



AGENDA
PLANNING COMMISSION
CITY OF PORT ORANGE

Meeting Date: Thursday, August 23, 2018

Time: 5:30 PM

Type of Meeting: Regular

Location: Council Chambers
City Hall, 1000 City Center Circle

A. CALL TO ORDER

1. Pledge of Allegiance
2. Silent Invocation
3. Roll Call

B. DISCUSSION/ACTION

4. Consideration of July 26, 2018 Minutes
5. Case No. 18-90000004
VARIANCE/4068 CARLISLE DRIVE
(Continued from July 26, 2018 Planning Commission Meeting)

A request by the applicant for variances from the Land Development Code to allow only one point of access for a subdivision, reduce the minimum right-of-way width, provide a sidewalk on one side of the right-of-way, reduce the minimum required lot area, reduce the rear building setback, reduce the minimum open space per lot, and increase maximum building coverage per lot. If the variances are approved, the property owner plans to change the Bella Oaks townhome development from a multi-family site development project to a residential subdivision with individual townhome lots.

Staff Contact: Gwen Perney, (386) 506-5673/gperney@port-orange.org

6. Case No. 18-52000001
MODIFICATION TO AN APPROVED DEVELOPMENT ORDER/WESTPORT
RESERVE PHASE 4
North side of Town West Boulevard, east of Tomoka Farms Road

A request by the applicant to amend the previously approved Subdivision Plat & Plans for Westport Reserve Phase 4 to reduce the number of single-family lots from 78 to 71 single-family lots, along with associated subdivision improvements.

Staff Contact: Gwen Perney (386) 506-5673/gperney@port-orange.org

7. Case No. 18-25000006
MORATORIUM/PERSONAL WIRELESS COMMUNICATIONS ON GOVERNED
BY CHAPTER 16, SECTION 9 OF THE LDC

A 3-month moratorium on the submittal of site plans, subdivisions, conditional use, special exception, and change of use applications and the issuance of development orders, building permits, or zoning verification letters for personal wireless communications governed by Chapter 16, Section 9 of the Port Orange Land Development Code.

Staff Contact: Tim Burman (386) 506-5675/tburman@port-orange.org

8. Case No. 18-25000007
LDC TEXT AMENDMENT/CHAPTER 17, SECTION 26

Amendment to Chapter 17, Section 26, of the Land Development Code, to remove the requirement for a public hearing to establish a permitted use in the Government/Public Use (GPU) zoning district.

Staff Contact: Penelope Cruz (386) 506-5671/pcruz@port-orange.org

C. OTHER BUSINESS

- 9. Commissioner Comments
- 10. Staff Comments

D. PUBLIC COMMENTS

E. ADJOURNMENT

ANY PERSON WHO DECIDES TO APPEAL ANY DECISION MADE BY THE **PLANNING COMMISSION** WILL NEED A RECORD OF THE PROCEEDINGS, AND FOR SUCH PURPOSE HE OR SHE MAY NEED TO ENSURE AT HIS OR HER OWN EXPENSE FOR THE TAKING AND PREPARATION OF A VERBATIM RECORD OF ALL TESTIMONY AND EVIDENCE OF THE PROCEEDINGS UPON WHICH THE APPEAL IS TO BE BASED. NOTE: IF YOU ARE A PERSON WITH A DISABILITY WHO NEEDS AN ACCOMMODATION IN ORDER TO PARTICIPATE IN THIS PROCEEDING, YOU ARE ENTITLED, AT NO COST TO YOU, TO THE PROVISION OF CERTAIN ASSISTANCE. PLEASE CONTACT THE CITY CLERK FOR THE CITY OF PORT ORANGE, 1000 CITY CENTER CIRCLE, PORT ORANGE, FLORIDA 32129, TELEPHONE NUMBER 386-506-5563, CITYCLERK@PORT-ORANGE.ORG, AS FAR IN ADVANCE AS POSSIBLE, BUT PREFERABLY WITHIN 2 WORKING DAYS OF YOUR RECEIPT OF THIS NOTICE OR 5 DAYS PRIOR TO THE MEETING DATE. IF YOU ARE HEARING OR VOICE IMPAIRED, CONTACT THE RELAY OPERATOR AT 7-1-1 or 1-800-955-8771. UPON REQUEST BY A QUALIFIED INDIVIDUAL WITH A DISABILITY, THIS DOCUMENT WILL BE MADE AVAILABLE IN AN ALTERNATE FORMAT. IF YOU NEED TO REQUEST THIS DOCUMENT IN AN ALTERNATE FORMAT, PLEASE CONTACT THE CITY CLERK WHOSE CONTACT INFORMATION IS PROVIDED ABOVE.

PLANNING COMMISSION MEETING MINUTES
CITY OF PORT ORANGE
1000 CITY CENTER CIRCLE
COUNCIL CHAMBERS
JULY 26, 2018

THE REGULAR MEETING OF THE PLANNING COMMISSION of the City of Port Orange was called to order by Chairman Newton White at 6:00 p.m.

Pledge of Allegiance

Silent Prayer

ROLL CALL:

Present:

Lance Green
John Junco
Maria Mills-Benat
Bo Bofamy
Mike Arminio
Thomas Jordan
Newton White

Also Present:

Matt Jones, Deputy City Attorney
Deanna Massey, City Clerk's office

B. DISCUSSION/ACTION

4. Consideration of June 28, 2018 Minutes

Motion to approve the June 28, 2018 Minutes as presented was made by Commissioner Arminio and Seconded by Commissioner Junco. Motion carried unanimously by roll call vote.

5. Case No. 18-90000004
Variance/4068 Carlisle Drive.

To be continued to a date certain of August 23, 2018.

Staff Contact: Gwen Perney, (386) 506-5673/gperney@port-orange.org

6. Case No. 18-32000001
Change of Use/Port Orange United Church of Christ 651 Taylor Road.

Acknowledgment that a monopole communications tower is a permitted use in the Governmental Public Use (GPU) zoning district.

Staff Contact: Penelope Cruz, (386) 506-5671/pcruz@port-orange.org
Ms. Cruz provided an overview of the acknowledgment for the monopole communications tower being proposed at 651 Taylor Road.

Mary Solik, Legal Counsel for AT&T Wireless, introduced herself to the board. She stated AT&T intends on complying with all of the requirements of the LDC.

Matt Jones, Deputy City Attorney, read a statement relating to the procedure for this public hearing. The Commission is not going to vote on this matter. This is presented for public comments.

Eugene Healey, 989 Smokerise Blvd., expressed some concerns with the application proposed by AT&T. He discussed a PowerPoint that several citizens put together to present to the Board. This included the Land Development Code and intent. He stated AT&T has failed to meet the intent of the LDC.

Paul Kern, 971 Smokerise Blvd., discussed AT&T's current coverage within the area. He stated there is no need for a cell phone tower. He expressed concern for the visual impact the tower will have in the community.

Several citizens expressed their concerns relating to the location of the monopole communications tower.

The Board members all stated they are opposed to the monopole communications tower being added to 651 Taylor Road. They expressed concerns about the height and location of the tower.

Chairman White thanked everyone for coming and expressing their opinions on this matter.

7. Case No. 18-60000003
Rezoning/6225 S. Williamson Blvd.

A request to rezone +/- 5.8 acres, located at the northeast corner of S. Williamson Blvd. and Oakwater Lane, from Planned Commercial Development (PCD) to Community Commercial (CC).

Staff Contact: Briana Conlan-King, (386) 506-5676/brking@port-orange.org

Ms. Conlan-King provided an overview of the proposed request to rezone +/- 5.8 acres, located at the northeast corner of 6225 S. Williamson Blvd and Oakwater Lane from PCD to CC.

Chairman White reconfirmed with Ms. Conlan-King the applicant would have to follow the current codes.

Arlene Fiorie, 704 Saw Palmetto Ct, expressed her concerns and requested the developers make contact with the residents in her community.

Shana Dayo, 727 Edgewater Ln., expressed her concerns with the traffic in the area and would like the Board to keep in mind that this is a very busy school zone.

Robert Myers, 793 Crosswind Ln., expressed his concerns regarding the right of way cutting through a residential area.

Ms. Conlan-King explained the applicant would be required to submit a site plan to be reviewed and discussed the site plan process. They will also be required to follow all LDC regulations. She stated at this time Volusia County is not entertaining any access points off Williamson Blvd. The traffic lights will be adjusted accordingly.

Mr. Tim Burman, Community Development, stated a traffic study will be required as the City is provided with more details.

Commissioners Arminio and Mills-Benat encouraged the developers to reach out to the public and hold a meeting to answer any questions they may have.

Motion to approve Case No. 18-60000003 was made by Vice Chairman Jordan and Seconded by Commissioner Junco. Motion carried unanimously by roll call vote.

8. Case No.18-25000005
LDC Amendment/Chapter 3, 5, 6, 13, 16 and 17.

Amendments to the Land Development Code (LDC) that are part of an on-going maintenance effort to update the LDC to make it more efficient and consistent.

Staff Contact: Penelope Cruz, (386) 506-5671/pcruz@port-orange.org

Ms. Cruz provided an overview of amendments to the Land Development Code (LDC) that are part of an on-going maintenance effort to update the LDC.

Chairman Green stated from a builder's point a view these changes would make everything better.

Chairman White asked if this would include pods, shipping containers, and carports.

Ms. Cruz stated as long as the containers meet the requirements they would be included. This change would allow the City to make the regulations clearer.

Motion to approve Case No. 18-25000005 was made by Commissioner Mills-Benat and Seconded by Commissioner Bofamy. Motion carried unanimously by roll call vote.

C. OTHER BUSINESS

9. Commissioner Comments

Commissioner Junco spoke on an abandoned home he is aware of in the City.

Commissioner Bofamy asked if they were finished with the remodel with the old Police Department.

Mr. Burman replied the improvements to the old Police Department are still ongoing.

Commissioner Green spoke on multiple uses on one piece of property and stated that he doesn't agree with it.

Mr. Burman stated for multiple uses on a property the requestors still have to submit a site plan and go through an approval process with the City.

10. Staff Comments- There were none.

D. PUBLIC COMMENTS There were none.

E. ADJOURNMENT 7:35PM

Chairman Newton White



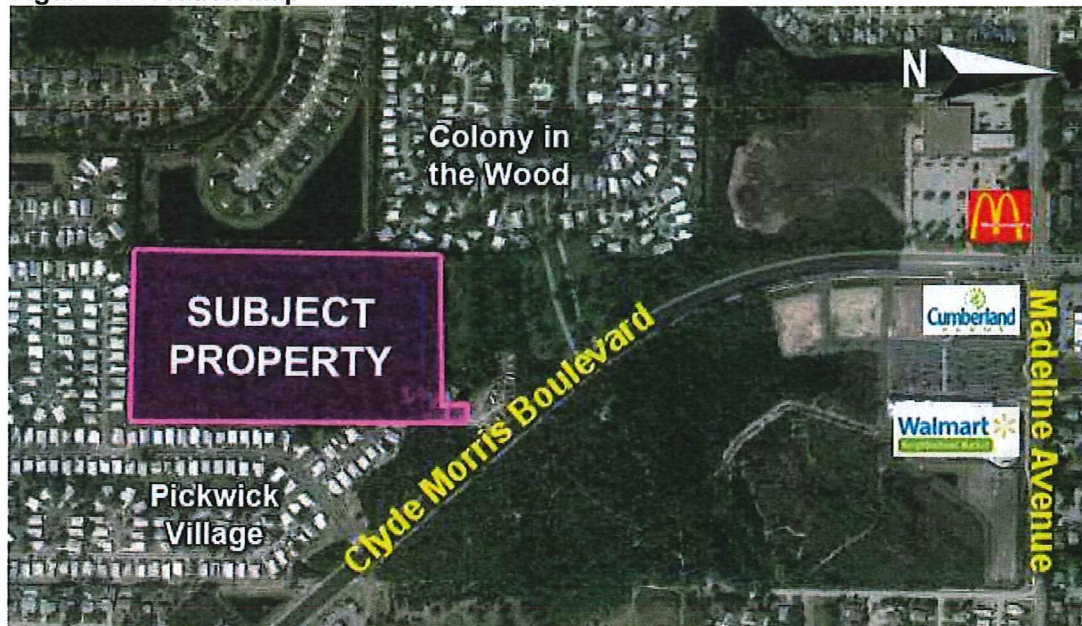
STAFF REPORT
VARIANCES FROM LDC CHAPTER 5, SECTION 4(a)(1)(c);
CHAPTER 5, SECTION 4(a)(3)(c); CHAPTER 5, SECTION 4(a)(2);
and CHAPTER 17, SECTION 27
CASE NO. 18-90000004

REQUEST:	Variances from the LDC to: 1) allow only one point of access for a subdivision, 2) reduce the minimum right-of-way width, 3) provide a sidewalk on only one side of the right-of-way, 4) reduce the minimum required lot area, 5) reduce the rear building setback, 6) reduce the minimum open space per lot, and 7) increase maximum building coverage per lot.
LOCATION:	4068 Carlisle Dr. (Figure 1 – Location Map)
PROPERTY OWNER:	Gatlin Two, LLC
APPLICANT:	Glenn Storch
STAFF RECOMMENDATION:	Approval of Variance 1 and Denial of Variances 2-7
STAFF CONTACT:	Gwen Perney, Planner (386) 506-5673
PLANNING COMMISSION DATE:	August 23, 2018

BACKGROUND:

The subject property is +/- 18.2 acres and is located on the west side of Clyde Morris Boulevard, north of Pickwick Village Mobile Home Park. According to the applicant, the proposed development for the property is to subdivide the property into 138 townhome lots, along with tracts of land for common area, private roads, stormwater retention, and tree conservation. If the variance requests are approved, the applicant intends to submit a subdivision plat and plans application to subdivide the property.

Figure 1. Location Map



In late 2017, a site plan was submitted for the subject property to develop a multi-family project that consisted of 138-townhome units that would be sold as condominium units where the purchaser would only own the townhome unit and not the ground around the unit. In May 2018, a Development Order was issued for the site plan to develop Bella Oaks as a condominium townhome project and construction began in July 2018.

The site plan for the Bella Oaks condominium townhome project was reviewed and approved based on requirements in the Land Development Code (LDC) including setbacks, open space, building coverage, access, architecture, parking, stormwater retention, landscaping, and utilities. The site plan also includes common facilities such as visitor parking, mail kiosks, garbage collection areas, picnic areas, and gazebos to be maintained by the Homeowners Association (HOA).

After the site plan was approved and construction began in Summer 2018, the developer inquired about changing the site plan with condominium townhome units to a residential subdivision with individual townhome lots. According to the applicant, by subdividing the property into individual townhome lots, purchasers would own the townhome unit along with the property directly in front of and behind their townhome. The developer is proposing to subdivide the property into 138-townhome lots and maintain the same layout as the approved site plan. According to the applicant, subdividing the property will allow amenities such a walking trail with benches around the stormwater pond, 30' perimeter landscape buffer, gazebo, common area parks/picnic areas, visitor parking spaces, and aesthetic improvements at the intersection of Carlisle Drive and Clyde Morris Boulevard. The applicant states that there would be no visible difference in the project if developed as a subdivision as opposed to a site plan, except for the subdivided lot lines.

However, there are specific development requirements in the LDC that only apply to the subdivision of land which did not apply when the project was reviewed as a site plan. The developer's site plan complies with the LDC but not with all the subdivision requirements; this is the reason the variances are required to subdivide the property into townhome lots. According to the applicant, if the variances are not approved, the project will continue as a condominium townhome development site plan. The property is zoned Low Density Multifamily Residential (R-3L), and the current zoning permits the development of a condominium townhome development (site plan) or individual townhome lots (subdivision).

Based on the proposed subdivision plan submitted by the applicant, seven (7) variances are required (See Exhibit 1). The variances requested are listed below:

1. Allow one point of access for a subdivision [Chapter 5, Section 4(a)(1)(c), LDC];
2. Reduce the minimum right-of-way width from 50 feet to 28 feet [Chapter 5, Section 4(a)(2), LDC];
3. Construct a 4-foot wide sidewalk on one side of the right-of-way [Chapter 5, Section 4(a)(3)(c), LDC];
4. Reduce the minimum required lot area to less than 2,000 square feet [LDC, Chapter 17, Section 27];

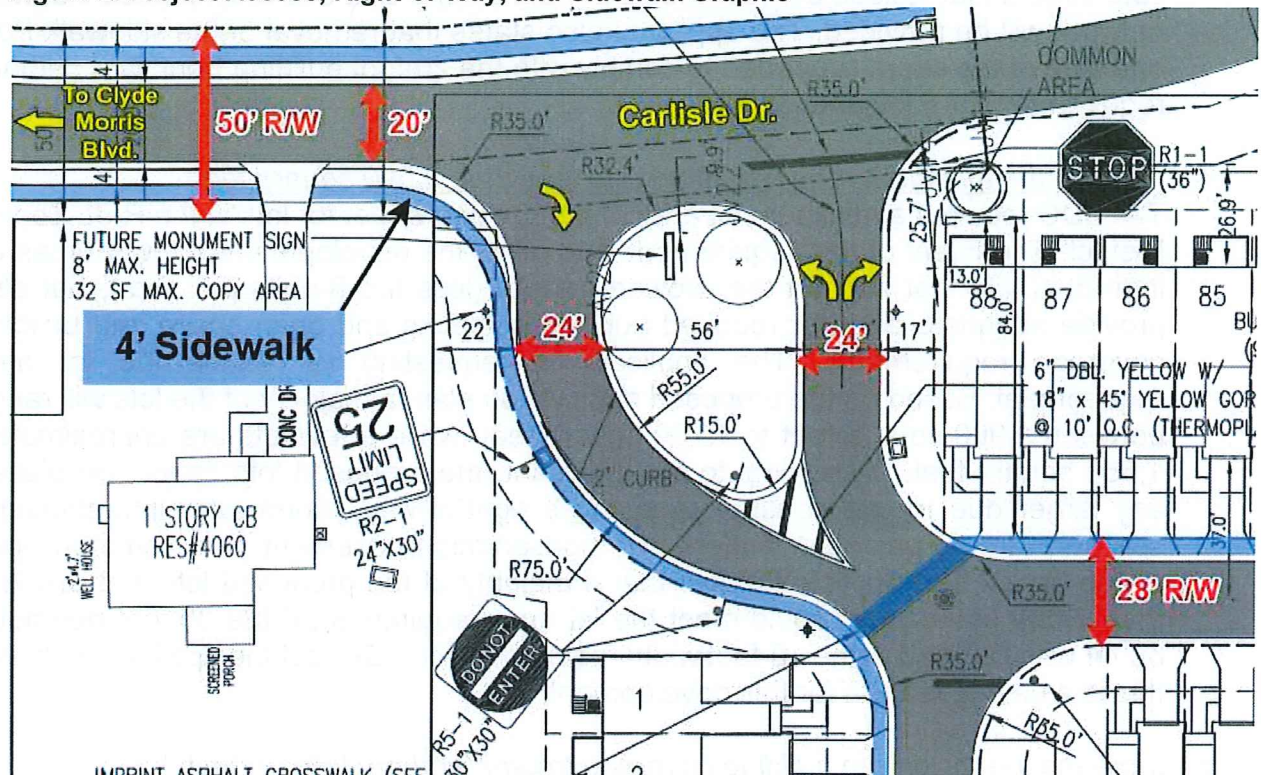
5. Increase the maximum building coverage on a lot to be greater than 40% [LDC, Chapter 17, Section 27];
6. Reduce the minimum open space on a lot to be less than 60% [LDC, Chapter 17, Section 27]; and
7. Reduce the minimum rear yard building setback for a townhome on a lot to less than 25 feet [LDC, Chapter 17, Section 27].

DISCUSSION OF VARIANCES:

1. Allow one point of access for a subdivision:

The LDC requires two points of access for a subdivision with 25 or more lots. The intent of this code requirement is to provide at least two routes of travel for a subdivision to alleviate traffic congestion and ensure multiple routes during emergencies. The proposed subdivision has a single roadway to access the development. The road into the subdivision off Carlisle Drive is designed as a split road with two 24-foot wide travel lanes. According to the applicant, this design was to maintain access into the development in the event a vehicle becomes disabled, while the other side is still accessible. In addition, the applicant states that the subject property is an infill site that abuts two mobile home parks (Pickwick Village and Colony in the Wood) as well as a single-family subdivision (Sunset Cove). As part of those developments, roadway stub-outs were not extended to the subject property to provide options for connectivity.

Figure 2. Project Access, Right-of-Way, and Sidewalk Graphic



2. Reduce the minimum right-of-way width from 50 feet to 28 feet:

The LDC requires private or public roads within a residential subdivision to be developed with a 50-foot wide right-of-way that includes 24-foot paved street, parkage, 4-foot sidewalk on both sides, and utilities. The applicant is requesting to plat a private 28-foot wide right-of-way. The proposed right-of-way would consist of a 2-lane road and a 4-foot sidewalk on one side.

Internal driveways for site plans are required to be 24 feet in width. The concept plan for the subdivision includes 20 feet of pavement with a 2-foot curb on either side which is the same width as required for a 50-foot-wide right-of-way in the Standard Construction Details. The difference is that the proposed 28-foot-wide right-of-way does not include the typical parkage area on both sides of the street and a 4-foot sidewalk on one side of the street. The right-of-way within the development is to remain a private drive and not be dedicated as a public street.

3. Provide a 4-foot sidewalk on only one side of the right-of-way:

The LDC requires minimum 4-foot wide concrete sidewalks be constructed along both sides of all streets within a subdivision. The intent of this requirement is to provide a safe sidewalk network within all subdivisions and that connects to the City's overall sidewalk and bike path network. As part of the applicant's proposed subdivision, there is a 4-foot sidewalk proposed on one side of the street that connects to sidewalks along Carlisle Drive (to be built with the development) and Clyde Morris Boulevard. According to the applicant, the proposed subdivision will be gated and consist of private streets that include a 4-foot wide sidewalk on one side and a connected sidewalk network will be provided. The applicant also states that removal of the sidewalk from one side of the street is needed to comply with the 20-foot building front yard setback requirement for a townhouse lot.

4. Reduce the minimum required lot area to less than 2,000 square feet:

The LDC requires a minimum lot area of 2,000 square-feet for lots in the R-3L Zoning District. The intent of this requirement is to allow the development of townhomes on individual lots that support the allowed density (less the 8-units per acre), but also provide adequate area for required building setbacks and open space and building coverage requirements. The applicant is requesting to reduce the lot area requirement. Based on the proposed subdivision plan, a majority of the lots will range between 1,900 square-feet to 1,700 square-feet, while a few lots are approximately 1,550 square-feet. According to the applicant, the proposed lots cannot be platted any larger due to site constraints such as right-of-way, stormwater infrastructure, specimen trees, perimeter buffers with conservation easement, and common open space areas. The applicant states that a majority of the proposed lots that are less than 2,000 square-feet could meet the lot area requirement if the 30-foot perimeter buffer was reduced to the 10-foot width required by the LDC, but the applicant believes this is a unique feature for this development.

5. Increase the maximum building coverage to greater than 40% of the lot:

The LDC requires the maximum building coverage on each townhome lot to be 40%. The intent of this requirement is to establish the maximum area of a lot that can be covered by both principal and accessory buildings to preserve open space on the lot. The applicant is requesting a maximum building coverage of 63%. Based on the

information provided by the applicant, the building coverage for the proposed lots range between 49% to 63%. According to the applicant, while the proposed lots exceed the building coverage requirement, the overall building coverage of all the townhome buildings for the proposed 18.2-acre subdivision does not exceed 40%. The applicant states that the intent of this subdivision is to create a fee simple townhome subdivision with a priority on providing common open area and amenities for all homeowners to use instead of private open space on individual lots.

The dimensional requirements of the R-3L zoning district require a maximum building coverage of 40% and 60% of the lot to remain as open space. In other residential zoning districts, there is typically a percentage of the lot area that is dedicated for impervious improvements such as driveways, patios, and sidewalks, but not in the R-3L zoning district for individual lots. The impervious improvements are included into the building coverage area.

6. *Decrease the minimum open space to less than 60% of the lot:*

The LDC requires a minimum of 60% open space on each townhome lot. The intent of this code requirement is to retain a portion of each lot that is not developed with impervious surfaces or a building. According to the applicant, while the proposed lots do not meet the 60% open space requirement, the overall 18.2-acre subdivision is designed with open space that exceeds 60%. The applicant states that the intent of this subdivision is to create a fee simple townhome subdivision with a priority on providing common open area and amenities for all homeowners to use instead of private open space on individual lots. Based on information provided by the applicant, the open space for a majority of the proposed lots range between 22% to 33%. There are at least six (6) lots where the lots range between 14% to 21%; these lots have a reduced lot area because they abut common areas with specimen trees.

7. *Decrease the minimum rear yard building setback to less than 25 feet:*

The LDC requires a rear yard building setback of 25 feet for all structures located in the R-3L zoning district. The intent of this code requirement is to provide adequate separation between buildings in order to minimize the visual appearance of the structure from adjacent properties, ensure adequate separation between structures for air movement and light, and to provide room on the subject property for maintenance and necessary repairs to the structure. According to the applicant, the 25-foot rear setback would be met, however, the lot depth for some of the proposed lots was reduced because of the 30-foot perimeter buffer and individual tree conservation easements.

REVIEW OF VARIANCE CRITERIA FOR VARIANCES 1-3:

Pursuant to LDC, Chapter 5, Section 8(a), variances may be requested from required subdivision improvements or design criteria. The variances may be granted by the City Council, upon recommendation of the Planning Commission.

Chapter 5, Section 8(b)(4) of the LDC, lists the review criteria used to determine whether subdivision variance requests should be granted. For a subdivision variance to be approved, the following criteria may be considered.

1. *Topographic or other physical conditions exist which are peculiar to the site and not a result of the actions of the applicant.*

As stated above, road access into the subject property from Carlisle Drive is limited to the 145-foot portion of the property that abuts Carlisle Drive. The proposed subdivision is designed with a single roadway to access the development. The roadway is designed as a split road with two 24-foot wide travel lanes. According to the applicant, this design was to maintain access into the development in the event a vehicle becomes disabled, the other side is still accessible. The applicant states that a second access roadway cannot be provided from Carlisle Drive and meet the standard roadway separation requirements in the LDC. In addition, the applicant states that the subject property is an infill site that abuts two mobile home parks (Pickwick Village and Colony in the Wood) as well as a single-family subdivision (Sunset Cove). As part of those developments, roadway stub-outs were not extended to the subject property to provide options for connectivity and the adjacent developments did not extend road stub-outs into the subject property.

As part of the development, the developer is constructing Carlisle Drive between Clyde Morris Boulevard and the Pickwick Village property line as a 50-foot right-of-way that includes 24-foot pavement, 4-foot sidewalks on both sides of road, parkage, and utilities.

The request to not build a 4-foot sidewalk on one side of the right-of-way and create a 28-foot-wide right-of-way throughout the proposed subdivision is based on the developer wanting to maintain the previously approved site plan layout. For a multi-family development built through a site plan, the LDC requires a minimum 24-foot-wide paved access drive to serve the units and an internal sidewalk that connects buildings, parking areas and common facilities. However, the requested variances are ultimately a matter of design choice and is not based on topographic or other physical conditions. The applicant states that are the variances for right-of-way width and sidewalk are approved, the rights-of-way in this subdivision will be private and the City of Port Orange will not be responsible for maintenance or traffic enforcement related to parking.

2. *Literal interpretation of this code would result in unnecessary and undue hardship on the applicant.*

The proposed project is designed for a maximum of eight units per building with each fee-simple lot having a one-car garage and full width driveway. As part of the project, common amenities will be provided throughout the subdivision, such a walking trail with benches around the stormwater pond, 30' perimeter landscape buffer, gazebo, common area parks, and visitor parking spaces. The property could potentially be subdivided and designed to meet these requirements, but it will require the developer to redesign the layout and may require a reduction in the number of townhomes.

The applicant states that there would be no visible difference in the project if developed as a subdivision as opposed to a site plan, except for the subdivided lot lines.

3. *Required services are already available to proposed lots without the construction of additional improvements.*

All required public utilities and services can be provided to all proposed lots through the proposed subdivision design.

4. *Levels of service can be reasonably provided through the site development plan review process or residential site plan review process for individual lots.*

The applicant will be able to provide the required services and meet the Level of Service standards for all townhome lots in the subdivision through the proposed subdivision design.

5. *Other methods can be arranged to assure construction of improvements, eliminating the need for formal subdivision approval.*

The applicant is not requesting a variance from the subdivision review process. The request is to be allowed to subdivide the property with a single point of access, reduced the standard right-of-way width to 28-foot and only install a sidewalk on one side of the road, so this criterion is not applicable to this request.

6. *The granting of a variance is consistent with the overall intent of this code and will not be injurious to the surrounding properties or detrimental to the public welfare.*

All properties being subdivided within the City are required to meet the development requirements of the LDC or secure variances from said requirements.

The intent of the right-of-way and sidewalk requirement is to ensure that streets are built to the construction standards of the City, there is sufficient room for utilities and to efficiently and safely move vehicles and pedestrians. For a majority of the residential subdivisions in Port Orange, the streets are designed with 50-foot rights-of-way with sidewalks on both sides of the road. However, there are older subdivisions that have modified right-of-way widths and a sidewalk on one side or no sidewalks.

According to the applicant, the right-of-way for the proposed subdivision will be private and maintained by the HOA. Also, includes 12-foot easements along the right-of-way are provided for the location of City and private underground utilities. According to the project engineer, the proposed 28' right-of-way for the proposed private road development is sufficient and provides area for underground utilities and will safely move vehicles and pedestrians. The width of the pavement and construction of the

road will be the same as the previously approved site plan local roads, the only change is the removal of the parkage area and a sidewalk from one side of the road. There will be a sidewalk on one side of the private road that will connect to common areas and the sidewalks to be constructed along Carlisle Drive that connect to Clyde Morris Boulevard. The applicant's request to remove the sidewalk from one side of the street allows the buildings to be set back from the front property line, providing parking in front of the garage of the townhome.

According to the applicant, granting of the requested variances will allow for adequate access, right-of-way width, and sidewalk network and will not be injurious to the surrounding properties or detrimental to the public welfare.

REVIEW OF VARIANCE CRITERIA FOR VARIANCES 4-7:

Chapter 19, Section 1, LDC, lists the review criteria that are used to determine whether a variance request should be granted. These criteria, accompanied by staff's analysis, are as follows:

1. *Special conditions and circumstances exist which are peculiar to the land, structure, or building involved, and which are not applicable to other lands, structures or buildings in the same zoning district.*

There are no special conditions or circumstances that exist which are peculiar to the land which are not applicable to other lands in the same zoning district.

According to the applicant, the subject property is an infill site surrounded by existing residential developments (Pickwick Village, Colony in the Wood, and Sunset Cove). The proposed townhome subdivision with fee simple lots is consistent with the character of the surrounding area. The applicant further states that the proposed subdivision layout is identical to the approved site plan for the condominium townhome development, but there are additional code requirements that apply to a subdivision that did not apply to the site plan. Therefore, the developer is requesting variances from these requirements to maintain the previously approved site plan layout.

Although subject property is an infill site within the City, the property could potentially be subdivided to meet the subdivision requirements in the LDC, but it may require a reduction in the number of townhomes or changes to the layout.

2. *The special conditions and circumstances are not a result of actions of the applicant.*

As noted, there are no other special conditions and circumstances associated with the subject property.

3. *Literal interpretation and enforcement of the development code regulations would deprive the applicant of rights commonly enjoyed by other properties in the same*

zoning district under the terms of the development code and would work unnecessary and undue hardship on the applicant.

Literal interpretation of the LDC would not deprive the property owner of rights commonly enjoyed by other properties within the same zoning district. As part of the subdivision approval process, all properties are required to be compliant with the current development requirements of the LDC.

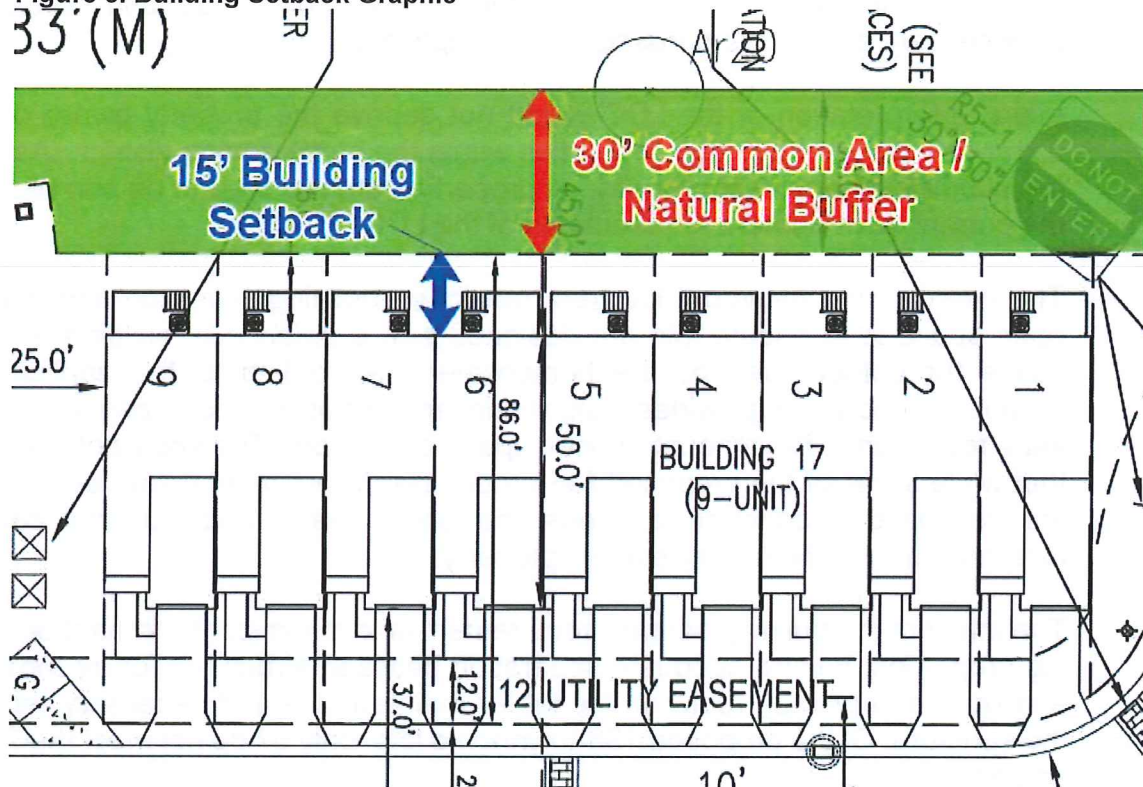
The intent of the minimum lot area, maximum building coverage and minimum open space is to ensure lots are designed with a balance of building and open space for outdoor use by the homeowner. According to the applicant, the proposed subdivision provides a significant amount of common open space to offset a reduction in the amount of open space on the lots. The applicant also states that while some of the proposed fee simple lots do not meet these requirements, the proposed subdivision exceeds the open space and building coverage requirements for the overall subject property.

The intent of the building setback requirement is to minimize the impact on adjoining properties, ensure adequate separation between structures for air movement and light, and provide room on the lot for maintenance and necessary repairs to the structure. Of the proposed 138-townhome lots, only 57 do not meet the 25' rear setback.

According to the applicant, the setback variance is necessary for the proposed subdivision to maintain the site plan layout. The applicant states that while there are 57 lots that do not meet the rear setback, there is sufficient space between adjacent structures because the lot lines for these lots were modified to maintain existing common areas for tree preservation that exceed the requirements in the LDC. The applicant states that the placement of the townhome on the proposed lots would not impact air movement and light for an adjacent property.

For example, the townhome units on the proposed lots that abut the east boundary line of the property are shown with a 15-foot rear setback, but behind the lot there is a 30' common area/perimeter buffer that is remain natural. While the building is setback 15-foot from the property line, there is sufficient space between the structure and adjacent property line. According to the LDC, the perimeter buffer is only required to be 10-foot; however, the developer wanted to maintain the 30-foot natural buffer and therefore requested the variance. According to the LDC, residential lots are not to have conservation easements, therefore, the developer adjusted the lot lines to maintain the existing conservation easements.

Figure 3. Building Setback Graphic



4. *The variances, if granted, are the minimum variance necessary to make possible the reasonable use of the land, building, or structure.*

The variances requested are not the minimum variances necessary to make possible reasonable use of the land. The property could be subdivided into fee simple individual townhome lots and comply with the requirements of the LDC, but this may result in the reduction of lots or changes to the layout.

As stated above, the variances would not be required if the townhome project is developed as the approved condominium townhome site plan. The need for the variances is a result of the developer requesting to subdivide the property but maintain site plan layout. However, as previously indicated, there are additional requirements that apply when subdividing the property that did not apply to a site plan. According to the applicant, the variances requested are the minimum variance necessary to subdivide the property and maintain the layout from the previously approved site plan.

5. *Granting the variance request will not confer on the applicant any special privilege that is denied by the development code to other lands, buildings, or structures in the same zoning district.*

All properties developed or redeveloped within the City are required to meet the development requirements of the LDC or secure variances from said requirements.

6. *The granting of the variances will be in harmony with the general intent and purpose of this code and will not be injurious to the surrounding properties or detrimental to the public welfare.*

The LDC is intended to implement the City's Comprehensive Plan, to protect the health, safety and general welfare of the citizens of the City, and to enhance the appearance, function and livability of the City, to the end of improving the overall quality of life within the community. However, the LDC is generally focused on regulating new "green field" development rather than infill development. Typically, infill development projects require variances or flexibility in development regulations to allow underutilized properties to develop. Granting of the variances will not be injurious to the surrounding properties or detrimental to the public welfare.

According to the applicants, the developer of the property is proposing to construct the same project that was approved as a site plan, except now it is proposed to be subdivided into fee simple lots. The layout that was approved as a site plan has not changed and *will not be injurious to the surrounding properties or detrimental to the public welfare*. The variances, if granted, would not increase the number of residential units, reduce open space or tree conservation areas, or change access into the site and the garages of the units compared to the previously approved site plan.

7. *The variances represent a reasonable disposition of a claim brought under the Bert J. Harris Private Property Rights Protection Act, chapter 95-181, Laws of Florida, that a development order of the city has unreasonably burdened the applicant's property, based upon the recommendations of the special master appointed in accordance with the act, or the order of a court as described in the act.*

The variance requested is not based on a claim brought under the Bert J. Harris Private Property Rights Protection Act.

RECOMMENDATION:

Based on the findings of this report, Staff recommends approval of Variance #1 and denial of Variances #2 - #7.

ATTACHMENTS:

1. Exhibit 1 – Conceptual Subdivision Plan and Applicant's Letter of Request
2. Exhibit 2 – Objection Letters from Adjacent Residents



GLENN D. STORCH, ESQUIRE
glenn@storchlawfirm.com

COREY D. BROWN, ESQUIRE
corey@storchlawfirm.com

August 6, 2018

A. JOSEPH POSEY, ESQUIRE
joey@storchlawfirm.com

Tim Burman, Community Development Director
Community Development
City of Port Orange
1000 City Center Circle
Port Orange, FL 32129

Re: Revised Variance Request / Bella Oaks Subdivision

Dear Tim:

As discussed, I have revised my client's variance request based on feedback received from the City. As you know, my client continues to review the design for this project to find a way to preserve protected tress and avoid mitigation. The variances proposed allow for a development consistent with the existing approved condominium site plan and permit private ownership of lots, which along with several other factors will lead to a better project. To convert this project to fee simple lot ownership, my client needs to request seven (7) interrelated variances. Some of the variances are administrative or subdivision waivers so the specific review criteria are in separate City Land Development Code ("City LDC") provisions. If approved, my client will limit the extent of the variances to the proposed site plan enclosed with this letter. Also, to minimize the potential impacts of the variances, my client has agreed work with the City to improve the Carlisle Drive entrance with landscaping and signage and will convey to the City any fee simple interest to Carlisle Drive.

Several special circumstances for this project demonstrate compliance with the City LDC variance requirements. Responses are as follows:

1. **Chapter 5, Section 8 of City LDC subdivision variance from Chapter 5, Section 4(a)(1)(c) of City LDC to allow for single point of access in lieu of two points of access for subdivisions with 25 lots or more.**

The subdivision chapter of the City LDC includes specific variance criteria to consider as the basis for the approving deviations from subdivision improvement and design requirements. These criteria are separate from a traditional variance, and the above request meets the criteria outlined. In this case, the City LDC requires an additional point of ingress to the property to convert the project to fee simple lot ownership; however, such an access point is not necessary or feasible.

- a) **Topographic or other physical conditions exist which are peculiar to the site and not a result of the actions of the applicant.**

Response: The site plan approved by the City for this property features one point of access including two 24-foot-wide driveways with one dedicated for ingress and one for egress, which is consistent with the applicable provisions of the City LDC for condominium style townhomes. The applicant is not proposing to change the configuration of the approved entrance vested with the property. However, by changing the subdivision from condominium to traditional fee simple lot ownership, the

City LDC would require two points of access. The existing configuration is safe and would allow easy access for emergency vehicles. The site also has limited frontage on Carlisle Drive, which only crosses the property at the northeast corner, and other potential access points are private easements that the applicant has not right to utilize. These are conditions peculiar to the site and not the result of the applicant.

- b) Literal interpretation of this code would result in unnecessary and undue hardship on the applicant.

Response: A literal interpretation of the City LDC would create an unnecessary and undue hardship since the entrance configuration is already approved by the City. This variance simply would allow the applicant to re-designate the subdivision from condominium to fee simple ownership, which provides a more desirable form of home ownership and will lead new residents to have a more vested interest in their property and the City. The configuration of the entrance is the same as currently approved by the City. It is worth noting that the subdivision entrance can function as two access points if needed. There will be a median constructed to separate the two 24-foot-wide lanes and alone each lane would meet City width standards.

2. **Chapter 5, Section 8 of the City LDC subdivision variance from Chapter 5, Section 4(a)(3)(c) of the City LDC to allow for a four-foot-wide concrete sidewalk on one-side of the street in lieu of a four-foot-wide concrete sidewalk on both sides of the street.**

As mentioned previously, the subdivision chapter of the City LDC includes specific variance criteria for consideration as the basis for approval of deviations from subdivision improvement and design requirements. These criteria are separate from a traditional variance and the above request meets the criteria outlined. In this case, the City LDC requires an additional sidewalk within the project if utilizing fee simple ownership, however, an additional sidewalk is not needed or feasible on this site.

- a) Topographic or other physical conditions exist which are peculiar to the site and not a result of the actions of the applicant.

Response: Again, similar to the access points, the site plan approved by the City for this property includes one 4-foot-wide sidewalk, which is consistent with the applicable provisions of the City LDC for condominium style townhomes. The project already has limited right-of-way space and to include an additional sidewalk would result in smaller lots. Also, if sidewalks were provided on both sides of the road, the project would not be able to meet the driveway depth requirements for the individual townhomes. The peculiar site conditions require an alternative and my client has proposed walking trails as an amenity around the water features to create a connected loop for pedestrians. This avoids needing a second sidewalk while meeting the intent of the City LDC.

- b) Literal interpretation of this code would result in unnecessary and undue hardship on the applicant.

Response: A literal interpretation of the City LDC would create an unnecessary and undue hardship since the sidewalk configuration is unnecessary and would not be feasible given the site conditions. Keep in mind that the subdivision could be developed as a condominium under the City LDC with only one-sidewalk. The proposed plan already includes walking trails as an alternative, so I do not see the added value of another sidewalk. Trying to add a sidewalk would just necessitate additional variances.

3. **Chapter 5 of the City LDC administrative variance from Chapter 5, Section 4(a)(2) of the City LDC to allow for the dedication of a 28-foot right-of-way width in lieu of 50-feet or in the alternative a Chapter 19 of the City LDC variance.**

This request appears to fall within the administrative variance procedure outlined in Chapter 5, Section 8 of the City LDC since the variance only requests a deviation from the standard construction details. According to the City LDC, the administrative official has the authority to deviate from standard construction details if alternative means can achieve the goal of the actual requirement. In this case, the roadway proposed is still the standard 24 feet width of pavement. The only deviations are in the standard utility width, the exclusion of a sidewalk and the location of the sewer under the road. The utilities will be in non-exclusive easements that overlap. This meets the justification for an administrative variance. However, if the City would prefer to review this request under the Chapter 19 of the City LDC variance provisions, then it would still meet the criteria outlined therein.

- a) Special conditions and circumstances exist which are peculiar to the land, structure or building involved, and which are not applicable to other lands, structures or buildings in the same zoning district.

Response: As specified in several places in this letter, this property has special conditions and circumstances that require design deviations, including a deviation from the typical right-of-way width. This is one of the few infill development parcels left in the City. A nearly identical site plan for the subject property has already been approved for this infill property with the main difference being that the applicant is now proposing townhomes with fee simple ownership, as opposed to the condominium ownership indicated on that approved site plan. As such, the site layout and features were already found by the City to be consistent with the character of the surrounding area. Since the right-of-way will be dedicated as a separate tract, any increase beyond the proposed width would result in a total redesign of the exiting site plan and a decrease in lot sizes.

- b) The special conditions and circumstances are not the result of actions of the applicant.

Response: The applicant simply wants to amend the approved site plan to have fee simple ownership of residences instead of a condominium form, and the impediments to doing so are not a result of the applicant's actions. The property could be developed as a condominium project consistent with the approved site plan, and in order to maintain the approved improvements and amenities, the applicant must request a variance.

- c) Literal interpretation and enforcement of the development code regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district under the terms of the development code, and would work unnecessary and undue hardship on the applicant.

Response: The applicant desires to construct essentially the same development that was approved as a condominium, but with a fee simple form of ownership. To force the applicant to completely redesign a development that already has an approved site plan solely to justify a different form of ownership would be an unnecessary and undue hardship on the applicant. This literal interpretation of the City LDC would seem to punish fee simple ownership of townhome lots as opposed to condominiums, which is surely not the City's intent or a goal or purpose of the City LDC.

- d) The variance, if granted, is the minimum variance necessary to make possible the reasonable use of the land, building or structure.

Response: The proposed variance width is the minimum necessary to allow for both a standard roadway width of 24 feet and the overlapping location of utilities. The roadway pavement will be the same width on the approved site plan for the property.

- e) Granting of the variance request will not confer on the applicant any special privilege that is denied by the development code to other lands, buildings or structures in the same zoning district.

Response: The grant of this variance will not confer a special privilege to the applicant. The overlapping of utility location areas to decrease the needed right-of-way is common and allows for more efficient use of the property.

- f) The granting of the variance will be in harmony with the general intent and purpose of this code, and will not be injurious to the surrounding properties or detrimental to the public welfare.

Response: This variance meets the general intent and purpose of the City LDC. The engineers for the project have already reviewed the proposed right-of-way width with the area utilities. The necessary utility lines can be provided within the right-of-way width proposed.

4. **Chapter 17 of the City LDC administrative variance from Chapter 17, Section 27 of the City LDC to allow for a lot area of 1560 square feet in lieu of 2,000 square feet required in the R-3L zoning district, or in the alternative a Chapter 19 of the City LDC variance.**

The fee simple lots proposed are approximately 2,000 to 1,700 square feet in size with a few lots around 1550 square feet to preserve existing large trees. The calculation excludes rights-of-way and sidewalks, which could have been included in the design as private road easements to achieve the required lot size. However, City staff has indicated that an actual dedicated right-of-way would be preferred so it remains a separate tract for the subdivision. Most of the lots appear to fall within the administrative variance procedure outlined in Chapter 17, Section 26.5 of the City LDC. According to the City LDC, the administrative official has the authority to deviate from the lot size requirement up to 10% of the required dimension. However, if the City would prefer to review this request under the Chapter 19 of the City LDC variance provisions, then it would still meet the criteria outlined therein.

- a) Special conditions and circumstances exist which are peculiar to the land, structure or building involved, and which are not applicable to other lands, structures or buildings in the same zoning district.

Response: As mentioned previously, special circumstances do exist with regard to the subject property and proposed development. This is one of the few infill development parcels left in the City. A nearly identical site plan for the subject property has already been approved for this infill property with the main difference being that the applicant is now proposing townhomes with fee simple ownership, as opposed to the condominium ownership indicated on that approved site plan. As such, the site layout and features were already found by the City to be consistent with the character of the surrounding area. The use of slightly smaller lots also permits larger amenities for residents, such as a large pond and preservation of historic and specimen trees. Also, because the original, approved condominium site plan did not have individual lots for the condo units, the placement of roads, sidewalks and buildings as separate tracts was not an issue. Now that the City LDC places a minimum lot size requirement on fee simple lot ownership, which is not required for condominium townhouses, the applicant must request a variance to dedicate rights-of-way and common areas as separate platted tracts.

- b) The special conditions and circumstances are not the result of actions of the applicant.

Response: The applicant simply wants to amend the approved site plan to have fee simple ownership of residences instead of a condominium form, and the impediments to doing so are not a result of the applicant's actions. The property could be developed as a condominium project consistent with the approved site plan, and in order to maintain the approved rights-of-way and amenities, the applicant must request a variance.

- c) Literal interpretation and enforcement of the development code regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district under the terms of the development code, and would work unnecessary and undue hardship on the applicant.

Response: The applicant desires to construct essentially the same development that was approved as a condominium, but with a fee simple form of ownership. To force the applicant to completely redesign a development that already has an approved site plan solely to justify a different form of ownership would be an unnecessary and undue hardship on the applicant. This literal interpretation of the City LDC would seem to punish fee simple ownership of townhome lots as opposed to condominiums, which is surely not the City's intent or a goal or purpose of the land development code.

- d) The variance, if granted, is the minimum variance necessary to make possible the reasonable use of the land, building or structure.

Response: The applicant is making the minimum changes necessary to convert the approved site plan from condominiums to townhomes. All the proposed lots less than 1,900 square feet about a tree conservation easement, and many are designed to avoid impacting existing large trees. The minimums requested are necessary and are not significantly smaller than the 2,000 sq. ft. required by the land development code.

- e) Granting of the variance request will not confer on the applicant any special privilege that is denied by the development code to other lands, buildings or structures in the same zoning district.

Response: This request does not grant applicant any special privilege, such as additional density or entitlements. The variance simply allows for a change in the ownership pattern for the townhome owners.

- f) The granting of the variance will be in harmony with the general intent and purpose of this code, and will not be injurious to the surrounding properties or detrimental to the public welfare.

Response: As mentioned above, the layout of the original site plan was approved by the City as being consistent with the land development code and nature of the surrounding areas. In addition, approval of the variance will permit the development of a community with a number of positive features, including: a large stormwater management pond for waterfront views; improvements to the Carlisle Street right-of-way; a quality walking trail and covered gazebo; and preservation of all specimen and historic trees on-site. The applicant is currently working with the City to enhance the Carlisle Street entrance with landscaping and subdivision signage. Furthermore, home ownership is more desirable than condominiums due to enhanced marketability and value of townhomes, along with increasing the numbers of non-seasonal, permanent residents in the area. The variance gives the applicant a chance to encourage new residents with a more vested interest in their homes.

5. **Chapter 19 of the City LDC variance from Chapter 17, Section 27 of the City LDC to allow for a maximum building coverage of 63% in lieu of 40% required in the R-3L zoning district.**

The unintended consequence of creating single-family ownership of townhome lots is that the townhomes now exceed the lot building coverage requirement of the City LDC. The requirements for platted rights-of-way, tree conservation areas and common areas limit the areas that can be designed for lots. Also, if the building coverage requirements were applied for each row of buildings instead of each individual building, as is the case with condominiums, then the requirement would be met. Regardless, this request still meets the variance criteria of Chapter 19 of the City LDC.

- a) Special conditions and circumstances exist which are peculiar to the land, structure or building involved, and which are not applicable to other lands, structures or buildings in the same zoning district.

Response: Special circumstances do exist with regard to the subject property and proposed development. A nearly identical site plan for the subject property has already been approved by the City, with the main difference being that the applicant is now proposing townhomes with fee simple ownership, as opposed to the condominium ownership indicated on that approved site plan. As such, the site layout and features were already found by the City to be consistent with the character of the surrounding area. Also, because the original, approved condominium site plan did not have individual lots for the condo units, the unit layout was not designed for 40% maximum building coverage for the interior townhomes. However, if one compares the building coverage of all the townhome units in each building compared to all of the individual townhome lots underlying that building added together, the overall building coverage meets the 40% required by the land development code. Townhome lots placed in the middle of the buildings are the lots that have difficulty meeting the 40%.

- b) The special conditions and circumstances are not the result of actions of the applicant.

Response: The applicant simply wants to amend the approved site plan to have fee simple ownership of residences instead of a condominium form, and the impediments to doing so are not a result of the applicant's actions.

- c) Literal interpretation and enforcement of the development code regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district under the terms of the development code, and would work unnecessary and undue hardship on the applicant.

Response: The applicant desires to construct essentially the same development that was approved as a condominium, but with a fee simple form of ownership. To force the applicant to completely redesign a development that already has an approved site plan solely to justify a different form of ownership would be an unnecessary and undue hardship on the applicant.

- d) The variance, if granted, is the minimum variance necessary to make possible the reasonable use of the land, building or structure.

Response: The applicant is only requesting that the existing site plan be altered to permit townhomes instead of condominiums, and the actual footprint of the buildings are not being altered from what has already been approved. In fact, as mentioned above, the townhome buildings as a whole meet the 40% maximum building coverage when all lots underlying that building are added together.

- e) Granting of the variance request will not confer on the applicant any special privilege that is denied by the development code to other lands, buildings or structures in the same zoning district.

Response: This request does nothing more than change the underlying ownership. This is an infill development and other townhome communities within the City do not have existing site entitlements and an approved site plan for vacant property. The applicant can meet the minimum building area requirements of the City LDC if the total condominium building is considered for the requirement, which is consistent with other lands in the same zoning district.

- f) The granting of the variance will be in harmony with the general intent and purpose of this code, and will not be injurious to the surrounding properties or detrimental to the public welfare.

Response: The layout of the original site plan was approved by the City as being consistent with the land development code and nature of the surrounding areas. Each block of townhomes would meet the building coverage requirements of the code, however, when the individual lots are platted for single family ownership, lots with a townhome on each side would be unable to meet the requirement. This would require greater lot depth, which is contrary to idea of encouraging smaller setbacks and lots as part of townhome developments. In addition, approval of the variance will permit the development of a community with a number of positive features, including: a large stormwater management pond for waterfront views; improvements to the Carlisle Street right-of-way; a quality walking trail and covered gazebo; and preservation of all specimen and historic trees on-site. Furthermore, home ownership is more desirable than condominiums due to enhanced marketability and value of townhomes, along with increasing the numbers of non-seasonal, permanent residents in the area.

6. Chapter 19 of the City LDC variance from Chapter 17, Section 27 of the City LDC to allow for open space of 14% in lieu of 60% required in the R-3L zoning district.

Another unintended consequence of creating private ownership of townhome lots is that some of townhome lots cannot meet the minimum open space requirements of the City LDC because of platted tree conservation areas, rights-of-way and other common areas. Much of the available project open space has been placed in larger tracts sperate from the lots.

This request meets the variance criteria of Chapter19 of the City LDC, and to mitigation any impacts, my client will limit the extent of the open space variance based on the enclosed site plan.

- a) Special conditions and circumstances exist which are peculiar to the land, structure or building involved, and which are not applicable to other lands, structures or buildings in the same zoning district.

Response: As previously stated, several special circumstances do exist regarding the subject property and proposed development. A nearly identical site plan for the subject property has already been approved by the City, with the main difference being that the applicant is now proposing townhomes with fee simple ownership, as opposed to the condominium ownership indicated on that approved site plan. The site layout and features for the project were already found by the City to be consistent with the character of the surrounding area. As mentioned previously, much of the project open space has been placed in much larger tracts sperate from the lots, which necessitates an open space variance.

- b) The special conditions and circumstances are not the result of actions of the applicant.

Response: The applicant simply wants to amend the approved site plan to have fee simple ownership of residences instead of a condominium form, and the impediments to doing so are not a result of the applicant's actions.

- c) Literal interpretation and enforcement of the development code regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district under the terms of the development code, and would work unnecessary and undue hardship on the applicant.

Response: The applicant desires to construct essentially the same development that was approved as a condominium, but with a fee simple form of ownership. To force the applicant to completely redesign a development that already has an approved site plan solely to justify a different form of ownership would be an unnecessary and undue hardship on the applicant.

- d) The variance, if granted, is the minimum variance necessary to make possible the reasonable use of the land, building or structure.

Response: The applicant is only requesting that the existing site plan be altered to permit townhomes instead of condominiums, and the actual lot footprints are not being altered from what has already been approved. This request is the minimum necessary and will allow for tree conservation areas, rights-of-way and other common areas for the project.

- e) Granting of the variance request will not confer on the applicant any special privilege that is denied by the development code to other lands, buildings or structures in the same zoning district.

Response: This request does nothing more than change the underlying ownership. This is an infill development and other townhome communities within the City do not have existing site entitlements and an approved site plan for vacant property.

- f) The granting of the variance will be in harmony with the general intent and purpose of this code, and will not be injurious to the surrounding properties or detrimental to the public welfare.

Response: The layout of the original site plan was approved by the City as being consistent with the surrounding areas. These variances will allow for the development of a private townhome community, which aligns with the goals and intent of the City LDC. The variances will permit the development of a community with a number of positive features, including: a large stormwater management pond for waterfront views; improvements to the Carlisle Street right-of-way; a quality walking trail and covered gazebo; and preservation of all specimen and historic trees on-site. Furthermore, home ownership is more desirable than condominiums due to enhanced marketability and value of townhomes, along with increasing the numbers of non-seasonal, permanent residents in the area.

7. Chapter 19 of the City LDC variance from Chapter 17, Section 27 of the City LDC to allow for an eight-foot rear yard setback in lieu of the 25 feet required in the R-3L zoning district.

This variance request is directly connected to the building coverage variance and includes many of the same justifications. To incorporate tree conservation areas, rights-of-way and common areas into the development, the rear yard setback for several lots had to be adjusted and reduced. As you can see, most of the lots with reduced rear yard setbacks abut either a tree conservation area or a common area tract. This

request meets the variance criteria of Chapter 19 of the City LDC, and again to mitigate any impacts, my client will limit the extent of the open space variance based on the enclosed site plan.

- a) Special conditions and circumstances exist which are peculiar to the land, structure or building involved, and which are not applicable to other lands, structures or buildings in the same zoning district.

Response: Special circumstances do exist with regard to the subject property and proposed development. A nearly identical site plan for the subject property has already been approved by the City, with the main difference being that the applicant is now proposing townhomes with fee simple ownership, as opposed to the condominium ownership indicated on that approved site plan. As such, the site layout and features were already found by the City to be consistent with the character of the surrounding area.

- b) The special conditions and circumstances are not the result of actions of the applicant.

Response: The applicant simply wants to amend the approved site plan to have fee simple ownership of residences instead of a condominium form, and the impediments to doing so are not a result of the applicant's actions.

- c) Literal interpretation and enforcement of the development code regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district under the terms of the development code, and would work unnecessary and undue hardship on the applicant.

Response: The applicant desires to construct essentially the same development that was approved as a condominium, but with a fee simple form of ownership. To force the applicant to completely redesign a development that already has an approved site plan solely to justify a different form of ownership would be an unnecessary and undue hardship on the applicant.

- d) The variance, if granted, is the minimum variance necessary to make possible the reasonable use of the land, building or structure.

Response: The applicant is only requesting that the existing site plan be altered to permit townhomes instead of condominiums, and the actual lot footprints are not being altered from what has already been approved. This request is the minimum necessary and will allow for tree conservation areas, rights-of-way and other common areas for the project.

- e) Granting of the variance request will not confer on the applicant any special privilege that is denied by the development code to other lands, buildings or structures in the same zoning district.

Response: This request does nothing more than change the underlying ownership. This is an infill development and other townhome communities within the City do not have existing site entitlements and an approved site plan for vacant property.

- f) The granting of the variance will be in harmony with the general intent and purpose of this code, and will not be injurious to the surrounding properties or detrimental to the public welfare.

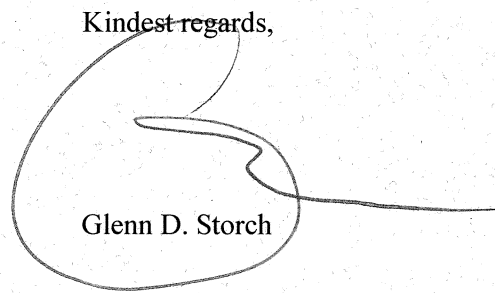
Response: The layout of the original site plan was approved by the City as being consistent with the surrounding areas. These variances will allow for the development of a private townhome community,

which aligns with the goals and intent of the City LDC. The variances will permit the development of a community with a number of positive features, including: a large stormwater management pond for waterfront views; improvements to the Carlisle Street right-of-way; a quality walking trail and covered gazebo; and preservation of all specimen and historic trees on-site. Furthermore, home ownership is more desirable than condominiums due to enhanced marketability and value of townhomes, along with increasing the numbers of non-seasonal, permanent residents in the area.

I appreciate the continued input provided by City staff regarding this request. The whole goal of this request is to make a better subdivision for the City and the future residents of Bella Oaks. As stated, my client is willing to condition any variances approvals on the enclosed site plan.

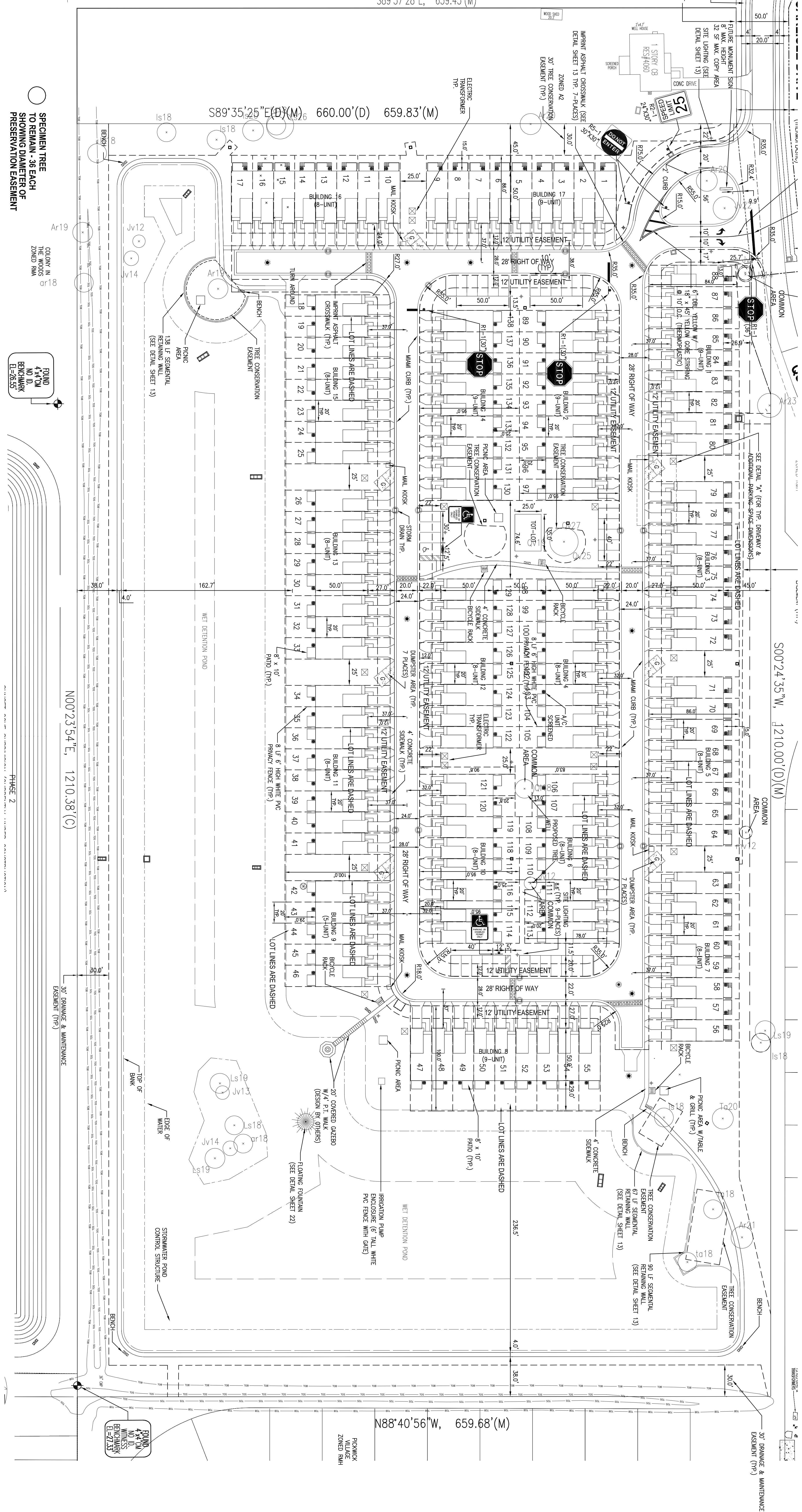
Please let me know if you have any questions or require additional information.

Kindest regards,

A handwritten signature in black ink, appearing to read "Glenn D. Storch". The signature is written in a cursive style with a large, looping initial "G".

Glenn D. Storch

GDS/ajp
Enclosure



Angela & Jacob Atwell
3963 Sunset Cove Drive
Port Orange, Florida NY 32129

Penelope Cruz, Interim Planning Manager
CC: Chase Tramont, Port Orange City Counsel
Re: Case No. 18-90000004
Port Orange Community Development Department
1000 City Center Circle
Port Orange, Florida 32129

July 22, 2018

Dear Ms. Cruz and Mr. Tramont,

As a board member for Sunset Cove, I would like to express objection to the request for the five variances requested by Gatlin Two, LLC. My property, along with many of my neighbors are water front and we have been appalled to see that so many trees have been cleared across from our houses, where this development is planned.

On a personal note, my family and I have been a resident of Port Orange for nearly ten years and have enjoyed the many amenities.

However, lately the development seems out of control. Every where we turn more trees are being cleared for more development. In fact, our son will begin Kindergarten this fall at Horizon Elementary school and I can only imagine the traffic concerns that will be caused by the new development across from this school.

However, this letter is to address the development planned for behind our property. Clearing these trees and adding an additional development will likely decrease our property values. In addition, the Sunset Cove community has seen many challenges due to the small lot sizes, narrow roadways and only limited access points. The plans for this new development seems even more restricted and will likely lead to many of the same problems we see here in Sunset Cove; only on a grander scale.

We and our neighbors moved to Port Orange to enjoy the beautiful Florida preserve while also taking advantage of the city amenities. However, lately it seems that both of these are being swallowed up by new home communities. These new home communities not only flood the market by inverting the supply and demand model, but in order to accommodate them we are depleting our natural resources such as preserve, trees and water.

A new home community should have to abide by the city regulations and should not be granted any variances, let alone five. The regulations are in place to protect surrounding property values and the interests of those who would purchase these homes. Please reconsider allowing these homes to be built behind our homes, the trees to be decimated and the resources to be further tapped.

Sincerely,



Angela Atwell

Sunset Cove Board Member

Francee Baker
3972 Sunset Cove Dr
Port Orange, Fl 32129

AUGUST 9, 2018

Port Orange Community Development Dept
1000 City Center Circle
Port Orange, Florida 32129

Dear Penelope Cruz,

I have been a resident in Port Orange since 2008. I have been disappointed to see the development that is happening with what seems like no regard to preserving the city. Even the development where we had a house built in 2011 is too small for the number of houses built. There is a problem with parking and the driveways or the road should have been larger. I feel that this latest development Case no, 18-90000004 is just another attempt to squeeze too much into too little a space. Construction or should I say destruction was started before letters went out. I think that more consideration should be put forth towards improving the quality and not the quantity of development. This is just my opinion, but I hear a lot of complaints amongst the people in our development but you would not know that unless someone lets it be known. I use to love Port Orange but no longer have the same feelings.

Sincerely.

A handwritten signature in cursive script that reads "Francee A Baker". The signature is written in dark ink and is positioned above the printed name.

