



AGENDA
PLANNING COMMISSION
CITY OF PORT ORANGE

Meeting Date: Thursday, October 27, 2016

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 Minutes
5. Case No. 16-90000007
VARIANCE/3658 NOVA ROAD

A request for variances from the Land Development Code (LDC) to reduce the Nova Road, Herbert Street, and Clara Street rights-of-way landscape buffer, reduce the Nova Road building setback, reduce the parking space width, and allow phased construction of the required site improvements. If the variances are approved, the property owner plans to redevelop the existing building and site to comply with the LDC.

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

6. Case No. 16-90000008
VARIANCE/WESTPORT RESERVE SUBDIVISION
South side of Town West Boulevard, between Coraci Boulevard and Tomoka Farms Road

A request for a variance from the Land Development Code (LDC) to allow a wetland buffer no less than 15 feet in width and an average width of 25 feet in lieu of a static 25-foot wetland buffer required by the LDC. If the variance request is approved, the property owner intends to subdivide the subject property into single family lots and provide a wetland buffer no less than 15 feet in width and an average width of 25 feet adjacent to the wetland areas to be preserved.

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

7. Case No. 16-50000003
REPLAT AND PLANS OF THE WESTPORT RESERVE
SUBDIVISION/WESTPORT RESERVE PHASE 2C
South side of Town West Boulevard, west of Coraci Boulevard

A request for approval of the Replat of Tract H of the Westport Reserve Subdivision. If approved, the applicant intends to subdivide the +/- 7.46 acres into 28 single-family lots and tracts for tree preservation, stormwater retention, and open space and construct the required subdivision infrastructure and improvements.

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

8. Case No. 16-20000002
SMALL-SCALE COMPREHENSIVE PLAN FUTURE LAND USE
AMENDMENT/CRACKER CREEK PLANNED UNIT DEVELOPMENT
1815 Taylor Road

A request to amend the Comprehensive Plan Future Land Use (FLU) Map to change the FLU designation of +/- 7.5 acres from Public/Institutional to Office/Residential Transition

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

9. Case No. 16-40000005
FIRST AMENDMENT TO THE CRACKER CREEK PLANNED UNIT
DEVELOPMENT MASTER DEVELOPMENT AGREEMENT AND CONCEPTUAL
DEVELOPMENT PLAN
1815 Taylor Road

A request to amend the Cracker Creek Planned Unit Development (PUD) Master Development Agreement (MDA) and Conceptual Development Plan (CDP) to establish development requirements for an Assisted Living Facility (ALF) and Memory Care Facility.

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

C. OTHER BUSINESS

10. Development Activity Report
11. Commissioner Comments
12. 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 ANY 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, 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 1-800-955-8771.

PLANNING COMMISSION MEETING MINUTES
CITY OF PORT ORANGE
1000 CITY CENTER CIRCLE
COUNCIL CHAMBERS
SEPTEMBER 22, 2016

THE REGULAR MEETING OF THE PLANNING COMMISSION of the City of Port Orange was called to order by Commissioner John Junco at 5:30 p.m.

Pledge of Allegiance

Silent Prayer

ROLL CALL:

Present:

Lance Green
John Junco
Newton White
Mike Arminio
Frank Crooks
Thomas Jordan
Maria Mills-Benat

Also Present:

Matthew Jones, Deputy City Attorney
Kelly McQuillen, Assistant City Clerk

DISCUSSION/ACTION

4. Consideration of Minutes

Motion to approve the minutes of August 25, 2016 as presented was made by Commissioner Arminio, and Seconded by Commissioner Jordan. Motion carried unanimously by roll call vote.

5. Case No. 16-90000005 - SUBDIVISION VARIANCE/870 TAYLOR ROAD

A request for a subdivision variance from Chapter 5, Section 2(b)(3)(a) of the Land Development Code (LDC), to waive the requirement for the submittal of a plat and development plan to subdivide a 7.88-acre parcel into two lots. If the subdivision variance request is approved, the applicant is proposing to apply for a minor subdivision to create two lots on a 7.88-acre parcel of land.

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

Tim Burman, Planner, provided details of the application and answered questions of Commissioners. Applicant, Joe Hopkins, Civil Engineer Performance Group, spoke to Commissioners and answered questions.

Sammy Sheehan, resident, asked about a buffer between the two lots. He stated concerns about possible fire hazards and wildlife.

James West, representing the neighbors across the street located at 870 Taylor Road, stated concerns about competition as they are also kennel owners.

Discussion ensued about fire hazard. Mr. Burman explained that there was a discussion with the Fire Department and was assured that there is no concern about being able to access the area.

Motion to recommend approval of Case No. 16-90000005 to the City Council was made by Commissioner Arminio, and Seconded by Commissioner White. Motion carried unanimously by roll call vote with Commissioner Green voting no.

6. Case No. 16-90000006 - VARIANCE/420 BAYWOOD CIRCLE

A request for a variance from Chapter 17, Section 27 of the Land Development Code (LDC) to allow a 50-foot rear building setback in lieu of the required 82-foot rear building setback required by the LDC. If the variance is approved, the property owners are proposing to construct a detached garage on the subject property.

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

Tim Burman, Planner, provided details of the application and answered questions of Commissioners.

Applicants, Ronald and Roseanne Rossi of 420 Baywood Circle, provided details and answered questions of Commissioners.

Motion to recommend approval of Case No. 16-90000006 to the City Council was made by Commissioner Arminio, and Seconded by Commissioner

Jordan. Motion carried unanimously by
roll call vote.

7. Case No. 16-25000004 - MORATORIUM/TATTOO PARLORS

A 9-month moratorium on the issuance of development orders, building permits, zoning verification letters, and zoning approvals for business tax receipts for the operation of tattoo parlors within the City of Port Orange.

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

Mr. Burman provided details of the application and answered questions of Commissioners.

Citizen, Jack Goldey of 736 Pringle Road, asked if the code can be updated and asked why there needs to be a moratorium. Chairman Junco stated that they are trying to collect data studies to unify new regulations since tattoo parlors are becoming more popular.

Motion to recommend approval of Case
No. 16-25000004 to the City Council
was made by Commissioner White and
Seconded by Commissioner Mills-
Benat. Motion carried unanimously by
roll call vote.

OTHER BUSINESS

8. Development Activity Report

Commissioners asked Staff questions relating to ongoing projects. Mr. Burman answered their questions.

9. Commissioner Comments – Matthew Jones, Assistant City Attorney, read Form 8B-EFF, *Memorandum of Voting Conflict for County, Municipal, and Other Local Public Officers* regarding a prior voting conflict between Commissioner Green and Paytas Homes.

10. Staff Comments - Wayne Clark, Community Development Director, stated that his staff is undermanned due to recent vacant positions. He explained that they are trying to handle the workload as it has increased.

PUBLIC COMMENTS

Citizen, Jack Goldey of 736 Pringle Road, stated he would like the Planning Commission to consider ethics in exploiting land to develop it. He explained that there is a barrier ridge that protects people from hurricanes.

ADJOURNMENT: 6:56 p.m.

Chairman John Junco



STAFF REPORT

Variances/ Chapter 6, Section 3(a) and Section 7(f); Chapter 12, Section 6; Chapter 13, Section 3; and Chapter 17, Section 27 of the Land Development Code (LDC)

CASE NO. 16-90000007

REQUEST:	Variances from the LDC to reduce the parking space width, landscape buffer width, front building setback, and allow for phased construction for a property in the Highway Commercial zoning district.
LOCATION:	3658 Nova Road (Figure 1)
OWNER:	Mialki Brothers, LLC
APPLICANT:	Harry Newkirk, Newkirk Engineering Inc.
STAFF RECOMMENDATION:	Approval
STAFF CONTACT:	Penelope Cruz, Principal Planner (386) 506-5671
PLANNING COMMISSION DATE:	October 27, 2016

PROPERTY OVERVIEW

The subject property is ± 1.43 acres and is located on the northwest corner of Herbert Street and Nova Road. The site is developed as Giuseppe's, a $\pm 4,470$ square-foot restaurant (Figure 2) and was previously a truck stop.

DISCUSSION

The property owner is proposing to redevelop the site with a $\pm 7,132$ square-foot restaurant along with associated site improvements.

The Land Development Code (LDC) requires a site to be brought up to current code standards when it is redeveloped. The site upgrades include, but are not be limited to, stormwater retention, landscaping and buffers, irrigation, signage and architectural design. Staff has worked with the property owner on identifying the necessary site upgrades and minimizing the variances being requested.

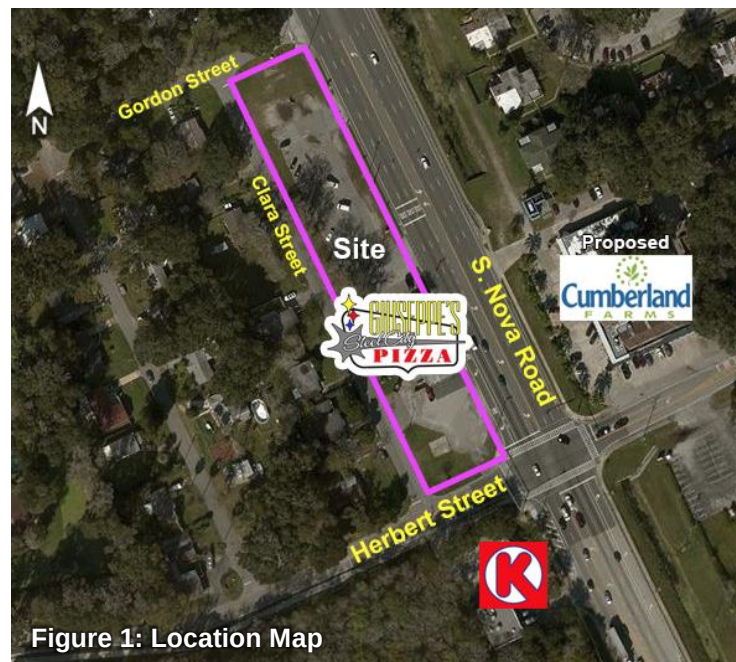


Figure 1: Location Map

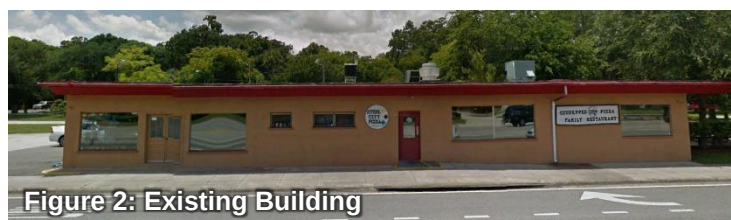


Figure 2: Existing Building

Redevelopment of this infill property would be an improvement for this site, as well as add to the improvement of the overall Herbert Street/Nova Road intersection area with a building that will meet current architectural codes, improved landscape buffering, and controlled access points for traffic management. However, to support redevelopment on infill sites variances or flexibility in development regulations are typically necessary for sites with restrictions to redevelop. A redeveloped structure with associated site improvements will add to the number of redevelopment projects that have lately been proposed at this intersection and will enhance the aesthetics and vitality of the area.

Figure 3: Proposed Architectural Elevations



According to the proposed site plan, the redevelopment of the site requires five (5) variances. The variances being requested are listed below:

1. Reduce the required width for the parking spaces from 10' to 9' [Ch. 12, Sec. 6 of the LDC].
2. Reduce the roadway landscape buffer for Herbert Street and Clara Street from 10' to 5' [Ch. 13, Sec. 3 of the LDC];
3. Reduce the roadway landscape buffer for Nova Road from 20' to 2.5' along building and 1' along the covered dining area [Ch. 13, Sec. 3 of the LDC];
4. Reduce the building setback along Nova Road from 20' to 2.5' [Ch. 17, Sec. 27 of the LDC]; and
5. Allow phased construction of the site and a Certificate of Completion to be issued before all of the required site improvements are inspected and accepted by the City [Chapter 6, Section 3(a) and Section 7(f) of the LDC].

Parking Space Width

The LDC requires the width of a parking space be a minimum of 10'. The parking space width is proposed to be 9'. The reduced width is requested to help provide the required number of parking spaces for the proposed use. The proposed 9' width is consistent with

the other cities in the area and with many of the Master Development Agreements approved by the City for commercial developments within Port Orange (Pavilion, Altamira, Riverwalk Riverboat and Marina, and Port Orange Gateway).

	Parking Space Width Requirement for Standard Parking Spaces
Proposed in Variance	9'
Port Orange	10'
New Smyrna Beach	10'
Daytona Beach	9'
Ormond Beach	9'
Deland	9'
South Daytona	9'
Daytona Beach Shores	9'

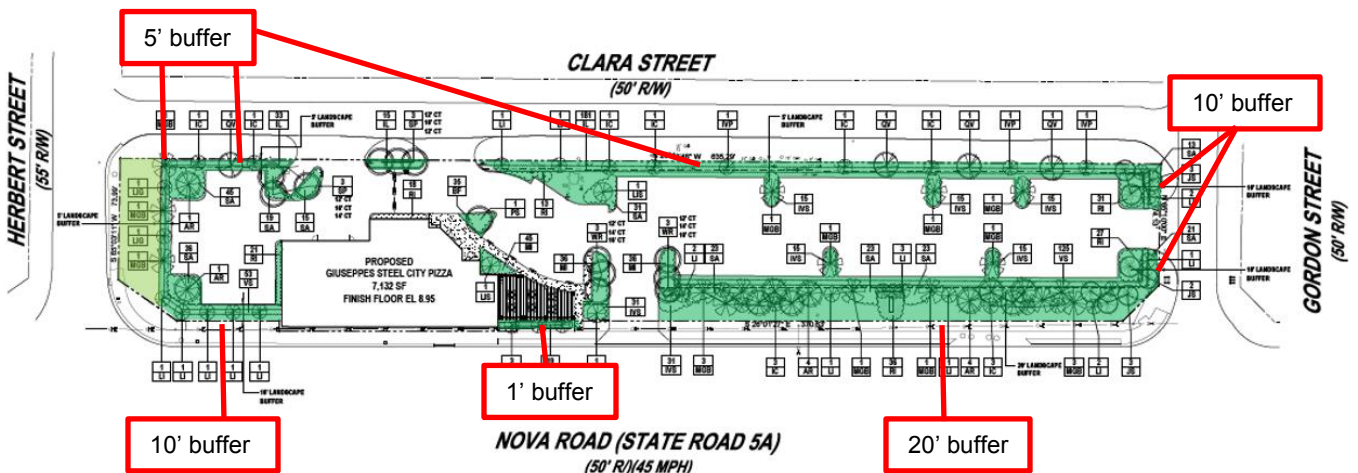
Landscape Buffers

The LDC requires a 20' wide landscape buffer along Nova Road and a 10' wide landscape buffer along Herbert Street, Clara Street, and Gordon Street. The intent of the landscape buffer requirements is to ensure quality landscape design, minimize the impact of adjoining differing land uses, and maintain and enhance an attractive environment within the city. The applicant is proposing to install a 20' wide buffer except for the $\pm 131'$ lineal feet where the existing building created an area where the width is limited to 2.5' and the $\pm 46'$ -lineal feet where the outdoor dining area creates an area where the width is limited to 1-foot within the property boundary. The landscape buffer along Herbert Street and Clara Street is proposed to be 5' in lieu of the required 10' landscape buffer. Currently, there is no landscaping along Nova Road and Gordon Street, one understory tree along Herbert Street, and eight existing trees along Clara Street. According to the applicant, the landscape material for the full buffer widths will still be planted within the proposed buffers. Although none of the proposed buffers meet code requirements, the proposed landscape buffers will be an improvement to existing conditions.



Figure 4: Existing Conditions – No Landscaping

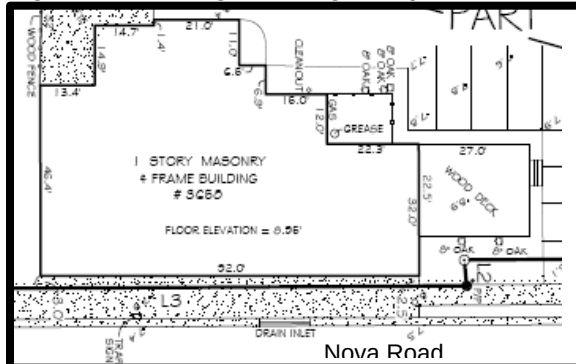
Figure 5: Draft Landscape Plan



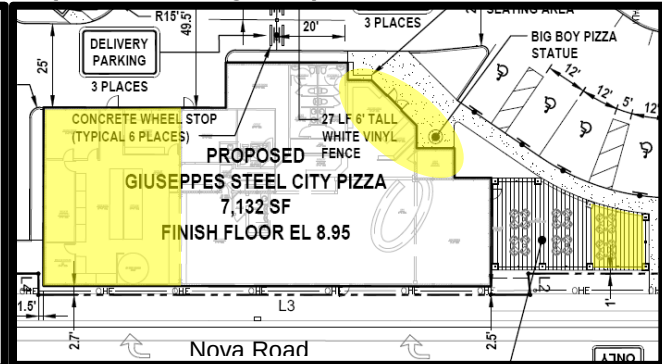
Building Setback

The existing building was constructed in 1959. After the taking of right-of-way by the State in 1996 for the widening of Nova Road, the building became a non-conforming structure that encroaches into the required 20' front building setback of the Highway Commercial (HC) zoning district. The building is in generally good condition, but is situated 2.5' from the front property line. The requested variances are specific to the location of the existing building. In order to redevelop the site and comply with all of the requirements of the LDC, the existing building would need to be demolished.

Figure 5: Existing Building Footprint



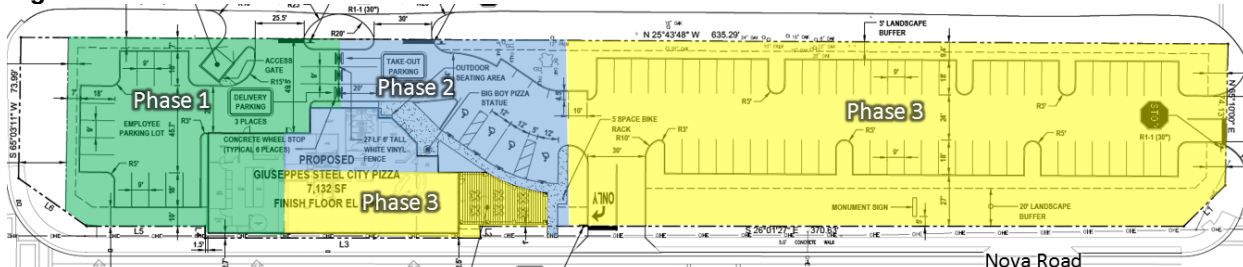
Proposed Building Footprint



Phased Construction

If the variance request is approved, the applicant/owner, will adhere to the phasing plan which will govern the timing and sequence of the site improvements while the existing restaurant is remodeled (Exhibit A). According to the applicant, the first phase will include the new kitchen, the new dumpster enclosure, and completion of site work in the southern portion of the site, including the employee parking and landscaping in this area. The second phase will include the central portion of the site which will be under construction with the building remodeling that includes the new entrance and parking and landscaping in this area. The third phase will include the completion of the remaining building remodeling and site improvements from the main access driveway on Nova Road to the north property line, including all the landscaping for this phase and the removal of old driveway cuts. The phasing plan provides for eighteen (18) months from the issuance of the Approved for Construction Plans for completion of all improvements.

Figure 6: Phased Construction



Phased construction of the site and building is requested because the owner has stated that existing restaurant needs to remain open during construction. Allowing for a Certificate of Completion to be issued as each phase is completed and before all of the required site improvements are inspected and accepted by the City would allow for a

transition into the new and remodeled portions of the building while the remainder of the building is remodeled.

REVIEW OF VARIANCE CRITERIA

Chapter 19, Section 1, of the LDC, lists the review criteria that are used to determine whether the variances requested should be granted. These criteria, accompanied by staff's comments, are listed below.

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

The existing building was constructed in 1959. After the taking of over 70 feet of additional right-of-way by the State in 1996 for the widening of Nova Road, the building became a non-conforming structure that encroaches into the front building setback.

The subject property is the only through lot in the Highway Commercial zoning district, bound on all four sides by a roadway. A property boundary adjacent to a roadway requires a larger landscape buffer than if the property boundary was adjacent to another commercial property.

- b) *The special conditions and circumstances are not result of actions of the property owner.*

The special conditions and circumstances are not result of actions of the property owner, who purchased the property in 1997. The existing building was constructed in 1959 and met the 20-foot building setback at that time. After the taking of additional right-of-way by the State in 1996 for the widening of Nova Road, the building became a non-conforming structure that encroaches 17.5 – 18.5 feet into the front building setback.

The applicant stated that the requested 5' landscape buffer reduction along Herbert Street is due to the additional land that is required by the LDC for the ultimate Herbert Street right-of-way for future intersection improvements. In addition, the subject property is the only through lot in the Highway Commercial zoning district, bound on all four sides by a roadway.

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

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 development approval process, all properties are required to be brought into compliance with the current development requirements of the LDC when there is

a change in use, when a property is vacant for six months or more, or when it is redeveloped.

The intent of the landscape buffer requirements is to ensure quality landscape design, minimize the impact of adjoining differing land uses, and to maintain and enhance an attractive environment within the city. The proposed landscape buffers create a separation between adjacent uses, enhance the proposed site design, and represent an improvement to the appearance of this part of the City.

The setback of the existing building is a result of the Nova Road widening in 1996. The requested 5' landscape buffer reduction along Herbert Street is due to the additional land that is required by the LDC for the ultimate Herbert Street right-of-way along for future intersection improvements. The proposed building expansion and redevelopment would create a safer customer environment with the main entrance on the east side of the building rather than on the Nova Road side.

According to the Owner, the phased construction is required in order to minimize the time that the existing restaurant is closed. Allowing for a Certificate of Completion to be issued before all of the required site improvements are inspected and accepted by the City would allow for a transition into the new and remodeled portions of the building while the remainder of the building is remodeled. This type of phasing has previously been approved and implemented for businesses such as Ravenwood Veterinary Clinic, The Fraternal Order of the Eagles Lodge, Hawthorne Groves Apartments, and Whitepalm Apartments.

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

The site could be redeveloped to comply with the requirements of the LDC; however, this would require demolition of large portions the existing building, closure of the existing business while the site and building are redeveloped, and changes to the proposed site design.

Staff has worked with the owner on the proposed site plan to reduce the overall number variances needed and to minimize the variances being requested.

- e) *Granting of the variances requested will not confer on the property owner 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.

- f) *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 generally focused on regulating new “green field” development rather than infill redevelopment. Typically infill redevelopment projects require flexibility or variances in development regulations to allow underutilized properties to redevelop.

The owner is proposing to redevelop the subject property while minimizing the time that the existing restaurant is closed. The landscape material for the full buffer widths will still be planted within the proposed buffers and the proposed landscape buffers will be an improvement to existing conditions. A 9’ parking space width is common in this region. The setback of the existing building is a result of the Nova Road widening in 1996 and the proposed building expansion and remodeling would create a safer customer environment with the main entrance on the east side of the building rather than on the Nova Road side.

Although the proposed project does not bring the site into full compliance with the current code, the proposed redevelopment will improve the existing conditions. The variances, if granted, would enable the property to be redeveloped in a manner that would enhance the appearance of the site.

- g) The variance represents 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 upon 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 the variances requested with the condition that the same level of architectural treatment must be provided as depicted in the proposed renderings submitted for staff review with the variance application.

ATTACHMENTS

Exhibit A - Phasing Plan

CONDITIONS OF VARIANCE APPROVAL FOR PHASING OF IMPRIVEMENTS**Giuseppe's Steel City Pizza**

3658 Nova Road, Port Orange, FL 32129

PURPOSE. These conditions are intended to establish the proper sequence and completion dates of Phases I, II, and III and the requirements for occupancy of the business establishment prior to the final completion of all planned improvements on the Subject Property.

As illustrated on the proposed site plan, the developer proposes to expand and remodel the existing restaurant and redevelop the subject property with associated site improvements. Upon completion of improvements in each Phase described below, the Developer shall obtain a Certificate of Completion to use the remodeled area of the building.

1. DESCRIPTION OF PHASES;

A. Phase I. The Developer shall complete the site and building improvements as generally depicted on Exhibit "A" including, but not limited to, the new kitchen including exterior architectural improvements, the new dumpster enclosure, and completion of site work in the southern portion of the site, including the employee parking and landscaping in this area.

B. Phase II. The central portion of the site will be under construction with the building remodeling as generally depicted on Exhibit "A" including, but not limited to, the new entrance and remodeling of the existing building area including exterior architectural improvements, and parking and landscaping in this area.

C. Phase III. Completion of the remaining building remodeling including all exterior architectural improvements and site improvements as generally depicted on Exhibit "A" including, but not limited to, the site improvements from the main access driveway on Nova Road to the north property line, including all the landscaping for this phase and the removal of old driveway cuts.

D. Prior to the issuance of a Certificate of Completion to allow for the use of the remodeled building during Phase III, the Developer shall request a Final Site Inspection upon completion of all site improvements. At the end of each Phase the Developer shall submit a punch list and certified cost estimate for the remaining site improvements.

E. Developer shall submit a financial guarantee in the amount of 110% of the approved cost estimate for the completion of the Phase III improvements to the City of Port Orange, Florida in the form of a standby irrevocable letter of credit. The letter of credit shall be issued by a financial institution acceptable to the City. The term of the letter of credit shall be for such period of time as is determined to be reasonable for the completion of the Phase III improvements but shall be not less than ninety (90) days. The Developer agrees to a maximum time for

completion of Phase III of eighteen (18) months from the issuance of the Approved for Construction Plans.

G. The Developer shall attempt to complete each Phase within four to six months.

2. PHASE COMPLETION OF THE DEVELOPMENT PLAN

A. Plan Approval. At the time the project is to commence, a set of engineered plans will have been prepared and submitted for review/approval by the City staff for each phase submitted. The set of plans (showing each of the phases) shall be reviewed by the City Staff to ensure compliance with the elements of these conditions and to ensure compliance with the Land Development Code and other applicable codes. The City shall review all engineered plans in accordance with the processes and turn-around times spoken to in the LDC. Each Phase may be occupied pursuant to satisfactorily passing its respective final inspections/re-inspections.

B. Responsibility and Expense. The Developer shall undertake the construction and maintenance of all improvements required by the approved site plan and these conditions at the Developer's sole cost and expense.

C. Conceptual Nature of Exhibits. At the time of this Variance, the engineered site plans have not been approved and stamped as "Approved for Construction." City and Developer agree that the improvements depicted by site plans when stamped and approved for construction on file with the City, and the attachments to these conditions, all being made a part hereof by reference, may require modification in order to comply with the applicable codes and regulations governing the phased improvements. Minor modifications not in conflict with these conditions may be approved by the City Administrative Official. The City Administrative Official's approval shall be required in writing.

3. DEFAULT

A. Notice of Default. The Developer agrees that in the event improvements are not completed as outlined herein or by amendments hereto, the City shall issue a notice of default to the record title owner and the developer of record on this project.

B. Failure to Resolve Default. In the event the parties fail to reach an amicable resolution of the default condition within 30 days after the expiration of time allowed within which an amendment may be requested, the City Manager shall have the right to refer this matter to a code inspector for analysis and prosecution before the code enforcement board. The Developer agrees to and does hereby waive any claim that the City is estopped from making now or hereafter or to which it may not otherwise be entitled with respect to the enforcement of the City of Port Orange Land Development Code effective as of the date of the Variance.

C. Code Enforcement Action. In the event the Subject Property is not brought into compliance, the code enforcement board shall have jurisdiction to enforce the provisions of Code of Ordinances Section 14-313, and other municipal ordinances for which the code inspector deems a violation exists on the Subject Property.

4. OCCUPANCY. The Developer shall have the obligation to obtain necessary Certificates of Occupancy upon completion of all major work (consistent with these conditions) that requires permit review/approval, and the right to seek satisfactory resolution of all deficiencies as noted by the inspections.

5. CONFLICTS. In the event of a conflict between the terms and provisions of the exhibits and the textual provisions of these conditions, the textual provisions of these conditions shall control. In the event of a conflict between the terms and provisions of these conditions and the City's ordinances, the requirements of those conditions shall control. If the conditions fail to address a particular subject or requirements, the applicable City ordinances in effect at the time which these conditions were adopted shall control.

6. WAIVER. The Owner, Developer, and their respective officers, employees, heirs, successors and assigns, hereby waive, release and forever discharge the City and the City's officers, employees and agents from all actions or causes of action, or other suits, in law or in equity, whether now known or later discovered, which an Owner and Developer may have against the City in connection with or resulting from actions taken or omissions made by the City in connection with these conditions, or the City's power to enforce or failure to enforce these conditions or any failure by the City to act under these conditions.

7. INDEMNIFICATION/HOLD HARMLESS. The Developer covenants and agrees to defend, indemnify and hold harmless the City, its officers, employees and agents, from and against third party claims, damages, losses and expenses, including reasonable attorneys' fees and costs, arising out of, resulting from, or in any way connected with the condition of the Subject Property, the City's issuance of or failure to issue any development permits, the exercise of the City's power to enforce these conditions to the Subject Property.

8. MISCELLANEOUS TERMS

A. Interpretation. In the even the Developer is aggrieved by any decision of any City Official interpreting the terms of these conditions, the Developer may appeal the decision directly to the City Council. The appeal shall be filed in writing with the City Manager. Upon receipt of such appeal the City Manager shall place the appeal on the next available City Council agenda established by his office after the notice of appeal is received.

B. Time Limits. If for any unforeseen circumstances a given phase is not completed within the time limits indicated herein, then such failure shall constitute a default by the Developer.



STAFF REPORT

VARIANCE / WESTPORT RESERVE PHASE 2C

CASE NO. 16-90000008

REQUEST: Variance from the Land Development Code (LDC) to reduce the width of a wetland buffer from 25 feet to a minimum of 15 feet and an average width of 25 feet.

LOCATION: South of Town West Blvd., West of Coraci Blvd.

