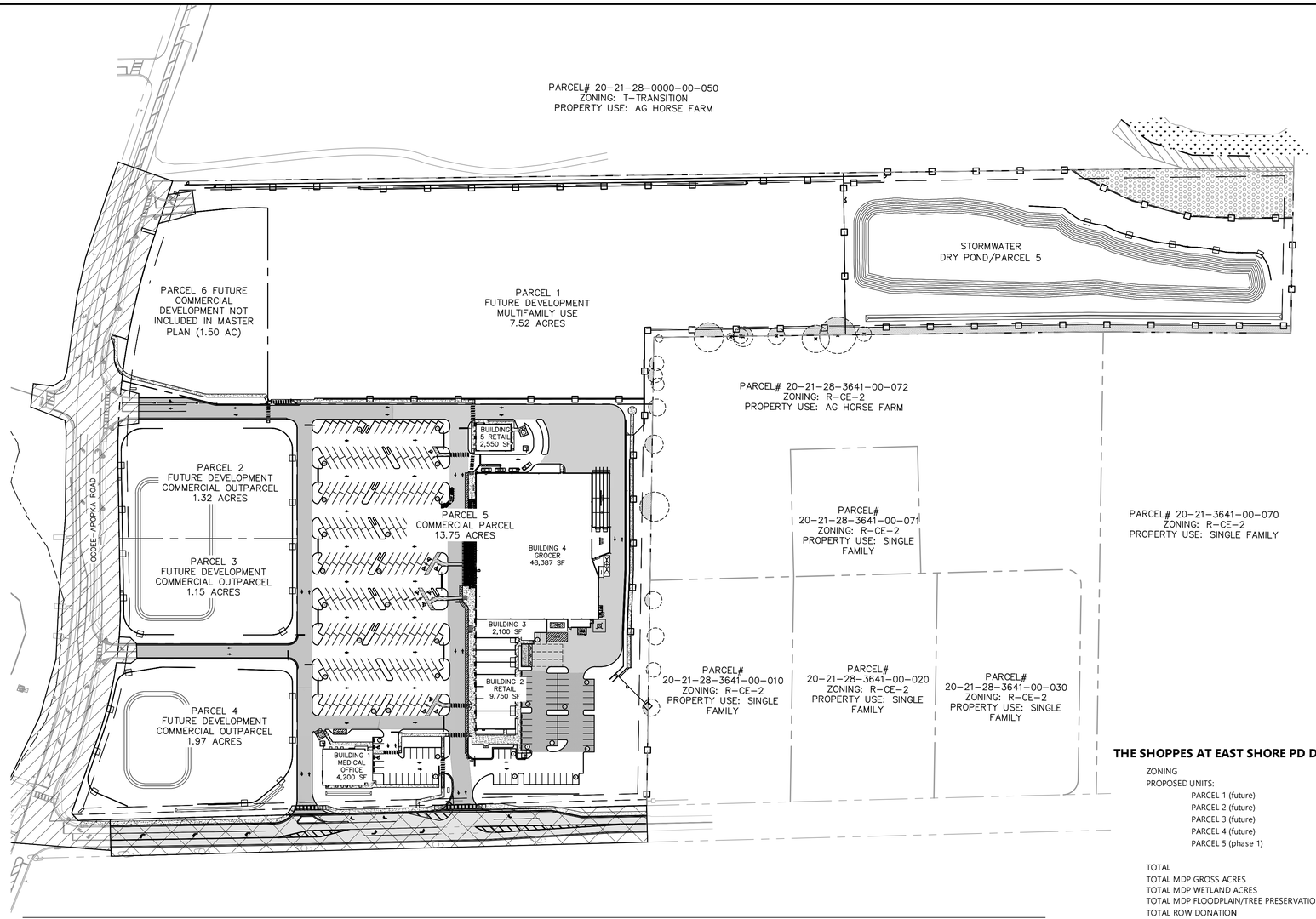

NORTH

GRAPHIC SCALE IN FEET
0 50 100 200

LEGEND

- PROPERTY LINE
- CONCRETE SIDEWALK (SEE DETAIL, SHEET C9.0)
- PROPOSED HEAVY DUTY CONCRETE PAVEMENT (SEE DETAIL, SHEET C9.0)
- PROPOSED HEAVY DUTY ASPHALT PAVEMENT (SEE DETAIL, SHEET C9.0)
- PROPOSED LIGHT DUTY ASPHALT PAVEMENT (SEE DETAIL, SHEET C9.0)
- PROPOSED PERVIOUS ASPHALT PAVEMENT SEE DETAIL, SHEET C9.0)
- OFF-SITE IMPROVEMENTS (BY OTHERS)
- TREE PRESERVATION AREA
- CRITICAL ROOT ZONE, ALL PROPOSED WORK WITHIN THIS AREA TO BE COORDINATED WITH OWNERSHIP AND ARBORIST
- WETLANDS
- PROPOSED INDUSTRIAL ALUMINUM FENCE
- EXISTING WETLAND BOUNDARY
- EXISTING FEMA FLOOD PLAIN

PARCEL 5: SITE DATA:

PARCEL ACREAGE:	13.75 ACRES
PERVIOUS AREA:	4.33 ACRES
IMPERVIOUS AREA:	7.59 ACRES
POND AREA:	1.83 ACRES
FAR:	0.13
MAX BUILDING HEIGHT:	45 FT
PROPOSED BUILDING HEIGHT:	35 FT
PARKING:	
REQUIRED:	
MEDICAL -1 SPACE/300 SF +1SPACE/EMPLOYEE:	26 SPACES
RETAIL -1 SPACE/250 SF:	51 SPACES
GROCERY-3.5 SPACE/1000 SF:	170 SPACES
	247 SPACES
PROVIDED:	
MEDICAL:	26 SPACES
RETAIL:	51 SPACES
GROCERY:	267 SPACES
PARKING PROVIDED:	
STANDARD PARKING (10'x18'):	83 SPACES
60 DEGREE SPACES (10'x18'):	246 SPACES
ADA PARKING (12'x18'):	15 SPACES
TOTAL PARKING PROVIDED:	344 SPACES
PERVIOUS PARKING:	
REQUIRED:	20% OF PROVIDED PARKING 71 SPACES OR 12,780 SF
PROVIDED:	14,947 SF
BIKE PARKING:	
PROVIDED:	24 SPACES
FAR	
MAXIMUM:	1.0
PROVIDED:	0.1

FENCES AND WALLS:
SHALL BE IN ACCORDANCE WITH THE CITY OF APOPKA LDC SECTION 5.5 AND APPROVED VARIANCES.

EXTERIOR LIGHTING:
SHALL BE IN ACCORDANCE WITH THE CITY OF APOPKA LDC SECTION 5.6.

SIGNS:
SHALL BE IN ACCORDANCE WITH MASTER SIGN PLAN AND/OR THE CITY OF APOPKA LDC SECTION 5.10.

GENERATOR SITING:
PROPOSED LOCATION OF STORAGE TANK(S) AT THE SUBJECT SITE IS NOT WITHIN 500 FEET OF ANY EXISTING COMMUNITY WATER SUPPLY WELL, NOT WITHIN 500 FEET OF ANY NON-TRANSIENT, NON-COMMUNITY WATER SUPPLY WELL, AND NOT WITHIN 100 FEET OF ANY OTHER POTABLE WATER SUPPLY WELL.

NOTES:
1. ALL CURB DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.
3. ALL RETAINING WALLS SHALL BE PRIVATELY OWNED AND MAINTAINED.
4. ALL IMPROVEMENTS WITHIN KEENE ROAD TO BE CONSTRUCTED PER APPROVED ORANGE COUNTY PLANS UNDER PERMIT #23-E-158. ALL IMPROVEMENTS WITHIN KEENE ROAD R.O.W. SHOWN FOR COORDINATION PURPOSES ONLY

UTILITY SERVICE:
CITY OF APOPKA IS THE PROVIDER FOR POTABLE WATER AND SEWER SERVICES.

STORMWATER MANAGEMENT:
STORMWATER MANAGEMENT SYSTEM WILL BE DESIGNED TO MEET CITY OF APOPKA AND THE REQUIREMENTS OF THE LOCAL WATER MANAGEMENT DISTRICT.

LANDSCAPING:
ALL LANDSCAPING SHALL MEET OR EXCEED THE REQUIREMENTS OF SECTION 5.2 OF THE CITY OF APOPKA LAND DEVELOPMENT CODE. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.

FIRE PROTECTION:
FIRE HYDRANTS SHALL BE INSTALLED SO THE DESIGN AND CALCULATIONS MEET THE REQUIREMENTS OF FFPC 6TH EDITION (NFPA 1 AND 101 2015 EDITION).

THE SHOPPES AT EAST SHORE PD DATA:

ZONING		PD	
PROPOSED UNITS:			
PARCEL 1 (future)	RESIDENTIAL	224	DU
PARCEL 2 (future)	COMMERCIAL	3,000	SF
PARCEL 3 (future)	COMMERCIAL	3,000	SF
PARCEL 4 (future)	COMMERCIAL	5,000	SF
PARCEL 5 (phase 1)	COMMERCIAL	62,782	SF
	MEDICAL OFFICE	4,200	SF
TOTAL		77,982	224 DU
TOTAL MDP GROSS ACRES		27.99	Ac.
TOTAL MDP WETLAND ACRES		0.00	Ac.
TOTAL MDP FLOODPLAIN/TREE PRESERVATION		0.54	Ac.
TOTAL ROW DONATION		0.78	Ac.
TOTAL MDP DEVELOPABLE ACRES		26.67	Ac.

DEVELOPMENT PLAN CHART		
PARCEL ID NUMBERS	20-21-28-0000-00-021, 20-21-28-0000-00-024, 20-21-28-0000-00-025, 20-21-28-0000-00-028,	
FUTURE LAND USE	MIXED USE	
ZONING	PD	
ADJACENT FUTURE LAND USE	NORTH (CITY): MIXED USE	
	EAST (COUNTY): RURAL	
	SOUTH (CITY & COUNTY): OFFICE/INSTITUTIONAL	
	WEST (CITY): MIXED USE	
ADJACENT ZONING	NORTH (CITY): MU-ES-GT (MIXED USE EAST SHORE GATEWAY)	
	EAST (COUNTY): R-CE-2 (RURAL RESIDENTIAL)	
	SOUTH (CITY & COUNTY): O (OFFICE) AND A-1 (AGRICULTURAL)	
	WEST (CITY): T (TRANSITION)	
ACREAGE/SQUARE FOOTAGE	27.99	
BUILDING HEIGHT (commercial)	PROPOSED: 35 FEET	MAX: 45'
BUILDING HEIGHT (multi-family)	PROPOSED: 55 FEET	MAX: 4 STORIES/55'
BUILDING SETBACKS (commercial)	PROPOSED: FRONT: 20' SIDE: 15' REAR: 10'	
	REQUIRED: FRONT: 15' SIDE: 10'(1) REAR: 10'	
BUILDING SETBACKS (multi-family)	PROPOSED: FRONT: 15' SIDE: 10' REAR: 25'	
	REQUIRED: FRONT: 15' SIDE: 10' REAR: 25'	
PARKING SPACES (parcel 5)	PROVIDED: 344	
	REQUIRED: 333	
NUMBER OF EMPLOYEES	N/A	
WAIVER REQUEST	YES: NO: X	
VARIANCE REQUEST	YES: NO: X	
MIN. LOT WIDTH (commercial)	75'	
MIN. LOT WIDTH (multi-family)	100'	

NOTES:
(1) MINIMUM OF 15 FT BETWEEN STRUCTURES, ONLY APPLIES TO EXTERIOR UNITS.

PUBLIC OPEN SPACE CALCULATIONS (OVERALL PD):

PARCEL	LAND USE	GROSS AREA (AC)	WETLAND/ WATER (AC)	DEVELOPABLE AREA (AC)	OPEN SPACE REQ'D %	OPEN SPACE REQ'D AC	OPEN SPACE PROVIDED PARK/REC/ OPEN/LA	OPEN SPACE PROVIDED AMENITIZED STORM	OPEN SPACE PROVIDED TOTAL
1	RESIDENTIAL	7.52	0.00	7.52	30%	2.26	TBD	0.00	
2	COMMERCIAL	1.15	0.00	1.15	20%	0.23	TBD	0.00	
3	COMMERCIAL	1.32	0.00	1.32	20%	0.26	TBD	0.00	
4	COMMERCIAL	1.97	0.00	1.97	20%	0.39	TBD	0.00	
5	COMMERCIAL	13.75	0.00	13.75	20%	2.75	3.69	0.00	3.69
6	COMMERCIAL	1.50	0.00	1.50	20%	0.30	TBD	0.00	
TOTAL		**27.21**	**0.00**	**27.21**		**5.89**	**3.69**	**0.00**	**3.69**

NOTES:
(1) TBD - TO BE DETERMINED WITH FUTURE MDP'S
(3) OPEN SPACE REQUIRED IS CALCULATED PARCEL BY PARCEL AND OPEN SPACE PROVIDED IS APPLIED OVER THE OVERALL PD.

Green Building Standards		
Minimum Points Required	4	4.0 points required for Non-Residential Developments more than 25,000 .
Item	Points	Notes
Development in the MU-ES: Mixed-Use East Shore District	1	
Elevate new and/or existing structures more than 3 feet above base flood elevation (BFE)	3	0.50 per foot above BFE 36.9 FEET ABOVE BFE
Total Recommended Potential Points	4	

PHASING:
THIS PROJECT WILL BE DEVELOPED IN PHASES. FOLLOWING CONSTRUCTION OF PHASE 1, EACH PHASE WILL HAVE SUFFICIENT INFRASTRUCTURE TO STAND ALONE.

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No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LORI A. ROCKER LICENSE NUMBER 71 STATE OF FLORIDA PROFESSIONAL ENGINEER
JORDAN D. RAPACZ LICENSE NUMBER 0090402 STATE OF FLORIDA PROFESSIONAL ENGINEER
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

OVERALL SITE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C4.0

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C4.0 - SITE PLAN.dwg C4.0 - OVERALL SITE PLAN Jul 22, 2024 4:47pm by: griffin.bolley
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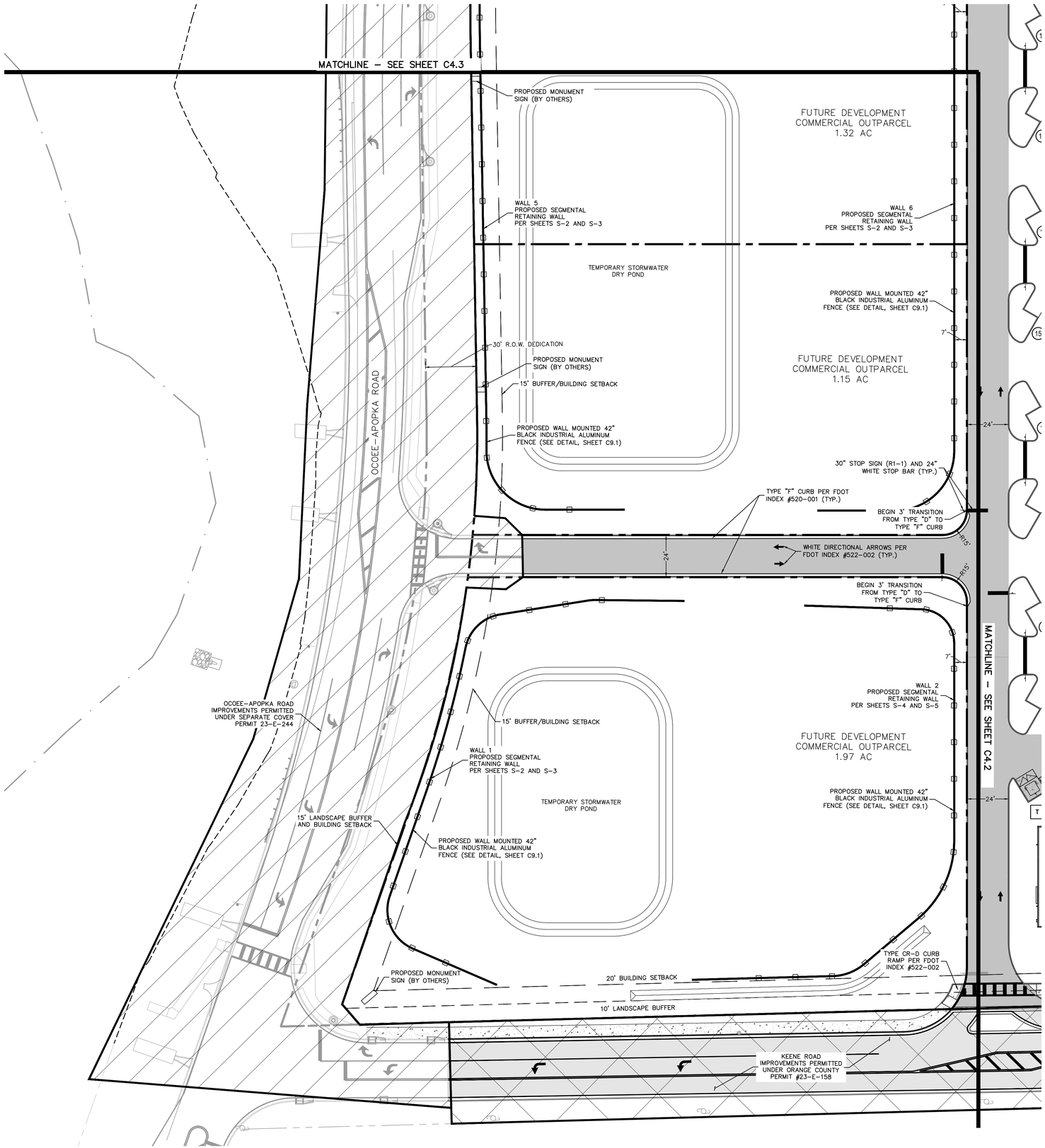
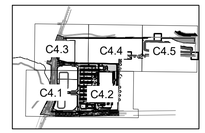


NORTH

GRAPHIC SCALE IN FEET
0 15 30 60



KEY MAP
SCALE: 1" = 1000'

LEGEND

- PROPERTY LINE
- CONCRETE SIDEWALK (SEE DETAIL, SHEET C9.0)
- PROPOSED HEAVY DUTY CONCRETE PAVEMENT (SEE DETAIL, SHEET C9.0)
- PROPOSED HEAVY DUTY ASPHALT PAVEMENT (SEE DETAIL, SHEET C9.0)
- PROPOSED LIGHT DUTY ASPHALT PAVEMENT (SEE DETAIL, SHEET C9.0)
- PROPOSED PERVIOUS ASPHALT PAVEMENT SEE DETAIL, SHEET C9.0)
- OFF-SITE IMPROVEMENTS (BY OTHERS)
- TREE PRESERVATION AREA
- CRITICAL ROOT ZONE, ALL PROPOSED WORK WTHIN THIS AREA TO BE COORDINATED WTH OWNERSHIP AND ARBORIST
- WETLANDS
- PROPOSED INDUSTRIAL ALUMINUM FENCE
- EXISTING WETLAND BOUNDARY
- EXISTING FEMA FLOOD PLAIN

NOTE:

1. ALL ON-SITE PAINT STRIPING TO BE 4" WHITE PAINT WITH A HIGH SLIP-RESISTANT FINISH.

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PHONE: 407-898-1511
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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
JORDAN D. RAPACZ, PLA
LICENSE NO. 6667307
STATE OF FLORIDA
PROFESSIONAL ENGINEER
CERTIFICATE OF AUTHORIZATION NO. 35106
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

SITE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C4.1

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C4.0 – SITE PLAN.dwg C4.1 – SITE PLAN Jul 22, 2024 4:47pm by: griffin.bolley
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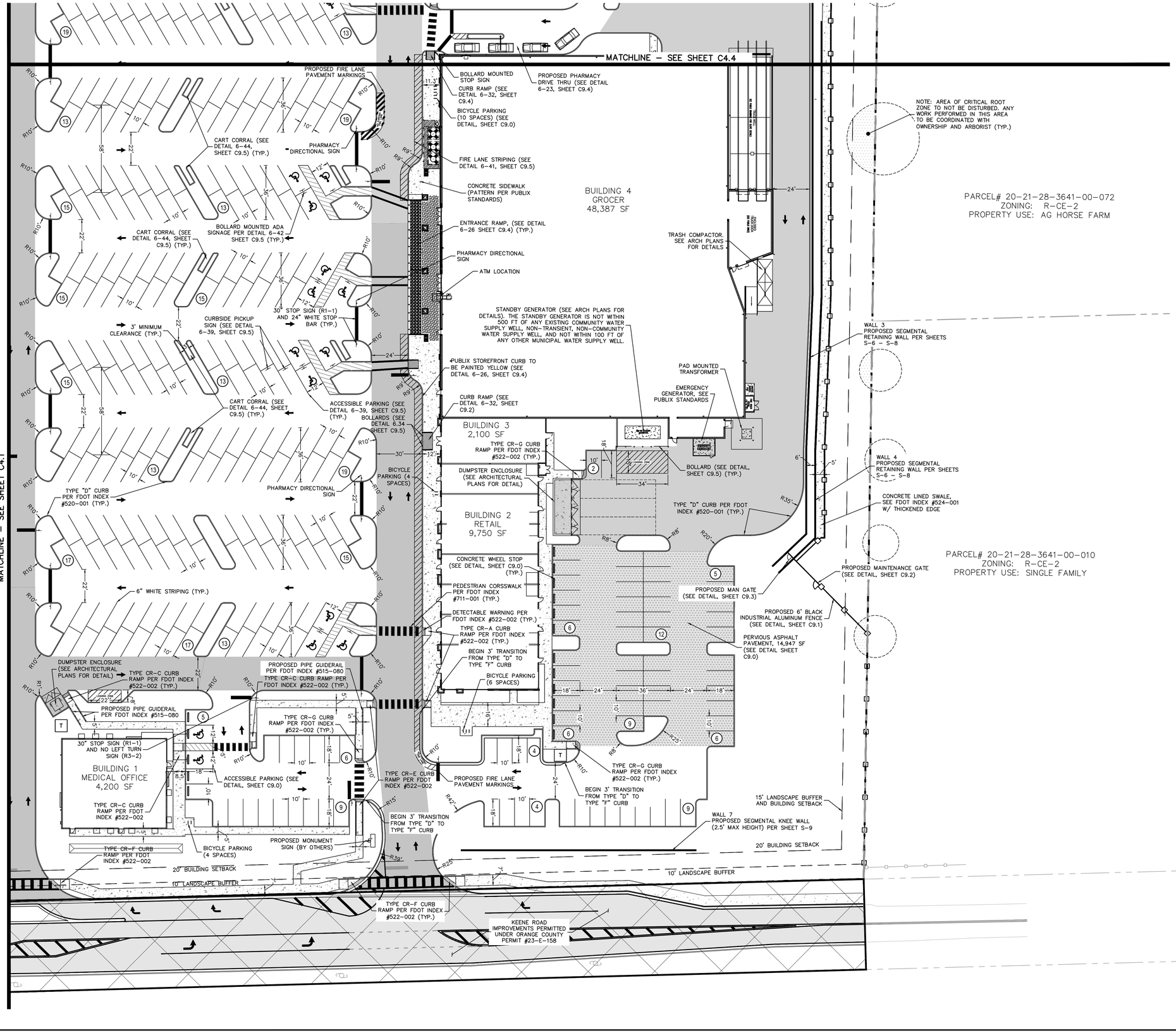
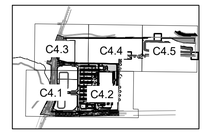


NORTH

GRAPHIC SCALE IN FEET
0 15 30 60



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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT LICENSE No. 7
JORDAN D. DRAPER
STATE OF FLORIDA
PROFESSIONAL LANDSCAPE ARCHITECT
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

SITE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C4.2

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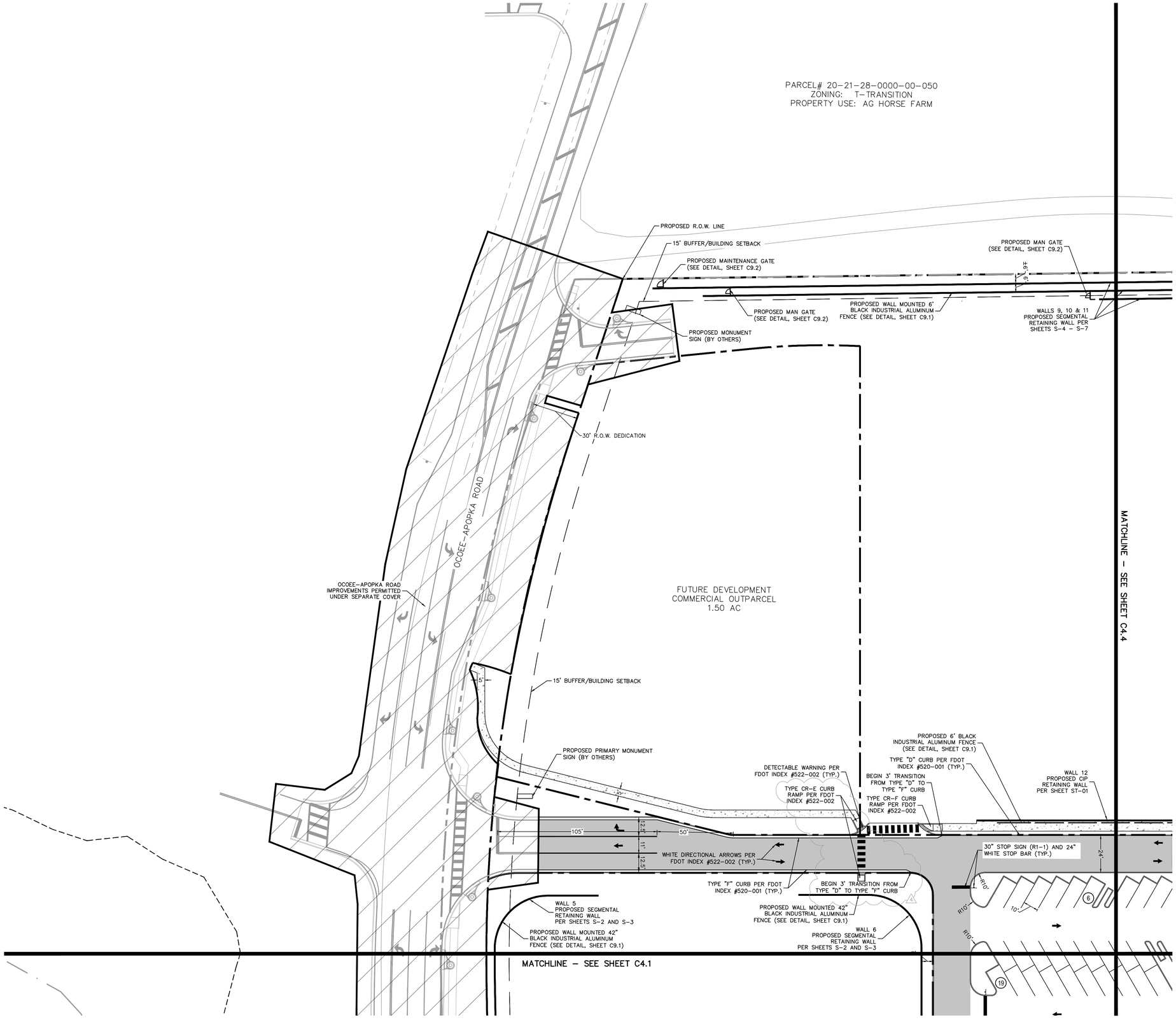

KEY MAP
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LICENSED PROFESSIONAL ENGINEER
JORDAN DRAPER
LICENSE NUMBER 94002
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: 7/23/2024

KHA PROJECT	049335015
DATE	7/23/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

SITE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C4.3

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C4.0 – SITE PLAN.dwg C4.4 – SITE PLAN Jul 22, 2024 4:49pm by: griffin.bailey
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PARCEL# 20-21-28-0000-00-050
ZONING: T-TRANSITION
PROPERTY USE: AG HORSE FARM

15' BUFFER/BUILDING SETBACK

WALLS 9, 10 & 11
PROPOSED SEGMENTAL
RETAINING WALL PER
SHEETS S-4 – S-7

PROPOSED WALL MOUNTED 6'
BLACK INDUSTRIAL ALUMINUM
FENCE (SEE DETAIL, SHEET C9.1)

PROPOSED MAN GATE
(SEE DETAIL, SHEET C9.2)

FUTURE DEVELOPMENT
MULTIFAMILY USE
7.52 AC

MATCHLINE – SEE SHEET C4.3

MATCHLINE – SEE SHEET C4.5

PROPOSED 6' BLACK
INDUSTRIAL ALUMINUM FENCE
(SEE DETAIL, SHEET C9.1)

WALL 13
PROPOSED CIP
RETAINING WALL
PER SHEET ST-02

NOTE: AREA OF CRITICAL ROOT
ZONE TO NOT BE DISTURBED.
ANY WORK PERFORMED IN THIS
AREA TO BE COORDINATED WITH
OWNERSHIP AND ARBORIST (TYP).

TYPE CR-C CURB
RAMP PER FDOT
INDEX #522-002

DETECTABLE WARNING PER
FDOT INDEX #522-002 (TYP.)

PEDESTRIAN CORSSWALK
PER FDOT INDEX
#711-001 (TYP.)

PROPOSED 6' BLACK
INDUSTRIAL ALUMINUM FENCE
(SEE DETAIL, SHEET C9.1)

WALL 12
PROPOSED CIP RETAINING WALL
PER SHEETS ST-01 AND ST-02

30" STOP SIGN (R1-1) AND 24"
WHITE STOP BAR (TYP.)

PHARMACY DIRECTIONAL SIGN

DUMPSTER ENCLOSURE
(SEE ARCHITECTURAL
PLANS FOR DETAIL)

TYPE CR-L CURB
RAMP PER FDOT INDEX
#522-002 (TYP.)

BUILDING 5
RETAIL
2,550 SF

TYPE "D" CURB PER FDOT
INDEX #520-001 (TYP.)

ROPOSED CART
CORRAL (TYP.)

6" WHITE STRIPING (TYP.)

TYPE CR-F CURB
RAMP PER FDOT INDEX
#522-002 (TYP.)

BICYCLE PARKING
(4 SPACES) SEE
DETAIL SHEET C9.0

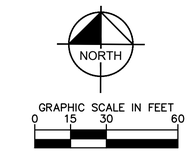
MATCHLINE – SEE SHEET C4.2

PARCEL# 20-21-28-3641-00-072
ZONING: R-CE-2
PROPERTY USE: AG HORSE FARM

PROPOSED 6' BLACK
INDUSTRIAL ALUMINUM FENCE
(SEE DETAIL, SHEET C9.1)

CONCRETE LINED SWALE,
SEE FDOT INDEX #524-001
W/ THICKENED EDGE

PROPOSED MAN GATE
(SEE DETAIL, SHEET C9.3)



KEY MAP
SCALE: 1" = 1000'

LEGEND

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- OFF-SITE IMPROVEMENTS (BY OTHERS)
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- EXISTING WETLAND BOUNDARY
- EXISTING FEMA FLOOD PLAIN

NOTE:
1. ALL ON-SITE PAINT STRIPING TO BE 4" WHITE PAINT WITH A HIGH SLIP-RESISTANT FINISH.

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No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
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LUCAS J. DRAPER
LICENSE NUMBER 73
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: 7/22/2024

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

SITE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C4.4

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MATCHLINE – SEE SHEET C4.4

PARCEL# 20-21-28-0000-00-050
ZONING: T-TRANSITION
PROPERTY USE: AG HORSE FARM

WETLAND BOUNDARY LINE

25' WETLAND BUFFER

APPROXIMATE LIMITS OF 100 YEAR FLOOD PLAIN (EL 70.1 FT)

PROPOSED MAINTENANCE GATE (SEE DETAIL, SHEET C9.2)

PROPOSED 6'X10' DOUBLE SWING VEHICULAR ACCESS GATE (SEE DETAIL, SHEET C9.2)

PROPOSED 6' BLACK INDUSTRIAL ALUMINUM FENCE (SEE DETAIL, SHEET C9.1)

PROPOSED WALL MOUNTED 42" BLACK INDUSTRIAL ALUMINUM FENCE (SEE DETAIL, SHEET C9.1)

WALL 8
PROPOSED SEGMENTAL RETAINING WALL PER SHEETS S-2 AND S-3

STORMWATER MANAGEMENT AREA
DRY POND 1

PROPOSED 6' BLACK INDUSTRIAL ALUMINUM FENCE (SEE DETAIL, SHEET C9.1)

PROPOSED 6' BLACK INDUSTRIAL ALUMINUM FENCE (SEE DETAIL, SHEET C9.1)

22'

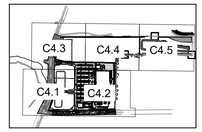
NOTE: AREA OF CRITICAL ROOT ZONE TO NOT BE DISTURBED. ANY WORK PERFORMED IN THIS AREA TO BE COORDINATED WITH OWNERSHIP AND ARBORIST (TYP.)

PARCEL# 20-21-28-3641-00-072
ZONING: R-CE-2
PROPERTY USE: AG HORSE FARM

PARCEL# 20-21-3641-00-070
ZONING: R-CE-2
PROPERTY USE: SINGLE FAMILY

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60



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Sunshine811.com

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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LUKE J. DIBBLE LICENSE NUMBER 73 STATE OF FLORIDA PROFESSIONAL ENGINEER DATE: 7/22/2024

JORDAN T. BRADDOCK LICENSED LANDSCAPE ARCHITECT

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

SITE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C4.5

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C5.0 – PAVING GRADING AND DRAINAGE PLAN.dwg C5.0 – PAVING GRADING AND DRAINAGE PLAN Jul 22, 2024 4:50pm by griffin.bailey
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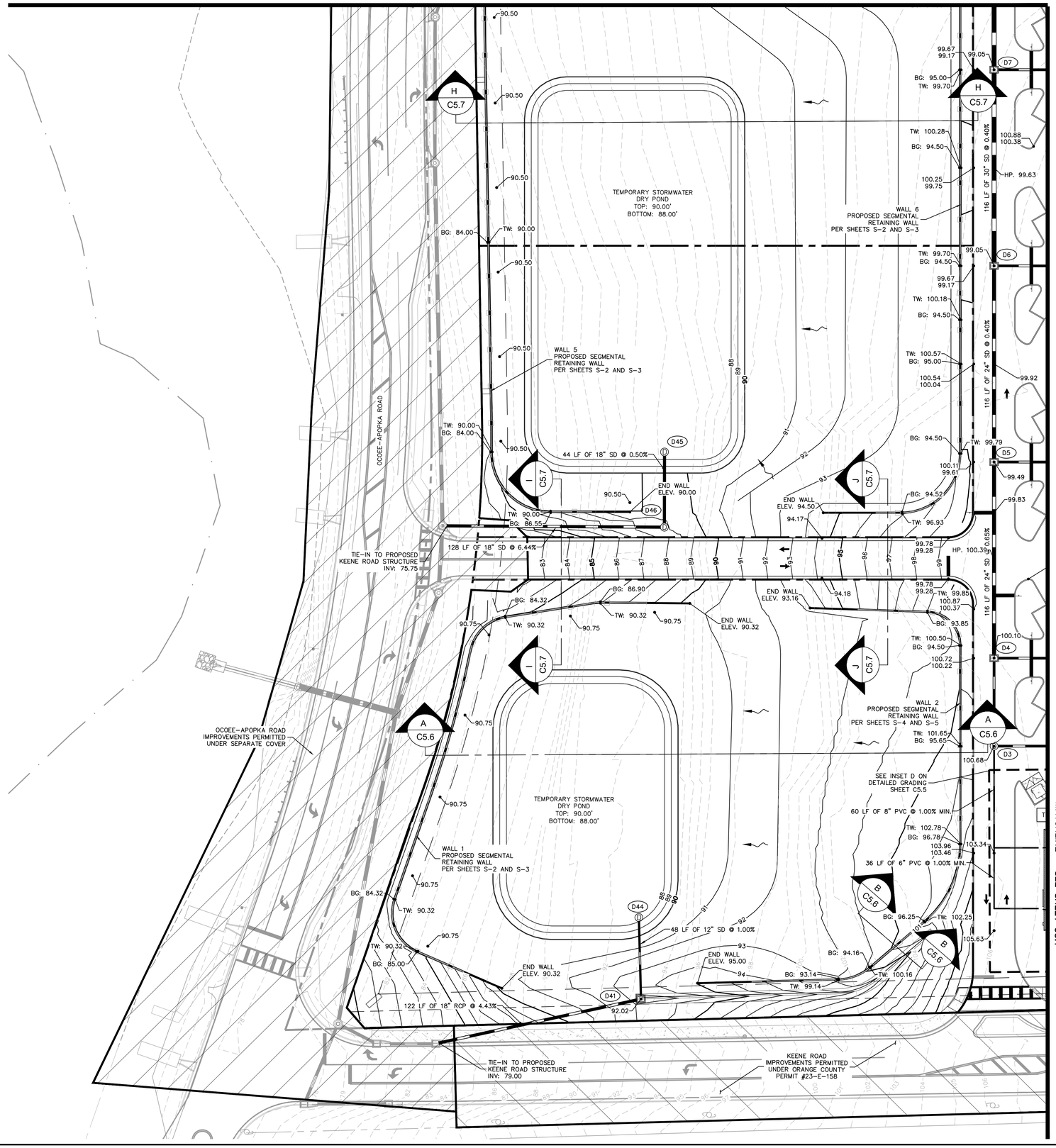

NOTES:

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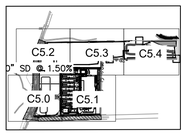
13. FOR EROSION CONTROL NOTES REFER TO SHEET C2.0.
14. CONTRACTOR TO ENSURE ADEQUATE COVER REMAINS OVER ALL EXISTING UTILITIES.
15. PROPOSED GRADE WITHIN 5' OF TOP AND BOTTOM OF PROPOSED WALLS TO BE 10:1 OR LESS, UNLESS OTHERWISE NOTED.

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D3	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 TOP: 100.68 S. INV IN: 98.16 (8" PVC) E. INV IN: 97.31 (15" SD) N. INV OUT: 97.31 (15" SD)
D4	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 100.10 S. INV IN: 96.79 (15" SD) E. INV IN: 97.31 (15" SD) N. INV OUT: 96.00 (24" SD)
D5	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 99.49 S. INV IN: 95.25 (24" SD) E. INV IN: 96.00 (15" SD) N. INV OUT: 95.25 (24" SD)
D6	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 99.05 S. INV IN: 94.79 (24" SD) E. INV IN: 95.75 (15" SD) N. INV OUT: 94.25 (30" SD)
D7	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 99.05 S. INV IN: 93.79 (30" SD) E. INV IN: 95.75 (15" SD) N. INV OUT: 93.17 (30" SD)
D41	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 92.02 N. INV IN: 84.42 (12" SD) W. INV OUT: 84.42 (18" RCP)
D44	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 W/ GRATED LID TOP: 88.50 S. INV OUT: 84.90 (12" SD)
D45	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 W/ GRATED LID TOP: 88.50 S. INV OUT: 84.25 (18" SD)
D46	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 TOP: 88.86 N. INV IN: 84.03 (18" SD) W. INV OUT: 84.03 (18" SD)

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60



KEY MAP
SCALE: 1" = 1000'

LEGEND

- EXISTING CONTOUR
- PROPOSED SURFACE ELEVATION
- PROPOSED STORM PIPE
- PROPOSED STORM INLET
- PROPOSED STORM MANHOLE
- DIRECTION OF SURFACE WATER RUNOFF
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- PROPOSED CONVEYANCE SWALE

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Sunshine811.com

No.	REVISIONS	DATE	BY
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3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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200 S. ORANGE AVENUE, SUITE 600, ORLANDO, FL 32801
PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
LICENSE NO. 7
JORDAN T. BRADDOCK JR.
STATE OF FLORIDA
PROFESSIONAL ENGINEER
LICENSE NO. 84022
DATE: 7/22/2024

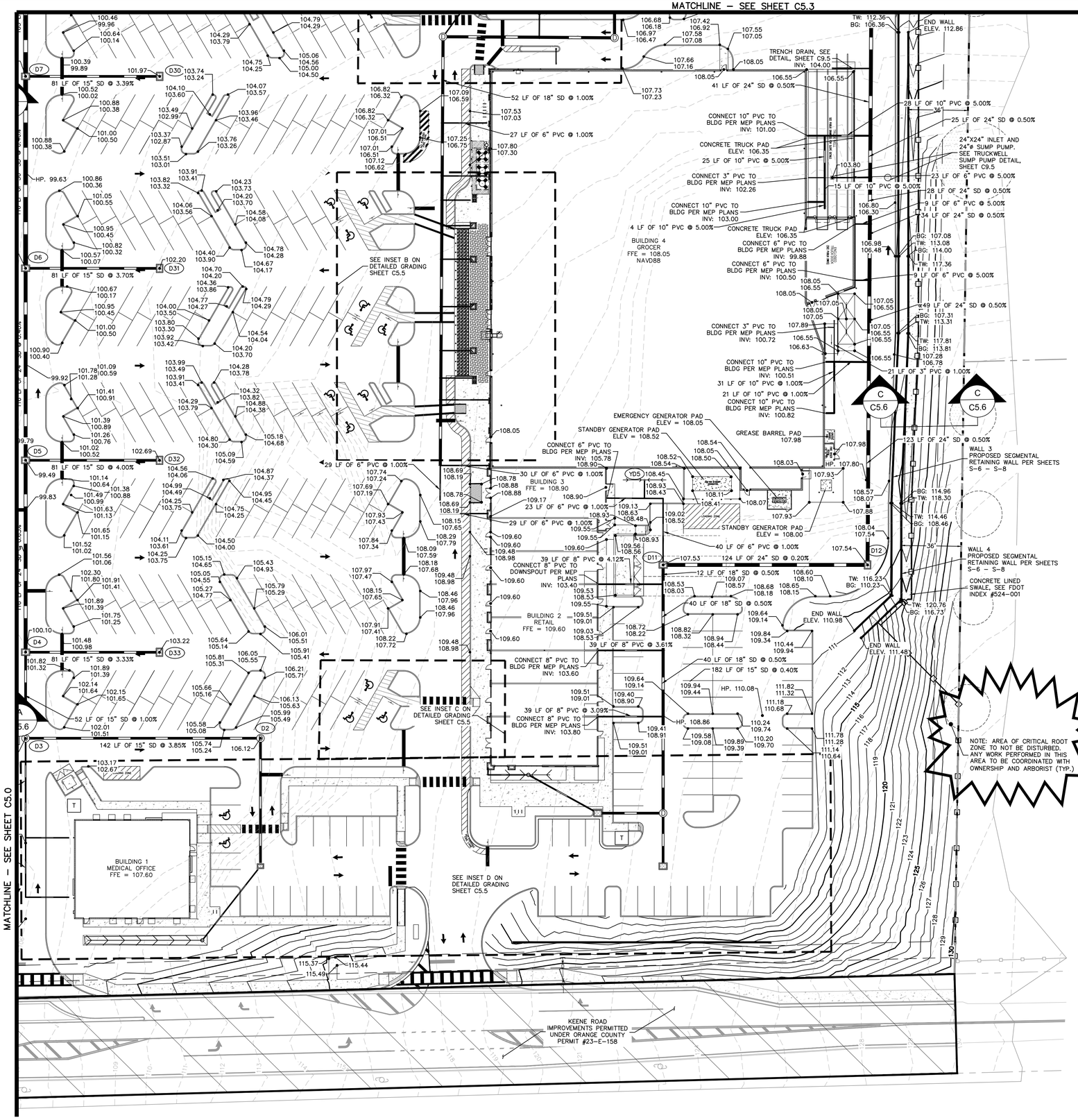
KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

PAVING GRADING AND DRAINAGE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C5.0



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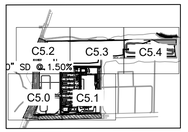
STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D2	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 TOP: 106.12 S. INV IN: 102.78 (15" SD) W. INV OUT: 102.78 (15" SD)
D11	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 107.53 S. INV IN: 103.34 (18" SD) N. INV IN: 105.27 (6" PVC) E. INV OUT: 103.34 (24" SD)
D12	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 107.54 W. INV IN: 103.09 (24" SD) N. INV OUT: 100.91 (24" SD)
D30	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 101.97 W. INV OUT: 98.50 (15" SD)
D31	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 102.20 W. INV OUT: 98.75 (15" SD)
D32	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 102.69 W. INV OUT: 99.24 (15" SD)

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D33	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 103.22 W. INV OUT: 100.00 (15" SD)
YD5	8" ADS NYLOPLAST STANDARD GRATE ASSEMBLY TOP: 107.90 S. INV OUT: 105.90 (6" PVC)

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60



KEY MAP
SCALE: 1" = 1000'

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200 S. ORANGE AVENUE, SUITE 600, ORLANDO, FL 32801
PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
JORDAN D. RAPACZ
LICENSE NO. 7
STATE OF FLORIDA
(FOR LICENSED PROFESSIONAL ENGINEER SEE SHEET C0.0)
DATE: 7/22/2024

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

PAVING GRADING AND DRAINAGE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C5.1

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C5.0 – PAVING GRADING AND DRAINAGE PLAN.dwg C5.1 – PAVING GRADING AND DRAINAGE PLAN Jul 22, 2024 4:50pm by: griffin.bailey
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Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C5.0 – PAVING GRADING AND DRAINAGE PLAN.dwg C5.2 – PAVING GRADING AND DRAINAGE PLAN Jul 23, 2024 8:34am by: Jacob Bubb
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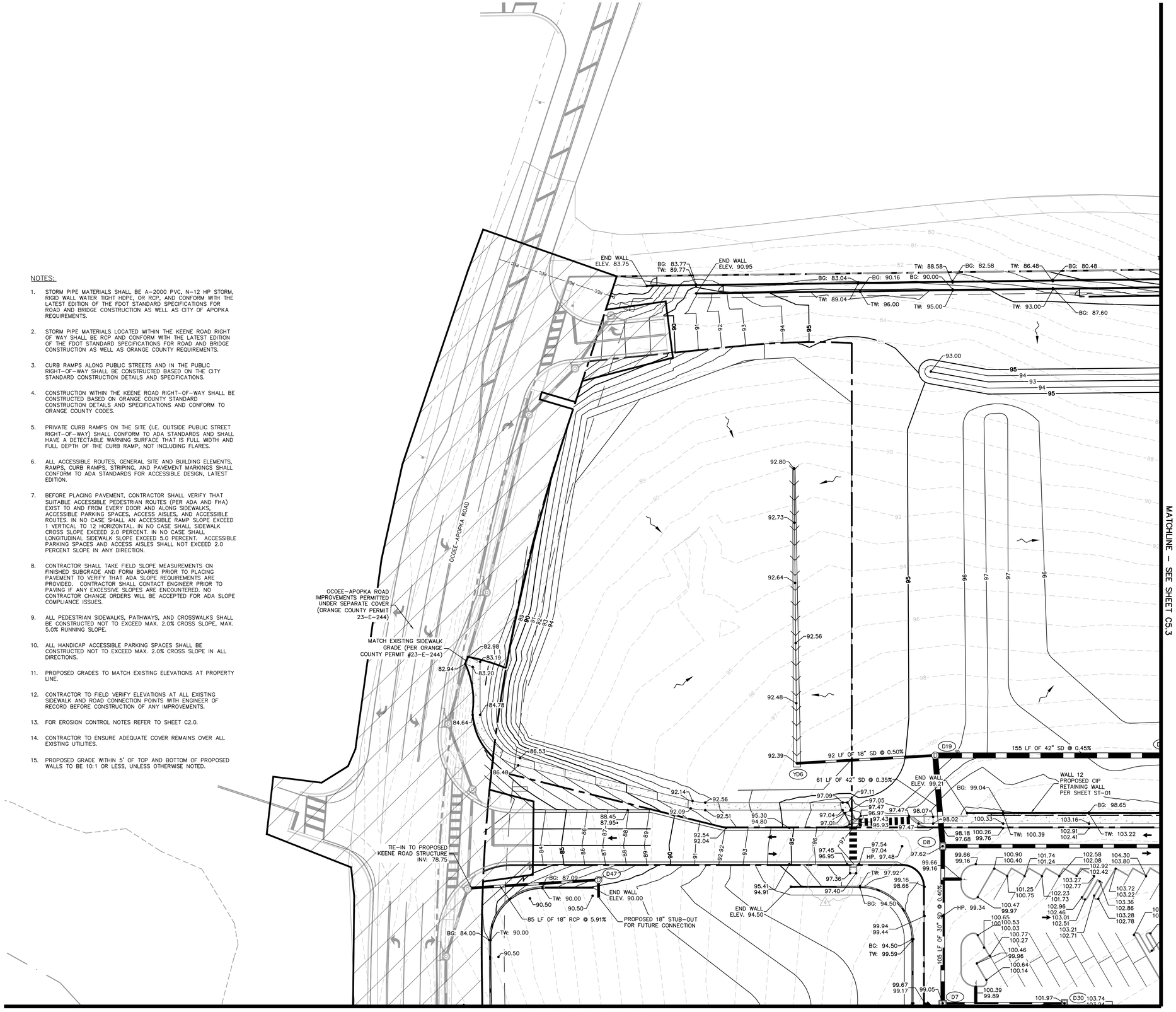

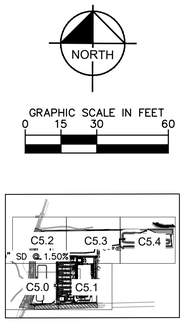

LEGEND

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STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D8	TYPE "D" INLET PER FDOT INDEX #425–052 TOP: 97.62 E. INV IN: 92.60 (30" SD) S. INV IN: 92.75 (30" SD) N. INV OUT: 89.76 (42" SD)
D19	TYPE "P7" MANHOLE PER FDOT INDEX #425–010, 022 TOP: 95.30 S. INV IN: 89.55 (42" SD) W. INV IN: 87.54 (18" SD) E. INV OUT: 87.54 (42" SD)
D47	TYPE "P7" MANHOLE PER FDOT INDEX #425–010, 022 TOP: 89.26 S. INV IN: 83.75 (18" RCP) W. INV OUT: 83.75 (18" RCP)
YD6	18" ADS NYLOPLAST DRAIN BASIN TOP: 92.39 E. INV OUT: 88.00 (18" SD)

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PHONE: 407–898–1511
WWW.KIMLEY–HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL ENGINEER
JORDAN T. JRAPKO
LICENSE NO. 77015
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: 7/23/2024

KHA PROJECT 049335015
DATE 7/23/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

PAVING GRADING AND DRAINAGE PLAN

THE SHOPPES AT EAST SHORE–PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C5.2

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C5.0 – PAVING GRADING AND DRAINAGE PLAN.dwg C5.3 – PAVING GRADING AND DRAINAGE PLAN Jul 22, 2024 4:51pm by: griffin.bailey
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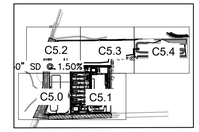
STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D9	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 TOP: 104.63 E. INV IN: 97.96 (30" SD) S. INV IN: 100.69 (18" SD) W. INV OUT: 97.96 (30" SD)
D13	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 103.28 E. INV IN: 99.73 (15" SD) S. INV IN: 98.91 (24" SD) W. INV OUT: 98.50 (30" SD)
D16	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 94.57 W. INV IN: 84.29 (48" SD) E. INV OUT: 84.29 (48" SD)
D17	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 TOP: 95.03 W. INV IN: 83.94 (48" SD) N. INV OUT: 83.94 (48" SD)
D18	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 95.19 N. INV OUT: 91.75 (15" SD)

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D20	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 94.31 W. INV IN: 86.84 (42" SD) E. INV OUT: 86.84 (42" SD)
D21	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 94.61 W. INV IN: 85.62 (42" SD) E. INV OUT: 85.62 (48" SD)
D22	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 TOP: 94.98 W. INV IN: 85.25 (48" SD) N. INV OUT: 85.25 (48" SD)
D29	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 94.56 S. INV IN: 85.01 (48" SD) E. INV OUT: 85.01 (48" SD)
D34	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 93.00 S. INV IN: 83.67 (48" SD) E. INV OUT: 83.67 (54" SD)

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D42	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 103.42
D43	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 TOP: 94.75 S. INV IN: 91.67 (15" SD) W. INV IN: 84.90 (48" SD) E. INV OUT: 84.90 (48" SD)

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60



KEY MAP
SCALE: 1" = 1000'

NOTES:

1. STORM PIPE MATERIALS SHALL BE A-2000 PVC, N-12 HP STORM, RIGID WALL WATER TIGHT HDPE, OR RCP, AND CONFORM WITH THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS WELL AS CITY OF APOPKA REQUIREMENTS.
2. STORM PIPE MATERIALS LOCATED WITHIN THE KEENE ROAD RIGHT OF WAY SHALL BE RCP AND CONFORM WITH THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS WELL AS ORANGE COUNTY REQUIREMENTS.
3. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON THE CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.
4. CONSTRUCTION WITHIN THE KEENE ROAD RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON ORANGE COUNTY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS AND CONFORM TO ORANGE COUNTY CODES.
5. PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA STANDARDS AND SHALL HAVE A DETECTABLE WARNING SURFACE THAT IS FULL WIDTH AND FULL DEPTH OF THE CURB RAMP, NOT INCLUDING FLARES.
6. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.
7. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS. ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPE EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPE EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.
8. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES.
9. ALL PEDESTRIAN SIDEWALKS, PATHWAYS, AND CROSSWALKS SHALL BE CONSTRUCTED NOT TO EXCEED MAX. 2.0% CROSS SLOPE, MAX. 5.0% RUNNING SLOPE.
10. ALL HANDICAP ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED NOT TO EXCEED MAX. 2.0% CROSS SLOPE IN ALL DIRECTIONS.
11. PROPOSED GRADES TO MATCH EXISTING ELEVATIONS AT PROPERTY LINE.
12. CONTRACTOR TO FIELD VERIFY ELEVATIONS AT ALL EXISTING SIDEWALK AND ROAD CONNECTION POINTS WITH ENGINEER OF RECORD BEFORE CONSTRUCTION OF ANY IMPROVEMENTS.
13. FOR EROSION CONTROL NOTES REFER TO SHEET C2.0.
14. CONTRACTOR TO ENSURE ADEQUATE COVER REMAINS OVER ALL EXISTING UTILITIES.
15. PROPOSED GRADE WITHIN 5' OF TOP AND BOTTOM OF PROPOSED WALLS TO BE 10:1 OR LESS, UNLESS OTHERWISE NOTED.

Always call 811 two full business days before you dig to have underground utilities located and marked.

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LEGEND

- EXISTING CONTOUR
- XX.XX PROPOSED SURFACE ELEVATION
- PROPOSED STORM PIPE
- PROPOSED STORM INLET
- PROPOSED STORM MANHOLE
- DIRECTION OF SURFACE WATER RUNOFF
- PROPOSED TYPE 6 CURB INLET
- TREE PRESERVATION AREA
- WETLANDS
- OFF-SITE IMPROVEMENTS BY OTHERS
- CRITICAL ROOT ZONE, ALL PROPOSED WORK WITHIN THIS AREA TO BE COORDINATED WITH OWNERSHIP AND ARBORIST
- PROPOSED CONVEYANCE SWALE

MATCHLINE – SEE SHEET C5.2

MATCHLINE – SEE SHEET C5.4

MATCHLINE – SEE SHEET C5.1

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT JORDAN DRAPER LICENSE No. 7 STATE OF FLORIDA

LICENSED PROFESSIONAL ENGINEER JORDAN DRAPER FL LICENSE No. 96524 STATE OF FLORIDA PROFESSIONAL ENGINEER DATE: 7/22/2024

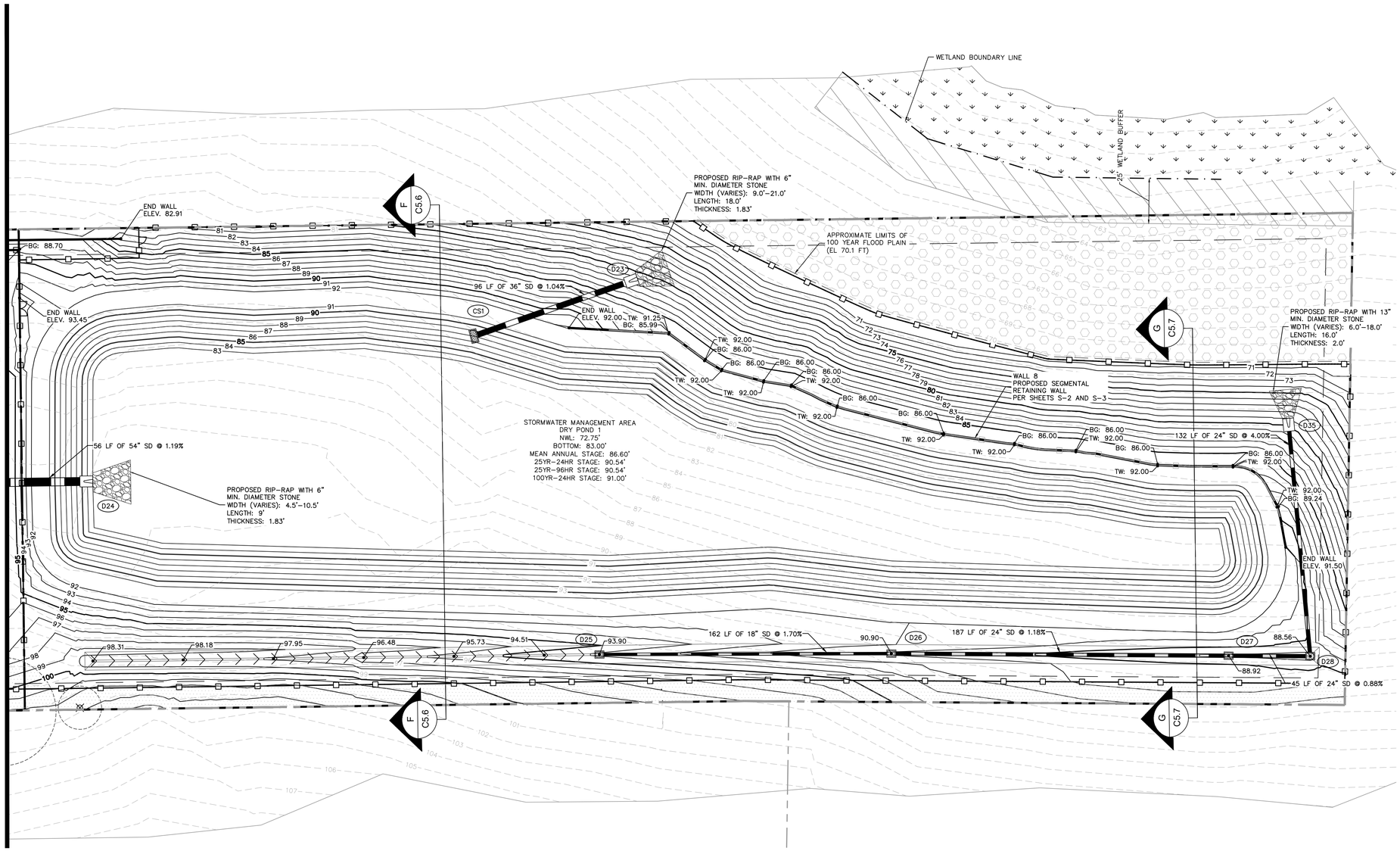
KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

PAVING GRADING AND DRAINAGE PLAN

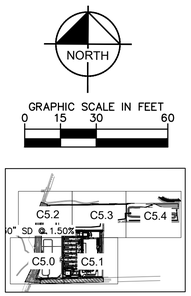
THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C5.3



STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D25	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 93.90 E. INV OUT: 90.00 (18" SD)
D26	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 90.90 W. INV IN: 87.25 (18" SD) E. INV OUT: 86.90 (24" SD)
D27	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 88.92 W. INV IN: 84.70 (24" SD) E. INV OUT: 84.70 (24" SD)
D28	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 88.56 W. INV IN: 84.30 (24" SD) N. INV OUT: 84.29 (24" SD)
D23	MITERED END SECTION PER FDOT INDEX #430-021 W. INV IN: 81.00 (36" SD)
D24	MITERED END SECTION PER FDOT INDEX #430-021 W. INV IN: 83.00 (54" SD)
D35	MITERED END SECTION PER FDOT INDEX #430-021 S. INV IN: 79.00 (24" SD)
CS1	CS-1 SEE DETAIL, SHEET C9.0



KEY MAP
SCALE: 1" = 1000'

LEGEND

- EXISTING CONTOUR
- PROPOSED SURFACE ELEVATION
- PROPOSED STORM PIPE
- PROPOSED STORM INLET
- PROPOSED STORM MANHOLE
- DIRECTION OF SURFACE WATER RUNOFF
- PROPOSED TYPE 6 CURB INLET
- TREE PRESERVATION AREA
- WETLANDS
- OFF-SITE IMPROVEMENTS BY OTHERS
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NOTES:

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No.	REVISIONS	DATE	BY
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LICENSED PROFESSIONAL ENGINEER LICENSE No. 77... STATE OF FLORIDA JORDAN D. DRAPER

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

PAVING GRADING AND DRAINAGE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C5.4

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C5.0 – PAVING GRADING AND DRAINAGE PLAN.dwg C5.4 – PAVING GRADING AND DRAINAGE PLAN Jul 22, 2024 4:51pm by: griffin.bailey
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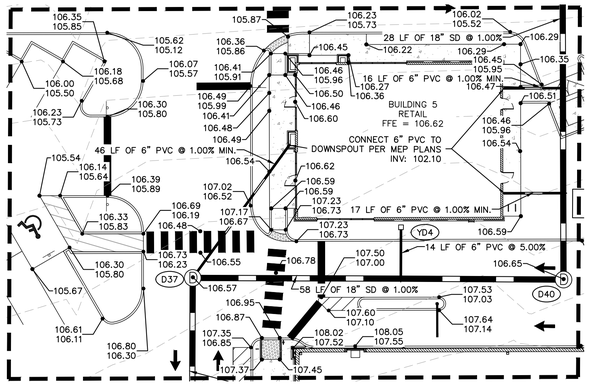
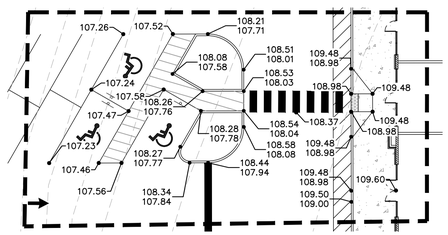
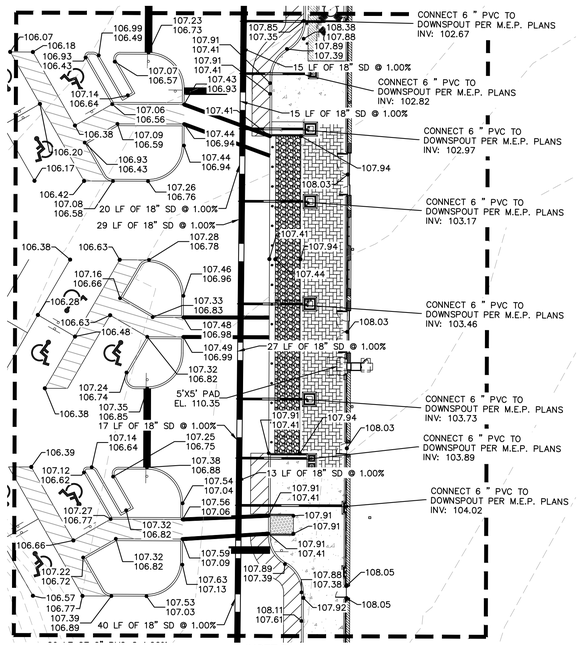


INSET A
SCALE: 1" = 20'

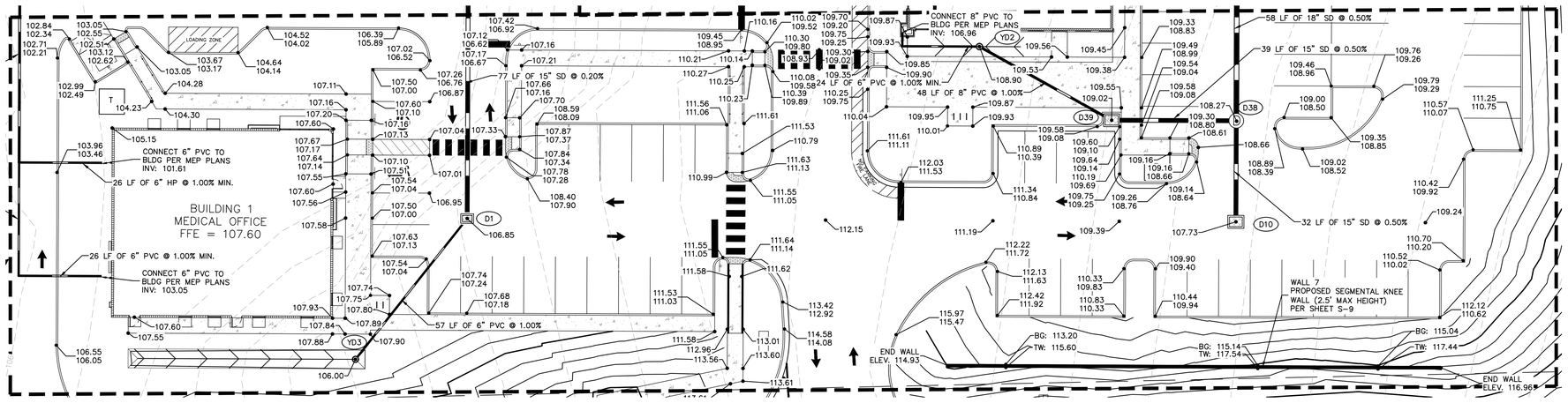
STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D37	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 TOP: 106.57 S. INV IN: 101.83 (18" SD) E. INV OUT: 103.24 (18" SD) NE. INV OUT: 104.00 (6" PVC)
D40	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 TOP: 106.65 W. INV IN: 102.20 (18" SD) N. INV OUT: 101.50 (18" SD)
YD4	8" ADS NYLOPLAST STANDARD GRATE ASSEMBLY TOP: 106.31 S. INV OUT: 103.38 (6" PVC)



INSET C
SCALE: 1" = 20'



INSET B
SCALE: 1" = 20'



INSET D
SCALE: 1" = 20'

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D1	TYPE "C" INLET PER FDOT INDEX #425-052 TOP: 106.85 SW. INV IN: 102.93 (6" PVC) N. INV OUT: 102.93 (15" SD)
D10	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 107.73 N. INV OUT: 104.25 (15" SD)
D38	TYPE "P7" MANHOLE PER FDOT INDEX #425-010, 022 TOP: 108.27 S. INV IN: 104.09 (15" SD) W. INV IN: 105.00 (15" SD) N. INV OUT: 104.09 (18" SD)
D39	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 109.02 NW. INV IN: 105.99 (8" PVC) E. INV OUT: 105.20 (15" SD)
YD2	8" ADS NYLOPLAST STANDARD GRATE ASSEMBLY TOP: 108.90 W. INV IN: 106.71 (6" PVC) SE. INV OUT: 106.47 (8" PVC)
YD3	8" ADS NYLOPLAST STANDARD GRATE ASSEMBLY TOP: 106.00 NE. INV OUT: 103.50 (6" PVC)

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- 120 — EXISTING CONTOUR
- XX.XX' PROPOSED SURFACE ELEVATION
- PROPOSED STORM PIPE
- PROPOSED STORM INLET
- PROPOSED STORM MANHOLE
- DIRECTION OF SURFACE WATER RUNOFF
- PROPOSED TYPE 6 CURB INLET
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No.	REVISIONS	DATE	BY
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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
JORDAN T. BRADDOCK
LICENSE
No. 7
STATE OF FLORIDA
PROFESSIONAL ENGINEER
JORDAN T. BRADDOCK
FLORIDA LICENSE No. 93602
DATE: 7/22/2024

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

DETAILED GRADING PLAN

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C5.5

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Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C5.0 - PAVING GRADING AND DRAINAGE PLAN.dwg C5.5 - DETAILED GRADING PLAN Jul 22, 2024 4:52pm by: griffin.bailey
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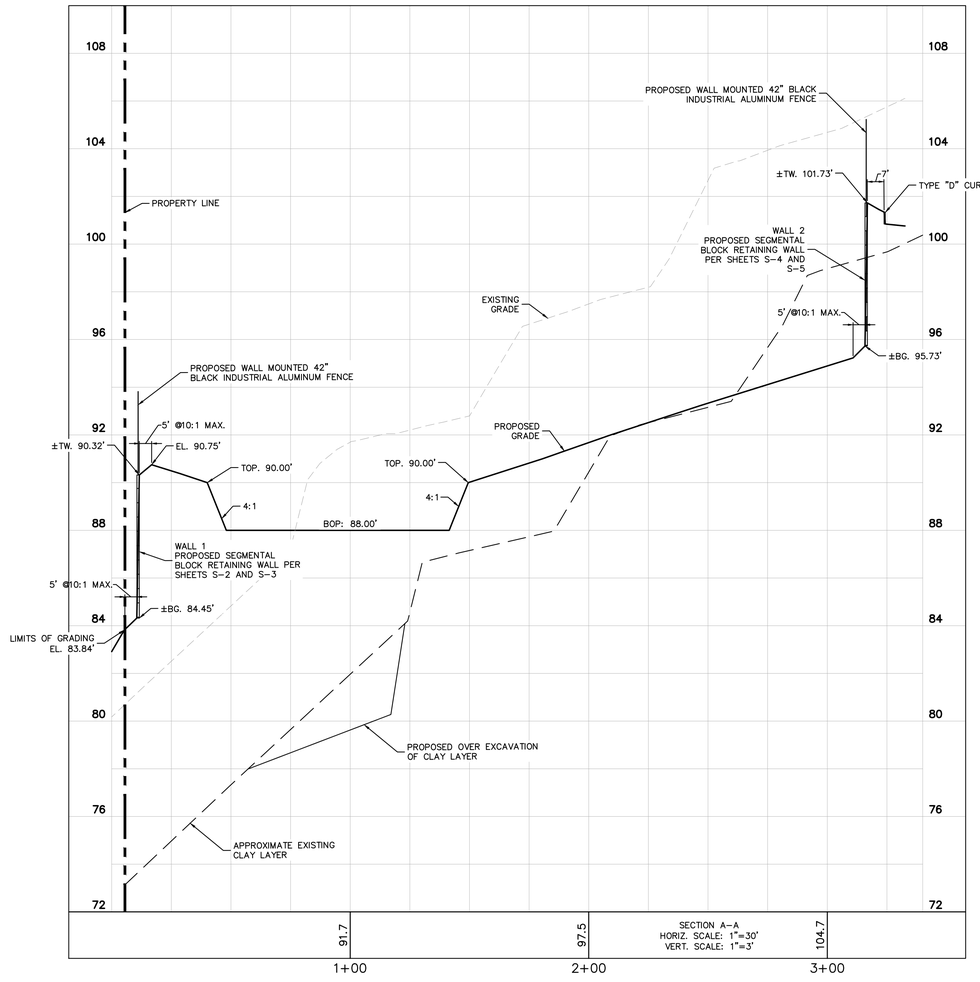

SECTION A–A
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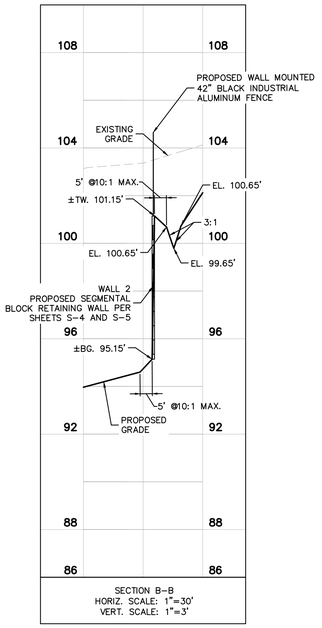
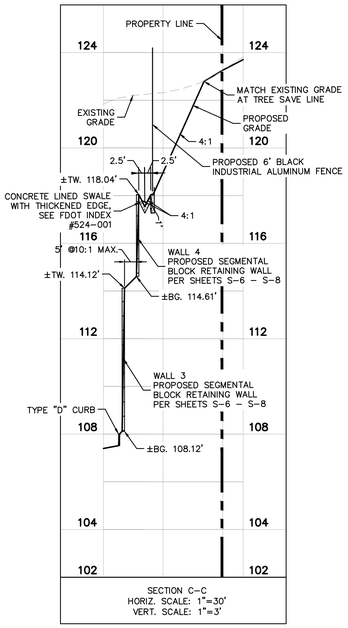
VERT. SCALE: 1"=3'



SECTION B–B
HORIZ. SCALE: 1"=30'
VERT. SCALE: 1"=3'



SECTION C–C
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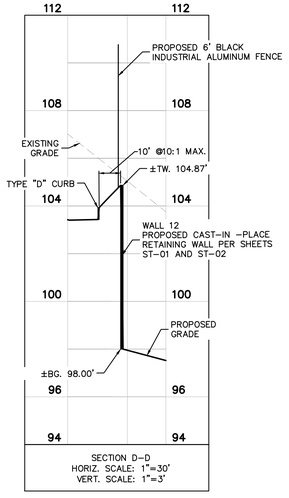
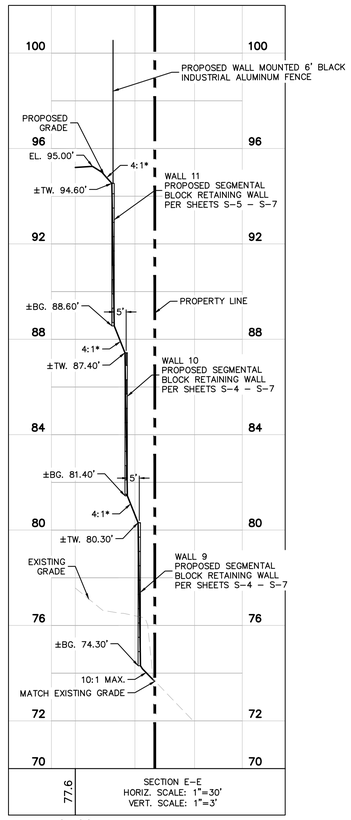
VERT. SCALE: 1"=3'

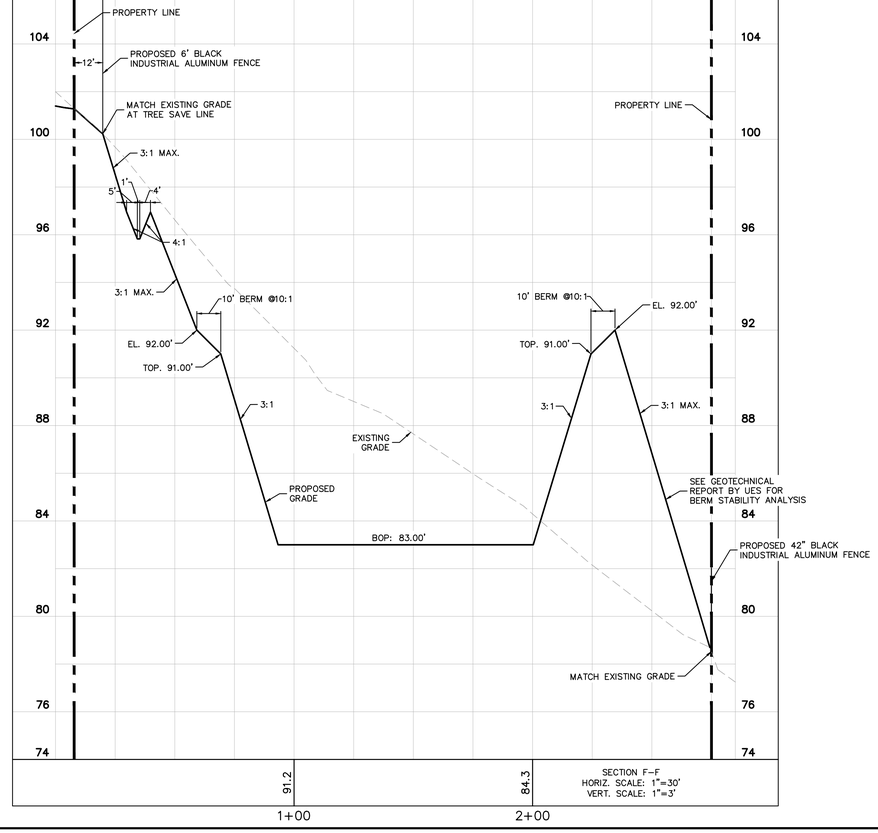


SECTION D–D
HORIZ. SCALE: 1"=30'
VERT. SCALE: 1"=3'



SECTION E–E
HORIZ. SCALE: 1"=30'
VERT. SCALE: 1"=3'

*SEE LANDSCAPE PLANS FOR SLOPE STABILIZATION MEASURES WHERE SLOPE EXCEEDS 10:1



SECTION F–F
HORIZ. SCALE: 1"=30'
VERT. SCALE: 1"=3'

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
JORDAN DRAPER PE
LICENSE NUMBER 71
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: 7/22/2024

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

CROSS SECTIONS

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C5.6

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C5.0 – PAVING GRADING AND DRAINAGE PLAN.dwg C5.6 – CROSS SECTIONS Jul 22, 2024 4:52pm by: griffin.bailey
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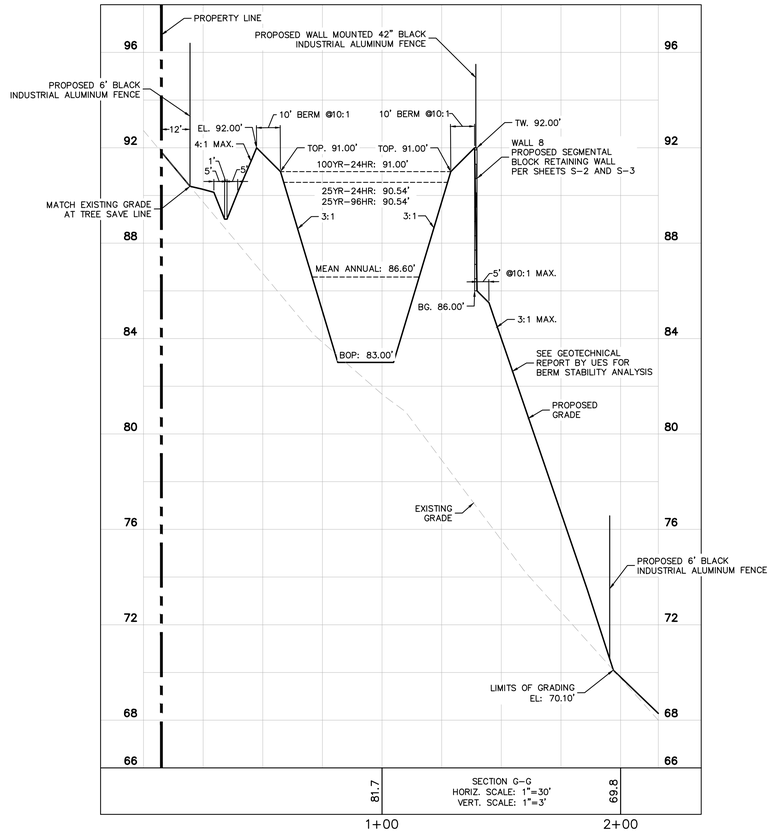

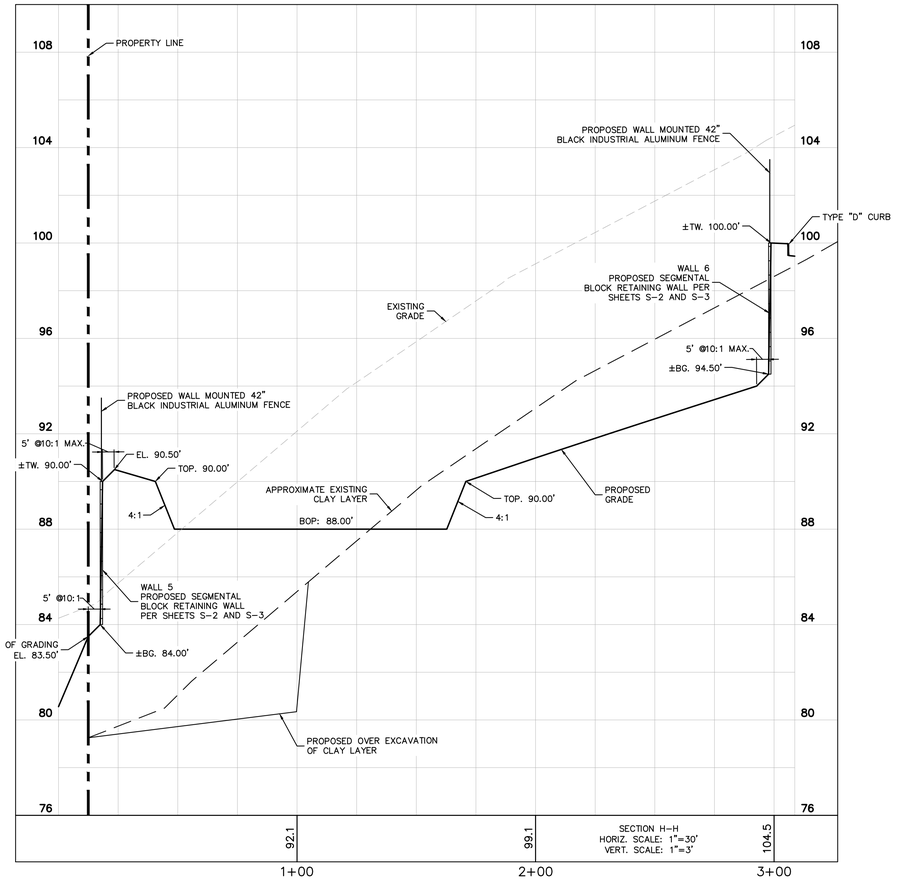

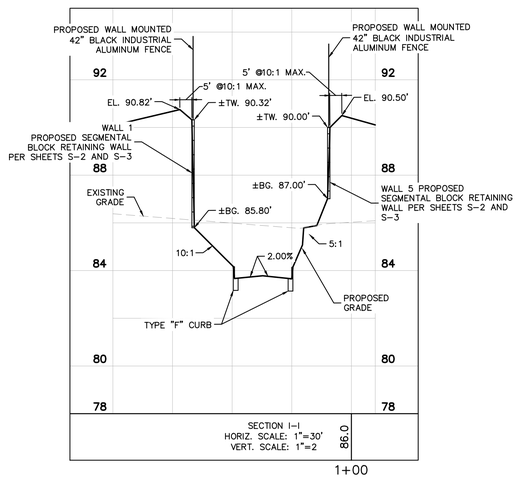

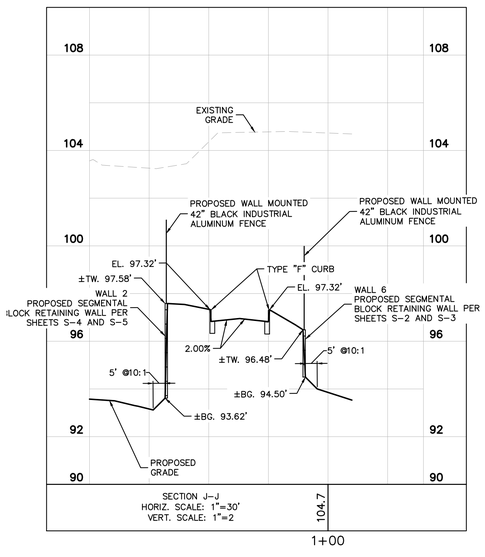

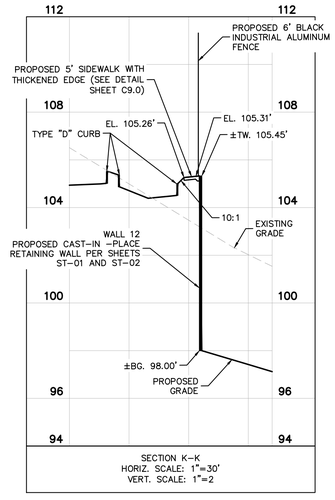

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1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT LICENSE NO. 7
STATE OF FLORIDA
JORDAN DRAPER, PLA
LICENSED LANDSCAPE ARCHITECT
PROFESSIONAL ENGINEER
DATE:

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

CROSS SECTIONS

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C5.7

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C5.0 - PAVING GRADING AND DRAINAGE PLAN.dwg C5.7 - CROSS SECTIONS Jul 22, 2024 4:53pm by: griffin.bailey
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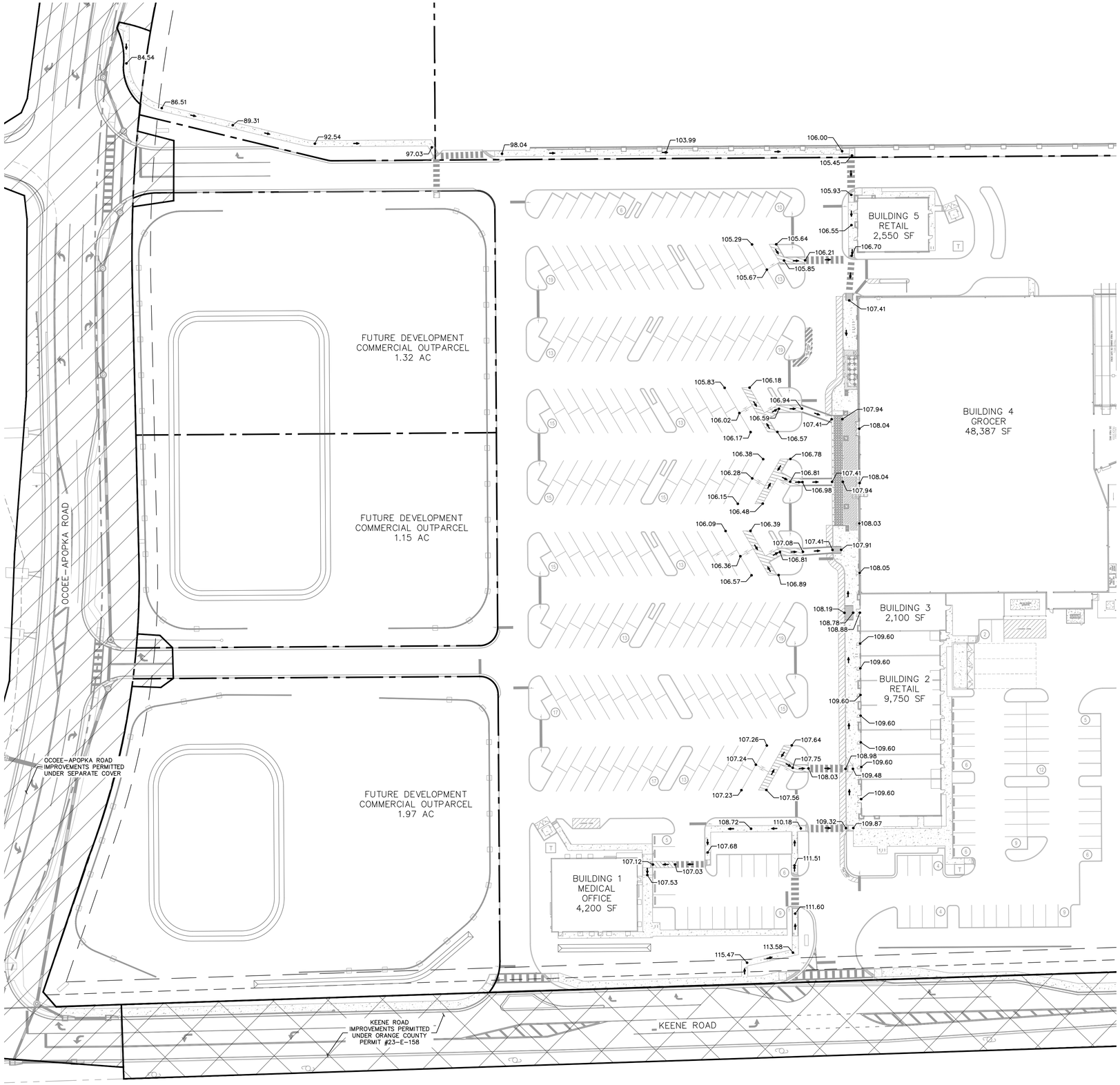
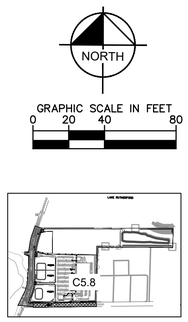




KEY MAP
SCALE: 1" = 1000'

LEGEND

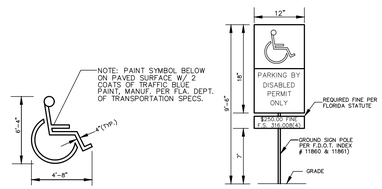
100.00 — PROPOSED ELEVATION

ACCESSIBLE ROUTE

NOTE:
1. ALL ON-SITE PAINT STRIPING TO BE 4" WHITE PAINT WITH A HIGH SLIP-RESISTANT FINISH.
2. ALL OFF-SITE STRIPING IN PUBLIC R.O.W. TO MATCH CURRENT FDOT STANDARDS.

HANDICAP PARKING CALCULATIONS:
TOTAL ACCESSIBLE PARKING PROVIDED= 12

NOTES:
1. CROSS SLOPES OF ACCESSIBLE ROUTES, ACCESSIBLE PARKING SPACES, PASSENGER LOADING ZONES, AND OTHER ACCESSIBLE FEATURES SHALL BE NO MORE THAN 2% WITH CHANGES IN LEVEL 1/2" WITH A BEVEL, OR LESS.
2. RAMPS SHALL HAVE A SLOPE NO GREATER THAN 1:14. WHERE CURB RAMPS ARE FLARED, FLARES SHALL HAVE A SLOPE NO GREATER THAN 1:14



TYPICAL SYMBOL FOR HANDICAP PKG. HANDICAP SIGN DETAIL

1. TOP PORTION OF FTP 25 & 26 SHALL HAVE A REFLECTIVE SYMBOL AND BORDER.
2. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP 25 & 26 MAY BE FABRICATED ON ONE PANEL OR TWO.
4. FTP 25 MAY BE SUBSTITUTED FOR THE FTP 26 IN AREAS WHERE SPACE IS LIMITED.
5. SIGNS ARE TO BE MOUNTED AT STANDARD HEIGHT. (7' FROM PAVEMENT TO BOTTOM OF SIGN).

Always call 811 two full business days before you dig to have underground utilities located and marked.

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4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
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LICENSED PROFESSIONAL ENGINEER
JORDAN D. RAPP
LICENSE
No. 77777
STATE OF FLORIDA
PROFESSIONAL ENGINEER
FLA. LICENSE No. 77777
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

ACCESSIBILITY PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C5.8

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C5.7-ACCESSIBILITY PLAN.dwg C5.8 – ACCESSIBILITY PLAN Jul 22, 2024 4:53pm by: griffin.bailey
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LEGEND

PROPOSED OVER EXCAVATION OF CLAY LAYER

GRAPHIC SCALE IN FEET
0 20 40 80

NORTH

SHEET NUMBER
C5.9

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

OVER EXCAVATION PLAN

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

JORDAN DRAPER LICENSE 71923 STATE OF FLORIDA PROFESSIONAL ENGINEER
JORDAN DRAPER, PE
LICENSED PROFESSIONAL ENGINEER
DATE

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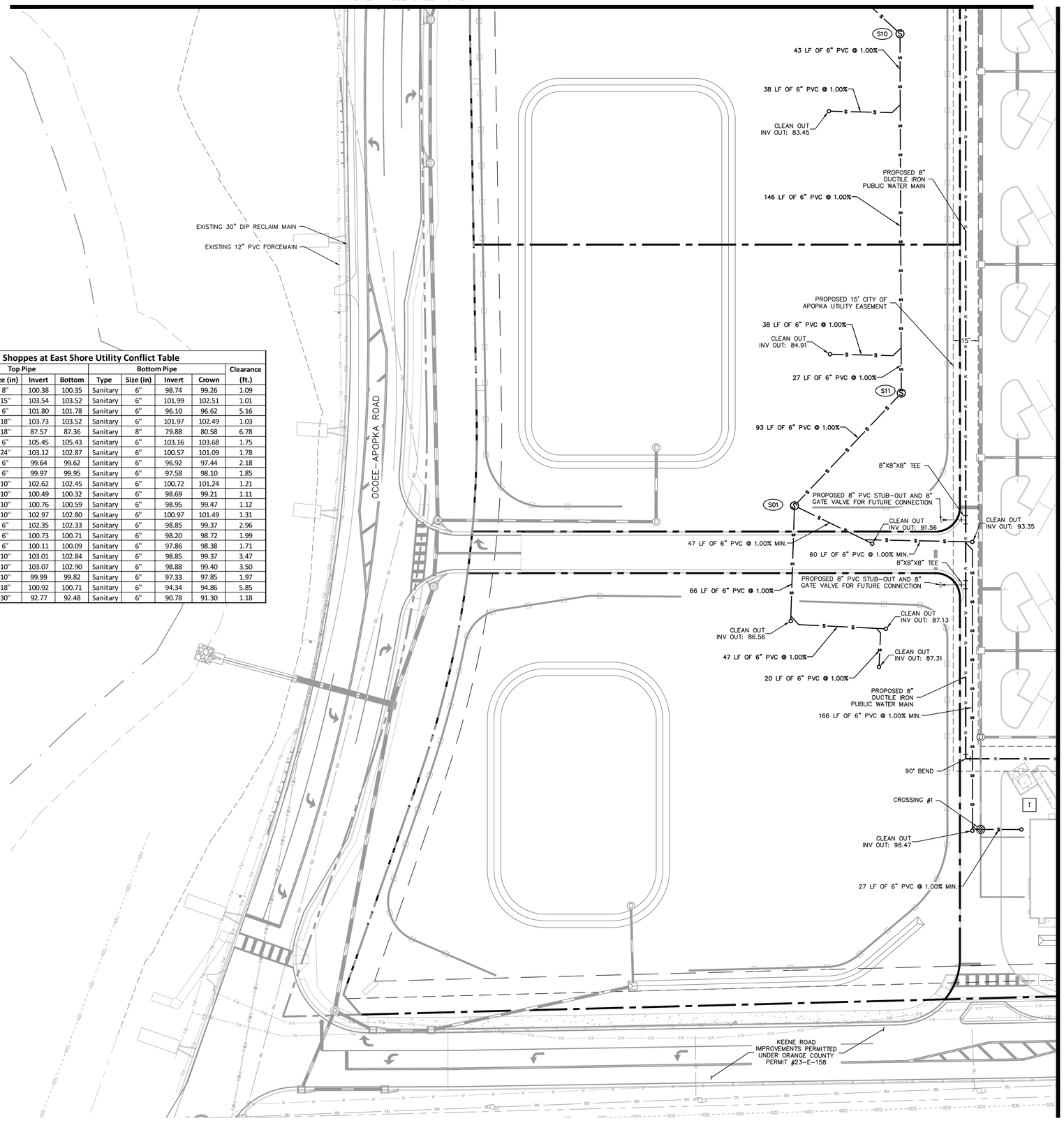
MATCHLINE – SEE SHEET C6.2



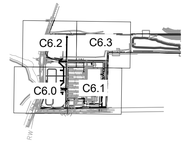
Shoppes at East Shore Utility Conflict Table

Crossing #	Top Pipe				Bottom Pipe				Clearance
	Type	Size (in)	Invert	Bottom	Type	Size (in)	Invert	Crown	(ft.)
1	Storm	8"	100.38	100.35	Sanitary	6"	98.74	99.26	1.09
2	Storm	15"	103.54	103.52	Sanitary	6"	101.99	102.51	1.01
3	Storm	6"	101.80	101.78	Sanitary	6"	96.10	96.62	5.16
4	Storm	18"	103.73	103.52	Sanitary	6"	101.97	102.49	1.03
5	Storm	18"	87.57	87.36	Sanitary	8"	79.88	80.58	6.78
6	Storm	6"	105.45	105.43	Sanitary	6"	103.16	103.68	1.75
7	Storm	24"	103.12	102.87	Sanitary	6"	100.57	101.09	1.78
8	Storm	6"	99.64	99.62	Sanitary	6"	96.92	97.44	2.18
9	Storm	6"	99.97	99.95	Sanitary	6"	97.58	98.10	1.85
10	Storm	10"	102.62	102.45	Sanitary	6"	100.72	101.24	1.21
11	Storm	10"	100.49	100.32	Sanitary	6"	98.69	99.21	1.11
12	Storm	10"	100.76	100.59	Sanitary	6"	98.95	99.47	1.12
13	Storm	10"	102.97	102.80	Sanitary	6"	100.97	101.49	1.31
14	Sanitary	6"	102.35	102.33	Sanitary	6"	98.85	99.37	2.96
15	Storm	6"	100.73	100.71	Sanitary	6"	98.20	98.72	1.99
16	Storm	6"	100.11	100.09	Sanitary	6"	97.86	98.38	1.71
17	Storm	10"	103.01	102.84	Sanitary	6"	98.85	99.37	3.47
18	Storm	10"	103.07	102.90	Sanitary	6"	98.88	99.40	3.50
19	Storm	10"	99.99	99.82	Sanitary	6"	97.33	97.85	1.97
20	Storm	18"	100.92	100.71	Sanitary	6"	94.34	94.86	5.85
21	Storm	30"	92.77	92.48	Sanitary	6"	90.78	91.30	1.18

STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
S01	DROP MANHOLE TOP: 93.98 SE. INV IN: 90.00 S. INV IN: 85.87 NE. INV OUT: 85.77
S10	SANITARY MANHOLE TOP: 93.34 S. INV IN: 82.58 NW. INV OUT: 82.48
S11	SANITARY MANHOLE TOP: 93.29 SW. INV IN: 84.84 N. INV OUT: 84.74

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60



KEY MAP
SCALE: 1" = 1000'

NOTES:

1. ALL ONSITE UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED UNLESS OTHERWISE NOTED.
2. MAINTAIN A MINIMUM OF 3-FT OF COVER OVER ALL PROPOSED UTILITIES.
3. ALL WATER MAINS, AND DOMESTIC LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF APOPKA STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL.
4. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
5. ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
6. CONTRACTOR TO CALL "SUNSHINE STATE ONE CALL OF FLORIDA" (1-800-432-4770) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
7. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/ DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE CITY OF APOPKA SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN PLANS.
8. CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.
9. CONTRACTOR TO AVOID DISRUPTION OF ANY ADJACENT TENANT'S TRAFFIC OPERATIONS, TO THE MAXIMUM EXTENT, DURING INSTALLATION OF UTILITIES. IF TRAFFIC IS TO BE OBSTRUCTED CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL PLAN WITH THE LOCAL MUNICIPALITY.
10. ALL DIMENSIONS ARE TO CENTERLINE OF PIPE OR CENTER OF MANHOLE UNLESS NOTED OTHERWISE.
11. SEE PLUMBING PLANS FOR EXACT UTILITY CONNECTION LOCATIONS AT BUILDING.
12. LIGHT POLES SHOWN FOR COORDINATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE SITE LIGHTING PLANS BY OTHERS FOR MORE INFORMATION.
13. ELECTRIC, TELEPHONE, AND OTHER DRY UTILITIES SHALL BE PLACED WITHIN CONDUIT, MEETING PRIVATE UTILITY STANDARDS, WHEN ROUTE CROSSES PAVED DRIVES AND PARKING AREAS.
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15. CONTRACTOR TO ENSURE ADEQUATE COVER REMAINS OVER ALL EXISTING UTILITIES.
16. CONTRACTOR TO VERIFY EXISTING COVER OVER ALL UTILITIES BEFORE START OF CONSTRUCTION AND TO COORDINATE WITH THE ENGINEER OF RECORD PRIOR TO START OF CONSTRUCTION IF DESIGN DOES NOT PROVIDE 36" COVER.
17. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES AT ALL POINTS OF CONNECTION TO, AND AT ALL AREAS OF CONFLICT WITH CITY OF APOPKA MAINS.
18. ALL UTILITIES (INCLUDING PUMP STATION IF APPLICABLE) LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
19. PRIOR TO INITIATING CONSTRUCTION, CONTACT THE CITY OF APOPKA AT (407) 703-1731 TO SCHEDULE A PRECONSTRUCTION MEETING. THE PRECONSTRUCTION MEETING CANNOT BE HELD UNTIL THE STAMPED PLANS ARE RELEASED BY THE BUILDING DEPARTMENT. CONSTRUCTION SHALL NOT BE PERMITTED WITHOUT A CITY OF APOPKA PRECONSTRUCTION MEETING AND SET OF STAMPED PLANS LOCATED ON THE PROJECT SITE.
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22. PRIOR TO FIRE LINE INSTALLATION, THE FLORIDA LICENSED CONTRACTOR SHALL SUBMIT LAYOUT DESIGN DRAWINGS TO THE OFFICE OF THE FIRE MARSHAL IF REQUIRED BY FLORIDA STATUE 553.79, DRAWINGS MUST BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER. THE DRAWINGS MUST SHOW ALL UNDERGROUND FIRE LINES AND COMPONENTS STARTING FROM THE "POINT OF SERVICE" AS DEFINED UNDER FLORIDA STATUE 633.102. THE DESIGN SHALL BE IN ACCORDANCE TO THE CURRENT FLORIDA FIRE PREVENTION CODE AND ALL ADOPTED NFPA CODES AND STANDARDS.
23. CONTRACTOR TO ENSURE THAT 36" CLEAR IS PROVIDED AROUND ALL FIRE HYDRANTS.

LEGEND

- F — PROPOSED FIRE LINE
- W — PROPOSED WATER LINE
- S — PROPOSED SANITARY GRAVITY LINE
- REC — PROPOSED RECLAIM LINE
- Ⓢ PROPOSED SANITARY MANHOLE
- W — EXISTING WATER LINE
- RW — EXISTING RECLAIM LINE
- FM — EXISTING FORCE MAIN
- OU — EXISTING OVERHEAD UTILITIES

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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
JORDAN DRAPER
LICENSE NUMBER 6667301
STATE OF FLORIDA
LICENSED PROFESSIONAL ENGINEER
LUIS J. DIAZ
LICENSE NUMBER 84467
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: 7/22/2024

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
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CHECKED BY	LJD

UTILITY PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C6.0

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C6.0 - UTILITY PLAN.dwg C6.0 - UTILITY PLAN Jul 22, 2024 4:54pm by: griffin.bailey
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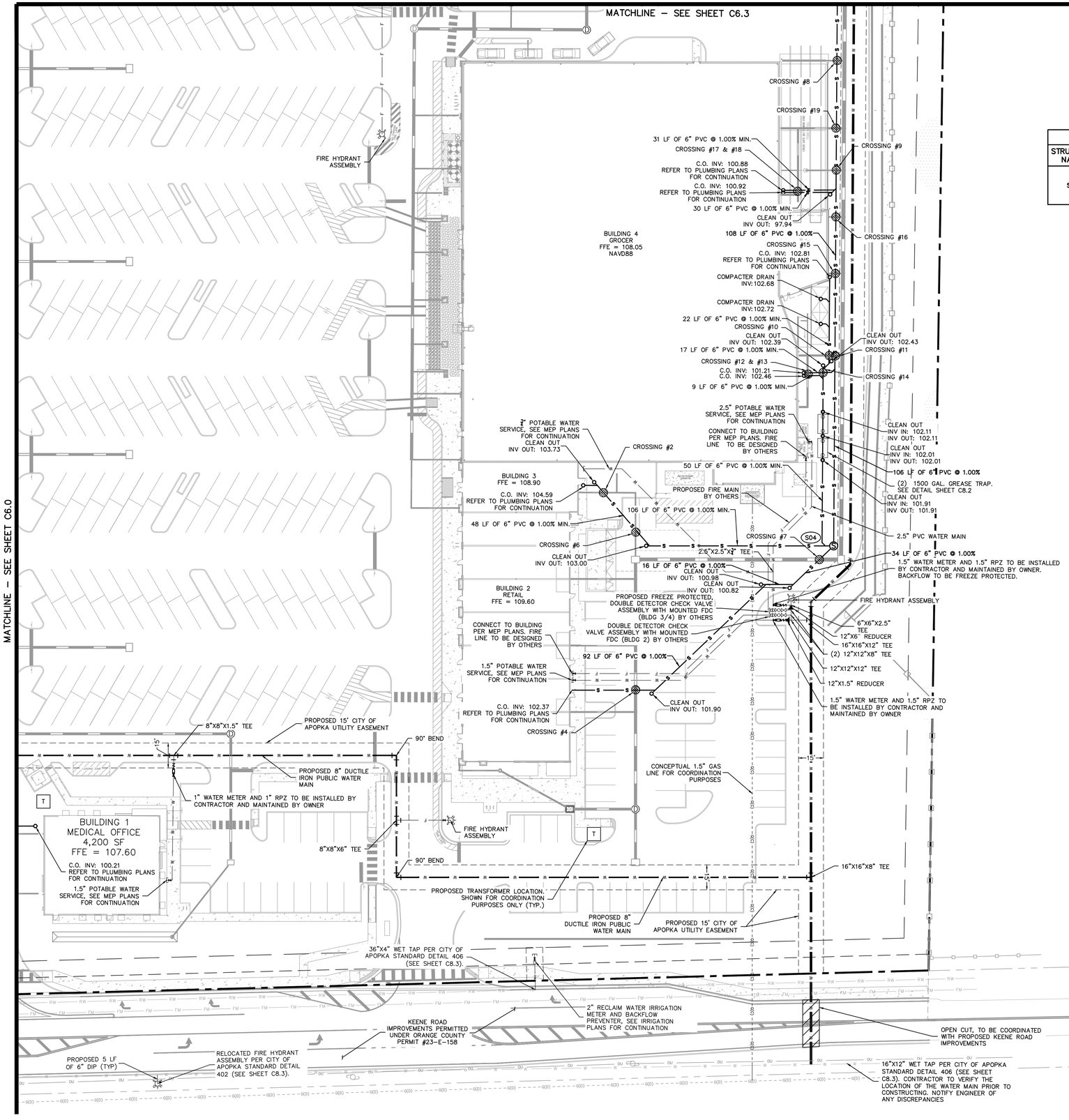
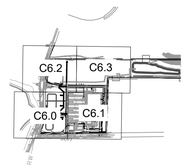


STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
S04	SANITARY MANHOLE TOP: 107.58 W. INV IN: 101.31 SW. INV IN: 100.45 N. INV OUT: 99.84

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60



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THE SHOPPES AT EAST SHORE-PHASE 1

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C6.1

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C6.0 – UTILITY PLAN.dwg C6.1 UTILITY PLAN Jul 22, 2024 4:54pm by: griffin.bailey
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Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C6.0 – UTILITY PLAN.dwg C6.2 UTILITY PLAN Jul 22, 2024 4:55pm by: griffin.bailey
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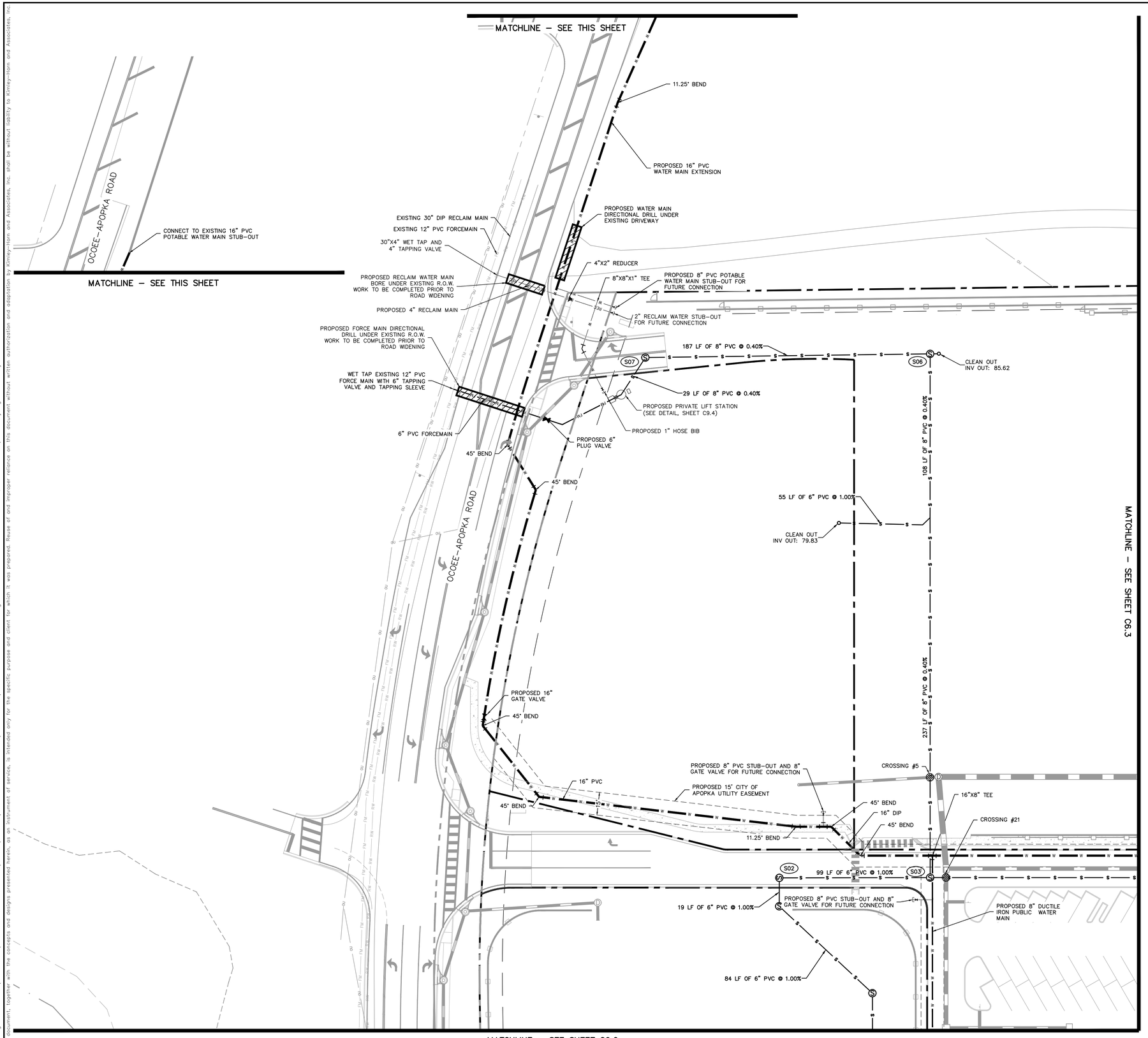
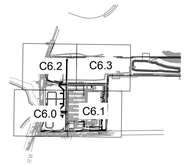


STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
S02	SANITARY MANHOLE TOP: 94.43 S. INV IN: 81.35 E. INV OUT: 81.25
S03	DROP MANHOLE TOP: 97.75 E. INV IN: 90.61 W. INV IN: 80.26 N. INV OUT: 80.16
S06	DROP MANHOLE TOP: 95.36 S. INV IN: 78.79 E. INV IN: 85.59 W. INV OUT: 78.69
S07	SANITARY MANHOLE TOP: 88.81 E. INV IN: 77.94 SW. INV OUT: 77.84

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60



KEY MAP
SCALE: 1" = 1000'

NOTES:

1. ALL ONSITE UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED UNLESS OTHERWISE NOTED.
2. MAINTAIN A MINIMUM OF 3–FT OF COVER OVER ALL PROPOSED UTILITIES.
3. ALL WATER MAINS, AND DOMESTIC LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF APOPKA STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL.
4. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
5. ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
6. CONTRACTOR TO CALL "SUNSHINE STATE ONE CALL OF FLORIDA" (1–800–432–4770) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
7. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/ DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE CITY OF APOPKA SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN PLANS.
8. CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.
9. CONTRACTOR TO AVOID DISRUPTION OF ANY ADJACENT TENANT'S TRAFFIC OPERATIONS, TO THE MAXIMUM EXTENT, DURING INSTALLATION OF UTILITIES. IF TRAFFIC IS TO BE OBSTRUCTED CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL PLAN WITH THE LOCAL MUNICIPALITY.
10. ALL DIMENSIONS ARE TO CENTERLINE OF PIPE OR CENTER OF MANHOLE UNLESS NOTED OTHERWISE.
11. SEE PLUMBING PLANS FOR EXACT UTILITY CONNECTION LOCATIONS AT BUILDING.
12. LIGHT POLES SHOWN FOR COORDINATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE SITE LIGHTING PLANS BY OTHERS FOR MORE INFORMATION.
13. ELECTRIC, TELEPHONE, AND OTHER DRY UTILITIES SHALL BE PLACED WITHIN CONDUIT, MEETING PRIVATE UTILITY STANDARDS, WHEN ROUTE CROSSES PAVED DRIVES AND PARKING AREAS.
14. ALL UNDERGROUND WATER MAINS AND HYDRANTS SHALL BE INSTALLED, COMPLETED AND IN SERVICE PRIOR TO ANY COMBUSTIBLES BEING BROUGHT ONSITE.
15. CONTRACTOR TO ENSURE ADEQUATE COVER REMAINS OVER ALL EXISTING UTILITIES.
16. CONTRACTOR TO VERIFY EXISTING COVER OVER ALL UTILITIES BEFORE START OF CONSTRUCTION AND TO COORDINATE WITH THE ENGINEER OF RECORD PRIOR TO START OF CONSTRUCTION IF DESIGN DOES NOT PROVIDE 36" COVER.
17. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES AT ALL POINTS OF CONNECTION TO, AND AT ALL AREAS OF CONFLICT WITH CITY OF APOPKA MAINS.
18. ALL UTILITIES (INCLUDING PUMP STATION IF APPLICABLE) LOCATED OUTSIDE PUBLIC RIGHT–OF–WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
19. PRIOR TO INITIATING CONSTRUCTION, CONTACT THE CITY OF APOPKA AT (407) 703–1731 TO SCHEDULE A PRECONSTRUCTION MEETING. THE PRECONSTRUCTION MEETING CANNOT BE HELD UNTIL THE STAMPED PLANS ARE RELEASED BY THE BUILDING DEPARTMENT. CONSTRUCTION SHALL NOT BE PERMITTED WITHOUT A CITY OF APOPKA PRECONSTRUCTION MEETING AND SET OF STAMPED PLANS LOCATED ON THE PROJECT SITE.
20. ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED AT ALL POINTS OF CONNECTION TO, AND AT ALL AREAS OF CONFLICT WITH CITY OF APOPKA MAINS.
21. PROJECT SHALL CONFORM TO FFPC 6TH EDITION (NFPA 1 AND 101 2015 EDITION)
22. PRIOR TO FIRE LINE INSTALLATION, THE FLORIDA LICENSED CONTRACTOR SHALL SUBMIT LAYOUT DESIGN DRAWINGS TO THE OFFICE OF THE FIRE MARSHAL. IF REQUIRED BY FLORIDA STATUE 553.79, DRAWINGS MUST BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER. THE DRAWINGS MUST SHOW ALL UNDERGROUND FIRE LINES AND COMPONENTS STARTING FROM THE "POINT OF SERVICE" AS DEFINED UNDER FLORIDA STATUE 633.102. THE DESIGN SHALL BE IN ACCORDANCE TO THE CURRENT FLORIDA FIRE PREVENTION CODE AND ALL ADOPTED NFPA CODES AND STANDARDS.
23. CONTRACTOR TO ENSURE THAT 36" CLEAR IS PROVIDED AROUND ALL FIRE HYDRANTS.