Francee Baker



STAFF REPORT

SUBDIVISION PLAT & PLANS / DEVELOPMENT ORDER
MODIFICATION
WESTPORT RESERVE PHASE 4
CASE NO. 18-52000001

REQUEST: Development Order Modification to the Westport Reserve Subdivision Plat and Plans for Phase 4

LOCATION: North of Town West Boulevard, east of Tomoka Farms Road (Figure 1)

OWNER/APPLICANT: Jonathan Claber, Edge Cove LLC

STAFF RECOMMENDATION: Approval

STAFF CONTACT: Gwen Perney (386) 506-5673

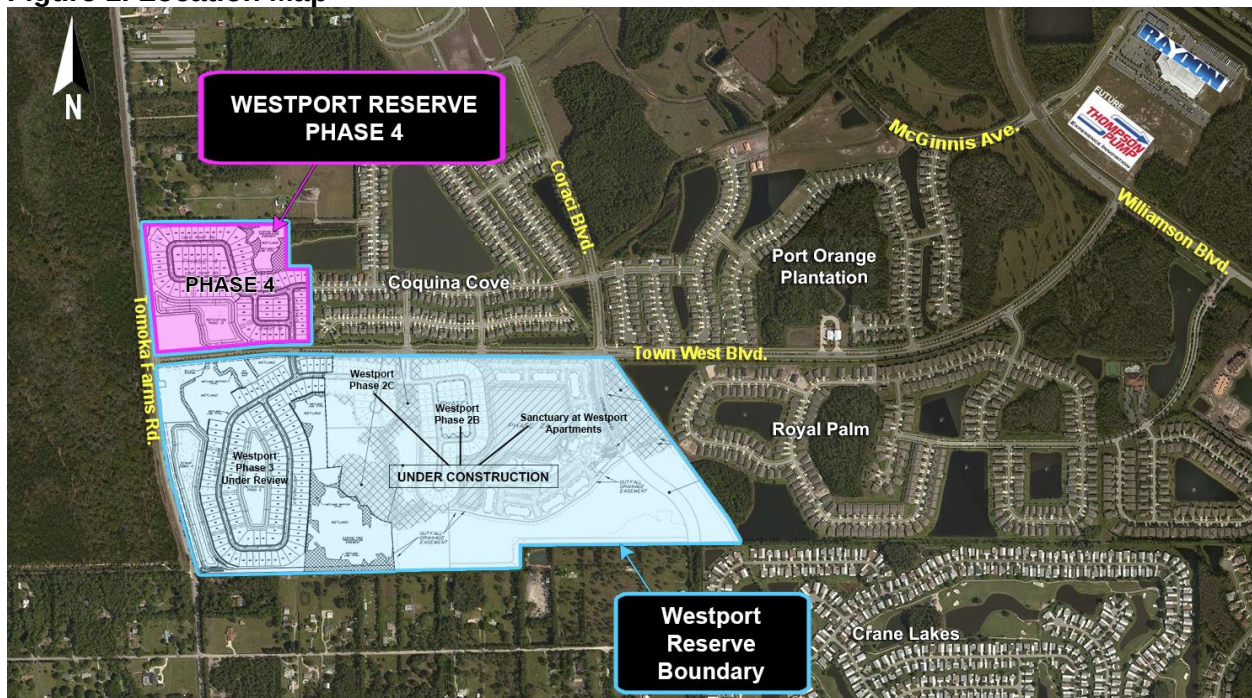
PLANNING COMMISSION DATE: August 23, 2018

DISCUSSION:

In December 2017, the City Council approved the Final Plat and Plans for a $\pm$ 25.73-acre subdivision. The subdivision consisted of 78 individual single-family lots, along with associated subdivision improvements (streets, sidewalks, utilities, stormwater, landscaping).

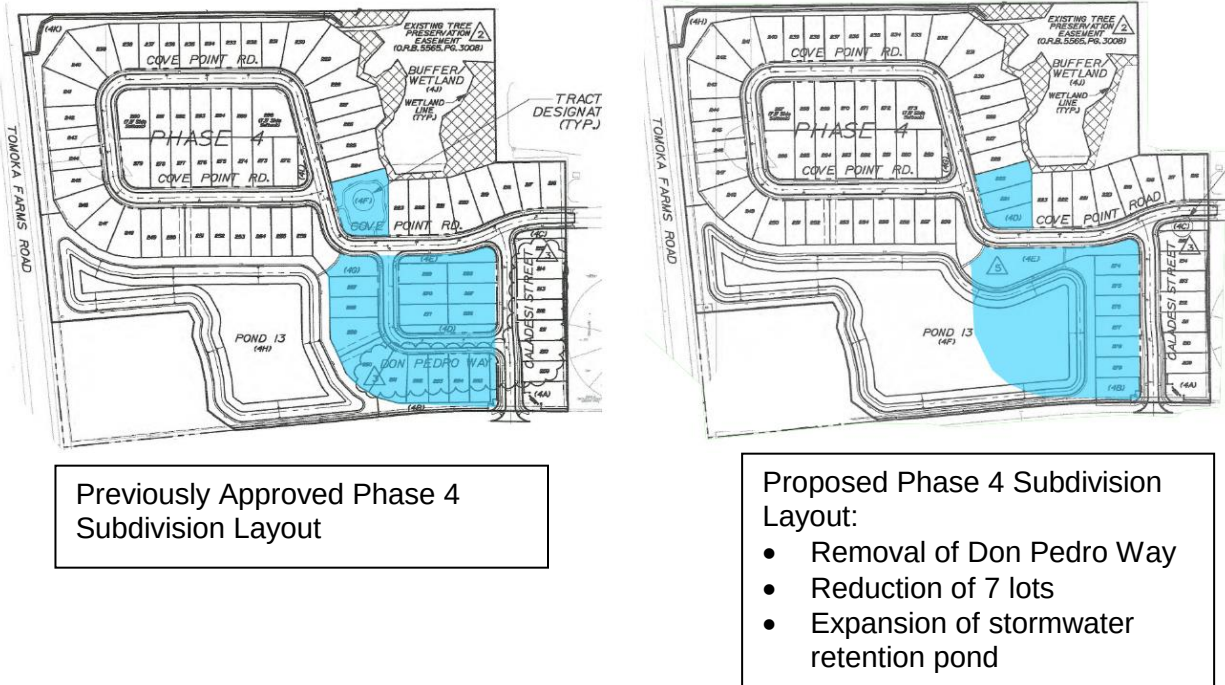
The property owner has requested a modification to the approved plat and plans. According to the Land Development Code, minor changes to a plat that has not been recorded must be reviewed through the same process as the original review of the plat. Therefore, the proposed minor changes to the plat and plans will need to be reviewed by the Planning Commission and reviewed and approved by City Council before it can be recorded.

Figure 1. Location Map



The proposed modifications to the plat and plans (Figure 2) include: 1) Removing Don Pedro Way and 7 single-family lots, and 2) Expanding the proposed stormwater pond along Town West Blvd. According to the applicant, the proposed modifications are to reduce the amount of fill dirt that has to be brought to the site to grade the subdivision. The proposed modifications result in 71 single-family lots on ± 25.73 acres (a net decrease of 7 lots). Staff has reviewed the proposed modifications for compliance with the Land Development Code and verified that public facilities and services, such as roads, public infrastructure, schools, and recreational facilities are currently available to serve the proposed 71 residential lots.

Figure 2. Proposed Modifications



RECOMMENDATION:

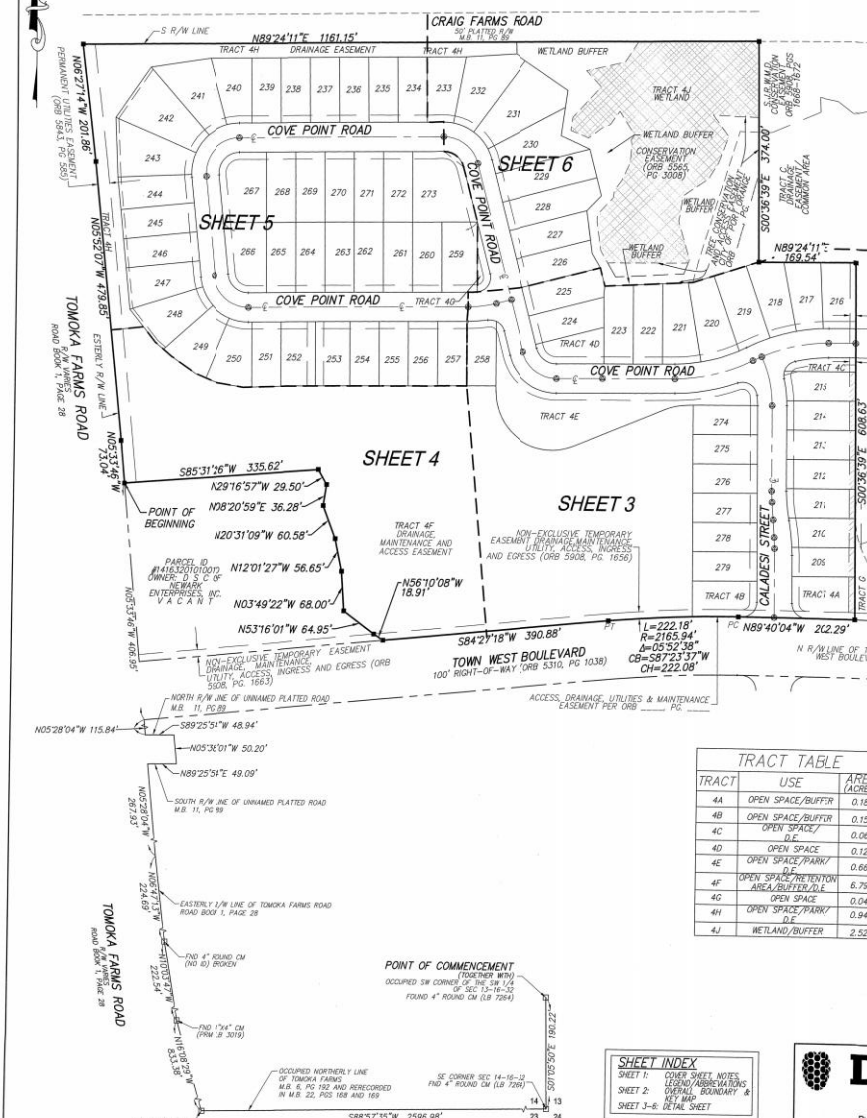
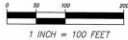
Approval of the proposed Development Order Modification to the Westport Reserve, Phase 4 Subdivision Final Plat and Plans approved by City Council in 2017.

ATTACHMENTS:

1. Exhibit A – Westport Reserve Phase 4 Modification to Subdivision Plat and Plans

WESTPORT RESERVE PHASE 4

LYING IN SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST,
CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA



TRACT	USE	AREA (ACRES)
4A	OPEN SPACE/BUFFER	0.19
4B	OPEN SPACE/BUFFER	0.15
4C	OPEN SPACE/ D.E.	0.06
4D	OPEN SPACE	0.12
4E	OPEN SPACE/PARK/ D.E.	0.66
4F	OPEN SPACE/RETENTION AREA/BUFFER/D.E.	6.79
4G	OPEN SPACE	0.04
4H	OPEN SPACE/PARK/ D.E.	0.94
4J	WETLAND/BUFFER	2.52

SHEET INDEX
SHEET 1: OTHER SHEET NOTES
SHEET 2: LEGEND/ABBREVIATIONS
SHEET 3: OVERALL BOUNDARY & CITY MAP
SHEET 4-6: DETAIL SHEET

GENERAL NOTES:

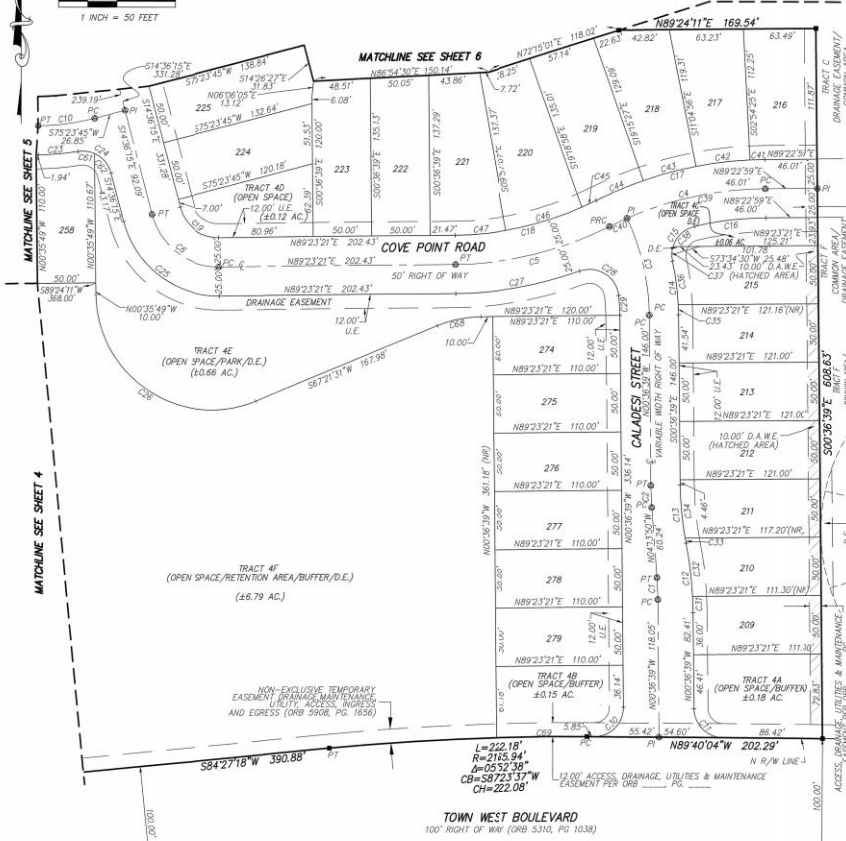
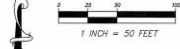
1. MONUMENTATION:
 (1) - DENOTES PERMANENT REFERENCE MONUMENT FOUND STAMPED AS NOTED
 (2) - DENOTES PERMANENT REFERENCE MONUMENT SET 4"X4" CONCRETE MONUMENT STAMPED PER LB 8011
 (3) - DENOTES PERMANENT CORNER, POINT SET NAIL AND LID STAMPED FOR LB 8011
2. ALL LINES INTERSECTING CURVES ARE RADIAL UNLESS OTHERWISE NOTED.
 (R) - DENOTES A LINE RADIAL RELATIVE TO ADJACENT CURVE.
 (NO) - DENOTES A LINE NOT RADIAL RELATIVE TO ADJACENT CURVE.
3. DIMENSIONS SHOWN ARE IN FEET AND DECIMALS THEREOF.
4. ACCURACY:
 - THE BOUNDARY LINEAR ERROR OF CLOSURE DOES NOT EXCEED 1:10,000.
 - THE BOUNDARY ANGULAR ERROR OF CLOSURE DOES NOT EXCEED 15 SECONDS MULTIPLIED BY THE SQUARE ROOT OF THE NUMBER OF ANGLES TURNED.
5. BEARINGS SHOWN HEREON ARE ASSUMED AND BASED ON THE OCCUPIED SOUTH LINE OF THE SE 1/4 OF SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA, HAVING A BEARING OF 188°57'35" W.
6. NOTE: ALL MEASUREMENTS REFER TO HORIZONTAL PLANE IN ACCORDANCE WITH THE DEFINITION OF THE U.S. SURVEY FOOT OR METER ADOPTED BY THE NATIONAL BUREAU OF STANDARDS AND TECHNOLOGY. ALL MEASUREMENTS SHALL USE THE 39.37 INCHES INTERNATIONAL EXACT FOR CONVERSION FROM METERS TO FEET.
7. NOTICE: THIS PLAT AS RECORDED IN ITS GRAPHIC FORM IS THE OFFICIAL VERSION OF THE PLAT. THIS PLAT SHALL BE THE AUTHORITY FOR CONVERSION FROM METERS TO FEET AND VICE VERSA. THE PLAT SHALL BE THE AUTHORITY FOR CONVERSION FROM METERS TO FEET AND VICE VERSA. THE PLAT SHALL BE THE AUTHORITY FOR CONVERSION FROM METERS TO FEET AND VICE VERSA.
8. THIS PLAT IS SUBJECT TO ALL EASEMENTS OF RECORD AND RESERVATIONS OF EASEMENTS INCLUDING BUT NOT LIMITED TO DRAINAGE, TELEPHONE, GAS, WATER, AND MAINTENANCE EASEMENTS. EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR PARTY OR PARTIES IN CONNECTION WITH THIS PLAT SHALL BE THE AUTHORITY FOR CONVERSION FROM METERS TO FEET AND VICE VERSA. THE PLAT SHALL BE THE AUTHORITY FOR CONVERSION FROM METERS TO FEET AND VICE VERSA. THE PLAT SHALL BE THE AUTHORITY FOR CONVERSION FROM METERS TO FEET AND VICE VERSA.
9. UTILITIES INCLUDE BUT ARE NOT LIMITED TO SANITARY SEWER, POTABLE WATER, STORM DRAINAGE, ELECTRIC, TELEPHONE, CABLE TELEVISION, SECURITY, NATURAL GAS, FIBER OPTIC, TELECOMMUNICATION.
10. ALL UTILITIES EXISTING OR TO BE INSTALLED SHALL BE SHOWN ON THIS PLAT. ALL UTILITIES EXISTING OR TO BE INSTALLED SHALL BE SHOWN ON THIS PLAT. ALL UTILITIES EXISTING OR TO BE INSTALLED SHALL BE SHOWN ON THIS PLAT.
11. SINGLE FAMILY RESIDENTIAL BUILDING SETBACK REQUIREMENTS:
 FRONT - 25 FEET
 REAR - 25 FEET
 SIDE - LOTS 3 & 65' = 5 FEET
 LOTS 3 & 65' = 5 FEET
 SIDE CORNER = 20 FEET
12. SINGLE FAMILY RESIDENTIAL LOT COVERAGE REQUIREMENT:
 MINIMUM OPEN SPACE AREA: 400
 MAXIMUM BUILDING COVERAGE = 50%
 MAXIMUM BUILDING HEIGHT = 35 FEET
13. THE OPEN SPACE AREAS TO BE CONVEYED BY SEPARATE INSTRUMENT RECORDED CONCURRENT WITH THIS PLAT TO THE HOA SHALL BE SUBJECT TO SUCH OPEN SPACE AREAS AS NOT INTENDED TO GRANT ANY RIGHTS TO THE GENERAL PUBLIC.
14. THE HOA SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING AND IRRIGATION IN OPEN SPACE AREAS (SUBJECT TO NOTE 22 BELOW WITH REGARD TO TRACT 4C AND 4D) AND IN THE RIGHTS-OF-WAY.
15. INTERSECTIONS AND OPEN SPACE AREAS ARE GRANTED AS EASEMENTS TO THE CITY OF PORT ORANGE WITH RIGHTS OF ACCESS, EGRESS, AND UTILITIES. TOGETHER WITH THE RIGHT TO HARVEST EXCESS WATER TO BE USED FOR IRRIGATION IN THE DISCRETION OF THE CITY.
16. THE HOA SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING AND IRRIGATION IN OPEN SPACE AREAS (SUBJECT TO NOTE 22 BELOW WITH REGARD TO TRACT 4C AND 4D) AND IN THE RIGHTS-OF-WAY.
17. THIS PLAT IS SUBJECT TO ALL EASEMENTS OF RECORD AND RESERVATIONS OF EASEMENTS INCLUDING BUT NOT LIMITED TO DRAINAGE, TELEPHONE, GAS, WATER, AND MAINTENANCE EASEMENTS. EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR PARTY OR PARTIES IN CONNECTION WITH THIS PLAT SHALL BE THE AUTHORITY FOR CONVERSION FROM METERS TO FEET AND VICE VERSA. THE PLAT SHALL BE THE AUTHORITY FOR CONVERSION FROM METERS TO FEET AND VICE VERSA. THE PLAT SHALL BE THE AUTHORITY FOR CONVERSION FROM METERS TO FEET AND VICE VERSA.
18. PORTIONS OF THE LAND SHOWN IN THIS PLAT ARE SUBJECT TO A PERMANENT UTILITIES EASEMENT IN THE OFFICIAL RECORDS OF VOLUSIA COUNTY, FLORIDA IN BOOK 5565, PAGE 3008, AS NOTED.
19. THIS PLAT IS SUBJECT TO A CONSERVATION EASEMENT IN THE OFFICIAL RECORDS OF VOLUSIA COUNTY, FLORIDA IN BOOK 5565, PAGE 3008, AS NOTED.
20. LOT CORNERS WILL BE SET IN ACCORDANCE WITH FLORIDA STATUTES CHAPTER 177.09 (3).
21. TRACTS 4A, 4B, 4C, 4D, 4E, 4F, 4G, 4H, 4I, AND 4J ARE SHOWN HEREON AS OPEN SPACE AREAS TO BE CONVEYED BY SEPARATE INSTRUMENT RECORDED CONCURRENT WITH THIS PLAT TO THE HOA. THE HOA SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING AND IRRIGATION IN OPEN SPACE AREAS (SUBJECT TO NOTE 22 BELOW WITH REGARD TO TRACT 4C AND 4D) AND IN THE RIGHTS-OF-WAY.
22. THE HOA SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING AND IRRIGATION IN OPEN SPACE AREAS (SUBJECT TO NOTE 22 BELOW WITH REGARD TO TRACT 4C AND 4D) AND IN THE RIGHTS-OF-WAY.
23. THE ENTIRETY OF TRACTS 4C, 4E, 4H, 4I, AND 4J AS SHOWN HEREON ARE SUBJECT TO A DRAINAGE EASEMENT IN FAVOR OF THE CITY OF PORT ORANGE, FLORIDA.
24. TRACT 4E SHOWN HEREON AS OPEN SPACE/RETENTION AREA IS TO BE CONVEYED BY SEPARATE INSTRUMENT (TO BE RECORDED CONCURRENT WITH THIS PLAT) TO THE HOA FOR THE PURPOSES OF OPEN SPACE AND STORMWATER RETENTION FOR THE BENEFIT OF ALL LOT OWNERS. SAID TRACT SHALL BE MAINTAINED BY THE HOA, ITS SUCCESSORS AND/OR ASSIGNS.
25. TRACT 4J SHOWN HEREON AS OPEN SPACE IS TO BE CONVEYED BY SEPARATE INSTRUMENT (TO BE RECORDED CONCURRENT WITH THIS PLAT) TO THE HOA FOR THE PURPOSES OF OPEN SPACE AND STORMWATER RETENTION FOR THE BENEFIT OF ALL LOT OWNERS. SAID TRACT SHALL BE MAINTAINED BY THE HOA, ITS SUCCESSORS AND/OR ASSIGNS.
26. THE DRAINAGE EASEMENT ON LOT 273 AND THE 200' DRAINAGE EASEMENT SHOWN SPANNING OVER LOTS 252 AND 253 ARE HEREBY GRANTED TO AND SHALL BE MAINTAINED BY THE HOA, ITS SUCCESSORS AND/OR ASSIGNS.
27. THE LOT OWNERS OF EACH OF LOTS 242-248 SHALL BE RESPONSIBLE FOR CLEANING AND MAINTAINING THE INTERIOR SIDES OF THE FENCE LOCATED ON THE INTERSECTION OF LOT 242 AND LOT 243. THE LOT OWNERS OF EACH OF LOTS 242-248 SHALL BE RESPONSIBLE FOR CLEANING AND MAINTAINING THE INTERIOR SIDES OF THE FENCE LOCATED ON THE INTERSECTION OF LOT 242 AND LOT 243. THE LOT OWNERS OF EACH OF LOTS 242-248 SHALL BE RESPONSIBLE FOR CLEANING AND MAINTAINING THE INTERIOR SIDES OF THE FENCE LOCATED ON THE INTERSECTION OF LOT 242 AND LOT 243.
28. MAINTENANCE OF ANY DRAINAGE AREAS AND THE WALL ON THE EASTERN BOUNDARY OF LOTS 242-248 SHALL BE THE RESPONSIBILITY OF THE LOT OWNERS OF LOTS 242-248. THE LOT OWNERS OF LOTS 242-248 SHALL BE RESPONSIBLE FOR MAINTAINING THE INTERIOR SIDES OF THE FENCE LOCATED ON THE INTERSECTION OF LOT 242 AND LOT 243. THE LOT OWNERS OF EACH OF LOTS 242-248 SHALL BE RESPONSIBLE FOR CLEANING AND MAINTAINING THE INTERIOR SIDES OF THE FENCE LOCATED ON THE INTERSECTION OF LOT 242 AND LOT 243.
29. TRACT 4J AS SHOWN HEREON IS SUBJECT TO THE TREE PRESERVATION AND ACCESS EASEMENT GRANTED TO THE CITY OF PORT ORANGE RECORDED IN THE OFFICIAL RECORDS OF VOLUSIA COUNTY, FLORIDA IN BOOK 5565, PAGE 3008, AS NOTED.
30. PROPERTY WITHIN THIS PLAT IS SUBJECT TO THE TREE PRESERVATION AND ACCESS EASEMENT GRANTED TO THE CITY OF PORT ORANGE RECORDED IN THE OFFICIAL RECORDS OF VOLUSIA COUNTY, FLORIDA IN BOOK 5565, PAGE 3008, AS NOTED.
31. THIS PLAT IS SUBJECT TO THE TREE PRESERVATION AND ACCESS EASEMENT GRANTED TO THE CITY OF PORT ORANGE RECORDED IN THE OFFICIAL RECORDS OF VOLUSIA COUNTY, FLORIDA IN BOOK 5565, PAGE 3008, AS NOTED.
32. PORTIONS OF THE LAND SHOWN IN THIS PLAT ARE SUBJECT TO EASEMENT AND COST SHARING AGREEMENT RECORDED IN THE OFFICIAL RECORDS OF VOLUSIA COUNTY, FLORIDA IN BOOK 5565, PAGE 3008, AS NOTED.
33. THERE IS A PERMANENT CONSERVATION EASEMENT RECORDED IN THE OFFICIAL RECORDS OF VOLUSIA COUNTY, FLORIDA IN BOOK 5565, PAGE 3008, AS NOTED.

MAP BOOK: PAGE:

131 WEST KALBY STREET
ORLANDO, FLORIDA 32809
PHONE: 407.584.8000 FAX: 407.648.9104
WWW.DEWBERRY.COM
CERTIFICATE OF AUTHORIZATION NO. LB 8011

WESTPORT RESERVE PHASE 4

LYING IN SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST,
CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA



- GENERAL NOTES:**
1. MONUMENTATION:
 - - DENOTES PERMANENT REFERENCE MONUMENT FORD STAMPED AS NOTED
 - - DENOTES PERMANENT REFERENCE MONUMENT SET BY THE CONVEYOR STAMPED PER LB 8011
 - - DENOTES PERMANENT CONTROL POINT SET BY THE CONVEYOR STAMPED PER LB 8011
 2. ALL LINES INTERSECTING CURVES ARE RADIAL UNLESS OTHERWISE NOTED.
 - (P) - DENOTES A LINE RADIAL RELATIVE TO ADJACENT CURVE
 - (NR) - DENOTES A LINE NOT RADIAL RELATIVE TO ADJACENT CURVE
 3. DIMENSIONS SHOWN ARE IN FEET AND DECIMALS THEREOF
 4. ACCURACY:
 - - THE BOUNDARY LINEAR ERROR OF CLOSURE DOES NOT EXCEED 1/10,000
 - - THE BOUNDARY ANGULAR ERROR OF CLOSURE DOES NOT EXCEED 15 SECONDS MULTIPLIED BY THE SQUARE ROOT OF THE NUMBER OF ANGLES TURNED
 5. BEARINGS SHOWN HEREON ARE ASSUMED AND BASED ON THE SECONDARY SOUTH LINE OF THE SE 1/4 OF SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA, HAVING A BEARING OF S88°52'00"E
 6. NOTE: ALL MEASUREMENTS REFER TO HORIZONTAL PLANS IN ACCORDANCE WITH THE DEFINITION OF THE U.S. SURVEY FOOT ON METERS ADOPTED BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY. ALL MEASUREMENTS SHALL USE THE 36,575,721.268333333 EQUATION FOR CONVERSION FROM A U.S. FOOT TO METERS.
 7. NOTICE: THIS PLAT IS A PRELIMINARY PLAT. IT IS THE OFFICIAL DECLARATION OF THE SURVEYOR THAT THE SURVEYED LOTS, EASEMENTS, AND MEASUREMENTS ARE CORRECT AND TRUE TO THE BEST OF HIS KNOWLEDGE AND BELIEF. THE SURVEYOR'S CERTIFICATE OF ACCURACY IS ATTACHED TO THIS PLAT. THE SURVEYOR'S CERTIFICATE OF ACCURACY IS ATTACHED TO THIS PLAT. THE SURVEYOR'S CERTIFICATE OF ACCURACY IS ATTACHED TO THIS PLAT.
 8. THIS PLAT IS SUBJECT TO ALL EASEMENTS, RIGHTS, AND INTERESTS OF RECORD. THE SURVEYOR HAS CONDUCTED A VISUAL INSPECTION OF THE LAND AND HAS FOUND NO OTHER EASEMENTS, RIGHTS, OR INTERESTS OF RECORD. THE SURVEYOR HAS CONDUCTED A VISUAL INSPECTION OF THE LAND AND HAS FOUND NO OTHER EASEMENTS, RIGHTS, OR INTERESTS OF RECORD.
 9. UTILITY EASEMENTS ARE NOT LIMITED TO SANITARY SEWER, POTABLE WATER, STORM DRAINAGE, ELECTRIC, TELEPHONE, CABLE TELEVISION, SECURITY, AND OTHER UTILITIES.
 10. ALL PLATTED UTILITY EASEMENTS, EXCEPT PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS, OR OTHER UTILITY COMPANY, SHALL BE CONSIDERED TO BE PUBLIC UTILITY EASEMENTS. THE SURVEYOR HAS CONDUCTED A VISUAL INSPECTION OF THE LAND AND HAS FOUND NO OTHER EASEMENTS, RIGHTS, OR INTERESTS OF RECORD.
 11. SINGLE FAMILY RESIDENTIAL BUILDING SETBACK REQUIREMENTS:
 - FRONT = 25 FEET
 - REAR = 20 FEET
 - SIDE = 10 FEET
 - LOT 5' 65" = 7.5 FEET
 - LOT 5' 65" = 7.5 FEET
 - LOT 5' 65" = 7.5 FEET
 12. SINGLE FAMILY RESIDENTIAL LOT COVERAGE REQUIREMENTS:
 - MINIMUM OPEN SPACE AREA = 400
 - MINIMUM BUILDING COVERAGE = 50%
 - MAXIMUM BUILDING HEIGHT = 36 FEET
 13. THE OPEN SPACE AREAS TO BE CONVEYED BY SEPARATE INSTRUMENT (RECORDED CONCURRENT WITH THIS PLAT) TO THE HOA SHALL BE SUBJECT TO THE HOA'S RIGHT TO MODIFY OR AMEND THE HOA'S DECLARATION (DETERMINED IN NOTE 17), THE GRANTING OF WHICH SHALL BE SUBJECT TO THE HOA'S RIGHT TO MODIFY OR AMEND THE HOA'S DECLARATION (DETERMINED IN NOTE 17), THE GRANTING OF WHICH SHALL BE SUBJECT TO THE HOA'S RIGHT TO MODIFY OR AMEND THE HOA'S DECLARATION (DETERMINED IN NOTE 17).
 14. THE HOA'S DECLARATION OF HOA SHALL BE SUBJECT TO THE HOA'S RIGHT TO MODIFY OR AMEND THE HOA'S DECLARATION (DETERMINED IN NOTE 17), THE GRANTING OF WHICH SHALL BE SUBJECT TO THE HOA'S RIGHT TO MODIFY OR AMEND THE HOA'S DECLARATION (DETERMINED IN NOTE 17), THE GRANTING OF WHICH SHALL BE SUBJECT TO THE HOA'S RIGHT TO MODIFY OR AMEND THE HOA'S DECLARATION (DETERMINED IN NOTE 17).
 15. RETENTION AREAS AND OPEN SPACE AREAS ARE GRANTED AS EASEMENTS TO THE CITY OF PORT ORANGE WITH RIGHTS OF ACCESS, EGRESS, AND EXCESS, TOGETHER WITH THE RIGHT TO HARVEST EXCESS STORM WATER / GROUND WATER AS DEEMED APPROPRIATE IN THE DISCRETION OF THE CITY.
 16. THE HOA IS RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING AND IRRIGATION IN OPEN SPACE AREAS (SUBJECT TO NOTE 22 BELOW WITH THE EXCEPT OF THE HOA'S RIGHT TO MODIFY OR AMEND THE HOA'S DECLARATION (DETERMINED IN NOTE 17), THE GRANTING OF WHICH SHALL BE SUBJECT TO THE HOA'S RIGHT TO MODIFY OR AMEND THE HOA'S DECLARATION (DETERMINED IN NOTE 17), THE GRANTING OF WHICH SHALL BE SUBJECT TO THE HOA'S RIGHT TO MODIFY OR AMEND THE HOA'S DECLARATION (DETERMINED IN NOTE 17).
 17. LOTS 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 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WESTPORT RESERVE PHASE 4 LYING IN SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA



SHEET INDEX

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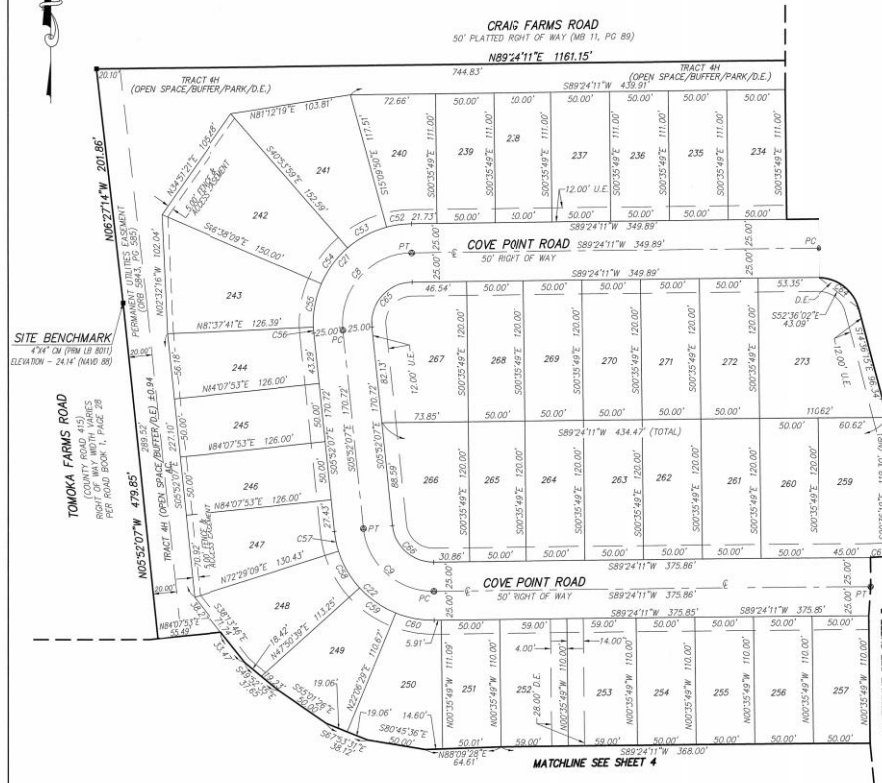
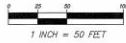
Dewberry

131 WEST KALEY STREET
 ORLANDO, FLORIDA 32808
 PHONE: 321.354.8026 FAX: 407.648.9104
 WWW.DEWBERRY.COM
 CERTIFICATE OF AUTHORIZATION NO. LB 8011

GENERAL NOTES:

1. DOCUMENTATION:
 (D) - DENOTES PERMANENT REFERENCE MONUMENT FOUND STAMPED PER LB 8011
 (M) - DENOTES PERMANENT REFERENCE MONUMENT SET 4"x4" CONCRETE MONUMENT STAMPED PER LB 8011
 (C) - DENOTES PERMANENT CONTROL POINT SET NAIL AND DISK STAMPED PER LB 8011
2. ALL LINES INTERSECTING CURVES ARE RADIAL UNLESS OTHERWISE NOTED.
 (R) - DENOTES A LINE RADIAL RELATIVE TO ADJACENT CURVE.
 (NR) - DENOTES A LINE NOT RADIAL RELATIVE TO ADJACENT CURVE.
3. DIMENSIONS SHOWN ARE IN FEET AND DECIMALS THEREOF.
 - THE BOUNDARY LINEAR ERROR OF CLOSURE DOES NOT EXCEED 1 IN 10,000
 - THE BOUNDARY ANGULAR ERROR OF CLOSURE DOES NOT EXCEED 15 SECONDS MULTIPLIED BY THE SQUARE ROOT OF THE NUMBER OF ANGLES TURNED.
4. ACCURACY:
 - THE BOUNDARY LINEAR ERROR OF CLOSURE DOES NOT EXCEED 1 IN 10,000
 - THE BOUNDARY ANGULAR ERROR OF CLOSURE DOES NOT EXCEED 15 SECONDS MULTIPLIED BY THE SQUARE ROOT OF THE NUMBER OF ANGLES TURNED.
5. BEARINGS SHOWN HEREON ARE ASSUMED AND BASED ON THE ASSUMED SOUTH LINE OF THE SE 1/4 OF SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA, HAVING A BEARING OF S89°37'55\"/>
6. NOTE: ALL MEASUREMENTS REFER TO HORIZONTAL PLANE IN ACCORDANCE WITH THE DEFINITION OF THE U.S. SURVEY FOOT OR METER ADOPTED BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY. ALL MEASUREMENTS SHALL USE THE 39.37/125.3-3936333333 EQUATION FOR CONVERSION FROM A U.S. FOOT TO METERS.
7. NOTICE: THIS PLAT AS RECORDED IN ITS ENTIRETY IS THE OFFICIAL POSITION OF THE SURVEYOR. ANY DISCREPANCY BETWEEN THIS PLAT AND ANY OTHER RECORDS OR PLATS ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.
8. THIS PLAT IS SUBJECT TO ALL EASEMENTS OF RECORD AND RESERVATIONS OF EASEMENTS, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITY, ACCESS AND MAINTENANCE EASEMENTS, EXISTING OR GRANTED AND ANY WHICH SHALL BE LOCATED AS FOLLOWS EXCEPT AS OTHERWISE NOTED ON THIS PLAT. ENTIRE STREET FRONTS OF LOTS AND OPEN SPACE AREAS: 10.0 FOOT WIDE UTILITY EASEMENT IN FAVOR OF THE HOA (DEFINED IN NOTE 14).
9. UTILITIES SHALL BE, BUT ARE NOT LIMITED TO: SANITARY SEWER, POTABLE WATER, STORM DRAINAGE, ELECTRIC, TELEPHONE, CABLE TELEVISION, SECURITY, AND OTHER UTILITIES.
10. ALL PLATTED UTILITY EASEMENTS, EXCLUSIVE OF PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS OR OTHER UTILITY COMPANY, SHALL BE CONSIDERED TO BE A PART OF THE PUBLIC RECORDS OF THIS COUNTY. ANY DISCREPANCY BETWEEN THIS PLAT AND ANY OTHER RECORDS OR PLATS ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.
11. SINGLE FAMILY RESIDENTIAL BUILDING SETBACK REQUIREMENTS:
 FRONT = 25 FEET
 REAR = 20 FEET
 SIDE = 10 FT < 65' = 5 FEET
 SIDE = 65' < 75' = 7.5 FEET
 SIDE CORNER = 20 FEET
12. SINGLE FAMILY RESIDENTIAL LOT COVERAGE REQUIREMENTS:
 MINIMUM OPEN SPACE AREA = 400
 MAXIMUM BUILDING COVERAGE = 50%
 MAXIMUM BUILDING HEIGHT = 30 FEET
13. THE OPEN SPACE AREAS TO BE CONVEYED BY SEPARATE INSTRUMENT (RECORDED CONCURRENT WITH THIS PLAT) TO THE HOA SHALL BE SUBJECT TO SEPARATE OPEN SPACE RULES & NOT BE SUBJECT TO SEPARATE OPEN SPACE RULES. THE GRANTING OF SEPARATE OPEN SPACE RULES & NOT BE SUBJECT TO SEPARATE OPEN SPACE RULES.
14. THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC. (THE "HOA") A FLORIDA NOT-FOR-PROFIT CORPORATION, SHALL BE RESPONSIBLE FOR THE DESIGN, CONSTRUCTION, MAINTENANCE, AND REPAIR OF THE COMMON AREAS AND UTILITIES SHOWN ON THIS PLAT. THE HOA SHALL BE RESPONSIBLE FOR THE DESIGN, CONSTRUCTION, MAINTENANCE, AND REPAIR OF THE COMMON AREAS AND UTILITIES SHOWN ON THIS PLAT. THE HOA SHALL BE RESPONSIBLE FOR THE DESIGN, CONSTRUCTION, MAINTENANCE, AND REPAIR OF THE COMMON AREAS AND UTILITIES SHOWN ON THIS PLAT.
15. RETENTION AREAS AND OPEN SPACE AREAS ARE GRANTED AS EASEMENTS TO THE CITY OF PORT ORANGE WITH RIGHTS OF ACCESS, EGRESS, AND EGRESS, TOGETHER WITH THE RIGHT TO HARVEST EXCESS STORM WATER / GROUND WATER AS DEEMED APPROPRIATE IN THE DISCRETION OF THE CITY.
16. THE HOA SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING AND IRRIGATION IN OPEN SPACE AREAS (SUBJECT TO NOTE 22 BELOW WITH REGARD TO LOTS 4C, 4D, 4E, 4F, 4G, 4H, 4I, 4J, 4K, 4L, 4M, 4N, 4O, 4P, 4Q, 4R, 4S, 4T, 4U, 4V, 4W, 4X, 4Y, 4Z, 4AA, 4AB, 4AC, 4AD, 4AE, 4AF, 4AG, 4AH, 4AI, 4AJ, 4AK, 4AL, 4AM, 4AN, 4AO, 4AP, 4AQ, 4AR, 4AS, 4AT, 4AU, 4AV, 4AW, 4AX, 4AY, 4AZ, 4BA, 4BB, 4BC, 4BD, 4BE, 4BF, 4BG, 4BH, 4BI, 4BJ, 4BK, 4BL, 4BM, 4BN, 4BO, 4BP, 4BQ, 4BR, 4BS, 4BT, 4BU, 4BV, 4BW, 4BX, 4BY, 4BZ, 4CA, 4CB, 4CC, 4CD, 4CE, 4CF, 4CG, 4CH, 4CI, 4CJ, 4CK, 4CL, 4CM, 4CN, 4CO, 4CP, 4CQ, 4CR, 4CS, 4CT, 4CU, 4CV, 4CW, 4CX, 4CY, 4CZ, 4DA, 4DB, 4DC, 4DD, 4DE, 4DF, 4DG, 4DH, 4DI, 4DJ, 4DK, 4DL, 4DM, 4DN, 4DO, 4DP, 4DQ, 4DR, 4DS, 4DT, 4DU, 4DV, 4DW, 4DX, 4DY, 4DZ, 4EA, 4EB, 4EC, 4ED, 4EE, 4EF, 4EG, 4EH, 4EI, 4EJ, 4EK, 4EL, 4EM, 4EN, 4EO, 4EP, 4EQ, 4ER, 4ES, 4ET, 4EU, 4EV, 4EW, 4EX, 4EY, 4EZ, 4FA, 4FB, 4FC, 4FD, 4FE, 4FF, 4FG, 4FH, 4FI, 4FJ, 4FK, 4FL, 4FM, 4FN, 4FO, 4FP, 4FQ, 4FR, 4FS, 4FT, 4FU, 4FV, 4FW, 4FX, 4FY, 4FZ, 4GA, 4GB, 4GC, 4GD, 4GE, 4GF, 4GG, 4GH, 4GI, 4GJ, 4GK, 4GL, 4GM, 4GN, 4GO, 4GP, 4GQ, 4GR, 4GS, 4GT, 4GU, 4GV, 4GW, 4GX, 4GY, 4GZ, 4HA, 4HB, 4HC, 4HD, 4HE, 4HF, 4HG, 4HH, 4HI, 4HJ, 4HK, 4HL, 4HM, 4HN, 4HO, 4HP, 4HQ, 4HR, 4HS, 4HT, 4HU, 4HV, 4HW, 4HX, 4HY, 4HZ, 4IA, 4IB, 4IC, 4ID, 4IE, 4IF, 4IG, 4IH, 4II, 4IJ, 4IK, 4IL, 4IM, 4IN, 4IO, 4IP, 4IQ, 4IR, 4IS, 4IT, 4IU, 4IV, 4IW, 4IX, 4IY, 4IZ, 4JA, 4JB, 4JC, 4JD, 4JE, 4JF, 4JG, 4JH, 4JI, 4JJ, 4JK, 4JL, 4JM, 4JN, 4JO, 4JP, 4JQ, 4JR, 4JS, 4JT, 4JU, 4JV, 4JW, 4JX, 4JY, 4JZ, 4KA, 4KB, 4KC, 4KD, 4KE, 4KF, 4KG, 4KH, 4KI, 4KJ, 4KK, 4KL, 4KM, 4KN, 4KO, 4KP, 4KQ, 4KR, 4KS, 4KT, 4KU, 4KV, 4KW, 4KX, 4KY, 4KZ, 4LA, 4LB, 4LC, 4LD, 4LE, 4LF, 4LG, 4LH, 4LI, 4LJ, 4LK, 4LL, 4LM, 4LN, 4LO, 4LP, 4LQ, 4LR, 4LS, 4LT, 4LU, 4LV, 4LW, 4LX, 4LY, 4LZ, 4MA, 4MB, 4MC, 4MD, 4ME, 4MF, 4MG, 4MH, 4MI, 4MJ, 4MK, 4ML, 4MM, 4MN, 4MO, 4MP, 4MQ, 4MR, 4MS, 4MT, 4MU, 4MV, 4MW, 4MX, 4MY, 4MZ, 4NA, 4NB, 4NC, 4ND, 4NE, 4NF, 4NG, 4NH, 4NI, 4NJ, 4NK, 4NL, 4NM, 4NN, 4NO, 4NP, 4NQ, 4NR, 4NS, 4NT, 4NU, 4NV, 4NW, 4NX, 4NY, 4NZ, 4OA, 4OB, 4OC, 4OD, 4OE, 4OF, 4OG, 4OH, 4OI, 4OJ, 4OK, 4OL, 4OM, 4ON, 4OO, 4OP, 4OQ, 4OR, 4OS, 4OT, 4OU, 4OV, 4OW, 4OX, 4OY, 4OZ, 4PA, 4PB, 4PC, 4PD, 4PE, 4PF, 4PG, 4PH, 4PI, 4PJ, 4PK, 4PL, 4PM, 4PN, 4PO, 4PP, 4PQ, 4PR, 4PS, 4PT, 4PU, 4PV, 4PW, 4PX, 4PY, 4PZ, 4QA, 4QB, 4QC, 4QD, 4QE, 4QF, 4QG, 4QH, 4QI, 4QJ, 4QK, 4QL, 4QM, 4QN, 4QO, 4QP, 4QQ, 4QR, 4QS, 4QT, 4QU, 4QV, 4QW, 4QX, 4QY, 4QZ, 4RA, 4RB, 4RC, 4RD, 4RE, 4RF, 4RG, 4RH, 4RI, 4RJ, 4RK, 4RL, 4RM, 4RN, 4RO, 4RP, 4RQ, 4RR, 4RS, 4RT, 4RU, 4RV, 4RW, 4RX, 4RY, 4RZ, 4SA, 4SB, 4SC, 4SD, 4SE, 4SF, 4SG, 4SH, 4SI, 4SJ, 4SK, 4SL, 4SM, 4SN, 4SO, 4SP, 4SQ, 4SR, 4SS, 4ST, 4SU, 4SV, 4SW, 4SX, 4SY, 4SZ, 4TA, 4TB, 4TC, 4TD, 4TE, 4TF, 4TG, 4TH, 4TI, 4TJ, 4TK, 4TL, 4TM, 4TN, 4TO, 4TP, 4TQ, 4TR, 4TS, 4TT, 4TU, 4TV, 4TW, 4TX, 4TY, 4TZ, 4UA, 4UB, 4UC, 4UD, 4UE, 4UF, 4UG, 4UH, 4UI, 4UJ, 4UK, 4UL, 4UM, 4UN, 4UO, 4UP, 4UQ, 4UR, 4US, 4UT, 4UU, 4UV, 4UW, 4UX, 4UY, 4UZ, 4VA, 4VB, 4VC, 4VD, 4VE, 4VF, 4VG, 4VH, 4VI, 4VJ, 4VK, 4VL, 4VM, 4VN, 4VO, 4VP, 4VQ, 4VR, 4VS, 4VT, 4VU, 4VV, 4VW, 4VX, 4VY, 4VZ, 4WA, 4WB, 4WC, 4WD, 4WE, 4WF, 4WG, 4WH, 4WI, 4WJ, 4WK, 4WL, 4WM, 4WN, 4WO, 4WP, 4WQ, 4WR, 4WS, 4WT, 4WU, 4WV, 4WW, 4WX, 4WY, 4WZ, 4XA, 4XB, 4XC, 4XD, 4XE, 4XF, 4XG, 4XH, 4XI, 4XJ, 4XK, 4XL, 4XM, 4XN, 4XO, 4XP, 4XQ, 4XR, 4XS, 4XT, 4XU, 4XV, 4XW, 4XX, 4XY, 4XZ, 4YA, 4YB, 4YC, 4YD, 4YE, 4YF, 4YG, 4YH, 4YI, 4YJ, 4YK, 4YL, 4YM, 4YN, 4YO, 4YP, 4YQ, 4YR, 4YS, 4YT, 4YU, 4YV, 4YW, 4YX, 4YY, 4YZ, 4ZA, 4ZB, 4ZC, 4ZD, 4ZE, 4ZF, 4ZG, 4ZH, 4ZI, 4ZJ, 4ZK, 4ZL, 4ZM, 4ZN, 4ZO, 4ZP, 4ZQ, 4ZR, 4ZS, 4ZT, 4ZU, 4ZV, 4ZW, 4ZX, 4ZY, 4ZZ, 4AA, 4AB, 4AC, 4AD, 4AE, 4AF, 4AG, 4AH, 4AI, 4AJ, 4AK, 4AL, 4AM, 4AN, 4AO, 4AP, 4AQ, 4AR, 4AS, 4AT, 4AU, 4AV, 4AW, 4AX, 4AY, 4AZ, 4BA, 4BB, 4BC, 4BD, 4BE, 4BF, 4BG, 4BH, 4BI, 4BJ, 4BK, 4BL, 4BM, 4BN, 4BO, 4BP, 4BQ, 4BR, 4BS, 4BT, 4BU, 4BV, 4BW, 4BX, 4BY, 4BZ, 4CA, 4CB, 4CC, 4CD, 4CE, 4CF, 4CG, 4CH, 4CI, 4CJ, 4CK, 4CL, 4CM, 4CN, 4CO, 4CP, 4CQ, 4CR, 4CS, 4CT, 4CU, 4CV, 4CW, 4CX, 4CY, 4CZ, 4DA, 4DB, 4DC, 4DD, 4DE, 4DF, 4DG, 4DH, 4DI, 4DJ, 4DK, 4DL, 4DM, 4DN, 4DO, 4DP, 4DQ, 4DR, 4DS, 4DT, 4DU, 4DV, 4DW, 4DX, 4DY, 4DZ, 4EA, 4EB, 4EC, 4ED, 4EE, 4EF, 4EG, 4EH, 4EI, 4EJ, 4EK, 4EL, 4EM, 4EN, 4EO, 4EP, 4EQ, 4ER, 4ES, 4ET, 4EU, 4EV, 4EW, 4EX, 4EY, 4EZ, 4FA, 4FB, 4FC, 4FD, 4FE, 4FF, 4FG, 4FH, 4FI, 4FJ, 4FK, 4FL, 4FM, 4FN, 4FO, 4FP, 4FQ, 4FR, 4FS, 4FT, 4FU, 4FV, 4FW, 4FX, 4FY, 4FZ, 4GA, 4GB, 4GC, 4GD, 4GE, 4GF, 4GG, 4GH, 4GI, 4GJ, 4GK, 4GL, 4GM, 4GN, 4GO, 4GP, 4GQ, 4GR, 4GS, 4GT, 4GU, 4GV, 4GW, 4GX, 4GY, 4GZ, 4HA, 4HB, 4HC, 4HD, 4HE, 4HF, 4HG, 4HH, 4HI, 4HJ, 4HK, 4HL, 4HM, 4HN, 4HO, 4HP, 4HQ, 4HR, 4HS, 4HT, 4HU, 4HV, 4HW, 4HX, 4HY, 4HZ, 4IA, 4IB, 4IC, 4ID, 4IE, 4IF, 4IG, 4IH, 4II, 4IJ, 4IK, 4IL, 4IM, 4IN, 4IO, 4IP, 4IQ, 4IR, 4IS, 4IT, 4IU, 4IV, 4IW, 4IX, 4IY, 4IZ, 4JA, 4JB, 4JC, 4JD, 4JE, 4JF, 4JG, 4JH, 4JI, 4JJ, 4JK, 4JL, 4JM, 4JN, 4JO, 4JP, 4JQ, 4JR, 4JS, 4JT, 4JU, 4JV, 4JW, 4JX, 4JY, 4JZ, 4KA, 4KB, 4KC, 4KD, 4KE, 4KF, 4KG, 4KH, 4KI, 4KJ, 4KK, 4KL, 4KM, 4KN, 4KO, 4KP, 4KQ, 4KR, 4KS, 4KT, 4KU, 4KV, 4KW, 4KX, 4KY, 4KZ, 4LA, 4LB, 4LC, 4LD, 4LE, 4LF, 4LG, 4LH, 4LI, 4LJ, 4LK, 4LM, 4LN, 4LO, 4LP, 4LQ, 4LR, 4LS, 4LT, 4LU, 4LV, 4LW, 4LX, 4LY, 4LZ, 4MA, 4MB, 4MC, 4MD, 4ME, 4MF, 4MG, 4MH, 4MI, 4MJ, 4MK, 4ML, 4MM, 4MN, 4MO, 4MP, 4MQ, 4MR, 4MS, 4MT, 4MU, 4MV, 4MW, 4MX, 4MY, 4MZ, 4NA, 4NB, 4NC, 4ND, 4NE, 4NF, 4NG, 4NH, 4NI, 4NJ, 4NK, 4NL, 4NM, 4NN, 4NO, 4NP, 4NQ, 4NR, 4NS, 4NT, 4NU, 4NV, 4NW, 4NX, 4NY, 4NZ, 4OA, 4OB, 4OC, 4OD, 4OE, 4OF, 4OG, 4OH, 4OI, 4OJ, 4OK, 4OL, 4OM, 4ON, 4OO, 4OP, 4OQ, 4OR, 4OS, 4OT, 4OU, 4OV, 4OW, 4OX, 4OY, 4OZ, 4PA, 4PB, 4PC, 4PD, 4PE, 4PF, 4PG, 4PH, 4PI, 4PJ, 4PK, 4PL, 4PM, 4PN, 4PO, 4PP, 4PQ, 4PR, 4PS, 4PT, 4PU, 4PV, 4PW, 4PX, 4PY, 4PZ, 4QA, 4QB, 4QC, 4QD, 4QE, 4QF, 4QG, 4QH, 4QI, 4QJ, 4QK, 4QL, 4QM, 4QN, 4QO, 4QP, 4QQ, 4QR, 4QS, 4QT, 4QU, 4QV, 4QW, 4QX, 4QY, 4QZ, 4RA, 4RB, 4RC, 4RD, 4RE, 4RF, 4RG, 4RH, 4RI, 4RJ, 4RK, 4RL, 4RM, 4RN, 4RO, 4RP, 4RQ, 4RR, 4RS, 4RT, 4RU, 4RV, 4RW, 4RX, 4RY, 4RZ, 4SA, 4SB, 4SC, 4SD, 4SE, 4SF, 4SG, 4SH, 4SI, 4SJ, 4SK, 4SL, 4SM, 4SN, 4SO, 4SP, 4SQ, 4SR, 4SS, 4ST, 4SU, 4SV, 4SW, 4SX, 4SY, 4SZ, 4TA, 4TB, 4TC, 4TD, 4TE, 4TF, 4TG, 4TH, 4TI, 4TJ, 4TK, 4TL, 4TM, 4TN, 4TO, 4TP, 4TQ, 4TR, 4TS, 4TT, 4TU, 4TV, 4TW, 4TX, 4TY, 4TZ, 4UA, 4UB, 4UC, 4UD, 4UE, 4UF, 4UG, 4UH, 4UI, 4UJ, 4UK, 4UL, 4UM, 4UN, 4UO, 4UP, 4UQ, 4UR, 4US, 4UT, 4UU, 4UV, 4UW, 4UX, 4UY, 4UZ, 4VA, 4VB, 4VC, 4VD, 4VE, 4VF, 4VG, 4VH, 4VI, 4VJ, 4VK, 4VL, 4VM, 4VN, 4VO, 4VP, 4VQ, 4VR, 4VS, 4VT, 4VU, 4VV, 4VW, 4VX, 4VY, 4VZ, 4WA, 4WB, 4WC, 4WD, 4WE, 4WF, 4WG, 4WH, 4WI, 4WJ, 4WK, 4WL, 4WM, 4WN, 4WO, 4WP, 4WQ, 4WR, 4WS, 4WT, 4WU, 4WV, 4WW, 4WX, 4WY, 4WZ, 4XA, 4XB, 4XC, 4XD, 4XE, 4XF, 4XG, 4XH, 4XI, 4XJ, 4XK, 4XL, 4XM, 4XN, 4XO, 4XP, 4XQ, 4XR, 4XS, 4XT, 4XU, 4XV, 4XW, 4XX, 4XY, 4XZ, 4YA, 4YB, 4YC, 4YD, 4YE, 4YF, 4YG, 4YH, 4YI, 4YJ, 4YK, 4YL, 4YM, 4YN, 4YO, 4YP, 4YQ, 4YR, 4YS, 4YT, 4YU, 4YV, 4YW, 4YX, 4YY, 4YZ, 4ZA, 4ZB, 4ZC, 4ZD, 4ZE, 4ZF, 4ZG, 4ZH, 4ZI, 4ZJ, 4ZK, 4ZL, 4ZM, 4ZN, 4ZO, 4ZP, 4ZQ, 4ZR, 4ZS, 4ZT, 4ZU, 4ZV, 4ZW, 4ZX, 4ZY, 4ZZ, 4AA, 4AB, 4AC, 4AD, 4AE, 4AF, 4AG, 4AH, 4AI, 4AJ, 4AK, 4AL, 4AM, 4AN, 4AO, 4AP, 4AQ, 4AR, 4AS, 4AT, 4AU, 4AV, 4AW, 4AX, 4AY, 4AZ, 4BA, 4BB, 4BC, 4BD, 4BE, 4BF, 4BG, 4BH, 4BI, 4BJ, 4BK, 4BL, 4BM, 4BN, 4BO, 4BP, 4BQ, 4BR, 4BS, 4BT, 4BU, 4BV, 4BW, 4BX, 4BY, 4BZ, 4CA, 4CB, 4CC, 4CD, 4CE, 4CF, 4CG, 4CH, 4CI, 4CJ, 4CK, 4CL, 4CM, 4CN, 4CO, 4CP, 4CQ, 4CR, 4CS, 4CT, 4CU, 4CV, 4CW, 4CX, 4CY, 4CZ, 4DA, 4DB, 4DC, 4DD, 4DE, 4DF, 4DG, 4DH, 4DI, 4DJ, 4DK, 4DL, 4DM, 4DN, 4DO, 4DP, 4DQ, 4DR, 4DS, 4DT, 4DU, 4DV, 4DW, 4DX, 4DY, 4DZ, 4EA, 4EB, 4EC, 4ED, 4EE, 4EF, 4EG, 4EH, 4EI, 4EJ, 4EK, 4EL, 4EM, 4EN, 4EO, 4EP, 4EQ, 4ER, 4ES, 4ET, 4EU, 4EV, 4EW, 4EX, 4EY, 4EZ, 4FA, 4FB, 4FC, 4FD, 4FE, 4FF, 4FG, 4FH, 4FI, 4FJ, 4FK, 4FL, 4FM, 4FN, 4FO, 4FP, 4FQ, 4FR, 4FS, 4FT, 4FU, 4FV, 4FW, 4FX, 4FY, 4FZ, 4GA, 4GB, 4GC, 4GD, 4GE, 4GF, 4GG, 4GH, 4GI, 4GJ, 4GK, 4GL, 4GM, 4GN, 4GO, 4GP, 4GQ, 4GR, 4GS, 4GT, 4GU, 4GV, 4GW, 4GX, 4GY, 4GZ, 4HA, 4HB, 4HC, 4HD, 4HE, 4HF, 4HG, 4HH, 4HI, 4HJ, 4HK, 4HL, 4HM, 4HN, 4HO, 4HP, 4HQ, 4HR, 4HS, 4HT, 4HU, 4HV, 4HW, 4HX, 4HY, 4HZ, 4IA, 4IB, 4IC, 4ID, 4IE, 4IF, 4IG, 4IH, 4II, 4IJ, 4IK, 4IL, 4IM, 4IN, 4IO, 4IP, 4IQ, 4IR, 4IS, 4IT, 4IU, 4IV, 4IW, 4IX, 4IY, 4IZ, 4JA, 4JB, 4JC, 4JD, 4JE, 4JF, 4JG, 4JH, 4JI, 4JJ, 4JK, 4JL, 4JM, 4JN, 4JO, 4JP, 4JQ, 4JR, 4JS, 4JT, 4JU, 4JV, 4JW, 4JX, 4JY, 4JZ, 4KA, 4KB, 4KC, 4KD, 4KE, 4KF, 4KG, 4KH, 4KI, 4KJ, 4KK, 4KL, 4KM, 4KN, 4KO, 4KP, 4KQ, 4KR, 4KS, 4KT, 4KU, 4KV, 4KW, 4KX, 4KY, 4KZ, 4LA, 4LB, 4LC, 4LD, 4LE, 4LF, 4LG, 4LH, 4LI, 4LJ, 4LK, 4LM, 4LN, 4LO, 4LP, 4LQ, 4LR, 4LS, 4LT, 4LU, 4LV, 4LW, 4LX, 4LY, 4LZ, 4MA, 4MB, 4MC, 4MD, 4ME, 4MF, 4MG, 4MH, 4MI, 4MJ, 4MK, 4ML, 4MM, 4MN, 4MO, 4MP, 4MQ, 4MR, 4MS, 4MT, 4MU, 4MV, 4MW, 4MX, 4MY, 4MZ, 4NA, 4NB, 4NC, 4ND, 4NE, 4NF, 4NG, 4NH, 4NI, 4NJ, 4NK, 4NL, 4NM, 4NN, 4NO, 4NP, 4NQ, 4NR, 4NS, 4NT, 4NU, 4NV, 4NW, 4NX, 4NY, 4NZ, 4OA, 4OB, 4OC, 4OD, 4OE, 4OF, 4OG, 4OH, 4OI, 4OJ, 4OK, 4OL, 4OM, 4ON, 4OO, 4OP, 4OQ, 4OR, 4OS, 4OT, 4OU, 4OV, 4OW, 4OX, 4OY, 4OZ, 4PA, 4PB, 4PC, 4PD, 4PE, 4PF, 4PG, 4PH, 4PI, 4PJ, 4PK, 4PL, 4PM, 4PN, 4PO, 4PP, 4PQ, 4PR, 4PS, 4PT, 4PU, 4PV, 4PW, 4PX, 4PY, 4PZ, 4QA, 4QB, 4QC, 4QD, 4QE, 4QF, 4QG, 4QH, 4QI, 4QJ, 4QK, 4QL, 4QM, 4QN, 4QO, 4QP, 4QQ, 4QR, 4QS, 4QT, 4QU, 4QV, 4QW, 4QX, 4QY, 4QZ, 4RA, 4RB, 4RC, 4RD, 4RE, 4RF, 4RG, 4RH, 4RI, 4RJ, 4RK, 4RL, 4RM, 4RN, 4RO, 4RP, 4RQ, 4RR, 4RS, 4RT, 4RU, 4RV, 4RW, 4RX, 4RY, 4RZ, 4SA, 4SB, 4SC, 4SD, 4SE, 4SF, 4SG, 4SH, 4SI, 4SJ, 4SK, 4SL, 4SM, 4SN, 4SO, 4SP, 4SQ, 4SR, 4SS, 4ST, 4SU, 4SV, 4SW, 4SX, 4SY, 4SZ, 4TA, 4TB, 4TC, 4TD, 4TE, 4TF, 4TG, 4TH, 4TI, 4TJ, 4TK, 4TL, 4TM, 4TN, 4TO, 4TP, 4TQ, 4TR, 4TS, 4TT, 4TU, 4TV, 4TW, 4TX, 4TY, 4TZ, 4UA, 4UB, 4UC, 4UD, 4UE, 4UF, 4UG, 4UH, 4UI, 4UJ, 4UK, 4UL, 4UM, 4UN, 4UO, 4UP, 4UQ, 4UR, 4US, 4UT, 4UU, 4UV, 4UW, 4UX, 4UY, 4UZ, 4VA, 4VB, 4VC, 4VD, 4VE, 4VF, 4VG, 4VH, 4VI, 4VJ, 4VK, 4VL, 4VM, 4VN, 4VO, 4VP, 4VQ, 4VR, 4VS, 4VT, 4VU, 4VV, 4VW, 4VX, 4VY, 4VZ, 4WA, 4WB, 4WC, 4WD, 4WE, 4WF, 4WG, 4WH, 4WI, 4WJ, 4WK, 4WL, 4WM, 4WN, 4WO, 4WP, 4WQ, 4WR, 4WS, 4WT, 4WU, 4WV, 4WW, 4WX, 4WY, 4WZ, 4XA, 4XB, 4XC, 4XD, 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4EW, 4EX, 4EY, 4EZ, 4FA, 4FB, 4FC, 4FD, 4FE, 4FF, 4FG, 4FH, 4FI, 4FJ, 4FK, 4FL, 4FM, 4FN, 4FO, 4FP, 4FQ, 4FR, 4FS, 4FT, 4FU, 4FV, 4FW, 4FX, 4FY, 4FZ, 4GA, 4GB, 4GC, 4GD, 4GE, 4GF, 4GG, 4GH, 4GI, 4GJ, 4GK, 4GL, 4GM, 4GN, 4GO, 4GP, 4GQ, 4GR, 4GS, 4GT, 4GU, 4GV, 4GW, 4GX, 4GY, 4GZ, 4HA, 4HB, 4HC, 4HD, 4HE, 4HF, 4HG, 4HH, 4HI, 4HJ, 4HK, 4HL, 4HM, 4HN, 4HO, 4HP, 4HQ, 4HR, 4HS, 4HT, 4HU, 4HV, 4HW, 4HX, 4HY, 4HZ, 4IA, 4IB, 4IC, 4ID, 4IE, 4IF, 4IG, 4IH, 4II, 4IJ, 4IK, 4IL, 4IM, 4IN, 4IO, 4IP, 4IQ, 4IR, 4IS, 4IT, 4IU, 4IV, 4IW, 4IX, 4IY, 4IZ, 4JA, 4JB, 4JC, 4JD, 4JE, 4JF, 4JG, 4JH, 4JI, 4JJ, 4JK, 4JL, 4JM, 4JN, 4JO, 4JP, 4JQ, 4JR, 4JS, 4JT, 4JU, 4JV, 4JW, 4JX, 4JY, 4JZ, 4KA, 4KB, 4KC, 4KD, 4KE, 4KF, 4KG, 4KH, 4KI, 4KJ, 4KK, 4KL, 4KM, 4KN, 4KO, 4KP, 4KQ, 4KR, 4KS, 4KT, 4KU, 4KV, 4KW, 4KX, 4KY, 4KZ, 4LA, 4LB, 4LC, 4LD, 4LE, 4LF, 4LG, 4LH, 4LI, 4LJ, 4LK, 4LM, 4LN, 4LO, 4LP, 4LQ, 4LR, 4LS, 4LT, 4LU, 4LV, 4LW, 4LX, 4LY, 4LZ, 4MA, 4MB, 4MC, 4MD, 4ME, 4MF, 4MG, 4MH, 4MI, 4MJ, 4MK, 4ML, 4MM, 4MN, 4MO, 4MP, 4MQ, 4MR, 4MS, 4MT, 4MU, 4MV, 4MW, 4MX, 4MY, 4MZ, 4NA, 4NB, 4NC, 4ND, 4NE, 4NF, 4NG, 4NH, 4NI, 4NJ, 4NK, 4NL, 4NM, 4NN, 4NO, 4NP, 4NQ, 4NR, 4NS, 4NT, 4NU, 4NV, 4NW, 4NX, 4NY, 4NZ, 4OA, 4OB, 4OC, 4OD, 4OE, 4OF, 4OG, 4OH, 4OI, 4OJ, 4OK, 4OL, 4OM, 4ON, 4OO, 4OP, 4OQ, 4OR, 4OS, 4OT, 4OU, 4OV, 4OW, 4OX, 4OY, 4OZ, 4PA, 4PB, 4PC, 4PD, 4PE, 4PF, 4PG, 4PH, 4PI, 4PJ, 4PK, 4PL, 4PM, 4PN, 4PO, 4PP, 4PQ, 4PR, 4PS, 4PT, 4PU, 4PV, 4PW, 4PX, 4PY, 4PZ, 4QA, 4QB, 4QC, 4QD, 4QE, 4QF, 4QG, 4QH, 4QI, 4QJ, 4QK

WESTPORT RESERVE PHASE 4 LYING IN SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA



CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	CHORD
C8	89.77'	60.00'	85°16'18"	88.87'
C9	88.73'	60.00'	84°43'42"	88.86'
C21	141.34'	85.00'	85°16'18"	125.81'
C22	125.70'	85.00'	84°43'42"	114.55'
C52	21.61'	85.00'	134°31'01"	21.55'
C53	38.18'	85.00'	25°44'30"	37.86'
C54	38.18'	85.00'	25°44'30"	37.86'
C55	38.18'	85.00'	25°44'30"	37.86'
C56	5.19'	85.00'	63°29'46"	5.18'
C57	17.28'	85.00'	11°28'44"	17.25'
C58	36.56'	85.00'	24°38'30"	36.28'
C59	38.18'	85.00'	25°44'30"	37.86'
C60	33.68'	85.00'	22°42'18"	33.46'
C64	46.42'	35.00'	75°59'24"	43.09'
C65	58.20'	35.00'	85°16'18"	51.72'
C66	51.76'	35.00'	84°43'42"	47.17'
C67	15.68'	175.00'	05°07'40"	15.66'

SHEET INDEX	
SHEET 1:	COVER SHEET, NOTES, LEGEND, ABBREVIATIONS
SHEET 2:	GENERAL BOUNDARY & KEY MAP
SHEET 3-6:	DETAIL SHEET

Dewberry
131 WEST KALEY STREET
ORLANDO, FLORIDA 32808
PHONE: 321.354.0000 FAX: 407.648.3104
WWW.DEWBERRY.COM
CERTIFICATE OF AUTHORIZATION NO. LE 8011

GENERAL NOTES:

1. DOCUMENTATION:
 (P) - DENOTES PERMANENT REFERENCE MONUMENT FOUND STAMPED AS NOTED.
 (M) - DENOTES PERMANENT REFERENCE MONUMENT SET 4"X4" CONCRETE MONUMENT STAMPED PER LB 8011.
 (C) - DENOTES PERMANENT CONTROL POINT SET NAIL AND DICK STAMPED PER LB 8011.
2. ALL LINES INTERSECTING CURVES ARE RADIAL UNLESS OTHERWISE NOTED.
 (PI) - DENOTES A LINE RADIAL RELATIVE TO ADJACENT CURVE.
 (NR) - DENOTES A LINE NOT RADIAL RELATIVE TO ADJACENT CURVE.
3. DIMENSIONS SHOWN ARE IN FEET AND DECIMALS THEREOF.
4. ACCURACY:
 - THE BOUNDARY LINEAR ERROR OF CLOSURE DOES NOT EXCEED 1:10,000.
 - THE BOUNDARY ANGULAR ERROR OF CLOSURE DOES NOT EXCEED 5 SECONDS MULTIPLIED BY THE SQUARE ROOT OF THE NUMBER OF ANGLES TURNED.
5. BOUNDARY SHOWN HEREON ARE ASSUMED AND BASED ON THE SOUTHEAST CORNER OF THE SE 1/4 OF SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA, HAVING A BEARING OF S89°24'11"W.
6. NOTE: ALL MEASUREMENTS REFER TO HORIZONTAL PLANE IN ACCORDANCE WITH THE DEFINITION OF THE U.S. SURVEY FOOT OR METER ADOPTED BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY. ALL MEASUREMENTS SHALL USE THE 39.37/12-3.603333333 EQUATION FOR CONVERSION FROM A U.S. FOOT TO METERS.
7. THIS PLAT IS AS SHOWN IN ITS ENTIRETY WITHIN THE OFFICIAL RECORDS OF THE CITY OF PORT ORANGE, FLORIDA. THE CITY OF PORT ORANGE, FLORIDA, IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS PLAT.
8. THIS PLAT IS SUBJECT TO ALL EASEMENTS OF RECORD AND NOTATIONS OF EASEMENTS INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITY, ACCESS, AND OTHER EASEMENTS OF RECORD. THE CITY OF PORT ORANGE, FLORIDA, IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS PLAT.
9. UTILITIES SHOWN ARE NOT LIMITED TO SANITARY SEWER, POTABLE WATER, STORM DRAINAGE, ELECTRIC, TELEPHONE, CABLE TELEVISION, SECURITY, AND OTHER UTILITIES.
10. ALL PLATTED UTILITY EASEMENTS, EXCLUSIVE OF PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS OR OTHER UTILITY COMPANY, SHALL BE CONSIDERED TO BE A PART OF THE PUBLIC RECORDS OF THE CITY OF PORT ORANGE, FLORIDA. THE CITY OF PORT ORANGE, FLORIDA, IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS PLAT.
11. SINGLE FAMILY RESIDENTIAL BUILDING SETBACK REQUIREMENTS:
 FRONT = 25 FEET
 REAR = 20 FEET
 SIDE = 10 FEET < 65' = 5 FEET
 SIDE = 10 FEET > 65' = 7.5 FEET
 SIDE CORNER = 20 FEET
12. SINGLE FAMILY RESIDENTIAL LOT COVERAGE REQUIREMENTS:
 MINIMUM OPEN SPACE AREA = 4000
 MINIMUM BUILDING COVERAGE = 50%
 MAXIMUM BUILDING HEIGHT = 36 FEET
13. THE OPEN SPACE AREAS TO BE CONVEYED BY SEPARATE INSTRUMENT (RECORDED CONCURRENT WITH THIS PLAT) TO THE HOA SHALL BE SUBJECT TO THE HOA'S DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (CC&R) AND THE HOA'S BYLAWS.
14. THE HOA'S DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (CC&R) AND THE HOA'S BYLAWS ARE ATTACHED TO THIS PLAT AS EXHIBITS A AND B. THE HOA'S DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (CC&R) AND THE HOA'S BYLAWS ARE ATTACHED TO THIS PLAT AS EXHIBITS A AND B. THE HOA'S DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (CC&R) AND THE HOA'S BYLAWS ARE ATTACHED TO THIS PLAT AS EXHIBITS A AND B.
15. RETENTION AREAS AND OPEN SPACE AREAS ARE GRANTED AS EASEMENTS TO THE CITY OF PORT ORANGE WITH RIGHTS OF ACCESS, EGRESS, AND EGRESS, TOGETHER WITH THE RIGHT TO HARVEST EXCESS STORM WATER / GROUND WATER AS DEMAND APPROPRIATE IN THE DISCRETION OF THE CITY.
16. THE HOA SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING AND IRRIGATION IN OPEN SPACE AREAS (SUBJECT TO NOTE 22) BELONG WITHIN THE HOA'S DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (CC&R) AND THE HOA'S BYLAWS.
17. LOTS 242-248 AND TRACTS 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

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PHASE 4 LEGAL DESCRIPTION:

A PORTION OF SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT THE OCCUPIED SOUTHWEST CORNER OF THE SOUTHWEST 1/4 OF SECTION 13, TOWNSHIP 16 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA, THENCE RUN S81°02'54"E A DISTANCE OF 180.22 FEET TO THE SOUTHWEST CORNER OF SAID SECTION 14, THENCE S89°02'28"W ALONG THE OCCUPIED NORTHERLY LINE OF TOMOKA FARMS, AS RECORDED IN MAP BOOK 6, PAGE 192 AND RE-RECORDED IN MAP BOOK 22, PAGES 156 AND 159, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, AND ITS EASTERLY EXTENSION THEREOF, A DISTANCE OF 2997.18 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF TOMOKA FARMS ROAD, PER ROAD BOOK 1, PAGE 28, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, THENCE RUN THE FOLLOWING FOUR COURSES ALONG SAID EASTERLY RIGHT-OF-WAY LINE: N65°02'23"W A DISTANCE OF 133.38 FEET; N10°02'44"W A DISTANCE OF 222.54 FEET; N06°44'06"W A DISTANCE OF 224.69 FEET; N05°10'10"W A DISTANCE OF 36.00 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF THE 50 FOOT UNNAMED, FLATTED ROAD DIVIDING BLOCKS 1 AND 2 OF PLAT NUMBER ONE OF CRAIG FARMS, AS RECORDED IN MAP BOOK 13, PAGE 89, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, THENCE N89°28'15"E ALONG SAID SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 49.08 FEET TO A POINT ON A LINE LYING 100 FEET EAST OF AND PARALLEL WITH THE CENTERLINE OF SAID TOMOKA FARMS ROAD, THENCE N05°10'10"W ALONG SAID PARALLEL LINE, A DISTANCE OF 50.20 FEET TO THE NORTH RIGHT-OF-WAY LINE OF SAID UNNAMED ROAD, THENCE S89°28'15"E ALONG SAID NORTH RIGHT-OF-WAY LINE, A DISTANCE OF 48.80 FEET TO THE AFORESAID EASTERLY RIGHT-OF-WAY LINE OF TOMOKA FARMS ROAD, THENCE RUN THE FOLLOWING TWO COURSES ALONG SAID EASTERLY RIGHT-OF-WAY LINE: N05°10'10"W A DISTANCE OF 115.84 FEET; THENCE N05°29'44"W A DISTANCE OF 406.92 FEET FOR A POINT OF BEGINNING, THENCE CONTINUE ALONG SAID EASTERLY RIGHT-OF-WAY LINE THE FOLLOWING THREE COURSES: N05°29'44"W A DISTANCE OF 73.08 FEET; N05°08'09"W A DISTANCE OF 406.00 FEET; N02°13'07"W A DISTANCE OF 201.86 FEET TO THE SOUTH LINE OF THE UNNAMED 50 FOOT ROAD RIGHT-OF-WAY BETWEEN BLOCKS 2 AND 1 OF SAID PLAT NUMBER ONE OF CRAIG FARMS, THENCE N89°28'15"E ALONG SAID SOUTH LINE, A DISTANCE OF 1161.15 FEET; THENCE S02°32'41"E A DISTANCE OF 374.00 FEET; THENCE N89°28'15"E A DISTANCE OF 169.54 FEET; THENCE S07°32'41"E A DISTANCE OF 608.59 FEET; THENCE N89°28'15"E A DISTANCE OF 202.10 FEET TO A POINT OF CURVATURE ON A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 2165.54 FEET, A CHORD BEARING OF S87°23'37"W, A CHORD DISTANCE OF 222.08 FEET, RUN THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 0°52'38", A DISTANCE OF 222.18 FEET; THENCE S87°23'37"W A DISTANCE OF 390.88 FEET; THENCE N06°10'08"W A DISTANCE OF 18.91 FEET; THENCE N03°18'01"W A DISTANCE OF 64.98 FEET; THENCE N02°08'39"W A DISTANCE OF 68.00 FEET; THENCE N11°18'44"W A DISTANCE OF 56.45 FEET; THENCE N02°13'07"W A DISTANCE OF 60.84 FEET; THENCE N89°28'15"E A DISTANCE OF 36.28 FEET; THENCE N02°14'34"W A DISTANCE OF 35.00 FEET; THENCE S85°34'09"W A DISTANCE OF 35.42 FEET TO THE POINT OF BEGINNING.