OWNER/APPLICANT: Edge Cove, LLC

STAFF RECOMMENDATION: Denial

STAFF CONTACT: Gwen Perney, Planner (386) 506-5673

PLANNING COMMISSION DATE: October 27, 2016

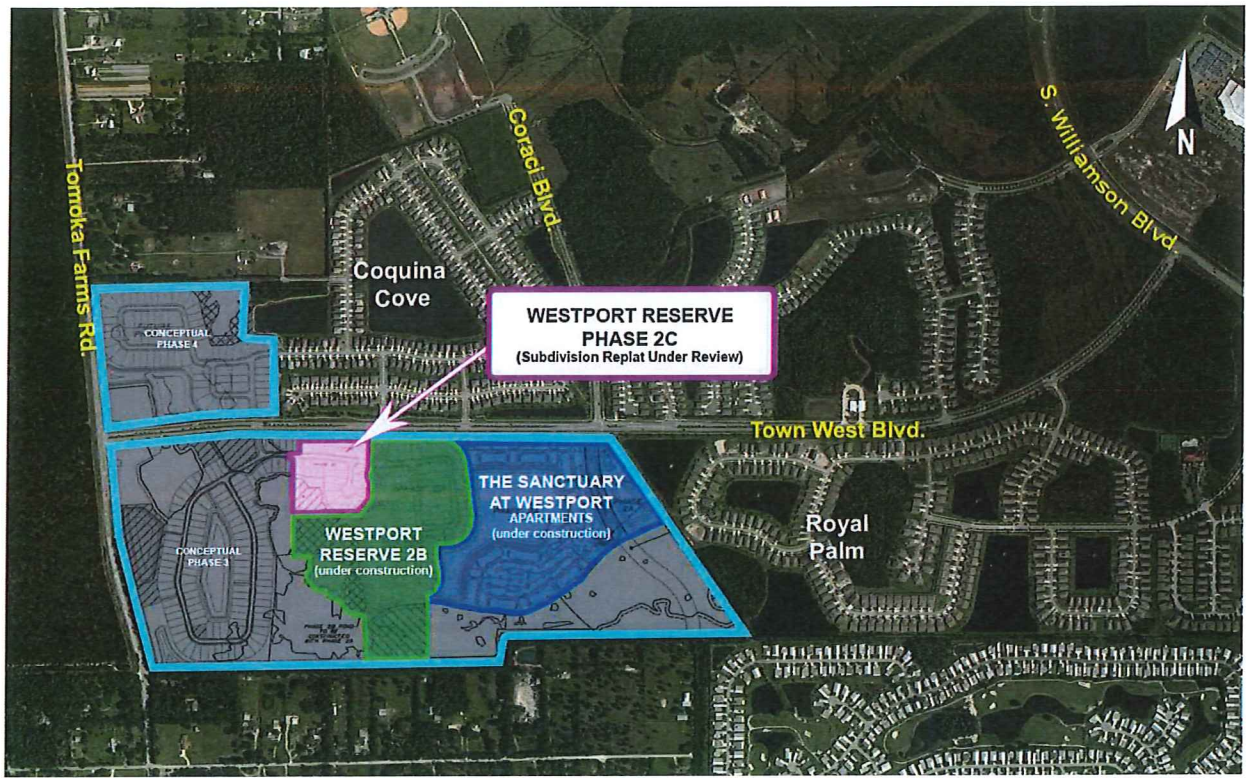
BACKGROUND/DISCUSSION:

The applicant is requesting a variance to allow a wetland buffer that averages 25-feet in width with a 15-foot minimum buffer width in lieu of the static 25-foot wide wetland buffer [LDC, Ch. 9, Article I, Sec. 5]. According to the LDC, an upland buffer is to provide a reasonable assurance that wetlands and their associated ecological functions and values are protected, including protection of water quality, protection against turbidity and provision of adequate upland habitat for wetland dependent wildlife.

If approved, the variance would allow the applicant to subdivide the subject property into single-family lots and where proposed lots are adjacent to an existing wetland the width of the buffer would be an average of 25-feet and a minimum width of 15 feet. The City's policy of no net loss of wetland function can be achieved with the proposed wetland buffer.

The applicant is in the process of platting the remaining property of the Westport Reserve Subdivision and anticipates there will be areas where the wetland buffer would be less than 25 feet. According to the applicant, the requested wetland buffer will provide flexibility that may be needed should a static 25 feet be difficult to attain on certain lots (Exhibit "A"). The requested variance would allow standard rear building setbacks and provide room for pools, sheds, etc. and still protect the quality of the wetlands.

Figure 1. Location Map



According to the applicant, the use of an averaged upland buffer has been used by other communities throughout the state (City of Eustis, Town of Lady Lake, City of St. Petersburg, City of Atlantic Beach, Flagler County, and Nassau County). St. Johns River Water Management District (SJRWMD) has deemed the use of averaged upland buffers to be acceptable as per the Environmental Resource Permit Applicant's Handbook, Effective October 1, 2013 (Exhibit "B"). The applicant contends that wherever a static 25-foot wide buffer is easily maintained, it will be used; however, the opportunity to average the upland buffer will offer the applicant some flexibility that may be needed should a static 25 feet be difficult to attain on certain lots.

An averaged 25-foot-wide upland buffer (with a minimum 15-foot width) is the standard for the SJRWMD as long as no secondary impacts to the wetlands are created. The applicant will be required to get a SJRWMD Permit prior to any construction activity. The City's Land Development Code stipulates that a permit from federal, state or regional agency may be deemed to meet the wetland alteration requirements of the City with no additional conditions placed by the City.

There are no existing developments in Port Orange where an averaged upland wetland buffer width has been used. However, the Master Development Agreement for the Woodhaven PUD that was approved in 2012 allows for the use of an averaged 25-foot-wide wetland buffer, with a minimum 15-foot width.

REVIEW OF VARIANCE CRITERIA:

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:

- 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.*

The applicants believe the unique circumstance that pertains to this property is that the standard for the review agency in charge of wetland protection, SJRWMD is an averaged 25-foot-wide wetland buffer, with a minimum 15-foot width.

When City adopted the current wetland policy requirements in the LDC in 1992, Volusia County's policy was used as a model, which requires a 25-foot buffer. Volusia County is currently drafting an ordinance to create zones county-wide for levels of wetland review. This area of Port Orange is proposed to be located in a Basic review area. Under the draft ordinance, properties within the basic review area will not be required to provide a minimum buffer, unless required by the City.

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

The applicant's asserted special condition is not a result of the actions of the applicant as the wetlands are an existing condition. The unique circumstance is that the City LDC requirement is less flexible than the SJRWMD requirement and could potentially be changed after the County adopts their new wetlands review ordinance.

- 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.*

When a property is subdivided, it must comply with current development requirements of the Land Development Code (LDC). The intent of the City's wetland buffer is to provide a reasonable assurance that wetlands and their associated ecological functions and values are protected, including protection of water quality, protection against turbidity and provision of adequate upland habitat for wetland dependent wildlife.

Although not their preference, the applicant could modify the layout for the proposed single-family lots adjacent to the wetlands to meet the wetland buffer requirement.

According to the applicant, the variance is necessary for their proposed lot layout plans. The applicant states that the proposed wetland buffer would still provide the necessary buffer to minimize the impact on the adjacent wetland, ensure that wetlands and their associated ecological functions and values are protected, including protection of water quality, protection against turbidity and provision of adequate upland habitat for wetland dependent wildlife adequate separation. The applicant is concerned that applying the static 25-foot buffer will impact the ability for home owners to add future improvements within their rear yards.

Literal interpretation of the code would not specifically deprive the applicant of rights others have in Port Orange. When a new subdivision is platted, the subdivision must meet all of the requirements of the LDC. It is not unusual for an LDC requirement to be less flexible than a county or federal requirement. The applicant is still able to plat around the existing wetland and maintain a 25-foot buffer. However, if the LDC were to adopt the SJRWMD requirements and only require a minimum 15-foot buffer, the applicant would not need to request a variance for the proposed subdivision. Staff does not disagree with the use of an averaged buffer and its effectiveness in protecting the wetlands, but it is not the current LDC requirement.

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

The subject property could be subdivided to comply with the static 25-foot wetland buffer requirement of the LDC; however, this would require changes to the proposed lot layout of Phase 2C and the remaining phases that are currently being designed by the applicant's engineer.

Although not their preference, the applicant could modify the layout of the proposed single-family lots adjacent to a wetland to meet the static 25-foot wetland buffer setback requirement. However, according to the applicant, meeting the static 25-foot wetland buffer would require the buffer to extend into the rear yard of the proposed lots. According to the applicant, the requested wetland buffer will still provide a sufficient buffer to protect water quality and provided adequate upland habitat for wetland dependent wildlife. Regardless if the variance is approved, the applicant will be required to get a SJRWMD permit and comply with all conditions of the permit prior to any construction activity.

- e) *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.*

Granting the variance will confer special privilege to the applicant as all subdivisions are required to provide a 25-foot minimum buffer. However, no other subdivision in the PC-A district has formally requested to use the SJRWMD standard in lieu of the LDC requirement.

The LDC was adopted in accordance with the County ordinance in 1990. Since that time, subdivisions with wetlands have provided a 25-foot upland buffer around the wetlands. The City's adopted code is less flexible than the SJRWMD district standards, which has jurisdiction over the wetlands within the City. According to the SJRWMD standards the average 25-foot width minimum is sufficient to protect wetlands. An average buffer width was recently approved as part of the Woodhaven PUD MDA.

- 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.*

Granting of the variance will be in harmony with the general intent and purpose of the code. As previously stated, the function of a wetland buffer is to provide a reasonable assurance that wetlands and their associated ecological functions and values are protected, including protection of water quality, protection against turbidity and provision of adequate upland habitat for wetland dependent wildlife.

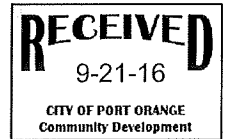
The City's standard for wetland alteration is based on a policy of no net loss of wetland function. If the proposed wetland buffer is approved, there will be no net loss of wetland function and there will be a wetland buffer that complies with the requirements of the SJRWMD.

- g) *The variance represents 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 variance criteria in the LDC for staff to review, staff recommends denial of the variance request. However, if the Planning Commission determines the proposed wetland buffer requested by the applicant as an alternative to the static 25-foot buffer is warranted, staff recommends the wetland buffer requirement for Westport Reserve Phase 2C and 3 be an average width of 25 feet with a minimum width of 15 feet and consistent with the wetland buffer required by STJWMD.



Variance Application
Owner: Edge Cove, LLC
Parcel No. 6214-01-01-0015

LETTER OF EXPLANATION

This request is a variance from Chapter 9, Article I, Section 5 of the LDC regarding the wetland buffer of not less than 25 feet in width which is required to be established adjacent to and surrounding all wetlands. This variance request has been submitted to address certain platted lots, located adjacent to wetlands, which cannot and do not meet the City's standard setback requirements for wetlands (25 feet). The variance requests that the City utilize the secondary impact criterion utilized by the St. Johns River Water Management District ("SJRWMD"). Specifically, under Section 10.2.7 of the Environmental Resource Permit Applicant's Handbook Vol. 1, "Secondary impacts to habitat functions of wetlands associated with adjacent upland activities will not be considered adverse if buffers, with a minimum width of 15 feet and an average width of 25 feet are provided abutting those wetlands that will remain under the permitted design... Buffers shall remain in an undisturbed condition, except for drainage features such as spreader swales and discharge structures." This is a standard that is deemed acceptable by the SJRWMD and would govern the terms of the requested variance.

The requested variance would allow the buffer to narrow in certain locations, but to go no narrower than 15 feet, so as to accommodate the regular dimensions of the platted lots and the irregular dimensions of the wetlands.

I have attached the relevant provisions from the SJRWMD Environmental Resource Permit Applicant's Handbook to this application package.

**ENVIRONMENTAL RESOURCE PERMIT
APPLICANT'S HANDBOOK
VOLUME I
(GENERAL AND ENVIRONMENTAL)**

**All Appendices, except A, B, D and E, are
incorporated by reference in subsection 62-330.010(4), F.A.C.**

Effective October 1, 2013

FOR:

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



- (b) In any Class II waters that are not classified by DACS as “approved,” “restricted,” “conditionally approved,” or “conditionally restricted” for shellfish harvesting, unless the applicant submits a plan or proposes a procedure to protect those waters and waters in the vicinity. The plan or procedure shall detail the measures to be taken to prevent significant damage to the immediate project area and the adjacent area, and shall provide reasonable assurance that the water quality standards for Class II waters will not be violated.
- (c) In any class of waters where the location of the activity is adjacent or in close proximity to Class II waters, unless the applicant submits a plan or proposes a procedure that demonstrates that the regulated activity will not have a negative effect on the Class II waters and will not result in violations of water quality standards in the Class II waters.

10.2.6 Vertical Seawalls

- (a) The construction of vertical seawalls in estuaries or lagoons is prohibited unless one of the following conditions exists:
 1. The proposed construction is located within a port, as defined in Section 315.02 or 403.021, F.S.;
 2. The proposed construction is necessary for the creation of a marina, the vertical seawalls are necessary to provide access to watercraft, or the proposed construction is necessary for public facilities;
 3. The proposed construction is to be located within an existing manmade canal and the shoreline of such canal is currently occupied in whole or in part by vertical seawalls; or
 4. The proposed construction is to be conducted by a public utility when such utility is acting in the performance of its obligation to provide service to the public.
 5. The proposed construction is located within the coastal areas of Collier, Lee, Miami-Dade, and Monroe Counties, or Charlotte Harbor/Peace River in Charlotte County designated by the National Marine Fisheries Service as Critical Habitat for the smalltooth sawfish (*Pristis pectinata*) -- see <http://www.nmfs.noaa.gov/pr/pdfs/criticalhabitat/smalltoothsawfish.pdf>.
- (b) When considering an application for a permit to repair or replace an existing vertical seawall, the Agency shall require such seawall to be faced with riprap material, or to be replaced entirely with riprap material unless a condition specified in paragraphs 1 through 5, above, exists. However, nothing in this subsection shall be construed to hinder any activity previously exempt or permitted under Part IV of Chapter 373, F.S., or permitted under Chapter 161, F.S.

10.2.7 Secondary Impacts

Pursuant to section 10.1.1(f), above, an applicant must provide reasonable assurances that a regulated activity will not cause adverse secondary impacts to the water resource, as described in

sections (a) through (d), below. Aquatic or wetland dependent fish and wildlife are an integral part of the water resources that the Agency is authorized to protect under Part IV, Chapter 373, F.S.

Aquatic or wetland dependent species that are listed species are particularly in need of protection, as are: the bald eagle (*Haliaeetus leucocephalus*), which is protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d) and Rule 68A-16.002, F.A.C.

A proposed activity shall be reviewed under this criterion by evaluating the impacts to: wetland and surface water functions identified in **section 10.2.2, above**, water quality, upland habitat for bald eagles and aquatic or wetland dependent listed species, and historical and archaeological resources. *De minimis* or remotely related secondary impacts will not be considered. Applicants may propose measures such as preservation to prevent secondary impacts. Such preservation shall comply with the land preservation provisions of **section 10.3.8, below**. If such secondary impacts cannot be prevented, the applicant may propose mitigation measures as provided for in **sections 10.3 through 10.3.8, below**.

This secondary impact criterion consists of the following four parts:

- (a) An applicant shall provide reasonable assurance that the secondary impacts from construction, alteration, and intended or reasonably expected uses of a proposed activity will not cause or contribute to violations of water quality standards or adverse impacts to the functions of wetlands or other surface waters as described in **section 10.2.2, above**.

Impacts such as lights from development adjacent to marine turtle nesting beaches, boat traffic generated by a proposed dock, boat ramp or dry dock facility, which causes an increased threat of collision with manatees; impacts to wildlife from vehicles using proposed roads in wetlands or other surface waters; impacts to water quality associated with the use of septic tanks or propeller dredging by boats and wakes from boats; and impacts associated with docking facilities as described in **sections 10.2.4.3(f) through (i), above**, will be considered relative to the specific activities proposed and the potential for such impacts. Impacts of groundwater withdrawals upon wetlands and other surface waters that result from the use of wells permitted pursuant to the District consumptive use rules shall not be considered under the rules adopted pursuant to Part IV of Chapter 373, F.S.

Secondary impacts to the habitat functions of wetlands associated with adjacent upland activities will not be considered adverse if buffers, with a minimum width of 15 ft. and an average width of 25 ft., are provided abutting those wetlands that will remain under the permitted design, unless additional measures are needed for protection of wetlands used by bald eagles for nesting, or listed species for nesting, denning, or critically important feeding habitat. The mere fact that a species is listed does not imply that all of its feeding habitat is critically important. Buffers shall remain in an undisturbed condition, except for drainage features such as spreader swales and discharge structures, provided the construction or use of these features does not adversely impact wetlands. Where an applicant elects not to use buffers of the above-described dimensions, buffers of different dimensions, or other measures, may be proposed to provide the required reasonable assurance. Wetlands or other surface waters shall not be filled to achieve this buffer requirement. For example, an undisturbed upland buffer would not be required to be established waterward of areas of wetlands or other surface waters that are authorized to be filled for other purposes, such as to construct a bulkhead, although this does not relieve the applicant from providing other reasonable assurance demonstrating that the construction, alteration, and intended or



STAFF REPORT

REPLAT OF TRACT H OF THE WESTPORT RESERVE SUBDIVISION & SUBDIVISION PLANS (PHASE 2C)

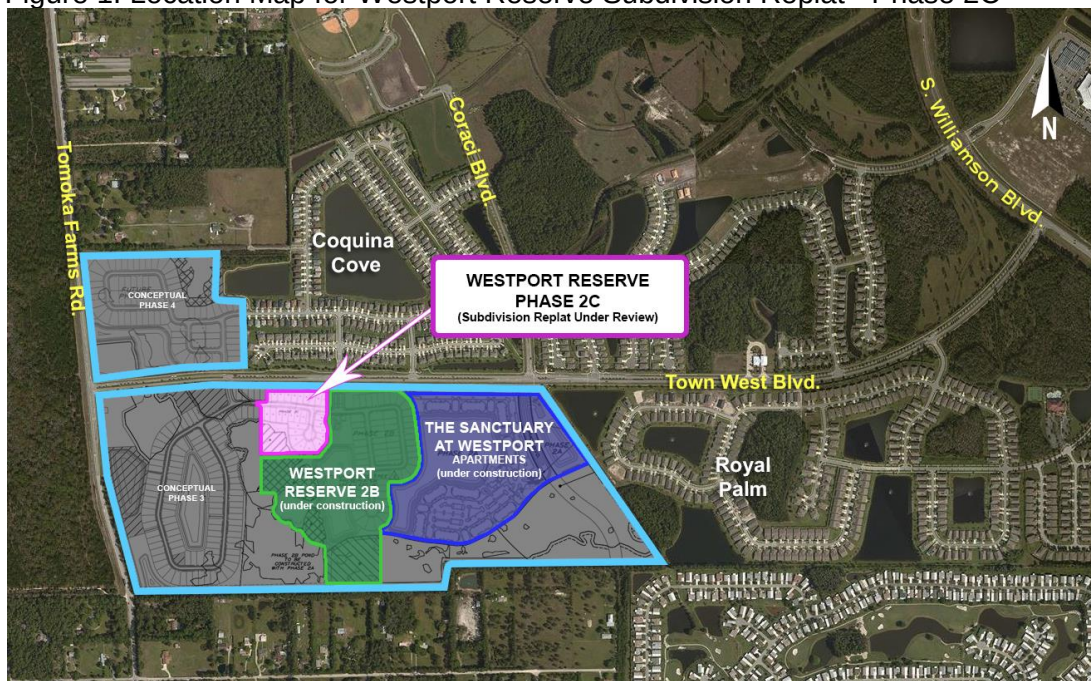
CASE NO. 16-50000003

REQUEST:	Approval of the Replat of Tract H of the Westport Reserve Subdivision and Subdivision Plans for Phase 2C
LOCATION:	South of Town West Boulevard west of Royal Palm PUD Subdivision and east of Tomoka Farms Road (Figure 1)
OWNER:	Edge Cove LLC
APPLICANT:	Jonathan Claber, Edge Cove LLC
STAFF RECOMMENDATION:	Approval
STAFF CONTACT:	Gwen Perney (386) 506-5673
PLANNING COMMISSION DATE:	October 27, 2016

DISCUSSION:

The applicant requests approval of the Westport Reserve Subdivision Replat of Tract H. If approved, the applicant intends to replat the 7.46-acre Tract H of the Westport Reserve Subdivision into a 28 lot single-family subdivision and tracts for tree preservation, stormwater retention, and open space. The subject property is located south of Town West Boulevard, between the Royal Palm PUD subdivision and Tomoka Farms Road.

Figure 1. Location Map for Westport Reserve Subdivision Replat - Phase 2C



The subject property is zoned “PC-A” (Planned Community Agriculture) Neighborhood District and has a Future Land Use designation of Planned Community No. 1. The PC-A Neighborhood zoning district is intended to accommodate a variety of standard suburban housing types at varying densities. Single-family, two-family, and multi-family housing are all permitted uses in this zoning district.

Based on the approved densities in the Neighborhood District, the maximum number of dwelling units that could be constructed is 3,148. If Phase 2C is approved, 100 acres in the Neighborhood District would remain vacant (Westport Reserve Phase 3 and 4); however, conceptual subdivision plans prepared by the property owner indicate the remaining land will be developed with +/- 199 single-family homes. As a result, when the Neighborhood District area is fully built out, it will have less than half of the maximum number of dwelling units it was planned for in the early 2000s (see Table 1 on Page 2).

Table 1. Neighborhood District Allowed & Developed Densities

Subdivisions in Neighborhood District	Year	Number of Approved or Proposed Dwelling Units	Development Size (acres)	Developed Density DU/Acre	Max Density per Acre	Max Number of Dwelling Units Allowed
Coquina Cove Ph 1	2005	332	85	3.91	4	340
Port Orange Plantation Ph 1	2004	90	33.4	2.69	8	267
Port Orange Plantation Ph 2	2005	104	28.3	3.67	8	226
Port Orange Plantation Ph 3	2006	53	17.5	3.03	4	70
Port Orange Plantation Ph 4- Village C	2014	49	15.7	3.12	16	251
Hawks Preserve Ph 1 & 2	2016	189	81	2.33	16	1,296
Westport Reserve Subdivision (Ph 2A, 2B, 2C, and 3*)	2016	573	148.7	3.85	4	594
Westport Reserve Subdivision (Ph 4)**	N/A	78	25.7	N/A	4	102
Total	N/A	1,468	435.3	3.37	N/A	3,148

* 452 dwelling units are in Phase 2A, 2B, and 2C. Phase 3 is under design but conceptual plans estimate an addition 121 single-family units. Phase 3 will require submittal of a development application and review by the Planning Commission and City Council.

**Phase 4 of Westport Reserve Subdivision is under design but conceptual plans estimate 78 single-family units. Phase 4 will require submittal of a development application and review by the Planning Commission and City Council.

The replat and subdivision plans have been designed according to the requirements of the City's Land Development Code (LDC) and the dimensional standards outlined in the PC-A neighborhood-zoning district of the LDC.

The following subdivision improvements will be constructed before or simultaneously with the development of the first lot:

- Access onto Town West Blvd. and stub-out for future connection to adjacent tracts;
- Water, sewer, and reclaimed water infrastructure;
- Public local streets (Santa Rosa Court and Estero Loop) within the subdivision;
- Stormwater drainage infrastructure;
- Sidewalks and streetlights along Santa Rosa Court and Estero Loop; and
- 20' landscape buffer with 3' tall berm and decorative split-rail fence along Town West Blvd.

CONCURRENCY REVIEW:

Public facilities and services, such as roads, public infrastructure, schools, and recreational facilities are currently available to serve the proposed 28 residential lots. Any future phases will be separately evaluated for concurrency at the time of subdivision review. The following discussion summarizes the impacts the proposed development will have on the public facilities and services.

Water, Sewer, Reclaimed Water:

The proposed phase will be served by potable water, sanitary sewer, and reclaimed water. All lots will be provided with stub-outs for utilities, and the developer will construct potable water, sanitary sewer, and reclaimed water lines in accordance with the utility plan for this project.

Staff from the Public Utilities Department have worked with the applicant to master design the utilities for this area to ensure that adequate capacity will exist and that correct connections will be provided for future development of the project to the west of this phase.

Stormwater Drainage:

The City's adopted level-of-service standard for stormwater drainage requires that all new retention/detention facilities be able to treat and convey the runoff from the 25-year, 24-hour storm event without causing flooding or pollution of receiving waterbodies. In addition, there must be no net loss of stormwater retention function as a result of development; therefore, the subdivision property must have the same ability to store and discharge water after development as it does before development occurs.

Recreation and Open Space:

According to the City's 2015 Concurrency Management Report, the City is not deficient in any of the recreational facilities categories and there are sufficient facilities to support the additional population from this subdivision phase.

School Capacity:

The Volusia County School District determined that the adopted level of service will be met and capacity exists in the schools for the estimated students to be generated by the proposed subdivision.

Transportation:

A slight increase in the number of vehicular trips on Town West Boulevard will result with the proposed development of this property. Based on the ITE Trip Generation Manual, 9th Edition, the proposed development could generate an additional 28 p.m. peak hour trips and an additional 267 daily trips. According to the latest traffic counts for Town West Boulevard, there is roadway capacity for the traffic that could be generated by the proposed development of the subject property (Table 1. – Page 4).

Table 1. Town West Blvd. Capacity

Roadway Segment	Adopted Level-of-Service	Maximum Capacity	Vehicles per Day	Remaining Capacity	V/C Ratio
Town West Blvd. (Tomoka Farms Rd. to Coraci Blvd.)	E	17,900	2,742	15,158	0.15
Town West Blvd. (Coraci Blvd. to Williamson Blvd.)	E	17,900	5,985	11,915	0.33

* City of Port Orange Public Works – April 2016

** Volume/Capacity (V/C) Ratio – Volume-Demand-to-Capacity Ratio compares roadway demand (vehicle volumes) with roadway supply (carrying capacity). A V/C ratio of 1.00 indicates the roadway is operating at its capacity.

The subject property is located in the 1,200-acre master planned area called Planned Community-Agricultural (PC-A). In 2001/2002, the City established specific maximum unit per acre densities for the PC-A for areas designated for residential uses and intensities (square-footage) for areas designated for non-residential uses. Roadway network improvements (collector roads, intersection improvements, turn lanes, sufficient right-of-way etc.) to support the planned development were also established.

The proposed subdivision phase is located within the Neighborhood District of the PC-A, which consists of residential uses with maximum densities from 4 units per acre to 16 units per acre. As the Neighborhood District has developed over the past ten years, the required roadway improvements (Coraci Blvd, McGinnis Blvd, Town West Blvd., Town West/Williamson intersection, and turn lanes) to support the planned residential density have been built but the residential density developed or planned is less than originally planned in 2001/2002.

Based on the approved densities in the Neighborhood District, the maximum number of dwelling units that could be constructed is 3,148. If Phase 2C is approved, 100 acres in the Neighborhood District would remain vacant (Westport Reserve Phase 3 and 4); however, conceptual subdivision plans prepared by the property owner indicate the remaining land will be developed with +/- 199 single-family homes. As a result, when the Neighborhood District area is fully built out, it will have less than half of the maximum number of dwelling units it was planned for in the early 2000s (see Table 1 on Page 2).

Consistency with the Comprehensive Plan:

The subject property has a FLU designation of *Planned Community No. 1* on the City's Future Land Use Map. According to the Comprehensive Plan, the maximum gross residential density for the 148.7-acre overall PC-A area is four units/acre. With the addition of 28 single-family lots along with the 360 approved multi-family units and 64

approved single-family lots, the overall density for the 148.7-acre area is currently 3.04 units per acre. The development of the proposed single-family home subdivision is consistent with the intent of the FLU designation and permitted uses in the PC-A Neighborhood zoning district.

RECOMMENDATION:

Staff recommends approval of the Replat of Tract H of the Westport Reserve Subdivision and Subdivision Plans for Phase 2C, subject to the following:

1. Approval of the variance to allow the width of the wetland buffer be an average of 25' with a minimum width of 15'. If the variance is not approved the subdivision replat and plans will need to be revised prior to City Council to show a static 25' wetland buffer; and
2. Addressing labeling and formatting comments on the subdivision replat prior to City Council.