LEGEND

- F — PROPOSED FIRE LINE
- W — PROPOSED WATER LINE
- S — PROPOSED SANITARY GRAVITY LINE
- REC — PROPOSED RECLAIM LINE
- Ⓢ PROPOSED SANITARY MANHOLE
- W — EXISTING WATER LINE
- RW — EXISTING RECLAIM LINE
- FM — EXISTING FORCE MAIN
- OU — EXISTING OVERHEAD UTILITIES

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No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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PHONE: 407–898–1511
WWW.KIMLEY–HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT JORDAN DRAPER LICENSE No. 7 STATE OF FLORIDA
LICENSED PROFESSIONAL ENGINEER JORDAN DRAPER LICENSE No. 0088422 STATE OF FLORIDA
DATE: 7/22/2024

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

UTILITY PLAN

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C6.2

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C6.0 – UTILITY PLAN.dwg C6.3 – UTILITY PLAN Jul 22, 2024 4:55pm by: griffin.bailey
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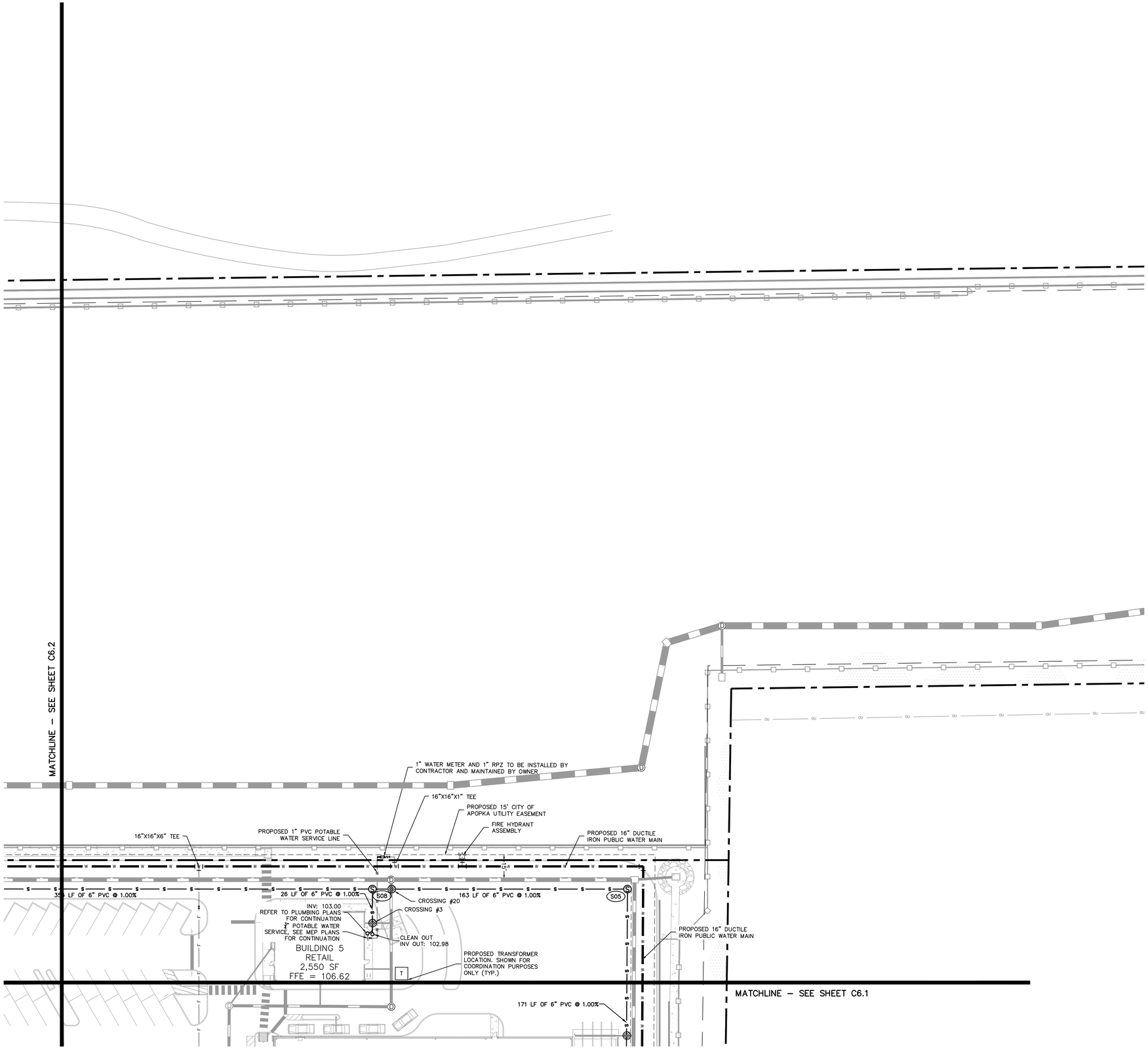
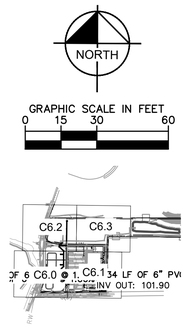


STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
S05	SANITARY MANHOLE TOP: 103.49 S. INV IN: 95.98 W. INV OUT: 95.88
S08	DROP MANHOLE TOP: 106.05 S. INV IN: 102.70 E. INV IN: 94.25 W. INV OUT: 94.15



KEY MAP
SCALE: 1" = 1000'

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- Ⓢ PROPOSED SANITARY MANHOLE
- W — EXISTING WATER LINE
- RW — EXISTING RECLAIM LINE
- FM — EXISTING FORCE MAIN
- OU — EXISTING OVERHEAD UTILITIES

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No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	LJD
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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PHONE: 407–898–1511
WWW.KIMLEY–HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT JORDAN DRAPER LICENSE LA 6667015
STATE OF FLORIDA JORDAN DRAPER LICENSE NUMBER 6667015 PROFESSIONAL LANDSCAPE ARCHITECT
DATE: 7/22/2024

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

UTILITY PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C6.3

Smeal Platform RM 100ft

	feet
Width	: 8.33
Track	: 7.83
Lock to Lock Time	: 6.0
Steering Angle	: 48.0

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
JORDAN DRAPER
LICENSE
STATE OF FLORIDA
PROFESSIONAL ENGINEER
JORDAN DRAPER
FLORIDA LICENSE NO. 0082222
DATE: 7/22/2024

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

FIRE TRUCK ROUTING PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C7.0

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C7.0 - FIRE TRUCK ROUTING PLAN.dwg C7.0 - FIRE TRUCK ROUTING PLAN Jul 22, 2024 4:55pm by: griffin.bailey
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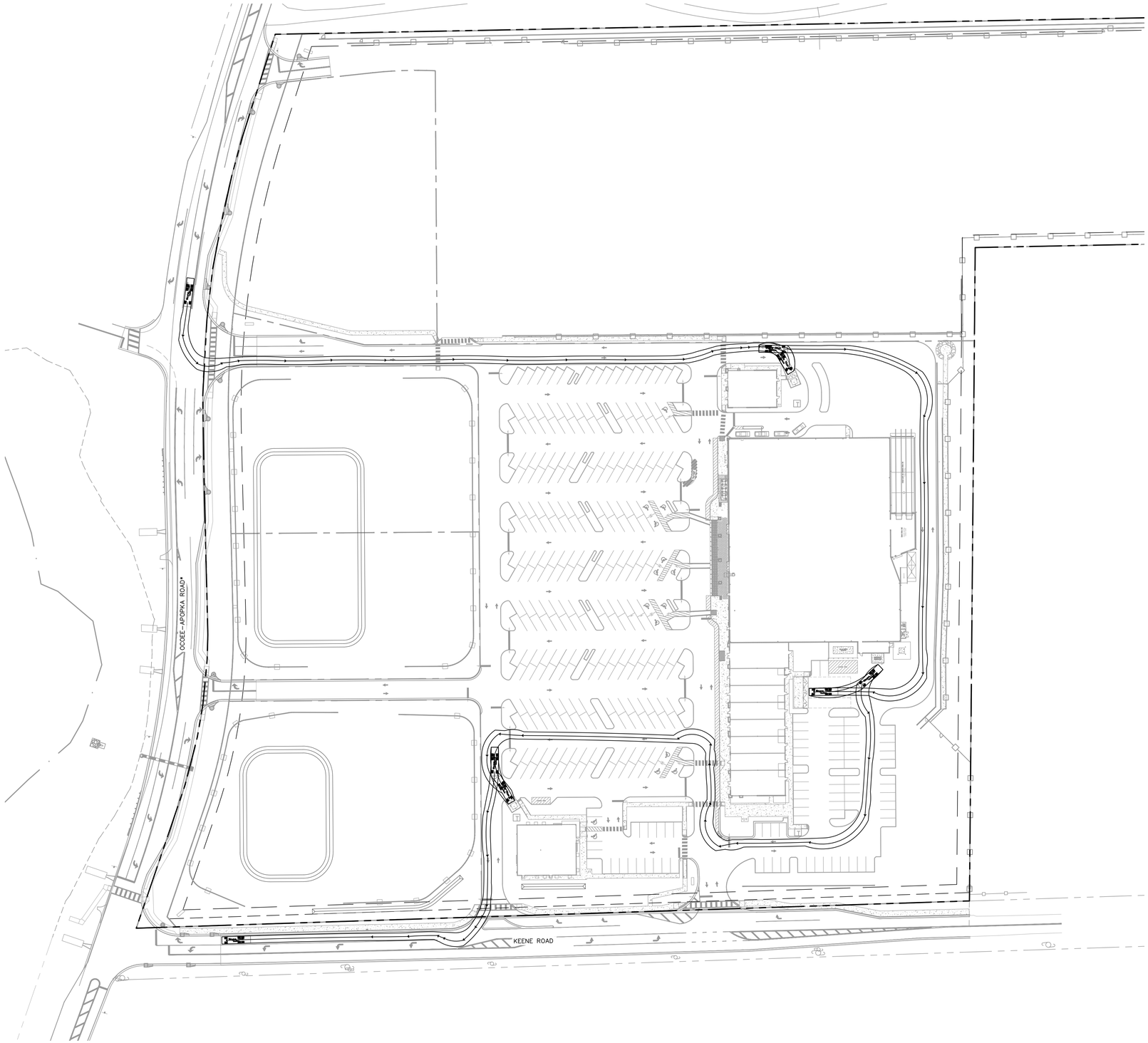
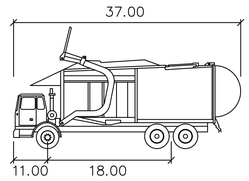


NORTH

GRAPHIC SCALE IN FEET
0 30 60 120

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC



Apopka Front Loader Garbage Truck

feet

Width	: 8.53
Track	: 8.53
Lock to Lock Time	: 6.0
Steering Angle	: 27.7

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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
JORDAN DRAPER
LICENSE
STATE OF FLORIDA
FLORIDA LICENSE NUMBER 6667000
PROFESSIONAL ENGINEER
DATE:

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

GARBAGE TRUCK ROUTING PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C7.1

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C7.1 - GARBAGE TRUCK ROUTING PLAN.dwg C7.1 - GARBAGE TRUCK ROUTING PLAN Jul 22, 2024 4:55pm by: griffin.bailey
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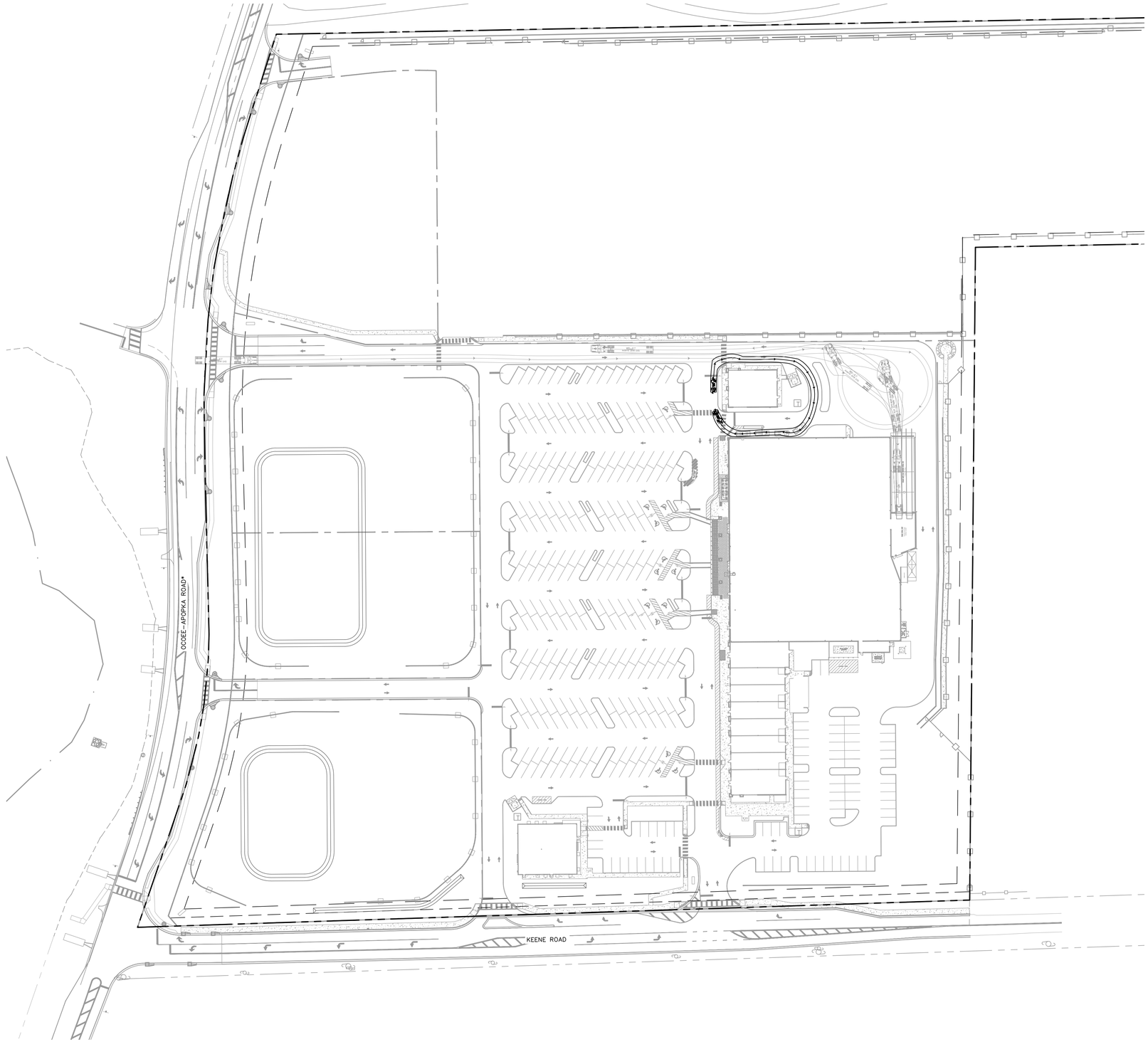
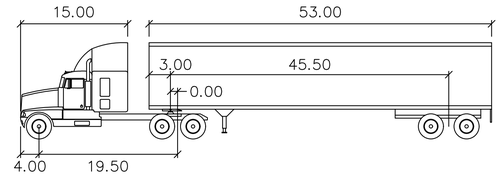


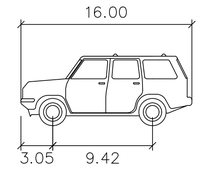
NORTH

GRAPHIC SCALE IN FEET
0 30 60 120



WB-67

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		



Paratransit Van

	feet
Width	: 6.55
Track	: 6.46
Lock to Lock Time	: 6.0
Steering Angle	: 42.4

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
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PHONE: 407-898-1511
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LICENSED PROFESSIONAL ENGINEER
JORDAN D. RAPER
LICENSE
No. 77777
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE:

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

COMMERCIAL TRUCK ROUTING PLAN

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C7.2

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C7.2 - COMMERCIAL TRUCK ROUTING PLAN.dwg C7.2 - COMMERCIAL TRUCK ROUTING PLAN Jul 22, 2024 4:56pm by: griffin.bailey
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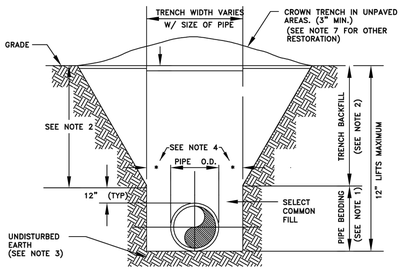
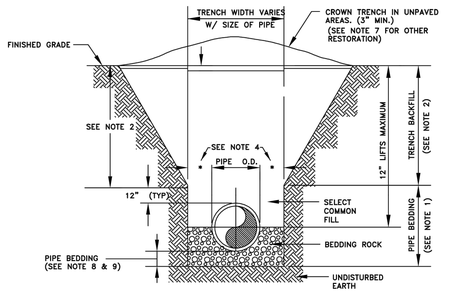


NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS TO AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETERS LESS THAN 24", AND 24" 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.
8. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.
9. ALL UNPAVED DISTURBED AREAS SHALL BE SODDED TO MATCH ADJACENT DOMINATE GRASS SPECIES.

TYPE "B" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 100



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. USE OF TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. 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. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING IF REQUIRED BY THE CITY. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15" 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. THE CITY SHALL DETERMINE IN THE FIELD IF REMOVAL OF UNSUITABLE MATERIAL IS REQUIRED TO REACH A SUITABLE FOUNDATION.
9. ALL UNPAVED DISTURBED AREAS SHALL BE SODDED TO MATCH ADJACENT DOMINATE GRASS SPECIES.
10. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF THE GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.

TYPE "A" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 101

PROPOSED UTILITY	HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS									
	POTABLE WATER		RECLAIMED WATER*		SANITARY SEWER FORCE MAIN		SANITARY SEWER GRAVITY MAIN		STORM SEWER	
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.
POTABLE WATER	–	–	3'	12"	6'	12"	6'	6"ABOVE 12"BELOW	3'	6"
RECLAIMED* WATER	3'	12"	–	–	3'	12"	3'	12"	–	–
SANITARY SEWER FORCE MAIN	6'	12"	3'	12"	–	–	–	–	–	–
SANITARY SEWER GRAVITY MAIN	6'	6"ABOVE 12"BELOW	3'	12"	–	–	–	–	–	–

GENERAL NOTES:

1. THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.). THESE SEPARATION REQIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.
2. FOR THE PURPOSE OF THIS TABLE, RECLAIMED WATER SHALL MEAN UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 17-610. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.
3. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATER CLEARANCE SHALL BE USED.

   C/C – DENOTES CENTER OF PIPE TO CENTER OF PIPE.

   O/O – DENOTES OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
4. ACCEPTABLE VARIANCES:
   A. WHERE HORIZONTAL SEPARATION IS NOT ATTAINABLE, PVC-C-900 SDR-14 OR CONCRETE ENCASEMENT MUST BE USED FOR THE SANITARY SEWER LINE FOR AT LEAST ONE OF THE PIPES. PVC-C-900 SDR 14 OR CONCRETE ENCASEMENT MUST BE USED UNTIL MINIMUM CLEARANCE IS REGAINED.
   B. WHERE 18 INCH VERTICAL SEPARATION IS NOT ATTAINABLE AT CROSSINGS, USE ONE FULL LENGTH OF PVC-C-900 SDR-14 FOR SANITARY SEWERS OR ENCASED PIPE CENTERED AT THE POINT OF CROSSING SPECIAL SUPPORT MAY BE REQUIRED.
5. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
6. CONCRETE ENCASEMENT SHALL NOT BE USED UNLESS APPROVED BY PUBLIC SERVICES DIRECTOR OR HIS DESIGNEE.

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 104

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). *										
	PIPE SIZE									
	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"	48"
90° BEND	33	43	51	60						
45° BEND	14	18	22	25						
22-1/2° BEND	7	9	11	12						
11-1/4° BEND	4	5	6	6						
TEE**	1	7	24	44						
REDUCER (ONE SIZE SMALLER)		41	39	40						
DEAD END	74	96	115	136						

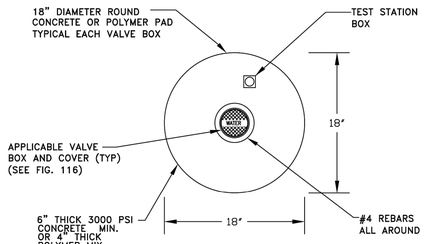
* ONLY RESTRAIN BRANCH PIPE FOR TEES. ONLY RESTRAIN LARGER PIPE FOR REDUCERS
** LENGTH ALONG RUN ASSUMED TO BE 18'

NOTES:

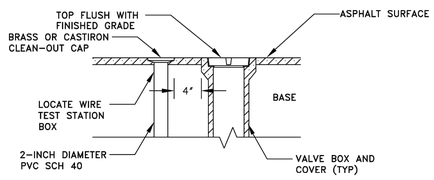
1. FITTINGS SHALL BE DUCTILE IRON RESTRAINED JOINT TYPE. FM FITTINGS TO BE LINED WITH PROTECTO 401.
2. INSTALL FULL LENGTHS OF PIPE WITH TOTAL LENGTH CONTAINING ONLY RESTRAINED JOINTS EQUAL TO OR GREATER THAN LENGTH SHOWN IN TABLE.
3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
4. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, FOR PVC WITH THE FOLLOWING ASSUMPTIONS:
   TYPE OF PIPE: PVC
   WORKING PRESSURE: 150 P.S.I.** ** FM = 100 P.S.I. / WM OR RWM = 150 P.S.I.
   SOIL DESIGNATION: SM(SAND SILT)
   LAYING CONDITIONS: S
6. FOR PIPE ENCASED IN POLYETHYLENE INCREASE THE GIVEN VALUE BY A FACTOR OF 1.5.
7. VALUES NOT LISTED IN THE TABLE TO BE COMPLETED BY THE ENGINEER.

RESTRAINED PIPE TABLE (PVC)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 105



OUTSIDE PAVEMENT

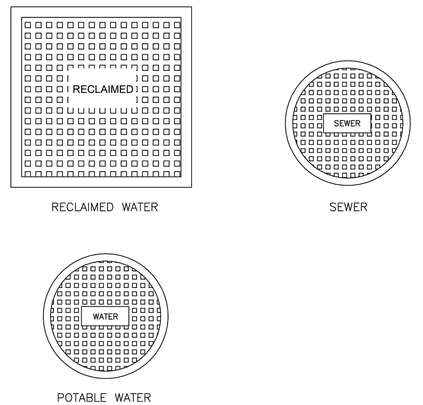


INSIDE PAVEMENT

VALVE IDENTIFICATION TAG TO BE INSTALLED BY CITY & PAID FOR BY DEVELOPER

VALVE BOX

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 109



TYPICAL VALVE BOX COVER DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 116

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT LICENSE NO. 7
JORDAN DRAPER PE
STATE OF FLORIDA
PE LICENSE NO. 88888
PROFESSIONAL ENGINEER
DATE:

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

CITY OF APOPKA DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C8.0

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C8.0 – CITY OF APOPKA DETAILS.dwg C8.0 – CITY OF APOPKA DETAILS Jul 22, 2024 4:56pm by: griffin.bailey
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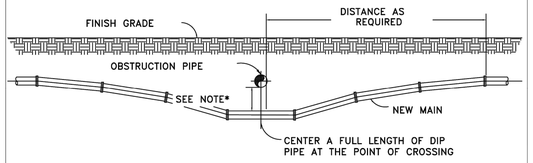


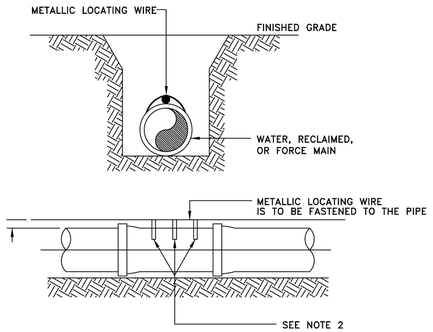
NOTES:

1. 18" MINIMUM CLEARANCE FOR WATER, SEWER AND RECLAIMED WATER MAIN CROSSINGS
2. 12" MINIMUM CLEARANCE REQUIRED FOR OTHER TYPE UTILITY CROSSINGS.
3. SEE ENCASEMENT DETAIL IF MINIMUM CLEARANCE CANNOT BE OBTAINED.

* CONSTRUCT UNIFORM PIPE DEFLECTION NOT TO EXCEED 75% OF MANUFACTURER RECOMMENDED MAXIMUM DEFLECTION PER PIPE JOINT

UTILITY CROSSING PIPE DEFLECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 117

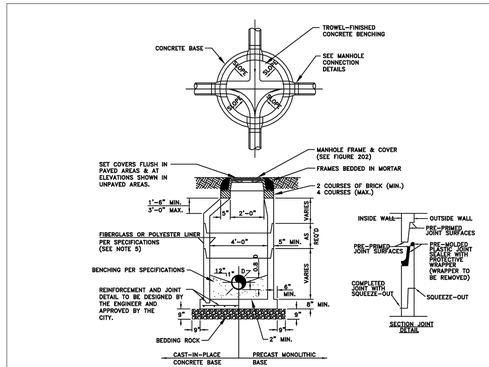


NOTES:

1. ALL PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 AWG-SOLID CCS REINFORCED TRACER WIRE-INSULATED 30 MIL HDPE - 30 VOLT MFG. BY COPPERHEAD INDUSTRIES, LLC OR EQUAL) CAPABLE OF DETECTION BY A CABLE LOCATOR.
2. SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND ATTACHED WITH DUCT TAPE OR NYLON STRAPS AT 3 LOCATIONS PER JOINT. LOCATING WIRE SHALL TERMINATE AT THE TEST STATION BOX AS SHOWN IN FIG. 109.
3. BE CAPABLE OF EXTENDING 12" ABOVE TOP OF TEST STATION BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.
4. SPLICES SHOULD BE MADE USING STANDARDS AND PRODUCTS DESIGNED FOR DIRECT BURIAL CONDUCTORS.
5. WIRE INSULATION SHALL BE COLOR CODED FOR THE TYPE OF PIPE BEING INSTALLED.

PIPE LOCATING WIRE DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 118



FORCE MAIN MANHOLE LINER

DIAMETER (INCHES)	THICKNESS (INCHES) HEIGHT (FEET) 3-6	7-12	13-17	MATERIAL	MANUFACTURER
48					
60					
72					

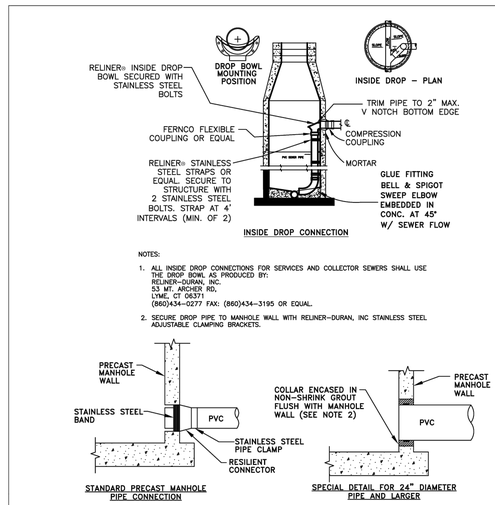
* TO BE COMPLETED BY THE ENGINEER

NOTES:

1. MANHOLE SHOWN IS FOR SEWER SIZE 8" THRU 24". SEE SECTION 20.4 OF THE MANUAL FOR MANHOLE DIAMETER FOR SEWERS LARGER THAN 24".
2. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS.
3. THE THICKNESS OF THE LINER SHALL BE 3/8" MINIMUM
4. EACH BENCH WALL SHALL BE A MINIMUM OF 18 INCHES LONG FROM THE WALL OF THE MANHOLE TOWARD THE CENTER.
5. SANITARY SEWER MANHOLES MAY BE REQUIRED TO BE LINED WITH HDPE OR FIBERGLASS AS DIRECTED BY THE CITY.

TYPICAL MANHOLE

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 200



NOTES:

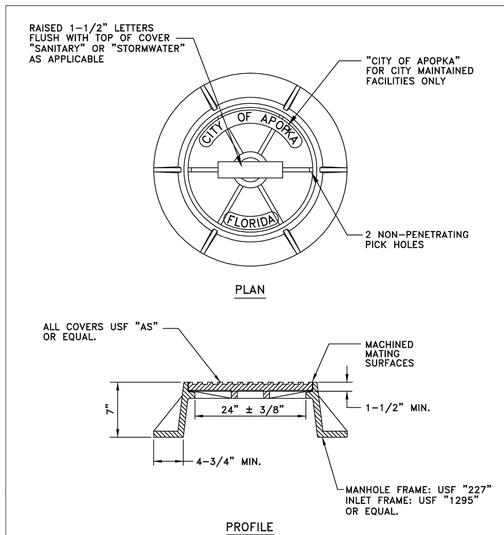
1. ALL INSIDE DROP CONNECTIONS FOR SERVICES AND COLLECTOR SEWERS SHALL USE THE DROP BOWL AS PRODUCED BY: RELINER-DURAN, INC. 53 MT. ARCHER RD, LYME, CT 06371 (860)434-0277 FAX: (860)434-3195 OR EQUAL.
2. SECURE DROP PIPE TO MANHOLE WALL WITH RELINER-DURAN, INC STAINLESS STEEL ADJUSTABLE CLAMPING BRACKETS.

NOTES:

1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. THE CITY MAY APPROVE ALTERNATE WATERTIGHT CONNECTION DETAILS FOR CONNECTION OF 24" DIAMETER PIPES AND LARGER.
3. AN INSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 24" OR MORE ABOVE THE OUTFLOW PIPE INVERT.
4. CONCRETE TO BE MINIMUM OF 3000 PSI.

MANHOLE CONNECTION DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 201

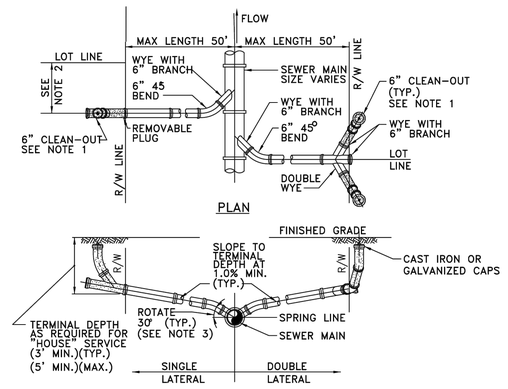


NOTES:

1. MANHOLE FRAME AND COVER ARE TO BE TRAFIC BEARING RATED H-20, CLASS 30 MEETING ASTM A 48.

STANDARD MANHOLE FRAME AND COVER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 202



NOTES:

1. CLEAN-OUT (SHOWN SHADED) SHALL BE INSTALLED BY THE BUILDER IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE.
3. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
4. RESIDENTIAL SERVICES SHALL BE 4 INCHES & NON-RESIDENTIAL SERVICES SHALL BE 6 INCHES IN DIAMETER AS A MINIMUM.
5. GALVANIZED, OR CAST IRON CLEAN-OUT CAP SHALL BE USED ON THE STUBOUT FOR EACH SERVICE.
6. LATERAL SHALL BE MARKED WITH AN "S" STAMPED OR CUT IN THE CURB.

SERVICE LATERAL DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 204

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LORI M. BRAPER LICENSE NUMBER 70 STATE OF FLORIDA PROFESSIONAL ENGINEER
JORDAN L. DRAPER LICENSE NUMBER 1101 STATE OF FLORIDA PROFESSIONAL ENGINEER
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

CITY OF APOPKA DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C8.1

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\PlanSheets\C8.0 - CITY OF APOPKA DETAILS.dwg C8.1 - CITY OF APOPKA DETAILS Jul 22, 2024 4:57pm by: griffin.bailey
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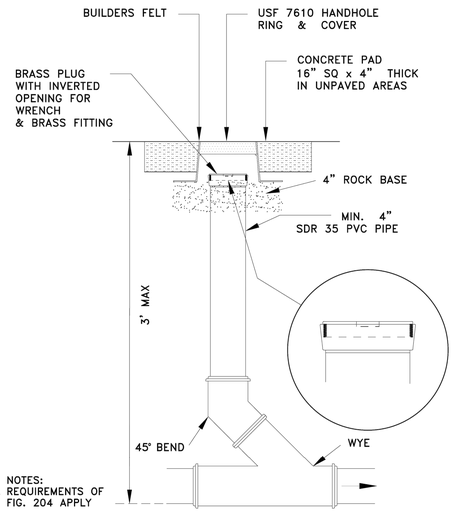
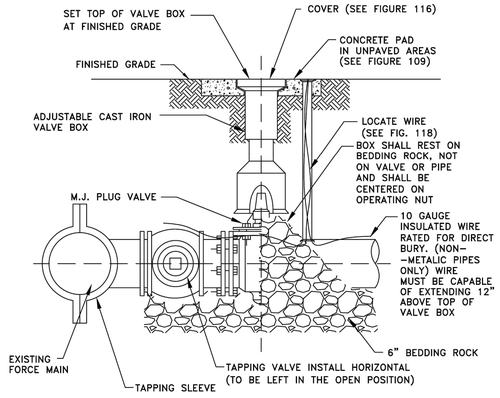


SANITARY SEWER SERVICE TRAFFIC RATED CLEAN-OUT DETAIL

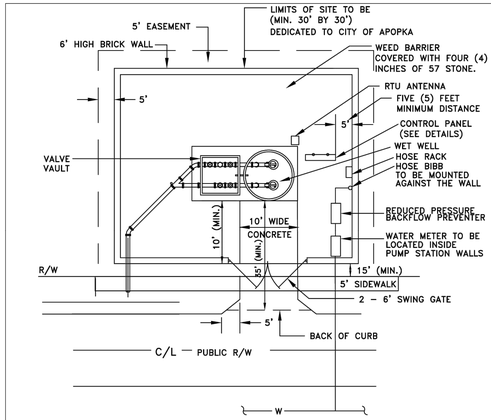
NTS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 205



FORCE MAIN WET TAP TIE-IN DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 206

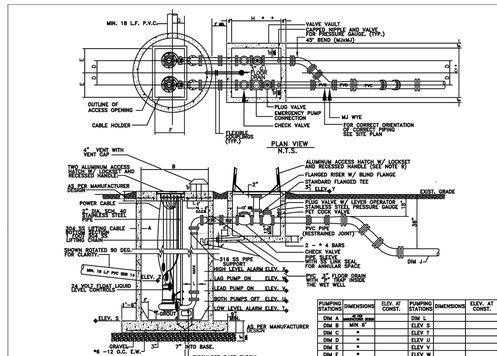


NOTES:

1. DRIVEWAY AND APRON SHALL BE SIX (6) INCH THICK, 3000 P.S.I. CONCRETE. WITH No.6X6 WIRE MESH OR FIBER MESH.
2. POWER TO THE PUMP STATION SHALL BE THROUGH UNDERGROUND CONDUIT FROM SUPPLY SOURCE IN RIGHT-OF-WAY.
3. GATE TO BE DECORATIVE BLACK POWDER COATED ALUMINUM W/PICKET SPACING = OR < 4"
4. WALLS ARE TO BE BRICK OR DECORATIVE STONE.
5. WET WELL LID MUST OPEN TOWARD CONTROL PANEL (HINGE SIDE TOWARD PANEL).
6. LIFT STATION WALL TO BE PLACED AT LEAST 15FT. BEHIND THE R/W LINE.

PUMP STATION TYPICAL SITE PLAN

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 300



PUMPING STATIONS	DIMENSIONS	ELEV. AT CONST.	PUMPING STATIONS	DIMENSIONS	ELEV. AT CONST.
DIM A	*		DIM L		
DIM B	MIN 6"		ELEV. S		
DIM C	*		ELEV. T		
DIM D	*		ELEV. U		
DIM E	*		ELEV. V		
DIM F	*		ELEV. W		
DIM G	*		ELEV. X		
DIM H	6'-0" MIN.		ELEV. Y		
DIM J	*		ELEV. Z		
DIM K	*				

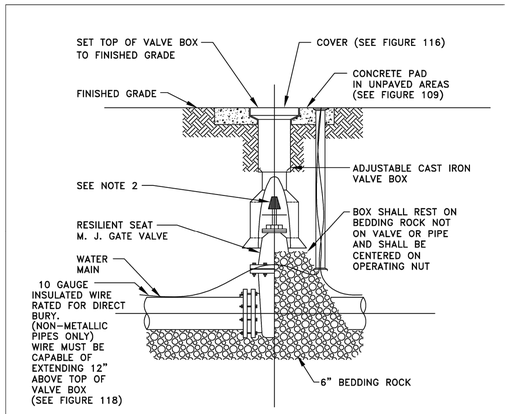
* PER PUMP MANUFACTURERS REQUIREMENT

GENERAL NOTES:

1. VALVE VAULT AND WET WELL LIDS SHALL BE COATED WITH 1 COAT OF THEMEC SERIES 66, COLOR ENGS, (2-3 MILS), FOLLOWED BY TOP COAT OF THEMEC SERIES 73, COLOR ENGS, (2-3 MILS) OR EQUAL.
2.A THE WET WELL SHALL BE CONSTRUCTED OF FIBERGLASS REINFORCED POLYESTER (RPP) AND MANUFACTURED FROM COMMERCIAL GRADE POLYESTER RESIN OR VINYL ESTER RESIN, WITH FIBERGLASS REINFORCEMENTS. THE WET WELL SHALL BE A ONE PIECE UNIT AND MANUFACTURED BY L.F. MANUFACTURE, INC. OR EQUAL.
2.B 99 LEVI OF RPP THE WET WELL MAY BE CONSTRUCTED OF PRECAST CONCRETE HAVING A MINIMUM WALL THICKNESS OF 8 INCHES. THE INTERIOR WALLS SHALL BE LINED USING A HIGH DENSITY POLYETHYLENE PRODUCT AS MANUFACTURED BY AGRU SURE GRIP, OR EQUAL.
3. PIPING IN THE WET WELL TO BE HDPE WITH FUSED 45 DEGREES FITTINGS FROM WET WELL TO VALVE VAULT.
4. INTERIOR OF THE VALVE VAULT AND PIPING IN THE VALVE VAULT WITH CorSeal CS-55 (OR EQUAL), TWO COATS, 4 MILS EACH. PIPING SHALL BE COATED AFTER INSTALLATION.
5. VALVE VAULT SHALL BE SIZED TO PERMIT EASY REMOVAL OF CHECK VALVE SPINDLES WITH MINIMUM CLEARANCES AS SHOWN FOR 6" DIAMETER PIPE AND LARGER. CONTRACTOR SHALL VERIFY CLEARANCES FOR LARGER PIPE SIZES.
6. VALVE VAULT SHALL HAVE SEALED FLOOR AND DRAIN.
7. ALL LOCATIONS WHERE PIPES ENTER OR LEAVE THE WET WELL OR VALVE VAULT SHALL BE MADE WATERTIGHT WITH WALL SLEEVE AND STAINLESS STEEL LINK SEAL.
8. THERE SHALL BE NO VALVES OR ELECTRICAL JUNCTION BOXES IN WET WELL.
9. ALL VALVE VAULT AND WET WELL COVERS SHALL BE ALUMINUM WITH 316 S.S. HARDWARE LOCK BRACKET. SIZE AS REQUIRED BY PUMP MANUFACTURER AND APPROVED BY THE CITY.
10. FLEXIBLE COUPLING SHALL BE SLEEVE TYPE, EPOXY COATED.
11. PUMPS SHALL BE:
MANUFACTURER: _____ MODEL: _____ DIA: _____ SPEED: _____ DISCHARGE SIZE: _____ IN.;
NO. _____ HZ.; _____ PHASE; _____ H.P.; _____ MIN. SOLID SIZE: _____ IN.
12. OPERATING CONDITIONS SHALL BE _____ GPM AT _____ FEET TDH.
13. ALL HARDWARE IN WET WELL AND VALVE BOX TO BE 316 STAINLESS STEEL.
14. "P" TRAP TO BE INSTALLED IN WET WELL.
15. ALL PUBLIC LIFT STATIONS SHALL BE EQUIPPED WITH SCADA SYSTEM.THE DEVELOPER SHALL PAY THE CITY COST OF THE UNIT.THE CITY WILL BE RESPONSIBLE FOR MAINTENANCE.
16. ALL LIFT STATIONS SHALL BE FENCED WITH DECORATIVE STONE OR BRICK OR AS DIRECTED BY THE CITY.
17. ALL LIFT STATIONS SHALL HAVE A 10 FEET WIDE CONCRETE ACCESS DRIVEWAY, 20' LONG FROM EDGE OF WET WELL TO BACK OF CURB.
18. ENGINEER SHALL PROVIDE A SCALED (1" = 20' MIN.) SITE SPECIFIC DETAIL.

PUMP STATION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 301

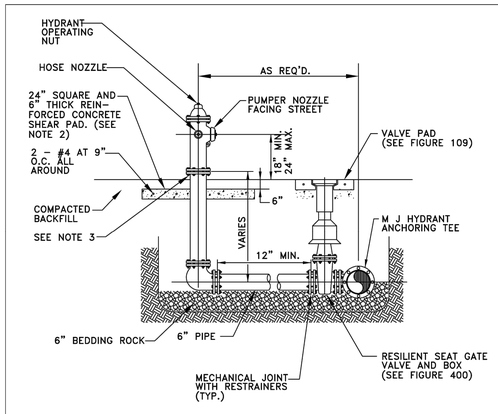


NOTES:

1. PVC EXTENSIONS MAY BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO WITHIN A 3 FEET BELOW FINISHED GRADE.

GATE VALVE AND BOX DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 400



NOTES:

1. FIRE HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE, OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
2. THE SHEAR PAD SHALL BE RECESSED SIX (6) INCHES BELOW THE FINISHED GRADE AND THE RECESSED SECTION SODDED.
3. CLEARANCE BETWEEN BOTTOM OF BOLTS AND TOP OF SHEAR PAD SHALL BE A TWELVE (12) INCH MINIMUM.
4. FIRE HYDRANTS SHALL BE IDENTIFIED IN ACCORDANCE WITH THE CITY OF APOPKA CONSTRUCTION DESIGN STANDARDS MANUAL.

FIRE HYDRANT ASSEMBLY DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 402

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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LORIDA PROFESSIONAL SURVEYOR & MAPPER LICENSE NO. LS 7 STATE OF FLORIDA JORDAN DRAPER PE LICENSE NUMBER 92822 PROFESSIONAL ENGINEER DATE: 2024.12.02

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

CITY OF APOPKA DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C8.2

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C8.0 - CITY OF APOPKA DETAILS.dwg C8.2 - CITY OF APOPKA DETAILS Jul 22, 2024 4:57pm by: griffin.bailey
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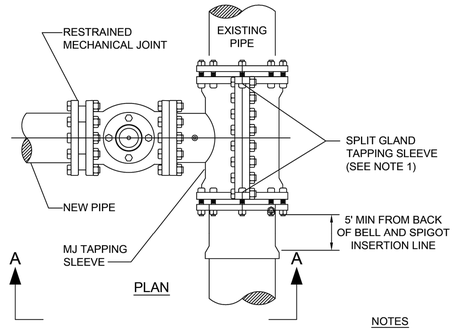
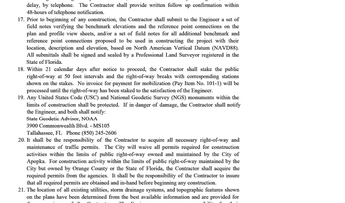


NOTES

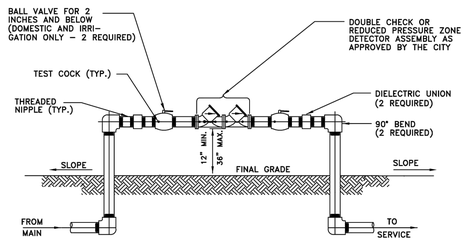
1. SIZE ON SIZE WET TAPS WILL CALL FOR FULL ENCIRCLEMENT STAINLESS STEEL MJ TAPPING SLEEVE; MUELLER H-304, OR EQUAL.
2. ALL NEWLY INSTALLED TAPPING SLEEVES & TAPPING VALVES SHALL BE PNEUMATICALLY TESTED AT A TEST PRESSURE OF 150PSI FOR A PERIOD OF THIRTY MINUTES.



SECTION A - A

WATER AND RECLAIMED WATER MAINS WET TAP TIE-IN DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 406



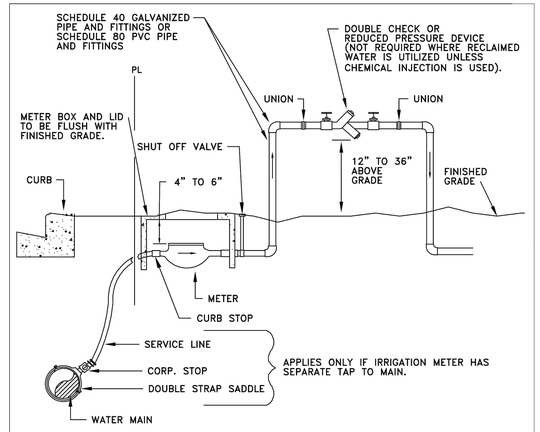
NOTES:

1. ALL PIPE FITTINGS, MATERIALS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED BY THE CONTRACTOR.
2. ALL PIPE AND FITTINGS TWO (2) INCHES AND SMALLER SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL.

DOUBLE CHECK OR REDUCED PRESSURE ZONE DETECTOR ASSEMBLY

2 INCH AND BELOW ASSEMBLY

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 500 A



NOTES:

1. A POSITIVE DIELECTRIC CONNECTION SHALL BE MADE BETWEEN ALL GALVANIZED AND BRASS COMPONENTS.
2. METER SHALL BE INSTALLED JUST INSIDE THE ROW LINE OR PROPERTY LINE AND IN NO CASE SHALL IT BE INSTALLED IN THE SIDEWALK OR OTHER PAVED AREAS.
3. DOUBLE CHECK VALVES MAY BE USED AS LONG AS THEIR ARE NO CHEMICALS OR A WELL ON SITE.
4. A PVB DEVICE SHALL BE 12-INCHES MINIMUM ABOVE HIGHEST OUTLET OR SPRAYHEAD
5. ALL BACKFLOW PREVENTION DEVICES ARE TO BE AWWA APPROVED.

IRRIGATION METER AND DOUBLE CHECK VALVE OR REDUCED PRESSURE BACKFLOW PREVENTER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 502

GENERAL NOTES

1. Governing standards and specifications on this project are considered the Florida Department of Transportation (FDOT) Design Standards (2013 Edition), FDOT Standard Specifications for Road and Bridge Construction (2013 Edition), and City of Apopka Utilities Design and Construction Standards Manual (2014 Edition).
2. All personal property, except mail boxes located within the public right-of-way (not relocated by the property owner), shall be removed by the Contractor as necessary to construct the project in accordance with the Construction Plans. Mail boxes shall be relocated by the Contractor in accordance with FDOT Index No. 532.
3. The disposal of excess earthwork materials shall be the responsibility of the Contractor. Approval of disposal sites shall be obtained from the City of Apopka prior to disposal.
4. All existing trees and stumps within the right-of-way and limit of the project are to be removed as clearing and grubbing unless otherwise directed.
5. Sod and mulch all disturbed areas not covered by sod unless otherwise directed.
6. All pavement offsets shown are to the proposed centerline of construction, as where radius dimensions are to the edge of pavement, unless otherwise noted.
7. Turnout locations and widths shown in the Construction Plans are approximate and may be adjusted as necessary or as directed by the Engineer. All turnouts shall be constructed in accordance with FDOT Index No. 515.
8. The various permits included in the bid specifications payment are included in the bid price for Section 104. The Contractor shall perform his work in accordance with the requirements of "Prevention, Control, and Abatement of Erosion and Water Pollution"; excluding items specified elsewhere. Environmental controls shall be used at locations designated in the plans and/or designated by the Engineer.
9. The information shown on these drawings concerning type and location of underground and other utilities are based on available records and surveys, but is not guaranteed to be accurate or all inclusive. The Contractor shall make his own determination as to the type and location of utilities as may be necessary to avoid damage there to, and is responsible for coordinating utility relocation.
10. Prior to ordering drainage structures, the Contractor shall determine if drainage utility conflicts exist. Information about possible conflicts shall be submitted to the Engineer as soon as possible after discovery of such for resolution.
11. The Contractor shall notify all gas utility companies a minimum of two working days prior to excavation as required by Chapter 77-153 of the Florida Statutes.
12. All inlet/manhole - pipe joints shall be filled with non-shrink grout, covered with an asphaltic mastic coating, and wrapped with a filter fabric material per Section 13.03.03 of the Orange County Road Construction Specifications.
13. All curb inlets, ditch bottom inlets, and manholes shall have traffic bearing frames and covers or grates meeting AASHTO-30 loading requirements.
14. Changes of pipe inverts not exceeding plus or minus one foot will not be considered as a basis for additional compensation for the pertinent pipe bid item or for modification of precast structures.
15. All benchmarks (irons and monuments) shown in the Construction Plans, or found, shall be preserved. Those shown in proposed pavement shall be protected with a cast iron valve box.
16. Public land corners within the limits of construction shall be protected. If a corner monument is in danger of being destroyed or disturbed, the Contractor shall notify the Engineer, without delay, by telephone. The Contractor shall provide written follow up confirmation within 48-hours of telephone notification.
17. Prior to beginning of any construction, the Contractor shall submit to the Engineer a set of field notes verifying the benchmark elevations and the reference point connections on the plan and profile view sheets, and/or a set of field notes for all additional benchmark and reference point connections proposed to be used in constructing the project with their location, description and elevation, based on North American Vertical Datum (NAVD88). All submittals shall be signed and sealed by a Professional Land Surveyor registered in the State of Florida.
18. Within 21 calendar days after notice to proceed, the Contractor shall stake the public right-of-way at 50 foot intervals and the right-of-way breaks with corresponding stations shown on the stakes. No invoice for payment for mobilization (Pay Item No. 101-1) will be processed until the right-of-way has been staked to the satisfaction of the Engineer.
19. Any United States Code (USC) and National Geodetic Survey (NGS) monuments within the limits of construction shall be protected. If in danger of damage, the Contractor shall notify the Engineer, and both shall notify:
    State Geodetic Advisor, NOAA
    3900 Commonwealth Blvd - MS105
    Tallahassee, FL Phone (850) 245-3606
20. It shall be the responsibility of the Contractor to acquire all necessary right-of-way and maintenance of traffic permits. The City will waive all permits required for construction activities within the limits of public right-of-way owned and maintained by the City of Apopka. For construction activity within the limits of public right-of-way maintained by the City but owned by Orange County or the State of Florida, the Contractor shall acquire the required permits from the agencies. It shall be the responsibility of the Contractor to insure that all required permits are obtained and in-hand before beginning any construction.
21. The location of all existing utilities, storm drainage systems, and topographic features shown on the plans have been determined from the best available information and are provided for the convenience of the Contractor. The Engineer assumes no responsibility for their inaccuracy. Should a discrepancy arise between these plans and actual field conditions, which would appreciably affect the execution of these plans, the Contractor shall halt construction and notify the Engineer immediately.
22. The Contractor shall be responsible for notifying the City within 48 hours before any inspections. Also, the Contractor shall be responsible for meeting all inspection criteria, schedules and signing said inspections.
23. The Contractor shall not excavate, remove or otherwise disturb any material, structure or part of a structure which is located outside the lines, grades or grading section, established for this project, except where such excavations or removal is provided or in the Contract Construction Plans or Technical Specifications.
24. All work and all materials furnished shall be in conformity with the lines, grades, grading sections, cross sections, dimensions, material requirements, and testing requirements that are specified in the Contract Construction Plans or Technical Specifications.
25. All work shall be accomplished in strict accordance with all applicable federal, state and local codes, ordinances and regulations
26. Apparent errors, discrepancies or omissions in the Construction Plans shall be brought to the Engineer's attention before bidding.
27. After completion of construction, the Contractor shall provide to the City a completed as-built plan one week prior to the final inspection. Before the final acceptance it shall be the Contractor's responsibility to perform a site cleanup for the removal of trash, debris, excess materials, and equipment to present the project site clean and in good order.
28. No extra payments shall be allowed for any work required due to misunderstanding of job or site conditions affecting the work as described in the Technical Specifications or shown on the Construction Plans. The Contractor shall not take advantage of any apparent error or omission in the Construction Plans or Technical Specifications and the Engineer shall be permitted to make corrections and interpretation as may be deemed necessary for the fulfillment of the intent of the Contract Documents. By entering the bidding process the bidders acknowledge acceptance of these conditions.
29. The Contractor shall submit four (4) sets of detailed shop drawings of all major items proposed for this project to the Engineer prior to ordering any of the equipment or material. Two (2) copies of the shop drawings will be returned to the Contractor. Upon the Contractor's receipt of approved shop drawings from the Engineer, the Contractor may proceed with the work.
30. The Contractor shall comply with the legal load restrictions in hauling of materials in public roads beyond the limits of construction work. A special permit will not relieve the Contractor of liability for damage which may result from the moving of material and equipment.
31. During construction, no direct discharge of water to downstream receiving waters will be allowed. The Contractor is responsible for maintaining water quality and route discharge water in such a manner as to adequately remove silt prior to runoff from the site.
32. Connection to existing lines to which utility pipe of the Contract must connect, the following work shall be performed:
    A. Expose buried lines to confirm or determine end connection, pipe material and diameter.
    B. Furnishing and installing piping and making proper connections.

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. GN

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
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LICENSED LANDSCAPE ARCHITECT
JORDAN DRAPER
LICENSE
No. 0001888
STATE OF FLORIDA
PROFESSIONAL LANDSCAPE ARCHITECT
DATE:

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

CITY OF APOPKA DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C8.3

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C8.0 – CITY OF APOPKA DETAILS.dwg C8.3 – CITY OF APOPKA DETAILS Jul 22, 2024 4:57pm by: griffin.bailey
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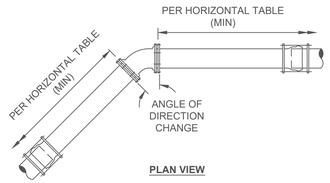
RESTRAINED HORIZONTAL PIPE - WATER, WASTEWATER FORCE, & RECLAIMED WATER MAINS (150 PSI)



PLAN VIEW

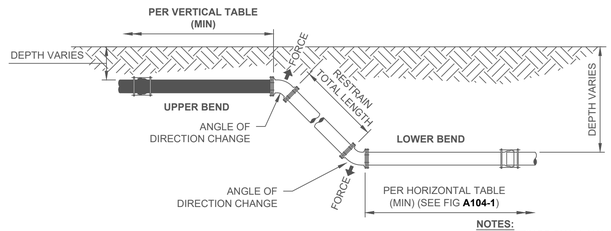
MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

	TYPE	PVC AND DUCTILE IRON PIPE SIZE (IN)													
		4	6	8	12	16	20	24	30	36	42	48	54	60	64
HORIZONTAL	90° BEND	21	29	37	52	65	78	104	122	143	154	167	180	188	195
	45° BEND	9	12	16	22	27	33	43	51	60	64	70	75	78	81
	22-1/2° BEND	5	6	8	11	13	16	21	25	29	31	34	36	38	39
	11-1/4° BEND	2	3	4	6	7	8	11	12	15	16	17	18	19	20
	5 5/8° BEND OR MJ SLEEVE	1	2	2	3	4	4	6	6	8	8	9	9	10	10
	PLUG OR BRANCH OF TEE OR DEAD END	43	59	78	109	139	167	277	330	415	424	465	506	529	551
	VALVE OR LINE STOP	22	30	39	55	70	84	139	165	208	212	233	253	265	276
	HDPE CONNECTION	19	26	34	49	62	75	125	151	174	203	223			

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. ALL INLINE VALVES SHALL BE RESTRAINED.
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, USING THE ASSUMPTIONS SHOWN BELOW:
   - WORKING PRESSURE: 150 PSI
   - SOIL DESIGNATION: SM (SAND SILT)
   - LAYING CONDITIONS: 3
   - DEPTH OF COVER: 3-FT
   - SAFETY FACTOR: 1.5

   THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.
7. 90° BENDS ON VERTICAL PIPE ARE SUBJECT TO REVIEW AND APPROVAL OF UTILITIES.
8. IF 4-IN THRU 20-IN PIPE IS POLYETHYLENE ENCASED, USE 1.25 MULTIPLIER ON RESTRAINT LENGTH.
9. RESTRAINING REQUIREMENTS APPLY TO BOTH EXISTING AND PROPOSED MAINS.

RESTRAINED VERTICAL PIPE - WATER, WASTEWATER FORCE, & RECLAIMED WATER MAINS (150 PSI)



PROFILE VIEW

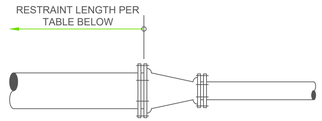
MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

	TYPE	PVC AND DUCTILE IRON PIPE SIZE (IN)													
		4	6	8	12	16	20	24	30	36	42	48	54	60	64
VERTICAL (UPPER)	90° BEND	43	59	78	109	139	167	277	330	415	424	465	506	529	551
	45° BEND	18	25	32	45	58	69	115	137	172	176	193	210	219	229
	22-1/2° BEND	9	12	16	22	28	34	56	66	83	85	93	101	106	110
	11-1/4° BEND	5	6	8	11	14	17	28	33	41	42	46	50	53	55
	5 5/8° BEND OR MJ SLEEVE	3	3	4	6	7	9	14	17	21	21	23	25	26	28

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. ALL INLINE VALVES SHALL BE RESTRAINED.
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, USING THE ASSUMPTIONS SHOWN BELOW:
   - WORKING PRESSURE: 150 PSI
   - SOIL DESIGNATION: SM (SAND SILT)
   - LAYING CONDITIONS: 3
   - DEPTH OF COVER: 3-FT
   - SAFETY FACTOR: 1.5

   THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.
7. 90° BENDS ON VERTICAL PIPE ARE SUBJECT TO REVIEW AND APPROVAL OF UTILITIES.
8. IF 4-IN THRU 20-IN PIPE IS POLYETHYLENE ENCASED, USE 1.25 MULTIPLIER ON RESTRAINT LENGTH.
9. RESTRAINING REQUIREMENTS APPLY TO BOTH EXISTING AND PROPOSED MAINS.

RESTRAINED PIPE TABLE - REDUCERS - WATER, WASTEWATER FORCE, & RECLAIMED WATER MAINS (150 PSI)



MINIMUM LENGTH (FEET) TO BE RESTRAINED ON LARGE SIDE OF REDUCER

PVC & DI PIPE	REDUCER SMALL SIZE (IN)										
DIA (INCH)	4	6	8	12	16	20	24	30	36	42	48
6	31										
8	56	33									
12		79	58								
16			101	59							
20				105	59						
24				205	151	83					
30					233	180	116				
36						259	208	115			
42							281	205	110		
48								281	201	109	
54									282	204	112
60										253	170
64											222

* BASED ON WORKING PRESSURE 150 PSI

NOTES:
1. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH THE PROCEDURES IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE", GUIDELINES PUBLISHED BY DIPRA AND AWWA M23 "PVC PIPE - DESIGN AND INSTALLATION.
2. THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATED AND LAYING CONDITIONS.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. RESTRAINING REQUIREMENTS APPLY TO BOTH EXISTING AND PROPOSED MAINS.

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
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1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT LICENSE No. LA0001811 STATE OF FLORIDA JORDAN D. RAPER PROFESSIONAL ENGINEER LICENSE No. 0093222 DATE: 7/22/2024

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

ORANGE COUNTY DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C8.4

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C8.0 - CITY OF APOPKA DETAILS.dwg C8.4 - ORANGE COUNTY DETAILS Jul 22, 2024 4:57pm by: griffin.bailey
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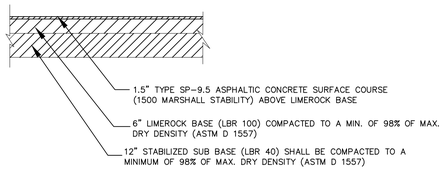
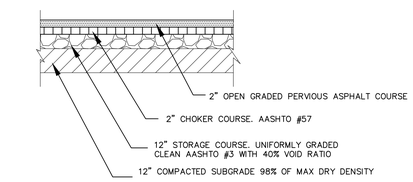


TYPICAL ASPHALT PAVEMENT SECTION

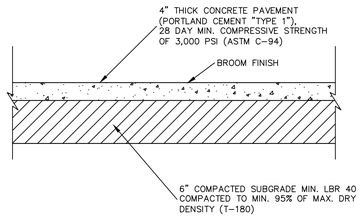
NTS

TYPICAL HEAVY DUTY ASPHALT PAVEMENT SECTION

NTS



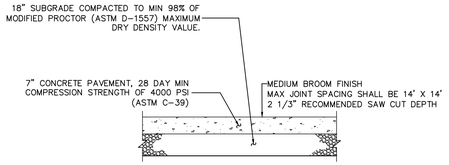
TYPICAL PERVIOUS ASPHALT SECTION



CONCRETE SIDEWALK DETAIL

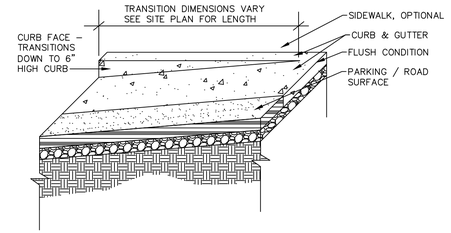
NTS

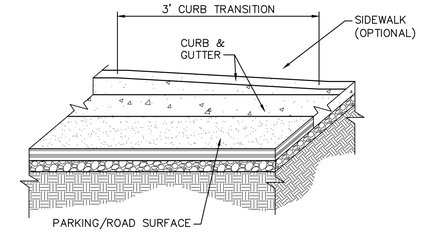
SIDEWALK NOTES:
1. ALL CONCRETE SIDEWALKS SHALL BE CONSTRUCTED PER FDOT DESIGN INDEX #310.

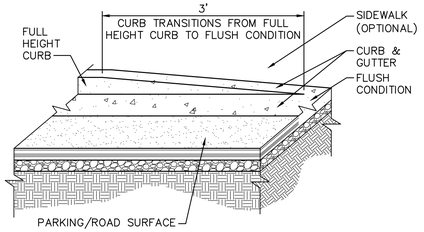


HEAVY DUTY CONCRETE PAVEMENT DETAIL

NTS

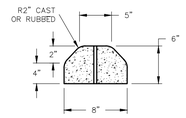




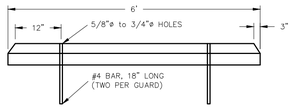


CURB TRANSITION DETAILS

NOT TO SCALE



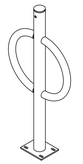
SECTION



CONCRETE WHEEL STOP

PGKH10A.DWG N.T.S.

NOTE: PLACE WHEEL STOPS 17 FEET FROM END OF PARKING STALL.

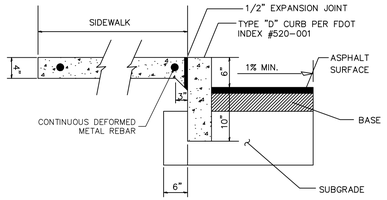


PRODUCT: DERO BIKE HITCH (OR EQUIVALENT)
FINISH: STAINLESS STEEL (OR OWNER APPROVED)
NOTE: INSTALL PER MANUFACTURER'S SPECIFICATIONS

WWW.DERO.COM
1-800-298-4915

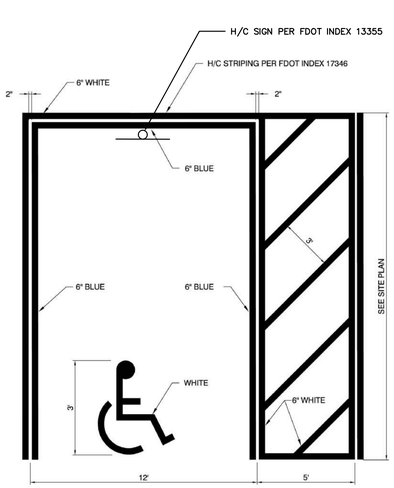
STANDARD BICYCLE RACK DETAIL

NTS



SIDEWALK INTERGRAL CURB DETAIL

NTS

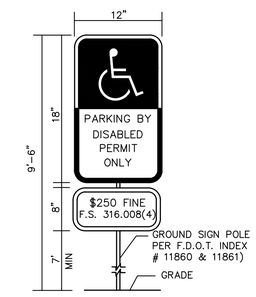


NOTE:

1. HANDICAP PARKING SPACE AND 5' WIDE LANDING AREA SHALL BE CONSTRUCTED AT 2% MAX SLOPE IN EVERY DIRECTION PER 2010 ADA STANDARDS.

HANDICAP PARKING PAVEMENT MARKING

NTS

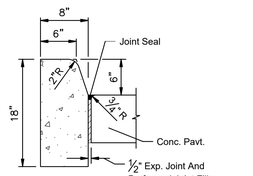


NOTES:

1. ALL LETTERS ARE 1" SERIES "C" PER MUTCD.
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
4. 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).
7. HANDICAP SIGNS SHALL NOT ENCROACH WITH THE PARKING STALL DEPTH.

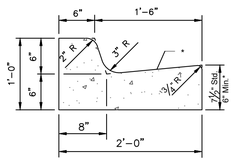
HANDICAP SIGN DETAIL

NTS



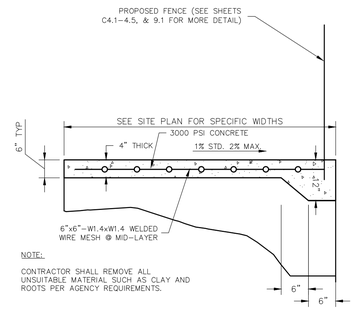
FDOT TYPE "D" CURB (INDEX #300)

NTS



FDOT TYPE "F" CURB (INDEX #300)

NTS



THICKENED EDGE SIDEWALK

N.T.S.

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	LJD
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LORI J. DRAPER LICENSE NUMBER 70933 STATE OF FLORIDA PROFESSIONAL ENGINEER
JORDAN C. DRAPER LICENSE NUMBER 1314602 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

GENERAL CONSTRUCTION DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C9.0

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C9.0 - GENERAL CONSTRUCTION DETAILS.dwg C9.0 - GENERAL CONSTRUCTION DETAILS Jul 22, 2024 4:57pm by: griffin.bailey
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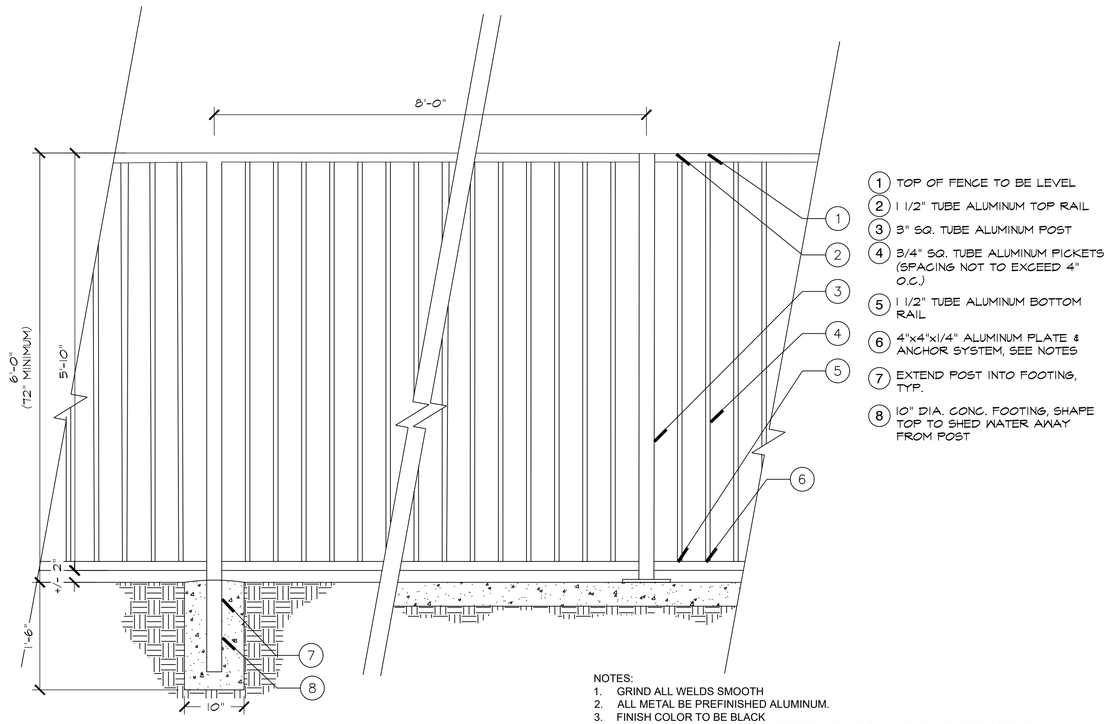
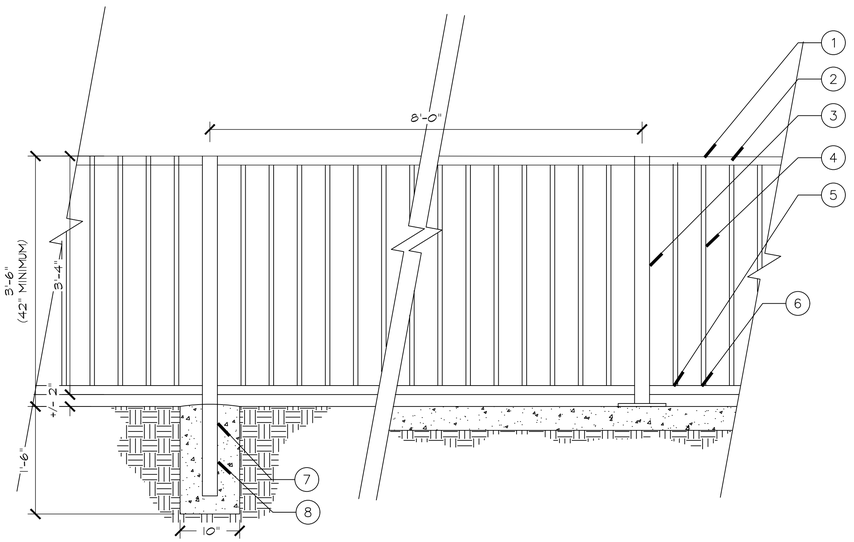


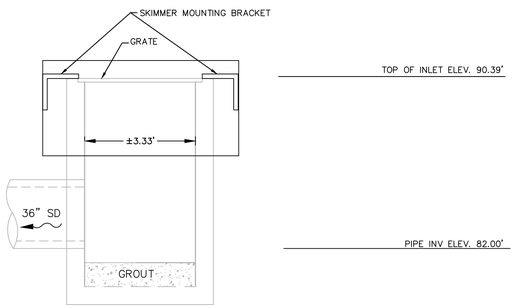
1. TOP OF FENCE TO BE LEVEL
2. 1 1/2" TUBE ALUMINUM TOP RAIL
3. 3" SQ. TUBE ALUMINUM POST
4. 3/4" SQ. TUBE ALUMINUM PICKETS (SPACING NOT TO EXCEED 4" O.C.)
5. 1 1/2" TUBE ALUMINUM BOTTOM RAIL
6. 4"x4"x1/4" ALUMINUM PLATE & ANCHOR SYSTEM, SEE NOTES
7. EXTEND POST INTO FOOTING, TYP.
8. 10" DIA. CONC. FOOTING, SHAPE TOP TO SHED WATER AWAY FROM POST

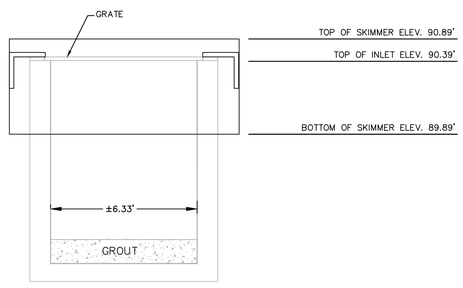
NOTES:
1. GRIND ALL WELDS SMOOTH
2. ALL METAL BE PREFINISHED ALUMINUM.
3. FINISH COLOR TO BE BLACK
4. PLATES TO BE WELDED TO THE POST WITH A CONTINUOUS 1/4" WELD GROUND SMOOTH AND ALL PRIMED/PAINTED TO MATCH THE FENCE. ANCHOR SYSTEM TO BE RED HEAD TRU-BOLT WEDGE ANCHOR 1/4" x 2 1/8" WW304S.S (OR APPROVED EQUAL)
5. SUBMIT SHOP DRAWING FOR REVIEW

01 6' FENCE
NTS



02 42" FENCE
NTS

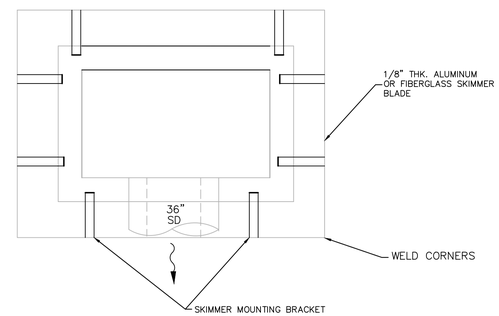




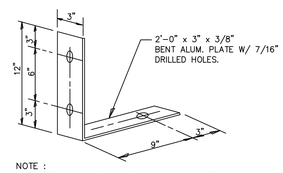
CONTROL STRUCTURE "CS1"
PROPOSED TYPE "H2" DITCH BOTTOM INLET
F.D.O.T. INDEX NO. 232
N.T.S.

CONTROL STRUCTURE BENCHMARK DETAIL

ITEM	ELEVATION	WIDTH	HEIGHT/LENGTH
GRATE	90.39	6'-4"	3'-4"
TOP STRUCTURE	90.39	6'-4"	3'-4"
PIPE INVERT	82.00	36"	36"



NOTE:
1. A BENCH MARK IS TO BE SET ON TOP OF CONTROL STRUCTURE



NOTE :
1. FASTEN SKIMMER BLADE TO MOUNTING STRAP W/3/8" GALV. BOLTS & FASTNERS.
2. FASTEN MOUNTING BRACKETS TO STRUCTURE W/3/8"x4" EXPAN. ANCHOR BOLT & FASTNERS.

SKIMMER MOUNTING BRACKET
N.T.S.

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
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LORDAN B. DRAPER PROFESSIONAL LANDSCAPE ARCHITECT LICENSE No. 6666667 STATE OF FLORIDA

JORDAN B. JONES PROFESSIONAL ENGINEER LICENSE No. 73184 STATE OF FLORIDA

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

GENERAL CONSTRUCTION DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C9.1

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C9.0 - GENERAL CONSTRUCTION DETAILS.dwg C9.1 - GENERAL CONSTRUCTION DETAILS Jul 22, 2024 4:57pm by: griffin.bailey
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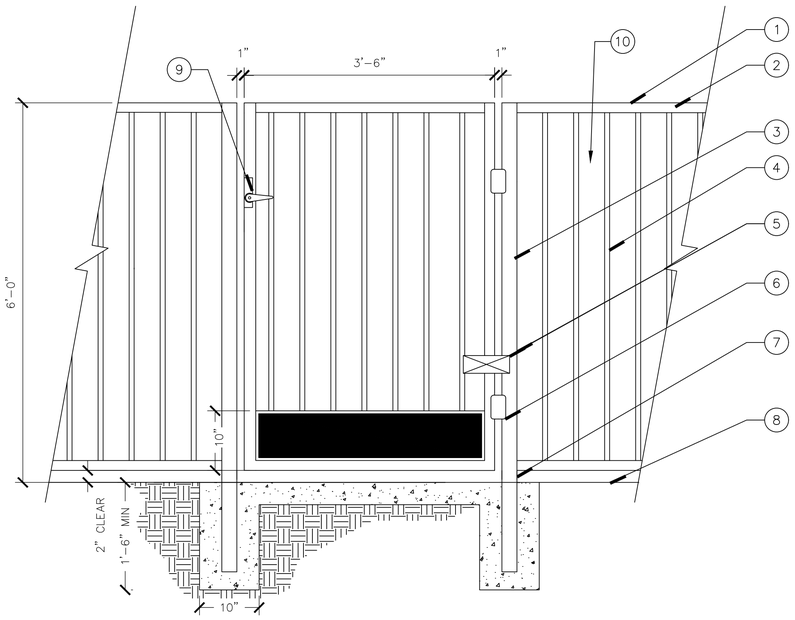
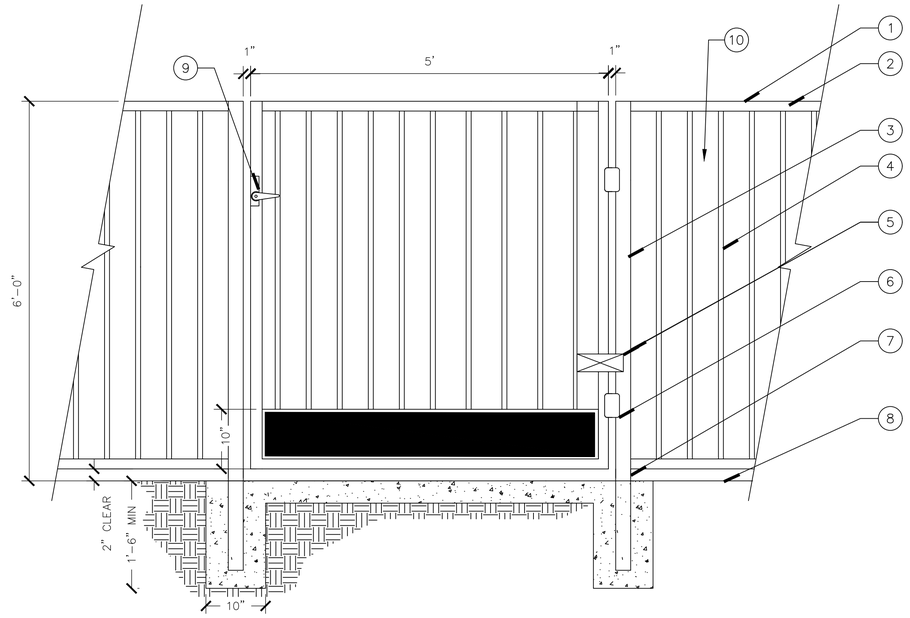


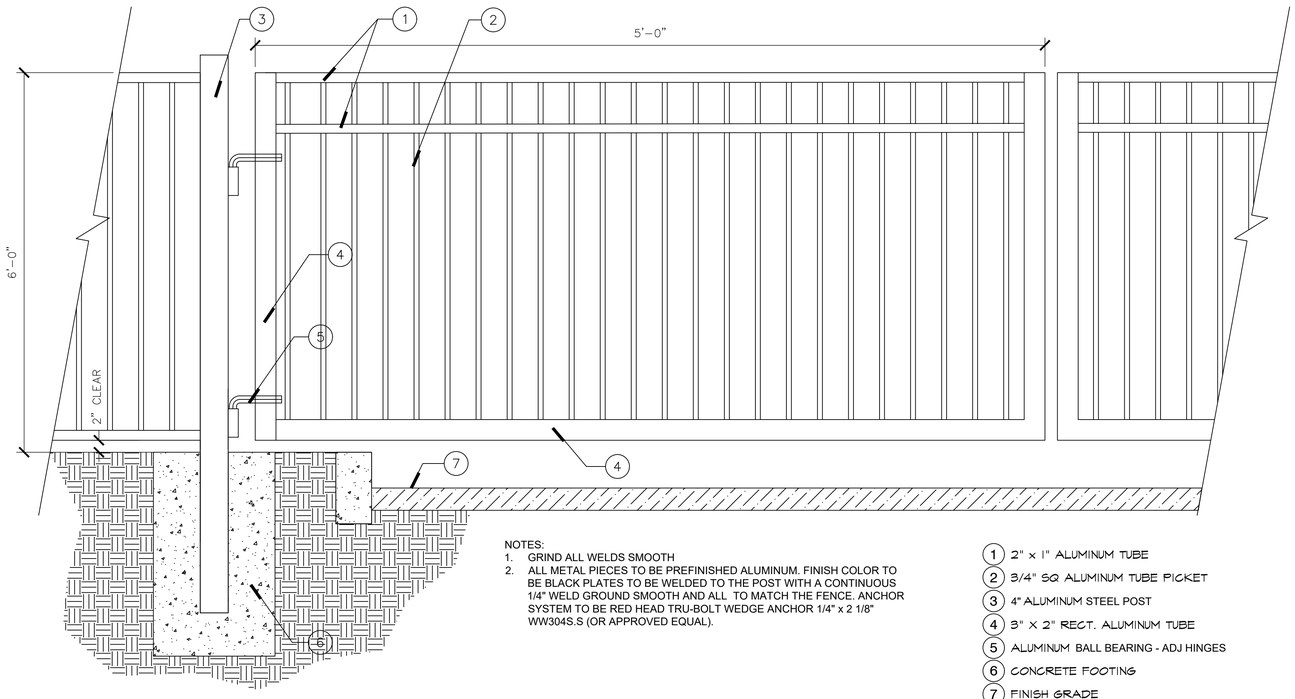
1. TOP OF FENCE TO BE LEVEL WITH FENCE
2. 1 1/2" TUBE ALUMINUM RAIL, TOP & BOTTOM
3. 3" SQ. TUBE ALUMINUM POST (AT GATE ONLY)
4. 3/4" SQ. TUBE ALUMINUM PICKETS
5. LOCINOX MAMMOTH-180 HINGE/CLOSER BY: LOCINOX 877 562 4669
6. HINGES
7. ST POST IN 10" DIA. FOOTING
8. FINISH GRADE
9. MANUAL LOCK / UN-LOCK LATCH SYSTEM

NOTES:
1. GRIND ALL WELDS SMOOTH
2. ALL METAL PIECES TO BE PREFINISHED ALUMINUM. FINISH COLOR TO BE BLACK PLATES TO BE WELDED TO THE POST WITH A CONTINUOUS 1/4" WELD GROUND SMOOTH AND ALL TO MATCH THE FENCE. ANCHOR SYSTEM TO BE RED HEAD TRU-BOLT WEDGE ANCHOR 1/4" x 2 1/8" WW304S.S (OR APPROVED EQUAL).
3. ALL POOL GATES TO HAVE FULL PANIC BAR AND WEATHERPROOF ELECTRIC STRIKE. FENCE FABRICATOR TO PROVIDE SHOP DRAWING FOR INSTALLATION AND GROUNDING.
4. SUBMIT SHOP DRAWING FOR REVIEW

03 6' MAN GATE
NTS



04 6' MAINTENANCE GATE
NTS



NOTES:
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1. 2" x 1" ALUMINUM TUBE
2. 3/4" SQ ALUMINUM TUBE PICKET
3. 4" ALUMINUM STEEL POST
4. 3" X 2" RECT. ALUMINUM TUBE
5. ALUMINUM BALL BEARING - ADJ HINGES
6. CONCRETE FOOTING
7. FINISH GRADE

05 6' DOUBLE SWING VEHICULAR ACCESS GATE
NTS

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
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LICENSED LANDSCAPE ARCHITECT
JORDAN DRAPER
LICENSE
No. 7
STATE OF FLORIDA
PROFESSIONAL LANDSCAPE ARCHITECT
DATE:

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

GENERAL CONSTRUCTION DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C9.2

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C9.0 - GENERAL CONSTRUCTION DETAILS.dwg C9.2 - GENERAL CONSTRUCTION DETAILS Jul 22, 2024 4:57pm by: griffin.bailey
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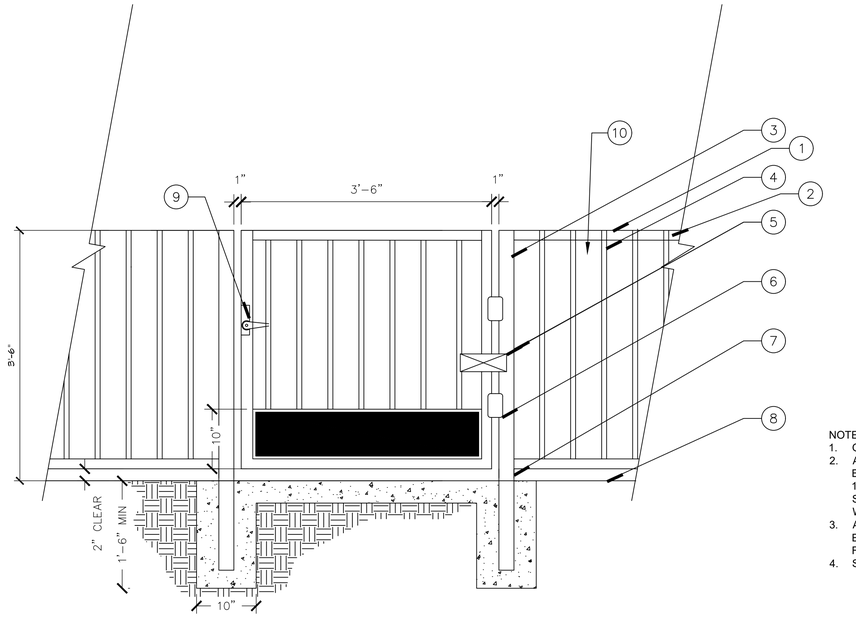

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3. 3" SQ. TUBE ALUMINUM POST (AT GATE ONLY)
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4. SUBMIT SHOP DRAWING FOR REVIEW

06 42" MAN GATE
NTS

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT LICENSE NO. 7
JORDAN DRAPER PE
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE:

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY MWW
DRAWN BY MWW
CHECKED BY LJD

GENERAL CONSTRUCTION DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C9.3

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C9.0 - GENERAL CONSTRUCTION DETAILS.dwg C9.3 - GENERAL CONSTRUCTION DETAILS Jul 22, 2024 4:57pm by: griffin.bailey
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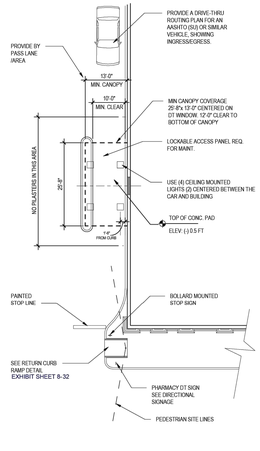
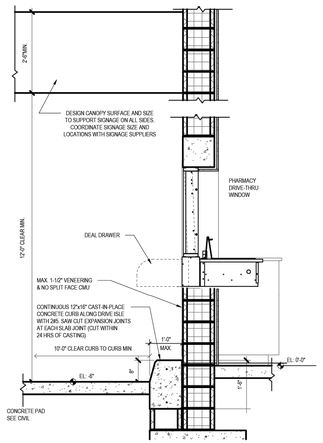


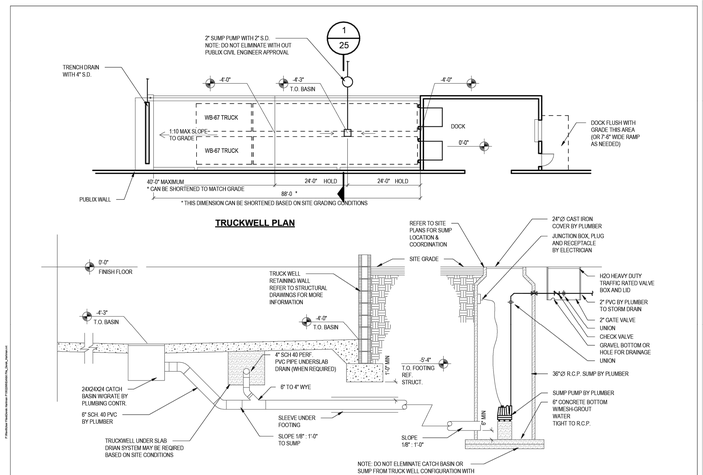
PHARMACY DRIVE THRU CONFIGURATION

SCALE: 1" = 20'-0"



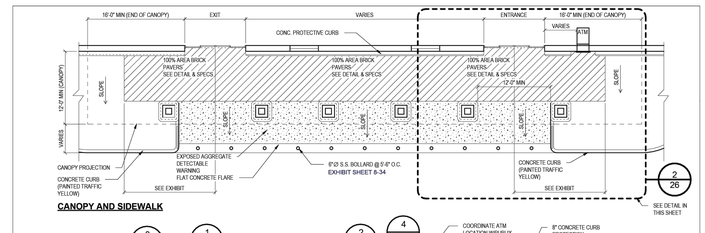
SECTION AT PHARMACY DRIVE-THRU WINDOW

SCALE: 1/2" = 1'-0"

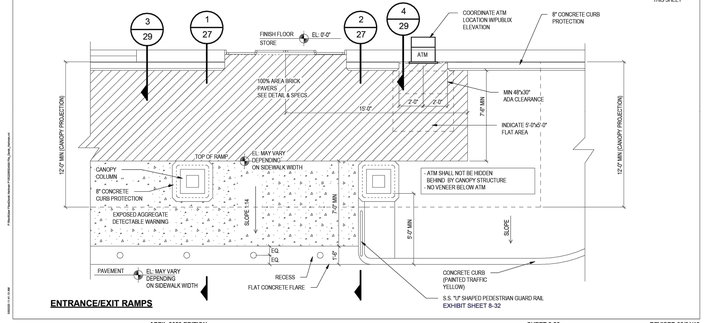


TRUCKWELL PLAN

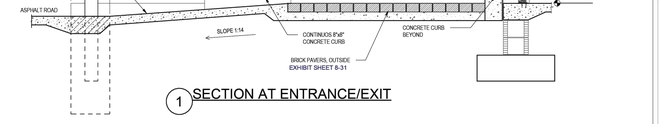
1 TRUCKWELL SUMP PUMP DETAIL



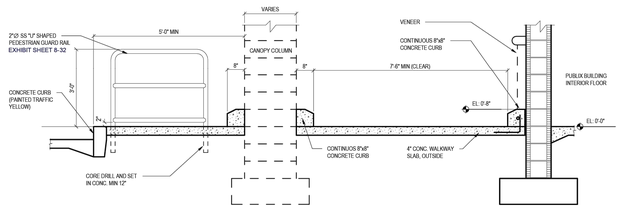
CANOPY AND SIDEWALK



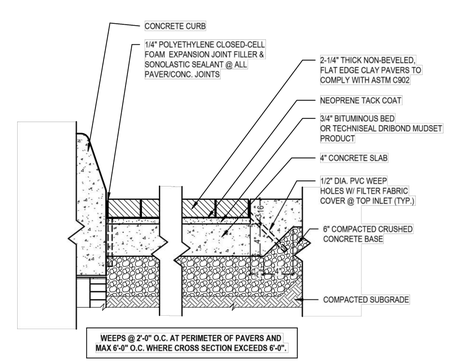
ENTRANCE/EXIT RAMPS



1 SECTION AT ENTRANCE/EXIT



2 SECTION AT STOREFRONT

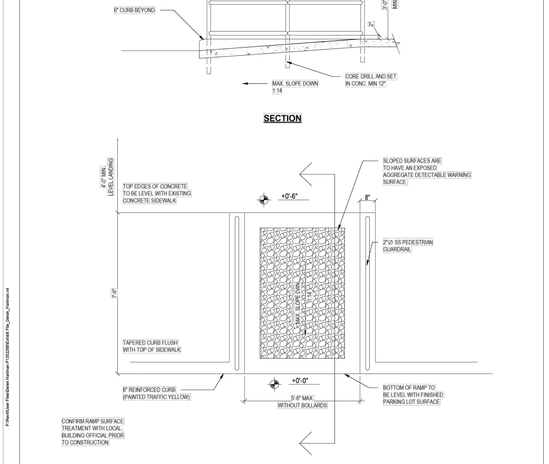


REFER TO SPECS FOR INSTALLATION AND APPROVED MANUFACTURERS

PAVER DETAIL

SCALE: 1 1/2" = 1'-0"

(TYP. ALL PROTOTYPES)



RETURN CURB RAMP DETECTABLE WARNING PLAN

USE IN FRONT OF PUBLIX STORE

Always call 811 two full business days before you dig to have underground utilities located and marked.

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No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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200 S. ORANGE AVENUE, SUITE 600, ORLANDO, FL 32801
PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT LICENSE NO. 6667311 JORDAN T. RAPER STATE OF FLORIDA

PROFESSIONAL ENGINEER LICENSE NO. 86980 STATE OF FLORIDA

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

PUBLIX CONSTRUCTION DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C9.4

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C9.0 – GENERAL CONSTRUCTION DETAILS.dwg PUBLIX CONSTRUCTION DETAILS Jul 22, 2024 4:57pm by: griffin.bailey
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Planshts\C9.0 – GENERAL CONSTRUCTION DETAILS.dwg C9.6 – PUBLIX CONSTRUCTION DETAILS Jul 22, 2024 4:58pm by: griffin.bailey
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

MCCUE CRASHCORE BOLLARD REQUIRED AT ENTRY/EXIT AND CUSTOMER SEATING AREAS

PLACE @ 5'-6" OC

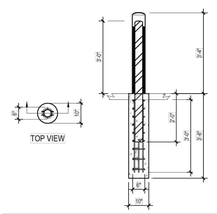
CONTRACTORS NOTE:

BOLLARDS SUPPLIED AND INSTALLED BY MCCUE PRIOR TO SIDEWALK BEING POURED.
NO SUBSTITUTIONS.
CONTACT MCCUE AND PUBILX TO RECEIVE PUBLIX NATIONAL ACCOUNT PRICING FOR MATERIALS AND INSTALLATION.

ORDERING INFORMATION AND TIMING:

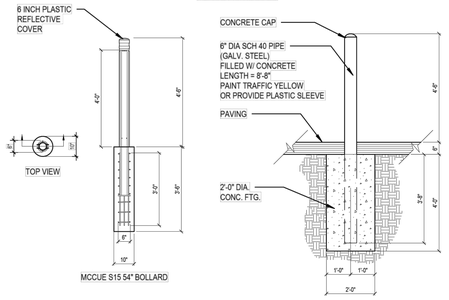
ORDER: 4 WEEKS PRIOR TO SIDEWALK POUR
RECEIVE: 2 WEEKS PRIOR TO SIDEWALK POUR
INSTALLATION: 1 WEEK PRIOR TO SIDEWALK POUR

CONTACT INFO:	YANI DE LA CRUZ
EMAIL:	YDELACRUZ@MCCUE.COM
DIRECT:	978-219-5282
OFFICE ADDRESS:	MCCUE, 13 CENTENNIAL DRIVE PEABODY, MA 01960
WEBSITE:	MCCUE.COM



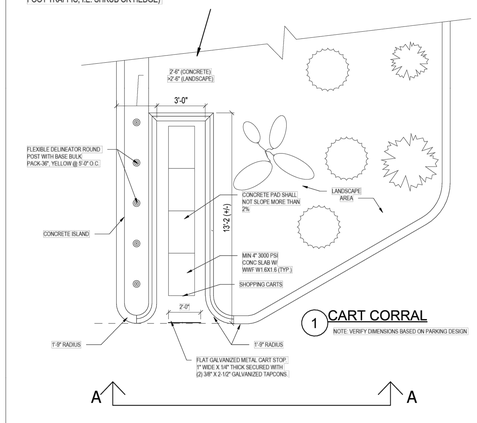
ACCEPTABLE DETAILS FOR BOLLARDS PROTECTING EQUIPMENT AND BUILDING COMPONENTS

PLACE AS NEEDED

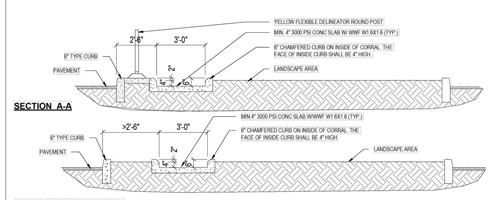


APRIL 2023 EDITION | SHEET 6-34 | REVISED 01/01/20

CONCRETE ISLAND WITH FLEXIBLE DELINEATOR POSTS (LANDSCAPE ISLAND MAYBE USED AS AN ALTERNATIVE IF WIDTH EXCEEDS 2'-6". PLANTING TYPE AND PLACEMENT SHOULD DETER PEDESTRIAN FOOT TRAFFIC, I.E. SHRUB OR HEDGE)

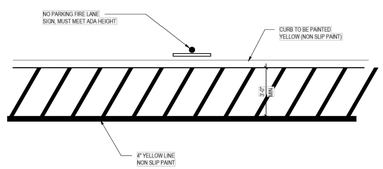


1 CART CORRAL
NOTE: VERIFY DIMENSIONS BASED ON PARKING DESIGN



SECTION A-A ALTERNATE

APRIL 2023 EDITION | SHEET 6-44 | REVISED 09/01/22

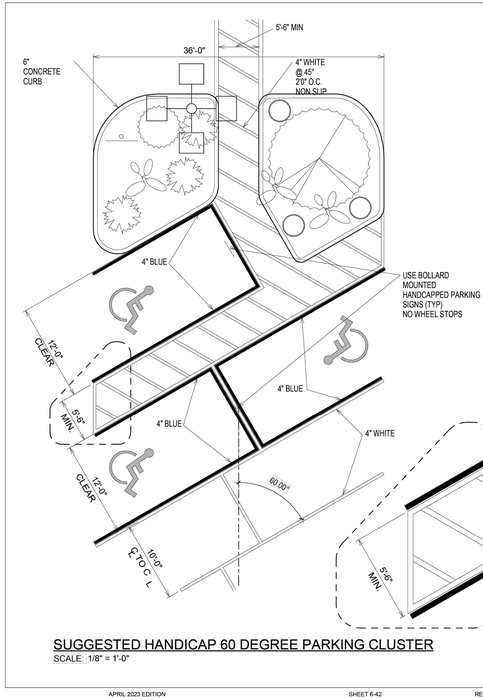


FIRE LANE DETAIL

SCALE: 1/4" = 1'-0"

SUGGESTED FIRE LANE DETAIL.
IF LOCAL JURISTICTION DOES NOT DICTATE.
PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
FIRE LANE SHOULD BE LOCATED ON EITHER SIDE OF THE MAIN ENTRANCE/EXIT SIDEWALK RAMP.

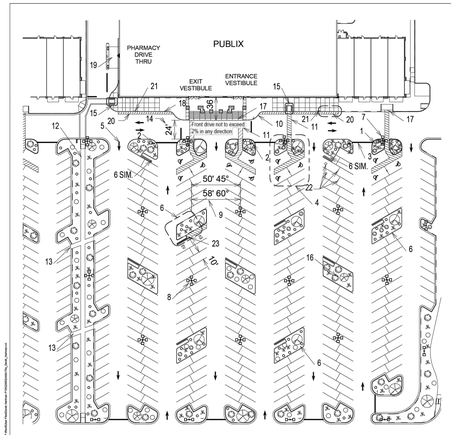
APRIL 2023 EDITION | SHEET 6-41 | REVISED 02/01/18



SUGGESTED HANDICAP 60 DEGREE PARKING CLUSTER

SCALE: 1/8" = 1'-0"

APRIL 2023 EDITION | SHEET 6-42 | REVISED 09/01/22



KEYNOTE LEGEND

1. STOP SIGN
2. PHARMACY DIRECTIONAL SIGN (SEE SIGN EXHIBITS)
3. STOP BAR
4. HC PARKING (3) CLUSTERS OF 3 (SEE ENLARGED EXHIBIT)
5. DIRECTIONAL ARROW
6. CART CORRAL (SEE ENLARGED EXHIBIT)
7. LED LIGHTING IN EVERY OTHER ISLAND ALONG FRONT DRIVE. NO TREES BETWEEN LIGHT AND DRIVE AISLE.
8. LED LIGHTING IN PARKING FIELD PLACED WITH GOOD DESIGN PRACTICES AND COORDINATED WITH LANDSCAPING.
9. 58' SPINE TO SPINE FOR 60 DEGREE PARKING. (60' FOR 45 DEGREE PARKING)
10. TRAFFIC CALMING BUMP OUT
11. STRIPED ACCESS ROUTE (NON SLIP PAINT)
12. ACCESSIBLE ROUTE TO PUBLIC RIGHT OF WAY
13. CUT THROUGH FOR SHOPPING CARTS.
14. 24' MIN. CLEAR
15. RETURN CURB RAMP (SEE EXHIBIT)
16. VARIETY OF PLANT MATERIAL FROM APPROVED LIST
17. FRONT BOLLARDS (SEE EXHIBIT)
18. 6" SIDEWALK CURBING ALONG STOREFRONT. PAINTED (NON SLIP) TRAFFIC YELLOW.
19. PHARMACY DRIVE THRU. COORDINATE LOCATION AND SIDEWALK WITH PROTOTYPE.
20. FIRE LANE (SEE EXHIBIT)
21. NO PARKING/FIRE LANE SIGN
22. CURBSIDE PICKUP SIGN AND 36"X24" PAVEMENT MARKING (CONFIRM W/ PUBLIX PROJECT MANAGER).
23. ELECTRICAL VEHICLE CHARGING STATION - PROVIDE ONLY WHEN SPECIFIED BY PUBLIX.

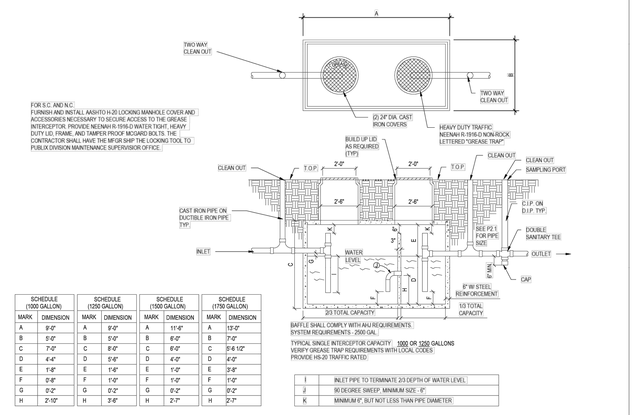
*OUTDOOR SEATING MAY BE REQUESTED BASED ON LOCATION

GENERIC PARKING LOT DESIGN GUIDE

SCALE: 1/8" = 1'-0"

WHERE LANDSCAPING STANDARDS REQUIRE LARGER AREAS THAN WHAT IS SHOWN, MODIFICATIONS TO THE ISLANDS MAY BE MADE, PROVIDED THAT THE DESIGN DOES NOT ENCOURAGE PARKING ALONGSIDE THE ISLAND. SEE DIRECTIONAL SIGNAGE EXHIBIT. SHOW SIGNAGE ON SITE PLAN AS APPROPRIATE.

APRIL 2023 EDITION | SHEET 6-39 | REVISED 04/24/23



FOR S.C. AND N.C.
FURNISH AND INSTALL ASHITO H-20 LOCKING MANHOLE COVER AND ACCESSORIES NECESSARY TO SECURE ACCESS TO THE GREASE INTERCEPTOR. PROVIDE NEENAH R-1916-D WATER TIGHT, HEAVY DUTY LID, FRAME, AND TAMPER PROOF MCGARD BOLTS. THE CONTRACTOR SHALL HAVE THE MFGR SHIP THE LOCKING TOOL TO PUBLIX DIVISION MAINTENANCE SUPERVISOR/S OFFICE.

SCHEDULE (1000 GALLON)		SCHEDULE (1250 GALLON)		SCHEDULE (1500 GALLON)		SCHEDULE (1750 GALLON)	
MARK	DIMENSION	MARK	DIMENSION	MARK	DIMENSION	MARK	DIMENSION
A	9'-0"	A	9'-0"	A	11'-6"	A	13'-0"
B	5'-0"	B	5'-0"	B	6'-0"	B	7'-0"
C	7'-0"	C	8'-0"	C	9'-0"	C	9'-6 1/2"
D	4'-4"	D	5'-6"	D	4'-0"	D	4'-0"
E	1'-8"	E	1'-8"	E	1'-0"	E	3'-8"
F	0'-8"	F	1'-0"	F	1'-0"	F	1'-0"
G	0'-2"	G	0'-2"	G	0'-2"	G	0'-2"
H	2'-10"	H	3'-8"	H	2'-7"	H	2'-7"

I	INLET PIPE TO TERMINATE 2/3 DEPTH OF WATER LEVEL
J	90 DEGREE SWEEP, MINIMUM SIZE - 6"
K	MINIMUM 6", BUT NOT LESS THAN PIPE DIAMETER

BAFFLE SHALL COMPLY WITH ANJ REQUIREMENTS
SYSTEM REQUIREMENTS - 2500 GAL.
TYPICAL SINGLE INTERCEPTOR CAPACITY: 1000 OR 1250 GALLONS
VERIFY GREASE TRAP REQUIREMENTS WITH LOCAL CODES
PROVIDE HS-20 TRAFFIC RATED

GREASE INTERCEPTOR DETAIL

SCALE: 3/32" = 1'-0"

APRIL 2023 EDITION | SHEET 6-46 | REVISED 10/01/22

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No.	REVISIONS	DATE	BY
1	CITY OF APOPKA COMMENTS	05/25/23	JAC
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB

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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LUIS J. DIAZ PROFESSIONAL SURVEYOR AND MAPPER LICENSE NO. LS7177 STATE OF FLORIDA
JORDAN D. GRAPES PE LICENSE NO. 0090127 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	MWW
DRAWN BY	MWW
CHECKED BY	LJD

PUBLIX CONSTRUCTION DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
C9.5

(H-20 LP) w/ BATTERY BACK-UP FOR AUDIO AND VISUAL ALARMS

SCOPE: *Supply one complete H-20 LP Pre-Fab Lift Station, per design.*

Pumps shall be capable of pumping domestic & commercial sewage.