ALL SAID LANDS SITUATE, LYING AND BEING IN VOLUSIA COUNTY, FLORIDA.
MORE PARTICULARLY DESCRIBED AS:
A PORTION OF SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
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CONTAINS 1,120,892 SQUARE FEET OR 25.732 ACRES MORE OR LESS.

RECEIVED
7-20-18
CITY OF PORT ORANGE
Community Development

REVISED

WESTPORT RESERVE (PHASE 4)

City of Port Orange, Florida FINAL SITE ENGINEERING PLANS May 2018

Parcel ID. Number
6214-01-01-0014

Developer / Applicant / Owner

WESTPORT RESERVE, LLC
370 CENTERPONTE CIRCLE, SUITE 1136
ALTA MONTE SPRINGS, FLORIDA 32701
CONTACT: M. SCOTT STEARNS, P.E., LEED AP
PHONE: 407-831-9580

Civil Engineer

DEWBERRY ENGINEERS, INC.
800 NORTH MAGNOLIA AVE., SUITE 1000
ORLANDO, FLORIDA 32803
CONTACT: DANIELLE VAN DE LOO, P.E.
PHONE: (321) 354-9711

Survey-Boundary & Topographic

DEWBERRY ENGINEERS, INC.
800 NORTH MAGNOLIA AVE., SUITE 1000
ORLANDO, FLORIDA 32803
CONTACT: BILL DONLEY
PHONE: (321) 354-9834

Geotechnical Engineer

UNIVERSAL ENGINEERING SCIENCES
911 BEVILLE ROAD SUITE 3
SOUTH DAYTONA, FL 32119
CONTACT: BRIAN C. POHL, P.E.
PHONE: (386) 756-1105

Traffic Engineer

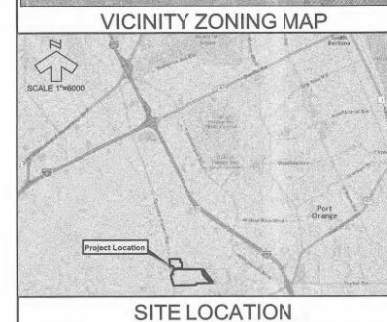
TRAFFIC ENGINEERING DATA SOLUTIONS, INC.
80 SPRING VISTA DRIVE
DEBARY, FL 32713
CONTACT: CHRIS J. WALSH, P.E.
PHONE: (386) 753-0558

Landscape Architect

DEWBERRY ENGINEERS, INC.
800 NORTH MAGNOLIA AVE., SUITE 1000
ORLANDO, FLORIDA 32803
CONTACT: MICHAEL URCHUK, L.A.
PHONE: (321) 354-9744

Environmental

DEWBERRY ENGINEERS, INC.
800 NORTH MAGNOLIA AVE., SUITE 1000
ORLANDO, FLORIDA 32803
CONTACT: JASON PERRYMAN
PHONE: (321) 354-9640



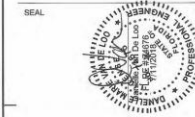
THIS IS TO CERTIFY THAT THE ROADWAY CONSTRUCTION PLANS AND SPECIFICATIONS AS CONTAINED HEREIN WERE DESIGNED TO APPLICABLE STANDARDS AS SET FORTH IN THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS" AS PREPARED BY FLORIDA DEPARTMENT OF TRANSPORTATION.



Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 1000
ORLANDO, FL 32803
PHONE: 407.842.8200
ENGINEERING BUSINESS 4754

WESTPORT RESERVE
(PHASE 4)

CITY OF PORT ORANGE, FLORIDA



REVISIONS				
No.	DATE	BY	DESCRIPTION	
1	1-10-18	KJK	REV PER CITY	
2	2-20-17	KJK	REV LAYOUT & GRADING	
3	11-3-17	KJK	REV PER CITY	
4	10-2-17	KJK	REV PER CITY	
5	1-14-17	KJK	REV PER CITY	
6	1-21-17	KJK	REV PER 3A	
7				
8				

PROJECT #	PROJECT #0063136
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

TITLE

COVER
SHEET

PROJECT: C01 Final Phase 4
SHEET NO.

C01

Wd I of II

1 2

GENERAL

1. UNLESS OTHERWISE SPECIFIED, ALL CONSTRUCTION SHALL BE PERFORMED CONSISTENT WITH THE MOST RECENT PUBLICATION OF THE FOLLOWING CODES, STANDARDS AND SPECIFICATIONS AS WELL AS THE LATEST EDITIONS OF ALL OTHER APPLICABLE SPECIFICATIONS & STANDARDS:
- ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD)
 - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP)
 - FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)
 - AMERICANS WITH DISABILITIES ACT (ADA) BY U.S. DEPARTMENT OF JUSTICE
 - MANUAL, DRAINAGE DESIGN CRITERIA (MDC) ISSUED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION
2. ALL CONSTRUCTION IS TO BE GOVERNED BY ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, BUILDING AND SAFETY CODES.
3. IN THE EVENT THAT ANY STANDARDS OR SPECIFICATIONS AS DESCRIBED HEREIN ARE IN CONFLICT WITH EACH OTHER, OR THAT SHOW IN THE PLANS, THE MORE STRINGENT CRITERIA WILL APPLY. CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY AND IN WRITING SHOULD THE MORE STRINGENT CRITERIA BE UNLESS, FOR ENGINEERS' INTERPRETATION OF THE MOST STRINGENT CRITERIA TO BE USED.
4. THESE PLANS WERE BASED ON THE BOUNDARY AND TOPOGRAPHIC SURVEY BY DEWBERRY INC.

ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) DERIVED FROM NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION 1, 80'±, BEING A ROUND CONCRETE MONUMENT WITH SURVEY DISK STAMPED 1, 805.004', LOCATED 10.0 FEET NORTH OF THE APPROXIMATE CENTERLINE OF SHULA ROAD, 342 FEET NORTH-WEST OF A FIRE HYDRANT, 2.0 FEET NORTH-NORTHWEST OF A POWER POLE 4.5 FEET SOUTH OF A POWER POLE, 9.0 FEET WEST-SOUTHWEST OF THE CENTERLINE OF COUNTY ROAD 416, 2.4 FEET EAST OF A HOV-WEAVE FENCE AND 2.7 FEET EAST OF A CARSON'S WITNESS POST, IN SECTION 11, TOWNSHIP 18 SOUTH, RANGE 32 EAST, VOLusia COUNTY, FLORIDA, HAVING AN ELEVATION OF 23.79 FEET.

THE CORPUS ELEVATION DATUM CONVERSION FROM NAVD 88 TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29) +1.52 FEET.

THE PLANTATION DEVELOPMENT ELEVATION DATUM CONVERSION FROM NAVD 88 TO NGVD 29 +1.53 FEET.

THESE PLANS WERE BASED ON THE (GEOGRAPHICAL REPORTS PROJECT NUMBER 0430, 800189.0000 BY UNIVERSAL ENGINEERING SCIENCES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE A COPY OF THE REPORT(S) FROM THE GEOGRAPHICAL ENGINEER. FAMILIARIZE THEMSELVES WITH THE CONDITIONS AS DESCRIBED IN THE REPORT(S), AND COMPLY WITH ALL RECOMMENDATIONS MADE IN THE REPORT(S). SPECIFICALLY FOR THIS PROJECT, THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF ALL SUPPLEMENTAL REPORTS FOR THIS PROJECT FROM THE OWNER AND TO FOLLOW THE SUPPLEMENTAL REPORTS' RECOMMENDATIONS.

7. GEOGRAPHICAL RECOMMENDATIONS OR RECOMMENDATIONS AS PROVIDED IN SUPPLEMENTAL REPORTS BY OTHERS ARE NOT THE RESPONSIBILITY OF DEWBERRY INC. OR THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION OF THE PLANS, ANY CONFLICT BETWEEN INFORMATION CONTAINED IN THE REPORT(S) AND THESE PLANS SHALL BE REPORTED TO THE ENGINEER AND OWNER IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION OF THE PLANS, ANY CONFLICT BETWEEN INFORMATION CONTAINED IN THE REPORT(S) AND THESE PLANS SHALL BE REPORTED TO THE ENGINEER AND OWNER IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION OF THE PLANS, ANY CONFLICT BETWEEN INFORMATION CONTAINED IN THE REPORT(S) AND THESE PLANS SHALL BE REPORTED TO THE ENGINEER AND OWNER IMMEDIATELY.

D. THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES OF PERMITS FOR ALL ACTIVITIES HAVING JURISDICTION, SUCH AS GOVERNMENTAL, REGULATORY OR LOCAL ENTITIES. THE CONTRACTOR SHALL BE EXPECTED TO REVIEW AND ABIDE BY ALL THE TERMS, CONDITIONS AND REQUIREMENTS OF ALL SUCH PERMITS. A COPY OF THE PERMITS SHALL BE KEPT ON THE CONSTRUCTION SITE AND MADE AVAILABLE FOR REVIEW AT ALL TIMES.

9. THE STANDARDS AND SPECIFICATIONS AS LISTED HEREIN THE SECTECHNICAL REPORT(S), BOUNDARY AND TOPOGRAPHIC SURVEY(S), SWPPP AND REQUIREMENTS ARE HEREBY INCORPORATED ALONG WITH THE PLANS BY DEWBERRY INC. AS THE COMPLETE "SITE CIVIL CONSTRUCTION DOCUMENTS".

10. IF ITEMS APPEARING TO BE HISTORICAL OR ARCHEOLOGICAL ARTIFACTS ARE DISCOVERED AT ANY TIME DURING CONSTRUCTION WITHIN THE PROJECT LIMITS, IMMEDIATE NOTIFICATION SHALL BE PROVIDED TO THE OWNER, THE ENGINEER, AND THE BUREAU OF HISTORICAL PRESERVATION, DIVISION OF HISTORICAL RESOURCES, 615 G. BRUNSON ST., TALLAHASSEE, FLORIDA 32309-0250.

CONTRACTOR RESPONSIBILITIES

1. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE, INCLUDING ALL SURFACE AND SUBSURFACE CONDITIONS, THE WORK REQUIRED AND ALL OTHER CONDITIONS THAT MAY AFFECT THE SUCCESSFUL COMPLETION OF THE JOB PRIOR TO COMMENCEMENT OF WORK.
2. THE LOCATION OF EXISTING UTILITY SERVICES, FACILITIES, AND STRUCTURAL FEATURES SHOWN ON THESE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER DOES NOT GUARANTEE THE LOCATION OR DEPTH OF ANY EXISTING UTILITY SERVICES. ANY INACCURACY OR OMISSION IN SUCH INFORMATION SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PROTECT THE EXISTING FEATURES FROM DAMAGE OR UNDESIRABLE INTERFERENCE OR SERVICE. SHOULD A DISCREPANCY ARISE BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS WHICH WOULD AFFECT THE EXECUTION OF THESE PLANS, THE CONTRACTOR SHALL STOP ALL CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY.
3. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND PERMIT CONDITIONS BEARING ON THE CONDUCT OF THE WORK, AS DRAWN AND SPECIFIED. IF THE CONTRACTOR OBSERVES THAT DRAWINGS AND SPECIFICATIONS ARE AT VARIANCE THEREWITH, HE SHALL PROMPTLY NOTIFY THE ENGINEER, IN WRITING, AND ANY NECESSARY CHANGES SHALL BE ADJUSTED, AS PROVIDED IN THE AGREEMENT FOR CHANGES IN THE WORK.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE FEATURES, RETENTION AND DETENTION FACILITIES UTILS, THE DISTURBED AREA SHALL BE RETURNED TO EQUAL OR BETTER CONDITION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER AND THE ENGINEER FOR THE ACTS AND OMISSIONS OF CONTRACTORS' EMPLOYEES AND THEIR AGENTS AND EMPLOYEES AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.
6. ALL WORK AND FURNISHED MATERIAL SHALL CONFORM WITH THE LINES, GRADES, GRADING SECTIONS, CROSS SECTIONS, DIMENSIONS, MATERIAL REQUIREMENTS AND TESTING REQUIREMENTS THAT ARE SPECIFIED IN THE CONTRACT, PLANS, DETAIL OR SPECIFICATIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL NECESSARY ARRANGEMENTS WITH GOVERNMENTAL DEPARTMENTS, PUBLIC UTILITIES, PUBLIC CARRIERS, SERVICE COMPANIES, AND CORPORATIONS OWNING OR CONTROLLING ROADWAYS, RAILWAYS, WATER, SEWER, GAS, ELECTRICAL, TELEPHONE, AND TELEGRAPH FACILITIES, SUCH AS PAYMENTS, TRACKS, PIPES, WIRES, CABLES, CONDUITS, HOLES, JOISTS, OR OTHER SIMILAR FACILITIES, INCLUDING INCIDENTAL STRUCTURES CONNECTED THEREWITH THAT ARE ENCOUNTERED IN THE WORK IN ORDER THAT SUCH ITEMS MAY BE PROPERLY SUPPORTED, PROTECTED OR LOCATED.
8. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL BARRICADES, LIGHTS, WARNING SIGNS, AND PAVEMENT MARKINGS FOR HAZARDS AND THE CONTROL OF TRAFFIC THROUGHOUT THE CONSTRUCTION ZONE IN CONFORMANCE WITH THE ALL AGENCIES HAVING JURISDICTION STANDARDS TO EFFECTIVELY PREVENT ACCIDENTS AT ALL LOCATIONS WHERE CONSTRUCTION CAUSES AN OBSTRUCTION TO THE NORMAL FLOW OF TRAFFIC OR CREATES A HAZARD IN ANY WAY TO THE PUBLIC.

B. IN THE EVENT THE CONTRACTOR DISCOVERS ANY ERRORS OR OMISSIONS IN THE PLANS HE SHALL IMMEDIATELY NOTIFY THE OWNER OR OWNER'S AGENT.

IN THE EVENT THE CONTRACTOR COMPLY WITH ALL LEGAL ROAD RESTRICTIONS IN THE HAULING OF MATERIALS ON PUBLIC ROADS BEYOND THE LIMITS OF THE WORK, A SPECIAL PERMIT WILL NOT RELIEVE THE CONTRACTOR OF LIABILITY FOR ANY DAMAGE THAT MAY RESULT FROM THE MOVING OF MATERIALS AND EQUIPMENT THEREON.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SURVEY MONUMENTATION, SUCH AS THE PRESERVATION OF ALL PERMANENT REFERENCE MONUMENTS, PERMANENT CONTROL POINTS, PERMANENT BENCH MARKS, PROPERTY CORNERS, POINTS OR MARKERS, AND ALL APPLICABLE STATE LAWS AND REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH. THE CONTRACTOR SHALL PROVIDE PROPER FACILITIES FOR SUCH ACCESS AND INSPECTIONS.

12. THE OWNER, OWNER'S REPRESENTATIVES AND INSPECTORS OF APPLICABLE GOVERNMENT AGENCIES HAVING JURISDICTION, SHALL AT ALL TIMES HAVE ACCESS TO THE WORK AREA IN ITS PREPARATION OR PROGRESS. THE CONTRACTOR SHALL PROVIDE PROPER FACILITIES FOR SUCH ACCESS AND INSPECTIONS.

13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO TAKE ALL REASONABLE AND PRUDENT PRECAUTIONS TO INSURE THAT ALL COMPLETED WORK, MATERIALS AND EQUIPMENT ARE PROTECTED FROM UNAUTHORIZED ACCESS OR USE. SUCH PRECAUTIONS MAY INCLUDE INSTALLATION OF SIGNS, FENCES, OR POSTING OF SECURITY GUARDS.

14. CONTRACTOR SHALL, AT ALL TIMES, UTILIZE ALL NORMALLY ACCEPTED AND REASONABLY EXPECTED SAFETY PRACTICES AND COMPLY WITH ALL APPLICABLE STATE LAWS AND REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH.

15. ADEQUATE TRAFFIC CONTROL, SIGNAGE, BARRICADES AND FLUWMAN SERVICES SHALL BE FURNISHED AND MAINTAINED BY THE CONTRACTOR AT ALL POINTS WHERE CONSTRUCTION EQUIPMENT ENGAGED IN WORK ENTERS ONTO OR CROSSES FUNCTIONING TRAFFIC-CARRYING ROADWAYS.

A. THOSE PARTS OF WORK IN PLACE THAT ARE SUBJECT TO DAMAGE BECAUSE OF OPERATIONS BEING CARRIED ON ADJACENT THERETO SHALL BE COVERED, SHORDED UP OR SUBSTANTIALLY ENCLOSED WITH ADEQUATE PROTECTION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

16. THE CONTRACTOR SHALL COMPLY IN EVERY RESPECT WITH THE FEDERAL OCCUPATIONAL HEALTH AND SAFETY ACT OF 1970 AND ALL RULES AND REGULATIONS NOW OR HEREAFTER IN EFFECT UNDER SAID ACT, AND THE CONTRACTOR FURTHER AGREES TO COMPLY WITH ANY AND ALL APPLICABLE STATE LAWS AND REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH.

17. THE CONTRACTOR SHALL PROTECT AND KEEP OWNER (INCLUDING THEIR AGENTS AND EMPLOYEES) FREE AND HARMLESS FROM ANY AND ALL LIABILITY, PUBLIC OR PRIVATE, PENALTIES, CONTRACTUAL OR OTHERWISE, LOSSES, DAMAGES, COSTS, ATTORNEYS' FEES, EXPENSES, CAUSES OF ACTION, CLAIMS OR JUDGMENTS RESULTING FROM THE FEDERAL OCCUPATIONAL HEALTH AND SAFETY ACT OF 1970 AS AMENDED OR ANY RULE OR REGULATION PROMULGATED THEREUNDER OR OF ANY STATE LAWS OR REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT AND CONTRACTOR SHALL INDEMNIFY OWNER FROM ANY SUCH CLAIMS, PENALTIES, SUITS OR ACTIONS, PUBLIC OR PRIVATE, PENALTIES, CONTRACTUAL OR OTHERWISE, LOSSES, DAMAGES, COSTS, ATTORNEYS' FEES, EXPENSES, CAUSES OF ACTION, CLAIMS OR JUDGMENTS, INCLUDING ATTORNEYS' FEES AND INCURRED BY OR ON BEHALF OF OWNER, JOINTLY OR SEVERALLY, AND THEIR AGENTS AND EMPLOYEES. THE CONTRACTOR FURTHER AGREES, IN THE EVENT OF A CLAIMED VIOLATION OF ANY FEDERAL OR STATE SAFETY AND HEALTH LAW OR REGULATION ARISING OUT OF OR IN ANY WAY

CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT, OWNER MAY IMMEDIATELY TAKE WHATEVER ACTIONS DEEMED NECESSARY BY OWNER TO REMEDY THE CLAIMED VIOLATION, AND ANY ALL COSTS OR EXPENSES PAID OR INCURRED BY OWNER IN TAKING SUCH ACTION SHALL BE BORNE BY CONTRACTOR, AND CONTRACTOR AGREES TO PROTECT, HOLD HARMLESS AND INDEMNIFY OWNER AGAINST ANY AND ALL SUCH COSTS OR EXPENSES.

19. THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE ALL REASONABLE PROTECTION TO PREVENT DAMAGE, INJURY OR LOSS TO:

- A. ALL EMPLOYEES ON THE WORK SITE AND ALL OTHER PERSONS WHO MAY BE AFFECTED THEREBY;
- B. THE WORK AND ALL MATERIALS AND EQUIPMENT TO BE INCORPORATED THEREIN, WHETHER IN STORAGE ON OR OFF THE SITE, UNDER THE CARE, CUSTODY OR CONTROL OF THE CONTRACTOR OR ANY OF ITS SUBCONTRACTORS;
- C. OTHER PROPERTY AT THE SITE OR ADJACENT THERETO, INCLUDING TREES, SHRUBS, LAWNS, WALKS, PAVEMENTS, ROADWAY, STRUCTURES AND UTILITIES NOT DESIGNATED FOR DEMOLITION IN THE COURSE OF CONSTRUCTION;

20. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND AMPL. ORDERS OF ANY LOCAL, STATE OR OTHER AUTHORITY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY OR FOR THEIR PROTECTION AGAINST DAMAGE, INJURY OR LOSS, OR DESIGNED TO PROTECT THE ENVIRONMENT. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY EXISTING CONDITIONS AND PROGRESS OF THE WORK, ALL REASONABLE SAFEGUARDS FOR SAFETY AND PROTECTION, INCLUDING POSTING DANGER SIGNS AND OTHER WARNINGS AGAINST HAZARDS, PROMULGATING SAFETY REGULATIONS AND NOTIFYING OWNERS AND USERS OF ADJACENT UTILITIES OF THE EXISTENCE OF HAZARDS AND OF THE SAFETY REGULATIONS.

21. ALL DAMAGE OR LOSS TO ANY PROPERTY REFERRED TO IN HEREIN CAUSED IN WHOLE OR IN PART BY THE CONTRACTOR OR A SUBCONTRACTOR, OR BY ANYONE FOR WHOM ANY OF THEM MAY BE LIABLE, SHALL BE REMEDIED BY THE CONTRACTOR, EXCEPT DAMAGE OR LOSS PROPERLY ATTRIBUTABLE TO THE ACTS OR OMISSIONS OF THE OWNER, OR THE ENGINEER OR ANYONE EMPLOYED BY THEM, OR FOR WHOM ANY OF THEM MAY BE LIABLE, AND NOT PROPERLY ATTRIBUTABLE IN WHOLE OR IN PART TO THE FAULT OR NEGLIGENCE OF THE CONTRACTOR.

22. UNTIL FINAL ACCEPTANCE OF THE WORK BY OWNER, THE CONTRACTOR SHALL HAVE THE CHARGE AND CARE OF AND SHALL BEAR THE RISK OF MAJORITY DAMAGE, LOSS OR EXPENSE TO ANY PART THEREOF, OR TO ANY MATERIALS STORED ON SITE, BY THE ACTION OF THE ELEMENTS OR FROM ANY OTHER CAUSE WHETHER ARISING FROM THE EXECUTION OR NON-EXECUTION OF THE WORK. THE CONTRACTOR SHALL REPAIR, REPLACE AND MAKE GOOD ALL INJURIES OR DAMAGES TO ANY PORTION OF THE WORK OCCASIONED BY ANY OF THE ABOVE CAUSES BEFORE FINAL ACCEPTANCE AND SHALL BEAR THE EXPENSES THEREOF.

23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL INSPECTION CRITERIA AND SCHEDULES, AND SIGNING FOR SAID INSPECTIONS.

24. THE CONTRACTOR SHALL CONTROL AND BE RESPONSIBLE FOR THE OPERATIONS AND THOSE OF THEIR SUBCONTRACTORS AND ALL SUPPLIERS, TO ASSURE THE LEAST INCONVENIENCE TO THE PUBLIC. THE CONTRACTOR SHALL MAINTAIN FREE AND UNOBSTRUCTED ACCESS TO ALL ADJACENT PROPERTIES AND TO THE TRAVELING PUBLIC, UNDER ALL CIRCUMSTANCES. SAFETY SHALL BE THE MOST IMPORTANT CONSIDERATION.

25. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE POLICIES AND GUIDELINES ESTABLISHED BY ALL AGENCIES HAVING JURISDICTION FOR PROTECTING ALL PUBLIC AND PRIVATE PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE OR INJURY TO PROPERTY OF ANY CHARACTER, DURING THE EXECUTION OF THE WORK, RESULTING FROM ANY ACT, OMISSION, NEGLIGENCE OR MISCONDUCT IN THEIR MANNER OR METHOD OF EXECUTING THE WORK, AT ANY TIME DUE TO DEFECTIVE WORK OR MATERIALS.

26. THE CONTRACTOR SHALL NOT EXCAVATE, REMOVE, OR OTHERWISE DISTURB ANY MATERIAL, STRUCTURE OR PART OF A STRUCTURE UNLESS IT IS LOCATED WITHIN THE PROJECT LIMITS. ANY EXCAVATION FOR THE PROJECT, EXCEPT WHERE SUCH EXCAVATION OR REMOVAL IS PROVIDED FOR IN THE CONTRACT, PLANS OR SPECIFICATIONS.

27. THE CONTRACTOR SHALL VERIFY THE QUANTITIES AND LENGTHS OF MATERIALS SHOWN ON THE PLANS, ANY DISCREPANCY BETWEEN MATERIAL CALLOUTS AND THE ENGINEER'S ATTENTION SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION BY THE CONTRACTOR PRIOR TO BIDDING. IT IS THE ENGINEER'S INTENTION TO CONSTRUCT WHAT IS SHOWN ON THE PLANS.

28. ANY DISCREPANCY BETWEEN THE DIMENSIONS AND MEASUREMENTS SHOWN ON THE PLANS AND THE ACTUAL FIELD CONDITIONS SHALL IMMEDIATELY BE REPORTED TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF SUCH DISCREPANCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERRORS AND NECESSARY CORRECTIONS THAT MAY SUBSEQUENTLY ARISE.

29. CONTRACTOR SHALL LIMIT NOISE MEASURES FROM THE PROPERTY LINE OF THE CLOSEST COMPLETED HOME TO 60 DB FROM 7 AM TO 10 PM AND TO 50 DB FROM 10 PM TO 7 AM. CITY ENGINEER PERMITS (ELEVATED) FOR POTENTIALLY NOISY CONSTRUCTION OPERATIONS IN THE 10 PM TO 7 AM PERIOD. [CODE OF ORDINANCES SECTION 43-030, TABLE 1]

EROSION CONTROL

1. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS AND ALL REGULATIONS CONTROLLING POLLUTION OF THE ENVIRONMENT.

2. THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) ACCORDING TO EPA/PAFED CRITERIA TO MINIMIZE EROSION AND INSURE PROPER FUNCTIONING OF STORM WATER MANAGEMENT SYSTEMS UPON COMPLETION OF CONSTRUCTION, IN ADDITION TO MEETING EPA/PAFED SWPPP CRITERIA, THE SWPPP SHALL BE SUBMITTED TO AND COMPLY WITH THE CITY ENGINEER HAVING JURISDICTION MINIMUM EROSION CONTROL PLAN.

3. CONTRACTOR SHALL EXECUTE ALL MEASURES NEEDED TO LIMIT THE TRANSPORTATION OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT TO THE VOLUME AND AMOUNT AS THOSE THAT EXIST PRIOR TO COMMENCEMENT OF CONSTRUCTION. THIS CONDITION MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE IN TEMPORARY EROSION CONTROL FEATURES AT HIS EXPENSE. PROVISION MUST BE MADE TO PRESERVE THE INTEGRITY AND CAPACITY OF CHECK DAMS, SEDIMENT TRAPS, AND OTHER EROSION CONTROL MEASURES. TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL, AS REQUIRED TO FULLY COMPLY WITH THE INTENT OF THIS EROSION CONTROL CONTRACTOR SHALL PROVIDE CONTINUAL MONITORING OF EROSION CONTROL FEATURES TAKEN AND SHALL COMPLY WITH ALL CORRECTIVE MEASURES. A COPY OF THE APPROVED SWPPP SHALL BE KEPT ON SITE AT ALL TIMES OR THE CONTRACTOR SHALL PROVIDE ACCESS TO THE SWPPP TO ALL CITY ENGINEER INSPECTORS. THIS PERMIT MUST BE SUBMITTED TO ORANGE COUNTY BY THE CONTRACTOR PRIOR TO THE ISSUANCE OF PERMITS.

4. THE OWNER AND/OR CONTRACTOR SHALL PROVIDE A NOTICE OF PERMIT IN ACCORDANCE WITH CRITERIA SET FORTH IN THE NPDES PERMIT REQUIREMENTS 48 HOURS PRIOR TO BEGINNING CONSTRUCTION, CLEARING OR DEMOLITION.

5. PROVIDE EFFECTIVE TEMPORARY AND PERMANENT EROSION CONTROL, FOLLOWING THE REQUIREMENTS IN SECTION 19A OF THE STATE DEPT. OF TRANSPORTATION STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. (F.O.T.C. SECTION 19A).

6. INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENTATION RESULTING FROM SURFACE RUNOFF UNTIL COMPLETION OF ALL CONSTRUCTION OPERATION THAT MAY CAUSE SEDIMENT RUNOFF. FILTER FABRIC SHALL BE PLACED AND MAINTAINED UNDER THE GRATE AND FILTER SCREENS PLACED IN FRONT OF THE TRAP OF CURB INLETS, DURING CONSTRUCTION.

7. TURBIDITY BARRIERS MUST BE INSTALLED AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSPORTING SEDIMENTS AND SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO CONSTRUCTION. TURBIDITY BARRIERS SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED, SOLIDS ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED.

8. ALL SLOPES 5:1 OR GREATER SHALL BE SOODED. ALL POND SLOPES AND RIGHTS-OF-WAY SHALL BE SOODED.

9. IN ACCORDANCE WITH FDOT AND WATER MANAGEMENT DISTRICT PERMITS, ALL DISTURBED AREAS SHALL BE SEEDDED AND MULCHED WITHIN 7 DAYS OF NO CONSTRUCTION ACTIVITIES.

DEMOLITION AND CLEARING

1. PRIOR TO INITIATING ANY DEMOLITION, THE CONTRACTOR SHALL CLEARLY DESIGNATE THE LIMITS OF CONSTRUCTION ON-SITE. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE THE LIMITS OF CONSTRUCTION.

2. THE CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING NEAR TREES THAT ARE TO BE SAVED, WHETHER SHOWN IN THE PLANS OR DESIGNATED IN THE FIELD.

3. ALL PRACTICAL AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT UNNECESSARY TREE REMOVAL.

4. ANY PROPOSED CUT OR FILL MATERIAL TO BE REMOVED OR PLACED WITHIN THE DRIP LINE OF SPECIMEN TREES TO REMAIN, INCLUDING TRENCING FOR PROPOSED IMPROVEMENTS SUCH AS UTILITIES, WILL REQUIRE THE ADVANCED PRE-TREATMENT OF EACH IMPACTED TREE BY A QUALIFIED ARBORIST OR A CITY ENGINEER. THE LANDSCAPE ARCHITECT WILL MINIMIZE THE POTENTIAL AVOIDABLE IMPACTS OF CONSTRUCTION.

5. TREE PROTECTION BARRICADES OR EQUIVALENT PROTECTIVE MEASURES WILL BE CONSTRUCTED ACCORDING TO THE LOCAL JURISDICTIONS CRITERIA FOR TREES TO REMAIN WITHIN THE LIMITS OF CONSTRUCTION.

6. IN AREAS REQUIRING FILL MATERIAL, THE CONTRACTOR SHALL STRIP OR OTHERWISE REMOVE ALL VEGETATION SUCH AS BRUSH, HEAVY SOILS, HEAVY GROWTH OF GRASS, DECAYED VEGETATION MATTER, RUBBISH AND ANY OTHER DELETERIOUS MATERIAL BEFORE THE FILL MATERIAL IS PLACED. IMMEDIATELY PRIOR TO THE PLACING OF THE FILL MATERIAL, THE FILL MATERIAL WHICH FILL TO BE PLACED SHALL BE SCANNED IN A DIRECTION APPROXIMATELY PARALLEL TO THE AXIS OF FILL. THE GEOGRAPHICAL ENGINEER SHALL APPROVE THE AREA PRIOR TO THE PLACEMENT OF FILL.

PAVING, GRADING & DRAINAGE

1. THE CONTRACTOR SHALL PERFORM ALL WORK PERTAINING TO DRAINAGE INCLUDING EXCAVATION OF STORMWATER MANAGEMENT PONDS OR EQUIVALENT FACILITIES PRIOR TO THE COMMENCEMENT OF OTHER WORK INCLUDED IN THESE PLANS.

2. THE CONTRACTOR SHALL STAKE ALL IMPROVEMENTS USING THE RECORD PLAT. THE CONTRACTOR SHALL VERIFY WITH THE ENGINEER THAT THE PLAT IS CORRECT AND THAT THE RECORD PLAT IS THE BASIS FOR THE RECORD PLAT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT WITH ENGINEER PRIOR TO STARTING WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL LAYOUTS AND TO CORRECT ANY ERRORS. BOTH HORIZONTAL AND VERTICAL, INCLUDING MINIMUM BUILDING SECTIONS PRIOR TO THE INSTALLATION OF ANY IMPROVEMENT, ANY DISCREPANCY BETWEEN PLATTED INFORMATION AND THE PLANS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY AND IN WRITING.

3. PRIOR TO INITIATING ANY DEMOLITION, THE CONTRACTOR SHALL CLEARLY DESIGNATE THE LIMITS OF CONSTRUCTION ON-SITE. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE THE LIMITS OF CONSTRUCTION.

4. THE CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING NEAR TREES THAT ARE TO BE SAVED, WHETHER SHOWN IN THE PLANS OR DESIGNATED IN THE FIELD.

4. ALL DRAINAGE STRUCTURES ARE TO BE TRAFFIC BEARING UNLESS OTHERWISE NOTED. ALL PRECAST CIRCULAR STRUCTURES SHALL BE CONSTRUCTED WITH A MINIMUM WALL THICKNESS IN ACCORDANCE WITH ASTM C478 & FOOT STANDARD NO. 200, SHEET 2, TABLE 1.

5. ALL PROPOSED PAVING SURFACES IN INTERSECTIONS AND ADJACENT EXISTING SURFACES SHALL BE GRADED TO DRAIN POSITIVELY IN THE DIRECTION SHOWN ON THE PROPOSED GRADING AND FLOW IN THE PLANS AND TO PROVIDE A SMOOTHLY TRANSITIONED PAVING SURFACE FOR VEHICLES WITH NO SHARP BREAKS IN GRADE, AND NO UNUSUAL STEEP OR REVERSE CROSS SLOPES. EXISTING SURFACES SHALL BE MAINTAINED TO THE MAXIMUM PRACTICABLE DEGREE. ALL SINKHOLE LOCAL REPAIRS AND ADJUSTMENTS SHOULD ADEQUATE CONDITIONS VARY FROM THE SURVEYED INFORMATION THE DESIGN WAS BASED UPON IN ORDER TO MAINTAIN THE ADEQUATE CONDITIONS. THE CONTRACTOR SHALL HAVE TO BE CHARGED WITH THE RESPONSIBILITY TO DRAIN POSITIVELY IN THE AREA OF INTERSECTIONS. ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ACCOMPLISH THE ABOVE AND CONSULT THE ENGINEER AS NEEDED TO ADEQUATE AND ALL REQUIRED INTERPRETATIONS OF THE PLANS OR FOR SUPPLEMENTARY INSTRUCTIONS. THE INTENT OF THE PLANS SHALL BE UNCHANGED.

6. CONSTRUCTION OF ROADWAYS SHALL MEET THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE LOCAL AGENCY(IES) HAVING JURISDICTION AND THE MINIMUM SUGGESTED SECTIONS AS OUTLINED IN THESE REPORTS RECOMMENDATIONS, UNLESS OTHERWISE NOTED.

7. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY EXCESS CUTS OR SUPPLYING FILL AS NECESSARY TO GRADE THE SITE TO THE PROPOSED ELEVATIONS AS DESIGNED WITHIN THE CONSTRUCTION DOCUMENTS.

8. IF LIMESTONE BEDROCK IS ENCOUNTERED DURING EXCAVATION OF THE RETENTION BASINS OR A SINKHOLE OR SOLUTION CAVITY FORMS DURING CONSTRUCTION, EXCAVATION OF THE BASIN MUST BE HALTED IMMEDIATELY. THE OWNER, ENGINEER, AND WATER MANAGEMENT DISTRICT MUST BE NOTIFIED, AND REMEDIAL ACTION WILL BE REQUIRED. THE PERMITTEE MUST INSPECT ALL PERMITTED SURFACE WATER MANAGEMENT BASINS MONTHLY FOR THE OCCURRENCE OF SINKHOLES AND DOCUMENT THESE OBSERVATIONS IN WATER MANAGEMENT DISTRICT CONSTRUCTION COMPLIANCE FORM NUMBER EN-3. TWO COPIES OF THE COMPLETED FORMS MUST BE SENT TO THE WATER MANAGEMENT DISTRICT AND THE LOCAL AGENCY HAVING JURISDICTION ANNUALLY BY MAY 31ST OF EACH YEAR. THE PERMITTEE MUST REPORT ANY SINKHOLE THAT DEVELOPS WITHIN THE SURFACE WATER MANAGEMENT SYSTEM. THE PERMITTEE MUST NOTIFY THE WATER MANAGEMENT DISTRICT AND LOCAL AGENCY HAVING JURISDICTION OF ANY SINKHOLE DEVELOPMENT IN THE SURFACE WATER MANAGEMENT SYSTEM WITHIN 48 HOURS OF ITS DISCOVERY AND COMPLETE SINKHOLE REPAIR WITHIN 10 DAYS OF SUCH DISCOVERY USING A DISTRICT APPROVED METHOD.

9. AFTER THE ROADWAY HAS BEEN CONSTRUCTED TO SUBGRADE, IT SHALL BE "PROOF-ROLLED" TO ASSURE THAT PROPER COMPACTION HAS BEEN ACHIEVED. THE PROOF-ROLLING AND COMPACTION OPERATIONS SHALL BE INSPECTED AND TESTED BY A FLORIDA LICENSED GEOTECHNICAL ENGINEER TO ASSURE THAT THE SPECIFIED COMPACTION IS MAINTAINED AND ALL DELETERIOUS MATERIALS HAVE BEEN REMOVED.

10. THE CONTRACTOR SHALL INSURE THAT A MINIMUM SOIL DENSITY OF 98% COMPACTION (ASTM D 1557 STANDARD PROCTOR METHOD) IS ACHIEVED UNLESS OTHERWISE NOTED FOR TESTING AND RECORDING. RETAINED VALUATION FOOTING SHALL BE CONSTRUCTED IN GENERAL, ANY FOOTING SUPPORT DESCRIBED ON THESE PLANS, IT WILL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE REQUIRED GEOTECHNICAL ENGINEERING DESIGN AND DESIGN FOR THE LOCAL MAINTENANCE DISTRICT.

11. BLUE REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN THE CENTER OF THE DRIVING LANE OPPOSITE EACH FIRE HYDRANT.

12. STORM PIPE LENGTHS SHOWN ON THE PLANS INCLUDE MITERED END SECTIONS. IF THE CONTRACTOR ELECTS TO USE AN APPROVED ALTERNATE, THE PIPE LENGTHS MUST BE ADJUSTED.

13. NUT OFFSETS ARE TO THE CENTERLINES SHOWN IN F.O.T.C. DESIGN STANDARDS INDEXES.

14. THE CONTRACTOR IS RESPONSIBLE FOR PAVING ALL ROADWAYS TO DRAIN POSITIVELY. INTERSECTIONS SHALL BE TRANSITIONED TO DRAIN POSITIVELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY DISCREPANCY BETWEEN THE PLANS AND THE FIELD. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PAVING SO THAT A SOLUTION OR RECOMMENDATION FOR CORRECTION MAY BE OBTAINED.

15. ALL REINFORCED CONCRETE PIPE (R.C.P.) SHALL BE MINIMUM CLASS III, UNLESS OTHERWISE APPROVED OR NOTED ON THE PLANS OR SPECIFICATIONS.

16. ALL STORMWATER PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC.

PUBLIC RIGHTS-OF-WAY

1. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH PUBLIC RIGHTS-OF-WAY WITH THE RESPECTIVE LOCAL AGENCY(IES) HAVING JURISDICTION CITY OR COUNTY DIRECTOR OF PUBLIC WORKS AND THE JURISDICTIONS ENGINEER. IN ADDITION, ANY WORK WITHIN A RIGHT-OF-WAY MUST BE APPROVED AND COORDINATED WITH THE FOOT THROUGH THE LOCAL MAINTENANCE DISTRICT FOR EACH DISTRICT.

2. PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC UTILITY RIGHT-OF-WAY, CONTRACTOR SHALL OBTAIN AUTHORIZATION AND PERMIT FROM ALL JURISDICTIONS RESPONSIBLE FOR SUCH RIGHT-OF-WAY.

3. PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC RIGHT-OF-WAY, CONTRACTOR SHALL DEVELOP AND SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO THE LOCAL AGENCY HAVING JURISDICTION OVER SAID RIGHT-OF-WAY. THIS PLAN MUST MEET THE MINIMUM REQUIREMENTS AS OUTLINED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION AND THE FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS.

UTILITIES

1. THE EXISTING UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES AS TO SIZE, LOCATION, AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AND ALL CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING SIZE, TYPE, LOCATION, AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND NOTIFYING THE INVOLVED UTILITY PROVIDERS TO MAKE ANY NECESSARY ARRANGEMENTS FOR RELOCATION, DISRUPTION OF SERVICE, OR CLARIFICATION OF ACTIVITY REGARDING SAID UTILITY. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THESE PLANS OR FIELD LOCATED. THE RESPECTIVE UTILITY PROVIDERS SHALL RELOCATE UTILITIES THAT INTERFERE WITH THE PROPOSED CONSTRUCTION AND THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY PROVIDERS DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED BY THE INVOLVED UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL CONFORM TO FLORIDA STATUTE CHAPTER 556 AND THE SUNSHINE STATE ONE-CALL OF FLORIDA.

3. CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS AND THE SUNSHINE UNDERGROUND UTILITIES NOTIFICATION CENTER AT 1800-442-4774 AT LEAST 72 HOURS PRIOR TO START OF WORK. CONTRACTOR RESPONSIBILITY FOR CONTINUAL MAINTENANCE OF ALL UTILITY LOCATES, FLAGS, MARKING, ET CETERA THROUGH THE ENTIRE DURATION OF CONSTRUCTION.

4. UTILITY SERVICES TO THE PROPOSED BUILDING(S) SHALL TERMINATE 6 FEET OUTSIDE OF THE BUILDING UNLESS OTHERWISE NOTED. MAJOR TO CONSTRUCTION, THE CONTRACTOR SHALL REVIEW BUILDING ARCHITECTURAL AND PLUMBING PLANS TO IDENTIFY PROPER CONTINUATION OF THE PROPOSED UTILITIES FOR LOCATION, ALIGNMENT AND ELEVATIONS (FOR EACH SERVICE TO THE BUILDINGS). SHOULD UTILITY SERVICES LOCATED SHOWN ON THE SITE CIVIL CONSTRUCTION PLANS NOT CORRESPOND WITH BUILDING ARCHITECTURAL OR PLUMBING PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.

5. THE POWER DISTRIBUTION SYSTEM SHALL BE DESIGNED AND INSTALLED BY THE POWER SERVICE PROVIDER. THE CONTRACTOR SHALL COORDINATE WITH SAID POWER SERVICE PROVIDER TO REPAIR PROPER CONSTRUCTION PRACTICES IS ACHIEVED, AND TO ALLOW THE INSTALLATION OF STREET LIGHTS, SIGNAGE, STREET LIGHTS, POLES, TRANSFORMERS, AND OTHER REQUIRED EQUIPMENT. IT IS THE OWNER'S RESPONSIBILITY TO ACQUIRE ANY NECESSARY EASEMENTS AS A RESULT OF THE POWER SERVICE PROVIDER'S DESIGN AND RESPECTIVE INSTALLATION LOCATIONS.

6. THE TELEPHONE, CABLE TV, DATA, AND/OR COMMUNICATION SYSTEMS SHALL BE DESIGNED AND INSTALLED BY THEIR RESPECTIVE SERVICE PROVIDER. THE CONTRACTOR SHALL COORDINATE WITH SAID SERVICE PROVIDER TO INSURE PROPER CONSTRUCTION PRACTICES IS ACHIEVED, AND TO ALLOW THE INSTALLATION OF STREET LIGHTS, SIGNAGE, STREET LIGHTS, POLES, TRANSFORMERS, AND OTHER REQUIRED EQUIPMENT. IT IS THE OWNER'S RESPONSIBILITY TO ACQUIRE ANY NECESSARY EASEMENTS AS A RESULT OF THE SERVICE PROVIDER'S DESIGN AND RESPECTIVE INSTALLATION LOCATIONS.

7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY COORDINATE THE FINAL DESIGNS AND SUBSEQUENT INSTALLATIONS OF ALL SERVICE PROVIDERS' UTILITIES AND THEIR MINIMUM CRITERIA AS SET FORTH HEREIN FOR ITEMS SUCH AS MAINTAINING THE MINIMUM SEPARATION DISTANCES BETWEEN THE VARIOUS UTILITIES.

8. UNLESS OTHERWISE NOTED, THE TOP 24 INCHES OF ALL UTILITY TRENCHES WITHIN ROADWAYS IN MAXIMUM 12" UTS, SHALL BE COMPACTED TO 98% OF THE MODIFIED PROCTOR MAXIMUM DENSITY. ALL OTHER UTILITY TRENCHES SHALL BE COMPACTED TO 90% OF THE MODIFIED PROCTOR MAXIMUM DENSITY.

9. THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITIES CONSTRUCTION DEPARTMENT FOR THE CORRESPONDING LOCAL AGENCY PROVIDED A MINIMUM OF 48 HOURS PRIOR TO STARTING ANY UTILITIES CONSTRUCTION.

10. PIPE ALIGNMENT, DEFLECTION, AND INTEGRITY TESTING SHALL BE PERFORMED BY THE TAPPING METHOD AND UTILIZING VIDEO INSPECTION. THE CONTRACTOR SHALL PERFORM INTERNAL VIDEO INSPECTION FOR GRAVITY SEWER TO CHECK PIPE ALIGNMENT AND DEFLECTION.

11. ALL FIRE HYDRANTS AND APPARATUS MUST COMPLY WITH FPPC SECTION 3-6.6 AND SECTION 3-7.1 WHEN APPLICABLE.

12. MAXIMUM SPACING OF FIRE HYDRANTS IS 500' IN ACCORDANCE WITH CITY CODE 24.30 (F.C.).

13. UNDERGROUND MAN CONSTRUCTION MUST APPLY FOR A FIRE PERMIT FOR THE INSTALLATION OR MODIFICATION OF ANY UNDERGROUND MANHOLE OR STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE PERMIT AND FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER.

14. THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITIES CONSTRUCTION DEPARTMENT FOR THE CORRESPONDING LOCAL AGENCY PROVIDED A MINIMUM OF 48 HOURS PRIOR TO STARTING ANY UTILITIES CONSTRUCTION.

15. PIPE ALIGNMENT, DEFLECTION, AND INTEGRITY TESTING SHALL BE PERFORMED BY THE TAPPING METHOD AND UTILIZING VIDEO INSPECTION. THE CONTRACTOR SHALL PERFORM INTERNAL VIDEO INSPECTION FOR GRAVITY SEWER TO CHECK PIPE ALIGNMENT AND DEFLECTION.

16. ALL FIRE HYDRANTS AND APPARATUS MUST COMPLY WITH FPPC SECTION 3-6.6 AND SECTION 3-7.1 WHEN APPLICABLE.

17. MAXIMUM SPACING OF FIRE HYDRANTS IS 500' IN ACCORDANCE WITH CITY CODE 24.30 (F.C.).

18. UNDERGROUND MAN CONSTRUCTION MUST APPLY FOR A FIRE PERMIT FOR THE INSTALLATION OR MODIFICATION OF ANY UNDERGROUND MANHOLE OR STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE PERMIT AND FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER.

19. THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITIES CONSTRUCTION DEPARTMENT FOR THE CORRESPONDING LOCAL AGENCY PROVIDED A MINIMUM OF 48 HOURS PRIOR TO STARTING ANY UTILITIES CONSTRUCTION.

20. PIPE ALIGNMENT, DEFLECTION, AND INTEGRITY TESTING SHALL BE PERFORMED BY THE TAPPING METHOD AND UTILIZING VIDEO INSPECTION. THE CONTRACTOR SHALL PERFORM INTERNAL VIDEO INSPECTION FOR GRAVITY SEWER TO CHECK PIPE ALIGNMENT AND DEFLECTION.

21. ALL FIRE HYDRANTS AND APPARATUS MUST COMPLY WITH FPPC SECTION 3-6.6 AND SECTION 3-7.1 WHEN APPLICABLE.

22. MAXIMUM SPACING OF FIRE HYDRANTS IS 500' IN ACCORDANCE WITH CITY CODE 24.30 (F.C.).

23. UNDERGROUND MAN CONSTRUCTION MUST APPLY FOR A FIRE PERMIT FOR THE INSTALLATION OR MODIFICATION OF ANY UNDERGROUND MANHOLE OR STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE PERMIT AND FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER.

24. THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITIES CONSTRUCTION DEPARTMENT FOR THE CORRESPONDING LOCAL AGENCY PROVIDED A MINIMUM OF 48 HOURS PRIOR TO STARTING ANY UTILITIES CONSTRUCTION.

25. PIPE ALIGNMENT, DEFLECTION, AND INTEGRITY TESTING SHALL BE PERFORMED BY THE TAPPING METHOD AND UTILIZING VIDEO INSPECTION. THE CONTRACTOR SHALL PERFORM INTERNAL VIDEO INSPECTION FOR GRAVITY SEWER TO CHECK PIPE ALIGNMENT AND DEFLECTION.

26. ALL FIRE HYDRANTS AND APPARATUS MUST COMPLY WITH FPPC SECTION 3-6.6 AND SECTION 3-7.1 WHEN APPLICABLE.

27. MAXIMUM SPACING OF FIRE HYDRANTS IS 500' IN ACCORDANCE WITH CITY CODE 24.30 (F.C.).

28. UNDERGROUND MAN CONSTRUCTION MUST APPLY FOR A FIRE PERMIT FOR THE INSTALLATION OR MODIFICATION OF ANY UNDERGROUND MANHOLE OR STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE PERMIT AND FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNERS/DEVELOPERS MAINTAINED BY THE CITY ENGINEER.

29. THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITIES CONSTRUCTION DEPARTMENT FOR THE CORRESPONDING LOCAL AGENCY PROVIDED A MINIMUM OF 48 HOURS PRIOR TO STARTING ANY UTILITIES CONSTRUCTION.

30. PIPE ALIGN

POTABLE WATER

- [illegible]

WATER LINE CONSTRUCTION NOTES PER FDEP

- ALL PIPE, PIPE FITTINGS, PIPING "ACKING" AND JOINTING MATERIALS, VALVES, FIREHYDRANTS, AND METERS INSTALLED WILL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS.
 - ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED AND THAT WILL COME INTO CONTACT WITH UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH RULE 6-555.320 (J)(C), F.A.C., OR OTHER APPLICABLE STANDARDS, REGULATIONS, OR REQUIREMENTS REFERENCED IN PARAGRAPH 6-555.320 (J)(C), F.A.C.
 - ALL PIPE AND PIPE FITTINGS INSTALLED WILL CONTAIN NO MORE THAN 8.0% LEAD, AND ANY SOLDER OR FLUX USED IN THIS PROJECT WILL BE LEAD-FREE AND ANTIMONY-FREE.
 - ALL PIPE AND PIPE FITTING INSTALLATIONS WILL BE COLOR-CODED MARKED IN ACCORDANCE WITH SUBPARAGRAPH 6-555.320 (I)(1)(B) F.A.C., USING BLUE AS A PREDOMINANT COLOR. UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE. WILL HAVE A WHITE END CAP. ALL STEEL PIPE SHALL BE PAINTED BLUE. ALL CAST IRON PIPE SHALL BE PAINTED BLUE. STRIPES APPLIED TO THE PIPE WALL, UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. WILL STRIKE DRIVING SURFACES OF ALL NEWLY INSTALLED PIPE. STRIPES SHALL BE AT LEAST ONE INCH WIDE AND SPACED AT LEAST TWO FEET ON GREATER THAN 90 DEGREE INTERSECTIONS AROUND THE PIPE; AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. ALL NEWLY INSTALLED PIPE SHALL BE MARKED WITH A CONTRASTING LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE FOR PIPE WITH INSULATED WALLS. ALL NEWLY INSTALLED PIPE SHALL BE MARKED WITH A CONTRASTING LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE BUT WILL BE COLOR-CODED OR MARKED IN BLUE ONLY WHEN NECESSARY.
 - ALL FIRE HYDRANTS THAT HAVE UNLINED, UNDERGROUND TRENCHES WILL BE LOCATED AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED UTILITY SEWER, STORMWATER FORCE MAIN, PIPELINE CONVEYING RECLAIMED WATER REGulated UNDER PART II OF CHAPTER 624.01, F.A.C., OR VACUUM-TYPE SANITARY SEWER, AT LEAST SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY OR PRESSURIZED WATER MAIN, AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED ON-SITE SEWAGE TREATMENT AND DISCHARGE SYSTEM.
 - NEW OR ALTERED CHIMNEYS, PITTS, OR MANHOLES THAT CONTAIN VALVES, BLOW-OFFS, METERS, OR OTHER SUCH WATER DISTRIBUTION SYSTEMS APPURTENANCES WILL NOT BE CONNECTED DIRECTLY TO ANY SANITARY OR STORM SEWER, AND BLOW-OFFS PROVIDED FOR CHIMNEYS MUST BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:
 - NEW OR ALTERED WATER MAINS WILL BE INSTALLED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS OR IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED PROCEDURES.
- A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE INSTALLED. BACKFILL MATERIAL WILL BE TAMPA COUNTY SAND OR EQUIVALENT. PIPE SHALL BE INSTALLED AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE, AND UNSUITABLY BEDDED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURER'S RECOMMENDED PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE.
- ALL WATER MAIN TEES, BENDS, PLUGS, AND HYDRANTS INSTALLED WILL BE PROVIDED WITH RESTRAINED JOINTS TO PREVENT MOVEMENT.
 - ALL WATER MAINS THAT ARE CONSTRUCTED OF ASBESTOS-CEMENT OR POLYVINYL CHLORIDE PIPE WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600 OR C900, RESPECTIVELY, AS INCORPORATED INTO RULE 6-555.320 (J)(C), AND ALL WATER MAINS THAT ARE CONSTRUCTED OF DUCTILE IRON PIPE WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C900 AS INCORPORATED INTO RULE 6-555.320 FAC.
 - ALL WATER MAINS INCLUDING FIRE HYDRANT LINES AND INCLUDING SERVICE LINES THAT WILL BE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER, WILL BE DISINFECTED AND BACTERIOLOGICAL

12. NEW OR RELOCATED: UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-OR VACUUM-TYPE SANITARY SEWER, OR ANY OTHER UTILITY. THE MINIMUM HORIZONTAL DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER. HOWEVER, IT IS PREFERABLE TO MAINTAIN THE TEN FEET MINIMUM HORIZONTAL DISTANCE BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
13. NEW OR RELOCATED: UNDERGROUND WATER MAINS CROSSING AN EXISTING OR PROPOSED GRAVITY-OR VACUUM-TYPE SANITARY SEWER SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SANITARY SEWER. IF THE WATER MAIN IS LAID AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE, HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
14. NEW OR RELOCATED: UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, OR ANY OTHER UTILITY, SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
15. WHERE AUTOMATIC AIR RELIEF VALVES ARE INSTALLED THE AIR VALVE SHALL BE EXTENDED SUCH THAT THE OPEN END OF THEIR RELIEF PIPE WILL BE SEPARATED FROM THE GROUND BY AT LEAST ONE FOOT AND WILL BE PROVIDED WITH A SCREENED, DOWNWARD FACING ELBOW.

SANITARY GRAVITY & FORCE MAINS

1. ALL PVC GRAVITY SANITARY SEWER SHALL BE SD3035, UNLESS OTHERWISE NOTED; AND ALL PVC SANITARY SEWER FOREMAN # 4 THRU 12 SHALL BE C900918. UNLESS OTHERWISE NOTED.
2. LEAKAGE TESTS FOR THE SANITARY SEWER SYSTEM SHALL MEET THE FOLLOWING SPECIFICATIONS USING THE LOW PRESSURE AIR TEST METHOD. A PRESSURE OF 1.5 PSI SHALL BE MAINTAINED FOR 15 MINUTES. ALL JOINTS IN LENGTH AND SHALL BE TESTED BETWEEN ADJACENT MARKING AND SHALL INCLUDE ALL LATERALS.
3. ALL PVC SANITARY FORCE MAINS SHALL BE COLOR-CODED OR MARKED USING GREEN AS A PREDOMINANT COLOR TO DIFFERENTIATE FROM FORCE MAIN FOR WATER SUPPLY.
4. MINIMUM SLOPE ALLOWED FOR SANITARY SEWER PIPE IS 0.40%.
5. PVC PIPE AND FITTINGS 4-INCHES THROUGH 15-INCHES SHALL CONFORM TO ASTM D3034, SD3033 OR 3026.
6. PVC PIPE AND FITTINGS 15-INCHES THROUGH 27-INCHES SHALL CONFORM TO ASTM F897-71, SD28.
7. PVC PIPE AND FITTINGS SHALL BE SOLID GREEN IN COLOR.
8. DUCTILE IRON PIPE FOR GRAVITY OR NON-PRESSURE SERVICE SHALL BE DESIGNED IN ACCORDANCE WITH AND CONFORMING TO THE REQUIREMENTS OF ASTM A747 FOR INSTALLATION WITH TRENCH TYPE OR IN ACCORDANCE WITH ANSI/AWWA C150A150-10 AND AWWA C150A150-10. COMPACT DUCTILE IRON FITTINGS.
9. DUCTILE IRON PIPE AND FITTINGS FOR GRAVITY OR NON-PRESSURE SERVICE SHALL HAVE AN EXTERNAL LINING CONSISTING OF A METHOD OF PROTECTING THE SPOT COAT TO REFER TO SPECIFICATIONS FOR DETAILS.
10. MATERIAL FOR GRAVITY SEWER PIPE AND FITTINGS SHALL BE AS SHOWN FOR THE FOLLOWING DEPTHS OF EXCAVATION: A. 6" TO 12" PVC, ASTM 3034/ASTM F897, SDR 35. B. LESS THAN 6" OR GREATER THAN 12" PVC, ASTM 3034, SDR 28
11. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL EQUIPMENT AND MATERIALS FOR APPROVAL BY THE ENGINEER AND SERVICE PROVIDER PRIOR TO PROCUREMENT.
12. PIPE MEASUREMENTS FOR THE MAIN TRUNK SEWER SHALL BE FROM CENTER TO CENTER OF MANHOLES OR CLEANOUTS, UNLESS OTHERWISE NOTED.
13. PIPE MEASUREMENTS FOR SERVICE LATERALS SHALL BE FROM THE MAIN TRUNK SEWER TO THE PROPERTY LINE. THE DEPTH OF THE LATERAL AT THE PROPERTY LINE SHALL BE MEASURED AND RECORDED ON THE RECORD DRAWINGS.
14. FOR A SCHEDULED INTERRUPTION OF MAIN FLOW, THE CONTRACTOR SHALL PROVIDE TO THE AGENCY WAIVER TO THE AGENCY WAIVER FOR A SCHEDULED INTERRUPTION OF MAIN FLOW. A WRITTEN SCHEDULE AS TO THE METHOD AND DURATION OF FLOW INTERRUPTION.
15. DURING NORMAL SANITARY SEWER MAIN FLOW INTERRUPTION, THE CONTRACTOR SHALL PROVIDE UNINTERRUPTED BYPASS FLOW AND SHALL PROVIDE ALL EQUIPMENT NECESSARY TO ACCOMPLISH THE SAME IN THE FORM OF, BUT NOT LIMITED TO, THE FOLLOWING: JUNCTION BOX, PUMP, PRESSURE TRANSFORMER, VALVE, AND ALL NECESSARY ELECTRICAL, PUMPING, HALLING AND CONTROLS.