ATTACHMENT:

1. Subdivision Plans for Phase 2C
2. Replat of Tract H of the Westport Reserve Subdivision

Drawing Index

Civil

C01	COVER SHEET
C02 - C03	GENERAL NOTES
C04	OVERALL DEVELOPMENT PLAN
C05	PHASE 2C TREE PRESERVATION PLAN
C06	OVERALL TREE PRESERVATION PLAN
C07	EXISTING CONDITIONS PLAN
C08	EROSION CONTROL PLAN
C09	OVERALL SITE PLAN
C10	COMMON OPEN SPACE
C11	SITE PLAN
C12	UTILITY PLAN
C13	LOT & BLOCK GRADING PLAN
C14 - C15	PLAN & PROFILES
C15A	DRAINAGE STRUCTURES TABLE
C16	STRIPING PLAN
C17 - C22	CITY ROAD/DRAINAGE DETAILS
C23 - C25	CITY SEWER DETAILS
C26 - C28	CITY WATER DETAILS
C29 - C30	CITY RECLAIMED WATER DETAILS
C31	TYPICAL PAVING SECTIONS
C32	GEOTECHNICAL REPORT

Irrigation

IR-1 - IR-4 LANDSCAPE PLAN, DETAILS & NOTES

Survey

1 OF 1 BOUNDARY SURVEY

Landscape

L1.1	LAYOUT PLAN
L2.1 - L2.2	LANDSCAPE PLAN, NOTES & DETAILS

LEGAL DESCRIPTION:

A PORTION OF SECTIONS 13 AND 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE OCCUPIED SOUTHWEST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION 13; THENCE RUN S01°05'50"E A DISTANCE OF 190.22 FEET TO THE SOUTHEAST CORNER OF SAID SECTION 14; THENCE RUN S88°57'35"W ALONG THE EASTERLY EXTENSION OF THE OCCUPIED NORTHERLY LINE OF TOMOKA FARMS, AS RECORDED IN MAP BOOK 6, PAGE 192, AND RE-RECORDED IN MAP BOOK 22, PAGES 168 AND 169, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, A DISTANCE OF 2596.98 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 THREE COURSES ALONG SAID EASTERLY RIGHT-OF-WAY LINE: N16°08'29"W A DISTANCE OF 833.38 FEET; N10°03'47"W A DISTANCE OF 222.54 FEET; N06°47'13"W A DISTANCE OF 201.00 FEET; THENCE LEAVING SAID EASTERLY RIGHT-OF-WAY LINE RUN N87°42'50"E A DISTANCE OF 252.99 FEET; THENCE N27°43'56"W A DISTANCE OF 32.45 FEET; THENCE N31°24'40"W A DISTANCE OF 89.27 FEET; THENCE N32°35'34"W A DISTANCE OF 78.98 FEET; THENCE N07°21'34"W A DISTANCE OF 60.82 FEET; THENCE N00°19'32"W A DISTANCE OF 59.57 FEET; THENCE N61°15'13"E A DISTANCE OF 126.00 FEET; THENCE N65°48'17"E A DISTANCE OF 65.09 FEET; THENCE N20°03'24"E A DISTANCE OF 111.70 FEET; THENCE N84°27'18"E A DISTANCE OF 417.64 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 2065.94 FEET, A CENTRAL ANGLE OF 05°52'38", A CHORD BEARING OF N87°23'37"E, A CHORD DISTANCE OF 211.82 FEET; THENCE RUN NORTHEASTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 211.92 FEET; THENCE S89°40'04"E A DISTANCE OF 2504.37 FEET; THENCE S00°19'55"W A DISTANCE OF 40.25 FEET TO A POINT OF CURVATURE ON A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1250.00 FEET, A CENTRAL ANGLE OF 57°05'19", A CHORD BEARING OF S28°12'44"E, A CHORD DISTANCE OF 1194.59 FEET; THENCE RUN SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1245.48 FEET TO A POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 483.51 FEET, A CENTRAL ANGLE OF 56°47'27", A CHORD BEARING OF S28°21'40"E, A CHORD DISTANCE OF 459.87 FEET; THENCE RUN SOUTHEASTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 479.25 FEET TO THE OCCUPIED SOUTH LINE OF SAID SOUTHWEST 1/4 OF SECTION 13; THENCE S89°26'31"W ALONG SAID OCCUPIED SOUTH LINE OF THE SOUTHWEST 1/4, A DISTANCE OF 1376.04 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH:

A PORTION OF SECTION 13, 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 SAID SECTION 13; THENCE RUN N89°26'31"E ALONG THE OCCUPIED SOUTH LINE OF SAID SOUTHWEST 1/4 OF SECTION 13, A DISTANCE OF 1476.04 FEET TO A NON-TANGENT POINT ON A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 583.51 FEET, A CENTRAL ANGLE OF 56°41'21", A CHORD BEARING OF N28°24'43"W, A CHORD DISTANCE OF 554.07 FEET FOR A POINT OF BEGINNING; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 577.33 FEET TO A POINT OF REVERSE CURVATURE ON A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1150.00 FEET, A CENTRAL ANGLE OF 57°05'19", A CHORD BEARING OF N28°12'44"W, A CHORD DISTANCE OF 1099.03 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 1145.84 FEET; THENCE N00°19'55"E A DISTANCE OF 40.25 FEET; THENCE S89°40'04"E A DISTANCE OF 50.47 FEET TO A POINT ON THE EASTERLY LINE OF THE 30 FOOT FLORIDA GAS TRANSMISSION COMPANY RIGHT-OF-WAY EASEMENT RECORDED IN OFFICIAL RECORDS BOOK 669, PAGE 1, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE S35°50'40"E ALONG SAID EASTERLY LINE, A DISTANCE OF 1644.32 FEET; THENCE S28°31'44"E ALONG SAID EASTERLY LINE, A DISTANCE OF 181.84 FEET TO THE OCCUPIED SOUTH LINE OF THE AFORESAID SOUTHWEST 1/4 OF SECTION 13; THENCE S89°26'31"W ALONG SAID OCCUPIED SOUTH LINE OF THE SOUTHWEST 1/4, A DISTANCE OF 317.26 FEET TO THE POINT OF BEGINNING. CONTAINING: 148.747 ACRES, MORE OR LESS.

WESTPORT RESERVE (PHASE 2C)

City of Port Orange, Florida

FINAL SITE ENGINEERING PLANS

August 2016

Parcel ID. Number

6214-01-01-0014

6214-01-01-0015

Developer / Applicant / Owner

EDGE COVE, LLC
370 CENTERPOINTE CIRCLE, SUITE 1136
ALTAMONTE SPRINGS, FLORIDA 32701
CONTACT: M. SCOTT STEARNS, P.E., LEED AP
PHONE: 407-834-9560

Civil Engineer

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

Survey-Boundary & Topographic

DEWBERRY
800 NORTH MAGNOLIA AVE., SUITE 1000
ORLANDO, FLORIDA 32803
CONTACT: THOMAS CAMDEN
PHONE: (407) 843-5120

Geotechnical Engineer

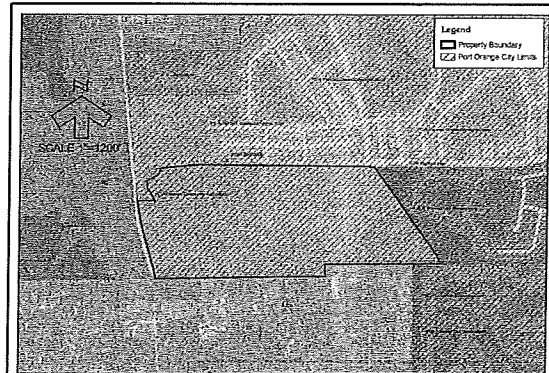
UNIVERSAL ENGINEERING SCIENCES
911 BEVILLE ROAD SUITE 3
SOUTH DAYTONA, FL 32119
CONTACT: BRIAN C. POHL, P.E.
PHONE: (386)756-1105

Traffic Engineer

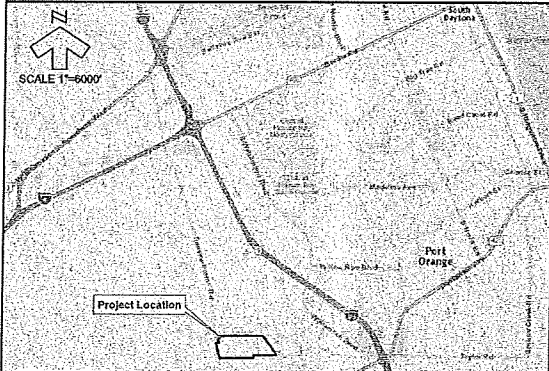
TRAFFIC ENGINEERING DATA SOLUTIONS, INC.
80 SPRING VISTA DRIVE
DEBARY, FL 32713
CONTACT: CHRIS J. WALSH, P.E.
PHONE: (386)753-0558

Landscape Architect

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



VICINITY ZONING MAP



SITE LOCATION

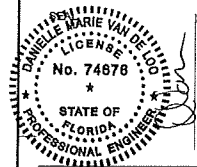
THIS IS TO CERTIFY THAT THE ROADWAY CONSTRUCTION PLANS AND SPECIFICATIONS AS CONTAINED HEREIN WERE DESIGNED TO APPLICABLE STANDARDS AS SET FORTH IN THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS" AS PREPARED BY FLORIDA DEPARTMENT OF TRANSPORTATION.



Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
ORLANDO, FL 32803
SUITE 1000
PHONE: 407.843.5120
ENGINEERING BUSINESS - 8754

WESTPORT RESERVE
(PHASE 2C)

PORT ORANGE, FL



RECEIVED
9-22-16

CITY OF PORT ORANGE
Community Development

REVISED

No.	DATE	BY	DESCRIPTION
1	9-19-16	TFS	REV PER COMMENTS

REVISIONS	
DRAWN BY	TFS
APPROVED BY	DMV
CHECKED BY	NPS
DATE	AUGUST 2016
DATUM	NAVD 88

TITLE

COVER
SHEET

PROJECT NO. 50079046 (CC 1)

C01

SHEET NO.

1

2

3

4

5

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:
CITY OF PORT ORANGE, FLORIDA
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SRJWMD)
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP)
FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)
AMERICANS WITH DISABILITIES ACT (ADA) BY U.S. DEPARTMENT OF JUSTICE
"MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED 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 SHOWN 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 UNCLEAR, FOR ENGINEER'S INTERPRETATION OF THE MORE STRINGENT CRITERIA TO BE USED.

4. THESE PLANS WERE BASED ON THE BOUNDARY AND TOPOGRAPHIC SURVEY BY DEWBERRY INC.

5. ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) DERIVED FROM NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION 1.605, BEING A ROUND CONCRETE MONUMENT WITH SURVEY DISK STAMPED "1.605 2004", LOCATED 710 FEET NORTH OF THE APPROXIMATE CENTERLINE OF SHUNZ ROAD, 242 FEET NORTH-NORTHWEST OF A FIRE HYDRANT, 228 FEET NORTH-NORTHWEST OF A POWER POLE, 81.6 FEET SOUTH OF A POWER POLE, 53.5 FEET WEST-SOUTHWEST OF THE CENTERLINE OF COUNTY ROAD 416, 2.8 FEET EAST OF A 4-INCH-WIRE FENCE, AND 27 FEET EAST OF A CANSITE WITNESS POST, IN SECTION 11, TOWNSHIP 16 SOUTH, RANGE 32 EAST, VOLusia COUNTY, FLORIDA, HAVING AN ELEVATION OF 23.79 FEET.
THE CORPSPCON ELEVATION DATUM CONVERSION FROM NAVD 88 TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29) = +1.42 FEET.
THE PLANTATION DEVELOPMENT ELEVATION DATUM CONVERSION FROM NAVD 88 TO NGVD 29 = +1.53 FEET.

6. THESE PLANS WERE BASED ON THE GEOTECHNICAL REPORT(S) PROJECT NUMBER 0430.1500169.0000 BY UNIVERSAL ENGINEERING SCIENCES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE A COPY OF THE REPORT(S) FROM THE GEOTECHNICAL ENGINEER, FAMILIARIZE THEMSELVES WITH THE CONDITIONS AS DESCRIBED IN THE REPORT(S), AND COMPLY WITH ALL RECOMMENDATIONS MADE IN THE REPORT(S) SPECIFICALLY FOR SOIL PREPARATION ON THE SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF ALL SUPPLEMENTAL REPORTS FROM THE OWNER AND TO FOLLOW THE SUPPLEMENTAL REPORTS' RECOMMENDATIONS.

7. GEOTECHNICAL RECOMMENDATIONS OR RECOMMENDATIONS AS PROVIDED IN SUPPLEMENTAL REPORTS BY OTHERS ARE NOT THE RESPONSIBILITY OF DEWBERRY INC. WHO HAS RELIED UPON THE REFERENCED GEOTECHNICAL REPORT(S) IN 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 AND IN WRITING. DEWBERRY INC. ASSUMES NO RESPONSIBILITY FOR THE CORRECTNESS, COMPLETENESS, OR ACCURACY OF THE REPORT(S). WHEN THE PLANS AND/OR SPECIFICATIONS CONTAIN THE RESULTS OF A SOILS SURVEY, THE CONTRACTOR SHALL NOT ASSUME THE INFORMATION IS A GUARANTEE OF THE DEPTH, EXTENT OR CHARACTER OF MATERIAL PRESENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE A NECESSARY EXAMINATION OF THE SITE AND OF ANY MATERIAL SOURCES INDICATED ON THE PLANS TO BE INFORMED OF THE CONDITIONS UNDER WHICH CONSTRUCTION IS TO OCCUR.

8. THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES OF PERMITS FOR ALL AGENCIES HAVING JURISDICTION, SUCH AS GOVERNMENTAL AGENCIES OR LOCAL AGENCIES. THE CONTRACTOR SHALL BE EXPECTED TO REVIEW AND ABIDE BY ALL THE TERMS, CONDITIONS, REQUIREMENTS AND LIMITATIONS SET FORTH IN ALL OF THESE 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 GEOTECHNICAL REPORT(S), BOUNDARY AND TOPOGRAPHIC SURVEY(S), SWPPP AND REQUIRED PERMITS 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 R.A. GRAY BUILDING, 509 S. BROWNGATE ST. TALLAHASSEE, FLORIDA 32399-0250.

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 EFFECT 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 AVAILABLE AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF THE LOCATION INFORMATION PROVIDED. ANY INACCURACY OR OMISSION IN SUCH INFORMATION SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PROTECT THE EXISTING FEATURES FROM DAMAGE OR UNSCHEDULED INTERRUPTION OF SERVICE. SHOULD A DISCREPANCY ARISE BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, WHICH WOULD APPRECIABLY 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 THE 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 BUFFERS, RETENTION AND DETENTION FACILITIES UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE OWNER. ALL DISTURBED AREAS 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 CONTRACTOR'S EMPLOYEES AND ALL HIS SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.

6. ALL WORK AND FURNISHED MATERIALS SHALL CONFORM WITH THE LINES, GRADES, GRADING SECTIONS, CROSS SECTIONS, DIMENSIONS, MATERIAL REQUIREMENTS AND TESTING REQUIREMENTS THAT ARE SPECIFIED IN THE CONTRACT, PLANS, DETAILS OR SPECIFICATIONS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL NECESSARY ARRANGEMENTS WITH GOVERNMENTAL DEPARTMENTS, PUBLIC UTILITIES, PUBLIC CARRIERS, SERVICE COMPANIES AND CONTRACTORS OR CONTROLLING ROADWAY TRAVEL, WATER, SEWER, GAS, ELECTRICAL, TELEPHONE, AND TELEGRAPH FACILITIES SUCH AS PAVEMENTS, TRACKS, PIPING, WIRES, CABLES, CONDUITS, POLES, GUYS, 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 THROUGH THE CONSTRUCTION ZONE IN CONFORMITY 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.

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

10. THE CONTRACTOR SHALL COMPLY WITH ALL LEGAL LOAD 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.

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, IN ANY MONUMENTATION IS DISTURBED, IT SHALL BE RESTORED BY A FLORIDA LICENSED SURVEYOR AND MAPPER SELECTED BY THE OWNER AT THE CONTRACTOR'S EXPENSE.

12. THE OWNER, OWNER'S REPRESENTATIVES AND INSPECTORS OF APPLICABLE GOVERNMENT AGENCIES HAVING JURISDICTION, SHALL AT ALL TIMES HAVE ACCESS TO THE WORK SITE WHEREVER AND WHENEVER IT IS IN 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 STORED ON SITE ARE SAFE AND SECURED 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 FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND GUIDELINES PERTAINING TO SAFE UTILIZATION OF EQUIPMENT OR MATERIALS AS PUBLISHED BY MANUFACTURERS.

15. ADEQUATE TRAFFIC CONTROL, SIGNAGE, BARRICADES AND FLAGMAN 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 ROADWAY.

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

17. 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.

18. 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, ATTORNEY'S 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. THE CONTRACTOR SHALL INDEMNIFY OWNER FROM ANY SUCH CLAIMS, PENALTIES, SUITS OR ACTIONS, PUBLIC OR PRIVATE, ADMINISTRATIVE OR JUDICIAL, INCLUDING ATTORNEY'S FEES PAID OR INCURRED BY OR ON BEHALF OF OWNER, JOINTLY OR SEVERALLY, AND/OR 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

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/DEP NPDES CRITERIA TO MINIMIZE EROSION AND INSURE PROPER FUNCTIONING OF STORM WATER MANAGEMENT SYSTEM UPON COMPLETION OF CONSTRUCTION. IN ADDITION TO MEETING EPA/DEP NPDES CRITERIA, THE SWPPP SHALL BE SUBMITTED TO AND COMPLY WITH LOCAL AGENCY HAVING JURISDICTION'S MINIMUM EROSION CONTROL CRITERIA.

3. CONTRACTOR SHALL EXECUTE ALL MEASURES NECESSARY 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 SATISFIED UNTIL PROJECT IS FULLY COMPLETED AND ACCEPTED. CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE ON TEMPORARY EROSION CONTROL FEATURES AT HIS EXPENSE. PROVISION MUST BE MADE TO PRESERVE THE INTEGRITY AND CAPACITY OF CHECK DAMS, SEDIMENT BASINS, SLOTTED PIPE RAIN GUTTERS, ETC. REQUIRED TO MEET THIS PROVISION THROUGHOUT THE LIFE OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE SILT BARRIERS, MURRAY FILTERS, TEMPORARY GRASSING, ETC. AS REQUIRED TO FULLY COMPLY WITH THE INTENT OF THIS SPECIFICATION. CONTRACTOR SHALL PROVIDE CONTINUOUS MONITORING OF EROSION AND SEDIMENT CONTROL TACTICS AND ALL CORRECTIVE MEASURES. A COPY OF THE APPROVED SWPPP SHALL BE KEPT ON SITE AT ALL TIMES FOR REVIEW BY OWNER'S REPRESENTATIVE AND BY NPDES 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 INTENT 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 104 OF THE STATE DEPT. OF TRANSPORTATION STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. (F.D.O.T. SECTION 104)

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 SOCKS PLACED IN FRONT OF THE THROAT OF CURB INLETS, DURING CONSTRUCTION.

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

8. ALL SLOPES 3:1 OR GREATER SHALL BE SODDED. ALL POND SLOPES AND RIGHTS-OF-WAY SHALL BE SODDED.

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

DEMOLITION AND CLEARING

1. PRIOR TO CONSTRUCTION, 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 TRENCHING FOR PROPOSED IMPROVEMENTS SUCH AS UTILITIES, WILL REQUIRE THE ADVANCED PRE-TREATMENT OF EACH IMPACTED TREE BY A QUALIFIED ARBORIST OR AT THE DIRECTION OF THE LANDSCAPE ARCHITECT TO MINIMIZE THE POTENTIALLY ADVERSE 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, STUMP, GRASS, GROUND COVER, GRAVELY MATERIAL, RUBBISH AND ANY OTHER DELETERIOUS MATERIAL BEFORE EMBANKMENT IS PLACED. IMMEDIATELY PRIOR TO THE PLACING OF FILL MATERIAL, THE ENTIRE AREA UPON WHICH FILL IS TO BE PLACED, SHALL BE SCARIFIED IN A DIRECTION APPROXIMATELY PARALLEL TO THE AXIS OF FILL. THE GEOTECHNICAL 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 PRIOR TO ANY CONSTRUCTION. IF A PLAT DOES NOT EXIST, CONTRACTOR IS TO VERIFY USE OF THE SURVEY FOR LAYOUT WITH ENGINEER PRIOR TO STARTING WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO INSURE CORRECT POSITIONING, BOTH HORIZONTAL AND VERTICAL, INCLUDING MINIMUM BUILDING SETBACKS PRIOR TO THE BEGINNING 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 EXCAVATION (INCLUDING BUT NOT LIMITED TO TUNNELS, DITCHES, STORM WATER PONDS, CANALS, ARTIFICIAL LAKES) CONTRACTOR SHALL INSTALL SAFETY FENCING AND TAKE ALL OTHER REASONABLE AND PRUDENT STEPS TO INSURE THAT ACCESS TO EXCAVATION BY UNAUTHORIZED PERSONNEL IS PREVENTED. ANY PERMANENT FENCING WILL REQUIRE A SEPARATE BUILDING PERMIT.

PUBLIC RIGHTS-OF-WAY

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

2. PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC OR 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 ROW FOR THEIR APPROVAL. THIS PLAN MUST MEET THE MINIMUM REQUIREMENTS AND STANDARDS OBTAINED 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

UTILITY PROVIDERS:
WATER: PORT ORANGE PUBLIC UTILITIES DEPARTMENT - (386) 506-5750
RECLAIMED WATER: PORT ORANGE PUBLIC UTILITIES DEPARTMENT - (386) 506-5750
SANITARY SEWER: PORT ORANGE PUBLIC UTILITIES DEPARTMENT - (386) 506-5750
SOLID WASTE: WASTE PRO - (888) 506-6575
ELECTRIC: FLORIDA POWER & LIGHT - (386) 322-3420
TELEPHONE: AT&T - (800) 222-2200
CABLE: BRIGHT HOUSE NETWORKS - (386) 760-9950
GAS: TECO PEOPLES GAS - 1-877-632-6747 & FLORIDA PUBLIC UTILITIES - (386) 686-9338

1. THE EXISTING UTILITIES SHOWN 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 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 656 AND THE SUNSHINE STATE ONE-CALL ACT OF FLORIDA.

3. CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS AND THE SUNSHINE UNDERGROUND UTILITIES NOTIFICATION CENTER AT 1-800-482-4770 AT LEAST 72 HOURS PRIOR TO START OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE 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 5 FEET OUTSIDE OF THE BUILDING UNLESS OTHERWISE NOTED. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL REVIEW BUILDING ARCHITECTURAL AND PLUMBING PLANS TO VERIFY PROPER CONTINUATION OF THE PROPOSED UTILITIES FOR LOCATION, ALIGNMENT AND ELEVATION(S) FOR EACH SERVICE TO THE BUILDING(S). SHOULD UTILITY SERVICE LATERALS 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 INSURE PROPER CONSTRUCTION PHASING IS ACHIEVED, AND TO ALLOW THE INSTALLATION OF STREET CROSSINGS, SLEEVES, CONDUITS, POLES, TRANSFORMERS, AND OTHER REQUIRED EQUIPMENT. IT IS THE OWNERS 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 PHASING IS ACHIEVED, CONFLICT FREE, AND TO ALLOW THE INSTALLATION OF STREET CROSSINGS, SLEEVES, CONDUITS, POLES, 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 THEREIN 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' LIFTS, SHALL BE COMPACTED TO 88% OF THE MODIFIED PROCTOR MAXIMUM DENSITY; ALL OTHER UTILITY TRENCHES SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DENSITY.

9. THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITIES CONSTRUCTION DEPARTMENT FOR THE CORRESPONDING LOCAL UTILITY 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 THE GRAVITY SEWER TO CHECK PIPE ALIGNMENT AND DEFLECTION.

11. ALL FIRE HYDRANTS AND APPARATUS MUST COMPLY WITH FPPC SECTION 3-5.6 AND SECTION 3-7.1 WHEN APPLICABLE.

12. MAXIMUM SPACING OF FIRE HYDRANTS IS 600' IN ACCORDANCE WITH CITY CODE 24.30 (F.I.L.).

13. UNDERGROUND MAIN CONTRACTOR MUST APPLY FOR A FIRE PERMIT FOR THE INSTALLATION OR MODIFICATION OF ANY UNDERGROUND UTILITY. CONTRACTOR SHALL COORDINATE WITH THE FIRE DEPARTMENT TO OBTAIN THE NECESSARY PERMIT. THE WATER DISTRIBUTION SYSTEM AND FIRE HYDRANTS ARE LOCATED IN A RIGHT-OF-WAY OR RECORDED EASEMENT AND OWNED/INSTALLED/MAINTAINED BY THE WATER PURVEYOR. WE WILL ONLY REQUIRE INSTALLATION TO THE WATER PURVEYOR'S STANDARDS FOR UNDERGROUND COMPONENTS AND SHALL NOT REQUIRE ANY OTHER STANDARDS. CONTRACTOR SHALL OBTAIN THE NECESSARY PERMIT, LOCATION, DISTRIBUTION, COLOR CODING, AND NEEDED FIRE FLOW MINIMUMS AS SPECIFIED IN CITY FIRE CODE, UNDERGROUND MAIN AND FIRE HYDRANT INSTALLATIONS ON PRIVATE PROPERTY WILL REQUIRE AN FIR PERMIT AND FULL COMPLIANCE WITH NFPA 24, [CITY FIRE CODE, SECTION 24.13(T)(13)].

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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:
CITY OF PORT ORANGE, FLORIDA
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SRJWMD)
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP)
FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)
AMERICANS WITH DISABILITIES ACT (ADA) BY U.S. DEPARTMENT OF JUSTICE
"MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED 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 SHOWN 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 UNCLEAR, FOR ENGINEER'S INTERPRETATION OF THE MORE STRINGENT CRITERIA TO BE USED.

4. THESE PLANS WERE BASED ON THE BOUNDARY AND TOPOGRAPHIC SURVEY BY DEWBERRY INC.

5. ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) DERIVED FROM NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION 1.605, BEING A ROUND CONCRETE MONUMENT WITH SURVEY DISK STAMPED "1.605 2004", LOCATED 710 FEET NORTH OF THE APPROXIMATE CENTERLINE OF SHUNZ ROAD, 242 FEET NORTH-NORTHWEST OF A FIRE HYDRANT, 228 FEET NORTH-NORTHWEST OF A POWER POLE, 81.6 FEET SOUTH OF A POWER POLE, 53.5 FEET WEST-SOUTHWEST OF THE CENTERLINE OF COUNTY ROAD 416, 2.8 FEET EAST OF A 4-INCH-WIRE FENCE, AND 27 FEET EAST OF A CANSITE WITNESS POST, IN SECTION 11, TOWNSHIP 16 SOUTH, RANGE 32 EAST, VOLusia COUNTY, FLORIDA, HAVING AN ELEVATION OF 23.79 FEET.
THE CORPSPCON ELEVATION DATUM CONVERSION FROM NAVD 88 TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29) = +1.42 FEET.
THE PLANTATION DEVELOPMENT ELEVATION DATUM CONVERSION FROM NAVD 88 TO NGVD 29 = +1.53 FEET.

6. THESE PLANS WERE BASED ON THE GEOTECHNICAL REPORT(S) PROJECT NUMBER 0430.1500169.0000 BY UNIVERSAL ENGINEERING SCIENCES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE A COPY OF THE REPORT(S) FROM THE GEOTECHNICAL ENGINEER, FAMILIARIZE THEMSELVES WITH THE CONDITIONS AS DESCRIBED IN THE REPORT(S), AND COMPLY WITH ALL RECOMMENDATIONS MADE IN THE REPORT(S) SPECIFICALLY FOR SOIL PREPARATION ON THE SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF ALL SUPPLEMENTAL REPORTS FROM THE OWNER AND TO FOLLOW THE SUPPLEMENTAL REPORTS' RECOMMENDATIONS.

7. GEOTECHNICAL RECOMMENDATIONS OR RECOMMENDATIONS AS PROVIDED IN SUPPLEMENTAL REPORTS BY OTHERS ARE NOT THE RESPONSIBILITY OF DEWBERRY INC. WHO HAS RELIED UPON THE REFERENCED GEOTECHNICAL REPORT(S) IN 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 AND IN WRITING. DEWBERRY INC. ASSUMES NO RESPONSIBILITY FOR THE CORRECTNESS, COMPLETENESS, OR ACCURACY OF THE REPORT(S). WHEN THE PLANS AND/OR SPECIFICATIONS CONTAIN THE RESULTS OF A SOILS SURVEY, THE CONTRACTOR SHALL NOT ASSUME THE INFORMATION IS A GUARANTEE OF THE DEPTH, EXTENT OR CHARACTER OF MATERIAL PRESENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE A NECESSARY EXAMINATION OF THE SITE AND OF ANY MATERIAL SOURCES INDICATED ON THE PLANS TO BE INFORMED OF THE CONDITIONS UNDER WHICH CONSTRUCTION IS TO OCCUR.

8. THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES OF PERMITS FOR ALL AGENCIES HAVING JURISDICTION, SUCH AS GOVERNMENTAL AGENCIES OR LOCAL AGENCIES. THE CONTRACTOR SHALL BE EXPECTED TO REVIEW AND ABIDE BY ALL THE TERMS, CONDITIONS, REQUIREMENTS AND LIMITATIONS SET FORTH IN ALL OF THESE 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 GEOTECHNICAL REPORT(S), BOUNDARY AND TOPOGRAPHIC SURVEY(S), SWPPP AND REQUIRED PERMITS 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 R.A. GRAY BUILDING, 509 S. BROWNGATE ST. TALLAHASSEE, FLORIDA 32399-0250.

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 EFFECT 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 AVAILABLE AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF THE LOCATION INFORMATION PROVIDED. ANY INACCURACY OR OMISSION IN SUCH INFORMATION SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PROTECT THE EXISTING FEATURES FROM DAMAGE OR UNSCHEDULED INTERRUPTION OF SERVICE. SHOULD A DISCREPANCY ARISE BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, WHICH WOULD APPRECIABLY 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 THE 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 BUFFERS, RETENTION AND DETENTION FACILITIES UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE OWNER. ALL DISTURBED AREAS 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 CONTRACTOR'S EMPLOYEES AND ALL HIS SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.

6. ALL WORK AND FURNISHED MATERIALS SHALL CONFORM WITH THE LINES, GRADES, GRADING SECTIONS, CROSS SECTIONS, DIMENSIONS, MATERIAL REQUIREMENTS AND TESTING REQUIREMENTS THAT ARE SPECIFIED IN THE CONTRACT, PLANS, DETAILS OR SPECIFICATIONS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL NECESSARY ARRANGEMENTS WITH GOVERNMENTAL DEPARTMENTS, PUBLIC UTILITIES, PUBLIC CARRIERS, SERVICE COMPANIES AND CONTRACTORS OR CONTROLLING ROADWAY TRAVEL, WATER, SEWER, GAS, ELECTRICAL, TELEPHONE, AND TELEGRAPH FACILITIES SUCH AS PAVEMENTS, TRACKS, PIPING, WIRES, CABLES, CONDUITS, POLES, GUYS, 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 THROUGH THE CONSTRUCTION ZONE IN CONFORMITY 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.

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

10. THE CONTRACTOR SHALL COMPLY WITH ALL LEGAL LOAD 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.

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, IN ANY MONUMENTATION IS DISTURBED, IT SHALL BE RESTORED BY A FLORIDA LICENSED SURVEYOR AND MAPPER SELECTED BY THE OWNER AT THE CONTRACTOR'S EXPENSE.

12. THE OWNER, OWNER'S REPRESENTATIVES AND INSPECTORS OF APPLICABLE GOVERNMENT AGENCIES HAVING JURISDICTION, SHALL AT ALL TIMES HAVE ACCESS TO THE WORK SITE WHEREVER AND WHENEVER IT IS IN 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 STORED ON SITE ARE SAFE AND SECURED 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 FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND GUIDELINES PERTAINING TO SAFE UTILIZATION OF EQUIPMENT OR MATERIALS AS PUBLISHED BY MANUFACTURERS.