Complete system shall be supplied by:

T.B.D. BY CONTRACTOR

The H-20 Load Rated Fiberglass Wetwell Must Be Manufactured By L.F. Manufacturing, Giddings, Texas, Which Includes A Written 20 Yr. Warranty

Certification of the wetwell H-20 load rating must be supplied with submittals. H-20 certification must be signed and sealed by an engineer registered in the State of Florida.

After the H-20 load rated wetwell has been installed, the ASTM Certification Number and Serial Tracking Number must be visible.

PUMPS: *The submersible pumps shall be manufactured by COUNTY APPROVED PUMP. "The pumps shall be installed in the H-20 LP FRP wetwell utilizing a dual slide rail system. The pumps shall be capable of handling solids, fibrous materials, heavy sludge, and other matter typically found in wastewater. Major pump components shall be grey cast iron, ASTM A-48, Class 35B. The pump motor shall be NEMA B design and housed in an air-filled watertight chamber. The stator windings shall be insulated with moisture resistant Class H insulation by use of the trickle impregnation method. The motor shall be heat-shrink fit into the stator housing. The use of bolts, pins, or other fastening devices is not acceptable. The cable entry seal shall consist of a cylindrical elastomer grommet flanked by washers. Epoxies, silicones, or other sealing systems are not acceptable. Thermal switches set to open at 125 degrees C shall be embedded in the stator end coils to monitor the temperature of each phase winding. The motor horsepower shall be adequate so that the pump is non-overloading throughout the entire pump performance curve from shut-off through run-out.*

The pump shall be provided with a dual mechanical seal. Both upper and lower seal assemblies shall consist of a stationary tungsten-carbide ring and a rotating tungsten-carbide ring. Other seal materials are not considered acceptable."

DUPLEX CONTROL PANEL:

Control panel shall be assembled and built by a TUV (UL508A CERTIFIED) manufacturing facility.

The Enclosure shall be NEMA 4X, minimum 30" high x 30" wide x 10" deep Fiberglass with padlockable draw latches.

The enclosure shall have external mounting feet to allow for wall mounting. All hardware shall be stainless steel.

The following components shall be mounted through the enclosure:
1- ea. Red Alarm Beacon (Light)
1- ea. Alarm Horn
1- ea. Generator Receptacle w/ weatherproof cover
1- ea. Alarm Silence Pushbutton

The backpanel 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 backpanel:
2- ea. Motor Contactors
1- ea. Volt Monitor (Single Phase) Phase Monitor (Three Phase)
1- ea. Control Transformer (480 Volt Only)
1- ea. Silence Relay
1- ea. Duplex Alternator
1- ea. Model BOAC5AH Battery Back-Up w/ Smart Charger (Per DEP)
20- ea. Terminals For Field Connections
6- ea. Terminals For Motor Connections (Single Phase Only)
3- ea. Grounding Lugs

The innerdoor shall be fabricated from .080, 5052-H32 marine alloy aluminum. The innerdoor shall have a continuous aluminum piano hinge.

The following components shall be mounted through the innerdoor:
1- ea. Main Circuit Breaker
1- ea. Emergency Circuit Breaker
1- ea. Mechanical Interlock For Emergency And Main Breakers
2- ea. Short Circuit Protectors
1- ea. Control Circuit Breaker
1- ea. Hand-Off-Auto Selector Switches
2- ea. Pump Run Pilot Lights
1- ea. Power On Pilot Light
2- ea. Elapse Time Meters (Non-Resetable)
1- ea. GFI Duplex Convenience Outlet

COMPONENT SPECIFICATIONS:
All circuit breakers shall be molded thermal magnetic.
The mechanical interlock shall prevent the normal and emergency main breakers being energized at the same time.
An emergency generator receptacle shall be supplied in accordance with DEP standards. The generator receptacle shall be adequately sized to meet the equipment operating conditions.

NEUTRAL TO BE SUPPLIED FOR BOTH 230V 3PHASE OR 230V SINGLE PHASE POWER

All motor short circuit protection devices must provide for undervoltage release and class 10 overload protection on all three phases. Visable trip indication, test, and reset capability must be provided without opening inner door.
Open frame, across the line, contactors shall be rated per IEC standards and properly sized per the motor requirements.
Contactors shall provide for safe touch power and control terminals.
Lightning Arrestor shall meet or exceed the requirements of ANSI/IEEE Std. C62.21-1984 section 8.6.1. and 8.7.3 shall be supplied by electrician and mounted on the bottom side of the switch disconnect ahead of the pump control panel.
A voltage monitor shall be supplied for single phase service.
A phase monitor shall be supplied for (3) phase service.
A green pilot light shall be supplied for each motor. The pilot light shall illuminate each time the motor is called to run.
Each pump shall have an Elapse Time Meter to record the accumulated run time. The ETM shall be 2" diameter, non-resettable, six digit, totally encapsulated unit.
A Red pilot light shall be supplied for control power. The pilot light shall illuminate when the control power is available inside the control panel.
Relays shall be ice-cube plug in type. Relay contacts shall be rated 10 amp minimum, DPDT.
Twenty (20) terminals shall be supplied for field connections.
The terminals shall be rated 25 amps minimum.
Each motors over-temperature contact shall be connected to the terminal strip and shall open a contact to de-energize the appropriate motor upon a high temperature within the motor.
A 15 Amp GFI duplex receptacle shall be supplied and mounted on the innerdoor.
Ground lugs shall be supplied and appropriately sized for each motor and for service entrance.

Nameplates for the innerdoor and back panel shall be of a graphic design, specifically depicting the intent for each device.

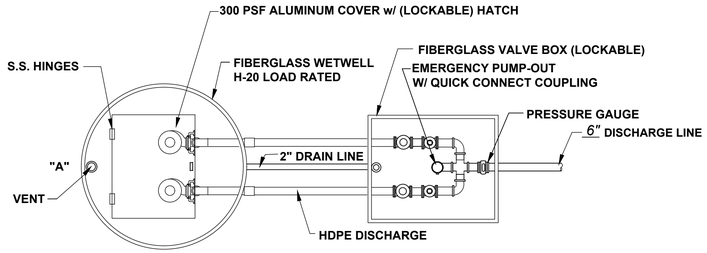
MISCELLANEOUS: All wiring on the backpanel shall be containted within the wiring duct. All wiring between the innerdoor and the backpanel shall be contained with in a plastic spiral wrap.
Each wire shall have a wire number at each end to correspond to the as built drawing for field troubleshooting.
The control panel shall be assembled by a TUV (UL508A Certified) manufacturing facility.

FASTNERS & APPURTANCES: *All fasternes, lifting cables, float cable bracket, hinges, and appurtances shall be made of AISI 304SS.*
A 304SS slide/latch assembly shall be provided for holding the doors open on the wetwell and valve box.
Slide rails shall be made of SCH.40 AISI 304SS pipe.
Pump lifting cables shall be made of AISI 304 SS.

H-20 LOAD RATED WETWELL WITH LIFTING LUGS:
The fiberglass wetwell must be H-20 load rated with integral lifting lugs, fiberglass slope in bottom of wetwell and valve box.
Certification of the H-20 load rating must be supplied at the time of submittals to Engineer.
The wetwell shall be manufactured of fiberglass reinforced polyester (FRP) of depth and diameter as shown on the lift station elevation detail. The wall thickness shall be adequate for the depth of the wetwell to maintain the H-20 LOAD RATING.

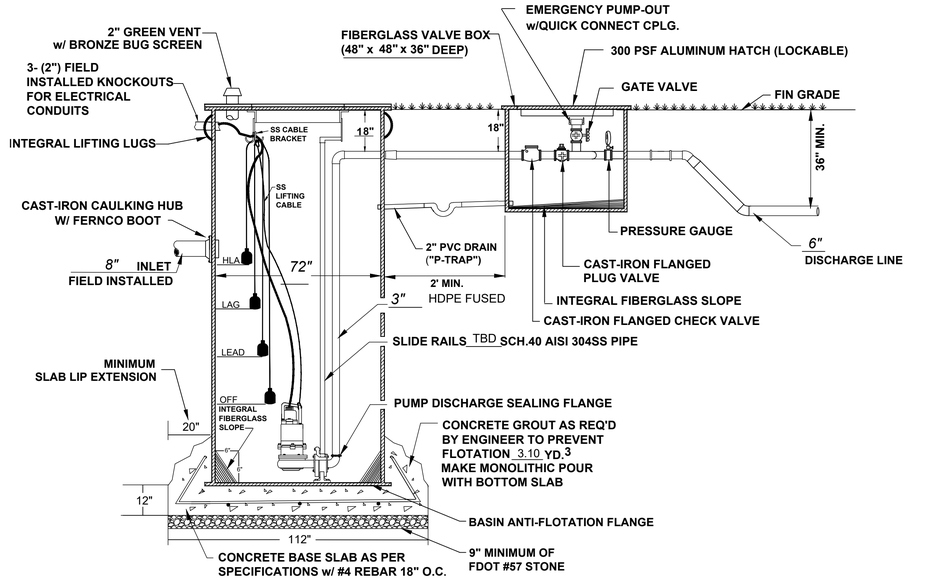
EXECUTION:
Installation shall be in strict accordance with the manufacturer's recommendations in the locations shown on the drawing.

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

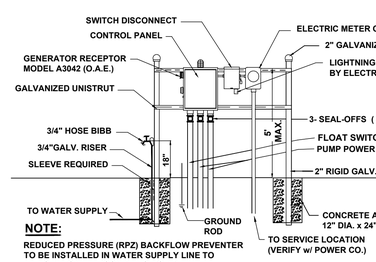


NOTE: PUMP CONTROL PANEL SHALL BE LOCATED 3 FEET MINIMUM FROM WETWELL PERIMETER AT POINT "A"

LIFT STATION PLAN



LIFT STATION SECTION



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

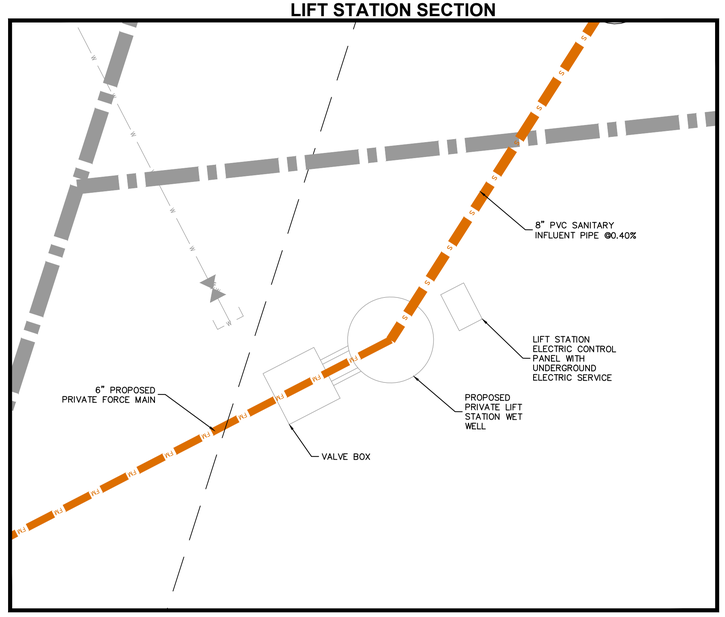
ELECTRICAL RISER

*** ELECTRICIAN NOTES:**

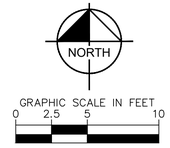
1. **DRAWING NOT TO SCALE**
* 2. **ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES**
* 3. **ELECTRICIAN SHALL SEAL OFF CONDUIT RUNS**
* 4. **ELECTRICIAN TO MOUNT LIGHTNING ARRESTOR AT SWITCH DISCONNECT**
* 5. **CONTRACTOR SHALL VERIFY POWER SOURCE PRIOR TO ORDERING EQUIPMENT**
* 6. **NEUTRAL TO BE SUPPLIED FOR 208V-3 PHASE OR 208V-SINGLE PHASE POWER.**

PUMP DATA	
PRIMARY PUMP CAPACITY	169 GPM
PRIMARY TDH	53.6 FT TDH
PUMP MANUFACTURER	FLYGHT
PUMP MODEL	NP 3102 SH 3~ Adaptive 257
RPMs	3,490
HORSEPOWER	6.5
ELECTRICAL VOLTS/PHASE	208 V / 2 P
PUMP DISCHARGE SIZE	3-IN
IMPELLER DIAMETER	125 mm

ELEVATIONS	
TOP OF WETWELL	89.00 -ft
INFLUENT INVERT	77.72 -ft
HIGH LEVEL ALARM (HLA)	77.72 -ft
2nd PUMP ON (LAG)	76.72 -ft
1sT PUMP ON (LEAD)	75.72 -ft
PUMPS OFF	73.22 -ft
BOTTOM OF WETWELL	72.22 -ft
WETWELL DIAMETER	72.00 -in



LIFT STATION SITE PLAN



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2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY
DRAWN BY
CHECKED BY

LIFT STATION DETAIL

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
C9.6

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\C9.7 – LIFT.dwg C9.6 – LIFT STATION DETAIL Jul 22, 2024 4:58pm by griffin.bailey
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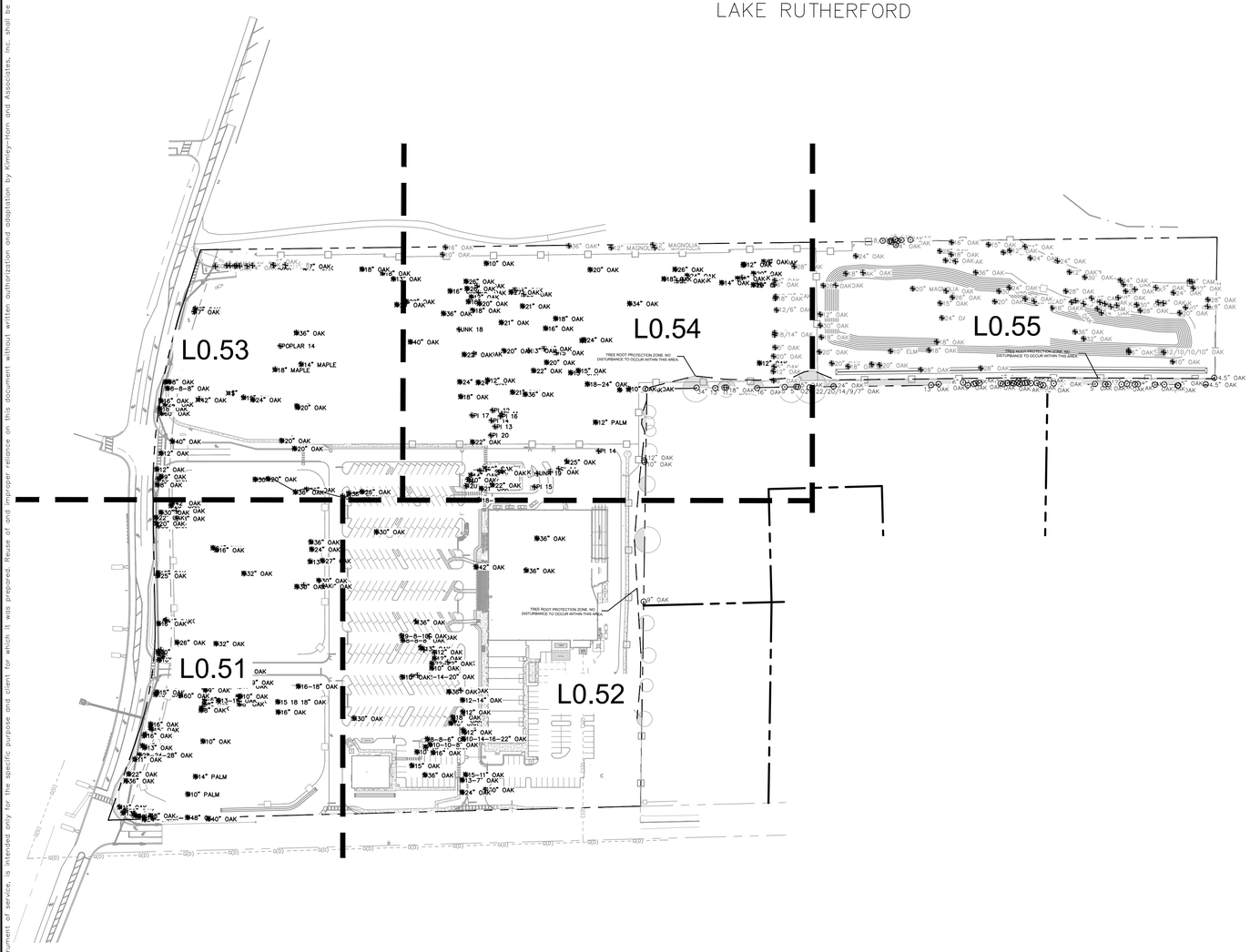

TREE LEGEND

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
	ER	60	EXISTING TREE CONTRACTOR LIABLE FOR DAMAGE	TO REMAIN	-
	EX	358	EXISTING TREE DISPOSE OF IN SUSTAINABLE MANNER	TO BE REMOVED	-

TREE CANOPY COVERAGE TABLE			
XXXX	SQUARE FEET	ACRES	PERCENT
TOTAL SITE AREA	1213988	27.87	100.00%
EXISTING CANOPY AREA	537677	12.34	44.29%
REQUIRED CANOPY TO REMAIN	32260	0.74	6.00%
CANOPY AREA TO REMAIN	43,270	0.99	8.05%

TREE REMOVAL TABLE		
	TREES	INCHES
TOTAL TREES ON SITE	418	7286
TOTAL TREES TO BE REMOVED	358	6702
TOTAL TREES TO REMAIN	60	584
TOTAL TREE INCHES TO BE MITIGATED		6702

TREE REPLACEMENT TABLE		
	TREES	INCHES
TOTAL MITIGATION REQUIRED		6702
TOTAL TREES TO BE PLANTED ON SITE	229	687
CANOPY TREES (3" CAL)	179	537
UNDERSTORY & ACCENT TREES	50	186
NET MITIGATION INCHES OWED		6015
TOTAL FEE TO BE PAID ($15 PER INCH)		$90,225

SPECIMEN TREE TABLE		
	TREES	INCHES
SPECIMEN TREES ON SITE	98	2989
SPECIMEN TREES TO BE REMOVED	94	2883
SPECIMEN TREES TO BE PRESERVED	4	106

*INVASIVE TREES (EAR, GUM, CHINABERRY, AND CAMPHOR) & DEAD TREES ARE NOT INCLUDED IN THE ABOVE CALCULATIONS

SEE TREE DATA ON SHEETS L0.51-L0.56
SEE CANOPY COVERAGE PLAN ON SHEET L0.57

NORTH

GRAPHIC SCALE IN FEET
0 60 120 240

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SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

OVERALL TREE MITIGATION PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L0.50

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Master Plan\PlanSheets\L0.50- TREE MITIGATION PLAN.dwg L0.50 OVERALL TREE MITIGATION PLAN Jul 22, 2024 5:01pm by: jake.mople
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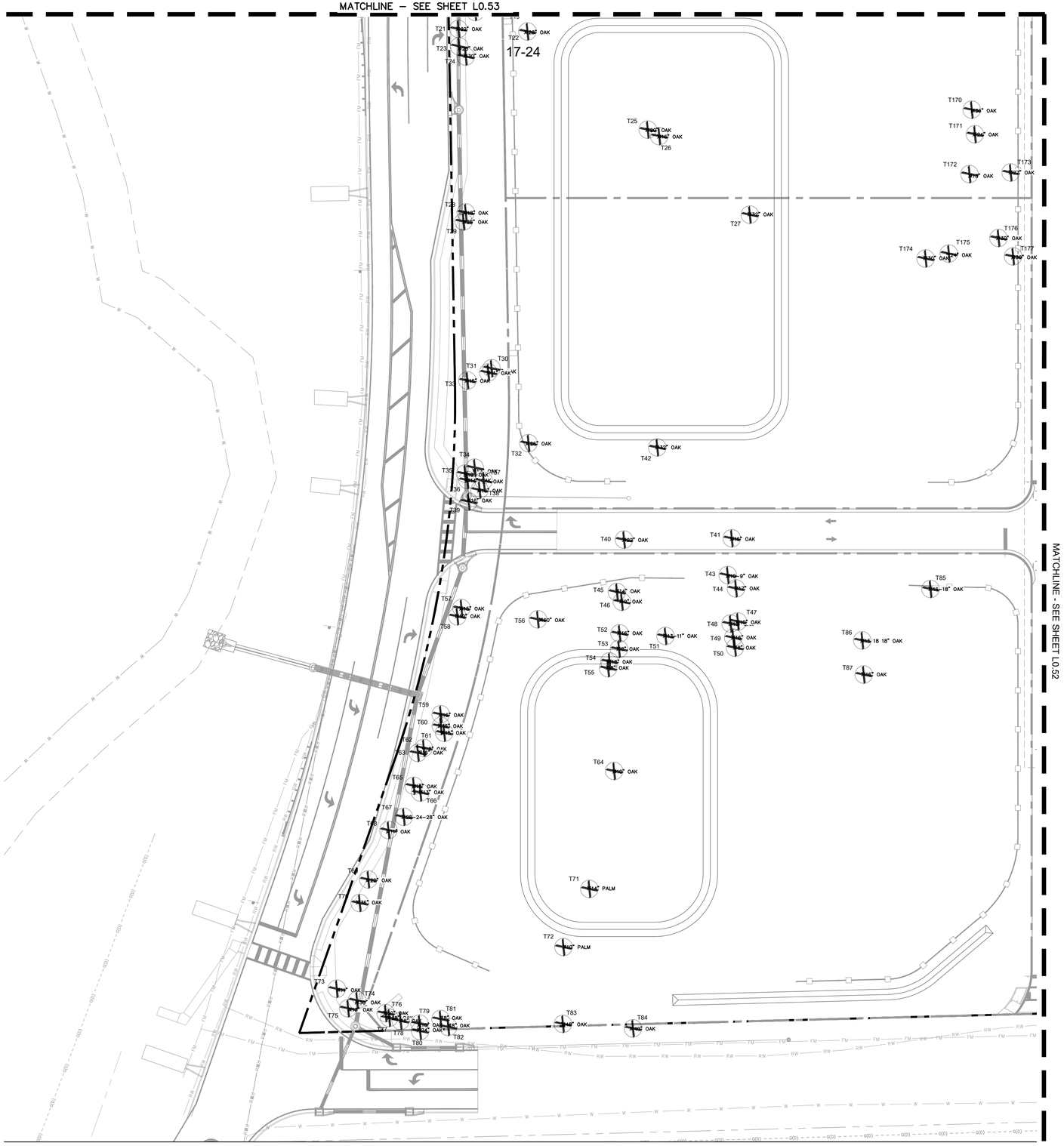
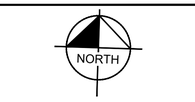
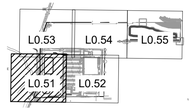




GRAPHIC SCALE IN FEET
0 15 30 60



KEY MAP
SCALE: 1" = 1000'

TREE LEGEND

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
	ER	60	EXISTING TREE CONTRACTOR LIABLE FOR DAMAGE	TO REMAIN	-
	EX	358	EXISTING TREE DISPOSE OF IN SUSTAINABLE MANNER	TO BE REMOVED	-

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LICENSED PROFESSIONAL

FLORIDA LICENSE NUMBER

DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

TREE MITIGATION PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L0.51

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Master Plan\PlanSheets\L0.50- TREE MITIGATION PLAN.dwg L0.51 TREE MITIGATION PLAN Jul 22, 2024 5:01pm by: jake.maple
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MATCHLINE - SEE SHEET L0.54

MATCHLINE - SEE SHEET L0.51

TREE ROOT PROTECTION ZONE. NO DISTURBANCE TO OCCUR WITHIN THIS AREA.

T178 30" OAK
T127 30" OAK
T126 40" OAK
T125 30" OAK
T124 9" OAK
T89 36" OAK
T90 8-10" OAK
T92 8-8" OAK
T91 15" OAK
T93 12" OAK
T94
T95 12" OAK
T96 40" OAK
T97 22-22" OAK
T98 18" OAK
T99 40" OAK
T102 40" OAK
T101
T100 12-14-20" OAK
T104 30" OAK
T103 40" OAK
T105 12-14" OAK
T106 40" OAK
T88 30" OAK
T107 18" OAK
T109 42" OAK
T108 18" OAK
T110 40" OAK
T111 40" OAK
T112 10-14-16-22" OAK
T113 8-6" OAK
T114 10-8" OAK
T115 8" OAK
T116 40" OAK
T117 30" OAK
T118 40" OAK
T119 30" OAK
T120 11" OAK
T121 7" OAK
T122 40" OAK
T123 30" OAK

TREE LEGEND

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
	ER	60	EXISTING TREE CONTRACTOR LIABLE FOR DAMAGE	TO REMAIN	-
	EX	358	EXISTING TREE DISPOSE OF IN SUSTAINABLE MANNER	TO BE REMOVED	-

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

L0.53 L0.54 L0.55
L0.51 L0.52

KEY MAP
SCALE: 1" = 1000'

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TREE MITIGATION PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L0.52

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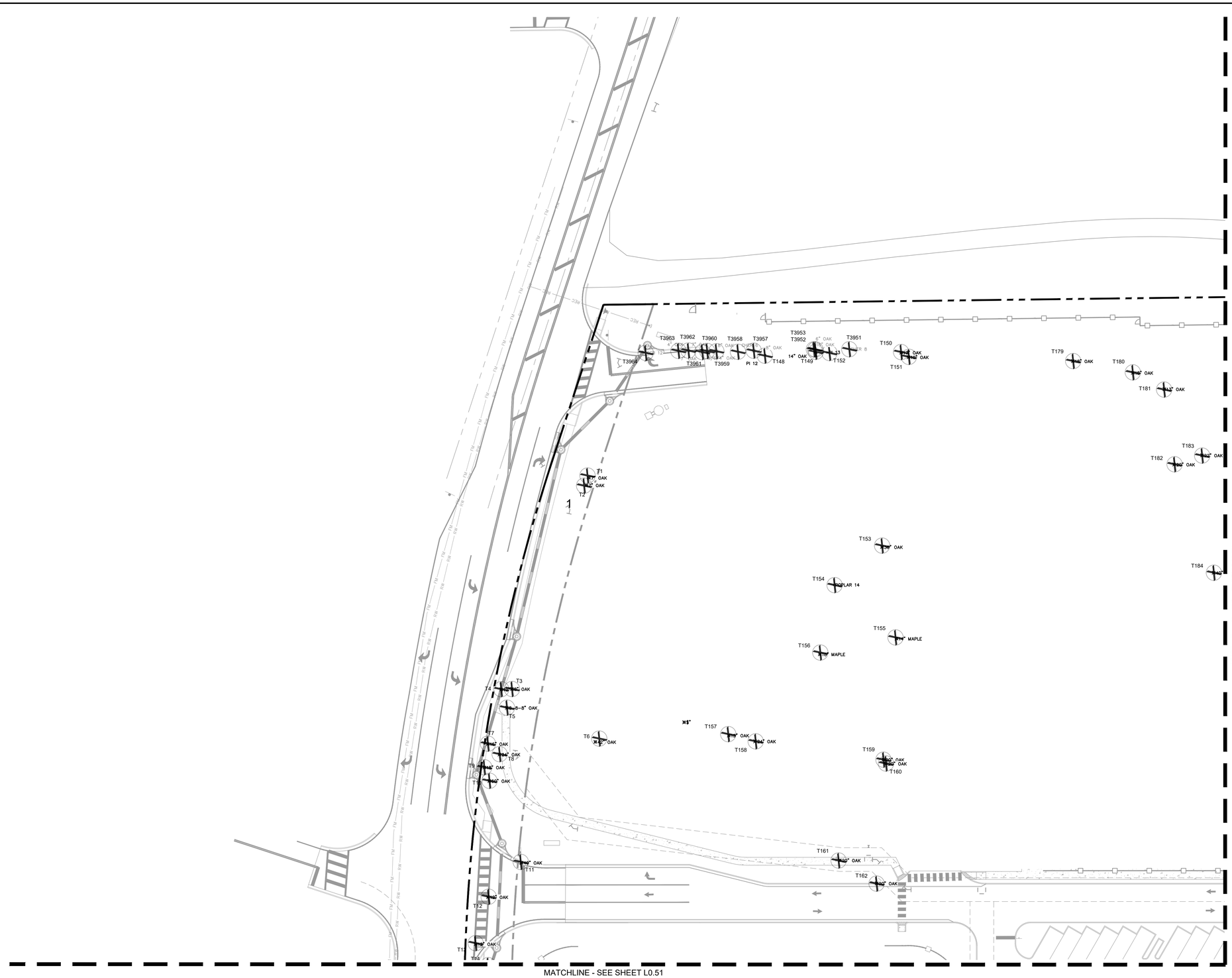

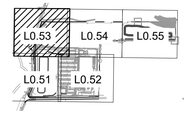

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CITY OF APOPKA FLORIDA

SHEET NUMBER
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Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Master Plan\PlanSheets\L0.50- TREE MITIGATION PLAN.dwg L0.53 TREE MITIGATION PLAN Jul 22, 2024 5:02pm by jake.maple
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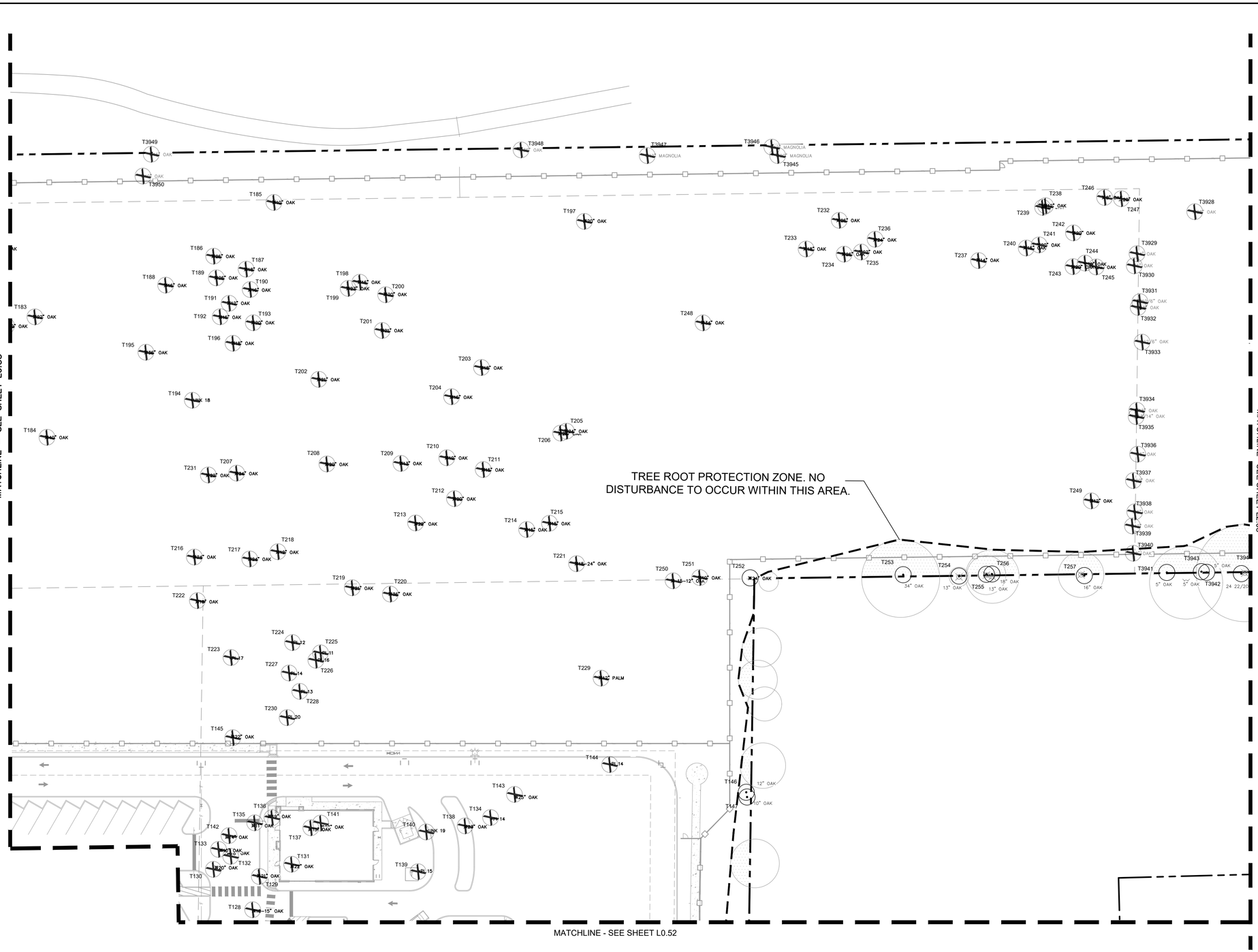

TREE LEGEND

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
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CITY OF APOPKA FLORIDA

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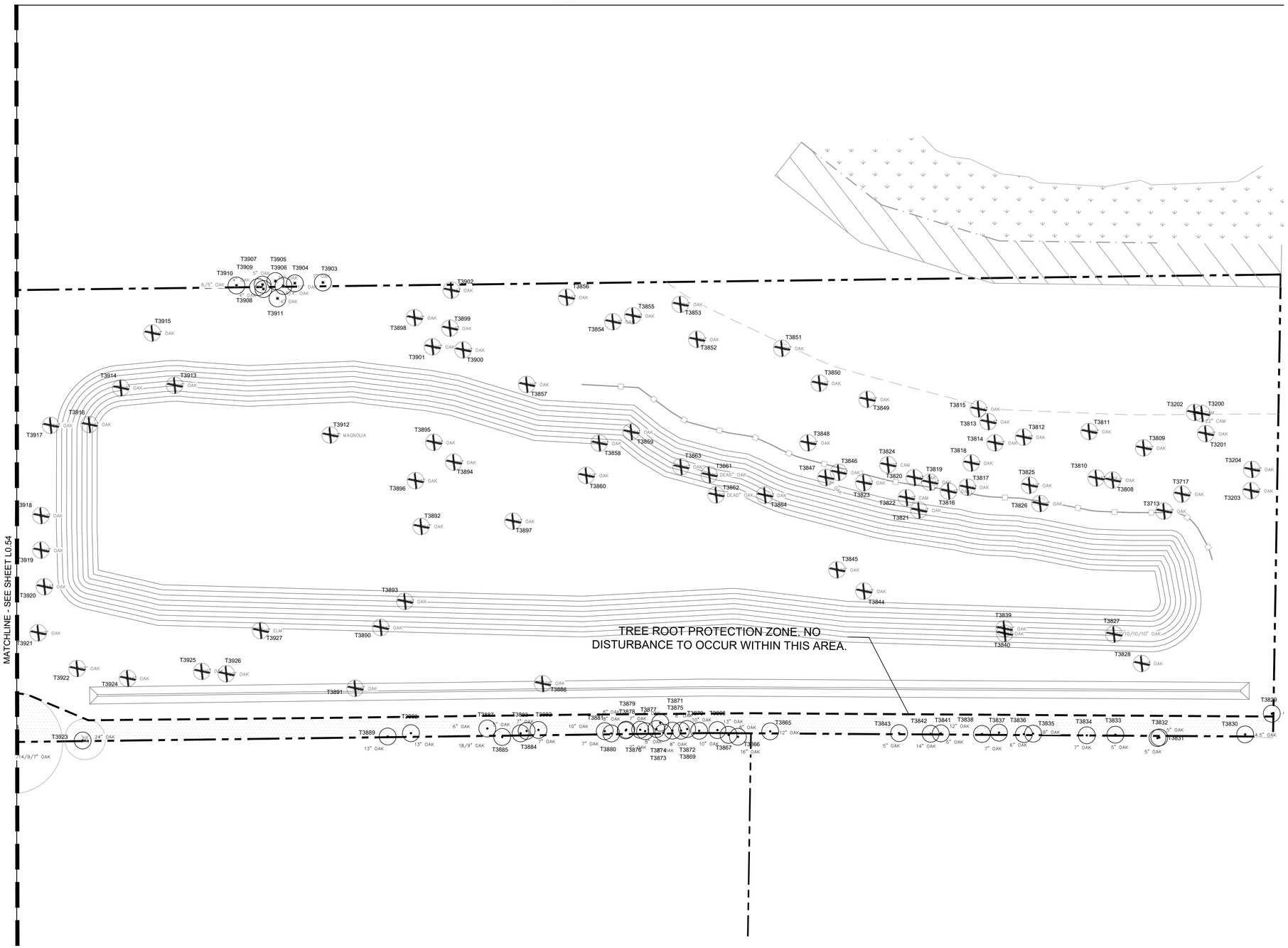
L0.54



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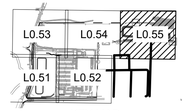
TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
	ER	60	EXISTING TREE CONTRACTOR LIABLE FOR DAMAGE	TO REMAIN	-
	EX	358	EXISTING TREE DISPOSE OF IN SUSTAINABLE MANNER	TO BE REMOVED	-

GRAPHIC SCALE IN FEET
0 15 30 60



KEY MAP
SCALE: 1" = 1000'

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TREE MITIGATION PLAN

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CITY OF APOPKA FLORIDA

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Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Master Plan\PlanSheets\L0.50- TREE MITIGATION PLAN.dwg L0.55 TREE MITIGATION Jul 22, 2024 5:02pm by: jake.maple
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TREE ID NUMBER	DBH (INCH)	TREE TYPE	STATUS	SPECIMEN (>24")
1	7	OAK	REMOVE	-
2	7	OAK	REMOVE	-
3	8	OAK	REMOVE	-
4	12	OAK	REMOVE	-
5	8	MULTI TRUNK OAK	REMOVE	-
6	42	OAK	REMOVE	SPECIMEN
7	16	OAK	REMOVE	-
8	24	OAK	REMOVE	-
9	18	OAK	REMOVE	-
10	60	OAK	REMOVE	SPECIMEN
11	40	OAK	REMOVE	SPECIMEN
12	12	OAK	REMOVE	-
13	12	OAK	REMOVE	-
14	9	OAK	REMOVE	-
15	20	OAK	REMOVE	-
16	8	OAK	REMOVE	-
17	42	OAK	REMOVE	SPECIMEN
18	20	OAK	REMOVE	-
19	32	OAK	REMOVE	SPECIMEN
20	30	OAK	REMOVE	SPECIMEN
21	22	OAK	REMOVE	-
22	28	OAK	REMOVE	SPECIMEN
23	20	OAK	REMOVE	-
24	30	OAK	REMOVE	SPECIMEN
25	20	OAK	REMOVE	-
26	16	OAK	REMOVE	-
27	32	OAK	REMOVE	SPECIMEN
28	18	OAK	REMOVE	-
29	25	OAK	REMOVE	SPECIMEN
30	24	OAK	REMOVE	SPECIMEN
31	11	OAK	REMOVE	-
32	26	OAK	REMOVE	SPECIMEN
33	16	OAK	REMOVE	-
34	12	OAK	REMOVE	-
35	10	OAK	REMOVE	-
36	14	OAK	REMOVE	-
37	20	OAK	REMOVE	-
38	16	OAK	REMOVE	-
39	16	OAK	REMOVE	-
40	22	OAK	REMOVE	-
41	16	OAK	REMOVE	-
42	32	OAK	REMOVE	SPECIMEN
43	10	MULTI TRUNK OAK	REMOVE	-
44	17	OAK	REMOVE	-
45	14	OAK	REMOVE	-
46	9	OAK	REMOVE	-
47	10	OAK	REMOVE	-
48	17	OAK	REMOVE	-
49	16	OAK	REMOVE	-
50	8	OAK	REMOVE	-
51	13	MULTI TRUNK OAK	REMOVE	-
52	16	OAK	REMOVE	-
53	8	OAK	REMOVE	-
54	18	OAK	REMOVE	-
55	8	OAK	REMOVE	-
56	60	OAK	REMOVE	SPECIMEN
57	15	OAK	REMOVE	-
58	10	OAK	REMOVE	-
59	16	OAK	REMOVE	-
60	16	OAK	REMOVE	-
61	15	OAK	REMOVE	-
62	18	OAK	REMOVE	-
63	16	OAK	REMOVE	-
64	10	OAK	REMOVE	-
65	18	OAK	REMOVE	-
66	13	OAK	REMOVE	-
67	28	MULTI TRUNK OAK	REMOVE	SPECIMEN
68	11	OAK	REMOVE	-
69	22	OAK	REMOVE	-
70	36	OAK	REMOVE	SPECIMEN
71	14	PALM	REMOVE	-
72	10	PALM	REMOVE	-
73	11	OAK	REMOVE	-
74	30	OAK	REMOVE	SPECIMEN
75	13	OAK	REMOVE	-
76	10	OAK	REMOVE	-
77	28	OAK	REMOVE	SPECIMEN
78	8	OAK	REMOVE	-
79	10	OAK	REMOVE	-
80	24	OAK	REMOVE	SPECIMEN
81	8	OAK	REMOVE	-
82	8	OAK	REMOVE	-
83	48	OAK	REMOVE	SPECIMEN
84	40	OAK	REMOVE	SPECIMEN
85	16	MULTI TRUNK OAK	REMOVE	-
86	15	MULTI TRUNK OAK	REMOVE	-
87	16	OAK	REMOVE	-
88	30	OAK	REMOVE	SPECIMEN
89	36	OAK	REMOVE	SPECIMEN
90	9	MULTI TRUNK OAK	REMOVE	-
91	15	OAK	REMOVE	-
92	8	MULTI TRUNK OAK	REMOVE	-
93	10	OAK	REMOVE	-
94	13	OAK	REMOVE	-
95	12	OAK	REMOVE	-
96	12	OAK	REMOVE	-
97	22	MULTI TRUNK OAK	REMOVE	-
98	18	OAK	REMOVE	-
99	10	OAK	REMOVE	-
100	15	OAK	REMOVE	-
101	10	MULTI TRUNK OAK	REMOVE	-
102	10	OAK	REMOVE	-
103	16	OAK	REMOVE	-
104	36	OAK	REMOVE	SPECIMEN
105	12	MULTI TRUNK OAK	REMOVE	-
106	12	OAK	REMOVE	-
107	18	OAK	REMOVE	-
108	17	OAK	REMOVE	-
109	18	OAK	REMOVE	-
110	36	OAK	REMOVE	SPECIMEN
111	12	OAK	REMOVE	-
112	10	MULTI TRUNK OAK	REMOVE	-
113	8	MULTI TRUNK OAK	REMOVE	-
114	10	MULTI TRUNK OAK	REMOVE	-
115	13	MULTI TRUNK OAK	REMOVE	-
116	10	OAK	REMOVE	-
117	16	OAK	REMOVE	-
118	15	OAK	REMOVE	-
119	36	OAK	REMOVE	SPECIMEN
120	15	MULTI TRUNK OAK	REMOVE	-
121	13	MULTI TRUNK OAK	REMOVE	-
122	24	OAK	REMOVE	SPECIMEN
123	30	OAK	REMOVE	SPECIMEN
124	9	OAK	REMAIN	-
125	36	OAK	REMOVE	SPECIMEN
126	42	OAK	REMOVE	SPECIMEN
127	36	OAK	REMOVE	SPECIMEN
128	18	MULTI TRUNK OAK	REMOVE	-
129	21	OAK	REMOVE	-
130	20	OAK	REMOVE	-
131	22	OAK	REMOVE	-
132	18	OAK	REMOVE	-
133	10	OAK	REMOVE	-
134	14	PL	REMOVE	-
135	11	OAK	REMOVE	-
136	19	OAK	REMOVE	-
137	15	OAK	REMOVE	-
138	23	OAK	REMOVE	-
139	15	PL	REMOVE	-
140	19	UNK	REMOVE	-
141	27	OAK	REMOVE	SPECIMEN
142	14	OAK	REMOVE	-
143	25	OAK	REMOVE	SPECIMEN
144	14	PL	REMOVE	-
145	22	OAK	REMOVE	-
146	12	OAK	REMAIN	-
147	10	OAK	REMAIN	-
148	12	PL	REMOVE	-
149	14	OAK	REMOVE	-
150	17	OAK	REMOVE	-
151	10	OAK	REMOVE	-
152	13	PL	REMOVE	-
153	36	OAK	REMOVE	SPECIMEN
154	14	POPLAR	REMOVE	-
155	14	MAPLE	REMOVE	-
156	18	MAPLE	REMOVE	-
157	15	OAK	REMOVE	-
158	24	OAK	REMOVE	SPECIMEN
159	20	OAK	REMOVE	-
160	20	OAK	REMOVE	-
161	20	OAK	REMOVE	-
162	20	OAK	REMOVE	-
163	30	OAK	REMOVE	SPECIMEN
164	20	OAK	REMOVE	-
165	36	OAK	REMOVE	SPECIMEN
166	30	OAK	REMOVE	SPECIMEN
167	36	OAK	REMOVE	SPECIMEN
168	36	OAK	REMOVE	SPECIMEN
169	26	OAK	REMOVE	SPECIMEN
170	36	OAK	REMOVE	SPECIMEN
171	24	OAK	REMOVE	SPECIMEN
172	13	OAK	REMOVE	-
173	27	OAK	REMOVE	SPECIMEN
174	30	OAK	REMOVE	SPECIMEN
175	24	OAK	REMOVE	SPECIMEN
176	30	OAK	REMOVE	SPECIMEN
177	30	OAK	REMOVE	SPECIMEN
178	30	OAK	REMOVE	SPECIMEN
179	18	OAK	REMOVE	-
180	18	OAK	REMOVE	-
181	13	OAK	REMOVE	-
182	20	OAK	REMOVE	-
183	22	OAK	REMOVE	-
184	40	OAK	REMOVE	SPECIMEN
185	10	OAK	REMOVE	-
186	26	OAK	REMOVE	SPECIMEN
187	18	OAK	REMOVE	-
188	16	OAK	REMOVE	-
189	26	OAK	REMOVE	SPECIMEN
190	16	OAK	REMOVE	-
191	12	OAK	REMOVE	-
192	16	OAK	REMOVE	-
193	20	OAK	REMOVE	-
194	18	UNK	REMOVE	-
195	36	OAK	REMOVE	SPECIMEN
196	18	OAK	REMOVE	-
197	20	OAK	REMOVE	-
198	16	OAK	REMOVE	-
199	27	OAK	REMOVE	SPECIMEN
200	20	OAK	REMOVE	-
201	21	OAK	REMOVE	-
202	21	OAK	REMOVE	-
203	18	OAK	REMOVE	-
204	16	OAK	REMOVE	-
205	24	OAK	REMOVE	SPECIMEN
206	26	OAK	REMOVE	SPECIMEN
207	24	OAK	REMOVE	SPECIMEN
208	20	OAK	REMOVE	-
209	13	OAK	REMOVE	-
210	19	OAK	REMOVE	-
211	15	OAK	REMOVE	-
212	20	OAK	REMOVE	-
213	22	OAK	REMOVE	-
214	15	OAK	REMOVE	-
215	15	OAK	REMOVE	-
216	24	OAK	REMOVE	SPECIMEN
217	24	OAK	REMOVE	SPECIMEN
218	12	OAK	REMOVE	-
219	21	OAK	REMOVE	-
220	36	OAK	REMOVE	SPECIMEN
221	18	MULTI TRUNK OAK	REMOVE	-
222	18	OAK	REMOVE	-
223	17	PL	REMOVE	-
224	12	PL	REMOVE	-
225	11	PL	REMOVE	-
226	16	PL	REMOVE	-
227	14	PL	REMOVE	-
228	13	PL	REMOVE	-
229	12	PALM	REMOVE	-
230	20	PL	REMOVE	-
231	22	OAK	REMOVE	-
232	26	OAK	REMOVE	SPECIMEN
233	18	OAK	REMOVE	-
234	26	OAK	REMOVE	SPECIMEN
235	22	OAK	REMOVE	-
236	24	OAK	REMOVE	SPECIMEN
237	14	OAK	REMOVE	-
238	12	OAK	REMOVE	-
239	13	OAK	REMOVE	-
240	16	OAK	REMOVE	-
241	20	OAK	REMOVE	-
242	20	OAK	REMOVE	-
243	20	OAK	REMOVE	-
244	20	OAK	REMOVE	-
245	20	OAK	REMOVE	-
246	8	OAK	REMOVE	-
247	20	OAK	REMOVE	-
248	34	OAK	REMOVE	SPECIMEN
249	12	OAK	REMOVE	-
250	15	MULTI TRUNK OAK	REMOVE	-
251	10	OAK	REMOVE	-
252	24	OAK	REMAIN	SPECIMEN
253	34	OAK	REMAIN	SPECIMEN
254	13	OAK	REMAIN	-
255	13	OAK	REMAIN	-
256	18	OAK	REMAIN	-
257	16	OAK	REMAIN	-
3200	22	CAM	REMOVE	
3201	22	OAK	REMOVE	
3202	9	CAM	REMOVE	
3203	28	OAK	REMOVE	SPECIMEN
3204	28	OAK	REMOVE	SPECIMEN
3713	20	OAK	REMOVE	
3717	20	OAK	REMOVE	
3808	30	OAK	REMOVE	SPECIMEN
3809	24	OAK	REMOVE	SPECIMEN
3810	18	OAK	REMOVE	
3811	26	OAK	REMOVE	SPECIMEN
3812	18	OAK	REMOVE	
3813	18	OAK	REMOVE	
3814	20	OAK	REMOVE	
3815	14	OAK	REMOVE	
3816	12	OAK	REMOVE	
3817	16	OAK	REMOVE	
3818	10	OAK	REMOVE	
3819	14	OAK	REMOVE	
3820	14	OAK	REMOVE	
3821	24	OAK	REMOVE	SPECIMEN
3822	12	CAM	REMOVE	
3823	15	OAK	REMOVE	
3824	12	CAM	REMOVE	
3825	30	OAK	REMOVE	SPECIMEN
3826	28	OAK	REMOVE	SPECIMEN
3827	12	OAK	REMOVE	
3828	10	OAK	REMOVE	
3829	4.5	OAK	REMAIN	
3830	4.5	OAK	REMAIN	
3831	5	OAK	REMAIN	
3832	5	OAK	REMAIN	
3833	5	OAK	REMAIN	
3834	7	OAK	REMAIN	
3835	8	OAK	REMAIN	
3836	6	OAK	REMAIN	
3837	7	OAK	REMAIN	
3838	12	OAK	REMAIN	
3839	32	OAK	REMOVE	SPECIMEN
3840	6	OAK	REMOVE	
3841	6	OAK	REMAIN	
3842	14	OAK	REMAIN	
3843	5	OAK	REMAIN	
3844	32	OAK	REMOVE	SPECIMEN
3845	36	OAK	REMOVE	SPECIMEN
3846	14	OAK	REMOVE	
3847	18	OAK	REMOVE	
3848	28	OAK	REMOVE	
3849	30	OAK	REMOVE	SPECIMEN
3850	12	OAK	REMOVE	
3851	24	OAK	REMOVE	SPECIMEN
3852	24	OAK	REMOVE	SPECIMEN
3853	24	OAK	REMOVE	SPECIMEN
3854	13	OAK	REMOVE	
3855	12	OAK	REMOVE	
3856	15	OAK	REMOVE	
3857	36	OAK	REMOVE	SPECIMEN
3858	30	OAK	REMOVE	SPECIMEN
3859	24	OAK	REMOVE	SPECIMEN
3860	20	OAK	REMOVE	
3861	20	DEAD OAK	REMOVE	
3862	30	DEAD OAK	REMOVE	
3863	16	OAK	REMOVE	
3864	18	OAK	REMOVE	
3865	12	OAK	REMAIN	
3866	16	OAK	REMAIN	
3867	8	OAK	REMAIN	
3868	13	OAK	REMAIN	
3869	10	OAK	REMAIN	
3870	10	OAK	REMAIN	
3871	8	OAK	REMAIN	
3872	8	OAK	REMAIN	
3873	8	OAK	REMAIN	
3874	8	OAK	REMAIN	
3875	7	OAK	REMAIN	
3876	7	OAK	REMAIN	
3877	7	OAK	REMAIN	
3878	8	OAK	REMAIN	
3879	8	OAK	REMAIN	
3880	7	OAK	REMAIN	
3881	10	OAK	REMAIN	
3882	7	OAK	REMAIN	
3883	7	OAK	REMAIN	
3884	5	OAK	REMAIN	
3885	18	OAK	REMAIN	
3886	28	OAK	REMOVE	SPECIMEN
3887	6	OAK	REMAIN	
3888	13	OAK	REMAIN	
3889	13	OAK	REMAIN	
3890	18	OAK	REMOVE	
3891	28	OAK	REMOVE	SPECIMEN
3892	24	OAK	REMOVE	SPECIMEN
3893	18	OAK	REMOVE	
3894	26	OAK	REMOVE	SPECIMEN
3895	12	OAK	REMOVE	
3896	15	OAK	REMOVE	
3897	16	OAK	REMOVE	
3898	28	OAK	REMOVE	SPECIMEN
3899	18	OAK	REMOVE	
3900	18	OAK	REMOVE	
3901	26	OAK	REMOVE	SPECIMEN
3902	16	OAK	REMOVE	
3903	7	OAK	REMAIN	
3904	12	OAK	REMAIN	
3905	10	OAK	REMAIN	
3906	5	OAK	REMAIN	
3907	5	OAK	REMAIN	
3908	4	OAK	REMAIN	
3909	4	OAK	REMAIN	
3910	8	OAK	REMAIN	
3911	4	OAK	REMAIN	
3912	20	MAGNOLIA	REMOVE	
3913	28	OAK	REMOVE	SPECIMEN
3914	18	OAK	REMOVE	
3915	24	OAK	REMOVE	SPECIMEN
3916	16	OAK	REMOVE	
3917	28	OAK	REMOVE	SPECIMEN
3918	12	OAK	REMOVE	
3919	30	OAK	REMOVE	SPECIMEN
3920	18	OAK	REMOVE	
3921	20	OAK	REMOVE	
3922	20	OAK	REMOVE	
3923	24	OAK	REMAIN	SPECIMEN
3924	18	OAK	REMOVE	
3925	16	OAK	REMOVE	
3926	20	OAK	REMOVE	
3927	10	ELM	REMOVE	
3928	28	OAK	REMOVE	SPECIMEN
3929	4	OAK	REMOVE	
3930	6	OAK	REMOVE	
3931	10	OAK	REMOVE	
3932	18	OAK	REMOVE	
3933	12	OAK	REMOVE	
3934	18	OAK	REMOVE	
3935	18	OAK	REMOVE	
3936	5	OAK	REMOVE	
3937	20	OAK	REMOVE	
3938	5	OAK	REMOVE	
3939	12	OAK	REMOVE	
3940	8	OAK	REMOVE	
3941	5	OAK	REMAIN	
3942	5	OAK	REMAIN	
3943	5	OAK	REMAIN	
3944	24	OAK	REMAIN	SPECIMEN
3945	20	MAGNOLIA	REMOVE	
3946	12	MAGNOLIA	REMOVE	
3947	12	MAGNOLIA	REMOVE	
3948	36	OAK	REMOVE	SPECIMEN
3949	16	OAK	REMOVE	
3950	10	OAK	REMOVE	
3951	8	CHER	REMOVE	
3952	16	OAK	REMOVE	
3953	6	OAK	REMOVE	
3957	8	OAK	REMOVE	
3958	6	CHER	REMOVE	
3959	8	OAK	REMOVE	
3960	8	OAK	REMOVE	
3961	7	OAK	REMOVE	
3962	7	OAK	REMOVE	
3963	4	OAK	REMOVE	
3964	12	SGB	REMOVE	

TREE CANOPY COVERAGE TABLE			
XXXX	SQUARE FEET	ACRES	PERCENT
TOTAL SITE AREA	1213988	27.87	100.00%
EXISTING CANOPY AREA	537677	12.34	44.29%
REQUIRED CANOPY TO REMAIN	32260	0.74	6.00%
CANOPY AREA TO REMAIN	43,270	0.99	8.05%

TREE REMOVAL TABLE		
	TREES	INCHES
TOTAL TREES ON SITE	418	7286
TOTAL TREES TO BE REMOVED	358	6702
TOTAL TREES TO REMAIN	60	584
TOTAL TREE INCHES TO BE MITIGATED		6702

TREE REPLACEMENT TABLE		
	TREES	INCHES
TOTAL MITIGATION REQUIRED		6702
TOTAL TREES TO BE PLANTED ON SITE	229	687
CANOPY TREES (3" CAL)	179	537
UNDERSTORY & ACCENT TREES	50	186
NET MITIGATION INCHES OWED		6015
TOTAL FEE TO BE PAID ($15 PER INCH)		$90,225

SPECIMEN TREE TABLE		
	TREES	INCHES
SPECIMEN TREES ON SITE	98	2989
SPECIMEN TREES TO BE REMOVED	94	2883
SPECIMEN TREES TO BE PRESERVED	4	106

*INVASIVE TREES (EAR, GUM, CHINABERRY, AND CAMPHOR) & DEAD TREES ARE NOT INCLUDED IN THE ABOVE CALCULATIONS

SEE TREE DATA ON SHEETS L0.51-L0.56
SEE CANOPY COVERAGE PLAN ON SHEET L0.57

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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200 S. ORANGE AVENUE, SUITE 600, ORLANDO, FL 32801
PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL — FLORIDA LICENSE NUMBER — DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

TREE MITIGATION DATA

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L0.56

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Master Plan\PlanSheets\L0.50- TREE MITIGATION PLAN.dwg L0.56 TREE MITIGATION DATA Jul 22, 2024 5:02pm by: jake.maple
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TREE CANOPY COVERAGE

TOTAL SITE AREA: 1,213,988 SF
TOTAL EXISTING CANOPY COVERAGE:

TREE CANOPY AREA TO BE REMOVED:
494,407 SF

TREE CANOPY AREA TO BE PRESERVED:
43,270 SF

NORTH

GRAPHIC SCALE IN FEET
0 40 80 160

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
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DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

TREE MITIGATION CANOPY COVER

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L0.57

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\L1.50 - LANDSCAPE DETAILS.dwg L0.57 Jul 22, 2024 4:47pm by: jake.maple
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TREE MITIGATION SPECIFICATIONS

A. GENERAL

1. CONTRACTOR SHALL ADHERE TO ALL TREE PROTECTION REQUIREMENTS LISTED IN THESE SPECIFICATIONS AND/OR THOSE LISTED IN THE CITY OR COUNTY ZONING CODE, TREE PROTECTION (LATEST EDITION). WHICHEVER IS MORE STRINGENT SHALL APPLY.
2. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION PROCEDURES WITH THE PROJECT ARBORIST PRIOR TO BEGINNING WORK.
3. ANY AREAS SUBJECT TO EROSION MUST BE ADEQUATELY STABILIZED WITH VEGETATION MATERIAL THAT WILL, WITHIN A REASONABLE TIME FRAME, DETER SOIL DISTURBANCE.
4. NO SIGNS, BUILDING PERMITS, WIRES OR OTHER ATTACHMENTS OF ANY KIND SHALL BE ATTACHED TO ANY TREE OR PALM. GUY WIRES DESIGNED TO PROTECT TREES ARE EXCLUDED FROM THIS PROHIBITION.
5. EXISTING TREE LOCATIONS AND SIZES ARE ESTIMATES AND ARE BASED ON A SURVEY PROVIDED BY THE OWNER SELECTED SURVEYOR.
6. CONTRACTOR SHALL COORDINATE TREE REMOVAL WITH PERMITTING AGENCY AND PROJECT ARBORIST PRIOR TO CONSTRUCTION. NO PERSON MAY REMOVE OR CAUSE TO BE REMOVED ANY PROTECTED TREE OR PALM WITHOUT FIRST HAVING PROCURED A PERMIT AS PROVIDED BY THE APPROPRIATE PERMITTING AGENCY.
7. FOR PROTECTED TREES OR PALMS BEING REMOVED, THE CONTRACTOR MUST GIVE THE PERMITTING AGENCY REASONABLE OPPORTUNITY TO RELOCATE TREES DESIGNATED FOR REMOVAL TO ANOTHER SITE AT THE PERMITTING AGENCY'S EXPENSE.
8. CONTRACTOR IS RESPONSIBLE FOR POSSESSING ALL REQUIRED APPLICATOR LICENSES, BUSINESS REGISTRATIONS AND INSURANCE, PESTICIDE LABELS, AND MATERIAL DATA SAFETY SHEETS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR HAVING ALL SPILL CONTAINMENT MATERIALS AND REQUIRED PERSONAL PROTECTIVE EQUIPMENT FOR PESTICIDE APPLICATIONS AND ACCIDENTAL SPILLS ON SITE AT ALL TIMES. THE OWNER RESERVES THE RIGHT TO INSPECT EACH APPLICATOR AND HAVE THESE MATERIALS PRESENTED BEFORE AND DURING ANY PESTICIDE TREATMENT.
9. WHERE TRAFFIC AREAS ARE PROPOSED WITHIN THE DRIP LINE OF PROTECTED TREES AND LESS THAN FOUR (4) INCHES OF GRADE CHANGE ARE PROPOSED, PERMEABLE SURFACES THAT ALLOW AIR AND WATER INTO THE SOIL SHOULD BE USED IN LIEU OF ASPHALT OR OTHER SUCH IMPERVIOUS SURFACES.
10. TREE WELLS OF AN APPROVED DESIGN SHALL BE CONSTRUCTED AROUND ALL TREES TO BE PRESERVED WHEN MORE THAN FOUR INCHES OF FILL IS TO BE DEPOSITED WITHIN THE DRIP LINE AREA OF THOSE TREES. COORDINATE WITH PROJECT ARBORIST.
11. THE SEQUENCE OF TREE MITIGATION AND PRESERVATION MEASURES IS IMPERATIVE TO THE HEALTH AND SURVIVABILITY OF THE SUBJECT TREES AND SHALL BE COORDINATED WITH THE OWNER SELECTED PROJECT ARBORIST. THE DESIRED SEQUENCE IS OUTLINED BELOW:
    a. TREE PROTECTION FENCING.
    b. ROOT PRUNING AND ROOT BARRIERS.
    c. CLEARING.
    d. TREE CANOPY PRUNING.
    e. FERTILIZATION.
    f. INSECTICIDE.
    g. IRRIGATION.

B. TREE PROTECTION FENCING

1. PRIOR TO THE ERECTION OF ANY TREE PROTECTION FENCING, ALL FOREIGN SURFACE MATERIAL, TRASH OR DEBRIS SHALL BE REMOVED FROM THE AREA TO BE ENCLOSED BY THE FENCING. AFTER ERECTION OF THE FENCING NO SUCH MATERIAL OR LITTER SHALL BE PERMITTED TO REMAIN WITHIN THE PROTECTED AREA.
2. TREE PROTECTION FENCING SHALL BE PLACED AROUND ALL PROTECTED TREES TO CREATE A PROTECTIVE ROOT ZONE AND SHALL REMAIN IN PLACE UNTIL SITE CLEARING, LAND ALTERATION, AND CONSTRUCTION ACTIVITIES ARE COMPLETE.
3. NATIVE GROUND COVER AND UNDERSTORY VEGETATION EXISTING WITHIN THE PROTECTED AREA SHALL REMAIN THROUGHOUT CONSTRUCTION. OTHER DESIGNATED VEGETATION AND INVASIVE PLANT SPECIES SHALL BE REMOVED ONLY BY MANUAL LABOR UTILIZING HAND TOOLS, OR BY OTHER METHODS APPROVED BY THE PROJECT ARBORIST.
4. TREE PROTECTION FENCING TYPES AND LOCATIONS SHALL BE ERECTED AS SHOWN ON THE TREE MITIGATION PLANS AND DETAILS, OR AS REQUESTED BY LOCAL AGENCY.
5. FINAL LOCATIONS SHALL BE COORDINATED WITH AND APPROVED BY THE PROJECT ARBORIST.
6. NO MATERIALS, EQUIPMENT, SPOIL, WASTE OR WASHOUT WATER MAY BE DEPOSITED, STORED, OR PARKED WITHIN 20 FEET OF THE TREE PROTECTION ZONE.
7. EROSION CONTROL DEVICES SUCH AS SILT FENCING, DEBRIS BASINS, AND WATER DIVERSION STRUCTURES SHALL BE INSTALLED TO PREVENT SILTATION AND/OR EROSION WITHIN THE TREE PROTECTION ZONE.
8. CONSTRUCTION ACTIVITY SHALL NOT DESTROY OR IRREVERSIBLY HARM THE ROOT SYSTEM OF PROTECTED TREES. POST HOLES AND TRENCHES LOCATED CLOSE TO PROTECTED TREES SHALL BE ADJUSTED TO AVOID DAMAGE TO MAJOR ROOTS.
9. DO NOT INSTALL CONDUIT, DRAIN OR IRRIGATION LINES, OR ANY UTILITY LINE WITHIN THE TREE PROTECTION ZONE WITHOUT THE APPROVAL OF THE PROJECT ARBORIST. IF LINES MUST TRAVERSE THE PROTECTION AREA, THEY SHALL BE TUNNELED OR BORED UNDER THE TREE.
10. CONTRACTOR'S ACCESS TO FENCED TREE PROTECTION AREAS WILL BE PERMITTED ONLY WITH APPROVAL OF THE PROJECT ARBORIST.
11. EXCAVATION OR GRADING REQUIRED WITHIN THE PROTECTED AREA SHALL BE LIMITED TO THREE (3) INCHES OF CUT OR FILL. COORDINATE WITH PROJECT ARBORIST.
12. STRUCTURES AND UNDERGROUND FEATURES TO BE REMOVED WITHIN THE TREE PROTECTION ZONE SHALL BE COORDINATED WITH THE PROJECT ARBORIST.
13. TREE PROTECTION FENCING AROUND TREES TO BE RELOCATED SHALL BE ERECTED UNTIL THE TREE IS READY TO BE RELOCATED AND NEW FENCING SHALL BE ERECTED AT THE TREES NEW LOCATION AND WILL REMAIN IN PLACE UNTIL ALL CONSTRUCTION ACTIVITIES ARE COMPLETE.
14. IF ANY DAMAGE TO TREE PROTECTION FENCING SHOULD OCCUR BY ACCIDENT OR NEGLIGENCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATE REPAIRS.
15. IF TEMPORARY HAUL OR ACCESS ROADS MUST PASS OVER THE PROTECTED AREA OF TREES TO BE PRESERVED, A ROAD BED OF SIX (6) INCHES OF MULCH OR GRAVEL SHALL BE CREATED TO PROTECT THE SOIL. THE ROAD BED MATERIAL SHALL BE REPLENISHED AS NECESSARY TO MAINTAIN A SIX (6) INCH ROAD BED AT ALL TIMES. CONTRACTOR SHALL REMOVE ALL SUCH MATERIALS FROM THE SITE AS SOON AS TEMPORARY ACCESS IS NO LONGER NECESSARY.
16. CONTRACTOR SHALL COORDINATE WITH THE PROJECT ARBORIST PRIOR TO THE REMOVAL OF ALL TREE PROTECTION FENCING.

C. ROOT PRUNING/TRENCHING

1. TRENCHING LOCATIONS SHALL BE APPROVED IN THE FIELD BY THE PROJECT ARBORIST.
2. TRENCHING EQUIPMENT THAT WILL TURN AT HIGH RPM'S IS PREFERRED, AND SHALL BE APPROVED BY THE PROJECT ARBORIST. APPROVED EQUIPMENT WILL BE USED TO PERFORM ALL ROOT PRUNING OPERATIONS. A MINIMUM DEPTH OF THREE FEET IS REQUIRED.
3. INSTALL ROOT BARRIER WHERE DESIGNATED. SEE TREE MITIGATION PLAN AND DETAIL SHEETS.
4. THE TRENCH SHALL BE BACKFILLED WITH PREVIOUSLY EXCAVATED SOIL AND COMPACTED IMMEDIATELY.
5. TREES TO BE RELOCATED SHALL BE ROOT PRUNED A MINIMUM OF TWELVE (12) WEEKS PRIOR TO TREE RELOCATION.
6. WHEN THE TREE ROOT ZONE WILL BE DISTURBED, AFFECTED ROOTS MUST BE SEVERED BY CLEAN PRUNING CUTS AT THE POINT WHERE CONSTRUCTION IMPACTS THE ROOTS.

D. CLEARING

1. ANY BRUSH CLEARING REQUIRED WITHIN THE TREE PROTECTION ZONE SHALL BE ACCOMPLISHED WITH HAND-OPERATED EQUIPMENT.
2. CONTRACTOR SHALL CLEAR ALL TREE PROTECTION AREAS OF VINES, SHRUBS, GROUND COVERS, WEEDS, SAPLINGS, AND INVASIVES LISTED ON THE LATEST EDITION OF THE FLORIDA EXOTIC PEST PLANT COUNCIL'S LIST OF INVASIVE SPECIES.
3. PROJECT ARBORIST MUST APPROVE METHODS OTHER THAN HAND CLEARING.
4. A TWO (2) INCH LAYER OF MULCH SHALL BE APPLIED OVER THE SURFACE OF EXPOSED ROOTS OF PROTECTED TREES DURING THE SITE CLEARING PHASE.

E. TREE CANOPY PRUNING

1. TREE PRUNING SPECIFICATIONS SHALL BE DEFINED BASED ON SPECIFIC RECOMMENDATIONS OF THE PROJECT ARBORIST. INFORMATION PRESENTED BELOW SHOULD BE USED AS A GUIDELINE.
2. CONTRACTOR SHALL VISIT THE SITE WITH THE PROJECT ARBORIST TO VERIFY THE EXTENT OF REQUIRED PRUNING.
3. ALL PRUNING SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF A QUALIFIED INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) CERTIFIED ARBORIST OR AN AMERICAN SOCIETY OF CONSULTING ARBORISTS (ASCA) REGISTERED CONSULTING ARBORIST (RCA).
4. AT LEAST ONE MEMBER OF THE PRUNING CREW SHALL BE AN ISA CERTIFIED ARBORIST.
5. WHILE IN THE TREE, THE ARBORIST SHALL PERFORM AN AERIAL INSPECTION TO IDENTIFY DEFECTS THAT REQUIRE TREATMENT. ANY ADDITIONAL WORK NEEDED SHALL BE REPORTED TO THE OWNER.
6. PRUNING CUTS SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI A300 PRUNING STANDARD (AMERICAN NATIONAL STANDARD FOR TREE CARE OPERATIONS) AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI Z133.1 SAFETY STANDARD. PRUNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ISA'S "BEST MANAGEMENT PRACTICES: TREE PRUNING".
7. WHERE TEMPORARY CLEARANCE IS NEEDED FOR ACCESS, BRANCHES SHALL BE TIED BACK TO HOLD THEM OUT OF THE CLEARANCE ZONE.
8. NO MORE THAN 20 PERCENT OF LIVE FOLIAGE SHALL BE REMOVED WITHIN ANY TREE.
9. ALL TREES WITHIN THE PROJECT AREA SHALL BE PRUNED AS FOLLOWS:
    a. LIVE BRANCH PRUNING SHOULD BE PERFORMED ONLY WHEN THE DANGER OF INSECT OR DISEASE INFESTATION IS NOT PRESENT.
    b. REMOVE STUBS, CUTTING OUTSIDE THE WOUND WOOD TISSUE THAT HAS FORMED AROUND THE BRANCH.
    c. CLEANING, FOR THE SELECTIVE REMOVAL OF DEAD, DISEASED, BROKEN, OR CROSSING BRANCHES DOWN TO ONE INCH IN DIAMETER OR AS DIRECTED BY THE PROJECT ARBORIST.
    d. PRUNING CUTS LARGER THAN 4 INCHES IN DIAMETER, EXCEPT FOR DEAD WOOD, SHALL BE AVOIDED.
    e. PRUNING CUTS THAT EXPOSE HEARTWOOD SHALL BE AVOIDED WHENEVER POSSIBLE.
    f. ALL TREES WITH CROWNS THAT PROJECT INTO PARKING LOT/ROADWAY AREAS SHALL BE RAISED TO 14 FEET ABOVE FINISHED GRADE.
    g. ALL TREES WITH CROWNS THAT PROJECT INTO SIDEWALK AREAS SHALL BE RAISED TO A HEIGHT OF 8 FEET ABOVE FINISHED GRADE.
9. TREES, WHO'S ROOT SYSTEMS WILL BE IMPACTED SHALL RECEIVE THE FOLLOWING PRUNING TO COMPENSATE FOR ROOT LOSS:
    a. THE LOCATION AND SIZE OF BRANCHES FOR REDUCTION SHALL BE DEFINED BY THE PROJECT ARBORIST.
    b. REDUCTION, OR THE SELECTIVE PRUNING TO REDUCE TREE HEIGHT OR SPREAD.
    c. REDUCE END WEIGHT ON HEAVY, HORIZONTAL BRANCHES BY SELECTIVELY REMOVING SMALL DIAMETER BRANCHES, NO GREATER THAN 2 TO 3 INCHES, NEAR THE ENDS OF SCAFFOLD BRANCHES.
    d. RAISING SHALL CONSIST OF SELECTIVE PRUNING TO PROVIDE VERTICAL CLEARANCE.
10. PROPOSED/REPLACEMENT TREES
    a. PRUNING SHALL BE LIMITED TO CLEANING.
11. BRUSH SHALL BE CHIPPED AND SPREAD (ONLY WHEN DISEASE OR INSECT INFESTATION IS NOT PRESENT) UNDERNEATH TREES WITHIN THE TREE PROTECTION ZONE TO A MAXIMUM DEPTH OF THREE (3) INCHES, LEAVING THE TRUNK CLEAR OF MULCH.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EXCESS DEBRIS ON A DAILY BASIS.

F. FERTILIZATION

1. CONTRACTOR SHALL COORDINATE FERTILIZATION PLAN, FOLLOWING BEST MANAGEMENT PRACTICES WITH THE PROJECT ARBORIST PRIOR TO COMMENCEMENT OF WORK.
2. EVERY EFFORT SHALL BE MADE TO UTILIZE CHEMICALS OF AN ORGANIC OR BIODEGRADABLE NATURE IN ORDER TO OFFER THE LEAST IMPACT TO THE NATURAL ENVIRONMENT. CONTRACTOR IS RESPONSIBLE FOR MIXING, APPLYING, AND DISPOSAL OF ALL CHEMICALS IN ACCORDANCE WITH STRICT ADHERENCE TO MANUFACTURER'S SPECIFICATIONS. COORDINATE WITH PROJECT ARBORIST FOR FURTHER INSTRUCTION.
3. ONLY TREES AFFECTED BY CONSTRUCTION OR AS SHOWN ON THE TREE MITIGATION PLAN AND TREE INVENTORY SCHEDULE SHALL BE TREATED.
4. TREES SPECIFIED TO RECEIVE FERTILIZER SHALL BE TREATED AS FOLLOWS.
    a. MIX FERTILIZER ACCORDING TO MANUFACTURER'S SPECIFICATIONS INTO A TANK WITH AGITATION CAPABILITY.
    b. MIX WETTING AGENT ACCORDING TO MANUFACTURER'S SPECIFICATIONS INTO SAME TANK WITH FERTILIZER. AGITATE MIX.
    c. INJECT THE MIXTURE WITH A HYDRAULIC INJECTION SYSTEM INTO THE UPPER 6-12 INCHES OF SOIL WITH A SOIL PROBE. INJECT AT THE RATE OF ONE THIRD (1/3) GALLON AT EACH INJECTION SITE.
    d. THE CRITICAL ROOT ZONE AREA PLUS 2' BEYOND THE CRITICAL ROOT ZONE SHALL BE INJECTED, BUT NOT BEYOND ROOT PRUNING LOCATIONS.
    e. FERTILIZER SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF ANY AERATION SYSTEMS.
    f. EMPTY PRODUCT CONTAINERS SHALL BE STOCKPILED FOR INSPECTION BY THE PROJECT ARBORIST PRIOR TO DISPOSAL.

G. INSECTICIDE

7. NOTIFY PROJECT ARBORIST IF ANY INFESTATION IS NOTICED.
8. FOLLOW PROJECT ARBORIST'S RECOMMENDED PROCEDURES.
9. FOLLOW ALL MANUFACTURERS' RECOMMENDATIONS CONCERNING APPLICATION. READ ALL WARNING LABELS.
10. ANY PETS, AS WELL AS, THE PETS FOOD AND WATER BOWLS SHOULD BE REMOVED FROM THE AREA AND ANY SWIMMING POOLS SHOULD BE COVERED. COORDINATE WITH PROJECT ARBORIST FOR FURTHER INSTRUCTION.
11. ENSURE COMPLETE COVERAGE AND REAPPLY 2-3 MONTHS AFTER INITIAL APPLICATION UTILIZING SAME PROCEDURE.

H. IRRIGATION

1. EVERY EFFORT SHALL BE MADE TO WATER THE PRESERVED TREES AND TRANSPLANTS. CONTRACTOR SHALL IRRIGATE BY HAND OR BY TEMPORARY IRRIGATION.
2. IRRIGATE AS REQUIRED BY PROJECT ARBORIST UNTIL PERMANENT IRRIGATION IS INSTALLED AND OPERATING.
3. UNDERGROUND IRRIGATION SHALL NOT BE INSTALLED WITHIN THE DRIP LINES OF EXISTING TREES UNLESS ROOT PROTECTION MEASURES ARE PROVIDED AND APPROVED BY PROJECT ARBORIST.

I. TREE REMOVALS

1. PRIOR TO AND DURING LAND CLEARING, INCLUDING GRUBBING, ALL TREES TO BE REMOVED SHALL BE CLEARLY MARKED BY PROJECT ARBORIST WITH RED SURVEY RIBBONS AT 36 INCHES MINIMUM ABOVE GRADE.
2. CONTRACTOR SHALL REMOVE ALL TREES AS SHOWN ON THE TREE MITIGATION PLANS AFTER THE TREE PROTECTION FENCING IS INSTALLED.
3. ALL TREES SHOWN TO BE REMOVED SHALL BE FELLED WITH A CHAIN SAW AND STUMP GROUND 6" BELOW SURFACE. ANY TREE SHOWN TO BE REMOVED THAT IS IN AN AREA WHERE COMPACTION IS CRITICAL SHALL BE FELLED WITH A CHAIN SAW AND STUMP REMOVED BY CONTRACTOR.
4. ALL WOOD AND STUMPS FROM REMOVALS SHALL BE HAULED FROM THE SITE THE SAME DAY, EXCEPT FOR TOPS. ALL TOPS ARE TO BE MULCHED AND STOCKPILED OR HAULED DIRECTLY TO MULCHED AREAS FOR RELOCATED TREES IF SCHEDULING PERMITS. TOPS SHALL BE CHIPPED AND PLACED IN THE TREE PROTECTION ZONE TO A DEPTH OF THREE (3) INCHES. ALL EXCESS WOOD CHIPS SHOULD BE HAULED OFF SITE AFTER TRANSPLANTING IS COMPLETE.
5. ALL BURN PITS IF APPLICABLE MUST BE APPROVED BY THE PROJECT ARBORIST AND OWNER.
6. TREES TO BE REMOVED THAT HAVE BRANCHES EXTENDING INTO THE CANOPY OF TREES TO REMAIN MUST BE REMOVED BY A QUALIFIED ISA CERTIFIED ARBORIST AND NOT BY DEMOLITION OR CONSTRUCTION CONTRACTORS. THE QUALIFIED ARBORIST SHALL REMOVE THE TREE IN A MANNER THAT CAUSES NO DAMAGE TO THE TREES AND UNDERSTORY VEGETATION TO REMAIN.
7. TREES TO BE REMOVED LOCATED WITHIN THE TREE PROTECTION ZONE SHALL BE REMOVED BY A QUALIFIED ISA CERTIFIED ARBORIST. THE TREES SHALL BE CUT NEAR GROUND LEVEL AND THE STUMP GROUND OUT.

L. TOPSOIL

10. CONTRACTOR SHALL COORDINATE ALL EARTHWORK OPERATIONS WITHIN TREE PROTECTION AREAS WITH THE PROJECT ARBORIST PRIOR TO BEGINNING WORK.
11. ALL TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY THAT PRODUCES HEAVY GROWTH.
12. TOPSOIL, PH RANGE OF 5.5 TO 7.0, 3-5 PERCENT ORGANIC MATERIAL MINIMUM, FREE FROM SUBSOIL, OBJECTIONABLE WEEDS, LITTER, SODS, STIFF CLAY, STONES LARGER THAN ONE (1) INCH IN DIAMETER, STUMPS, ROOTS, TRASH, TOXIC SUBSTANCES, OR ANY OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH.
13. VERIFY AMOUNT STOCKPILED IF ANY, AND SUPPLY ADDITIONAL AS NEEDED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST FOUR (4) INCHES DEEP. DO NOT OBTAIN TOPSOIL FROM BOGS OR MARSHES.
14. PROJECT ARBORIST SHALL APPROVE ALL TOPSOIL PRIOR TO PLACEMENT.

M. REPAIR OF DAMAGED TREES

1. IF DAMAGE TO ANY TREE SHOULD OCCUR BY ACCIDENT OR NEGLIGENCE DURING THE CONSTRUCTION PERIOD, THE PROJECT ARBORIST SHALL APPRAISE THE DAMAGE AND MAKE RECOMMENDATIONS TO THE OWNER FOR REPAIR BY THE CONTRACTOR.
2. IF ANY TREE DESIGNATED TO BE SAVED IS REMOVED FROM THE SITE WITHOUT PERMISSION OF THE OWNER'S REPRESENTATIVE, THE PROJECT ARBORIST SHALL APPRAISE THE TREE AND MAKE RECOMMENDATIONS TO THE OWNER FOR REPLACEMENT BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF THE TREE AND ANY FEES THAT MAY BE ASSESSED TO THE OWNER BY THE GOVERNING AGENCY.

1 / L0.58 TYPICAL TREE MITIGATION NOTES

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

TREE MITIGATION NOTES

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER L0.58

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\L1.50 - LANDSCAPE DETAILS.dwg L0.58 Jul 22, 2024 4:47pm by: jake.maple
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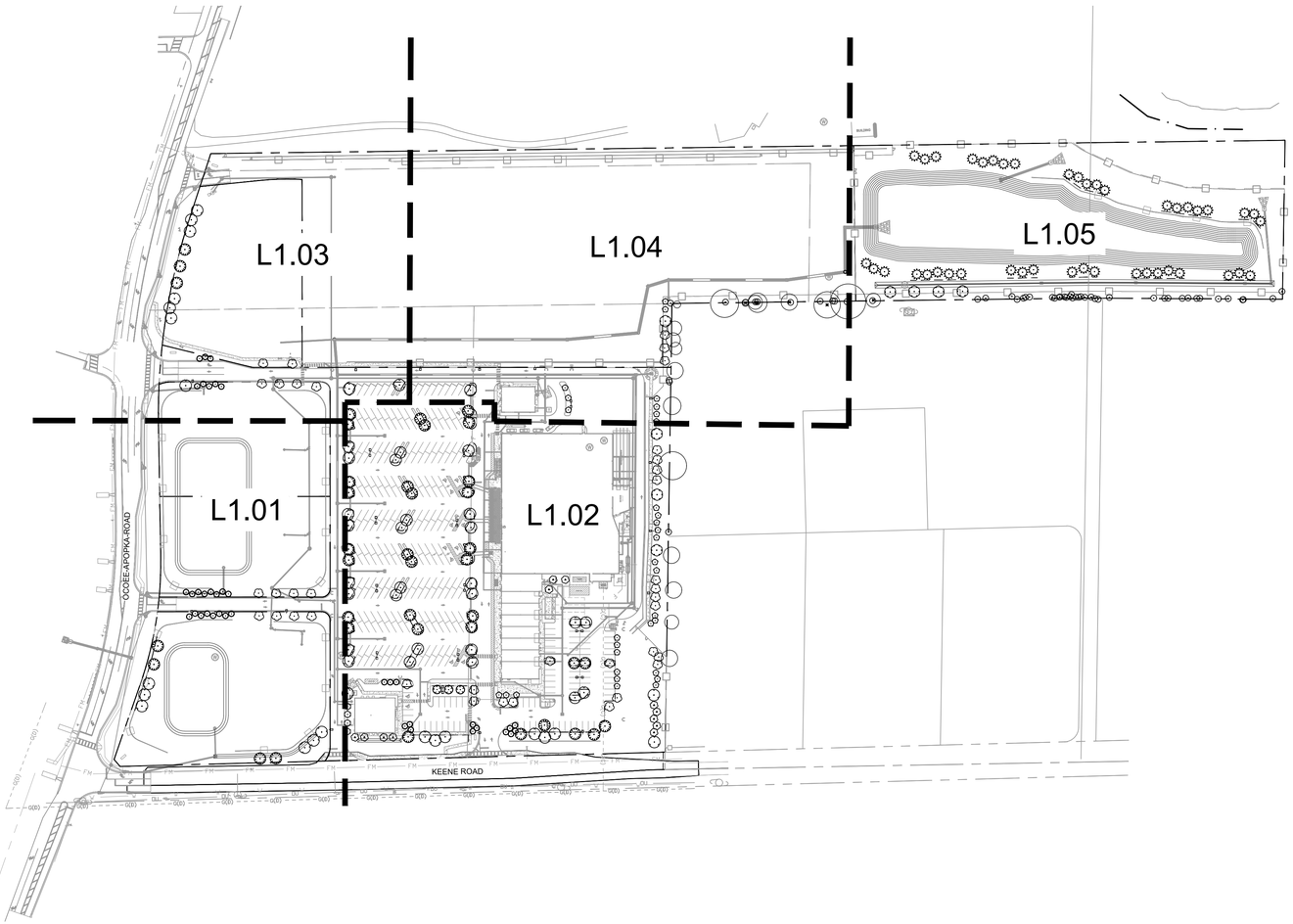

CODE MINIMUM LANDSCAPE CALCULATIONS

PER "CITY OF APOPKA" LAND DEVELOPMENT CODE

	REQUIRED	PROVIDED
BUILDING FOUNDATION LANDSCAPE *SECTION 5.2.5.A.1* *BUILDING FACADE FACING R.O.W.* *(AND)* *SECTION 5.2.5.B.2.A.1.B* *BUILDING FACADE ADJACENT TO PARKING*	**BUILDING 1 - 117 LF (SOUTH FACADES)** 4' WIDTH LANDSCAPE AREA, SHRUBS A MINIMUM OF 24 INCHES IN HEIGHT, 30 INCHES ON-CENTER, 6 UNDERSTORY TREES REQ. (1 UNDERSTORY TREE / 20 LF) **BUILDING 2 - 71 LF (SOUTH FACADES)** 4' WIDTH LANDSCAPE AREA, SHRUBS A MINIMUM OF 24 INCHES IN HEIGHT, 30 INCHES ON-CENTER, 4 UNDERSTORY TREES REQ. (1 UNDERSTORY TREE / 20 LF)	**BUILDING 1 - 267 LF (SOUTH FACADES)** 5' WIDTH LANDSCAPE AREA, SHRUBS 36 INCHES IN HEIGHT, 30 INCHES ON-CENTER, 6 UNDERSTORY TREES **BUILDING 2 - 71 LF (SOUTH FACADES)** 7'-11" WIDTH LANDSCAPE AREA, SHRUBS 24 INCHES IN HEIGHT, 36 INCHES ON-CENTER, 4 UNDERSTORY TREES
INTERIOR VUA LANDSCAPE *SECTION 5.2.5.B.2*	10% OF VUA AREA TO BE LANDSCAPED (246,958 SF) 1 TREE PER 10 PARKING SPACES (354 PARKING SPACES) 100,712 SF VUA X 0.1 = 24,696 SF LANDSCAPE REQUIRED 354 SPACES / 10 = 36 SHADE TREES REQUIRED	 29,274 SF LANDSCAPE AREA PROVIDED 36+ SHADE TREES PROVIDED
PERIMETER LANDSCAPING *SECTION 5.2.5.B.3* *SECTION 5.2.5.B.b.2*	**BUFFER 1-1 - 1192'-2"** N/A REQUIRED **BUFFER 1-2 - 680'** N/A REQUIRED **BUFFER 2 - 273'-7"** N/A REQUIRED **BUFFER 3 - 1464'** N/A REQUIRED **BUFFER 4 - 351'** 4 CANOPY TREES, 18 UNDERSTORY TREES, AND 39 SHRUBS REQUIRED **BUFFER 5 - 980'-8"** N/A REQUIRED **BUFFER 6 - 1070'-2"** N/A REQUIRED	**BUFFER 1 - 1192'-2"** N/A PROVIDED **BUFFER 2 - 680'** N/A PROVIDED **BUFFER 3 - 273'-7"** N/A PROVIDED **BUFFER 4 - 1464'** N/A PROVIDED **BUFFER 5-1 - 351'** 4 CANOPY TREES, 18 UNDERSTORY TREES, AND 39+ SHRUBS PROVIDED **BUFFER 5-2 - 980'-8"** N/A PROVIDED **BUFFER 6 - 1070'-2"** N/A PROVIDED

TREE CANOPY COVERAGE TABLE			
XXXX	SQUARE FEET	ACRES	PERCENT
TOTAL SITE AREA	1213988	27.87	100.00%
EXISTING CANOPY AREA	537677	12.34	44.29%
REQUIRED CANOPY TO REMAIN	32260	0.74	6.00%
CANOPY AREA TO REMAIN	34843	0.80	6.48%

TREE REMOVAL TABLE		
	TREES	INCHES
TOTAL TREES ON SITE	418	7286
TOTAL TREES TO BE REMOVED	359	6711
TOTAL TREES TO REMAIN	59	575
TOTAL TREE INCHES TO BE MITIGATED		6711

TREE REPLACEMENT TABLE		
	TREES	INCHES
TOTAL MITIGATION REQUIRED		6711
TOTAL TREES TO BE PLANTED ON S	267	768
CANOPY TREES (3" CAL)	227	681
UNDERSTORY & ACCENT TREES	40	87
NET MITIGATION INCHES OWED		5943
TOTAL FEE TO BE PAID ($15 PER INCH)		$89,145

SPECIMEN TREE TABLE		
	TREES	INCHES
SPECIMEN TREES ON SITE	98	2989
SPECIMEN TREES TO BE REMOVED	94	2883
SPECIMEN TREES TO BE PRESERVE	4	106

*INVASIVE TREES (EAR, GUM, CHINABERRY, AND CAMPHOR) & DEAD TREES ARE NOT INCLUDED IN THE ABOVE CALCULATIONS

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE
TREES							
	AF	52	ACER RUBRUM 'FLORIDA FLAME' STRAIGHT, SINGLE LEADER, FULL, FL #1	FLORIDA FLAME RED MAPLE	FG	3" CAL MIN	14` HT., 6` SPR.
	MB	37	MAGNOLIA GRANDIFLORA `BRACKENS BROWN BEAUTY` STRAIGHT, SINGLE LEADER, FULL, FL #1	BRACKEN`S SOUTHERN MAGNOLIA	F.G.	3" CAL MIN	14` HT., 6` SPR.
	QS	39	QUERCUS SHUMARDII STRAIGHT, SINGLE LEADER, FULL, FL #1	SHUMARD OAK	FG	3" CAL MIN	14` HT., 6` SPR.
	QV	8	QUERCUS VIRGINIANA STRAIGHT, SINGLE LEADER, FULL, FL #1	SOUTHERN LIVE OAK	FG	3" CAL MIN	14` HT., 6` SPR.
	TD	43	TAXODIUM DISTICHUM STRAIGHT, SINGLE LEADER, FULL, FL #1	BALD CYPRESS	FG	3" CAL MIN	14` HT., 6` SPR.
PALM							
	SP2	38	SABAL PALMETTO STRAIGHT, SLICK, HURRICANE CUT, FL #1	SABAL PALM	FG	-	12` - 18` CT
UNDERSTORY TREE							
	ED	4	ELAEOCARPUS DECIPIENS STRAIGHT, SINGLE LEADER, FULL TO BASE, FL #1	JAPANESE BLUEBERRY TREE	FG	3.5" CAL MIN	12` HT., 4` SPR.
	LT	3	LAGERSTROEMIA X `TUSKEGEE` STRAIGHT, SINGLE LEADER, FULL, FL #1	TUSKEGEE CRAPE MYRTLE	F.G.	3" CAL MIN	12` HT., 4` SPR.
	LY	12	LAGERSTROEMIA X `TUSKEGEE` MULTI-TRUNK, 5 TRUNK MIN., FULL, FL #1	CRAPE MYRTLE	F.G.	3.5" CAL MIN	12` HT., 4` SPR.
	ML	31	MAGNOLIA GRANDIFLORA 'LITTLE GEM' STRAIGHT, SINGLE LEADER, FULL, FL #1	LITTLE GEM DWARF SOUTHERN MAGNOLIA	FG	3.5" CAL MIN	12` HT., 4` SPR.

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SPACING	SIZE
SHRUBS							
	DE	529	DURANTA ERECTA 'GOLD MOUND' FULL	GOLD MOUND DEWDROPS	3 GAL	30" OC	24" FULL
	IB	351	ILEX CORNUTA 'BURFORDII' FULL	BURFORD HOLLY	3 GAL	36" OC	24" FULL
	LG	152	LOROPETALUM CHINENSE FULL	CHINESE FRINGE FLOWER	3 GAL	30" OC	24" FULL
	PE	207	PASPALUM QUADRIFARIUM FULL	EVERGREEN PASPALUM	3 GAL	36" OC	24" FULL
	PM	95	PODOCARPUS MACROPHYLLUS FULL TO BASE, CLSOELEY MATCHING	PODOCARPUS	7 GAL	30" OC	30" HT MIN
	SB	350	SPARTINA BAKERI FULL	SAND CORDGRASS	3 GAL	30" OC	30" FULL
	TF	443	TRIPSACUM DACTYLOIDES FULL	FAKAHATCHEE GRASS	3 GAL	30" OC	30" FULL
	VO	638	VIBURNUM ODORATISSIMUM FULL	SWEET VIBURNUM	7 GAL	30" OC	30" HT MIN

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SIZE	SPACING
SHRUB AREAS							
	MC	577	MUHLENBERGIA CAPILLARIS FULL	PINK MUHLY GRASS	3 GAL	24" HT MIN	30" OC
	PI	449	PLUMBAGO AURICULATA 'IMPERIAL BLUE' FULL	IMPERIAL BLUE PLUMBAGO	3 GAL	24" HT MIN	30" OC
GROUND COVERS							
	AV	301	ANNUALS VARIES, BY OWNER FULL	ANNUALS	1 GAL		
	DB	135	DIANELLA TASMANICA `BLUEBERRY` VARIEGATED, FULL	VARIEGATED BLUEBERRY FLAX LILY	3 GAL	12" FULL	24" OC
	EB	1,672	EVOLVULUS GLOMERATUS 'BLUE DAZE' FULL	BLUE DAZE	3 GAL	12" SPRD MIN	24" OC
	JP	19	JUNIPERUS CHINENSIS `PARSONII' FULL	PARSONI JUNIPER	3 GAL	10" HT. MIN.	24" OC
	JT	2,072	JUNIPERUS CONFERTA `BLUE PACIFIC' FULL	BLUE PACIFIC JUNIPER	3 GAL	12" SPRD MIN	24" OC
	LE	1,309	LIRIOPE MUSCARI 'EMERALD GODDESS' FULL	EMERALD GODDESS LILYTURF	1 GAL	12" SPRD MIN	18" OC
	LH	85	LANTANA X 'NEW GOLD' FULL	NEW GOLD LANTANA	1 GAL	12" SPRD MIN	18" OC
	PG	1,532 SF	PEA GRAVEL 1/4"	PEA GRAVEL	-		
	TM	473	TRACHELOSPERMUM ASIATICUM 'MINIMA' FULL	MINIMA ASIATIC JASMINE	1 GAL	12" SPRD MIN	18" OC
	TV	5,392	TRACHELOSPERMUM ASIATICUM 'VARIEGATA' FULL	VARIEGATED ASIATIC JASMINE	1 GAL	12" SPRD MIN	18" OC
	TV2	4,254	TULBAGHIA VIOLACEA FULL	SOCIETY GARLIC	3 GAL	10" HT. MIN.	18" OC
SOD							
	PA	757,224 SF	PASPALUM NOTATUM 'ARGENTINE' ROLLED TIGHT, 100% WEED/INSECT/DIESEASE/DEBRIS FREE	ARGENTINE BAHIA GRASS	SOD	-	-
	SS	7,121 SF	STENOTAPHRUM SECUNDATUM 'FLORATAM' ROLLED TIGHT, 100% WEED/INSECT/DIESEASE/DEBRIS FREE	FLORATAM ST. AUGUSTINE GRASS	SOD		

MISC.	QTY	BOTANICAL/COMMON NAME	SPECIFICATIONS
MULCH	TBD	DARK BROWN SHREDDED PINE BARK MULCH	3" DEPTH MINIMUM, SHREDDED, FREE OF WEEDS/INVASIVE PLANT MATERIAL

NORTH

GRAPHIC SCALE IN FEET
0 60 120 240

Always call 811 two full business days before you dig to have underground utilities located and marked.