HAZARDOUS MATERIALS

- [illegible]

PRE-CONSTRUCTION

1. CONTRACTOR SHALL ATTEND A MANDATORY PRE-CONSTRUCTION MEETING WITH THE ENGINEER OF RECORD AND APPLICABLE STAFF OF THE LOCAL AGENCY HAVING JURISDICTION (E.G. CITY OR COUNTY) PRIOR TO ANY DISTURBANCE OF LAND, CLEARING OR DEMOLITION. CONTRACTOR MUST PROVIDE WRITTEN NOTICE OF THE PRE-CONSTRUCTION MEETING TIME, DATE AND LOCATION TO THE OWNER AND ENGINEER OF RECORD A MINIMUM OF 48 HOURS PRIOR TO.
2. IF ANY TESTING, INSPECTION OR APPROVAL UNDERSTANDING THIS PARAGRAPH REVEALS DEFECTIVE WORK, CONTRACTOR SHALL NOT BEELIGIBLE FOR PAYMENT UNTIL SUCH DEFECTS ARE CORRECTED. CONTRACTOR SHALL BE ENTITLED TO DETRACT FROM THE TOTAL PROJECT PRICE IN PROPORTION TO CHANGE ORDER. OWNER'S COSTS ARISING OUT OF THE DEFECTIVE WORK, INCLUDING COSTS OF REPEATED PROCEDURES, INCLUDING BUT NOT LIMITED TO, FOR DEFECTIVE WORK, SHALL BE PAID BY THE OWNER'S SERVICES AND OTHER PROFESSIONAL FEES.
3. SHOP DRAWINGS AND CERTIFICATIONS FOR ALL STORM DRAINAGE, WATER SYSTEM, SEWER SYSTEM, AND PAVING SYSTEM MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL, PRIOR TO BEGINNING THE MATERIALS AND LABOR FOR CONSTRUCTION.
4. THE CONTRACTOR SHALL PROVIDE THE ENGINEER 6-HOUR ADVANCE NOTIFICATION FOR THE FOLLOWING CONSTRUCTION AND OBSERVATION ACTIVITIES:
- SANITARY SEWER LAUNING AND VIDEO INSPECTION
CONNECTIONS TO EXISTING SYSTEMS
STORM DRAINAGE LAUNING
CUTLEY TPO POUR (REINFORCING STEEL CHECK)
WATER AND FORCE MAIN PRESSURE TESTS
HYDROLOGICAL SAMPLING
BASE OBSERVATION & SOUNDING
ASPHALT PLACEMENT
PRE-FINAL OBSERVATION

RECORD DRAWINGS & CERTIFICATION

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL OBTAIN A COPY OF THE MINIMUM REQUIREMENTS FOR AS-BUILT RECORD DRAWING COORDINATION FOR THE AGENCY HAVING JURISDICTION (SUCH AS THE CITY OF COUNTY/AND/OR UTILITY SERVICE PROVIDER, PARULIANA PERSEUS) WITH THESE REQUIREMENTS, AND THE STANDARDS SET FORTH BY THE FLORIDA BOARD OF SURVEYORS AND MAPPERS. THE CONTRACTOR SHALL COMPLY WITH THESE REQUIREMENTS, INCLUDING ANY REQUIRED ELECTRONIC DATA SUBMITTALS.
2. AS-BUILT DRAWINGS SHALL BE ACCURATELY RECORDED AND CERTIFIED BY A LICENSED LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA AND SHALL BE SUBMITTED TO THE BOARD OF SURVEYORS AND MAPPERS FOR REVIEW AND APPROVAL BY THE BOARD OF SURVEYORS AND MAPPERS. THE CONTRACTOR MUST OBTAIN A LETTER OF APPROVAL FROM THE BOARD OF SURVEYORS AND MAPPERS. THE CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE SUFFICIENT AS-BUILT INFORMATION TO CONVEY THAT THE CONSTRUCTION HAS COMPLETED WITH ACCEPTABLE TOLERANCES TO THE APPROVED DESIGN AND SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
- SANITARY SEWER:**
- 1. TOP ELEVATION OF EACH MANHOLE FRAME AND COVER.
 - 2. INVERT OF EACH LINE AND ELEVATION OF EACH MANHOLE STRUCTURE.
 - 3. LENGTH OF EACH RUN OF MAIN BETWEEN MANHOLE CENTER TO CENTER.
 - 4. MATERIAL AND SIZE OF PIPE.
 - 5. LOCATE ALL SERVICE LINES FROM DOWNSPANN MANHOLE WITH DEPTH AT LOT LINE AND DISTANCE FROM THE MAIN LINE.
 - 6. LOCATE ALL FITTINGS/ACCESSORIES FROM PERMANENT VISIBLE OBJECTS ALL FITTINGS/ACCESSORIES NOT VISIBLE FROM THE SURFACE (MINIMUM TWO POINTS).
- WATER AND RISELIE SYSTEMS AND FORCE MAINS:**
- 1. ACTUAL LENGTHS OF PIPE BETWEEN BRANCHES AND VALVES IN THE RUN.
 - 2. LOCATE WITH MEASUREMENTS FROM PERMANENT VISIBLE OBJECTS ALL FITTINGS/ACCESSORIES NOT VISIBLE FROM THE SURFACE (MINIMUM TWO POINTS).
 - 3. LIST THE DEPTHS OF THE LINES AT ALL VALVE, FITTINGS AND FIRE HYDRANTS.
- OTHER IMPROVEMENTS:**
- 1. BUILDINGS, SIDEWALKS, PAVEMENT, CURBS & UTILITY. SUBMIT CERTIFIED DRAWINGS TO THE ENGINEER TWO WEEKS PRIOR TO INSPECTION OF THE WORK TO BE CERTIFIED.
- THE ENGINEER STRONGLY RECOMMENDS THAT THE CONTRACTOR KEEP A DAILY "AS-BUILT" SET OF DRAWINGS WHILE THE WORK BEING DONE IS VISIBLE EXPOSED/ACCORDING TO THE CRITERIA OUTLINED HEREIN.
- THE ENGINEER RESERVE THE RIGHT TO REQUIRE THE CONTRACTOR TO UNCOVER, RESET AND REPAIR ANY ACTION NECESSARY TO CORRECT THE DATA ON THE CONSTRUCTION DRAWINGS TO BE IN AGREEMENT WITH THE PLANS AND SPECIFICATIONS.
2. FINAL "AS-BUILT" DRAWINGS FOR POTABLE WATER SHALL CLEARLY INDICATE COMPLIANCE TO MINIMUM REFORMATION DISTANCES OR REQUIRED PIPE UPGRADE. ALL WATER MAIN AND FORCE MAIN PIPE FITTINGS SHALL BE REFERENCED TO AT LEAST TWO VISIBLE POINTS. ALL UTILITY LOCATIONS AND DISTANCES SHALL BE REFERENCED TO AT LEAST TWO VISIBLE POINTS.
3. THE CONTRACTORS GEOTECHNICAL ENGINEER SHALL CERTIFY ALL SITE, UTILITY, AND ROADWAY COMPACTION AND ALL UNDERDRAIN AND PAVEMENT CONSTRUCTION TO BOWSER-SINGLTON & ASSOCIATES, INC.
4. ALL PVC WATER MAINS AND PVC FORCE MAINS SHALL BE INSTALLED WITH A SOLID COPPER "LOCATING WIRE" WITH SUFFICIENT BOUNDING POINTS AT EACH END OF THE LINE.



Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 1000
ORLANDO, FL 32803
PHONE: 407.843.5120
ENGINEERING BUSINESS -8794

WESTPORT RESERVE
(PHASE 4)

SEAL



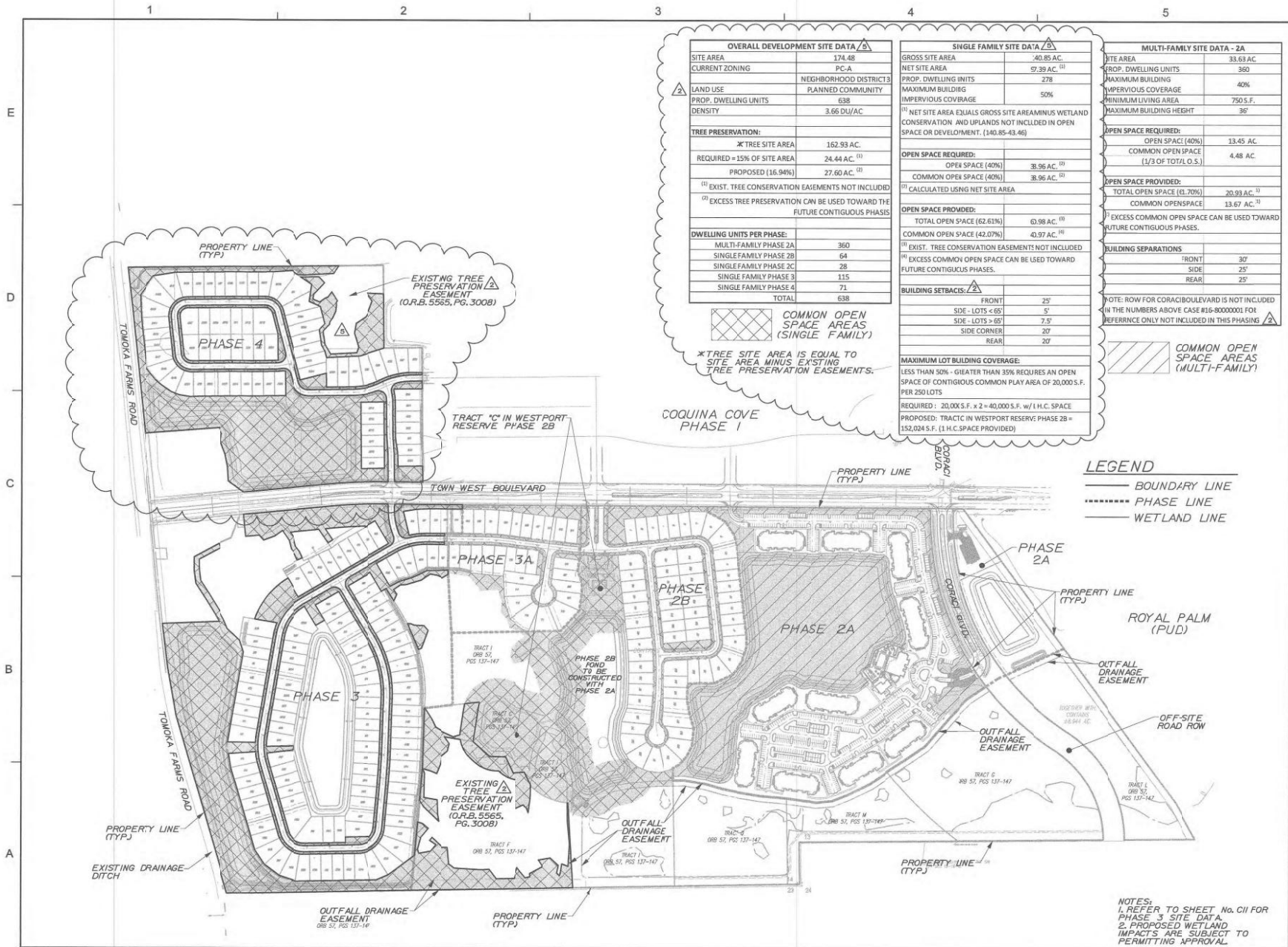
REVISIONS

No.	DATE	BY	Description
PROJECT #	PROJECT #5005136		
DRAWN BY	KJK		
APPROVED BY	DMV		
CHECKED BY	DMV		
DATE	MAY 2018		
DATUM	NAVD 88		
TITLE			

GENERAL NOTES

PROJECT: CC 1(Final)/SF Phase 4
SHEET NO.

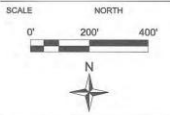
C03



Dewberry
Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32803
PHONE: 407.943.6500
ENGINEERING BUSINESS 4754

**WESTPORT RESERVE
(PHASE 4)**

CITY OF FORT ORANGE, FLORIDA



REVISIONS			
No.	DATE	BY	Description
1	12-20-17	KJK	REV LAYOUT & GRADING
2	8-14-17	KJK	REV PER CITY

PROJECT #	PROJECT #5008136
DRAWN BY	JKK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88
TITLE	

OVERALL DEVELOPMENT PLAN
PROJECT: CG 1/Phase 4
SHEET NO.

C04

LEGEND
 — BOUNDARY LINE
 - - - - - PHASE LINE

NOTE: EXCESS AREAS SUITABLE FOR TREE PRESERVATION WITHIN EXISTING PHASES ARE USED TO MEET TREE PRESERVATION REQUIREMENTS BASED ON OVERALL DEVELOPMENT FOOTPRINT (162.93 AC.).

TREE PRESERVATION	
TREE SITE AREA* (EXCLUDES TREE PRESERVATION EASEMENTS)	162.93 AC.
REQUIRED 15% OF SITE	24.44 AC.
PROPOSED (16.94%)	27.60 AC.
PHASE 2A AREA	33.63 AC.
REQUIRED 15% OF SITE	5.04 AC.
PERMITTED (15.05%)	5.06 AC.
PHASE 2B AREA (EXCLUDES TREE PRESERVATION EASEMENT)	54.28 AC.
REQUIRED 15% OF SITE	8.14 AC.
PERMITTED (15.46%)	8.39 AC.
PHASE 2C AREA	7.46 AC.
REQUIRED 15% OF SITE	1.12 AC.
PERMITTED (16.49%)	1.23 AC.
PHASE 3 AREA	43.48 AC.
REQUIRED 15% OF SITE	6.52 AC.
PROPOSED (16.12%)	7.01 AC.
PHASE 4 AREA (EXCLUDES TREE PRESERVATION EASEMENT)	24.08 AC.
REQUIRED 15% OF SITE	3.61 AC.
PROPOSED (24.50%) ON-SITE & OFF-SITE	5.90 AC.

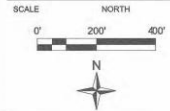
*TREE SITE IS EQUAL TO THE TOTAL SITE AREA MINUS THE EXISTING TREE PRESERVATION EASEMENTS. (174.48-11.55 = 162.93)

Dewberry
 Dewberry Engineers Inc.
 810 NORTH MAGNOLIA AVE.
 SUITE 100
 ORLANDO, FL 32803
 PHONE: 407.841.9100
 ENGINEERING BUSINESS 4794

WESTPORT RESERVE
 (PHASE 4)

CITY OF PORT ORANGE, FLORIDA

7/11/2018

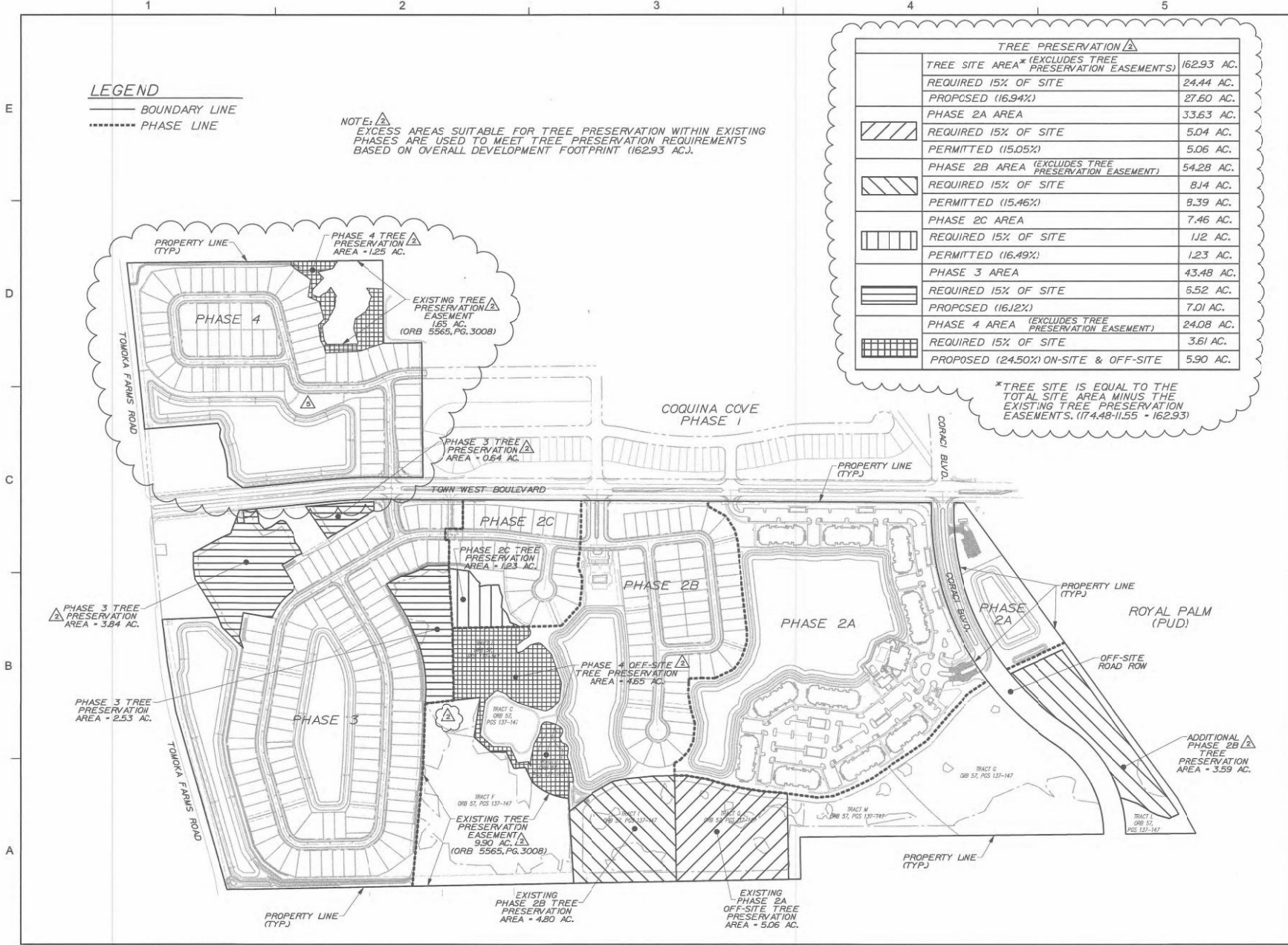


REVISIONS			
No.	DATE	BY	Description
1	12-20-17	KJK	REV LAYOUTS
2	8-1-17	KJK	REV PER CITY

PROJECT #	PROJECT #00083596
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

OVERALL TREE PRESERVATION PLAN
 PROJECT: CC 1/FinalSP Phase 4
 SHEET NO.

C05



WESTPORT RESERVE
(PHASE 4)

THESE ARE THE RESULTS OF THE STUDY.

SEAL

2/11/2018

KEY PLAN

REVISION

[illegible]

PROJECT #	PROJECT #5008336
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

T:\Final\SF Phase 4\CC1-SF Phase 4

TITLE	PHASE 4 TREE PRESERVATION PLAN
PROJECT:	CC 1\Final\SF Phase 4
SHEET NO.	

C06

NOTE:
TREE SITE IS EQUAL TO THE TOTAL PHASE 4
SITE AREA MINUS THE EXISTING TREE
PRESERVATION EASEMENT. (25.73 - 1.65 = 24.08)

LEGEND

————— BOUNDARY LINE

..... PHASE LINE



PHASE 4 TREE
PRESERVATION

PHASE 4 TREE COUNT TABLE - 1 TREE PER 2500 SQ. FT. OF LGT Δ	
PHASE 4 SITE AREA (INCLUDING EXISTING TREE CE)	257.3 AC
NUMBER OF TREES REQUIRED (PER LGT TREE PER 2500 SQ. FT.)	448
PHASE 4 ON-SITE TREE PRESERVATION AREA	1.25 AC
NUMBER OF TREES WITHIN ON-SITE TREE PRESERVATION AREAS (007 TREES PER ACRE ARBORIST SAMPLE PLOT)	1259
PHASE 4 OFF-SITE TREE PRESERVATION AREA	4.65 AC
NUMBER OF TREES WITHIN OFF-SITE TREE PRESERVATION AREAS (007 TREES PER ACRE ARBORIST SAMPLE PLOT)	4683
TREE COUNT DEFICIT	0

WESTPORT RESERVE
(PHASE 4)

ABILITY OF BOAT CRUISE IN CHINA



SEAL

REVISIONS			
	12-20-17	KJK	REV LAYOUT & GRADING
	11-2-17	KJK	REV PER CTY
	8-14-17	KJK	REV PER CTY
No.	DATE	BY	Description

PROJECT #	PROJECT #5003138
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 83

TITLE
OVERALL  SPECIMEN TREE PRESERVATION PLAN

PROJECT: CC 1WFinchSF Phase 4
SHEET NO.

C07

SPECIMEN TREE LEGEND	
No.	SPECIMEN
1	18" CYPRESS
2	18" CYPRESS
3	18" CYPRESS
4	18" CYPRESS
5	18" OAK
6	18" OAK
7	12" BAY
8	18" CYPRESS
9	18" CYPRESS
10	18" CYPRESS
11	18" OAK
12	21" OAK
13	18" CYPRESS
14	19" CYPRESS
15	23" CYPRESS
16	20" CYPRESS
17	21" CYPRESS
18	20" LIVE OAK
19	20" OAK
20	18" CYPRESS
21	13" BAY
22	13" BAY
23	13" BAY
24	23" LIVE OAK
25	28" LAUREL OAK
26	18" LAUREL OAK
27	30" OAK
28	20" CYPRESS
29	13" BAY
30	16" BAY

30	SPECIMEN TREES		
6	SPECIMEN TREES IMPACTED		
20	SPECIMEN TREES PRESERVED	UNDER	
	PROPOSED TREE CE		
4	SPECIMEN TREES PRESERVED	UNDER	
	EXISTING ON-SITE TREE CE		

OVERALL SUBDIVISION AREA (EXCLUDES PHASE 2A)	140.86 ACRES
NUMBER OF SPECIMEN TREES	30
NUMBER OF SPECIMEN TREES PER ACRE	0.21
REQUIRED PRESERVATION	80% (24 TREES)
PROPOSED PRESERVATION	80% (24 TREES)
DEFICIT	0 TREES

NOTE: ADMINISTRATION VARIANCE CASE No. 17-90000003 IS BE'ING PROCESSED FOR PHASE 4 SPECIMEN TREE REQUIREMENTS.



LEGEND:

-  SPECIMEN TREE
-  PROPOSED TREE PRESERVATION
AREAS TO BE PLACED UNDER
PROTECTIVE CONSERVATION
EASEMENT
-  EXISTING TREE PRESERVATION
AREAS UNDER PROTECTIVE
CONSERVATION EASEMENT



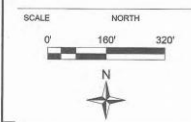
Dewberry
 Dewberry Engineers Inc.
 800 NORTH MADRID AVE
 SUITE 100
 ORLANDO, FL 32803
 PHONE: 407.343.1000
 ENGINEERING BUSINESS 407.474

**WESTPORT RESERVE
 (PHASE 4)**

CITY OF PORT ORANGE, FLORIDA

SEAL

7/11/2018



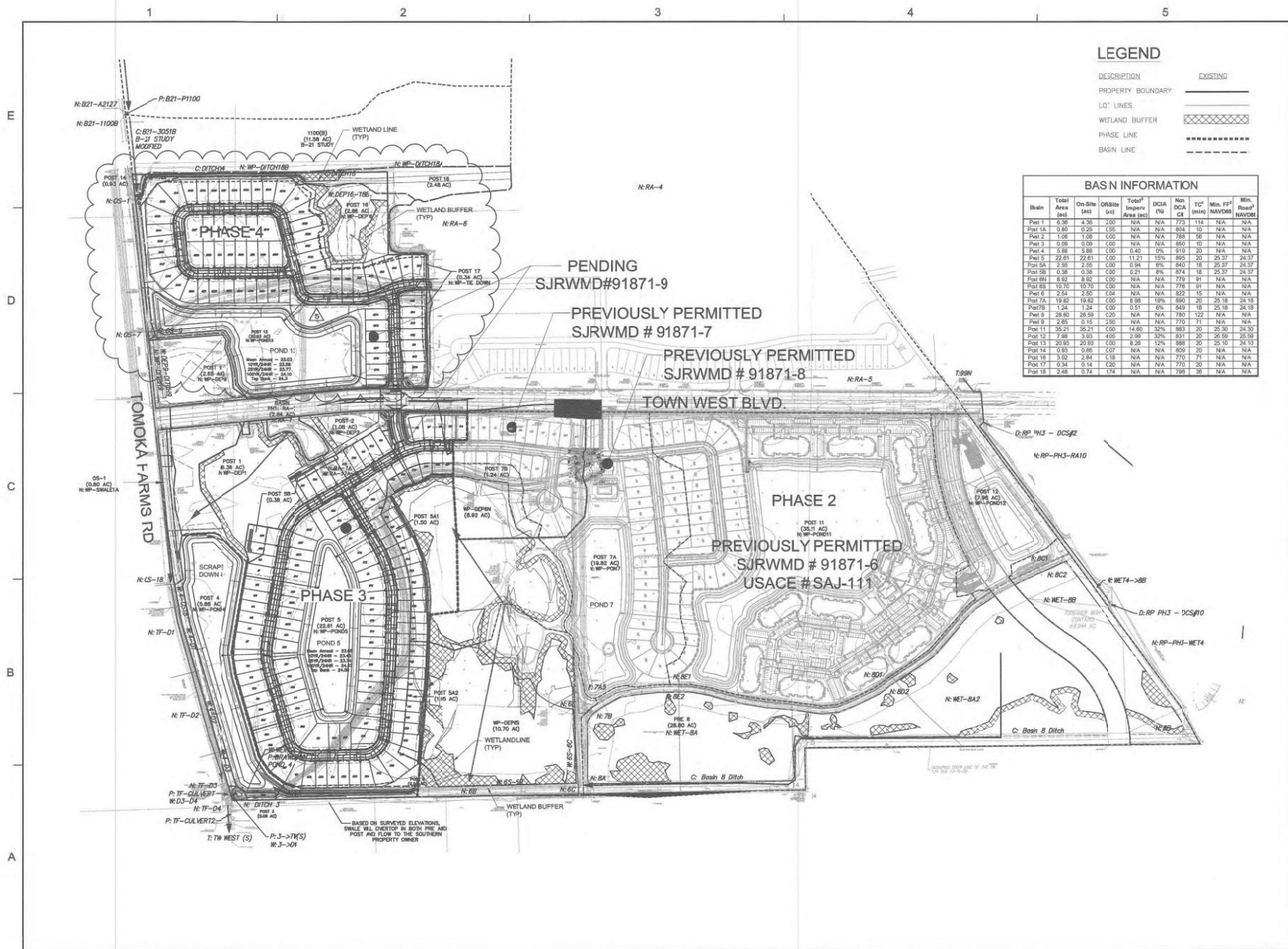
REVISIONS				
No.	DATE	BY	DESCRIPTION	REV PER CITY

PROJECT #	PROJECT #50003136
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

TITLE
EXISTING CONDITIONS PLAN

PROJECT: CC 1P/Inf/SF Phase 4
 SHEET NO.

C08



LEGEND

DESCRIPTION	EXISTING
PROPERTY BOUNDARY	---
LO' LINES	---
WETLAND BUFFER	---
PHASE LINE	---
BASE LINE	---

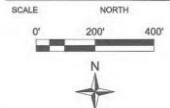
BASIN INFORMATION

Basin	Total Area (ac)	On-Site Area (ac)	Off-Site Area (ac)	Total Impervious Area (ac)	DCA (%)	Non DCA (%)	TC ¹ (min)	Min. F ² NAVD83	Min. F ³ NAVD83
Basin 1	0.36	0.36	0.00	0.36	0.00	0.00	114	N/A	N/A
Basin 2	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 3	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 4	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 5	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 6	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 7	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 8	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 9	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 10	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 11	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 12	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 13	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 14	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 15	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 16	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 17	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A
Basin 18	0.08	0.08	0.00	0.08	0.00	0.00	114	N/A	N/A

Dewberry
Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32803
PHONE: 407.541.4900
ENGINEERING BUSINESS 4754

WESTPORT RESERVE
(PHASE 4)

CITY OF PORT ORANGE, FLORIDA



REVISIONS			
No.	DATE	BY	DESCRIPTION

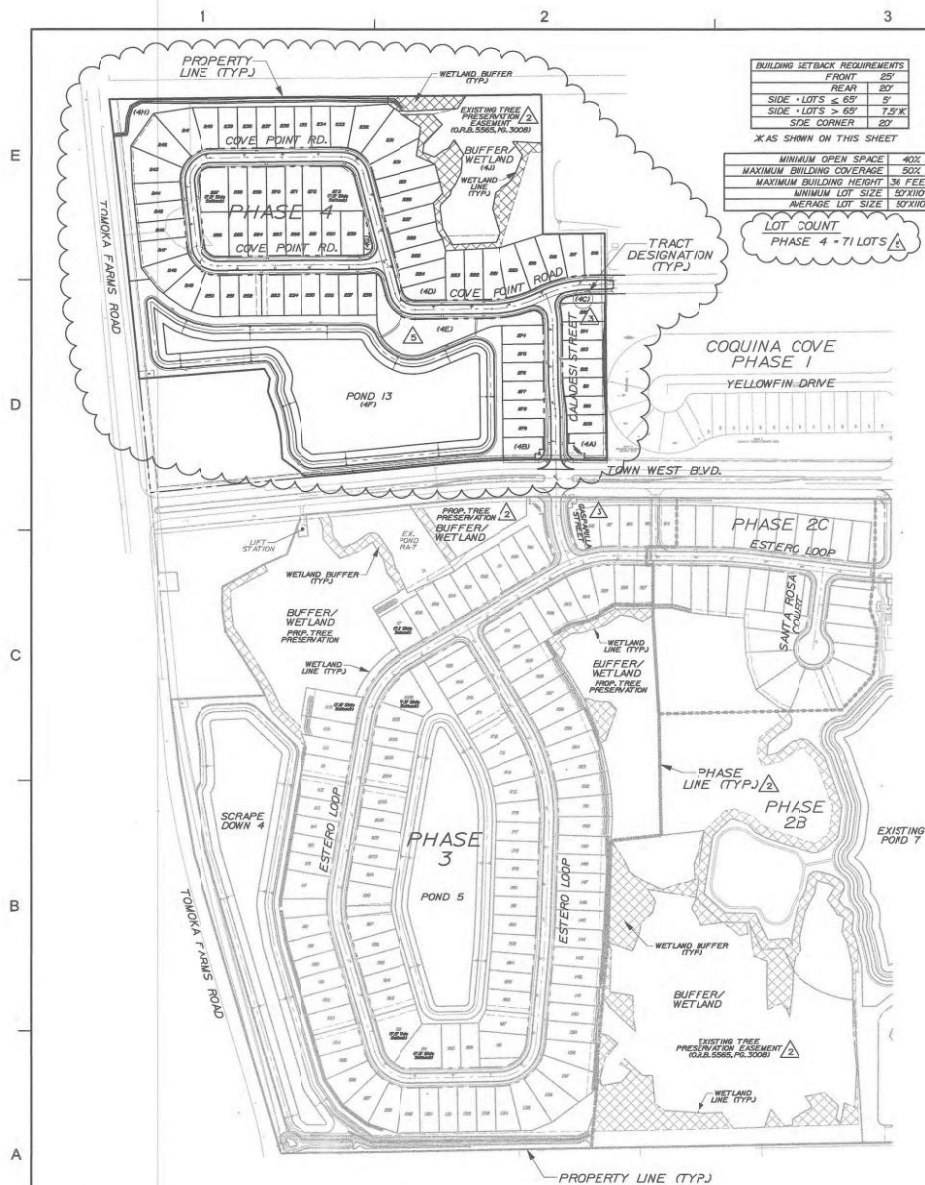
PROJECT #	PROJECT #0003138
DRAWING	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

TITLE

ERP PERMITS

PROJECT: CC 1/Final/SP Phase 4
SHEET NO.

C08A

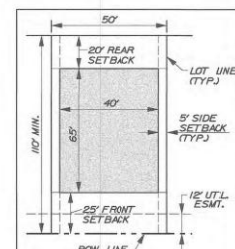


BUILDING SETBACK REQUIREMENTS	
FRONT	25'
REAR	25'
SIDE - LOTS < 65'	5'
SIDE - LOTS > 65'	7.5'
SIZE CORNER	20'

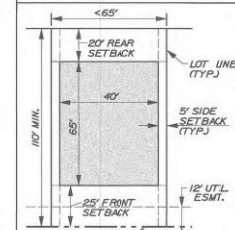
*AS SHOWN ON THIS SHEET

MINIMUM OPEN SPACE	40%
MAXIMUM BUILDING COVERAGE	50%
MAXIMUM BUILDING HEIGHT	34 FEET
MINIMUM LOT SIZE	50'X100'
AVERAGE LOT SIZE	50'X100'

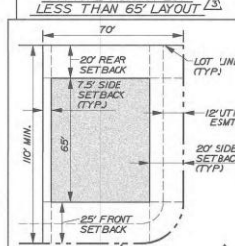
LOT COUNT
PHASE 4 - 71 LOTS



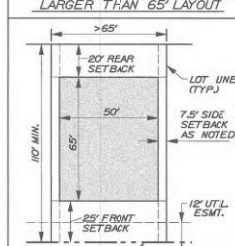
TYPICAL 50' LOT LAYOUT



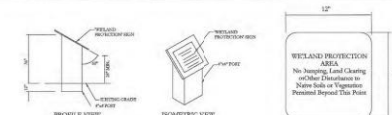
TYPICAL FOR A LOT LESS THAN 65' LAYOUT



TYPICAL FOR A CORNER LOT LARGER THAN 65' LAYOUT



TYPICAL FOR A LOT LARGER THAN 65' LAYOUT



TYPICAL WETLAND PROTECTION SIGN

NOTE: TO BE POSTED ON 100 FOOT COUNTERS IN COMMON AREAS ON THE LANDWARD EDGE OF THE BUFFER INOT IN THE BUFFER AND ON EVERY OTHER INDIVIDUAL LOT LINE FOR RESIDENTIAL PROPERTIES ADJACENT.

TRACT SUMMARY				
TRACT	ACRES	DESCRIPTION	OWNERSHIP	MAINTENANCE
PHASE 4				
4A	0.18	OPEN SPACE/BUFFER	HOA	HOA
4B	0.15	OPEN SPACE/BUFFER	HOA	HOA
4C	0.08	OPEN SPACE/T.E.	HOA	HOA
4D	0.12	OPEN SPACE	HOA	HOA
4E	0.88	OPEN SPACE/PARK	HOA	HOA
4F	6.79	OPEN SPACE/WATERWAY	HOA	HOA
4G	0.04	OPEN SPACE	HOA	HOA
4H	0.94	OPEN SPACE/PARK/D.E.	HOA	HOA
4J	2.50	WETLAND/BUFFER	HOA	HOA

WETLAND/BUFFER SUMMARY			
TRACT	WETLAND ACRES	BUFFER ACRES	WETLAND BUFFER COMMON
PHASE 4	1.737	1.185	2.902

SITE DATA (PHASE 4)		
PROJECT AREAS	AREA (AC.)	%
GREEN AREA (TOTAL)	11.4	46.02%
WETLAND CONSERVATION (not included in open space)	1.8	7.72%
UPLAND BUFFERS	1.17	4.55%
RIGHT-OF-WAYS TOTAL	3.0	11.66%
ROADWAY	1.7	6.62%
R.O.W. GREEN AREA/OPEN SPACE	1.29	5.01%
LOTS (TOTAL)	10.89	42.32%
LOTS OUTSIDE BUFFER	10.89	42.32%
TOTAL GROSS PROJECT AREA	25.3	100.00%
TOTAL NET PROJECT AREA	24.40	
NET PROJECT AREA EQUALS GROSS AREA MINUS WETLAND CONSERVATION NOT INCLUDED IN OPEN SPACE (25.31 AC. - 1.73 AC. = 24.00 AC.)		
OPEN SPACE REQUIRED	AREA (AC.)	%
OPEN SPACE	9.64	40.00%
COMMON OPEN SPACE	9.64	40.00%
OPEN SPACE PROVIDED	AREA (AC.)	%
COMMON AREA	8.94	37.25%
UPLAND BUFFERS	1.17	4.88%
R.O.W. GREEN AREA/OPEN SPACE	1.29	5.37%
30% (OT) OPEN SPACE	3.27	13.63%
TOTAL	14.67	61.13%
COMMON OPENSAPCE PROVIDED	AREA (AC.)	%
COMMON AREA	8.94	37.25%
UPLAND BUFFERS	1.17	4.88%
R.O.W. GREEN AREA/OPEN SPACE	1.29	5.37%
TOTAL	11.40	47.50%
EXCESS COMMON OPEN SPACE CAN BE USED TOWARD FUTURE CONTIGUOUS		
PORTION OF DRAINAGE AREA/WETLAND CONSERVATION CONSIDERED AS COMMON OPEN SPACE WHICH IS DELINEATED AS THE AREA WITHIN 10' OF PUBLIC PEDESTRIAN ACCESS.		
AREAS ABOVE ARE NOT ROUNDED		

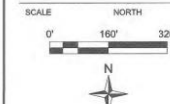


Dewberry Engineers Inc.
800 NORTH HANGLIA AVE
SUITE 100
ORLANDO, FL 32805
PHONE: 407.843.1129
ENGINEERING BUSINESS 4794

WESTPORT RESERVE
(PHASE 4)

CITY OF PORT ORANGE, FLORIDA

SEAL



REVISIONS

No.	DATE	BY	Description
1	12-20-17	KJK	REV LAYOUT & GRADING
2	10-2-17	KJK	REV PER CITY
3	8-4-17	KJK	REV PER CITY
4	7-1-17	KJK	REV PER CITY

PROJECT # PROJECT #00081396
DRAWN BY KJK
APPROVED BY DMV
CHECKED BY DMV
DATE MAY 2018
DUTY NAVD 88

TITLE

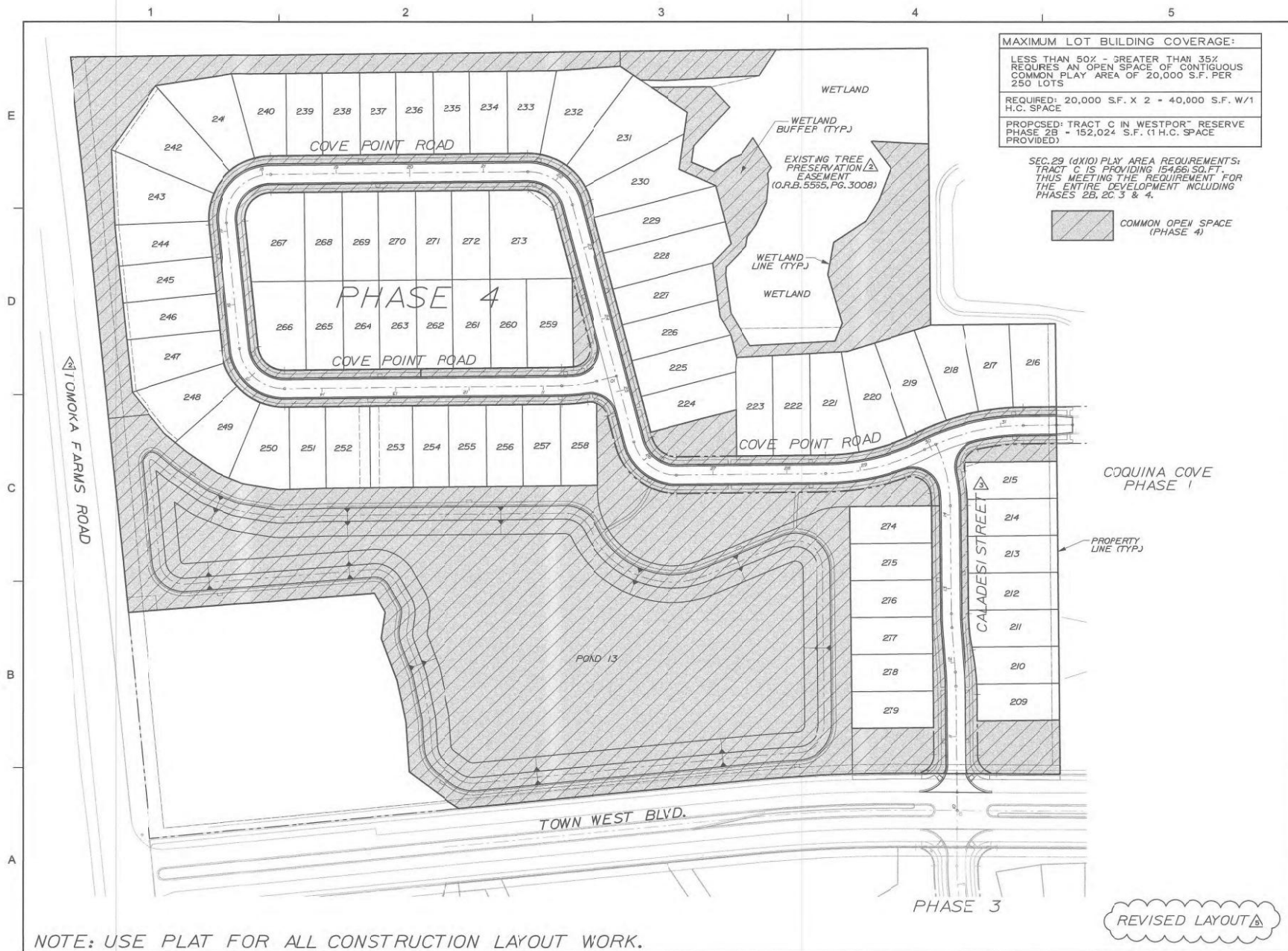
PHASE 4
SITE PLAN
DATA

PROJECT: CC 1YFinalSF Phase 4
SHEET NO.

C10

NOTE:
WHERE REQUIRED BUFFER AREAS HAVE BEEN PREVIOUSLY CLEARED, THEY SHALL BE REPLANTED WITH NATIVE VEGETATION OF SIMILAR TYPE AND DENSITY TO ADJOINING UNCLEARED BUFFER AREAS. IF ALL ADJOINING BUFFER AREAS HAVE BEEN CLEARED, THEN BUFFERS ADJACENT TO SIMILAR WETLANDS IN OTHER LOCATIONS WILL BE USED TO DETERMINE THE NECESSARY REPLANTING CRITERIA.

NOTE: USE FLAT FOR ALL CONSTRUCTION LAYOUT WORK.



MAXIMUM LOT BUILDING COVERAGE:
 LESS THAN 50% - GREATER THAN 35%
 REQUIRES AN OPEN SPACE OF CONTIGUOUS
 COMMON PLAY AREA OF 20,000 S.F. PER
 250 LOTS
 REQUIRED: 20,000 S.F. X 2 = 40,000 S.F. W/1
 H.C. SPACE
 PROPOSED: TRACT C IN WESTPORT RESERVE
 PHASE 2B = 152,024 S.F. (1 H.C. SPACE
 PROVIDED)

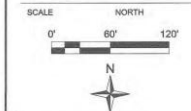
SEC. 29 (d)(10) PLAY AREA REQUIREMENTS:
 TRACT C IS PROVIDING 154,661 SQ. FT.
 THUS MEETING THE REQUIREMENT FOR
 THE ENTIRE DEVELOPMENT INCLUDING
 PHASES 2B, 2C, 3 & 4.

COMMON OPEN SPACE
 (PHASE 4)

Dewberry
 Dewberry Engineers Inc.
 810 NORTH MAGNOLIA AVE.
 SUITE 100
 ORLANDO, FL 32808
 PHONE: 407-841-8100
 ENGINEERING BUSINESS 4714

WESTPORT RESERVE
 (PHASE 4)

CITY OF PORT ORANGE, FLORIDA



REVISIONS			
No.	DATE	BY	Description
1	12-20-17	KJK	REV LAYOUT & GRADING
2	11-2-17	KJK	REV PER CITY
3	8-14-17	KJK	REV PER CITY

PROJECT #	PROJECT #0008136
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

TITLE
**PHASE 4
 COMMON
 OPEN
 SPACE PLAN**
 PROJECT: CC 1VFinalSP Phase 4
 SHEET NO.

REVISED LAYOUT

C12

NOTE: USE PLAT FOR ALL CONSTRUCTION LAYOUT WORK.

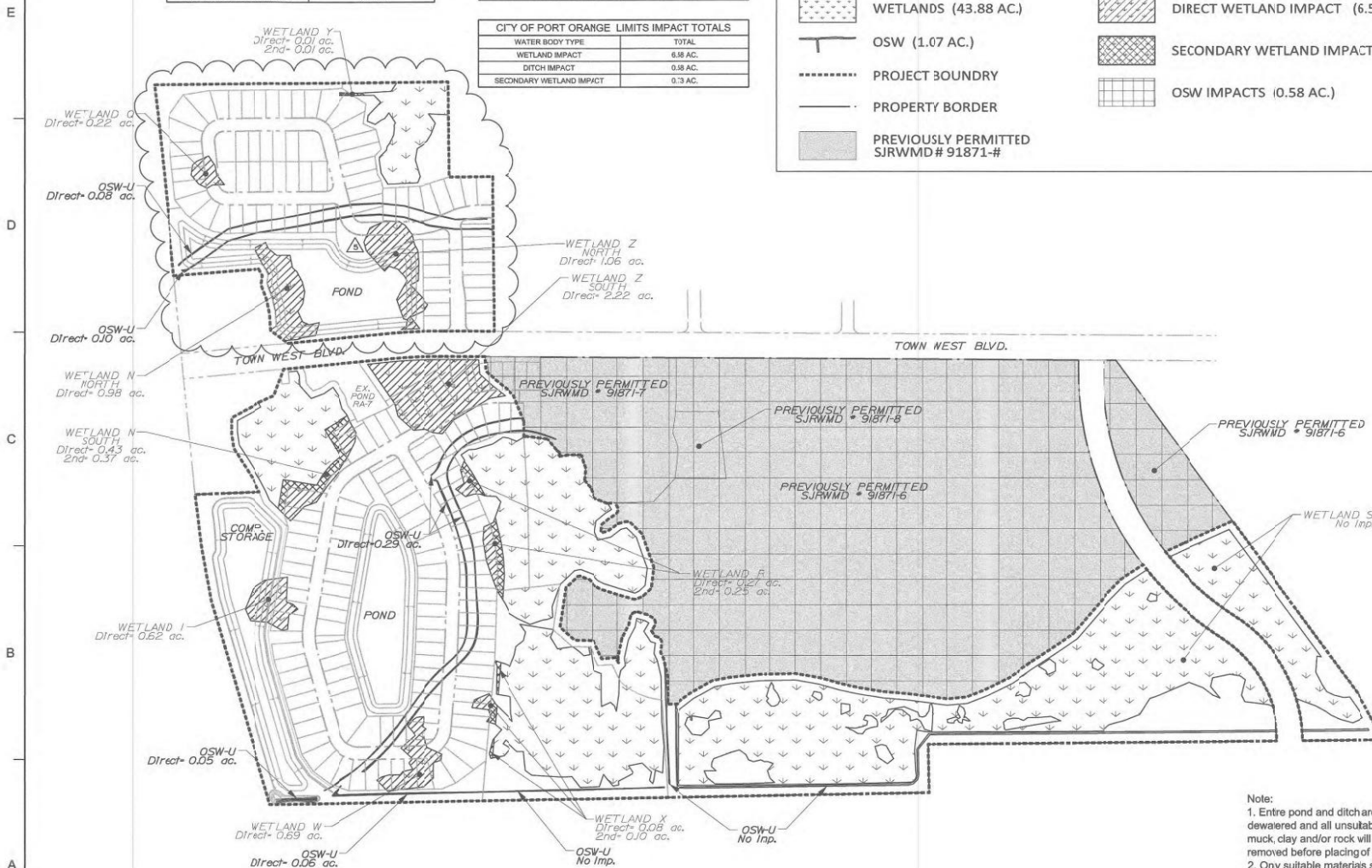
USACE ADDITIONAL IMPACTS PER PHASE 3 & 4	
WATER BODY TYPE	TOTAL
WETLAND IMPACT	0.08 AC.
DITCH IMPACT	0.11 AC.
SECONDARY WETLAND IMPACT	0.10 AC.

SJRWMD ADDITIONAL IMPACTS PER PHASE 3 & 4	
WATER BODY TYPE	TOTAL
WETLAND IMPACT	6.58 AC.
DITCH IMPACT	0.58 AC.
SECONDARY WETLAND IMPACT	0.73 AC.

CITY OF PORT ORANGE LIMITS IMPACT TOTALS	
WATER BODY TYPE	TOTAL
WETLAND IMPACT	6.58 AC.
DITCH IMPACT	0.58 AC.
SECONDARY WETLAND IMPACT	0.73 AC.

LEGEND:

-  WETLANDS (43.88 AC.)
-  DIRECT WETLAND IMPACT (6.58 AC.)
-  OSW (1.07 AC.)
-  SECONDARY WETLAND IMPACT (0.73 AC.)
-  PROJECT BOUNDARY
-  PROPERTY BORDER
-  OSW IMPACTS (0.58 AC.)
-  PREVIOUSLY PERMITTED SJRWMD # 91871-#



Note:

1. Entire pond and ditch areas will be dewatered and all unsuitable subsoil such as muck, clay and/or rock will be excavated and removed before placing of fill.
2. Only suitable materials shall be used for the fill and shall be done in layers not exceeding 12 inches in thickness and compacted to 95% max density per AASTHO T-180.
3. Any unsuitable soils such as clay, muck or any organic soils are found, all unsuitable soils shall be excavated and replaced with suitable soils.



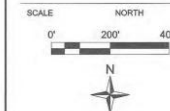
Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 1000
ORLANDO, FL 32808
PHONE: 407-843-1310
FAX: 407-843-1311
ENGINEERING BUSINESS 4794

WESTPORT RESERVE (PHASE 4)

CITY OF PORT ORANGE, FLORIDA

SEAL

KEY PLAN



REVISIONS

No.	DATE	BY	DESCRIPTION
1	12-20-17	KJK	REVISED LAYOUT & GRADING

PROJECT #	PROJECT #5008136
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

TITLE

OVERALL WETLAND IMPACT PLAN

PROJECT: CC 1/Final/SP Phase 4
SHEET NO.

C13

LEGEND: Δ

- PROJECT BOUNDARY
- PROPERTY BORDER
- PREVIOUSLY PERMITTED SJRWMD # 91871-# Δ
- WETLAND PRESERVATION (37.30 AC.)
- UPLAND BUFFER PRESERVATION (7.87 AC.)
- UPLAND REMAINING (7.28 AC.)
- OSW REMAINING (0.49 AC.)



Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32803
PHONE: 407.541.1100
ENGINEERING BUSINESS 4794

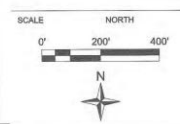
WESTPORT RESERVE (PHASE 4)

CITY OF PORT ORANGE, FLORIDA

SEAL

7/1/2010

KEY PLAN



REVISIONS

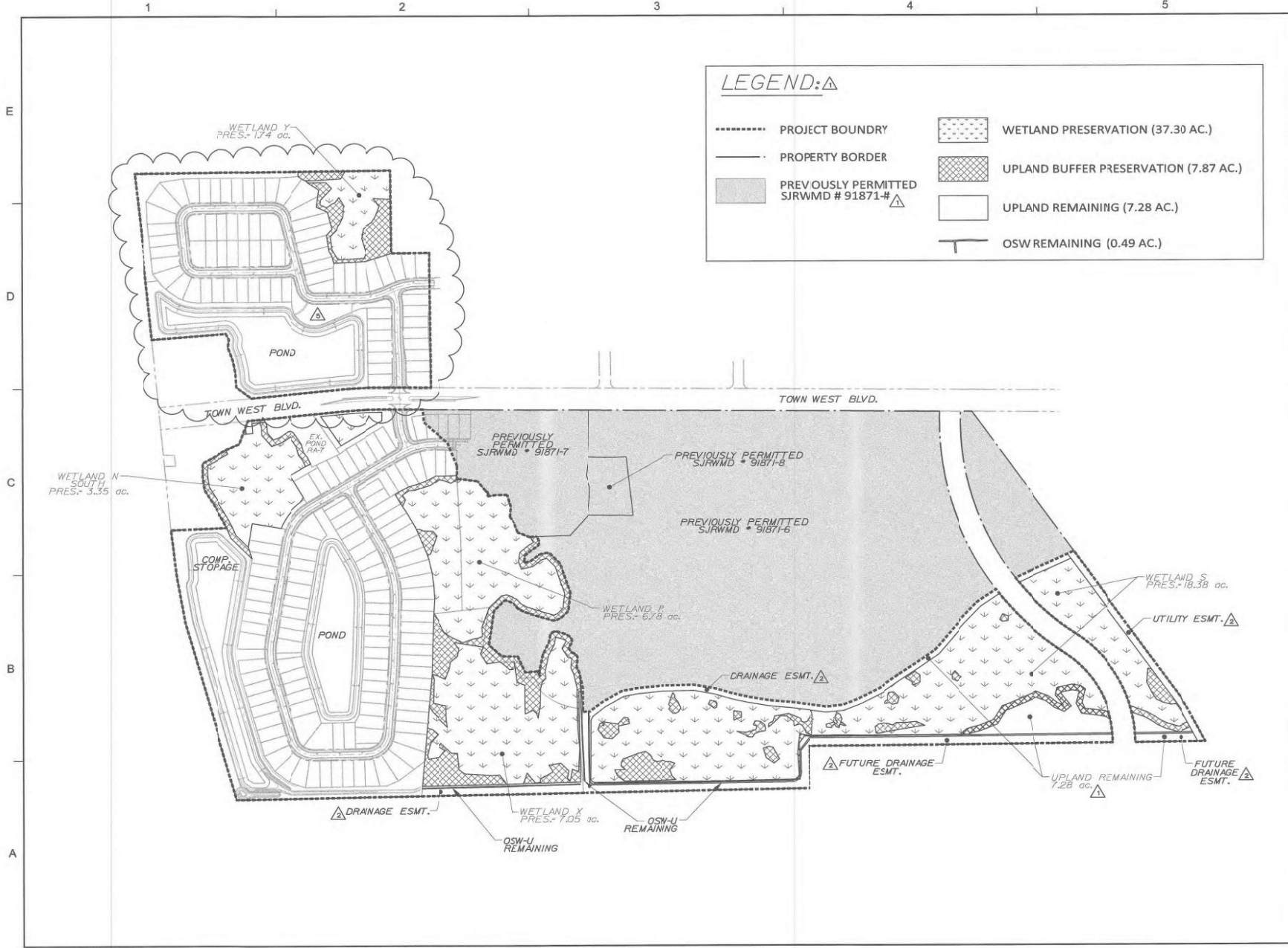
No.	DATE	BY	Description
Δ	12-20-17	KJK	REV LAYOUT & GRADING
Δ	5-14-17	KJK	REV PER QTY
Δ	1-21-17	KJK	REV PER CA

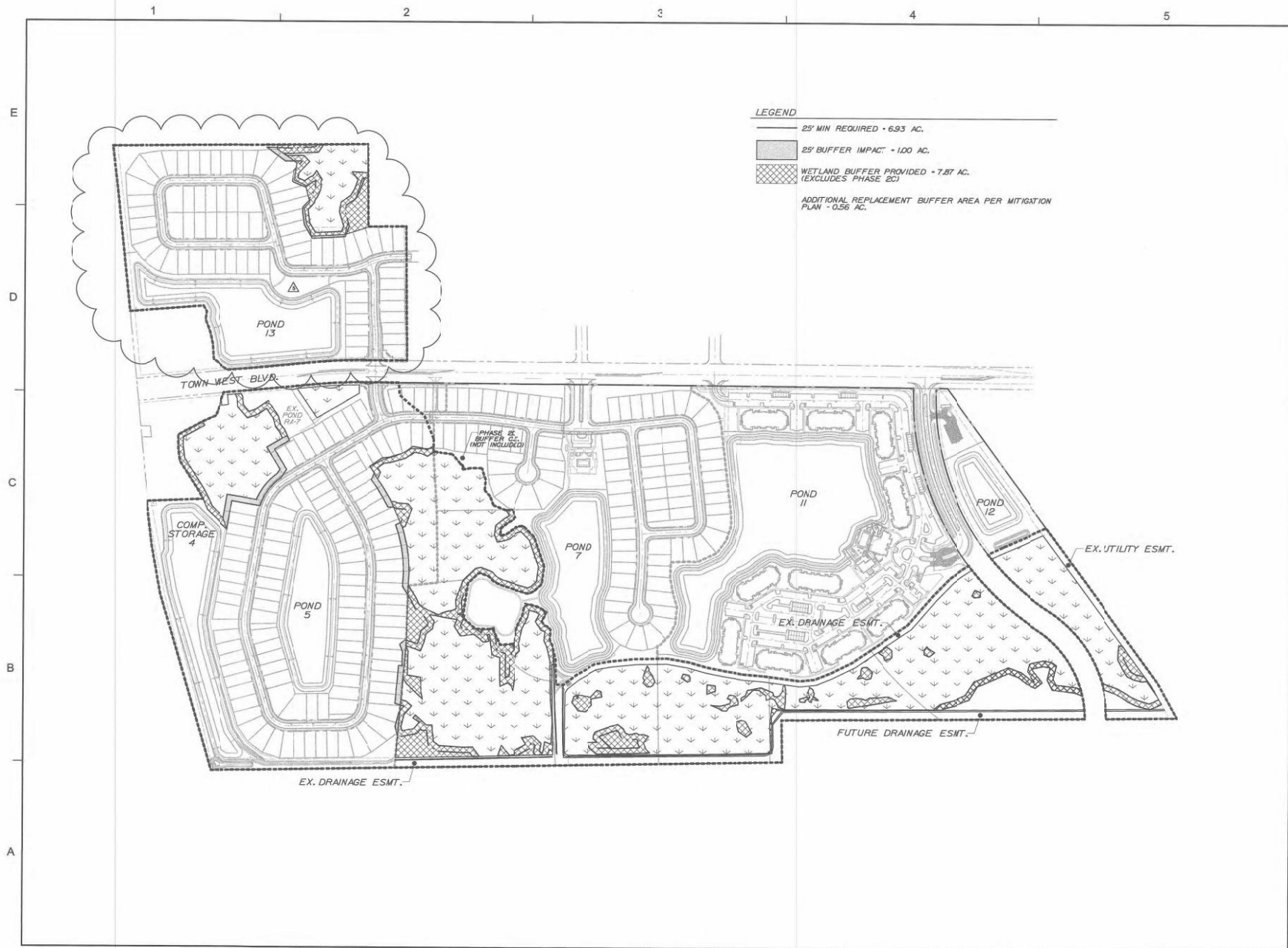
PROJECT #	PROJECT #5003136
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

TITLE
OVERALL
WETLAND &
UPLAND BUFFER
MITIGATION/
PRESERVATION PLAN

PROJECT: CC 1/Prel/SF Phase 4
SHEETNO.

C14





Dewberry
Dewberry Engineers Inc.
800 NORTH MANORIAL AVE
SUITE 1000
ORLANDO, FL 32803
PHONE: 407.843.1200
ENGINEERING LICENSE: 4794

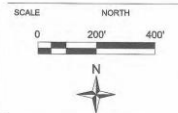
**WESTPORT RESERVE
(PHASE 4)**

CITY OF PORT ORANGE, FLORIDA

SEAL

7/1/2018

KEY PLAN



REVISIONS

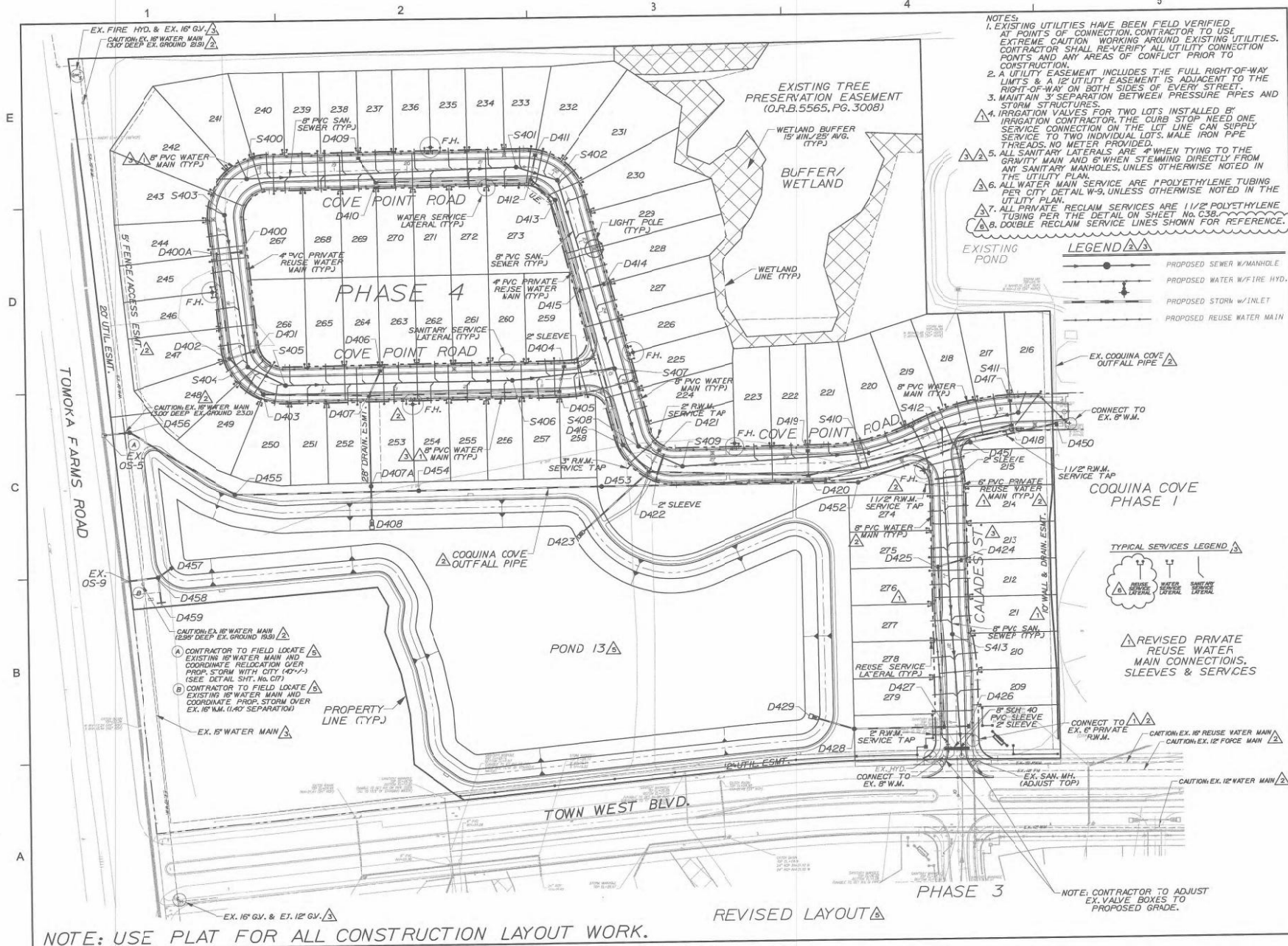
No.	DATE	BY	DESCRIPTION
1	12-20-17	KJK	REV LAYOUT & GRADING
2	1-14-17	KJK	REV PER CITY

PROJECT # PROJECT #0003136
DRAWN BY J.K.K.
APPROVED BY DMV
CHECKED BY DMV
DATE MAY 2018
DATUM NAVD 83

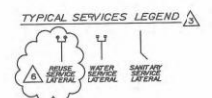
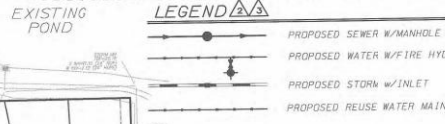
**OVERALL
BUFFER
MITIGATION
PLAN**

PROJECT: CC 1/PineSF Phase 4
SHEET 40.

C14A



- NOTES:**
1. EXISTING UTILITIES HAVE BEEN FIELD VERIFIED. AT POINTS OF CONNECTION, CONTRACTOR TO USE EXTREME CAUTION WORKING AROUND EXISTING UTILITIES. CONTRACTOR SHALL RE-VERIFY ALL UTILITY CONNECTION POINTS AND ANY AREAS OF CONFLICT PRIOR TO CONSTRUCTION.
 2. A UTILITY EASEMENT INCLUDES THE FULL RIGHT-OF-WAY LIMITS & A 12' UTILITY EASEMENT IS ADJACENT TO THE RIGHT-OF-WAY ON BOTH SIDES OF EVERY STREET.
 3. MAINTAIN 3' SEPARATION BETWEEN PRESSURE PIPES AND STORM STRUCTURES.
 4. IRRIGATION VALVES FOR TWO LOTS INSTALLED BY IRRIGATION CONTRACTOR. THE CURB STOP NEED ONE SERVICE CONNECTION ON THE LOT LINE CAN SUPPLY SERVICE TO TWO INDIVIDUAL LOTS. MALE IRON PIPE THREADS. NO METER PROVIDED.
 5. ALL SANITARY LATERALS ARE 4" WHEN TYING TO THE GRAVITY MAIN AND 6" WHEN STEERING DIRECTLY FROM ANY SANITARY MANHOLES, UNLESS OTHERWISE NOTED IN THE UTILITY PLAN.
 6. A WATER MAIN SERVICE ARE 11/2" POLYETHYLENE TUBING PER CITY DETAIL W-9, UNLESS OTHERWISE NOTED IN THE UTILITY PLAN.
 7. ALL PRIVATE RECLAIM SERVICES ARE 11/2" POLYETHYLENE TUBING PER THE DETAIL ON SHEET NO. C38.
 8. DOUBLE RECLAIM SERVICE LINES SHOWN FOR REFERENCE.



Dewberry
Dewberry Engineers Inc.
201 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32803
PHONE: 407.843.8120
FAX: 407.843.8120
ENGINEERING BUSINESS 4794

WESTPORT RESERVE (PHASE 4)

SEAL

SCALE: 0' 60' 120'

REVISIONS

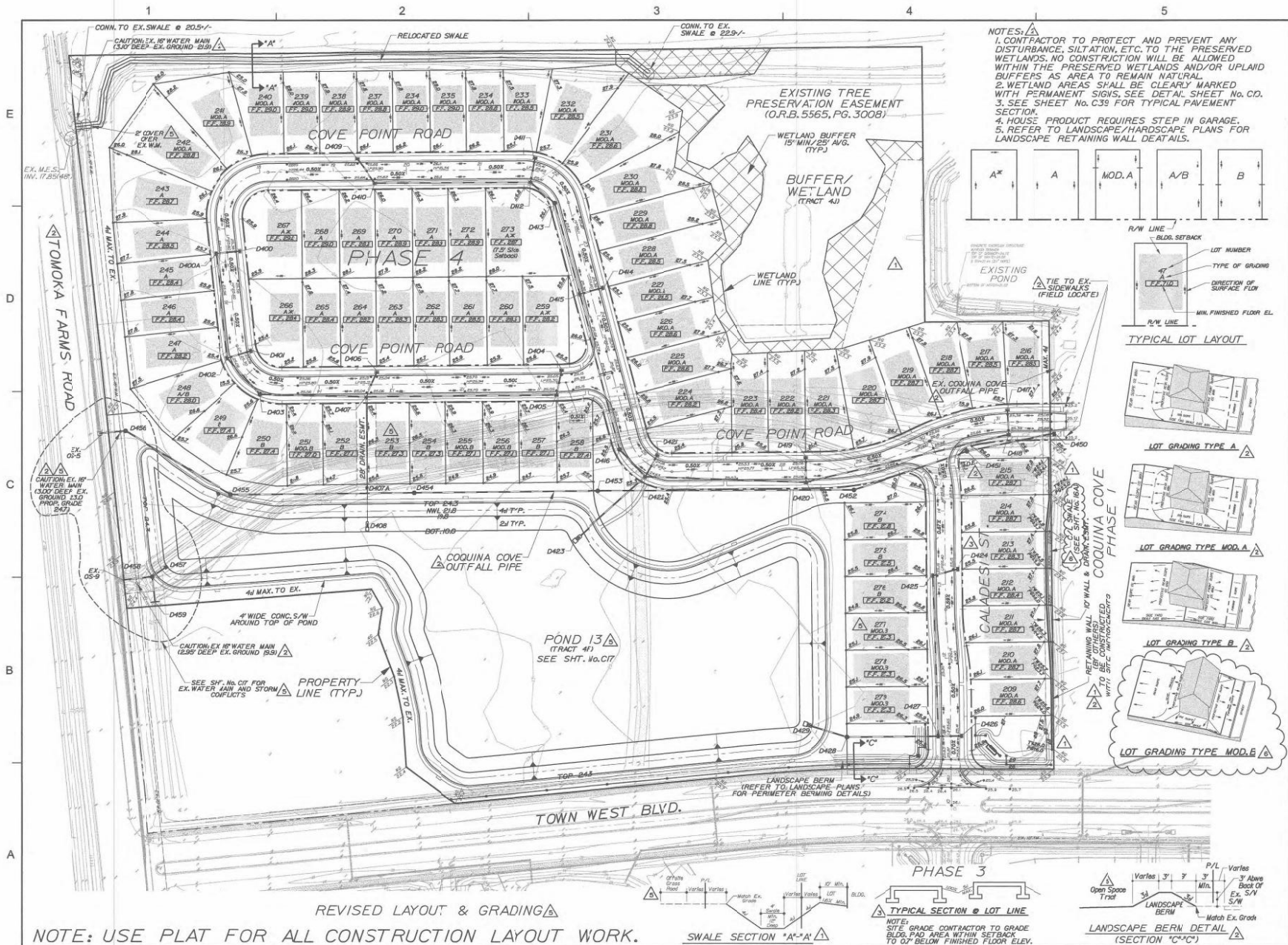
No.	DATE	BY	Description
1	7-10-18	KJK	REV PER CITY
2	12-20-17	KJK	REV LAYOUT & DRAINING
3	10-2-17	KJK	REV PER CITY
4	8-14-17	KJK	REV PER CITY
5	7-21-17	KJK	REV PER QA

PROJECT # 850093136
DRAWN BY KJK
APPROVED BY DMV
CHECKED BY DMV
DATE MAY 2018
DUTY NAVI 88

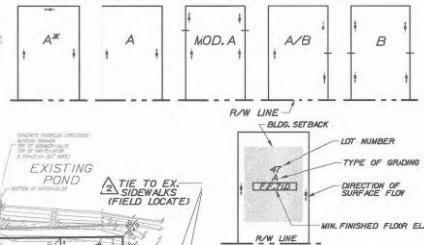
PHASE 4 UTILITY PLAN

PROJECT: CC 19FinalSP Phase 4
SHEET NO.