15. ADEQUATE TRAFFIC CONTROL, SIGNAGE, BARRICADES AND FLAGMAN 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 ROADWAY.

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

17. 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.

18. 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, ATTORNEY'S 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. THE CONTRACTOR SHALL INDEMNIFY OWNER FROM ANY SUCH CLAIMS, PENALTIES, SUITS OR ACTIONS, PUBLIC OR PRIVATE, ADMINISTRATIVE OR JUDICIAL, INCLUDING ATTORNEY'S FEES PAID OR INCURRED BY OR ON BEHALF OF OWNER, JOINTLY OR SEVERALLY, AND/OR 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

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/DEP NPDES CRITERIA TO MINIMIZE EROSION AND INSURE PROPER FUNCTIONING OF STORM WATER MANAGEMENT SYSTEM UPON COMPLETION OF CONSTRUCTION. IN ADDITION TO MEETING EPA/DEP NPDES CRITERIA, THE SWPPP SHALL BE SUBMITTED TO AND COMPLY WITH LOCAL AGENCY HAVING JURISDICTION'S MINIMUM EROSION CONTROL CRITERIA.

3. CONTRACTOR SHALL EXECUTE ALL MEASURES NECESSARY 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 SATISFIED UNTIL PROJECT IS FULLY COMPLETED AND ACCEPTED. CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE ON TEMPORARY EROSION CONTROL FEATURES AT HIS EXPENSE. PROVISION MUST BE MADE TO PRESERVE THE INTEGRITY AND CAPACITY OF CHECK DAMS, SEDIMENT BASINS, SLOTTED PIPE RAIN GUTTERS, ETC. REQUIRED TO MEET THIS PROVISION THROUGHOUT THE LIFE OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE SILT BARRIERS, MURRAY FILTERS, TEMPORARY GRASSING, ETC. AS REQUIRED TO FULLY COMPLY WITH THE INTENT OF THIS SPECIFICATION. CONTRACTOR SHALL PROVIDE CONTINUOUS MONITORING OF EROSION AND SEDIMENT CONTROL TACTICS AND ALL CORRECTIVE MEASURES. A COPY OF THE APPROVED SWPPP SHALL BE KEPT ON SITE AT ALL TIMES FOR REVIEW BY OWNER'S REPRESENTATIVE AND BY NPDES 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 INTENT 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 104 OF THE STATE DEPT. OF TRANSPORTATION STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. (F.D.O.T. SECTION 104)

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 SOCKS PLACED IN FRONT OF THE THROAT OF CURB INLETS, DURING CONSTRUCTION.

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

8. ALL SLOPES 3:1 OR GREATER SHALL BE SODDED. ALL POND SLOPES AND RIGHTS-OF-WAY SHALL BE SODDED.

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

DEMOLITION AND CLEARING

1. PRIOR TO CONSTRUCTION, 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 TRENCHING FOR PROPOSED IMPROVEMENTS SUCH AS UTILITIES, WILL REQUIRE THE ADVANCED PRE-TREATMENT OF EACH IMPACTED TREE BY A QUALIFIED ARBORIST OR AT THE DIRECTION OF THE LANDSCAPE ARCHITECT TO MINIMIZE THE POTENTIALLY ADVERSE 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, STUMP, GRASS, GROUND COVER, GRAVELY MATERIAL, RUBBISH AND ANY OTHER DELETERIOUS MATERIAL BEFORE EMBANKMENT IS PLACED. IMMEDIATELY PRIOR TO THE PLACING OF FILL MATERIAL, THE ENTIRE AREA UPON WHICH FILL IS TO BE PLACED, SHALL BE SCARIFIED IN A DIRECTION APPROXIMATELY PARALLEL TO THE AXIS OF FILL. THE GEOTECHNICAL 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 PRIOR TO ANY CONSTRUCTION. IF A PLAT DOES NOT EXIST, CONTRACTOR IS TO VERIFY USE OF THE SURVEY FOR LAYOUT WITH ENGINEER PRIOR TO STARTING WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO INSURE CORRECT POSITIONING, BOTH HORIZONTAL AND VERTICAL, INCLUDING MINIMUM BUILDING SETBACKS PRIOR TO THE BEGINNING 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 EXCAVATION (INCLUDING BUT NOT LIMITED TO TUNNELS, DITCHES, STORM WATER PONDS, CANALS, ARTIFICIAL LAKES) CONTRACTOR SHALL INSTALL SAFETY FENCING AND TAKE ALL OTHER REASONABLE AND PRUDENT STEPS TO INSURE THAT ACCESS TO EXCAVATION BY UNAUTHORIZED PERSONNEL IS PREVENTED. ANY PERMANENT FENCING WILL REQUIRE A SEPARATE BUILDING PERMIT.

PUBLIC RIGHTS-OF-WAY

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

2. PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC OR 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 ROW FOR THEIR APPROVAL. THIS PLAN MUST MEET THE MINIMUM REQUIREMENTS AND STANDARDS OBTAINED 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

UTILITY PROVIDERS:
WATER: PORT ORANGE PUBLIC UTILITIES DEPARTMENT - (386) 506-5750
RECLAIMED WATER: PORT ORANGE PUBLIC UTILITIES DEPARTMENT - (386) 506-5750
SANITARY SEWER: PORT ORANGE PUBLIC UTILITIES DEPARTMENT - (386) 506-5750
SOLID WASTE: WASTE PRO - (888) 506-65

- ALL PVC WATER MAINS 2" OR LESS SHALL BE SDR21 (200 PSI) UNLESS OTHERWISE NOTED.
- WATER MAINS SHALL COMPLY WITH AWWA STANDARDS. ALL PVC PIPE 3 TO 12 INCHES SHALL BE AWWA C900 DR18. ALL PVC PIPE 14 INCHES AND LARGER SHALL COMPLY WITH AWWA C905 DR25. ALL WATER MAINS SHALL BEAR THE NSF LOGO AND SHALL BE COLOR-CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM OTHER WATER LINES.
- WHERE DUCTILE IRON PIPE IS REQUIRED FOR WATER MAINS, IT SHALL CONFORM TO ANSI/AWWA A21.51, A MINIMUM THICKNESS FOR PRESSURE CLASS 350 PER ANSI/AWWA SHALL BE SUPPLIED. DIP SIZES UP TO 12 INCHES IN DIAMETER SHALL BE PRESSURE CLASS 350. DIP SIZES 14 INCHES AND LARGER SHALL BE PRESSURE CLASS 250.
- ALL WATER MAIN FITTINGS, VALVES, RESTRAINTS, COUPLINGS, PIPE, AND IN GENERAL, THOSE MATERIALS REQUIRED FOR INSTALLING THE WATER SUPPLY SYSTEM, SHALL COMPLY WITH THE MINIMUM MATERIAL STANDARDS, RATINGS AND CLASSIFICATIONS ESTABLISHED BY THE AWWA CODE OF PRACTICE. ALL WATER MAIN FITTINGS SHALL BE DIP FOR ALL 3" THRU 12" PVC AND DIP WATER MAINS CONFORMING TO THE REQUIREMENTS OF ANSI/AWWA C153/A21.53 AND EPOXY COATED EXTERIOR, UNLESS NOTED OTHERWISE. THESE FITTINGS SHALL INCORPORATE RESTRAINING RINGS, MEGA-LUGS OR OTHER APPROVED EQUIVALENT MECHANICAL DEVICES.
- DUCTILE IRON PIPE AND FITTINGS SHALL HAVE A CEMENT MORTAR INTERIOR LINING CONFORMING TO THE REQUIREMENTS OF ANSI/AWWA C104/A21.4.
- VALVES FOR POTABLE AND RAW WATER MAINS SHALL BE DUCTILE IRON (D.I.) EPOXY COATED GATE VALVES OR BUTTERFLY VALVES. SEE SPECIFICATIONS FOR DETAILS.
- ALL POLYETHYLENE PRESSURE PIPE AND FITTINGS 4 INCH AND LARGER SHALL CONFORM TO AWWA STANDARD C906-99 (DR11) PRESSURE CLASS 160 AND ASTM STANDARD D3330, D2837 PE 3408.
- ALL POLYETHYLENE PIPES FOR SERVICE TUBING SHALL CONFORM TO AWWA STANDARD C901 (DR9) PRESSURE CLASS 200 AND STANDARD D2737 PE 3408.
- ALL PIPE AND POLYETHYLENE SERVICE TUBING SHALL BEAR THE NATIONAL SANITATION FOUNDATION (NSF) SEAL OF APPROVAL FOR POTABLE WATER SERVICE.
- PVC PIPE LESS THAN 2 INCHES SHALL CONFORM TO ASTM D1785. THREADED PIPE AND FITTINGS SHALL BE SCH. 40 AND CONFORM TO ASTM D2464. UNTHREADED PIPE AND FITTINGS SHALL BE SCH. 40 WITH SOLVENT-CEMENTED JOINTS. CEMENTED JOINTS AND FITTINGS SHALL COMPLY WITH ASTM D2466 AND D2855.
- 2", 2.5" AND 3" PVC PIPE SHALL CONFORM TO ASTM D2241. PIPE SHALL BE FURNISHED IN 20-FOOT LENGTHS. SHALL HAVE DIMENSION RATIO (DR21) AND A WATER PRESSURE RATING OF 200 PSI.
- PIPE MEASUREMENTS SHALL BE CENTER TO CENTER OF FITTINGS OR VALVES.
- CONTRACTOR SHALL PROVIDE TEMPORARY THRUST RESTRAINTS, BRACING, TEST PLUGS AND/OR OTHER DEVICES NECESSARY TO SUCCESSFULLY COMPLETE PRESSURE TESTING OF ALL PRESSURE PIPING SYSTEMS, ANCILLARY TO THE WORK.
- AUTOMATIC AIR RELEASE/VAUUM AIR RELEASE VALVES FOR UNDERGROUND INSTALLATION SHALL CONFORM WITH 62-555.320(21)(B)FAC & RSWW 8.4.2.
- ALL BURIED PIPING SPECIFIED FOR PRESSURE SERVICE SHALL BE PROVIDED WITH RESTRAINING DEVICES AT ALL DIRECTIONAL CHANGES, UNLESS NOTED OTHERWISE.
- ALL FASTENERS SHALL BE MANUFACTURED OF NON-CORROSIVE MATERIALS.
- LOCATIONS AND DIMENSIONS OF EXISTING RIGHTS-OF-WAY AND EASEMENTS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY ALL THE LIMITS OF RIGHTS-OF-WAY AND EASEMENTS IN ORDER TO AVOID ENCRoACHMENTS.
- THE CONTRACTOR SHALL REPAIR OR REPLACE WITH EQUAL MATERIALS IN KIND OR AS DIRECTED BY THE OWNER OR INSPECTOR ANY ITEMS DISTURBED OR DAMAGED BY THE UTILITY CONSTRUCTION OR ITS RELATED ACTIVITIES FOR ITEMS SUCH AS BUT NOT LIMITED TO, PAVING, STABILIZED EARTH, DRIVEWAYS, ETC.
- CONTRACTOR SHALL PAINT THE HYDRANTS ACCORDING TO FIRE DEPARTMENT REQUIREMENTS.
- WHERE APPLICABLE FINE HYDRANTS SHALL BE INSTALLED WITHIN THE ROW.
- PROPER BACKFLOW PREVENTION ASSEMBLIES SHALL BE PROVIDED IN ACCORDANCE WITH RULE 62-555.360, F.A.C. AND AWWA MANUAL 1100.01. BACKFLOW PREVENTION SHALL BE PROVIDED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION PERMIT FOR CONSTRUCTION OF THE WATER DISTRIBUTION SYSTEM (IF PERMIT IS REQUIRED). DOCUMENTATION OF THE MINIMUM TESTING RESULTS SUCH AS BACTERIOLOGICAL REPORTS WITH RESIDUAL CL LEVELS SHALL BE SUBMITTED TO THE ENGINEER WITHIN 15 DAYS FROM THE DAY OF SAMPLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND VERIFY THE RESULTS AS PASSING PRIOR TO SUBMITTAL TO THE ENGINEER.
- ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED IN ACCORDANCE WITH AWWA STANDARDS. LATEST REVISIONS. HYDROSTATIC TESTING FOR PVC MAINS SHALL BE 160 PSI FOR MINIMUM OF 2 HOURS AND MEET AWWA STANDARD C605/M23. DUCTILE IRON MAINS SHALL BE TESTED AT 150 PSI FOR 2 HOURS PER AWWA C600. ALL NEW MAINS SHALL BE DISINFECTED PER AWWA STANDARD C651. BACTERIOLOGICAL TESTING FOR 2 CONSECUTIVE DAYS SHALL BE APPROVED PRIOR TO PLACING SYSTEM INTO SERVICE.
- ALL WATER MAINS SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE SHALL BE INSTALLED DURING THE BACKFILL 6" TO 12 INCHES BELOW FINISH GRADE DIRECTLY OVER THE PIPE AND BE COMPOSED OF THE FOLLOWING "CAUTION - WATER MAIN BURIED BELOW" THE TAPE SHALL HAVE AN EMBEDDED METALLIC DETECTABLE STRIP AND BE BLUE IN COLOR FOR POTABLE WATER.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL EQUIPMENT AND MATERIALS FOR APPROVAL TO THE ENGINEER AND WATER SERVICE PROVIDER PRIOR TO PROCUREMENT.

1. ALL PIPE, PIPE FITTINGS, JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED WILL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS.
2. ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED AND THAT WILL COME INTO CONTACT WITH DRINKING WATER WILL CONFORM TO NSF INTERNATIONAL STANDARD 61 AS ADOPTED IN RULE 6-555.335, F.A.C., OR OTHER APPLICABLE STANDARDS, REGULATIONS, OR REQUIREMENTS REFERENCED IN PARAGRAPH 6-55.320 (F)(8), F.A.C.
3. ALL PIPE AND PIPE FITTINGS INSTALLED WILL CONTAIN NO MORE THAN 8.0% LEAD, AND ANY SOLDER OR FLUX USED IN THIS PROJECT WILL CONTAIN NO MORE THAN 0.2% LEAD.
4. ALL PIPE AND PIPE FITTINGS INSTALLED WILL BE COLOR-CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 6-555.320 (2)(B) 3, DISINFECTANT RESISTANT COLOR. UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE. WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING CONSTRUCTION SHALL BE IDENTICAL TO THE STRIPES OF THE PIPE AFTER FINAL INSTALLATION. ALL STRIPES SHALL BE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE ALONG THE FULL CIRCUMFERENCE OF THE PIPE, AND THAT IS LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE. FOR PIPE WITH AN INTERNAL DIAMETER 14 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR-CODED OR MARKED LIKE UNDERGROUND PIPE.)
5. ALL FIRE HYDRANTS THAT HAVE UNPLUGGED, UNDERGROUND DRAINS WILL BE LOCATED AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER DRAIN, MAINLINE PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART II OF CHAPTER 19B OF THE F.S., OR SANITARY PIPELINE SANITARY SEWER, AT LEAST SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART II OF CHAPTER 12-10, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM".
6. NEW OR ALTERED CHAMBERS, PITS, 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 OR AIR RIEF VALVES INSTALLED UNDER THIS PROJECT WILL NOT BE CONNECTED DIRECTLY TO ANY SANITARY OR STORM SEWER.
7. NEW OR ALTERED WATER MAINS WILL BE INSTALLED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS OR IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED PROCEDURES.
8. A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE INSTALLED; BACKFILL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE INSTALLED AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE.
9. ALL WATER MAINS, TEES, BUNS, PLUGS, AND HYDRANTS INSTALLED WILL BE PROVIDED WITH EXISTING JOINTS TO PREVENT MOVEMENT.
10. WATER MAINS THAT ARE CONSTRUCTED OF ASBESTOS-CEMENT OR POLYVINYL CHLORIDE PIPE WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C603 OR C605, RESPECTIVELY, AS INCORPORATED INTO RULE 6-555.330, F.A.C., AND ALL OTHER NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600 AS INCORPORATED INTO RULE 6-555.330 FAC.
11. 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 BACTERIOLOGICALLY EVALUATED IN ACCORDANCE WITH RULE 6-555.340, F.A.C.

SANITARY GRAVITY & FORCE MAINS

1. ALL PVC GRAVITY SANITARY SEWER SHALL BE SDR35, UNLESS OTHERWISE NOTED; AND ALL PVC SANITARY SEWER FORCEMAIN 4" THRU 12" SHALL BE C900DR18, UNLESS OTHERWISE NOTED.
2. LEAKAGE TESTS FOR THE SANITARY SEWER SYSTEM SHALL MEET PROVIDER'S SPECIFICATIONS USING THE LOW PRESSURE AIR TEST METHOD, 5 PSI FOR 5 MINUTES AND SHALL NOT EXCEED 400 FEET IN LENGTH AND SHALL BE TESTED BETWEEN ADJACENT MANHOLES 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 THE FORCE MAIN FROM OTHER UTILITY LINES.
4. MINIMUM SLOPE ALLOWED FOR SANITARY SEWER PIPE IS 0.40%.
5. PVC PIPE AND FITTINGS 4-INCHES THROUGH 16-INCHES SHALL CONFORM TO ASTM D3034, SDR35 OR 26.
6. PVC PIPE AND FITTINGS 18-INCHES THROUGH 27-INCHES SHALL CONFORM TO ASTM F679-T1, SDR35.
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 A746 FOR INSTALLATION WITH TRENCH TYPE II, OR IN ACCORDANCE WITH ANSI/AWWA C150/A21.50 AND ANSI/AWWA C151/A21.51.
9. DUCTILE IRON FITTINGS FOR USE IN GRAVITY OR NON-PRESSURE SERVICE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWWA C153/A21.53, COMPACT DUCTILE IRON FITTINGS.
10. DUCTILE IRON PIPE AND FITTINGS FOR GRAVITY OR NON-PRESSURE SERVICE SHALL HAVE AN INTERIOR LINING CONSISTING OF A MINIMUM 40 MILS OF A CERAMIC EPOXY COATING. REFER TO SPECIFICATIONS FOR DETAILS.
11. MATERIAL FOR GRAVITY SEWER PIPE AND FITTINGS SHALL BE AS SHOWN FOR THE FOLLOWING DEPTHS OF EXCAVATION: A. 5' TO 12' PVC, ASTM 3034/ASTM F679, SDR 35 B. LESS THAN 5' OR GREATER THAN 12' PVC, ASTM 3034, SDR 26
12. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL EQUIPMENT AND MATERIALS FOR APPROVAL BY THE ENGINEER AND SERVICE PROVIDER PRIOR TO PROCUREMENT.
13. PIPE MEASUREMENTS ON THE MAIN "TRUNK" SEWER SHALL BE FROM CENTER TO CENTER OF MANHOLES OR CLEANOUTS, UNLESS OTHERWISE NOTED.
14. 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.
15. FOR A SCHEDULED INTERRUPTION OF SANITARY SEWER MAIN FLOW, THE CONTRACTOR SHALL PROVIDE TO THE AGENCY HAVING JURISDICTION AND SERVICE PROVIDER FOR REVIEW A WRITTEN SCHEDULE AS TO THE METHOD AND DURATION OF FLOW INTERRUPTION.
16. DURING NORMAL SANITARY SEWER MAIN FLOW INTERRUPTION, THE CONTRACTOR SHALL PROVIDE UNINTERRUPTED BY-PASS FLOW AND SHALL PROVIDE ALL EQUIPMENT NECESSARY TO ACCOMPLISH THE SAME IN THE FORM OF, BUT NOT LIMITED TO, THE FOLLOWING: POWER, PUMPS, PIPING, APPURTENANCE VALVES AND FITTINGS AND/OR SEPTIC TANKER TRUCK PUMPING, HAULING AND DISPOSAL SERVICES.
17. CONTRACTOR SHALL PAY FOR INSPECTION OF THE GRAVITY SEWER LINE BY A TV CAMERA SYSTEM. A VHS TAPE AND REPORT SHALL BE SUBMITTED TO THE AGENCY FOR REVIEW AND APPROVAL PRIOR TO FINAL INSPECTION BY SERVICE PROVIDER'S AUTHORIZED REPRESENTATIVE.

1. HAZARDOUS MATERIAL MEANS ANY SUBSTANCE: (A) THE PRESENCE OF WHICH REQUIRES INVESTIGATION OR REMEDIATION UNDER ANY PRESENT FEDERAL, STATE OR LOCAL STATUTE, REGULATION, ORDINANCE, RULE, CODE, ORDER, ACTION, POLICY OR COMMON LAW; (B) THE PRESENCE OF WHICH REQUIRES INVESTIGATION OR REMEDIATION UNDER ANY PRESENT FEDERAL, STATE OR LOCAL STATUTE, REGULATION, RULE OR ORDINANCE OR AMENDMENTS THEREOF INCLUDING, WITHOUT LIMITATION, THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (42 U.S.C. SECTIONS 9601 ET SEQ.) AND THE RESOURCE CONSERVATION AND RECOVERY ACT (42 U.S.C. SECTIONS 9601 ET SEQ.); OR (C) WHICH IS TOXIC, EXPLOSIVE, CORROSIVE, FLAMMABLE, INFECTIOUS, RADIOACTIVE, CARCINOGENIC, MUTAGENIC, OR OTHERWISE HAZARDOUS AND IS REGULATED BY ANY GOVERNMENTAL AUTHORITY, AGENCY, DEPARTMENT, COMMISSION, BOARD, AGENCY OR INSTRUMENTALITY OF THE UNITED STATES, OR THE STATE IN WHICH THE WORK IS TO BE DONE, OR ANY POLITICAL SUBDIVISION THEREOF; OR (D) THE PRESENCE OF WHICH COULD BE CAUSE OR THREATENS TO CAUSE A NUISANCE UPON THE PREMISES OR TO ADJACENT PROPERTIES OR POSE OR THREATENS TO POSE A HAZARD TO THE HEALTH OR SAFETY OF PERSONS ON OR ABOUT THE PREMISES; OR (E) WHICH CONTAINS OR COMBUSTIBLE, DIESEL FUEL, OR OTHER PETROLEUM HYDROCARBONS; OR (F) WHICH CONTAINS POLYCHLORINATED BIPHENYLS (PCBS), ASBESTOS, OR OTHER FIBER FOLDED FOR FURTHER CONSULTATION.

2. CONTRACTOR AND ITS SUBCONTRACTORS SHALL USE, HANDLE, TRANSPORT, AND DISPOSE OF ALL HAZARDOUS MATERIALS (AS DEFINED HEREIN) IN COMPLIANCE WITH ALL PRESENT FEDERAL, STATE AND LOCAL ENVIRONMENTAL, HEALTH OR SAFETY LAW, INCLUDING, BUT NOT LIMITED TO, ALL SUCH STATUTES, REGULATIONS, RULES, ORDINANCES, CODES, AND RULES OF COMMON LAW.

3. CONTRACTOR FURTHER AGREES THAT CONTRACTOR AND ITS SUBCONTRACTORS SHALL NOT CAUSE THE DISCHARGE, RELEASE OR DISPOSAL OF ANY HAZARDOUS MATERIAL CREATED BY ITS WORK ON OR ABOUT THE JOB SITE. IN THE EVENT OF ANY SPILL, RELEASE OR ANY OTHER REPORTABLE OCCURRENCE, CONTRACTOR SHALL NOTIFY THE APPROPRIATE GOVERNMENTAL AGENCY AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE EFFECT OF SUCH SPILL ON PERSONS OR PROPERTY.

4. CONTRACTOR AND ITS SUBCONTRACTORS SHALL, UPON COMPLETION OF PERFORMANCE OF ALL DUTIES UNDER THIS CONTRACT, REMOVE, REPAIR, SUPPLY, MATERIALS AND WASTE CONTAINING ANY HAZARDOUS MATERIAL FROM THE JOB SITE. CONTRACTOR SHALL BEAR FULL FINANCIAL RESPONSIBILITY, AS BETWEEN THE PARTIES OF THIS CONTRACT, FOR THE COMPLIANCE OF CONTRACTOR AND ITS SUBCONTRACTORS WITH THE PROVISIONS AS OUTLINED HEREIN.

5. CONTRACTOR AGREES TO INDEMNIFY, DEFEND, PROTECT AND HOLD THE OWNER HARMLESS FROM AND AGAINST ANY CLAIMS INCLUDING, WITHOUT LIMITATION, ACTUAL ATTORNEY'S FEES AND ANY COSTS OF INVESTIGATION, SOILS TESTING, GOVERNMENTAL PERMITS, REMEDIATION, AND OTHER COSTS THAT MAY BE INCURRED BY THE OWNER, CONTRACTOR OR ITS SUBCONTRACTORS, OR THEIR AGENTS, EMPLOYEES, OFFICERS, OR REPRESENTATIVES, TO COMPLY WITH THE TERMS AS DESCRIBED HEREIN.

6. SHOULD CONTRACTOR OR ITS SUBCONTRACTORS DISCHARGE, RELEASE OR DISPOSE OF ANY HAZARDOUS MATERIAL ON OR ABOUT THE JOB SITE IN VIOLATION OF THIS PARAGRAPH, CONTRACTOR SHALL IMMEDIATELY INFORM THE OWNER IN WRITING, IN THE EVENT OF ANY SUCH RELEASE OR DISCHARGE, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE GOVERNMENTAL AGENCY(S) AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE DELETERIOUS EFFECT OF SUCH SPILL ON PERSONS, PROPERTY OR THE ENVIRONMENT.

7. IN THE EVENT CONTRACTOR OR ITS SUBCONTRACTORS ENCOUNTER ON THE PREMISES ANY PIPELINE, UNDERGROUND STORAGE TANK OR OTHER CONTAINER, OF ANY KIND, THAT MAY CONTAIN A HAZARDOUS MATERIAL, OR ENCOUNTER MATERIAL REASONABLY BELIEVED TO BE AN UNDERGROUND STORAGE TANK, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE OWNER IN WRITING.

8. IF CONTRACTOR OR ITS SUBCONTRACTORS DO NOT COMPLY WITH THE REQUIREMENTS AS OUTLINED HEREIN, OWNER MAY, BUT IS NOT OBLIGATED TO, GIVE WRITTEN NOTICE OF VIOLATION TO CONTRACTOR. SHOULD CONTRACTOR OR ITS SUBCONTRACTORS FAIL TO COMPLY WITH THE REQUIREMENTS OF THE PARAGRAPH WITHIN TWENTY-FOUR (24) HOURS FROM THE TIME OWNER ISSUES SUCH NOTICE, CONTRACTOR SHALL BE IN DEFAULT OF THIS CONTRACT. SHOULD CONTRACTOR OR ITS SUBCONTRACTORS, OR ANY GOVERNMENTAL AGENCY, WHICHEVER PERIOD IS SHORTER, CONTRACTOR SHALL BE IN MATERIAL DEFAULT OF THIS CONTRACT.

9. ALL AREAS USED FOR FUEL STORAGE SHALL HAVE THE PROPERTY OWNER'S PRIOR APPROVAL AND APPROPRIATE MEASURES SHALL BE TAKEN TO INSURE PROTECTION OF GROUNDWATER AND SOIL RESOURCES.

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'S 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 UNDER THIS PARAGRAPH REVEAL DEFECTIVE WORK, CONTRACTOR SHALL NOT BE ALLOWED TO RECEIVE ANY ASSOCIATED COSTS AND THE OWNER SHALL BE ENTITLED TO DEDUCT FROM THE CONTRACT PRICE, BY ISSUING A CHANGE ORDER, OWNER'S COSTS ARISING OUT OF THE DEFECTIVE WORK, INCLUDING COSTS OF REPEATED PROCEDURES, COMPENSATION FOR ENGINEER'S AND DESIGN ENGINEER'S SERVICES AND OTHER RELATED COSTS.
3. SHOP DRAWINGS AND CERTIFICATIONS FOR ALL STORM DRAINAGE, WATER SYSTEM, SEWER SYSTEM, AND PAYING SYSTEM MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.
4. THE CONTRACTOR SHALL PROVIDE THE ENGINEER 48-HOUR ADVANCE NOTIFICATION FOR THE FOLLOWING CONSTRUCTION AND OBSERVATION ACTIVITIES:
 - SANITARY SEWER LAMPING AND VIDEO INSPECTION
 - CONNECTIONS TO EXISTING SYSTEMS
 - STORM DRAINAGE LAMPING
 - INLET TOP POURS (REINFORCING STEEL CHECK)
 - WATER AND FORCE MAIN PRESSURE TESTS
 - BACTERIOLOGICAL SAMPLING
 - BASE OBSERVATION & SOUNDING
 - ASPHALT PLACEMENT
 - PRE-FINAL OBSERVATION
 - FINAL OBSERVATION

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL OBTAIN A COPY OF THE MINIMUM REQUIREMENTS FOR AS-BUILT RECORD DRAWING ACCEPTANCE FOR THE AGENCY HAVING JURISDICTION (SUCH AS THE CITY OR COUNTY) AND/OR UTILITY SERVICE PROVIDER. FAMILIARIZE THEMSELVES WITH THESE REQUIREMENTS, AND PRODUCE AS-BUILT RECORD DRAWINGS THAT SUBSTANTIALLY COMPLY WITH OR EXCEED 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 MEET THE MINIMAL TECHNICAL REQUIREMENTS SET FORTH BY THE FLORIDA BOARD OF SURVEYORS AND MAPPERS IN CHAPTER 61G17-6, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 47.027 FLORIDA STATUTES.

3. THE CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE SUFFICIENT AS-BUILT INFORMATION TO CONVEY THAT THE CONSTRUCTION HAS BEEN COMPLETED WITHIN ACCEPTABLE TOLERANCES TO THE APPROVED DESIGN AND SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING:

SANITARY SEWER:

1. TOP ELEVATION OF EACH MANHOLE FRAME AND COVER.
2. INVERT OF EACH LINE ENTERING AND LEAVING EACH MANHOLE/STRUCTURE.
3. LEAN OF EACH RUN OF MAIN BETWEEN MANHOLES (CENTER TO CENTER).
4. ACTUAL GRADE OF PIPE BETWEEN MANHOLES.
5. LOCATE ALL SERVICE WYES FROM DOWNSTREAM MANHOLE WITH DEPTH AT LOT LINE AND DISTANCE FROM THE MAIN LINE.
6. LOCATE WITH PRECISION ALL FITTINGS FROM PERMANENT VISIBLE OBJECTS ALL FITTINGS/ACCESSORIES NOT VISIBLE FROM THE SURFACE (MINIMUM TWO POINT TIES).