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No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
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LICENSED PROFESSIONAL

FLORIDA LICENSE NUMBER

DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

OVERALL LANDSCAPE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L1.00

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\L1.00 - LANDSCAPE PLAN.dwg L1.00 Jul 22, 2024 4:48pm by: jake.maple
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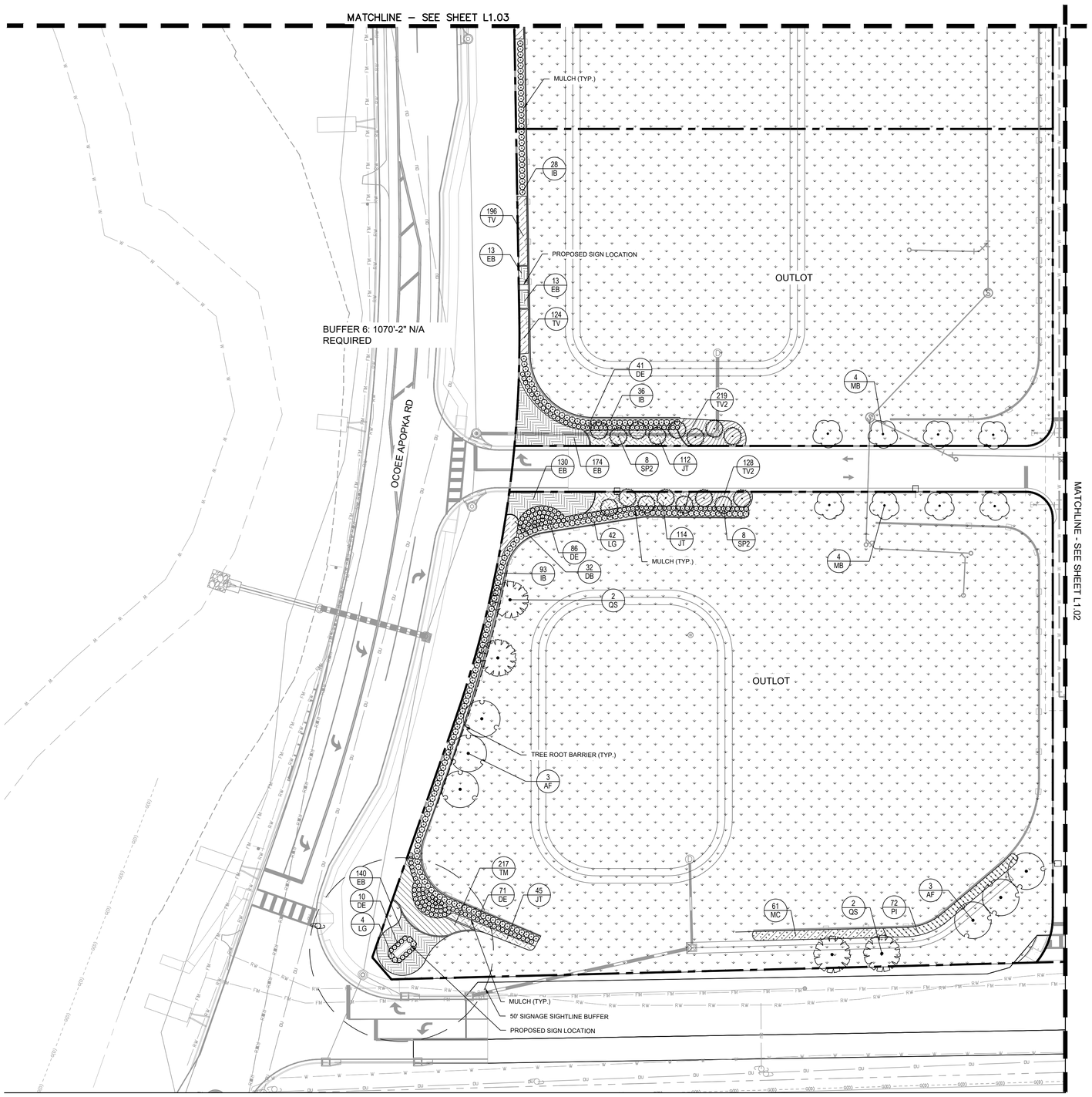

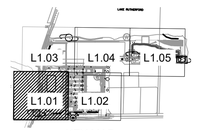

KEY MAP
SCALE: 1" = 1000'

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME
TREES				
	AF	52	ACER RUBRUM 'FLORIDA FLAME' STRAIGHT, SINGLE LEADER, FULL, FL #1	FLORIDA FLAME RED MAPLE
	MB	37	MAGNOLIA GRANDIFLORA `BRACKENS BROWN BEAUTY` STRAIGHT, SINGLE LEADER, FULL, FL #1	BRACKEN`S SOUTHERN MAGNOLIA
	QS	39	QUERCUS SHUMARDII STRAIGHT, SINGLE LEADER, FULL, FL #1	SHUMARD OAK
	QV	8	QUERCUS VIRGINIANA STRAIGHT, SINGLE LEADER, FULL, FL #1	SOUTHERN LIVE OAK
	TD	43	TAXODIUM DISTICHUM STRAIGHT, SINGLE LEADER, FULL, FL #1	BALD CYPRESS
PALM				
	SP2	38	SABAL PALMETTO STRAIGHT, SLICK, HURRICANE CUT, FL #1	SABAL PALM
UNDERSTORY TREE				
	ED	4	ELAEOCARPUS DECIPIENS STRAIGHT, SINGLE LEADER, FULL TO BASE, FL #1	JAPANESE BLUEBERRY TREE
	LT	3	LAGERSTROEMIA X `TUSKEGEE` STRAIGHT, SINGLE LEADER, FULL, FL #1	TUSKEGEE CRAPE MYRTLE
	LY	12	LAGERSTROEMIA X `TUSKEGEE` MULTI-TRUNK, 5 TRUNK MIN., FULL, FL #1	CRAPE MYRTLE
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SHRUBS				
	DE	529	DURANTA ERECTA 'GOLD MOUND' FULL	GOLD MOUND DEWDROPS
	IB	351	ILEX CORNUTA 'BURFORDII' FULL	BURFORD HOLLY
	LG	152	LOROPETALUM CHINENSE FULL	CHINESE FRINGE FLOWER
	PE	207	PASPALUM QUADRIFARIUM FULL	EVERGREEN PASPALUM
	PM	95	PODOCARPUS MACROPHYLLUS FULL TO BASE, CLSOELEY MATCHING	PODOCARPUS
	SB	350	SPARTINA BAKERI FULL	SAND CORDGRASS
	TF	443	TRIPSACUM DACTYLOIDES FULL	FAKAHATCHEE GRASS
	VO	638	VIBURNUM ODORATISSIMUM FULL	SWEET VIBURNUM
SHRUB AREAS				
	MC	577	MUHLENBERGIA CAPILLARIS FULL	PINK MUHLY GRASS
	PI	449	PLUMBAGO AURICULATA 'IMPERIAL BLUE' FULL	IMPERIAL BLUE PLUMBAGO
GROUND COVERS				
	AV	289 SF	ANNUALS VARIES, BY OWNER FULL	ANNUALS
	DB	515 SF	DIANELLA TASMANICA `BLUEBERRY` VARIEGATED, FULL	VARIEGATED BLUEBERRY FLAX LILY
	EB	6,400 SF	EVOLVULUS GLOMERATUS 'BLUE DAZE' FULL	BLUE DAZE
	JP	72 SF	JUNIPERUS CHINENSIS `PARSONII` FULL	PARSONI JUNIPER
	JT	7,854 SF	JUNIPERUS CONFERTA `BLUE PACIFIC` FULL	BLUE PACIFIC JUNIPER
	LE	2,829 SF	LIRIOPE MUSCARI 'EMERALD GODDESS' FULL	EMERALD GODDESS LILYTURF
	LH	183 SF	LANTANA X 'NEW GOLD' FULL	NEW GOLD LANTANA
	PG	1,532 SF	PEA GRAVEL 1/4"	PEA GRAVEL
	TM	1,018 SF	TRACHELOSPERMUM ASIATICUM 'MINIMA' FULL	MINIMA ASIATIC JASMINE
	TV	5,184 SF	TRACHELOSPERMUM ASIATICUM 'VARIEGATA' FULL	VARIEGATED ASIATIC JASMINE
	TV2	9,184 SF	TULBAGHIA VIOLACEA FULL	SOCIETY GARLIC
SOD				
	PA	757,224 SF	PASPALUM NOTATUM 'ARGENTINE' ROLLED TIGHT, 100% WEED/INSECT/DIESEASE/DEBRIS FREE	ARGENTINE BAHIA GRASS
	SS	7,121 SF	STENOTAPHRUM SECUNDATUM 'FLORATAM' ROLLED TIGHT, 100% WEED/INSECT/DIESEASE/DEBRIS FREE	FLORATAM ST. AUGUSTINE GRASS

MISC.	QTY	BOTANICAL/COMMON NAME	SPECIFICATIONS
MULCH	TBD	DARK BROWN SHREDDED PINE BARK MULCH	3" DEPTH MINIMUM, SHREDDED, FREE OF WEEDS/INVASIVE PLANT MATERIAL

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FLORIDA LICENSE NUMBER
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

LANDSCAPE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L1.01

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\L1.00 – LANDSCAPE PLAN.dwg L1.01 Jul 22, 2024 4:48pm by: jake.maple
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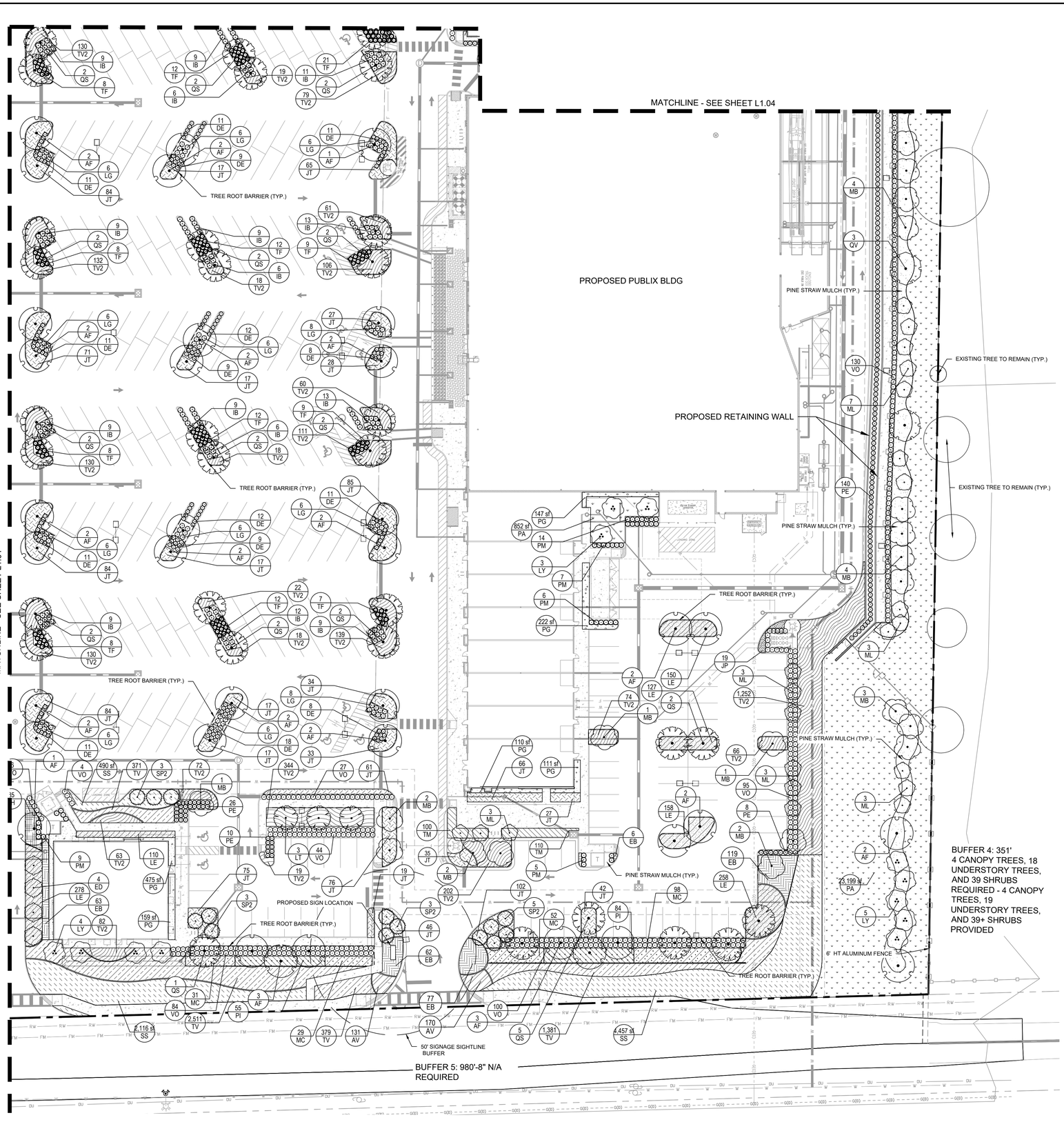

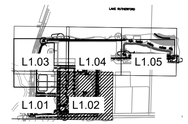

KEY MAP
SCALE: 1" = 1000'

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME
TREES				
	AF	52	ACER RUBRUM 'FLORIDA FLAME' STRAIGHT, SINGLE LEADER, FULL, FL #1	FLORIDA FLAME RED MAPLE
	MB	37	MAGNOLIA GRANDIFLORA `BRACKENS BROWN BEAUTY` STRAIGHT, SINGLE LEADER, FULL, FL #1	BRACKEN`S SOUTHERN MAGNOLIA
	QS	39	QUERCUS SHUMARDII STRAIGHT, SINGLE LEADER, FULL, FL #1	SHUMARD OAK
	QV	8	QUERCUS VIRGINIANA STRAIGHT, SINGLE LEADER, FULL, FL #1	SOUTHERN LIVE OAK
	TD	43	TAXODIUM DISTICHUM STRAIGHT, SINGLE LEADER, FULL, FL #1	BALD CYPRESS
PALM				
	SP2	38	SABAL PALMETTO STRAIGHT, SLICK, HURRICANE CUT, FL #1	SABAL PALM
UNDERSTORY TREE				
	ED	4	ELAEOCARPUS DECIPIENS STRAIGHT, SINGLE LEADER, FULL TO BASE, FL #1	JAPANESE BLUEBERRY TREE
	LT	3	LAGERSTROEMIA X `TUSKEGEE` STRAIGHT, SINGLE LEADER, FULL, FL #1	TUSKEGEE CRAPE MYRTLE
	LY	12	LAGERSTROEMIA X `TUSKEGEE` MULTI-TRUNK, 5 TRUNK MIN., FULL, FL #1	CRAPE MYRTLE
	ML	31	MAGNOLIA GRANDIFLORA 'LITTLE GEM' STRAIGHT, SINGLE LEADER, FULL, FL #1	LITTLE GEM DWARF SOUTHERN MAGNOLIA
SHRUBS				
	DE	529	DURANTA ERECTA 'GOLD MOUND' FULL	GOLD MOUND DEWDROPS
	IB	351	ILEX CORNUTA 'BURFORDII' FULL	BURFORD HOLLY
	LG	152	LOROPETALUM CHINENSE FULL	CHINESE FRINGE FLOWER
	PE	207	PASPALUM QUADRIFARIUM FULL	EVERGREEN PASPALUM
	PM	95	PODOCARPUS MACROPHYLLUS FULL TO BASE, CLSOELEY MATCHING	PODOCARPUS
	SB	350	SPARTINA BAKERI FULL	SAND CORDGRASS
	TF	443	TRIPSACUM DACTYLOIDES FULL	FAKAHATCHEE GRASS
	VO	638	VIBURNUM ODORATISSIMUM FULL	SWEET VIBURNUM
SHRUB AREAS				
	MC	577	MUHLENBERGIA CAPILLARIS FULL	PINK MUHLY GRASS
	PI	449	PLUMBAGO AURICULATA 'IMPERIAL BLUE' FULL	IMPERIAL BLUE PLUMBAGO
GROUND COVERS				
	AV	289 SF	ANNUALS VARIES, BY OWNER FULL	ANNUALS
	DB	515 SF	DIANELLA TASMANICA `BLUEBERRY` VARIEGATED, FULL	VARIEGATED BLUEBERRY FLAX LILY
	EB	6,400 SF	EVOLVULUS GLOMERATUS 'BLUE DAZE' FULL	BLUE DAZE
	JP	72 SF	JUNIPERUS CHINENSIS `PARSONII` FULL	PARSONI JUNIPER
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	PG	1,532 SF	PEA GRAVEL 1/4"	PEA GRAVEL
	TM	1,018 SF	TRACHELOSPERMUM ASIATICUM 'MINIMA' FULL	MINIMA ASIATIC JASMINE
	TV	5,184 SF	TRACHELOSPERMUM ASIATICUM 'VARIEGATA' FULL	VARIEGATED ASIATIC JASMINE
	TV2	9,184 SF	TULBAGHIA VIOLACEA FULL	SOCIETY GARLIC
SOD				
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	SS	7,121 SF	STENOTAPHRUM SECUNDATUM 'FLORATAM' ROLLED TIGHT, 100% WEED/INSECT/DIESEASE/DEBRIS FREE	FLORATAM ST. AUGUSTINE GRASS

MISC.	QTY	BOTANICAL/COMMON NAME	SPECIFICATIONS
MULCH	TBD	DARK BROWN SHREDDED PINE BARK MULCH	3" DEPTH MINIMUM, SHREDDED, FREE OF WEEDS/INVASIVE PLANT MATERIAL

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LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

LANDSCAPE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L1.02

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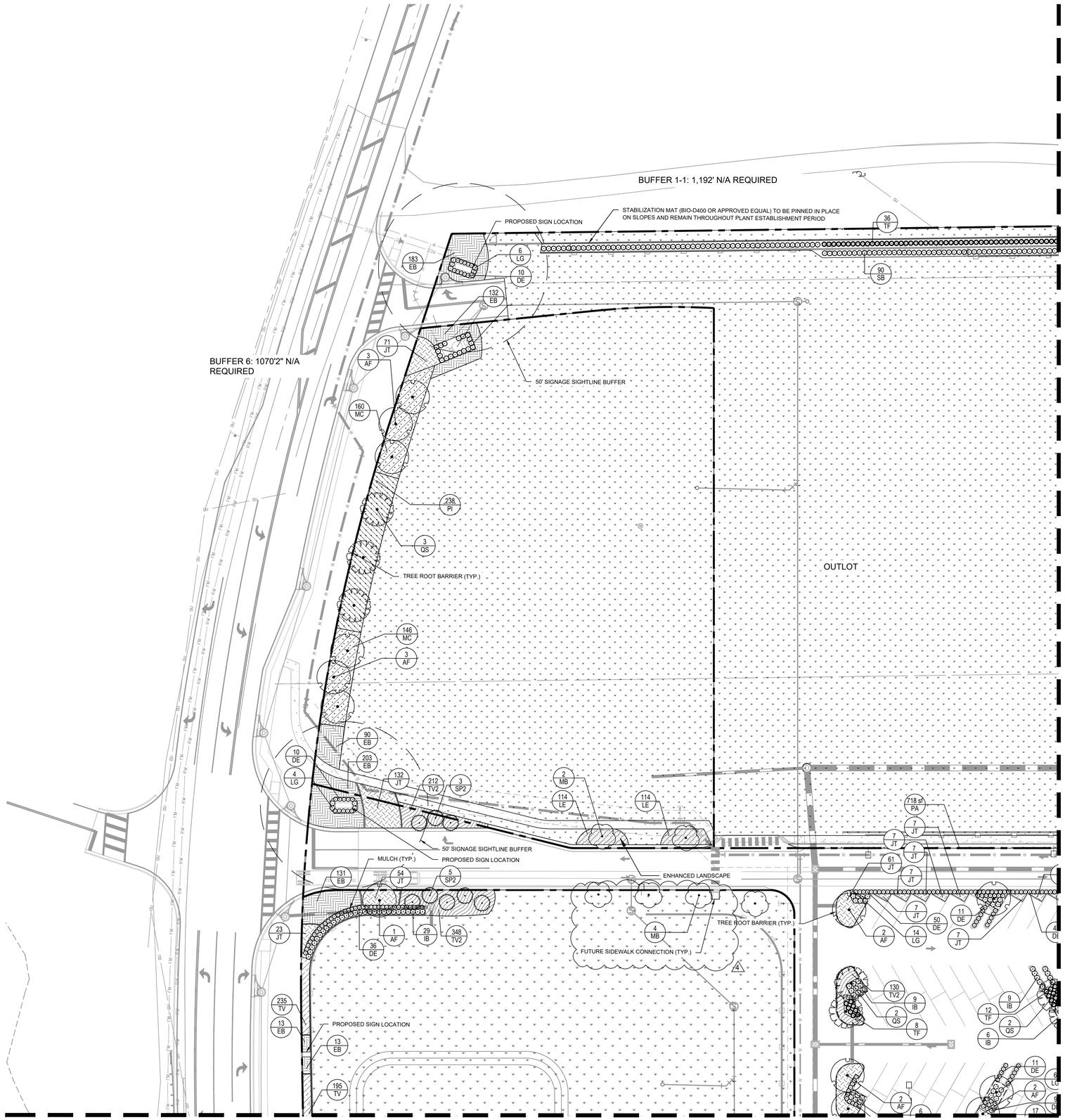

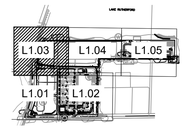

KEY MAP
SCALE: 1" = 1000'

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME
TREES				
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	MB	37	MAGNOLIA GRANDIFLORA `BRACKENS BROWN BEAUTY` STRAIGHT, SINGLE LEADER, FULL, FL #1	BRACKEN`S SOUTHERN MAGNOLIA
	QS	39	QUERCUS SHUMARDII STRAIGHT, SINGLE LEADER, FULL, FL #1	SHUMARD OAK
	QV	8	QUERCUS VIRGINIANA STRAIGHT, SINGLE LEADER, FULL, FL #1	SOUTHERN LIVE OAK
	TD	43	TAXODIUM DISTICHUM STRAIGHT, SINGLE LEADER, FULL, FL #1	BALD CYPRESS
PALM				
	SP2	38	SABAL PALMETTO STRAIGHT, SLICK, HURRICANE CUT, FL #1	SABAL PALM
UNDERSTORY TREE				
	ED	4	ELAEOCARPUS DECIPIENS STRAIGHT, SINGLE LEADER, FULL TO BASE, FL #1	JAPANESE BLUEBERRY TREE
	LT	3	LAGERSTROEMIA X `TUSKEGEE` STRAIGHT, SINGLE LEADER, FULL, FL #1	TUSKEGEE CRAPE MYRTLE
	LY	12	LAGERSTROEMIA X `TUSKEGEE` MULTI-TRUNK, 5 TRUNK MIN., FULL, FL #1	CRAPE MYRTLE
	ML	31	MAGNOLIA GRANDIFLORA 'LITTLE GEM' STRAIGHT, SINGLE LEADER, FULL, FL #1	LITTLE GEM DWARF SOUTHERN MAGNOLIA
SHRUBS				
	DE	529	DURANTA ERECTA 'GOLD MOUND' FULL	GOLD MOUND DEWDROPS
	IB	351	ILEX CORNUTA 'BURFORDII' FULL	BURFORD HOLLY
	LG	152	LOROPETALUM CHINENSE FULL	CHINESE FRINGE FLOWER
	PE	207	PASPALUM QUADRIFARIUM FULL	EVERGREEN PASPALUM
	PM	95	PODOCARPUS MACROPHYLLUS FULL TO BASE, CLSOELEY MATCHING	PODOCARPUS
	SB	350	SPARTINA BAKERI FULL	SAND CORDGRASS
	TF	443	TRIPSACUM DACTYLOIDES FULL	FAKAHATCHEE GRASS
	VO	638	VIBURNUM ODORATISSIMUM FULL	SWEET VIBURNUM
SHRUB AREAS				
	MC	577	MUHLENBERGIA CAPILLARIS FULL	PINK MUHLY GRASS
	PI	449	PLUMBAGO AURICULATA 'IMPERIAL BLUE' FULL	IMPERIAL BLUE PLUMBAGO
GROUND COVERS				
	AV	289 SF	ANNUALS VARIES, BY OWNER FULL	ANNUALS
	DB	515 SF	DIANELLA TASMANICA `BLUEBERRY` VARIEGATED, FULL	VARIEGATED BLUEBERRY FLAX LILY
	EB	6,400 SF	EVOLVULUS GLOMERATUS 'BLUE DAZE' FULL	BLUE DAZE
	JP	72 SF	JUNIPERUS CHINENSIS `PARSONII` FULL	PARSONI JUNIPER
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	SS	7,121 SF	STENOTAPHRUM SECUNDATUM 'FLORATAM' ROLLED TIGHT, 100% WEED/INSECT/DIESEASE/DEBRIS FREE	FLORATAM ST. AUGUSTINE GRASS

MISC.	QTY.	BOTANICAL/COMMON NAME	SPECIFICATIONS
MULCH	TBD	DARK BROWN SHREDDED PINE BARK MULCH	3" DEPTH MINIMUM, SHREDDED, FREE OF WEEDS/INVASIVE PLANT MATERIAL

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FLORIDA LICENSE NUMBER
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

LANDSCAPE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L1.03

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\L1.00 - LANDSCAPE PLAN.dwg L1.03 Jul 22, 2024 4:48pm by: jake.maple
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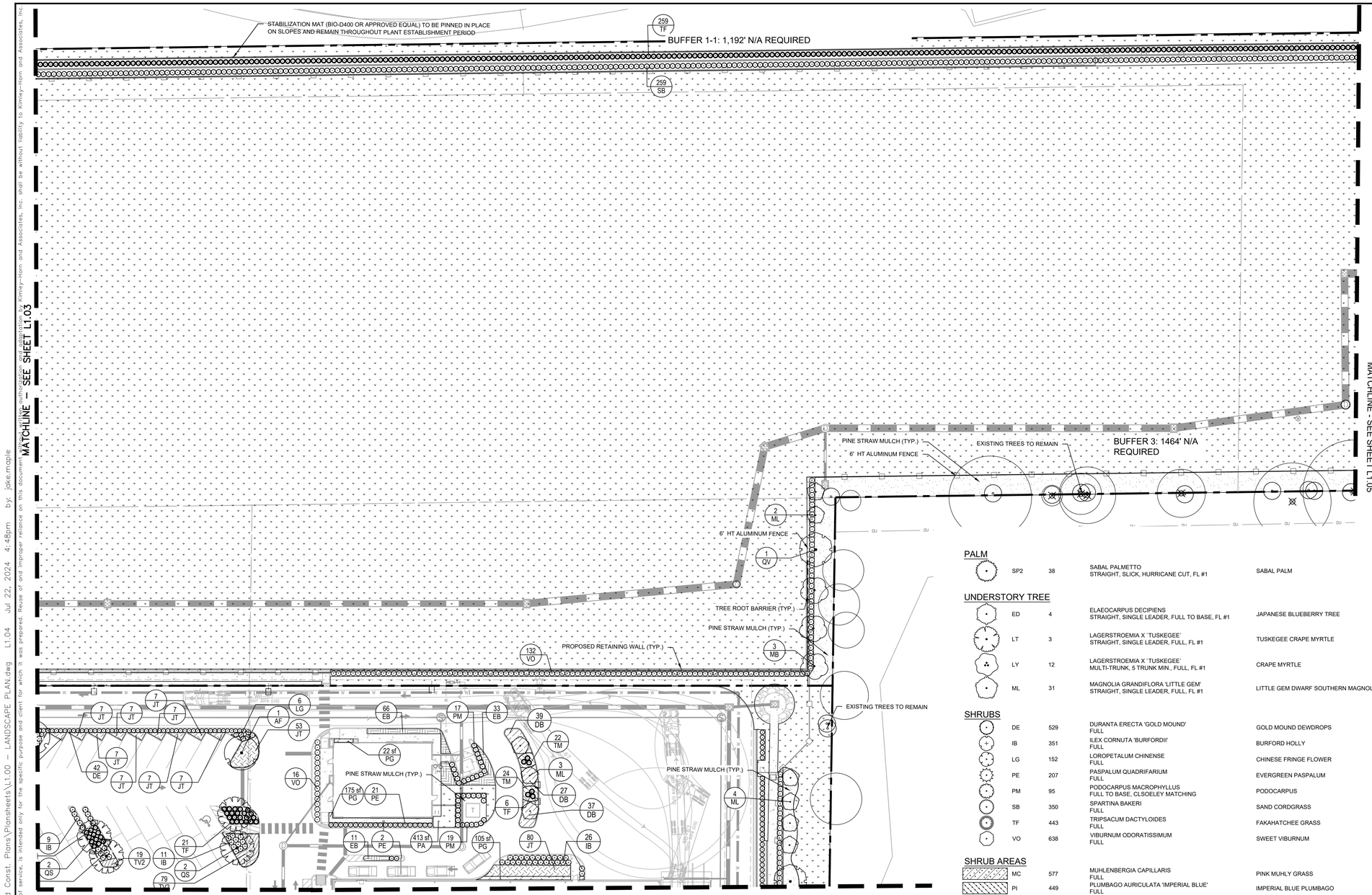

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PALM				
	SP2	38	SABAL PALMETTO STRAIGHT, SLICK, HURRICANE CUT, FL #1	SABAL PALM
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	EB	6,400 SF	EVOLVULUS GLOMERATUS 'BLUE DAZE' FULL	BLUE DAZE
	JP	72 SF	JUNIPERUS CHINENSIS `PARSONII` FULL	PARSONI JUNIPER
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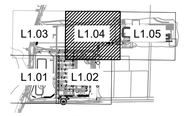

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LANDSCAPE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
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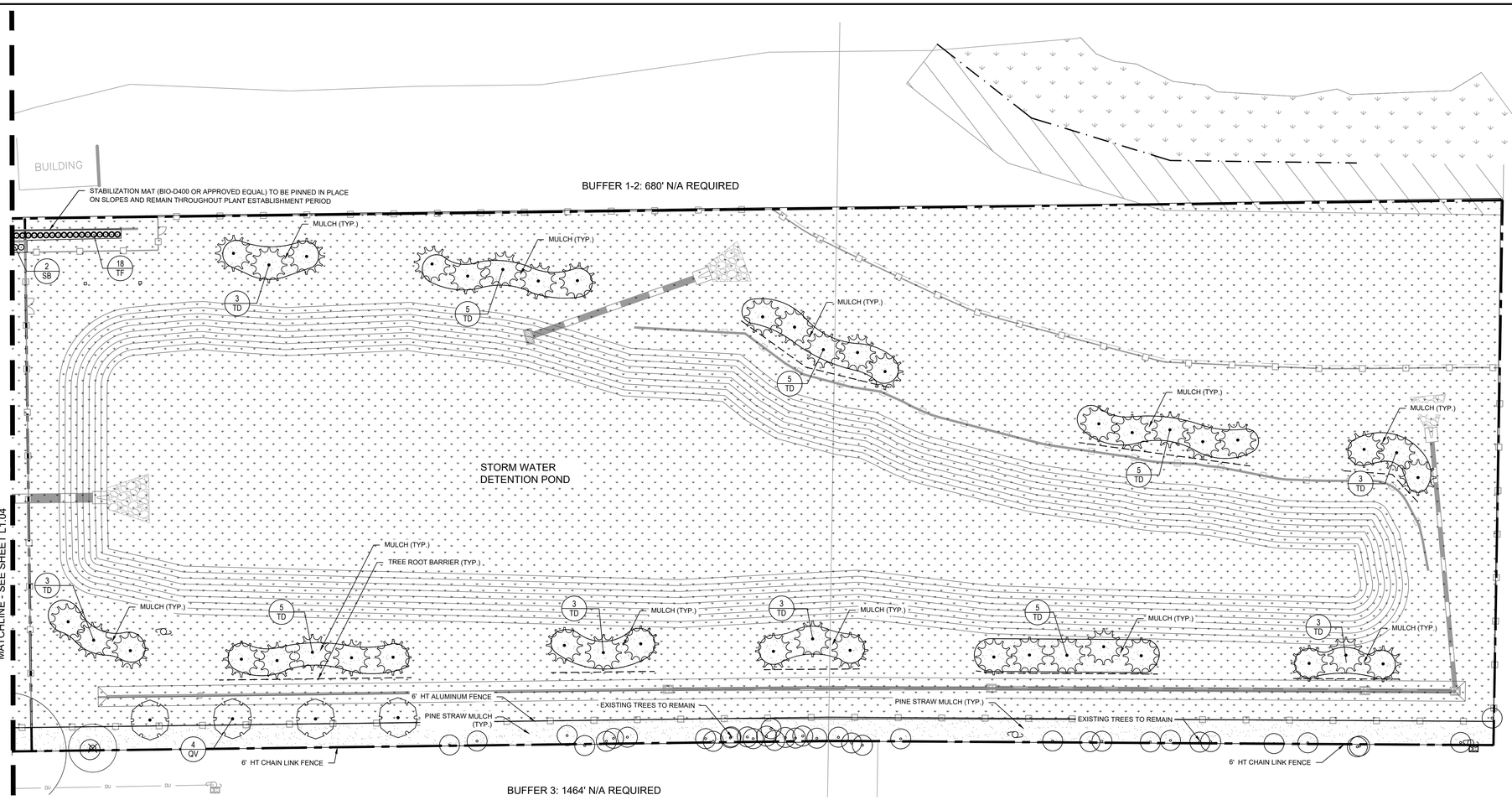

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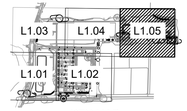

KEY MAP
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PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE
TREES							
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PALM							
	SP2	38	SABAL PALMETTO STRAIGHT, SLICK, HURRICANE CUT, FL #1	SABAL PALM	FG	-	12` - 18` CT
UNDERSTORY TREE							
	ED	4	ELAEOCARPUS DECIPIENS STRAIGHT, SINGLE LEADER, FULL TO BASE, FL #1	JAPANESE BLUEBERRY TREE	FG	3.5" CAL MIN	12` HT., 4` SPR.
	LT	3	LAGERSTROEMIA X `TUSKEGEE` STRAIGHT, SINGLE LEADER, FULL, FL #1	TUSKEGEE CRAPE MYRTLE	F.G.	3" CAL MIN	12` HT., 4` SPR.
	LY	12	LAGERSTROEMIA X `TUSKEGEE` MULTI-TRUNK, 5 TRUNK MIN., FULL, FL #1	CRAPE MYRTLE	F.G.	3.5" CAL MIN	12` HT., 4` SPR.
	ML	31	MAGNOLIA GRANDIFLORA 'LITTLE GEM' STRAIGHT, SINGLE LEADER, FULL, FL #1	LITTLE GEM DWARF SOUTHERN MAGNOLIA	FG	3.5" CAL MIN	12` HT., 4` SPR.

MISC.	QTY	BOTANICAL/COMMON NAME	SPECIFICATIONS
MULCH	TBD	DARK BROWN SHREDDED PINE BARK MULCH	3" DEPTH MINIMUM, SHREDDED, FREE OF WEEDS/INVASIVE PLANT MATERIAL

SHRUBS

	DE	529	DURANTA ERECTA 'GOLD MOUND' FULL	GOLD MOUND DEWDROPS	3 GAL	30" OC	24" FULL
	IB	351	ILEX CORNUTA 'BURFORDII' FULL	BURFORD HOLLY	3 GAL	36" OC	24" FULL
	LG	152	LOROPETALUM CHINENSE FULL	CHINESE FRINGE FLOWER	3 GAL	30" OC	24" FULL
	PE	207	PASPALUM QUADRIFARIUM FULL	EVERGREEN PASPALUM	3 GAL	36" OC	24" FULL
	PM	95	PODOCARPUS MACROPHYLLUS FULL TO BASE, CLSOELEY MATCHING	PODOCARPUS	7 GAL	30" OC	30" HT MIN
	SB	350	SPARTINA BAKERI FULL	SAND CORDGRASS	3 GAL	30" OC	30" FULL
	TF	443	TRIPSACUM DACTYLOIDES FULL	FAKAHATCHEE GRASS	3 GAL	30" OC	30" FULL
	VO	638	VIBURNUM ODORATISSIMUM FULL	SWEET VIBURNUM	7 GAL	30" OC	30" HT MIN

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SIZE	SPACING
SHRUB AREAS							
	MC	577	MUHLENBERGIA CAPILLARIS FULL	PINK MUHLY GRASS	3 GAL	24" HT MIN	30" OC
	PI	449	PLUMBAGO AURICULATA 'IMPERIAL BLUE' FULL	IMPERIAL BLUE PLUMBAGO	3 GAL	24" HT MIN	30" OC
GROUND COVERS							
	AV	301	ANNUALS VARIES, BY OWNER FULL	ANNUALS	1 GAL		
	DB	135	DIANELLA TASMANICA `BLUEBERRY` VARIEGATED, FULL	VARIEGATED BLUEBERRY FLAX LILY	3 GAL	12" FULL	24" OC
	EB	1,672	EVOLVULUS GLOMERATUS 'BLUE DAZE' FULL	BLUE DAZE	3 GAL	12" SPRD MIN	24" OC
	JP	19	JUNIPERUS CHINENSIS `PARSONII` FULL	PARSONI JUNIPER	3 GAL	10" HT. MIN.	24" OC
	JT	2,072	JUNIPERUS CONFERTA `BLUE PACIFIC` FULL	BLUE PACIFIC JUNIPER	3 GAL	12" SPRD MIN	24" OC
	LE	1,309	LIRIOPE MUSCARI 'EMERALD GODDESS' FULL	EMERALD GODDESS LILYTURF	1 GAL	12" SPRD MIN	18" OC
	LH	85	LANTANA X 'NEW GOLD' FULL	NEW GOLD LANTANA	1 GAL	12" SPRD MIN	18" OC
	PG	1,532 SF	PEA GRAVEL 1/4"	PEA GRAVEL	-		
	TM	473	TRACHELOSPERMUM ASIATICUM 'MINIMA' FULL	MINIMA ASIATIC JASMINE	1 GAL	12" SPRD MIN	18" OC
	TV	5,392	TRACHELOSPERMUM ASIATICUM 'VARIEGATA' FULL	VARIEGATED ASIATIC JASMINE	1 GAL	12" SPRD MIN	18" OC
	TV2	4,254	TULBAGHIA VIOLACEA FULL	SOCIETY GARLIC	3 GAL	10" HT. MIN.	18" OC
SOD							
	PA	757,224 SF	PASPALUM NOTATUM 'ARGENTINE' ROLLED TIGHT, 100% WEED/INSECT/DISEASE/DEBRIS FREE	ARGENTINE BAHIA GRASS	SOD	-	-
	SS	7,121 SF	STENOTAPHRUM SECUNDATUM 'FLORATAM' ROLLED TIGHT, 100% WEED/INSECT/DISEASE/DEBRIS FREE	FLORATAM ST. AUGUSTINE GRASS	SOD		

Always call 811 two full business days before you dig to have underground utilities located and marked.
Sunshine811.com

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
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LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

LANDSCAPE PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER L1.05

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\L1.00 - LANDSCAPE PLAN.dwg L1.05 Jul 22, 2024 4:49pm by: jake.maple
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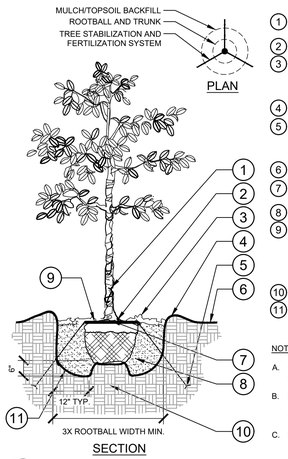


1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 3" MINIMUM MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. 4" HIGH BERM, FIRMLY COMPACTED.
5. TREE FROG ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. TOP OF ROOTBALL SHALL BE 1" ABOVE FINISHED GRADE. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.

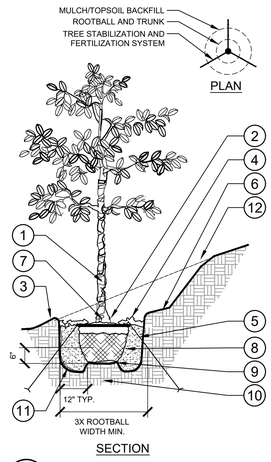
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

1 L1.50 **TREE PLANTING** — SECTION / PLAN — NTS



1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 3. 4" HIGH BERM, FIRMLY COMPACTED.
4. 3" MINIMUM OF HARDWOOD BARK MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
5. TREE FROG ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. 4" MIN. OF TOPSOIL TO BRING TO FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.
12. CUT BACK SLOPE TO PROVIDE A FLAT SURFACE FOR PLANTING.

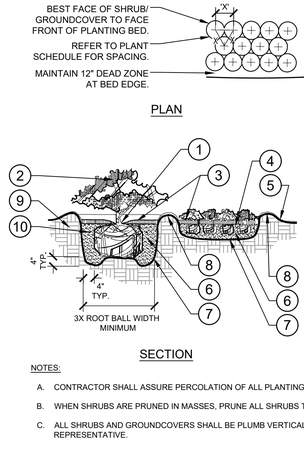
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

2 L1.50 **TREE PLANTING ON A SLOPE** — SECTION / PLAN — NTS



1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT.
3. 3" MULCH LAYER AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES) NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
7. SCARIFY OF PLANTING PIT SIDES AND BOTTOM.
8. 4" HIGH BERM FIRMLY COMPACTED.
9. UNDISTURBED NATIVE SOIL.
10. FERTILIZER TABLETS (MAX 3" DEEP)

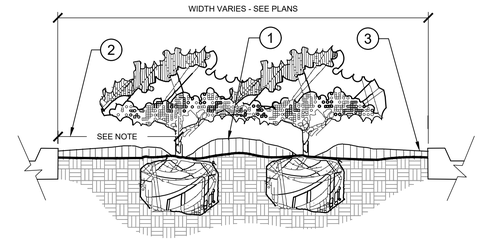
NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.

C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.

3 L1.50 **SHRUB/GROUNDCOVER PLANTING** — SECTION / PLAN — NTS



1. CROWN ISLANDS @ 5:1 SLOPES (OR AS SPECIFIED ON THE LANDSCAPE PLANS).
2. CLEAR ZONE: 36" MIN. FROM BACK OF CURB TO CENTER OF NEAREST SHRUB. CLEAR ZONE SHALL CONTAIN 3" CONTINUOUS MULCH OR TURF, SEE PLANS.
3. 2" MIN VERTICAL CLEARANCE, TOP OF CURB TO TOP OF MULCH.

NOTES:

A. EXCAVATE A CONTINUOUS 24" DEEP PIT (FROM TOP OF CURB) FOR ENTIRE LENGTH AND WIDTH OF ISLAND & BACKFILL WITH APPROVED PLANTING MIX.

B. PROTECT AND RETAIN ALL CURBS AND BASE. COMPACTED SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF CURB SYSTEM (TYP.).

C. ALL ISLANDS SHALL UTILIZE POOR DRAINAGE DETAIL WHEN PERCOLATION RATES ARE 2" PER HOUR OR LESS.

4 L1.50 **PLANTED PARKING LOT ISLANDS/MEDIANS** — SECTION — NTS

1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. PRUNE SHRUBS AS DIRECTED BY OWNER'S REPRESENTATIVE.
3. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE SHRUBS ARE PLACED IN MASSES, MULCH SHALL BE SPREAD IN A CONTINUOUS BED.
4. SOIL BERM TO HOLD WATER. TOP OF PLANTING PIT 'BERM' TO BE LEVEL ACROSS PIT. SLOPE DOWNHILL PORTION OF BERM AS REQUIRED TO MEET EXISTING GRADE. MULCH OVER EXPOSED TOPSOIL.
5. FINISHED GRADE (SEE GRADING PLAN)
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES).
7. SCARIFY SIDES AND BOTTOM OF PLANTING PIT.
8. FERTILIZER TABLETS (MAX 3" DEEP).
9. UNDISTURBED NATIVE SOIL

NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.

C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.

5 L1.50 **SHRUB/GROUNDCOVER PLANTING ON A SLOPE** — SECTION — NTS

NOTES:

1. CLEAR ZONE: 36" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.
2. INSTALL SPECIFIED MULCH: 24" MIN. FROM BUILDING. SPECIFIED MULCH TO BE INSTALLED AT A DEPTH OF 3" (MIN.)

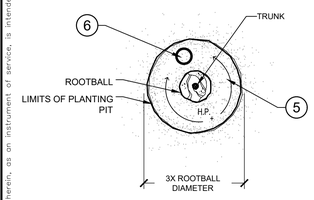
6 L1.50 **PLANTINGS ADJACENT TO BUILDINGS** — SECTION — NTS

1. INSTALL CONTINUOUS MULCH BED ADJACENT TO PARKING SPACES AS SHOWN. MULCH SHALL BE MIN. 3" DEEP. NO POP-UP IRRIGATION HEADS SHALL BE LOCATED WITHIN 24" OF A PARKING SPACE ON ANY SIDE.
2. CURB / PARKING LOT EDGE.

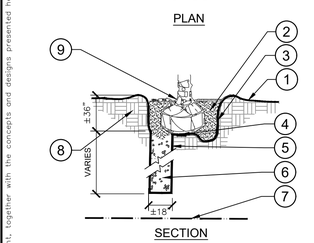
7 L1.50 **PARKING SPACE/CURB PLANTING** — SECTION — NTS

1. FIRE HYDRANT.
2. NO PLANT EXCEEDING 12" MATURE HEIGHT MATERIAL SHALL BE PLACED WITHIN SHOWN RADIUS OF ALL PROPOSED OR EXISTING FIRE HYDRANTS. CONTRACTOR SHALL ADJUST PLANT MATERIAL SO THAT NO CONFLICTS WITH FIRE HYDRANTS OCCUR ON SITE.
3. FRONT OF HYDRANT (TOWARD CURB)

8 L1.50 **SHRUB PLANTING AT FIRE HYDRANT** — SECTION / PLAN — NTS



1. FINISH GRADE (SEE GRADING PLANS).
2. BACKFILL WITH PREPARED PLANTING SOIL MIX AS SPECIFIED.
3. FILTER CLOTH, MIRAFI 500X OR BETTER.
4. SLOPE BOTTOM TO DRAIN.
5. AUGURED HOLE Ø ±18" PENETRATE THROUGH OCCLUDING LAYER TO WATER TABLE OR TO A DEPTH OF 7' TO ASSURE PROPER PERCOLATION.
6. BACKFILL WITH 1/2" - 3/4" GRAVEL TO REQUIRED DEPTH THROUGH OCCLUDING LAYER TO ASSURE PROPER PERCOLATION.
7. WATER TABLE. (DEPTH VARIES)
8. UNDISTURBED NATIVE SOIL.
9. SET ROOTBALL ON UNDISTURBED STABLE SUBSOIL SO THAT TOP OF ROOT BALL IS 1" ABOVE FINISHED GRADE.



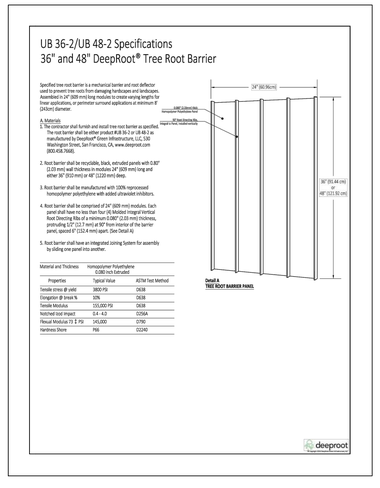
NOTES:

A. THIS DETAIL SHALL BE IMPLEMENTED WHERE PERCOLATION RATES ARE 2" PER HOUR OR LESS.

B. CONTRACTOR TO PERFORM PERCOLATION TEST AS REQUIRED. AND NOTIFY OWNER/LANDSCAPE ARCHITECT.

C. SEE TYPICAL TREE PLANTING DETAIL THIS SHEET FOR PLANT STAKING.

9 L1.50 **POOR DRAINAGE CONDITION** — SECTION / PLAN — NTS


UB 36-2/UB 48-2 Specifications
36" and 48" DeepRoot® Tree Root Barrier

Specified tree root barrier is a mechanical barrier and root deflector used to prevent tree roots from damaging hardscapes and landscapes. Assembled in 24" (609 mm) long modules to create varying lengths for linear applications, or perimeter surround applications at minimum 8' (2438m) diameter.

A. Materials
1. The contractor shall furnish and install tree root barrier as specified. The root barrier shall be either product #UB 36-2 or UB 48-2 as manufactured by DeepRoot® Green Infrastructure, LLC, 530 Washington Street, San Francisco, CA, www.deeproot.com (800.458.7668).

2. Root barrier shall be recyclable, black, extruded panels with 0.80" (120 mm) wall thickness in modules 24" (609 mm) long and either 36" (910 mm) or 48" (1220 mm) deep.

3. Root barrier shall be manufactured with 100% reprocessed homopolymer polyethylene with added ultraviolet inhibitors.

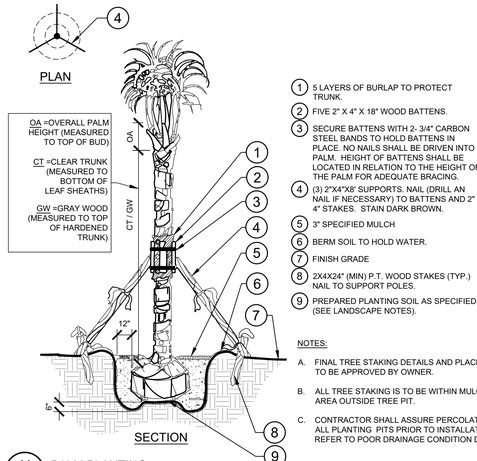
4. Root barrier shall be comprised of 24" (609 mm) modules. Each panel shall have no less than (4) Molded Integral Vertical Root Directing Ribs of a minimum 0.080" (2.03 mm) thickness, protruding 0.5" (12.7 mm) at 90° from interior of the barrier panel, spaced 6" (152.4 mm) apart. (See Detail A)

5. Root barrier shall have an integrated zoning System for assembly by sliding one panel into another.

Material and Thickness	Homopolymer Polyethylene 0.080 Inch Extruded	
Properties	Typical Value	ASTM Test Method
Tensile stress @ yield	3800 PSI	D638
Elongation @ break %	10%	D638
Tensile Modulus	155,000 PSI	D638
Notched izod impact	0.4 - 4.0	D256A
Flexual Modulus 73 F PSI	145,000	D790
Hardness Shore	R86	D2240

24" (60.96cm)
36" (91.44 cm) or 48" (121.92 cm)
Detail A
TREE ROOT BARRIER PANEL
deeproot

10 L1.50 **TREE ROOT BARRIER** — NTS



1. 5 LAYERS OF BURLAP TO PROTECT TRUNK.
2. FIVE 2" X 4" X 18" WOOD BATTENS.
3. SECURE BATTENS WITH 2- 3/4" CARBON STEEL BANDS TO HOLD BATTENS IN PLACE. NO NAILS SHALL BE DRIVEN INTO PALM. HEIGHT OF BATTENS SHALL BE LOCATED IN RELATION TO THE HEIGHT OF THE PALM FOR ADEQUATE BRACING.
4. (3) 2"X4"X8' SUPPORTS. NAIL (DRILL AN NAIL IF NECESSARY) TO BATTENS AND 2" 4" STAKES. STAIN DARK BROWN.
5. 3" SPECIFIED MULCH
6. BERM SOIL TO HOLD WATER.
7. FINISH GRADE
8. 2X4X24" (MIN) P.T. WOOD STAKES (TYP.) NAIL TO SUPPORT POLES.
9. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES).

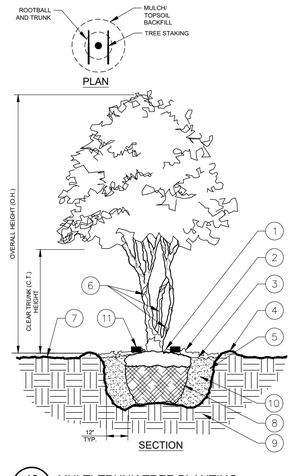
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. ALL TREE STAKING IS TO BE WITHIN MULCH BED AREA OUTSIDE TREE PIT.

C. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION - REFER TO POOR DRAINAGE CONDITION DETAIL.

11 L1.50 **PALM PLANTING** — SECTION / PLAN — NTS



1. BASE OF TREE SHALL BE PLANTED SLIGHTLY ABOVE (1" MIN.) ADJACENT FINISH GRADE. REMOVE ALL TWINE & STRAPS & CUT BURLAP FROM TOP 1/3 OF ROOT BALL. NO SYNTHETIC BURLAP WILL BE ACCEPTED.
2. 4" SHREDDED HARDWOOD MULCH OR APPROVED EQUAL.
3. DIAMETER OF TREE PIT TO BE TWICE THE DIAMETER OF ROOT BALL-ROUGHEN SIDES OF TREE PIT.
4. 3" HIGH SOIL BERM TO HOLD WATER.
5. TOPSOIL MIX BACKFILL.
6. TREE WRAP.
7. 4" MIN. OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
8. ROOT BALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING ROOT BALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.
9. UNDISTURBED SUBSOIL.
10. PREPARE PLANTING SOIL AS SPECIFIED.
11. **Tree Frog® RBK40pt** FOR UP TO 4" TREE CALIPER OR **Tree Frog® RBK60pt** FOR GREATER THAN 4" AND UP TO 6" TREE CALIPER. REFER TO SITEWORK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS.

NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. SET TREE AT ORIGINAL DEPTH. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

D. PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT

E. ASSURE PERCOLATION OF ALL PLANTING PITS

12 L1.50 **MULTI-TRUNK TREE PLANTING** — SECTION/PLAN — NTS

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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LICENSED PROFESSIONAL

FLORIDA LICENSE NUMBER

DATE: 7/22/2024

KHA PROJECT	049335015
DATE	7/22/2024
SCALE	AS SHOWN
DESIGNED BY	JM
DRAWN BY	JM
CHECKED BY	MTF

LANDSCAPE DETAILS

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L1.50

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\L1.50 - LANDSCAPE DETAILS.dwg L1.50 Jul 22, 2024 4:49pm by: jake.maple

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GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS SPECIFIED HEREIN.

2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

1. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED AND DESIGNATED TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BMP DEVICES ACCORDING TO ALL REGULATORY AGENCY'S STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.

3. THE CONTRACTOR SHALL SUBMIT A DETAILED PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN UNLESS THE WORK REQUIRES NOTHING MORE THAN A DIRECT APPLICATION OF FDOT DESIGN STANDARDS, INDEX 600. IF A DIRECT APPLICATION OF INDEX 600 IS PROPOSED, THE CONTRACTOR SHALL SUBMIT IN WRITING A STATEMENT INDICATING THE STANDARD INDEX AND PAGE NUMBER NO LESS THAN 10 BUSINESS DAYS PRIOR TO START OF CONSTRUCTION. WHEN A DIRECT APPLICATION OF FDOT STANDARD INDEX 600 IS NOT ACCEPTABLE A PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN SHALL BE PREPARED BY A FLORIDA PROFESSIONAL ENGINEER WHO HAS SUCCESSFULLY COMPLETED ADVANCED TRAINING IN MAINTENANCE OF TRAFFIC, AS DEFINED BY FDOT FOR APPROVAL BY THE COUNTY ENGINEER'S REPRESENTATIVE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE INFORMATION AND DATA SHOWN WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS APPROXIMATE AND BASED ON INFORMATION FURNISHED BY THE OWNER OF SUCH UNDERGROUND FACILITIES OR ON PHYSICAL APPURTENANCES OBSERVED IN THE FIELD. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA. THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR; REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA; LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION, THE SAFETY AND PROTECTION THEREOF; REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

C. PROTECTION OF EXISTING PLANT MATERIALS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC.. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF THREE HUNDRED DOLLARS ($300) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

2. SEE TREE MITIGATION PLAN AND NOTES, IF APPLICABLE.

D. MATERIALS

1. GENERAL

MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE OWNER. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SAMPLE SIZE
MULCH	ONE (1) CUBIC FOOT
TOPSOIL MIX	ONE (1) CUBIC FOOT
PLANTS	ONE (1) OF EACH VARIETY (OR TAGGED IN NURSERY)

2. PLANT MATERIALS

a. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE.

b. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

c. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

1. CONTRACTOR SHALL TEST EXISTING SOIL AND AMEND AS NECESSARY IN ACCORDANCE WITH THE GUIDELINES BELOW:

2. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF TWO PARTS OF TOPSOIL AND ONE PART SAND, AS DESCRIBED BELOW. CONTRACTOR TO SUBMIT SAMPLES AND PH TESTING RESULTS OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

a. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND HAVE A PH BETWEEN 5.5 AND 7.0.

b. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND.

2. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.

F. WATER

1. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.... IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

* WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

* FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

1. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A DEPTH OF THREE (3) INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). MULCH SHALL BE "FLORIMULCH," EUCALYPTUS MULCH, OR SIMILAR SUSTAINABLY HARVESTED MULCH UNLESS SPECIFIED OTHERWISE.

2. PROVIDE A THREE (3) INCH MINIMUM LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT (6' MINIMUM) PLANTED UNDER THIS CONTRACT.

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO THE SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.

2. BALLED AND BURLAPPED (B&B), AND FIELD GROWN (FG) PLANTS SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.

3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.

4. PROTECTION OF PALMS: ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.

5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

3. ROOT BOUND PLANTS ARE NOT ACCEPTABLE AND WILL BE REJECTED.

4. RPG= "ROOTS PLUS GROWER" CONTAINER PRODUCTS SHALL BE USED WHERE SPECIFIED.

K. COLLECTED STOCK

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

L. NATIVE STOCK

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

N. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.

3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

O. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.

2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL SUNSHINE STATE ONE CALL OF FLORIDA, INC. (811) TO LOCATE UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36" OR TO NATIVE SOIL. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE POOR DRAINAGE CONDITION PLANTING DETAIL.

4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS SPECIFIED HEREIN. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

5. COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ONSITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.

7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACK FILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. IF POOR DRAINAGE EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.

8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.

9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.

10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACK FILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).

11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.

12. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET, ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE. ALL BURLAP, ROPE, WIRES, BASKETS, ETC.,. SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.

13. TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY CERTIFIED ARBORIST, IN ACCORDANCE WITH ANSI A-300.

14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOW ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" THE PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.

16. ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

P. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.

2. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.

3. PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.

4. SODDING

a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.

b. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.

c. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.

5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

6. LAWN MAINTENANCE

a. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).

b. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

S. FINAL INSPECTION AND ACCEPTANCE OF WORK

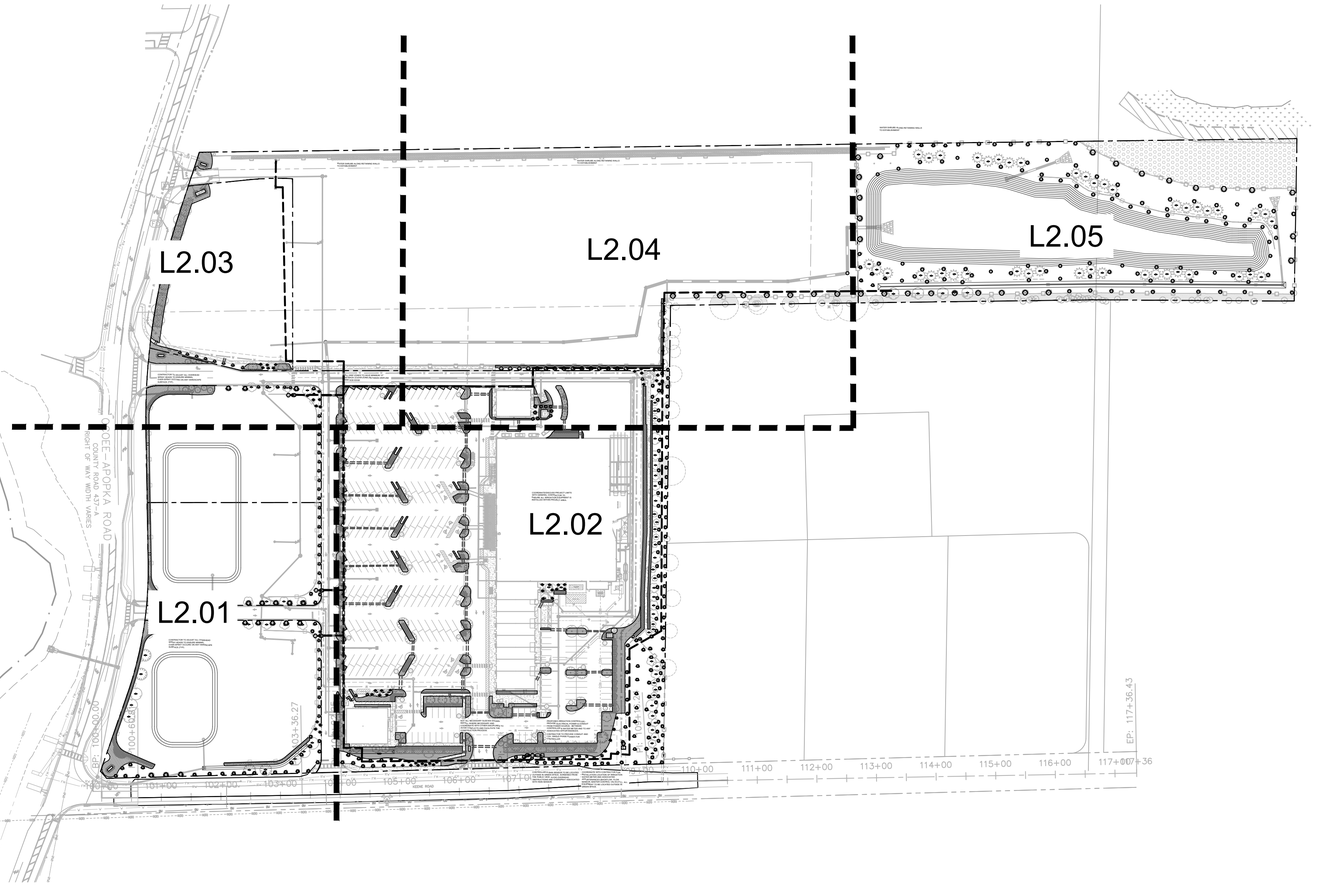
FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

T. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

2. ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.

3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE AND IRRIGATION MAINTENANCE, THE CONTRACTOR SHOULD VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER. CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHIC


L2.03
L2.04
L2.05
L2.02
L2.01
EXISTING APOPKA VINELAND ROAD
EXISTING 42' WIDE ASPHALT ROAD
EXISTING 100' RIGHT OF WAY WIDTH VARIES
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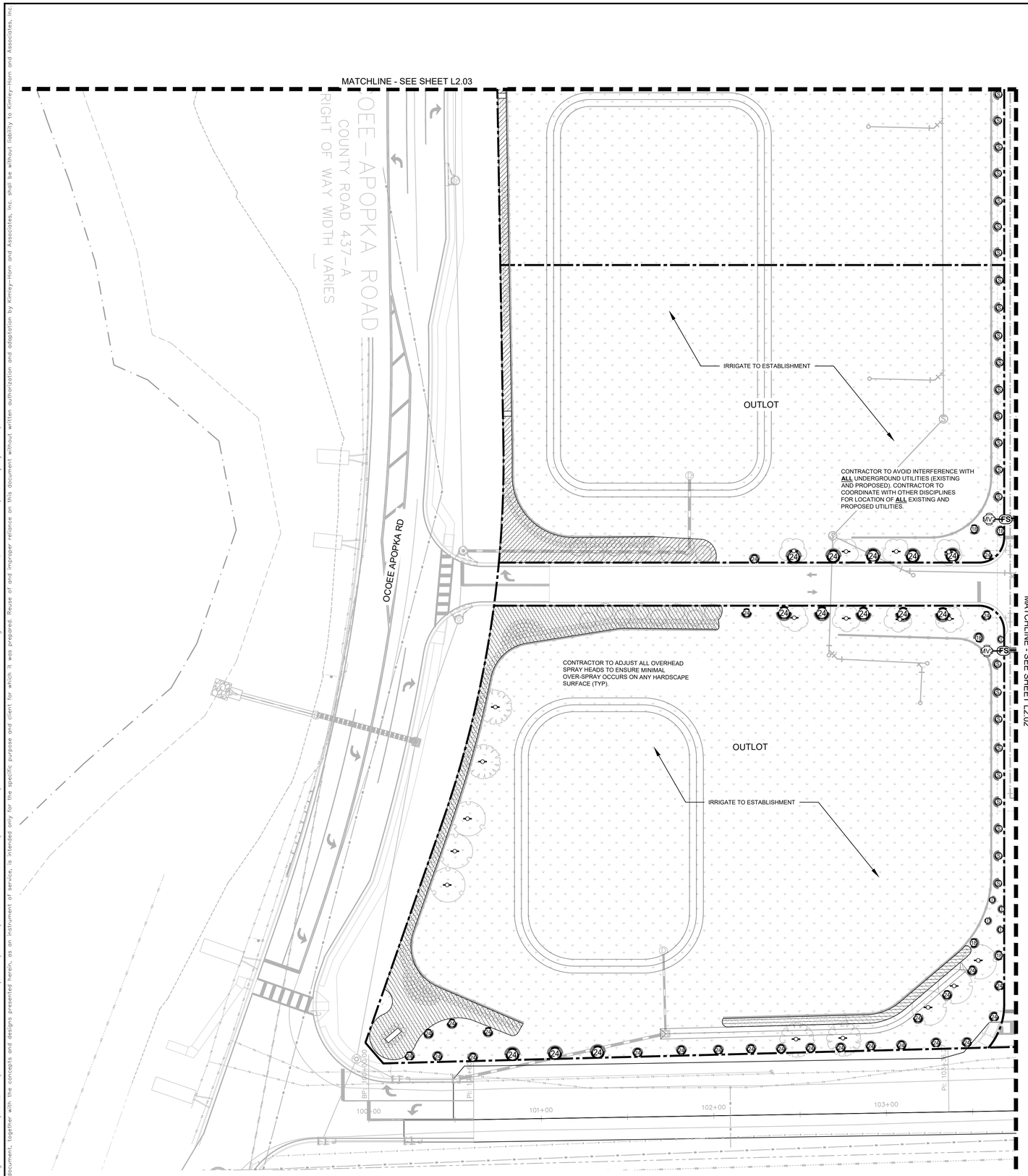

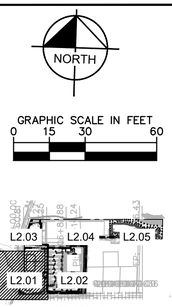

KEY MAP
SCALE: 1" = 1000'

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
L S R LST SST RST	RAIN BIRD R-VAN-STRIP 1806-SAM-P45 SHRUB ROTARY, 5'X15' (LCS AND RCS), 5'X30' (SST) HAND ADJUSTABLE MULTI-STREAM ROTARY W/ 1800 TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	60	45
14 ADJ 14 F	RAIN BIRD R-VAN14 1806-SAM-P45 TURF ROTARY, 8'-14' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	64	45
18 ADJ 18 F	RAIN BIRD R-VAN18 1806-SAM-P45 TURF ROTARY, 13'-18' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	105	45
24 ADJ 24 F	RAIN BIRD R-VAN24 1806-SAM-P45 TURF ROTARY, 17'-24' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	102	45
1401 1402	RAIN BIRD 1806-SAM-PRS-1400 FLOOD 1401 MINI ROOT WATERING SYSTEM WITH 4" DIAMETER X 18" LONG WITH LOCKING GRATE, SEMI-RIGID MESH TUBE AND RAIN BIRD 1401 0.25 GPM OR 1402 0.5 GPM BUBBLER AS INDICATED. WITH CHECK VALVE, AND SAND SOCK FOR SANDY SOIL.	120	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
35	RAIN BIRD 5006-PL-PC-SAM-MPR 35 TURF ROTOR, 6" POP-UP, PLASTIC RISER, WITH FLOW SHUT-OFF DEVICE. MATCHED PRECIPITATION ROTOR (MPR NOZZLE), ARC AND RADIUS AS PER SYMBOL. 25 FT=RED, 30 FT=GREEN, 35FT=BEIGE. WITH SEAL-A-MATIC CHECK VALVE.	105	45		35'
8.0	RAIN BIRD 5006-PL-PC-SAM-R 8.0 TURF ROTOR, 6" POP-UP WITH PLASTIC RISER. ADJUSTABLE TO FULL CIRCLE. STANDARD ANGLE NOZZLE, IN-STEM PRESSURE REGULATOR, AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	26	45	8.03	47'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE. 0.9 GPH EMITTERS AT 12" O.C. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT. SPECIFY XF INSERT FITTINGS.	60,575 L.F.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	SHUT OFF VALVE 3" FULL PORT BRASS BALL VALVE BY RED-WHITE VALVE CORPORATION	2
MV2	RAIN BIRD PEB 1-1/2" 1", 1-1/2", 2" PLASTIC INDUSTRIAL MASTER VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	3
MV	RAIN BIRD PEB 2" 1", 1-1/2", 2" PLASTIC INDUSTRIAL MASTER VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	1
BF	FEBCO 825Y 2" REDUCED PRESSURE BACKFLOW PREVENTER	1
C	RAIN BIRD ESPLXIVM-LXMMSS 60 STATION, 2-WIRE CONTROLLER W/ SMART VALVE TECHNOLOGY. (1) ESPLXIVM 60-STATION, INDOOR/OUTDOOR, PLASTIC WALL-MOUNT ENCLOSURE. INSTALLED IN LXMMSS STAINLESS STEEL WALL-MOUNTED CABINET. SYSTEM REQUIREMENTS: RAIN BIRD LXIVM-XXX INTEGRATED VALVE MODULES & 2-WIRE DEVICES. USE PAIGE ELECTRIC CABLE P7072D & RAIN BIRD WC20 DRY SPLICES ONLY. GROUND SYSTEM W/ (X) LXIVMSD SURGE DEVICE IN RAIN BIRD ROUND VALVE BOXES. INSTALL PER MANUFACTURERS RECOMMENDATIONS.	1
RS	RAIN BIRD WR2-RFS WIRELESS RAIN/FREEZE SENSOR.	1
FS	RAIN BIRD FS-150-B 1-1/2" FLOW SENSOR, BRASS MODEL. SUGGESTED OPERATING RANGE 4.0 GPM TO 80.0 GPM. SIZE FOR FLOW NOT ACCORDING TO PIPE SIZE. RAIN BIRD COMPATIBLE CONTROLLERS: ESP-LXIVM(P) | LXD | LXME2(P) | ME3, OR CONTROLLERS ACCEPTING CUSTOM K-FACTOR AND OFFSET. INSTALL IN RAIN BIRD VALVE BOX.	4
M	WATER METER 2"	1
	IRRIGATION MAINLINE: PVC SCHEDULE 40	3,638 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 LATERAL SLEEVE	1,498 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 MAINLINE SLEEVE	477.4 L.F.

FLOW TOTALS
Area for Dripline: 908.6
Bubbler: 30
Turf Rotary: 344.2
Turf Rotor: 644.9
Total: 1,928 GPM

4

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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

IRRIGATION PLAN

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
L2.01

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\L2.05 SCHEMATIC IRRIGATION PLAN.dwg L2.01 Jul 22, 2024 4:49pm by: jake.maple
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MATCHLINE - SEE SHEET L2.04

PROPOSED PUBLIX BLDG

COORDINATE/DISCUSS PROJECT LIMITS WITH GENERAL CONTRACTOR TO ENSURE ALL IRRIGATION EQUIPMENT IS INSTALLED WITHIN PROJECT AREA.

NOT ALL NECESSARY SLEEVES SHOWN. INSTALL WHERE NECESSARY AND COORDINATE WITH OTHER DISCIPLINES TO AVOID CONFLICTS AND FACILITATE THE CONSTRUCTION PROCESS.

PROPOSED IRRIGATION CONTROLLER - PROVIDE ELECTRICAL POWER & CONDUIT FROM POWER SOURCE, BETWEEN CONTROLLER & WATER METER AND TO ANY ASSOCIATED APPURTENANCES.

CONTRACTOR TO PROVIDE CONDUIT AND 110V, SINGLE PHASE POWER FOR CONTROLLER

CONTROLLER & RAIN SENSOR TO BE LOCATED OUTSIDE IN GREEN SPACE, SCREENED FROM THE PUBLIC VIEW. AVOID OVERHEAD OBSTRUCTIONS AND OVERSPRAY ASSOCIATED WITH RAIN SENSOR.

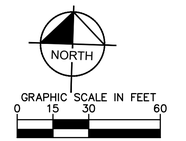
COORDINATE WITH CONTRACTOR FOR INSTALLATION LOCATION OF IRRIGATION WATER METER AND ASSOCIATED APPURTENANCES (BACKFLOW, FLOW SENSOR, MASTER CONTROL VALVE,ETC). ALL EQUIPMENT TO BE LOCATED OUTSIDE IN GREEN SPACE.

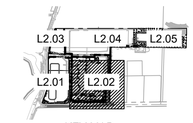
KEENE ROAD

105+00 106+00 107+00 108+00 109+00 110+00

PVI 108+66.00

PVI 108+66.24





KEY MAP
SCALE: 1" = 1000'

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Area for Dripline: 908.6
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Total: 1,928 GPM

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LICENSED PROFESSIONAL
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DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

IRRIGATION PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L2.02

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\L2.05 SCHEMATIC IRRIGATION PLAN.dwg L2.02 Jul 22, 2024 4:50pm by: jake.maple
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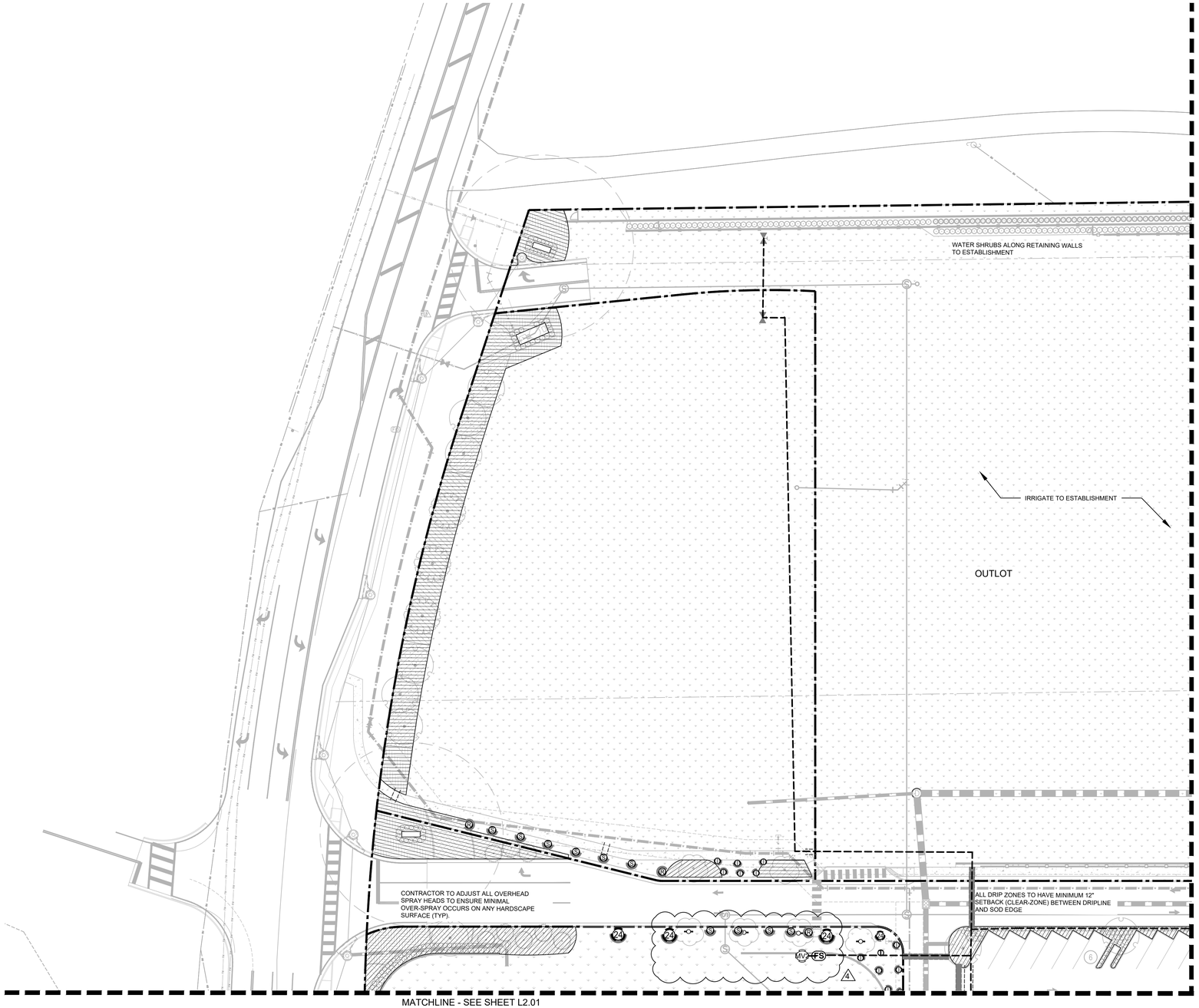

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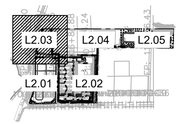

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SHEET NUMBER
L2.03

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\L2.05 SCHEMATIC IRRIGATION PLAN.dwg L2.03 Jul 22, 2024 4:51pm by: jake.maple
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Drawing name: K:\ORL_Civil\049335015--Keene Rd\CADD\CONST\Revised Const. Plans\Plansheets\L2.05 SCHEMATIC IRRIGATION PLAN.dwg L2.04 Jul 22, 2024 4:52pm by: jake.maple
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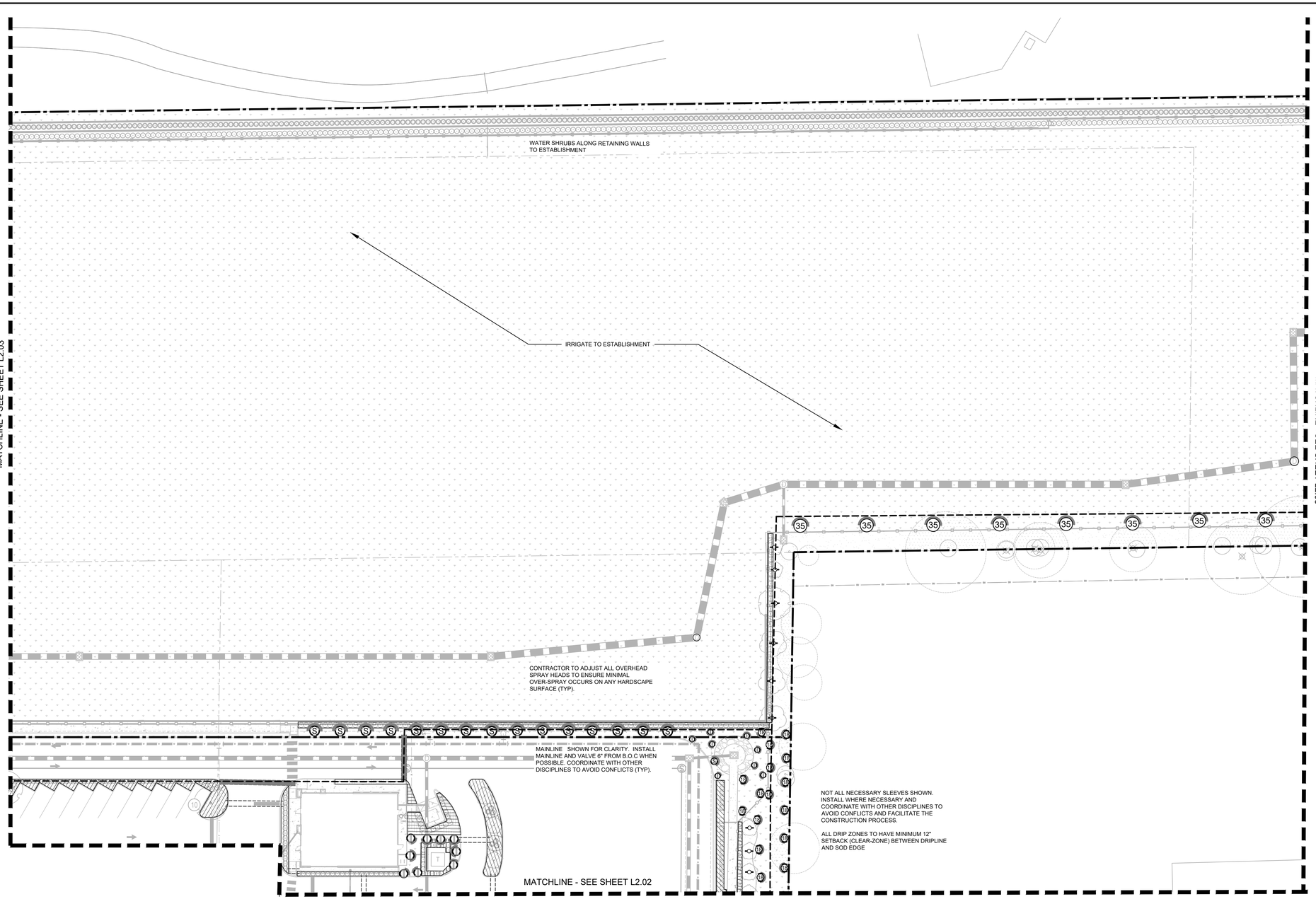

GRAPHIC SCALE IN FEET
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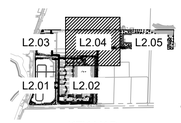

KEY MAP
SCALE: 1" = 1000'

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
L S R LST SST RST	RAIN BIRD R-VAN-STRIP 1806-SAM-P45 SHRUB ROTARY, 5'X15' (LCS AND RCS), 5'X30' (SST) HAND ADJUSTABLE MULTI-STREAM ROTARY W/ 1800 TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	60	45
14 ADJ 14 F	RAIN BIRD R-VAN14 1806-SAM-P45 TURF ROTARY, 8' -14' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	64	45
18 ADJ 18 F	RAIN BIRD R-VAN18 1806-SAM-P45 TURF ROTARY, 13' -18' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	105	45
24 ADJ 24 F	RAIN BIRD R-VAN24 1806-SAM-P45 TURF ROTARY, 17' -24' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	102	45
1401 1402	RAIN BIRD 1806-SAM-PRS-1400 FLOOD 1401 MINI ROOT WATERING SYSTEM WITH 4" DIAMETER X 18" LONG WITH LOCKING GRATE, SEMI-RIGID MESH TUBE AND RAIN BIRD 1401 0.25 GPM OR 1402 0.5 GPM BUBBLER AS INDICATED. WITH CHECK VALVE, AND SAND PROOF FOR PANDY SOIL	120	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
35	RAIN BIRD 5006-PL-PC-SAM-MPR 35 TURF ROTOR, 6" POP-UP, PLASTIC RISER, WITH FLOW SHUT-OFF DEVICE. MATCHED PRECIPITATION ROTOR (MPR NOZZLE), ARC AND RADIUS AS PER SYMBOL. 25 FT=RED, 30 FT=GREEN, 35FT=BEIGE. WITH SEAL-A-MATIC CHECK VALVE.	105	45
8.0	RAIN BIRD 5006-PL-PC-SAM-R 8.0 TURF ROTOR, 6" POP-UP WITH PLASTIC RISER. ADJUSTABLE TO FULL CIRCLE. STANDARD ANGLE NOZZLE, IN-STEM PRESSURE REGULATOR, AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	26	45

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE. 0.9 GPH EMITTERS AT 12" O.C. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT. SPECIFY XF INSERT FITTINGS.	60,575 L.F.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	SHUT OFF VALVE 3" FULL PORT BRASS BALL VALVE BY RED-WHITE VALVE CORPORATION	2
MV2	RAIN BIRD PEB 1-1/2" 1", 1-1/2", 2" PLASTIC INDUSTRIAL MASTER VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	3
MV	RAIN BIRD PEB 2" 1", 1-1/2", 2" PLASTIC INDUSTRIAL MASTER VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	1
BF	FEBCO 825Y 2" REDUCED PRESSURE BACKFLOW PREVENTER	1

C	RAIN BIRD ESPLXIVM-LXMMSS 60 STATION, 2-WIRE CONTROLLER W/ SMART VALVE TECHNOLOGY. (1) ESPLXIVM 60-STATION, INDOOR/OUTDOOR, PLASTIC WALL-MOUNT ENCLOSURE. INSTALLED IN LXMMSS STAINLESS STEEL WALL-MOUNTED CABINET. SYSTEM REQUIREMENTS: RAIN BIRD LXIVM-XXX INTEGRATED VALVE MODULES & 2-WIRE DEVICES. USE PAIGE ELECTRIC CABLE P7072D & RAIN BIRD WC20 DRY SPLICES ONLY. GROUND SYSTEM W/ (X) LXIVMSD SURGE DEVICE IN RAIN BIRD ROUND VALVE BOXES. INSTALL PER MANUFACTURERS RECOMMENDATIONS.	1
RS	RAIN BIRD WR2-RFS WIRELESS RAIN/FREEZE SENSOR.	1
FS	RAIN BIRD FS-150-B 1-1/2" FLOW SENSOR, BRASS MODEL. SUGGESTED OPERATING RANGE 4.0 GPM TO 80.0 GPM. SIZE FOR FLOW NOT ACCORDING TO PIPE SIZE. RAIN BIRD COMPATIBLE CONTROLLERS: ESP-LXIVM(P) | LXD | LXME2(P) | ME3, OR CONTROLLERS ACCEPTING CUSTOM K-FACTOR AND OFFSET. INSTALL IN RAIN BIRD VALVE BOX.	4
M	WATER METER 2"	1
	IRRIGATION MAINLINE: PVC SCHEDULE 40	3,638 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 LATERAL SLEEVE	1,498 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 MAINLINE SLEEVE	477.4 L.F.

FLOW TOTALS	
Area for Dripline:	908.6
Bubbler:	30
Turf Rotary:	344.2
Turf Rotor:	644.9
Total:	1,928 GPM

4

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No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
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1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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PHONE: 407-898-1511
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LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

IRRIGATION PLAN

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
L2.04

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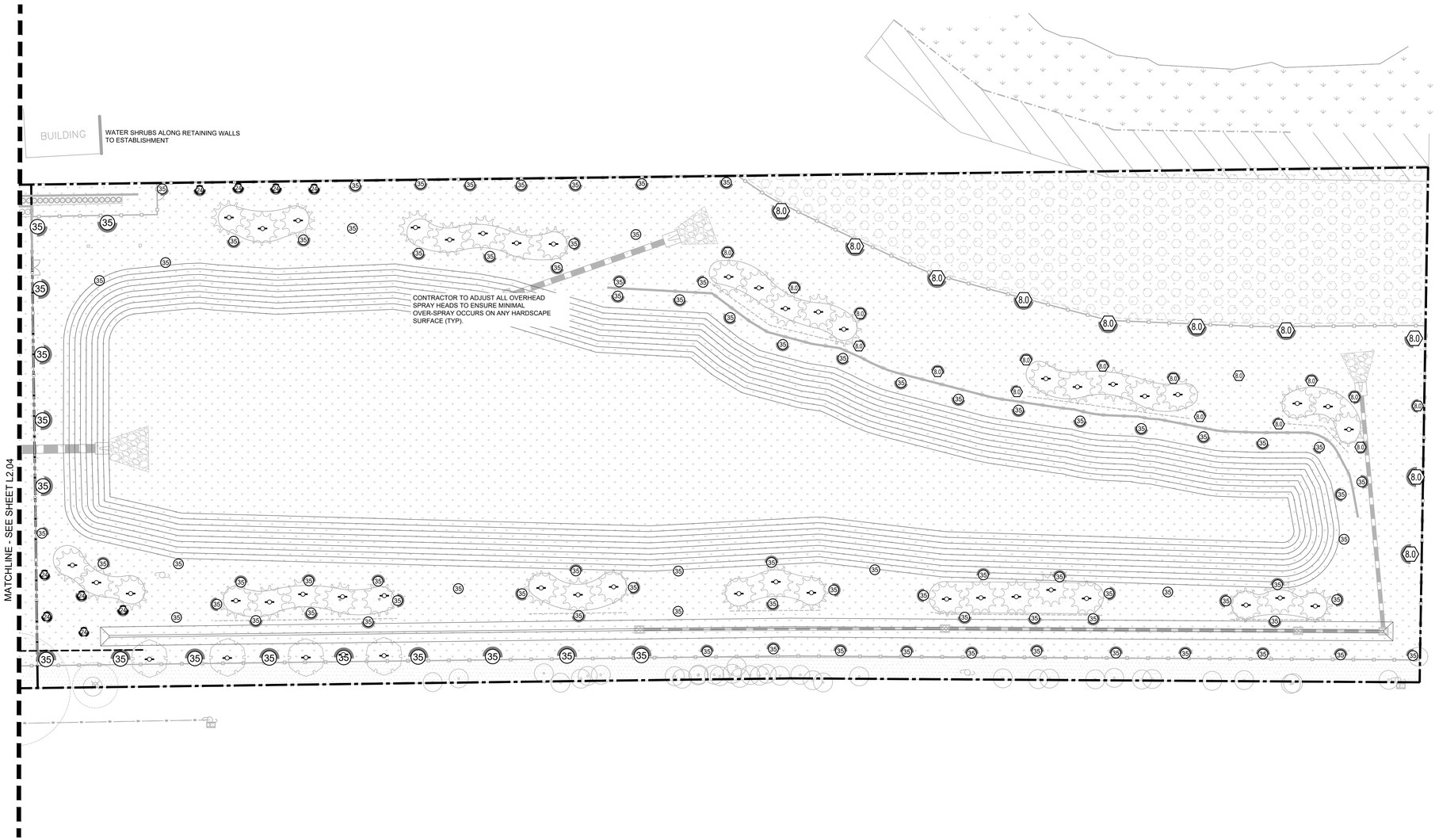

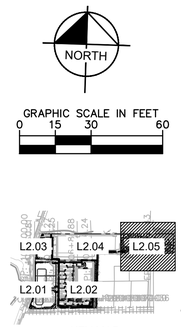

KEY MAP
SCALE: 1" = 1000'

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14 ADJ 14 F	RAIN BIRD R-VAN14 1806-SAM-P45 TURF ROTARY, 8'-14' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	64	45
18 ADJ 18 F	RAIN BIRD R-VAN18 1806-SAM-P45 TURF ROTARY, 13'-18' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	105	45
24 ADJ 26 F	RAIN BIRD R-VAN24 1806-SAM-P45 TURF ROTARY, 17'-24' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	102	45
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SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIL
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8.0	RAIN BIRD 5006-PL-PC-SAM-R 8.0 TURF ROTOR, 6" POP-UP WITH PLASTIC RISER. ADJUSTABLE TO FULL CIRCLE. STANDARD ANGLE NOZZLE, IN-STEM PRESSURE REGULATOR, AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	26	45	8.03	47'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
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RS	RAIN BIRD WR2-RFS WIRELESS RAIN/FREEZE SENSOR.	1
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M	WATER METER 2"	1
	IRRIGATION MAINLINE: PVC SCHEDULE 40	3,638 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 LATERAL SLEEVE	1,498 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 MAINLINE SLEEVE	477.4 L.F.

FLOW TOTALS
Area for Dripline: 908.6
Bubbler: 30
Turf Rotary: 344.2
Turf Rotor: 644.9
Total: 1,928 GPM

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3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
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1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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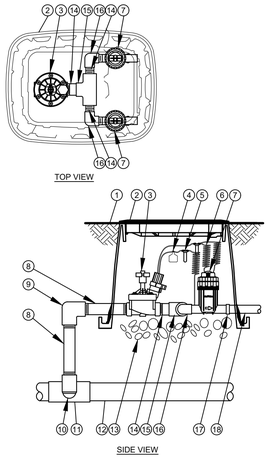
LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

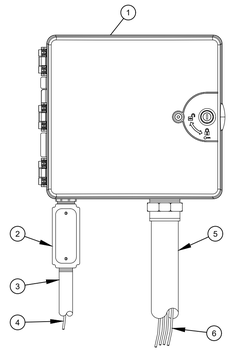
IRRIGATION PLAN

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
L2.05

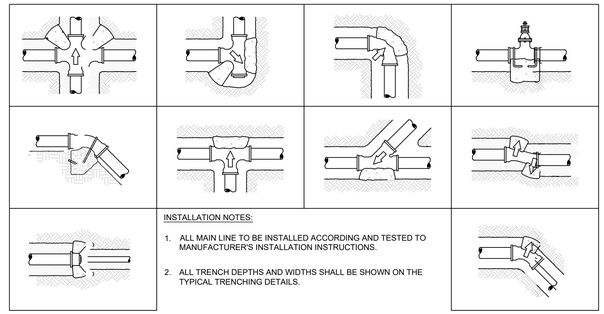


1 L2.50 COMMERCIAL CONTROL DRIP ZONE VALVE KIT
SECTION / PLAN NTS



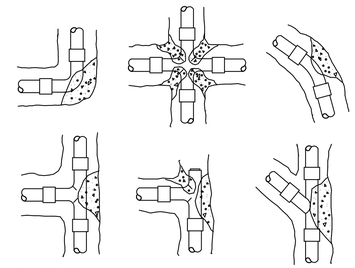
NOTES:
1. FOR EASE OF INSTALLATION INTO A CONTROLLER WITH MORE THAN 24 STATIONS, INSTALL A JUNCTION BOX AT THE BASE OF CONTROLLER AND TRANSITION LARGER VALVE AND COMMON WIRES FROM FIELD TO 18 AWG MULTI CONDUCTOR WIRE TO BE USED IN CONTROLLER.
2. USE STEEL CONDUIT FOR ABOVE GRADE AND SCH 40 PVC CONDUIT FOR BELOW GRADE CONDITIONS.
3. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.

2 L2.50 TYPICAL CONTROLLER
ELEVATION NTS



INSTALLATION NOTES:
1. ALL MAIN LINE TO BE INSTALLED ACCORDING AND TESTED TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. ALL TRENCH DEPTHS AND WIDTHS SHALL BE SHOWN ON THE TYPICAL TRENCHING DETAILS.

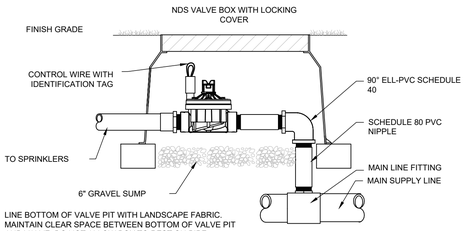
3 L2.50 TYPICAL THRUST BLOCK
SECTION NTS



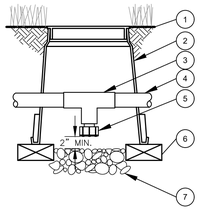
INSTALLATION NOTES
1. 3000 PSI CONCRETE OR BETTER IS TO BE USED FOR THRUST BLOCKS.
2. FOR 45°/90° FITTINGS, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED.
3. FOR 22-1/2° FITTINGS, MINIMUM OF 0.5 CUBIC FEET OF CONCRETE TO BE USED.
4. FOR TEES, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED. THRUST

BLOCKS REQUIRED FOR IRRIGATION MAINLINE 2 1/2" AND LARGER.

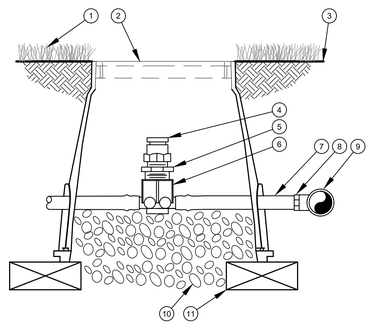
4 L2.50 THRUST BLOCK REINFORCEMENT
SECTION NTS



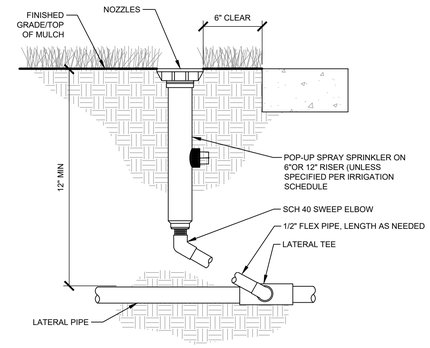
5 L2.50 TYPICAL CONTROL VALVE
SECTION NTS



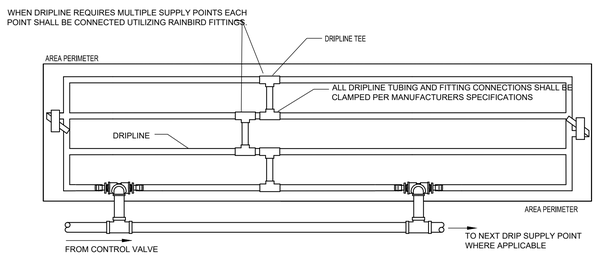
6 L2.50 DRAIN VALVE
SECTION NTS



7 L2.50 AIR RELIEF VALVE IN XFS DRIP LINE
SECTION NTS



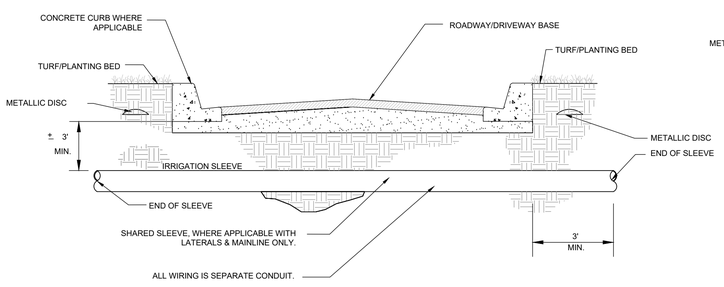
8 L2.50 TYPICAL SPRAY / ROTAR HEAD
SECTION NTS



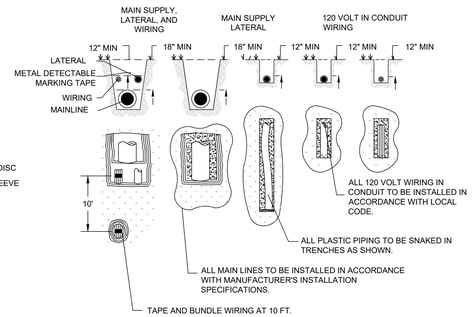
CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS. IF NOT SHOWN, INSTALL WITHIN ADJACENT GREEN AREA NOT IN A HIGHLY VISIBLE AREA.

NOTE:
1. DRIP TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 16 INCHES.
2. DRIP TUBING TO BE INSTALLED IN A GRID PATTERN. DRIP TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.
3. CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS (IF SHOWN).

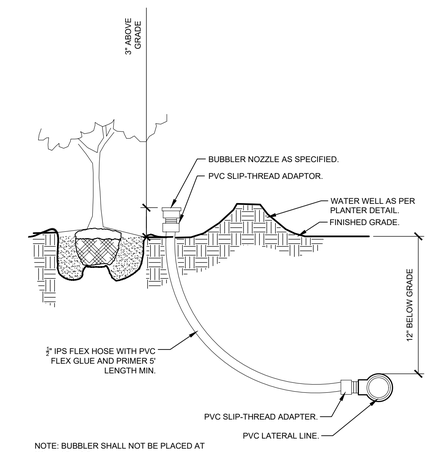
9 L2.50 TYPICAL DRIP LINE
PLAN NTS



10 L2.50 TYPICAL SLEEVING
SECTION NTS



11 L2.50 TYPICAL TRENCHING
SECTION / PLAN NTS



NOTE: BUBBLER SHALL NOT BE PLACED AT TRUNK FLARE.

12 L2.50 TYPICAL BUBBLER
SECTION NTS

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THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

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IRRIGATION SYSTEM NOTES:

1. THE IRRIGATION MAINLINE LAYOUT IS DIAGRAMMATIC. ANY CHANGES MADE IN THE IRRIGATION MAINLINE DUE TO FIELD CONDITIONS OR CONTRACTOR'S SUBMITTED DESIGN SHALL BE IN ACCORDANCE WITH THESE STANDARDS.
2. SET SPRAY HEADS 6" AND ROTORS 12" IN FROM BACK OF CURB OR 24" IF PAVEMENT HAS NO CURB.
3. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL NECESSARY MODIFICATIONS REQUIRED TO MEET THE SCHEMATIC INTENT OF THESE PLANS PRIOR TO SUBMITTING PROPOSAL. THESE PLANS OUTLINE THE OVERALL LAYOUT THE SYSTEM AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ZONE THE SYSTEM ACCORDINGLY BASED ON FLOW AND PRESSURE AVAILABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE FOLLOWING BUT NOT LIMITED TO AVAILABLE FLOW, AVAILABLE PRESSURE, CONNECTION ASSEMBLY, CAPACITY OF THE SYSTEM.
4. CONTRACTOR TO PROVIDE NEW AUTOMATIC CONTROLLER FOR PROPOSED SYSTEM (NO BATTERY OPERATED CONTROLLERS ALLOWED). COORDINATE LOCATION WITH OWNER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AUTOMATIC RAIN SENSOR. COORDINATE LOCATION W/ OWNER.
6. IRRIGATION SHALL NOT BE COMBINED ON A SINGLE ZONE AND SHALL BE ZONED ACCORDING TO IRRIGATION TYPE, PRECIPITATION RATE, AND THE SYSTEM'S AVAILABLE WATER / PRESSURE. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO OWNER FOR REVIEW PRIOR TO INSTALLATION.
7. VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS-CONTRACTOR SHALL FIELD VERIFY.
8. CONTRACTOR TO FIELD VERIFY ALL POINT OF CONNECTION SOURCE INFORMATION INCLUDING PSI AND GPM PRIOR TO CONSTRUCTION.
9. INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY COMPLETION OF ALL WORK ON-SITE.
10. CONTRACTOR SHALL COORDINATE WITH THE PLANTING PLAN FOR PLANTER BED AND TREE LOCATIONS TO ENSURE ALL PLANT MATERIAL IS COVERED BY 100% HEAD-TO-HEAD IRRIGATION.
11. CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS OF THE FINAL INSTALLATION TO OWNER AT SUBSTANTIAL COMPLETION BEFORE RECEIVING FINAL PAYMENT.
12. PRODUCTS SHALL BE AS SPECIFIED OR APPROVED EQUAL.

PRE-APPROVED MANUFACTURERS:
1. TORO
2. HUNTER
3. RAINBIRD

13. IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE JURISDICTION.
14. LOCATE ALL IRRIGATION LINES WITHIN LANDSCAPED AREAS WHENEVER POSSIBLE. ALL LINES UNDER PAVEMENT MUST BE SLEEVED WITHIN SCH. 40 PVC 2x SIZE OF PIPE AND FREE OF STONES/DEBRIS. ALL VALVES SHALL BE LOCATED WITHIN LANDSCAPED AREAS.
15. MAINLINE SHALL NOT BE LOCATED WITHOUT PRIOR APPROVAL OF THE OWNER'S REPRESENTATIVE.
16. THE IRRIGATION CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE FOR SLEEVING AND DIRECTIONAL BORES.
17. ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF THE SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS. ALL SLEEVES ON PLAN FOR WALL PENETRATIONS AND UNDER SIDEWALKS SHALL BE SIZED TWO PIPE SIZES GREATER THAN THE PIPE IT CARRIES.
18. ALL PRESSURIZED MAINLINES AND LATERALS UNDER PAVEMENT SHALL BE WITHIN SCH. 40 PVC SLEEVES. WHERE ELECTRIC OR HYDRAULIC VALVE CONTROL LINES PASS THROUGH A SLEEVE WITH OTHER MAIN OR LATERAL LINES THEY SHALL BE CONTAINED WITHIN A SEPARATE, SMALLER CONDUIT.
19. NUMBER THE TOP OF ALL VALVE BOX LIDS WITH MINIMUM 1" HEIGHT BLACK LETTERS TO CORRESPOND TO AUTOMATIC AND GATE VALVE DESIGNATIONS. ALL HOSE BIBB VALVE BOXES SHALL BE LABELED IN A SIMILAR MANNER WITH THE DESIGNATION "HB". LETTER OUTSIDE OF TIME CLOCK CABINETS TO CORRESPOND WITH IRRIGATION CLOCK PROGRAM DESIGNATION.
20. THE IRRIGATION CONTRACTOR SHALL INSTALL A COLOR CODED METAL DETECTABLE MARKING TAPE WHICH CLEARLY NOTES: "CAUTION: IRRIGATION LINE BURIED BELOW." THE TAPE SHALL BE INSTALLED THE FULL LENGTH OF THE IRRIGATION MAINLINE.
21. ELECTRIC SERVICE TO THE CONTROLLER SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.
22. ALL 24 VAC WIRING FROM DECODER TO VALVE SHALL BE OF DIRECT BURIAL COPPER WIRE. MAXIMUM LENGTH OF WIRE FROM DECODER TO VALVE SHALL NOT EXCEED 400 FEET. AS FOLLOWS:
    CONTROL WIRES - #14
    COMMON WIRES - #14
23. ALL VALVES, SPLICES WITHIN CONTROL LINES, AND QUICK COUPLERS SHALL BE LOCATED WITHIN NDS VALVE BOXES AS FOLLOWS:
    -RECTANGULAR 12"X17" HEAVY DUTY BOX. (PURPLE COVER FOR REUSE TO BE PROVIDED WHERE APPROPRIATE).
24. ALL IRRIGATION HEADS/DRIP TUBING SHALL BE LOCATED ONE (1) FOOT FROM BACK OF CURB WHEN NEXT TO A ROADWAY. (THIS SHALL NOT INCLUDE PARKING AREAS OR DRIVE AISLES).
25. HEADS, LATERALS, EMITTERS, AND VALVES ARE NOT SHOWN, BUT ARE NECESSARY FOR A FULLY FUNCTIONING IRRIGATION SYSTEM.
26. LOCATE ALL VALVES IN PLANTING BEDS WITH A MINIMUM OF 3'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. PIPE SIZES ON EITHER SIDE OF SECTION VALVES CONNECTING MAINLINE TO SECTION LATERAL SHALL BE ONE (1) PIPE SIZE LARGER THAN VALVE SIZE. WHERE MAINLINES RUN PARALLEL TO PAVEMENT OR CURBING, THE MAINLINE SHALL BE OFFSET 2'-0" FROM THE EDGE OF PAVEMENT OR CURB.
27. IRRIGATION ZONES SHALL BE SEPARATED FOR HIGH AND LOW WATER USE REQUIREMENTS AND OPERATED ON DIFFERENT WATERING CYCLES. BUBBLERS, DRIPLINE, AND SPRAY HEADS SHALL BE SEPARATED ON DIFFERENT VALVES. AT NO TIME SHALL MULTIPLE IRRIGATION HEAD TYPES BE LOCATED ON THE SAME VALVE.
28. ALL DRIP ZONES SHALL BE INSTALLED WITH A FLUSH VALVE AND AIR RELIEF VALVE. IN THE EVENT THAT A DRIP ZONE HAS MORE THAN ONE HIGH OR LOW POINT, MORE THAN ONE AIR RELIEF VALVE OR FLUSH VALVE WILL BE REQUIRED FOR THAT ZONE. DRIPLINE SHALL PROVIDE 0.9 GPH EMITTERS, 12" O.C. WITH 12" LINE SPACING AT A MINIMUM.
29. ALL WIRING FOR CONNECTION OF THE VALVES TO THE CONTROLLER SHALL FOLLOW MANUFACTURERS SPECIFICATIONS. IF REQUIRED, ALL WIRING FOR A TWO WIRE PATH SHALL BE WITH RED/BLUE TWISTED PAIR 14 AWG. ELECTRIC CONTROL LINES FROM THE DECODER TO THE SOLENOID VALVES SHALL BE TWISTED PAIR 18 AWG. ALL DECODERS SHALL BE GROUNDED EVERY 1,000 L.F. OR EVERY 10 DEVICES. ALL WIRE SHALL BE FURNISHED IN MINIMUM 2,500' REELS AND SPLICING SHALL BE MINIMIZED. BURY SPLICE KIT. ALL 24 VOLT WIRING SHALL BE DONE IN ACCORDANCE WITH EXISTING CODES. SPLICING SHALL BE IN VALVE BOXES OR CONTROLLERS ONLY. IRRIGATION SYSTEM CONTROL SHALL BE TWO WIRE PATH. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S REQUIREMENTS FOR THIS INSTALLATION. TWO WIRE SYSTEM SHALL HAVE 2-WAY COMMUNICATIONS FIELD PROGRAMMABILITY, STATION SPECIFICATIONS AND INTEGRATED SURGE PROTECTION.
30. ALL CONTROL WIRE SHALL BE INSTALLED IN A 1 ¼" ELECTRICAL CONDUIT.
31. SMALLEST DIAMETER LATERAL PIPE SHALL BE 3/4".
32. IRRIGATION SYSTEM SHALL BE CAPABLE OF SUPPLYING AN AVERAGE OF 1.05" OF WATER PER WEEK WITHIN WATERING RESTRICTIONS AS APPLICABLE.
33. IRRIGATION SYSTEM SHALL NOT BE INSTALLED THROUGH EXISTING, OR PRESERVED PLANT COMMUNITIES. DO NOT TRENCH THROUGH EXISTING ROOT SYSTEMS OF ANY VEGETATION INTENDED TO BE PRESERVED.
34. CONTRACTOR TO MINIMIZE IRRIGATION OVERTHROW TO IMPERVIOUS AND NATURAL AREAS THROUGH FIELD ADJUSTMENTS TO INDIVIDUAL HEADS.
35. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR TO THE CONDITION DENOTED ON THE LANDSCAPE PLAN.
36. IRRIGATION PIPING INSTALLED UNDER ROADS AND SIDEWALKS SHALL BE IN SCHEDULE 40 PVC SLEEVING AT 2X THE PIPE SIZE. ALL SLEEVING SHALL BE FREE OF STONES AND DEBRIS.
37. IRRIGATION SOURCE TO BE EITHER WELL, POTABLE, OR NON-POTABLE WATER. IRRIGATION CONTRACTOR TO VERIFY SOURCE PRIOR TO DESIGN.
38. POINT OF CONNECTION TO BE DETERMINED BY OWNER. IRRIGATION SYSTEM CONNECTIONS TO THE LOCAL JURISDICTION SERVICE SHALL COMPLY WITH ALL APPLICABLE CODES.
39. IRRIGATION CONNECTION MAY REQUIRE BACKFLOW PREVENTION, VERIFY WITH LOCAL JURISDICTION.
40. IRRIGATION SYSTEM SHALL COMPLY WITH THE LOCAL JURISDICTION LAND DEVELOPMENT CODE.

1 L2.51 TYPICAL SCHEMATIC IRRIGATION NOTES

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
1	CITY OF APOPKA COMMENTS	05/25/23	JAC

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PHONE: 407-898-1511
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LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE: 7/22/2024

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF

IRRIGATION NOTES

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER L2.51

Drawing name: K:\ORL_Civil\049335015--Keene Rd\CADD\CONST\Master Plan\PlanSheets\L2.50 – IRRIGATION DETAILS.dwg L2.51 IRRIGATION NOTES Jul 22, 2024 4:53pm by: jake.maple
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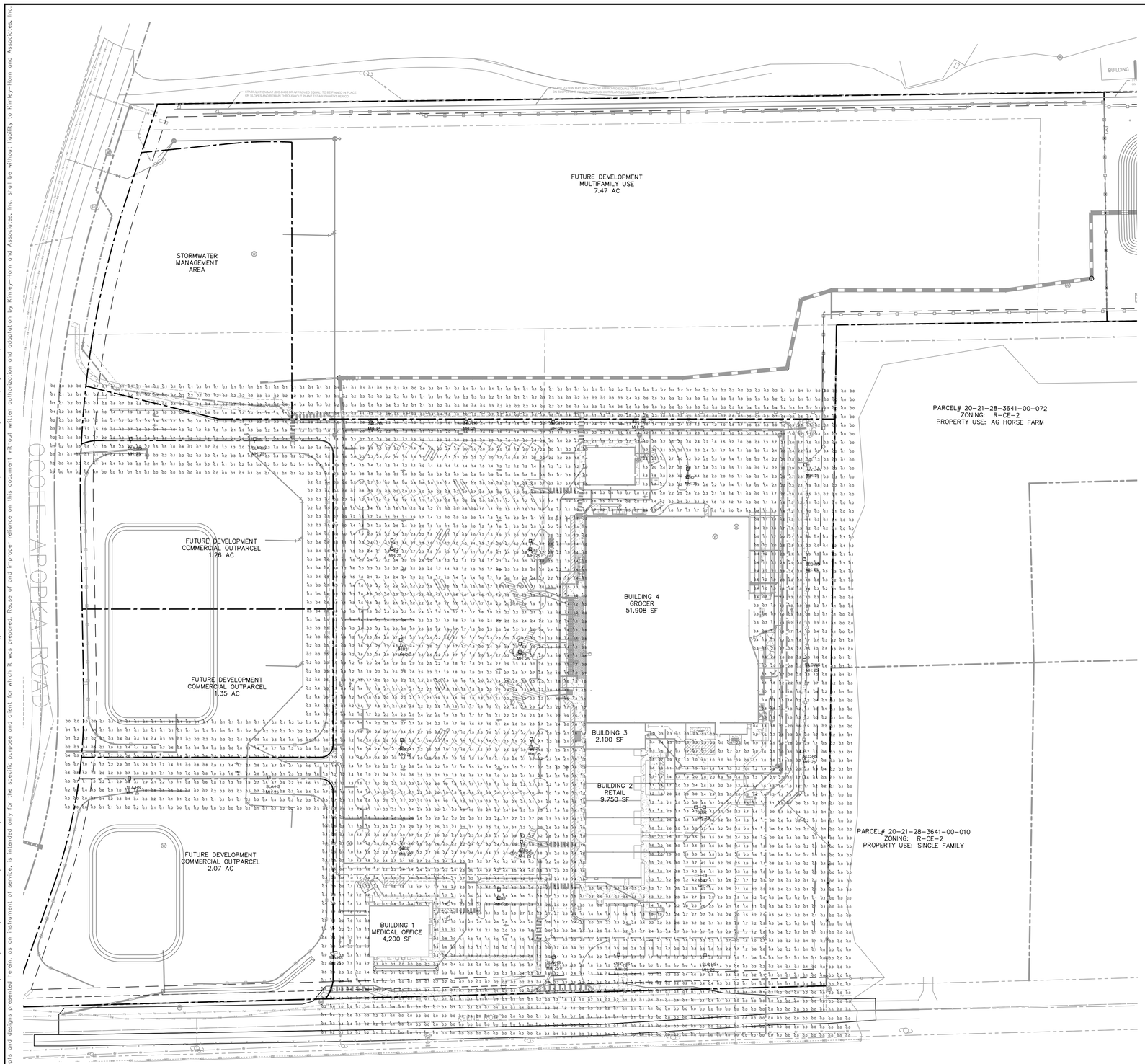


Landreth Lighting Luminaire Schedule

Symbol	[MANUFAC]	Qty	Label	Arrangement	Description	LLF	Lum. Watts	Lum. Lumens	BUG Rating
	Lithonia Lighting	9	SLC-HS	Single	DSX0 LED P7 40K TFTM MVOLT RPA NLTAIR2 PIRH HS FINISH TBD; MOUNTED @ 25' AFG ON A ROUND TAPERED DIRECT BURY ALUMINUM POLE	1.000	166	14332	B2-U0-G3
	Lithonia Lighting	12	SLB2	Back-Back	DSX0 LED P7 40K T5W MVOLT RPA NLTAIR2 PIRH FINISH TBD; MOUNTED @ 25' AFG ON A ROUND TAPERED DIRECT BURY ALUMINUM POLE	1.000	166	18931	B5-U0-G3
	Lithonia Lighting	7	SLA-HS	Single	DSX0 LED P7 40K T2M MVOLT RPA NLTAIR2 PIRH HS FINISH TBD; MOUNTED @ 25' AFG ON A ROUND TAPERED DIRECT BURY ALUMINUM POLE	1.000	166	15010	B2-U0-G3

D-Series Size 0
LED Area Luminaire

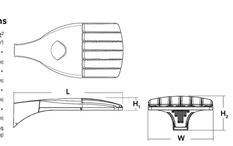
Buy American

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA: 0.95 ft² (.09 m²)
Length: 26" (66.0 cm)
Width: 13" (33.0 cm)
Height$_L$: 3" (7.62 cm)
Height$_2$: 7" (17.8 cm)
Weight (max): 16 lbs (7.26 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED

Series
DSX0 LED

LEDs
Forward optics
P1 P5
P2 P6
P3 P7[1]
P4[1]
Rotated optics
P10[2] P12[2]
P11[2] P13[2,3]

Color temperature
30K 3000 K
40K 4000 K
50K 5000 K

Distribution
T1S Type I short (Automotive)
T2S Type II short
T2M Type II medium
T3S Type III short
T3M Type III medium
T4M Type IV medium
TFTM Forward throw medium
T5VS Type V very short[1]
T5S Type V short[1]
T5M Type V medium[1]
T5W Type V wide[1]
BLC Backlight control[4]
LCCO Left corner cutoff[4]
RCCO Right corner cutoff[4]

Voltage
MVOLT (120V-277V)[5,6]
XVOLT (277V-480V)[5,6]
120[7]
208[7]
240[7]
277[7]
347[7]
480[7]

Mounting
Shipped included
SPA Square pole mounting
RPA Round pole mounting[8]
WBA Wall bracket[9]
SPUMBA Square pole universal mounting adaptor[10]
RPUMBA Round pole universal mounting adaptor[10]
Shipped separately
KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[11]

Control options
Shipped installed
NLTAIR2 nLight AIR generation 2 enabled[12,13]
PIRHN Network, high/low motion/ambient sensor[13]
PER NEMA twist-lock receptacle only (control ordered separately)[14]
PERS Five-pin receptacle only (control ordered separately)[14,15]
PER7 Seven-pin receptacle only (leads exit fixture) (control ordered separately)[14,15]
DMG 0-10V dimming extend out back of housing for external control (control ordered separately)[16]
PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 8'[16,18]
PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 15'[16,18]
PIR1FC3V High/low, motion/ambient sensor, 8-12 mounting height, ambient sensor enabled at 8'[16,18]
PIRH1FC3V High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 15'[16,18]
FAO Field adjustable output[17]

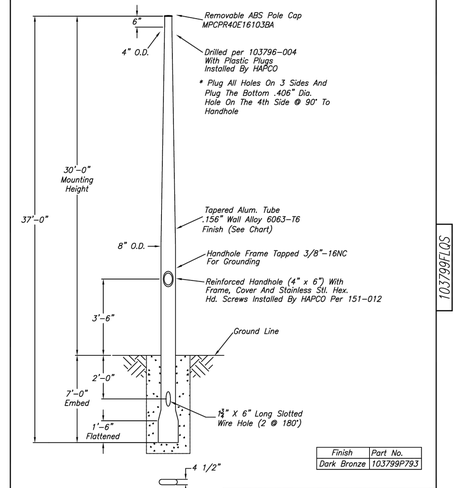
Other options
Shipped installed
HS House-side shield[19]
SF Single fuse (120, 277, 347V)[6]
DF Double fuse (208, 240, 480V)[6]
L90 Left rotated optics[7]
R90 Right rotated optics[7]
DDL Diffused drop lens[20]
HA 50°C ambient operations[1]
BAA Buy American Act Compliant

Shipped separately
BS Bird spikes[20]
EGS External glare shield

Finish (required)
DDBXD Dark bronze
DBLXD Black
DNAXD Natural aluminum
DWHXD White
DDBTXD Textured dark bronze
DBLBXD Textured black
DNATXD Textured natural aluminum
DWHGXD Textured white

FBC 2017, Ultimate Design Strength Wind Speed With EPA Ratings (sq. ft.)							
MH	Weight	120	130	140	150	160	170	180
30'	140 lbs.	10.4	8.4	6.8	5.6	4.7	4.0	3.4
29'		11.5	9.2	7.5	6.2	5.3	4.5	3.9
28'		12.5	10.1	8.3	6.9	5.9	5.1	4.4

The EPA and Weight are located 1'-0" above the top of the pole and 1'-6" offset horizontally from the pole centerline.
For different loading cases, please contact Hapco.



Finish	Part No.
Dark Bronze	103799P793

NO.	REVISIONS	DATE
1	Revised Loading Notes (BAD) ←	12.20

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

hapco
Abingdon, Va.

TITLE 30' EMBEDDED POLE
CUSTOMER
SCALE NTS DATE 2/26/2020
BY JBC DWG. NO. 103799FLQS
CHK'D

NORTH

GRAPHIC SCALE IN FEET
0 30 60 120

No.	REVISIONS	DATE	BY
4	CITY OF APOPKA COMMENTS #2	07/22/24	GEB
3	ORANGE COUNTY COMMENTS #2	05/30/24	MWW
2	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER

KHA PROJECT 049335015
DATE 7/22/2024
SCALE AS SHOWN
DESIGNED BY JM
DRAWN BY JM
CHECKED BY MTF
DATE: 7/22/2024

PRELIMINARY PHOTOMETRIC PLAN

THE SHOPPES AT EAST SHORE-PHASE 1
CITY OF APOPKA FLORIDA

SHEET NUMBER
L3.00

Drawing name: K:\ORL_Civil\049335015-Keene Rd\CADD\CONST\Master Plan\PlanSheets\L3.00 - PRELIMINARY PHOTOMETRIC PLAN.dwg L3.00 PHOTOMETRIC PLAN Jul 22, 2024 5:02pm by: jake.maple
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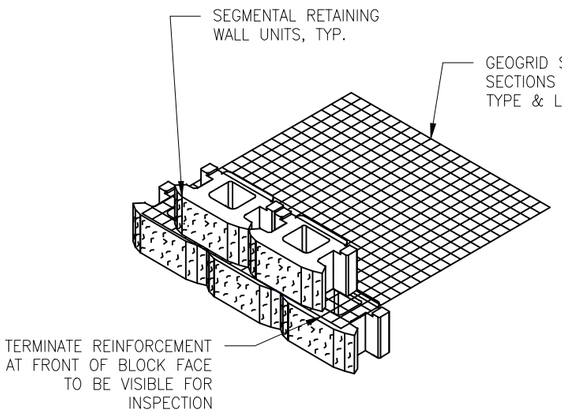
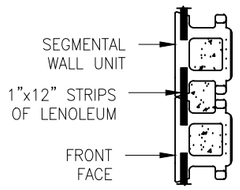
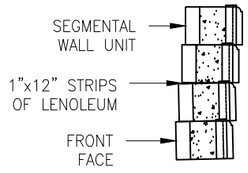
SEGMENTAL RETAINING WALL SHOP DRAWINGS
SHOPPES @ EAST SHORE, APOPKA, FL



SEGMENTAL BLOCK UNITS
STACKED WALL DETAIL
(SCALE: NTS)



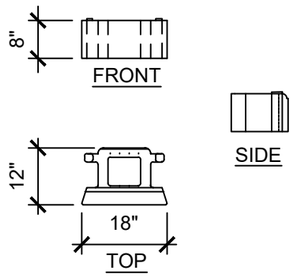
FACE WALL



SIDE WALL

NOTE: SEE SECTION VI SHIMMING FOR ADDITIONAL INFORMATION

TRINITY BLOCK UNITS
SHIMMING DETAIL
(SCALE: NTS)



TRINITY BLOCK UNITS
TYPICAL DIMENSIONS
(SCALE: NTS)

TABLE FOR SEGMENTAL WALL UNITS	
ACCEPTABLE SEGMENTAL WALL UNITS	TYPICAL BATTER
TRINITY 12" DEEP x8" HIGH x18" LONG	5.4 DEGREES
ANCHORED DIAMOND PRO 12" DEEP x8" HIGH x18" LONG	7.1 DEGREES
KEYSTONE COMPAC 12" DEEP x8" HIGH x18" LONG	8.8 DEGREES

TABLE FOR GEOSYNTHETIC REINFORCING (GEOGRID) TYPES			
ACCEPTABLE GEOGRID MANUFACTURERS	GEOGRID TYPE	GEOGRID NAME	
EARTH WALL PRODUCTS			
	TYPE B	EWG 60	
STRATA SYSTEMS, INC.	TYPE A	SGU 60	
	TYPE B	SGU 80	
TENCATE GEOSYNTHETICS			
	TYPE B	MIRAFI 5XT	

NOTE: ON SUCCESSIVE SHEETS WHERE HTG GEOGRID IS SPECIFIED, THE EQUIVALENT EWG PRODUCT MAY BE SUBSTITUTED.