C15



- NOTES:
1. CONTRACTOR TO PROTECT AND PREVENT ANY DISTURBANCE, SILTATION, ETC. TO THE PRESERVED WETLANDS. NO CONSTRUCTION WILL BE ALLOWED WITHIN THE PRESERVED WETLANDS AND/OR UPLAND BUFFERS AS AREA TO REMAIN NATURAL.
 2. WETLAND AREAS SHALL BE CLEARLY MARKED WITH PERMANENT SIGNS, SEE DETAIL SHEET NO. C.D. 3. SEE SHEET NO. C39 FOR TYPICAL PAVEMENT SECTION.
 4. HOUSE PRODUCT REQUIRES STEP IN GARAGE.
 5. REFER TO LANDSCAPE/HARDSCAPE PLANS FOR LANDSCAPE RETAINING WALL DETAILS.



Dewberry

Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 1000
ORLANDO, FL 32809
PHONE: 407-841-9190
ENGINEERING BUSINESS 4794

WESTPORT RESERVE (PHASE 4)

CITY OF PORT ORANGE, FLORIDA

SCALE: 0' 60' 120'

NORTH

REVISIONS

No.	DATE	BY	DESCRIPTION
7-10-18	KJK	REV PER CIV	
12-20-17	KJK	REV LAYOUT & GRADING	
11-2-17	KJK	REV PER CIV	
8-14-17	KJK	REV PER CIV	
7-21-17	KJK	REV PER CIV	

PROJECT #

DRAWN BY

APPROVED BY

CHECKED BY

DATE

DATUM

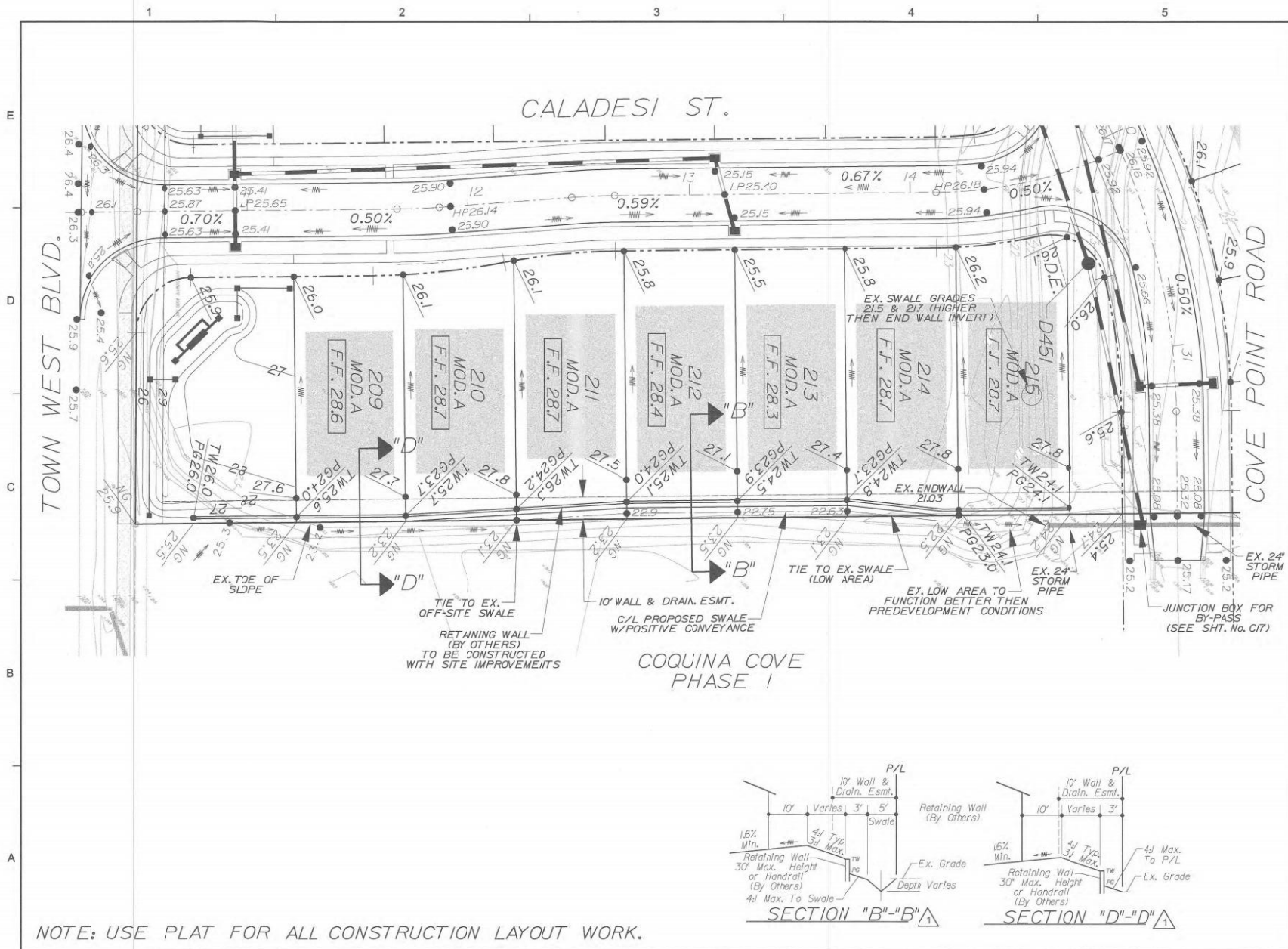
TITLE

PHASE 4 LOT & BLOCK GRADING PLAN

PROJECT: CC 1 Final SP Phase 4

SHEET NO.

C16

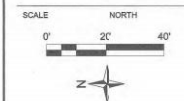


Dewberry

Dewberry Engineers Inc.
801 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32803
PHONE: 407.843.8300
ENGINEERING BUSINESS 4794

WESTPORT RESERVE
(PHASE 4)

CITY OF PORT ORANGE, FLORIDA



REVISIONS			
No.	DATE	BY	Description
1	7-15-18	KJK	REV PER CITY
2	12-25-17	KJK	REV LAYOUT & GRADING
3	10-2-17	KJK	REV PER CITY
4	8-14-17	KJK	REV PER CITY
5	7-21-17	KJK	REV PER QA

PROJECT # PROJECT #50083138
DRAWN BY KJK
APPROVED BY DMV
CHECKED BY DMV
DATE MAY 2018
DATUM NAVD 88

TITLE

**PHASE 4
SWALE**

PROJECT: CC 19 Final Phase 4
SHEET NO.

C16A



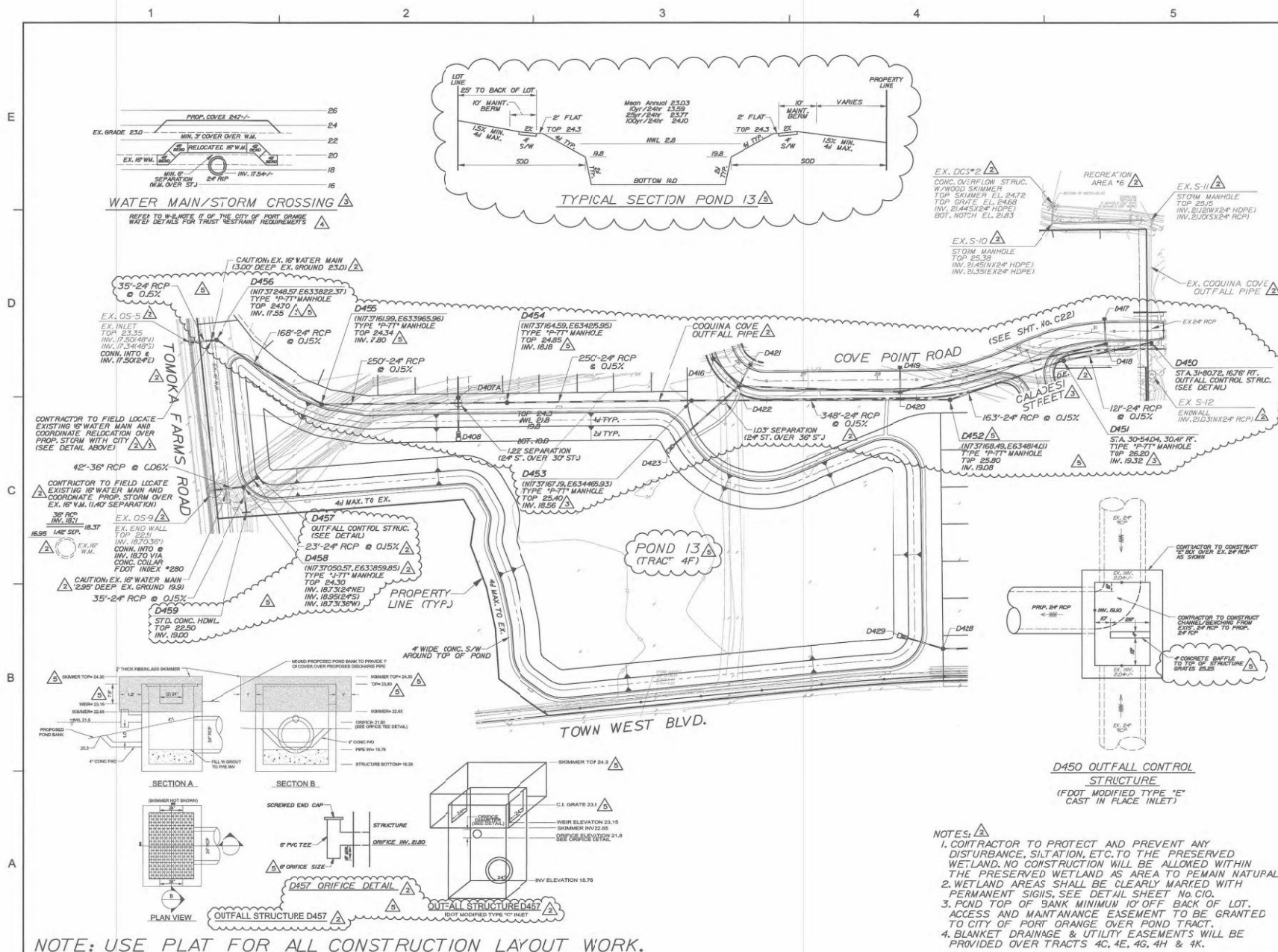
REVISIONS					
A	1220-17	KJK	REV LAYOUT & GRADING		
A	1'-3-17	KJK	REV PER CIFY		
A	16-17	KJK	REV PER CIFY		
A	844-17	KJK	REV PER CIFY		
No.	DATE	BY	Description		

PROJECT #	PROJECT #5008136
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88
TITLE	

PHASE 4
POND 13

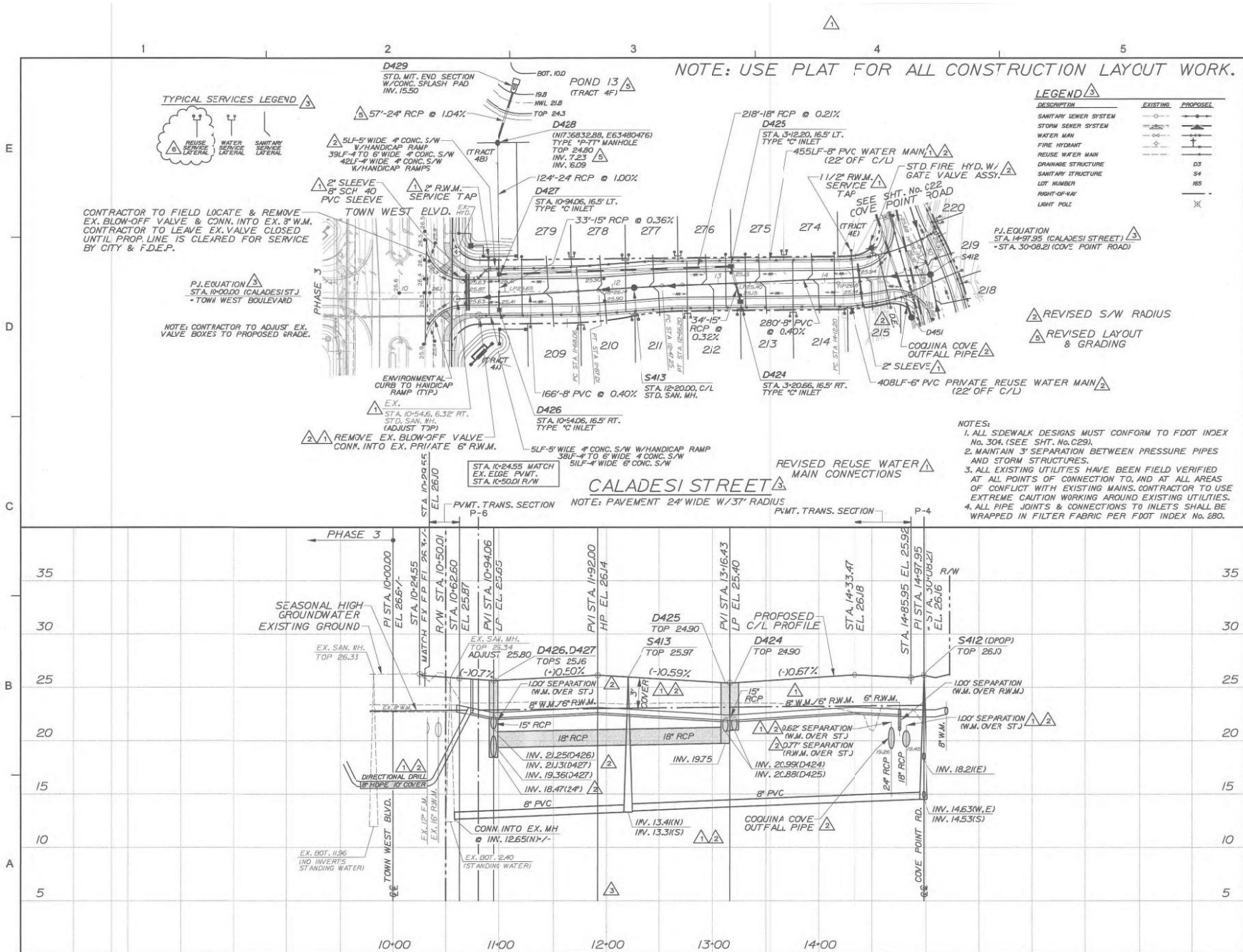
PROJECT: CC 1(Final)SF Phase 4
SHEET NO.

C17



NOTES: 

1. CONTRACTOR TO PROTECT AND PREVENT ANY DISTURBANCE, SITUATION, ETC. TO THE PRESERVED WETLAND. NO CONSTRUCTION WILL BE ALLOWED WITHIN THE PRESERVED WETLAND AS AREA TO REMAIN NATURAL.
2. WETLAND AREAS SHALL BE CLEARLY MARKED WITH PERMANENT SIGNS. SEE DETAIL SHEET NO. C0.
3. PCND TOP OF BANK MINIMUM 10' OFF BACK OF LOT. ACCESS AND MAINTENANCE EASEMENT TO BE GRANTED TO CITY OF FORT ORANGE OVER FORD TRACT.
4. EASEMENT TO BE GRANTED TO CITY OF FORT ORANGE OVER FORD TRACT WILL BE PROVIDED OVER TRACTS 4C, 4D, 4E, 4F, 4G, 4H, 4I, 4J, 4K.

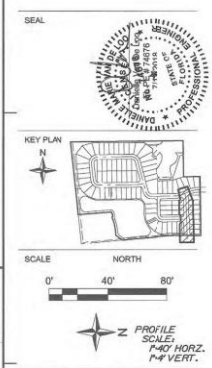


Dewberry

Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 1000
ORLANDO, FL 32803
PHONE: 407.841.9100
FAX: 407.841.9101
ENGINEERING BUSINESS 4794

**WESTPORT RESERVE
(PHASE 4)**

CITY OF PORT ORANGE, FLORIDA



REVISIONS

No.	DATE	BY	Description
1	7-10-18	KJK	REV PER CITY
2	12-20-17	KJK	REV LAYOUT & GRADING
3	1-12-17	KJK	REV PER CITY
4	8-14-17	KJK	REV PER CITY
5	7-21-17	KJK	REV PER Co.

PROJECT # PROJECT #50081396

DRAWN BY KJK

APPROVED BY DMV

CHECKED BY DMV

DATE MAY 2018

DATUM NAVD 88

TITLE

**PHASE 4
CALADESI STREET
PLAN & PROFILE**

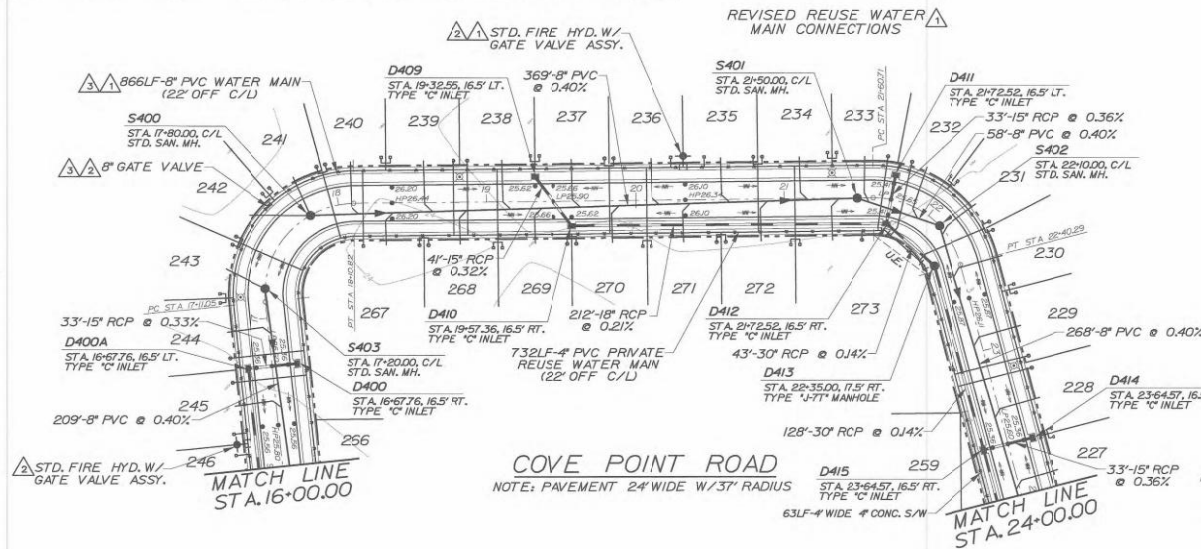
PROJECT: CC 1/1FinalSP Phase 4

SHEET NO.

C18

Vol. II of IV

NOTE: USE PLAT FOR ALL CONSTRUCTION LAYOUT WORK.



TYPICAL SERVICES LEGEND



LEGEND

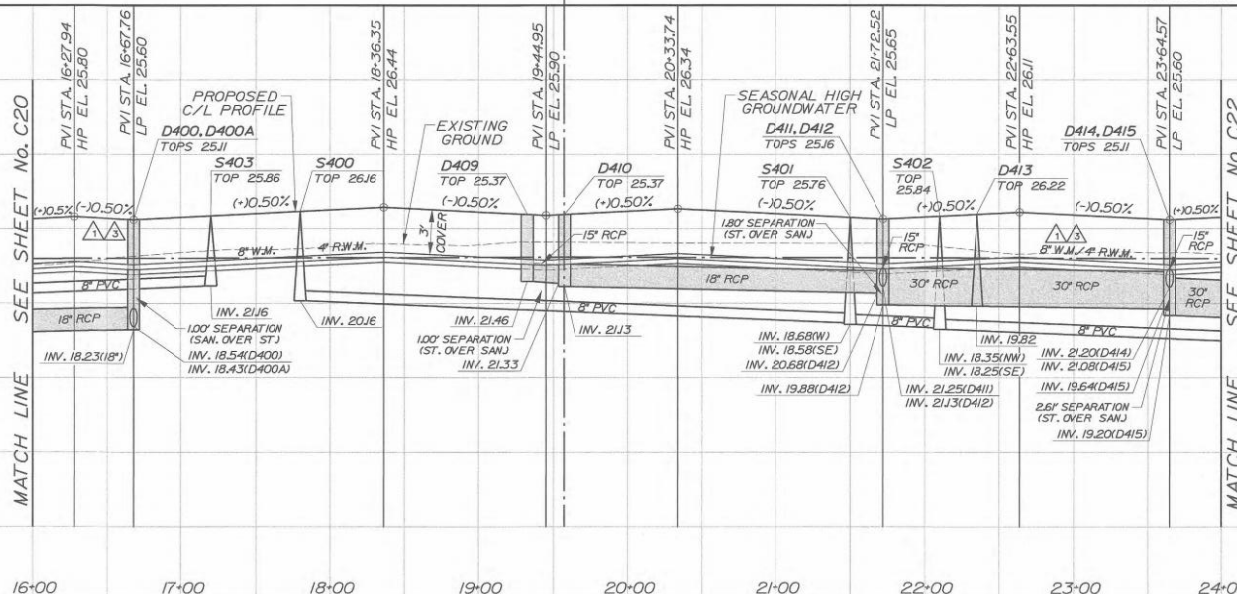
DESCRIPTION	EXISTING	PROPOSED
SANITARY SEWER SYSTEM		
STORM SEWER SYSTEM		
WATER MAIN		
FIRE HYDRANT		
REUSE WATER MAIN		
DRAINAGE STRUCTURE		
SANITARY STRUCTURE		
LOT NUMBER	D3	S4
RIGHT-OF-WAY	S4	NS
LIGHT POLE		

REVISED LAYOUT & GRADING

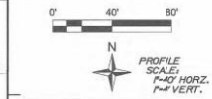
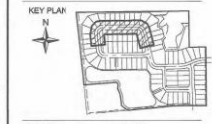
- NOTES:
1. ALL SIDEWALK DESIGNS MUST CONFORM TO FDOT INDEX No. 304. (SEE SHT. No. C29).
 2. MAINTAIN 3' SEPARATION BETWEEN PRESSURE PIPES AND STORM STRUCTURES.
 3. ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED AT ALL POINTS OF CONNECTION TO, AND AT ALL AREAS OF CONFLICT WITH EXISTING MAINS. CONTRACTOR TO USE EXTREME CAUTION WORKING AROUND EXISTING UTILITIES.
 4. ALL PIPE JOINTS & CONNECTIONS TO INLETS SHALL BE WRAPPED IN FILTER FABRIC PER FDOT INDEX No. 280.

MATCH LINE SEE SHEET No. C20

MATCH LINE SEE SHEET No. C22



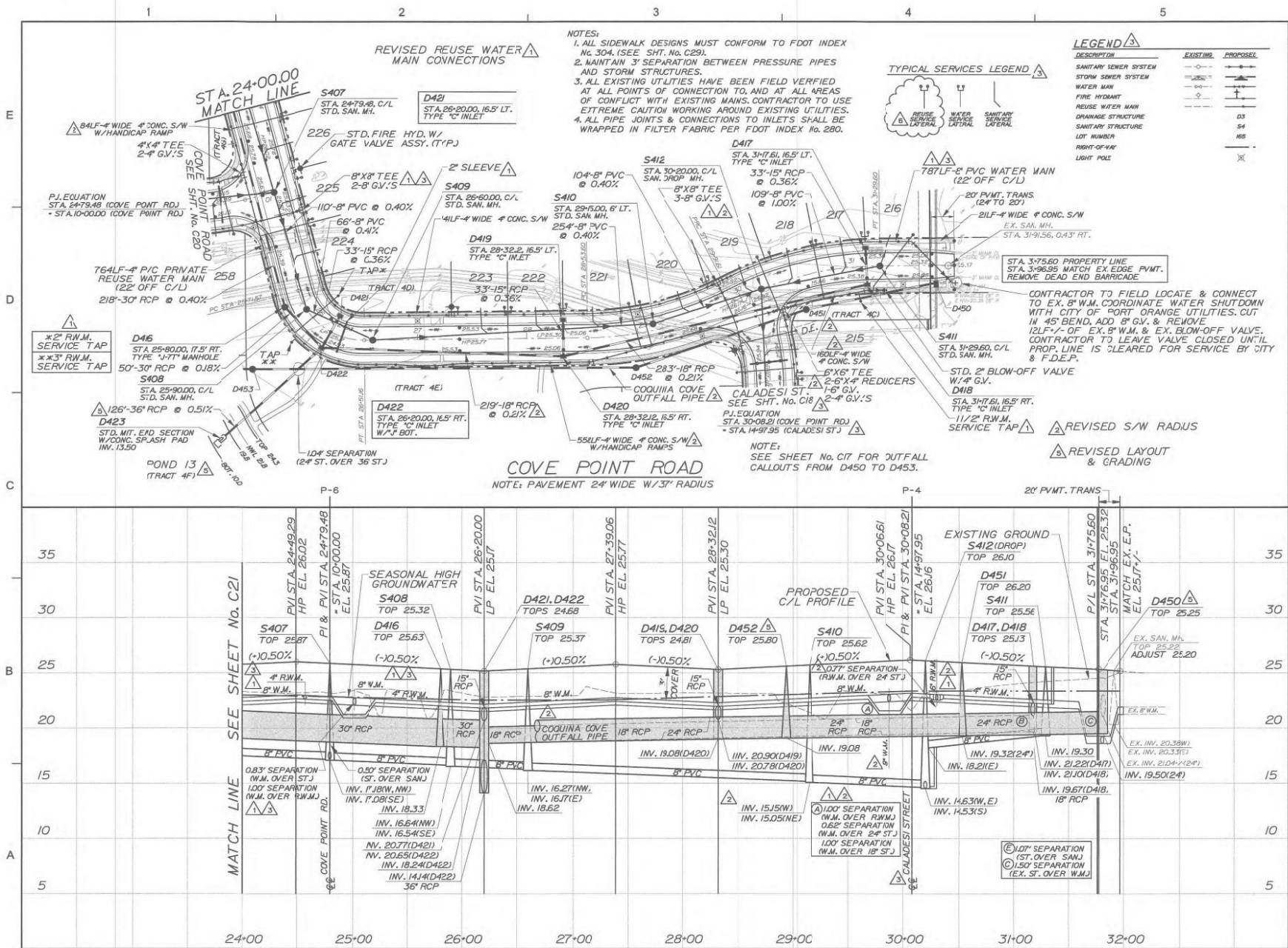
WESTPORT RESERVE
(PHASE 4)



REVISIONS			
No.	DATE	BY	DESCRIPTION
1	7-10-18	KJK	REV PER CITY
2	12-20-17	KJK	REV LAYOUT & GRADING
3	10-2-17	KJK	REV PER CITY
4	8-14-17	KJK	REV PER CITY
5	7-21-17	KJK	REV PER CA

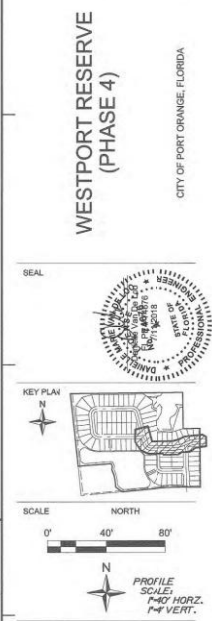
PROJECT #	PROJECT #0008336
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88
TITLE	
PHASE 4 COVE POINT RD. PLAN & PROFILE	
PROJECT: CC 11FinalSP Phase 4	
SHEET NO.	

C21



Dewberry

Dewberry Engineers Inc.
80 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32801
PHONE: 407.843.1212
ENGINEERING BUSINESS 4794



C22

STORM DRAINAGE STRUCTURES

D400

STA. 16+67.76, 16.5' RT.
TYPE "C" INLET
TOP 25.11
INV. 18.54(15')

D400A

STA. 16+67.76, 16.5' LT.
TYPE "C" INLET
TOP 25.11
INV. 18.43(15')
INV. 18.23(18')

D401

STA. 15+28.13, 16.5' RT.
TYPE "C" INLET
TOP 24.81
INV. 17.97(15')

D402

STA. 15+28.13, 16.5' LT.
TYPE "C" INLET
TOP 24.81
INV. 17.86(15')
INV. 17.93(18')
INV. 17.53(24')

D403

STA. 14+75.38, 17.5' LT.
TYPE "P-7T" MANHOLE
TOP 25.82
INV. 17.43(24')

D404

STA. 10+70.03, 16.5' RT.
TYPE "C" INLET
TOP 24.80
INV. 20.89(15')

D405

STA. 10+77.64, 16.5' LT.
TYPE "C" INLET
TOP 24.80
INV. 20.78(15')
INV. 20.58(18')

D406

STA. 13+20.74, 16.5' RT.
TYPE "C" INLET
TOP 24.79
INV. 20.88(15')

D407

STA. 13+36.69, 16.5' LT.
TYPE "C" INLET
TOP 24.79
INV. 20.76(15')
INV. 20.03(18')
INV. 17.21(24')
INV. 6.81(30')

D407A

(N1737177.42, E634151.38)
TYPE "P-7T" MANHOLE
TOP 25.20
INV. 15.57(30')
INV. 13.95(30')

D408

STD. MIT. END SECTION
W/CONC. SPLASH PAD
INV. 13.00(30')

D409

STA. 19+32.55, 16.5' LT.
TYPE "C" INLET
TOP 25.37
INV. 21.46(15')

D410

STA. 19+57.36, 16.5' RT.
TYPE "C" INLET
TOP 25.37
INV. 21.33(15')
INV. 21.13(18')

D411

STA. 21+72.52, 16.5' LT.
TYPE "C" INLET
TOP 25.16
INV. 21.25(15')

D412

STA. 21+72.52, 16.5' RT.
TYPE "C" INLET
TOP 25.16
INV. 21.25(15')

D413

STA. 22+35.00, 17.5' RT.
TYPE "J-7T" MANHOLE
TOP 26.22
INV. 19.82(30')

D414

STA. 23+64.57, 16.5' LT.
TYPE "C" INLET
TOP 25.11
INV. 21.20(15')

D415

STA. 23+64.57, 16.5' RT.
TYPE "C" INLET
TOP 25.11
INV. 21.08(15')
INV. 19.64(30')
INV. 19.20(30')

D416

STA. 25+80.00, 17.5' RT.
TYPE "J-7T" MANHOLE
TOP 25.63
INV. 18.33(30')

D417

STA. 31+75.1, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D418

STA. 31+75.1, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.10(15')
INV. 19.67(18')

D419

STA. 28+32.12, 16.5' LT.
TYPE "C" INLET
TOP 24.81
INV. 20.90(15')

D420

STA. 28+32.12, 16.5' RT.
TYPE "C" INLET
TOP 24.81
INV. 20.78(15')
INV. 19.08(18')

D421

STA. 26+20.00, 16.5' LT.
TYPE "C" INLET
TOP 24.63
INV. 20.77(15')

D422

STA. 26+20.00, 16.5' RT.
TYPE "C" INLET
W/CONC. BOT.
TOP 24.63
INV. 20.65(15')
INV. 18.62(18')
INV. 18.24(30')
INV. 14.14(36')

D423

STD. MIT. END SECTION
W/CONC. SPLASH PAD
INV. 13.50(36')

D424

STA. 31+80.72, 16.76' RT.
OUTFALL CONTROL STRUC.
TOP 25.25
INV. 21.04(EX. 24')
INV. 15.50(24')

D425

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D426

STA. 17+94.06, 16.5' RT.
TYPE "C" INLET
TOP 25.16
INV. 15.36(18')
INV. 12.47(24')

D427

STA. 17+94.06, 16.5' LT.
TYPE "C" INLET
TOP 25.16
INV. 15.36(18')
INV. 12.47(24')

D428

(N1736832.88, E634804.76)
TYPE "P-7T" MANHOLE
TOP 24.80
INV. 17.23(24'E)
INV. 16.09(24'W)

D429

STD. MIT. END SECTION
W/CONC. SPLASH PAD
INV. 15.50(24')

D430

STA. 31+80.72, 16.76' RT.
OUTFALL CONTROL STRUC.
TOP 25.25
INV. 21.04(EX. 24')
INV. 15.50(24')

D431

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D432

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D433

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D434

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D435

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D436

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D437

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D438

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D439

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D440

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D441

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D442

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D443

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D444

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D445

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D446

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D447

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D448

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D449

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D450

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D451

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D452

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D453

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D454

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D455

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D456

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D457

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D458

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D459

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D460

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D461

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D462

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D463

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D464

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D465

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D466

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D467

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D468

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D469

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D470

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D471

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D472

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D473

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D474

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D475

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D476

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D477

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D478

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D479

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D480

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D481

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D482

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D483

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D484

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D485

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D486

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D487

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D488

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

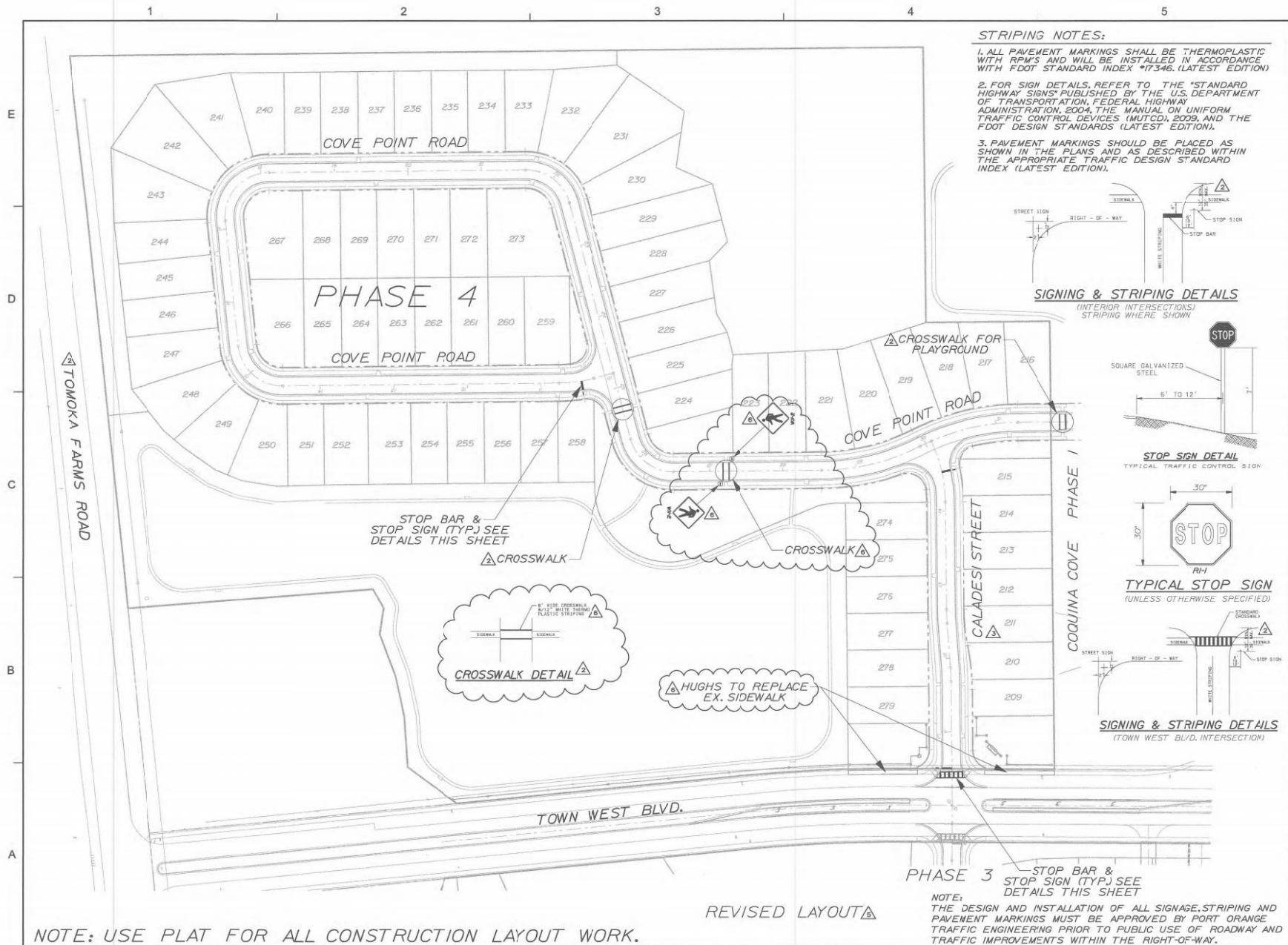
D489

STA. 31+80.72, 16.5' LT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

D490

STA. 31+80.72, 16.5' RT.
TYPE "C" INLET
TOP 25.13
INV. 21.22(15')

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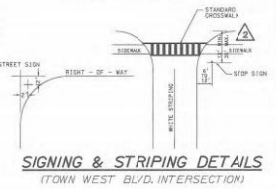
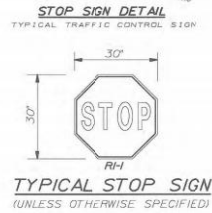
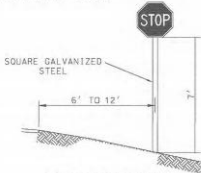
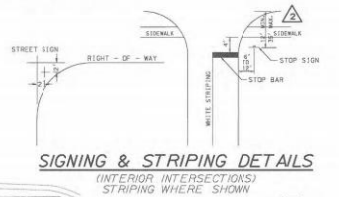


STRIPING NOTES:

1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC WITH RPM'S AND WILL BE INSTALLED IN ACCORDANCE WITH FDOT STANDARD INDEX #17346. (LATEST EDITION)

2. FOR SIGN DETAILS, REFER TO THE 'STANDARD HIGHWAY SIGNS' PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, 2004, THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009, AND THE FDOT DESIGN STANDARDS (LATEST EDITION).

3. PAVEMENT MARKINGS SHOULD BE PLACED AS SHOWN IN THE PLANS AND AS DESCRIBED WITHIN THE APPROPRIATE TRAFFIC DESIGN STANDARD INDEX (LATEST EDITION).



Dewberry

Dewberry Engineers Inc.
810 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32803
PHONE: 407.641.7474
FAX: 407.641.7475
ENGINEERING BUSINESS 4754

WESTPORT RESERVE (PHASE 4)

CITY OF PORT ORANGE, FLORIDA

SCALE NORTH

0' 60' 120'

REVISIONS			
No.	DATE	BY	Description
1	7-13-18	KJK	REV PER CITY
2	12-20-17	KJK	REV LAYOUT & GRADING
3	10-1-17	KJK	REV PER CITY
4	8-14-17	KJK	REV PER CITY

PROJECT#	PROJECT #00083 36
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

TITLE

PHASE 4 STRIPING PLAN

PROJECT: CC 1/Final/SP Phase 4

SHEET NO.

C24

NOTE: USE PLAT FOR ALL CONSTRUCTION LAYOUT WORK.

E

D

C

B

A

1

2

3

4

5

ROAD CLASSIFICATION	DESIGN SPEED (MPH)	LANE WIDTH (LW)	RIGHT OF WAY WIDTH	MIN. HORIZ. RADIUS C.L.	MIN. VERT. CURVE	MIN. LONG. GRADE (%)	MIN. INT. SPACE
LOCAL / COLLECTOR UP TO 400 VPD	15	10	50	50'	70'	0.3	150'
	20	10	50	90'	120'	0.3	200'
	25	11	50	100'	180'	0.3	250'
	30	11	50	90'	120'	0.3	200'
	35	12	80	300'	200'	0.3	330'
ARTERIAL UP TO 7500 VPD	35	12	80	375'	225'	0.5	660'
	40	12	80	450'	275'	0.5	660'
	45	12	80	450'	275'	0.5	660'

DESIGN SPEED (MPH)	20	25	30	35	40	45	50	55
SIGHT DISTANCE (FT) (MIN/MIN)	200	250	300	350	400	450	500	550



STANDARD CONSTRUCTION DETAIL
ROADWAY GEOMETRY

REV. 12/08

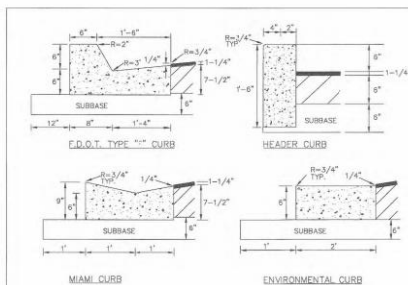
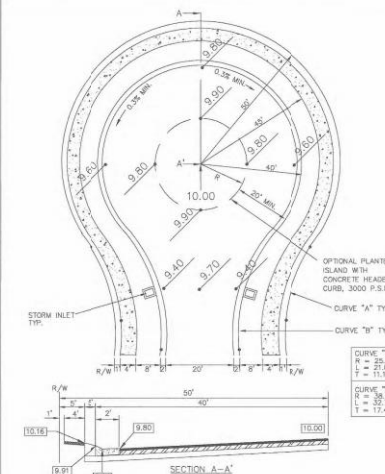
FILE NAME:
R6.DWG
DETAIL REF:
R-6



STANDARD CONSTRUCTION DETAIL
STANDARD CUL-DE-SAC DETAIL
WITH DUAL STORY INLET
"PREFERRED"

REV. 12/08

FILE NAME:
R8.DWG
DETAIL REF:
R-8



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'.
3. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES AND AT ALL RADIUS POINTS.
4. 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY BASED ON AASHTO T-99 MODIFIED PROCTOR TEST AND SHALL BE STABILIZED TO A MINIMUM L.B.R. 40.
5. EXPANSION JOINT MATERIAL MUST COVER THE ENTIRE CROSS SECTION OF CURB.
6. IN NO INSTANCE SHALL EXTRUDED CURBS (DEFINED AS HEADER-TYPE CURBS INSTALLED DIRECTLY ON TOP OF PAVEMENT) BE PERMITTED.
7. ALL ASPHALT AND/OR PAVED DRIVEWAY APPLICABLE LOCATED IN PUBLIC RIGHTS-OF-WAY, SHALL INCLUDE CURBING.



STANDARD CONSTRUCTION DETAIL
STANDARD CURB CONSTRUCTION

REV. 12/08

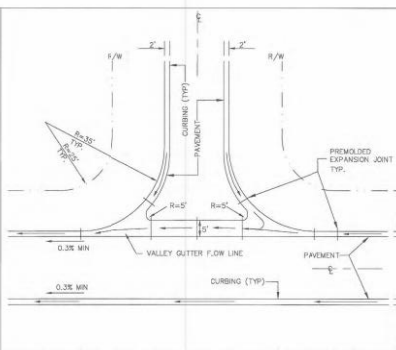
FILE NAME:
R9.DWG
DETAIL REF:
R-9



STANDARD CONSTRUCTION DETAIL
ROADWAY INTERSECTION VALLEY CUTTER

REV. 12/08

FILE NAME:
R10.DWG
DETAIL REF:
R-10



R/W

NOTES:

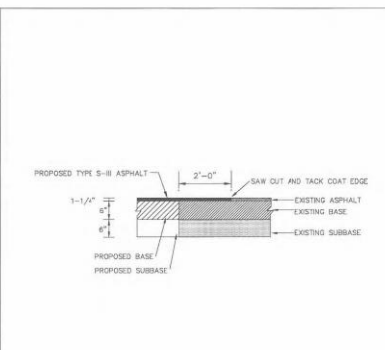
1. VALLEY CUTTER TO HAVE A STANDARD MINIMUM LONGITUDINAL SLOPE OF 0.30%.
2. VALLEY CUTTER TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE.
3. 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASHTO T-99 MODIFIED PROCTOR TEST.
4. VALLEY CUTTERS ARE REQUIRED WHEN STORMWATER CROSSES THE INTERSECTION OF ROADWAYS AND DRIVEWAY CONNECTIONS.
5. REFER TO F.O.D.T. STANDARD INDEX NO. 300.



STANDARD CONSTRUCTION DETAIL
PAVEMENT BUTT JOINT

REV. 12/08

FILE NAME:
R11.DWG
DETAIL REF:
R-11



Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 500
ORLANDO, FL 32803
PHONE: 407.843.1515
ENGINEERING BUSINESS 4794

WESTPORT RESERVE (PHASE 4)

SEAL

7/1/2019

CITY OF PORT ORANGE, FLORIDA

REVISIONS

No.	DATE	BY	Description

PROJECT# PROJECT #50083/38
DRAWN BY KJK
APPROVED BY DMV
CHECKED BY DMV
DATE MAY 2018
DATUM NAVD 88

TITLE
CITY ROAD/
DRAINAGE
DETAILS

PROJECT: CC 1Final/SP Phase 4
SHEET NO.

C25

	1	2	3	4	5														
	ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES ALL MATERIALS AND INSTALLATION METHODS USED FOR LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS FOR SUBDIVISIONS AND SITE PLANS SHALL BE IN CONFORMANCE WITH THE CITY, DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), AND THE CITY ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION). 1. ALL RIGHT-OF-WAY OTHER THAN ROADWAY AREAS SHALL BE GRAZED AND MULCHED OR SKIDED. ALL SLOPES STEEPER THAN 6:1 SHALL REQUIRE SODDING. THE CITY RESERVES THE RIGHT TO REQUIRE SODDING IN SPECIAL AREAS WHERE EROSION IS A CONCERN. 2. THE FOLLOWING WILL BE THE STANDARD PROTECTION FOR DITCHES UNLESS DRAINAGE CALCULATIONS INDICATE OTHERWISE: <table><tr><th>SMALL PROFILE GRADES</th><th>PROTECTION REQUIRED</th></tr><tr><td>0.25% - 1.0%</td><td>GRASSING AND MULCHING</td></tr><tr><td>1.0% - 4.0%</td><td>SODDING</td></tr><tr><td>4.0% AND GREATER</td><td>DITCH PAVING</td></tr></table> 3. THE PAVEMENT, BASE, AND SUBBASE THICKNESS PRESENTED ON DETAILS REPRESENTS THE MINIMUM REQUIREMENTS FOR LOCAL PUBLIC STREETS AND PRIVATE PARKING LOTS. THE CITY RESERVES THE RIGHT AT ITS DISCRETION TO INCREASE THESE REQUIREMENTS FOR COLLECTOR AND ARTERIAL ROADWAYS AND PRIVATE PARKING LOTS SUBJECTED TO HEAVY VEHICULAR COMMERCIAL TRAFFIC. 4. THE DEVELOPER SHALL PROVIDE AT THEIR OWN EXPENSE A CERTIFIED SOILS ENGINEERING LABORATORY TO PERFORM ALL FIELD AND LABORATORY TESTING REQUIRED TO VERIFY THAT THE CONSTRUCTION IS IN COMPLIANCE WITH THE CITY'S MINIMUM STANDARDS. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO ENSURE THAT COPIES OF ALL TEST REPORTS ARE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR PRIOR TO THE PROJECT FINAL INSPECTION IN ORDER TO ALLOW PROJECT ACCEPTANCE BY THE CITY. 5. THE LIMITS OF STABILIZED SUBBASE SHALL EXTEND TO A DEPTH OF SIX INCHES (6") BELOW THE BOTTOM OF THE BASE AND OUTWARD TO TIE-IN INDICES (1:2) BEYOND THE CURB. 6. THE STABILIZING MATERIAL, IF REQUIRED, SHOULD BE A 60% BEARING VALUE, SAND-CLAY, LIMEPOCK, RECYCLED CONCRETE, SHEL, OR OTHER MATERIAL AS APPROVED BY THE CITY'S DESIGNATED SITE INSPECTOR AND A LICENSED SOILS ENGINEER. 7. THE SUBBASE SHALL BE STABILIZED NOT LESS THAN 100% UNDER LIMEPOCK BEARING RATIO (BRI) TO A 1% MINIMUM DENSITY. ON A COMPACTION OF NO LESS THAN NINETEEN (90%) AT MINIMUM DENSITY BASED ON AASHOT T-180 SHALL BE REQUIRED. 8. FOR ROADWAYS, TESTS FOR SUBBASE BEARING CAPACITY AND COMPACTION SHALL BE DONE AT A MINIMUM OF EVERY 300 FEET AND SHALL BE STAGGERED TO THE LEFT, RIGHT, AND AT THE CENTER LINE OF THE ROADWAY. TEST BASES BE PERFORMED FOR EVERY 600 SQUARE YARDS OF STABILIZED AREA, OR PORTIONS THEREOF. 9. BUSES FOR ALL BUSES SHALL BE MINIMUM SIX INCH (6") DEPTH. SOIL CEMENT BASES SHALL HAVE A STRENGTH OF 350 POUNDS PER SQUARE INCH AT 7 DAYS COMPACTED TO 98% DENSITY. TEST REPORTS ARE REQUIRED TO BE DELIVERED TO THE CITY'S DESIGNATED SITE INSPECTOR PRIOR TO TRAFFIC CLOSURE. IN AREAS NOT MEETING THESE STANDARDS, A SOIL CEMENT BASE SHALL BE USED. ALL CHANGING OF RECYCLED CONCRETE SHALL BE DONE PRIOR TO THE MATERIAL BEING PLACED IN THE ROADWAY. TESTING SHALL HAVE THE SAME REQUIREMENTS AND BE PERFORMED AT THE SAME LOCATION AND INTERVALS AS REQUIRED FOR LIMEPOCK.	SMALL PROFILE GRADES	PROTECTION REQUIRED	0.25% - 1.0%	GRASSING AND MULCHING	1.0% - 4.0%	SODDING	4.0% AND GREATER	DITCH PAVING	ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONT'D.) 10. SOIL CEMENT AND RECYCLED CONCRETE MIX DESIGNS SHALL BE SUBMITTED BY A LICENSED SOILS ENGINEER TO THE CITY'S DESIGNATED SITE INSPECTOR PRIOR TO THE START OF SUBBASE PREPARATION. ALL MIX DESIGNS SHALL BE SUBJECT TO THE APPROVAL OF THE CITY. 11. CEMENT DELIVERY TICKETS SHALL BE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR AT THE TIME OF PLACEMENT. IF THE INSPECTOR IS NOT ON SITE THROUGHOUT THE ENTIRE INSTALLATION, ACCUMULATED DELIVERY TICKETS CAN BE PROVIDED TO THE INSPECTOR BY THE CONTRACTOR ON THE FOLLOWING DAY. 12. TESTING OF THE IN-PLACE BASE SHALL BE DONE AT INTERVALS EQUIVALENT TO SUBBASE TESTING AND SHALL CONSIST OF, AS A MINIMUM, A MOISTURE CONTENT AND COMPACTION TEST. 13. PORTLAND CEMENT CONCRETE, LIMEPOCK, RECYCLED CONCRETE OR FULL DEPTH ASPHALT PAVEMENT MAY BE USED IN PLACE OF SOIL CEMENT BASE. ALL BASE AND ROADWAY DESIGNS SHALL BE SUBJECT TO THE APPROVAL OF THE CITY. 14. SOIL CEMENT BASE MATERIAL CONSTRUCTION SHALL BE CONTINUOUSLY SUPERVISED BY A SOILS TESTING LABORATORY AT THE DEVELOPER'S EXPENSE. THE TESTING LABORATORY SHALL PROVIDE AN ON-SITE TECHNICIAN CERTIFIED IN THE INSTALLATION OF SOIL CEMENT WITH THE CERTIFICATION RECORDED BY F.D.O.T. 15. SOIL CEMENT PAVEMENT BASES WITH THE CURE COT APPLIED SHALL BE ALLOWED TO CURE A MINIMUM OF SEVEN (7) DAYS UNDER NO TRAFFIC PRIOR TO PLACING ANY ASPHALT SURFACE. (TEST REPORTS ARE REQUIRED TO BE DELIVERED TO THE CITY'S DESIGNATED SITE INSPECTOR PRIOR TO TRAFFIC CLOSURE.) 16. RECYCLED CONCRETE CAN BE USED AS AN ALTERNATIVE BASE MATERIAL PROVIDED THE MATERIAL IS A MINIMUM OF 60% CARBONATE OF CALCIUM AND MAGNESIUM. THE MATERIAL SHALL BE LIMITED TO MAXIMUM OF 3/4" VERTICALLY SENSITIVE CLAY MATERIAL. LIQUID LIMIT SHALL NOT EXCEED 30 AND BE NON-PLASTIC, AND THE PLASTICITY INDEX SHALL NOT EXCEED 10. THE MATERIAL SHALL NOT CONTAIN ORGANIC MATERIAL, CHERRY OR OTHER EXTREMELY HARD PIECES (LUMPS, BALLS OR PECKETS OF HARD SOIL MATERIAL, RECYCLED CONCRETE SHALL PASS A 1" SIEVE AND FOR SUBBASE APPLICATIONS AT LEAST 87.5% (BY WEIGHT) OF THE MATERIAL SHALL PASS A 1/2" SIEVE. FOR BOTH APPLICATIONS, THE MATERIAL SHALL BE GRAZED UNIFORMLY DOWN TO DUST AND THE MINIMUM LUMP VALUES ARE TO BE NOT LESS THAN 100. COARSE AGGREGATE USED IN THE RECYCLED CONCRETE SHALL HAVE A MAXIMUM LOSS OF 45.8 PER LOSS ANGLE ASSAY TEST. ALL MATERIALS SHALL BE WELL GRADED IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN SECTION 204, F.D.O.T. STANDARD SPEC. FOR ROAD AND BRIDGE CONSTRUCTION, (LATEST EDITION). 17. RECYCLED CONCRETE OR LIMEPOCK FOR BASE OR SUBBASE APPLICATIONS SHALL BE ALLOWED ON CITY ROADWAYS ONLY WHERE THE LOWEST ELEVATION OF THE ROADWAY SUBBASE IS A MINIMUM OF 6" ABOVE THE SEASONAL HIGH GROUNDWATER TABLE AS CERTIFIED BY A LICENSED PROFESSIONAL SOILS ENGINEER AND SUBSEQUENTLY APPROVED FOR BY THE CITY. IN AREAS NOT MEETING THESE STANDARDS, A SOIL CEMENT BASE SHALL BE USED. ALL CHANGING OF RECYCLED CONCRETE SHALL BE DONE PRIOR TO THE MATERIAL BEING PLACED IN THE ROADWAY. TESTING SHALL HAVE THE SAME REQUIREMENTS AND BE PERFORMED AT THE SAME LOCATION AND INTERVALS AS REQUIRED FOR LIMEPOCK.	ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONT'D.) 18. DESIGN MIXES AND PRODUCT GRADATION INFORMATION FOR ALL MATERIALS TO BE INSTALLED AS PART OF THE LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS SHALL BE SUBMITTED TO THE CITY'S DESIGNATED SITE INSPECTOR FOR ACCEPTANCE BY THE CITY. THE INFORMATION SHALL BE SUBMITTED NO LATER THAN THREE (3) MONTHS PRIOR TO ANY CONSTRUCTION. SUBMITTALS SHALL INCLUDE, BUT NOT BE LIMITED TO, INFORMATION TO EVALUATE THE MATERIALS PROPOSED FOR INSTALLATION AS SUBBASE MIX DESIGNS FOR ALL ROADWAY AND PARKING AREA SURFACES AS WELL AS SIMILAR INFORMATION FOR ALL OTHER CONCRETE, SOILMASS, CURBS, AND COMPARABLE STRUCTURES AND APPLICATIONS. 19. ALL WEARING COURSE HOT MIX AGGREGATES SHALL BE VIRGIN MATERIAL. THE USE OF RECYCLED ASPHALT MATERIAL (RAP) IN WEARING COURSE MIXES IS NOT ALLOWED. 20. PRIOR TO PLACEMENT FLOUDA STATE CERTIFIED BATCH PLANTS MUST CIFY TO THE CITY'S DESIGNATED SITE INSPECTOR THAT THE ASPHALT DELIVERED TO THE SITE IS IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. 21. EXTRACTION AND GRADATION TESTS ON ASPHALT MIXES SHALL BE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR FOR EVERY 2500 SQUARE YARDS OF ASPHALT, OR PART THEREOF, TO ENSURE THAT DESIGN MIXES MEET THE CITY STANDARD SPECIFICATIONS. 22. FIELD TESTING OF THE ASPHALT PAVEMENT SHALL BE DONE AT INTERVALS EQUIVALENT TO SUBBASE TESTING AND SHALL CONSIST OF, AS A MINIMUM, A COMPACTION TEST. ASPHALT PAVEMENT SHALL BE COMPACTED TO 98% DENSITY FOR FM-12.5 (METHOD B), NUCLEAR DENSITY TEST, "BACKSCATTER METHOD". 23. IN ADDITION TO THE FIELD DENSITY TESTS NOTED, THE CITY RESERVES THE RIGHT TO REQUIRE CORE SAMPLES OF PAVEMENT SECTIONS CONTRACTED AND TESTED BY A CERTIFIED SOILS ENGINEERING LABORATORY AT THE DEVELOPER'S EXPENSE. THE CITY'S DESIGNATED SITE INSPECTOR SHALL DESIGNATE THE LOCATIONS OF THE TEST CORE LOCATIONS. 24. THE ROADWAY CROWN SHALL HAVE A STANDARD ONE QUARTER INCH (1/4") PER FOOT SLOPE. 25. ALL ROADWAYS WITH CURBS AND GUTTER SECTIONS SHALL HAVE AS A STANDARD A MINIMUM LONGITUDINAL SLOPE OF 0.30% THE ROADWAY CENTERLINE SHALL BE CLEARLY MARKED ON THE DESIGN PLANS AT A MINIMUM DESIGN INTERVALS. CENTERLINE DEVIATIONS SHALL BE NOTED AT ALL GRADE CHANGES AND AT 100' INTERVALS ALONG THE ROADWAY PROFILE ON BOTH THE DESIGN PLANS AND AS-BUILT DRAWINGS. 26. THE FINISHED PAVEMENT EDGE SHALL BE WITHIN ONE QUARTER INCH (1/4") ABOVE THE ADJACENT CONCRETE CURB FOR CURBS COLLARING AND CONVEYING STRAWBERRY. 27. CONCRETE CURBS SHALL BE PROVIDED ON BOTH SIDES OF ALL STREETS AND ALL CONCRETE CURBS SHALL BE CONSTRUCTED WITH 3000 PSI DENSITY AT 28 DAYS.	ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONT'D.) 28. CONCRETE CURBING, SIDEWALKS, PAVEMENT AND SIMILAR CONCRETE AREAS SHALL BE SAW CUT WITHIN 4 TO 18 HOURS OF PLACEMENT. SAW CUTS SHALL BE 1/4" IN WIDTH TO A DEPTH OF 1/4" OF THE TOTAL DEPTH OF CONCRETE OR 1-1/2", WHICHEVER IS LESS. SAW CUTS SHALL BE LOCATED AT INTERVALS OF TEN (10) FEET WITH EXPANSION JOINTS AT STREET INTERSECTIONS, RADIUS PAVES, STRUCTURES, AND ADJACENT AREAS AT SIXTY FEET (60') INTERVALS. ALL EXPANSION JOINT MATERIAL IS REQUIRED TO BE INSTALLED THROUGH THE ENTIRE DEPTH OF THE CONCRETE CURB. FOR LINAL SECTIONS OF CURBS, EXPANSION JOINTS SHALL BE LOCATED AT A MAXIMUM SPACING 3 FIVE-FOOTED FEET (300) AND SHALL BE 1/2" IN WIDTH. 29. AN "X" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF WATER DISTRIBUTION SYSTEM VALVE. 30. A "Y" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL SEWER SERVICES. 31. A "Z" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL RECLAIMED WATER SERVICES. 32. A "A" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL POTABLE WATER SERVICES. 33. THREE (3) CONCRETE CHUNDERS SHALL BE TAKEN AND TESTED IN 14 DAYS AND 1 IN 28 DAYS FOR EVERY SEVENTY-FIVE (75) CUBIC YARDS OF CONCRETE OR LESS PLACED. TEST RESULTS SHALL THEN BE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR AS THEY BECOME AVAILABLE. 34. A CONCRETE SLUMP TEST SHALL BE REQUIRED WITHIN THE FIRST 30 CUBIC YARDS OF CONCRETE. THERMOPLASTIC SLUMP TESTS SHALL BE REQUIRED FOR EVERY THIRTY (30) CUBIC YARDS OF CONCRETE, OR FRACTION THEREOF, WITH COPIES OF THE RESULTS PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR. THE SLUMP TEST SHALL MEET THE REQUIRED MIX DESIGN ON EACH LADY DELIVERED. 35. THE DEVELOPER SHALL PROVIDE ALL REQUIRED PAVEMENT MARKINGS ON ALL ROADWAYS FOR CITY, COUNTY, AND STATE REQUIREMENTS. CENTERLINE STRIPES SHALL BE PROVIDED ON EXTENSIONS OF CITY COLLECTOR OR ARTERIAL ROADS, COUNTY ROADS, STATE HIGHWAYS, AND ALONG LOCAL STREETS IN THE VICINITY OF THEIR INTERSECTION WITH THE ABOVE MENTIONED ROADWAYS. 36. A FOOT APPROVED STOP SIGN AND A 24" WIDE WHITE THERMOPLASTIC STOP BAR ARE REQUIRED AT ALL ROADWAY INTERSECTIONS. 37. ALL TRAFFIC CONTROL DEVICES PLACED AT INTERSECTIONS, PRIVATE STREETS, PUBLIC STREETS, COUNTY ROADS, AND STATE HIGHWAYS WITHIN THE CITY LIMITS SHALL BE INSTALLED ACCORDING TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. THE MAINTENANCE-OF-TRAFFIC (MOT) INSTALLATION AND SUBSEQUENT OPERATION SHALL BE OVERSEEN BY A CONTRACTOR CERTIFIED BY THE FLORIDA TRAFFIC SERVICES ASSOCIATION, OR EQUIVALENT CERTIFICATION RECORDED BY FDOT.	ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONT'D.) 38. THE DEVELOPER IS RESPONSIBLE FOR PAYING FEES FOR TRAFFIC CONTROL DEVICES TO THE CITY FOR INSTALLATION. STREET SIGNS AND STOP SIGNS SHALL BE PLACED AT ALL INTERSECTIONS, INCLUDING BUT NOT LIMITED TO PRIVATE STREETS, PUBLIC STREETS, COUNTY ROADS, AND STATE HIGHWAYS WITHIN THE CITY LIMITS. 39. THE DEVELOPER IS RESPONSIBLE FOR PAYING FEES FOR ALL STREET LIGHTS PRIOR TO ACCEPTANCE OF THE PROJECT BY THE CITY. 40. FOUR FOOT (4') WIDE SIDEWALKS SHALL BE PROVIDED ON BOTH SIDES OF ALL RESIDENTIAL STREETS. (SEE DETAIL, INDEXES M-2 AND M-3). 41. BIKE PATHS SHALL BE CONSTRUCTED EIGHT FEET (8') IN WIDTH ALONG ARTERIAL HIGHWAYS AS DIRECTED BY THE CITY. (SEE DETAIL, INDEXES M-2 AND M-3). 42. STANDARD TURNING RADIUS FOR INTERSECTIONS: <table><tr><td>RESIDENTIAL STREETS WITH STATE & COUNTY ROADWAYS OR MAJOR THROUGHSTREETS WITHIN THE CITY</td><td>35-50 FT.</td></tr><tr><td>ENTRANCES TO COMMERCIAL SITES OFF OF CITY STREETS</td><td>35 FT.</td></tr><tr><td>INTERSECTIONS INTERIOR IN SUBDIVISIONS</td><td>35 FT.</td></tr></table> 43. WHERE VOLUSIA COUNTY OR THE FLORIDA DEPARTMENT OF TRANSPORTATION (F.D.O.T.) DETERMINE THAT LARGER RADII ARE WARRANTED WITHIN THEIR RIGHT-OF-WAY, THAT LARGER RADII SHALL PREVAIL. 44. ALL CONTRACTORS THAT ARE PERFORMING THE CONSTRUCTION OF LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS INCLUDING WATER MAINS, SANITARY SEWER MAINS, RECLAIMED WATER MAINS, STORM WATER PIPES AND INLETS, ROADWAYS, AND PARKING FACILITIES SHALL BE CERTIFIED WITH THE STATE OF FLORIDA BOARD OF PROFESSIONAL REGULATION (BPR) FOR THE TYPE OF WORK THAT THEY PERFORM. 45. ASSET AS PROVIDED IN THE LAND DEVELOPMENT CODE, ALL ELECTRIC, TELEPHONE, TELEVISION LINES AND SIMILAR UTILITIES ARE REQUIRED TO BE INSTALLED UNDERGROUND AT THE EXPENSE OF THE OWNER, DEVELOPER, AND BUILDER.	RESIDENTIAL STREETS WITH STATE & COUNTY ROADWAYS OR MAJOR THROUGHSTREETS WITHIN THE CITY	35-50 FT.	ENTRANCES TO COMMERCIAL SITES OFF OF CITY STREETS	35 FT.	INTERSECTIONS INTERIOR IN SUBDIVISIONS	35 FT.
SMALL PROFILE GRADES	PROTECTION REQUIRED																		
0.25% - 1.0%	GRASSING AND MULCHING																		
1.0% - 4.0%	SODDING																		
4.0% AND GREATER	DITCH PAVING																		
RESIDENTIAL STREETS WITH STATE & COUNTY ROADWAYS OR MAJOR THROUGHSTREETS WITHIN THE CITY	35-50 FT.																		
ENTRANCES TO COMMERCIAL SITES OFF OF CITY STREETS	35 FT.																		
INTERSECTIONS INTERIOR IN SUBDIVISIONS	35 FT.																		
	FILE NAME: R12.DWG DETAIL REF: R-12 REV. 12/08	FILE NAME: R13.DWG DETAIL REF: R-13 REV. 12/08	FILE NAME: R14.DWG DETAIL REF: R-14 REV. 12/08	FILE NAME: R15.DWG DETAIL REF: R-15 REV. 12/08															

A	B. RESIDENTIAL STREETS WITH STATE & COUNTY ROADWAYS OR MAJOR THROUGHSTREETS WITHIN THE CITY		35-50 FT.					
	C. ENTRANCES TO COMMERCIAL SITES OFF OF CITY STREETS		35 FT.					
42	D. INTERSECTIONS INTERIOR IN SUBDIVISIONS		35 FT.					
	E. SHOULD VOLUSIA COUNTY OR THE FLORIDA DEPARTMENT OF TRANSPORTATION (F.D.O.T.) DETERMINE THAT LARGER RADII ARE WARRANTED WITHIN THEIR RIGHT-OF-WAY, THAT LARGER RADII SHALL PREVAIL.							
43	F. CONSTRUCTION METHODS AND DESIGN FOR CONCRETE PAVEMENT SHALL CONFORM TO CITY STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.							
	G. ALL CONTRACTORS THAT ARE PERFORMING THE CONSTRUCTION OF LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS (INCLUDING WATER MAINS, SANITARY SEWER MAINS, RECLAIMED WATER MAINS, STORM WATER PIPES AND INLETS, ROADWAYS, AND PARKING FACILITIES) SHALL BE CERTIFIED WITH THE STATE OF FLORIDA BOARD OF PROFESSIONAL REGULATION (BPR) FOR THE TYPE OF WORK THAT THEY PERFORM.							
44	H. ALL CONTRACTORS THAT ARE PERFORMING THE CONSTRUCTION WORK OF LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS SHALL BE LICENSED BY THE STATE OF FLORIDA AND REGISTERED WITH THE CITY OF PORT ORANGE. THE LICENSE AND REGISTRATION SHALL PERTAIN DIRECTLY TO THE TYPE OF WORK BEING PERFORMED.							
	I. ASSET AS PROVIDED IN THE LAND DEVELOPMENT CODE, ALL ELECTRIC, TELEPHONE, TELEVISION LINES AND SIMILAR UTILITIES ARE REQUIRED TO BE INSTALLED UNDERGROUND AT THE EXPENSE OF THE OWNER, DEVELOPER, AND BUILDER.							
INFRASTRUCTURE IN ORDER TO EVALUATE POTENTIAL CONFLICTS.								
5. SPECIFICATIONS - SAMPLING, TESTING, AND LABORATORY METHODS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE ASHRAE OR ASTM, WHERE AVAILABLE OR ASTM SPECIFICATIONS ARE USED, THE REFERENCE SHALL BE CONSIDERED TO BE THE MOST RECENT STANDARD SPECIFICATIONS OR TENTATIVE SPECIFICATIONS OF THE ASHRAE OR ASTM IN FORCE ON THE DATE OF THE TEST.								
6. TEST & CERTIFICATES - THE CONTRACTOR SHALL ENGAGE AN APPROVED TESTING LABORATORY TO PROVIDE THE FOLLOWING TESTS AND CERTIFICATIONS SIGNED BY A REGISTERED ENGINEER OF THE STATE OF FLORIDA. ALL TECHNICIANS PERFORMING THE TESTS SHALL BE STATE CERTIFIED FOR THE TESTING PERFORMED. ADDITIONAL TESTS THAT MAY BE REQUESTED BY THE CONTRACTOR SHALL BE PROVIDED BY THE CONTRACTOR. THE FOLLOWING SHALL NOT BE TAKEN AS A COMPLETE AND EXHAUSTIVE LIST OF THE CONTRACTOR'S TESTING RESPONSIBILITIES:								
A. SOIL ANALYSIS FOR STRUCTURAL, ALL MATERIALS PRIOR TO INSTALLATION.								
B. PROCTOR DENSITIES, MOISTURE CONTENT, COMPACTIONED FIELD DENSITIES, AND ATTERBURG LIMITS.								
C. SOIL CEMENT MIX DESIGNS AND COMPRESSION STRENGTH TESTS FOR SOIL CEMENT ROAD BASE AND SUBBASE.								
D. SUPERVISION OF ALL SOIL CEMENT BASE CONSTRUCTION.								
E. ANALYSIS OF RECYCLED CONCRETE BASE MATERIAL PRIOR TO INSTALLATION.								
F. ASPHALT MIX DESIGN, BITUMEN CONTENT, SEVE ANALYSIS, HISSARD FIELD STABILITY TESTS, NUCLEAR DENSITY TESTS (BACKSCATTER METHOD), AND ANALYSIS OF CORE SAMPLES.								
G. CONCRETE MIX DESIGNS FOR ALL APPLICATIONS INCLUDING PAVEMENT, CAST-IN-PLACE STRUCTURES, CURBING, GUTTERS, SIDEWALKS, BIKE PATHS, APPROX AND DRIVEWAYS.								
H. COMPRESSION TEST CHUNDERS AND SLUMP TESTS FOR ALL APPLICATIONS OF CONCRETE, INCLUDING PAVEMENT, CAST-IN-PLACE STRUCTURES, CURBING, GUTTERS, SIDEWALKS, BIKE PATHS, APPROX, AND DRIVEWAYS.								
I. CHLORINE RESIDUAL AND BACTERIOLOGICAL TESTING OF WATER MAINS.								
J. PRESSURIZED LEAK TESTING OF WATER MAINS, FORCE MAINS, AND RECLAIMED WATER MAINS.								
MULCH USED SHALL BE STRAW OR HAY CONSIDERING OF OATS, RYE, OR WHEAT STRAW, OR OF PANGOLA, PEARL, COASTAL BERMUDA, OR BAHIA GRASS. MULCH SHALL BE FREE FROM UNDESIRABLE WEED AND OTHER UNDESIRABLE GRASS.								
C. METHODS - GRASSING SHALL BE DONE IMMEDIATELY UPON COMPLETION OF THE FINISHING OPERATION. HOWEVER, NO SEEDING SHALL BE DONE WHEN THE GROUND IS FROZEN OR UNUSUALLY WET. THE RATE OF SPREAD FOR THE SEED MATERIAL SHALL BE THE HIGHEST AND MOST UNIFORM. APPROXIMATELY ONE INCH (1") LOOSE THICKNESS OF MULCH MATERIAL SHALL BE APPLIED UNIFORMLY OVER THE SEEDS AREAS (APPROXIMATELY ONE AND ONE-HALF (1-1/2) BALES PER 1000 SQUARE FEET). THE MULCH MATERIAL SHALL BE CUT INTO ONE INCH (1") BALE SIZES WITH A DISC HAYWARD OR OTHERWISE ADJUSTED DOWN UNDER PROPER CIRCUMSTANCES. THE CONTRACTOR MAY REQUEST PERMISSION TO INSTALL PORE-AND-SUBJECT TO THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT AND THE CITY.								
STANDARD CONSTRUCTION DETAIL ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES		FILE NAME: R16.DWG DETAIL REF: R-16 REV. 12/08	STANDARD CONSTRUCTION DETAIL ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES	FILE NAME: R17.DWG DETAIL REF: R-17 REV. 12/08	STANDARD CONSTRUCTION DETAIL TECHNICAL SPECIFICATIONS FOR SITE PLANS AND SUBDIVISIONS TESTING	FILE NAME: R18.DWG DETAIL REF: R-18 REV. 12/08	STANDARD CONSTRUCTION DETAIL SUBDIVISION TECHNICAL SPECIFICATIONS: SODDING SEEDING AND MULCHING	FILE NAME: R20.DWG DETAIL REF: R-20 REV. 12/08

Dewberry
Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32809
PHONE: 407.643.1110
ENGINEERING BUSINESS 4794

**WESTPORT RESERVE
(PHASE 4)**
CITY OF PORT ORANGE, FLORIDA

SEAL

77140018

PROJECT #	PROJECT #0003138
DRAWN BY	J.K.
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

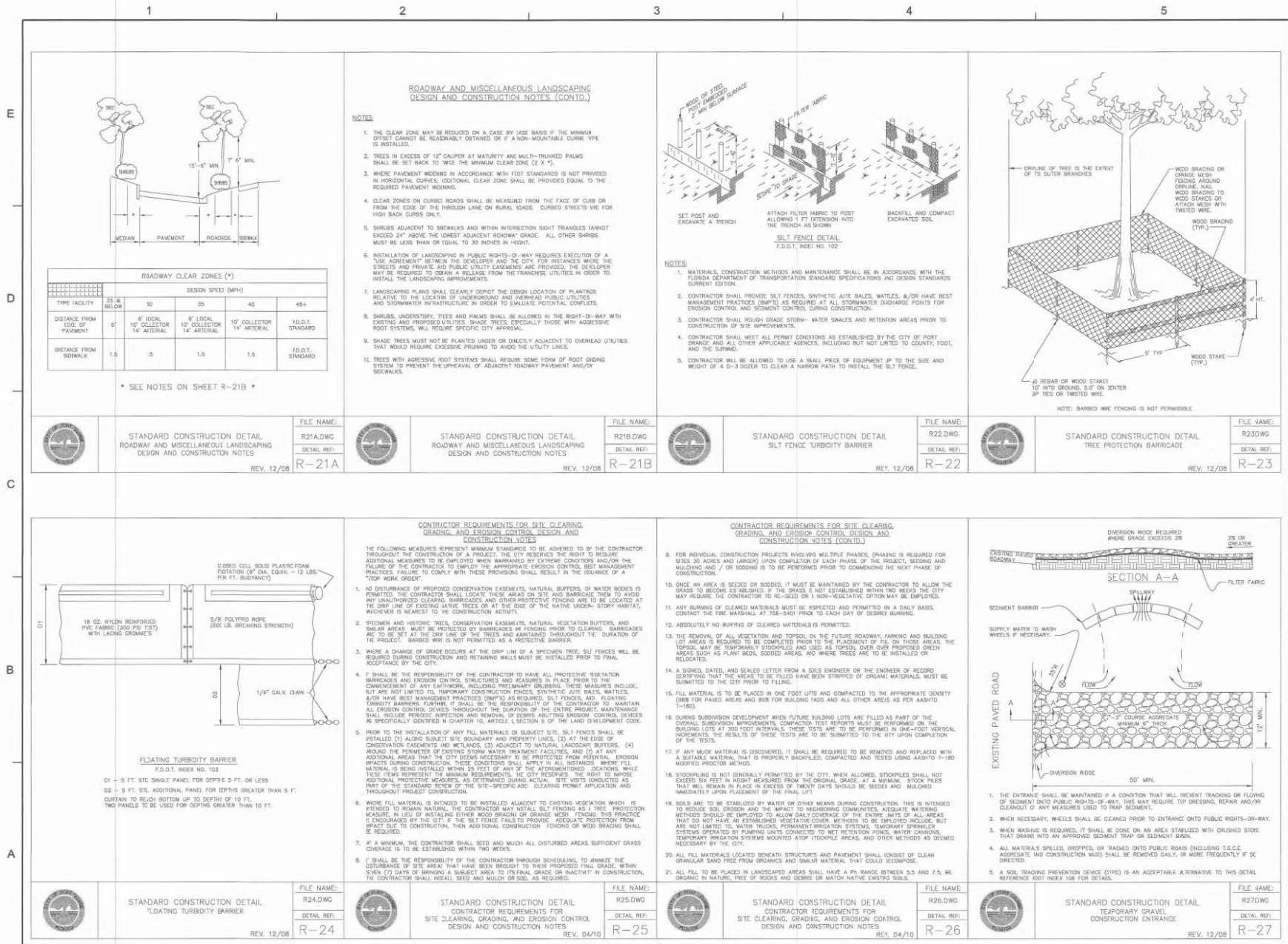
**CITY ROAD/
DRAINAGE
DETAILS**

PROJECT: CC-1/Final/SP Phase 4

SHEET NO.