WATER AND REUSE SYSTEM 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 POINT TIES).
3. LIST THE DEPTHS OF THE LINES AT ALL VALVES, FITTINGS AND FIRE HYDRANTS.

OTHER IMPROVEMENTS:

(SIDEWALKS, SIDEWALKS, PAVEMENT, CURB & GUTTER. SUBMIT CERTIFIED DRAWINGS TO THE ENGINEER TWO WEEKS PRIOR TO FINAL INSPECTION OF THE WORK TO BE CERTIFIED.

4. 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.

5. THE ENGINEER RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO UNCOVER, RETEST AND/OR PERFORM ANY ACTION NECESSARY TO ENSURE THAT THE IMPROVEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

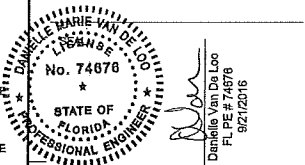
6. FINAL "AS-BUILT" DRAWINGS FOR POTABLE WATER SHALL CLEARLY INDICATE COMPLIANCE TO MINIMUM SEPARATION DISTANCES OR REQUIRED PIPE UPGRADES, ALL WATER MAIN AND FORCE MAIN PIPE FITTINGS SHALL BE REFERENCED TO AT LEAST TWO VISIBLE REFERENCE POINTS (SWING TIES) AND THE NEAREST DISTANCE TO THE CENTERLINE OF ROAD.

7. THE CONTRACTOR'S GEOTECHNICAL ENGINEER SHALL CERTIFY ALL SITE, UTILITY, AND ROADWAY COMPACTION AND ALL UNDERDRAIN AND PAVEMENT CONSTRUCTION TO BOWYER-SINGLETON & ASSOCIATES, INC.

8. ALL PVC WATER MAINS AND PVC FORCE MAINS SHALL BE INSTALLED WITH A SOLID COPPER "LOCATING WIRE" WITH SUFFICIENT GROUNDING POINTS AT MAXIMUM 500 FEET SPACING.



PORT ORANGE, FL



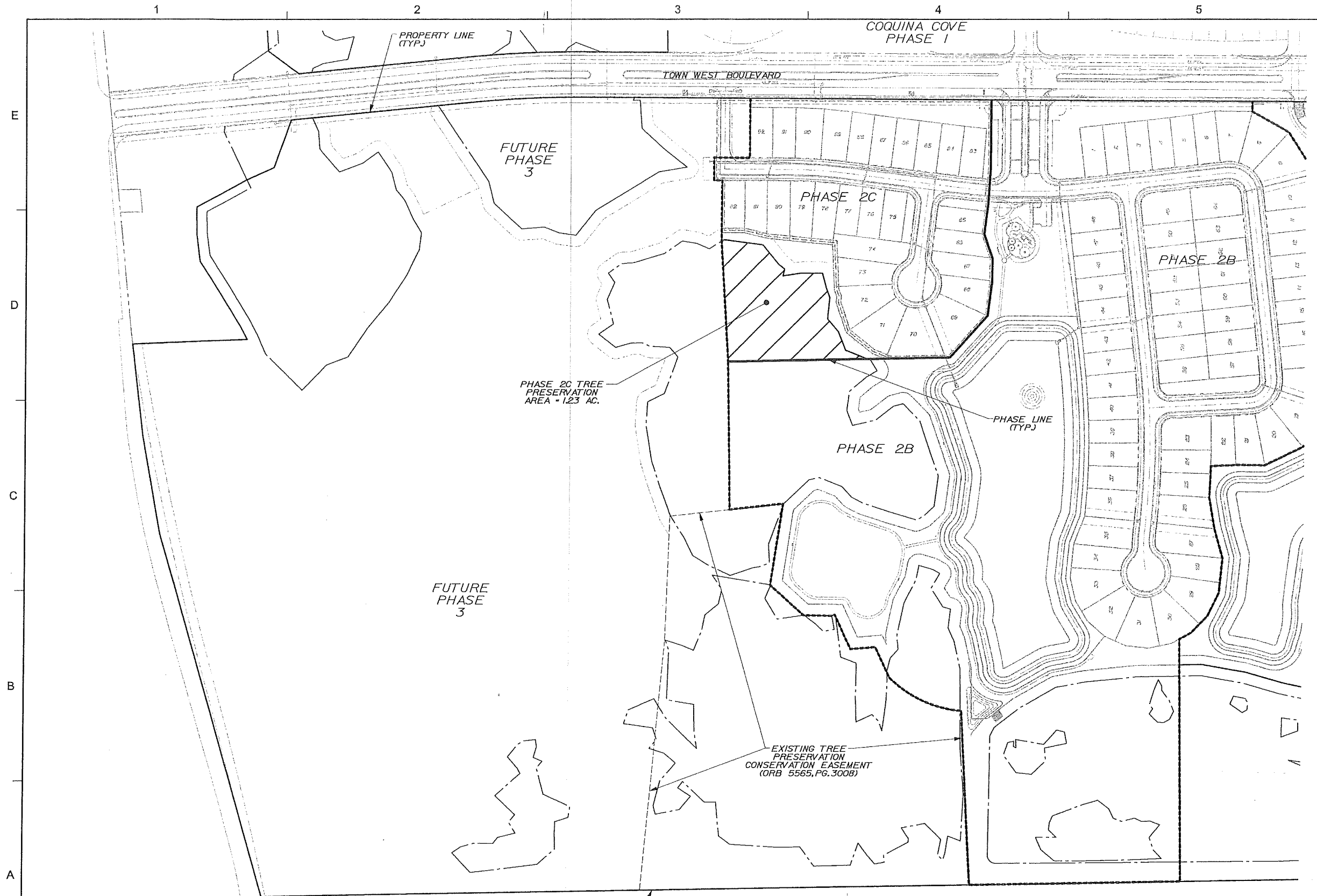
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DATUM	NAVD 88

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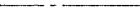
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SHEET NO.



TREE PRESERVATION		
	PHASE 2C AREA	7.46AC
	REQUIRED 15% OF SITE (INCLUDING TREE PRESERVATION AREA)	1.12AC
	PROPOSED (16.49%)	1.23AC

NOTE:
NO SPECIMEN TREES ARE LOCATED WITHIN THE DEVELOPMENT FOOTPRINT OF THE PHASE 2C PROJECT AREA. THEREFORE SPECIMEN TREES DO NOT REQUIRE ADDRESS AS PART OF THIS PHASE 2C APPLICATION.

LEGEND	
	BOUNDARY LINE
	PHASE LINE
	WETLAND LINE



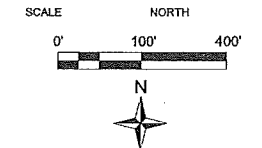
Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
ORLANDO, FL 32803
SUITE 1000
PHONE: 407.643.5120
ENGINEERING BUSINESS-4704

WESTPORT RESERVE (PHASE 2C)

PORT ORANGE, FL

SEAL

9/21/2016



No.	DATE	BY	Description
REVISIONS			
1		IFS	
2		DMV	
3		NPS	
4	AUGUST 2016		
5	NAVD 88		

PHASE 2C TREE PRESERVATION PLAN

PROJECT NO. 50079046 (CC 1)

C05

SHEET NO.

LEGEND

BOUNDARY LINE
PHASE LINE
WETLAND LINE

- NOTES:
1.) EXCESS AREAS SUITABLE FOR TREE PRESERVATION WITHIN 2C CAN BE USED TO MEET TREE PRESERVATION REQUIREMENTS FOR FUTURE PHASES OF DEVELOPMENT.
2.) FUTURE TREE CONSERVATION AREAS WILL BE ESTABLISHED WITH EACH PHASE.
3.) NO SPECIMEN TREES ARE LOCATED WITHIN THE DEVELOPMENT FOOTPRINT OF THE PHASE 2C PROJECT AREA. THEREFORE SPECIMEN TREES DO NOT REQUIRE ADDRESS AS PART OF THIS PHASE 2C APPLICATION.

TREE PRESERVATION		
	OVERALL SITE AREA	174.48 AC.
	REQUIRED 15% OF SITE (INCLUDING TREE PRESERVATION AREA)	26.17 AC.
	PROPOSED (15.14%)	26.42 AC.
	PHASE 2A AREA	33.63 AC.
	REQUIRED 15% OF SITE (INCLUDING TREE PRESERVATION AREA)	5.04 AC.
	PROPOSED (15.05%)	5.06 AC.
	PHASE 2B AREA	31.24 AC.
	REQUIRED 15% OF SITE (INCLUDING TREE PRESERVATION AREA)	4.69 AC.
	PROPOSED (15.36%)	4.80 AC.
	PHASE 2C AREA	7.46 AC.
	REQUIRED 15% OF SITE (INCLUDING TREE PRESERVATION AREA)	1.12 AC.
	PROPOSED (16.49%)	1.23 AC.
	FUTURE PHASE AREA	102.15 AC.
	REQUIRED 15% OF SITE (INCLUDING TREE PRESERVATION AREA)	15.32 AC.
	PROPOSED (15.01%)	15.33 AC.



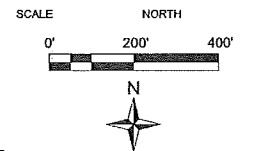
Dewberry Engineers Inc.
800 NORTH WASHOLLA AVE
ORLANDO, FL 32803
SUITE 1000
PHONE: 407.243.5100
ENGINEERING BUSINESS - 8784

WESTPORT RESERVE
(PHASE 2C)

PORT ORANGE, FL

SEAL

9/21/2016



No.	DATE	BY	Description
REVISIONS			

DRAWN BY JFS
APPROVED BY DMV
CHECKED BY NPS
DATE AUGUST 2016
DATUM NAVD 88

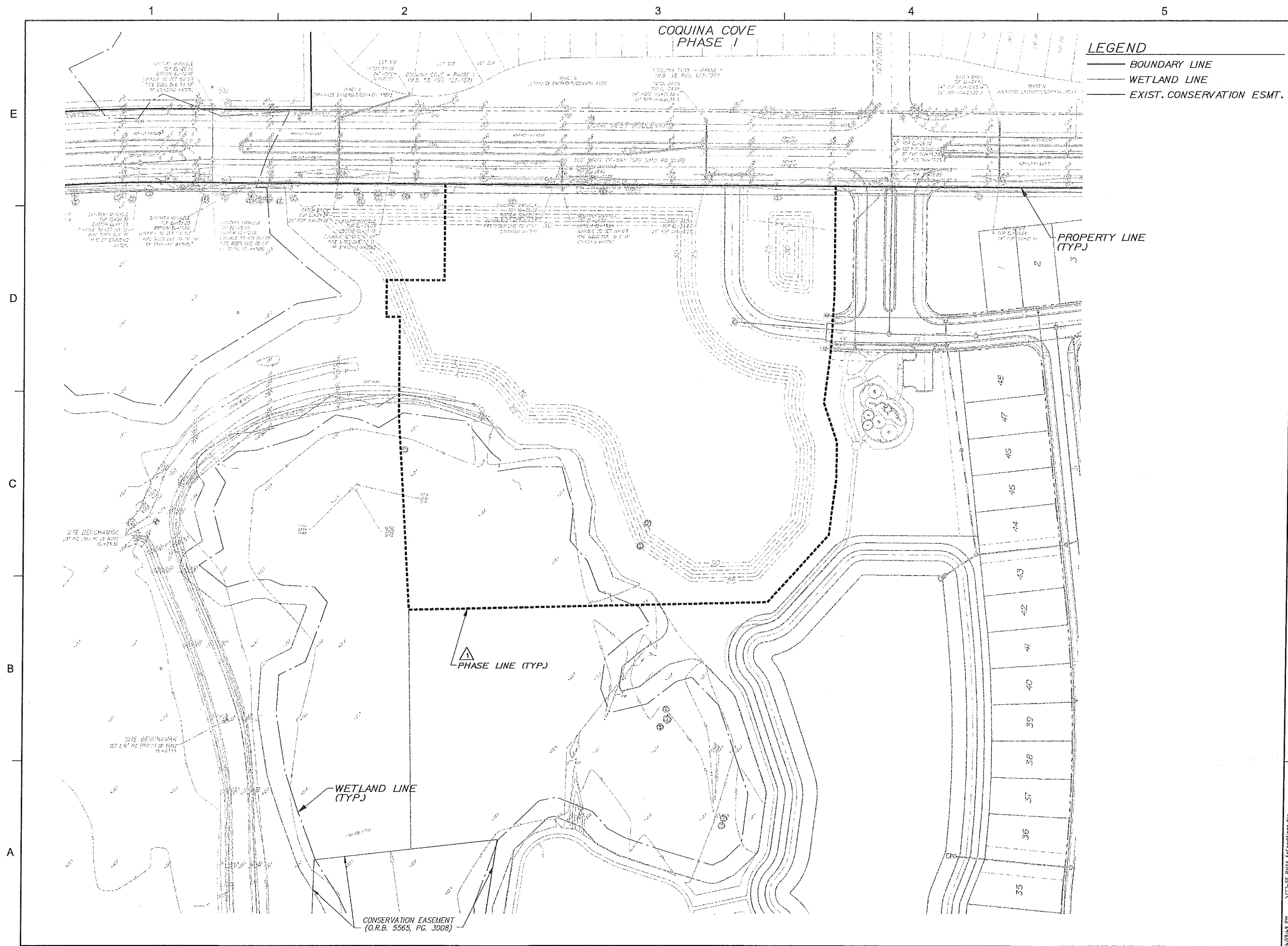
TITLE
OVERALL
TREE
PRESERVATION
PLAN

PROJECT NO. 50079046 (CC 1)

C06

SHEET NO.

NOTE:
FUTURE PROPOSED WETLAND
IMPACTS ARE SUBJECT TO
PERMITTING & APPROVAL.



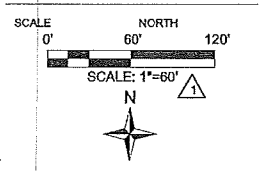
- LEGEND**
- BOUNDARY LINE
 - WETLAND LINE
 - EXIST. CONSERVATION ESMT.

Dewberry®
Dewberry Engineers Inc.
600 NORTH MAGNOLIA AVE
ORLANDO, FL 32803
SUITE 1000
PHONE: 407.843.5120
ENGINEERING BUSINESS #794

WESTPORT RESERVE
(PHASE 2C)

PORT ORANGE, FL

SEAL
9/21/2016



REVISIONS			
No.	DATE	BY	DESCRIPTION
1	9-19-16	TFS	REV PER COMMENTS

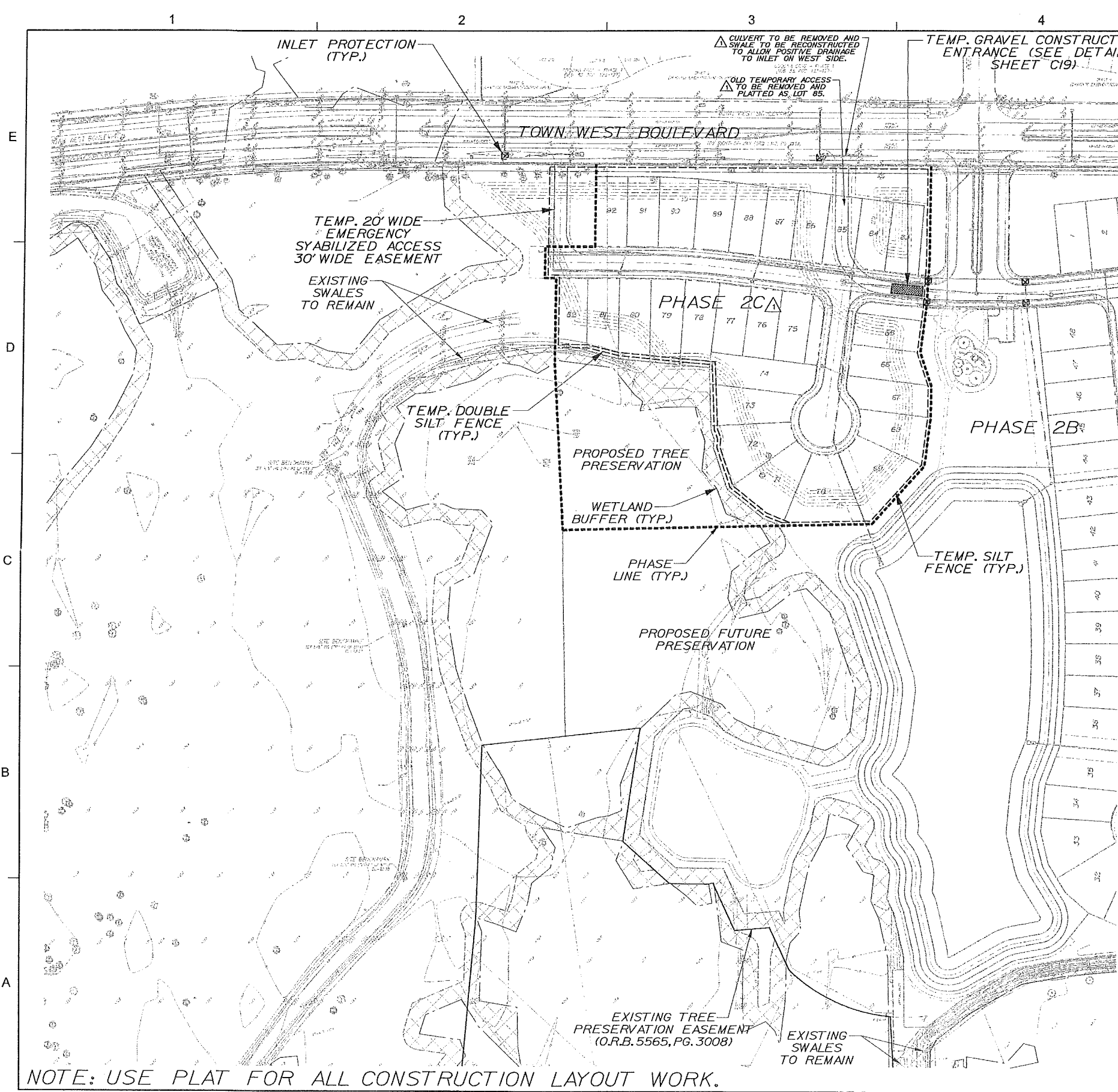
DRAWN BY TFS
APPROVED BY DMV
CHECKED BY NPS
DATE AUGUST 2016
DATUM NAVD 88

TITLE
**EXISTING
CONDITIONS
PLAN**

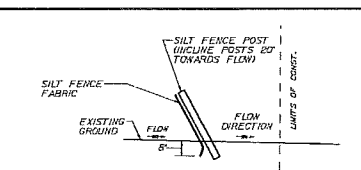
PROJECT NO. 50079046 (CC 1)

C07

SHEET NO.

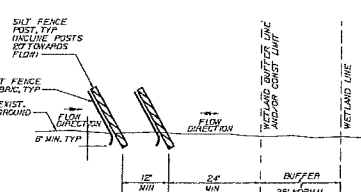


NOTE: USE PLAT FOR ALL CONSTRUCTION LAYOUT WORK.



NOTES:
CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AS FOLLOWS:
1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DURING PROPOSED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF ITS USE, IT SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT.
4. ANY SEDIMENT DEPOSITS LEFT IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE FINISHED GRADE, PREPARED AND SEED.
5. GEOTEXTILE MATERIAL TO MEET THE REQUIREMENTS OF SEC. 945-4.

TYPICAL SILT FENCE DETAIL
11/25



NOTES:
CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AS FOLLOWS:
1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DURING PROPOSED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF ITS USE, IT SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT.
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5. GEOTEXTILE MATERIAL TO MEET THE REQUIREMENTS OF SEC. 945-4.

WETLAND/POND SILT FENCE DETAIL
11/25

2,743 LF SILT FENCE

- LEGEND**
- BOUNDARY LINE
 - PHASE LINE
 - UPLAND BUFFER
 - WETLAND LINE
 - SINGLE ROW SILT FENCE
 - DOUBLE ROW SILT FENCE

- NOTES:**
1) ACCESS SHALL BE MADE THROUGH TEMPORARY GRAVEL CONSTRUCTION ENTRANCE ONLY.
2) CONTRACTOR TO PROVIDE SWPPP PRIOR TO THE PRE-CONSTRUCTION MEETING.
3) SEE SHEET C19 FOR CITY EROSION CONTROL DETAILS.
4) SILT FENCE TO REMAIN IN PLACE UNTIL COMPLETION OF CONSTRUCTION AND STABILIZATION OF SLOPES.

NOTE:
SEE SHEET C19 FOR STANDARD CITY EROSION CONTROL DETAILS.

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

**WESTPORT RESERVE
(PHASE 2C)**

DANIEL MARIE VAN DE LEE
LICENSE No. 74678
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Daniel Van De Loo
FL 0212/2016

SCALE: 1"=80'
NORTH
N

No.	DATE	BY	DESCRIPTION
1	9-19-16	TFS	REV PER COMMENTS

REVISIONS

DRAWN BY	TFS
APPROVED BY	DMV
CHECKED BY	NPS
DATE	AUGUST 2016
DATUM	NAVD 88

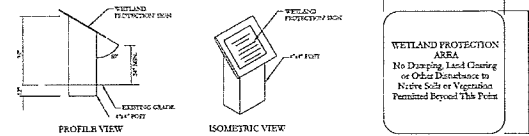
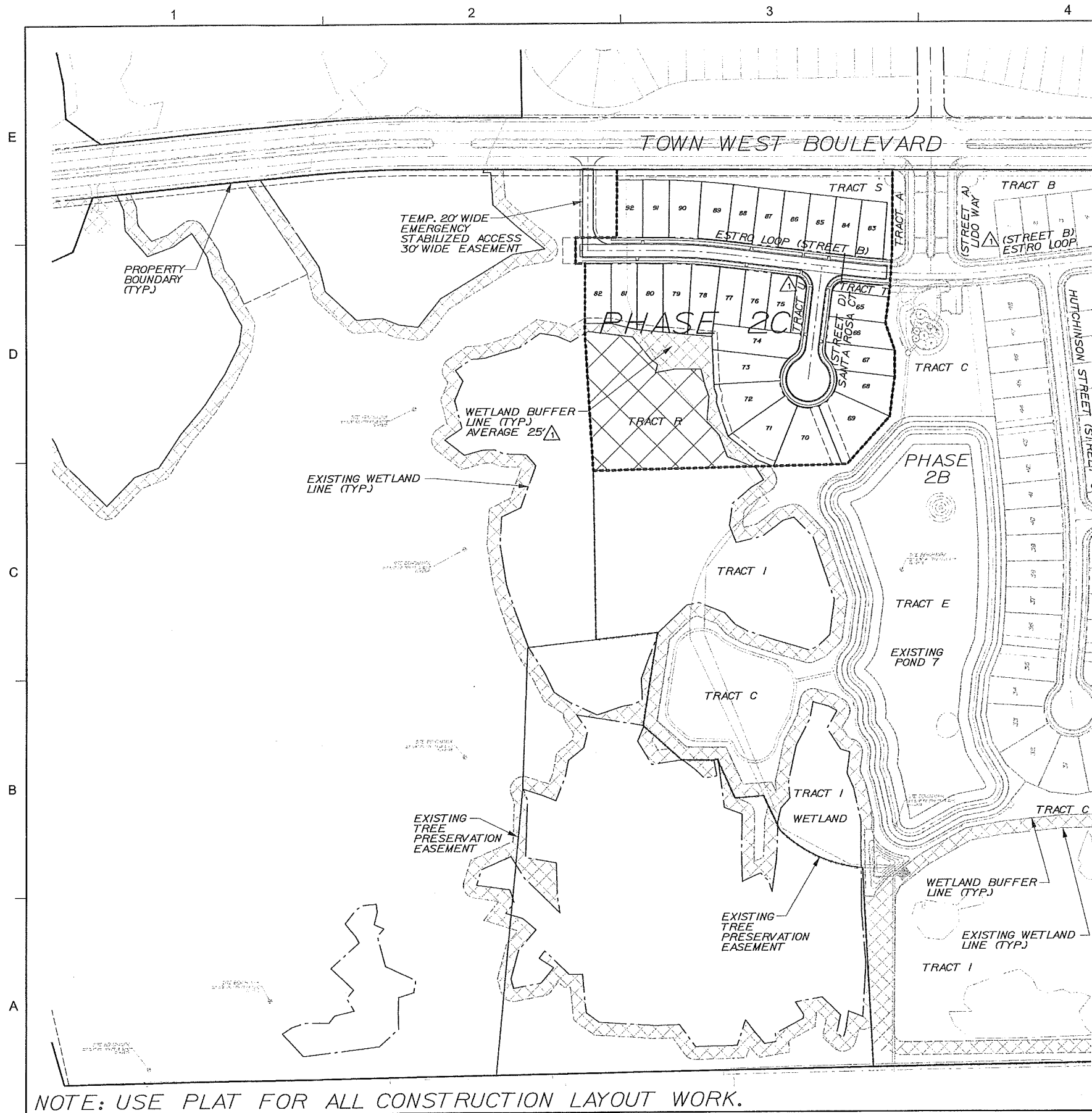
TITLE

EROSION CONTROL PLAN

PROJECT NO. 50079046 (CC 1)

C08

SHEET NO.



TYPICAL WETLAND PROTECTION SIGN

NOTE:
TO BE POSTED ON 50 FOOT CENTERS IN COMMON AREAS ON THE LANDWARD EDGE OF THE BUFFER (NOT IN THE BUFFER), AND ON EVERY OTHER INDIVIDUAL LOT LINE FOR RESIDENTIAL PROPERTIES ADJACENT.

SITE DATA		
PROJECT AREAS	AREA (AC.)	%
GREEN AREA (TOTAL)	2.17	29.09%
COMMON AREA	0.58	7.77%
WETLAND CONSERVATION (not included in open space)	1.59	16.43%
UPLAND BUFFERS	0.36	4.83%
RIGHT-OF-WAYS (TOTAL)		
ROADWAY	1.09	14.61%
R.O.W. GREEN AREA/OPEN SPACE	0.66	8.85%
0.43	5.76%	
LOTS (TOTAL)		
LOTS OUTSIDE BUFFER	4.20	56.90%
4.20	56.90%	
TOTAL GROSS PROJECT AREA		
7.46	100.00%	
TOTAL NET PROJECT AREA		
6.23		
(1) NET PROJECT AREA EQUALS GROSS AREA MINUS WETLAND CONSERVATION NOT INCLUDED IN OPEN SPACE (7.46 AC. - 1.23 AC. = 6.23 AC.)		

OPEN SPACE REQUIRED		
OPEN SPACE	AREA (AC.)	%
COMMON OPEN SPACE	2.49 (1)	42.00%
2.49 (2)	40.00%	
(2) CALCULATED USING NET PROJECT AREA		

OPEN SPACE PROVIDED		
COMMON AREA	AREA (AC.)	%
COMMON AREA	0.58	9.31%
UPLAND BUFFERS	0.36	5.78%
R.O.W. GREEN AREA/OPEN SPACE	0.43	6.90%
20.27%		
30% LOT OPEN SPACE	2.63	42.32%
TOTAL		

COMMON OPEN SPACE PROVIDED		
COMMON AREA	AREA (AC.)	%
COMMON AREA	0.58	9.31%
UPLAND BUFFERS	0.36	5.78%
R.O.W. GREEN AREA/OPEN SPACE	0.43	6.90%
EXCESS OPEN SPACE PHASE 2B	1.80	28.83%
3.17 (1)	50.83%	
TOTAL		

(1) PORTION OF DRAINAGE AREA/WETLAND CONSERVATION CONSIDERED AS COMMON OPEN SPACE WHICH IS DELINEATED AS THE AREA WITHIN 100' OF PUBLIC PEDESTRIAN ACCESS.

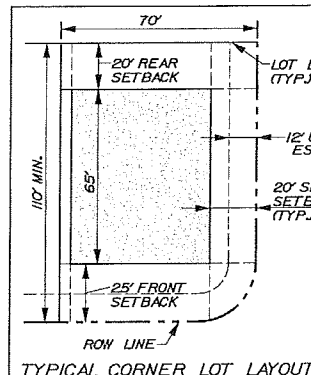
(2) EXCESS COMMON OPEN SPACE CAN BE USED TOWARD FUTURE CONTIGUOUS PHASES.

BUILDING SETBACK REQUIREMENTS:		FEET
FRONT	25	
REAR	20	
SIDE - LOTS ≤ 65'	5	
SIDE - LOTS > 65'	7.5	
SIDE CORNER	20	

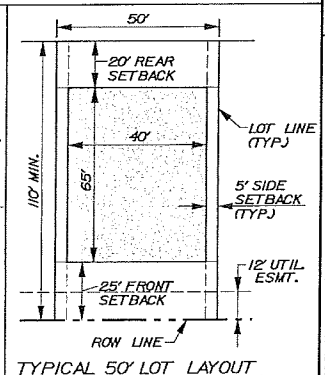
MINIMUM OPEN SPACE	40%
MAXIMUM BUILDING COVERAGE	50%
MAXIMUM BUILDING HEIGHT	35 FEET
MINIMUM LOT SIZE	50' x 110'
AVERAGE LOT SIZE	50' x 110'

NOTES:
1. WALKING TRAILS AND CATWALKS MAY BE PERMITTED IN THE WETLAND BUFFER. VEGETATION MAY BE PRUNED TO ALLOW FOR THESE AND INVASIVE VEGETATION MAY BE REMOVED.
2. THE PLAYGROUND ON TRACT C IN PHASE 2B MUST BE COMPLETED BEFORE C.D.'S CAN BE ISSUED FOR THE HOMES IN PHASE 2C.
3. 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, OR, 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.