GENERAL NOTES:

A. SEE CIVIL PLANS FOR ALL TOP OF WALL & FINISHED GRADE ELEVATIONS.
B. ALL WALLS WILL BE CONSTRUCTED OF TRINITY OR EQUIVALENT UNITS (8" HIGH) AS SHOWN WITH STANDARD (OR SIMILAR) CAP ON THE TOP OF THE WALLS (UNO).
C. THE OWNER IS SOLELY RESPONSIBLE TO COORDINATE WITH LOCAL AUTHORITIES HAVING CODE INTERPRETATION AUTHORITY FOR THE DESIGN AND INSTALLATION OF ANY RAILING SYSTEM THAT MAY BE REQUIRED.
D. SURVEY MUST INDICATE WALL FACE LOCATION OF BASE COURSE AND ELEVATION AT TOP OF LEVELING PAD.
E. AREA DRAINS & UNDERDRAIN SYSTEMS ARE DESIGNED & INSTALLED BY OTHERS.
F. DESIGN DOES NOTE INCLUDE A RAPID DRAW DOWN (MORE THAN 2 FEET PER DAY) OF THE RETENTION POND.
G. DESIGN DOES NOT INCLUDE VERIFICATION OF LONG TERM GLOBAL STABILITY. WHICH IS THE OWNER & PROJECT GEOTECHNICAL ENGINEER'S RESPONSIBILITY PER THE NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA) DESIGN MANUAL.
H. AFTER THE INITIAL CONSTRUCTION OF THE WALL, NO NEW OR REPLACEMENT UTILITIES MAY BE PLACED WITHIN THE REINFORCED GRID ZONE OF THE WALL WITHOUT THE EXPRESSED WRITTEN CONSENT OF PAVERSCAPE, INC. AND ENGINEER OF RECORDS.
I. NO POOLS OR FOOTINGS MORE THAN 18" BELOW GRADE MAY BE INSTALLED WITHIN THE REINFORCED GRID ZONE.
J. TRENCHING FOR IRRIGATION LINES OR OTHER UTILITIES SHALL BE WITHIN 18" BELOW GRADE IN THE REINFORCED GRID ZONE.
K. DRAINAGE: PERMANENT DRAINAGE & SITE GRADING SHALL BE INCORPORATED INTO THE SITE DRAWINGS TO MINIMIZE RUNOFF FROM BEING DIRECTED OVER THE WALL FACE.

DESIGN CRITERIA

ASSUMED SOIL CHARACTERISTICS (UNO): SAND TO SLIGHTLY SILTY SAND (SP & SP–SM UNIFIED SOIL CLASSIFICATION).
SPECIFIC GRAVITY OF ALL SOILS: 2.7 ASSUMED VOID RATIO OF ALL SOILS: 0.61 FOR ASSUMED VARIOUS SOIL ZONE VALUES. (DRY UNIT WEIGHT, SUBMERGED UNIT WEIGHT INTERNAL FRICTION ANGLES) REFER TO SHEET 'S–2')
INT. FRICTION ANGLE OF RETAINED SOIL = 30 DEG.
INT. FRICTION ANGLE OF COMPACTED & REINFORCED GRID ZONE SOIL = 32 DEG.
WALL FRICTION ANGLE = 17 DEG.
ALLOWABLE SOIL BEARING CAPACITY = 2,000 PSF MIN
LIVE LOAD SURCHARGE = 100 PSF (PARKING LOT), BUILDINGS ARE SET BACK BEYOND THE INFLUENCE OF THE WALL, U.N.O. (A MINIMUM DISTANCE OF TWICE THE WALL HEIGHT FROM THE TOP OF THE WALL).
250 PSF: PAVEMENT/ROADWAY (HEAVY TRAFFIC)
100 PSF: PAVEMENT/ROADWAY (LIGHT TRAFFIC)
75 PSF: PEDESTRIAN LOADING
50 PSF: GRASS/RESIDENTIAL
AMERICAN ASSOCIATION OF HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO 2002)
AASHTO STANDARD SPECIFICATION OF HIGHWAY BRIDGES
FEDERAL HIGHWAY ADMINISTRATION (FHWA)
MECHANICALLY STABILIZED EARTH WALLS AND REINFORCES SOIL SLOPE DESIGN AND CONSTRUCTION GUIDELINES (FHWA NHI–00–043, MARCH 2001)
IF SITE SOILS CONDITIONS OR ANTICIPATED LOADING VARY FROM DESIGN ASSUMPTIONS, NOTIFY THE ENGINEER OF RECORD AND GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION FOR NECESSARY SITE IMPROVEMENTS AND REDESIGN.

INSTALLATIONS GUIDELINES

I.
A. THE FOUNDATION SOIL FOR THE LEVELING PAD SHALL BE AT LEAST 25 INCHES WIDE OF COMPACTED NATIVE SOIL. THE FOUNDATION SOIL SHALL BE COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR (ASTM D1557).
B. THE LEVELING PAD SHALL BE AT LEAST 25 INCHES WITH AND 6 INCHES THICK, AND CONSTRUCTED OF CRUSHED ROCK OR RECYCLED CONCRETE, .25 INCH TO 1 INCH, WITH NO MORE THAN 10% PASSING THE #200 SIEVE.
NOTE: IT IS CRITICAL THAT FOUNDATION SOIL IS WELL COMPACTED TO 95% MODIFIED PROCTOR. OWNER IS RESPONSIBLE TO HAVE COMPACTION TESTING OF SOIL DONE AT ABOUT 200 FOOT INTERVALS. PLEASE PROVIDE PAVERSCAPE WITH RESULTS OF ALL TESTING WHILE CONSTRUCTION IS PROCEEDING.

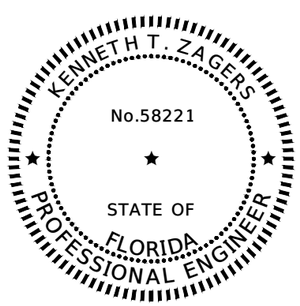
II. BASE COURSE
A. PLACE UNITS ON LEVELING PAD FOLLOWING THE DESIGN PLAN FOR THE WALL.
B. LEVEL UNITS IN BOTH DIRECTIONS, MAKING SURE THE UNITS ARE IN FULL CONTACT WITH THE BASE.
C. ALIGN UNITS WITH THE VERTICAL FACTORY EDGE IN FULL CONTACT OF THE PRECEDING UNIT.
D. IN CREATING RADII OR CURVES, IT MAY BE NECESSARY TO REMOVE ONE OR BOTH PARTS OF THE TAIL AT THE SCORE MARKS ON THE REAR OF THE BLOCK.
E. BACKFILLING AND COMPACTING BEHIND THE WALL.
1. PLACE 9" OF FREE DRAINING MATERIAL DIRECTLY BEHIND THE BLOCK AND FILL ALL CORE AREAS WITH FREE DRAINING AGGREGATE. FREE DRAINING AGGREGATE SHALL CONSIST OF #57 CRUSHED ROCK OR RECYCLED CONCRETE.
2. FILL THE AREA BETWEEN THE FREE DRAINING MATERIAL AND THE EXCAVATED AREA BEHIND THE WALL WITH ACCEPTABLE NATIVE SOIL (LESS THAN 10% FINES PASSING THE 200 SIEVE).
F. COMPACT USING THE FOLLOWING STEPS:
1. USE SMALL LIFTS WITH WALK BEHIND EQUIPMENT. BACKFILL LIFT THICKNESS MUST BE LIMITED TO THE HEIGHT OF THE CONCRETE BLOCK OR MAXIMUM OF 8 IN.
2. STAY 3' BEHIND THE WALL WITH LARGE EQUIPMENT, LESS THAN 5,000 LBS GVW.
3. USE THE SAME PROCEDURE FOR COMPACTION OF EACH LIFT TO ASSURE CONSISTENT AND PROPER COMPACTION.

III. SOIL REINFORCING
A. ALWAYS FOLLOW THESE ENGINEERED PLANS TO DETERMINE THE PLACEMENT OF GEOSYNTHETIC REINFORCEMENT AND EMBEDMENT LENGTH.
B. PULL GEOSYNTHETIC REINFORCEMENT TAUT AND HOLD IN PLACE.
C. PLACE AND COMPACT SOIL OVER GEOSYNTHETIC REINFORCEMENT (GEOGRID). (BE SURE THAT ALL SOIL IS 95% MODIFIED PROCTOR DENSITY.) OWNER IS RESPONSIBLE TO HAVE COMPACTION TESTING OF SOIL DONE AT ABOUT 200 FOOT INTERVALS. PLEASE PROVIDE PAVERSCAPE WITH RESULTS OF ALL TESTING WHILE CONSTRUCTION IS PROCEEDING.

IV. ADDITIONAL COURSES
A. SWEEP OFF EXCESS MATERIAL FROM THE TOP OF THE UNITS AND INSTALL THE NEXT COURSE. LAY EACH COURSE WITH THE SIDE CORE OF THE UNITS RESTING AROUND ONE SIDE OF THE "LOCATOR NUB"; PULL THE UNIT FORWARD AS FAR AS POSSIBLE. REPEAT THIS PROCEDURE UNTIL SECOND COURSE IS COMPLETED.
B. REPEAT BACKFILLING AND COMPACTION STEPS IN SECTION II, ITEMS E AND F.
C. CONTINUE THESE PROCEDURES UNTIL DESIRED WALL HEIGHT IS ACHIEVED.

V. CAP UNITS – TRAPEZOIDAL
A. MODIFIED CAP UNITS ARE TO BE ADHERED TO THE TOP OF THE WALL. ADHESIVES, SUCH AS SONNEBORN PL PREMIUM CONSTRUCTION ADHESIVE, SHOULD BE USED TO SECURE CAPS AND UNITS SHOULD BE ALTERNATED TO ACHIEVE WALL APPLICATION. CAPS CAN ALSO BE CUT TO FIT SPECIAL APPLICATIONS.
B. IT IS IMPORTANT TO ALWAYS CAP THE WALL FROM THE LOWEST ELEVATION AND WORK UP THE WALL.

VI. SHIMMING
A. IT IS IMPORTANT THAT THE WALL MAINTAIN A POSITIVE BATTER. THEREFORE, FROM TIME TO TIME IT MAY BE NECESSARY TO INSTALL SHIMS NEAR THE FRONT OF THE BLOCK TO MAINTAIN THAT POSITIVE BATTER. SEE THE SHIMMING DETAIL FOR THE INSTALLATION OF THE SHIMS. DO NOT USE MORE THAN TWO (2) SHIMS AT ANY POSITION.



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ON THE DATE ADJACENT TO THE SEAL

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KENNETH T. ZAGERS, P.E. NO. 58221

INDEX OF DRAWINGS

DWG #	DESCRIPTION
S–1	SEGMENTAL WALL GENERAL NOTES
S–1A to 1D	SEGMENTAL WALLS TYP. SECTIONS AND STD. DETAILS
S–2 to S–9	SEGMENTAL WALL SECTIONS

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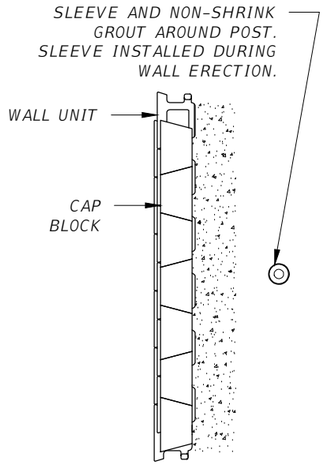
SHOPPES @ EAST SHORE, APOPKA, FL

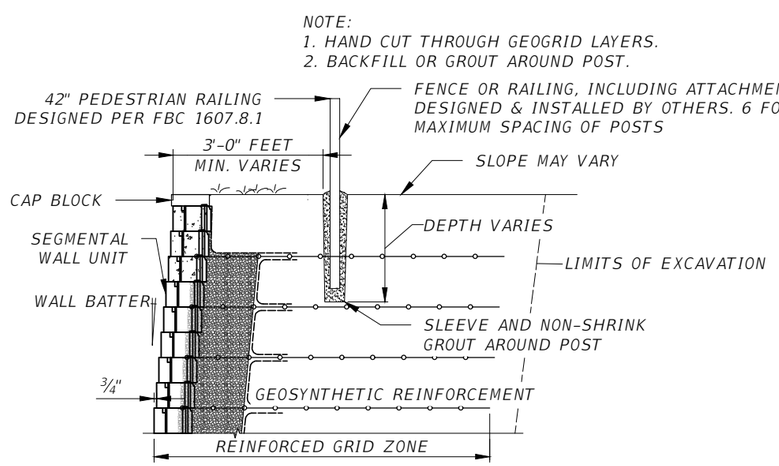
SEGMENTAL WALL GENERAL NOTES

DRAWING
S-1

SHEET 1 OF 13



FACE WALL



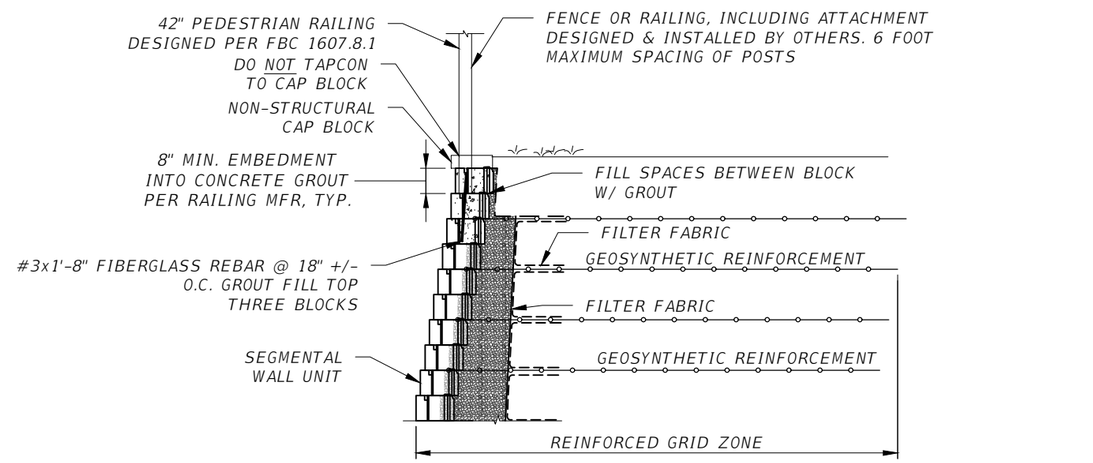
SIDE WALL

TYPICAL SECTION
OPTION A - FENCE OR RAIL DETAIL

NOT TO SCALE

PEDESTRIAN RAILING DESIGN CRITERIA:

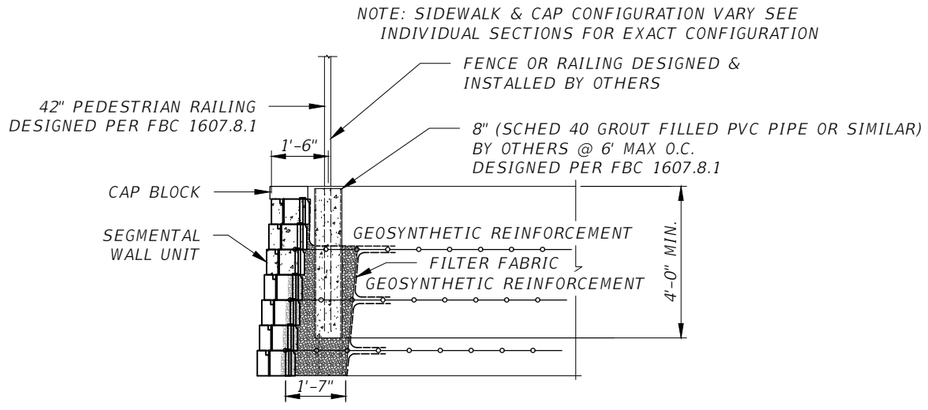
1. GUARDRAIL BY OTHERS REQ'D WHEN EXPOSED WALL HEIGHT IS 30" OR GREATER, PER FBC 1015.2. CORE DRILL THRU CAP AND INTO FIRST FILLED COURSE 8" MINIMUM AND GROUT RAILING IN PLACE. RAILING DESIGN AND FINAL EMBEDMENT. LOCATION, SPACING AND QUANTITY BY RAILING DESIGNER IN ACCORDANCE WITH FBC AND OWNER REQUIREMENTS. TYP.
2. ATTACHMENT DESIGN IS NOT TO BE USED WITH SOLID PRIVACY FENCES, WIND BARRIERS, SOUND BARRIERS OR OTHER SOLID TYPE STRUCTURES.
3. REQUIRED GUARDRAILS SHALL NOT BE LESS THAN 42 INCHES HIGH PER FBC 1015.3.
4. REQUIRED GUARDRAILS SHALL NOT HAVE OPENINGS WHICH ALLOW THE PASSAGE OF A SPHERE 4 INCHES IN DIAMETER FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT, PER FBC 1015.4.
5. HANDRAILS AND GUARDS SHALL BE ABLE TO RESIST:
   1. 50 LBS PER LINEAR FOOT ALONG THE TOP RAIL OR,
   2. A SINGLE CONCENTRATED LOAD OF 200 LBS APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP, AND TO TRANSFER THIS LOAD THROUGH THE SUPPORTS TO THE STRUCTURE. PER FBC 1607.8.1. THESE LOADS ARE NON-CONCURRENT.
6. INTERMEDIATE RAILS & PICKETS SHALL BE ABLE TO RESIST: 50 LBS OVER ONE SQUARE FOOT, NON-CONCURRENT WITH RAILING LOADS ABOVE, PER FBC 1607.8.1.2.



MATERIALS
1. GROUT PUMP MIX, f'c = 2,500 PSI MIN.
2. REBAR ALTERNATIVES: #4 GRADE 60, OR #3 FRP Fy = 130ksi MIN.

TYPICAL SECTION
OPTION B - REINF. BLOCK DETAIL

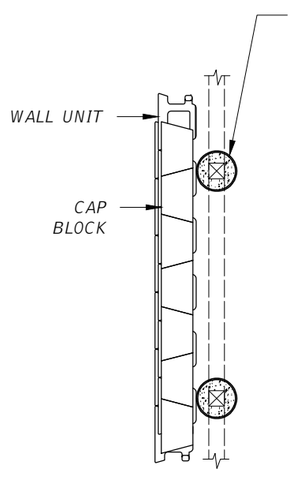
NOT TO SCALE



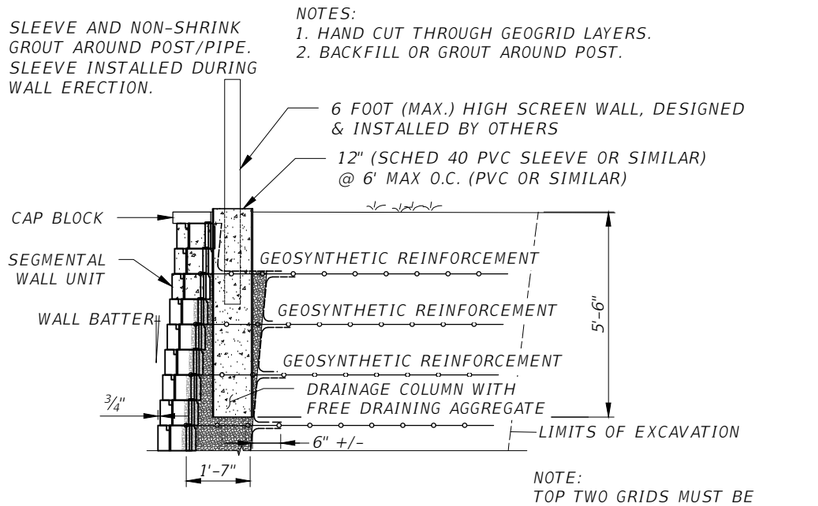
NOTES:
1. LOCATE THE FENCE POSTS IN THE FIELD. MAX SPACING IS 6 FEET.
2. INSTALL SLEEVE AS THE WALL IS BEING CONSTRUCTED. CAREFULLY CUT THE TOP TWO GRIDS TO MATCH DIAMETER OF THE PIPE.
3. AFTER WALL IS CONSTRUCTED, PLACE FENCE POST INTO SLEEVE AND GROUT INTO PLACE USING 2,500 PSI PUMP MIX.

TYPICAL SECTION
OPTION C - POST OR SLEEVE DETAIL

NOT TO SCALE



FACE WALL



SIDE WALL

NOTE:
TOP TWO GRIDS MUST BE EWG 60 AND TWO FEET LONGER.

TYPICAL SECTION
OPTION D - SCREEN WALL DETAIL

NOT TO SCALE

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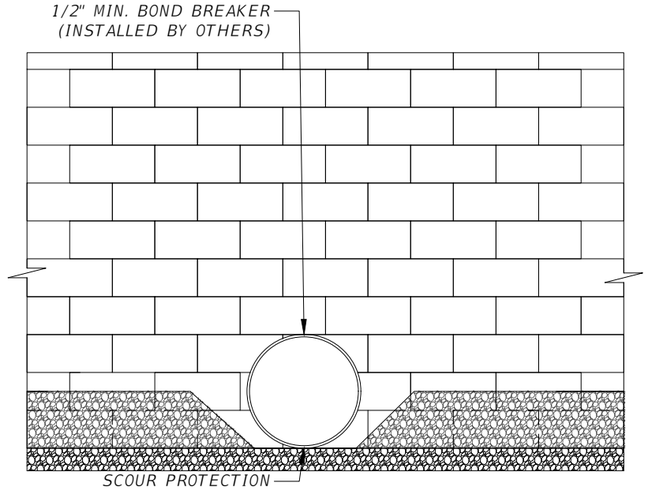
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL
TYPICAL SECTION AND STANDARD DETAILS

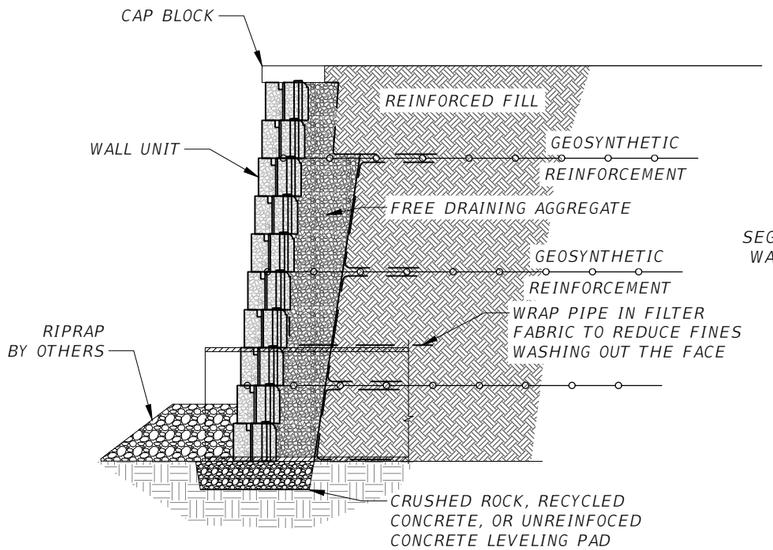
DRAWING
S-1A

SHEET 2 OF 13



PIPE PENETRATION ELEVATION

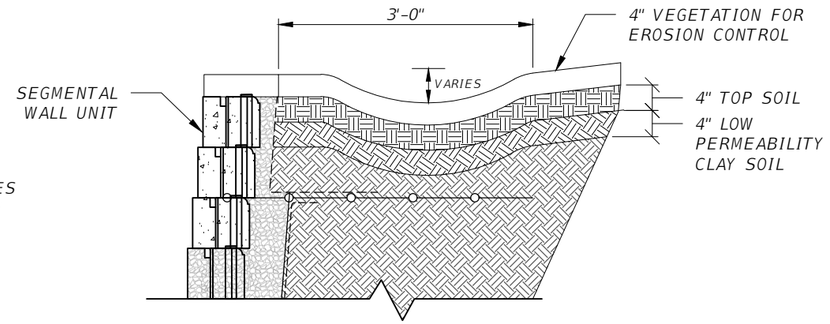
NOT TO SCALE



PIPE PENETRATION SECTION

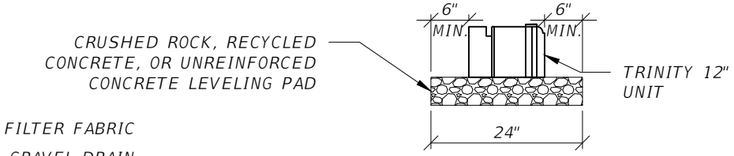
NOT TO SCALE

CIVIL ENGINEER & CONTRACTOR NOTE: PER NCMA DESIGN MANUAL, BACKSLOPES SHALL HAVE SWALES OR AREA DRAINS TO MINIMIZE WATER FLOWING OVER TOP OF WALL DURING EXTREME RAIN EVENTS (100 YEAR STORM)



DRAINAGE SWALE EARTH LINED

NOT TO SCALE



LEVELING PAD CROSS - SECTION

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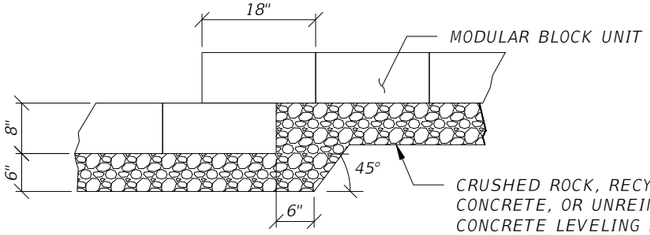

TYPICAL LEVELING PAD STEP

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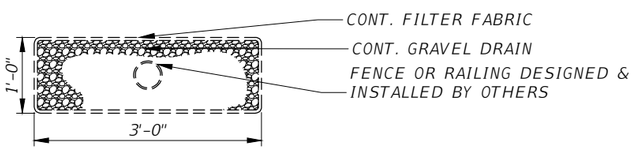

COLLECTOR DRAIN DETAIL

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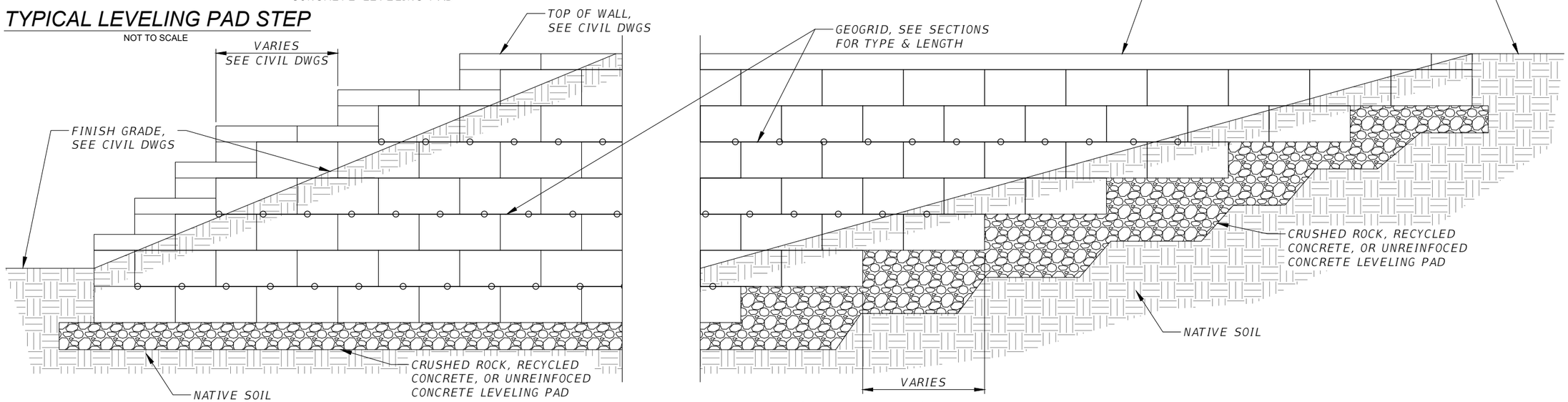

TYPICAL ELEVATION & LAYOUT

NOT TO SCALE

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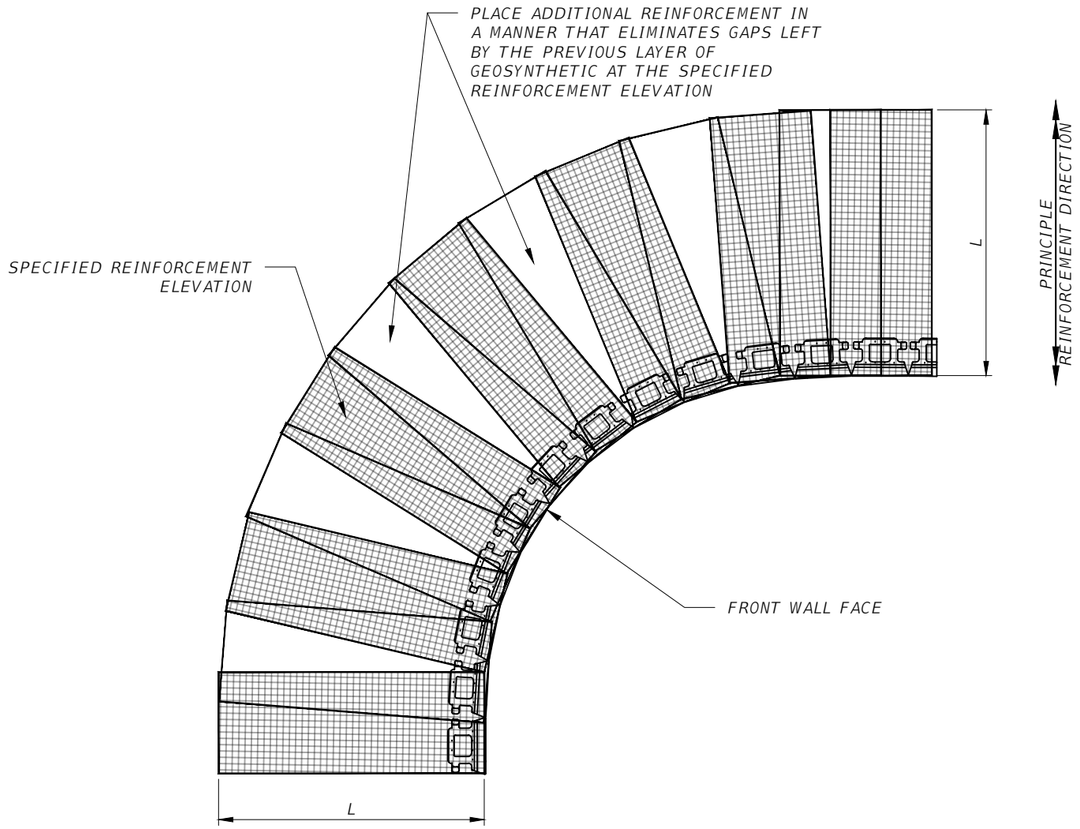
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL

TYPICAL SECTION AND STANDARD DETAILS

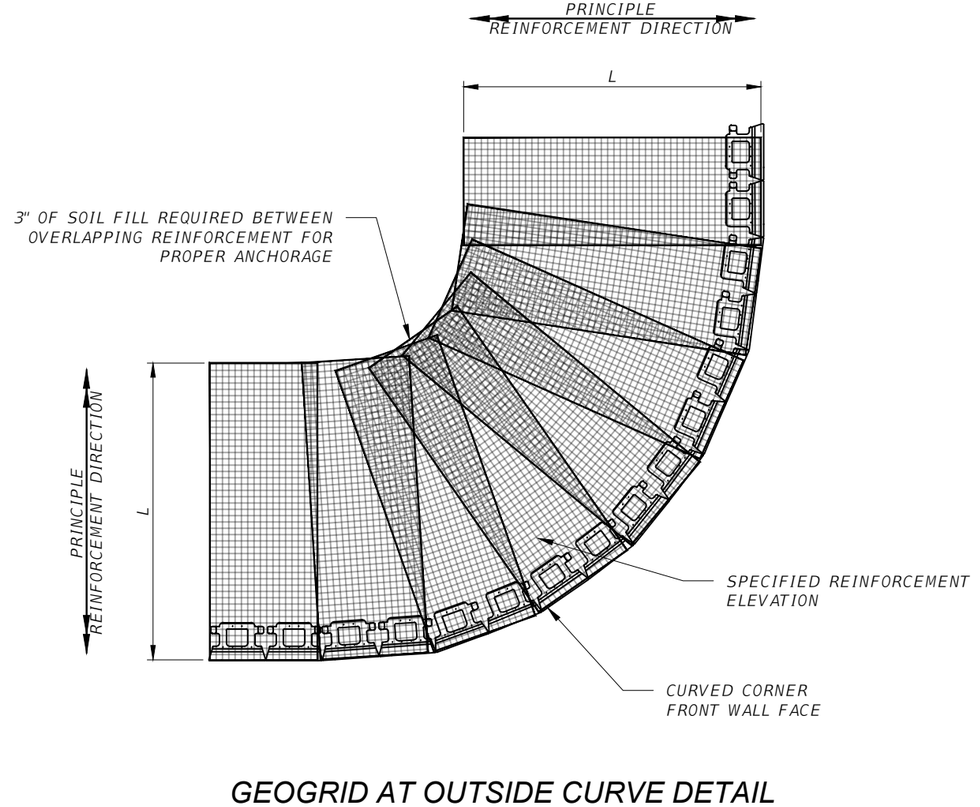
DRAWING

S-1B



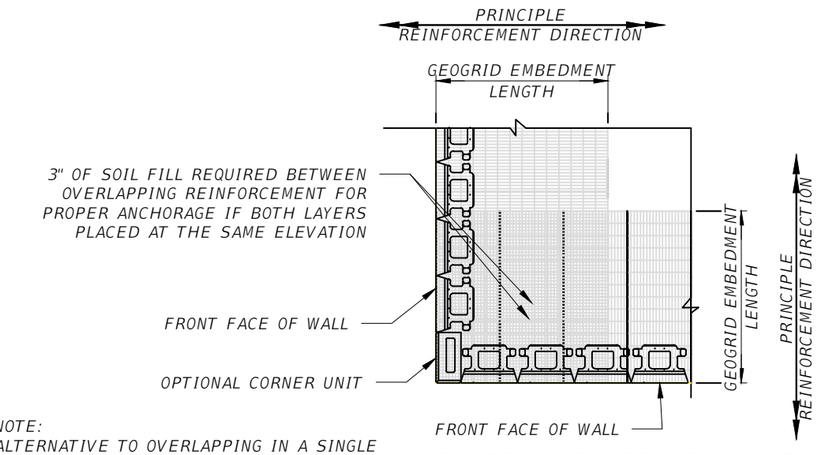
GEOGRID AT INSIDE CURVE DETAIL

NOT TO SCALE



GEOGRID AT OUTSIDE CURVE DETAIL

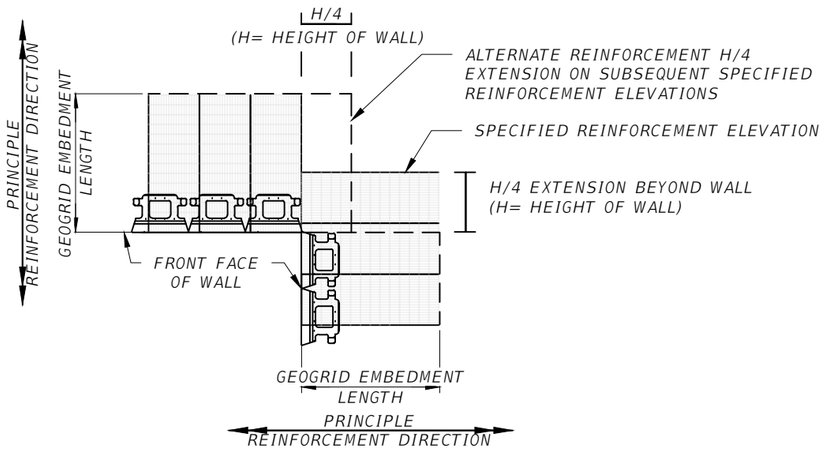
NOT TO SCALE



NOTE:
ALTERNATIVE TO OVERLAPPING IN A SINGLE COURSE. REINFORCEMENT COULD BE PLACED IN THE PERPENDICULAR PRINCIPAL DIRECTION IN THE CROSS-OVER ARE ON THE SUCCEEDING COURSE.

OUTSIDE CORNER REINFORCEMENT LAYOUT DETAIL

NOT TO SCALE



INSIDE CORNER REINFORCEMENT LAYOUT DETAIL

NOT TO SCALE

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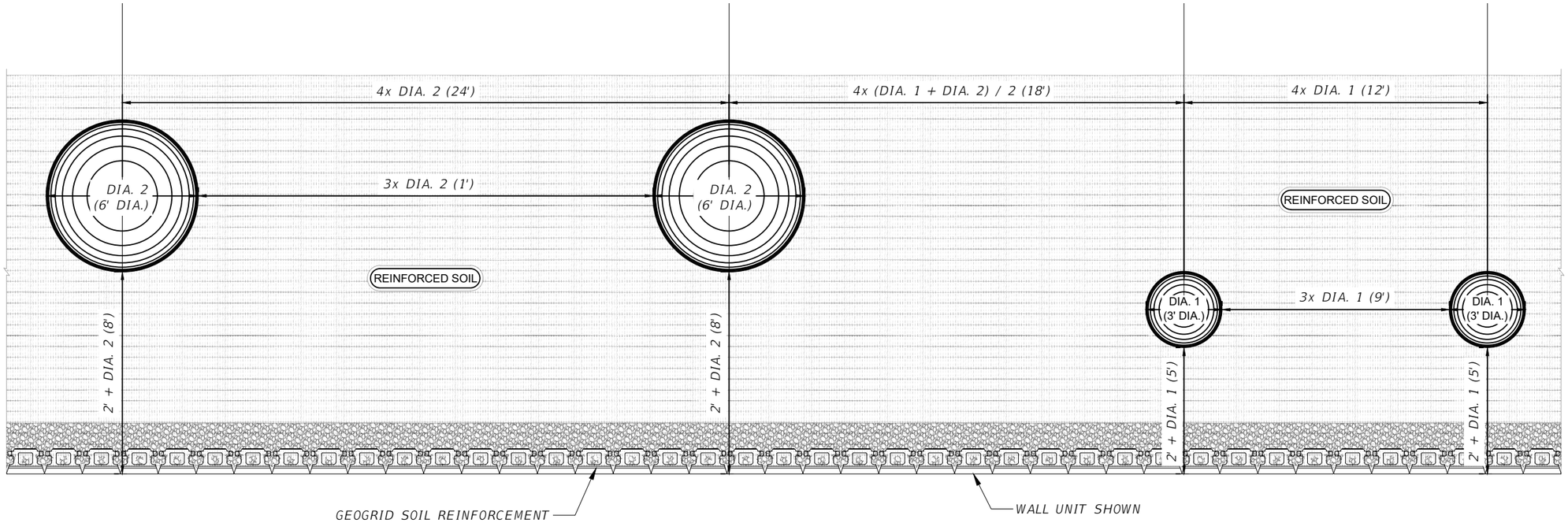
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL
TYPICAL SECTION AND STANDARD DETAILS

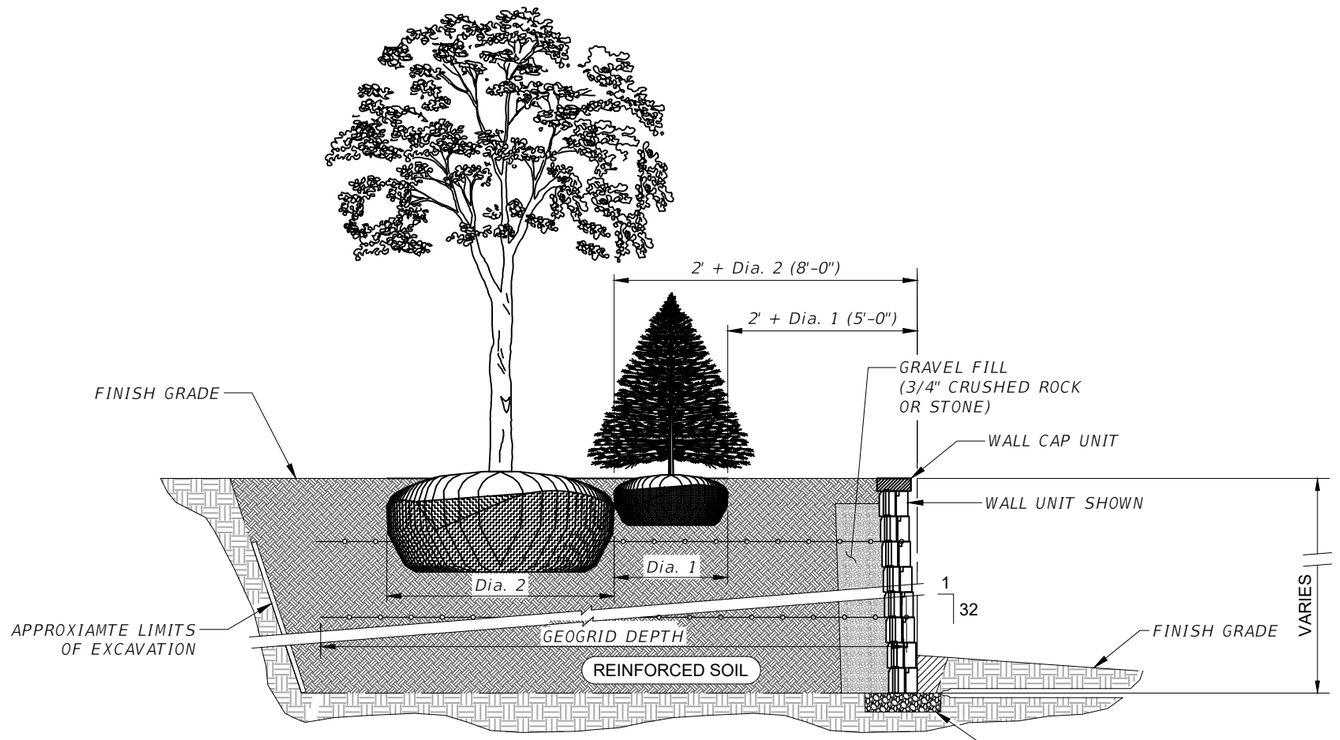
DRAWING
S-10

SHEET 4 OF 13



TYPICAL PLANTING LIMITS PLAN

NOT TO SCALE



TYPICAL PLANTING LIMITS SECTION

NOT TO SCALE

NO.	ISSUED FOR	DATE
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SHOPPES @ EAST SHORE, APOPKA, FL

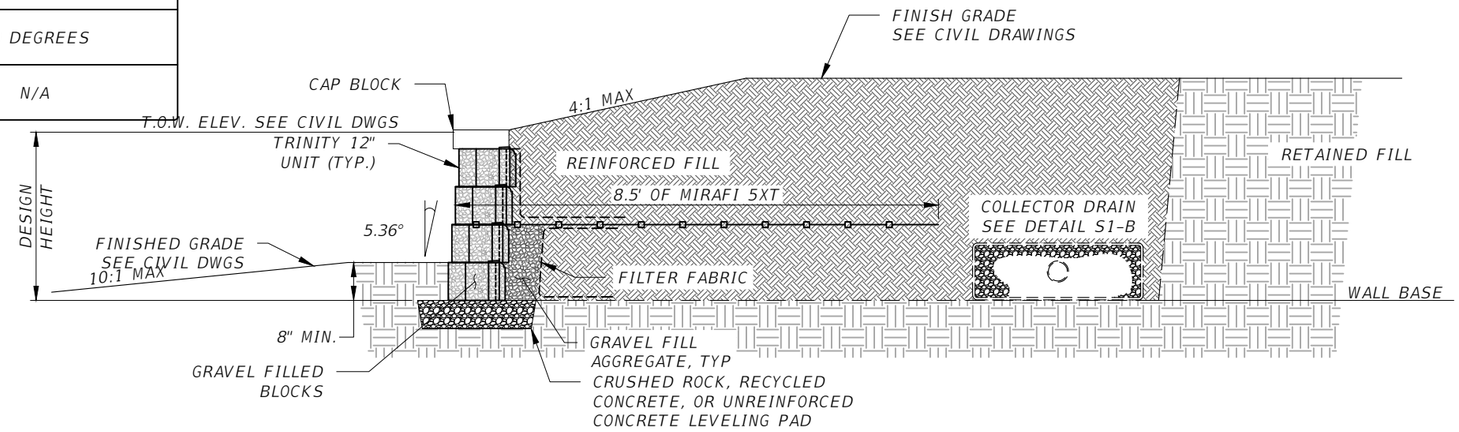
SEGMENTAL WALL

TYPICAL SECTION AND STANDARD DETAILS

DRAWING

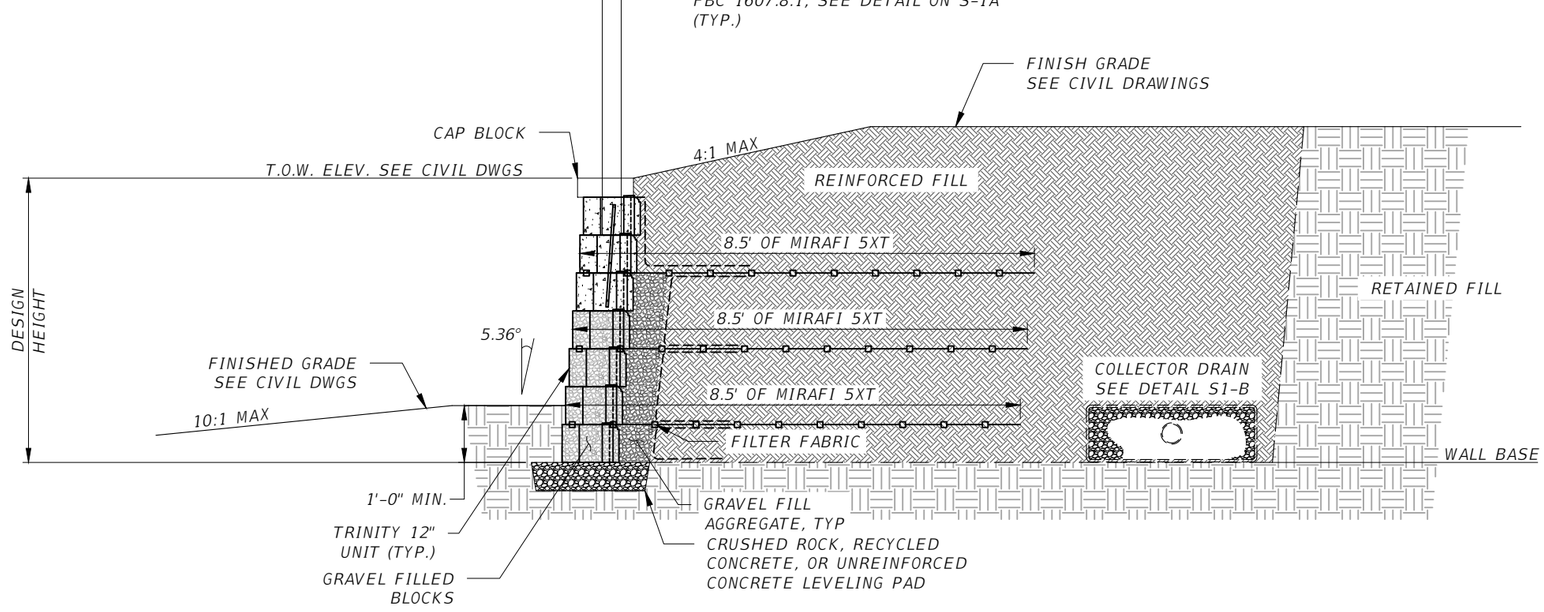
S-1D

LEGEND			
SYMBOL	MATERIAL	ASSUMED SOIL WEIGHT	ASSUMED INTERNAL FRICTION
	REINFORCED FILL	110 PCF & 48 PCF SUBMERGED	32 DEGREES
	RETAINED FILL	110 PCF & 48 PCF SUBMERGED	30 DEGREES
	COMPACTED GRANULAR BASE	125 PCF & 60 PCF SUBMERGED	30 DEGREES
	CONCRETE	150 PCF	N/A



SEGMENTAL WALLS 1, 5 & 6 - 3'-0" MAX DESIGN HEIGHT

NOT TO SCALE



SEGMENTAL WALLS 1, 5 & 6 - 5'-0" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
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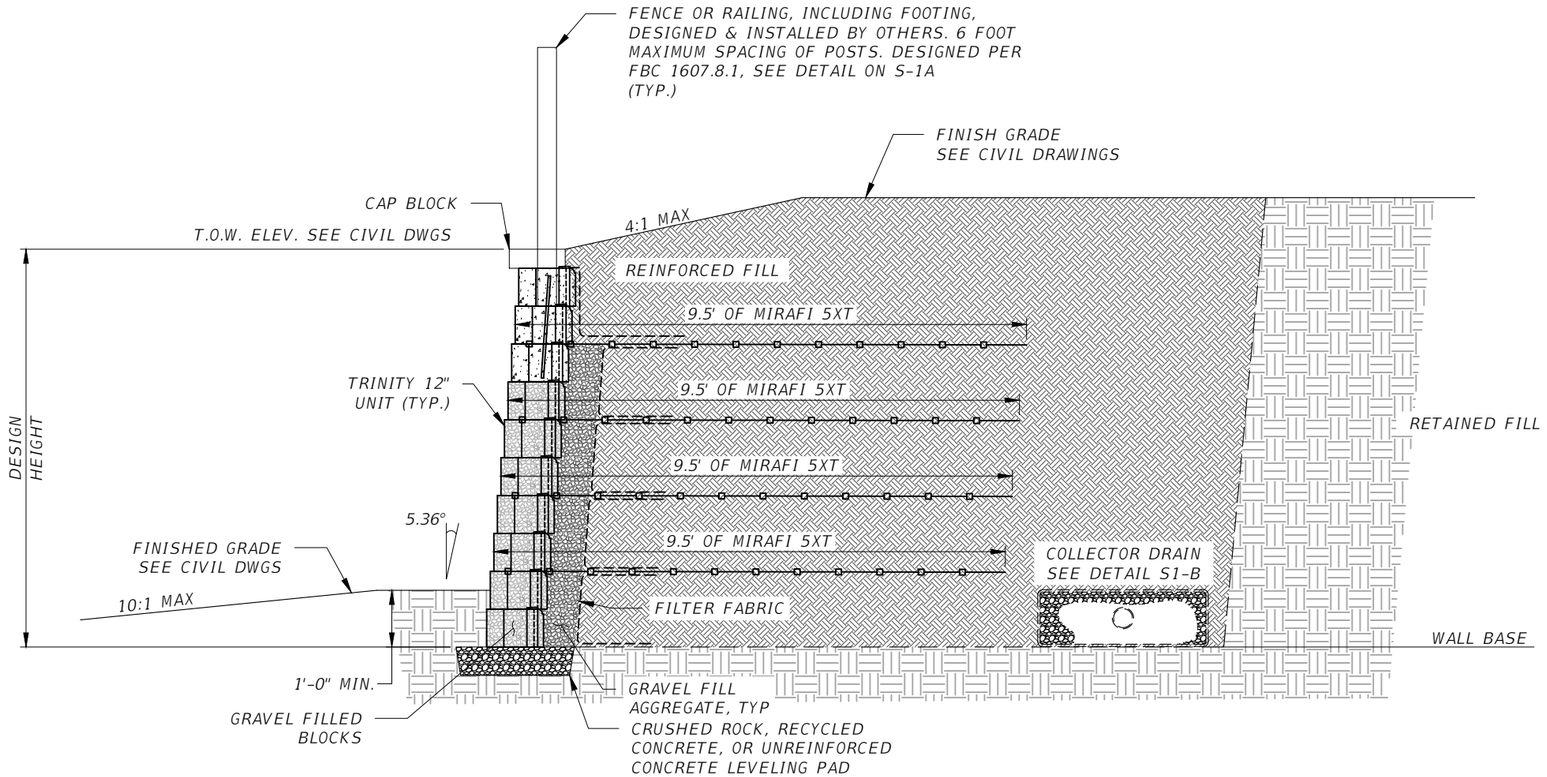
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING
S-2

SHEET 6 OF 13



SEGMENTAL WALLS 1, 5 & 6 - 7'-0" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
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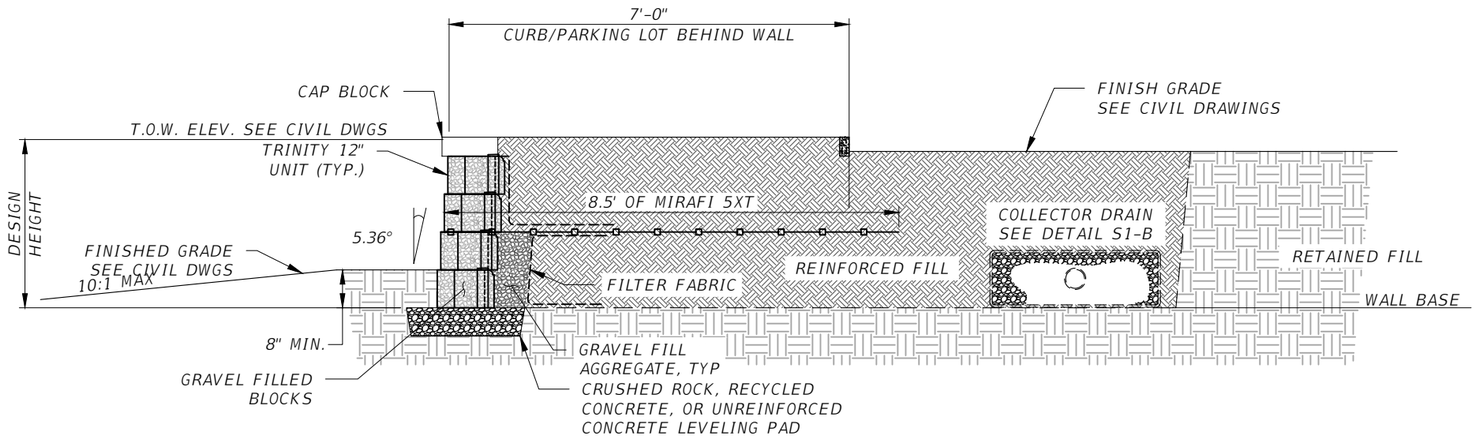
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

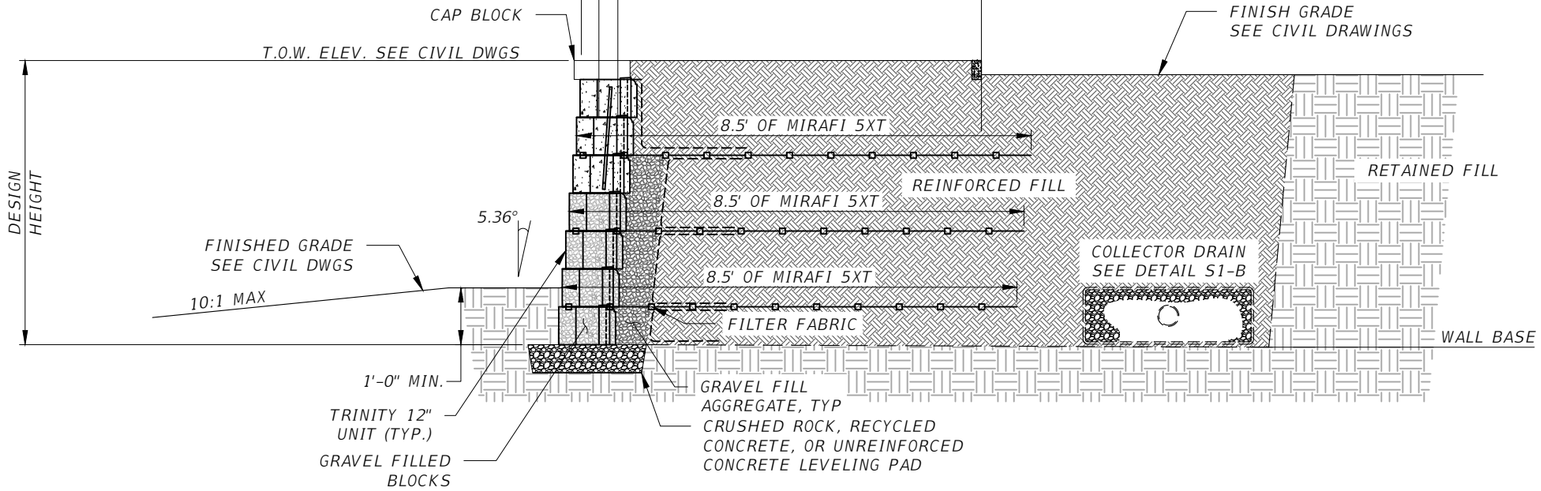
DRAWING

S-3



SEGMENTAL WALL 2 - 3'-0" MAX DESIGN HEIGHT

NOT TO SCALE



SEGMENTAL WALL 2 - 5'-0" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
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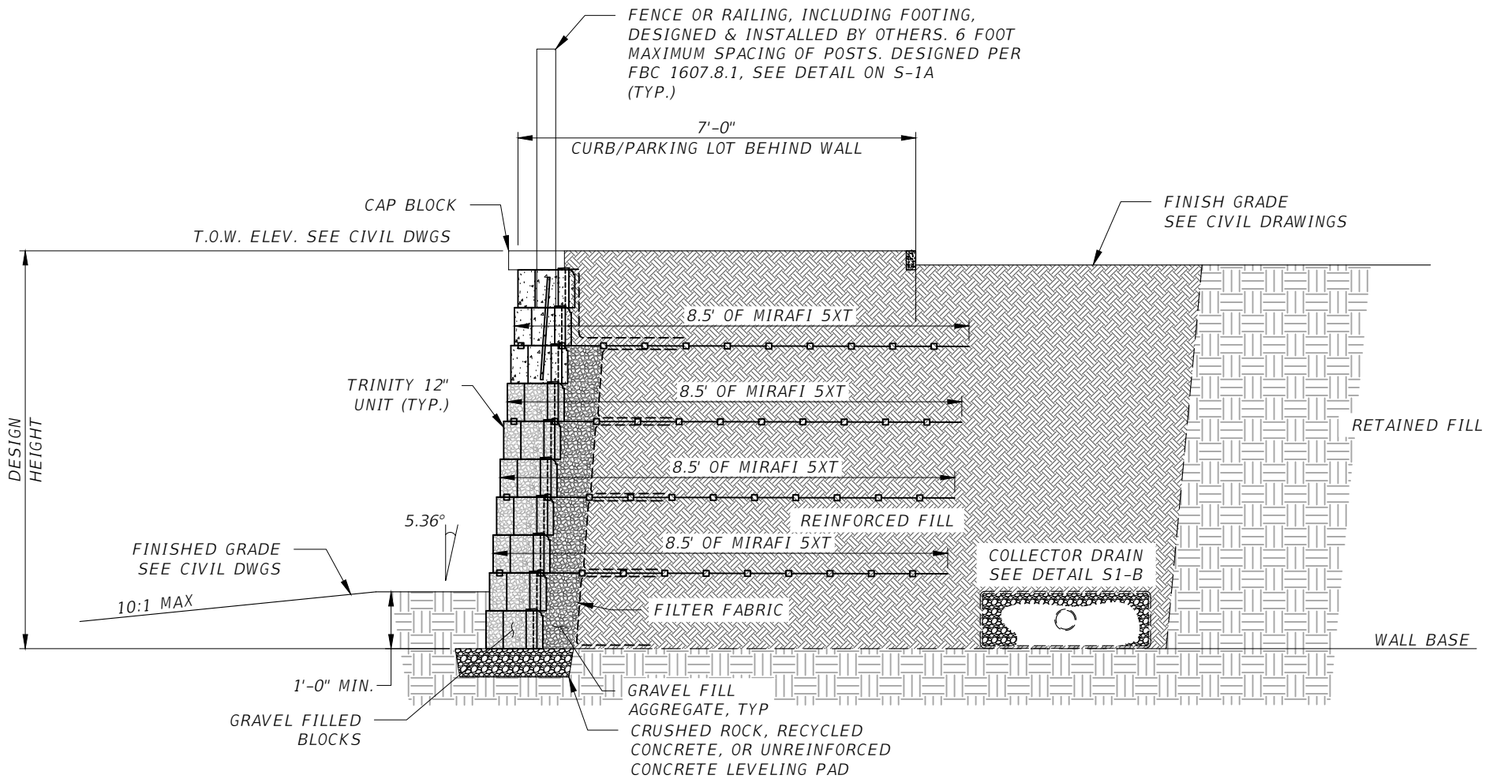
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING
S-4

SHEET 8 OF 13



SEGMENTAL WALL 2 - 7'-0" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
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ORLANDO, FL 32803
REG. NO.: PE. 58221

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Engineering | Construction | COA: 8276
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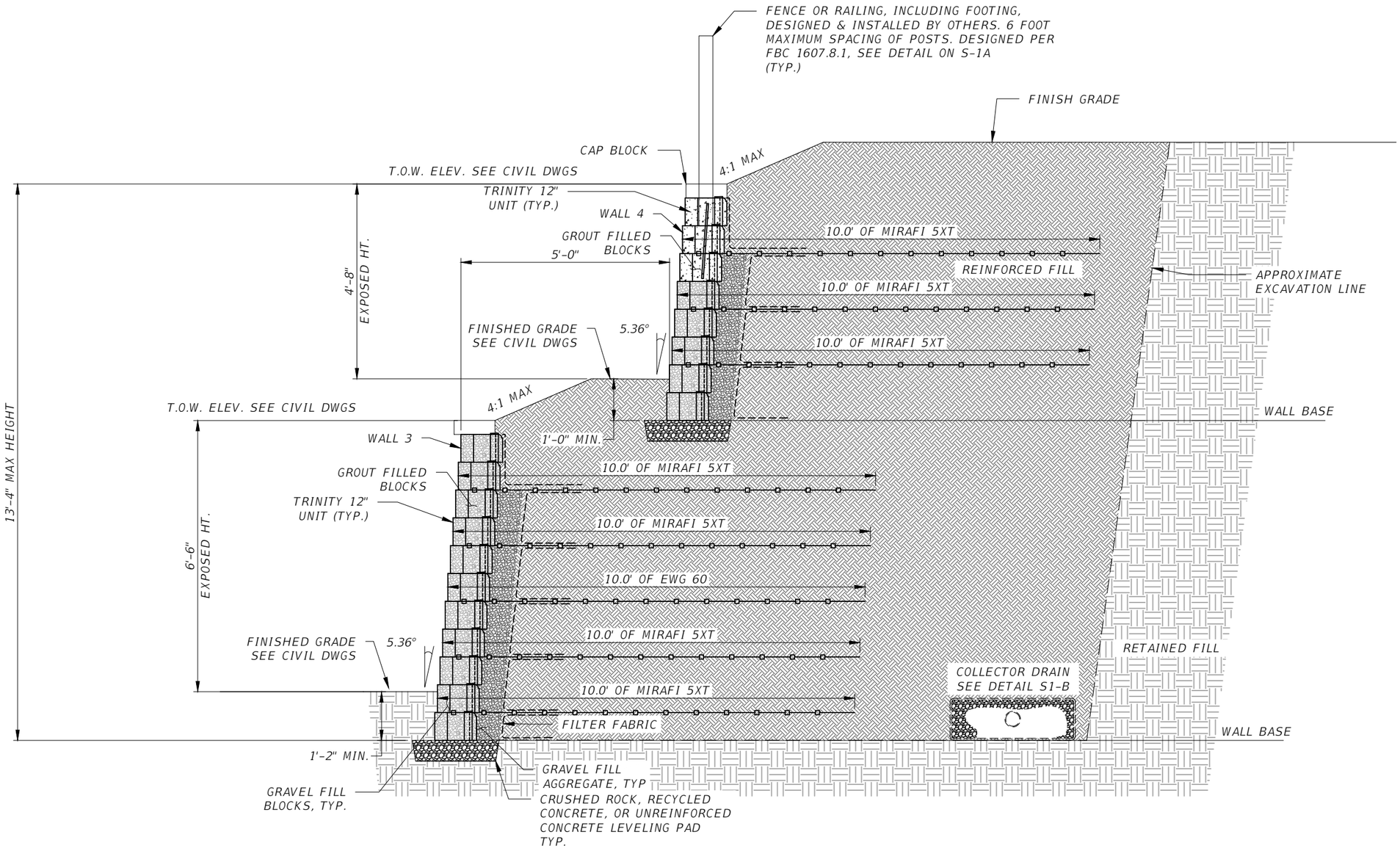
P: (407)377-2222

SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING
S-5

SHEET 9 OF 13



TWO SEGMENTAL TIERED WALLS 3 AND 4 WALL - 13'-4" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
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STRUCTURAL ENGINEER:
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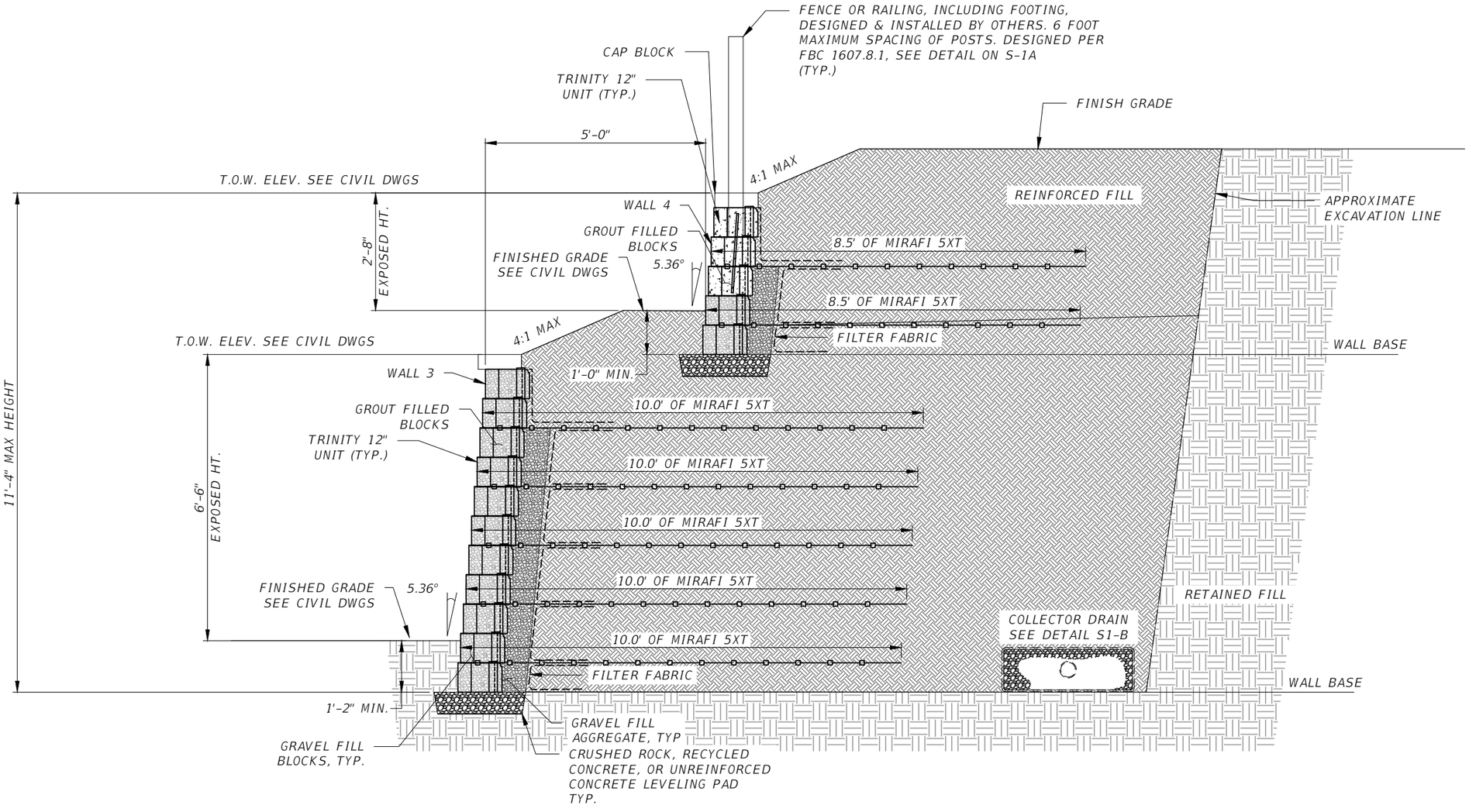
ORLANDO, FLORIDA 32801
(407) 422-2272

SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING

S-6



TWO SEGMENTAL TIERED WALLS 3 AND 4 WALL - 11'-4" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
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STRUCTURAL ENGINEER:
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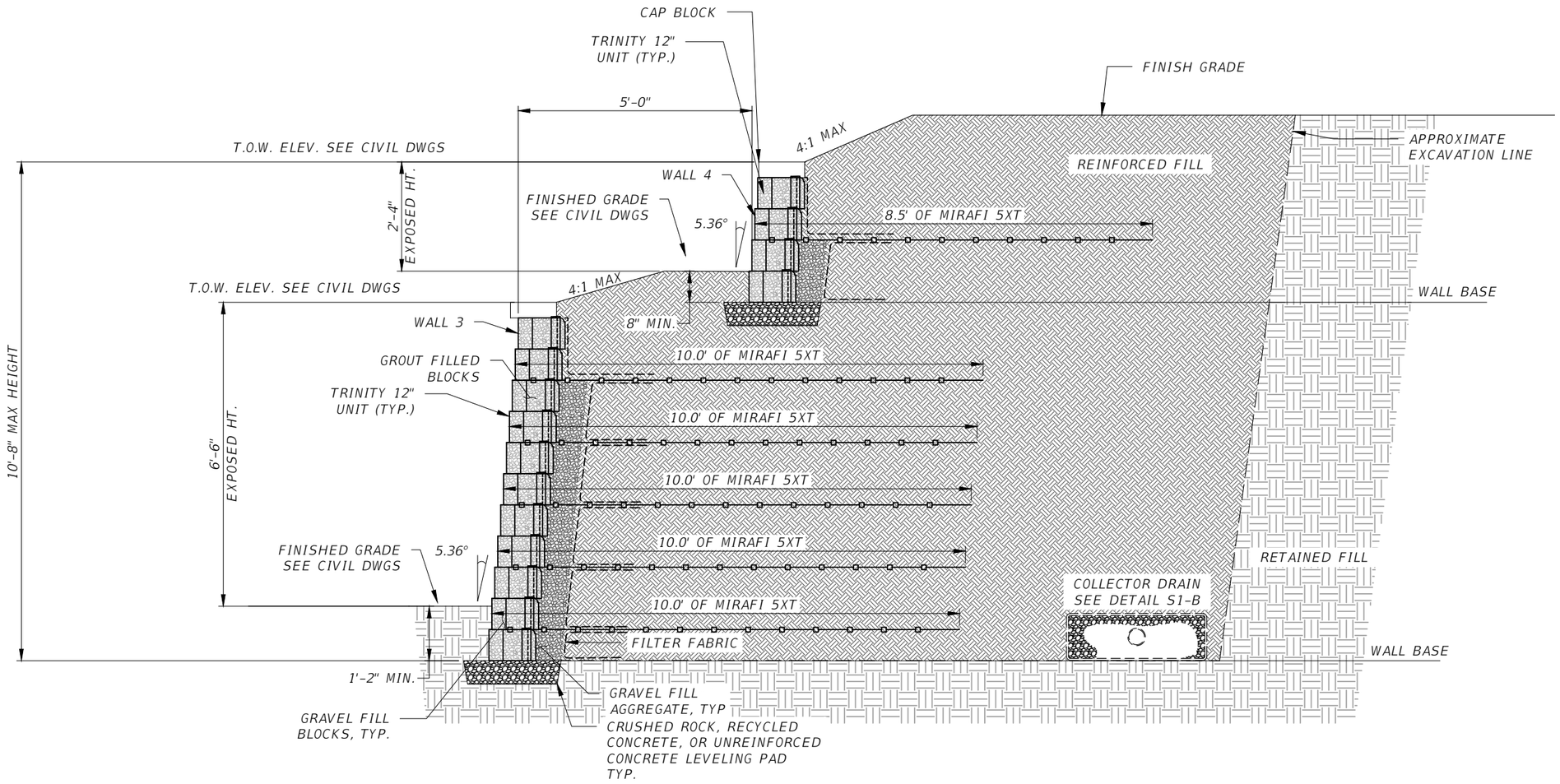
214 E. Concord Street, Orlando, FL 32803
Tel: 407.377.2277

SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING
S-7



TWO SEGMENTAL TIERED WALLS 3 AND 4 WALL - 10'-8" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
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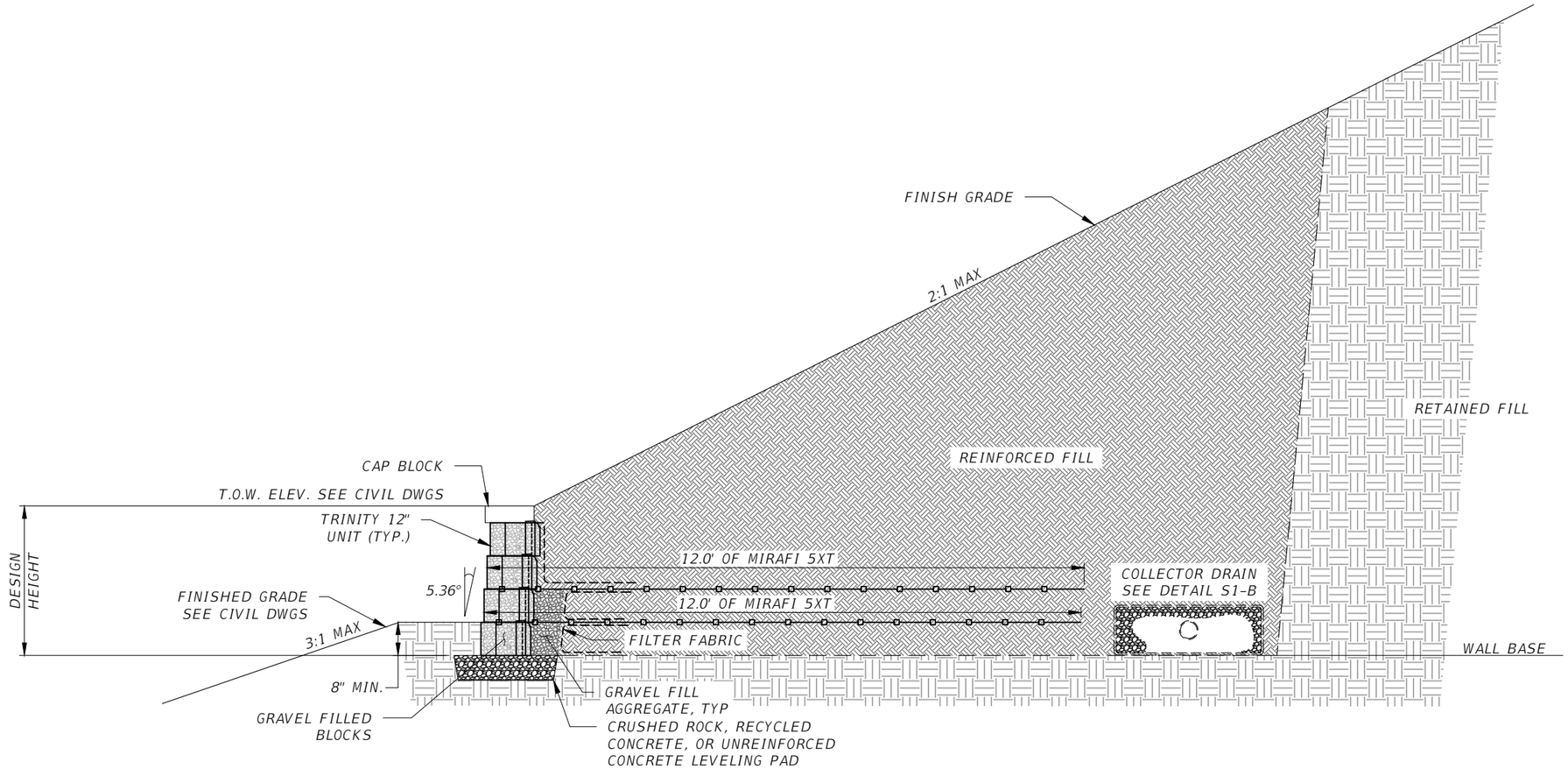
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING
S-8



SEGMENTAL WALL 7 - 3'-0" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
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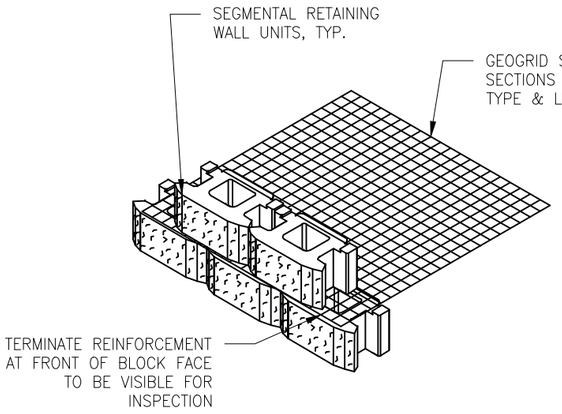
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

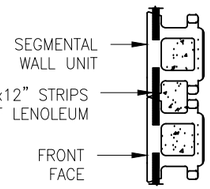
DRAWING
S-9

SHEET 13 OF 13

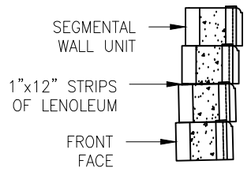
SEGMENTAL RETAINING WALL SHOP DRAWINGS
SHOPPES @ EAST SHORE, APOPKA, FL



SEGMENTAL BLOCK UNITS
STACKED WALL DETAIL
(SCALE: NTS)



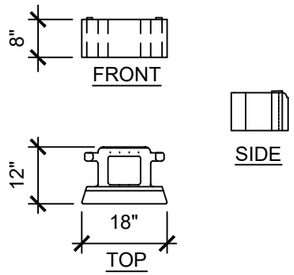
FACE WALL



SIDE WALL

NOTE: SEE SECTION VI SHIMMING FOR ADDITIONAL INFORMATION

TRINITY BLOCK UNITS
SHIMMING DETAIL
(SCALE: NTS)



TRINITY BLOCK UNITS
TYPICAL DIMENSIONS
(SCALE: NTS)

TABLE FOR SEGMENTAL WALL UNITS	
ACCEPTABLE SEGMENTAL WALL UNITS	TYPICAL BATTER
TRINITY 12" DEEP x8" HIGH x18" LONG	5.4 DEGREES
ANCHORED DIAMOND PRO 12" DEEP x8" HIGH x18" LONG	7.1 DEGREES
KEYSTONE COMPAC 12" DEEP x8" HIGH x18" LONG	8.8 DEGREES

TABLE FOR GEOSYNTHETIC REINFORCING (GEOGRID) TYPES			
ACCEPTABLE GEOGRID MANUFACTURERS	GEOGRID TYPE	GEOGRID NAME	
EARTH WALL PRODUCTS			
	TYPE B	EWG 60	
STRATA SYSTEMS, INC.	TYPE A	SGU 60	
	TYPE B	SGU 80	
TENCATE GEOSYNTHETICS			
	TYPE B	MIRAFI 5XT	

NOTE: ON SUCCESSIVE SHEETS WHERE HTG GEOGRID IS SPECIFIED, THE EQUIVALENT EWG PRODUCT MAY BE SUBSTITUTED.

GENERAL NOTES:

A. SEE CIVIL PLANS FOR ALL TOP OF WALL & FINISHED GRADE ELEVATIONS.
B. ALL WALLS WILL BE CONSTRUCTED OF TRINITY OR EQUIVALENT UNITS (8" HIGH) AS SHOWN WITH STANDARD (OR SIMILAR) CAP ON THE TOP OF THE WALLS (UNO).
C. THE OWNER IS SOLELY RESPONSIBLE TO COORDINATE WITH LOCAL AUTHORITIES HAVING CODE INTERPRETATION AUTHORITY FOR THE DESIGN AND INSTALLATION OF ANY RAILING SYSTEM THAT MAY BE REQUIRED.
D. SURVEY MUST INDICATE WALL FACE LOCATION OF BASE COURSE AND ELEVATION AT TOP OF LEVELING PAD.
E. AREA DRAINS & UNDERDRAIN SYSTEMS ARE DESIGNED & INSTALLED BY OTHERS.
F. DESIGN DOES NOTE INCLUDE A RAPID DRAW DOWN (MORE THAN 2 FEET PER DAY) OF THE RETENTION POND.
G. DESIGN DOES NOT INCLUDE VERIFICATION OF LONG TERM GLOBAL STABILITY. WHICH IS THE OWNER & PROJECT GEOTECHNICAL ENGINEER'S RESPONSIBILITY PER THE NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA) DESIGN MANUAL.
H. AFTER THE INITIAL CONSTRUCTION OF THE WALL, NO NEW OR REPLACEMENT UTILITIES MAY BE PLACED WITHIN THE REINFORCED GRID ZONE OF THE WALL WITHOUT THE EXPRESSED WRITTEN CONSENT OF PAVERSCAPE, INC. AND ENGINEER OF RECORDS.
I. NO POOLS OR FOOTINGS MORE THAN 18" BELOW GRADE MAY BE INSTALLED WITHIN THE REINFORCED GRID ZONE.
J. TRENCHING FOR IRRIGATION LINES OR OTHER UTILITIES SHALL BE WITHIN 18" BELOW GRADE IN THE REINFORCED GRID ZONE.
K. DRAINAGE: PERMANENT DRAINAGE & SITE GRADING SHALL BE INCORPORATED INTO THE SITE DRAWINGS TO MINIMIZE RUNOFF FROM BEING DIRECTED OVER THE WALL FACE.

DESIGN CRITERIA

ASSUMED SOIL CHARACTERISTICS (UNO): SAND TO SLIGHTLY SILTY SAND (SP & SP–SM UNIFIED SOIL CLASSIFICATION).
SPECIFIC GRAVITY OF ALL SOILS: 2.7 ASSUMED VOID RATIO OF ALL SOILS: 0.61 FOR ASSUMED VARIOUS SOIL ZONE VALUES. (DRY UNIT WEIGHT, SUBMERGED UNIT WEIGHT INTERNAL FRICTION ANGLES) REFER TO SHEET 'S–2')
INT. FRICTION ANGLE OF RETAINED SOIL = 30 DEG.
INT. FRICTION ANGLE OF COMPACTED & REINFORCED GRID ZONE SOIL = 32 DEG.
WALL FRICTION ANGLE = 17 DEG.
ALLOWABLE SOIL BEARING CAPACITY = 2,000 PSF MIN
LIVE LOAD SURCHARGE = 100 PSF (PARKING LOT), BUILDINGS ARE SET BACK BEYOND THE INFLUENCE OF THE WALL, U.N.O. (A MINIMUM DISTANCE OF TWICE THE WALL HEIGHT FROM THE TOP OF THE WALL).
250 PSF: PAVEMENT/ROADWAY (HEAVY TRAFFIC)
100 PSF: PAVEMENT/ROADWAY (LIGHT TRAFFIC)
75 PSF: PEDESTRIAN LOADING
50 PSF: GRASS/RESIDENTIAL
THIS DESIGN CONFORMS TO 8th EDITION FLORIDA BUILDING CODE 2023, & SECTIONS 6 & 7 OF THE NCMA's "DESIGN MANUAL FOR SEGMENTAL RETAINING WALLS", 3rd EDITION.
IF SITE SOILS CONDITIONS OR ANTICIPATED LOADING VARY FROM DESIGN ASSUMPTIONS, NOTIFY THE ENGINEER OF RECORD AND GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION FOR NECESSARY SITE IMPROVEMENTS AND REDESIGN.

INSTALLATIONS GUIDELINES

I.
A. THE FOUNDATION SOIL FOR THE LEVELING PAD SHALL BE AT LEAST 25 INCHES WIDE OF COMPACTED NATIVE SOIL. THE FOUNDATION SOIL SHALL BE COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR (ASTM D1557).
B. THE LEVELING PAD SHALL BE AT LEAST 25 INCHES WITH AND 6 INCHES THICK, AND CONSTRUCTED OF CRUSHED ROCK OR RECYCLED CONCRETE, .25 INCH TO 1 INCH, WITH NO MORE THAN 10% PASSING THE #200 SIEVE.
NOTE: IT IS CRITICAL THAT FOUNDATION SOIL IS WELL COMPACTED TO 95% MODIFIED PROCTOR. OWNER IS RESPONSIBLE TO HAVE COMPACTION TESTING OF SOIL DONE AT ABOUT 200 FOOT INTERVALS. PLEASE PROVIDE PAVERSCAPE WITH RESULTS OF ALL TESTING WHILE CONSTRUCTION IS PROCEEDING.

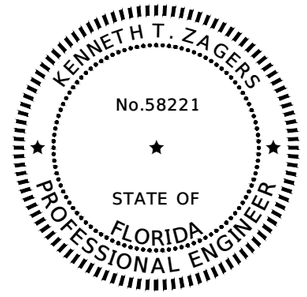
II. BASE COURSE
A. PLACE UNITS ON LEVELING PAD FOLLOWING THE DESIGN PLAN FOR THE WALL.
B. LEVEL UNITS IN BOTH DIRECTIONS, MAKING SURE THE UNITS ARE IN FULL CONTACT WITH THE BASE.
C. ALIGN UNITS WITH THE VERTICAL FACTORY EDGE IN FULL CONTACT OF THE PRECEDING UNIT.
D. IN CREATING RADII OR CURVES, IT MAY BE NECESSARY TO REMOVE ONE OR BOTH PARTS OF THE TAIL AT THE SCORE MARKS ON THE REAR OF THE BLOCK.
E. BACKFILLING AND COMPACTING BEHIND THE WALL.
1. PLACE 9" OF FREE DRAINING MATERIAL DIRECTLY BEHIND THE BLOCK AND FILL ALL CORE AREAS WITH FREE DRAINING AGGREGATE. FREE DRAINING AGGREGATE SHALL CONSIST OF #57 CRUSHED ROCK OR RECYCLED CONCRETE.
2. FILL THE AREA BETWEEN THE FREE DRAINING MATERIAL AND THE EXCAVATED AREA BEHIND THE WALL WITH ACCEPTABLE NATIVE SOIL (LESS THAN 10% FINES PASSING THE 200 SIEVE).
F. COMPACT USING THE FOLLOWING STEPS:
1. USE SMALL LIFTS WITH WALK BEHIND EQUIPMENT. BACKFILL LIFT THICKNESS MUST BE LIMITED TO THE HEIGHT OF THE CONCRETE BLOCK OR MAXIMUM OF 8 IN.
2. STAY 3' BEHIND THE WALL WITH LARGE EQUIPMENT, LESS THAN 5,000 LBS GVW.
3. USE THE SAME PROCEDURE FOR COMPACTION OF EACH LIFT TO ASSURE CONSISTENT AND PROPER COMPACTION.

III. SOIL REINFORCING
A. ALWAYS FOLLOW THESE ENGINEERED PLANS TO DETERMINE THE PLACEMENT OF GEOSYNTHETIC REINFORCEMENT AND EMBEDMENT LENGTH.
B. PULL GEOSYNTHETIC REINFORCEMENT TAUT AND HOLD IN PLACE.
C. PLACE AND COMPACT SOIL OVER GEOSYNTHETIC REINFORCEMENT (GEOGRID). (BE SURE THAT ALL SOIL IS 95% MODIFIED PROCTOR DENSITY.) OWNER IS RESPONSIBLE TO HAVE COMPACTION TESTING OF SOIL DONE AT ABOUT 200 FOOT INTERVALS. PLEASE PROVIDE PAVERSCAPE WITH RESULTS OF ALL TESTING WHILE CONSTRUCTION IS PROCEEDING.

IV. ADDITIONAL COURSES
A. SWEEP OFF EXCESS MATERIAL FROM THE TOP OF THE UNITS AND INSTALL THE NEXT COURSE. LAY EACH COURSE WITH THE SIDE CORE OF THE UNITS RESTING AROUND ONE SIDE OF THE "LOCATOR NUB"; PULL THE UNIT FORWARD AS FAR AS POSSIBLE. REPEAT THIS PROCEDURE UNTIL SECOND COURSE IS COMPLETED.
B. REPEAT BACKFILLING AND COMPACTION STEPS IN SECTION II, ITEMS E AND F.
C. CONTINUE THESE PROCEDURES UNTIL DESIRED WALL HEIGHT IS ACHIEVED.

V. CAP UNITS – TRAPEZOIDAL
A. MODIFIED CAP UNITS ARE TO BE ADHERED TO THE TOP OF THE WALL. ADHESIVES, SUCH AS SONNEBORN PL PREMIUM CONSTRUCTION ADHESIVE, SHOULD BE USED TO SECURE CAPS AND UNITS SHOULD BE ALTERNATED TO ACHIEVE WALL APPLICATION. CAPS CAN ALSO BE CUT TO FIT SPECIAL APPLICATIONS.
B. IT IS IMPORTANT TO ALWAYS CAP THE WALL FROM THE LOWEST ELEVATION AND WORK UP THE WALL.

VI. SHIMMING
A. IT IS IMPORTANT THAT THE WALL MAINTAIN A POSITIVE BATTER. THEREFORE, FROM TIME TO TIME IT MAY BE NECESSARY TO INSTALL SHIMS NEAR THE FRONT OF THE BLOCK TO MAINTAIN THAT POSITIVE BATTER. SEE THE SHIMMING DETAIL FOR THE INSTALLATION OF THE SHIMS. DO NOT USE MORE THAN TWO (2) SHIMS AT ANY POSITION.



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ON THE DATE ADJACENT TO THE SEAL

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BASE CONSULTANTS
1214 EAST CONCORD STREET
ORLANDO, FLORIDA 32803

KENNETH T. ZAGERS, P.E. NO. 58221

INDEX OF DRAWINGS

DWG #	DESCRIPTION
S–1	SEGMENTAL WALL GENERAL NOTES
S–1A to 1D	SEGMENTAL WALLS TYP. SECTIONS AND STD. DETAILS
S–2 to S–7	SEGMENTAL WALL SECTIONS

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SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL GENERAL NOTES

DRAWING
S-1

SHEET 1 OF 11

NO.	ISSUED FOR	DATE
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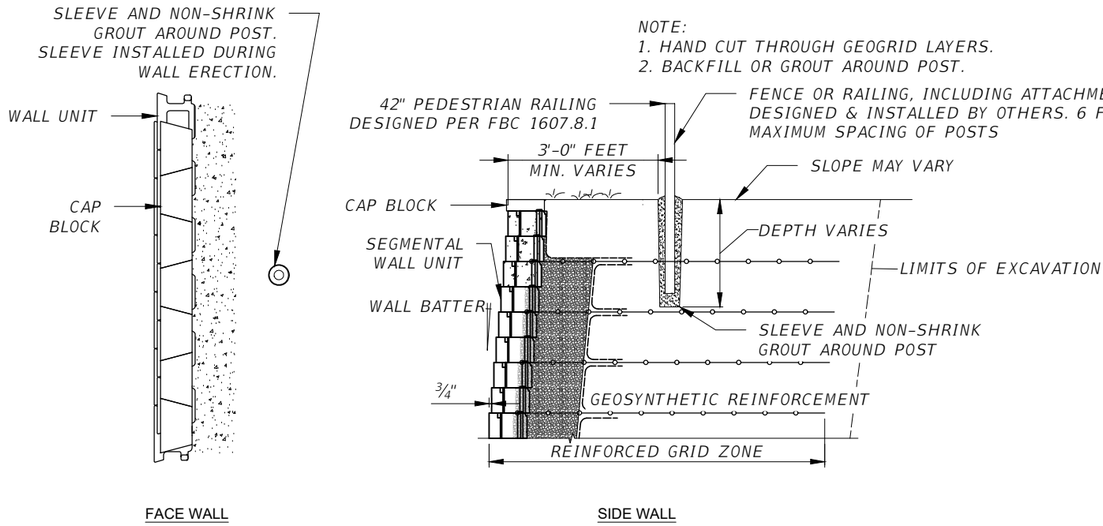
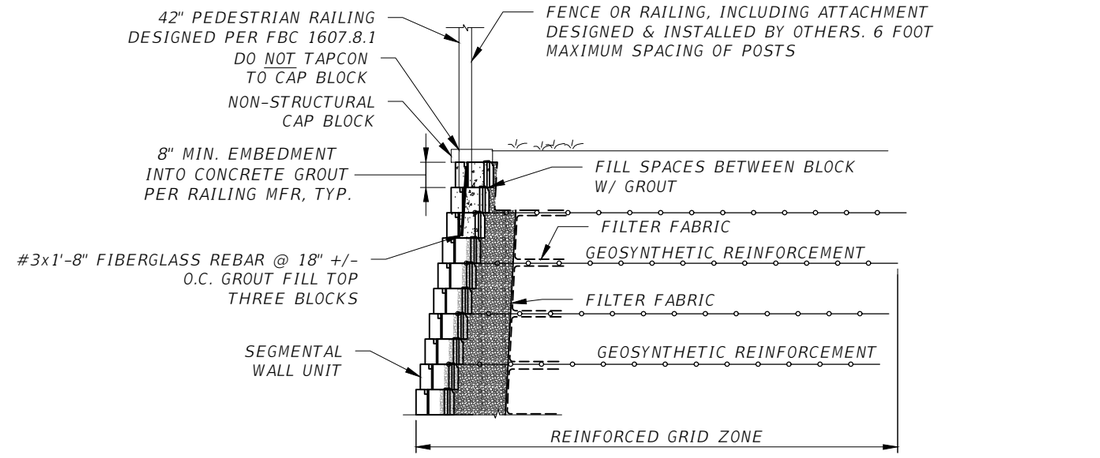


TYPICAL SECTION
OPTION A - FENCE OR RAIL DETAIL

NOT TO SCALE



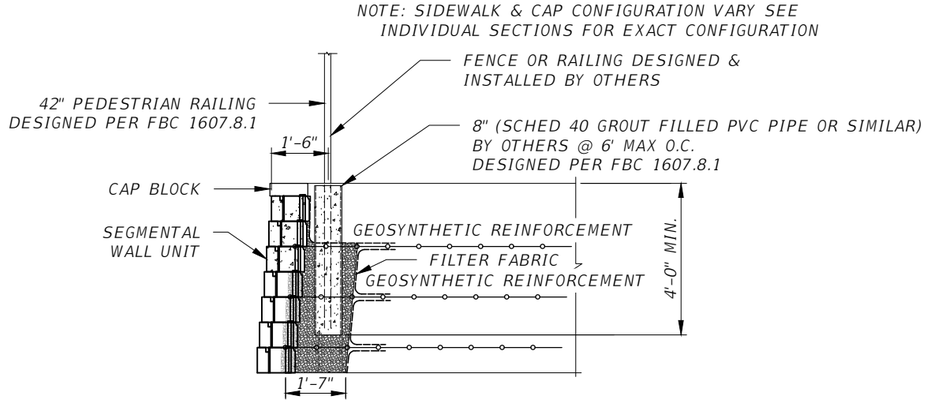
MATERIALS
1. GROUT PUMP MIX, f'c = 2,500 PSI MIN.
2. REBAR ALTERNATIVES: #4 GRADE 60, OR #3 FRP Fy = 130ksi MIN.

TYPICAL SECTION
OPTION B - REINF. BLOCK DETAIL

NOT TO SCALE

PEDESTRIAN RAILING DESIGN CRITERIA:

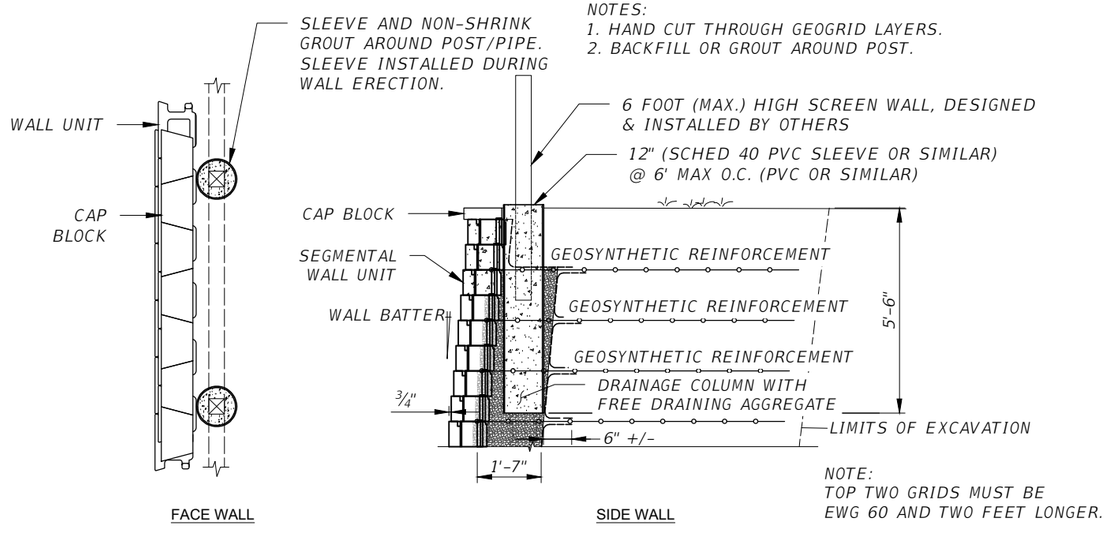
1. GUARDRAIL BY OTHERS REQ'D WHEN EXPOSED WALL HEIGHT IS 30" OR GREATER, PER FBC 1015.2. CORE DRILL THRU CAP AND INTO FIRST FILLED COURSE 8" MINIMUM AND GROUT RAILING IN PLACE. RAILING DESIGN AND FINAL EMBEDMENT. LOCATION, SPACING AND QUANTITY BY RAILING DESIGNER IN ACCORDANCE WITH FBC AND OWNER REQUIREMENTS. TYP.
2. ATTACHMENT DESIGN IS NOT TO BE USED WITH SOLID PRIVACY FENCES, WIND BARRIERS, SOUND BARRIERS OR OTHER SOLID TYPE STRUCTURES.
3. REQUIRED GUARDRAILS SHALL NOT BE LESS THAN 42 INCHES HIGH PER FBC 1015.3.
4. REQUIRED GUARDRAILS SHALL NOT HAVE OPENINGS WHICH ALLOW THE PASSAGE OF A SPHERE 4 INCHES IN DIAMETER FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT, PER FBC 1015.4.
5. HANDRAILS AND GUARDS SHALL BE ABLE TO RESIST:
   1. 50 LBS PER LINEAR FOOT ALONG THE TOP RAIL OR,
   2. A SINGLE CONCENTRATED LOAD OF 200 LBS APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP, AND TO TRANSFER THIS LOAD THROUGH THE SUPPORTS TO THE STRUCTURE. PER FBC 1607.8.1. THESE LOADS ARE NON-CONCURRENT.
6. INTERMEDIATE RAILS & PICKETS SHALL BE ABLE TO RESIST: 50 LBS OVER ONE SQUARE FOOT, NON-CONCURRENT WITH RAILING LOADS ABOVE, PER FBC 1607.8.1.2.



NOTES:
1. LOCATE THE FENCE POSTS IN THE FIELD. MAX SPACING IS 6 FEET.
2. INSTALL SLEEVE AS THE WALL IS BEING CONSTRUCTED. CAREFULLY CUT THE TOP TWO GRIDS TO MATCH DIAMETER OF THE PIPE.
3. AFTER WALL IS CONSTRUCTED, PLACE FENCE POST INTO SLEEVE AND GROUT INTO PLACE USING 2,500 PSI PUMP MIX.

TYPICAL SECTION
OPTION C - POST OR SLEEVE DETAIL

NOT TO SCALE



TYPICAL SECTION
OPTION D - SCREEN WALL DETAIL

NOT TO SCALE

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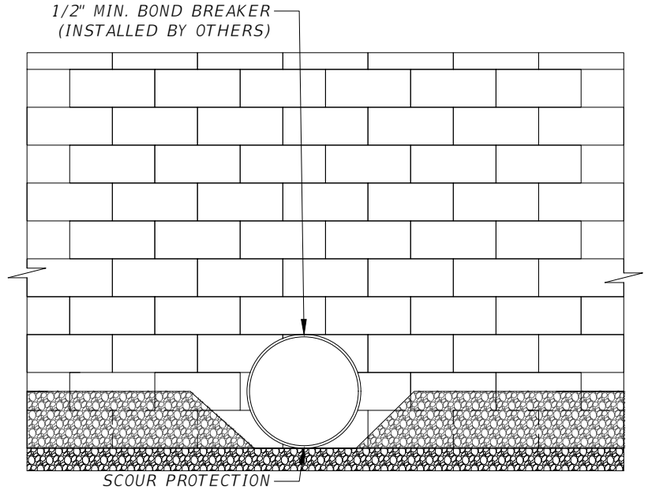
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL
TYPICAL SECTION AND STANDARD DETAILS

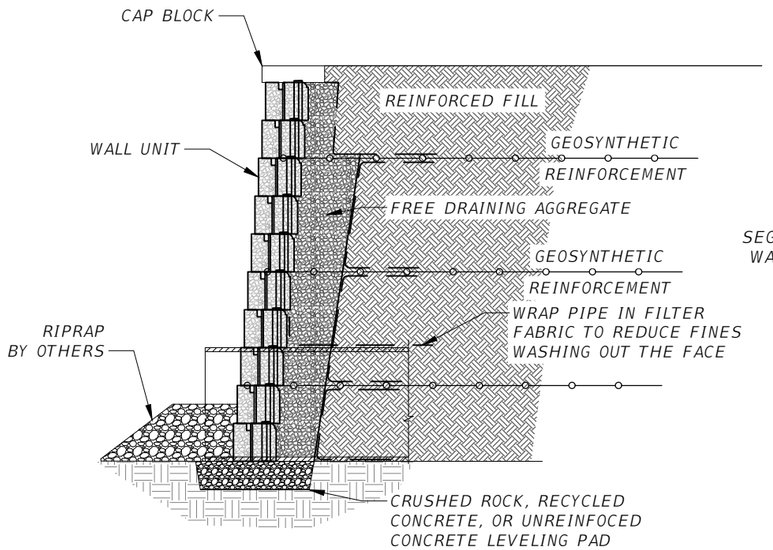
DRAWING
S-1A

SHEET 2 OF 11



PIPE PENETRATION ELEVATION

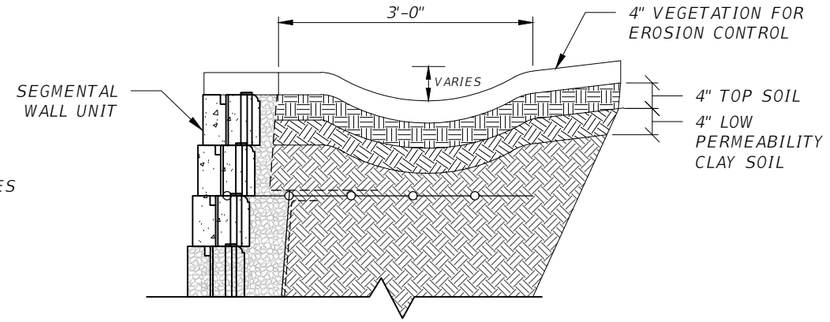
NOT TO SCALE



PIPE PENETRATION SECTION

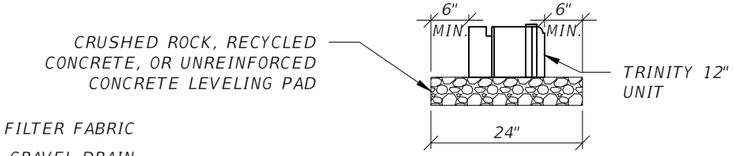
NOT TO SCALE

CIVIL ENGINEER & CONTRACTOR NOTE: PER NCMA DESIGN MANUAL, BACKSLOPES SHALL HAVE SWALES OR AREA DRAINS TO MINIMIZE WATER FLOWING OVER TOP OF WALL DURING EXTREME RAIN EVENTS (100 YEAR STORM)



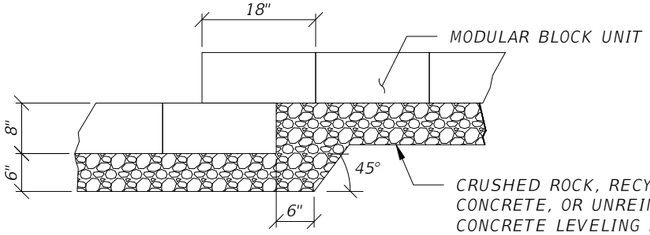
DRAINAGE SWALE EARTH LINED

NOT TO SCALE



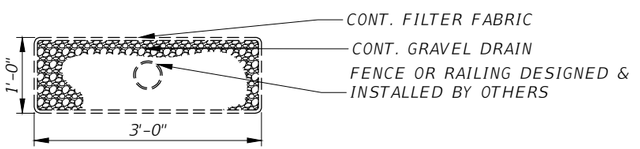
LEVELING PAD CROSS - SECTION

NOT TO SCALE



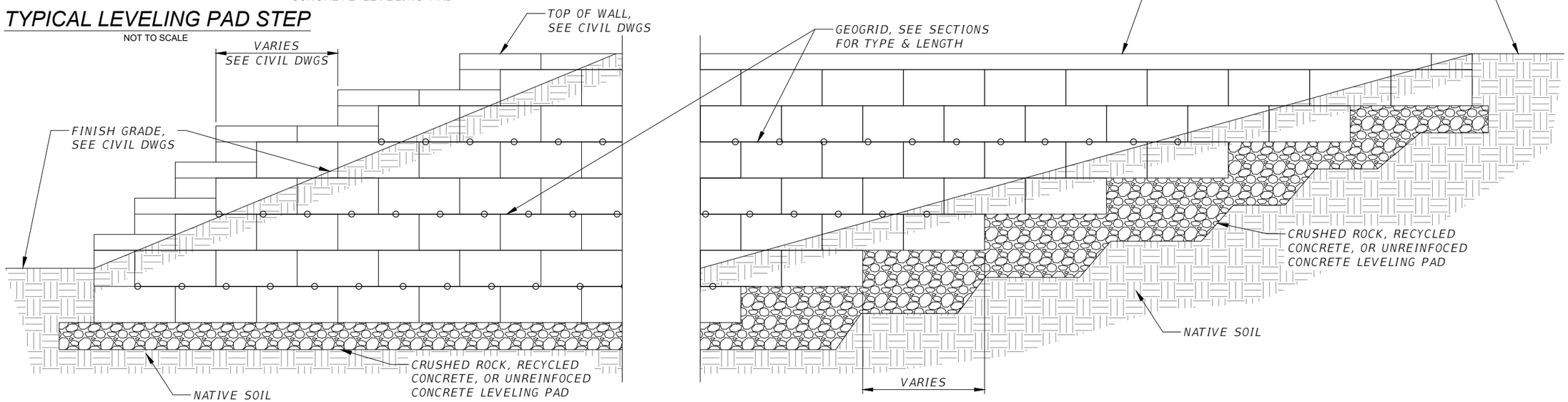
TYPICAL LEVELING PAD STEP

NOT TO SCALE



COLLECTOR DRAIN DETAIL

NOT TO SCALE



TYPICAL ELEVATION & LAYOUT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
KENNETH T. ZAGERS
BASE CONSULTANTS
1214 EAST CONCORD STREET
ORLANDO, FL 32803
REG. NO.: PE. 58221

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BASE CONSULTANTS
Engineering + Construction | COA: 6526
ORLANDO, FLORIDA 32803
P: 407.377.2277

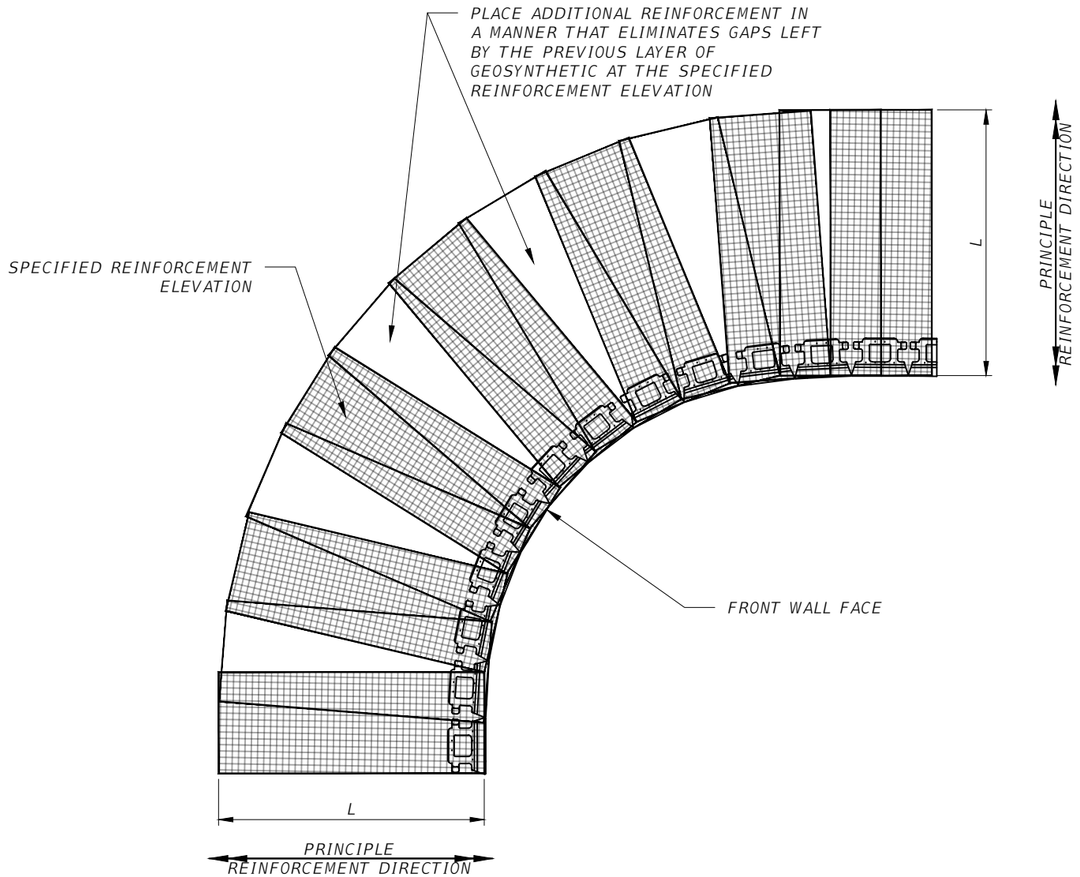
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL

TYPICAL SECTION AND STANDARD DETAILS

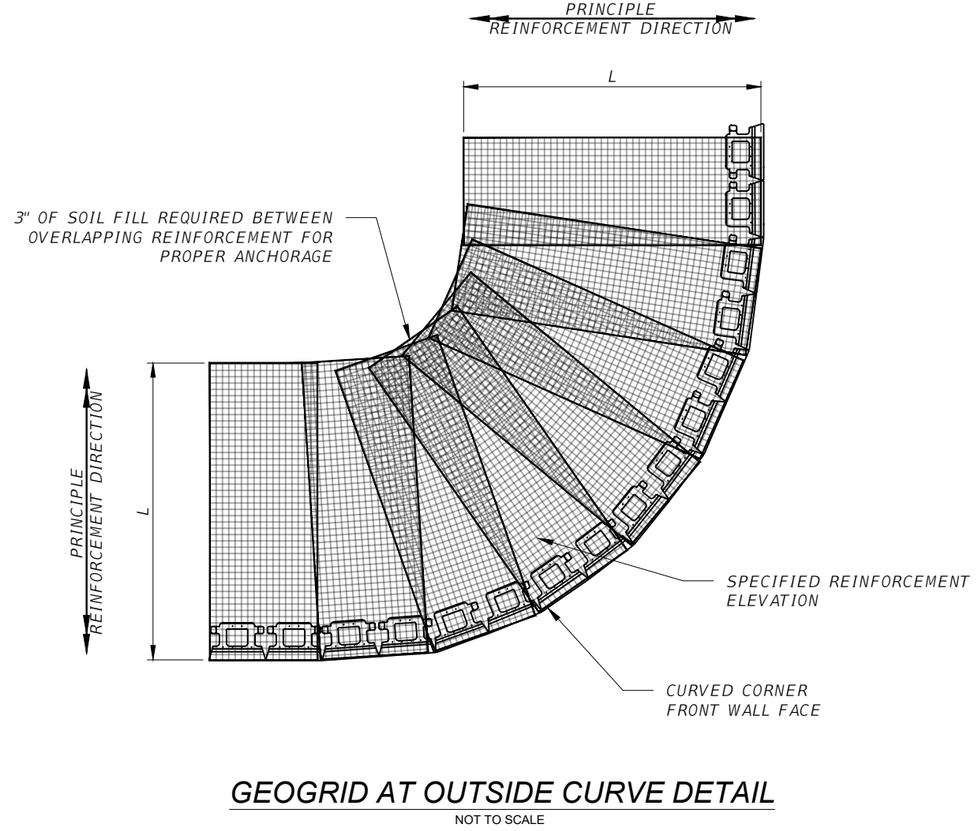
DRAWING

S-1B



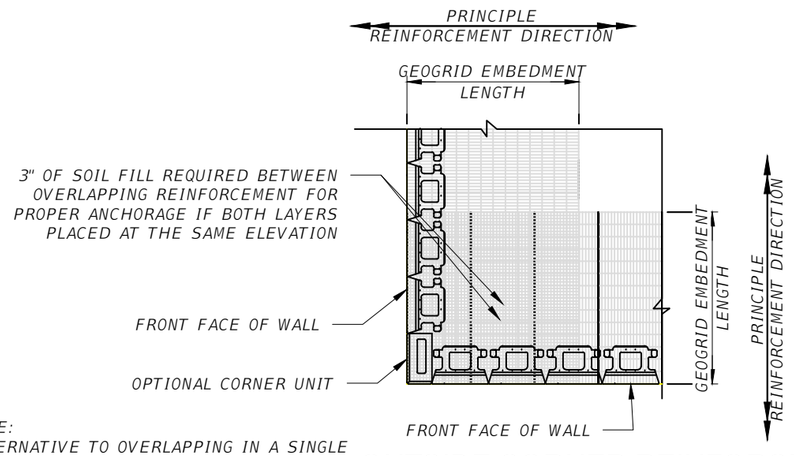
GEOGRID AT INSIDE CURVE DETAIL

NOT TO SCALE



GEOGRID AT OUTSIDE CURVE DETAIL

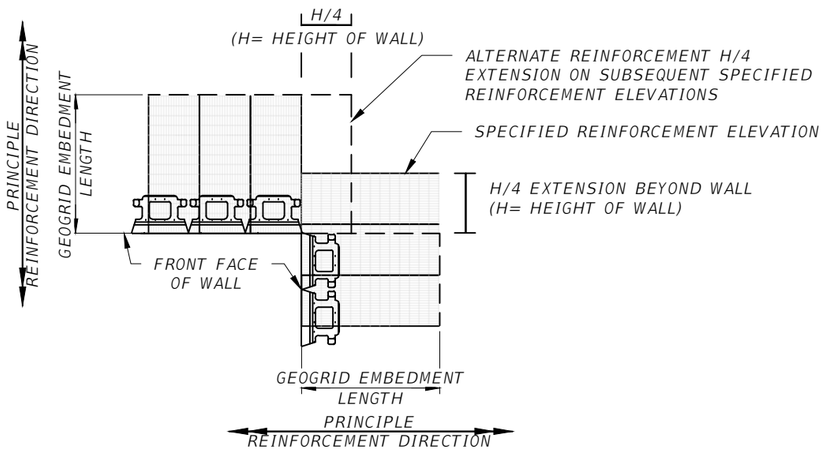
NOT TO SCALE



NOTE:
ALTERNATIVE TO OVERLAPPING IN A SINGLE COURSE. REINFORCEMENT COULD BE PLACED IN THE PERPENDICULAR PRINCIPAL DIRECTION IN THE CROSS-OVER ARE ON THE SUCCEEDING COURSE.