C26

771312.AW J:\CC-1/Final/SP Phase 4\CC-1/Final/SP Phase 4.dwg 12/12/08



E
D
C
B
A

1
2
3
4
5

REQUIREMENTS FOR AS-BUILT DRAWINGS (CONT'D)

IN ORDER TO ENSURE THAT NEW SUBDIVISIONS AND SITE PLANS ARE CONSTRUCTED SUBSTANTIALLY IN ACCORDANCE WITH CITY REGULATIONS AND THE APPROVED DRAWINGS, THE FOLLOWING INFORMATION IS REQUIRED ON ALL SUBDIVISION AS-BUILT DRAWINGS.

12. SANITARY SEWER MANHOLES SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINE/LOT LINES AS APPROPRIATE. ALL RIM AND INVERT ELEVATIONS SHALL BE VERIFIED AND RECORDED. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND AS-BUILT INFORMATION WRITTEN NEXT TO IT.
13. FOR SUBDIVISIONS, PROPOSED DESIGN FINISHED FLOOR ELEVATIONS SHALL APPEAR ON ALL SUBDIVISION LOTS ON THE APPROPRIATE PLAN AND PROFILE SHEET AS WELL AS ON THE MASTER DRAINAGE PLAN, SANITARY SEWER LINE LENGTHS, SIZE, MATERIAL, ETC., SHALL BE VERIFIED AND RECORDED. THIS INFORMATION IS TO BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION.
14. SEWER LATERALS SHALL BE VERIFIED AND RECORDED AT THEIR CLEAN-OUT LOCATIONS, STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLE TOWARDS UPSTREAM MANHOLES.
15. LIFT STATIONS AND FORCE MAINS SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. FORCE MAIN DEPTH AND LOCATION INCLUDING VALVES WILL BE PROVIDED AND TIED TO PERMANENT ABOVE GRADE FEATURES. DIMENSIONAL AND ELEVATION INFORMATION INDICATED ON THE APPROVED PLAN SHALL BE VERIFIED AND RECORDED. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION. BURIED ELECTRICAL SERVICE LINE SHALL BE CLEARLY DIMENSIONED, LOCATED, AND LABELED.
16. CURB CUTS OR METAL TABS, USED TO MARK SEWER LATERALS, WATER SERVICES AND WATER VALVES, SHALL BE VERIFIED FOR PRESENCE AND ACCURACY OF LOCATION.
17. POTABLE AND RECLAIMED WATER MAIN LINES SHALL BE DIMENSIONED OFF THE BACK OF CURB, OR EDGE OF PAVEMENT IF NO CURB IS PRESENT. WATER MAIN LINE MATERIAL, SIZE, LENGTH AND DEPTH PLACED SHALL ALSO BE NOTED. LOCATIONS OF VALVES TEES AND CROSSES SHALL BE TIED TO (3) THREE PERMANENT ABOVE GRADE FEATURES. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION.
18. POTABLE AND RECLAIMED WATER VALVES, TEES, BENDS, ALL SERVICES, AND HYDRANTS SHALL BE LOCATED BY TIEING THEM TO SANITARY SEWER MANHOLES. SIMILARLY, FORCE MAIN VALVES, TEES, AND BENDS SHALL BE LOCATED IN THE SAME MANNER. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TO UPSTREAM MANHOLES.
19. FOR PERPENDICULAR CROSSINGS OF STORMWATER, SANITARY SEWER, POTABLE WATER, OR RECLAIMED WATER, THE AS-BUILT PLANS SHALL CLEARLY INDICATE WHICH UTILITIES ARE LOCATED OVER OR UNDER OTHER UTILITIES, AS NECESSARY.
20. ANY SPECIAL FEATURES SUCH AS, CONCRETE FLUMES, LAKE BANKS, WALLS, FENCING, ETC., WHICH WERE A PART OF THE APPROVED CONSTRUCTION DRAWINGS SHOULD ALSO BE LOCATED AND DIMENSIONED.
21. IF AN APPROVED SUBDIVISION PLAT OR SITE PLAN SHOWS A CONSERVATION EASEMENT, THE PROJECT SURVEYOR SHALL PROVIDE THE EXACT LOCATION OF THE SPECIFIC TREES FROM THE RIGHT-OF-WAY OR PROPERTY LINES AND PROPOSED EASEMENT BOUNDARIES ON THE AS-BUILT DRAWING. THE AS-BUILT LOCATION OF THESE TREES WILL HELP VERIFY THE SUFFICIENCY OF THE CONSERVATION EASEMENT PRIOR TO PLAT RECORDING OR CERTIFICATE OF OCCUPANCY.

STANDARD CONSTRUCTION DETAIL
REQUIREMENTS FOR AS-BUILT DRAWINGS

FILE NAME:
M1.DWG
DETAIL REF:
M-1
REV. 12/08

REQUIREMENTS FOR AS-BUILT DRAWINGS (CONT'D)

IN ORDER TO ENSURE THAT NEW SUBDIVISIONS AND SITE PLANS ARE CONSTRUCTED SUBSTANTIALLY IN ACCORDANCE WITH CITY REGULATIONS AND THE APPROVED DRAWINGS, THE FOLLOWING INFORMATION IS REQUIRED ON ALL SUBDIVISION AS-BUILT DRAWINGS.

22. WHEN STORMWATER, POTABLE WATER, RECLAIMED WATER, OR SANITARY SEWER IMPROVEMENTS ARE LOCATED WITHIN AN EASEMENT, THE AS-BUILT DRAWINGS SHALL ACCURATELY DEPICT THE LOCATION OF THE EASEMENT ITSELF AS WELL AS THE EXACT LOCATION OF THE IMPROVEMENTS WITHIN THE EASEMENT. THIS IS REQUIRED IN ORDER TO VERIFY THAT THE IMPROVEMENTS HAVE BEEN PROPERLY LOCATED AND TO ENSURE THAT FUTURE SURFACING EXCAVATION TO PERFORM REMEDIAL REPAIR CAN BE ACCOMPLISHED WITHOUT DISTURBANCE BEYOND THE EASEMENT. SUCH DOCUMENTATION AND THE ASSOCIATED PROPOSED EASEMENT DOCUMENT WITH LEGAL DESCRIPTION SHALL BE SUBMITTED FOR CITY REVIEW AND APPROVAL PRIOR TO RECORDING OF SAID EASEMENT. UPON CITY APPROVAL, THE EASEMENT SHALL BE RECORDED VIA A SEPARATE LEGAL INSTRUMENT AND SHALL NOT BE INCLUDED AS PART OF HOMEOWNER COVENANTS & RESTRICTIONS.

NOTE: 1. REFERENCES TO WATER SHALL MEAN BOTH POTABLE AND RECLAIMED WATER.

STANDARD CONSTRUCTION DETAIL
REQUIREMENTS FOR AS-BUILT DRAWINGS

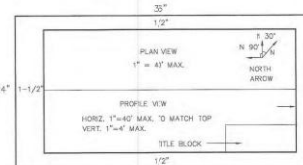
FILE NAME:
M1.DWG
DETAIL REF:
M-1
REV. 12/08

PLAN SHEET REQUIREMENTS

1. PLANS SUBMITTED TO THE COMMUNITY DEVELOPMENT DEPARTMENT FOR REVIEW INCLUDING SITE PLANS, SUBDIVISION PLANNED UNIT DEVELOPMENTS, AND OTHER DEVELOPMENTS, SHALL CONSIST OF AT LEAST THE FOLLOWING ITEMS:
 - a. INDEX PLANS WITH AREA MAP SHOWING PROJECT LIMITS
 - b. PLAN AND PROFILE SHEETS, AS APPROPRIATE
 - c. PLAN SHEETS, AS APPROPRIATE
 - d. PROFILE SHEETS, AS APPROPRIATE
 - e. DETAIL SHEETS, AS APPROPRIATE
 - f. OTHER INFORMATION, AS REQUIRED BY CODE

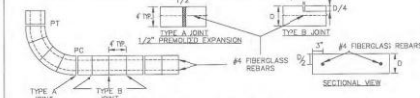
2. THEY SHALL BE DRAWN ON STANDARD 24" X 36" SHEETS. THE PLAN AND PROFILE MAY BE EITHER SINGLE OR DOUBLE AS THE INDIVIDUAL PROJECT DICTATES. EACH SHEET SHALL CONTAIN AN APPROPRIATE TITLE BLOCK SHOWING THE FOLLOWING INFORMATION:
 - a. THE NAME OF THE PROJECT
 - b. THE NAME, ADDRESS, AND PHONE NUMBER OF THE COMPANY PREPARING THE DRAWING
 - c. THE NAME, ADDRESS, AND PHONE NUMBER OF THE ENGINEER, SURVEYOR, OR LANDSCAPE ARCHITECT AS APPROPRIATE
 - d. THE SHEET NUMBER
 - e. THE DRAWING NUMBER
 - f. THE DATE
 - g. ANY REVISIONS AND DATE
 - h. OTHER INFORMATION AS APPROPRIATE

3. THE STANDARD SHEET SHALL BE Laid OUT AS SHOWN BELOW, WITH EACH SHEET CONTAINING A NORTH ARROW AND SCALE.



STANDARD CONSTRUCTION DETAIL
PLAN SHEET REQUIREMENTS

FILE NAME:
M2.DWG
DETAIL REF:
M-2
REV. 12/08



SIDEWALK CONSTRUCTION REQUIREMENTS

1. ALL CONCRETE SIDEWALKS & BIKE PATHS IN PUBLIC RIGHT-OF-WAY, PRIVATE RIGHT-OF-WAY AND ON NON-RESIDENTIAL SITES SHALL CONTAIN FIBERGLASS REINFORCEMENT EXCEPT REPAIRS TO NON-RESURFACED EXISTING SIDEWALKS. FIBERGLASS REINFORCEMENT SHALL NOT BE REQUIRED ON PRIVATE RESIDENTIAL SIDEWALKS.
2. SIDEWALKS, BIKERAMP, AND DRIVEWAY APRONS SHALL BE CONSTRUCTED OF PLAIN PORTLAND CEMENT CONCRETE WITH FIBERGLASS REINFORCEMENT, HAVING A MAXIMUM SLUMP OF 3 INCHES, A MINIMUM DEVELOPED COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS, AND A MINIMUM UNIFORM THICKNESS OF 4 INCHES WHERE INTENDED SOLELY FOR PEDESTRIAN TRAFFIC, AND 6 INCHES THICK WHERE MOTOR VEHICLES ARE LIKELY TO CROSS.
3. 2-#4 CONTINUOUS FIBERGLASS BARS (8" OVERLAP REQUIRED) SHALL BE INSTALLED LONGITUDINALLY 3" FROM THE EDGE OF ALL BIKERAMP AND SIDEWALKS TO CONTROL CRACKING. MOVEMENT AT JOINTS, SIDEWALKS AND BIKERAMP SHALL BE PLACED PARALLEL TO, AND ONE FOOT WITHIN THE RIGHT-OF-WAY LINE EXCEPT THAT THE CITY MAY APPROVE ADJUSTMENTS TO SAVE SPECIFIC TREES PROVIDED THAT THE SIDEWALK REMAINS WITHIN THE RIGHT-OF-WAY OR AN APPROVED SIDEWALK ADJUTING THE RIGHT OF WAY. SIDEWALKS AND BIKE PATHS SHOULD BE LOCATED AT LEAST 4 FEET FROM THE EDGE OF THE STREET PAVEMENT UNLESS OTHERWISE APPROVED BY THE CITY.
4. THE TOP OF THE CONCRETE SHALL BE AT AN ELEVATION NO LOWER THAN THE CROWN OF THE ADJACENT ROADWAY, AND NO HIGHER THAN 8 INCHES ABOVE THE CROWN UNLESS APPROVED BY THE CITY TO HAVE A MORE ALIQUOT TRANSITION WITH THE ADJACENT LAND.
5. ISOLATION JOINTS (TYPE A JOINTS) SHALL BE PROVIDED BETWEEN EXISTING SLABS OR STRUCTURES AND FRESH CONCRETE TO SEPARATE FRESHMAN SECTIONS FROM SECTIONS WHICH WILL UNDERGO VEHICLE TRAFFIC TO SEPARATE FRESH PLACEMENT FROM CONCRETE WHICH HAS SET FOR MORE THAN 80 MINUTES AND NO FURTHER ABLE TO FRET IN SIDEWALKS AND BIKERAMP JOINT MATERIAL SHALL BE PERFORMED JOINT FILLER MEETING F.D.O.T. SPECIFICATIONS.
6. CONTROL JOINTS (TYPE B JOINTS) SHALL BE SET INTO THE FRESH CONCRETE TO A DEPTH EQUAL TO 1/4 THE SLAB THICKNESS AND SPACED APART A DISTANCE EQUAL TO THE WIDTH OF THE SLAB OF 4 FEET.
7. THE SLAB SURFACE SHALL BE BROOM FINISHED TO BE SLIP RESISTANT, AND SHALL MATCH AS CLOSELY AS POSSIBLE THE FINISH OF EXISTING ADJACENT SLABS AND ALL EDGES SHALL BE TOoled TO ELIMINATE SHARP CORNERS.
8. THE BEARING SUBGRADE SHALL HAVE ALL ORGANIC, LOOSE, AND DELIVERIOUS MATERIAL REMOVED AND THE REMAINING CLEAN SOIL SHALL BE SMOOTH, SOUND, AND SOLID. ANY FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM IN SITU FIELD DENSITY OF 95 PERCENT.
9. ALL CONCRETE WORK IN THE RIGHT-OF-WAY SHALL BE INSPECTED BY THE CITY AFTER THE SUBSOL IS PREPARED AND THE FORMS ARE SET, BUT BEFORE THE CONCRETE PLACEMENT BEGINS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE FINISHED SLAB FROM ALL DAMAGE AND VANDALISM UNTIL THE CITY ACCEPTS OR APPROVES THE SLAB, AFTER WHICH TIME, THE OWNER OF THE ADJUTING LAND SHALL BE RESPONSIBLE FOR THE SLAB IN ACCORDANCE WITH THE CITY CODE. ANY SLAB SECTION DAMAGED OR VANDALIZED PRIOR TO ACCEPTANCE OR APPROVAL SHALL BE CUT OUT BETWEEN JOINTS AND REPAIRED. REPAIRS ARE NOT ACCEPTABLE.
11. SIDEWALKS LOCATED WITHIN THE RIGHT-OF-WAY SHALL NOT BE UNTOED, STAINED, COLORED, OR COATED.
12. ALL FORMS SHALL BE REMOVED PRIOR TO ACCEPTANCE OR APPROVAL, AND THE DISTURBED GROUND SHALL BE BACKFILLED, REPAIRED, AND SLOPED SO THAT THE WEAR SURFACE OF THE CONCRETE IS REASONABLY FLUSH WITH THE ADJUTING GRADE.

STANDARD CONSTRUCTION DETAIL
SIDEWALK CONSTRUCTION REQUIREMENTS

FILE NAME:
M3.DWG
DETAIL REF:
M-3
REV. 12/08



Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32803
PHONE: 407.641.1100
ENGINEERING BUSINESS 4794

WESTPORT RESERVE
(PHASE 4)

CITY OF PORT ORANGE, FLORIDA

SEAL

7/1/2010

REVISIONS			
No.	DATE	BY	Description

PROJECT # PROJECT #00093136
DRAWN BY J.K.K.
APPROVED BY DMV
CHECKED BY DMV
DATE MAY 2018
DATUS NAVD 88

TITLE
CITY ROAD/
DRAINAGE
DETAILS

PROJECT: CC 1/Final/SP Phase 4
SHEET NO.

C29

- NOTES:
1. RAMP LOCATIONS ARE TO BE COORDINATED WITH AND IN CONFORMANCE WITH CROSSWALK MARKING DETAILS SHOWN IN THE PLANS.
 2. CURBED RAMPS SHALL HAVE FLARED SIDES WITH A MINIMUM SLOPE OF 12:1.
 3. NO CURB TRANSITION IS NEEDED FOR MAJOR CURBS.
 4. ALL RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FOOT INDEX NO. 304 AND ACCESSIBILITY REQUIREMENTS IN ACCORDANCE WITH THE AMERICAN DISABILITIES ACT.
 5. CURB RAMPS SUBJECT TO THE DEPARTMENT OF TRANSPORTATION REGULATION CFR 37.721 SHALL HAVE A DETECTABLE WARNING.

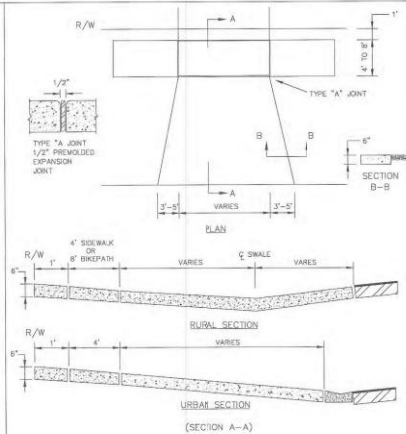
STANDARD CONSTRUCTION DETAIL
SIDEWALK AND BIKEPATH RAMP
(WITHIN RIGHT-OF-WAY)

FILE NAME:
M4.DWG
DETAIL REF:
M-4
REV. 2/13

- NOTES:
1. ON RAMPS THAT ARE PERPENDICULAR WITH THE CURB LINE, THE DOME PATTERN SHALL BE IN-LINE WITH THE DIRECTION OF TRAVEL. ON RAMPS INTERSECTING CURBS ON A RADIUS, THE DOME PATTERN SHALL BE IN-LINE WITH THE DIRECTION OF TRAVEL TO BE EXTENDED PRACTICAL.
 2. CURB RAMPS SUBJECT TO THE DEPARTMENT OF TRANSPORTATION REGULATION CFR 37.721 SHALL HAVE A DETECTABLE WARNING.

STANDARD CONSTRUCTION DETAIL
SIDEWALK AND BIKEPATH RAMP

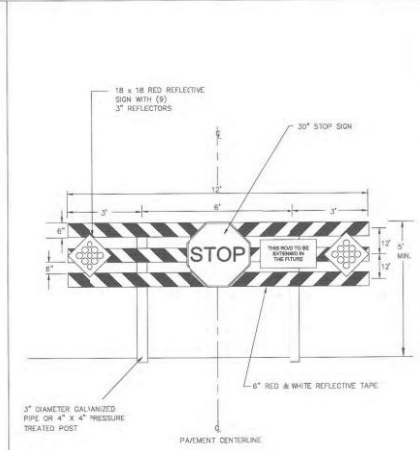
FILE NAME:
M5.DWG
DETAIL REF:
M-5
REV. 1/13



- NOTES:
1. DRIVEWAY APRON BASK TO BE COMPACTED AND TESTED TO DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASTHO T-150 MODIFIED PROCTOR TEST.
 2. CONCRETE DRIVEWAY APRON TO BE 28 DAY, 3000 P.S.I.

STANDARD CONSTRUCTION DETAIL
DRIVEWAY APRON

FILE NAME:
M6.DWG
DETAIL REF:
M-6
REV. 12/08



STANDARD CONSTRUCTION DETAIL
ROAD BARRICADE

FILE NAME:
M9.DWG
DETAIL REF:
M-9
REV. 12/08



Dewberry Engineers Inc.
805 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32803
PHONE: 407.641.1238
ENGINEERING BUSINESS 4794

WESTPORT RESERVE
(PHASE 4)

CITY OF PORT ORANGE, FLORIDA

1/1/2008

SEAL

STREET AND WALKWAY LIGHTS

WALKWAY LIGHTS: (HEIGHT: 10 TO 20 FEET)

1. ALONG DUNLAWTON AVENUE:
 - A. WEST OF I-95
 - B. THE FLOODPLAIN (SEE DETAIL M-15)
 - C. FROM I-95 TO SPRUCE CREEK ROAD
 - D. EAST OF SPRUCE CREEK ROADLUMES LIGHTING (SEE DETAIL M-17)
2. ALONG RIDGEWOOD AVENUE FROM THE NORTHERN CITY LIMITS SOUTH TO MEADOW PLACE:
 - A. LUMES LIGHTING (SEE DETAIL M-17)
3. IN LOCATIONS OTHER THAN DUNLAWTON AVENUE, THE WALKWAY LIGHTS SHALL BE ANY OF THE THREE (3) STYLES NOTED ABOVE ON THE FOLLOWING: STERNBERG GEORGE/JOHN 2652 / 4402-2771, WILLIAMS/BERG 3405-19 / 3855-17 OR COLONIAL 4402-17-17. ALL CITY MAINTAINED WALKWAY LIGHTS ARE TO BE FLORIDA POWER AND LIGHT (FPL) SUPPLIED LIGHTS, UTILIZING 150 WATT HPS.
4. SPACING SHALL BE A MAXIMUM OF 100 FEET ON CENTER.

STREET LIGHTS: (HEIGHT: 20+ FEET)

1. STREET LIGHTS SHALL BE GENERALLY PROVIDED AT ALL INTERSECTIONS, AND AT MAJOR ENTRY ROADS INTO THE SUBDIVISION AS DISCREATED BY THE ADMINISTRATIVE OFFICIAL.
2. ALL CITY MAINTAINED STREET LIGHTS ARE TO BE FPL SUPPLIED STREET LIGHTS.
3. PRIVATELY MAINTAINED STREET LIGHTS SHALL BE:
GARCO LIGHTING EN / 26" / 1 / 3 / 50 HPS / 240 / BBA / PC
(NOTE: POLE SHALL BE CONCRETE AVAILABLE THROUGH F.P.L. AND SPACED AT INTERVALS OF 300 TO 400 FEET.)
4. ALTERNATIVE STREET LIGHTING PROPOSALS BY DEVELOPERS SHOULD BE SUBMITTED TO THE COMMUNITY DEVELOPMENT DEPT. FOR APPROVAL.

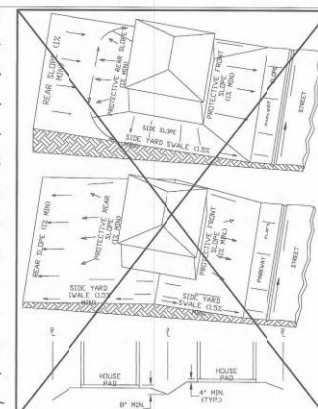


STANDARD CONSTRUCTION DETAIL
STREET AND WALKWAY LIGHTS

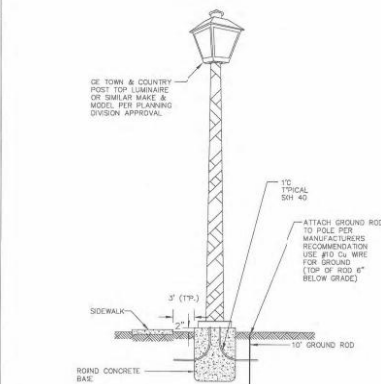
REV. 12/08

FILE NAME:
M14.DWG
DETAIL REF:
M-14

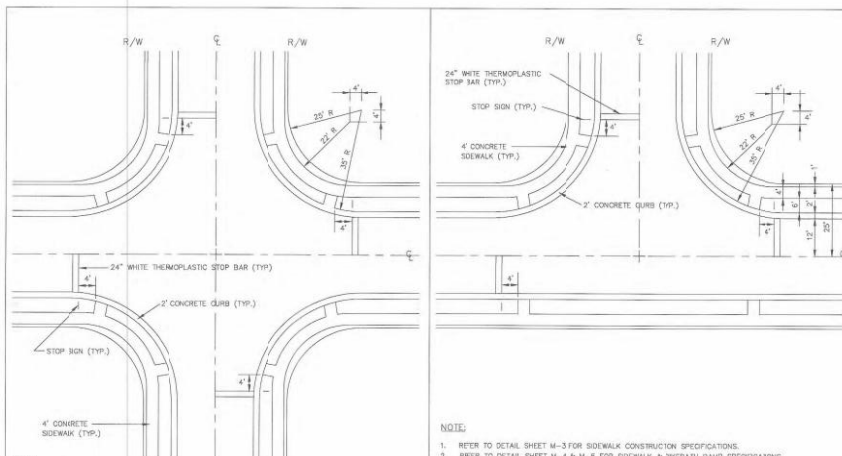
REFER TO SHT. No. C16 FOR LOT GRADING



- NOTE:
1. ALL FINISHED FLOOR ELEVATIONS SHALL BE SET A MINIMUM OF 18 INCHES ABOVE THE CENTERLINE OF THE ADJACENT ROADWAY.
 2. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 1 FOOT ABOVE THE LIMITS OF THE 100 YEAR FLOOD PLAIN AND/OR 1 FOOT ABOVE THE 100-YEAR DESIGN HIGH WATER LEVEL OF THE ADJACENT DETENTION/RETENTION AREA.
 3. IN CASES WHERE THE ABOVE CONDITIONS CONFLICT, NOTE #2 SHALL TAKE PRECEDENCE.
 4. SIDE YARD SHALL BE CENTERED ON THE COMMON PROPERTY LINE.



- NOTE:
1. ALL WALKLIGHTS SHALL BE LOCATED IN 100' CENTERS. THE PLANNING DIVISION SHALL BE CONTACTED AT (407) 508-5800 TO FIELD VERIFY THE PROPOSED LOCATIONS FOR WALKLIGHTS.
 2. ALL LIGHT POLES SHALL BE DESIGNED TO WITHSTAND 130 M.P.H. WIND SPEED.
 3. THE SPACING / SPACING OF WALK LIGHTS ADJACENT TO EACH PROJECT SHALL BE FITTED AND CONTROLLED BY ONE SINGLE SOLAR CELL.
 4. MAINTENANCE AND OPERATION OF WALKLIGHTS SHALL BE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION OR ADJACENT PROPERTY OWNER.



- NOTE:
1. REFER TO DETAIL SHEET M-3 FOR SIDEWALK CONSTRUCTION SPECIFICATIONS.
 2. REFER TO DETAIL SHEET M-4 & M-5 FOR SIDEWALK & BIKEPATH RAMP SPECIFICATIONS.

- NOTE:
1. REFER TO DETAIL SHEET M-3 FOR SIDEWALK CONSTRUCTION SPECIFICATIONS.
 2. REFER TO DETAIL SHEET M-4 & M-5 FOR SIDEWALK & BIKEPATH RAMP SPECIFICATIONS.



STANDARD CONSTRUCTION DETAIL
SIDEWALK CONSTRUCTION AT INTERSECTIONS

REV. 12/08

FILE NAME:
M18.DWG
DETAIL REF:
M-18



STANDARD CONSTRUCTION DETAIL
SIDEWALK CONSTRUCTION AT INTERSECTIONS

REV. 12/08

FILE NAME:
M19.DWG
DETAIL REF:
M-19



STANDARD CONSTRUCTION DETAIL
RESIDENTIAL GRADING

REV. 12/08

FILE NAME:
M23.DWG
DETAIL REF:
M-23



STANDARD CONSTRUCTION DETAIL
TRADITIONAL POST TOP

REV. 2/13

FILE NAME:
M24.DWG
DETAIL REF:
M-24

REVISIONS			
No.	DATE	BY	DESCRIPTION

PROJECT # 914-17
DRAFTER KJK
APPROVED BY DMV
CHECKED BY DMV
DATE MAY 2018
DRAFT NAVD 88

TITLE

CITY ROAD/
DRAINAGE
DETAILS

PROJECT: CC-1 Final SF Phase 4
SHEET NO.

C30

1

2

3

4

5

E

D

C

B

A

City of Port Orange Public Utilities Department List of Approved Products

Sanitary Sewer & Force Main

12/08

Air Release Valves

MANUFACTURER	MODEL #
A.R.I.	D-025P (Plastic)

Gate Valves and Tee/tee Valves - Resilient Seated (AWWA C509 and CS151 24" or Smaller)

MANUFACTURER	MODEL #
American AVK Co.	Series 3, 18, 25, 45, 55, & 66
Clew	Model 2634 and 2639
Muehler	A-2360, A-2361, T-2360 & T-2361
American Flow Control	Series 2500

Joints Restricted - PVC Only

MANUFACTURER	MODEL #
EBBA Iron Inc	Series 1500/1600 2000/2500/2800
Star Pipe	Starpipe Series 1000/1100/1200/4000
Sigma	One-Lock S.C. PV-Link for PVC
Smith-Blair	Cam-Lock (111 & 120) & Bell-Lock (115 & 165)



STANDARD CONSTRUCTION DETAIL
SANITARY SEWER & FORCE MAIN
APPROVED PRODUCTS

FILE NAME:
S5.DWGDETAIL REF:
S-5

City of Port Orange Public Utilities Department List of Approved Products

Sanitary Sewer & Force Main

12/08

Force Main Fittings - PVC and DIP Class 350 (with Protecto 401 Ceramic Epoxy)

C-900, C-901 or C-907

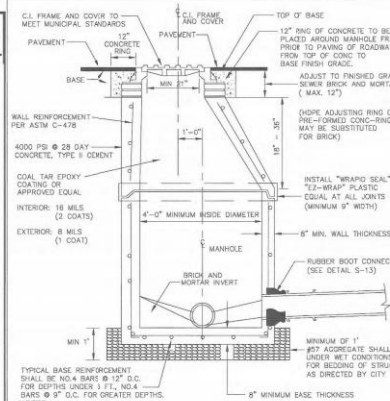
MANUFACTURER	MODEL #
Hanco	
Multi-Fittings	
Plastic Trends	
Head	
Tyler/Uniser (Lined with Protecto 401 Ceramic Epoxy)	

Manhole and Lift Station Wet Well Rehabilitation Liner

MANUFACTURER	MODEL #
Raven 405	
3/4" Minimum Thick Fiberglass Liner (lyliner)	



STANDARD CONSTRUCTION DETAIL
SANITARY SEWER & FORCE MAIN
APPROVED PRODUCTS

FILE NAME:
S5.DWGDETAIL REF:
S-5

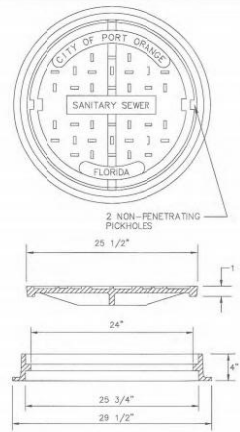
- NOTES:
- ON TRANSITIONS BETWEEN LARGER DIAMETER AND SMALLER SEWER COLLECTORS, OR THE TOP OF THE INSIDE OF THE TWO SEWER PIPES SHALL BE WATERTIGHT.
 - NON-PENETRATING PICK-HOLES IN ALL CONCRETE SECTIONS. USE FASBRETE BITUMASTIC SEALER BETWEEN SECTIONS OF MANHOLES.
 - 0.1" DROP ACROSS MANHOLE TOP.
 - MAXIMUM DEPTH NOT TO EXCEED 15.0 FEET MEASURED FROM MANHOLE TOP TO INSIDE BOTTOM.



STANDARD CONSTRUCTION DETAIL
STANDARD MANHOLE

FILE NAME:
S6.DWGDETAIL REF:
S-6

REV. 12/08



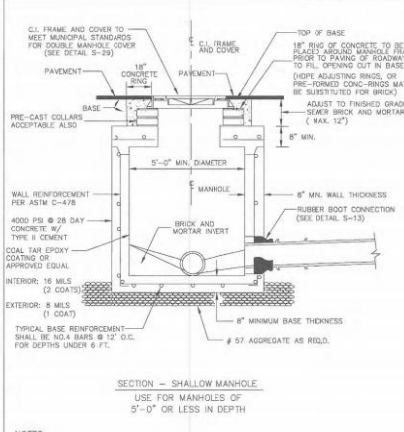
- NOTES:
- MATERIAL: ASTM-A48 CLASS 35B GRAY IRON
 - RING WT.: 85 LBS. APP.
 - COVER WT.: 120 LBS. APP.



STANDARD CONSTRUCTION DETAIL
SANITARY SEWER COVER & GENERAL NOTES
USF 117 RING & BL COVER

FILE NAME:
S7.DWGDETAIL REF:
S-7

REV. 12/08



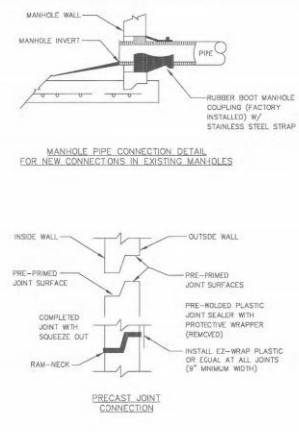
- NOTES:
- INSTALL EZ-WRAP PLASTIC OR EQUAL AT ALL JOINTS (MINIMUM 9" WIDTH).
 - NON-PENETRATING PICK-HOLES IN ALL CONCRETE SECTIONS.
 - USE FASBRETE BITUMASTIC SEALER BETWEEN SECTIONS OF MANHOLE.



STANDARD CONSTRUCTION DETAIL
SHALLOW MANHOLE

FILE NAME:
S8.DWGDETAIL REF:
S-8

REV. 06/11



- NOTES:
- ALL NEW CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES SHALL UTILIZE A CORING METHOD AND THE IN-FIELD INSTALLATION OF A RUBBER BOOT INTO THE MANHOLE.



STANDARD CONSTRUCTION DETAIL
RUBBER BOOT AND PRECAST JOINT CONNECTION

FILE NAME:
S13.CWGDETAIL REF:
S-13

REV. 12/08



Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32803
PHONE: 407-841-1111
ENGINEERING BUSINESS 407-841-1111

WESTPORT RESERVE
(PHASE 4)

SEAL

7/11/2019

REVISIONS

No.	DATE	BY	Description

PROJECT #	PROJECT #50083 38
DRAWN BY	KJK
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

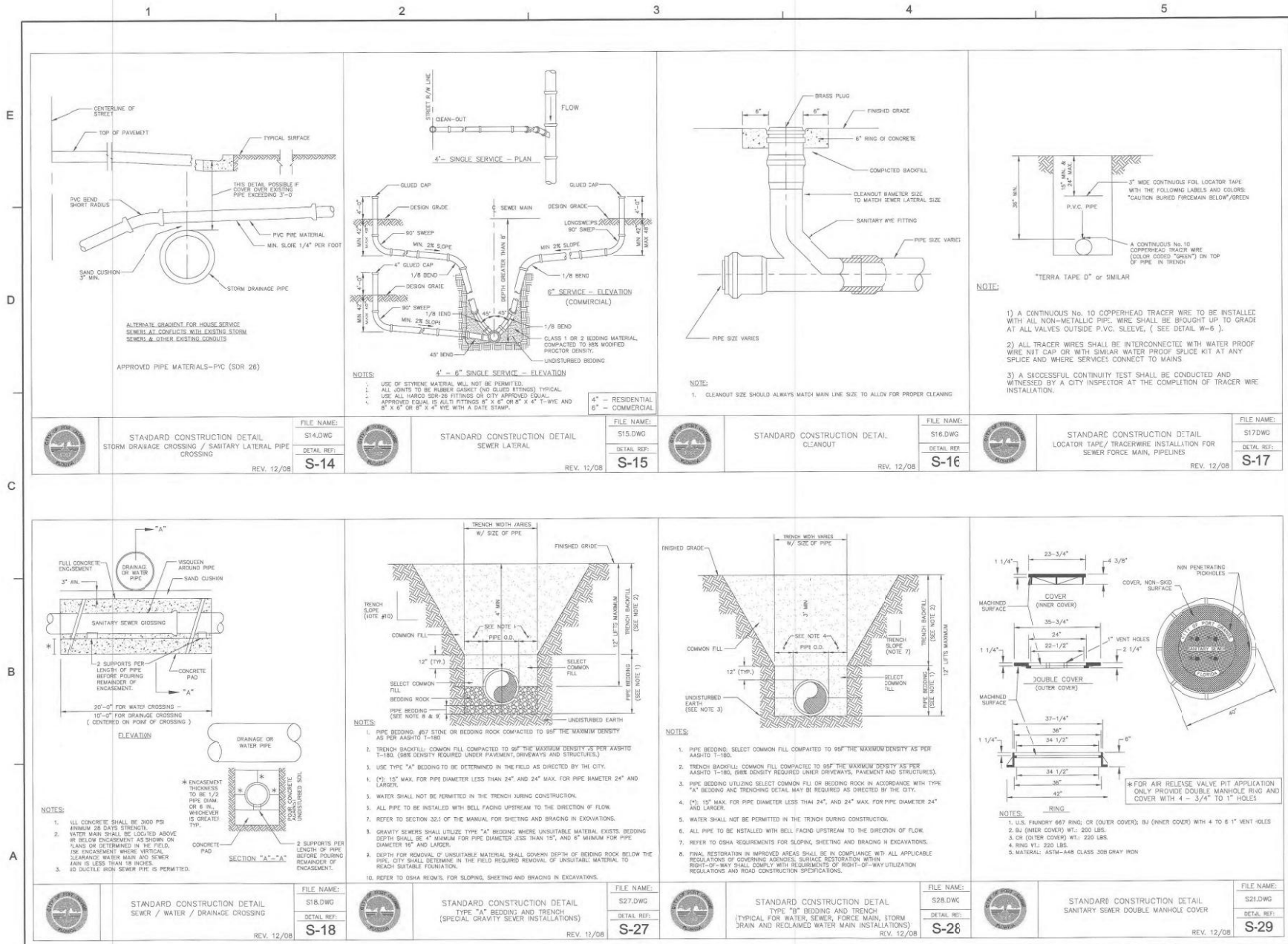
TITLE

CITY
SEWER
DETAILS

PROJECT CC-1FinalSP Phase 4

SHEET NO.

C32



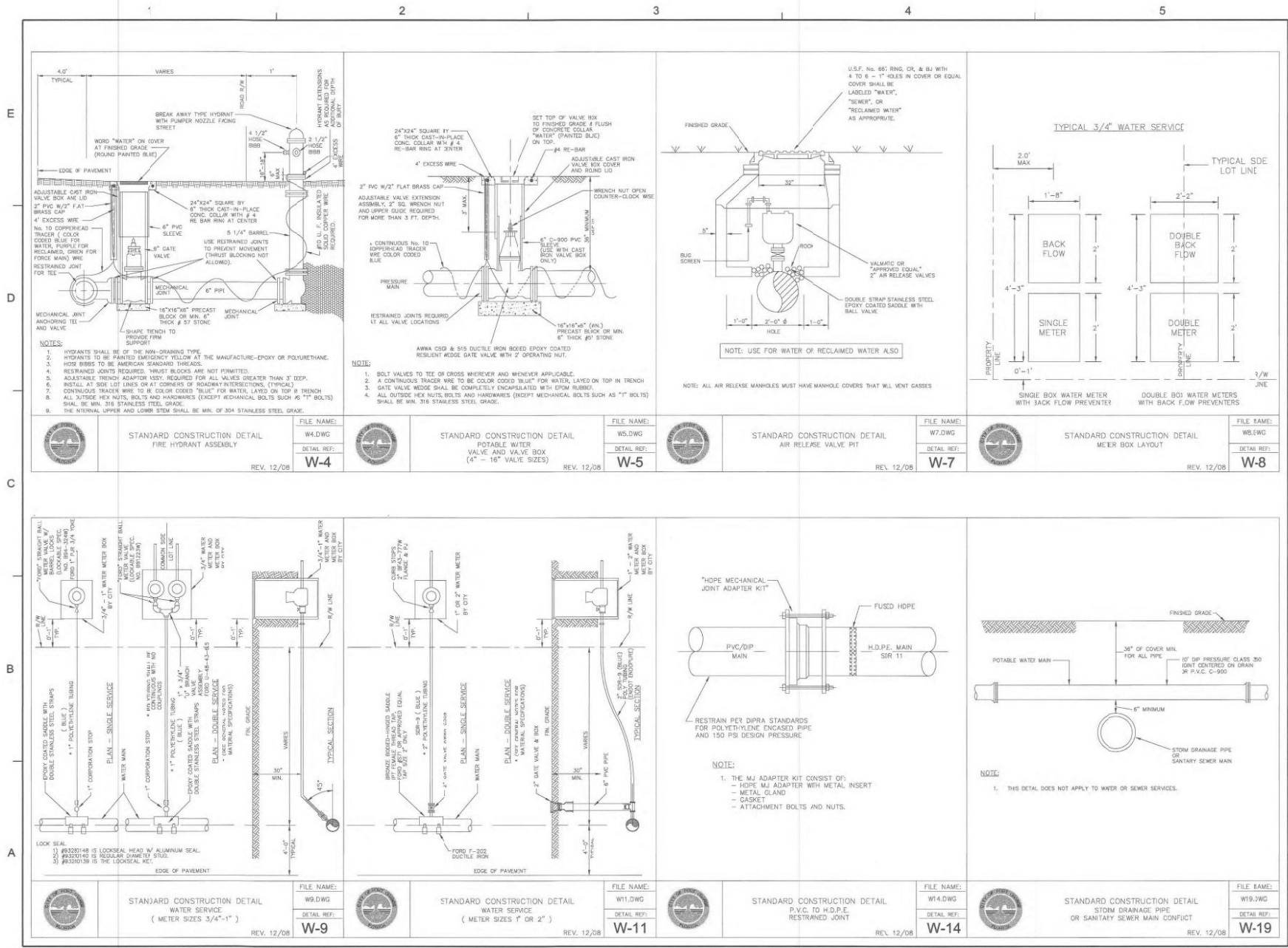
**WESTPORT RESERVE
(PHASE 4)**

CITY OF PORT ORANGE, FLORIDA

SEAL
7/1/2018

REVISIONS				
No.	DATE	BY	DESCRIPTION	

PROJECT # **05003136**
DRAWN BY **KJK**
APPROVED BY **DMV**
CHECKED BY **DMV**
DATE **MAY 2018**
DUTY **NAVD 88**
TITLE
**CITY
SEWER
DETAILS**
PROJECT: CC 1 Final SP Phase 4
SHEET NO.
C33



Dewberry
Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32801
PHONE: 407.843.1230
ENGINEERING BUSINESS 4794

WESTPORT RESERVE (PHASE 4)
CITY OF PORT ORANGE, FLORIDA
7/11/2016

REVISIONS			
No.	DATE	BY	Description

PROJECT #	PROJECT #0008138
DRAWN BY	J.K.K.
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

TITLE	CITY WATER DETAILS
PROJECT	CC 1Pin&SF Phase 4
SHEET NO.	C35



Dewberry Engineers Inc.
602 NORTH MAGNOLIA AVE
SUITE 1000
ORLANDO, FL 32806
PHONE: 407.481.5200
ENGINEERING BUSINESS-4794

WESTPORT RESERVE
(PHASE 4)

CITY OF PORT ORANGE, FLORIDA

7/11/2019

SEAL

RECLAIMED WATER DESIGN NOTES

1. ALL RECLAIMED WATER MAINS SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL. ALL RECLAIMED WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES (3.0 FEET) AND A MAXIMUM DEPTH OF 48 INCHES (4.0 FEET) FROM FINISH GRADE EXCEPT AT LOCATIONS OF UTILITY CROSSINGS WHERE SPECIAL APPROVAL WHEN IT IS DETERMINED TO BE IN THE BEST INTEREST OF THE CITY.
2. RECLAIMED WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACINGS OF 300.0 FEET.
3. AT ALL RECLAIMED WATER MAIN TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL LEGS EXCEPT ONE.
4. AS STANDARD PRACTICE RECLAIMED WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF THE CURB ON THE OPPOSITE SIDE OF THE POTABLE WATER LINES AS APPROVED BY THE CITY.
5. RECLAIMED WATER SERVICES SHALL BE NORMALLY DOUBLE 1 1/2" SERVICES LOCATED AT SIDE LOT LINES ALTERNATING WITH POTABLE WATER SERVICE LOCATIONS. IN INSTANCES WHERE RECLAIMED WATER SERVICES NEED TO BE OFFSET, 1" SINGLE SERVICES SHALL BE SPECIFIED. THESE SERVICES MAY BE OFFSET FROM THE LOT LINE A MAXIMUM DISTANCE OF 2.0'.
6. MAXIMUM OBTAINABLE SEPARATION OF PUBLIC RECLAIMED WATER MAINS, STORMWATER MAINS, AND SANITARY SEWER MAINS SHALL BE MAINTAINED. A MINIMUM HORIZONTAL SEPARATION OF FIVE (5) FEET (CENTER TO CENTER OR THREE (3) FEET (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN RECLAIMED WATER MAINS AND SEWAGE MAINS. WHERE RECLAIMED WATER AND SANITARY SEWAGE MAINS CROSS WITH LESS THAN EIGHTEEN (18) INCHES VERTICAL CLEARANCE, THE SANITARY SEWAGE MAIN SHALL BE TWENTY (20) FEET OF EITHER CONCRETE ENCASED PVC PIPE OR ENCASED IN A WATERTIGHT CARRIER PIPE, CENTERED ON THE POINT OF CROSSING.
7. A 7.5 FOOT SETBACK OR DRAINAGE SHALL BE PROVIDED FROM PUBLIC ACCESS, REUSE, WETTED AREAS TO ANY PUBLIC AND ANY PRIVATE POTABLE WATER SUPPLY WELLS.
8. LOW TRAJECTORY NOZZLES ARE REQUIRED WITHIN 10 FEET OF PUBLIC EATING, DRINKING OR BATHING FACILITIES.
9. FOR CONSTRUCTION PURPOSES, THE PLANS SHALL DIMENSION THE PROPOSED LOCATIONS OF ALL RECLAIMED WATER MAINS MEASURED FROM THE BACK OF CURB OR EDGE OF PAVEMENT IF NO CURB EXISTS.
10. ALL H.D.P.E. PIPE RECLAIMED WATER MAINS SHALL BE 1.0 D.R. 11 UNLESS SPECIFICALLY NOTED OTHERWISE. THE HOPE PIPE SHALL BE SIZED TO MATCH THE EXTERNAL DIAMETER OF THE PVC OR DIP PIPE TO WHICH IT IS ATTACHED.
11. LANDSCAPE PLANS SHALL CLEARLY DEPICT THE DESIGN LOCATION OF PLANTINGS RELATIVE TO THE LOCATION OF PUBLIC UTILITIES AND STORMWATER INFRASTRUCTURE IN ORDER TO EVALUATE POTENTIAL CONFLICTS.
12. LARGE COMMERCIAL WATER AND RECLAIMED WATER METERS GREATER THAN 2" TAKE A MINIMUM OF 6 WEEKS FOR DELIVERY AFTER FEES ARE PAID TO THE CITY. IN ADDITION ALL METERS AND VALVES 2" AND GREATER SHALL BE INSTALLED BY THE CITY'S DEVELOPER/CONTRACTOR. THE FEE COLLECTED BY THE CITY FOR MATERIALS ONLY. ALL METERS, 1 1/2" AND LESS, SHALL BE INSTALLED BY THE CITY.
13. THE CITY REQUIRES DOUBLE SERVICE INSTALLATIONS WHEREVER FEASIBLE. WHEN DESIGN CONFLICTS EXIST, SINGLE SERVICES MAY BE ALLOWED. THIS MAY APPLY AT STORMWATER INLETS, FIRE HYDRANTS, FPL TRANSFORMERS, ETC. AND OTHER LOCATIONS DEEMED APPROPRIATE BY THE CITY.



STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER DESIGN NOTES

FILE NAME
RW1.DOC
DETAIL REF.
RW-1
REV. 12/08

RECLAIMED WATER CONSTRUCTION NOTES

1. THE CITY'S PUBLIC UTILITIES DEPARTMENT (386) 306-5700 SHALL BE GIVEN A MINIMUM OF 2 BUSINESS DAYS ADVANCE NOTICE NOT INCLUDING HOLIDAYS OR WEEKENDS PRIOR TO BEGINNING ANY RECLAIMED WATER SYSTEM CONSTRUCTION.
2. DOWNSHIFTING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW RECLAIMED WATER MAINS (LAD).
3. ALL RECLAIMED WATER MAINS SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL. ALL RECLAIMED WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES (3.0 FEET) AND A MAXIMUM DEPTH OF 48 INCHES (4.0 FEET) FROM FINISH GRADE EXCEPT AT LOCATIONS OF UTILITY CROSSINGS OR WITH SPECIAL APPROVAL WHEN IT IS DETERMINED TO BE IN THE BEST INTEREST OF THE CITY.
4. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE CITY WITH MINIMUM COMPACTION OF 95% IN PAVED AREAS AND A MINIMUM COMPACTION OF 95% IN UNPAVED AREAS ACCORDANCE WITH AASHTO T-155.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 1 FOOT VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET.
6. 3" METALLIZED PIPE LOCATION TAPE SHALL BE LOCATED BETWEEN 15" AND 24" BELOW FINISHED GRADE OR AS SPECIFIED BY MANUFACTURER FOR ALL PVC LINES. MARKER TAPE SHALL BE PROVIDED ON ALL DIP PIPE ALSO.
7. ALL SINGLE RESIDENTIAL WATER SERVICES SHALL BE 1" AND DOUBLE RESIDENTIAL SERVICES SHALL BE 1 1/2" SERVICES SHALL BE CTS 3408 HIGH DENSITY POLYETHYLENE TUBING RATED FOR A MINIMUM OF 200 PSI WITH SDR 9 (CTS). THE TUBING SHALL HAVE A VIRGIN HIGH DENSITY POLYETHYLENE CENTER FOR WHICH THE MANUFACTURER SHALL FURNISH A CERTIFICATE OF PURITY. THE TUBING SHALL BE LAYED OUT IN COLOR AND SHALL HAVE THE WORDS "RECLAIMED WATER" PERMANENTLY PRINTED ON THE OUTSIDE. THE TUBING SHALL HAVE U.V. PROTECTION AND SHALL NOT BE AFFECTED BY DIRECT SUNLIGHT. THE TUBING SHALL COMPLY WITH OR EXCEED THE APPLICABLE STANDARDS OF A.S.N. 03248, 03360, 02238, 02271, N.E.S. 18-48 AND A.W.W.A. C905 AND SHALL COME WITH A LIFETIME WARRANTY. APPROVED SIZES: 1", 1 1/2" AND 2" DIAMETERS.
8. ALL RECLAIMED WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR APPROPRIATE TO PROVIDE ADEQUATE COVER, DUCTILE IRON PRESSURE CLASS 350 OR CONCRETE ENCASEMENT MAY BE USED AS APPROVED BY THE CITY.
9. ALL RECLAIMED WATER VALVES SHALL BE ADJUSTED TO FINISH GRADE AND THE CAPS SHALL BE PAINTED LAVENDER OR PURPLE TO MAKE THEM PLAINLY DISTINGUISHABLE.
10. AS STANDARD PRACTICE RECLAIMED WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF THE CURB ON THE OPPOSITE SIDE OF THE POTABLE WATER LINES OR AS APPROVED BY THE CITY.
11. ALL RECLAIMED WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR APPROPRIATE TO PROVIDE ADEQUATE COVER, DUCTILE IRON PRESSURE CLASS 350 OR CONCRETE ENCASEMENT MAY BE USED AS APPROVED BY THE CITY.
12. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED INSPECTOR PRIOR TO ATTEMPTING TO CLEAR ANY RECLAIMED WATER MAIN FOR USE. THE INSPECTOR SHALL COORDINATE WITH CITY PERSONNEL AT THE RECLAIMED WATER PLANT AT BUSINESS DAYS PRIOR TO BEGINNING ANY FULL DIAMETER FLOOD OF MAINS. THE CONTRACTOR WILL CONDUCT A STANDARD WATER PRESSURE TEST, 150 PSI/57.75 PSI PRESSURE FOR A PERIOD OF



STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER CONSTRUCTION NOTES

FILE NAME
RW2.DOC
DETAIL REF.
RW-2
REV. 12/08

RECLAIMED WATER CONSTRUCTION NOTES (CONT'D)

- 2 HOURS PER AWWA POTABLE WATER STANDARDS. THE RECLAIMED LINE WILL THEN BE DISINFECTED WITH CHLORINE, FLUSHED CLEAR AGAIN, WITH A MINIMUM OF 1 POSITIVE CHLORINE RESIDUAL TEST RESULT PROVIDED TO THE CITY.
13. THE CONTRACTOR SHALL BE REQUIRED TO PIG ALL RECLAIMED MAINS IN SECTIONS OF 6" DIAMETER AND PRIMARY DISTRIBUTION MAINS LOCATED ON COLLECTOR AND ARTERIAL ROADWAYS. ALL PIGS SHALL BE NEW. NO FOAM PIGS ARE ALLOWED. LAUNCHING AND EXTRACTION POINTS SHALL BE DETERMINED BY THE CONTRACTOR. ALL PIGGING OPERATIONS SHALL BE WITNESSED BY A PUBLIC UTILITIES REPRESENTATIVE OR CITY UTILITY INSPECTOR.
14. ALL RECLAIMED WATER MAINS SHALL USE A THRUST RESTRAINED JOINT METHOD IN COMPLIANCE WITH THE DUCTILE IRON PIPE RESEARCH ASSOCIATION (DIPRA) GUIDELINES IN THE EVENT THAT PVC FITTINGS ARE SPECIFIED, THE RESTRAINED JOINT SHALL BE MODIFIED IN ACCORDANCE WITH THE RECOMMENDED ADDITIONAL RESTRAINED LENGTH REQUIRED FOR PIPE WRAPPED WITH POLYETHYLENE. IN NO INSTANCE SHALL THRUST BLOCKS BE PERMITTED.
15. METALLIZED POLYETHYLENE RESTRAINED JOINTS, OR GRIPPER GASKETS SHALL BE USED ON ALL RESTRAINED JOINT INSTALLATIONS. MINIMUM DEPTH OF BURY ON PIPES NOT MEETING REQUIRED COVER REQUIREMENTS SHALL FOLLOW THE MOST RECENT DIPRA THRUST JOINT RESTRAINT DESIGN GUIDELINES.
16. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO INSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE CITY OF PORT ORANGE PUBLIC UTILITIES AND "AS-BUILT" ARE PROVIDED TO THE CITY, PRIOR TO ANY USE OF THE SYSTEM.
17. ALL RECLAIMED WATER MAINS AND SERVICE LINES SHALL BE READILY DISTINGUISHABLE BY THEIR PURPLE COLOR OR TAPE MARKINGS. DUCTILE IRON PIPE SHALL BE WRAPPED WITH PURPLE POLYETHYLENE.
18. ALL RECLAIMED WATER SERVICES SHALL BE MARKED ALONG THE OUTSIDE EDGE OF CURB WITH AN "L" OR BY METAL TABS SET INTO PAVEMENT. VALVES AND BLOW-OFFS FOR RECLAIMED WATER MAINS SHALL BE MARKED BY AN "X" SET INTO THE PAVEMENT. REVERSE TAPPING VALVE SHALL BE MARKED WITH AN "Y" SAW CUT IN TO THE CURB OR PAVEMENT WITH THE ARROW POINTING TO THE DIRECTION OF PRESSURE MAIN RUN.
19. RECLAIMED WATER SERVICES SHALL BE NORMALLY DOUBLE 1 1/2" SERVICES LOCATED AT SIDE LOT LINES ALTERNATING WITH POTABLE WATER SERVICE LOCATIONS. IN INSTANCES WHERE RECLAIMED WATER SERVICES NEED TO BE OFFSET, 1" SINGLE SERVICES SHALL BE SPECIFIED. THESE SERVICES MAY BE OFFSET FROM THE LOT LINE A MAXIMUM DISTANCE OF 2.0'.
20. MAXIMUM OBTAINABLE SEPARATION OF PUBLIC RECLAIMED WATER MAINS, STORMWATER MAINS, AND SANITARY SEWER MAINS SHALL BE MAINTAINED. A MINIMUM HORIZONTAL SEPARATION OF FIVE (5) FEET (CENTER TO CENTER OR THREE (3) FEET (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN RECLAIMED WATER MAINS AND SEWAGE MAINS WHERE RECLAIMED WATER AND SANITARY SEWAGE MAINS CROSS WITH LESS THAN EIGHTEEN (18) INCHES VERTICAL CLEARANCE. THE SANITARY SEWAGE MAIN SHALL BE TWENTY (20) FEET OF EITHER CONCRETE ENCASED PVC PIPE OR ENCASED IN A WATERTIGHT CARRIER PIPE, CENTERED ON THE POINT OF CROSSING.
21. ALL TAPPING OF MAINS SHALL BE PERFORMED BY THE CITY AND BILLED IN ACCORDANCE WITH THE ADOPTED FEE RESOLUTION. SCHEDULING OF THESE CONNECTIONS SHALL REQUIRE A MINIMUM 2 BUSINESS DAYS NOTIFICATION (MEASURED ON NORMAL WORK DAYS) DIRECTED TO THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE THE WORK DIRECTLY WITH THE PUBLIC UTILITIES DEPARTMENT. SUBSEQUENTLY, THE CONNECTION SHALL BE SCHEDULED TO COMMENCE BETWEEN 7:00 A.M. AND NOON ON THE APPROPRIATE



STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER CONSTRUCTION NOTES

FILE NAME
RW2.DOC
DETAIL REF.
RW-2
REV. 12/08

RECLAIMED WATER CONSTRUCTION NOTES (CONT'D)

22. WITH RESPECT TO TIE-IN CONNECTIONS, THE CITY RESERVES THE RIGHT TO REQUIRE CONNECTIONS TO BE PERFORMED DURING PERIODS OF LOW FLOW IN ORDER TO MINIMIZE SERVICE DISRUPTION TO DISTRICT CUSTOMERS.
23. ALL WORK PERFORMED UPON RECLAIMED WATER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE CITY SHALL BE CONSTRUCTED BY AN UNDERGROUND UTILITY GENERAL CONTRACTOR LICENSED IN THE STATE OF FLORIDA AND REGISTERED WITH THE CITY.
24. FOR CONSTRUCTION PURPOSES, THE PLANS SHALL DIMENSION THE PROPOSED LOCATIONS OF ALL RECLAIMED WATER MAINS MEASURED FROM THE BACK OF CURB OR EDGE OF PAVEMENT IF NO CURB EXISTS.
25. ALL H.D.P.E. PIPE RECLAIMED WATER MAINS SHALL BE 1.0 D.R. 11 UNLESS SPECIFICALLY NOTED OTHERWISE. THE HOPE PIPE SHALL BE SIZED TO MATCH THE EXTERNAL DIAMETER OF THE PVC OR DIP PIPE TO WHICH IT IS ATTACHED.
26. ALL P.V.C. PIPE SHALL BE STORED IN SUCH A WAY AS TO PREVENT WARPING, DEFLECTION, OR ANY DEFORMATION.
27. RECLAIMED WATER HYDRANTS MAY BE REQUIRED BY THE CITY. ALL RECLAIMED HYDRANTS SHALL BE PAINTED PURPLE.
28. NO USED, RE-USED, RUSTED, SECOND HAND, OR ANY MATERIAL THAT IS NOT NEW SHALL BE USED IN ANY UTILITY IMPROVEMENT PROJECTS WITHIN THE CITY SERVICE AREA.
29. IN AREAS WHERE RECLAIMED WATER IS AVAILABLE, RECLAIMED WATER WILL BE UTILIZED IN THE PRESSURE TESTING OF NEW RECLAIMED WATER LINES.
30. RECLAIMED WATER MAINS SHALL BE PVC AWWA CLASS 300 OR C905, C.130 (COLOR PANTONE PURPLE) OR DIP PRESSURE CLASS 350 STANDARD CEMENT UNITS UNLESS APPROVED OTHERWISE BY THE CITY.



STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER CONSTRUCTION NOTES

FILE NAME
RW2.DOC
DETAIL REF.
RW-2
REV. 12/08

City of Port Orange Public Utilities Department
List of Approved Products

Reclaimed Water 12/08

Air Release Valves	
MANUFACTURER	MODEL #
Val-Matic	Series 38
Gate Valves and Tapping Valves - Resilient Seating (AWWA C509 and C515) 14" or Smaller (Valve wedges to be complete enclosed with EPDM rubber)	
MANUFACTURER	MODEL #
American AVC Co.	Series 3, 18, 25, 45, 55, & 66
Clow	Model 2618 and 2639
Mueller	A-2360, A-2361, T-2360 & T-2361
American Flow Control	Series 2500
Joints Restrainted - DIP and PVC	
MANUFACTURER	MODEL #
EBBA Iron Inc.	Series 1100/1500/1600/1000/2500/2800
Star Pipe	Stargrip Series 1000/1100/1300/1000/4000
Signa	One-Lock SLD & One-Lock SLC & PV-Lock for PVC
Smith-Blair	Cam-Lock 1111 & 1201 & Bell-Lock 1115 & 1601



STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER APPROVED PRODUCTS

FILE NAME
RW3.DOC
DETAIL REF.
RW-3

City of Port Orange Public Utilities Department
List of Approved Products

Reclaimed Water 12/08

Polyethylene Tubing - (Purple with UV Protection (SDR-9) 1" to 2" only)	
MANUFACTURER	MODEL #
Endot Endocore RVT	Endotrace with #10 Copperhead tracer wire
Corporation Stop 1"	
MANUFACTURER	MODEL #
Ford	F-1100-4
Corporation Stop 1 1/2"	
MANUFACTURER	MODEL #
Ford	FB-1100-4
Curb Stop - Straight Ball Meter Valve w/ Barrel Locks	
MANUFACTURER	MODEL #
Ford	B-94-324W (Single Service) B-91-223W (Double Service) BF 45-777W (For 2" meter)
"U" Branch 2" x 1/2"	
MANUFACTURER	MODEL #
Ford	U-48-63-7.5



STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER APPROVED PRODUCTS

FILE NAME
RW3.DOC
DETAIL REF.
RW-3

REVISIONS

No.	DATE	BY	Description

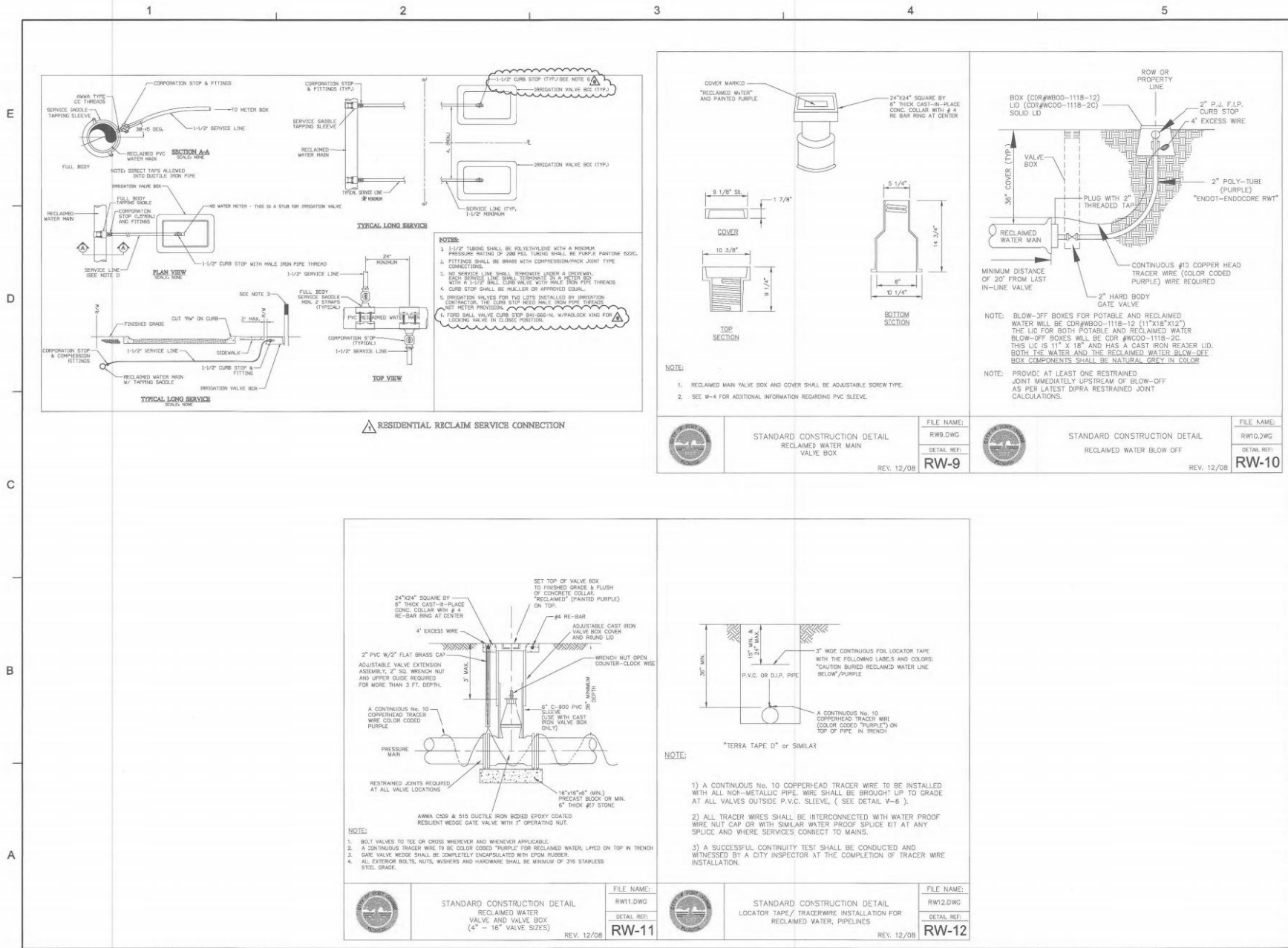
PROJECT #	PROJECT #00003136
DRAWN BY	J.K.R.
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2018
DATUM	NAVD 88

TITLE

CITY RECLAIMED
WATER DETAILS

PROJECT: CC-1Final05F Phase 4
SHEET NO.

C37



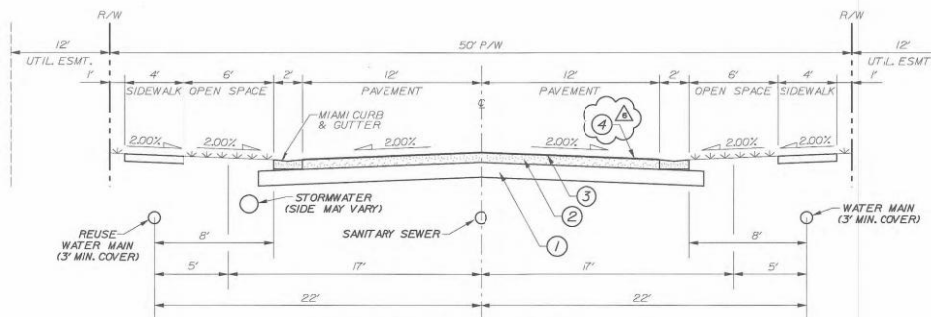
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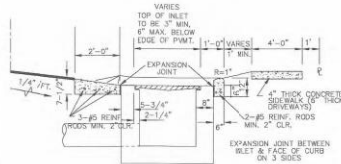
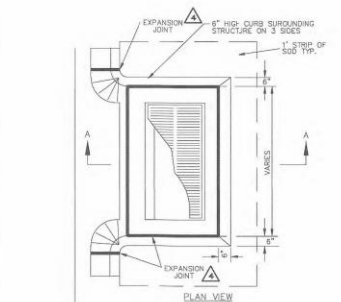
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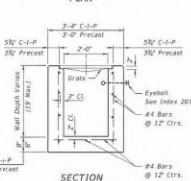
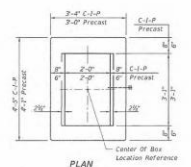
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TYPICAL SECTION - 50' R/W



STANDARD CONSTRUCTION DETAIL
STORM INLET APRON



HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)

WALL DEPTH	SCHEDULE	AREA (sq. ft.)	MAX. SPACING	REINFORCEMENT	W/F
2'-10"	A12	0.20	12"	4# Bars	W/F

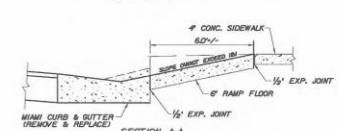
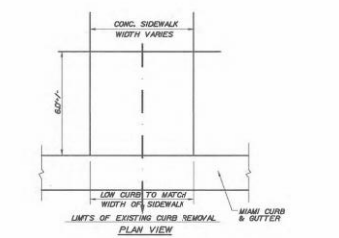
TYPE C
Recommended Maximum Pipe Size:
2'-0" Wall - 18" Pipe
2'-1" Wall - 24" Pipe (if where on 18" pipe enters a 2'-0" wall)

PAVEMENT LEGEND

- 6" RECYCLED CONCRETE BASE (LBR 130) COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST. THE CONSTRUCTION METHODS SHALL CONFORM TO THE LATEST EDITION OF THE F.D.O.T. ROAD AND BRIDGE CONSTRUCTION SPECIFICATIONS.
- 6" RECYCLED CONCRETE BASE (LBR 130) COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST. THE CONSTRUCTION METHODS SHALL CONFORM TO THE LATEST EDITION OF THE F.D.O.T. ROAD AND BRIDGE CONSTRUCTION SPECIFICATIONS.
- 1.5" OF FLORIDA DOT ASPHALTIC CONCRETE MIX OF TYPE SP-9.5 & COMPACTED TO 98% DENSITY. THE CONSTRUCTION METHODS SHALL CONFORM TO THE LATEST EDITION OF THE F.D.O.T. ROAD AND BRIDGE CONSTRUCTION SPECIFICATIONS.
- CONTRACTOR TO APPLY PRIME COAT OF EMULSIFIED ASPHALT WHEN BASE IS USED TO SERVE CONSTRUCTION TRAFFIC OR TAKE THE ROADWAY OUT OF SERVICE UNTIL WEARING COURSE IS PLACED.

ALTERNATE BASE:
6" SOIL CEMENT BASE MINIMUM BEARING STRENGTH OF 300 P.S.I. SHALL BE OBTAINED WITHIN 7 DAYS AND COMPACTED TO 98% DENSITY BASED ON AASHTO T-99 STANDARD PROCTOR TEST. CONSTRUCTION METHODS SHALL CONFORM TO SECTION 270 OF STANDARD F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

USE OF ALTERNATE BASE MUST FIRST BE APPROVED BY THE COMMUNITY DEVELOPMENT ENGINEER.



NOTES:
1. ENTIRE EXISTING CURB SHALL BE REMOVED & REPLACED WITHIN LIMITS SHOWN.
2. LOW CURB & TRANSITION MAY BE FORMED AT TIME OF CURB CONSTRUCTION.
3. CONSTRUCT WITH CLASS A 13000PSI CONCRETE.

HANDICAP RAMP



Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32803
PHONE: 407.443.8500
ENGINEERING BUSINESS - 4794

WESTPORT RESERVE (PHASE 4)

CITY OF PORT ORANGE, FLORIDA



REVISIONS

No.	DATE	BY	Description
1	7-10-18	KJK	REV PER CTY
2	11-3-17	KJK	REV PER CTY
3	12-2-17	KJK	REV PER CTY
4	8-14-17	KJK	REV PER CTY

PROJECT # PROJECT #50003138
DRAWN BY KJK
APPROVED BY DMV
CHECKED BY DMV
DATE MAY 2018
DATUM NAVD 88

TYPICAL PAVING SECTION

PROJECT: CC 19FinalSP Phase 4
SHEET NO.

C39

1

2

3

4

5



UNIVERSAL ENGINEERING SCIENCES

GEOTECHNICAL EXPLORATION
COQUINA COVE
VOLUSIA COUNTY, FLORIDA

UES Project No. 0430 1500159.0001
UES Report No. 131484

January 12, 2016
Revised, March 1, 2016

PREPARED FOR:

Edge Cove, LLC
370 Center Pointe Circle, Suite 1156
Altamonte Springs, Florida 32701

PREPARED BY:

Universal Engineering Sciences
111 Beville Road, Suite 32174
South Daytona, Florida 32174
(386) 756-1105

CONSULTANTS:

Geotechnical Engineering • Environmental Engineering • Construction
Materials Testing • Threshold Inspection • Private Provider Inspection •
Geophysical Studies

OFFICE: 111 Beville Road, Suite 32174 • South Daytona, FL 32174 • (386) 756-1105 • Fax: (386) 756-1106
Field Office: 111 Beville Road, Suite 32174 • South Daytona, FL 32174 • (386) 756-1105 • Fax: (386) 756-1106

Coquina Cove
Volusia County, Florida

UES Project No. 0430 1500159.0001
UES Report No. 131484

Differential settlement results from differences in applied bearing pressures and the variations in the compressibility characteristics of the subsurface soils. Based on the subsurface conditions as determined by our borings, it is anticipated that differential settlements will be within tolerable limits.

9.3 SITE PREPARATION FOR SHALLOW FOUNDATIONS

We recommend the following site preparation procedures for the structure areas:

1. Prior to construction, the location of existing underground utility lines within the construction area should be established. Provisions should then be made to relocate interfering utilities to appropriate locations. It should be noted that if underground pipes are not properly removed or plugged, they may serve as conduits for subsurface erosion which may subsequently lead to excessive settlement of the overlying structures.
2. Strip the proposed construction limits of all grass, roots, topsoil, and other deleterious materials within and 5 feet beyond the perimeter of the proposed structure. Expect initial clearing and grubbing to depths of approximately one to two feet.
3. Based on the ground water levels and anticipated fill, dewatering for foundation excavation and compaction may be required. We recommend implementing temporary groundwater control measures if the groundwater is within two feet of the required depth of excavation at the time of construction. Dewatering measures should be the responsibility of the contractor. We recommend the groundwater control measures remain in-place until compaction of the existing soils is completed and backfilling has reached a height of 2 feet above the groundwater level at the time of construction. The site should be graded to direct surface water runoff from the construction area.
4. Compact the exposed surface using tracked dozer or vibratory equipment. We recommend that vibratory equipment be operated in static mode within 100 feet of any existing structures. The upper one foot of soils below the exposed surface within the building area should be improved to achieve a minimum compaction requirement of 95% of the Modified Proctor Test (ASTM D-1557). We recommend the compacted soils exhibit moisture content within ± 2 percent of the soils optimum moisture content as determined by the Modified Proctor Test (ASTM D-1557). Should the soils experience pumping and soil strength loss during the compaction operations, compaction work should be immediately terminated and (1) the disturbed soils removed and backfilled with dry structural fill soils which are then compacted, or (2) the excess moisture content within the disturbed soils allowed to dissipate before recompacting.
5. Test the compacted surface for compliance at a minimum of one location per 2,500 square feet within the building area, or at a minimum of four locations per building area.
6. Place fill material, as required within building padfoot areas. The fill should consist of "clean" fine sand with less than 5 percent silt and clay. You may use fill materials with silt and clay contents between 5 percent and 10 percent, but strict moisture control may be required. Place fill in uniform 8 to 12-inch loose lifts and compact each lift to a minimum density of 95 percent of the Modified Proctor maximum dry density. We recommend the compacted soils exhibit moisture content within ± 2 percent of the soils optimum moisture content.

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Coquina Cove
Volusia County, Florida

UES Project No. 0430 1500159.0001
UES Report No. 131484

as determined by the Modified Proctor Test (ASTM D-1557). If light compaction equipment is used, we recommend the lift thickness be reduced to 8 inch thick lifts.

7. Perform compaction tests within the backfill and fill soils at a minimum of one location per 2,500 square feet per lift (minimum four locations per building area).
8. Compact and test footing cuts for compaction to a depth of one foot below bearing level. We recommend that you test one out of every four (25 percent) column footings and perform one test per every 50 linear feet of wall footing. Compaction operations in confined areas, such as footing excavations, can best be performed with a lightweight vibratory sled or other hand-held compaction equipment.

10.0 PAVEMENT RECOMMENDATIONS

10.1 ASSUMPTIONS

We have assumed that the proposed roadways will consist of a flexible pavement section with typical residential traffic. At the time of this exploration, specific traffic loading information was not provided to us. Our recommendations for design of the roadways are listed in the following sections.

10.2 ASPHALTIC PAVEMENTS

Because traffic loadings are commonly unavailable, we have generalized our pavement design into two groups. The group descriptions and the recommended component thicknesses are presented in Table II below.

Traffic Group	MINIMUM ASPHALTIC PAVEMENT COMPONENT THICKNESSES Layer Component (inches)		
	Surface Course	Base Course	Stabilized Subgrade
Roadway Light Duty	1.5"	6"	12"
Roadway Heavy Duty	2.0"	8"	12"

10.2.1 Stabilized Subgrade

We recommend that the stabilized subgrade materials immediately beneath the base course exhibit a minimum Limerock Bearing Ratio (LBR) of 40. The stabilized subgrade should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D-1557) value.

Stabilized subgrade can be imported materials or a blend of on-site and imported materials. If a blend is proposed, we recommend that the contractor perform a mix design to find the optimum mix proportions.

July 15, 2016

**UNIVERSAL
ENGINEERING SCIENCES**
CONSULTANTS: GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING • CONSTRUCTION MATERIALS TESTING • THRESHOLD INSPECTION • PRIVATE PROVIDER INSPECTION • GEOPHYSICAL STUDIES

City of Port Orange
Attn: Larry Roberts
1000 City Center Circle
Port Orange, FL 32129

Mr. Roberts:

I understand that with respect to the Standard Construction Detail for roadways, a required 6 inch Sub-base meeting LBR-40 requirement, underlain by 12 inch Subgrade meeting LBR-40 requirement (both inherently the same thing), further overlay by 6 inches of Base material is required. In my opinion, a 12 inch Subgrade/Sub-base should be utilized. Subgrade/Sub-base typically is sandy soils blended with silt/clays to increase the section to LBR-40. In areas where high water tables are present, the 18 inch section may potentially become saturated as it may encroach closer to groundwater (low sites in Port Orange water will percolate subsequent to significant rainfall activity, especially Westport), and due to the percentages fines passing a No. 200 sieve generally being well over 10 percent fines in a blended LBR 40 mix could potentially result in pumping conditions. A sandy zone between water level and Subgrade and Base is conducive in allowing pore pressures to dissipate.

We always recommend the 12 inch Subgrade/Sub-base as in conjunction with FOOT, County and other municipalities. We are currently performing the testing services for I-95 which utilizes the 12 inch Subgrade/Sub-base (LBR 40) section. This road has much higher traffic loadings.

We request a 12 inch Subgrade/Sub-base in combination with a 6 inch base and 1.5 inch asphalt section for the Westport Phase 2B.

Respectfully submitted,
UNIVERSAL ENGINEERING SCIENCES, INC.

[Signature]
Bryce E. Roberts
Professional Engineer No. 60216
Branch Manager

BEP/rsp

911 Beville Road, Suite 3 • South Daytona, Florida 32119 • (386) 756-1105 • Fax (386) 760-4007
www.UniversalEngineering.com



Dewberry Engineers Inc.
802 NORTH MAGNOLIA AVE
SUITE 100
ORLANDO, FL 32803
PHONE: 407.441.1550
ENGINEERING BUSINESS-4794

WESTPORT RESERVE
(PHASE 4)

SEAL

7/15/2016

12.0 SUITABILITY OF EXCAVATED MATERIAL FOR USE AS FILL

The borings were performed, in part, to provide an indication of the suitability of excavated soils from the proposed borrow areas for use as structural fill soil. Based on the results of the borings the fine sand (SP), the fine sand with silt (SP-SM), fine sand with clay (SP-SC), and shell with fine sand as encountered at the boring locations, is suitable for use as structural fill soil. The sandy clay (CH), clayey (SC) and silty fine sand with clay (SM) as encountered are not considered suitable for use as fill due to their fines content and plasticity characteristics making it difficult to place and compact. Because the fine sand with silt (SP-SM) and fine sand with clay (SP-SC) significantly retains moisture, strict moisture control may be required during placement and compaction operations to avoid moisture related instability. The clayey fine sand (SC), sandy clay (CH) and silty fine sand (SM) as encountered in the boring locations can be used for road base stabilization material. However this is not recommended in areas where the road base elevation is in close proximity to the groundwater table.

It should be anticipated the soils in the proposed pond areas that are below the groundwater level will have moisture contents in excess of the Modified Proctor optimum moisture content and will require stockpiling or spreading to bring the moisture content within ± 2 percent of the soil's optimum moisture content corresponding to the required degree of compaction.

The contractor should anticipate very loose soils if excavations exceed 11 to 12 feet below the existing grade.

13.0 DEWATERING AND EXCAVATION CONSIDERATIONS

Depending upon the time of year construction commences and the depth of excavation required, some dewatering may be required for the successful construction of this project. Where excavations will extend only a few feet below the groundwater table, a sump pump may be sufficient to control the groundwater table. Deeper excavations may require well points and/or silt drains to control the groundwater table. Regardless of the method(s) used, we recommend dewatering down the water level at least 2 feet below the bottom of the excavation. The actual method(s) of dewatering should be determined by the contractor. The design and discharge of the dewatering system must be performed in accordance with applicable regulatory criteria (i.e. water management district, etc.) and compliance with such criteria is the sole responsibility of the contractor.

Excavations should be sloped as necessary to prevent slope failure and to allow backfilling. As a minimum, temporary excavations below 4-foot depth should be sloped in accordance with OSHA regulations. Where lateral confinement will not permit slopes to be laid back, the excavation should be shored in accordance with OSHA requirements. During excavation, excavated material should not be stockpiled at the top of the slope within a horizontal distance equal to the excavation depth. Provisions should be made for maintaining worker safety within excavations is the sole responsibility of the contractor.

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Coquina Cove
Volusia County, Florida

UES Project No. 0430 1500159.0001
UES Report No. 131484

14.0 CONSTRUCTION RELATED SERVICES

We recommend the owner retain Universal to provide inspection services during the site preparation procedures for confirmation of the adequacy of the earthwork operations. Field tests and observations include verification of foundation and pavement subgrades by monitoring earthwork operations and performing quality assurance tests of the placement of structural fill and pavement courses.

The geotechnical engineering design does not and with the advertisement of the construction documents. The design is an ongoing process throughout construction. Because of our familiarity with the site conditions and the intent of the engineering design, we are most qualified to address site problems or construction changes, which may arise during construction, in a timely and cost-effective manner.

15.0 LIMITATIONS

This report has been prepared for the exclusive use of Jones Horne, USA and other designated members of their design/construction team associated with the proposed construction for the specific project discussed in this report. No other site or project facilities should be designed using the soil information contained in this report. As such, UES will not be responsible for the performance of any other site improvement designed using the data in this report.

This report should not be relied upon for final design recommendations or professional opinions by unauthorized third parties without the expressed written consent of Universal Engineering Sciences. Unauthorized third parties that rely upon the information contained herein without the expressed written consent of Universal Engineering Sciences, Inc. assume all risk and liability for such reliance.

The recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated on the Boring Location Plan and from other information as referenced. This report does not reflect any variations which may occur between the borings locations. The nature and extent of such variations may not become evident until the course of construction. If variations become evident, it will then be necessary for a re-evaluation of the recommendations of this report after performing on-site observations during the construction period and noting the characteristics of the variations.

The Borings for a typical geotechnical report are widely spaced and generally not sufficient for reliably detecting the presence of isolated, anomalous surface or subsurface conditions, or reliably estimating erasable or suitable material quantities. Accordingly, UES does not recommend relying on our boring information for estimation of material quantities unless our contract specifically includes sufficient exploration for such purposes(s) and within the report we so state that the level of exploration provided should be sufficient to detect anomalous conditions or estimate such quantities. Therefore, UES will not be responsible for any extrapolation or use of our data by others beyond the purposes for which it is applicable or intended.

All users of this report are cautioned that there was no requirement for Universal to attempt to locate any man-made buried objects or identify any other potentially hazardous conditions that

15



No.	DATE	BY	Description

PROJECT #	PROJECT #50003136
DRAWN BY	J.K.R.
APPROVED BY	DMV
CHECKED BY	DMV
DATE	MAY 2016
DATUM	NAVD 88

TITLE
**GEOTECHNICAL
REPORT BY
UNIVERSAL
ENGINEERING
SCIENCES, INC.**

PROJECT: CC 1/FinalSP Phase 4
SHEET NO.

C40

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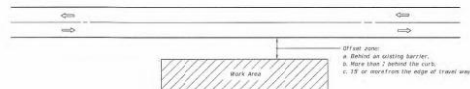
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GENERAL NOTES

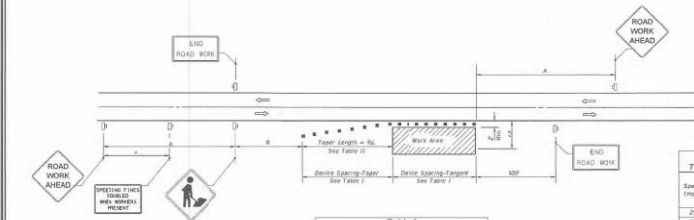
1. If the work operation (including establishing and terminating the work area) requires that an or more work vehicles enter the travel lane in any one hour, traffic control will be in accordance with Index No. 602.
2. No special signing is required.
3. When a side road intersects the highway within the work area, additional TTC devices shall be placed in accordance with other applicable TTC indexes.
4. When construction activities encroach on a shoulder refer to Index No. 600.
5. For general TTC requirements and additional information, refer to Index No. 600.

SYMBOLS

- Work Area
- Line Identification + Direction of Traffic

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ARE BEHIND AN EXISTING BARRIER, MORE THAN 2' BEHIND THE CURB, OR IF ON MORE FROM THE EDGE OF TRAVEL WAY.



DISTANCE BETWEEN SIGNS

Speed (mph)	A	B
25 or less	100	200
30 to 40	150	250
40 mph or greater	200	300

SYMBOLS

- Work Area
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Line Identification + Direction of Traffic

Speed (mph)	Case or Future Markers	Type T or Type II	Variable or Variable	Variable or Variable
25	25	50	75	100
30 to 40	30	60	90	120
40 to 50	40	80	120	160
50 to 60	50	100	160	200
60 to 70	60	120	200	240
70 to 80	70	140	240	280
80 to 90	80	160	280	320
90 to 100	90	180	320	360

GENERAL NOTES

1. When four or more work vehicles enter the travel lane in a one hour period or less (including establishing and terminating the work area), the advance FLASHER sign shall be substituted for the WORKERS sign. For location of flaggers and FLASHER signs, see Index No. 600.
2. SHOULDER WORK sign may be used as an alternate to the WORKERS sign only on the side where the shoulder work is being performed.
3. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TTC indexes.
4. For general TTC requirements and additional information, refer to Index No. 600.

DURATION NOTES

1. Signs and channelizing devices may be omitted if all of the following conditions are met:
 - a. Work operations are 60 minutes or less.
 - b. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe light operation.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ARE BEHIND AN EXISTING BARRIER, MORE THAN 2' BEHIND THE CURB, OR IF ON MORE FROM THE EDGE OF TRAVEL WAY.

LAST REVISION
07/01/05

FY 2016-17
DESIGN STANDARDS

TWO-LANE, TWO-WAY, WORK OUTSIDE SHOULDER

INDEX NO.
601

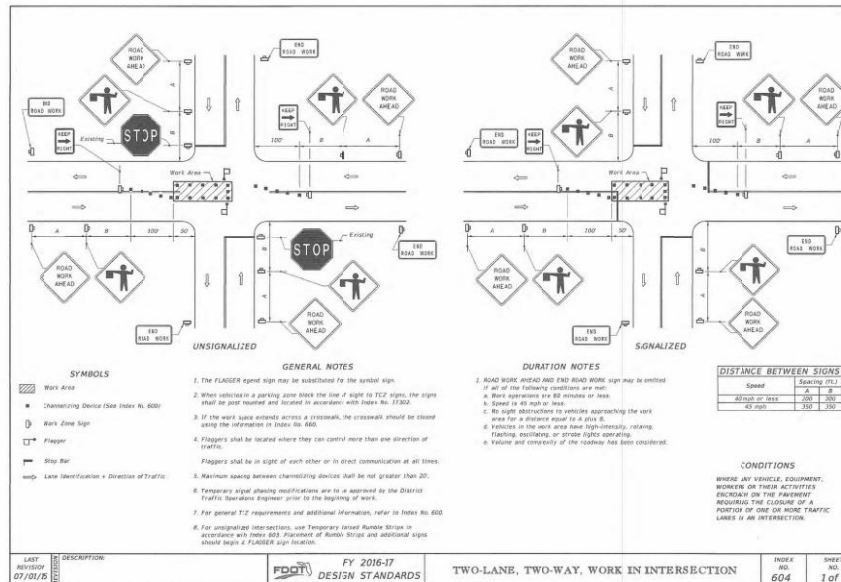
SHEET NO.
1 of 1

FY 2016-17
DESIGN STANDARDS

TWO-LANE, TWO-WAY, WORK ON SHOULDER

INDEX NO.
602

SHEET NO.
1 of 1



SYMBOLS

- Work Area
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Stop Bar
- Line Identification + Direction of Traffic

GENERAL NOTES

1. The FLASHER sign may be substituted for the symbol sign.
2. When vehicles in a parking area block the line of sight in TTC signs, the signs shall be placed as far back as possible in accordance with Index No. 31202.
3. If the work lane extends across a crosswalk, the crosswalk should be closed using the information in Index No. 600.
4. Flaggers shall be located where they can control more than one direction of traffic.
5. Flaggers shall be in sight of each other or in direct communication at all times.
6. Maximum spacing between channelizing devices shall be no greater than 20'.
7. Temporary sign placement modifications are to be approved by the District Traffic Management Engineer prior to the beginning of work.
8. For general TTC requirements and additional information, refer to Index No. 600.
9. For unsignaled intersections, use Temporary (Closed) Roundabout Signs in accordance with Index 603. Placement of Roundabout Signs and additional signs should begin a FLASHER sign location.

DURATION NOTES

1. ROAD WORK AHEAD AND END ROAD WORK sign may be omitted if all of the following conditions are met:
 - a. Work operations are 60 minutes or less.
 - b. Speed is 40 mph or less.
 - c. No sight obstructions to vehicles approaching the work area for a distance equal to A plus B.
 - d. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe light operation.
 - e. Volume and complexity of the roadway have been considered.

Speed	Spacing (ft.)
25 or less	100
30 to 40	150
40 mph or greater	200

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ARE BEHIND AN EXISTING BARRIER, MORE THAN 2' BEHIND THE CURB, OR IF ON MORE FROM THE EDGE OF TRAVEL WAY.

LAST REVISION
07/01/05

FY 2016-17
DESIGN STANDARDS

TWO-LANE, TWO-WAY, WORK IN INTERSECTION

INDEX NO.
604

SHEET NO.
1 of 1



Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 1000
ORLANDO, FL 32803
PHONE: 407.641.8100
ENGINEERING BUSINESS 4794

WESTPORT RESERVE
(PHASE 4)

CITY OF PORT ORANGE, FLORIDA

TY-1100010

REVISIONS

No.	DATE	BY	Description

PROJECT # PROJECT #00001330
DRAWN BY J.K.K.
APPROVED BY DMV
CHECKED BY DMV
DATE MAY 2018
DATUM NAVD 88

TITLE

JURISDICTIONAL
STANDARDS

PROJECT: CC-1FinalSP Phase 4
SHEET NO.

C41

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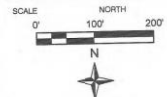


Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
SUITE 1000
ORLANDO, FL 32803
PHONE: 407.843.5100
ENGINEERING BUSINESS: 407.843.5100
LAND AREA: 1.00000000

WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN
EDGE COVE, LLC
PORT ORANGE, FL



KEY PLAN



No.	DATE	BY	Description
REVISIONS			

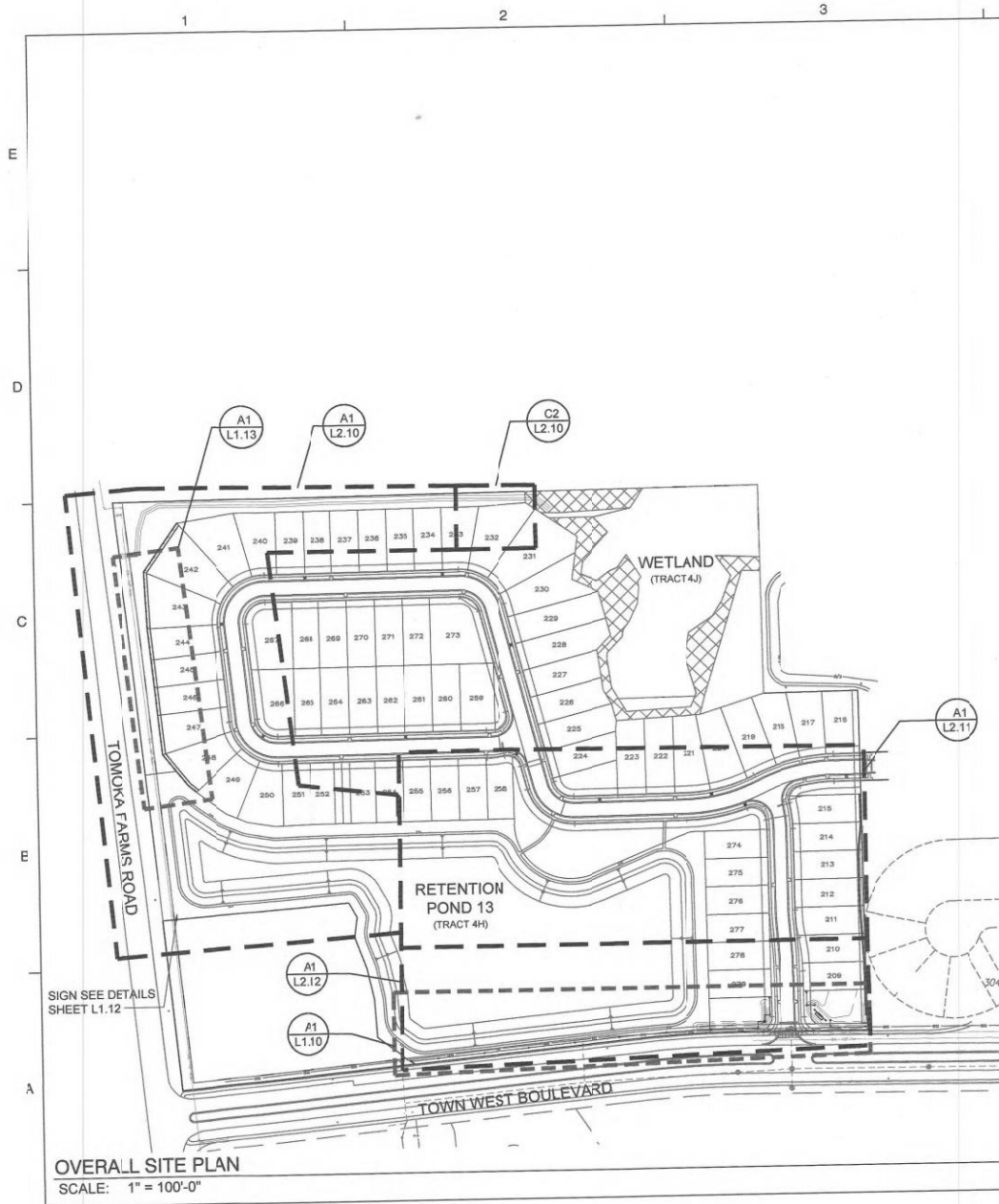
DRAWN BY _____
APPROVED BY _____
CHECKED BY _____
DATE _____
TITLE _____

OVERALL PLAN

PROJECT NO: 90008031

L1.00

SHEET NO.
Vol. IV of IV

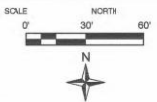


OVERALL SITE PLAN
SCALE: 1" = 100'-0"

**WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN**
EDGE COVE, LLC
PORT ORANGE, FL



KEY PLAN



No.	DATE	BY	Description

REVISIONS

DRAWN BY _____

APPROVED BY _____

CHECKED BY _____

DATE _____

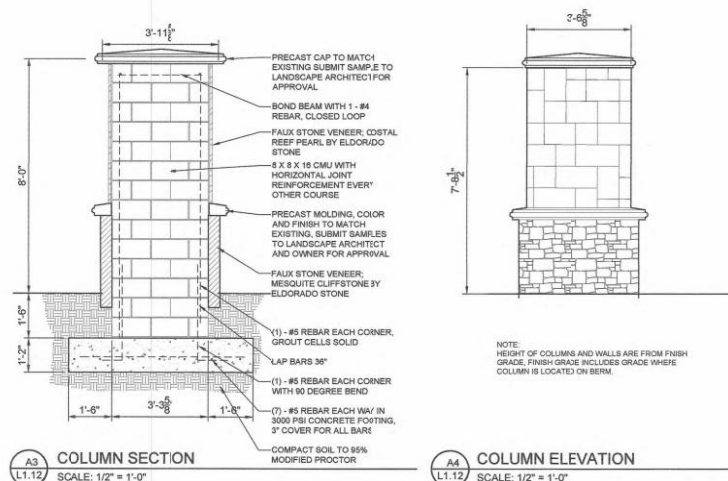
TITLE _____

DETAILS

PROJECT NO. 50080831

L1.12

SHEET NO.





Dewberry Engineers Inc.
807 NORTH MICHOLIA AVE
SUITE 1000
ORLANDO, FL 32803
PHONE: 407.855.1120
FAX: 407.855.1120
ENGINEERING BUSINESS 4794
LAND ARCH: L20000099

WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN
EDGE COVE, LLC
PORT ORANGE, FL

SEAL



KEY PLAN



NO.	DATE	BY	DESCRIPTION

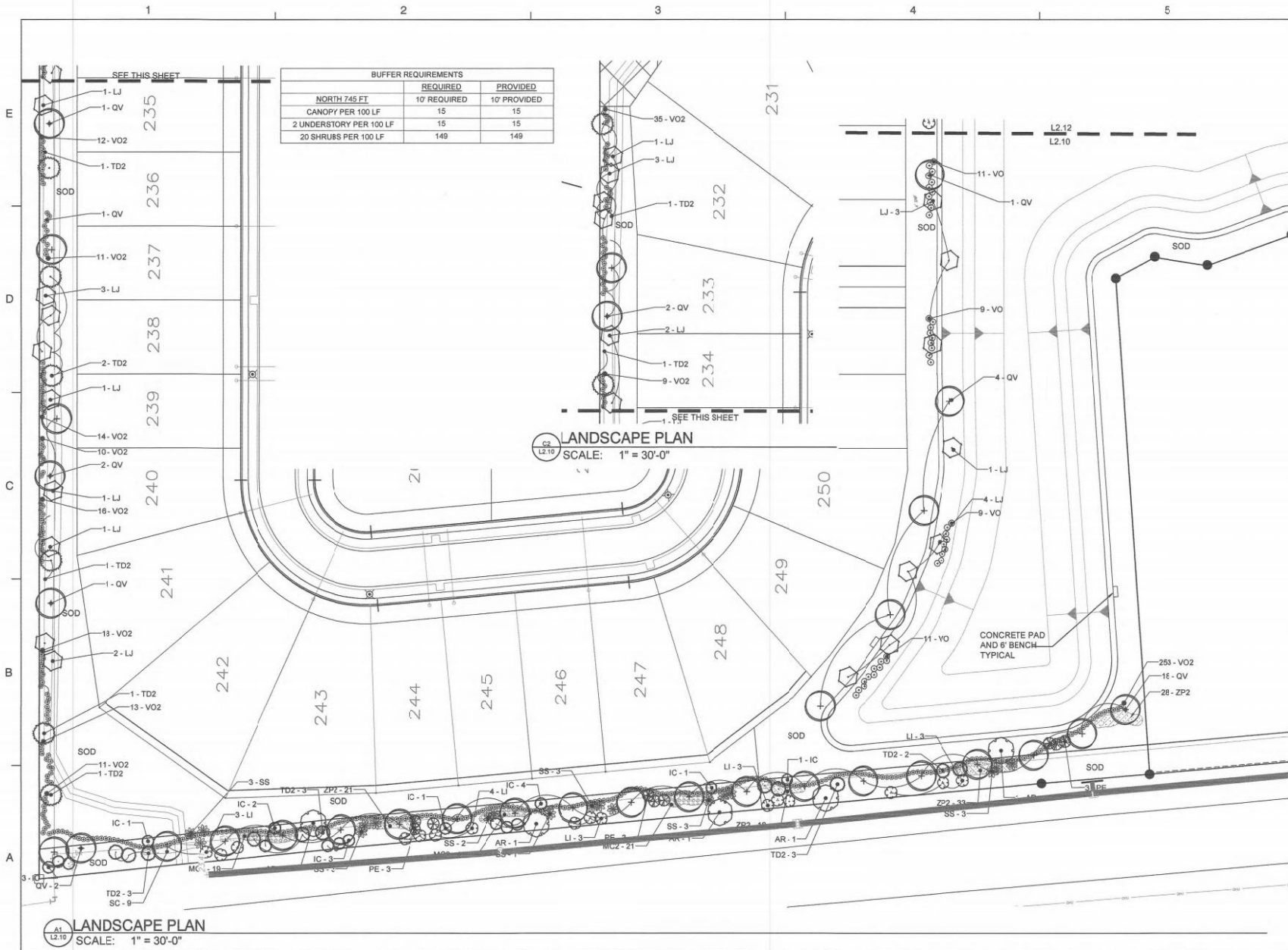
DRAWN BY _____
APPROVED BY _____
CHECKED BY _____
DATE _____
TITLE _____

LANDSCAPE PLAN

PROJECT NO. 50092831

L2.10

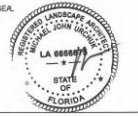
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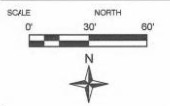


Dewberry Engineers Inc.
800 NORTH MIAMI AVENUE
SUITE 1000
MIAMI, FL 33136
PHONE: 407.431.5100
FAX: 407.431.5101
LAND ARCH: L20000000

WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN
EDGE COVE, LLC
PORT CHARLIE, FL



KEY PLAN



No.	DATE	BY	Description

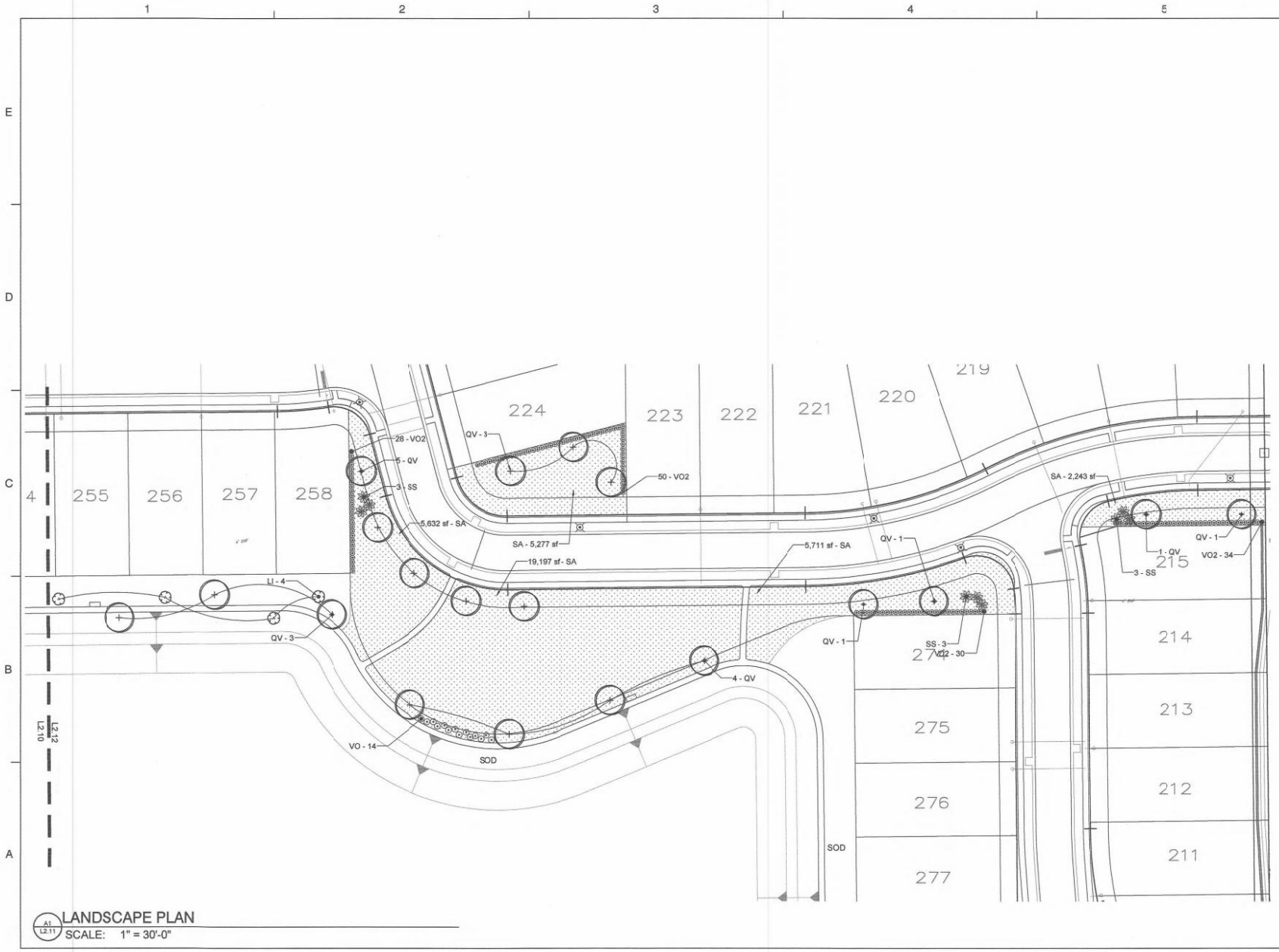
REVISIONS
DRAWN BY _____
APPROVED BY _____
CHECKED BY _____
DATE _____

TITLE
LANDSCAPE PLAN

PROJECT NO. 5000831

L2.11

SHEET NO.



LANDSCAPE PLAN
SCALE: 1" = 30'-0"

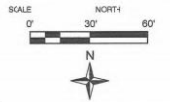


Dewberry Engineers Inc.
900 NORTH MAGNOLIA AVE
SUITE 1000
CHICAGO, IL 60603
PHONE: 407.461.8139
ENGINEERING BUSINESS 4794
LAND ARCH - 123000089

WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN
EDGE COVE, LLC
PORT ORANGE, FL



KEY PLAN



No.	DATE	BY	Description

REVISIONS
DRAWN BY _____
APPROVED BY _____
CHECKED BY _____
DATE _____
TITLE _____

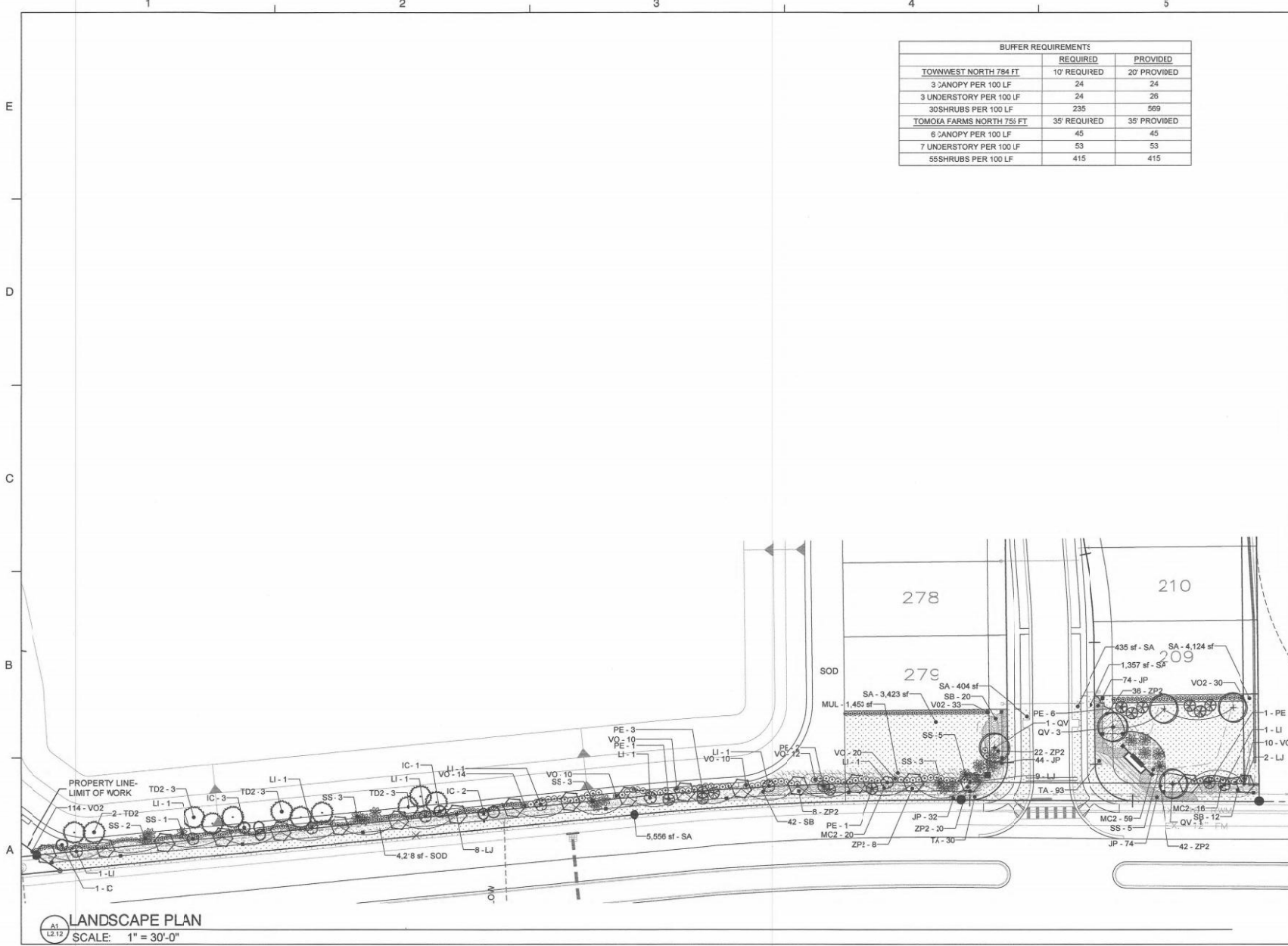
LANDSCAPE PLAN

PROJECT NO. 50008931

L2.12

SHEET NO.

BUFFER REQUIREMENTS		
	REQUIRED	PROVIDED
TOWNWEST NORTH 784 FT	10' REQUIRED	20' PROVIDED
3 CANOPY PER 100 LF	24	24
3 UNDERSTORY PER 100 LF	24	26
30SHRUBS PER 100 LF	235	569
TOMOKA FARMS NORTH 753 FT	35' REQUIRED	35' PROVIDED
6 CANOPY PER 100 LF	45	45
7 UNDERSTORY PER 100 LF	53	53
55SHRUBS PER 100 LF	415	415





KEY PLAN

SCALE NORTH

No.	DATE	BY	Description

REVISIONS
DRAWN BY _____
APPROVED BY _____
CHECKED BY _____
DATE _____

TITLE

NOTES AND
LEGEND

PROJECT NO. 00000031

L3.10

SHEET NO.

PLANT SCHEDULE

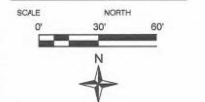
TREES	CODE	QTY	BOTANICAL NAME / COMMON NAME	CONT	SIZE	REMARKS
	AR	5	Acer rubrum / Red Maple	45 gal	3" Cal	12' - 14' HT
	IC	23	Ilex cassine / Dahoon Holly	30 gal	2" Cal	8' Ht. x 5' Sp.
	LI	29	Lagerstroemia x 'Tuscarora' / Red Crape Myrtle Multi-Trunk	-	2" Avg	10' Ht
	LJ	42	Ligustrum japonicum / Japanese Privet	45 gal	2.5" Cal	8' Ht. x 6' Sp.
	PE	23	Pinus elliotti / Slash Pine	-	5' Ht. - 10' Ht.	SEE PLAN FOR HEIGHTS
	QV	58	Quercus virginiana / Southern Live Oak	30 gal	2.5" Cal	10' Ht
	SS	49	Subal palmetto / Cabbage Palmetto	-	8'-14' CT	VARIED HEIGHTS
	TD2	30	Taxodium distichum / Bald Cypress	30 gal	2.5" Cal	10' - 12' HT
SHRUBS	CODE	QTY	BOTANICAL NAME / COMMON NAME	CONT	SIZE	REMARKS
	VO2	721	Viburnum odoratissimum / Sweet Viburnum	3 gal	24" Ht & 6PR	
	VO	140	Viburnum odoratissimum / Sweet Viburnum	7 gal	36" H. x 24" Spr.	
SHRUB AREAS	CODE	QTY	BOTANICAL NAME / COMMON NAME	CONT	SIZE	SPACING REMARKS
	JP	224	Juniperus chinensis 'Pensoni' / Pensoni Juniper	1 gal		24" o.c.
	MC2	151	Muhlenbergia capillaris / Pink Muhly	1 gal	12" H. x 24" Spr.	36" o.c.
	BC	9	Breynia repens 'Citrusa' / Silver Saw Palmetto	5 gal	30" x 24"	48" o.c.
	GB	74	Equisetum Bakeri / Sand Cord Grass	1 gal	18" H. x 18" W.	36" o.c.
	ZP2	236	Zamia pumila / Coonle	1 gal	14" H., Full	36" o.c.
GROUND COVERS	CODE	QTY	BOTANICAL NAME / COMMON NAME	CONT	SIZE	SPACING REMARKS
	MUL	1,453 sf	Mulch - / Pine Bark	None		3" Thick
	SOD	4,218 sf	Festuca rotundifolia / Bahia Grass	sod		Solid
	SA	53,357 sf	Stenotaphrum secundatum 'Floritan' / Floritan St. Augustine Sod	sod		Solid, Sand Green
	TA	123	Trachelospermum asiaticum / Dwarf Asiatic Jasmine	1 gal	FULL	24" o.c.

LANDSCAPE NOTES:

- The Landscape Contractor shall be responsible for all materials and all work called for on the Landscape Plans and in the Landscape Specifications. In the event of variation between quantities shown on plant list and the plans, the plans shall control. The Landscape Contractor shall verify all quantities and report any discrepancies at the time of planting.
- The Landscape Contractor shall review architectural/hardscape plans and become thoroughly familiar with surface and subsurface utilities.
- Every possible safeguard shall be taken to protect building surfaces, equipment and furnishings. The Landscape Contractor shall be responsible for any damage or injury to person or property which may occur as a result of negligence in the execution of the work.
- The work shall be coordinated with other trades to prevent conflicts. Coordinate the planting with the irrigation work to assure availability and proper location of irrigation lines and plants.
- All planting shall be performed by personnel familiar with plantings/structure and under the supervision of a qualified planting foreman.
- All plant material shall be graded Florida No. 1 or better as outlined under Grades and Standards to Nursery Plants, Part I and II, published by the Florida Department of Agriculture and Consumer Services.
- The Landscape Architect or Owner shall have the right, at any stage of the operations, to reject any/all work and materials which, in his opinion, do not meet with the requirements of these specifications.
- Except as otherwise specified, the Landscape Contractor's work shall conform to accepted horticultural practices as used in the trade.
- The minimum acceptable size of all plants, measured after pruning, with branches in normal position, shall conform to the measurements specified on the plant list or indicated on the landscape drawings. Height and spread dimensions shall be measured to the main body of the plant and not extreme branch tip to tip. The caliper of tree trunks is to be taken one foot above the ground level.
- Plants shall be protected upon arrival at the site, by being thoroughly watered and properly maintained until planted.
- All tree pits shall be excavated size and depth in accordance with the USDA Standard for Nursery Stock 280.1, unless shown otherwise on the drawings, and backfilled with the specified planting soil. The Landscape Contractor shall test fill all tree pits with water before planting to ensure proper drainage provision is available.
- The Landscape Contractor shall be responsible for proper watering of all plants. All plants shall be thoroughly watered at time of planting and kept adequately watered until time of acceptance. It shall be the Landscape Contractor's responsibility to ensure that plants are not over watered.
- It shall be the Landscape Contractor's responsibility to prevent plants from falling or being blown over, to re-stake and replace all plants which lean or fall and to replace all plants which are damaged due to lack of proper pruning or staking. The Landscape Contractor shall be liable for any damage caused by inability of any plant material.
- All trees and all palms shall be girdled or staked or braced. The Landscape Contractor shall determine which small or multi-trunk trees need to be girdled and staked to maintain health. Staking of trees and shrubs, if required, shall be done in a permanent and proper design prepared by the Landscape Architect. It shall be the responsibility of the Landscape Contractor to remove girdles and stakes from the trees and job after a period of 90 days.
- Plants blown over by high winds, within the guaranteed period, shall not be cause for additional expense to the Owner, but shall be the responsibility of the Landscape Contractor. Damaged plants shall be replaced by the Landscape Contractor at no additional cost to the Owner.
- Sod shall be verified to be free of the imported fire ant. Sod shall have a clean growth of acceptable grass, reasonably free of weeds with not less than 1 1/2" of soil firmly adhering to roots. It shall be the responsibility of the Landscape Contractor to measure and determine the exact amount required. This amount shall be verified with the Owner or Landscape Architect before installation.
- The Landscape Contractor shall insure adequate vertical drainage in all plant beds, planters, and soil areas. Vertical drilling through any compacted fill to native soil shall be accomplished to insure drainage. If well drained fill is necessary to assure positive drainage, drainage shall be brought up by the Landscape Contractor at time of bidding.
- The Landscape Contractor shall insure that his work does not impair established or proposed drainage patterns.
- The Landscape Contractor shall prune, shape and remove dead foliage/limbs from existing plant material to remain. Conform with the Landscape Architect or Owner the exterior work required at time of bidding.
- Mulch - All plant beds shall be top dressed with 3" shredded hardwood mulch (or approved equal).
- Transplanted Material - The Landscape Contractor shall be responsible for determining and evaluating which plant materials are suitable for transplanting and shall verify the same with the Landscape Architect or Owner. The Landscape Contractor shall take all reasonable, horticulturally acceptable measures to assure the successful transplanting of all transplanted plant materials. The Landscape Contractor shall be responsible for replacing any transplanted plant materials which die within measures are not taken, as determined by the Landscape Architect or Owner. Replacement plants shall be of identical species and size if required.
- MAINTENANCE PRIOR TO FINAL INSPECTION AND ACCEPTANCE:
 - Maintenance shall commence after each plant is planted and the maintenance period shall continue until the job or specific phase of the job is accepted by the Landscape Architect or Owner. Extreme care shall be taken to instruct the Owner or his representatives in general maintenance procedures.
 - Plant maintenance shall include watering, pruning, weeding, cultivating, mulching, lightening and repairing of gas, replacement of lack or dead plants, reseeding plants to proper grades or upright position and replacement of the plants and all other care needed for proper growth of the plants.
 - During the maintenance period and up to the date of final acceptance, the Landscape Contractor shall do all seasonal spraying either during of trees and shrubs. Upon completion of all planting, an inspection for acceptance of work will be held. The Landscape Contractor shall notify the Landscape Architect or Owner for scheduling of the inspection 10 days prior to the anticipated date.
 - At the time of the inspection, if all of the materials are acceptable, a written notice will be given by the Landscape Architect or Owner to the Landscape Contractor listing the date when the Maintenance Period ends.
- GUARANTEE AND REPLACEMENT:
 - All plant materials shall be guaranteed for one (1) year from the time of final inspection and final acceptance shall be alive and in satisfactory growth for each specific kind of plant at the end of the guaranteed period.
 - At the end of the guarantee period, any plant required under this contract that is dead or not in satisfactory growth, as determined by the Owner or the Landscape Architect, shall be removed and replaced. Replacement plants shall have an extended guarantee, as stated above, from time of replacement.
 - All replacements shall be planted of the same kind and size as specified on the plant list. They shall be the responsibility of the Landscape Contractor.



KEY PLAN



No.	DATE	BY	Description

REVISIONS

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APPROVED BY _____

CHECKED BY _____

DATE _____

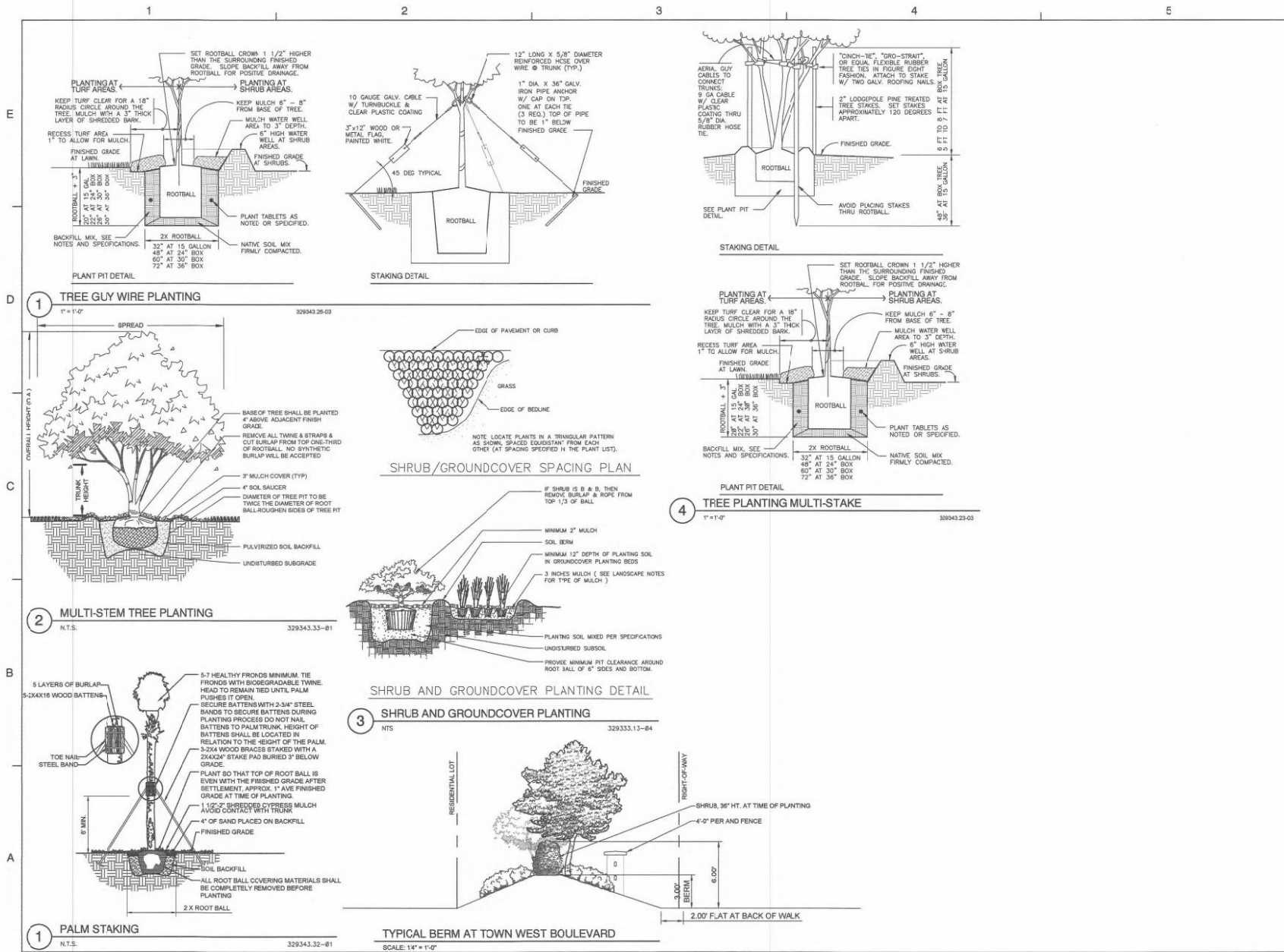
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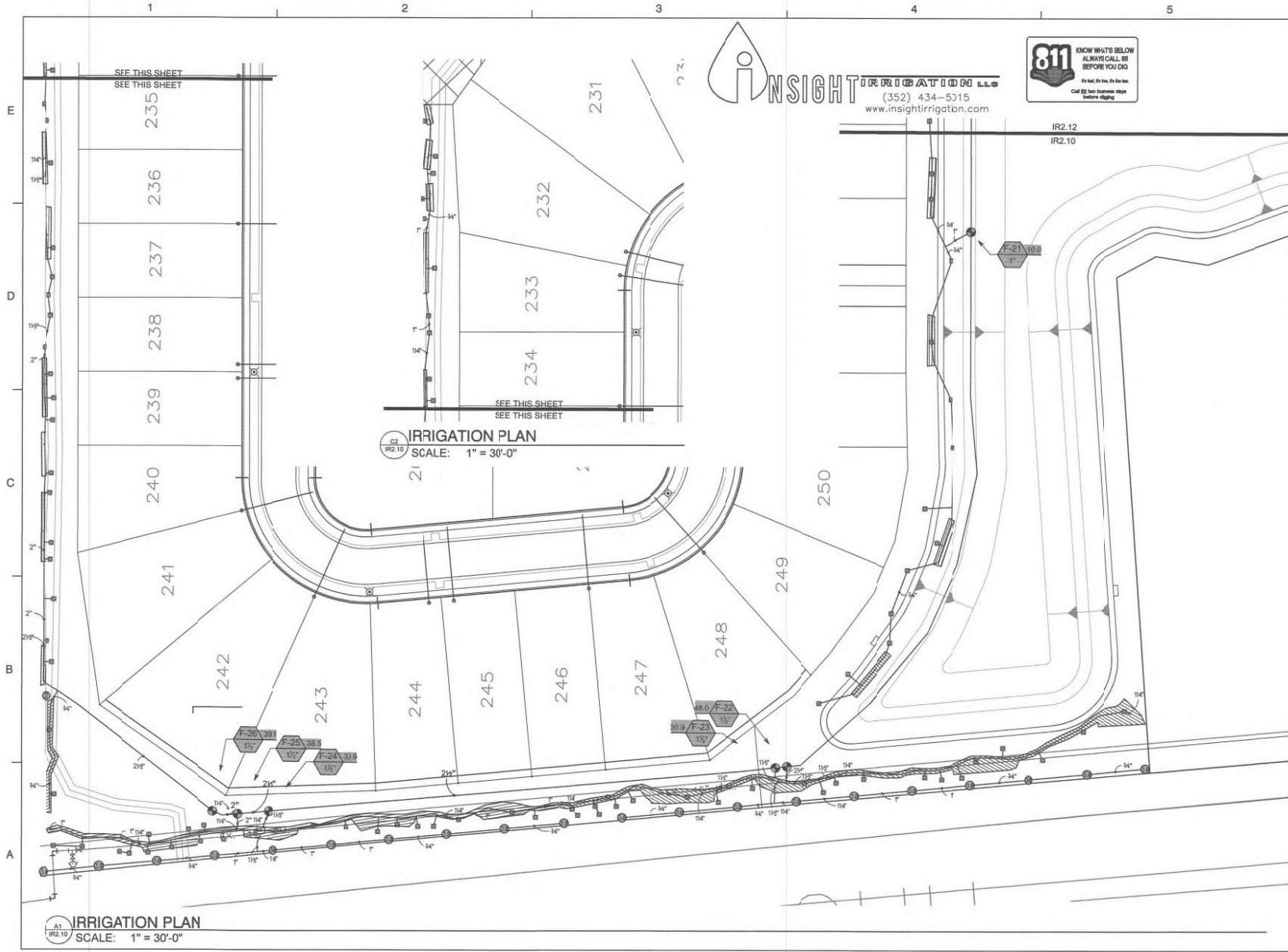
DETAILS

PROJECT NO. 8008031

L3.11

SHEET NO.