TRACT SUMMARY				
TRACT	AREA	DESCRIPTION	OWNERSHIP	MAINTENANCE
R	1.59	OPEN SPACE	HOA	HOA
S	0.48	COMMON OPEN SPACE	HOA	HOA
T	0.05	COMMON OPEN SPACE	HOA	HOA
U	0.05	COMMON OPEN SPACE	HOA	HOA



TYPICAL CORNER LOT LAYOUT

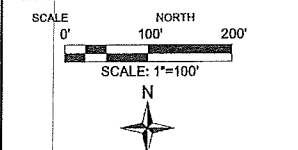
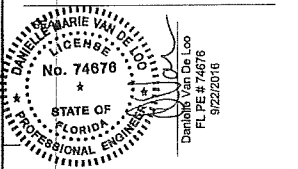


TYPICAL 50' LOT LAYOUT



Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
ORLANDO, FL 32803
SUITE 1000
PHONE: 407.843.6120
FAX: 407.843.6124

WESTPORT RESERVE
(PHASE 2C)



REVISIONS				
No.	DATE	BY	REV	PER COMMENTS
1	9-19-16	TFS		

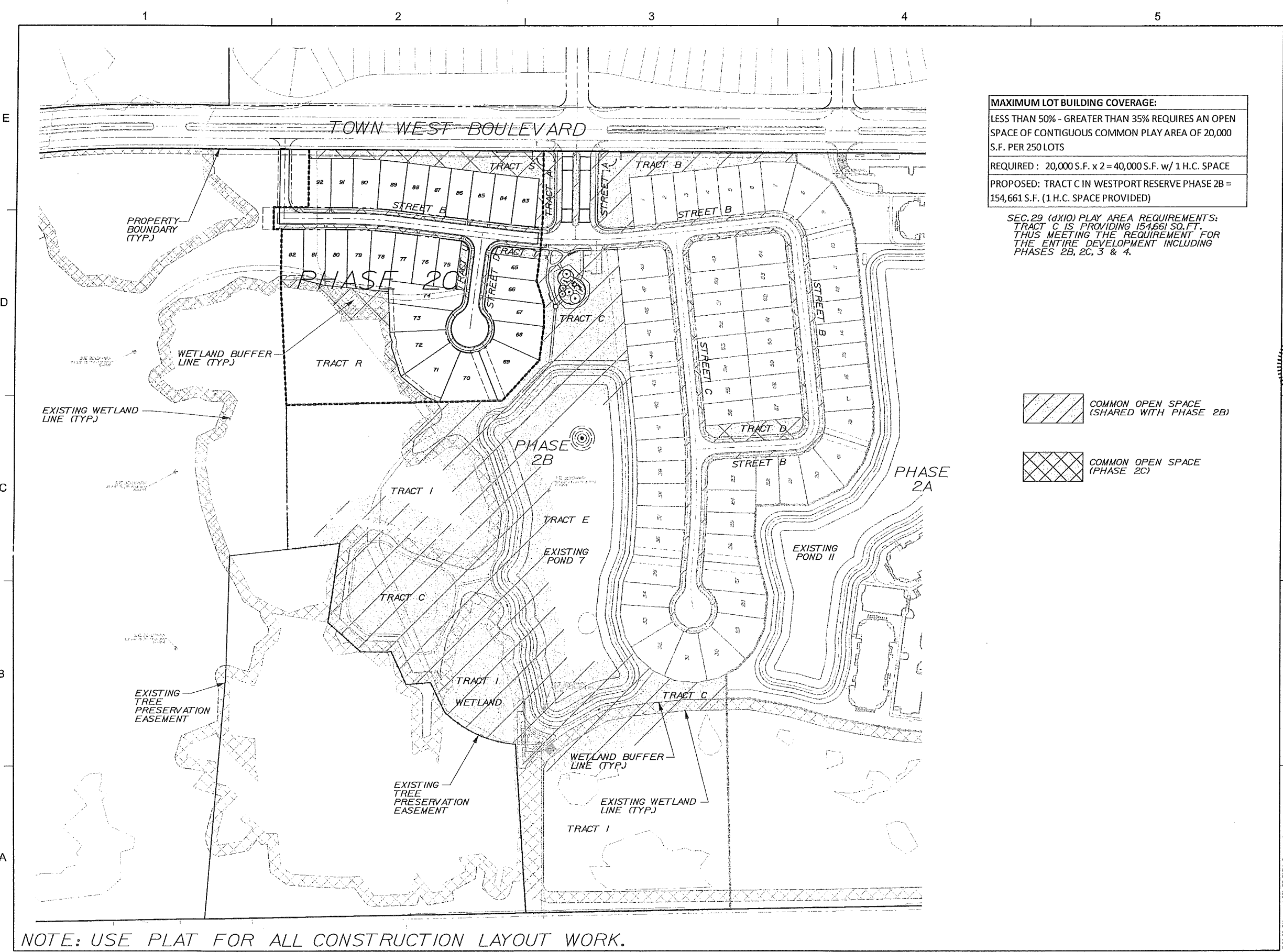
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APPROVED BY: DMV
CHECKED BY: NPS
DATE: AUGUST 2016
DATUM: NAVD 88

TITLE: OVERALL SITE PLAN

PROJECT NO. 50079048 (CC 1)

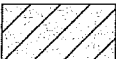
C09

SHEET NO.



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 = 154,661 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.

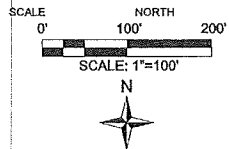
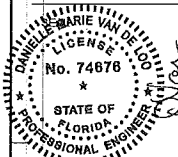
-  COMMON OPEN SPACE (SHARED WITH PHASE 2B)
-  COMMON OPEN SPACE (PHASE 2C)



Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
ORLANDO, FL 32803
SUITE 1000
PHONE: 407.843.5120
ENGINEERING BUSINESS-4734

WESTPORT RESERVE
(PHASE 2C)

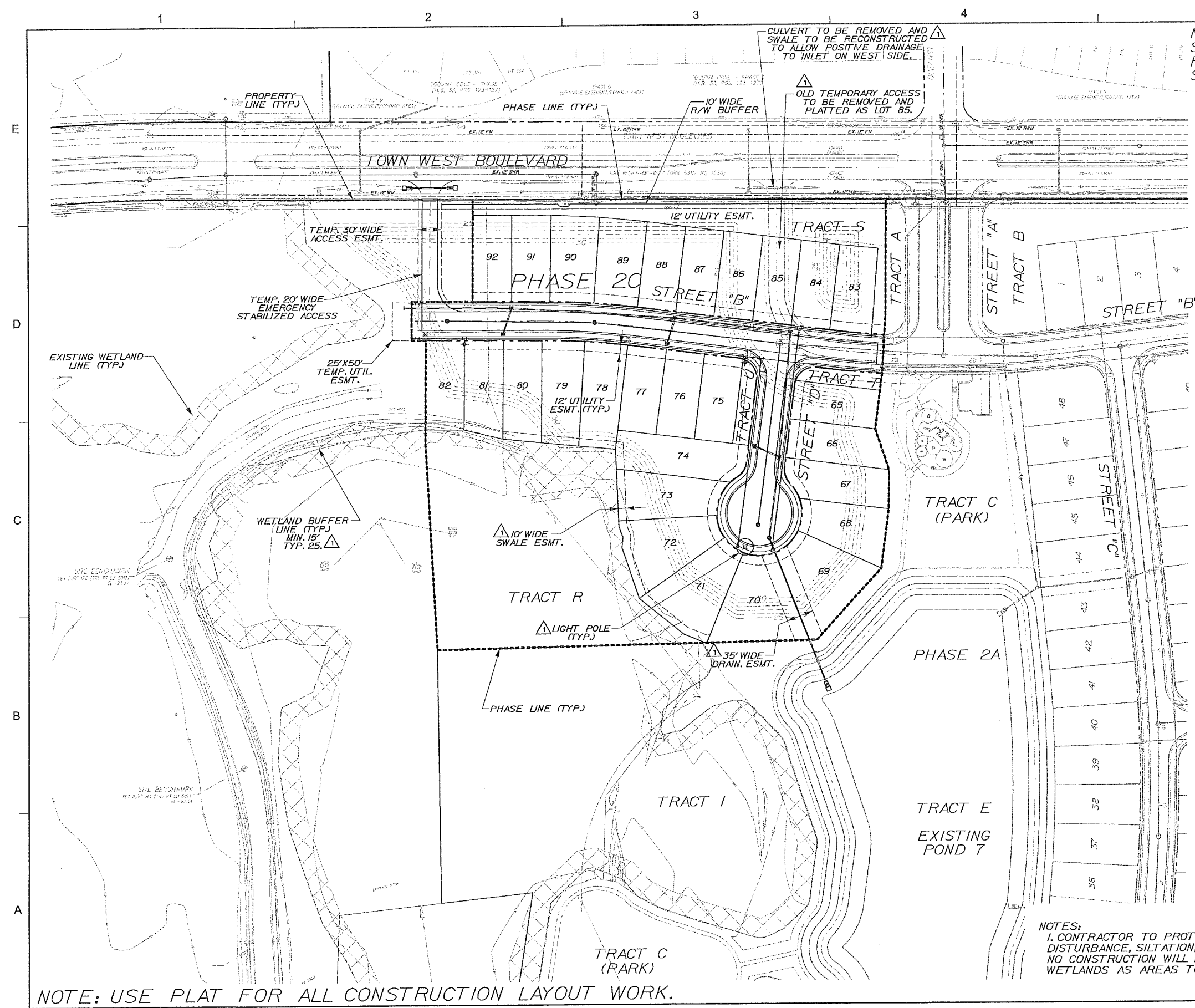
PORT ORANGE, FL



No.	DATE	BY	Description
REVISIONS			
DRAWN BY	TFS		
APPROVED BY	DMV		
CHECKED BY	NPS		
DATE	AUGUST 2016		
DATUM	NAVD 88		

TITLE
COMMON OPEN SPACE
PROJECT NO. 50079046 (CC 1)

C10
SHEET NO.



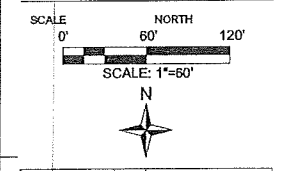
NOTE:
SEE SHEET No. C31
FOR TYPICAL PVMT.
SECTIONS.

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

**WESTPORT RESERVE
(PHASE 2C)**

PORT ORANGE, FL

DMITRIE MARIE VAN DE LIND
LICENSE
No. 74678
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
Dmitriy Van De Loo
FL PE # 74678
9/21/2016



No.	DATE	BY	REVISIONS
1	9-19-16	TFS	REV PER COMMENTS

DRAWN BY: TFS
APPROVED BY: DMV
CHECKED BY: NPS
DATE: AUGUST 2016
DATUM: NAVD 88

TITLE
SITE PLAN
PROJECT NO. 50079046 (CC 1)

C11
SHEET NO.

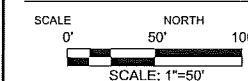
NOTES:
1. CONTRACTOR TO PROTECT AND PREVENT ANY
DISTURBANCE, SILTATION, ETC. TO THE WETLANDS.
NO CONSTRUCTION WILL BE ALLOWED WITHIN THE
WETLANDS AS AREAS TO REMAIN NATURAL.

WESTPORT RESERVE
(PHASE 2C)

1
2
3
4
5
6
7
8

SEA

anette Van De Loo
FL PE # 74676



I	9-19-16	TFS	REV PER COMMENT
No.	DATE	BY	Description

REVISIONS

DRAWN BY	TFS
APPROVED BY	DMV
CHECKED BY	NPS
DATE	AUGUST 2016
DATUM	NAVD 88

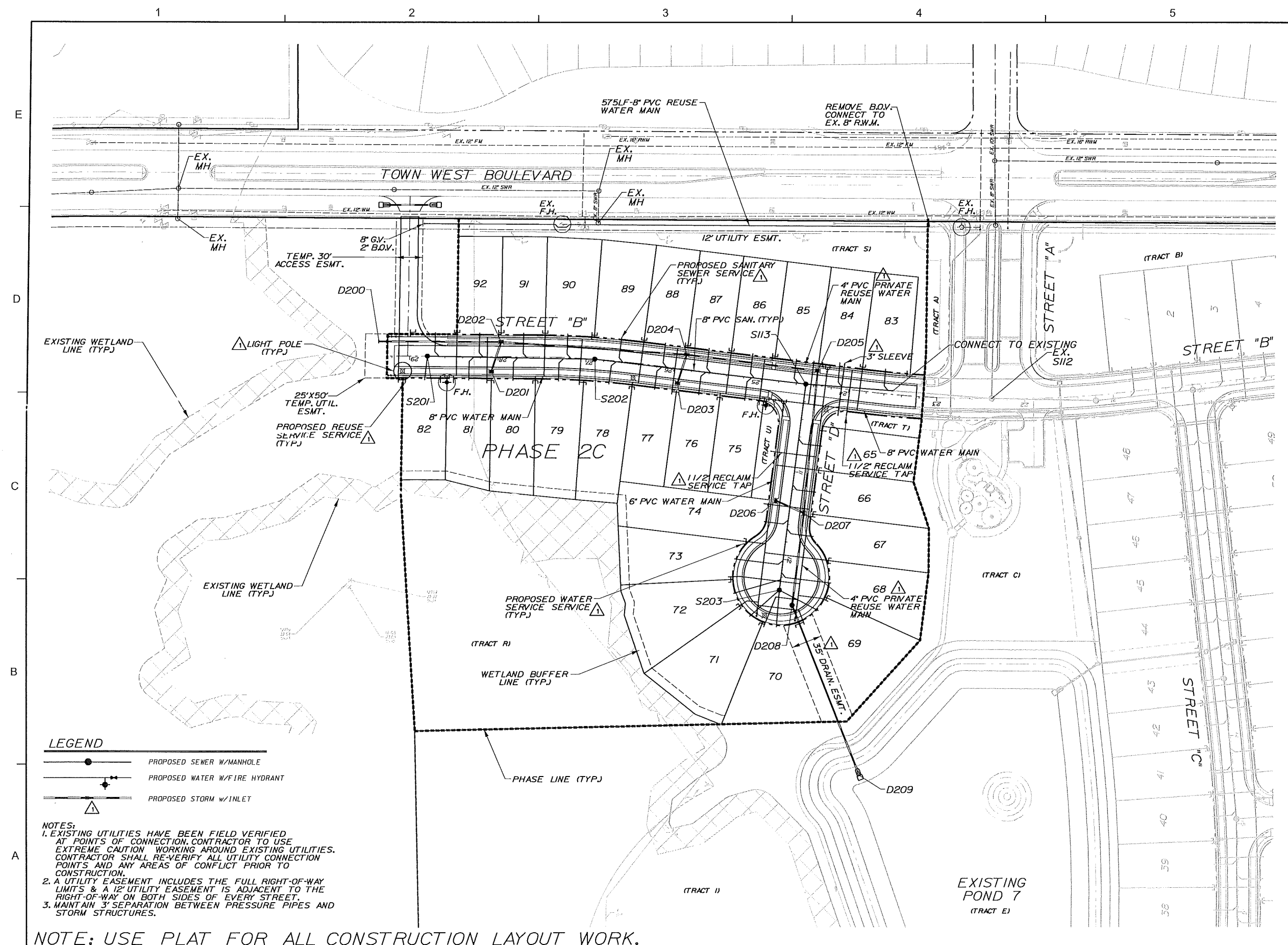
TITLE

UTILITY PLAN

PROJECT NO. 50079046 (CC 1)

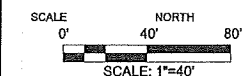
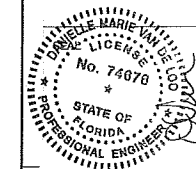
C12

SHEET NO.



WESTPORT RESERVE
(PHASE 2C)

PORT ORANGE, FL.



1	9-19-16	TFS	REV PER COMMENT:
No	DATE	BY	Description

REV.	DATE	BY	Description
REVISIONS			
DRAWN BY		TFS	
APPROVED BY		DMV	
CHECKED BY		NPS	
DATE	AUGUST 2016		
DATUM	NAVD 68		

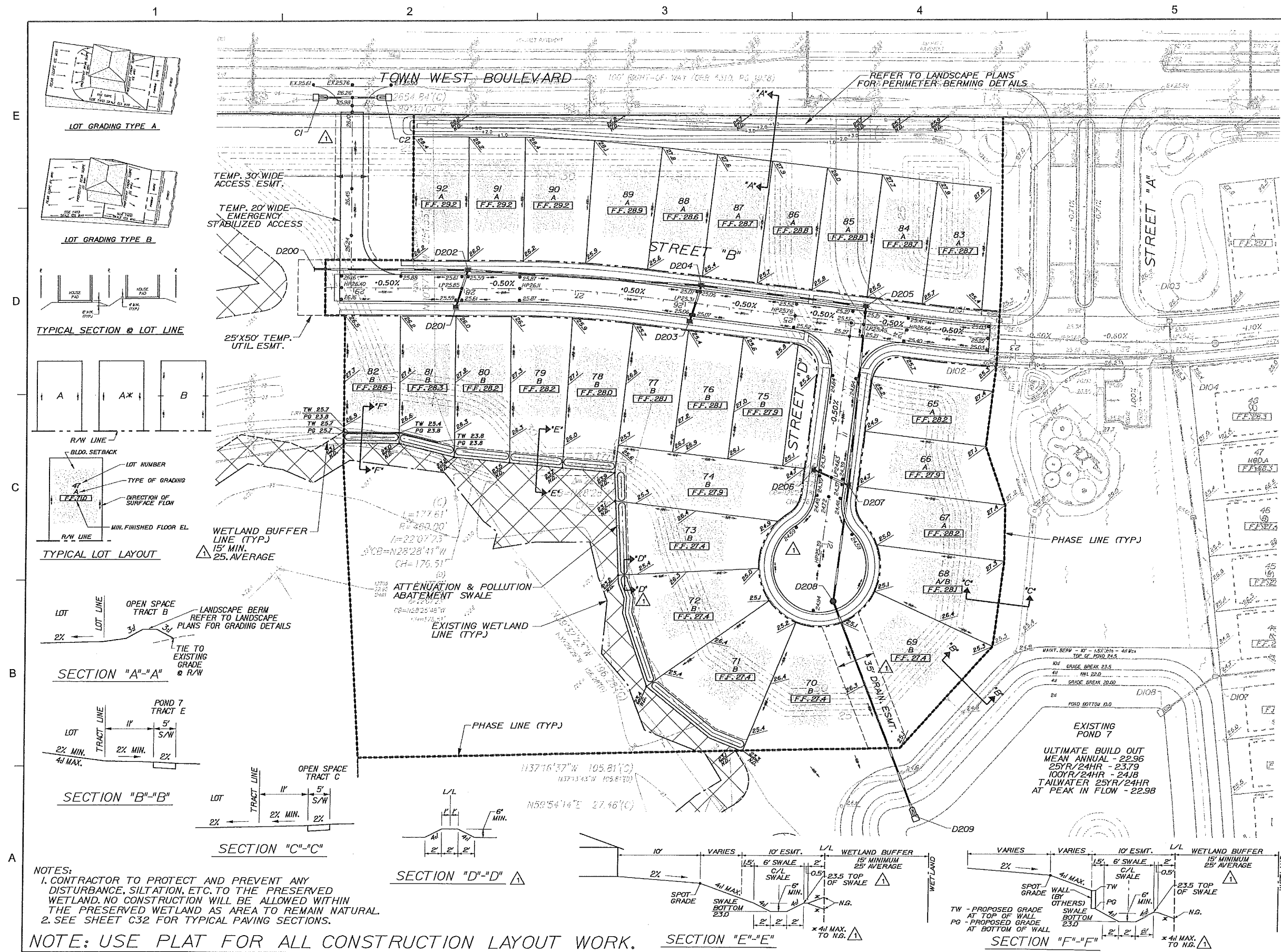
TITLE

LOT & BLOCK
GRADING
PLAN

PROJECT NO. 50079046 (CC 1)

C13

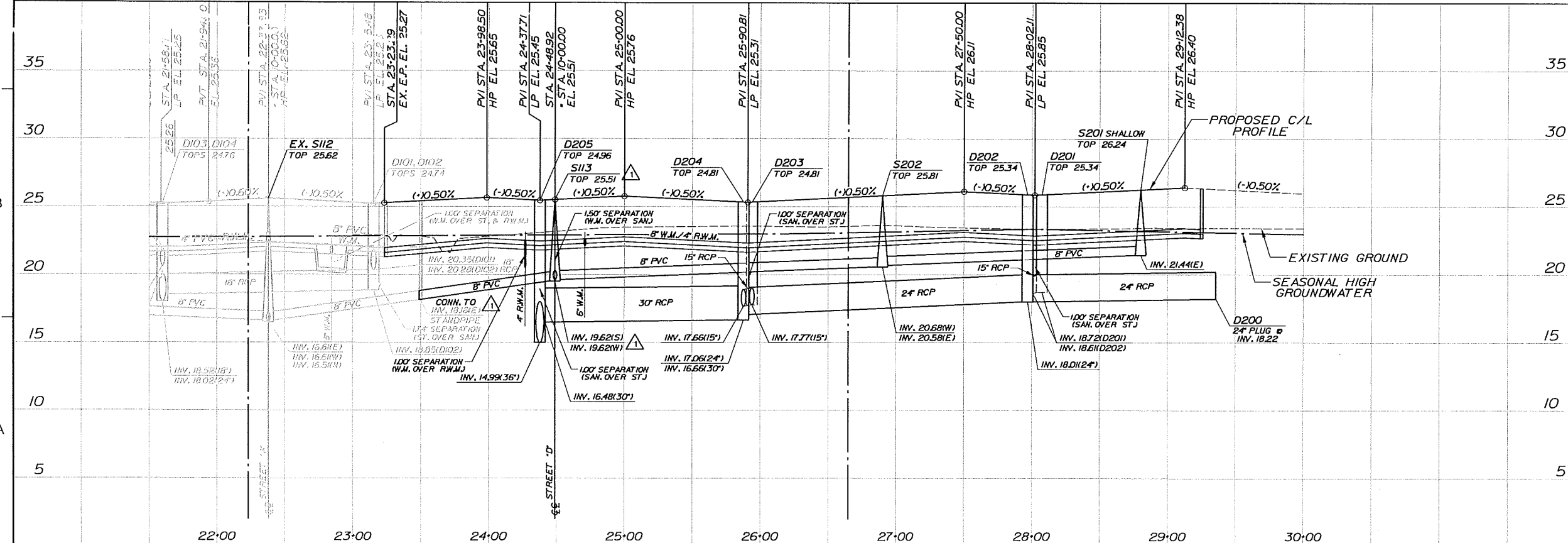
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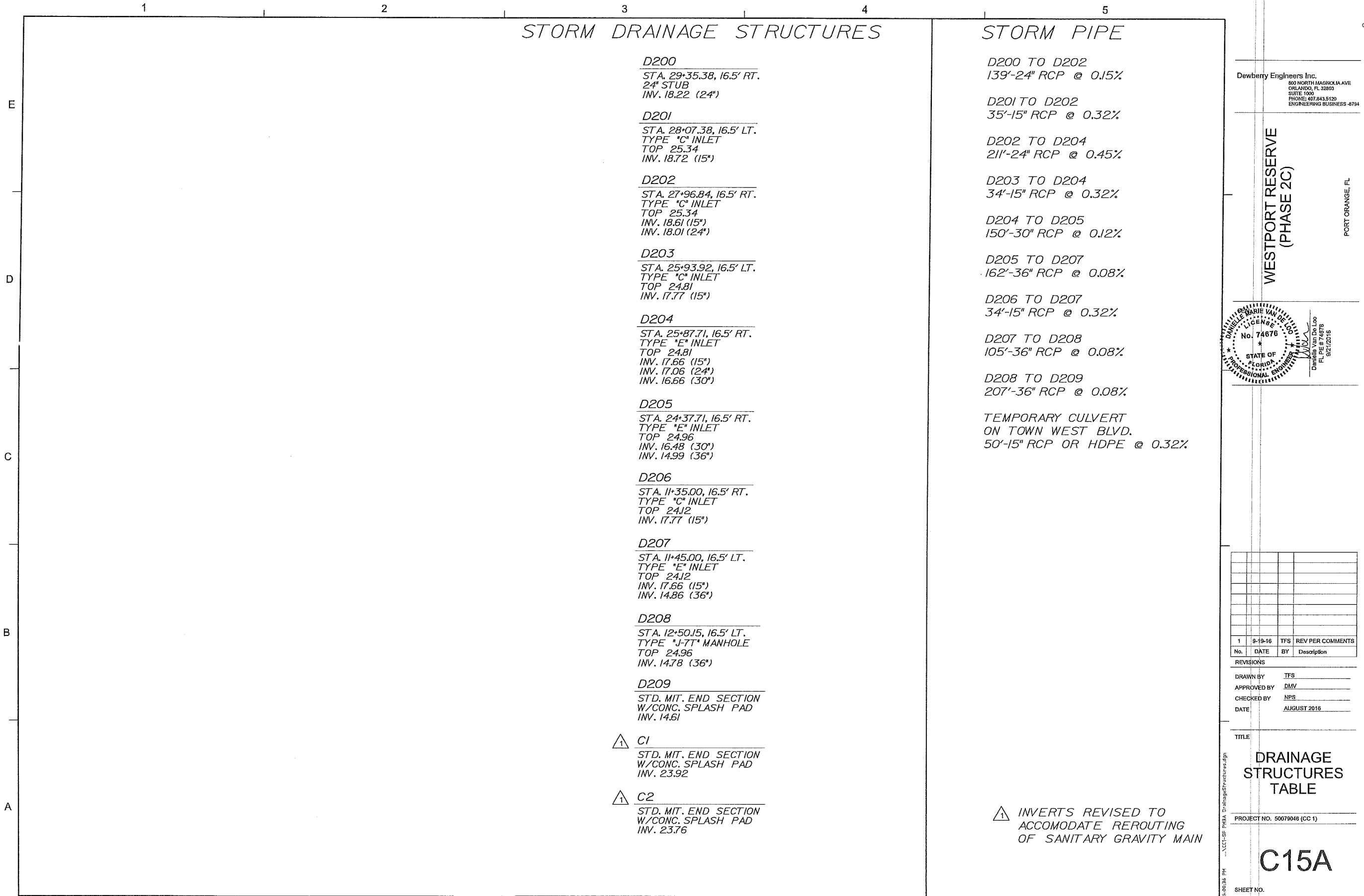
NOTES:
1. CONTRACTOR TO PROTECT AND PREVENT ANY
DISTURBANCE, SILTATION, ETC. TO THE PRESERVED
WETLAND. NO CONSTRUCTION WILL BE ALLOWED WITHIN
THE PRESERVED WETLAND AS AREA TO REMAIN NATURAL
2. SEE SHEET C32 FOR TYPICAL PAVING SECTIONS.

NOTE: USE PLAT FOR ALL CONSTRUCTION LAYOUT WORK.

A ————— B ————— C ————— D ————— E



C14



STORM DRAINAGE STRUCTURES

STORM PIPE

D200
STA. 29+35.38, 16.5' RT.
24" STUB
INV. 18.22 (24")

D201
STA. 28+07.38, 16.5' LT.
TYPE "C" INLET
TOP 25.34
INV. 18.72 (15")

D202
STA. 27+96.84, 16.5' RT.
TYPE "C" INLET
TOP 25.34
INV. 18.61 (15")
INV. 18.01 (24")

D203
STA. 25+93.92, 16.5' LT.
TYPE "C" INLET
TOP 24.81
INV. 17.77 (15")

D204
STA. 25+87.71, 16.5' RT.
TYPE "E" INLET
TOP 24.81
INV. 17.66 (15")
INV. 17.06 (24")
INV. 16.66 (30")

D205
STA. 24+37.71, 16.5' RT.
TYPE "E" INLET
TOP 24.96
INV. 16.48 (30")
INV. 14.99 (36")

D206
STA. 11+35.00, 16.5' RT.
TYPE "C" INLET
TOP 24.12
INV. 17.77 (15")

D207
STA. 11+45.00, 16.5' LT.
TYPE "E" INLET
TOP 24.12
INV. 17.66 (15")
INV. 14.86 (36")

D208
STA. 12+50.15, 16.5' LT.
TYPE "J-7T" MANHOLE
TOP 24.96
INV. 14.78 (36")

D209
STD. MIT. END SECTION
W/CONC. SPLASH PAD
INV. 14.61

1 CI
STD. MIT. END SECTION
W/CONC. SPLASH PAD
INV. 23.92

1 C2
STD. MIT. END SECTION
W/CONC. SPLASH PAD
INV. 23.76

D200 TO D202
139'-24" RCP @ 0.15%

D201 TO D202
35'-15" RCP @ 0.32%

D202 TO D204
211'-24" RCP @ 0.45%

D203 TO D204
34'-15" RCP @ 0.32%

D204 TO D205
150'-30" RCP @ 0.12%

D205 TO D207
162'-36" RCP @ 0.08%

D206 TO D207
34'-15" RCP @ 0.32%

D207 TO D208
105'-36" RCP @ 0.08%

D208 TO D209
207'-36" RCP @ 0.08%

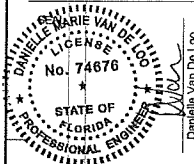
TEMPORARY CULVERT
ON TOWN WEST BLVD.
50'-15" RCP OR HDPE @ 0.32%

1 INVERTS REVISED TO
ACCOMMODATE REROUTING
OF SANITARY GRAVITY MAIN

Dewberry Engineers Inc.
800 NORTH MAGNOLIA AVE
ORLANDO, FL 32803
SUITE 1000
PHONE: 407.843.5120
ENGINEERING BUSINESS #734

WESTPORT RESERVE
(PHASE 2C)

PORT ORANGE, FL



No.	DATE	BY	DESCRIPTION
1	9-19-16	TFS	REV PER COMMENTS

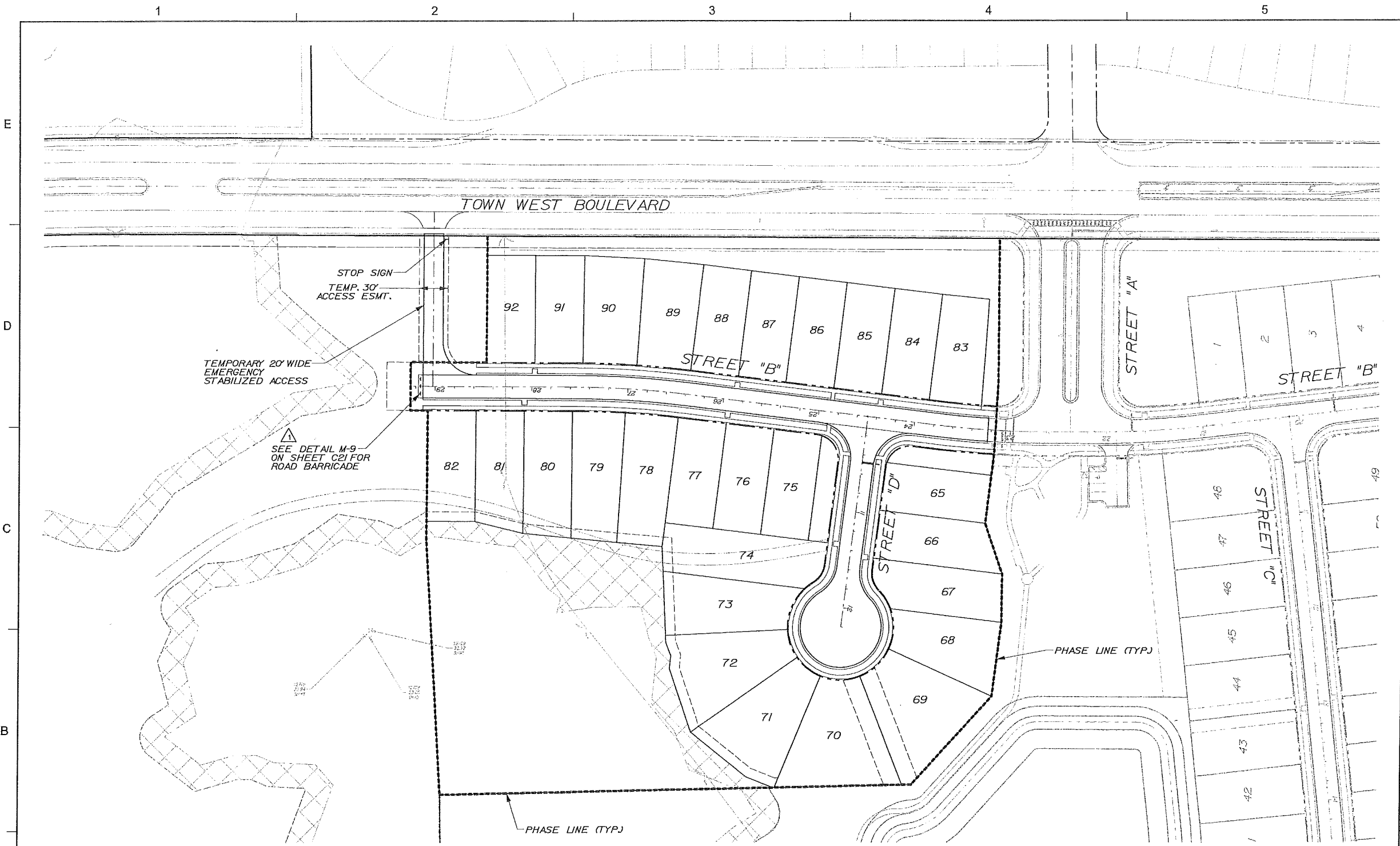
REVISIONS
DRAWN BY TFS
APPROVED BY DMV
CHECKED BY NPS
DATE AUGUST 2016

TITLE
DRAINAGE
STRUCTURES
TABLE

PROJECT NO. 50079046 (CC 1)

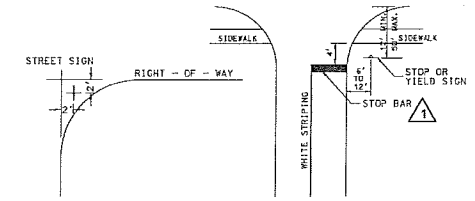
C15A

SHEET NO.