OUTSIDE CORNER REINFORCEMENT LAYOUT DETAIL

NOT TO SCALE



INSIDE CORNER REINFORCEMENT LAYOUT DETAIL

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
KENNETH T. ZAGERS
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Engineering + Construction | COC: 6526507
1214 E. Concord Street, Orlando, FL 32803
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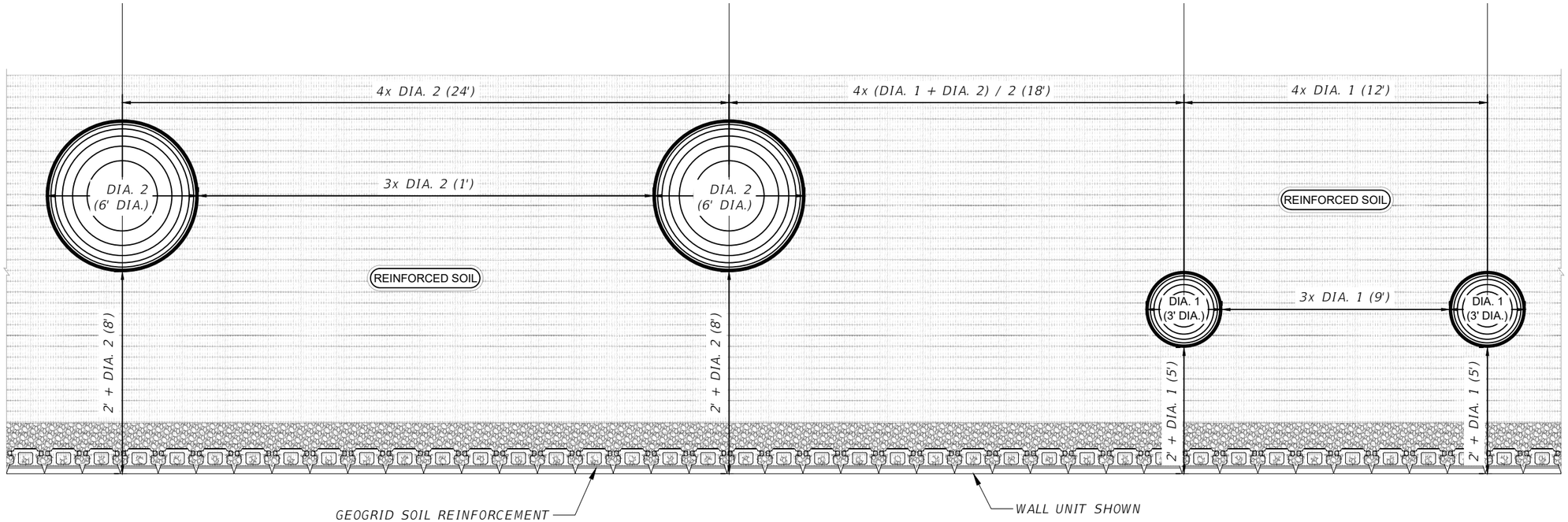
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL
TYPICAL SECTION AND STANDARD DETAILS

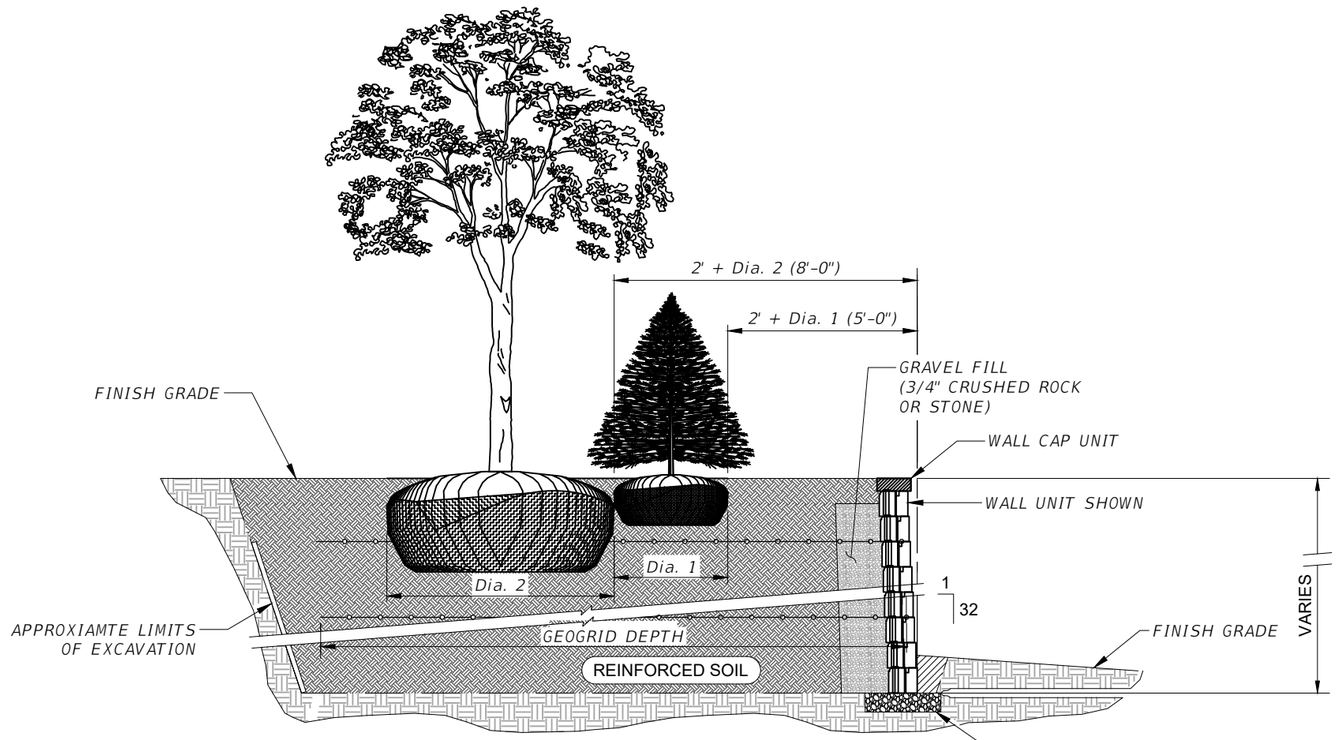
DRAWING
S-10

SHEET 4 OF 11



TYPICAL PLANTING LIMITS PLAN

NOT TO SCALE



TYPICAL PLANTING LIMITS SECTION

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
KENNETH T. ZAGERS
BASE CONSULTANTS
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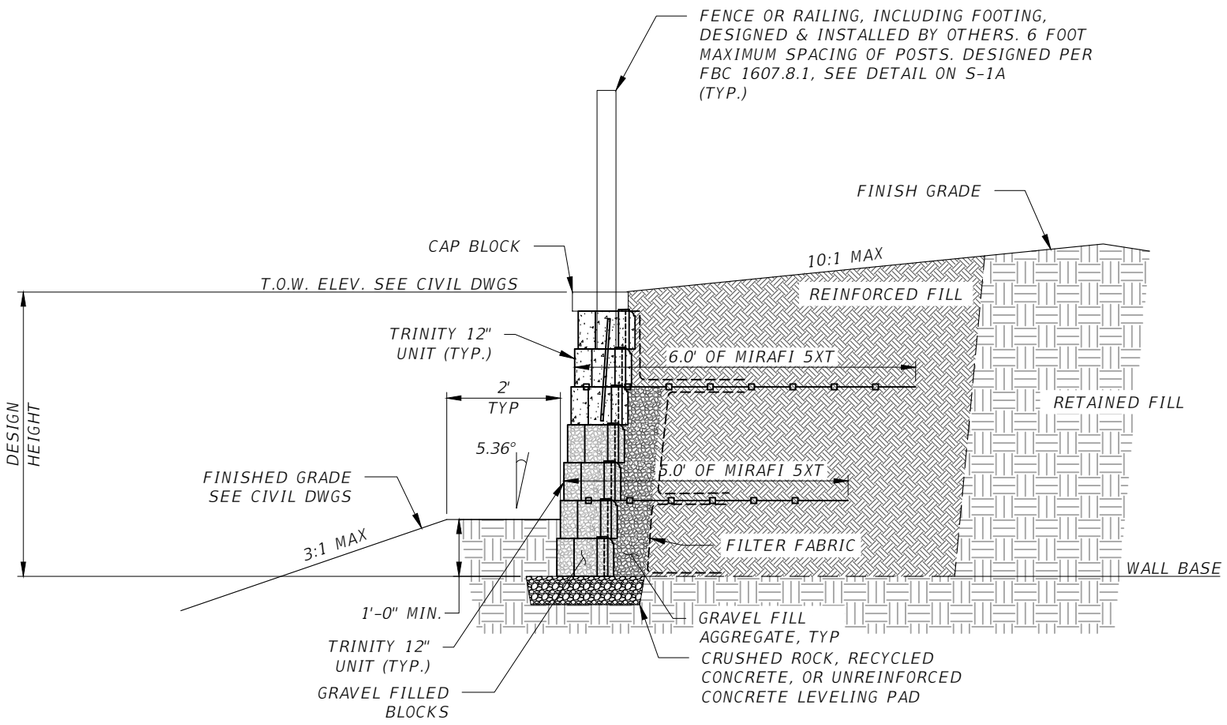
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL

TYPICAL SECTION AND STANDARD DETAILS

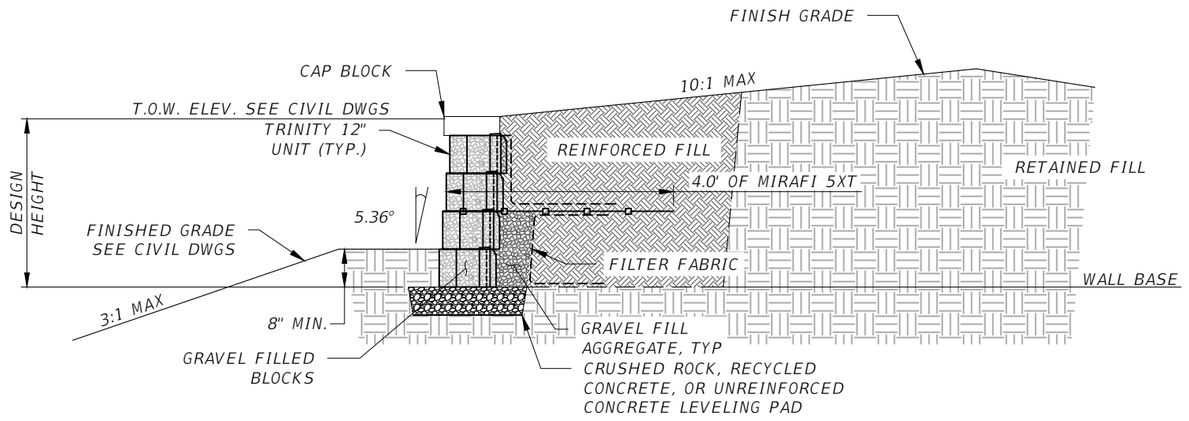
DRAWING

S-1D



SEGMENTAL WALL 8 - 5'-0" MAX DESIGN HEIGHT

NOT TO SCALE



SEGMENTAL WALL 8 - 3'-0" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
KENNETH T. ZAGERS
BASE CONSULTANTS
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ORLANDO, FL 32803
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Orlando, FL 32803
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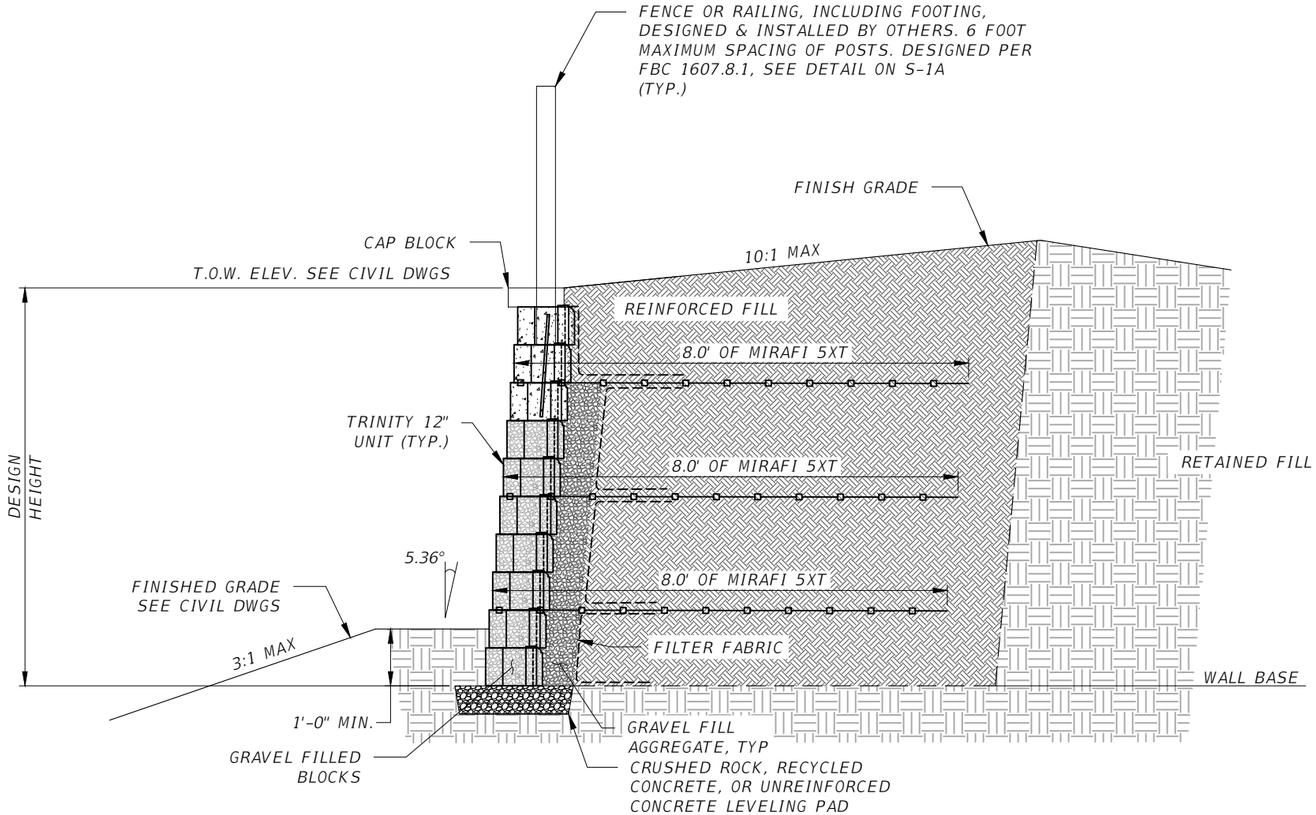
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING
S-2

SHEET 6 OF 11



SEGMENTAL WALL 8 - 7'-0" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
KENNETH T. ZAGERS
BASE CONSULTANTS
1214 EAST CONCORD STREET
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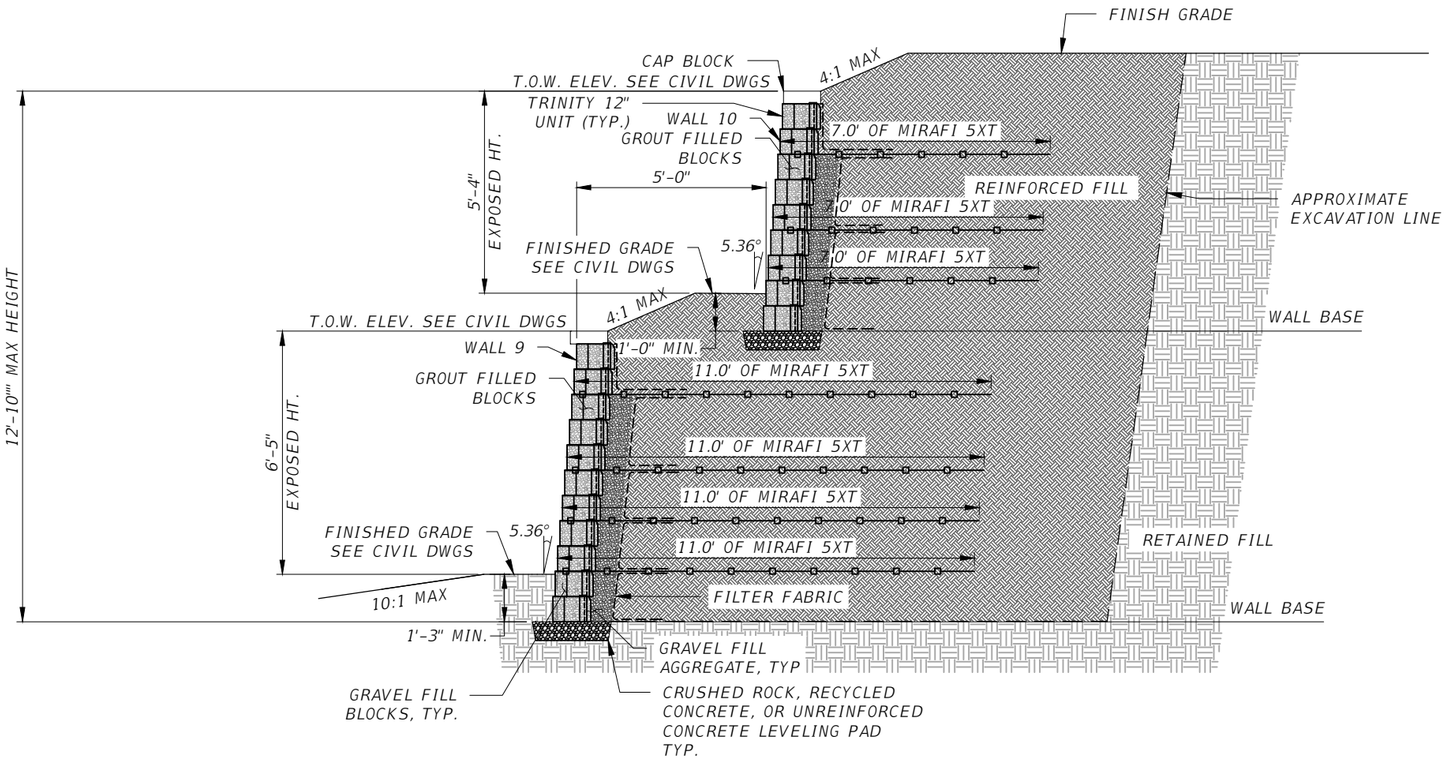
(407) 377-2777

SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING
S-3



TWO TIERED SEGMENTAL WALLS 9 AND 10 - 14'-1" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
KENNETH T. ZAGERS
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ORLANDO, FL 32803
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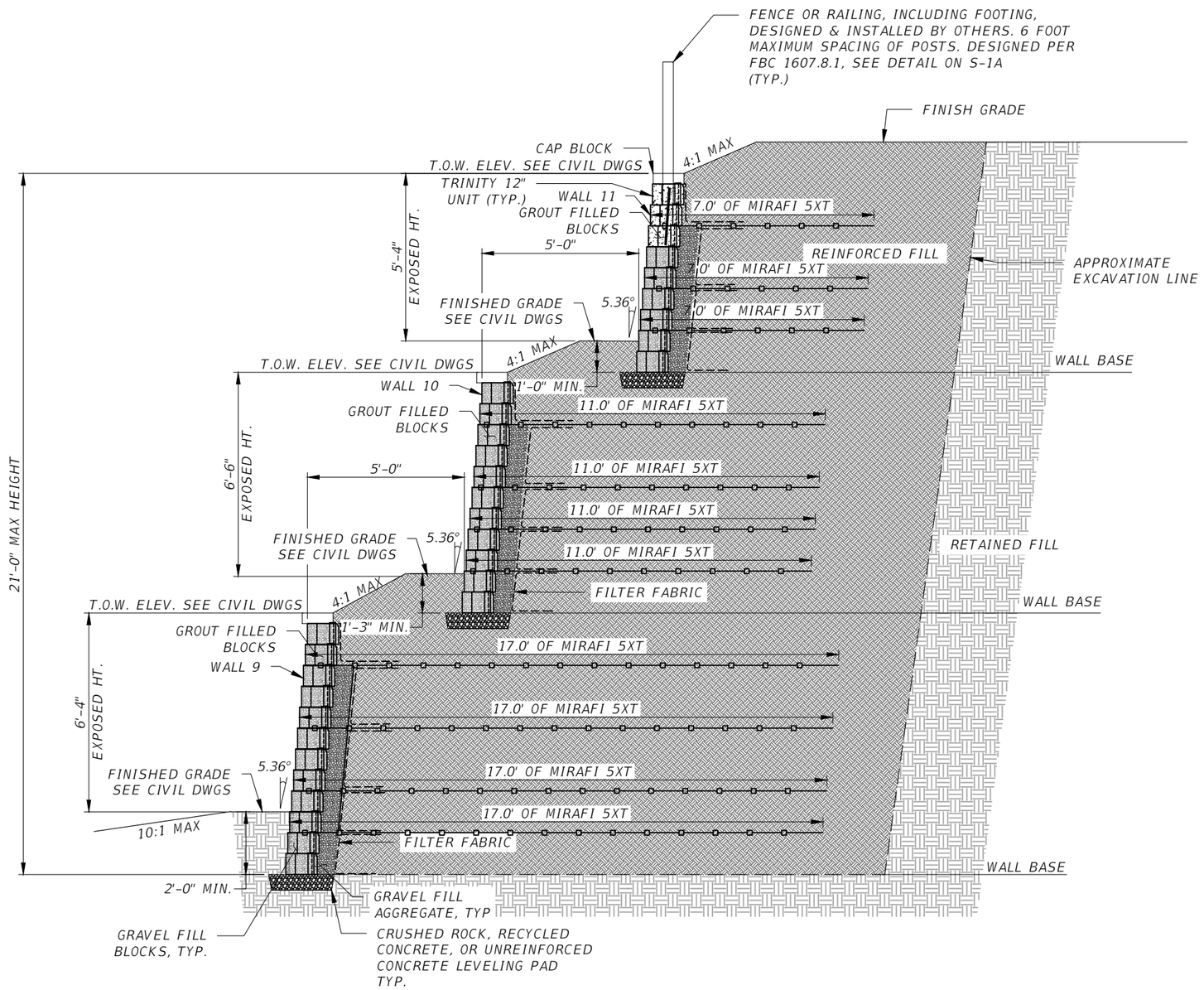
BASE CONSULTANTS
Engineering - Construction | COC: 6526502

SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING
S-4



TIERED SEGMENTAL WALLS 9,10 & 11 - 22'-4" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
KENNETH T. ZAGERS
BASE CONSULTANTS
1214 EAST CONCORD STREET
ORLANDO, FL 32803
REG. NO.: PE 58221

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Engineering + Construction | COC 6526507
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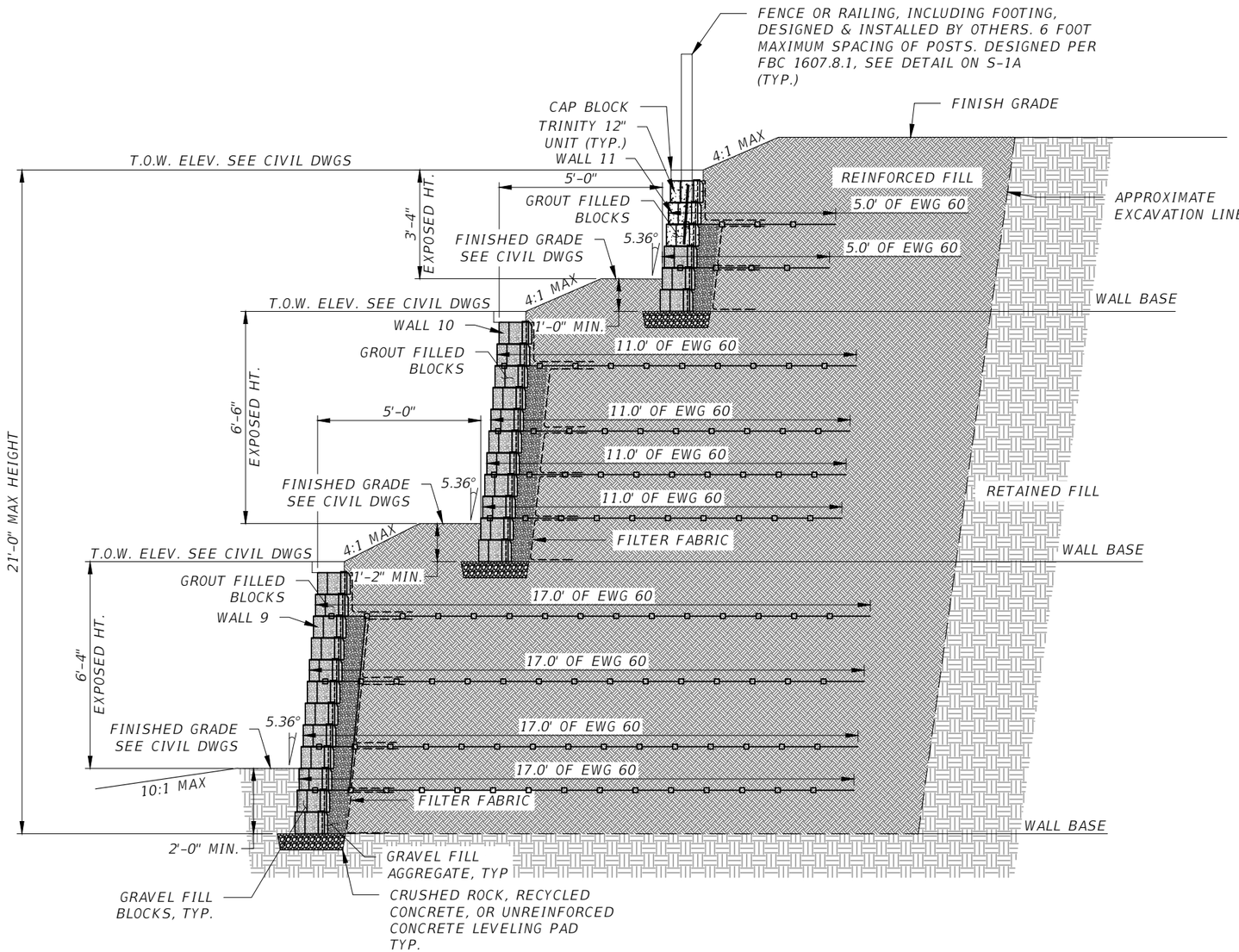
ORLANDO, FLORIDA 32803
p: (407) 377-2277

SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING
S-5

SHEET 9 OF 11



TIERED SEGMENTAL WALLS 9,10 & 11 - 20'-4" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
KENNETH T. ZAGERS
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ORLANDO, FL 32803
REG. NO.: PE. 58221

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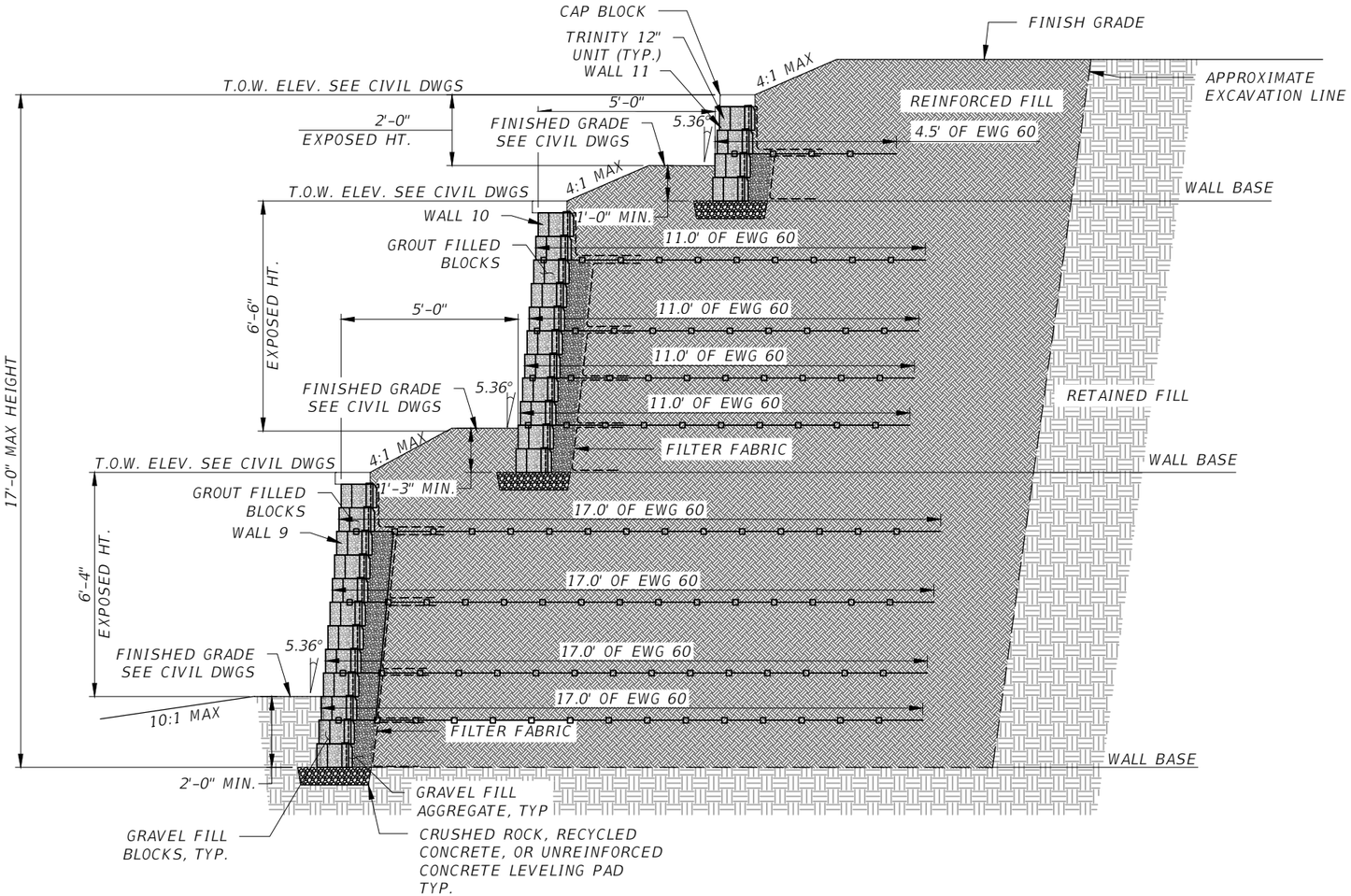
ph: 407.377.2777

SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING
S-6

SHEET 10 OF 11



TIERED SEGMENTAL WALLS 9,10 & 11 - 19'-0" MAX DESIGN HEIGHT

NOT TO SCALE

NO.	ISSUED FOR	DATE
1		
2		
3		

STRUCTURAL ENGINEER:
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ORLANDO, FL 32803
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PAVERSCAPE, INC
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PHONE: (407) 381-1022 FAX: (407) 381-1034

BASE CONSULTANTS
Engineering + Construction | COC: 6525602
1214 EAST CONCORD STREET, ORLANDO, FL 32803
ORLANDO, FLORIDA 32803
P: 407.422.2222

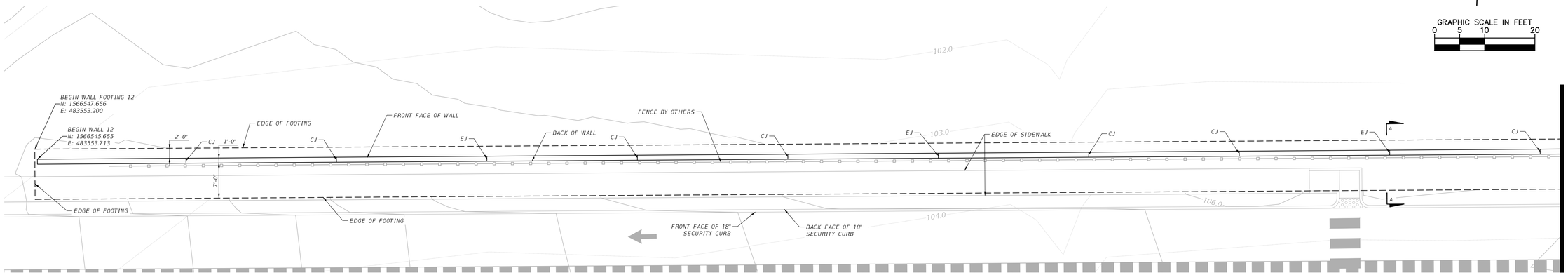
SHOPPES @ EAST SHORE, APOPKA, FL

SEGMENTAL WALL SECTION

DRAWING
S-7

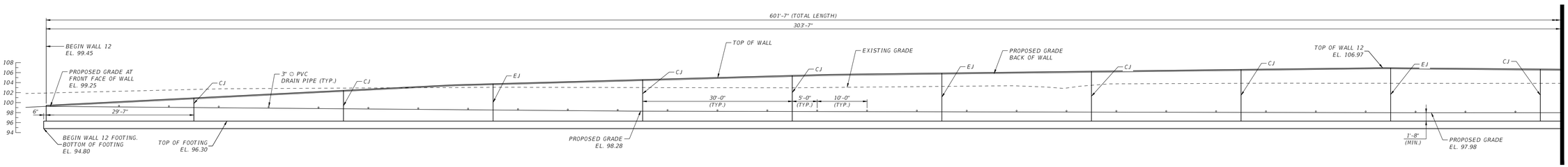
SHEET 11 OF 11

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by VHB shall be without liability to VHB.



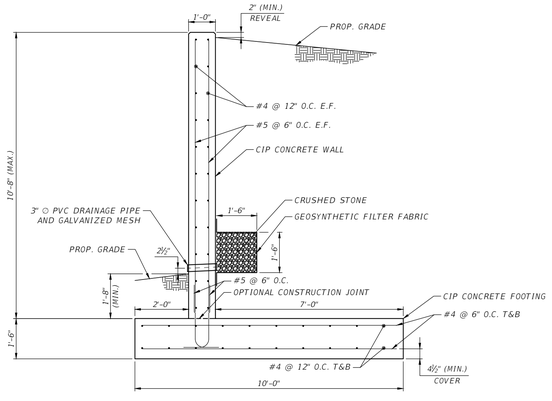
RETAINING WALL 12 PLAN

SCALE: 1" = 10'



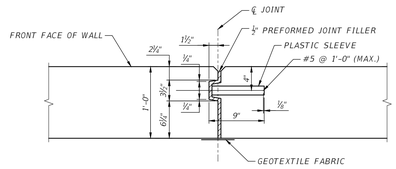
RETAINING WALL 12 FRONT FACE ELEVATION

SCALE: 1" = 10'



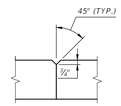
RETAINING WALL 12 SECTION A-A

SCALE: 3/8" = 1'-0"



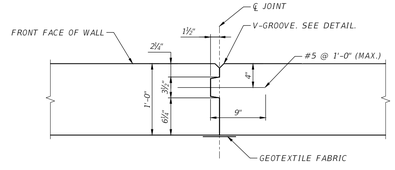
EXPANSION JOINT DETAIL

SCALE: 1" = 1'-0"



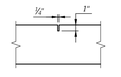
V-GROOVE DETAIL

SCALE: 1" = 1'-0"



CONSTRUCTION JOINT DETAIL (OPTIONAL)

SCALE: 1" = 1'-0"



CONTRACTION JOINT DETAIL

SCALE: 1" = 1'-0"

NOTES:

1. GOVERNING SPECIFICATIONS: FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION FY 2024-25.
2. CONCRETE WALL STEM AND FOOTERS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5,500 PSI AT 28 DAYS.
3. ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.
4. ALL REBAR SHALL HAVE 3" CLEAR COVER, UNLESS NOTED OTHERWISE.
5. ALL 180 DEGREE AND 90 DEGREE HOOKS SHALL BE STANDARD HOOKS
6. PROVIDE MINIMUM LAP PER AASHTO LRFD BETWEEN HOOKED FOOTING BARS AND VERTICAL WALL BARS.
7. PROVIDE ¾" CHAMFER TO ALL EDGES OF EXPOSED CONCRETE SURFACES.
8. MAXIMUM SPACING BETWEEN JOINT IS 30FT. AT MINIMUM EVERY THIRD JOINT TO BE AN EXPANSION JOINT. CONTRACTOR MAY PROPOSE ALTERNATE JOINT LAYOUTS INCLUDING CONSTRUCTION JOINT LOCATIONS TO THE ENGINEER FOR REVIEW AND APPROVAL.
9. INSIDE ENDS OF WEEP HOLES SHALL BE COVERED WITH 1.0 SQUARE FOOT OF GALVANIZED MESH WITH ½" OPENINGS.
10. DRAIN SHALL BE 1'-6"x1'-6"X1'-6" CLEAN, BROKEN STONE OR GRAVEL, GRADED AND PLACED TO ALLOW FREE DRAINAGE. PLACE TYPE D-3 (SEE SPECIFICATION SECTION 985) GEOTEXTILE FABRIC, AROUND THE PERIMETER TO PREVENT FILL FROM WASHING OUT.
11. PRIOR TO CONSTRUCTION, SOILS SHALL BE DEWATERED TO A MINIMUM 2'-0" BELOW THE PROPOSED FOUNDATION AS REQUIRED.
12. SUBGRADE SOILS SHALL BE COMPACTED 2'-0" BELOW THE BOTTOM OF THE FOOTINGS TO AT LEAST 95% OF THE MODIFIED PROCTOR TEXT MAXIMUM DRY DENSITY (ASTM D1557).
13. CONTRACTOR'S ATTENTION IS CALLED TO THE PROXIMITY OF CIP WALL 13 WITH THE ROOT NON-DISTURBANCE ZONE SHOWN ON SHEET ST-02. TEMPORARY SUPPORT IN THIS AREA TO MINIMIZE ANY DISTURBANCE.
14. RAILING NOT SHOWN FOR CLARITY. SEE CIVIL SHEETS FOR RAILING INFORMATION.
15. ABBREVIATIONS:

CIP	CAST IN PLACE
CJ	CONTRACTION JOINT
E.F.	EACH FACE
EJ	EXPANSION JOINT
EL.	ELEVATION
MAX.	MAXIMUM
MIN.	MINIMUM
O.C.	ON CENTER
T&B	TOP AND BOTTOM

No.	REVISIONS	DATE	BY
1	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
2	CITY OF APOPKA COMMENTS	05/25/23	JAC

Engineers | Scientists
Planners | Designers
225 E. Robinson St., Suite 300
Orlando, FL (407)839-4006
Cert. of Authorization # 3932
Kenneth B. Ray, P.E.
P.E. No. 74776

LICENSED PROFESSIONAL

FLORIDA LICENSE NUMBER

DATE: 4/25/2024

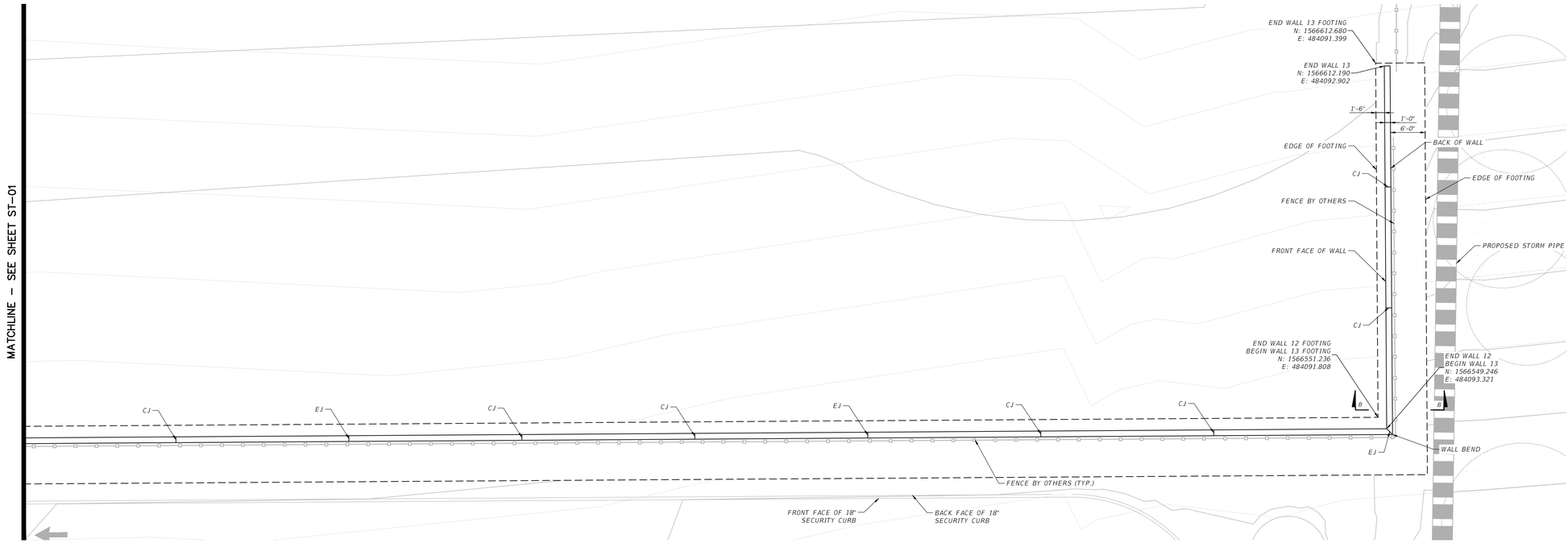
VHB PROJECT 64253.01
DATE 4/25/2024
SCALE AS SHOWN
DESIGNED BY WRV
DRAWN BY WRV
CHECKED BY LJP

CIP RETAINING WALL PLAN, ELEVATION, AND SECTIONS

THE SHOPPES AT EAST SHORE-PHASE 1

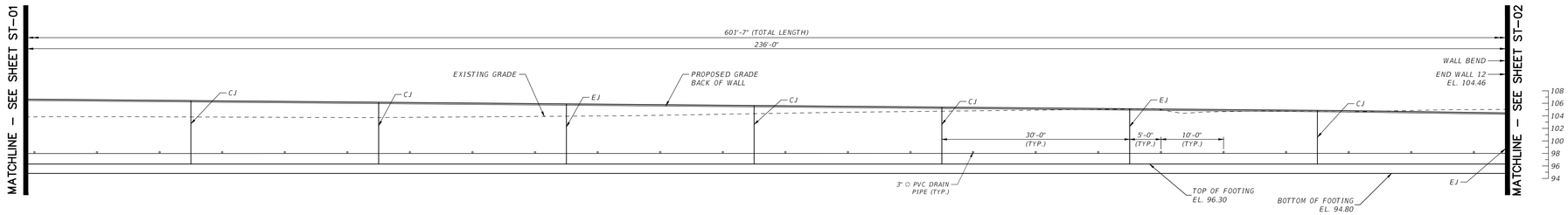
CITY OF APOPKA FLORIDA

SHEET NUMBER
ST-01



RETAINING WALL PLAN

SCALE: 1" = 10'

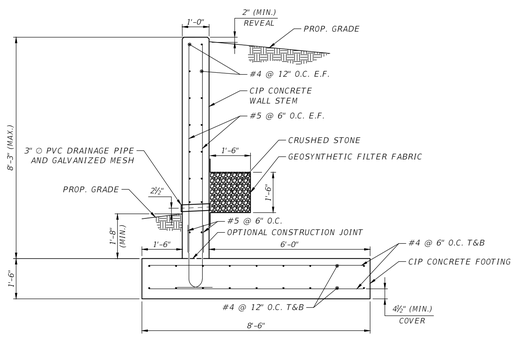


RETAINING WALL 12 FRONT FACE ELEVATION

SCALE: 1" = 10'

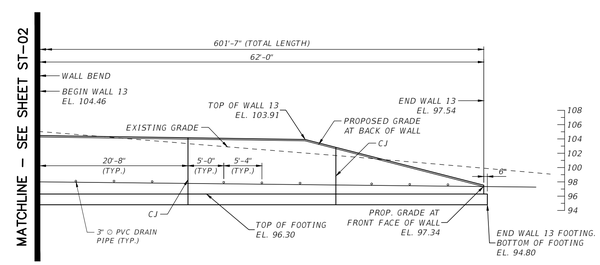
NOTES:

1. FOR WALL NOTES SEE SHEET ST-01.



RETAINING WALL 13 SECTION B-B

SCALE: 3/8" = 1'-0"



RETAINING WALL 13 FRONT FACE ELEVATION

SCALE: 1" = 10'

No.	REVISIONS	DATE	BY
1	ORANGE COUNTY COMMENTS #1	08/10/23	JDB
2	CITY OF APOPKA COMMENTS	05/25/23	JAC

Engineers | Scientists
Planners | Designers
225 E. Robinson St., Suite 300
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Cert. of Authorization # 3932
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LICENSED PROFESSIONAL

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DATE: 4/25/2024

VHB PROJECT 64253.01
DATE 4/25/2024
SCALE AS SHOWN
DESIGNED BY WRV
DRAWN BY WRV
CHECKED BY LJP

CIP RETAINING WALL PLAN, ELEVATION, AND SECTION

THE SHOPPES AT EAST SHORE-PHASE 1

CITY OF APOPKA FLORIDA

SHEET NUMBER
ST-02

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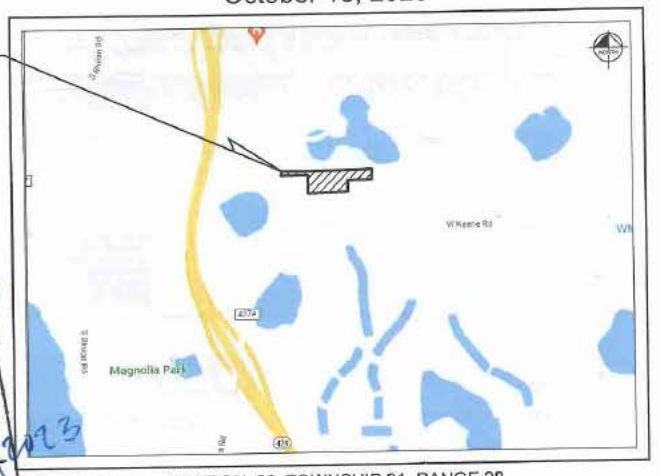
CONSTRUCTION SITE PLAN
FOR
SHOPPES AT EAST SHORE MULTI-FAMILY

ORANGE COUNTY PARCEL ID NO.
20-21-28-0000-00-021
20-21-28-0000-00-028

CITY OF APOPKA, FLORIDA

October 18, 2023

SOILS MAP
N.T.S.



SECTION 20, TOWNSHIP 21, RANGE 28
LOCATION MAP
N.T.S.

AERIAL PHOTOGRAPH
N.T.S.

INDEX OF SHEETS

C0.0	COVER SHEET
C1.0 - C1.1	GENERAL NOTES
C2.0	SWPPP
C2.1	EROSION CONTROL DETAILS
C3.0	EXISTING CONDITIONS AND DEMOLITION PLAN
C4.0	OVERALL SITE PLAN
C4.1 - C4.2	SITE PLAN
C5.0 - C5.1	PAVING GRADING AND DRAINAGE PLAN
C6.0 - C6.1	UTILITY PLAN
C7.0	FIRE TRUCK ROUTING PLAN
C7.1	GARBAGE TRUCK ROUTING PLAN
C7.2	FIRE ACCESS ROAD
C8.0 - C8.2	CITY OF APOPKA UTILITY DETAILS
C9.0 - C9.1	GENERAL CONSTRUCTION DETAILS
L1.00	OVERALL LANDSCAPE PLAN
L1.01 - L1.03	LANDSCAPE PLAN
L1.03	LANDSCAPE PLANT SCHEDULE & NOTES
L1.50	LANDSCAPE DETAILS
L1.51	LANDSCAPE SPECIFICAITONS
L2.00	OVERALL IRRIGATION PLAN
L2.01 - L2.02	IRRIGATION PLAN
L2.50	IRRIGATION DETAILS
L2.51	IRRIGATION SPECIFICATIONS & NOTES
E1.03	SITE PLAN PHOTOMETRICS
E1.04	SITE FIXTURE CUTSHEETS

LEGAL DESCRIPTION:

A PORTION OF:

PID 20-21-28-0000-00-021

BEG 766.7 FT N & 478.15 FT W OF S1/4 COR OF SEC RUN W 1245.71 FT TO ST RD 9/W NLY ALONG R/W TO A PT 346.47 FT S OF N LINE OF S1/2 OF SW1/4 RUN E 1245.71 FT S 346.47 FT TO POB IN SEC 20-21-28

PID 20-21-28-0000-00-028

BEG 766.7 FT N OF S1/4 COR OF SEC RUN E 331.67 FT N 232.54 FT W 331.67 FT S 232.54 FT TO POB IN SEC 20-21-28

CONTAINING 7.47 ACRES

CITY OF APOPKA
DEVELOPMENT REVIEW COMMITTEE
Compliance Review Per Land Development Code

DEPARTMENT	NAME	DATE
ENGINEERING		11-2-23
FIRE		11-7-23
BUILDING		11-6-23
PLANNING/ZONING		11/6/2023
POLICE		11/6/2023
PUBLIC SERVICES/ UTILITIES		11-7-23

REVIEW/APPROVAL(S) REQUIRED — DATE

Development Review Committee	Yes ☑	No ☐	11/8/2023
Planning Commission	Yes ☐	No ☐	
City Council	Yes ☐	No ☐	

THIS REVIEW / APPROVAL DOES NOT GRANT PERMISSION TO VIOLATE OR WAIVE ANY APPLICABLE CITY CODE.

THIS PLAN MUST BE KEPT ON JOB SITE.

UTILITY PROVIDERS

WATER/SEWER:
CITY OF APOPKA
748 EAST CLEVELAND STREET
APOPKA, FL 32703
CONTACT: VLADIMIR SIMONOVSKI
PHONE: (407) 703-1731

ELECTRIC :
DUKE ENERGY
452 EAST CROWN POINT ROAD
WINTER GARDEN, FL 34787
CONTACT: STEPHANIE OLMO
PHONE: (407) 905-3376

GAS:
LAKE APOPKA NATURAL GAS DISTRICT
1320 WINTER GARDEN VINELAND ROAD
WINTER PARK, FL 34787
CONTACT: PATRICK NGUYEN
PHONE: (407) 656-2734

CABLE:
[illegible]
[illegible] AMERICAN BLVD
ORLANDO, FL 32810
CONTACT: RAMON NUNEZ
PHONE: (407) 215-5870

TELEPHONE:
CENTURYLINK
1325 BLAIRSTONE ROAD, ROOM 113
TALLAHASSEE, FL 32301
CONTACT: BILL MCCLOUD
PHONE: (850) 599-1444

PROJECT TEAM

OWNER:
SHOPPES AT EAST SHORE LLC
1200 NETWORK CENTRE DR
EFFINGHAM, IL 62401-4602

DEVELOPER:
SPARROW PARTNERS
2500 BEE CAVES RD. SUITE 380
AUSTIN, TX 78746
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CIVIL ENGINEER:
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SURVEYOR:
ALLEN & COMPANY
16 EAST PLANT STREET
WINTER GARDEN, FL 34787
CONTACT: JAMES RICKMAN
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LANDSCAPE ARCHITECT:
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PREPARED BY
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L. JORDAN DRAPER, P.E.
FLORIDA LICENSE NUMBER
81928
10/6/2023

10/6/23

SHOPPES AT EAST SHORE MULTI-FAMILY
1/26/2023
ENGINEER'S PROJECT No. 249218001

NO.	DESCRIPTION	DATE

RECEIVED
OCT 20 2023
PLANNING & ZONING

Drawing name: K:\ORL_Civil\249218001--Shoppes at East Shore ALF\CADD\CIVIL\CSP\PlanSheets\C0.0 -- COVER.dwg C0.0 -- COVER SHEET Oct 18, 2023 12:43pm by: cole.sauer
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GENERAL

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING (HORIZONTALLY AND VERTICALLY) ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND FOR NOTIFYING THE VARIOUS UTILITY COMPANIES TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION, TEMPORARY DISTRIBUTION SERVICE, OR CLARIFICATION OF ACTIVITY REGARDING SAID UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THESE PLANS OR FIELD LOCATED. ALL OTHER UTILITIES WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANIES AND THE CONTRACTOR SHALL COOPERATE WITH THEM DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE OF THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED. CONTRACTOR SHALL CALL "SUNSHINE ONE" AT 811 TO HAVE EXISTING UTILITIES LOCATED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
2. THE LOCATIONS OF ALL EXISTING UTILITIES, STORM DRAINAGE SYSTEMS, AND TOPOGRAPHIC FEATURES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. SHOULD A DISCREPANCY ARISE BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, WHICH WOULD APPRECIABLY AFFECT THE EXECUTION OF THESE PLANS, THE CONTRACTOR SHALL HALT CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY.
3. 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.
4. THE CONTRACTOR SHALL EXERCISE CAUTION IN AREAS OF BURIED UTILITIES AND SHALL CALL "SUNSHINE 811" AT 811 OR 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO ARRANGE FOR FIELD LOCATIONS OF BURIED UTILITIES.
5. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED, BY THE CONTRACTOR OR SUB-CONTRACTORS, AS CALLED FOR IN THESE CONTRACT DOCUMENTS.
6. 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, SUCH AS RIGHT OF WAY PERMIT(S), EXCAVATION/FILL PERMIT(S), FIRE PROTECTION PERMIT(S), OR UNDERGROUND UTILITY PERMIT(S), PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL INSPECTION CRITERIA OF APPLICABLE AGENCIES, SCHEDULING OF INSPECTIONS, AND OBTAINING REQUIRED INSPECTIONS FROM AGENCY.
7. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, ON ALL PRECAST AND MANUFACTURED ITEMS, TO THE OWNER'S ENGINEER FOR REVIEW. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. ALL UTILITY SERVICE STUB-OUTS (WATER, SANITARY SEWER, etc.) ARE TO BE INSTALLED WITHIN 5' OF BUILDING(S), UNLESS OTHERWISE NOTED ON PLANS.
9. 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.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AN R-O-W UTILIZATION 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 DIMENSIONS ARE TO FACE OF CURB.
16. ALL SIGNAGE MUST COMPLY WITH THE LAND DEVELOPMENT CODE OF THE CITY OF APOPKA, FLORIDA.
17. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING ACTIVITIES NECESSARY TO PERFORM THE WORK WITHIN THESE PLANS.
18. THE CONTRACTOR SHALL RESTORE OFF-SITE CONSTRUCTION AREAS TO EQUAL AND/OR BETTER CONDITION THAN EXISTING PRIOR TO START OF CONSTRUCTION.
19. THE CONTRACTOR SHALL COMPLY WITH THE LEGAL LOAD RESTRICTIONS IN HAULING OF MATERIALS IN PUBLIC ROADS BEYOND THE LIMITS OF WORK. A SPECIAL PERMIT WILL NOT RELIEVE THE CONTRACTOR OF LIABILITY FOR THE DAMAGE WHICH MAY RESULT FROM THE MOVING OF MATERIAL AND EQUIPMENT.
20. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A LICENSED LAND SURVEYOR CURRENTLY REGISTERED IN THE STATE OF FLORIDA.
21. 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.
22. ALL WORK PERFORMED WITHIN THE FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE 2022-23 EDITIONS OF FDOT STANDARD PLANS, SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE 2017 UTILITY ACCOMMODATION MANUAL.

TREES AND VEGETATION

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE BUFFERS AND RETENTION AND DETENTION FACILITIES UNTIL THE WORK HAS BEEN ACCEPTED BY THE OWNER. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.

DEMOLITION

1. CONTRACTOR SHALL SUBMIT DEMOLITION SCHEDULE TO OWNER PRIOR TO PROCEEDING WITH DEMOLITION ACTIVITIES.
2. EXTENT OF SITE CLEARING IS SHOWN ON DRAWINGS.
3. CONTRACTOR SHALL CONDUCT SITE DEMOLITION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
4. CONTRACTOR SHALL PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED ON PLAN "EXISTING TO REMAIN".
5. CONTRACTOR SHALL RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
6. CONTRACTOR SHALL REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF-SITE IN A LEGAL MANNER.
7. CONTRACTOR SHALL DEMOLISH AND COMPLETELY REMOVE FROM SITE MATERIAL INDICATED ON PLAN OR NOTES "TO BE REMOVED".
8. CONTRACTOR SHALL 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.

STORM DRAINAGE SYSTEM

1. STANDARD INDEXES REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
2. THE LATEST EDITION OF F.D.O.T. "DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM" IS REFERRED TO FOR THE STRUCTURAL DESIGN OF DRAINAGE STRUCTURES SPECIFIED IN THESE PLANS, AS REFERENCED BY STANDARD INDEX. ALL SPECIALTY DRAINAGE STRUCTURES REQUIRE SEPARATE STRUCTURAL DESIGN, WHICH IS NOT INCLUDED IN THESE PLANS. STATION OFFSETS ARE TO THE CENTERLINE OF THE STRUCTURE TOP (I.E. DITCH BOTTOM INLET OR CURB INLET TOP), AS OPPOSED TO THE STRUCTURE BASE.
3. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURES, WITH THE EXCEPTION OF MITERED END AND FLARED END SECTIONS. LENGTHS OF PIPE SHOWN WHICH TERMINATE WITH MITERED END OR FLARED END SECTIONS ARE MEASURED TO THE DOWNSTREAM INVERT OF THE MITERED END OR FLARED END SECTION.
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. STORM WATER PIPES, STRUCTURES, MINIMUM COVER, AND INSTALLATION PROCEDURES TO BE IN ACCORDANCE WITH THE LAND DEVELOPMENT CODE OF THE CITY OF APOPKA, FLORIDA.
7. DURING CONSTRUCTION, NO DIRECT DISCHARGE OF WATER TO DOWNSTREAM RECEIVING WATERS WILL BE ALLOWED. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING WATER QUALITY AND SHALL ROUTE DISCHARGE WATER IN SUCH A MANNER AS TO ADEQUATELY REMOVE SILT PRIOR TO RUNOFF FROM THE SITE.

DRAINAGE SYSTEM TESTING AND INSPECTION

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 AT THE CONTRACTORS EXPENSE AND PRIOR TO FINAL ACCEPTANCE.

SAFETY

1. 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.
2. 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. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION. 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. CONTRACTOR SHALL PROVIDE FOR THE SAFETY AND CONTROL OF LOCAL TRAFFIC DURING CONSTRUCTION. ADDITIONAL INFORMATION MAY BE REQUIRED IF LANE CLOSURE DURATIONS ARE LONGER THAN DAYTIME OPERATIONS.

PAVING, GRADING AND DRAINAGE

1. ALL PAVING SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES, UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.
4. CURBING SHALL BE PLACED AT THE EDGES OF ALL PAVEMENT, UNLESS OTHERWISE NOTED. REFER TO THE LATEST EDITION OF F.D.O.T. "DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. TYPE CURB AND GUTTERS CALLED FOR IN THESE PLANS.
5. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE SOILS ENGINEER FOR APPROVAL.
6. CONTRACTOR TO PROVIDE A 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIALS (STRUCTURES, OTHER POURED)
7. ALL PAVEMENT MARKINGS SHALL BE MADE IN ACCORDANCE WITH F.D.O.T. DESIGN STANDARDS.
8. 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.
9. THE CONTRACTOR SHALL RESTORE OFF-SITE CONSTRUCTION AREAS TO EQUAL AND/OR BETTER CONDITION THAN EXISTING PRIOR TO START OF CONSTRUCTION.
10. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
11. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR AT CONTRACTORS EXPENSE.
12. FINAL GRADES SHOWN INCLUDE SOD HEIGHT. ALL AREAS SHALL BE GRADED TO DRAIN AWAY FROM THE BUILDINGS.
13. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH ALL LOCAL, STATE AND JURISDICTIONAL PERMITTING AGENCIES.
14. ALL WORK SHALL COMPLY WITH THE GEOTECHNICAL REPORT BY TERRACON ON JUNE 28, 2022.
15. CONTRACTOR SHALL SOD ALL DISTURBED AREAS WITH BAHIA UNLESS OTHERWISE NOTED.

PAVING/GRADING TESTING AND INSPECTION

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 AND GEOTECHNICAL REPORT, THE VARIOUS AGENCIES AND PERMIT CONDITIONS. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THESE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING.

PAVEMENT MARKING AND SIGNAGE

1. THE INSTALLATION, SHAPE, AND SIZE OF ALL SIGNS AND THEIR LETTERING SHALL COMPLY WITH THE LATEST EDITIONS OF THE U.S. DEPARTMENT OF TRANSPORTATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE F.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND THE F.D.O.T. "DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM". WHERE CONFLICTS EXIST BETWEEN THE PLANS AND THE ABOVE MENTIONED SPECIFICATIONS, THE MORE STRINGENT CRITERIA SHALL PREVAIL.

TEST, INSPECTION AND CLOSEOUT REQUIREMENTS

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. TV INSPECTION SHALL BE IN ACCORDANCE TO THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL. 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 LEAKAGE TESTS ON ALL GRAVITY SEWERS PER THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.
3. AN AS-BUILT SURVEY SHALL BE PREPARED IN ACCORDANCE WITH CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE (F.A.C.), PURSUANT TO CHAPTER 472, FLORIDA STATUTES (F.S.) SHALL BE REQUIRED.
4. THE CONTRACTOR SHALL PROVIDE UTILITY AS-BUILT AND GRADING/DRAINAGE AS-BUILT RECORD DRAWINGS BASED ON THE CIVIL DESIGN PLAN SHEETS. ALL AS-BUILTS SHALL BE OVERLAID ON THE CIVIL DESIGN PLANS WITH THE DESIGN SHADED BACK AND THE AS-BUILT BOLD. THE AS-BUILTS SHALL BE SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR.
5. THE UTILITY AS-BUILT SHALL INCLUDE ALL SANITARY SEWERS AND FORCE MAIN SYSTEMS, POTABLE AND RECLAIMED WATER MAIN SYSTEMS, METERS, VALVES, FORCE MAINS, GAS MAINS, AND IRRIGATION LINES (2-INCH AND LARGER). CONTRACTOR TO PROVIDE ALL UTILITY CROSSING INFORMATION ON THE AS-BUILT. THE UTILITY AS-BUILTS SHALL IDENTIFY ALL WATER MAIN CROSSINGS WITH STORM AND SANITARY LINES INDICATING TOP OF PIPE AND INVERTS OF THE ABOVE CROSSING PIPE ALONG WITH CLEARANCE DIMENSIONS. THIS SHALL ALSO BE DONE FOR SANITARY/STORM CROSSINGS. ALL TEMPORARY SAMPLE POINT NUMBER (TSP#) LOCATIONS SHALL ALSO BE NOTED ON THE AS-BUILT. CONTRACTOR TO ALSO PROVIDE AN AS-BUILT ASSET TABLE IDENTIFYING SIZE OF PIPE OR FITTING AS WELL AS DEPTH TO TOP OF PIPE AND NORTHING AND EASTING OF EACH FITTING/VALVE, ETC. AS-BUILT DRAWINGS SHALL PROVIDE GPS COORDINATES FOR SANITARY STRUCTURES.
6. THE GRADING/DRAINAGE AS-BUILT SHALL INCLUDE ALL CONSTRUCTED IMPROVEMENTS THAT HAVE LOCATION AND/OR ELEVATION INFORMATION CALLED-OUT ON THE PLANS. THE AS-BUILT SHALL CLEARLY PROVIDE THE SAME INFORMATION IDENTIFIED ON THE DESIGN DOCUMENTS AND ALSO THE CONSTRUCTED LOCATIONS AND ELEVATIONS AS-BUILT INFORMATION.
7. THE CONTRACTOR SHALL PROVIDE A SIGNED AND SEALED LETTER FROM THE INDEPENDENT TESTING AGENCY THAT STATES CONFORMANCE WITH THE CONTRACT DOCUMENT REQUIREMENTS FOR COMPACTION TESTING. THE CONTRACTOR IS TO PROMPTLY NOTIFY THE OWNER AND ENGINEER OF RECORD WHEN ANY TESTING OR INSPECTIONS ARE DEFICIENT OR IRREGULAR.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY
1	CITY OF APOPKA CSP COMMENT REVISIONS	08/07/2023	CS

Kimley»Horn

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LORDAN PROFESSIONAL REGISTERED LANDSCAPE ARCHITECT LICENSE No. 6667307

LORDAN B. DRAPER, PE LICENSE NUMBER 73331 STATE OF FLORIDA

PROFESSIONAL ENGINEER

DATE: 10/16/2023

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

GENERAL NOTES

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
C1.0

Posted By Sauer Cole Sheet Set:SHOPPES AT EAST SHORE MULTI-FAMILY Layout:C1.0 NOTES October 16, 2023 08:23:02am K:\ORL_Civil\249218001_Shoppes at East Shore ALF\CADD\CONST\CSP\PlanSheets\C1.0 - NOTES.dwg
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POTABLE WATER SYSTEM

1. ALL WATER MAIN PIPE FITTINGS AND APPURTENANCES SHALL BE INSTALLED TO COMPLY WITH THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.
2. ALL WATER SERVICE LINES, VALVES AND METERS SHALL BE INSTALLED TO COMPLY WITH APPLICABLE MUNICIPALITY/AGENCY DEPARTMENT STANDARDS AND SPECIFICATIONS.
3. ALL WATER SYSTEM CONSTRUCTION, UP TO AND INCLUDING POINT OF METERING AND BACK FLOW PREVENTION (IF REQUIRED), SHALL BE BUILT ACCORDING TO THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.
4. 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.
5. 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 THE CITY OF APOPKA.
6. ALL WATER MAINS SHALL BE STERILIZED IN ACCORDANCE WITH THE APPLICABLE SECTION OF THE LATEST AWWA SPECIFICATION C651 AND THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.
7. 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.
8. ALL POLYVINYL CHLORIDE PIPE SHALL BE LAID WITH AN INSULATED 12 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.
9. ALL POTABLE WATER MATERIALS AND INSTALLATION SHALL CONFORM WITH THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.

POTABLE WATER TESTING AND INSPECTION

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 THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL. 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.

SANITARY SYSTEM

1. 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.
2. ALL GRAVITY SEWER MAINS AND FITTINGS MUST BE SDR 26 PVC. 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.
3. ALL ON-SITE PVC FORCE MAINS (IF REQUIRED) SHALL BE CLASS 200, DR 14 FOR 4" DIAMETER, AND CLASS 150 DR 18 FOR 6" TO 12" DIAMETER PIPE, IN ACCORDANCE WITH AWWA C900 STANDARDS. PVC FORCE MAIN PIPE SMALLER THAN 4" DIAMETER SHALL BE CLASS 200, SDR 21, IN ACCORDANCE WITH ASTM D 2241. FORCE MAIN SHALL BE SPIRAL WRAPPED WITH 2 INCH WIDE DARK GREEN STICK-ON VINYL TAPE. FORCE MAINS WITHIN THE RIGHT-OF-WAY SHALL BE CLASS 52 DIP, MINIMUM 4" DIAMETER.
4. 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.
5. ALL SLOPES FOR GRAVITY SEWER MAINS AND SERVICE CONNECTIONS SHALL COMPLY WITH THE FOLLOWING MINIMUM GRADES: 4" @ 2.00% ; 6" @ 1.00% ; 8" @ 0.40% ; and 10" @ 0.30%.
6. ALL SANITARY SEWER WORK SHALL CONFORM WITH APPLICABLE THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.
7. 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.
8. SANITARY SEWER MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE MAIN LINES.
9. ONSITE WASTEWATER COLLECTION SYSTEM, LIFTSTATION, AND FORCEMAIN ARE TO BE PRIVATELY OWNED AND MAINTAINED.

SANITARY TESTING AND INSPECTION

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 ISSPECIFIED 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.

CITY OF APOPKA FIRE DEPARTMENT NOTES

1. ROADWAYS, WATER LINE INFRASTRUCTURE, AND FIRE HYDRANTS SHALL BE IN PLACE BEFORE BUILDING CONSTRUCTION MAY BEGIN.
2. FIRE HYDRANTS SHALL BE MARKED WITH A BLUE REFLECTIVE PAVEMENT MARKER.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY
1	CITY OF APOPKA CSP COMMENT REVISIONS	08/07/2023	CS

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LORIDA PROFESSIONAL LANDSCAPE ARCHITECT LICENSE No. 7 JORDAN DRAPER STATE OF FLORIDA PROFESSIONAL LANDSCAPE ARCHITECT DATE: 08/07/2023

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

GENERAL NOTES

SHOPPES AT EAST SHORE MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
C1.1

Plotted By: Sauer, Cole Sheet Set: SHOPPES AT EAST SHORE MULTI-FAMILY Layout: C1.1 NOTES October 16, 2023 08:23:03am K:\ORL_Civil\249218001-Shoppes at East Shore\CAD\CONST\CSP\PlanSheets\C1.0 - NOTES.dwg
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STORMWATER POLLUTION PREVENTION PLAN

SITE DESCRIPTION

PROJECT NAME AND LOCATION

MERA APOPKA
TAX PARCEL: A PORTION OF 20-21-28-0000-00-021 AND 20-21-28-0000-00-028
DIRECTLY EAST OF OCOEE-APOPKA ROAD, NORTH OF WEST KEENE ROAD
APOPKA, FLORIDA 32703

*SEE COVER SHEET FOR LOCATION MAP

DEVELOPER NAME AND ADDRESS

SPARROW PARTNERS
2500 BEE CAVES RD, SUITE 380
AUSTIN, TX 78746
CONTACT: MILT BARBER
EMAIL: MILT.BARBER@SPARROW-PARTNERS.COM

PROJECT DESCRIPTION

THE MERA APOPKA PROJECT IS A RESIDENTIAL MULTIFAMILY DEVELOPMENT ON A 7.47 ACRE MASS GRADED SITE. THE SITE IS LOCATED NORTH OF WEST KEENE ROAD AND BORDERS THE EAST SIDE OF OCOEE-APOPKA ROAD.

PROJECT AREA: ±7.47 ACRES
CONTRIBUTING DRAINAGE AREA: ±7.47 ACRES

ULTIMATE RECEIVING WATERS: LAKE RUTHERFORD AND MEDICINE LAKE
ACTIVITIES THAT REQUIRE EROSION CONTROL

PROVIDING A STABILIZED CONSTRUCTION ENTRANCE, PERIMETER, AND OTHER EROSION AND SEDIMENT CONTROLS; SITE GRADING; INSTALLATION OF STORM WATER, SANITARY SEWER, AND WATER STRUCTURES; CURB, ROADWAYS, AND PARKING FACILITIES.

*SEE PLANS FOR THE LOCATION OF TEMPORARY SEDIMENT BARRIERS AND OTHER EROSION CONTROL METHODS.

SOIL PARAMETERS

SOIL TYPES:

HYDROLOGIC SOIL GROUP SUMMARY		
SOIL TYPE	SOIL NAME	SOIL RATING
5	CANDLER FINE SAND 5-12% SLOPES	A
6	CANDLER-APOPKA FINE SANDS	A

SEQUENCE OF MAJOR ACTIVITIES

THE ORDER OF CONSTRUCTION IS AS FOLLOWS:

1. PROVIDE STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND OTHER EROSION CONTROL METHODS
3. PROVIDE INITIAL GRADING AS REQUIRED
4. STABILIZE ALL DISTURBED AREAS AS SOON AS POSSIBLE
5. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER
6. INSTALL BASE TO ROAD AND PARKING AREAS
7. FINISH GRADING ENTIRE SITE
8. CONSTRUCT FINAL PAVING
9. REMOVE ACCUMULATED SEDIMENT
10. REMOVE ANY ITEMS THAT ARE NOT REQUIRED

TIMING OF CONTROL MEASURES

THE INSTALLATION OF SILT FENCE (AND OTHER EROSION CONTROL MEASURES), A STABILIZED ENTRANCE AND SEDIMENT BASIN SHALL OCCUR PRIOR TO CLEARING AND GRUBBING ACTIVITY. AFTER CONSTRUCTION IS COMPLETE, THE ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE AREAS SHALL BE REGRADED AND PERMANENTLY STABILIZED AS SHOWN ON THE PLANS.

EROSION AND SEDIMENT CONTROLS

BEST MANAGEMENT PRACTICES SHALL BE USED FOR THIS PROJECT TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN-OFF. THE LOCATION AND DETAILS OF EROSION CONTROL METHODS ARE SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING THESE CONTROL METHODS AS SHOWN ON THE PLANS OR AS REQUIRED. HE/SHE SHALL ALSO PROVIDE THE REQUIRED EROSION PROTECTION AS REQUIRED BY LOCAL, STATE AND FEDERAL LAW.

STORM WATER MANAGEMENT

STORM WATER COLLECTION SHALL BE PROVIDED BY CATCH BASINS. THE SITE WILL DISCHARGE TO THE EXISTING STORMWATER MANAGEMENT POND FOR TREATMENT AND ATTENUATION.

STABILIZATION PRACTICES:

TEMPORARY STABILIZATION - TOPSOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE, SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH WITHIN 7 DAYS OF THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED REQUIRED CAN BE FOUND IN TABLE 1.65 A OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, WHERE SOILS ARE ACIDIC 2 TONS OF PULVERIZED AGRICULTURAL LIMESTONE SHOULD BE ADDED PER ACRE AND 450 POUNDS OF 10-20-20 FERTILIZER SHALL BE APPLIED TO EACH ACRE. AFTER SEEDING, EACH AREA SHALL BE IMMEDIATELY MULCHED WITH STRAW OR EQUIVALENT EQUAL. AREAS OF THE SITE WHICH ARE TO BE PAVED SHALL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILE AND STONE SUB-BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED.

PERMANENT STABILIZATION - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE APPROPRIATE PERMANENT SEED MIX CAN BE FOUND IN TABLES 1.66A, 1.66B AND 1.66C OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, 2 TONS/ACRE OF FINELY GROUND AGRICULTURAL LIMESTONE AND THE PROPER FERTILIZER BASED ON THE TYPE OF SEEDING SHALL BE APPLIED TO EACH ACRE TO PROVIDE PLANT NUTRIENTS. AFTER SEEDING, EACH AREA SHALL BE MULCHED IMMEDIATELY. ALL RETENTION/DETENTION BASINS SHALL BE SODDED AT LEAST TO THE NORMAL WATER LINE. ALL EXPOSED AREAS WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE SOLID SODDED, OTHER AREAS WITH SLOPES STEEPER THAN 4:1 SHALL BE SODDED.

STRUCTURAL PRACTICES:

EARTH DIKE - IF REQUIRED, AN EARTH DIKE SHALL BE CONSTRUCTED ALONG THE SITE PERIMETER. A PORTION OF THE DIKE SHALL DIVERT RUN-ON AROUND THE CONSTRUCTION SITE. THE REMAINING PORTION OF THE DIKE SHALL COLLECT RUNOFF FROM THE DISTURBED AREA AND DIRECT THE RUNOFF TO THE SEDIMENT BASIN.

SEDIMENT BASIN - A SEDIMENT BASIN SHALL BE CONSTRUCTED IN THE COMMON DRAINAGE AREA FOR THE SITE. ALL SEDIMENT COLLECTED IN THE BASIN MUST BE REMOVED FROM THE BASIN UPON COMPLETION OF CONSTRUCTION. SEDIMENT FROM THE BASIN MAY BE USED AS FILL ON THE SITE IF IT IS SUITABLE SOIL.

WASTE DISPOSAL

WASTE MATERIALS - ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A METAL DUMPSTER WITH A SECURE LID IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITIES TO HAVE THE DUMPSTER EMPTIED AT LEAST TWICE A WEEK AND THE WASTE TAKEN TO AN APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE. THE SUPERINTENDENT SHALL ORGANIZE TRAINING FOR THE EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH WASTE MATERIALS. THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR POSTING AND ENFORCING WASTE MATERIAL PROCEDURES.

HAZARDOUS WASTE - HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS OR AS DIRECTED BY THE MANUFACTURER. THE SUPERINTENDENT SHALL ORGANIZE THE PROPER TRAINING FOR EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH HAZARDOUS WASTE MATERIALS. THESE PROCEDURES SHALL BE POSTED ON THE SITE. THE PERSON WHO MANAGES THE SITE SHALL BE RESPONSIBLE FOR ENFORCING THE PROCEDURES.

SANITARY WASTE - SANITARY WASTE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITY FOR COLLECTION OF THE SANITARY WASTE AT LEAST THREE TIMES A WEEK TO PREVENT SPILLAGE ONTO THE SITE.

OFF-SITE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO REDUCE SEDIMENT TRACKING OFFSITE. THE CONTRACTOR SHALL PROMPTLY REMOVE ALL MUD, DIRT, OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING PUBLIC ROADS AND FACILITIES, DUE TO CONSTRUCTION. ALL TRUCKS HAULING MATERIALS OFFSITE SHALL BE COVERED WITH A TARPAULIN.

DUST & DEBRIS CONTROL
THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL WITHIN THE CONSTRUCTION LIMITS AS WELL AS ALONG HAUL ROUTES AND ROADWAYS USED BY THE EQUIPMENT AND VEHICLES. THE CONTRACTOR SHALL ENSURE THAT EXCESSIVE DUST IS NOT TRANSPORTED BEYOND THE LIMITS OF CONSTRUCTION IN POPULATED AREAS. THE CONTRACTOR MAY CONTROL DUST FOR EMBANKMENTS OR OTHER CLEARED OR UNSURFACED AREAS BY APPLYING WATER. INSTALL MULCH, SEED, SOD, OR TEMPORARY PAVING AS EARLY AS PRACTICAL. CONTROL DUST DURING STORAGE AND HANDLING OF DUSTY MATERIALS BY WETTING, COVERING, OR OTHER MEANS AS APPROVED BY THE ENGINEER.
DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE ON THE PROJECT SITE.

ITEMS REQUIRING POLLUTION PREVENTION

THE FOLLOWING ITEMS ARE EXPECTED TO BE PRESENT ON THE PROJECT SITE:

-ASPHALT
-CONCRETE
-FERTILIZERS
-METAL PIECES
-PETROLEUM BASED PRODUCTS
-TAR
-CLEANING SUPPLIES
-DETERGENTS
-MASONARY BLOCK/BRICKS
-PAINT
-WOOD

THE FOLLOWING ARE NON-STORM WATER SOURCES THAT WILL BE ENCOUNTERED AT THE SITE AND SHOULD BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE:

-UNCONTAMINATED GROUNDWATER EXPOSED DURING EXCAVATION
-WATER FROM WATER LINE FLUSHING
-PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

SPILL PREVENTION AND CONTROL

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

-SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.

-STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION.

-ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.

-ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR PROTECTIVE COVER.

-PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER.

-ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

HAZARDOUS PRODUCTS

-MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINER WITH LABELS UNLESS THE ORIGINAL CONTAINERS CANNOT BE RESEALED. IF ORIGINAL CONTAINERS CANNOT BE USED, LABELS AND PRODUCT INFORMATION SHALL BE SAVED.

-PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.

PRODUCT SPECIFIC PRACTICES

-PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELED. VEHICLES CONTAINING PETROLEUM PRODUCTS SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.

-THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND MIXED INTO THE SOIL IN ORDER TO LIMIT EXPOSURE TO STORM WATER. FERTILIZERS SHALL BE STORED IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

-PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.

-CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

-SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.

-THE FOLLOWING CLEAN-UP EQUIPMENT MUST BE KEPT ON-SITE NEAR THE MATERIAL STORAGE AREA: GLOVES, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS.

-ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.

-WHEN CLEANING A SPILL, THE AREA SHOULD BE WELL VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY.

-TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.

-AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SIMILAR SPILLS FROM OCCURRING. THE CAUSE OF THE SPILL, MEASURES TO PREVENT IT, AND HOW TO CLEAN THE SPILL UP SHALL BE RECORDED.

-THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. THE SUPERINTENDENT ALSO OVERSEES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

MAINTENANCE AND INSPECTION PRACTICES

THE FOLLOWING ARE MAINTENANCE AND INSPECTION PRACTICES THAT SHALL BE COMPLETED BY THE CONTRACTOR:

-ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE CHECKED DAILY AND AFTER EACH 0.5 INCH OR GREATER RAINFALL BY THE SUPERINTENDENT OR SOMEONE UNDER HIS/HER DIRECT SUPERVISION.

-ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE KEPT IN GOOD CONDITION. REPAIRS MUST BE MADE WITHIN 24 HOURS OF REPORT.

-THE SILT FENCE SHALL BE INSPECTED PERIODICALLY FOR HEIGHT OF SEDIMENT AND CONDITION OF FENCE.

-THE SILT FENCE SHALL BE CLEARED OF SEDIMENT WHEN SEDIMENT MEASURES ONE-THIRD THE HEIGHT OF THE FENCE.

-THE SEDIMENT BASINS/DITCHES SHALL BE CHECKED MONTHLY FOR DEPTH OF SEDIMENT. THEY SHALL BE CLEANED WHEN SEDIMENT REACHES 10% OF TOTAL CAPACITY AND AFTER CONSTRUCTION IS COMPLETE.

-DIVERSION DIKES SHALL BE INSPECTED MONTHLY. ANY BREACHES SHALL BE PROMPTLY REPAIRED.

-ALL SEEDING SHALL BE CHECKED FOR PROPER GROWTH AND UNIFORMITY. UNSTABALIZED AREAS SHALL BE RE-SODDED.

-A MAINTENANCE REPORT SHALL BE COMPLETED DAILY AFTER EACH INSPECTION OF THE SEDIMENT AND EROSION CONTROL METHODS. THE REPORTS SHALL BE FILED IN AN ORGANIZED MANNER AND RETAINED ON-SITE DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETED, THE REPORTS SHALL BE SAVED FOR AT LEAST THREE YEARS. THE REPORTS SHALL BE AVAILABLE FOR ANY AGENCY THAT HAS JURISDICTION OVER EROSION CONTROL.

-THE SUPERINTENDENT SHALL ORGANIZE THE TRAINING FOR INSPECTION PROCEDURES AND PROPER EROSION CONTROL METHODS FOR EMPLOYEES THAT COMPLETE INSPECTIONS AND REPORTS.

POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNED: _____ DATE:_____

L. JORDAN DRAPER, P.E.
FLORIDA REGISTRATION NUMBER: 81928
PROFESSIONAL ENGINEER

CONTRACTOR'S CERTIFICATION

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

SIGNATURE AND DATE	NAME AND TITLE, COMPANY / ADDRESS AND TELEPHONE NUMBER	RESPONSIBILITY

No.	REVISIONS	DATE	BY
1	CITY OF APOPKA CSP COMMENT REVISIONS	08/07/2023	CS

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LICENSED PROFESSIONAL ENGINEER L. JORDAN DRAPER LICENSE NUMBER 81928 STATE OF FLORIDA PROFESSIONAL ENGINEER DATE: 7/12/2023

KHA PROJECT 249218001
DATE 7/12/2023
SCALE AS SHOWN
DESIGNED BY JDB
DRAWN BY JDB
CHECKED BY LJD

SWPPP

SHOPPES AT EAST SHORE MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
C2.0

Plotted By: Sauer, Cole Sheet Set: SHOPPES AT EAST SHORE MULTI-FAMILY Layout: C2.0 — SWPPP October 16, 2023 08:23:08am K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CAD\CONST\CSP\PlanSheets\C2.0 — SWPPP.dwg
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Drawing name: K:\orl_civil\249218001-shoppes at east shore dl\CADD\CONST\CSP\plansheets\C2.1 - EROSION CONTROL DETAILS.dwg C2.1 - EROSION CONTROL DETAILS Oct 16, 2023 8:23am by: cole.sauer
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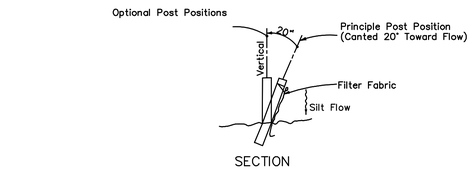
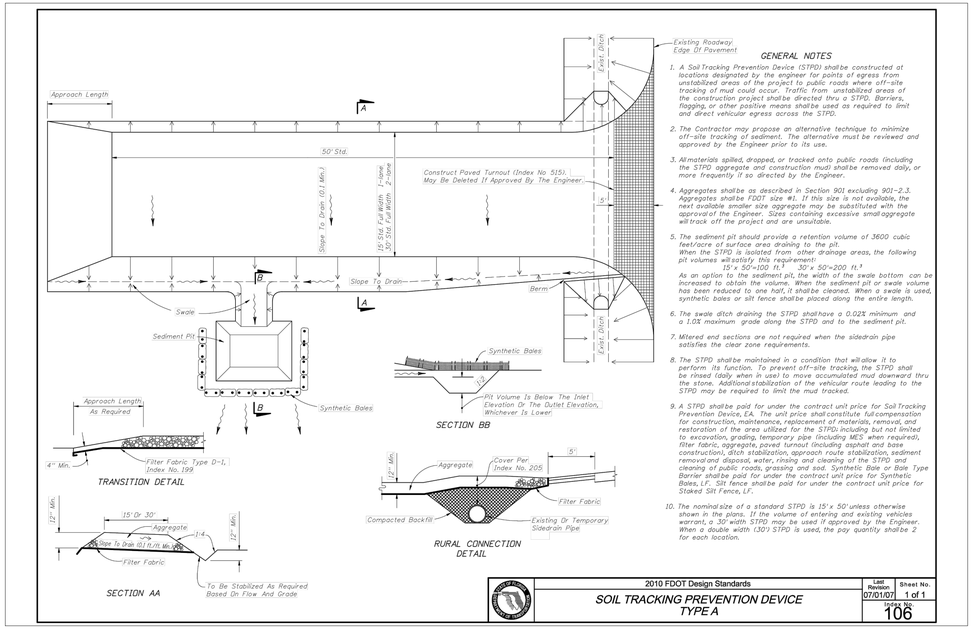


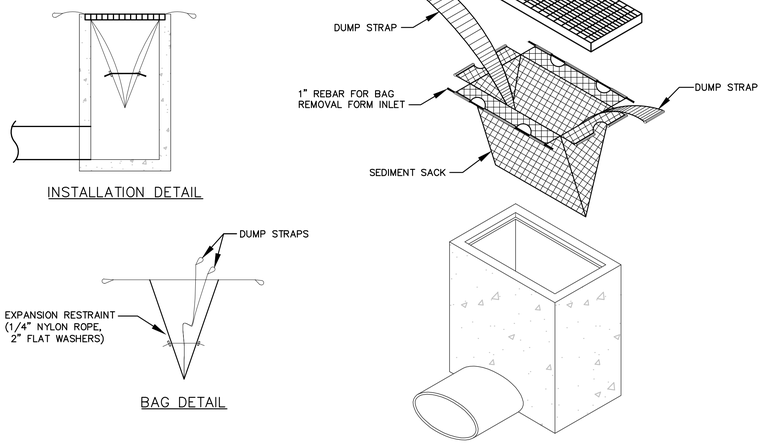
TYPE III SILT FENCE
NTS



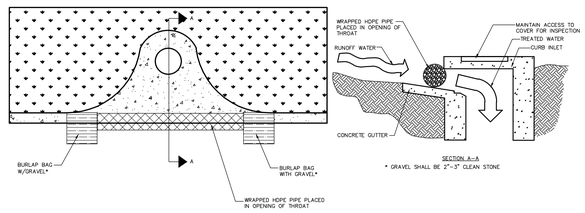
GENERAL NOTES

1. A Soil Tracking Prevention Device (STPD) shall be constructed at locations designated by the engineer for points of egress from unstabilized areas of the project to public roads where off-site tracking of mud could occur. Traffic from unstabilized areas of the construction project shall be directed thru a STPD. Barriers, flagging, or other positive means shall be used as required to limit and direct vehicular egress across the STPD.
2. The Contractor may propose an alternative technique to minimize off-site tracking of sediment. The alternative must be reviewed and approved by the Engineer prior to its use.
3. All materials spilled, dropped, or tracked onto public roads (including the STPD aggregate and construction mud) shall be removed daily, or more frequently if so directed by the Engineer.
4. Aggregates shall be as described in Section 901 excluding 901-2.3. Aggregates shall be FDOT size #1. If this size is not available, the next available smaller size aggregate may be substituted with the approval of the Engineer. Sizes containing excessive small aggregate will track off the project and are unsuitable.
5. The sediment pit should provide a retention volume of 3600 cubic feet/acre of surface area draining to the pit. When the STPD is isolated from other drainage areas, the following pit volumes will satisfy this requirement:
   15' x 50'=100 ft.³ 30' x 50'=200 ft.³
   As an option to the sediment pit, the width of the swale bottom can be increased to obtain the volume. When the sediment pit or swale volume has been reduced to one half, it shall be cleaned. When a swale is used, synthetic bales or silt fence shall be placed along the entire length.
6. The swale ditch draining the STPD shall have a 0.02% minimum and a 1.0% maximum grade along the STPD and to the sediment pit.
7. Mitered end sections are not required when the sidedrain pipe satisfies the clear zone requirements.
8. The STPD shall be maintained in a condition that will allow it to perform its function. To prevent off-site tracking, the STPD shall be rinsed (daily when in use) to move accumulated mud downward thru the stone. Additional stabilization of the vehicular route leading to the STPD may be required to limit the mud tracked.
9. A STPD shall be paid for under the contract unit price for Soil Tracking Prevention Device, EA. The unit price shall constitute full compensation for construction, maintenance, replacement of materials, removal, and restoration of the area utilized for the STPD; including but not limited to excavation, grading, temporary pipe (including MES when required), filter fabric, aggregate, paved turnout (including asphalt and base construction), ditch stabilization, approach route stabilization, sediment removal and disposal, water, rinsing and cleaning of the STPD and cleaning of public roads, grassing and sod. Synthetic Bale or Bale Type Barrier shall be paid for under the contract unit price for Synthetic Bales, LF. Silt fence shall be paid for under the contract unit price for Staked Silt Fence, LF.
10. The nominal size of a standard STPD is 15' x 50' unless otherwise shown in the plans. If the volume of entering and existing vehicles warrant, a 30' width STPD may be used if approved by the Engineer. When a double width (30') STPD is used, the pay quantity shall be 2 for each location.

2010 FDOT Design Standards		
SOIL TRACKING PREVENTION DEVICE TYPE A	Last Revision 07/01/07	Sheet No. 1 of 1
	Index No. 106	



STANDARD INLET SEDIMENT CONTROL DEVICE
NTS



SOCK DRAIN INLET SEDIMENT FILTER
NTS

NOTE: THE PERFORATED PIPE MUST EXTEND AT LEAST 1' BEYOND THE CURB OPENING ON EACH SIDE AND BE ANCHORED WITH GRAVEL BAGS, OR SIMILAR, ON EACH END. A SPACER MUST BE PROVIDED FOR BETWEEN THE INLET OPENING AND THE PIPE TO ALLOW FOR OVERFLOW, PREVENT FLOODING AND TO PREVENT THE PIPE FROM FALLING INTO THE INLET.

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No.	REVISIONS	DATE	BY
1	CITY OF APOPKA CSP COMMENT REVISIONS	08/07/2023	CS

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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

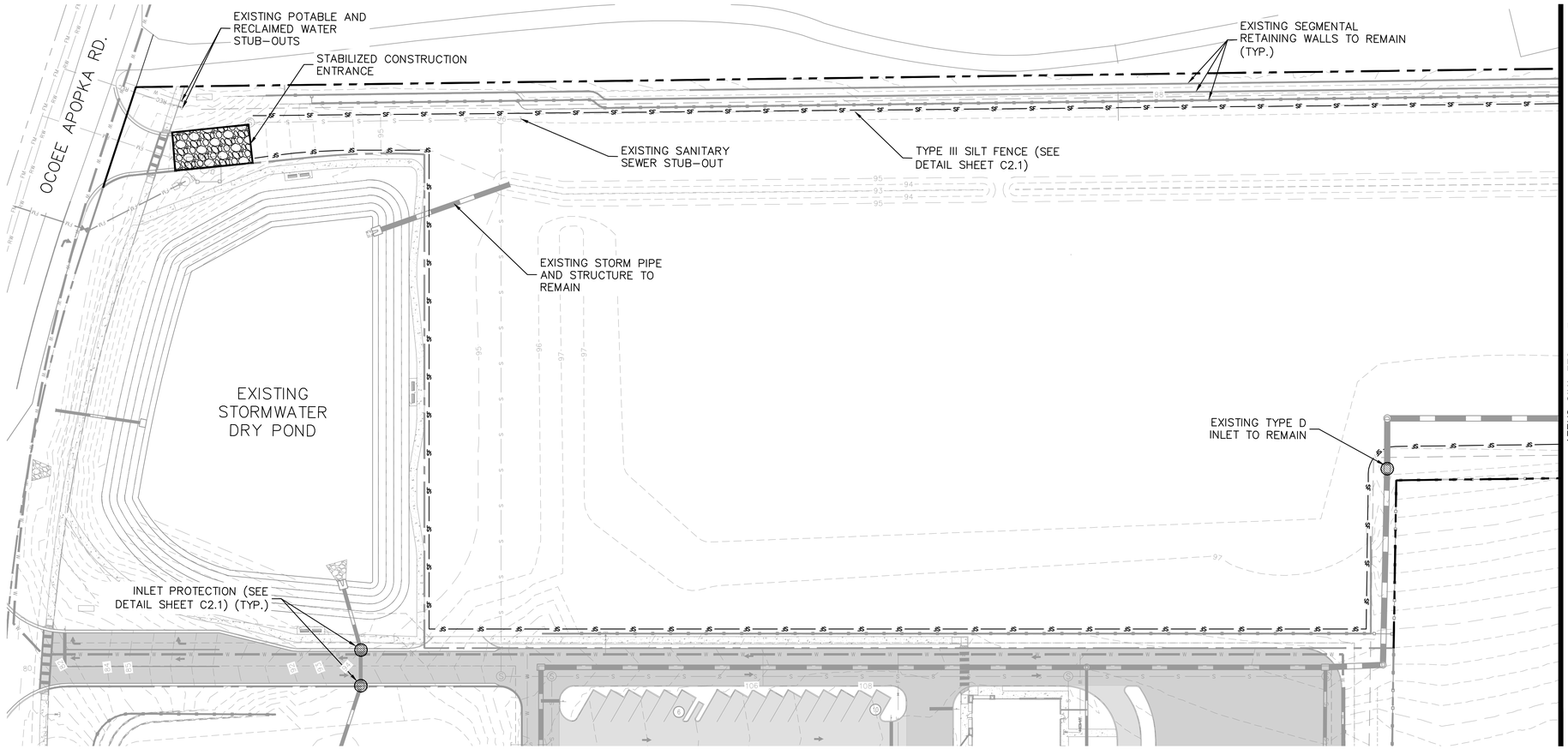
LORDAN B. DRAPER, PROFESSIONAL ENGINEER, LICENSE NUMBER 70324, STATE OF FLORIDA, DATE: 10/16/2023

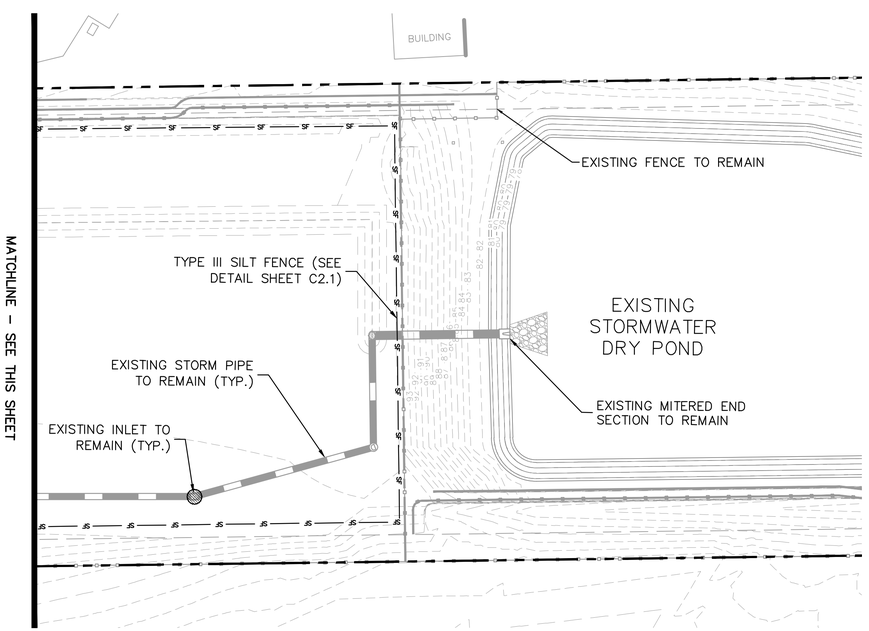
KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

EROSION CONTROL DETAILS

SHOPPES AT EAST SHORE
MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
C2.1





NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

THIS PLAN AND THE EXISTING CONDITIONS SHOWN ON THIS PLAN DO NOT SUPERSEDE OR SUBSTITUTE ANY SURVEYED INFORMATION. PLEASE REFERENCE SURVEY FOR OFFICIAL LOCATIONS AND INFORMATION OF THE EXISTING CONDITIONS.

LEGEND

- PROPERTY LINE (TYP.)
- SF — TYPE III SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- INLET PROTECTION

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LICENSED PROFESSIONAL ENGINEER
JORDAN DRAPER
LICENSE
STATE OF FLORIDA LICENSE NUMBER 88842
PROFESSIONAL ENGINEER
DATE: 10/16/2023

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

EXISTING CONDITIONS AND DEMOLITION PLAN

SHOPPES AT EAST SHORE
MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
C3.0

Drawing name: K:\ORL_Civil\249218001-Shoppes at East Shore AL\CADD\CONST\CSP\PlanSheets\C3.0 – EXISTING CONDITIONS PLAN.dwg C3.0 – EXISTING CONDITIONS AND DEMOLITION PLAN Oct 16, 2023 8:23am by: cole.souer
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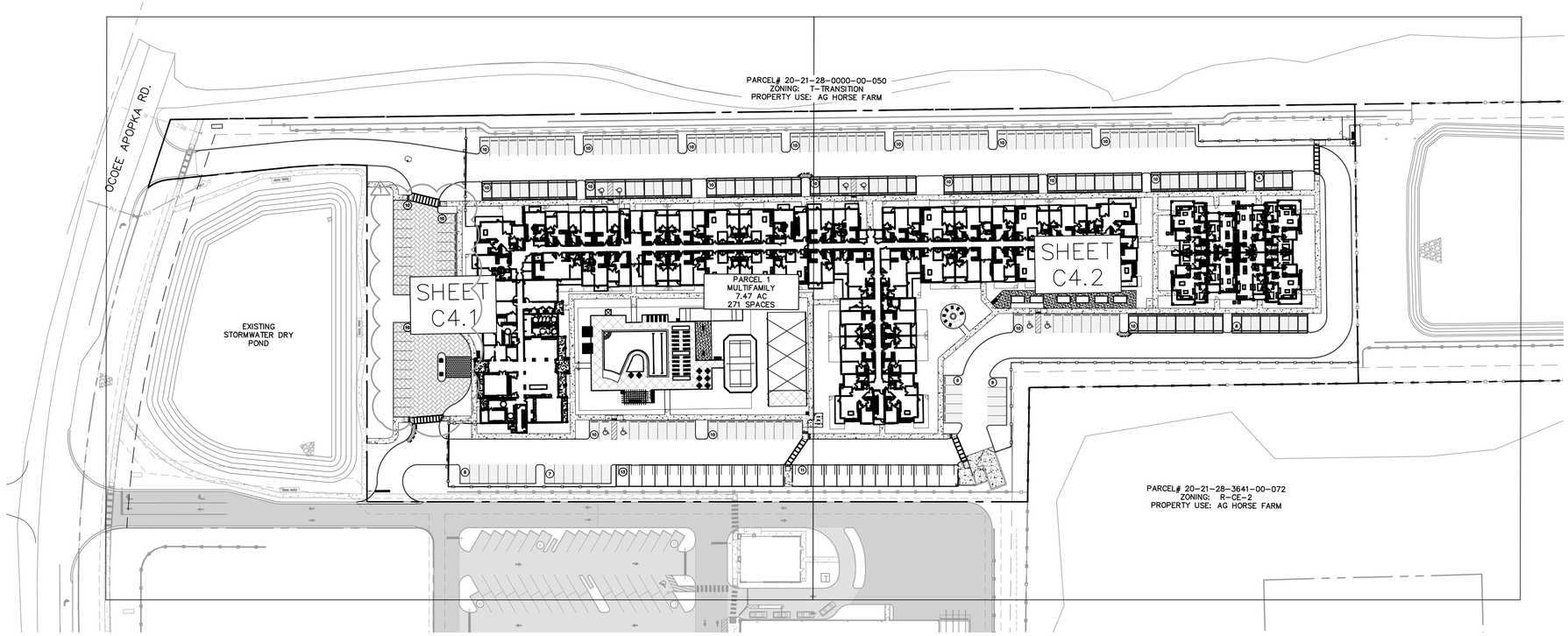

NORTH

GRAPHIC SCALE IN FEET
0 30 60 120

LEGEND

- PROPERTY LINE (TYP.)
- LANDSCAPE BUFFER
- PROPOSED FENCE 6 FT ALUMINUM
- PROPOSED STANDARD DUTY ASPHALT PAVEMENT (SEE DETAIL SHEET C9.0)
- PROPOSED CONCRETE SIDEWALK (SEE DETAIL SHEET C9.0)
- PROPOSED CONCRETE SIDEWALK (SEE DETAIL SHEET C9.0)
- PROPOSED BELGARD PERVIOUS INTERLOCKING CONCRETE PAVERS, OR APPROVED ALTERNATIVE. SEE DETAIL C9.0
- (10) PROPOSED PARKING COUNT
- EXISTING RETAINING WALL

PARCEL 1: SITE DATA:

PARCEL ACREAGE:	7.55 ACRES
PERVIOUS AREA:	2.35 ACRES
IMPERVIOUS AREA:	5.12 ACRES
IMPERVIOUS AREA %:	68.5%
MAX IMPERVIOUS AREA %:	75% PER SJRWMD PERMIT #200500-1
MAX BUILDING HEIGHT:	4 STORIES – 55'
PROPOSED BUILDING HEIGHT:	4 STORIES – 54' 1 ½"
PARKING REQUIRED:	
1 SPACE/1 BEDROOM:	124
1.35 SPACES/2 BEDROOM:	114
0.1 VISITOR SPACES/RESIDENT SPACE:	24
TOTAL PARKING REQUIRED:	262 SPACES
PARKING PROVIDED:	
STANDARD PARKING (9'x18'):	237 SPACES (1)
GARAGE PARKING:	24
ADA PARKING (12'x18'):	10 SPACES
TOTAL PARKING PROVIDED:	271 SPACES
PERVIOUS PARKING:	
REQUIRED:	20% OF PROVIDED PARKING 55 SPACES OR 8,910 SF
PROVIDED:	11,414 SF
BIKE PARKING:	
PROVIDED:	16 SPACES

FENCES:
SHALL BE IN ACCORDANCE WITH THE CITY OF APOPKA LDC SECTION 5.5.

EXTERIOR LIGHTING:
SHALL BE IN ACCORDANCE WITH THE CITY OF APOPKA LDC SECTION 5.6.