INSIGHT IRRIGATION LLC
 (352) 434-5315
 www.insightirrigation.com

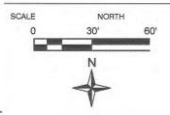


Dewberry
 Dewberry Engineers Inc.
 800 NORTH MAGNOLIA AVE
 SUITE 1000
 ORLANDO, FL 32803
 PHONE: 407.840.8325
 ENGINEERING BUSINESS 4794
 LAND ARCH - 12000588

**WESTPORT
 PHASE 4
 SITE DEVELOPMENT PLAN**
 EDGE COVE, LLC
 PORT ORANGE, FL



KEY PLAN



No.	DATE	BY	Description

REVISIONS
 DRAWN BY _____
 APPROVED BY _____
 CHECKED BY _____
 DATE _____
 TITLE _____

NOTES

PROJECT NO. 50080831

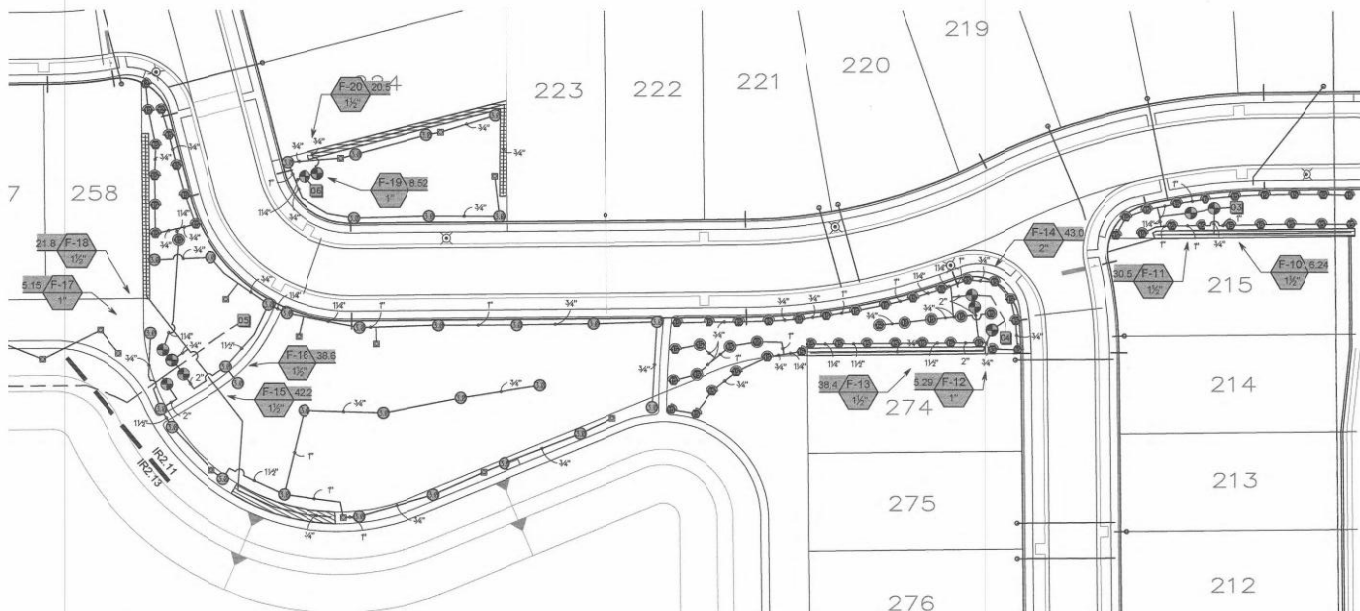
IR2.10

SHEET NO.

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



VALVE SCHEDULE									
NUMBER	MODEL	SIZE	TYPE	SPR	WIRE	PBI	PBI @ POC	PRECIP	
F-1	Rain Bird PEB	1-1/2"	Turf Spray	54.56	294.4	56.82	17.01	1.21 in/h	
F-2	Rain Bird PEB	2"	Area for Driftline	56.88	295.1	54.77	30.81	1.32 in/h	
F-3	Rain Bird PEB	1-1/2"	Turf Spray	22.12	111.4	56.42		1.14 in/h	
F-4	Rain Bird PEB	1-1/2"	Turf Spray	40.11	95.8	56.61		0.88 in/h	
F-5	Rain Bird PEB	1-1/2"	Area for Driftline	46.82	49.8	57.44		1.52 in/h	
F-6	Rain Bird PEB	1-1/2"	Turf Rotor	21.65	11.6	41.66		0.65 in/h	
F-7	Rain Bird PEB	1-1/2"	Subirator	42.81	945.5	54.56		1.52 in/h	
F-8	Rain Bird PEB	1-1/2"	Turf Spray	54.32	955.4	54.21		0.81 in/h	
F-9	Rain Bird PEB	1-1/2"	Turf Spray	32.76	540.3	54.55		0.82 in/h	
F-10	Rain Bird PEB	1-1/2"	Area for Driftline	6.21		57.60		1.32 in/h	
F-11	Rain Bird PEB	1-1/2"	Turf Spray	50.31		56.46		1.14 in/h	
F-12	Rain Bird PEB	1"	Area for Driftline	5.21		55.16		1.32 in/h	
F-13	Rain Bird PEB	1-1/2"	Turf Spray	55.45		56.71		1.00 in/h	
F-14	Rain Bird PEB	2"	Turf Spray	42.46		57.66		1.01 in/h	
F-15	Rain Bird PEB	1-1/2"	Turf Rotor	42.11		55.20		0.41 in/h	
F-16	Rain Bird PEB	1-1/2"	Turf Rotor	55.55		55.15		0.55 in/h	
F-17	Rain Bird PEB	1"	Area for Driftline	5.15		55.65		1.52 in/h	
F-18	Rain Bird PEB	1-1/2"	Turf Spray	21.73		56.42		1.10 in/h	
F-19	Rain Bird PEB	1"	Area for Driftline	5.52		54.45		1.52 in/h	
F-20	Rain Bird PEB	1-1/2"	Turf Rotor	20.47		41.54		0.55 in/h	
F-21	Rain Bird PEB	1"	Subirator	10.00		56.46		1.10 in/h	
F-22	Rain Bird PEB	1-1/2"	Subirator	48.00		54.06		1.52 in/h	
F-23	Rain Bird PEB	1-1/2"	Turf Rotor	50.10		54.65		0.44 in/h	
F-24	Rain Bird PEB	1-1/2"	Turf Rotor	50.10		54.05		0.44 in/h	
F-25	Rain Bird PEB	1-1/2"	Area for Driftline	55.34		55.94		1.52 in/h	
F-26	Rain Bird PEB	1-1/2"	Subirator	54.14		57.57		1.52 in/h	

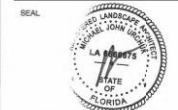


IRRIGATION PLAN
SCALE: 1" = 30'-0"

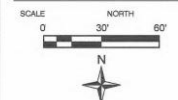


Dewberry Engineers Inc.
805 NORTH MAGNOLIA AVE
SUITE 1000
ORLANDO, FL 32803
PHONE: 407.243.9700
ENGINEERING BUSINESS-4794
LAND ARCH - 100000000

WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN
EDGE COVE, LLC
PORT ORANGE, FL



KEY PLAN



No.	DATE	BY	Description

REVISIONS
DRAWN BY _____
APPROVED BY _____
CHECKED BY _____
DATE _____

TITLE
IRRIGATION
PLAN

PROJECT NO. 50082831

IR2.11

SHEET NO.

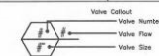
MAINLINE AND LATERAL LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING FDEP GUIDELINES AND TO IRRIGATION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

IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	GPM	RADIUS
●	Rain Bird IBO6-FRS-NP 5 Strip Series	2	EST	30	0.61	4'x5'
●	Rain Bird IBO6-FRS-NP 5 Strip Series	11	55T	30	1.21	4'x30'
●	Rain Bird IBO6-FRS-NP 5 Series MPR	148	180	30	0.52	6'
●	Rain Bird IBO6-FRS-NP 5 Series MPR	7	40	30	0.26	6'
●	Rain Bird IBO6-FRS-NP 10 Series MPR	6	180	30	0.74	10'
●	Rain Bird IBO6-FRS-NP 10 Series MPR	9	40	30	0.34	10'
●	Rain Bird IBO6-FRS-NP 12 Series MPR	9	360	30	2.31	12'
●	Rain Bird IBO6-FRS-NP 12 Series MPR	2	180	30	1.50	12'
●	Rain Bird IBO6-FRS-NP 12 Series MPR	1	40	30	0.65	12'
●	Rain Bird IBO6-FRS-NP 15 Series MPR	14	360	30	3.10	15'
●	Rain Bird IBO6-FRS-NP 15 Series MPR	62	180	30	1.65	15'
●	Rain Bird IBO6-FRS-NP 15 Series MPR	15	40	30	0.92	15'
●	Rain Bird IBO6-FRS-NP 15 Series MPR	1	120	30	1.25	15'
●	Rain Bird IBO6-FRS-NP HE-VAN Series	4	Adj	30		15'
■	Rain Bird IBO4-1400 Flood	151	360	30	0.50	3'
■	Rain Bird IBO4-1400 Flood	4	360	30	0.50	3'
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY		PSI	GPM	RADIUS
●	Rain Bird 5006-PC, FC-NP Turf Rotor, 6.0" Pop-Up, Plastic Riser, Adjustable and Full Circle, Standard Angle Nozzle, With Non-Potable Purple Cover.	46		45	3.04	40'
●	Rain Bird 5004-PC, FC (2) Turf Rotor, 4.0" Pop-Up, Plastic Riser, Adjustable and Full Circle, Standard Angle Nozzle.	15		35	2.71	35'

IRRIGATION_SCHEDULE

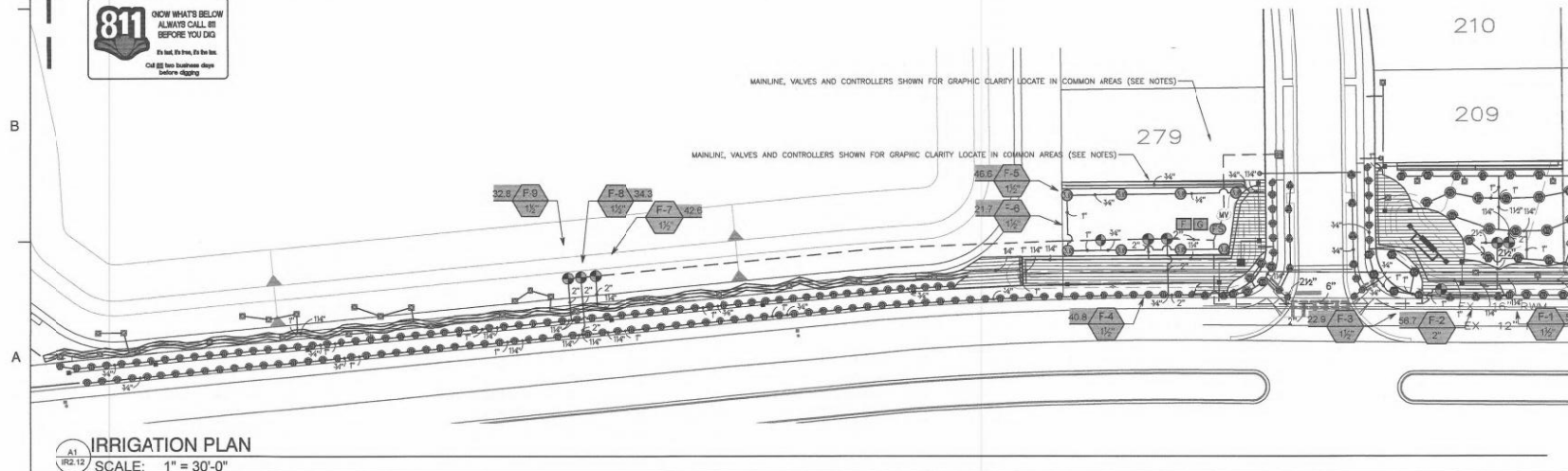
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Area to Receive Dripine	16,224 s.f.
	Netalim T-2L-4-12 (12) Techline Pressure Compensating Landscape Dripine, 0.15GPH emitters at 12.0" O.C. Dripine laterals spaced at 12.0" apart, with emitters offset for triangular pattern. Surface and Sub Surface Installations, UV Resistant.	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
●	Rain Bird F8B 1", 1/2", 2" Plastic Industrial Valves, Low Flow Operating Capability, Globe Configuration.	26
W	Netalim Slope Grooved 6" Cast Iron Electric Master Valve, with Slope Grooved Connection, Pressure Reducing, Pressure Sustaining, Quick Relief, and Pump Control. Available in 1-1/2", 2", 2.5", 3", 4", 6", 8", and 10".	1
IS	Rain Bird F8-400-P 4" Flow Sensor for use with Rain Bird Maxicom, SiteControl, and ESP-LXD Central Control Systems. Plastic (PVC) Model. Suggested Operating Range of 40.0 GPM to 500.0 GPM. Sensors should be sized for flow rather than pipe size.	1
MI	Water Meter 2" 2" Meter	1
MI	Water Meter 1-1/2"	1
MI	Water Meter 1-1/2"	1
MI	Water Meter 1-1/2"	1
MI	Water Meter 3"	1
	Irrigation Lateral Line: PVC Class 200 SDR 21-NP	10,001 L.F.
	Irrigation Mainline: PVC Schedule 40-NP	1,400 L.F.
	Pipe Sleeve: PVC Schedule 40	42.7 L.F.



INSIGHT IRRIGATION LLC
(352) 434-5015
www.insightirrigation.com



MAINLINE, VALVES AND CONTROLLERS SHOWN FOR GRAPHIC CLARITY LOCATE IN COMMON AREAS (SEE NOTES)

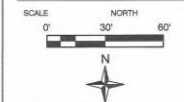


Dewberry Engineers Inc.
802 NORTH MAHONIA AVE
SUITE 1000
ORLANDO, FL 32809
PHONE: 407.455.1515
ENGINEERING BUSINESS 4794
LAND ARCH - LC000088

WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN
EDGE COVE, LLC
PORT ORANGE, FL



KEY PLAN



No.	DATE	BY	Description

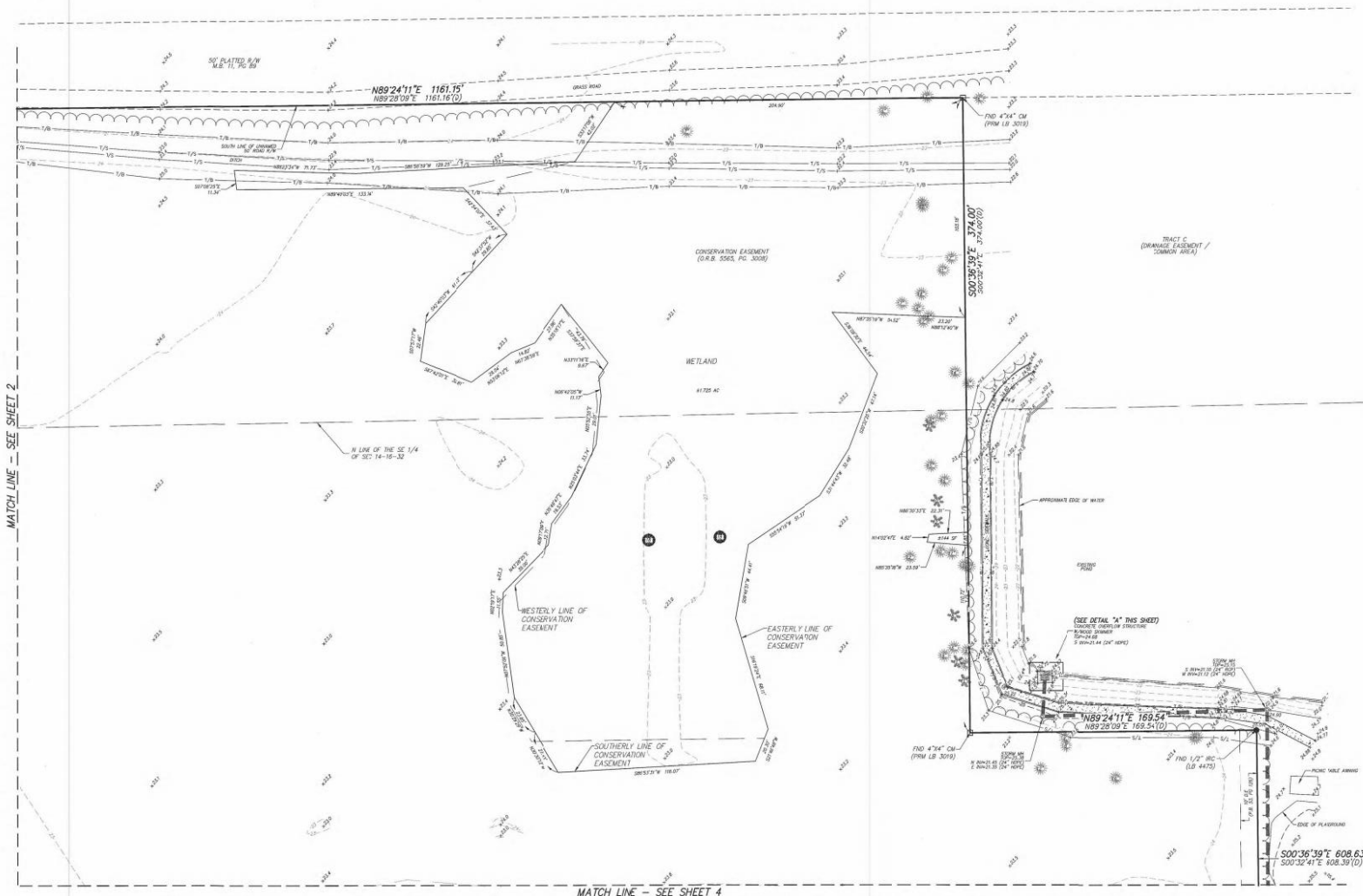
REVISIONS
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APPROVED BY
CHECKED BY
DATE

TITLE
IRRIGATION PLAN

PROJECT NO. 80082831

IR2.12

SHEET NO.

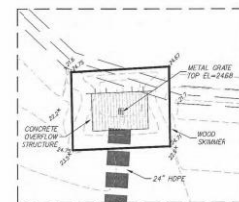


SPECIMEN TREE LEGEND
(BOLD)
(SIZE DENOTED INSIDE SYMBOL)

	BAY
	CYPRESS
	LIVE OAK
	MAPLE
	OAK
	LAUREL OAK

TREE LEGEND
(SIZE DENOTED INSIDE SYMBOL)

	BAY
	CAMPHOR
	CEDAR
	CHERRY
	CHINABERRY
	CYPRESS
	DOGWOOD
	ELM
	GUM
	HICKORY
	HOLLY
	LAUREL OAK
	LIVE OAK
	MAGNOLIA
	MAPLE
	MIMOSA
	MISC
	OAK
	PALM
	PECAN
	PINE TREE
	SUGAR HACKBERRY
	SYCAMORE



DETAIL "A"
1" = SEE SHEET 1 FOR
LEGEND/ABBREVIATIONS

REVISIONS				
FR/PG	DATE	DRAWN	REVISION	OWN
14-16	08/07/17	MRP	ADDED ADDITIONAL TREES	WOD
SETCH	08/24/17	MRP	REVISED SPECIMEN TREES	WOD



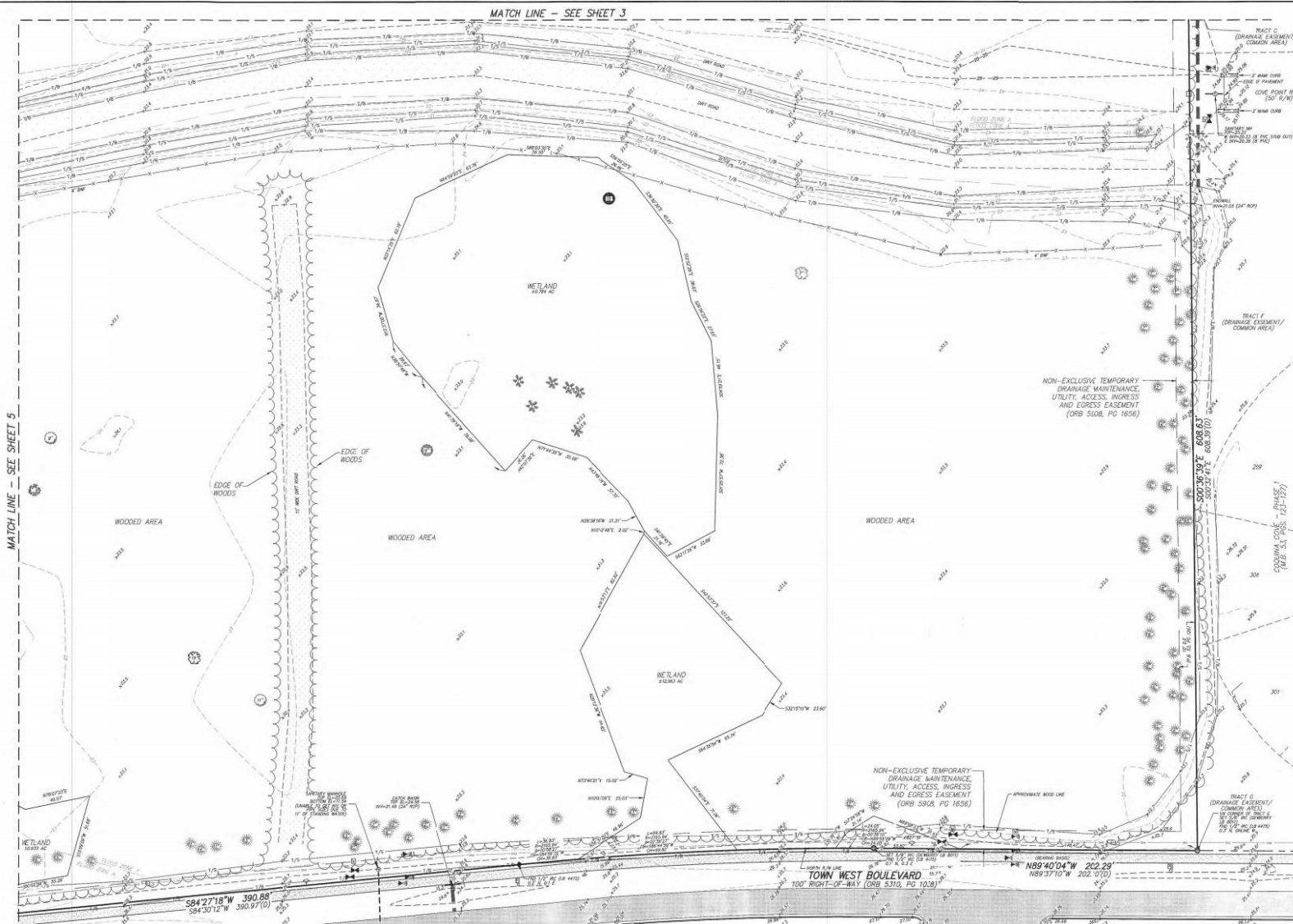
Dewberry

131 WEST KALEY STREET
ORLANDO, FLORIDA 32806
PHONE: 321.354.9528 FAX: 407.648.9104
WWW.DEBERRY.COM
CERTIFICATE OF AUTHORIZATION NO. LB 8011

A PORTION OF SECTION 14,
TOWNSHIP 16 SOUTH, RANGE 32
EAST, VOLUSIA COUNTY, FLORIDA

PLAT OF BOUNDARY AND
TOPOGRAPHIC SURVEY
—FOR—
EMERSON INTERNATIONAL, INC.

FR/PG		FIELD DATE		PROJECT NO. 50081369	3 OF 5
14-16-32 / 19-49		03/31/16			
DRAWING DATE	BY	APPROVED	SCALE		
04/11/16	KMS	WOD	1" = 30'		



SPECIMEN TREE LEGEND
(SIZE DENOTED INSIDE SYMBOL)

○	BAY
○	CYPRESS
○	LIVE OAK
○	MAPLE
○	OAK
○	LAUREL OAK

TREE LEGEND
(SIZE DENOTED INSIDE SYMBOL)

○	BAY
○	CAMPHOR
○	CEDAR
○	CHERRY
○	CHINABERRY
○	CYPRESS
○	DOGWOOD
○	ELM
○	GUM
○	HICKORY
○	HOLLY
○	LAUREL OAK
○	LIVE OAK
○	MAGNOLIA
○	MAPLE
○	MIMOSA
○	MISC
○	OAK
○	PECAN
○	PINE TREE
○	SUGAR HACKBERRY
○	SYCAMORE

SEE SHEET 1 FOR
LEGEND/ABBREVIATIONS

REVISED	DATE	BY	REVISION
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2	08/24/17	MRP	REVISED SPECIMEN TREES



Dewberry

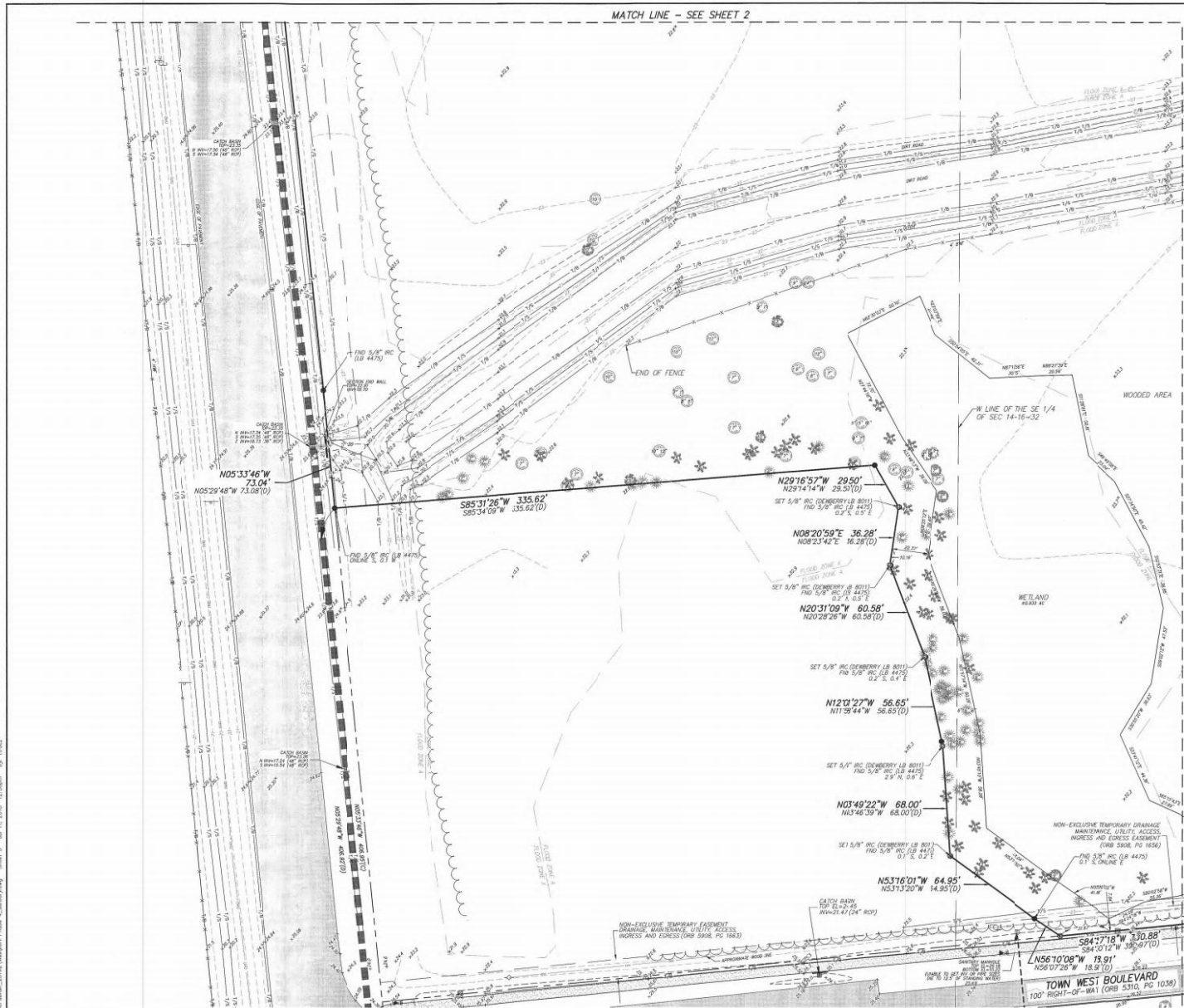
131 WEST KALEY STREET
ORLANDO, FLORIDA 32805
PHONE: 321.354.9226 FAX: 407.648.9104
WWW.DEWBERRY.COM
CERTIFICATE OF AUTHORIZATION NO. LB 8011

A PORTION OF SECTION 14,
TOWNSHIP 16 SOUTH, RANGE 32
EAST, VOLUSIA COUNTY, FLORIDA

PLAT OF BOUNDARY AND
TOPOGRAPHIC SURVEY
—FOR—
EMERSON INTERNATIONAL, INC.

FB/PG	FIELD DATE	PROJECT NO.	4 OF 5
14-15-32 / 21-49	03/31/14	50081369	
DRAWING DATE	BY	APPROVED	
04/11/16	HMS	WOD	SCALE 1" = 33'

Drawing name: C:\Users\johndoe\Documents\2016\Mapport\Phase 4\boundary.mxd Sheet: 5 of 11, 2016 12:30pm By: jhndoe



SPECIMEN TREE LEGEND (BOLD) (SIZE INDICATED INSIDE SYMBOL)

- RAY
- CYPRESS
- LIVE OAK
- NAPLE
- OAK
- LAUREL OAK

TREE LEGEND (SIZE INDICATED INSIDE SYMBOL)

- RAY
- CAMPBELL
- CEGAR
- CHERRY
- CHINABERRY
- CYPRESS
- DOGWOOD
- ELM
- GUM
- HICKORY
- HOLLY
- LAUREL OAK
- LIVE OAK
- MAGNOLIA
- NAPLE
- NYMOSA
- NYSC
- OAK
- PALM
- PECAN
- PINE TREE
- SUGAR HACKBERRY
- ZYCAMORE

SEE SHEET 1 FOR
LEGEND/ABBREVIATIONS

REVISIONS				
NO.	DATE	DRAWN	REVISION	CHK
1	06/07/17	MRP	ADDED ADDITIONAL TREES	WDO
2	06/24/17	MRP	REVISED SPECIMEN TREES	WDO

Dewberry
131 WEST KOLEY STREET
ORLANDO, FLORIDA 32806
PHONE: 321.354.9628 FAX: 407.848.9104
WWW.DEBERRY.COM
CERTIFICATE OF AUTHORIZATION NO. LB 8011

A PORTION OF SECTION 14,
TOWNSHIP 16 SOUTH, RANGE 32
EAST, VOLUSIA COUNTY, FLORIDA

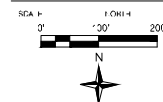
PLAT OF BOUNDARY AND
TOPOGRAPHIC SURVEY
-FOR-
EMERSON INTERNATIONAL, INC.

FB/PG		FIELD DATE		PROJECT NO. 50081369	5 OF 5
14-16-32 / 21-49		03/31/16			
DRAWING DATE	BY	APPROVED	SCALE		
04/11/16	KMS	WDO	1" = 30'		

**WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN**
EDGE COVE, LLC
PORT ORANGE, FL

SEAL

KEY PLAN



No.	Date	dV	Downloaded on

DRAWN BY _____
APPROVED BY _____
CHECKED BY _____
DATE _____

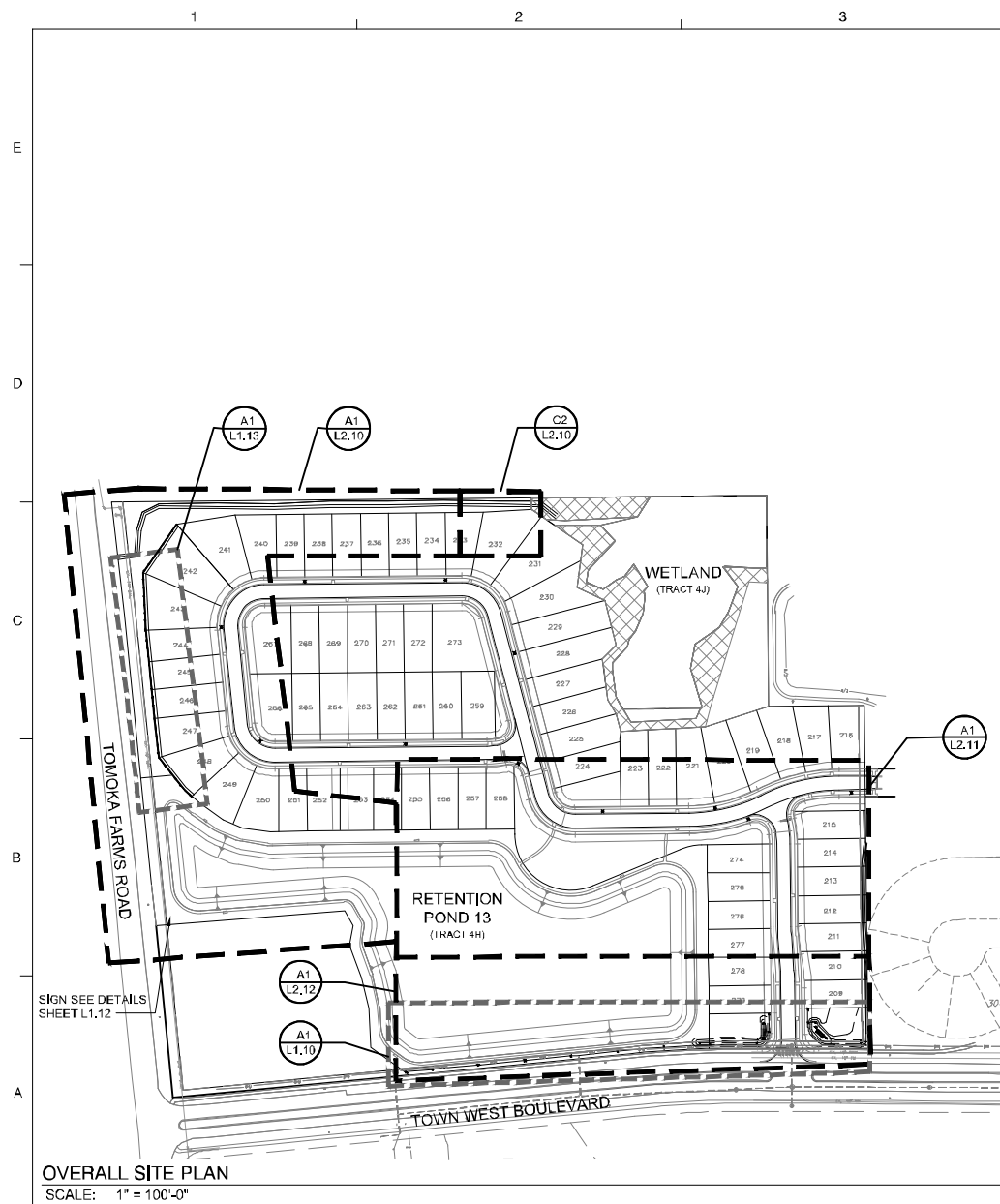
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OVERALL PLAN

PROJECT NO. 52002631

L1.00

ST-HI-40.



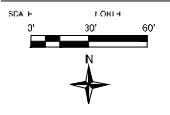


Dewberry Engineers Inc.
10001 E. MANICOR BLVD
SUITE 200
ORLANDO, FL 32837
PHONE: (407) 251-1200
FAX: (407) 251-1201
WWW.DEBERRY.COM

WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN
EDGE COVE, LLC
PORT ORANGE, FL

SP-4

KEY PLAN



NO.	DATE	BY	DESCRIPTION

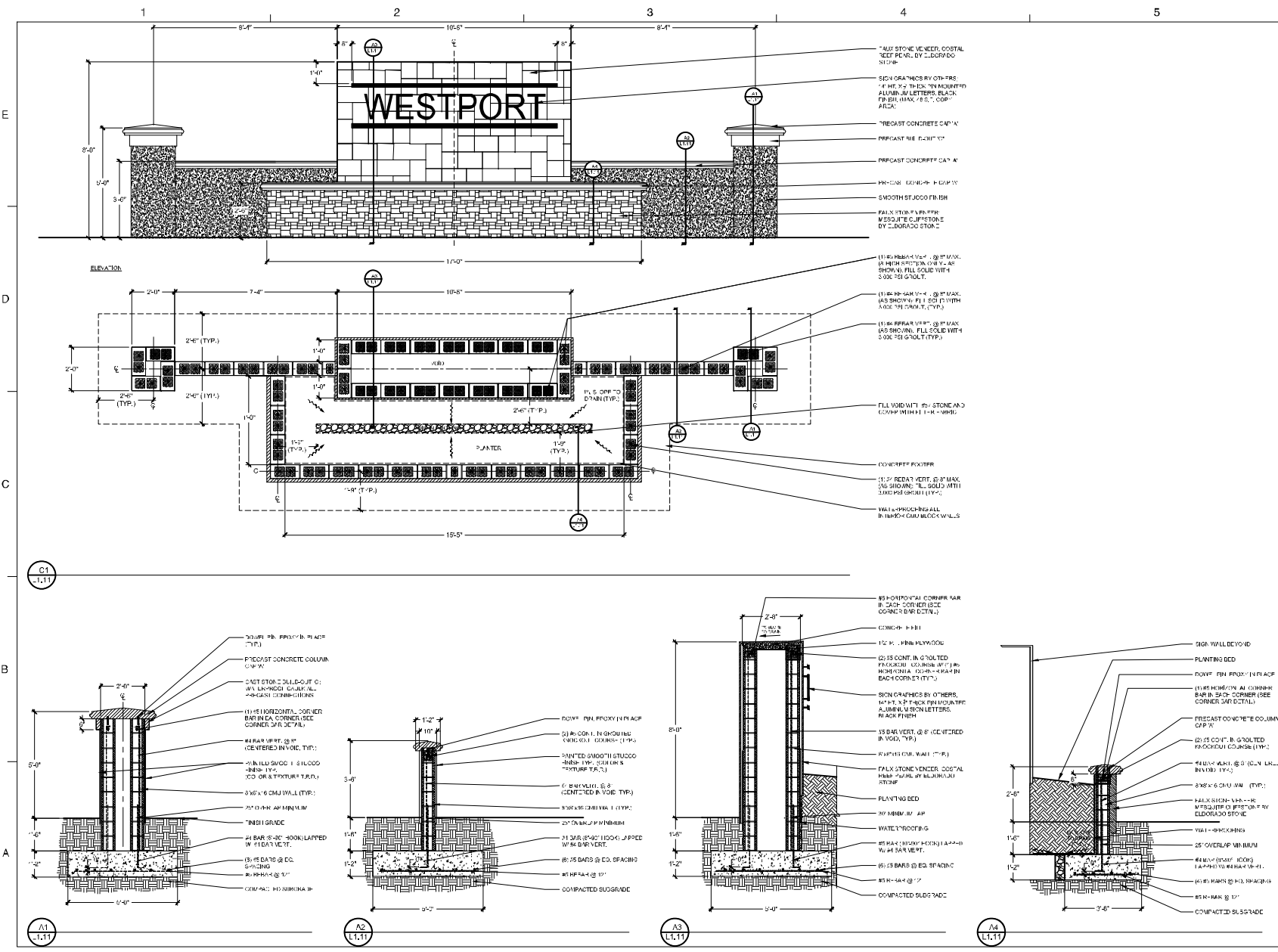
DESIGNED BY: _____
CHECKED BY: _____
DATE: _____
11/11

DETAILS

PROJECT NO.: SC000001

L1.11

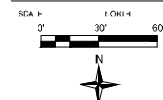
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**WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN**
EDGE COVE, LLC
PORT ORANGE, FL

SEAL

KEY PLAN



No.	Units	dY	Description on

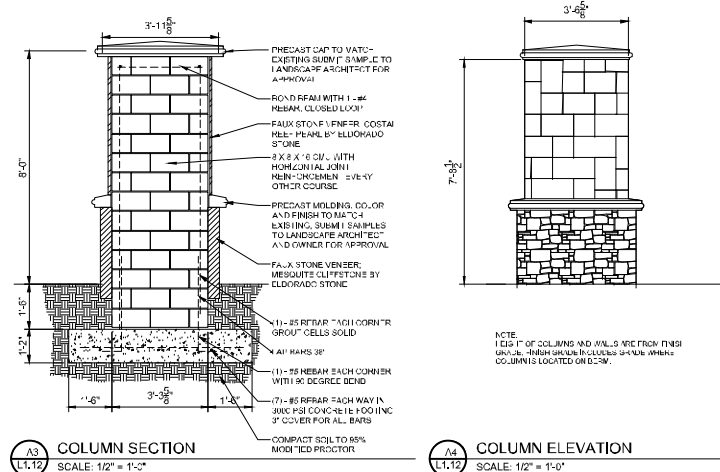
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 APPROVED BY _____
 CHECKED BY _____
 DATE _____
 U. U. _____

DETAILS

PROJECT NO. 65002631

L1.12

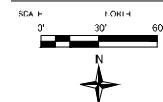
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**WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN**
EDGE COVE, LLC
PORT ORANGE, FL

SFAI

KEY PLAN



No.	Date	dy	Description

No.	DAI =	-FY	Director of
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DRAWN BY _____

APPROVED BY _____

CHECKED BY _____

DATE _____

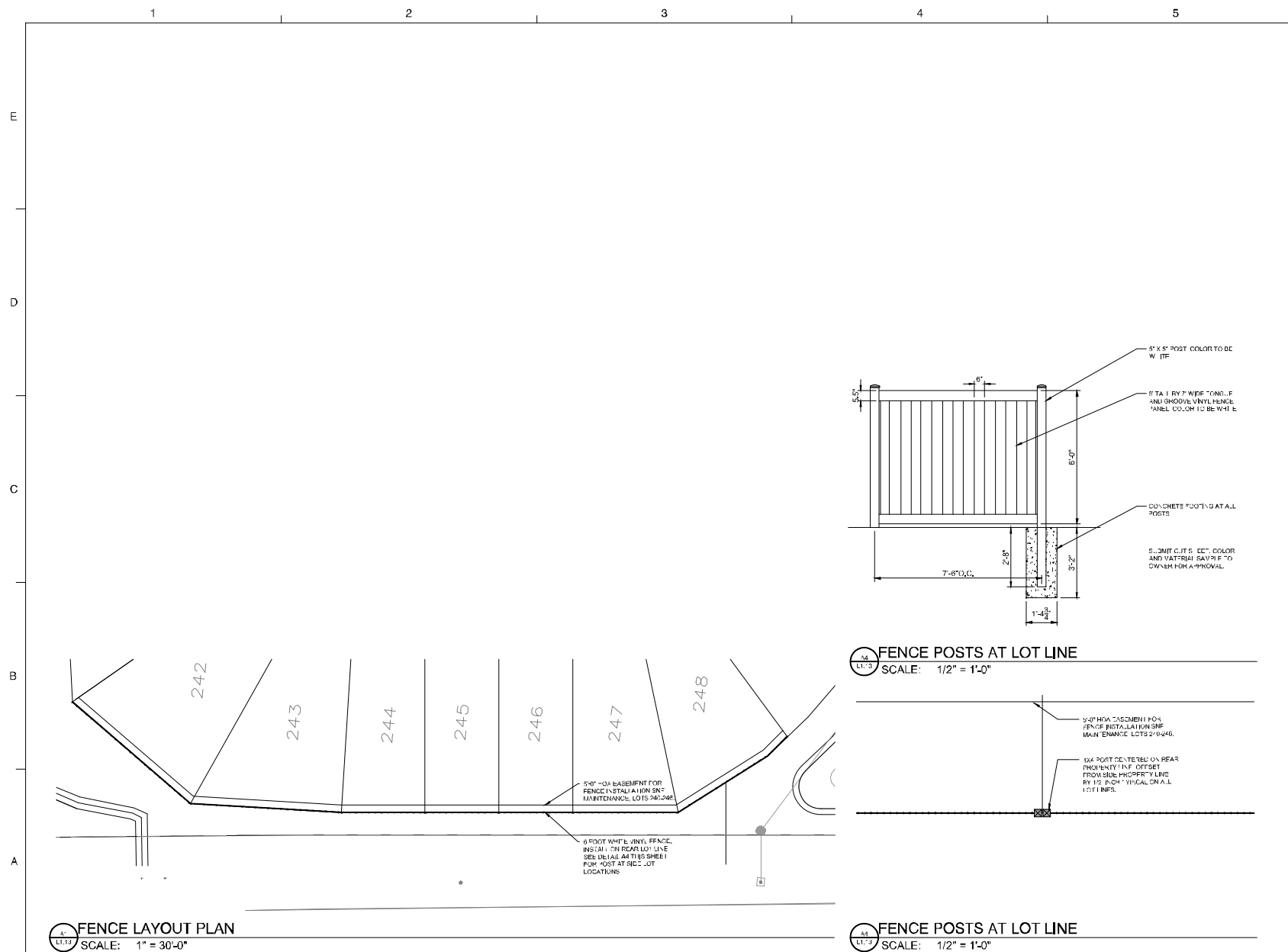
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LAYOUT PLAN

PROJECT NO. 52002631

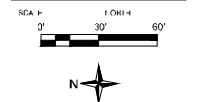
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St-Hil-10.



SFAI

KEY PLAN

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APPROVED BY _____

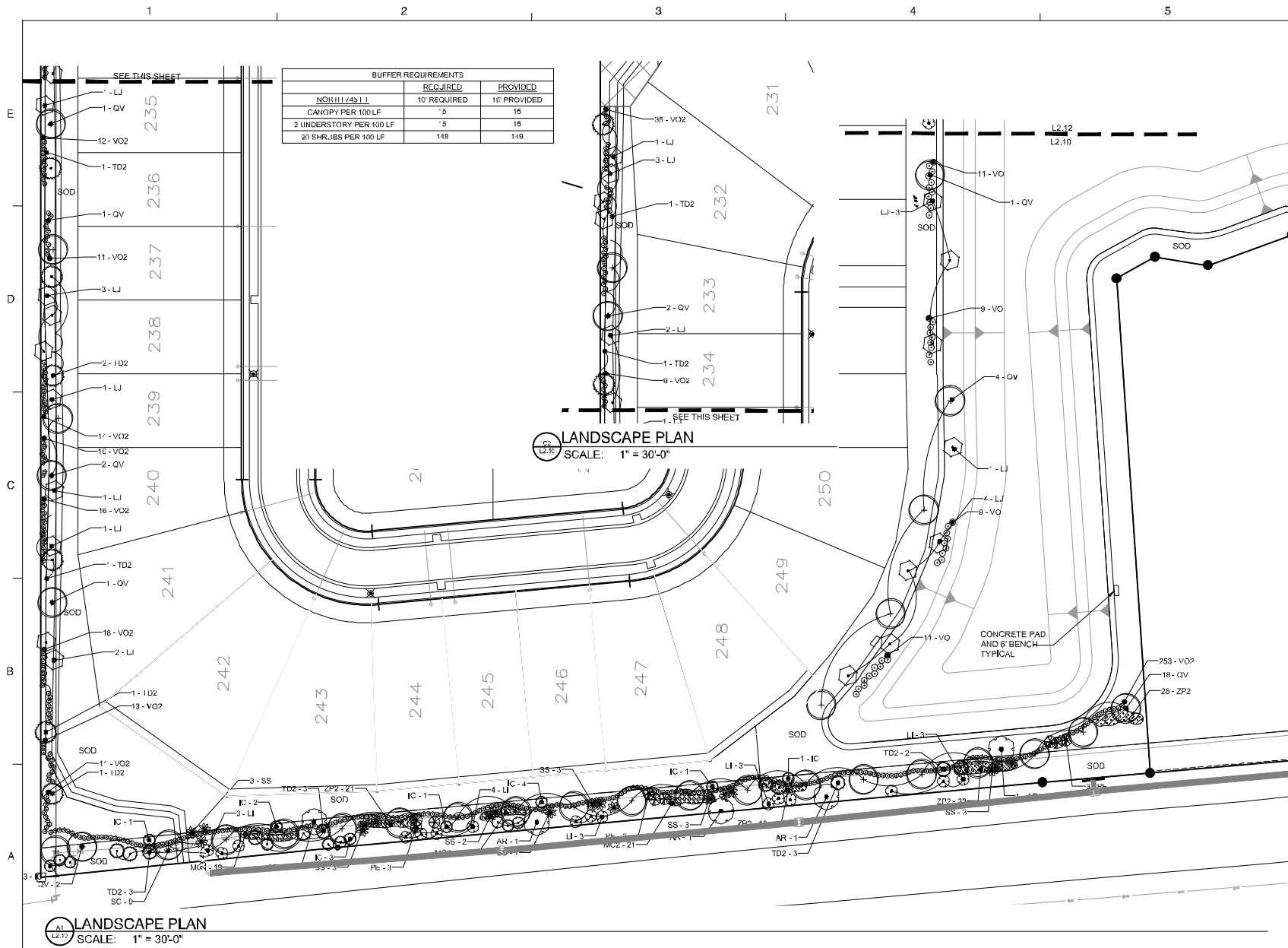
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DATE _____

LANDSCAPE
PLAN

PROJECT NO. 52062631

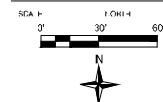
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$$\text{Si}-\text{H}+\text{H}_2\text{O}$$


**WESTPORT
PHASE 4
SITE DEVELOPMENT PLAN**
EDGE COVE, LLC
PORT ORANGE, FL

SEAL

KEY PLAN

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DRAWN BY _____

APPROVED BY _____

CHECKED BY _____

DATE _____

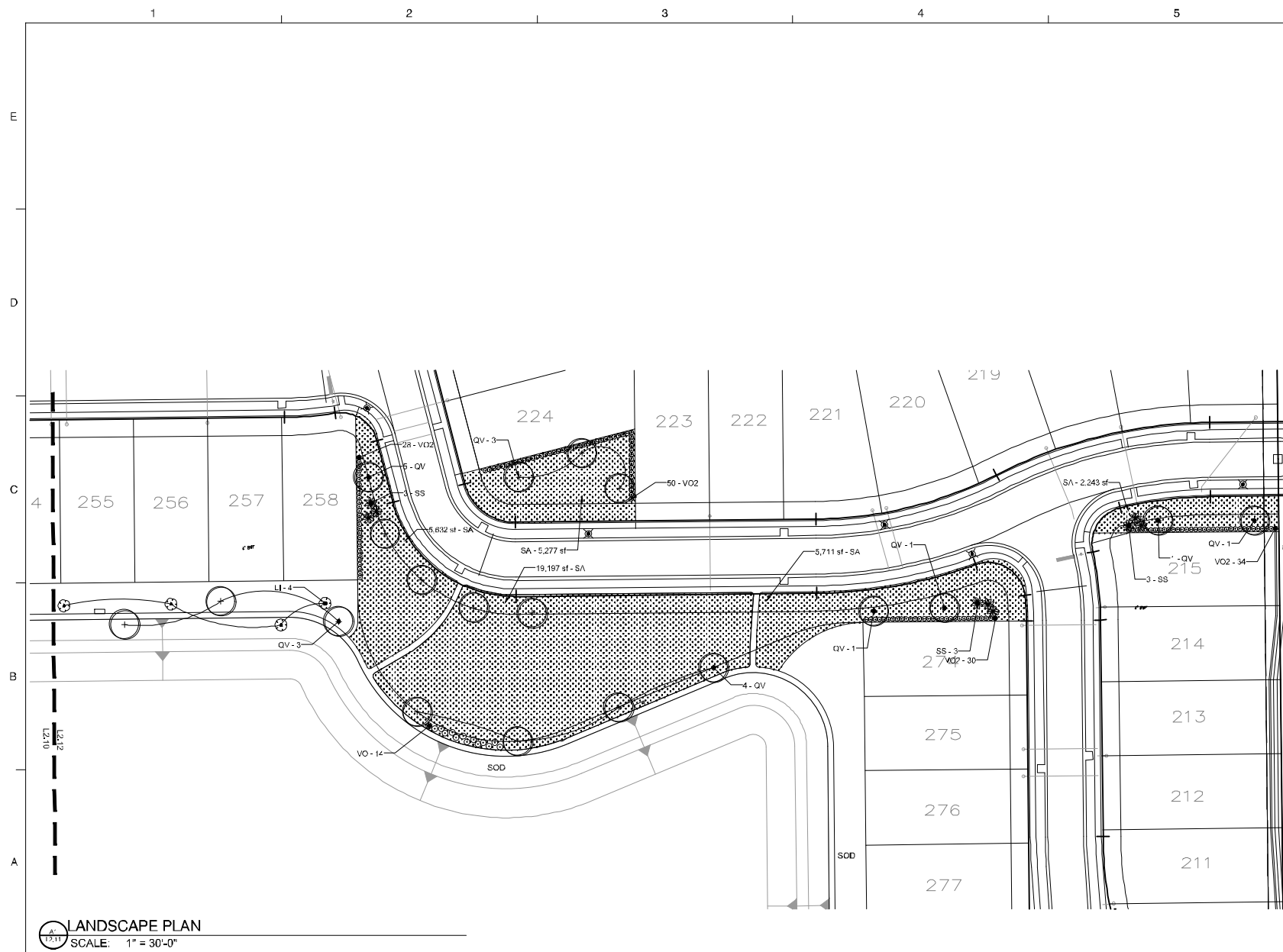
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LANDSCAPE
PLAN

PROJECT NO. 65002631

L2.11

ST-HI-40.



No.	Date	By	Description

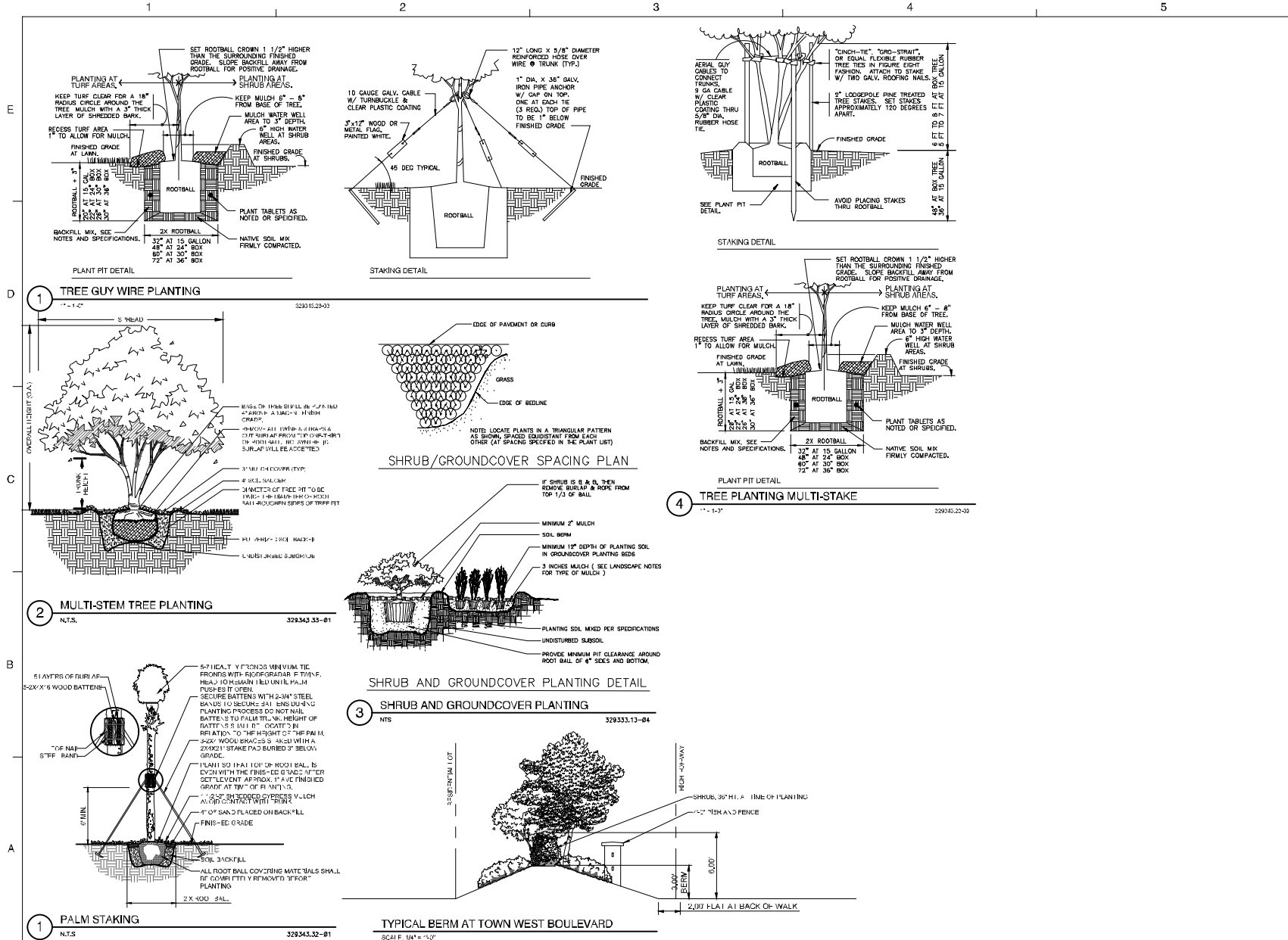
DESIGNED BY	
APPROVED BY	
CHECKED BY	
DATE	

DETAILS

PROJECT NO.: 8200861

L3.11

SP-11.D

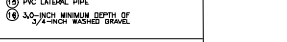
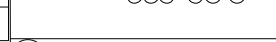
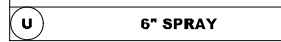
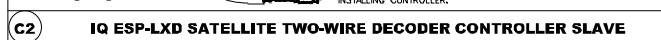


MAINLINE AND LATERAL LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING FDEP GUIDELINES AND TO IRRIGATION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



VALVE SCHEDULE									
NUMBER	MODEL	SIZE	TYPE	GPM	ARE	PM	PSI @ POC	PRECIP	
F-1	Rain Bird PEB	1-1/2"	Turf Spray	84.56	284.4	80.82	41.21	1.21 in/h	
F-2	Rain Bird PEB	2"	Area for Dripine	56.86	259.1	84.77	50.81	1.82 in/h	
F-3	Rain Bird PEB	1-1/2"	Turf Spray	22.42	471.4	86.92		1.14 in/h	
F-4	Rain Bird PEB	1-1/2"	Turf Spray	40.71	86.6	80.61		0.86 in/h	
F-5	Rain Bird PEB	1-1/2"	Area for Dripine	48.62	45.8	81.44		1.82 in/h	
F-6	Rain Bird PEB	1-1/2"	Turf Rotor	21.65	71.8	41.66		0.55 in/h	
F-7	Rain Bird PEB	1-1/2"	Bubbler	42.61	94.55	84.86		1.82 in/h	
F-8	Rain Bird PEB	1-1/2"	Turf Spray	34.32	888.4	84.27		0.81 in/h	
F-9	Rain Bird PEB	1-1/2"	Turf Spray	32.16	860.5	84.88		0.82 in/h	
F-10	Rain Bird PEB	1-1/2"	Area for Dripine	6.24		81.60		1.82 in/h	
F-11	Rain Bird PEB	1-1/2"	Turf Spray	30.31		86.96		1.14 in/h	
F-12	Rain Bird PEB	1"	Area for Dripine	8.24		88.16		1.82 in/h	
F-13	Rain Bird PEB	1-1/2"	Turf Spray	38.48		88.71		1.00 in/h	
F-14	Rain Bird PEB	2"	Turf Spray	42.48		87.66		1.81 in/h	
F-15	Rain Bird PEB	1-1/2"	Turf Rotor	42.11		88.20		0.41 in/h	
F-16	Rain Bird PEB	1-1/2"	Turf Rotor	58.58		88.15		0.38 in/h	
F-17	Rain Bird PEB	1"	Area for Dripine	8.15		88.68		1.82 in/h	
F-18	Rain Bird PEB	1-1/2"	Turf Spray	21.15		86.42		1.10 in/h	
F-19	Rain Bird PEB	1"	Area for Dripine	8.52		84.48		1.82 in/h	
F-20	Rain Bird PEB	1-1/2"	Turf Rotor	20.47		41.84		0.38 in/h	
F-21	Rain Bird PEB	1"	Bubbler	10.00		88.96		1.10 in/h	
F-22	Rain Bird PEB	1-1/2"	Bubbler	48.00		84.08		1.82 in/h	
F-23	Rain Bird PEB	1-1/2"	Turf Rotor	30.40		84.65		0.44 in/h	
F-24	Rain Bird PEB	1-1/2"	Turf Rotor	30.40		84.08		0.44 in/h	
F-25	Rain Bird PEB	1-1/2"	Area for Dripine	58.84		86.44		1.82 in/h	
F-26	Rain Bird PEB	1-1/2"	Bubbler	34.14		81.87		1.82 in/h	





INSIGHT IRRIGATION LLC
(352) 434-5015
www.insightirrigation.com



**STAFF REPORT
MORATORIUM – PERSONAL WIRELESS COMMUNICATIONS
GOVERNED BY CHAPTER 16, SECTION 9 OF THE LAND
DEVELOPMENT CODE
CASE NO. 18-25000006**

Request:	To establish a 3-month moratorium on the submittal of site plans, subdivisions, conditional use, special exception, and change of use applications and the issuance of development orders, building permits, zoning verification letters for personal wireless communications governed by Chapter 16, Section 9 of the Land Development Code.
Applicant:	City of Port Orange
Staff Recommendation:	Approval
Staff Contact:	Tim Burman, Community Development Director (386) 506-5675
Planning Commission Date:	August 23, 2018

DISCUSSION:

The requested moratorium will allow staff to review the existing City requirements for personal wireless communications governed by Chapter 16, Section 9 of the Land Development Code (LDC) as part of an on-going maintenance effort. The personal wireless communications regulations in the LDC have not been comprehensively updated since 1997. The moratorium will allow City staff to review the existing City requirements for personal wireless communications as part of an on-going maintenance effort. If modifications are needed to maintain reasonable and uniform regulations for personal wireless communications that protect the health, safety and general welfare of the residents of Port Orange, amendments to the Land Development Code will be prepared and brought before Council for review. During this moratorium, the Community Development Department will work with the City Attorney's office to develop and implement reasonable regulations that are legally enforceable.

RECOMMENDATION:

Approval of a 3-month moratorium on the submittal of site plans, subdivisions, conditional use, special exception, and change of use applications and the issuance of development orders, building permits, zoning verification letters for personal wireless communications governed by Chapter 16, Section 9 of the Land Development Code as part of an on-going maintenance effort to update the Land Development Code.



STAFF REPORT

CASE NO. 18-25000007

LDC Amendment/Chapter 17, Section 26

REQUEST:	To amend the Land Development Code (LDC) to remove the requirement for a notice hearing for permitted uses in the GPU zoning district.
APPLICANT:	City of Port Orange
STAFF RECOMMENDATION:	Approval
STAFF CONTACT:	Penelope Cruz, Planning Manager (386) 506-5671
PLANNING COMMISSION DATE:	August 23, 2018

SUMMARY OF PROPOSED AMENDMENT

The Land Development Code (LDC) requires all uses listed in the Government/Public Use (GPU) Zoning District as permitted to be brought before the Planning Commission and City Council, but no action is required because the uses are allowed. For any new use on property zoned GPU, a “Change of Use” application is required to be submitted and presented to the Planning Commission and City Council.

The “Change of Use” application only applies to the GPU zoning district and no other Port Orange zoning district requires a “Change of Use” application for a permitted use. The “change of use” process creates confusion because having the item presented at a public hearing gives the perception that there will be a vote to allow or deny the use. Unlike other development applications listed in the LDC, such as Special Exception, Conditional Use, Rezoning, and Future Land Use, there is not specific criteria that a “Change of Use” request is required to meet.

Similar to any use listed as permitted in a City zoning district, including the GPU zoning district, the proposed development will be required to go through the standard Development Review Process, including submitting a site plan or subdivision that meets all of the regulations within the LDC and building permits to meet the Florida Building Code.

The uses listed as a permitted use with special development requirements or a Special Exception use in the GPU Zoning District will not change and will be required to comply with requirements and approval process in the LDC.

The proposed amendment removes the following text in ~~strike through~~ format from Chapter 17, Section 26 of the LDC:

Chapter 17 - ZONING DISTRICT REGULATIONS
Section 26: - Government/public use (GPU) district.

(a) Purpose and intent. The government/public use (GPU) district is intended to provide for public and quasi-public uses in a setting which recognizes the special character and location requirements of such facilities.

(b) Permitted uses. All uses proposed by any governmental entity or agency thereof shall be permitted in this district. In addition, the following quasi-public uses shall be permitted in this district:

- (1) Adult/vocational education.
- (2) Antennas.
- (3) Camouflaged and monopole communication towers.
- (4) Cemeteries.
- (5) Charitable organization offices.
- (6) Hospitals.
- (7) Houses of worship.
- (8) Nursing homes.
- (9) Private schools.
- (10) Public utility stations/plants.

~~All proposed uses of land within the GPU district shall be advertised for public hearing at the time of rezoning, or prior to a change of use.~~

(bb) Permitted uses with special development requirements (chapter 18, section 4).

- (1) Child care centers (subsection 4).
- (2) Community gardens (subsection 5.1).

(c) Special exception uses (chapter 18, section 3).

- (1) Guyed and lattice communication towers.
- (2) Marina, recreational (subsection 9.6).

(d) Violation of terms or conditions. It is a violation of this code for any person to violate or to refuse or fail to comply with any term or condition of a rezoning or a change of use in the GPU district. Violations may be prosecuted or enforced as provided by law for prosecution or enforcement of municipal ordinances.

CONSISTENCY WITH THE COMPREHENSIVE PLAN

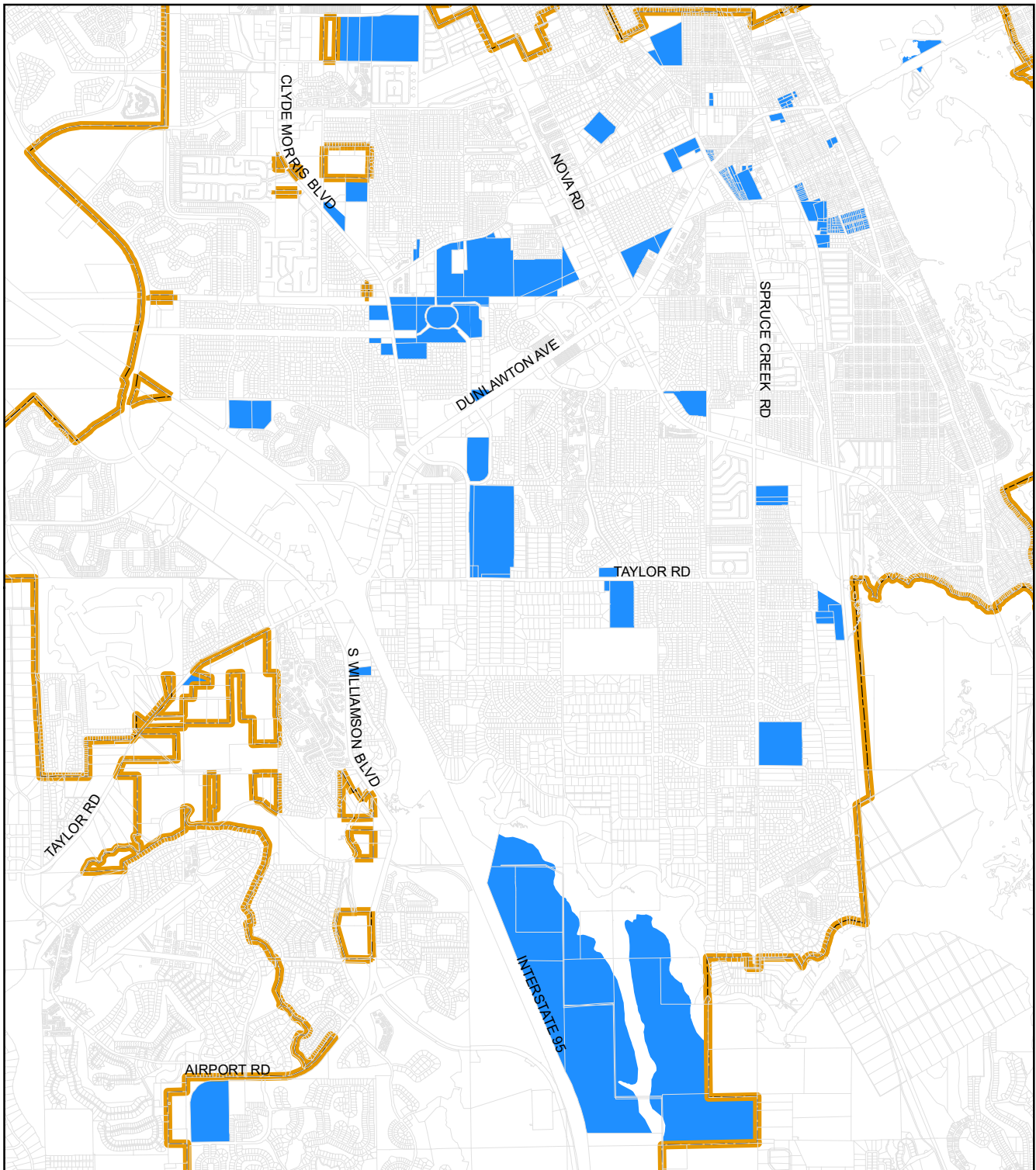
The proposed amendment is generally consistent with the pertinent Goals, Objectives, and Policies of the City's Comprehensive Plan. Policy 2.1.4 of the Future Land Use Element of the Comprehensive Plan recognizes that Public/Institutional uses are acceptable in a wide range of land use environments and, therefore, small and/or isolated properties of this type may be designated under any land use category where appropriate.

RECOMMENDATION

Staff recommends **approval** of the request to amend Chapter 17, Section 26 of the Land Development Code.

ATTACHMENT

Exhibit A – GPU Zoning District Map



GPU Zoning District
CITY OF PORT ORANGE
DEPARTMENT OF COMMUNITY DEVELOPMENT