NOTE:
THE DESIGN AND INSTALLATION OF ALL SIGNAGE, STRIPING AND PAVEMENT MARKINGS MUST BE APPROVED BY PORT ORANGE TRAFFIC ENGINEERING PRIOR TO PUBLIC USE OF ROADWAY AND TRAFFIC IMPROVEMENTS WITHIN THE RIGHT-OF-WAY.

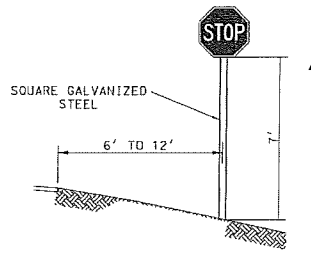
NOTE: USE PLAT FOR ALL CONSTRUCTION LAYOUT WORK.



SIGNING & STRIPING DETAILS



TYPICAL STOP SIGN
(UNLESS OTHERWISE SPECIFIED)



STOP & STREET SIGN DETAIL
TYPICAL TRAFFIC CONTROL SIGN

- STRIPING NOTES:**
- 1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC WITH RPM'S AND WILL BE INSTALLED IN ACCORDANCE WITH FDOT STANDARD INDEX #7346, (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)", 2003, 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 Engineers Inc.
800 NORTH MAGNOLIA AVE
ORLANDO, FL 32803
SUITE 1000
PHONE: 407.843.5120
ENGINEERING BUSINESS - 8784

WESTPORT RESERVE
(PHASE 2C)

PORT ORANGE, FL

Danielle Van De Loo
FL License # 74676
02/12/2016

SCALE: 1"=50'

NORTH

No.	DATE	BY	REV PER COMMENTS
1	9-19-16	TFS	REV PER COMMENTS

REVISIONS

DRAWN BY: TFS
APPROVED BY: DMV
CHECKED BY: NPS
DATE: AUGUST 2016
DATUM: NAVD 88

STRIPING PLAN

PROJECT NO. 50079046 (CC 1)

C16

SHEET NO.

WESTPORT RESERVE
(PHASE 2C)

PORT ORANGE, FL

8/2/2016

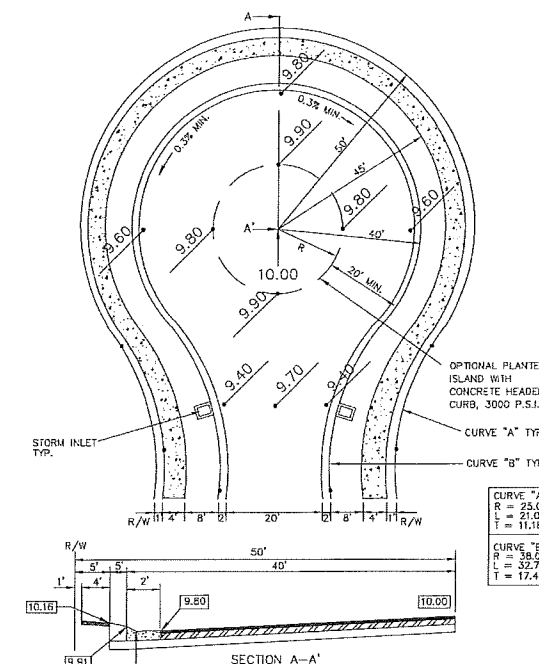
SEAL

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'	75'	0.3	150'
	20	10	50	95'	125'	0.3	200'
	25	11	50	180'	165'	0.3	250'
	30	11	50	250'	225'	0.3	300'
	35	12	60	300'	275'	0.3	350'
UP TO 1000 VPD	40	12	60	375'	325'	0.5	400'
	45	12	60	450'	400'	0.5	450'
	50	12	60	550'	500'	0.5	550'
UP TO 5000 VPD	35	12	80	300'	200'	0.3	330'
	40	12	80	450'	275'	0.5	450'
ARTERIAL UP TO 7500 VPD	35	5 LANES (3)		375'	225'	0.5	660'
	40	5 LANES (3)		450'	275'	0.5	660'

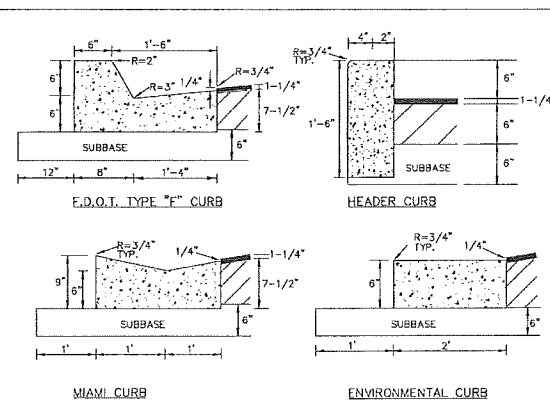
- NOTES:
- ALL ROADWAY DESIGN SHALL MEET THE MINIMUM REQUIREMENTS OF THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS (LATEST EDITION), AS PUBLISHED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION.
 - PAVEMENT WIDTHS FOR INDUSTRIAL AND COMMERCIAL ROADS SHALL BE INCREASED BY A MINIMUM OF ONE (1) FOOT.
 - AS A RULE, ALL INTERSECTIONS SHALL BE DESIGNED AT 90 DEGREE ANGLES. DEVIATION FROM THIS SHALL BE CONSIDERED STRICTLY ON A CASE BY CASE BASIS. IN THE EVENT THAT ANY DEVIATION IS PERMITTED, THEN IN NO CASE SHALL INTERSECTION ANGLES BE LESS THAN 75 DEGREES FOR INTERSECTIONS WITH ARTERIAL ROADWAYS EXCEPT ON LOCAL AND COLLECTOR ROADWAYS WHICH SHALL NOT BE LESS THAN 60 DEGREES. INTERSECTIONS WITH COUNTY AND STATE ROADS SHALL BE 90 DEGREES.
 - ALL INTERSECTIONS AND ACCESS POINTS SHALL HAVE ADEQUATE LINE OF SIGHT BASED ON AN EYE LEVEL OF 3.5' ABOVE THE GROUND AND AN OBJECT 3.0' ABOVE THE LOWEST ROADWAY. FOR PURPOSES OF THIS STANDARD, THE EYE LEVEL SHALL BE MEASURED 8' IN BACK OF THE STOP BAR AT ENTRANCES. THE FOLLOWING SIGHT DISTANCES SHALL BE PROVIDED:

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

REV. 12/08

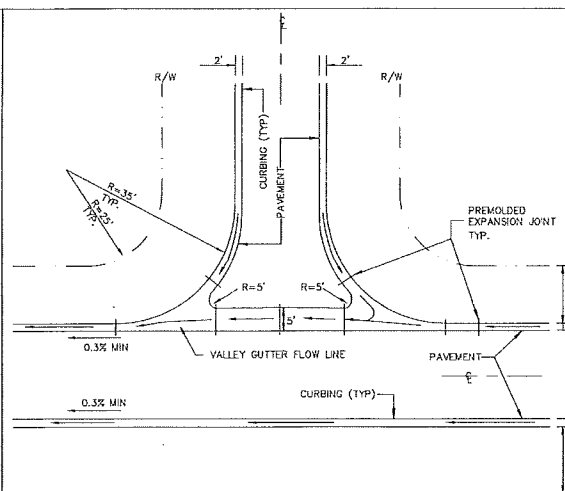


REV. 12/08



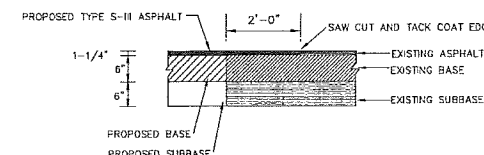
NOTES:

- ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE
- 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 500', CONSTRUCTION JOINT REQUIRED EVERY 10' MAXIMUM (4' MINIMUM).
- 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES AND AT ALL RADIUS POINTS.
- 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST AND SHALL BE STABILIZED TO A MINIMUM L.B.R. 40.
- EXPANSION JOINT MATERIAL MUST COVER THE ENTIRE CROSS SECTION OF CURB.
- IN NO INSTANCE SHALL EXTRUDED CURBS (DEFINED AS HEADER-TYPE CURBS INSTALLED DIRECTLY ON TOP OF PAVEMENT) BE PERMITTED.
- ALL ASPHALT AND/OR PAYER DRIVEWAY APPROX LOCATED IN PUBLIC RIGHTS-OF-WAY, SHALL INCLUDE CURBING.



NOTES:

- VALLEY GUTTER TO HAVE A STANDARD MINIMUM LONGITUDINAL SLOPE OF 0.30%
- VALLEY GUTTER TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE.
- 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
- VALLEY GUTTERS ARE REQUIRED WHEN STORMWATER CROSSES THE INTERSECTION AND/OR DRIVEWAY CONNECTIONS.
- REFER TO F.D.O.T. STANDARD INDEX No. 300



No.	DATE	BY	Description
-----	------	----	-------------

REVISIONS

DRAWN BY	IFS
APPROVED BY	DMV
CHECKED BY	NPS
DATE	AUGUST 2016
DATUM	NAVD 88

TITLE

CITY ROAD/
DRAINAGE
DETAILS

PROJECT NO. 60079046 (CC 1)

C17

SHEET NO.



STANDARD CONSTRUCTION DETAIL
ROADWAY GEOMETRY

FILE NAME:

R6.DWG

DETAIL REF:

R-6



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

FILE NAME:

R8.DWG

DETAIL REF:

R-8



STANDARD CONSTRUCTION DETAIL
STANDARD CURB CONSTRUCTION

FILE NAME:

R9.DWG

DETAIL REF:

R-9



STANDARD CONSTRUCTION DETAIL
ROADWAY INTERSECTION VALLEY GUTTER

FILE NAME:

R10.DWG

DETAIL REF:

R-10



STANDARD CONSTRUCTION DETAIL
PAVEMENT BUTT JOINT

FILE NAME:

R11.DWG

DETAIL REF:

R-11

REV. 12/08



PORT ORANGE FL

3/21/2016

SEAL

No.	DATE	BY	Description	

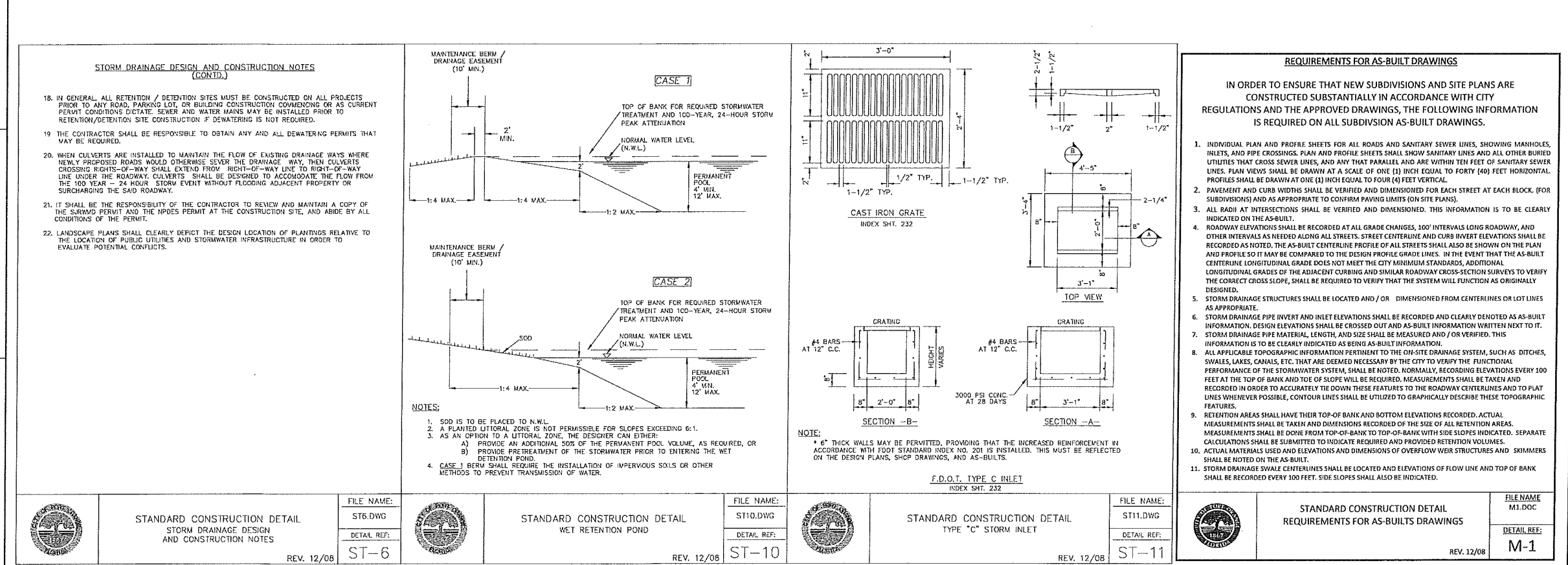
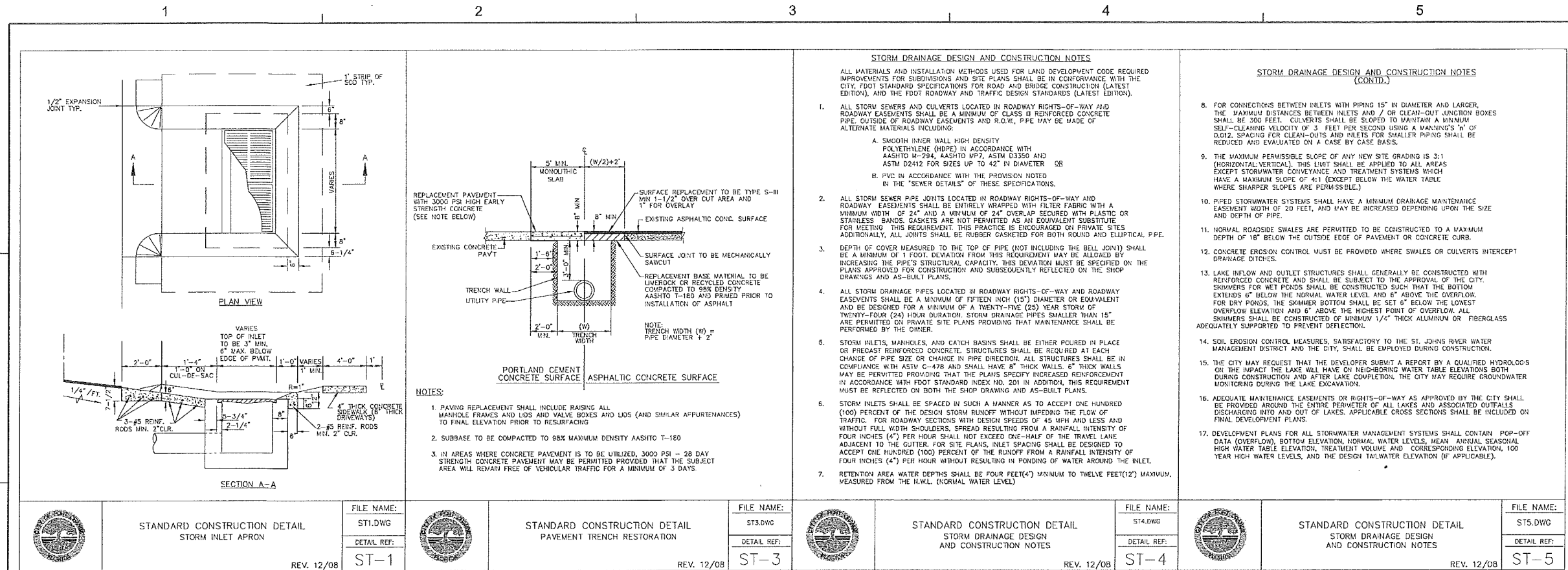
REVISIONS	
DRAWN BY	TFS
APPROVED BY	DMV
CHECKED BY	NPS
DATE	AUGUST 2016
DATUM	NAVD 88

CITY ROAD/
DRAINAGE
DETAILS

PROJECT NO. 50079046 (CC 1)

C18

SHEET NO.



Dewberry®

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200 NORTH MAGNOLIA AVE
ORLANDO, FL 32803
SUITE 1000
PHONE: 407.843.5120
ENGINEERING BUSINESS 4794

WESTPORT RESERVE (PHASE 2C)

PORT ORANGE, FL

9/2/2016

SEAL

No.	DATE	BY	Description
REVISIONS			
DRAWN BY			TFS
APPROVED BY			DMV
CHECKED BY			NPS
DATE			AUGUST 2016
DATUM			NAVD 88
TITLE			
CITY ROAD/ DRAINAGE DETAILS			
PROJECT NO. 50079046 (CC 1)			
C20			
SHEET NO.			

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.

- SANITARY SEWER MANHOLES SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR 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.
- 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, SIZES, MATERIAL, ETC., SHALL BE VERIFIED AND RECORDED. THIS INFORMATION IS TO BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION.
- SEWER LATERALS SHALL BE VERIFIED AND RECORDED AT THEIR CLEAN-OUT LOCATIONS. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TOWARDS UPSTREAM MANHOLES.
- 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.
- CURB CUTS OR METAL TABS, USED TO MARK SEWER LATERALS, WATER SERVICES AND WATER VALVES, SHALL BE VERIFIED FOR PRESENCE AND ACCURACY OF LOCATION.
- 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.
- POTABLE AND RECLAIMED WATER VALVES, TEES, BENDS, ALL SERVICES, AND FIRE HYDRANTS SHALL BE LOCATED BY TYPING 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.
- 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.
- 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.
- IF AN APPROVED SUBDIVISION PLAT OR SITE PLAN SHOWS A CONSERVATION EASEMENT, THE PROJECT SURVEYOR SHALL PROVIDE THE EXACT LOCATION OF THE SPECIFIC TREE(S) 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 DRAWINGSFILE 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.

- WHEN STORMWATER, POTABLE WATER, RECLAIMED WATER, OR SANITARY SEWER IMPROVEMENTS ARE LOCATED WITHIN AN EASEMENT, THE AS-BUILT DRAWING 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 SUBSURFACE 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 DRAWINGSFILE NAME:
M1.DWG

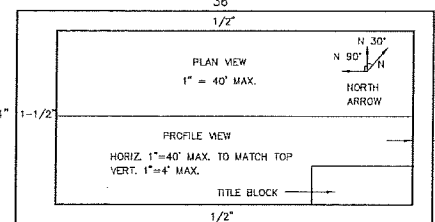
DETAIL REF:

M-1

REV. 12/08

PLAN SHEET REQUIREMENTS:

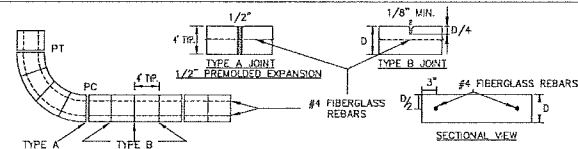
- PLANS SUBMITTED TO THE COMMUNITY DEVELOPMENT DEPARTMENT FOR REVIEW INCLUDING SITE PLANS, SUBDIVISIONS, PLANNED UNIT DEVELOPMENTS, AND OTHER DEVELOPMENTS, SHALL CONSIST OF AT LEAST THE FOLLOWING ITEMS:
 - INDEX PAGE WITH AREA MAP SHOWING PROJECT LIMITS
 - PLAN AND PROFILE SHEETS, AS APPROPRIATE
 - PLAN SHEETS, AS APPROPRIATE
 - PROFILE SHEETS, AS APPROPRIATE
 - DETAIL SHEETS, AS APPROPRIATE
 - OTHER INFORMATION, AS REQUIRED BY CODE
- 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:
 - THE NAME OF THE PROJECT
 - THE NAME, ADDRESS, AND PHONE NUMBER OF THE COMPANY PREPARING THE DRAWINGS
 - THE NAME, ADDRESS, AND PHONE NUMBER OF THE ENGINEER, SURVEYOR, OR LANDSCAPE ARCHITECT AS APPROPRIATE
 - THE SHEET NUMBER
 - THE DRAWING NUMBER
 - THE DATE
 - ANY REVISIONS AND DATE
 - OTHER INFORMATION AS APPROPRIATE
- THE STANDARD SHEET SHALL BE Laid OUT AS SHOWN BELOW, WITH EACH SHEET CONTAINING A NORTH ARROW AND SCALE.

STANDARD CONSTRUCTION DETAIL
PLAN SHEET REQUIREMENTSFILE NAME:
M2.DWG

DETAIL REF:

M-2

REV. 12/08



SIDEWALK CONSTRUCTION REQUIREMENTS

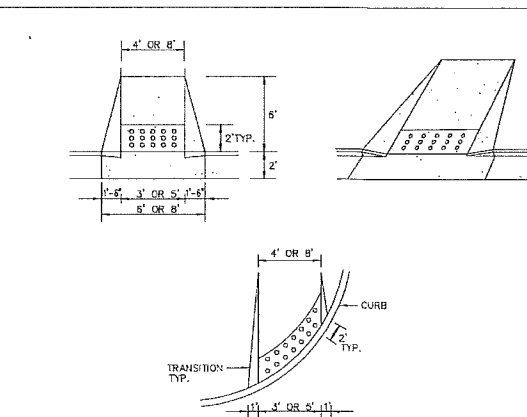
- ALL CONCRETE SIDEWALKS & BIKE PATHS IN PUBLIC RIGHT-OF-WAY, PRIVATE RIGHT-OF-WAY AND ON NON-RESIDENTIAL SITES SHALL CONTAIN FIBERGLASS REINFORCEMENT EXCEPT REPAIRS TO NON-REINFORCED EXISTING SIDEWALKS. FIBERGLASS REINFORCEMENT SHALL NOT BE REQUIRED ON PRIVATE RESIDENTIAL SIDEWALKS.
- SIDEWALKS, BIKEPATHS, RAMPS, 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.
- 2-#4 CONTINUOUS FIBERGLASS BARS (8" OVERLAP REQUIRED) SHALL BE INSTALLED LONGITUDINALLY, 3" FROM THE EDGE OF ALL BIKEPATHS AND SIDEWALKS, TO CONTROL DIFFERENTIAL MOVEMENT AT JOINTS.
- SIDEWALKS AND BIKEPATHS SHALL BE PLACED PARALLEL TO, AND ONE FOOT WITHIN THE RIGHT-OF-WAY LINE EXCEPT THAT THE CITY MAY APPROVE DEVIATIONS TO SAVE SPECIMEN TREES PROVIDED THAT THE SIDEWALK REMAINS WITHIN THE RIGHT-OF-WAY OR AN APPROVED SIDEWALK EASEMENT ABUTTING 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.
- THE TOP OF THE CONCRETE SHALL BE AT AN ELEVATION NO LOWER THAN THE CROWN OF THE ADJACENT ROADWAY, AND NO HIGHER THAN 6 INCHES ABOVE THE CROWN UNLESS APPROVED BY THE CITY TO MAKE A MORE NATURAL TRANSITION WITH THE ADJACENT LAND.
- ISOLATION JOINTS (TYPE A JOINTS) SHALL BE PROVIDED BETWEEN EXISTING SLABS OR STRUCTURES AND FRESH CONCRETE. TO SEPARATE PEDESTRIAN SECTIONS FROM SECTIONS WHICH WILL ENCOUNTER VEHICLE TRAFFIC, TO SEPARATE FRESH PLACEMENT FROM CONCRETE WHICH HAS SET FOR MORE THAN 60 MINUTES, AND NO FARTHER APART THAN 100 FEET IN SIDEWALKS AND BIKEPATHS. JOINT MATERIAL SHALL BE PREFORMED JOINT FILLER MEETING F.D.O.T. SPECIFICATIONS.
- CONTROL JOINTS (TYPE B JOINTS) SHALL BE TOoled 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 OR 4 FEET WHICHEVER IS GREATER.
- 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.
- THE BEARING SUBSURFACE SHALL HAVE ALL ORGANIC, LOOSE, AND DELETERIOUS MATTER REMOVED, AND THE REMAINING CLEAN SOIL SHALL BE SMOOTH, SOUND, AND SOLID. ANY FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM PROCTOR FIELD DENSITY OF 95 PERCENT.
- ALL CONCRETE WORK IN THE RIGHT-OF-WAY SHALL BE INSPECTED BY THE CITY AFTER THE SUBSOIL IS PREPARED AND THE FORMS ARE SET, BUT BEFORE THE CONCRETE PLACEMENT BEGINS.
- 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 REPLACED. REPAIRS ARE NOT ACCEPTABLE.
- SIDEWALKS LOCATED WITHIN THE RIGHT-OF-WAY SHALL NOT BE TINTED, STAINED, COLORED, OR COATED.
- ALL FORMS SHALL BE REMOVED PRIOR TO ACCEPTANCE OR APPROVAL AND THE DISTURBED GROUND SHALL BE BACKFILLED, REGRADED, AND SODDED SO THAT THE WEAR SURFACE OF THE CONCRETE IS REASONABLY FLUSH WITH THE ADJACENT GRADE.

STANDARD CONSTRUCTION DETAIL
SIDEWALK CONSTRUCTION REQUIREMENTSFILE NAME:
M3.DWG

DETAIL REF:

M-3

REV. 12/08



NOTES:

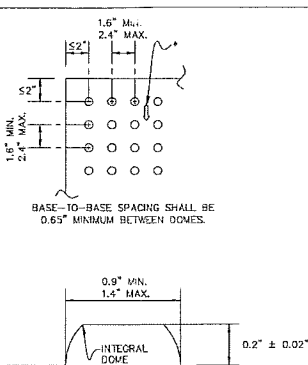
- RAMP LOCATIONS ARE TO BE COORDINATED WITH AND IN CONFORMANCE WITH CROSSWALK MARKING DETAILS SHOWN IN THE PLANS.
- CURBED RAMPS SHALL HAVE FLARED SIDES WITH A MAXIMUM SLOPE OF 12:1.
- NO CURB TRANSITION IS NEEDED FOR MIAMI CURBS.
- ALL RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX NO. 304 AND ACCESSIBILITY REQUIREMENTS IN ACCORDANCE WITH THE AMERICAN DISABILITIES ACT.
- CURB RAMPS SUBJECT TO THE DEPARTMENT OF TRANSPORTATION REGULATION CFR 37.21 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:

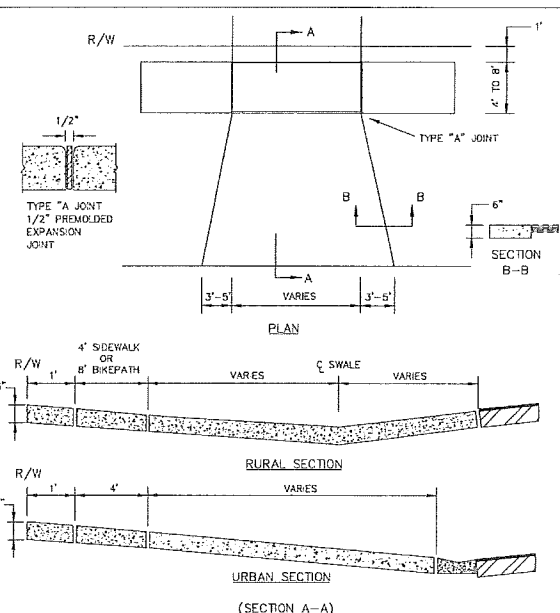
- ON RAMPS THAT ARE PERPENDICULAR WITH THE CURB LINE, THE DOME PATTERN SHALL BE IN-LINE WITH THE DIRECTION OF TRAVEL. ON RAMPS INTERSECTING CURBS ON A RADIUS, THE DOME PATTERN SHALL BE IN-LINE WITH THE DIRECTION OF TRAVEL TO THE EXTENT PRACTICAL.
- CURB RAMPS SUBJECT TO THE DEPARTMENT OF TRANSPORTATION REGULATION CFR 37.21 SHALL HAVE A DETECTABLE WARNING.