SIGNS:
SHALL BE IN ACCORDANCE WITH MASTER SIGN PLAN AND/OR THE CITY OF APOPKA LDC SECTION 5.10.

NOTES:

1. ALL CURB DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.
3. THIS DEVELOPMENT WILL BE CONSTRUCTED IN ONE PHASE.
4. ALL RADII TO BE 3' UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT IS TO BE HEAVY DUTY ASPHALT UNLESS OTHERWISE NOTED ON THE PLANS.

THE SHOPPES AT EAST SHORE PD DATA:

ZONING		PD
PROPOSED UNITS:		
PARCEL 1 (future)	RESIDENTIAL	224 DU
PARCEL 2 (future)	COMMERCIAL	3,000 SF
PARCEL 3 (future)	COMMERCIAL	3,000 SF
PARCEL 4 (future)	COMMERCIAL	5,000 SF
PARCEL 5 (phase 1)	COMMERCIAL	63,000 SF
	MEDICAL OFFICE	4,200 SF
TOTAL		78,200 224 DU
TOTAL MDP GROSS ACRES		28.02 Ac.
TOTAL MDP WETLAND ACRES		0.00 Ac.
TOTAL MDP FLOODPLAIN/TREE PRESERVATION		0.54 Ac.
TOTAL MDP DEVELOPABLE ACRES		27.48 Ac.

DEVELOPMENT PLAN CHART		
PARCEL ID NUMBERS	20-21-28-0000-00-021, 20-21-28-0000-00-024, 20-21-28-0000-00-025, 20-21-28-0000-00-028,	
FUTURE LAND USE	MIXED USE	
ZONING	PD	
ADJACENT FUTURE LAND USE	NORTH (CITY): MIXED USE	
	EAST (COUNTY): RURAL	
	SOUTH (CITY & COUNTY): OFFICE/INSTITUTIONAL	
	WEST (CITY): MIXED USE	
ADJACENT ZONING	NORTH (CITY): MU-ES-GT (MIXED USE EAST SHORE GATEWAY)	
	EAST (COUNTY): R-CE-2 (RURAL RESIDENTIAL)	
	SOUTH (CITY & COUNTY): O (OFFICE) AND A-1 (AGRICULTURAL)	
	WEST (CITY): T (TRANSITION)	
ACREAGE/SQUARE FOOTAGE	28.02	
BUILDING HEIGHT (commercial)	PROPOSED: 35 FEET	MAX: 45'
BUILDING HEIGHT (multi-family)	PROPOSED: 55 FEET	MAX: 4 STORIES/55'
BUILDING SETBACKS (commercial)	PROPOSED: FRONT: 20' SIDE: 15' REAR: 10'	
	REQUIRED: FRONT: 15' SIDE: 10'(1) REAR: 10'	
BUILDING SETBACKS (multi-family)	PROPOSED: FRONT: 15' SIDE: 10' REAR: 25'	
	REQUIRED: FRONT: 15' SIDE: 10' REAR: 25'	
PARKING SPACES (parcel 5)	PROVIDED: 353	
	REQUIRED: 333	
NUMBER OF EMPLOYEES	N/A	
WAIVER REQUEST	YES: NO: X	
VARIANCE REQUEST	YES: NO: X	
MIN. LOT WIDTH (commercial)	75'	
MIN. LOT WIDTH (multi-family)	100'	

NOTES:
(1) MINIMUM OF 15 FT BETWEEN STRUCTURES, ONLY APPLIES TO EXTERIOR UNITS.

PUBLIC OPEN SPACE CALCULATIONS (OVERALL PD):

PARCEL	LAND USE	GROSS AREA (AC)	WETLAND/ WATER (AC)	DEVELOPABLE AREA (AC)	OPEN SPACE REQ'D		OPEN SPACE PROVIDED		
					%	AC	PARK/REC/ OPEN/LA	AMENITIZED STORM	TOTAL
1	RESIDENTIAL	7.55	0.00	7.55	30%	2.27	2.35	0.00	2.35
2	COMMERCIAL	1.26	0.00	1.26	20%	0.25	(1)	0.00	(1)
3	COMMERCIAL	1.35	0.00	1.35	20%	0.27	(1)	0.00	(1)
4	COMMERCIAL	2.07	0.00	2.07	20%	0.41	(1)	0.00	(1)
5	COMMERCIAL	15.79	0.00	15.09	20%	3.02	3.78	1.07	4.85
TOTAL		**28.02**	**0.00**	**27.32**		**6.22**	(1)	**1.07**	(1)

NOTES:
(1) TBD - TO BE DETERMINED WITH FUTURE MDP'S AND CSP'S
(3) OPEN SPACE REQUIRED IS CALCULATED PARCEL BY PARCEL AND OPEN SPACE PROVIDED IS APPLIED OVER THE OVERALL PD.

Green Building Standards		
Minimum Points Required	4	4.0 points required for Residential Developments 30 units or more.
Item	Points	Notes
Development in the MU-ES: Mixed-Use East Shore District	1	
Additional 5% bicycle parking	4	0.5 per additional 5% 40% additional
Elevate new and/or existing structures more than 3 feet above base flood elevation (BFE)	15	0.50 per foot above BFE 30..64 FEET ABOVE BFE
Total Recommended Potential Points	4	

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LICENSED PROFESSIONAL ENGINEER LICENSE # 71 JORDAN D. RAPER STATE OF FLORIDA PROFESSIONAL ENGINEER DATE: 07/12/2023

KHA PROJECT 249218001
DATE 7/12/2023
SCALE AS SHOWN
DESIGNED BY JDB
DRAWN BY JDB
CHECKED BY LJD

OVERALL SITE PLAN

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
C4.0

Drawing name: K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CADD\CONST\CSP\PlanSheets\C4.0 - OVERALL SITE PLAN.dwg C4.0 - OVERALL SITE PLAN Oct 16, 2023 8:23am by: cole.sauer
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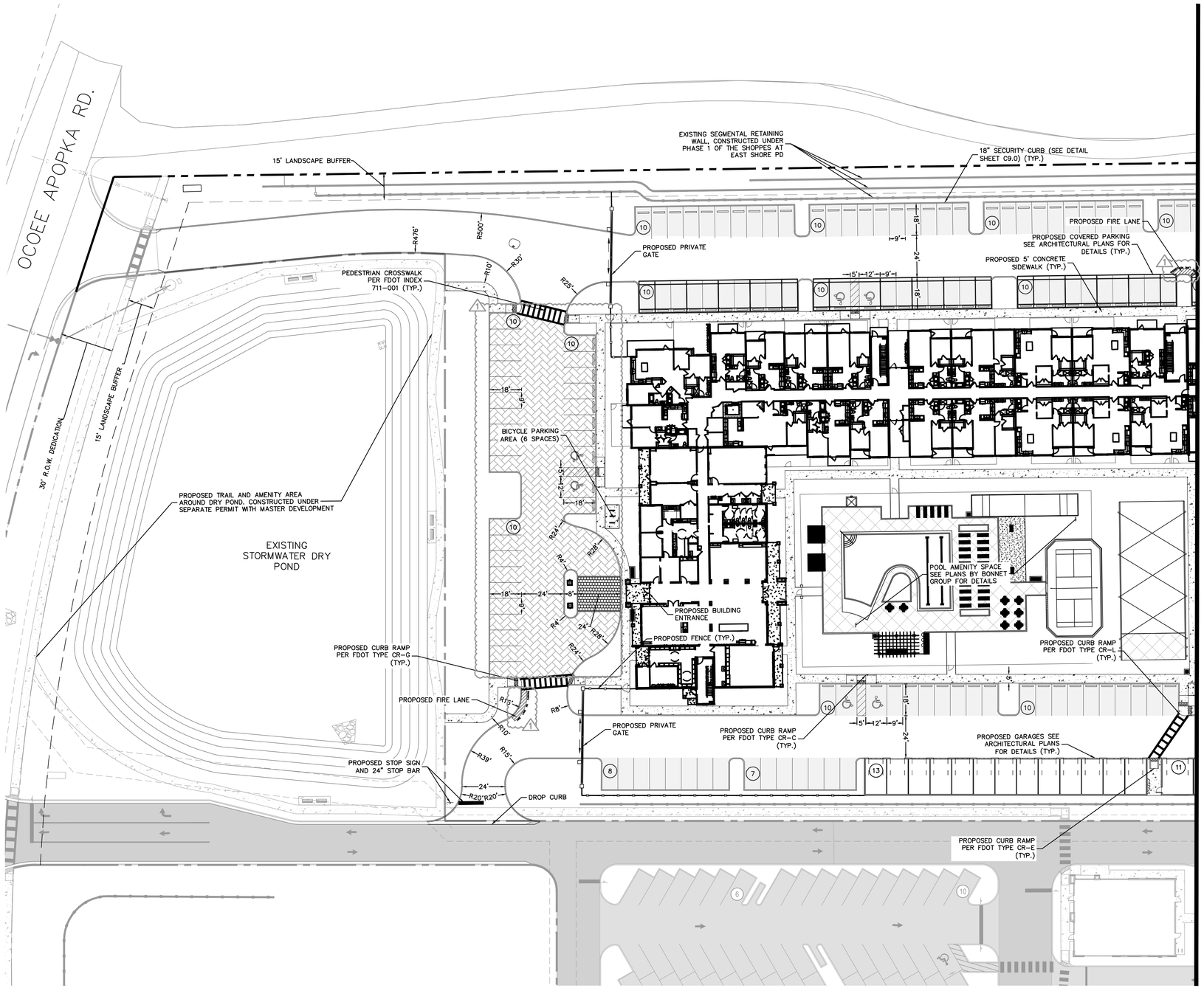

NORTH

GRAPHIC SCALE IN FEET
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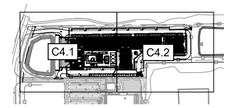

KEY MAP
SCALE: 1" = 500'

LEGEND

- PROPERTY LINE (TYP.)
- LANDSCAPE BUFFER
- PROPOSED FENCE 6 FT ALUMINUM
- PROPOSED STANDARD DUTY ASPHALT PAVEMENT SEE DETAIL C9.0
- PROPOSED CONCRETE SIDEWALK SEE DETAIL C9.0
- PROPOSED HEAVY DUTY CONCRETE SEE DETAIL C9.0
- PROPOSED BELGARD PERVIOUS INTERLOCKING CONCRETE PAVERS, OR APPROVED ALTERNATIVE. SEE DETAIL C9.0
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No.	REVISIONS	DATE	BY
1	CITY OF APOPKA CSP COMMENT REVISIONS	06/07/2023	CS

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LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER 73911
STATE OF FLORIDA
JORDAN D. BRADDY
PROFESSIONAL ENGINEER
DATE: 7/12/2023

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

SITE PLAN

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
C4.1

Drawing name: K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CADD\CONST\CSP\PlanSheets\C4.1 - SITE PLAN.dwg C4.1 - SITE PLAN Oct 16, 2023 8:24am by: cole.spuer
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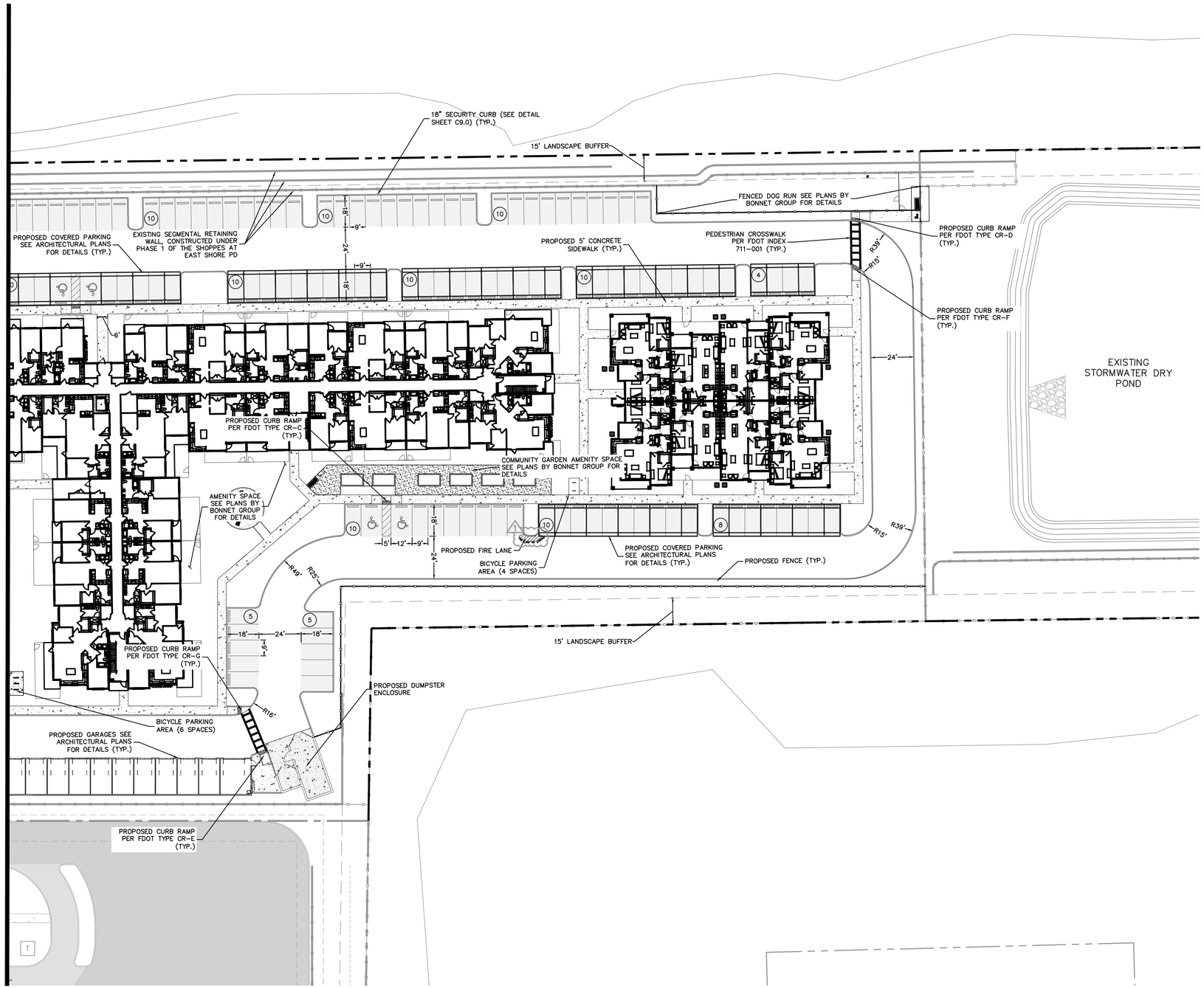

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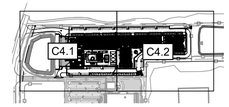

KEY MAP
SCALE: 1" = 500'

LEGEND

- PROPERTY LINE (TYP.)
- LANDSCAPE BUFFER
- PROPOSED FENCE 6 FT ALUMINUM
- PROPOSED STANDARD DUTY ASPHALT PAVEMENT SEE DETAIL C9.0
- PROPOSED CONCRETE SIDEWALK SEE DETAIL C9.0
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1	CITY OF APOPKA CSP COMMENT REVISIONS	08/07/2023	CS
1	SITE PLAN REVIEW COMMENTS	09/15/23	KW

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LICENSED PROFESSIONAL ENGINEER
JORDAN DRAPER
LICENSE NUMBER 93922
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: 10/16/2023

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

SITE PLAN

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
C4.2

Drawing name: K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CADD\CONSTV\CSP\PlanSheets\C4.1 – SITE PLAN.dwg C4.2 – SITE PLAN Oct 16, 2023 8:24am by: cole.souer
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STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D-3	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 94.31 E. INV IN: 89.56 SE. INV IN: 91.22 W. INV OUT: 89.56
D-6	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 94.31 E. INV IN: 89.21 SE. INV IN: 91.28 W. INV OUT: 89.21

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D-7	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 94.19 S. INV IN: 88.34 E. INV IN: 91.50 N. INV OUT: 88.34
D-8	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 93.50 E. INV OUT: 90.50

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
MH-2	MH TOP: 95.30 E. INV IN: 88.74 NE. INV IN: 92.63 N. INV OUT: 88.74
MH-3	MH TOP: 94.93 E. INV IN: 88.94 S. INV IN: 88.00 W. INV IN: 90.04

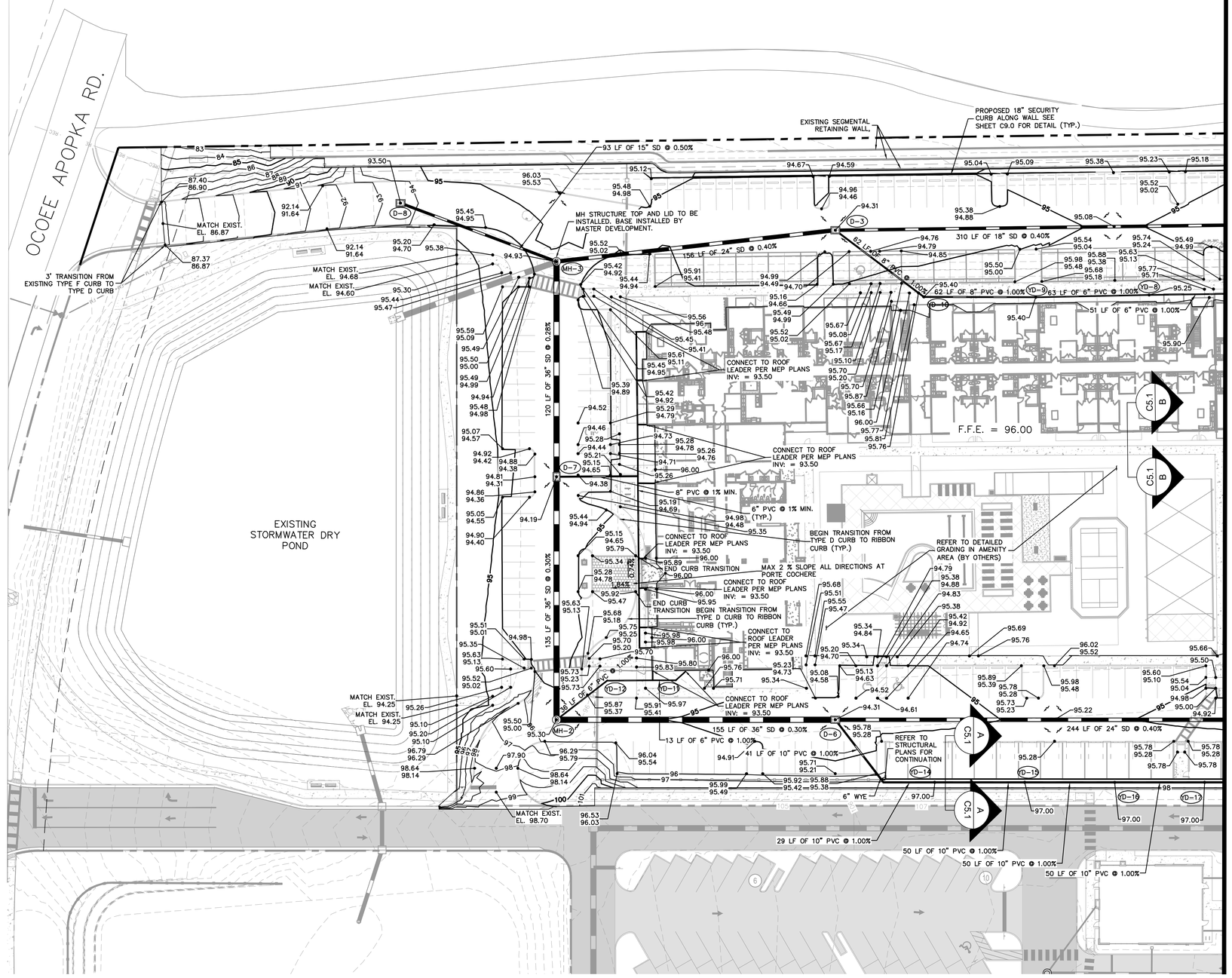
STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
YD-10	YARD DRAIN TOP: 95.40 E. INV IN: 91.83 NW. INV OUT: 91.83
YD-11	YARD DRAIN TOP: 95.25 NE. INV IN: 93.36 W. INV OUT: 93.36

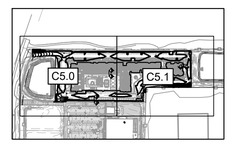
STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
YD-8	YARD DRAIN TOP: 95.25 E. INV IN: 93.09 W. INV OUT: 93.08
YD-9	YARD DRAIN TOP: 95.40 E. INV IN: 92.45 W. INV OUT: 92.46

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
YD-12	YARD DRAIN TOP: 95.15 E. INV IN: 92.98 SW. INV OUT: 92.98
YD-14	ADS IN-LINE INLET TOP: 97.00 E. INV IN: 92.01 W. INV OUT: 92.01

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
YD-15	ADS IN-LINE INLET TOP: 97.00 E. INV IN: 92.51 W. INV OUT: 92.51
YD-16	ADS IN-LINE INLET TOP: 97.00 E. INV IN: 93.01 W. INV OUT: 93.01

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
YD-17	ADS IN-LINE INLET TOP: 97.00 E. INV IN: 93.51 W. INV OUT: 93.51





KEY MAP
SCALE: 1" = 500'

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND

- PROPERTY LINE (TYP.)
- PROPOSED STORM PIPE
- ±99.00 PROPOSED SPOT ELEVATION
- PROPOSED STORM INLET
- 100 PROPOSED CONTOUR (TYP.)
- EXISTING STORM PIPE
- EXISTING RETAINING WALL (HEIGHT VARIES)
- 100 EXISTING CONTOUR
- EXISTING STORM INLET

NOTES:

1. STORM PIPE MATERIALS SHALL BE A-2000 PVC, N-12 HP STORM, RIGID WALL WATER TIGHT HDPE, OR RCP, AND CONFORM WITH THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS WELL AS CITY OF APOPKA REQUIREMENTS.
2. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON THE CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.
3. PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA STANDARDS AND SHALL HAVE A DETECTABLE WARNING SURFACE THAT IS FULL WIDTH AND FULL DEPTH OF THE CURB RAMP, NOT INCLUDING FLARES.
4. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.
5. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL IN NO CASE SHALL SIDEWALK CROSS SLOPE EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPE EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.
6. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES.
7. ALL PEDESTRIAN SIDEWALKS, PATHWAYS, AND CROSSWALKS SHALL BE CONSTRUCTED NOT TO EXCEED MAX. 2.0% CROSS SLOPE, MAX. 5.0% RUNNING SLOPE.
8. ALL HANDICAP ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED NOT TO EXCEED MAX. 2.0% CROSS SLOPE IN ALL DIRECTIONS.
9. PROPOSED GRADES TO MATCH EXISTING ELEVATIONS AT PROPERTY LINE.
10. CONTRACTOR TO FIELD VERIFY ELEVATIONS AT ALL EXISTING SIDEWALK AND ROAD CONNECTION POINTS WITH ENGINEER OF RECORD BEFORE CONSTRUCTION OF ANY IMPROVEMENTS.
11. FOR EROSION CONTROL NOTES REFER TO SHEET C2.1.
12. CONTRACTOR TO ENSURE ADEQUATE COVER REMAINS OVER ALL EXISTING UTILITIES.
13. AREA UNDER PORTE COCHERE SHALL NOT EXCEED 2.00% SLOPE IN ANY DIRECTION.

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No.	REVISIONS	DATE	BY
1	CITY OF APOPKA CSP COMMENT REVISIONS	06/07/2023	CS

Kimley»Horn

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189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801
PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL ENGINEER
JORDAN DRAPER
LICENSE NO. 88911
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

PAVING GRADING AND DRAINAGE PLAN

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
C5.0

Drawing name: K:\orl_civil\249218001-shoppes at east shore alt\CADD\CONST\CSP\plansheets\C5.0 - PAVING GRADING AND DRAINAGE PLAN.dwg Oct 16, 2023 8:24am by cole.sauer
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Drawing name: K:\orl_civil\249218001-shoppes at east shore at\CADD\CONST\CSP\plansheets\C5.0 - PAVING GRADING AND DRAINAGE PLAN.dwg C5.1 - PAVING GRADING AND DRAINAGE PLAN Oct 16, 2023 8:25am by: cole.spuer
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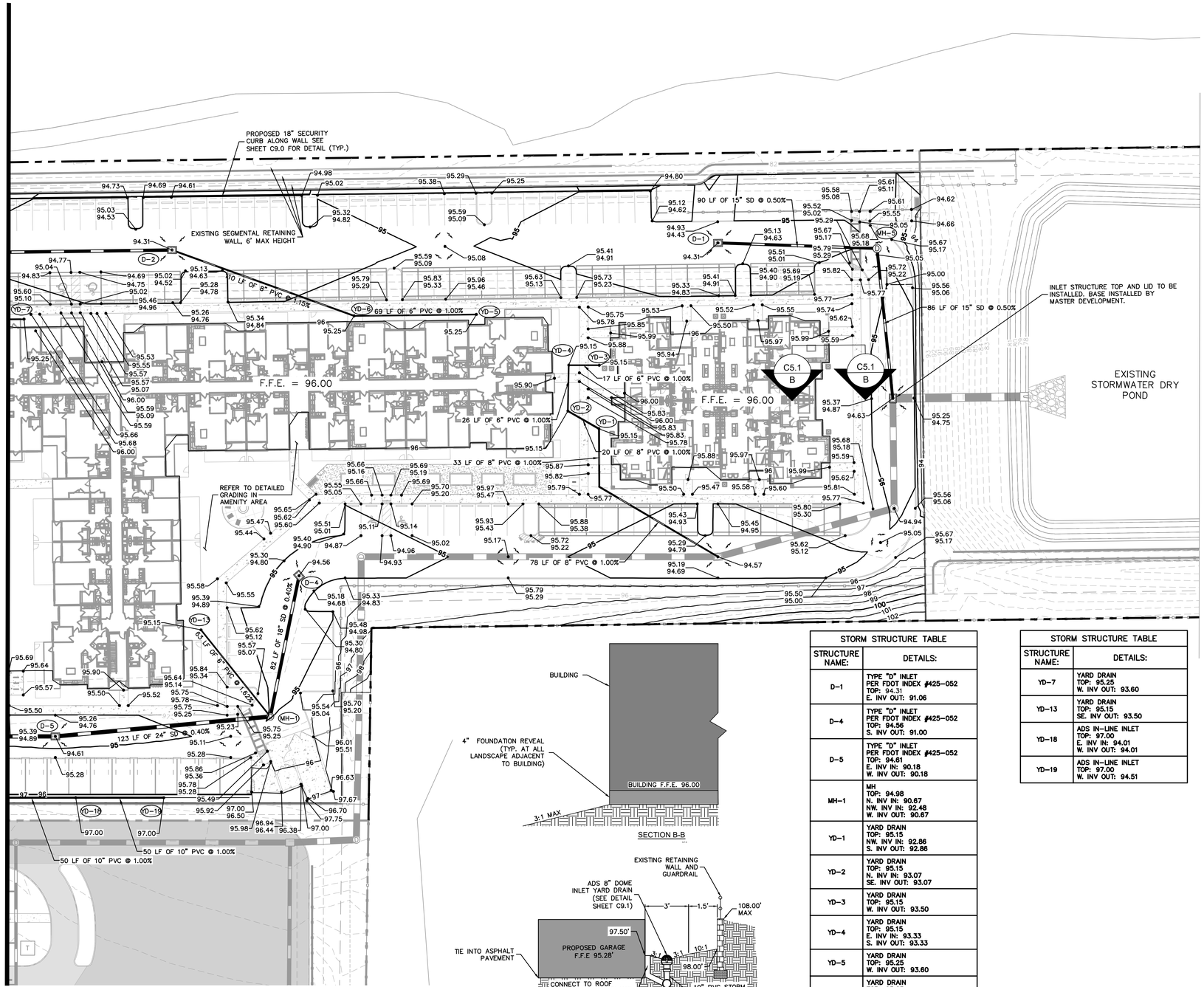
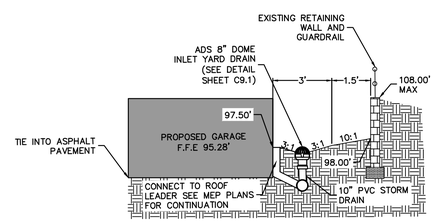


SECTION B-B

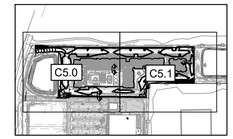


SECTION A-A

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D-1	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 94.31 E. INV OUT: 91.06
D-4	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 94.56 S. INV OUT: 91.00
D-5	TYPE "D" INLET PER FDOT INDEX #425-052 TOP: 94.61 E. INV IN: 90.18 W. INV OUT: 90.18
MH-1	MH TOP: 94.98 N. INV IN: 90.67 NW. INV IN: 92.48 W. INV OUT: 90.67
YD-1	YARD DRAIN TOP: 95.15 NW. INV IN: 92.86 S. INV OUT: 92.86
YD-2	YARD DRAIN TOP: 95.15 N. INV IN: 93.07 SE. INV OUT: 93.07
YD-3	YARD DRAIN TOP: 95.15 W. INV OUT: 93.50
YD-4	YARD DRAIN TOP: 95.15 E. INV IN: 93.33 S. INV OUT: 93.33
YD-5	YARD DRAIN TOP: 95.25 W. INV OUT: 93.60
YD-6	YARD DRAIN TOP: 95.25 E. INV IN: 92.91 W. INV OUT: 92.91

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
YD-7	YARD DRAIN TOP: 95.25 W. INV OUT: 93.60
YD-13	YARD DRAIN TOP: 95.15 SE. INV OUT: 93.50
YD-18	ADS IN-LINE INLET TOP: 97.00 E. INV IN: 94.01 W. INV OUT: 94.01
YD-19	ADS IN-LINE INLET TOP: 97.00 W. INV OUT: 94.51

GRAPHIC SCALE IN FEET
0 15 30 60



KEY MAP
SCALE: 1" = 500'

LEGEND

- PROPERTY LINE (TYP.)
- PROPOSED STORM PIPE
- ±99.00 — PROPOSED SPOT ELEVATION
- PROPOSED STORM INLET
- 100 — PROPOSED CONTOUR (TYP.)
- EXISTING STORM PIPE
- EXISTING RETAINING WALL (HEIGHT VARIES)
- 100 — EXISTING CONTOUR
- EXISTING STORM INLET

NOTES:

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13. AREA UNDER PORTE COCHERE SHALL NOT EXCEED 2.00% SLOPE IN

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LICENSED PROFESSIONAL ENGINEER
JORDAN D. DRAPER
LICENSE NO. 84961
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: 10/16/2023

KHA PROJECT 249218001
DATE 7/12/2023
SCALE AS SHOWN
DESIGNED BY JDB
DRAWN BY JDB
CHECKED BY LJD

PAVING GRADING AND DRAINAGE PLAN

SHOPPES AT EAST SHORE MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
C5.1

SANITARY SEWER STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
S-3	SANITARY MANHOLE TOP: 94.51 S. INV IN: 86.32 E. INV IN: 86.41 W. INV OUT: 86.32

Mera Apopka Utility Conflict Table

Crossing #	Top Pipe			Bottom Pipe			Clearance
	Type	Size (in)	Bottom	Type	Size (in)	Crown	(ft.)
1	Storm	15"	90.17	Sanitary	8"	85.95	4.22
2	Storm	15"	89.88	Sanitary	6"	86.28	3.60
3	Storm	42"	87.61	Sanitary	6"	86.30	1.31
4	Storm	30"	88.57	Sanitary	8"	87.57	1.00
5	Storm	6"	90.65	Sanitary	8"	88.91	1.74
6	Storm	30"	88.67	Sanitary	6"	87.67	1.00
7	Storm	6"	90.95	Sanitary	6"	89.95	1.00

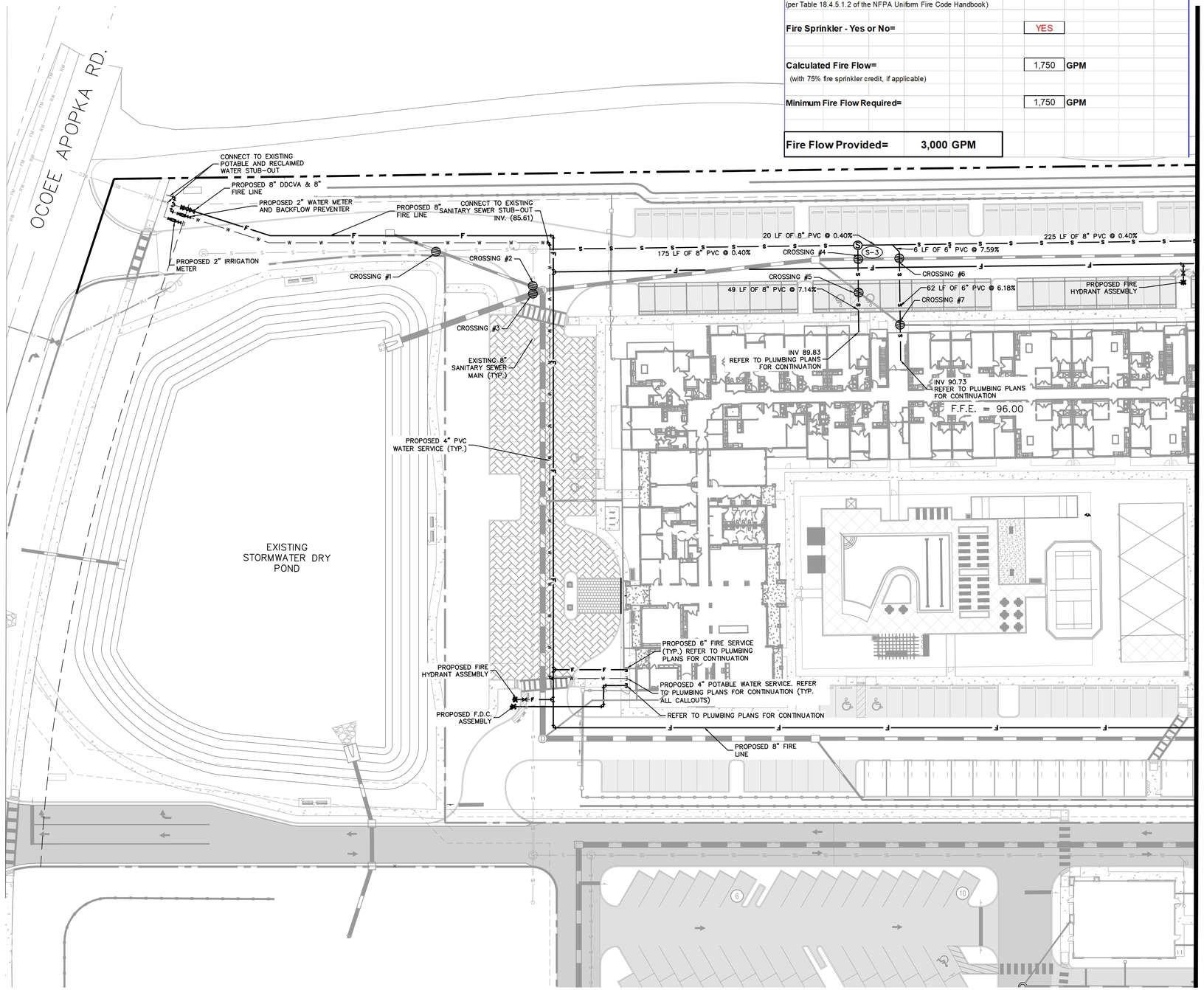
January 18, 2023
KHA Job# 249218001

Mera Apopka

Needed Fire Flow (NFF)
(per NFPA 1 Uniform Fire Code Handbook, 2018 Edition)

BUILDING 1

Building Fire Area=	259,885	**SF**
Building Type (per NFPA 220) =	V(200)	
Associated Min. Required Fire Flow= (per Table 18.4.5.1.2 of the NFPA Uniform Fire Code Handbook)	7,000	**GPM**
Fire Sprinkler - Yes or No=	YES	
Calculated Fire Flow= (with 75% fire sprinkler credit, if applicable)	1,750	**GPM**
Minimum Fire Flow Required=	1,750	**GPM**
Fire Flow Provided=	3,000 GPM	

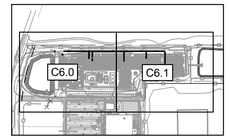


LEGEND

- PROPERTY LINE (TYP.)
- EXISTING POTABLE WATER MAIN
- EXISTING RECLAIMED WATER MAIN
- EXISTING SANITARY SEWER MAIN
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED POTABLE WATER MAIN
- PROPOSED RECLAIMED WATER MAIN
- PROPOSED FIRE MAIN
- PROPOSED SANITARY SEWER MAIN
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED F.D.C.
- PROPOSED SANITARY SEWER MANHOLE
- UTILITY CROSSING

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60



KEY MAP
SCALE: 1" = 500'

NOTES:

1. ALL ONSITE UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED UNLESS OTHERWISE NOTED.
2. MAINTAIN A MINIMUM OF 3-FT OF COVER OVER ALL PROPOSED UTILITIES.
3. ALL WATER MAINS, AND DOMESTIC LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF APOPKA STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL.
4. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
5. ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
6. CONTRACTOR TO CALL "SUNSHINE STATE ONE CALL OF FLORIDA" (1-800-432-4770) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
7. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/ DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE CITY OF APOPKA SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN PLANS.
8. CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.
9. CONTRACTOR TO AVOID DISRUPTION OF ANY ADJACENT TENANT'S TRAFFIC OPERATIONS, TO THE MAXIMUM EXTENT, DURING INSTALLATION OF UTILITIES. IF TRAFFIC IS TO BE OBSTRUCTED CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL PLAN WITH THE LOCAL MUNICIPALITY.
10. ALL DIMENSIONS ARE TO CENTERLINE OF PIPE OR CENTER OF MANHOLE UNLESS NOTED OTHERWISE.
11. SEE PLUMBING PLANS FOR EXACT UTILITY CONNECTION LOCATIONS AT BUILDING.
12. LIGHT POLES SHOWN FOR COORDINATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE SITE LIGHTING PLANS BY OTHERS FOR MORE INFORMATION.
13. ELECTRIC, TELEPHONE, AND OTHER DRY UTILITIES SHALL BE PLACED WITHIN CONDUIT, MEETING PRIVATE UTILITY STANDARDS, WHEN ROUTE CROSSES PAVED DRIVES AND PARKING AREAS.
14. ALL UNDERGROUND WATER MAINS AND HYDRANTS SHALL BE INSTALLED, COMPLETED AND IN SERVICE PRIOR TO ANY COMBUSTIBLES BEING BROUGHT ONSITE.
15. CONTRACTOR TO ENSURE ADEQUATE COVER REMAINS OVER ALL EXISTING UTILITIES.
16. CONTRACTOR TO VERIFY EXISTING COVER OVER ALL UTILITIES BEFORE START OF CONSTRUCTION AND TO COORDINATE WITH THE ENGINEER OF RECORD PRIOR TO START OF CONSTRUCTION IF DESIGN DOES NOT PROVIDE 36" COVER.
17. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES AT ALL POINTS OF CONNECTION TO, AND AT ALL AREAS OF CONFLICT WITH CITY OF APOPKA MAINS.
18. ALL UTILITIES (INCLUDING PUMP STATION IF APPLICABLE) LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
19. PRIOR TO INITIATING CONSTRUCTION, CONTACT THE CITY OF APOPKA AT (407) 703-1731 TO SCHEDULE A PRECONSTRUCTION MEETING. THE PRECONSTRUCTION MEETING CANNOT BE HELD UNTIL THE STAMPED PLANS ARE RELEASED BY THE BUILDING DEPARTMENT. CONSTRUCTION SHALL NOT BE PERMITTED WITHOUT A CITY OF APOPKA PRECONSTRUCTION MEETING AND SET OF STAMPED PLANS LOCATED ON THE PROJECT SITE.
20. ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED AT ALL POINTS OF CONNECTION TO, AND AT ALL AREAS OF CONFLICT WITH CITY OF APOPKA MAINS.
21. PROJECT SHALL CONFORM TO FFPC 6TH EDITION (NFPA 1 AND 101 2015 EDITION)
22. PRIOR TO FIRE LINE INSTALLATION, THE FLORIDA LICENSED CONTRACTOR SHALL SUBMIT LAYOUT DESIGN DRAWINGS TO THE OFFICE OF THE FIRE MARSHAL. IF REQUIRED BY FLORIDA STATUE 553.79, DRAWINGS MUST BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER. THE DRAWINGS MUST SHOW ALL UNDERGROUND FIRE LINES AND COMPONENTS STARTING FROM THE "POINT OF SERVICE" AS DEFINED UNDER FLORIDA STATUE 633.102. THE DESIGN SHALL BE IN ACCORDANCE TO THE CURRENT FLORIDA FIRE PREVENTION CODE AND ALL ADOPTED NFPA CODES AND STANDARDS.
23. CONTRACTOR TO ENSURE THAT 36" CLEAR IS PROVIDED AROUND ALL FIRE HYDRANTS.

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PHONE: 407-898-1511
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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
JORDAN DRAPER
LICENSE NO. LA0001234
STATE OF FLORIDA
PROFESSIONAL ENGINEER
JORDAN DRAPER
FLORIDA LICENSE NUMBER 0000000
DATE: 7/12/2023

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

UTILITY PLAN

SHOPPES AT EAST SHORE
MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
C6.0

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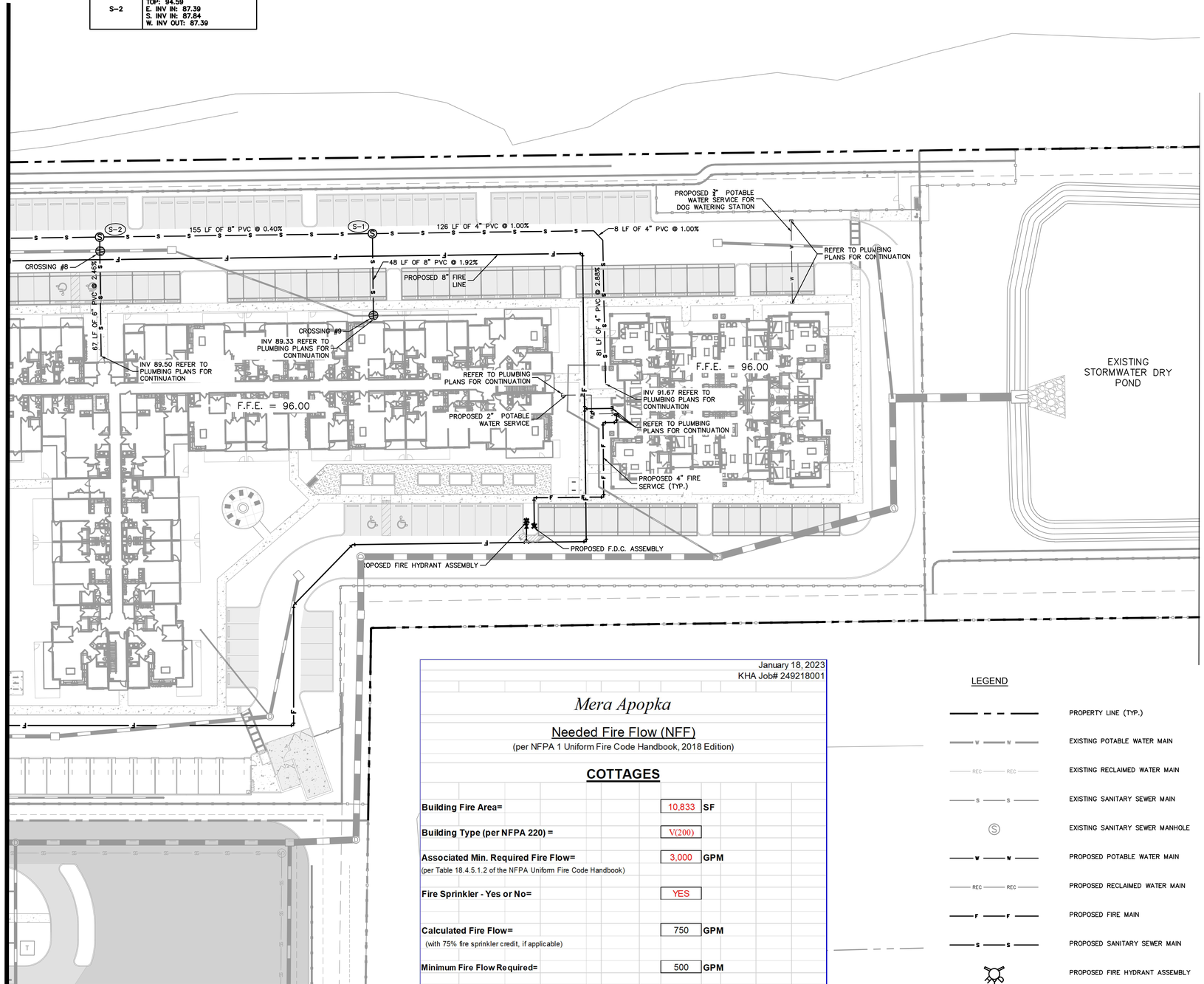
Drawing name: K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CADD\CONST\CSP\PlanSheets\C6.0 - UTILITY PLAN.dwg C6.0 - UTILITY PLAN Oct 16, 2023 8:25am by: cole.squer

SANITARY SEWER STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
S-1	SANITARY MANHOLE TOP: 94.96 S. INV IN: 88.41 E. INV IN: 88.01 W. INV OUT: 88.01
S-2	SANITARY MANHOLE TOP: 94.59 E. INV IN: 87.39 S. INV IN: 87.84 W. INV OUT: 87.39

Mera Apopka Utility Conflict Table

Crossing #	Top Pipe			Bottom Pipe			Clearance
	Type	Size (in)	Bottom	Type	Size (in)	Crown	(ft.)
8	Storm	30"	89.55	Sanitary	6"	88.55	1.00
9	Storm	12"	91.20	Sanitary	6"	90.00	1.20



January 18, 2023
KHA Job# 249218001

Mera Apopka

Needed Fire Flow (NFF)
(per NFPA 1 Uniform Fire Code Handbook, 2018 Edition)

COTTAGES

Building Fire Area=	10,833	**SF**
Building Type (per NFPA 220) =	V(200)	
Associated Min. Required Fire Flow= (per Table 18.4.5.1.2 of the NFPA Uniform Fire Code Handbook)	3,000	**GPM**
Fire Sprinkler - Yes or No=	YES	
Calculated Fire Flow= (with 75% fire sprinkler credit, if applicable)	750	**GPM**
Minimum Fire Flow Required=	500	**GPM**
Fire Flow Provided=	1,000 GPM	

LEGEND

- PROPERTY LINE (TYP.)
- EXISTING POTABLE WATER MAIN
- EXISTING RECLAIMED WATER MAIN
- EXISTING SANITARY SEWER MAIN
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED POTABLE WATER MAIN
- PROPOSED RECLAIMED WATER MAIN
- PROPOSED FIRE MAIN
- PROPOSED SANITARY SEWER MAIN
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED F.D.C.
- PROPOSED SANITARY SEWER MANHOLE
- UTILITY CROSSING

NOTES:

1. ALL ONSITE UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED UNLESS OTHERWISE NOTED.
2. MAINTAIN A MINIMUM OF 3-FT OF COVER OVER ALL PROPOSED UTILITIES.
3. ALL WATER MAINS, AND DOMESTIC LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF APOPKA STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL.
4. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
5. ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
6. CONTRACTOR TO CALL "SUNSHINE STATE ONE CALL OF FLORIDA" (1-800-432-4770) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
7. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/ DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE CITY OF APOPKA SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN PLANS.
8. CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.
9. CONTRACTOR TO AVOID DISRUPTION OF ANY ADJACENT TENANT'S TRAFFIC OPERATIONS, TO THE MAXIMUM EXTENT, DURING INSTALLATION OF UTILITIES. IF TRAFFIC IS TO BE OBSTRUCTED CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL PLAN WITH THE LOCAL MUNICIPALITY.
10. ALL DIMENSIONS ARE TO CENTERLINE OF PIPE OR CENTER OF MANHOLE UNLESS NOTED OTHERWISE.
11. SEE PLUMBING PLANS FOR EXACT UTILITY CONNECTION LOCATIONS AT BUILDING.
12. LIGHT POLES SHOWN FOR COORDINATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE SITE LIGHTING PLANS BY OTHERS FOR MORE INFORMATION.
13. ELECTRIC, TELEPHONE, AND OTHER DRY UTILITIES SHALL BE PLACED WITHIN CONDUIT, MEETING PRIVATE UTILITY STANDARDS, WHEN ROUTE CROSSES PAVED DRIVES AND PARKING AREAS.
14. ALL UNDERGROUND WATER MAINS AND HYDRANTS SHALL BE INSTALLED, COMPLETED AND IN SERVICE PRIOR TO ANY COMBUSTIBLES BEING BROUGHT ONSITE.
15. CONTRACTOR TO ENSURE ADEQUATE COVER REMAINS OVER ALL EXISTING UTILITIES.
16. CONTRACTOR TO VERIFY EXISTING COVER OVER ALL UTILITIES BEFORE START OF CONSTRUCTION AND TO COORDINATE WITH THE ENGINEER OF RECORD PRIOR TO START OF CONSTRUCTION IF DESIGN DOES NOT PROVIDE 36" COVER.
17. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES AT ALL POINTS OF CONNECTION TO, AND AT ALL AREAS OF CONFLICT WITH CITY OF APOPKA MAINS.
18. ALL UTILITIES (INCLUDING PUMP STATION IF APPLICABLE) LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
19. PRIOR TO INITIATING CONSTRUCTION, CONTACT THE CITY OF APOPKA AT (407) 703-1731 TO SCHEDULE A PRECONSTRUCTION MEETING. THE PRECONSTRUCTION MEETING CANNOT BE HELD UNTIL THE STAMPED PLANS ARE RELEASED BY THE BUILDING DEPARTMENT. CONSTRUCTION SHALL NOT BE PERMITTED WITHOUT A CITY OF APOPKA PRECONSTRUCTION MEETING AND SET OF STAMPED PLANS LOCATED ON THE PROJECT SITE.
20. ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED AT ALL POINTS OF CONNECTION TO, AND AT ALL AREAS OF CONFLICT WITH CITY OF APOPKA MAINS.
21. PROJECT SHALL CONFORM TO FFPC 6TH EDITION (NFPA 1 AND 101 2015 EDITION)
22. PRIOR TO FIRE LINE INSTALLATION, THE FLORIDA LICENSED CONTRACTOR SHALL SUBMIT LAYOUT DESIGN DRAWINGS TO THE OFFICE OF THE FIRE MARSHAL. IF REQUIRED BY FLORIDA STATUE 553.79, DRAWINGS MUST BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER. THE DRAWINGS MUST SHOW ALL UNDERGROUND FIRE LINES AND COMPONENTS STARTING FROM THE 'POINT OF SERVICE' AS DEFINED UNDER FLORIDA STATUE 633.102. THE DESIGN SHALL BE IN ACCORDANCE TO THE CURRENT FLORIDA FIRE PREVENTION CODE AND ALL ADOPTED NFPA CODES AND STANDARDS.
23. CONTRACTOR TO ENSURE THAT 36" CLEAR IS PROVIDED AROUND ALL FIRE HYDRANTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.
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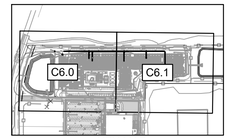
NORTH

GRAPHIC SCALE IN FEET
0 15 30 60



KEY MAP
SCALE: 1" = 500'

No.	REVISIONS	DATE	BY
1	CITY OF APOPKA CSP COMMENT REVISIONS	08/07/2023	CS

Kimley»Horn
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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
JORDAN DRAPER
LICENSE NUMBER 6667
STATE OF FLORIDA
REGISTERED
PROFESSIONAL
DATE: 10/16/2023

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

UTILITY PLAN

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
C6.1

Drawing name: K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CADD\CONST\CSP\PlanSheets\C6.0 - UTILITY PLAN.dwg C6.1 - UTILITY PLAN Oct 16, 2023 8:26am by: cole.sauer
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Drawing name: K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CADD\CONST\CSP\PlanSheets\C7.0 - FIRE TRUCK ROUTING PLAN.dwg C7.0 - FIRE TRUCK ROUTING PLAN Oct 16, 2023 8:26am by: cole.sauer

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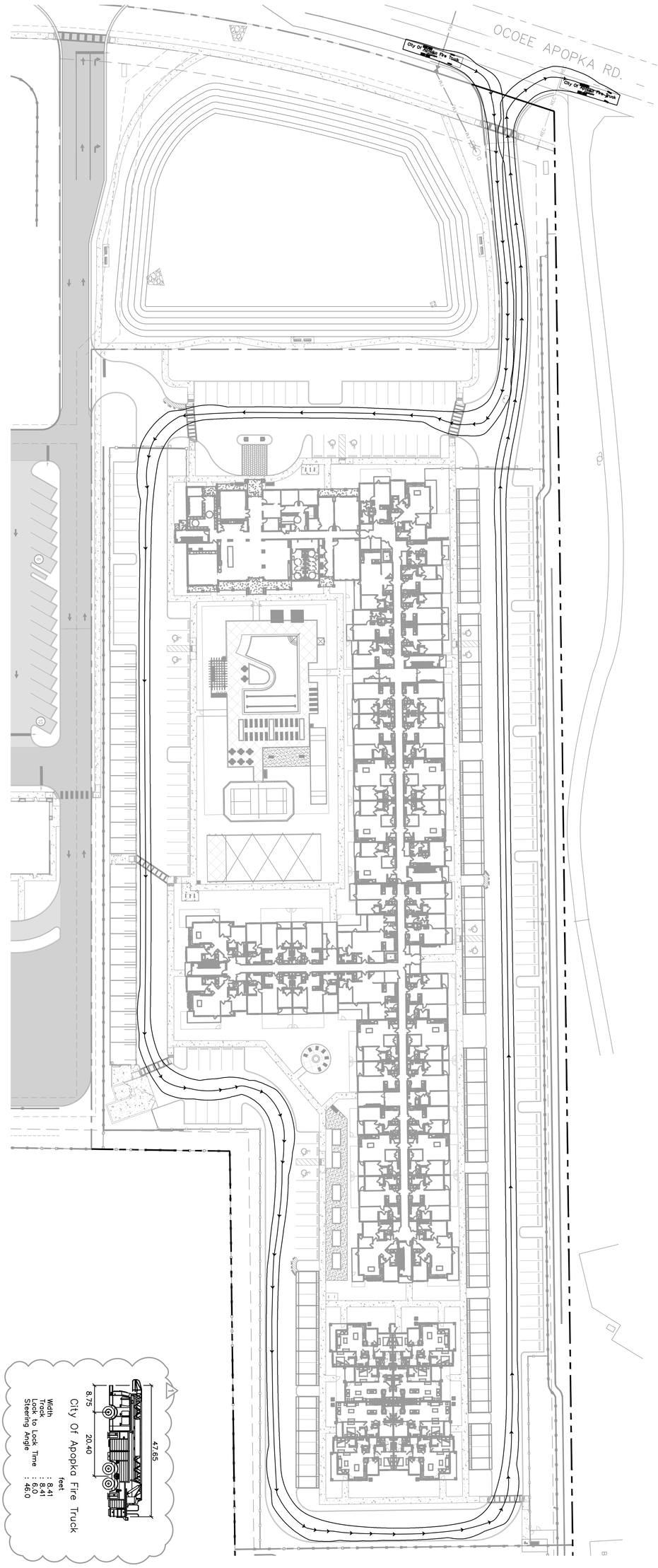

SHEET NUMBER C7.0

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

FIRE TRUCK ROUTING PLAN

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

LICENSED PROFESSIONAL
JORDAN DRAPER
LICENSE
No. 81926
JORDAN DRAPER
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE:

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Apopka Front Loader Garbage Truck

	feet
Width	: 8.53
Track	: 8.53
Lock to Lock Time	: 6.0
Steering Angle	: 27.7

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LICENSED PROFESSIONAL ENGINEER
JORDAN D. BRAPPER
LICENSE
STATE OF FLORIDA
PROFESSIONAL ENGINEER
LICENSE NUMBER 88922
DATE: 10/16/2023

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

GARBAGE TRUCK ROUTING PLAN

SHOPPES AT EAST SHORE
MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
C7.1

Drawing name: K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CADD\CONST\CSP\PlanSheets\C7.1 - GARBAGE TRUCK ROUTING PLAN.dwg C7.1 - GARBAGE TRUCK ROUTING PLAN Oct 16, 2023 8:26am by: cole.souer
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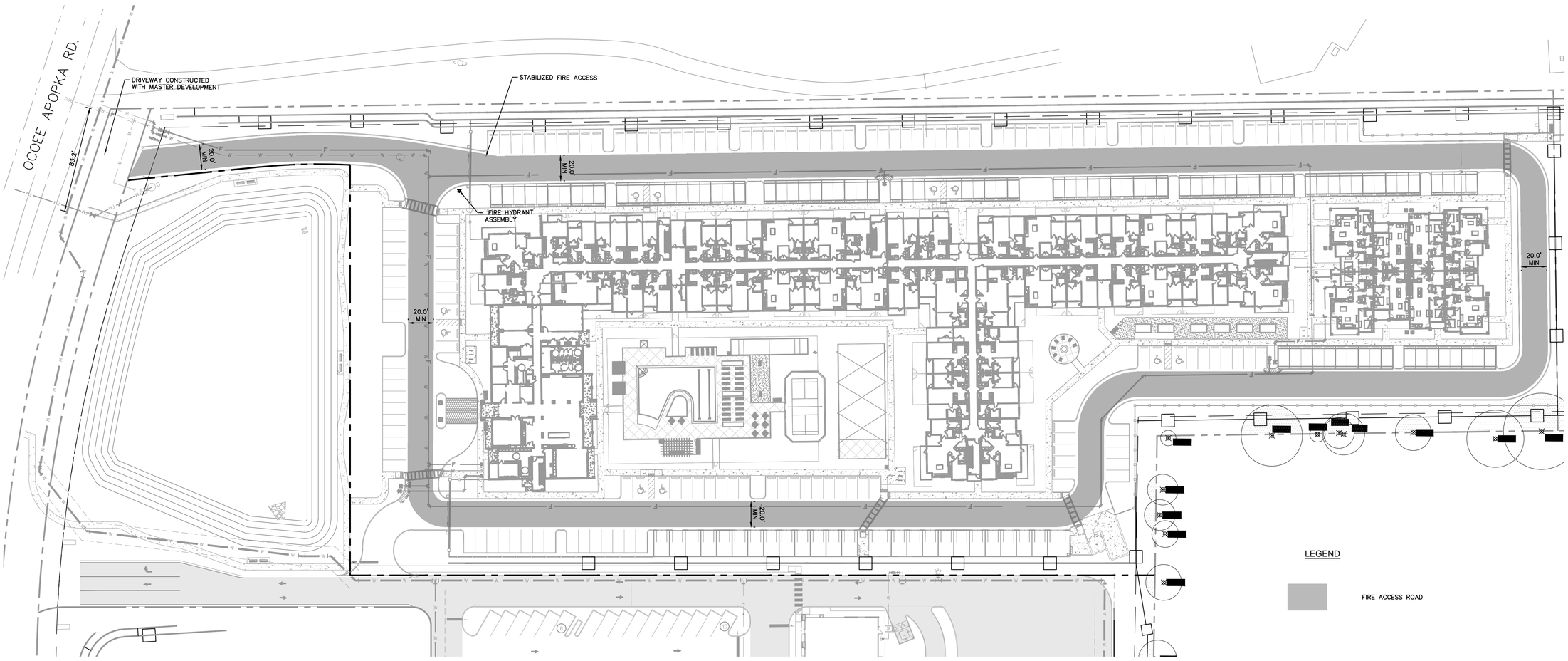
NOTE:

PROJECT DRIVEWAY WITH FULL DEPTH SUBGRADE, BASE AND 1" MINIMUM LIFT OF ASPHALT, STABILIZED ACCESS ROADWAY AROUND PROPOSED BUILDING AND FIRE HYDRANT REQUIRED TO BE INSTALLED AND INSPECTED PRIOR TO ISSUANCE OF BUILDING PERMITS.



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LICENSED PROFESSIONAL ENGINEER
JORDAN D. BRAPPER
LICENSE
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE:

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

FIRE ACCESS ROAD

SHOPPES AT EAST SHORE
MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
C7.2

Drawing name: K:\orl_civil\249218001-shoppes at east shore alf\CADD\CONST\CSP\plonsheets\C7.2 FIRE ACCESS ROAD.dwg C7.2-FIRE ACCESS ROAD Oct 16, 2023 8:27am by: cole.squier
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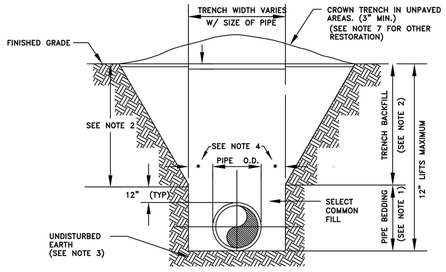
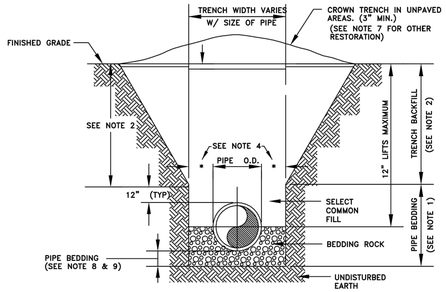


NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS TO AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETERS LESS THAN 24", AND 24" 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.
8. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.
9. ALL UNPAVED DISTURBED AREAS SHALL BE SODDED TO MATCH ADJACENT DOMINATE GRASS SPECIES.

TYPE "B" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 100



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. USE OF TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. 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. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING IF REQUIRED BY THE CITY. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15" 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. THE CITY SHALL DETERMINE IN THE FIELD IF REMOVAL OF UNSUITABLE MATERIAL IS REQUIRED TO REACH A SUITABLE FOUNDATION.
9. ALL UNPAVED DISTURBED AREAS SHALL BE SODDED TO MATCH ADJACENT DOMINATE GRASS SPECIES.
10. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF THE GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.

TYPE "A" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 101

PROPOSED UTILITY	HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS									
	POTABLE WATER		RECLAIMED WATER*		SANITARY SEWER FORCE MAIN		SANITARY SEWER GRAVITY MAIN		STORM SEWER	
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.
POTABLE WATER	–	–	3'	12"	6'	12"	6'	6"ABOVE 12"BELOW	3'	6"
RECLAIMED* WATER	3'	12"	–	–	3'	12"	3'	12"	–	–
SANITARY SEWER FORCE MAIN	6'	12"	3'	12"	–	–	–	–	–	–
SANITARY SEWER GRAVITY MAIN	6'	6"ABOVE 12"BELOW	3'	12"	–	–	–	–	–	–

GENERAL NOTES:

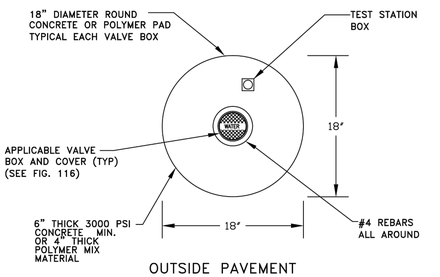
1. THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.). THESE SEPARATION REQIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.
2. * FOR THE PURPOSE OF THIS TABLE, RECLAIMED WATER SHALL MEAN UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 17-610. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.
3. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATER CLEARANCE SHALL BE USED.

   C/C – DENOTES CENTER OF PIPE TO CENTER OF PIPE.

   O/O – DENOTES OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
4. ACCEPTABLE VARIANCES:
   A. WHERE HORIZONTAL SEPARATION IS NOT ATTAINABLE, PVC-C-900 SDR-14 OR CONCRETE ENCASEMENT MUST BE USED FOR THE SANITARY SEWER LINE FOR AT LEAST ONE OF THE PIPES. PVC-C-900 SDR 14 OR CONCRETE ENCASEMENT MUST BE USED UNTIL MINIMUM CLEARANCE IS REGAINED.
   B. WHERE 18 INCH VERTICAL SEPARATION IS NOT ATTAINABLE AT CROSSINGS, USE ONE FULL LENGTH OF PVC-C-900 SDR-14 FOR SANITARY SEWERS OR ENCASED PIPE CENTERED AT THE POINT OF CROSSING SPECIAL SUPPORT MAY BE REQUIRED.
5. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
6. CONCRETE ENCASEMENT SHALL NOT BE USED UNLESS APPROVED BY PUBLIC SERVICES DIRECTOR OR HIS DESIGNEE.

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

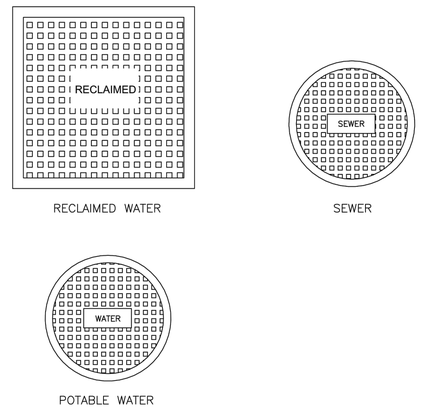
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 104



VALVE IDENTIFICATION TAG TO BE INSTALLED BY CITY & PAID FOR BY DEVELOPER

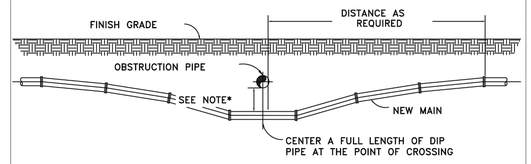
VALVE BOX

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 109



TYPICAL VALVE BOX COVER DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 116



NOTES:

1. 18" MINIMUM CLEARANCE FOR WATER, SEWER AND RECLAIMED WATER MAIN CROSSINGS
2. 12" MINIMUM CLEARANCE REQUIRED FOR OTHER TYPE UTILITY CROSSINGS.
3. SEE ENCASEMENT DETAIL IF MINIMUM CLEARANCE CANNOT BE OBTAINED.

* CONSTRUCT UNIFORM PIPE DEFLECTION NOT TO EXCEED 75% OF MANUFACTURER RECOMMENDED MAXIMUM DEFLECTION PER PIPE JOINT

UTILITY CROSSING PIPE DEFLECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 117

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LICENSED PROFESSIONAL LANDSCAPE ARCHITECT JORDAN DRAPER LICENSE # 6667323 STATE OF FLORIDA

LICENSED PROFESSIONAL ENGINEER JORDAN BOYD LICENSE NUMBER 84923 STATE OF FLORIDA

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

CITY OF APOPKA DETAILS

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER C8.0

Drawing name: K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CADD\CONST\CSP\PlanSheets\C8.0 - CITY OF APOPKA DETAILS.dwg C8.0 - CITY OF APOPKA DETAILS Oct 16, 2023 8:27am by: cole.sauer
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MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). *											
	PIPE SIZE										
	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"	48"
90° BEND	33	43	51	60							
45° BEND	14	18	22	25							
22-1/2° BEND	7	9	11	12							
11-1/4° BEND	4	5	6	6							
TEE**	1	7	24	44							
REDUCER (ONE SIZE SMALLER)		41	39	40							
DEAD END	74	96	115	136							

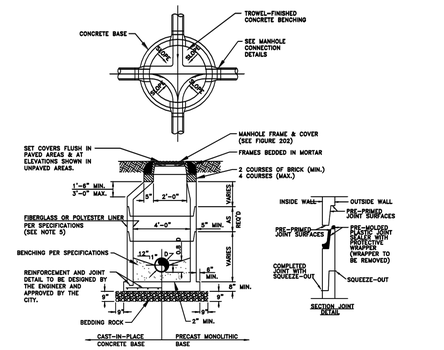
* ONLY RESTRAIN BRANCH PIPE FOR TEES. ONLY RESTRAIN LARGER PIPE FOR REDUCERS
** LENGTH ALONG RUN ASSUMED TO BE 18'

NOTES:

1. FITTINGS SHALL BE DUCTILE IRON RESTRAINED JOINT TYPE. FM FITTINGS TO BE LINED WITH PROTECTO 401.
2. INSTALL FULL LENGTHS OF PIPE WITH TOTAL LENGTH CONTAINING ONLY RESTRAINED JOINTS EQUAL TO OR GREATER THAN LENGTH SHOWN IN TABLE.
3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
4. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, FOR PVC WITH THE FOLLOWING ASSUMPTIONS:
   TYPE OF PIPE: PVC
   WORKING PRESSURE: 150 P.S.I.** ** FM = 100 P.S.I. / WM OR RWM = 150 P.S.I.
   SOIL DESIGNATION: SM(SAND SILT)
   LAYING CONDITIONS: 3
6. FOR PIPE ENCASED IN POLYETHYLENE INCREASE THE GIVEN VALUE BY A FACTOR OF 1.5.
7. VALUES NOT LISTED IN THE TABLE TO BE COMPLETED BY THE ENGINEER.

RESTRAINED PIPE TABLE (PVC)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 105



FORCE MAIN MANHOLE LINER

THICKNESS (INCHES)					
DIAMETER (INCHES)	HEIGHT (FEET) 3-6	7-12	13-17	MATERIAL	MANUFACTURER
48					
60					
72					

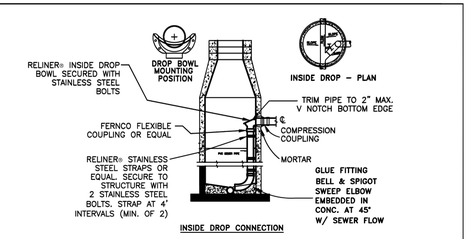
* TO BE COMPLETED BY THE ENGINEER

NOTES:

1. MANHOLE SHOWN IS FOR SEWER SIZE 8" THRU 24". SEE SECTION 20.4 OF THE MANUAL FOR MANHOLE DIAMETER FOR SEWERS LARGER THAN 24".
2. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS.
3. THE THICKNESS OF THE LINER SHALL BE 3/8" MINIMUM
4. EACH BENCH WALL SHALL BE A MINIMUM OF 18 INCHES LONG FROM THE WALL OF THE MANHOLE TOWARD THE CENTER.
5. SANITARY SEWER MANHOLES MAY BE REQUIRED TO BE LINED WITH HDPE OR FIBERGLASS AS DIRECTED BY THE CITY.

TYPICAL MANHOLE

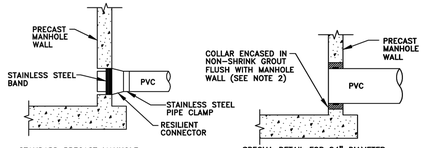
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 200



INSIDE DROP CONNECTION

NOTES:

1. ALL INSIDE DROP CONNECTIONS FOR SERVICES AND COLLECTOR SEWERS SHALL USE THE DROP BOWL AS PRODUCED BY:
   RELINER-DURAN, INC.
   53 MT. ARCHER RD.
   LYME, CT 06371
   (860)434-0277 FAX: (860)434-3195 OR EQUAL.
2. SECURE DROP PIPE TO MANHOLE WALL WITH RELINER-DURAN, INC STAINLESS STEEL ADJUSTABLE CLAMPING BRACKETS.

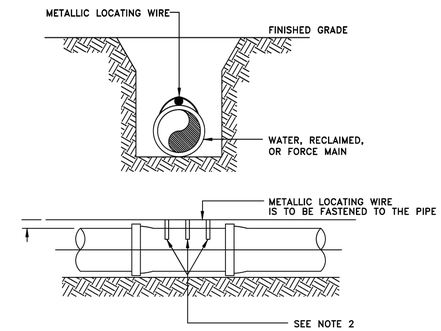


NOTES:

1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. THE CITY MAY APPROVE ALTERNATE WATERTIGHT CONNECTION DETAILS FOR CONNECTION OF 24" DIAMETER PIPES AND LARGER.
3. AN INSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 24" OR MORE ABOVE THE OUTFLOW PIPE INVERT.
4. CONCRETE TO BE MINIMUM OF 3000 PSI.

MANHOLE CONNECTION DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 201

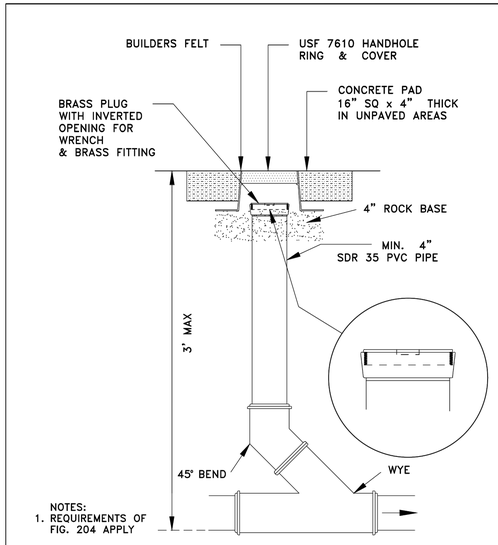


NOTES:

1. ALL PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 AWG-SOLID CCS REINFORCED TRACER WIRE-INSULATED 30 MIL HDPE - 30 VOLT MFG. BY COPPERHEAD INDUSTRIES, LLC OR EQUAL) CAPABLE OF DETECTION BY A CABLE LOCATOR.
2. SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND ATTACHED WITH DUCT TAPE OR NYLON STRAPS AT 3 LOCATIONS PER JOINT. LOCATING WIRE SHALL TERMINATE AT THE TEST STATION BOX AS SHOWN IN FIG. 109.
3. BE CAPABLE OF EXTENDING 12" ABOVE TOP OF TEST STATION BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.
4. SPLICES SHOULD BE MADE USING STANDARDS AND PRODUCTS DESIGNED FOR DIRECT BURIAL CONDUCTORS.
5. WIRE INSULATION SHALL BE COLOR CODED FOR THE TYPE OF PIPE BEING INSTALLED.

PIPE LOCATING WIRE DETAIL

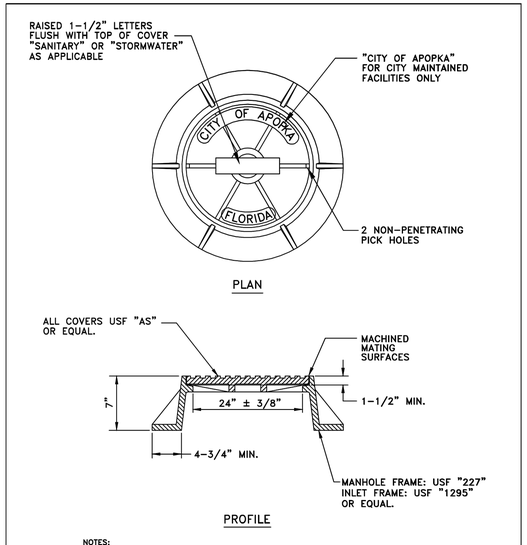
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 118



SANITARY SEWER SERVICE TRAFFIC RATED CLEAN-OUT DETAIL

NTS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 205



NOTES:

1. MANHOLE FRAME AND COVER ARE TO BE TRAFIC BEARING RATED H-20, CLASS 30 MEETING ASTM A 48.

STANDARD MANHOLE FRAME AND COVER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 202

No.	REVISIONS	DATE	BY
1	CITY OF APOPKA CSP COMMENT REVISIONS	08/07/2023	CS

Kimley»Horn
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189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801
PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL ENGINEER JORDAN DRAPER LICENSE No. 88777 STATE OF FLORIDA PROFESSIONAL ENGINEER DATE:

KHA PROJECT 249218001	
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

CITY OF APOPKA DETAILS

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
C8.1

Drawing name: K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CADD\CONST\CSP\PlanSheets\C8.0 - CITY OF APOPKA DETAILS.dwg C8.1 - CITY OF APOPKA DETAILS Oct 16, 2023 8:27am by: cole.sauer
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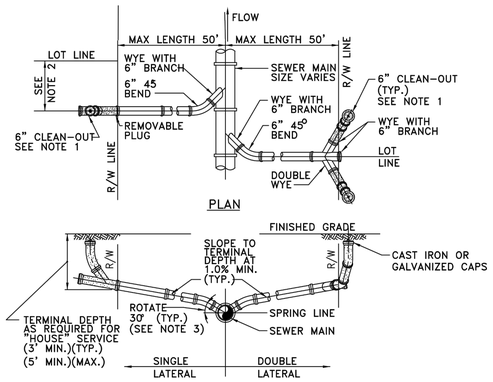
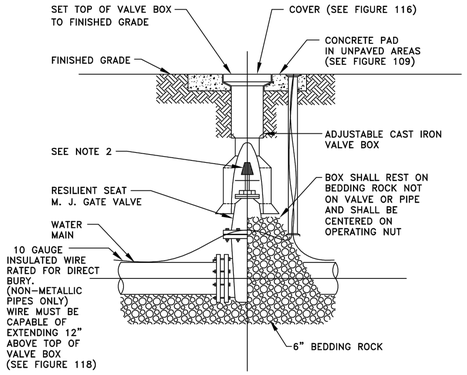


NOTES:

1. CLEAN-OUT (SHOWN SHADED) SHALL BE INSTALLED BY THE BUILDER IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE.
3. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
4. RESIDENTIAL SERVICES SHALL BE 4 INCHES & NON-RESIDENTIAL SERVICES SHALL BE 6 INCHES IN DIAMETER AS A MINIMUM.
5. GALVANIZED OR CAST IRON CLEAN-OUT CAP SHALL BE USED ON THE STUBOUT FOR EACH SERVICE.
6. LATERAL SHALL BE MARKED WITH AN "S" STAMPED OR CUT IN THE CURB.

SERVICE LATERAL DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 204

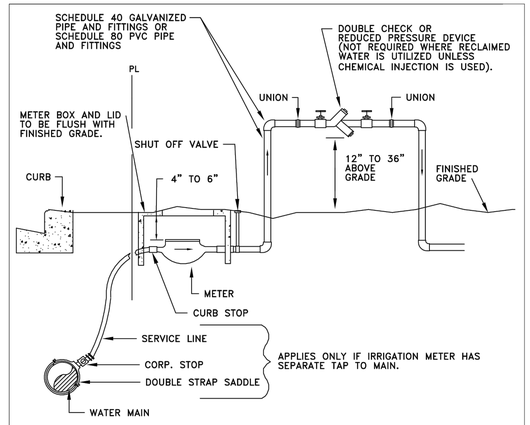


NOTES:

1. PVC EXTENSIONS MAY BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO WITHIN A 3 FEET BELOW FINISHED GRADE.

GATE VALVE AND BOX DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 400

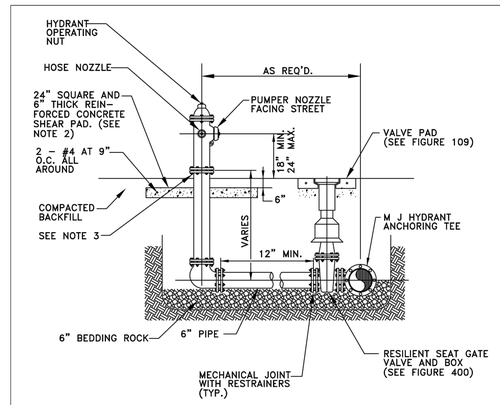


NOTES:

1. A POSITIVE DIELECTRIC CONNECTION SHALL BE MADE BETWEEN ALL GALVANIZED AND BRASS COMPONENTS.
2. METER SHALL BE INSTALLED JUST INSIDE THE ROW LINE OR PROPERTY LINE AND IN NO CASE SHALL IT BE INSTALLED IN THE SIDEWALK OR OTHER PAVED AREAS.
3. DOUBLE CHECK VALVES MAY BE USED AS LONG AS THEIR ARE NO CHEMICALS OR A WELL ON SITE.
4. A PVB DEVICE SHALL BE 12-INCHES MINIMUM ABOVE HIGHEST OUTLET OR SPRAYHEAD
5. ALL BACKFLOW PREVENTION DEVICES ARE TO BE AWWA APPROVED.

IRRIGATION METER AND DOUBLE CHECK VALVE OR REDUCED PRESSURE BACKFLOW PREVENTER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 502

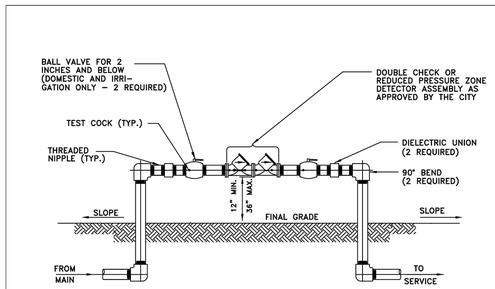


NOTES:

1. FIRE HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE, OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
2. THE SHEAR PAD SHALL BE RECESSED SIX (6) INCHES BELOW THE FINISHED GRADE AND THE RECESSED SECTION SODDED.
3. CLEARANCE BETWEEN BOTTOM OF BOLTS AND TOP OF SHEAR PAD SHALL BE A TWELVE (12) INCH MINIMUM.
4. FIRE HYDRANTS SHALL BE IDENTIFIED IN ACCORDANCE WITH THE CITY OF APOPKA CONSTRUCTION DESIGN STANDARDS MANUAL.

FIRE HYDRANT ASSEMBLY DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 402



NOTES:

1. ALL PIPE FITTINGS, MATERIALS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED BY THE CONTRACTOR.
2. ALL PIPE AND FITTINGS TWO (2) INCHES AND SMALLER SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL.

DOUBLE CHECK OR REDUCED PRESSURE ZONE DETECTOR ASSEMBLY

2 INCH AND BELOW ASSEMBLY

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 500 A

GENERAL NOTES

1. Governing standards and specifications on this project are considered the Florida Department of Transportation (FDOT) Design Standards (2013 Edition), FDOT Standard Specifications for Road and Bridge Construction (2013 Edition), and City of Apopka Utilities Design and Construction Standards Manual (2014 Edition).
2. All personal property, except mail boxes located within the public right-of-way (not relocated by the property owner), shall be removed by the Contractor as necessary to construct the project in accordance with the Construction Plans. Mail boxes shall be relocated by the Contractor in accordance with FDOT Index No. 532.
3. The disposal of excess earthwork materials shall be the responsibility of the Contractor. Approval of disposal sites shall be obtained from the City of Apopka prior to disposal.
4. All existing trees and stumps within the right-of-way and limit of the project are to be removed as clearing and grubbing unless otherwise directed.
5. Sood and mulch all disturbed areas not covered by sod unless otherwise directed.
6. All pavement offsets shown are to the proposed centerline of construction, as where radius dimensions are to the edge of pavement, unless otherwise noted.
7. Turnout locations and widths shown in the Construction Plans are approximate and may be adjusted as necessary or as directed by the Engineer. All turnouts shall be constructed in accordance with FDOT Index No. 515.
8. The various permits included in the bid specifications payment are included in the bid price for Section 104. The Contractor shall perform the work in accordance with the requirements of "Prevention, Control, and Abatement of Erosion and Water Pollution", excluding items specified elsewhere. Environmental controls shall be used at locations designated in the plans and/or designated by the Engineer.
9. The information shown on these drawings concerning type and location of underground and other utilities are based on available records and surveys, but is not guaranteed to be accurate or all inclusive. The Contractor shall make his own determination as to the type and location of utilities as may be necessary to avoid damage there to, and is responsible for coordinating utility relocation.
10. Prior to ordering drainage structures, the Contractor shall determine if drainage utility conflicts exist. Information about possible conflicts shall be submitted to the Engineer as soon as possible after discovery of such for resolution.
11. The Contractor shall notify all gas utility companies a minimum of two working days prior to excavation as required by Chapter 77-153 of the Florida Statutes.
12. All inlet/manhole - pipe joints shall be filled with non-shrink grout, covered with an asphaltic mastic coating, and wrapped with a filter fabric material per Section 13.03.03 of the Orange County Road Construction Specifications.
13. All curb inlets, ditch bottom inlets, and manholes shall have traffic bearing frames and covers or grates meeting AASHTO-20 loading requirements.
14. Changes of pipe inverts not exceeding plus or minus one foot will not be considered as a basis for additional compensation for the pertinent pipe bid item or for modification of precast structures.
15. All benchmarks (irons and monuments) shown in the Construction Plans, or found, shall be preserved. Those shown in proposed pavement shall be protected with a cast iron valve box.
16. Public land corners within the limits of construction shall be protected. If a corner monument is in danger of being destroyed or disturbed, the Contractor shall notify the Engineer, without delay, by telephone. The Contractor shall provide written follow up confirmation within 48-hours of telephone notification.
17. Prior to beginning of any construction, the Contractor shall submit to the Engineer a set of field notes verifying the benchmark elevations and the reference point connections on the plan and profile view sheets, and/or a set of field notes for all additional benchmark and reference point connections proposed to be used in constructing the project with their location, description and elevation, based on North American Vertical Datum (NAVD88). All submittals shall be signed and sealed by a Professional Land Surveyor registered in the State of Florida.
18. Within 21 calendar days after notice to proceed, the Contractor shall stake the public right-of-way at 50 foot intervals and the right-of-way breaks with corresponding stations shown on the stakes. No invoice for payment for mobilization (Pay Item No. 101-1) will be processed until the right-of-way has been staked to the satisfaction of the Engineer.
19. Any United States Code (USC) and National Geodetic Survey (NGS) monuments within the limits of construction shall be protected. If in danger of damage, the Contractor shall notify the Engineer, and both shall notify:
    State Geodetic Advisor, NOAA
    3900 Commonwealth Blvd. - MS105
    Tallahassee, FL Phone (850) 245-2606
20. It shall be the responsibility of the Contractor to acquire all necessary right-of-way and maintenance of traffic permits. The City will waive all permits required for construction activities within the limits of public right-of-way owned and maintained by the City of Apopka. For construction activity within the limits of public right-of-way maintained by the City but owned by Orange County or the State of Florida, the Contractor shall acquire the required permits from the agencies. It shall be the responsibility of the Contractor to insure that all required permits are obtained and in-hand before beginning any construction.
21. The location of all existing utilities, storm drainage systems, and topographic features shown on the plans have been determined from the best available information and are provided for the convenience of the Contractor. The Engineer assumes no responsibility for their inaccuracy. Should a discrepancy arise between these plans and actual field conditions, which would appreciably affect the execution of these plans, the Contractor shall halt construction and notify the Engineer immediately.
22. The Contractor shall be responsible for notifying the City within 48 hours before any inspections. Also, the Contractor shall be responsible for meeting all inspection criteria, schedules and signing said inspections.
23. The Contractor shall not excavate, remove or otherwise disturb any material, structure or part of a structure which is located outside the lines, grades or grading section, established for this project, except where such excavations or removal is provided or in the Contract Construction Plans or Technical Specifications.
24. All work and all materials furnished shall be in conformity with the lines, grades, grading sections, cross sections, dimensions, material requirements, and testing requirements that are specified in the Contract Construction Plans or Technical Specifications.
25. All work shall be accomplished in strict accordance with all applicable federal, state and local codes, ordinances and regulations.
26. Apparent errors, discrepancies or omissions in the Construction Plans shall be brought to the Engineer's attention before bidding.
27. After completion of construction, the Contractor shall provide to the City a completed as-built plan one week prior to the final inspection. Before the final acceptance it shall be the Contractor's responsibility to perform a site cleanup for the removal of trash, debris, excess materials, and equipment to present the project site clean and in good order.
28. No extra payments shall be allowed for any work required due to misunderstanding of job or site conditions affecting the work as described in the Technical Specifications or shown on the Construction Plans. The Contractor shall not take advantage of any apparent error or omission in the Construction Plans or Technical Specifications and the Engineer shall be permitted to make corrections and interpretation as may be deemed necessary for the fulfillment of the intent of the Contract Documents. By entering the bidding process the bidders acknowledge acceptance of these conditions.
29. The Contractor shall submit four (4) sets of detailed shop drawings of all major items proposed for this project to the Engineer prior to ordering any of the equipment or material. Two (2) copies of the shop drawings will be returned to the Contractor. Upon the Contractor's receipt of approved shop drawings from the Engineer, the Contractor may proceed with the work.
30. The Contractor shall comply with the legal load restrictions in hauling of materials in public roads beyond the limits of construction work. A special permit will not relieve the Contractor of liability for damage which may result from the moving of material and equipment.
31. During construction, no direct discharge of water to downstream receiving waters will be allowed. The Contractor is responsible for maintaining water quality and route discharge water in such a manner as to adequately remove silt prior to runoff from the site.
32. Connection to existing lines to which utility pipe of the Contract must connect, the following work shall be performed:
    A. Expose buried lines to confirm or determine end connection, pipe material and diameter.
    B. Furnishing and installing piping and making proper connections.

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. GN

No.	REVISIONS	DATE	BY
1	CITY OF APOPKA CSP COMMENT REVISIONS	08/07/2023	CS

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WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL ENGINEER
JORDAN DRAPER
LICENSE NO. 93001
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: 7/12/2023

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

SHOPPES AT EAST SHORE MULTI-FAMILY
CITY OF APOPKA FLORIDA

CITY OF APOPKA DETAILS

SHEET NUMBER
C8.2

Drawing name: K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CADD\CONST\CSP\PlanSheets\C8.0 - CITY OF APOPKA DETAILS.dwg C8.2 - CITY OF APOPKA DETAILS Oct 16, 2023 8:27am by: cole.sauer
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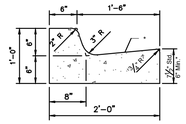
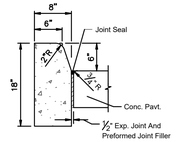
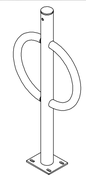


FDOT TYPE "F" CURB (INDEX #300)
NTS



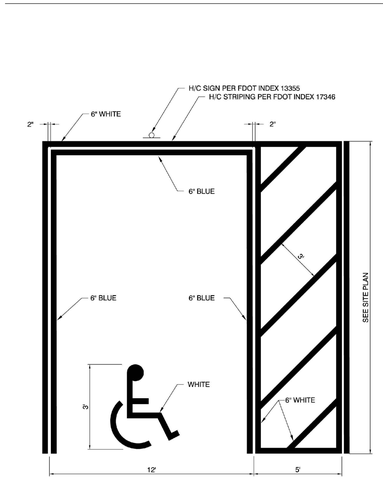
FDOT TYPE "D" CURB (INDEX #300)
NTS



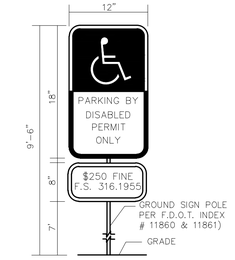
PRODUCT: DERO BIKE HITCH (OR EQUIVALENT)
FINISH: STAINLESS STEEL (OR OWNER APPROVED)
NOTE: INSTALL PER MANUFACTURER'S SPECIFICATIONS

WWW.DERO.COM
1-800-298-4915

STANDARD BICYCLE RACK DETAIL
NTS



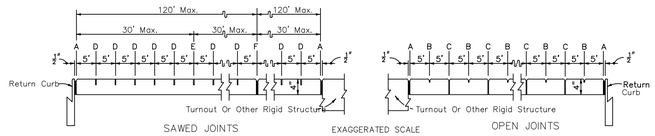
HANDICAP PARKING PAVEMENT MARKING
NTS



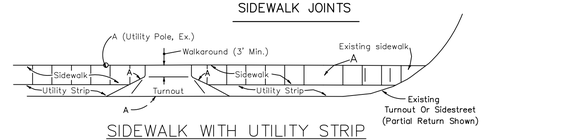
NOTES:

1. ALL LETTERS ARE 1" SERIES "C" PER MUTCD.
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
4. 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).

HANDICAP SIGN DETAIL
NTS



SIDEWALK JOINTS



SIDEWALK WITH UTILITY STRIP
NTS

JOINT LEGEND

A– ½" EXPANSION JOINTS (PREFORMED JOINT FILLER)
B– ½" DUMMY JOINTS, TOOLED
C– ½" FORMED OPEN JOINTS
D– ½" SAW CUT JOINTS, ¼" DEEP (96 HOUR) MAX. 5' CENTERS
E– ½" SAW CUT JOINTS, ¼" DEEP (12 HOUR) MAX. 30' CENTERS
F– ½" EXPANSION JOINT WHEN RUN OF SIDEWALK EXCEEDS 120'
G– COLD JOINT WITH BOND BREAKER, TOOLED

FOOTNOTES:

ALL 1/2" JOINTS SHALL BE CONSTRUCTED WITH PREFORMED JOINT FILLER.

* 1/8" OPEN JOINTS PLACED AT EQUAL (20' MAX.) INTERVALS FOR DRIVEWAYS OVER 20' WIDE. JOINTS IN CURB AND GUTTER TO MATCH JOINTS IN DRIVEWAYS.

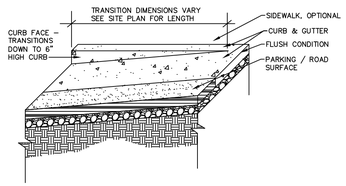
◊ DRIVEWAYS (6" CONCRETE) SHALL BE OF A UNIFORM WIDTH (W) AS SHOWN ON SHT. P-1.

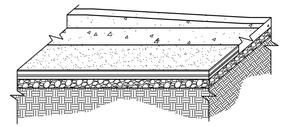
GENERAL NOTES

SIDEWALKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION NO. 522 EXCEPT FOR CURB CUT RAMP RUNS WHICH SHALL BE FINISHED IN ACCORDANCE WITH INDEX NO. 304.

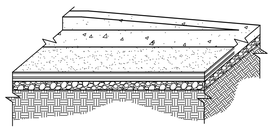
BOND BREAKER MATERIAL CAN BE ANY IMPERMEABLE COATED OR SHEET MEMBRANE OR PREFORMED MATERIAL HAVING A THICKNESS OF NOT LESS THAN 6 MILS NOR MORE THAN 1/2".

CONCRETE SIDEWALK JOINT DETAIL
NTS

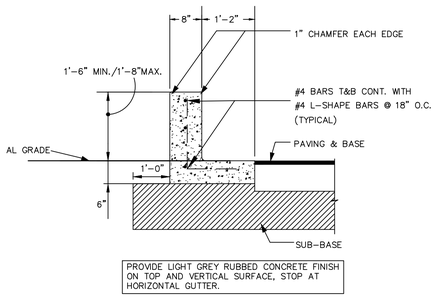




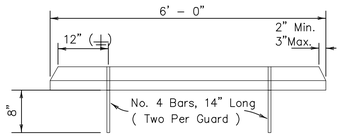
CURB TRANSITIONS FROM FULL HEIGHT CURB TO FLUSH CONDITION



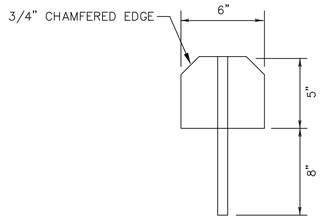
CURB TRANSITION DETAILS
NOT TO SCALE



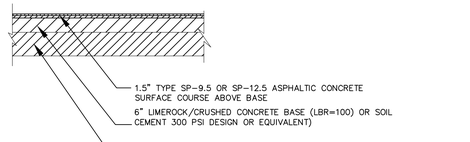
18" SECURITY CURB DETAIL
NTS



WHEEL STOP FRONT VIEW
NTS

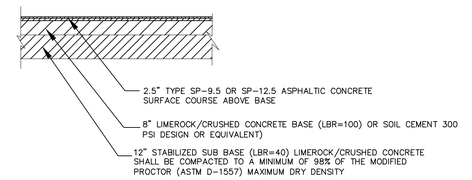


WHEEL STOP PROFILE VIEW (TYP.)
NTS



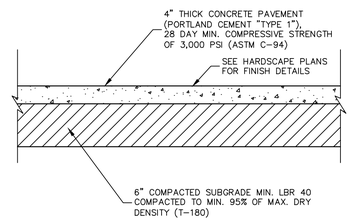
LIGHT DUTY ASPHALT PAVEMENT SECTION
NTS

NOTE: SOIL-CEMENT BASE AND LIMEROCK BASE MAY BE SUBSTITUTED IN LIEU OF CRUSHED CONCRETE BASE. PAVEMENT SECTION SHALL MEET THE RECOMMENDATION WITHIN THE GEOTECHNICAL REPORT PREPARED BY TERRACON CONSULTANTS INC. DATED APRIL 1, 2021.



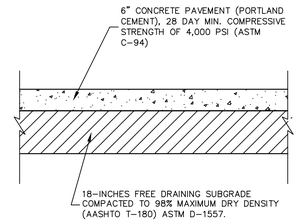
HEAVY DUTY ASPHALT PAVEMENT SECTION
NTS

NOTE: SOIL-CEMENT BASE AND LIMEROCK BASE MAY BE SUBSTITUTED IN LIEU OF CRUSHED CONCRETE BASE. PAVEMENT SECTION SHALL MEET THE RECOMMENDATION WITHIN THE GEOTECHNICAL REPORT PREPARED BY TERRACON CONSULTANTS INC. DATED APRIL 1, 2021.

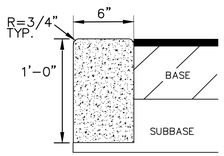


CONCRETE SIDEWALK DETAIL
NTS

SIDEWALK NOTES:
1. ALL CONCRETE SIDEWALKS SHALL BE CONSTRUCTED PER FDOT DESIGN INDEX #522-001.



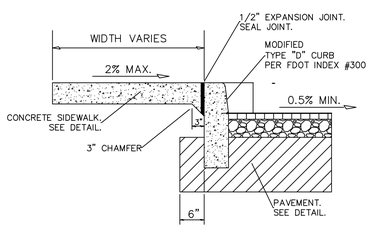
HEAVY DUTY CONCRETE PAVEMENT DETAIL
NTS



RIBBON CURB
NTS

NOTES:

1. ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE
2. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 500', CONSTRUCTION JOINT REQUIRED EVERY 10' MAXIMUM (4" MINIMUM).
3. 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST AND SHALL BE STABILIZED TO A MINIMUM L.B.R. 40.
4. IN NO INSTANCE SHALL EXTRUDED CURBS (DEFINED AS HEADER-TYPE CURBS INSTALLED DIRECTLY ON TOP OF PAVEMENT) BE PERMITTED.



SIDEWALK INTEGRAL CURB DETAIL
NTS

No.	REVISIONS	DATE	BY
1	CITY OF APOPKA CSP COMMENT REVISIONS	08/07/2023	CS

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PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL ENGINEER
JORDAN DRAPER
LICENSE
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE:

KHA PROJECT	249218001
DATE	7/12/2023
SCALE	AS SHOWN
DESIGNED BY	JDB
DRAWN BY	JDB
CHECKED BY	LJD

GENERAL CONSTRUCTION DETAILS

SHOPPES AT EAST SHORE MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
C9.0

Plotted By: Sauer, Cole Street Set: SHOPPES AT EAST SHORE MULTI-FAMILY Layout: C9.0 — GENERAL CONSTRUCTION DETAILS October 16, 2023 08:27:40pm K:\ORL_Civil\249218001_Shoppes at East Shore ALF\CAD\CONST\CSP\PlanSheets\C9.0 — GENERAL CONSTRUCTION DETAILS.dwg
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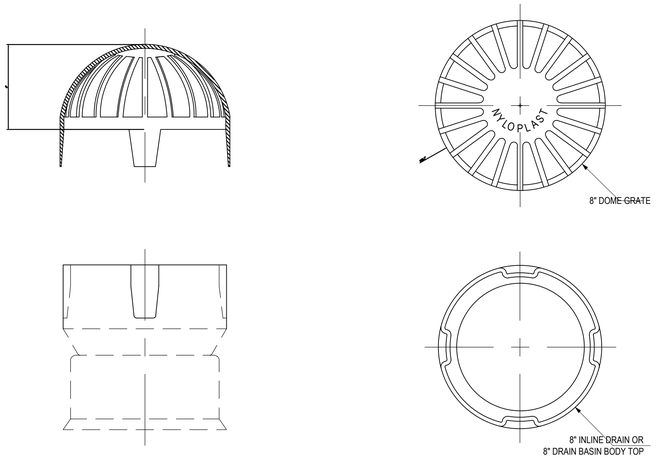
0899CGD

APPROX. DRAIN AREA = 30.00 SQ IN
APPROX. WEIGHT = 4.54 LBS



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-228

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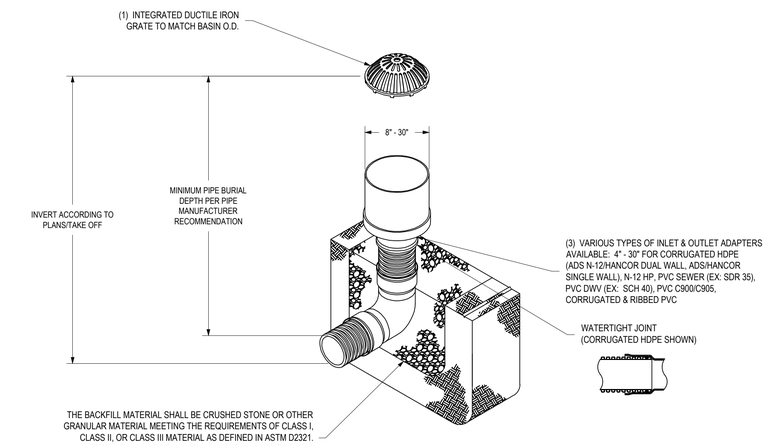
DRAWN BY	EBC	MATERIAL	DUCTILE IRON
DATE	03-03-06		
REVISED BY	CCA	PROJECT NO./NAME	
DATE	08-27-13		
DWG SIZE	A	SCALE 1:4	SHEET 1 OF 1
DWG NO.	7001-110-197	REV	C

ADS Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: 8 IN DOME GRATE ASSEMBLY

NYLOPLAST INLINE DRAIN WITH DOME GRATE



1 - 8" - 30" DOME GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
3 - 8" - 30" DOME GRATES HAVE NO LOAD RATING

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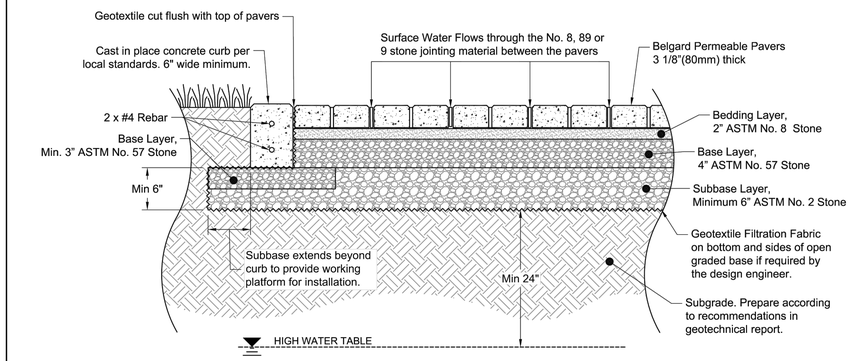
DRAWN BY	EBC	MATERIAL	
DATE	03-25-10		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	03-15-16		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1
DWG NO.	7003-110-057	REV	D

ADS Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: INLINE DRAIN WITH DOME GRATE
QUICK SPEC INSTALLATION DETAIL



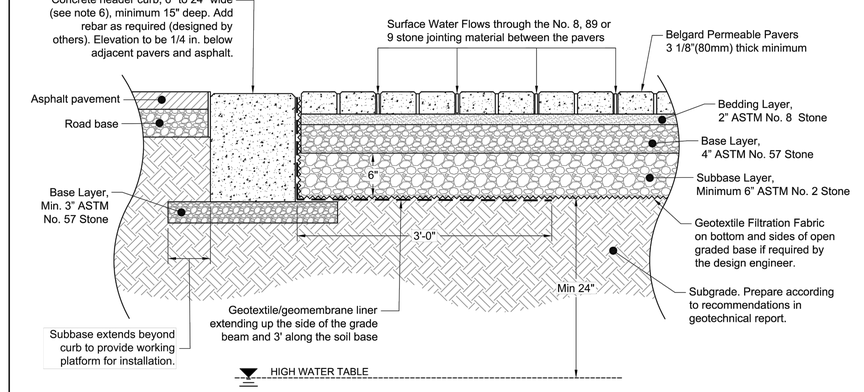
Design Notes:
1. Depth of subbase subject to site specific hydraulic and structural requirements. Contact Belgard Commercial for design assistance.
2. Paver dimensions subject to aspect and plan ratio requirements based on traffic loading.
3. Geotechnical engineer needs to balance structural stability and soil infiltration when recommending subgrade conditions.
4. Where the filtration geotextile is used, verify with the manufacturer that the material is not subject to clogging and meets requirements of AASHTO M-288.
5. ASTM No. 2 stone may be substituted with No. 3 or No. 4 stone.
6. Strictly pedestrian applications may substitute base/subbase layers with one 6" base layer of ASTM No. 57 stone.

BELGARD
belgardcommercial.com
877-235-4273
details@belgard.com

This drawing is for illustrative purposes only and should not be used for construction without the signature of a registered professional engineer.

Belgard Permeable Paving Detail
PICP Pavement

Scale:	Drawn by:
N.T.S.	MAH
Date:	Drawing number:
5/7/18	PICP_1



Design Notes:
1. Depth of subbase subject to site specific hydraulic and structural requirements. Contact Belgard Commercial for design assistance.
2. Paver dimensions subject to aspect and plan ratio requirements based on traffic loading, including any maintenance and/or emergency vehicles.
3. Geotechnical engineer needs to balance structural stability and soil infiltration when recommending subgrade conditions.
4. Elevation of horizontal discharge pipe(s) subject to storage reservoir requirements. Ensure proper cover over the horizontal pipes.
5. Where the filtration geotextile is used, verify with the manufacturer that the material is not subject to clogging and meets requirements of AASHTO M-288.
6. When traffic flow is perpendicular to the direction of the header, the width of the header curb should be sufficient to ensure that a bouncing tire caused by differential settlement will land on the header and not skip over it.
7. Strictly pedestrian applications may substitute base/subbase layers with one 6" base layer of ASTM No. 57 stone.

BELGARD
belgardcommercial.com
877-235-4273
details@belgard.com

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Belgard Permeable Paving Detail
PICP Pavement Transition to Asphalt

Scale:	Drawn by:
N.T.S.	MAH
Date:	Drawing number:
5/7/18	PICP_7

No.	REVISIONS	DATE	BY
1	CITY OF APOPKA CSP COMMENT REVISIONS	08/07/2023	CS

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189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801
PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL ENGINEER
JORDAN DRAPER
LICENSE NUMBER 92180
STATE OF FLORIDA
DATE: 08/07/2023

KHA PROJECT 249218001
DATE 7/12/2023
SCALE AS SHOWN
DESIGNED BY JDB
DRAWN BY JDB
CHECKED BY LJD

GENERAL CONSTRUCTION DETAILS

SHOPPES AT EAST SHORE MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
C9.1

Plotted By:Sauer, Cole Sheet Set:SHOPPES AT EAST SHORE MULTI-FAMILY Layout:C9.1 - GENERAL CONSTRUCTION DETAILS October 16, 2023 08:27:43am K:\ORL_Civil\249218001-Shoppes at East Shore ALF\CAD\CONST\CSP\PlanSheets\C9.0 - GENERAL CONSTRUCTION DETAILS.dwg
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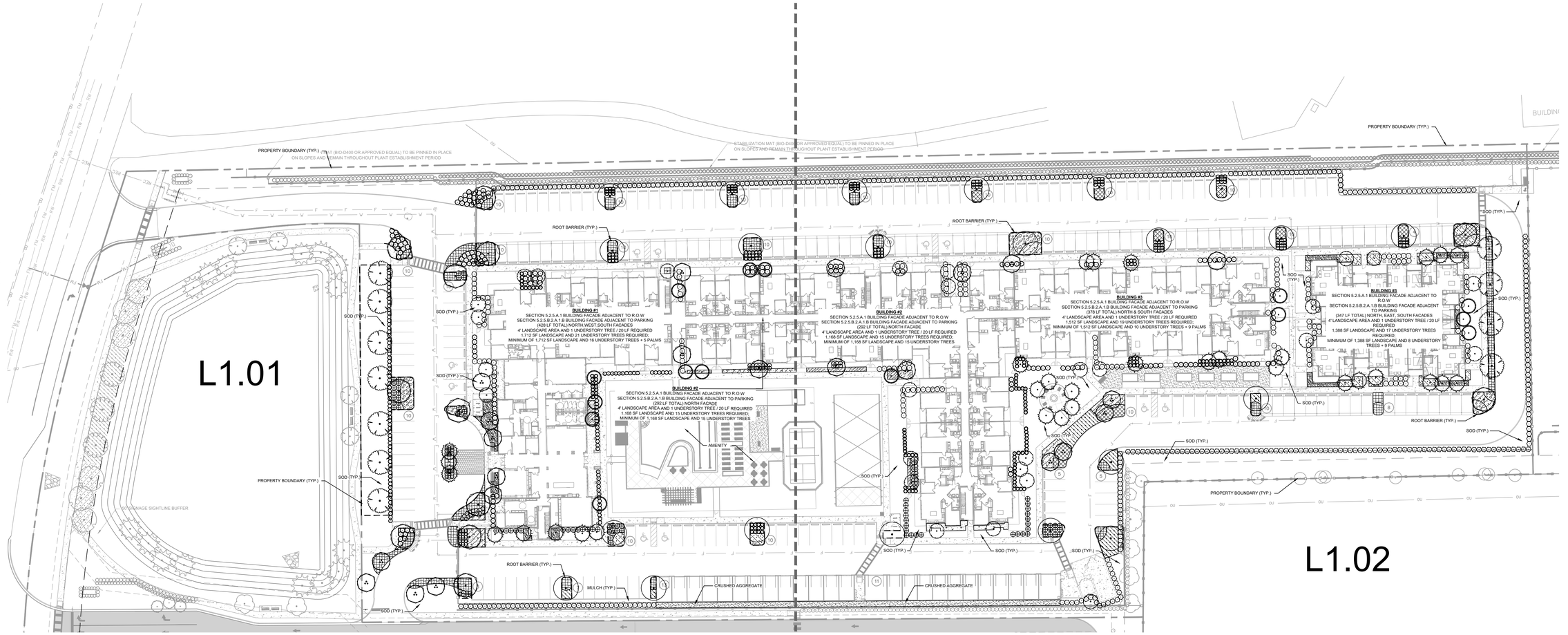

LANDSCAPE NOTES:

1. ALL LANDSCAPE MATERIAL TO BE FLORIDA GRADE #1 OR BETTER QUALITY
2. ALL LANDSCAPED AREAS ARE TO RECEIVE A MINIMUM OF 4" OF TOPSOIL.
3. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.
4. ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
5. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
6. ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES ADJACENT TO THE WORK AREA 2) TO PROTECT ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING TO MAINTAIN HEALTHY PLANT CONDITIONS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR THE WARRANTY PERIOD.
11. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
12. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR WARRANTY PERIOD. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS DURING THE NORMAL PLANTING SEASON.
13. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
14. ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND NURSERY PRACTICES, AND SHALL BE FLORIDA NO. 1 OR BETTER AS GIVEN IN "GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I AND II," STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE.
15. ALL INVASIVE / EXOTIC SPECIES AND PROHIBITED TREE SPECIES SHALL BE REMOVED FROM SITE, INCLUDING ROOT BALLS TO THE EXTENT POSSIBLE WITH NO DAMAGE TO ADJACENT EXISTING TREES.
16. ALL LANDSCAPE AREAS WILL BE PROVIDED WITH PERMANENT AUTOMATIC IRRIGATION SYSTEM.
17. TREE SUPPORT MATERIALS ARE TO BE REMOVED FROM EACH TREE ONCE IT IS "ESTABLISHED" (AS APPROVED BY THE LANDSCAPE ARCHITECT).
18. ALL PLANT SPECIFICATIONS IN THE PLANT SCHEDULE SHALL BE CONSIDERED THE MINIMUM ALLOWABLE SPECIFICATIONS. CONTRACTOR SHALL PROCURE PLANT MATERIALS AND UPSIZE AS NECESSARY TO MEET THE MOST STRINGENT SPECIFICATION.

CODE MINIMUM LANDSCAPE CALCULATIONS

PER "CITY OF APOPKA" LAND DEVELOPMENT CODE

	REQUIRED	PROVIDED
BUILDING FOUNDATION LANDSCAPE *SECTION 5.2.5.A.1* *BUILDING FACADE FACING R.O.W.* *(AND)* *SECTION 5.2.5.B.2.A.1.B* *BUILDING FACADE ADJACENT TO PARKING*	**BUILDING 1 - 428 LF (NORTH, WEST, SOUTH FACADES)** 1,712 SF OF LANDSCAPE REQ. (4' WIDTH LANDSCAPE AREA) 21 UNDERSTORY TREES REQ. (1 UNDERSTORY TREE / 20 LF) **BUILDING 2 - 292 LF (NORTH FACADES)** 1,168 SF OF LANDSCAPE REQ. (4' WIDTH LANDSCAPE AREA) 15 UNDERSTORY TREES REQ. (1 UNDERSTORY TREE / 20 LF) **BUILDING 3 - 378 LF (NORTH & SOUTH FACADES)** 1,512 SF OF LANDSCAPE REQ. (4' WIDTH LANDSCAPE AREA) 19 UNDERSTORY TREES REQ. (1 UNDERSTORY TREE / 20 LF) **BUILDING 4 - 347 LF (NORTH, SOUTH, EAST FACADES)** 1,388 SF OF LANDSCAPE REQ. (4' WIDTH LANDSCAPE AREA) 17 UNDERSTORY TREES REQ. (1 UNDERSTORY TREE / 20 LF)	**BUILDING 1** 2,534 SF OF LANDSCAPE 16 UNDERSTORY TREES + 5 PALMS **BUILDING 2** 1,583 SF OF LANDSCAPE 15 UNDERSTORY TREES **BUILDING 3** 2,946 SF OF LANDSCAPE 15 UNDERSTORY TREES + 9 PALMS **BUILDING 4** 2,328 SF OF LANDSCAPE 8 UNDERSTORY TREES + 9 PALMS
INTERIOR VUA LANDSCAPE *SECTION 5.2.5.B.2*	10% OF VUA AREA TO BE LANDSCAPED (9,861 SF) 1 TREE + 1 TREE PER 10 PARKING SPACES (267 PARKING SPACES) 98,610 SF VUA X 0.1 = 9,861 SF LANDSCAPE REQUIRED 267 SPACES / 10 +1 = 27.7 ~ 28 SHADE TREES REQUIRED 9,861 SF VUA x .3 = 2,958 SF OF MATURE TREE CANOPY COVERAGE	10,402 SF LANDSCAPE AREA PROVIDED 43 SHADE TREES PROVIDED 3,088 SF PROVIDED
PERIMETER LANDSCAPING *SECTION 5.2.5.B.3* *SECTION 5.2.5.B.b.2*	**1 CANOPY TREE AND 10 SHRUBS (36" HT. MIN) PER 35 LF (OR FRACTION THEREOF) OF PROPERTY PERIMETER**	ALL PERIMETER LANDSCAPE PROVIDED IN OVERALL MASTER PLAN DEVELOPMENT "THE SHOPPES AT EAST SHORE"

PLANT SCHEDULE

CANOPY TREE	CODE	BOTANICAL NAME
	AR	ACER RUBRUM 'FLORIDA FLAME' STRAIGHT, SINGLE LEADER, FULL, FL #1
	MB	MAGNOLIA GRANDIFLORA `D.D. BLANCHARD` TM STRAIGHT, SINGLE LEADER, 6` CT, FL #1
	QV	QUERCUS VIRGINIANA STRAIGHT, SINGLE LEADER, FULL, FL #1
PALM TREES	**CODE**	**BOTANICAL NAME**
	SP	SABAL PALMETTO STRAIGHT, BOOTED, HURRICANE CUT, FULL, FL #1
UNDERSTORY TREE	**CODE**	**BOTANICAL NAME**
	IC	ILEX CASSINE STRAIGHT, FULL, FL #1, SINGLE LEADER
	LI	LAGERSTROEMIA INDICA X FAURIEI 'MUSKOGEE' MULTI-TRUNK, 5 TRUNK MIN, FL #1
	ML	MAGNOLIA GRANDIFLORA 'LITTLE GEM' STRAIGHT, SINGLE LEADER, FULL, FL #1
SHRUBS	**CODE**	**BOTANICAL NAME**
	AV	ALPINIA ZERUMBET `VARIEGATA` FULL
	HP	HAMELIA PATENS 'COMPACTA' FULL
	IV	ILEX VOMITORIA `SCHILLINGS DWARF` FULL
	PM	PODOCARPUS MACROPHYLLUS FULL
	RA	RHAPHIOLEPIS INDICA `ALBA` FULL
	VO	VIBURNUM ODORATISSIMUM FULL
	ZF	ZAMIA FLORIDANA FULL
SHRUB AREAS	**CODE**	**BOTANICAL NAME**
	DR	DURANTA REPENS 'VARIEGATA' FULL
	MC	MUHLENBERGIA CAPILLARIS FULL

GROUND COVERS	CODE	BOTANICAL NAME
	AA	AGAPANTHUS AFRICANUS FULL
	AG	ARACHIS GLABRATA FULL
	BF	BULBINE FRUTESCENS FULL
	DT	DIANELLA TASMANICA FULL
	EB	EVOLVULUS GLOMERATUS 'BLUE DAZE' FULL
	LG	LIRIOPE MUSCARI `EVERGREEN GIANT` FULL
	TJ	TRACHELOSPERMUM JASMINOIDES 'CONFEDERATE' FULL
	TV	TULBAGHIA VIOLACEA FULL
MISC. MULCH	QTY TBD	BOTANICAL/COMMON NAME DESIGNER BROWN HARDWOOD MULCH
SOD	TBD	PASPALUM NOTATUM 'ARGENTINE'/BAHIA GRASS

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

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LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE: 10/16/2023

KHA PROJECT 249218001
DATE 1/26/2023
SCALE AS SHOWN
DESIGNED BY ASIL
DRAWN BY ASIL
CHECKED BY MTF

OVERALL LANDSCAPE PLAN

SHOPPES AT EAST SHORE MULTI-FAMILY

FLORIDA
CITY OF APOPKA

SHEET NUMBER
L1.00

Plotted By:Sauer, Cole Sheet Set:SHOPPES AT EAST SHORE MULTI-FAMILY Layout:L1.00 October 16, 2023 08:28:26pm K:\orl_civil\249218001-shoppes at east shore of\CADD\CONST\CSP\plotsheets\L1.00-- LANDSCAPE PLAN.dwg
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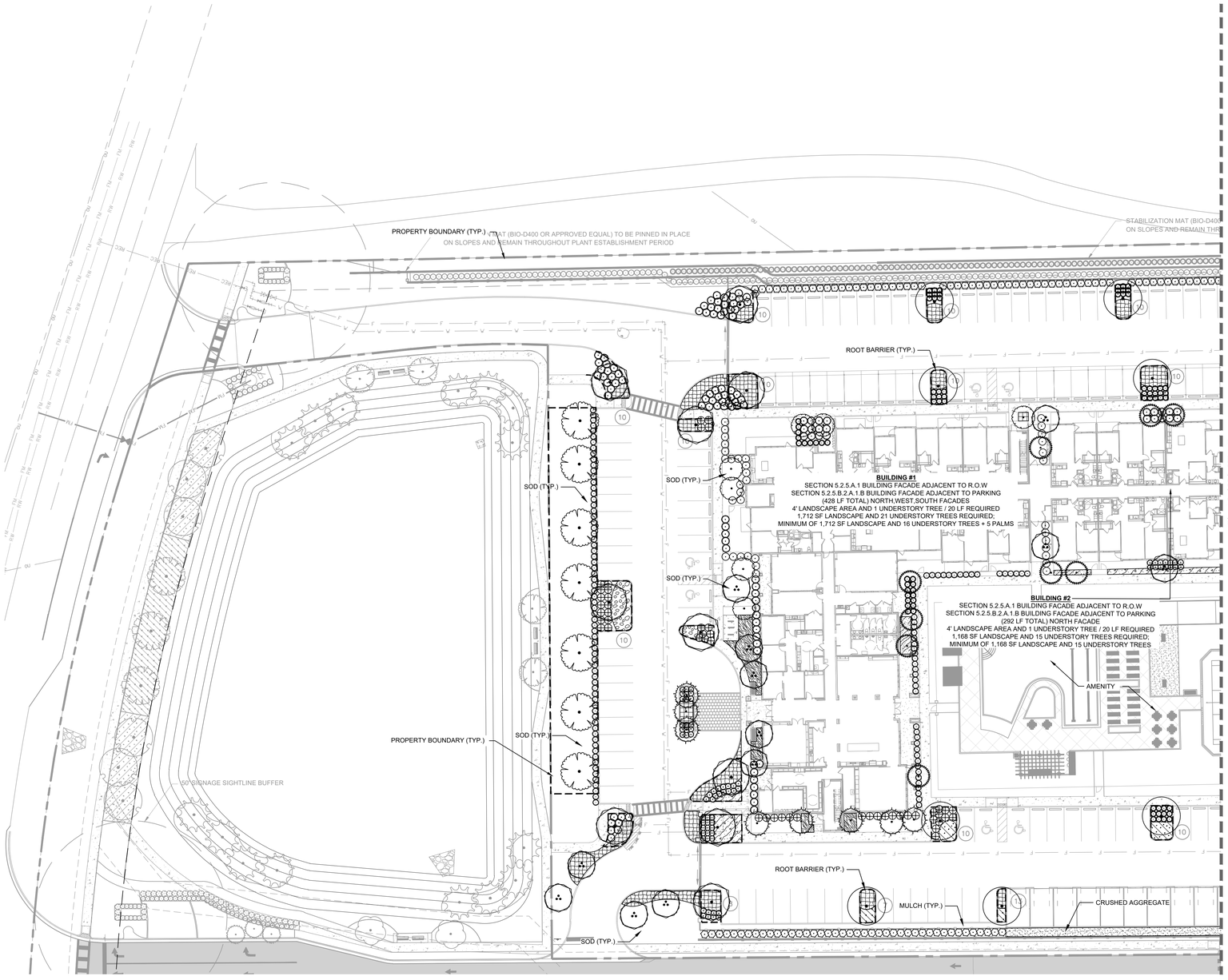

PLANT SCHEDULE

CANOPY TREE	CODE	BOTANICAL NAME	COMMON NAME
	AR	ACER RUBRUM 'FLORIDA FLAME' STRAIGHT, SINGLE LEADER, FULL, FL #1	FLORIDA FLAME RED MAPLE
	MB	MAGNOLIA GRANDIFLORA `D.D. BLANCHARD` TM STRAIGHT, SINGLE LEADER, 6` CT, FL #1	SOUTHERN MAGNOLIA
	QV	QUERCUS VIRGINIANA STRAIGHT, SINGLE LEADER, FULL, FL #1	SOUTHERN LIVE OAK
PALM TREES	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
	SP	SABAL PALMETTO STRAIGHT, BOOTED, HURRICANE CUT, FULL, FL #1	SABAL PALM
UNDERSTORY TREE	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
	IC	ILEX CASSINE STRAIGHT, FULL, FL #1, SINGLE LEADER	DAHOON HOLLY
	LI	LAGERSTROEMIA INDICA X FAURIEI 'MUSKOGEE' MULTI-TRUNK, 5 TRUNK MIN, FL #1	MUSKOGEE CRAPE MYRTLE MULTI-TRUNK
	ML	MAGNOLIA GRANDIFLORA 'LITTLE GEM' STRAIGHT, SINGLE LEADER, FULL, FL #1	LITTLE GEM DWARF SOUTHERN MAGNOLIA
SHRUBS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
	AV	ALPINIA ZERUMBET `VARIEGATA` FULL	VARIEGATED SHELL GINGER
	HP	HAMELIA PATENS 'COMPACTA' FULL	DWARF FIREBUSH
	IV	ILEX VOMITORIA `SCHILLINGS DWARF` FULL	DWARF YAUPON HOLLY
	PM	PODOCARPUS MACROPHYLLUS FULL	PODOCARPUS
	RA	RHAPHIOLEPIS INDICA `ALBA` FULL	WHITE INDIAN HAWTHORN
	VO	VIBURNUM ODORATISSIMUM FULL	SWEET VIBURNUM
	ZF	ZAMIA FLORIDANA FULL	COONTIE PALM
SHRUB AREAS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
	DR	DURANTA REPENS 'VARIEGATA' FULL	VARIEGATED GOLD MOUND
	MC	MUHLENBERGIA CAPILLARIS FULL	PINK MUHLY GRASS
GROUND COVERS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
	AA	AGAPANTHUS AFRICANUS FULL	LILY OF THE NILE
	AG	ARACHIS GLABRATA FULL	PERENNIAL PEANUT
	BF	BULBINE FRUTESCENS FULL	STALKED BULBINE
	DT	DIANELLA TASMANICA FULL	FLAX LILY
	EB	EVOLVULUS GLOMERATUS 'BLUE DAZE' FULL	BRAZILIAN DWARF MORNING GLORY
	LG	LIRIOPE MUSCARI `EVERGREEN GIANT` FULL	EVERGREEN GIANT LILYTURF
	TJ	TRACHELOSPERMUM JASMINOIDES 'CONFEDERATE' FULL	CONFEDERATE JASMINE
	TV	TULBAGHIA VIOLACEA FULL	SOCIETY GARLIC
MISC.	**QTY**	**BOTANICAL/COMMON NAME**	
MUCLH	TBD	DESIGNER BROWN HARDWOOD MULCH	
SOD	TBD	PASPALUM NOTATUM 'ARGENTINE'/BAHIA GRASS	

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

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LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE: 10/16/2023

KHA PROJECT 249218001
DATE 1/26/2023
SCALE AS SHOWN
DESIGNED BY ASIL
DRAWN BY ASIL
CHECKED BY MTF

LANDSCAPE PLAN

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
L1.01

Plotted By:Sauer, Cole Sheet Set:SHOPPES AT EAST SHORE MULTI-FAMILY Layout:L1.01 October 16, 2023 08:28:37pm K:\Orl_civil\249218001-shoppes at east shore at\CADD\CONST\CSP\plotsheets\L1.00- LANDSCAPE PLAN.dwg
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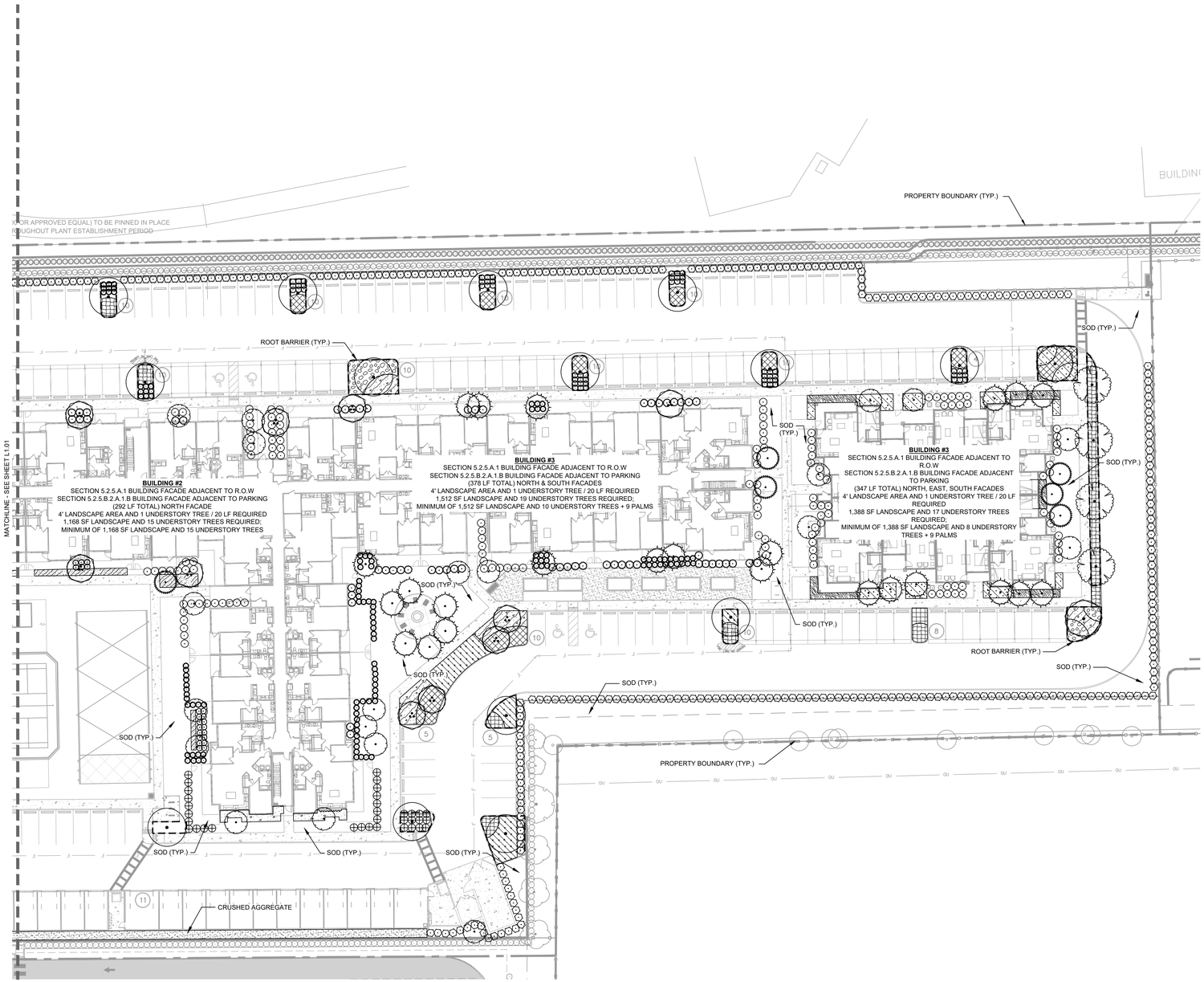

PLANT SCHEDULE

CANOPY TREE	CODE	BOTANICAL NAME	COMMON NAME
	AR	ACER RUBRUM 'FLORIDA FLAME' STRAIGHT, SINGLE LEADER, FULL, FL #1	FLORIDA FLAME RED MAPLE
	MB	MAGNOLIA GRANDIFLORA `D.D. BLANCHARD` TM STRAIGHT, SINGLE LEADER, 6` CT, FL #1	SOUTHERN MAGNOLIA
	QV	QUERCUS VIRGINIANA STRAIGHT, SINGLE LEADER, FULL, FL #1	SOUTHERN LIVE OAK
PALM TREES	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
	SP	SABAL PALMETTO STRAIGHT, BOOTED, HURRICANE CUT, FULL, FL #1	SABAL PALM
UNDERSTORY TREE	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
	IC	ILEX CASSINE STRAIGHT, FULL, FL #1, SINGLE LEADER	DAHOON HOLLY
	LI	LAGERSTROEMIA INDICA X FAURIEI 'MUSKOGEE' MULTI-TRUNK, 5 TRUNK MIN, FL #1	MUSKOGEE CRAPE MYRTLE MULTI-TRUNK
	ML	MAGNOLIA GRANDIFLORA 'LITTLE GEM' STRAIGHT, SINGLE LEADER, FULL, FL #1	LITTLE GEM DWARF SOUTHERN MAGNOLIA
SHRUBS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
	AV	ALPINIA ZERUMBET `VARIEGATA` FULL	VARIEGATED SHELL GINGER
	HP	HAMELIA PATENS 'COMPACTA' FULL	DWARF FIREBUSH
	IV	ILEX VOMITORIA `SCHILLINGS DWARF` FULL	DWARF YAUPON HOLLY
	PM	PODOCARPUS MACROPHYLLUS FULL	PODOCARPUS
	RA	RHAPHIOLEPIS INDICA `ALBA` FULL	WHITE INDIAN HAWTHORN
	VO	VIBURNUM ODORATISSIMUM FULL	SWEET VIBURNUM
	ZF	ZAMIA FLORIDANA FULL	COONTIE PALM
SHRUB AREAS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
	DR	DURANTA REPENS 'VARIEGATA' FULL	VARIEGATED GOLD MOUND
	MC	MUHLENBERGIA CAPILLARIS FULL	PINK MUHLY GRASS
GROUND COVERS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
	AA	AGAPANTHUS AFRICANUS FULL	LILY OF THE NILE
	AG	ARACHIS GLABRATA FULL	PERENNIAL PEANUT
	BF	BULBINE FRUTESCENS FULL	STALKED BULBINE
	DT	DIANELLA TASMANICA FULL	FLAX LILY
	EB	EVOLVULUS GLOMERATUS 'BLUE DAZE' FULL	BRAZILIAN DWARF MORNING GLORY
	LG	LIRIOPE MUSCARI `EVERGREEN GIANT` FULL	EVERGREEN GIANT LILYTURF
	TJ	TRACHELOSPERMUM JASMINOIDES 'CONFEDERATE' FULL	CONFEDERATE JASMINE
	TV	TULBAGHIA VIOLACEA FULL	SOCIETY GARLIC

MISC.	QTY	BOTANICAL/COMMON NAME
MUCLH	TBD	DESIGNER BROWN HARDWOOD MULCH
SOD	TBD	PASPALUM NOTATUM 'ARGENTINE'/BAHIA GRASS

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

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SCALE AS SHOWN
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LANDSCAPE PLAN

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
L1.02

Plotted By:Sauer, Cole Sheet Set:SHOPPES AT EAST SHORE MULTI-FAMILY Layout:L1.02 October 16, 2023 08:28:47pm K:\orl_civil\249218001-shoppes at east shore at\CADD\CONST\CSP\plansheet\L1 00- LANDSCAPE PLAN.dwg
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PLANT SCHEDULE

CANOPY TREE	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE
	AR	12	ACER RUBRUM 'FLORIDA FLAME' STRAIGHT, SINGLE LEADER, FULL, FL #1	FLORIDA FLAME RED MAPLE	FG	3" CAL MIN	12' HT MIN
	MB	11	MAGNOLIA GRANDIFLORA `D.D. BLANCHARD` TM STRAIGHT, SINGLE LEADER, 6' CT, FL #1	SOUTHERN MAGNOLIA	FG	3" CAL MIN	12' HT MIN
	QV	22	QUERCUS VIRGINIANA STRAIGHT, SINGLE LEADER, FULL, FL #1	SOUTHERN LIVE OAK	FG	3" CAL MIN	14' HT MIN
PALM TREES	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**
	SP	32	SABAL PALMETTO STRAIGHT, BOOTED, HURRICANE CUT, FULL, FL #1	SABAL PALM	FG	-	12` - 18` CT
UNDERSTORY TREE	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**
	IC	27	ILEX CASSINE STRAIGHT, FULL, FL #1, SINGLE LEADER	DAHOON HOLLY	FG	3" CAL MIN	10` HT, 4` SPR
	LI	22	LAGERSTROEMIA INDICA X FAURIEI 'MUSKOGEE' MULTI-TRUNK, 5 TRUNK MIN, FL #1	MUSKOGEE CRAPE MYRTLE MULTI-TRUNK	FG	5" CAL. TOT.	10`-12`H X 5`-6`W
	ML	15	MAGNOLIA GRANDIFLORA 'LITTLE GEM' STRAIGHT, SINGLE LEADER, FULL, FL #1	LITTLE GEM DWARF SOUTHERN MAGNOLIA	FG	3" CAL MIN	10` HT, 4` SPR
SHRUBS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SPACING**	**SIZE**
	AV	172	ALPINIA ZERUMBET `VARIEGATA` FULL	VARIEGATED SHELL GINGER	3 GAL	30" OC	24" OC
	HP	197	HAMELIA PATENS 'COMPACTA' FULL	DWARF FIREBUSH	3 GAL	24" HT MIN	30" OC
	IV	86	ILEX VOMITORIA `SCHILLINGS DWARF` FULL	DWARF YAUPON HOLLY	3 GAL	24" OC	12" FULL
	PM	411	PODOCARPUS MACROPHYLLUS FULL	PODOCARPUS	7 GAL	36" OC	36" HT MIN
	RA	176	RHAPHIOLEPIS INDICA `ALBA` FULL	WHITE INDIAN HAWTHORN	3 GAL	30" OC	14" FULL
	VO	168	VIBURNUM ODORATISSIMUM FULL	SWEET VIBURNUM	3 GAL	36" OC	24" FULL
	ZF	92	ZAMIA FLORIDANA FULL	COONTIE PALM	3 GAL	30" OC	24" OC
SHRUB AREAS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACING**
	DR	263	DURANTA REPENS 'VARIEGATA' FULL	VARIEGATED GOLD MOUND	3 GAL	18" HT MIN	24" OC
	MC	137	MUHLENBERGIA CAPILLARIS FULL	PINK MUHLY GRASS	3 GAL	24" HT MIN	36" OC
GROUND COVERS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACING**
	AA	47	AGAPANTHUS AFRICANUS FULL	LILY OF THE NILE	3 GAL	12" FULL	24" OC
	AG	1,300	ARACHIS GLABRATA FULL	PERENNIAL PEANUT	1 GAL	10" SPRD	18" OC
	BF	240	BULBINE FRUTESCENS FULL	STALKED BULBINE	1 GAL	12" FULL	18" OC
	DT	364	DIANELLA TASMANICA FULL	FLAX LILY	1 GAL	14" FULL	18" OC
	EB	130	EVOLVULUS GLOMERATUS 'BLUE DAZE' FULL	BRAZILIAN DWARF MORNING GLORY	3 GAL	12" FULL	18" OC
	LG	486	LIRIOPE MUSCARI `EVERGREEN GIANT` FULL	EVERGREEN GIANT LILYTURF	3 GAL	12" HT. MIN.	18" OC
	TJ	294	TRACHELOSPERMUM JASMINOIDES 'CONFEDERATE' FULL	CONFEDERATE JASMINE	1 GAL	12" FULL	24" OC
	TV	473	TULBAGHIA VIOLACEA FULL	SOCIETY GARLIC	1 GAL	12" FULL	18" OC

MISC.	QTY	BOTANICAL/COMMON NAME	SPECIFICATIONS
MULCH	TBD	DESIGNER BROWN HARDWOOD MULCH	3" DEPTH MINIMUM, SHREDDED, FREE OF WEEDS/INVASIVE PLANT MATERIAL
SOD	TBD	PASPALUM NOTATUM 'ARGENTINE/BAHIA GRASS	ROLLED TIGHT, 100% WEED/INSECT/DISEASE FREE

CODE MINIMUM LANDSCAPE CALCULATIONS

PER "CITY OF APOPKA" LAND DEVELOPMENT CODE

	REQUIRED	PROVIDED
BUILDING FOUNDATION LANDSCAPE *SECTION 5.2.5.A.1* *BUILDING FACADE FACING R.O.W.* *(AND)* *SECTION 5.2.5.B.2.A.1.B* *BUILDING FACADE ADJACENT TO PARKING*	**BUILDING 1 - 428 LF (NORTH, WEST, SOUTH FACADES)** 1,712 SF OF LANDSCAPE REQ. (4' WIDTH LANDSCAPE AREA) 21 UNDERSTORY TREES REQ. (1 UNDERSTORY TREE / 20 LF) **BUILDING 2 - 292 LF (NORTH FACADES)** 1,168 SF OF LANDSCAPE REQ. (4' WIDTH LANDSCAPE AREA) 15 UNDERSTORY TREES REQ. (1 UNDERSTORY TREE / 20 LF) **BUILDING 3 - 378 LF (NORTH & SOUTH FACADES)** 1,512 SF OF LANDSCAPE REQ. (4' WIDTH LANDSCAPE AREA) 19 UNDERSTORY TREES REQ. (1 UNDERSTORY TREE / 20 LF) **BUILDING 4 - 347 LF (NORTH, SOUTH, EAST FACADES)** 1,388 SF OF LANDSCAPE REQ. (4' WIDTH LANDSCAPE AREA) 17 UNDERSTORY TREES REQ. (1 UNDERSTORY TREE / 20 LF)	**BUILDING 1** 2,534 SF OF LANDSCAPE 16 UNDERSTORY TREES + 5 PALMS **BUILDING 2** 1,583 SF OF LANDSCAPE 15 UNDERSTORY TREES **BUILDING 3** 2,946 SF OF LANDSCAPE 15 UNDERSTORY TREES + 9 PALMS **BUILDING 4** 2,328 SF OF LANDSCAPE 8 UNDERSTORY TREES + 9 PALMS
INTERIOR VUA LANDSCAPE *SECTION 5.2.5.B.2*	10% OF VUA AREA TO BE LANDSCAPED (9,861 SF) 1 TREE + 1 TREE PER 10 PARKING SPACES (267 PARKING SPACES) 98,610 SF VUA X 0.1 = 9,861 SF LANDSCAPE REQUIRED 267 SPACES / 10 +1 = 27.7 ~ 28 SHADE TREES REQUIRED 9,861 SF VUA x .3 = 2,958 SF OF MATURE TREE CANOPY COVERAGE	10,402 SF LANDSCAPE AREA PROVIDED 43 SHADE TREES PROVIDED 3,088 SF PROVIDED
PERIMETER LANDSCAPING *SECTION 5.2.5.B.3* *SECTION 5.2.5.B.b.2*	**1 CANOPY TREE AND 10 SHRUBS (36" HT. MIN) PER 35 LF (OR FRACTION THEREOF) OF PROPERTY PERIMETER**	ALL PERIMETER LANDSCAPE PROVIDED IN OVERALL MASTER PLAN DEVELOPMENT "THE SHOPPES AT EAST SHORE"

LANDSCAPE NOTES:

1. ALL LANDSCAPE MATERIAL TO BE FLORIDA GRADE #1 OR BETTER QUALITY
2. ALL LANDSCAPED AREAS ARE TO RECEIVE A MINIMUM OF 4" OF TOPSOIL.
3. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.
4. ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
5. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
6. ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES ADJACENT TO THE WORK AREA 2) TO PROTECT ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING TO MAINTAIN HEALTHY PLANT CONDITIONS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR THE WARRANTY PERIOD.
11. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
12. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR WARRANTY PERIOD. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS DURING THE NORMAL PLANTING SEASON.
13. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
14. ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND NURSERY PRACTICES, AND SHALL BE FLORIDA NO. 1 OR BETTER AS GIVEN IN "GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I AND II," STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE.
15. ALL INVASIVE / EXOTIC SPECIES AND PROHIBITED TREE SPECIES SHALL BE REMOVED FROM SITE, INCLUDING ROOT BALLS TO THE EXTENT POSSIBLE WITH NO DAMAGE TO ADJACENT EXISTING TREES.
16. ALL LANDSCAPE AREAS WILL BE PROVIDED WITH PERMANENT AUTOMATIC IRRIGATION SYSTEM.
17. TREE SUPPORT MATERIALS ARE TO BE REMOVED FROM EACH TREE ONCE IT IS "ESTABLISHED" (AS APPROVED BY THE LANDSCAPE ARCHITECT).
18. ALL PLANT SPECIFICATIONS IN THE PLANT SCHEDULE SHALL BE CONSIDERED THE MINIMUM ALLOWABLE SPECIFICATIONS. CONTRACTOR SHALL PROCURE PLANT MATERIALS AND UPSIZE AS NECESSARY TO MEET THE MOST STRINGENT SPECIFICATION.

No.	REVISIONS	DATE	BY

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LANDSCAPE PLAN

SHOPPES AT EAST SHORE
MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
L1.03

Plotted By:Sauer, Cole Sheet Set:SHOPPES AT EAST SHORE MULTI-FAMILY Layout:L1.03 October 16, 2023 08:28:54pm K:\orl_civil\249218001-shoppes at east shore of\CADD\CONST\CSP\plotsheets\L1.00- LANDSCAPE PLAN.dwg
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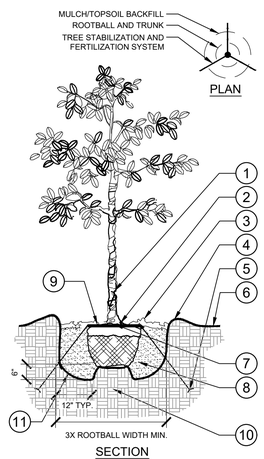


1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 3" MINIMUM MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. 4" HIGH BERM, FIRMLY COMPACTED.
5. TREE FROG ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. TOP OF ROOTBALL SHALL BE 1" ABOVE FINISHED GRADE. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.

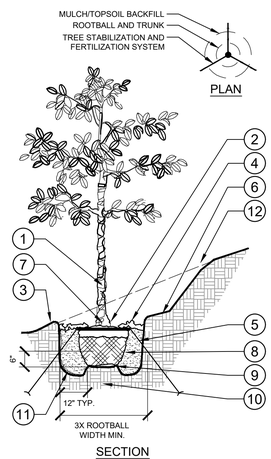
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

1 L1.50 TREE PLANTING
SECTION / PLAN NTS



1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 3. 4" HIGH BERM, FIRMLY COMPACTED.
4. 3" MINIMUM OF HARDWOOD BARK MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
5. TREE FROG ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. 4" MIN. OF TOPSOIL TO BRING TO FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.
12. CUT BACK SLOPE TO PROVIDE A FLAT SURFACE FOR PLANTING.

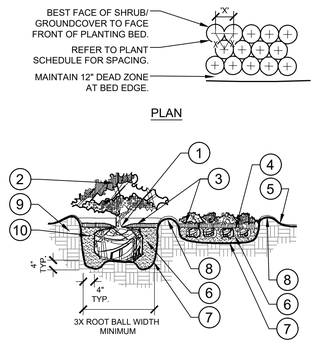
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

2 L1.50 TREE PLANTING ON A SLOPE
SECTION / PLAN NTS



1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT.
3. 3" MULCH LAYER AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES) NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
7. SCARIFY OF PLANTING PIT SIDES AND BOTTOM.
8. 4" HIGH BERM FIRMLY COMPACTED.
9. UNDISTURBED NATIVE SOIL.
10. FERTILIZER TABLETS (MAX 3" DEEP)

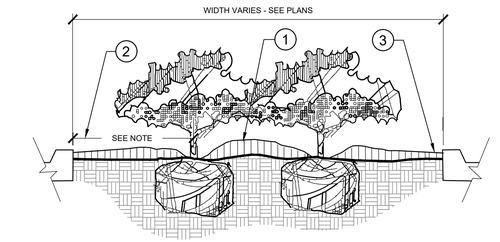
NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.

C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.

3 L1.50 SHRUB/GROUNDCOVER PLANTING
SECTION / PLAN NTS



1. CROWN ISLANDS @ 5:1 SLOPES (OR AS SPECIFIED ON THE LANDSCAPE PLANS).
2. CLEAR ZONE: 36" MIN. FROM BACK OF CURB TO CENTER OF NEAREST SHRUB. CLEAR ZONE SHALL CONTAIN 3" CONTINUOUS MULCH OR TURF, SEE PLANS.
3. 2" MIN VERTICAL CLEARANCE, TOP OF CURB TO TOP OF MULCH.

NOTES:

A. EXCAVATE A CONTINUOUS 24" DEEP PIT (FROM TOP OF CURB) FOR ENTIRE LENGTH AND WIDTH OF ISLAND & BACKFILL WITH APPROVED PLANTING MIX.

B. PROTECT AND RETAIN ALL CURBS AND BASE. COMPACTED SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF CURB SYSTEM (TYP).

C. ALL ISLANDS SHALL UTILIZE POOR DRAINAGE DETAIL WHEN PERCOLATION RATES ARE 2" PER HOUR OR LESS.

4 L1.50 PLANTED PARKING LOT ISLANDS/MEDIANS
SECTION NTS

1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. PRUNE SHRUBS AS DIRECTED BY OWNER'S REPRESENTATIVE.
3. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE SHRUBS ARE PLACED IN MASSES, MULCH SHALL BE SPREAD IN A CONTINUOUS BED.
4. SOIL BERM TO HOLD WATER. TOP OF PLANTING PIT 'BERM' TO BE LEVEL ACROSS PIT. SLOPE DOWNHILL PORTION OF BERM AS REQUIRED TO MEET EXISTING GRADE. MULCH OVER EXPOSED TOPSOIL.
5. FINISHED GRADE (SEE GRADING PLAN)
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES).
7. SCARIFY SIDES AND BOTTOM OF PLANTING PIT.
8. FERTILIZER TABLETS (MAX 3" DEEP).
9. UNDISTURBED NATIVE SOIL

NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.

C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.

5 L1.50 SHRUB/GROUNDCOVER PLANTING ON A SLOPE
SECTION NTS

NOTES:

1. CLEAR ZONE: 36" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.
2. INSTALL SPECIFIED MULCH: 24" MIN. FROM BUILDING. SPECIFIED MULCH TO BE INSTALLED AT A DEPTH OF 3" (MIN.)

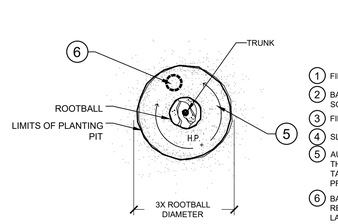
6 L1.50 PLANTINGS ADJACENT TO BUILDINGS
SECTION NTS

1. INSTALL CONTINUOUS MULCH BED ADJACENT TO PARKING SPACES AS SHOWN. MULCH SHALL BE MIN. 3" DEEP. NO POP-UP IRRIGATION HEADS SHALL BE LOCATED WITHIN 24" OF A PARKING SPACE ON ANY SIDE.
2. CURB / PARKING LOT EDGE.

7 L1.50 PARKING SPACE/CURB PLANTING
SECTION NTS

1. FIRE HYDRANT.
2. NO PLANT EXCEEDING 12" MATURE HEIGHT MATERIAL SHALL BE PLACED WITHIN SHOWN RADIUS OF ALL PROPOSED OR EXISTING FIRE HYDRANTS. CONTRACTOR SHALL ADJUST PLANT MATERIAL SO THAT NO CONFLICTS WITH FIRE HYDRANTS OCCUR ON SITE.
3. FRONT OF HYDRANT (TOWARD CURB)

8 L1.50 SHRUB PLANTING AT FIRE HYDRANT
SECTION / PLAN NTS



1. FINISH GRADE (SEE GRADING PLANS).
2. BACKFILL WITH PREPARED PLANTING SOIL MIX AS SPECIFIED.
3. FILTER CLOTH, MIRAFI 500X OR BETTER.
4. SLOPE BOTTOM TO DRAIN.
5. AUGURED HOLE @ ±18" PENETRATE THROUGH OCCLUDING LAYER TO WATER TABLE OR TO A DEPTH OF 7' TO ASSURE PROPER PERCOLATION.
6. BACKFILL WITH 1/2" - 3/4" GRAVEL TO REQUIRED DEPTH THROUGH OCCLUDING LAYER TO ASSURE PROPER PERCOLATION.
7. WATER TABLE. (DEPTH VARIES)
8. UNDISTURBED NATIVE SOIL.
9. SET ROOTBALL ON UNDISTURBED STABLE SUBSOIL SO THAT TOP OF ROOT BALL IS 1" ABOVE FINISHED GRADE.

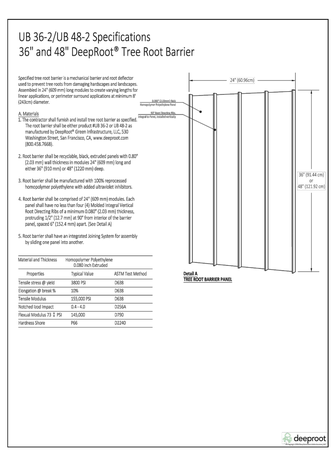
NOTES:

A. THIS DETAIL SHALL BE IMPLEMENTED WHERE PERCOLATION RATES ARE 2" PER HOUR OR LESS.

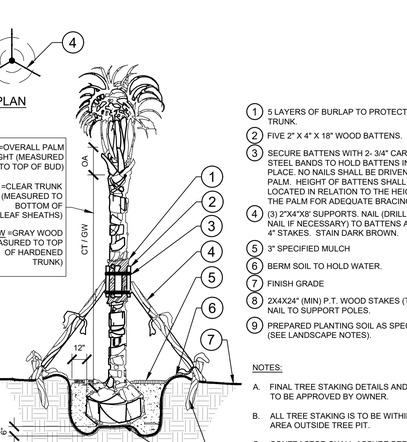
B. CONTRACTOR TO PERFORM PERCOLATION TEST AS REQUIRED. AND NOTIFY OWNER/LANDSCAPE ARCHITECT.

C. SEE TYPICAL TREE PLANTING DETAIL THIS SHEET FOR PLANT STAKING.

9 L1.50 POOR DRAINAGE CONDITION
SECTION / PLAN NTS



10 L1.50 TREE ROOT BARRIER



1. 5 LAYERS OF BURLAP TO PROTECT TRUNK.
2. FIVE 2" X 4" X 18" WOOD BATTENS.
3. SECURE BATTENS WITH 2- 3/4" CARBON STEEL BANDS TO HOLD BATTENS IN PLACE. NO NAILS SHALL BE DRIVEN INTO PALM. HEIGHT OF BATTENS SHALL BE LOCATED IN RELATION TO THE HEIGHT OF THE PALM FOR ADEQUATE BRACING.
4. (3) 2"X4"X'8' SUPPORTS. NAIL (DRILL AN NAIL IF NECESSARY) TO BATTENS AND 2" 4" STAKES. STAIN DARK BROWN.
5. 3" SPECIFIED MULCH
6. BERM SOIL TO HOLD WATER.
7. FINISH GRADE
8. 2X4X24" (MIN) P.T. WOOD STAKES (TYP.) NAIL TO SUPPORT POLES.
9. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES).

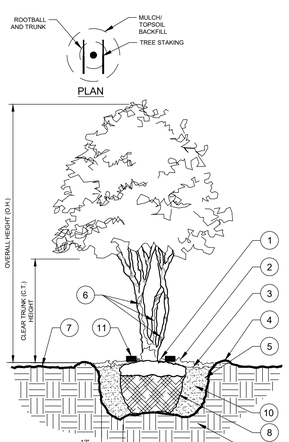
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. ALL TREE STAKING IS TO BE WITHIN MULCH BED AREA OUTSIDE TREE PIT.

C. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION - REFER TO POOR DRAINAGE CONDITION DETAIL.

11 L1.50 PALM PLANTING
SECTION / PLAN NTS



1. BASE OF TREE SHALL BE PLANTED SLIGHTLY ABOVE (1" MIN.) ADJACENT FINISH GRADE. REMOVE ALL TWINE & STRAPS & CUT BURLAP FROM TOP 1/3 OF ROOT BALL. NO SYNTHETIC BURLAP WILL BE ACCEPTED.
2. 4" SHREDDED HARDWOOD MULCH OR APPROVED EQUAL.
3. DIAMETER OF TREE PIT TO BE TWICE THE DIAMETER OF ROOT BALL-ROUGHEN SIDES OF TREE PIT.
4. 3" HIGH SOIL BERM TO HOLD WATER.
5. TOPSOIL MIX BACKFILL.
6. TREE WRAP.
7. 4" MIN. OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
8. ROOT BALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING ROOT BALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.
9. UNDISTURBED SUBSOIL.
10. PREPARE PLANTING SOIL AS SPECIFIED.
11. **Tree Frog® RBK40pt** FOR UP TO 4" TREE CALIPER OR **Tree Frog® RBK60pt** FOR GREATER THAN 4" AND UP TO 6" TREE CALIPER. REFER TO SITEWORK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS.

NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. SET TREE AT ORIGINAL DEPTH. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

D. PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT

E. ASSURE PERCOLATION OF ALL PLANTING PITS

12 L1.50 MULTI-TRUNK TREE PLANTING
SECTION/PLAN NTS

No.	REVISIONS	DATE	BY

Kimley»Horn

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LICENSED PROFESSIONAL

FLORIDA LICENSE NUMBER

DATE: 10/16/2023

KHA PROJECT 249218001
DATE 1/26/2023
SCALE AS SHOWN
DESIGNED BY ASIL
DRAWN BY ASIL
CHECKED BY MTF

LANDSCAPE DETAILS

SHOPPES AT EAST SHORE
MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
L1.50

Plotted By: Sauer, Cole Sheet Set: SHOPPES AT EAST SHORE MULTI-FAMILY Layout: L1.50 October 16, 2023 08:28:56am K:\orl_civil\249218001-shoppes at east shore at\CADD\CONST\CSP\plotsheets\L1.00- LANDSCAPE PLAN.dwg
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GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS SPECIFIED HEREIN.

2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

1. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED AND DESIGNATED TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BMP DEVICES ACCORDING TO ALL REGULATORY AGENCY'S STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.

3. THE CONTRACTOR SHALL SUBMIT A DETAILED PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN UNLESS THE WORK REQUIRES NOTHING MORE THAN A DIRECT APPLICATION OF FDOT DESIGN STANDARDS, INDEX 600. IF A DIRECT APPLICATION OF INDEX 600 IS PROPOSED, THE CONTRACTOR SHALL SUBMIT IN WRITING A STATEMENT INDICATING THE STANDARD INDEX AND PAGE NUMBER NO LESS THAN 10 BUSINESS DAYS PRIOR TO START OF CONSTRUCTION. WHEN A DIRECT APPLICATION OF FDOT STANDARD INDEX 600 IS NOT ACCEPTABLE A PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN SHALL BE PREPARED BY A FLORIDA PROFESSIONAL ENGINEER WHO HAS SUCCESSFULLY COMPLETED ADVANCED TRAINING IN MAINTENANCE OF TRAFFIC, AS DEFINED BY FDOT FOR APPROVAL BY THE COUNTY ENGINEER'S REPRESENTATIVE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE INFORMATION AND DATA SHOWN WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS APPROXIMATE AND BASED ON INFORMATION FURNISHED BY THE OWNER OF SUCH UNDERGROUND FACILITIES OR ON PHYSICAL APPURTENANCES OBSERVED IN THE FIELD. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA. THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR; REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA; LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION; THE SAFETY AND PROTECTION THEREOF; REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

C. PROTECTION OF EXISTING PLANT MATERIALS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC... THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF THREE HUNDRED DOLLARS ($300) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

2. SEE TREE MITIGATION PLAN AND NOTES, IF APPLICABLE.

D. MATERIALS

1. GENERAL

MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE OWNER. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SAMPLE SIZE
MULCH	ONE (1) CUBIC FOOT
TOPSOIL MIX	ONE (1) CUBIC FOOT
PLANTS	ONE (1) OF EACH VARIETY (OR TAGGED IN NURSERY)

2. PLANT MATERIALS

a. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE.

b. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

c. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

1. CONTRACTOR SHALL TEST EXISTING SOIL AND AMEND AS NECESSARY IN ACCORDANCE WITH THE GUIDELINES BELOW:

2. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF TWO PARTS OF TOPSOIL AND ONE PART SAND, AS DESCRIBED BELOW. CONTRACTOR TO SUBMIT SAMPLES AND TEST RESULTS OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

a. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND HAVE A PH BETWEEN 5.5 AND 7.0.

b. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND.

2. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.

F. WATER

1. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC... IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

* WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

* FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

1. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A DEPTH OF THREE (3) INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). MULCH SHALL BE "FLORIMULCH," EUCALYPTUS MULCH, OR SIMILAR SUSTAINABLY HARVESTED MULCH UNLESS SPECIFIED OTHERWISE.

2. PROVIDE A THREE (3) INCH MINIMUM LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT (6' MINIMUM) PLANTED UNDER THIS CONTRACT.

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO THE SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.

2. BALLED AND BURLAPPED (B&B), AND FIELD GROWN (FG) PLANTS SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.

3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.

4. PROTECTION OF PALMS: ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.

5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

3. ROOT BOUND PLANTS ARE NOT ACCEPTABLE AND WILL BE REJECTED.

4. RPG= "ROOTS PLUS GROWER" CONTAINER PRODUCTS SHALL BE USED WHERE SPECIFIED.

K. COLLECTED STOCK

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

L. NATIVE STOCK

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

N. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.

3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

O. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.

2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL SUNSHINE STATE ONE CALL OF FLORIDA, INC. (811) TO LOCATE UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36" OR TO NATIVE SOIL. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE POOR DRAINAGE CONDITION PLANTING DETAIL.

4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS SPECIFIED HEREIN. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

5. COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ONSITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.

7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACK FILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. IF POOR DRAINAGE EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.

8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.

9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.

10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACK FILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).

11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.

12. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET, ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE. ALL BURLAP, ROPE, WIRES, BASKETS, ETC.., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.

13. TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY CERTIFIED ARBORIST, IN ACCORDANCE WITH ANSI A-300.

14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOW ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" THE PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.

16. ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

P. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.

2. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.

3. PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.

4. SODDING

a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.

b. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.

c. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.

5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

6. LAWN MAINTENANCE

a. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).

b. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

S. FINAL INSPECTION AND ACCEPTANCE OF WORK

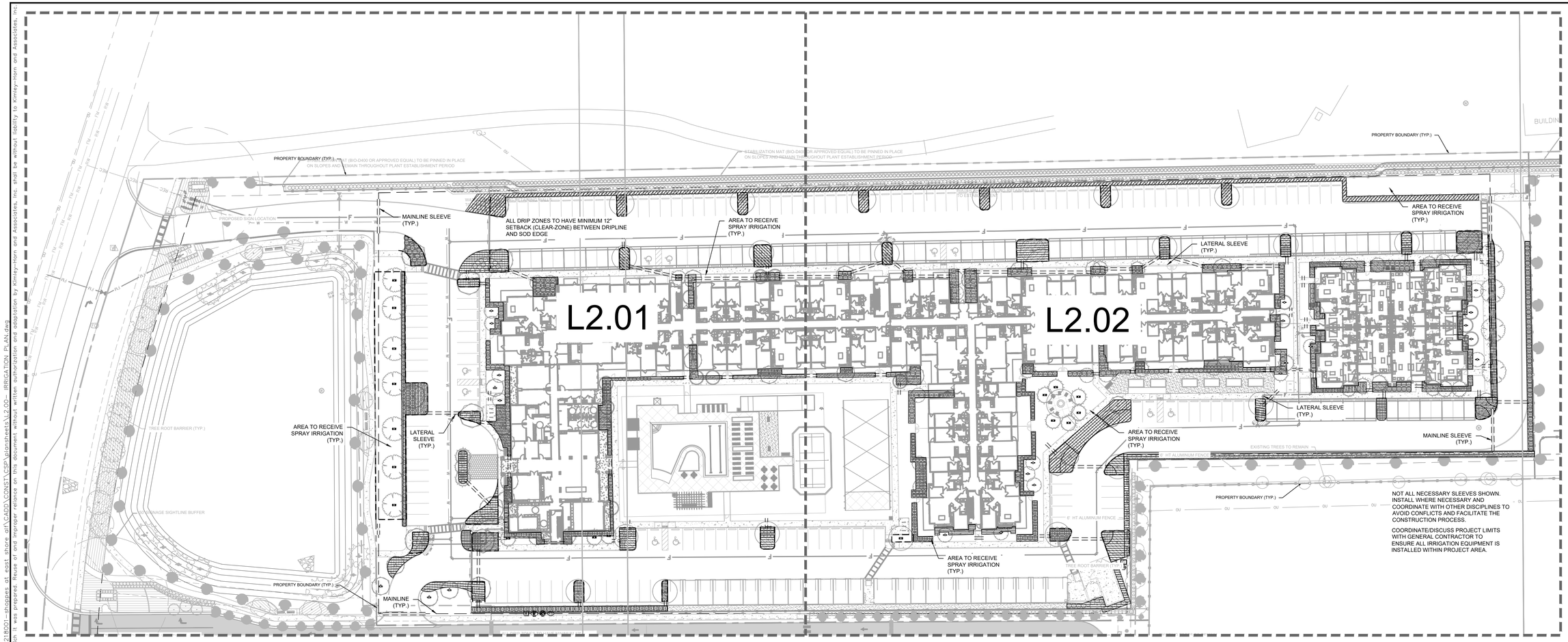
FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

T. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

2. ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.

3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE AND IRRIGATION MAINTENANCE, THE CONTRACTOR SHOULD VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER. CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
1401 1402	RAIN BIRD RWS-M-B-C W/ RWS-SOCK 1400 SERIES MINI ROOT WATERING SYSTEM WITH 4IN. DIAMETER X 18IN. LONG WITH LOCKING GRATE, SEMI-RIGID MESH TUBE AND RAIN BIRD 1401 0.25 GPM OR 1402 0.5 GPM BUBBLER AS INDICATED. WITH CHECK VALVE, AND SAND SOCK FOR SANDY SOIL.	40	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE. 0.9 GPH EMITTERS AT 12" O.C. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT. SPECIFY XF INSERT FITTINGS.	28,320 L.F.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
MCV	RAIN BIRD PEB 1-1/2" 1IN., 1-1/2IN., 2IN. PLASTIC INDUSTRIAL MASTER VALVES. LOW FLOW OPERATING CAPABILITY. GLOBE CONFIGURATION.	1
BF	WATTS LF909M1 1-1/2" LEAD FREE REDUCED PRESSURE BACKFLOW PREVENTER.	1
RS	RAIN BIRD WR2-RFS WIRELESS RAIN/FREEZE SENSOR.	1
FS	RAIN BIRD FS-150-B 1-1/2IN. FLOW SENSOR, BRASS MODEL. SUGGESTED OPERATING RANGE 4.0 GPM TO 80.0 GPM. SIZE FOR FLOW NOT ACCORDING TO PIPE SIZE. RAIN BIRD COMPATIBLE CONTROLLERS: ESP-LXIVM(P) | LXD | LXME2(P) | ME3, OR CONTROLLERS ACCEPTING CUSTOM K-FACTOR AND OFFSET. INSTALL IN RAIN BIRD VALVE BOX.	1
M	WATER METER 1-1/2"	1
	IRRIGATION MAINLINE: PVC SCHEDULE 40	2,523 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 - LATERALS	1,057 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 - MAINLINE	142.0 L.F.

Valve Callout
Valve Number
Valve Flow
Valve Size

FLOW TOTALS
Area for Dripline: 424.8
Bubbler: 14.3
Total: 439.1 GPM

IRRIGATION NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, EQUIPMENT QUANTITIES, ETC. PRIOR TO BEGINNING WORK.
2. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANS OR SPECIFICATIONS PRIOR TO BEGINNING OR CONTINUING WORK.
3. THE CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
4. ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS.
5. THIS PLAN IS SCHEMATIC AND DUE TO THE NATURE OF CONSTRUCTION SLIGHT FIELD MODIFICATIONS MAY BE NECESSARY TO IMPLEMENT PLAN.
6. CONTRACTOR TO VERIFY ACTUAL AVAILABLE WATER PRESSURE BEFORE BEGINNING INSTALLATION. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AVAILABLE WATER PRESSURE WILL NOT ALLOW SYSTEM MODIFICATION TO BE POSSIBLE.
7. IRRIGATION SYSTEMS CONNECTED TO POTABLE WATER SUPPLY, SHALL HAVE A BACKFLOW PREVENTER INSTALLED.
8. WHERE APPLICABLE IRRIGATION HEADS ARE TO BE ADJUSTED FOR COMPLETE COVERAGE WITH MINIMUM OVER SPRAY BEYOND LANDSCAPE AREAS.
9. EXISTING TREES TO REMAIN ARE TO BE PROTECTED FROM DAMAGE. DO NOT TRENCH OR EXCAVATE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE.
10. ALL IRRIGATION SLEEVING TO BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES.
11. IRRIGATION CONTRACTOR SHALL REVIEW WINTERIZATION PROCEDURES FOR IRRIGATION SYSTEM WITH OWNER'S REPRESENTATIVE.
12. ALL PLANT MATERIAL IN TREE HOLDING AREAS SHALL BE MANUALLY WATERED/IRRIGATED TO KEEP MOIST UNTIL PLANTED.
13. CONTRACTOR TO PROVIDE PERMANENT BENCH-MARKS ON ALL CURB LINES AT RELATED SLEEVE LOCATIONS (TYP).
14. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED TO MINIMIZE ROOT DISTURBANCE IN EXISTING TREES.
15. IRRIGATION SPRAYS AND ROTORS ARE NOT COMBINED ON THE SAME CONTROL VALVE CIRCUIT - LANDSCAPE BEDS AND TURF ON SEPARATE CIRCUITS.

IRRIGATION CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL NECESSARY MODIFICATIONS REQUIRED TO MEET THE SCHEMATIC INTENT OF THESE PLANS PRIOR TO SUBMITTING PROPOSAL. THESE PLANS OUTLINE THE OVERALL LAYOUT THE SYSTEM AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ZONE THE SYSTEM ACCORDINGLY BASED ON FLOW AND PRESSURE AVAILABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE FOLLOWING BUT NOT LIMITED TO AVAILABLE FLOW, AVAILABLE PRESSURE, CONNECTION ASSEMBLY, CAPACITY OF THE SYSTEM.

NORTH

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No.	REVISIONS	DATE	BY

Kimley»Horn
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LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE: 10/16/2023

KHA PROJECT 249218001
DATE 1/26/2023
SCALE AS SHOWN
DESIGNED BY ASIL
DRAWN BY ASIL
CHECKED BY MTF

OVERALL IRRIGATION PLAN

SHOPPES AT EAST SHORE MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
L2.00

Plotted By: Sawyer.Cole Sheet Set: SHOPPES AT EAST SHORE MULTI-FAMILY Layout: L2.00 October 16, 2023 08:29:30pm K:\orl_civil\249218001-shoppes at east shore of\CADD\CONST\CSP\plansheets\L2.00- IRRIGATION PLAN.dwg
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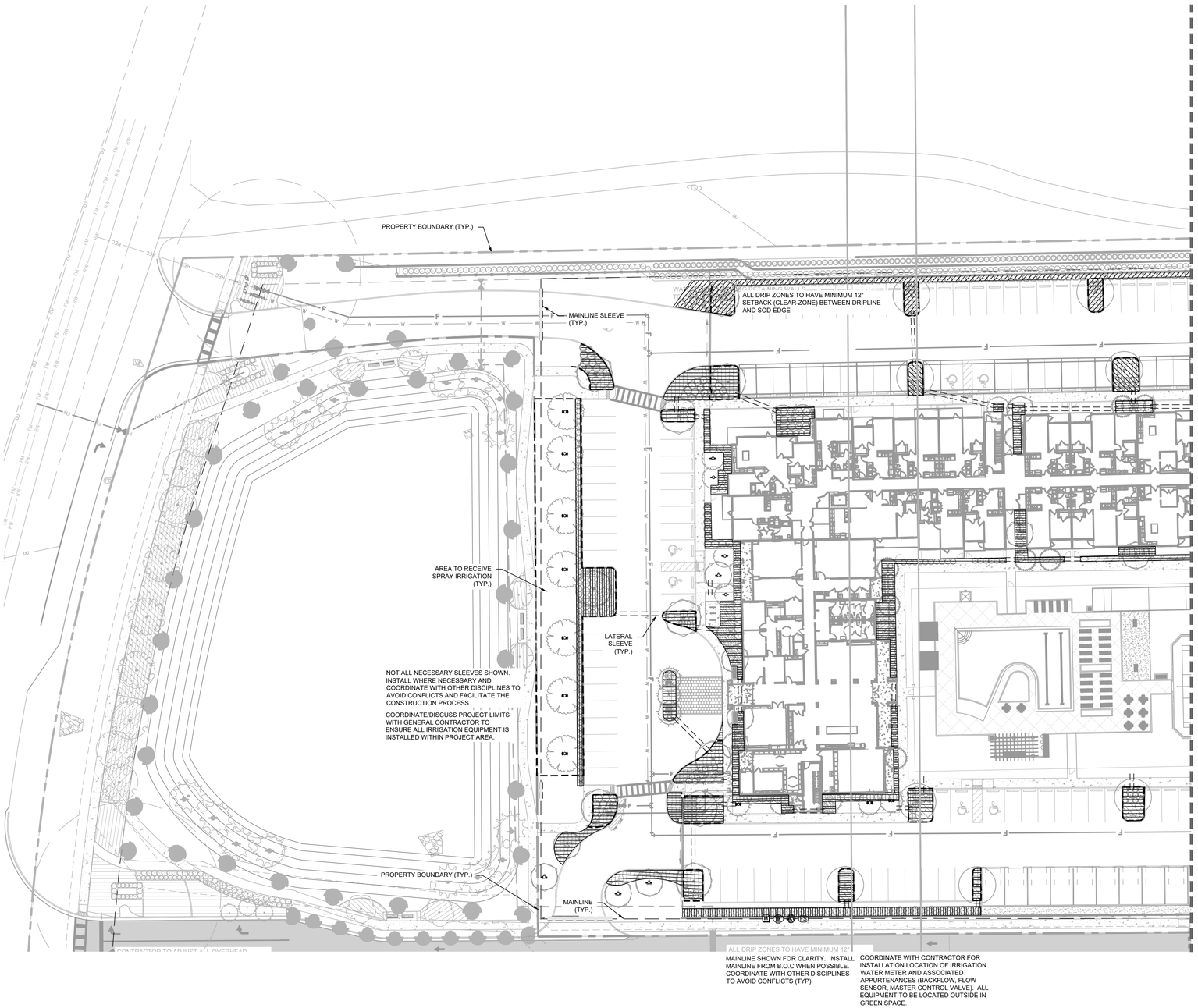

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
1401 1402	RAIN BIRD RWS-M-B-C W/ RWS-SOCK 1400 SERIES MINI ROOT WATERING SYSTEM WITH 4IN. DIAMETER X 18IN. LONG WITH LOCKING GRATE, SEMI-RIGID MESH TUBE AND RAIN BIRD 1401 0.25 GPM OR 1402 0.5 GPM BUBBLER AS INDICATED. WITH CHECK VALVE, AND SAND SOCK FOR SANDY SOIL.	40	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
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M	WATER METER 1-1/2"	1
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	PIPE SLEEVE: PVC SCHEDULE 40 - LATERALS	1,057 L.F.
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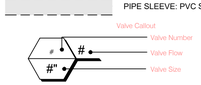

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CHECKED BY MTF

IRRIGATION PLAN

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
L2.01

Plotted By: Sauer, Cole Sheet Set: SHOPPES AT EAST SHORE MULTI-FAMILY Layout: L2.01 October 16, 2021 08:29:43pm K:\orl_civil\249218001-shoppes at east shore all\CADD\CONST\CSP\plansheet\L2.00- IRRIGATION PLAN.dwg
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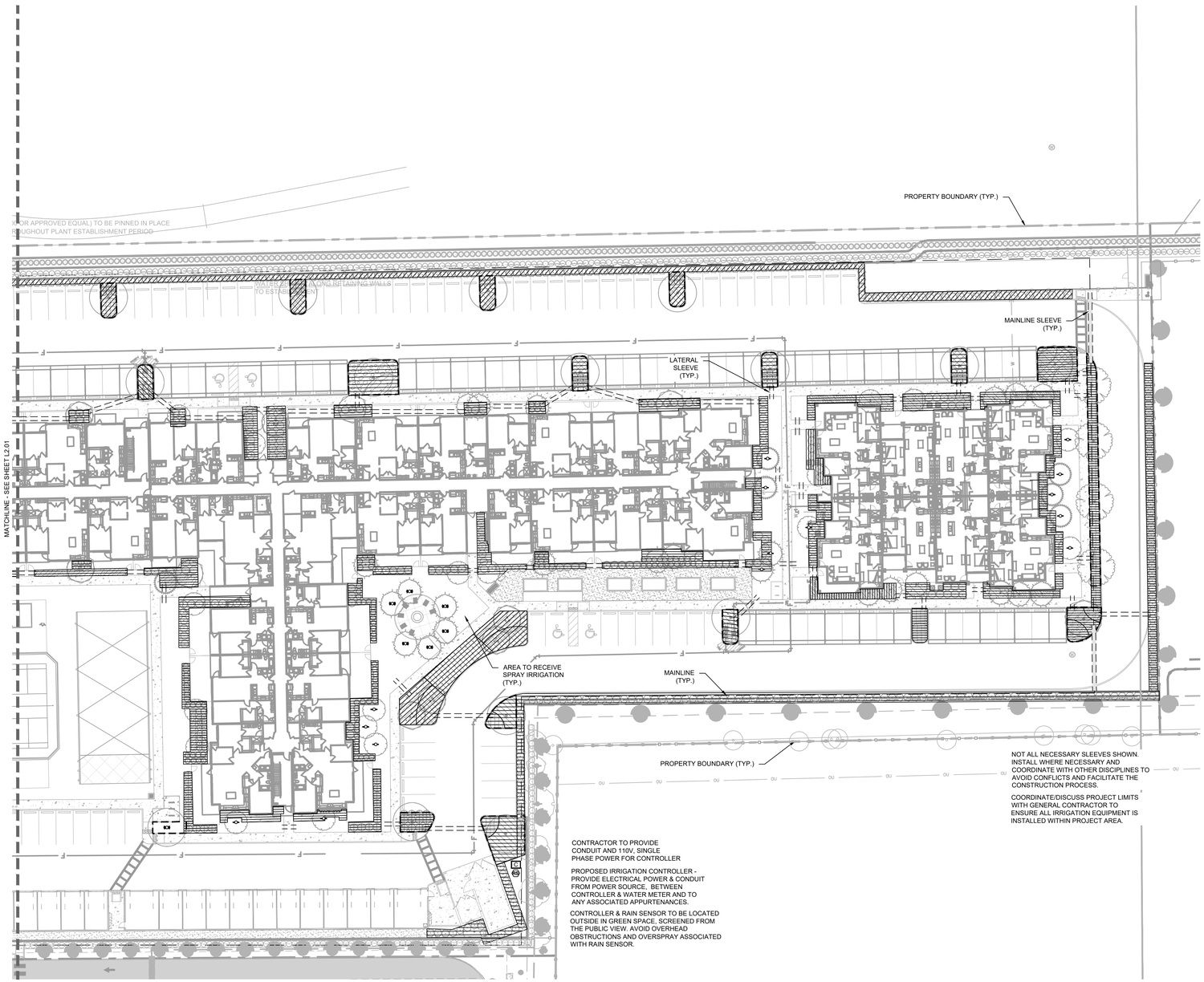

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1401 1402	RAIN BIRD RWS-M-B-C W/ RWS-SOCK 1400 SERIES MINI ROOT WATERING SYSTEM WITH 4IN. DIAMETER X 18IN. LONG WITH LOCKING GRATE, SEMI-RIGID MESH TUBE AND RAIN BIRD 1401 0.25 GPM OR 1402 0.5 GPM BUBBLER AS INDICATED. WITH CHECK VALVE, AND SAND SOCK FOR SANDY SOIL.	40	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE, 0.9 GPH EMITTERS AT 12" O.C. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT. SPECIFY XF INSERT FITTINGS.	28,320 L.F.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
MCV	RAIN BIRD PEB 1-1/2" 1IN., 1-1/2IN., 2IN. PLASTIC INDUSTRIAL MASTER VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	1
BF	WATTS LF909M1 1-1/2" LEAD FREE REDUCED PRESSURE BACKFLOW PREVENTER.	1
RS	RAIN BIRD WR2-RFS WIRELESS RAIN/FREEZE SENSOR.	1
FS	RAIN BIRD FS-150-B 1-1/2IN. FLOW SENSOR, BRASS MODEL. SUGGESTED OPERATING RANGE 4.0 GPM TO 80.0 GPM. SIZE FOR FLOW NOT ACCORDING TO PIPE SIZE. RAIN BIRD COMPATIBLE CONTROLLERS: ESP-LXIVM(P)	LXD	LXME2(P)	ME3, OR CONTROLLERS ACCEPTING CUSTOM K-FACTOR AND OFFSET. INSTALL IN RAIN BIRD VALVE BOX.	1
M	WATER METER 1-1/2"	1
	IRRIGATION MAINLINE: PVC SCHEDULE 40	2,523 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 - LATERALS	1,057 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40 - MAINLINE	142.0 L.F.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

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811 Know what's below. Call before you dig.
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LICENSED PROFESSIONAL
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DATE: 10/16/2023

KHA PROJECT 249218001
DATE 1/26/2023
SCALE AS SHOWN
DESIGNED BY ASIL
DRAWN BY ASIL
CHECKED BY MTF

IRRIGATION PLAN

SHOPPES AT EAST SHORE
MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
L2.02

Plotted By:Sauer, Cole Sheet Set:SHOPPES AT EAST SHORE MULTI-FAMILY Layout:L2.02 October 16, 2023 08:29:57am K:\orl_civil\249218001-shoppes at east shore of\CADD\CONST\CSP\plansheets\L2.00- IRRIGATION PLAN.dwg
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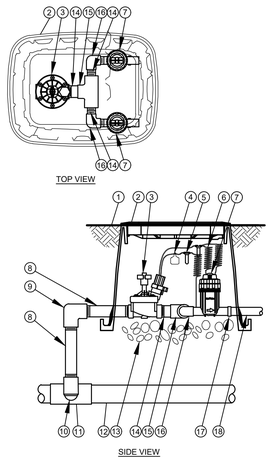
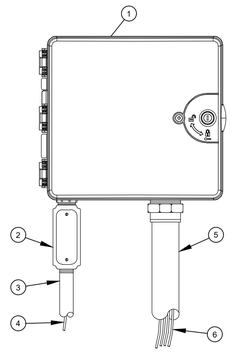


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER:
3. REMOTE CONTROL VALVE:
4. ID TAG
5. WATERPROOF CONNECTION:
6. 30-INCH LINEAR LENGTH OF WIRE, COILED
7. PRESSURE REGULATING QUICK CHECK BASKET FILTER:
8. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
9. PVC SCH 40 ELL
10. PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
11. PVC SCH 40 TEE OR ELL
12. MAINLINE PIPE
13. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
14. PVC SCH 80 NIPPLE, CLOSE
15. PVC SCH 40 TEE
16. PVC SCH 40 ELL
17. PVC SCH 40 FEMALE ADAPTOR
18. LATERAL PIPE

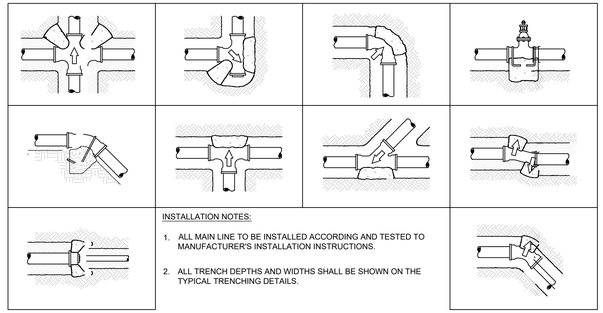
1 L2.50 COMMERCIAL CONTROL DRIP ZONE VALVE KIT
SECTION / PLAN — NTS



1. IRRIGATION CONTROLLER: CONTROLLER (OWNER TO SPECIFY WALL MOUNT OR STAINLESS STEEL PEDESTAL MOUNT). INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. JUNCTION BOX
3. 1-INCH CONDUIT AND FITTINGS TO POWER SUPPLY
4. POWER SUPPLY WIRE
5. 2-INCH CONDUIT AND FITTINGS FOR STATION WIRES
6. WIRES TO REMOTE CONTROL VALVES

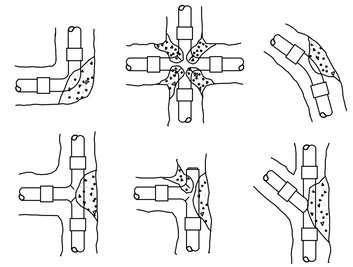
NOTES:
1. FOR EASE OF INSTALLATION INTO A CONTROLLER WITH MORE THAN 24 STATIONS, INSTALL A JUNCTION BOX AT THE BASE OF CONTROLLER AND TRANSITION LARGER VALVE AND COMMON WIRES FROM FIELD TO 18 AWG MULTI CONDUCTOR WIRE TO BE USED IN CONTROLLER.
2. USE STEEL CONDUIT FOR ABOVE GRADE AND SCH 40 PVC CONDUIT FOR BELOW GRADE CONDITIONS.
3. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.

2 L2.50 TYPICAL CONTROLLER
ELEVATION — NTS



INSTALLATION NOTES:
1. ALL MAIN LINE TO BE INSTALLED ACCORDING AND TESTED TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. ALL TRENCH DEPTHS AND WIDTHS SHALL BE SHOWN ON THE TYPICAL TRENCHING DETAILS.

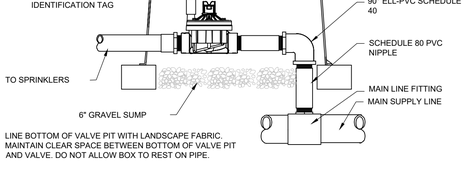
3 L2.50 TYPICAL THRUST BLOCK
SECTION — NTS



INSTALLATION NOTES
1. 3000 PSI CONCRETE OR BETTER IS TO BE USED FOR THRUST BLOCKS.
2. FOR 45°/90° FITTINGS, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED.
3. FOR 22-1/2° FITTINGS, MINIMUM OF 0.5 CUBIC FEET OF CONCRETE TO BE USED.
4. FOR TEES, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED. THRUST

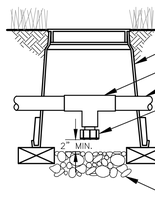
BLOCKS REQUIRED FOR IRRIGATION MAINLINE 2 1/2" AND LARGER.

4 L2.50 THRUST BLOCK REINFORCEMENT
SECTION — NTS



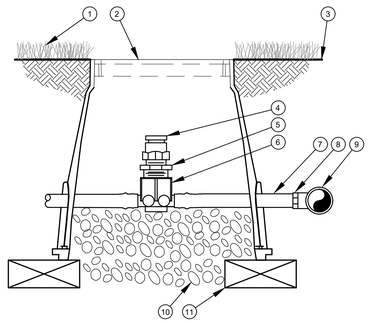
LINE BOTTOM OF VALVE PIT WITH LANDSCAPE FABRIC. MAINTAIN CLEAR SPACE BETWEEN BOTTOM OF VALVE PIT AND VALVE. DO NOT ALLOW BOX TO REST ON PIPE.

5 L2.50 TYPICAL CONTROL VALVE
SECTION — NTS



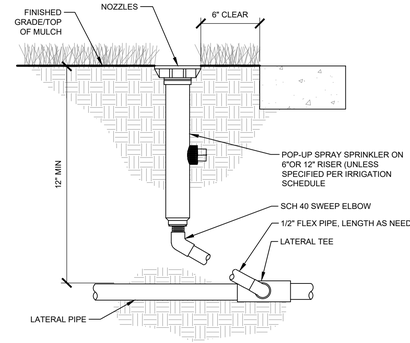
1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER:
3. PVC SCH 40 TEE
4. PVC LATERAL PIPE
5. FILTERED DRAIN VALVE:
6. BRICK (1 OF 2)
7. 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

6 L2.50 DRAIN VALVE
SECTION — NTS

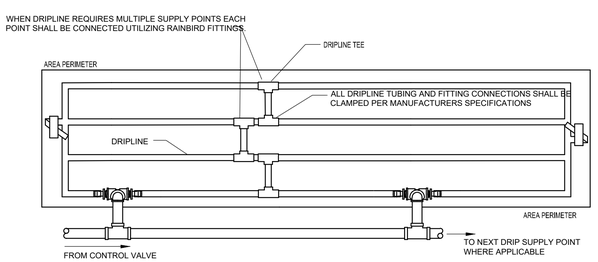


1. TURF GRASS
2. VALVE BOX LID
3. FINISH GRADE
4. ½" AIR RELIEF VALVE: TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
5. ½" X ¾" PVC REDUCER BUSHING
6. BARB X FEMALE THREAD CONNECTOR:
7. ½" BLANK DRIPLINE TUBING:
8. BARB X MALE THREAD CONNECTOR:
9. PVC TEE CONNECTED TO PVC HEADER PIPE
10. 3" MINIMUM DEPTH OF ¾" WASHED GRAVEL
11. BRICK (1 OF 2)

7 L2.50 AIR RELIEF VALVE IN XFS DRIP LINE
SECTION — NTS



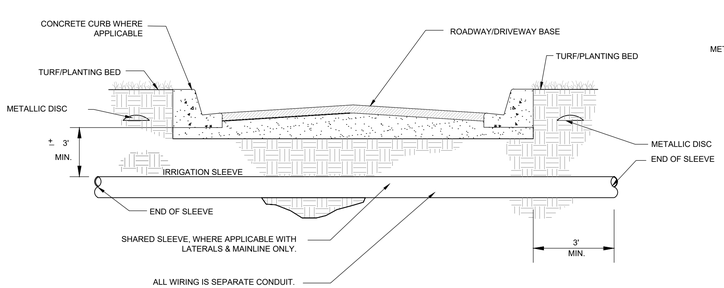
8 L2.50 TYPICAL SPRAY / ROTAR HEAD
SECTION — NTS



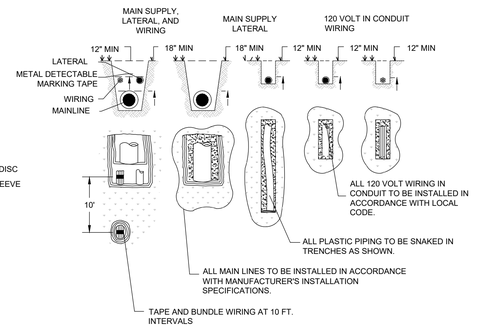
CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS. IF NOT SHOWN, INSTALL WITHIN ADJACENT GREEN AREA NOT IN A HIGHLY VISIBLE AREA.

NOTE:
1. DRIP TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 16 INCHES.
2. DRIP TUBING TO BE INSTALLED IN A GRID PATTERN. DRIP TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.
3. CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS (IF SHOWN).

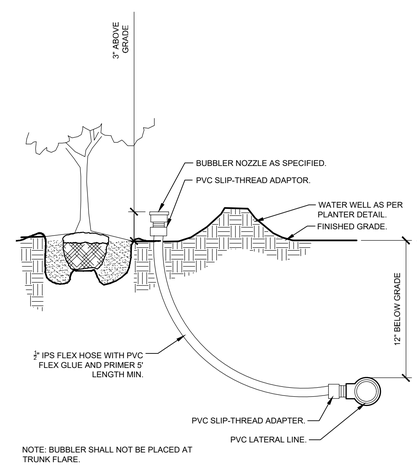
9 L2.50 TYPICAL DRIP LINE
PLAN — NTS



10 L2.50 TYPICAL SLEEVING
SECTION — NTS



11 L2.50 TYPICAL TRENCHING
SECTION / PLAN — NTS



NOTE: BUBBLER SHALL NOT BE PLACED AT TRUNK FLARE.

12 L2.50 TYPICAL BUBBLER
SECTION — NTS

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KHA PROJECT	249218001
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SCALE	AS SHOWN
DESIGNED BY	ASIL
DRAWN BY	ASIL
CHECKED BY	MTF

IRRIGATION DETAILS

SHOPPES AT EAST SHORE MULTI-FAMILY
CITY OF APOPKA FLORIDA

SHEET NUMBER
L2.50

IRRIGATION SYSTEM NOTES:

1. THE IRRIGATION MAINLINE LAYOUT IS DIAGRAMMATIC. ANY CHANGES MADE IN THE IRRIGATION MAINLINE DUE TO FIELD CONDITIONS OR CONTRACTOR'S SUBMITTED DESIGN SHALL BE IN ACCORDANCE WITH THESE STANDARDS.
2. SET SPRAY HEADS 6" AND ROTORS 12" IN FROM BACK OF CURB OR 24" IF PAVEMENT HAS NO CURB.
3. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL NECESSARY MODIFICATIONS REQUIRED TO MEET THE SCHEMATIC INTENT OF THESE PLANS PRIOR TO SUBMITTING PROPOSAL. THESE PLANS OUTLINE THE OVERALL LAYOUT THE SYSTEM AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ZONE THE SYSTEM ACCORDINGLY BASED ON FLOW AND PRESSURE AVAILABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE FOLLOWING BUT NOT LIMITED TO AVAILABLE FLOW, AVAILABLE PRESSURE, CONNECTION ASSEMBLY, CAPACITY OF THE SYSTEM.
4. CONTRACTOR TO PROVIDE NEW AUTOMATIC CONTROLLER FOR PROPOSED SYSTEM (NO BATTERY OPERATED CONTROLLERS ALLOWED). COORDINATE LOCATION WITH OWNER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AUTOMATIC RAIN SENSOR. COORDINATE LOCATION W/ OWNER.
6. IRRIGATION SHALL NOT BE COMBINED ON A SINGLE ZONE AND SHALL BE ZONED ACCORDING TO IRRIGATION TYPE, PRECIPITATION RATE, AND THE SYSTEM'S AVAILABLE WATER / PRESSURE. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO OWNER FOR REVIEW PRIOR TO INSTALLATION.
7. VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS-CONTRACTOR SHALL FIELD VERIFY.
8. CONTRACTOR TO FIELD VERIFY ALL POINT OF CONNECTION SOURCE INFORMATION INCLUDING PSI AND GPM PRIOR TO CONSTRUCTION.
9. INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY COMPLETION OF ALL WORK ON-SITE.
10. CONTRACTOR SHALL COORDINATE WITH THE PLANTING PLAN FOR PLANTER BED AND TREE LOCATIONS TO ENSURE ALL PLANT MATERIAL IS COVERED BY 100% HEAD-TO-HEAD IRRIGATION.
11. CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS OF THE FINAL INSTALLATION TO OWNER AT SUBSTANTIAL COMPLETION BEFORE RECEIVING FINAL PAYMENT.
12. PRODUCTS SHALL BE AS SPECIFIED OR APPROVED EQUAL.

PRE-APPROVED MANUFACTURERS:
1. TORO
2. HUNTER
3. RAINBIRD

13. IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE JURISDICTION.
14. LOCATE ALL IRRIGATION LINES WITHIN LANDSCAPED AREAS WHENEVER POSSIBLE. ALL LINES UNDER PAVEMENT MUST BE SLEEVED WITHIN SCH. 40 PVC 2x SIZE OF PIPE AND FREE OF STONES/DEBRIS. ALL VALVES SHALL BE LOCATED WITHIN LANDSCAPED AREAS.
15. MAINLINE SHALL NOT BE LOCATED WITHOUT PRIOR APPROVAL OF THE OWNER'S REPRESENTATIVE.
16. THE IRRIGATION CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE FOR SLEEVING AND DIRECTIONAL BORES.
17. ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF THE SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS. ALL SLEEVES ON PLAN FOR WALL PENETRATIONS AND UNDER SIDEWALKS SHALL BE SIZED TWO PIPE SIZES GREATER THAN THE PIPE IT CARRIES.
18. ALL PRESSURIZED MAINLINES AND LATERALS UNDER PAVEMENT SHALL BE WITHIN SCH. 40 PVC SLEEVES. WHERE ELECTRIC OR HYDRAULIC VALVE CONTROL LINES PASS THROUGH A SLEEVE WITH OTHER MAIN OR LATERAL LINES THEY SHALL BE CONTAINED WITHIN A SEPARATE, SMALLER CONDUIT.
19. NUMBER THE TOP OF ALL VALVE BOX LIDS WITH MINIMUM 1" HEIGHT BLACK LETTERS TO CORRESPOND TO AUTOMATIC AND GATE VALVE DESIGNATIONS. ALL HOSE BIBB VALVE BOXES SHALL BE LABELED IN A SIMILAR MANNER WITH THE DESIGNATION "HB". LETTER OUTSIDE OF TIME CLOCK CABINETS TO CORRESPOND WITH IRRIGATION CLOCK PROGRAM DESIGNATION.
20. THE IRRIGATION CONTRACTOR SHALL INSTALL A COLOR CODED METAL DETECTABLE MARKING TAPE WHICH CLEARLY NOTES: "CAUTION: IRRIGATION LINE BURIED BELOW." THE TAPE SHALL BE INSTALLED THE FULL LENGTH OF THE IRRIGATION MAINLINE.
21. ELECTRIC SERVICE TO THE CONTROLLER SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.
22. ALL 24 VAC WIRING FROM DECODER TO VALVE SHALL BE OF DIRECT BURIAL COPPER WIRE. MAXIMUM LENGTH OF WIRE FROM DECODER TO VALVE SHALL NOT EXCEED 400 FEET. AS FOLLOWS:
    CONTROL WIRES - #14
    COMMON WIRES - #14
23. ALL VALVES, SPLICES WITHIN CONTROL LINES, AND QUICK COUPLERS SHALL BE LOCATED WITHIN NDS VALVE BOXES AS FOLLOWS:
    -RECTANGULAR 12"X17" HEAVY DUTY BOX. (PURPLE COVER FOR REUSE TO BE PROVIDED WHERE APPROPRIATE).
24. ALL IRRIGATION HEADS/DRIP TUBING SHALL BE LOCATED ONE (1) FOOT FROM BACK OF CURB WHEN NEXT TO A ROADWAY. (THIS SHALL NOT INCLUDE PARKING AREAS OR DRIVE AISLES).
25. HEADS, LATERALS, EMITTERS, AND VALVES ARE NOT SHOWN, BUT ARE NECESSARY FOR A FULLY FUNCTIONING IRRIGATION SYSTEM.
26. LOCATE ALL VALVES IN PLANTING BEDS WITH A MINIMUM OF 3'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. PIPE SIZES ON EITHER SIDE OF SECTION VALVES CONNECTING MAINLINE TO SECTION LATERAL SHALL BE ONE (1) PIPE SIZE LARGER THAN VALVE SIZE. WHERE MAINLINES RUN PARALLEL TO PAVEMENT OR CURBING, THE MAINLINE SHALL BE OFFSET 2'-0" FROM THE EDGE OF PAVEMENT OR CURB.
27. IRRIGATION ZONES SHALL BE SEPARATED FOR HIGH AND LOW WATER USE REQUIREMENTS AND OPERATED ON DIFFERENT WATERING CYCLES. BUBBLERS, DRIPLINE, AND SPRAY HEADS SHALL BE SEPARATED ON DIFFERENT VALVES. AT NO TIME SHALL MULTIPLE IRRIGATION HEAD TYPES BE LOCATED ON THE SAME VALVE.
28. ALL DRIP ZONES SHALL BE INSTALLED WITH A FLUSH VALVE AND AIR RELIEF VALVE. IN THE EVENT THAT A DRIP ZONE HAS MORE THAN ONE HIGH OR LOW POINT, MORE THAN ONE AIR RELIEF VALVE OR FLUSH VALVE WILL BE REQUIRED FOR THAT ZONE. DRIPLINE SHALL PROVIDE 0.9 GPH EMITTERS, 12" O.C. WITH 12" LINE SPACING AT A MINIMUM.
29. ALL WIRING FOR CONNECTION OF THE VALVES TO THE CONTROLLER SHALL FOLLOW MANUFACTURERS SPECIFICATIONS. IF REQUIRED, ALL WIRING FOR A TWO WIRE PATH SHALL BE WITH RED/BLUE TWISTED PAIR 14 AWG. ELECTRIC CONTROL LINES FROM THE DECODER TO THE SOLENOID VALVES SHALL BE TWISTED PAIR 18 AWG. ALL DECODERS SHALL BE GROUNDED EVERY 1,000 L.F. OR EVERY 10 DEVICES. ALL WIRE SHALL BE FURNISHED IN MINIMUM 2,500' REELS AND SPLICING SHALL BE MINIMIZED. BURY SPLICE KIT. ALL 24 VOLT WIRING SHALL BE DONE IN ACCORDANCE WITH EXISTING CODES. SPLICING SHALL BE IN VALVE BOXES OR CONTROLLERS ONLY. IRRIGATION SYSTEM CONTROL SHALL BE TWO WIRE PATH. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S REQUIREMENTS FOR THIS INSTALLATION. TWO WIRE SYSTEM SHALL HAVE 2-WAY COMMUNICATIONS FIELD PROGRAMMABILITY, STATION SPECIFICATIONS AND INTEGRATED SURGE PROTECTION.
30. ALL CONTROL WIRE SHALL BE INSTALLED IN A 1 $\frac{1}{2}$" ELECTRICAL CONDUIT.
31. SMALLEST DIAMETER LATERAL PIPE SHALL BE 3/4".
32. IRRIGATION SYSTEM SHALL BE CAPABLE OF SUPPLYING AN AVERAGE OF 1.05" OF WATER PER WEEK WITHIN WATERING RESTRICTIONS AS APPLICABLE.
33. IRRIGATION SYSTEM SHALL NOT BE INSTALLED THROUGH EXISTING, OR PRESERVED PLANT COMMUNITIES. DO NOT TRENCH THROUGH EXISTING ROOT SYSTEMS OF ANY VEGETATION INTENDED TO BE PRESERVED.
34. CONTRACTOR TO MINIMIZE IRRIGATION OVERTHROW TO IMPERVIOUS AND NATURAL AREAS THROUGH FIELD ADJUSTMENTS TO INDIVIDUAL HEADS.
35. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR TO THE CONDITION DENOTED ON THE LANDSCAPE PLAN.
36. IRRIGATION PIPING INSTALLED UNDER ROADS AND SIDEWALKS SHALL BE IN SCHEDULE 40 PVC SLEEVING AT 2X THE PIPE SIZE. ALL SLEEVING SHALL BE FREE OF STONES AND DEBRIS.
37. IRRIGATION SOURCE TO BE EITHER WELL, POTABLE, OR NON-POTABLE WATER. IRRIGATION CONTRACTOR TO VERIFY SOURCE PRIOR TO DESIGN.
38. POINT OF CONNECTION TO BE DETERMINED BY OWNER. IRRIGATION SYSTEM CONNECTIONS TO THE LOCAL JURISDICTION SERVICE SHALL COMPLY WITH ALL APPLICABLE CODES.
39. IRRIGATION CONNECTION MAY REQUIRE BACKFLOW PREVENTION, VERIFY WITH LOCAL JURISDICTION.
40. IRRIGATION SYSTEM SHALL COMPLY WITH THE LOCAL JURISDICTION LAND DEVELOPMENT CODE.

1 L2.51 TYPICAL SCHEMATIC IRRIGATION NOTES

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LICENSED PROFESSIONAL
FLORIDA LICENSE NUMBER
DATE: 10/16/2023

KHA PROJECT 249218001
DATE 1/26/2023
SCALE AS SHOWN
DESIGNED BY ASIL
DRAWN BY ASIL
CHECKED BY MTF

IRRIGATION SPECIFICATIONS

SHOPPES AT EAST SHORE MULTI-FAMILY

CITY OF APOPKA FLORIDA

SHEET NUMBER
L2.51

Plotted By:Sauer, Cole Sheet Set:SHOPPES AT EAST SHORE MULTI-FAMILY Layout:L2.51 October 16, 2023 08:30:00pm K:\orl_civil\249218001-shoppes at east shore at\CADD\CONST\CSP\plansheets\L2.00- IRRIGATION PLAN.dwg
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SITE LIGHTING FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	VOLTS	LAMP QTY	LAMP WATTS	LAMP MODEL	FIXTURE WATTS
SLA3	LED AREA LIGHT WITH TYPE 3 DIST., INTEGRAL DIMMING, HOUSE-SIDE SHIELD AND 3000K COLOR TEMP. MOUNTED 20'-0" AFG ON 25' DIRECT BURIAL CONCRETE POLE	NLS LIGHTING	CAL-1-T3-48L-7-40K-UNV-AM-BLK	208	1	104	LED	104
SLA4	LED AREA LIGHT WITH TYPE 4 DIST., INTEGRAL DIMMING, HOUSE-SIDE SHIELD AND 3000K COLOR TEMP. MOUNTED 20'-0" AFG ON 25' DIRECT BURIAL CONCRETE POLE	NLS LIGHTING	CAL-1-T4-48L-7-40K-UNV-AM-BLK	208	1	104	LED	104
SLB3	LED AREA LIGHT WITH TYPE 3 DIST., INTEGRAL DIMMING, HOUSE-SIDE SHIELD AND 3000K COLOR TEMP. MOUNTED 15'-0" AFG ON 20' DIRECT BURIAL CONCRETE POLE	NLS LIGHTING	CAL-1-T4-48L-7-40K-UNV-AM-BLK	208	1	104	LED	104
SLB	LED SURFACE MOUNTED AREA LIGHT, WET LOCATION LISTED	LITHONIA	OLCFM-15-DDB	120	1	16	LED	16
SL1	LUMEC SLEEK VISION BOLLARD LIGHT WITH DECORATIVE CAGE AND TEXTURED MEDIUM GREY FINISH.	LUMEC	VBC-15L100NW-G1-5-120-CAGE-GY3TX	120	1	35	LED	35
SL2	DECORATIVE LED LOW VOLTAGE TREE UP LIGHT WITH METALIC BRONZE FINISH LOCATED THROUGHOUT COURTYARD	FX LUMINAIRE	QZ-1LED-BZ	15	1	–	LED	–

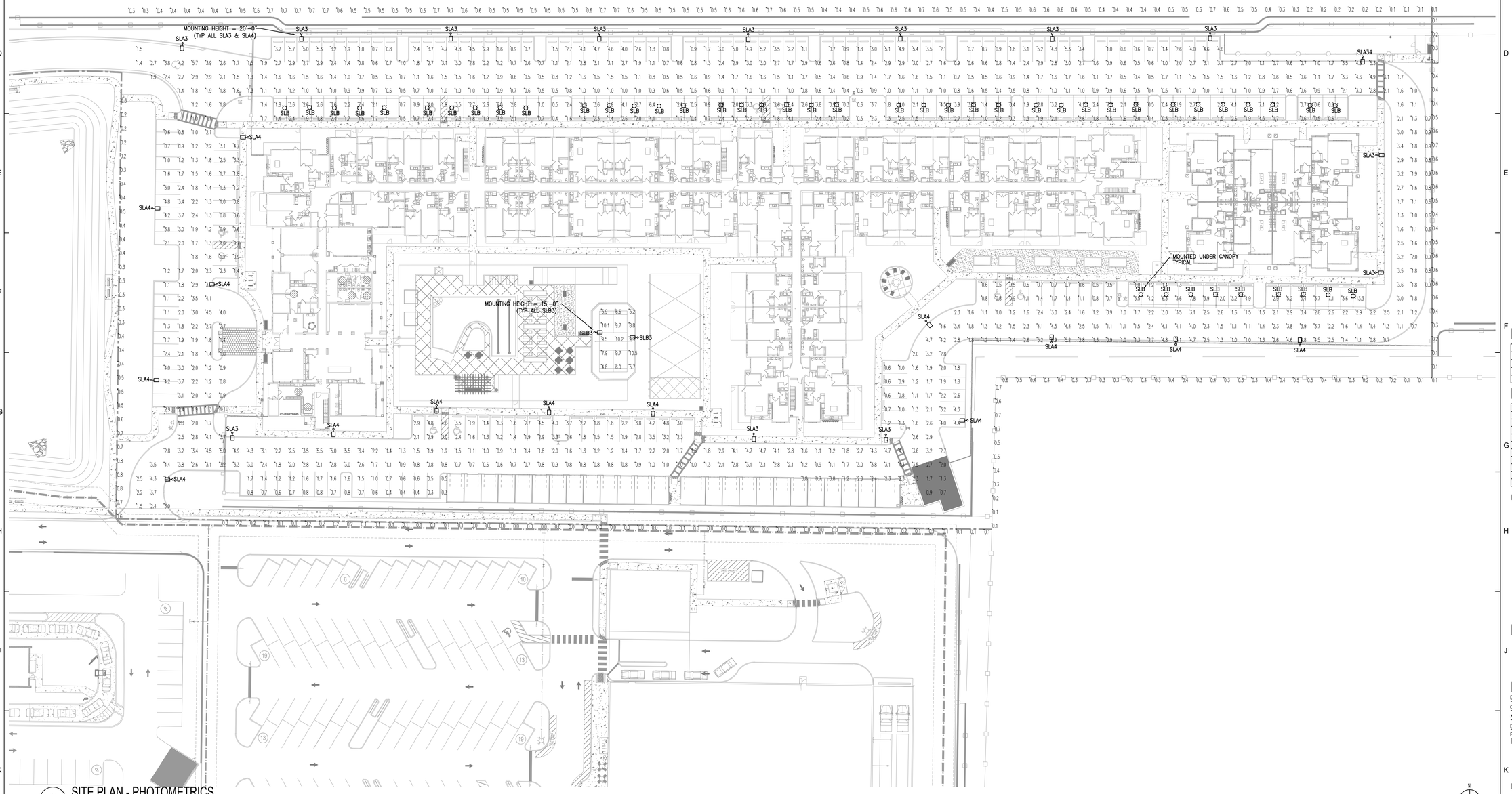
NOTES:
DIVISION 16 CONTRACTOR SHALL VERIFY ALL FIXTURE MANUFACTURERS, TYPES, OPTIONS AND FINISHES WITH OWNER/ARCHITECT/INTERIOR DESIGNER PRIOR TO ORDERING.
CONTRACTOR SHALL VERIFY ALL FIXTURE QUANITIES PRIOR TO ROUGH-IN.

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	Tag	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	16	SLF3	Single	CAL-1-T3-48L-7-40K	SLF3	0.950	11232	104	1664
	14	SLF4	Single	CAL-1-T4-48L-7-40K	SLF4	0.950	11544	104	1456
	53	WLD	SINGLE	OLCFM 15 DDB	WLD	0.950	1043	16.6	879.8

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking & Drive Area	Illuminance	Fc	2.02	13.3	0.2	10.10	66.50
Pickle Ball Court	Illuminance	Fc	8.03	10.5	4.8	1.67	2.19
Property Line	Illuminance	Fc	0.36	0.8	0.0	N.A.	N.A.



K1 SITE PLAN - PHOTOMETRICS
1" = 30'-0"

FK ARCHITECTURE
2555 Temple Trail
Winter Park, FL 32789
(407) 629-0595
www.fugleberghoch.com
FL LICENSE # 0009897

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CA NO. 28730

ISSUE HISTORY

No.	Date	Description
1	01/13/2023	SCHEMATIC DESIGN
2	03/30/2023	100% DESIGN DEVELOPMENT
3		
4		

REVISION HISTORY

No.	Date	Description

JLC22.0203.00

BLAKE L. SUDDETH LICENSED PROFESSIONAL ENGINEER STATE OF FLORIDA
PRELIMINARY
-NOT FOR CONSTRUCTION-

OCOEE-APOPKA

APOPKA, FL

Drawn:	MJR/SMB
Checked:	BLS/AJB
Approval:	BLS/AJB
Date:	03/30/2023
Project #:	5906

SITE PLAN PHOTOMETRICS

E1.03

LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

FEATURES & SPECIFICATIONS

INTENDED USE — The OLCFM provides years of maintenance-free general illumination for residential and commercial outdoor applications such as porches, covered walkways and store entrances.

CONSTRUCTION — Rugged cast-aluminum top-plate and outer-ring are protected by a thermoset powder-coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

Polycarbonate LED lens/cover protects LEDs.

Fixture weight = 2.98 lbs.

OPTICS — 96 high-performance LEDs produces up to 1077 lumens and maintain 70% of light output at 50,000 hours of service.

(LED lifespan based on IESNA LM-80-08 results and calculated per IESNA TM-21-11 methodology.)

White acrylic diffuser provides a soft white light at 4000K CCT

See Lighting Facts Labels for specific fixture performance.

ELECTRICAL — Fixture operates at 120 volts, 60 Hz.

Standard Input = 16.6 watts

Operating temperature -40ºC to 40ºC.

Amps @ 120V = .131.

Surge protection — 2.5kV.

INSTALLATION — Mounts easily to existing junction box (by others).

LISTINGS — UL Listed to U.S. and Canadian safety standards for wet locations.

Designed for ceiling or wall mounting more than 4' above the ground.

Tested in accordance with IESNA LM-79 and LM-80 standards.

WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Actual performance may differ as a result of end-user environment and application.

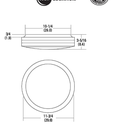
All values are design or typical values, measured under laboratory conditions at 25 °C.

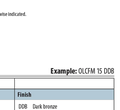
Note: Specifications subject to change without notice.

Outdoor General Purpose

OLCFM

OUTDOOR LED CAST FLUSH MOUNT





All dimensions are inches (centimeters) unless otherwise indicated.

Notes

1 Nominal Correlated Color Temperature (CCT) per ANSI C78.377-2008.

ORDERING INFORMATION All configurations of this product are considered "standard" and have short lead times. **Example:** OLCFM 15 DDB

OLCFM				
Series	**Light Engine**	**Color Temperature (CCT)**[1]	**Voltage**	**Finish**
OLCFM	15	(blank) 4000K	(blank) 120V	DDB Dark bronze WH White

DECORATIVE: INDOOR & OUTDOOR — OLCFM

1 Fixture Type 'SLB'
NTS

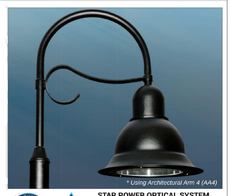
NLS LIGHTING

CALIFORNIA 1

SITE + ARCHITECTURAL LIGHTING

The beautiful and simple California Series LED Pedestrian Luminaires depict not only the California lifestyle, but the architecture of California as well. This ornamental piece is a delightful sight to see and a great model to illuminate any urban, rural, retail, or park, or campus setting.

The different caps and shades depict different California styles and a touch of California's historic Spanish mission era. The California Series is the perfect selection to combine both design and efficiency in light performance. Designed, tooled, manufactured and assembled in the USA.



* Using Architectural Arm 4 (AA4)

STAR POWER OPTICAL SYSTEM

The Star Power reflector is an excellent system which provides great value and performance.

LED WATTAGE CHART

	32L	48L	64L
350 milliamps	-	51w	69w
530 milliamps	72w	80w	107w
700 milliamps	77w	104w	137w
1050 milliamps	106w	156w	205w

Project Name: Type:

CAL-1			T3	48	7	40K7	UNV	AM	BLK	
Cat#	**Top**	**Shade**	**Light Dist.**	**# of LEDs**	**Milliamps**	**Kelvin**	**Volts**	**Mounting**	**Color**	**Options**
California 1 20" Decorative **(CAL-1)**	Top 1 **(TP1)** Top 2 **(TP2)** Top 3 **(TP3)**	Shade 1 **(S1)** Shade 2 **(S2)** Shade 4 **(S4)** Shade 5 **(S5)** Shade 6 **(S6)** Shade 7 **(S7)** Shade 8 **(S8)**	Type 2 **(T2)** Type 3 **(T3)** Type 4 **(T4)** Type 5 **(T5)**	32 **(32L)** 48 **(48L)** 64 **(64L)**	350 **(35)**● 530 **(53)**● 700 **(7)** 1050 **(1)**	2700K, 70 CRI **(27K7)**● 2700K, 80 CRI **(27K8)**●● 3000K, 70 CRI **(30K7)**● 3000K, 80 CRI **(30K8)**●● 3500K, 80 CRI **(35K8)**● 4000K, 70 CRI **(40K7)** 4000K, 80 CRI **(40K8)**● 5000K, 70 CRI **(50K7)** 5000K, 80 CRI **(50K8)**●	120-277 **(UNV)** 347-480 **(HV)**	Arm Mount **(AM)**● Wall Mount **(WM)**●	Bronze Textured **(BRZ)** White Textured **(WHT)** Smooth White Gloss **(SWT)** Silver **(SVR)** Black Textured **(BLK)** Smooth Black Gloss **(SBK)** Graphite Textured **(GPH)** Grey Textured **(GRY)** Custom **(CS)**	House-Side Shield **(HSS)** Bird Spikes **(BS)** Prismo **(PC)**● Nema 7 Fire Receptacle **(PE7)**● Photocell – Receptacle **(PCR)**● Receptacle + Shorting Cap **(PER)**● FSP-211 with Motion Sensor **(FSP-x)**● *8' mast **(FSP-80)**● *10' mast **(FSP-100)**● *12' mast **(FSP-120)**● *2-40' Heights Frosted Lens **(FLD)** Marine Grade Finish **(MGF)**

Notes:
- ❶ 450, 640, Only
- ❷ Consult Factory for Lead Time. Consult Factory for 90 CRI Requests.
- ❸ For Arm Mount, please select an Architectural Arm (AA) separately.
- ❹ Universal Voltage 120-277
- ❺ Only compatible with Arm Mount Arch Arms: 2, 3, 7 11, 13-18
- ❻ 480, option only, using IK-10 rated Silicone Optics
- ❼ Fixture color must be selected to meet International Dark-Sky Association certification.
- ❽ For Wall Mount, please select an Architectural arm (AA) separately.

REV. 11.21.22 — 1

2 Fixture Type 'SLA3' & 'SLB3'
NTS

NLS LIGHTING

CALIFORNIA 1

SITE + ARCHITECTURAL LIGHTING

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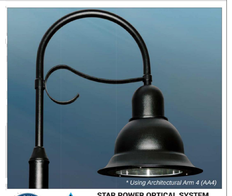

* Using Architectural Arm 4 (AA4)

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LED WATTAGE CHART

	32L	48L	64L
350 milliamps	-	51w	69w
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1050 milliamps	106w	156w	205w

Project Name: Type:

CAL-1			T4	48	7	40K7	UNV	AM	BLK	
Cat#	**Top**	**Shade**	**Light Dist.**	**# of LEDs**	**Milliamps**	**Kelvin**	**Volts**	**Mounting**	**Color**	**Options**
California 1 20" Decorative **(CAL-1)**	Top 1 **(TP1)** Top 2 **(TP2)** Top 3 **(TP3)**	Shade 1 **(S1)** Shade 2 **(S2)** Shade 4 **(S4)** Shade 5 **(S5)** Shade 6 **(S6)** Shade 7 **(S7)** Shade 8 **(S8)**	Type 2 **(T2)** Type 3 **(T3)** Type 4 **(T4)** Type 5 **(T5)**	32 **(32L)** 48 **(48L)** 64 **(64L)**	350 **(35)**● 530 **(53)**● 700 **(7)** 1050 **(1)**	2700K, 70 CRI **(27K7)**● 2700K, 80 CRI **(27K8)**●● 3000K, 70 CRI **(30K7)**● 3000K, 80 CRI **(30K8)**●● 3500K, 80 CRI **(35K8)**● 4000K, 70 CRI **(40K7)** 4000K, 80 CRI **(40K8)**● 5000K, 70 CRI **(50K7)** 5000K, 80 CRI **(50K8)**●	120-277 **(UNV)** 347-480 **(HV)**	Arm Mount **(AM)**● Wall Mount **(WM)**●	Bronze Textured **(BRZ)** White Textured **(WHT)** Smooth White Gloss **(SWT)** Silver **(SVR)** Black Textured **(BLK)** Smooth Black Gloss **(SBK)** Graphite Textured **(GPH)** Grey Textured **(GRY)** Custom **(CS)**	House-Side Shield **(HSS)** Bird Spikes **(BS)** Prismo **(PC)**● Nema 7 Fire Receptacle **(PE7)**● Photocell – Receptacle **(PCR)**● Receptacle + Shorting Cap **(PER)**● FSP-211 with Motion Sensor **(FSP-x)**● *8' mast **(FSP-80)**● *10' mast **(FSP-100)**● *12' mast **(FSP-120)**● *2-40' Heights Frosted Lens **(FLD)** Marine Grade Finish **(MGF)**

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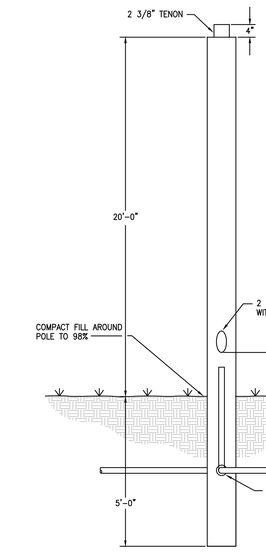
REV. 11.21.22 — 1

3 Fixture Type 'SLA4'
NTS



4 15FT MOUNTING HEIGHT POLE DETAIL
NTS

5 20FT MOUNTING HEIGHT POLE DETAIL
NTS

FUGLEBERG KOCH ARCHITECTURE
2555 Temple Trail
Winter Park, FL 32789
(407) 629-0595
www.fuglebergkoch.com
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CA NO. 28730

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No.	Date	Description
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4		

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No.	Date	Description

JLC22.0203.00

BLAKE L. SUDDUTH — LICENSED — STATE OF FLORIDA — PROFESSIONAL ENGINEER

PRELIMINARY
-NOT FOR CONSTRUCTION-

OCOEE-APOPKA

APOPKA, FL

Drawn:	MJR/SMB
Checked:	BLS/AJB
Approval:	BLS/AJB
Date:	03/30/2023
Project #:	5906

SITE FIXTURE CUTSHEETS

E1.04

N