STANDARD CONSTRUCTION DETAIL
SIDEWALK AND BIKEPATH RAMPFILE NAME:
M5.DWG

DETAIL REF:

M-5

REV. 2/13



NOTES:

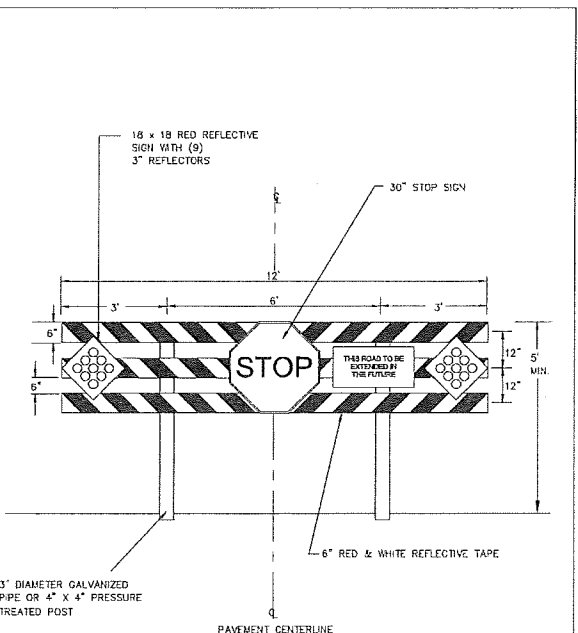
- DRIVEWAY APRON BASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
- CONCRETE DRIVEWAY APRON TO BE 28 DAY, 3000 P.S.I.

STANDARD CONSTRUCTION DETAIL
DRIVEWAY APRONFILE NAME:
M6.DWG

DETAIL REF:

M-6

REV. 12/08

STANDARD CONSTRUCTION DETAIL
ROAD BARRICADEFILE NAME:
M9.DWG

DETAIL REF:

M-9

REV. 12/08



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PHONE: 407.843.5120
ENGINEERING BUSINESS-4794

WESTPORT RESERVE
(PHASE 2C)

PORT ORANGE, FL

9/21/2016

SEAL

No. DATE BY Description

REVISIONS

DRAWN BY: TFS
APPROVED BY: DMV
CHECKED BY: NPS
DATE: AUGUST 2016
DATUM: NAVD 88

TITLE

CITY ROAD/
DRAINAGE
DETAILS

PROJECT NO. 50079046 (CC 1)

C21

SHEET NO.

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-02 5P (Plastic)

Gate Valves and Trapping Valves – Resilient Seated (AWWA C509 and C515) 24" or Smaller

MANUFACTURER	MODEL #
American AVK Co.	Series 3, 18, 25, 45, 55, & 66
Clow	Model 2638 and 2639
Mueller	A-2360, A-2361, T-2360 & T-2361
American Flow Control	Series 2500

Joints Restrained – PVC Only

MANUFACTURER	MODEL #
EBBA Iron Inc	Series 1500/1600 2000/2500/2800
Star Pipe	Starpipe Series 1030/1100/1200/4000
Sigma	One-Lock SLC PV-Lock for PVC
Smith-Blair	Cam-Lock (111 & 120) & Bell-Lock (115 & 165)

STANDARD CONSTRUCTION DETAIL
SANITARY SEWER & FORCE MAIN
APPROVED PRODUCTS

FILE NAME
S5.DOC

DETAIL REF:

S-5

City of Port Orange Public Utilities Department		
List of Approved Products		
Sanitary Sewer & Force Main		12/08
<u>Force Main Fittings – PVC and DIP Class 350 (with Protecto 401 Ceramic Epoxy)</u>		
<u>C-900, C-905 or C-907</u>		
MANUFACTURER	MODEL #	
Harco		
Multi Fittings		
Plastic Trends		
Head		
Tyler/Union (Lined with Protecto 401 Ceramic Epoxy)		
<u>Manhole and Lift Station Wet Well Rehabilitation Liner</u>		
MANUFACTURER	MODEL #	
Raven 405		
1/2" Minimum Thick Fiberglass Liner (cylinder)		
	STANDARD CONSTRUCTION DETAIL SANITARY SEWER & FORCE MAIN APPROVED PRODUCTS	FILE NAME S5.DOC
		DETAIL REF: S-5

STANDARD CONSTRUCTION DETAIL STANDARD MANHOLE		FILE NAME: S6.DWG DETAIL REF: S-6
REV. 12/08		

STANDARD CONSTRUCTION DETAIL SANITARY SEWER COVER & GENERAL NOTES USF 117 RING & BL COVER		FILE NAME: S7.DWG DETAIL REF: S-7
REV. 12/08		

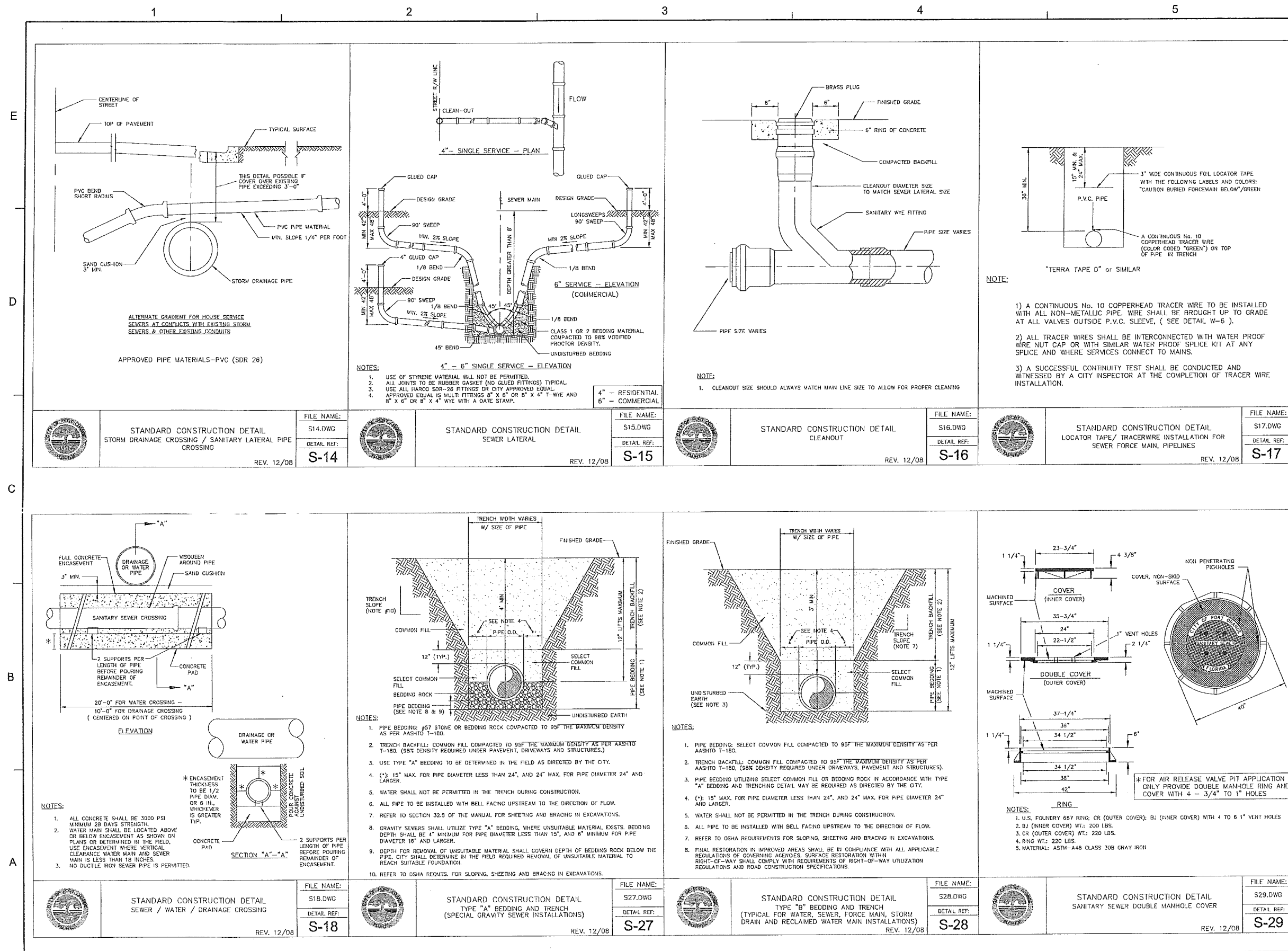
STANDARD CONSTRUCTION DETAIL SHALLOW MANHOLE		FILE NAME: S8.DWG DETAIL REF: S-8
REV. 06/11		

STANDARD CONSTRUCTION DETAIL RUBBER BOOT AND PRECAST JOINT CONNECTION		FILE NAME: S13.DWG DETAIL REF: S-13
REV. 12/08		

No.	DATE	BY	Description
REVISIONS			

DRAWN BY	TFS
APPROVED BY	DMV
CHECKED BY	NPS
DATE	AUGUST 2016
DATUM	NAVD 88

TITLE	CITY SEWER DETAILS
PROJECT NO.	50079046 (CC 1)



POTABLE WATER CONSTRUCTION NOTES (CONT'D)

1. THE CITY'S PUBLIC UTILITIES DEPARTMENT (386) 506-5750 SHALL BE GIVEN A MINIMUM OF 2 BUSINESS DAYS ADVANCE NOTICE (NOT INCLUDING HOLIDAYS OR WEEKENDS) PRIOR TO BEGINNING ANY POTABLE WATER SYSTEM CONSTRUCTION.
2. DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW WATER MAIN BEING LAID.
3. ALL WATER MAINS SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
4. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE CITY WITH A MINIMUM COMPACTION OF 90% IN PAVED AREAS AND 95% IN UNPAVED AREAS IN ACCORDANCE WITH AASHTO T-180.
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 50 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 USED ON ALL DUCTILE IRON PIPES, AS WELL.
7. ALL WATER SERVICE ENDINGS SHALL BE MARKED WITH A 2" X 4" LUMBER (PRESSURE TREATED) EXTENDING 4 FEET ABOVE GRADE, WITH WATER SERVICES SECURED 12" MAXIMUM ABOVE THE GROUND, ALL SERVICES SHALL BE LOCKED AT THE TIME OF FINAL INSPECTION BY THE CONTRACTOR IN THE PRESENCE OF THE CITY INSPECTOR AND CITY PERSONNEL. AFTER THEY HAVE BEEN INSPECTED AND VERIFIED TO OPERATE PROPERLY.
8. AT ALL WATER MAIN TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL LEGS EXCEPT ONE.
9. ALL WATER VALVES SHALL BE ADJUSTED TO FINISHED GRADE AND THE CAPS PAINED BLACK TO MAKE THEM PLAINLY VISIBLE.
10. UPON FINAL ACCEPTANCE OF NEW WATER SYSTEMS, WATER VALVES SHALL BE COMPLETELY OPENED BY PUBLIC UTILITIES PERSONNEL AT NO TIME SHALL CONTRACTOR OPERATE ANY EXISTING VALVES.
11. ALL FIRE HYDRANTS SHALL BE CONSTRUCTED TO MAKE THEM EASILY ACCESSIBLE TO FIRE PERSONNEL IN CASE OF FIRE. THE PRIMARY FIRE HYDRANT PORT SHALL ALWAYS FACE THE STREET.
12. AS STANDARD PRACTICE, WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF CURB OR AS APPROVED BY THE CITY.
13. ALL WATER MAINS SHALL BE NSF AND/OR AWWA APPROVED FOR POTABLE WATER USE, AND SHALL HAVE A MINIMUM COVER OF 36 INCHES (3.0 FEET) AND A MAXIMUM DEPTH OF 48 INCHES (4.0 FEET) FROM FINAL GRADE EXCEPT AT LOCATIONS OF UTILITY CROSSINGS OR WITH SPECIAL APPROVAL WHEN IT IS DETERMINED TO BE IN THE INTEREST OF THE CITY.
14. WATER MAINS SHALL BE C500 PVC OR C905 CL 150 (COLOR "BLUE") OR D.I.P., PRESSURE CLASS 350 STANDARD CEMENT LINED UNLESS OTHERWISE APPROVED BY THE CITY.
15. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE DEPARTMENT OF HEALTH AND AS-BUILTS ARE PROVIDED TO THE CITY PRIOR TO ANY PUBLIC USE OF THIS SYSTEM.
16. IN AREAS WHERE RECLAIMED WATER IS NOT AVAILABLE THE CONTRACTOR SHALL BE REQUIRED TO (UPON SATISFACTORY COMPLETION OF THE PRESSURE TEST) TRANSFER THE WATER FROM THE POTABLE WATER LINES TO THE RECLAIMED WATER LINES FOR UTILIZATION OF THE PRESSURE TEST.
17. ALL POTABLE WATER MAINS SHALL USE TYPICAL RESTRAINT JOINT METHOD IN COMPLIANCE WITH THE DUCTILE IRON PIPE RESEARCH ASSOCIATION (DIPRA) GUIDELINES, IN THE EVENT THAT PVC PIPE IS SPECIFIED, THE

- RESTRAINT JOINT SHALL BE MODIFIED IN ACCORDANCE WITH THE RECOMMENDED ADDITIONAL RESTRAINT LENGTH REQUIRED FOR PIPE WRAPPED WITH POLYETHYLENE.
28. MEGALUGS, BOLTSLESS RESTRAINED JOINTS OR GRIPPER GASKETS SHALL BE USED ON ALL RESTRAINED JOINT INSTALLATIONS. MINIMUM DEPTH OF BURY ON GRIPPER SHALL MEETING COVER REQUIREMENTS SHALL FOLLOW THE MOST RECENT DRAIN THURST RESTRAINT DESIGN GUIDELINES USING TORQUE WRENCHES PER MANUFACTURER'S RECOMMENDATION.
29. WATER SYSTEMS SHALL BE PRESSURE TESTED AT 150 PSI STATIC PRESSURE FOR A PERIOD OF 2 HOURS PER AWWA STANDARDS.
30. ALL WATER SERVICES SHALL BE MARKED WITH AN "X" SAW CUT INTO THE CURB OR BY METAL TAGS SET INTO THE PAVEMENT.
31. ALL WATER VALVES SHALL BE MARKED WITH AN "X" SAW CUT INTO THE CURB OR BY METAL TAGS SET INTO THE PAVEMENT. VALVES OR SUBS SHALL BE MARKED SIMILARLY, AS WELL. SERVICE TAPPING VALVE SHALL BE MARKED WITH AN "X" SAW CUT INTO THE CURB OR PAVEMENT WITH THE ARROW POINTING TO THE DIRECTION OF THE PRESSURE MAIN RUN.
32. ALL TAPPING OF MAINS SHALL BE PERFORMED BY THE CITY AND BILLED IN ACCORDANCE WITH THE ADOPTED, FEE RESOLUTION. SCHEDULING OF THESE CONNECTIONS OR TAPPIINGS SHALL REQUIRE A MINIMUM OF 2 BUSINESS DAYS, DIRECTED TO THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE THE WORK BETWEEN THE PUBLIC UTILITIES DEPARTMENT. SUBSEQUENTLY, THE CONNECTION SHALL BE SCHEDULED TO TAKE PLACE BETWEEN 6:00 AM AND 6:00 PM.
33. LARGE COMMERCIAL WATER AND RECLAIMED WATER METERS GREATER THAN 3" TAKE A MINIMUM OF 6 WEEKS FOR DELIVERY AFTER FEES ARE PAID TO THE CITY. IN ADDITION ALL METERS AND VALVES 3" AND GREATER SHALL BE INSTALLED BY THE OWNER/DEVELOPER/ CONTRACTOR. THE FEE COLLECTED BY THE CITY IS FOR MATERIALS ONLY. ALL METERS, 2" AND LESS, SHALL BE INSTALLED BY THE CITY.
34. THE CITY REQUIRES DOUBLE WATER SERVICE INSTALLATIONS WHEREAS FEASIBLE, WHEN DESIGN CONFLICTS EXIST. WATER SERVICES ARE REQUIRED TO BE INSTALLED AT STORMWATER INLETS, FIRE HYDRANTS, TRANSFORMERS, ETC. AND OTHER LOCATIONS DEEMED APPROPRIATE BY THE CITY.
35. ALL PROPOSED POTABLE WATER MAINS SHALL BE FLUSHED, DISINFECTED, PRESSURE TESTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE WHEN APPROPRIATE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE WITH CITY PERSONNEL AT THE WATER TREATMENT PLANT AT LEAST 2 BUSINESS DAYS PRIOR TO BEGINNING FLUSH OF THE MAINS. FLUSH TO DISCHARGE TO THE CORNER MANHOLE OF PRESSURE TESTING.
36. THE CONTRACTOR SHALL BE REQUIRED TO PIG ALL POTABLE MAINS 6" AND LARGER IN 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 WITHNESSED BY A PUBLIC UTILITIES REPRESENTATIVE OR A CITY UTILITY INSPECTOR.
37. WITH RESPECT TO THE CONNECTIONS, THE CITY RESERVES THE RIGHT TO REQUIRE CONNECTIONS TO BE PERFORMED DURING PERIODS OF LOW FLOW (MIDNIGHT TO 6:00 AM.) IN ORDER TO MINIMIZE SERVICE DISRUPTION TO EXISTING CUSTOMERS. THE INSTALLATION OF LINE STOPPING DEVICES ON PRESSURE MAIN (POTABLE WATER AND FORCE MAIN) MAY BE REQUIRED ON ANY REQUESTED UTILITY OUTAGE AT THE DISCRETION OF PUBLIC UTILITIES DEPARTMENT TO MINIMIZE INTERRUPTION TO EXISTING UTILITY CUSTOMERS.

REV. 12/08

REV. 12/08

REV. 12/08

REV. 12/08

Potable Water

12/08

12/08

Joints Restrained – DIP and PVC

MANUFACTURER	MODEL #
EBBA Iron Inc.	Series 1100/1500/1600 2000/2500/2800
Star Pipe	Stargrip Series 1000/1100/1200 3000/ 4000
Sigma	One-Lock SLD; One-Lock SLG; PV-Lok for PVC
Smith-Blair	Cam-Lock {111 & 120} ; Bell-Lock {115 & 165}

Water Service Materials

MANUFACTURER	MODEL #
Endot Endopure	Endotrace w/#10 Copperhead Tracer Wire

Corporation Step 1*	
MANUFACTURER	MODEL #
Ford	F-1100-4

Curb Stop – Straight Ball Meter Valve w/ Barrel Locks	
MANUFACTURER	MODEL #
Ford	B-94-324W (Single Service) B-91-223W (Double Service)
"U" Branch (1" x 3/4")	
MANUFACTURER	MODEL #
Ford	U-48-43-6.5

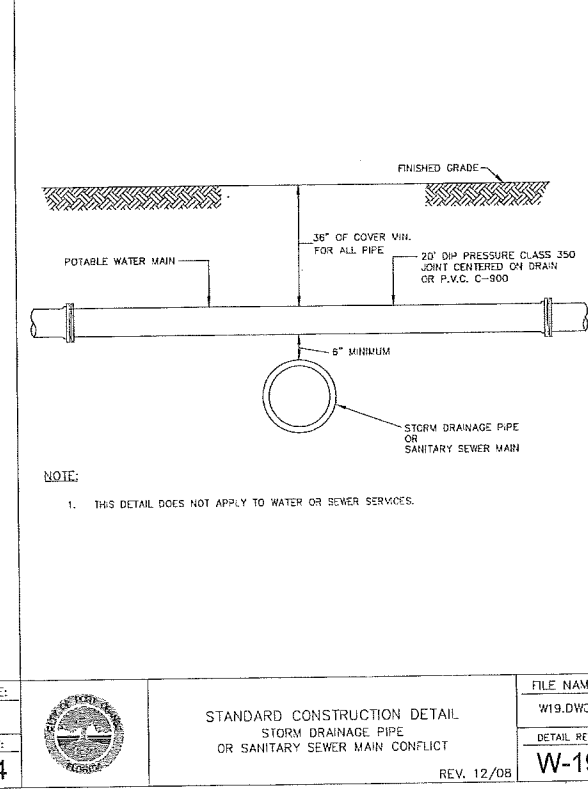
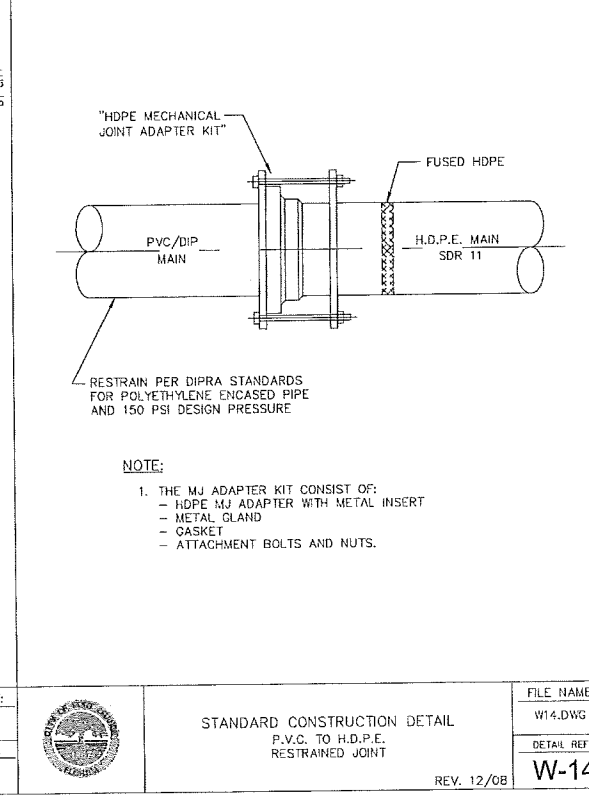
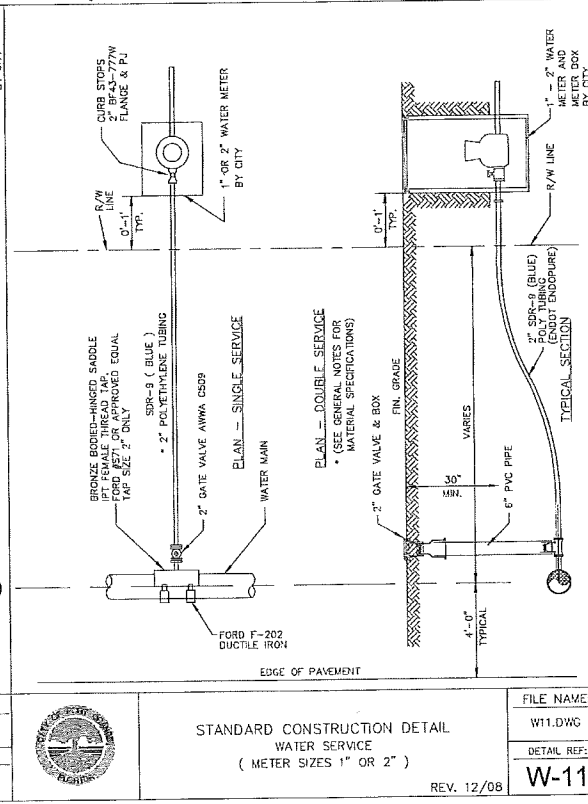
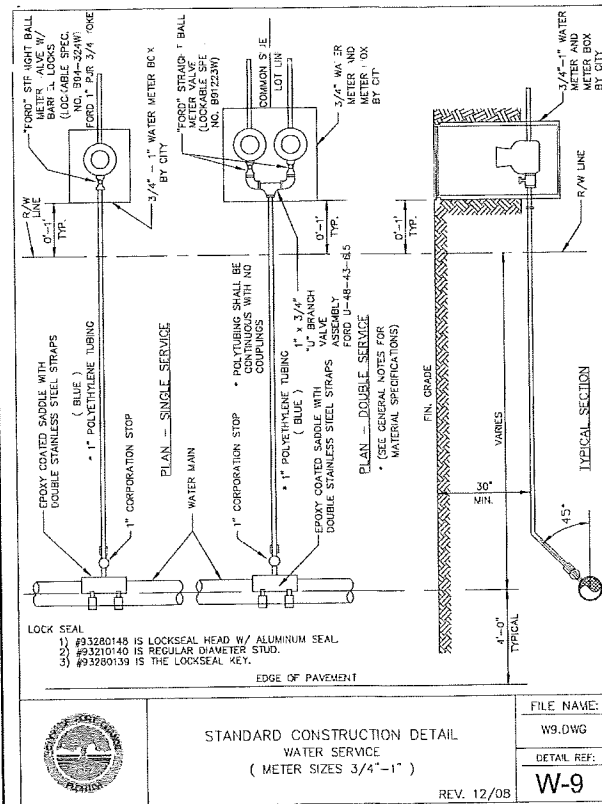
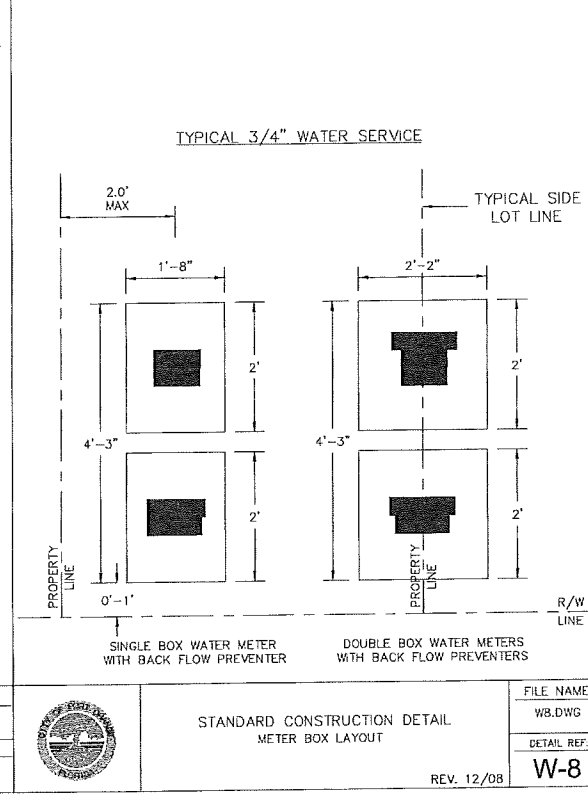
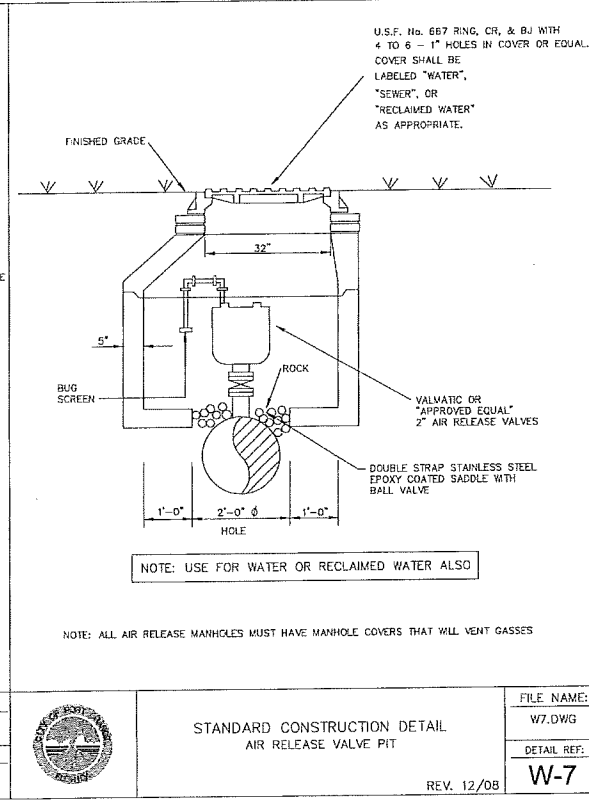
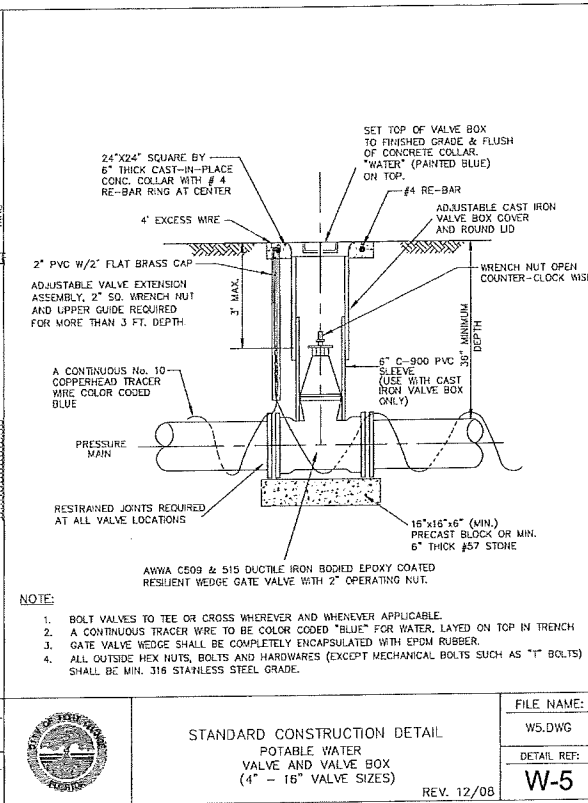
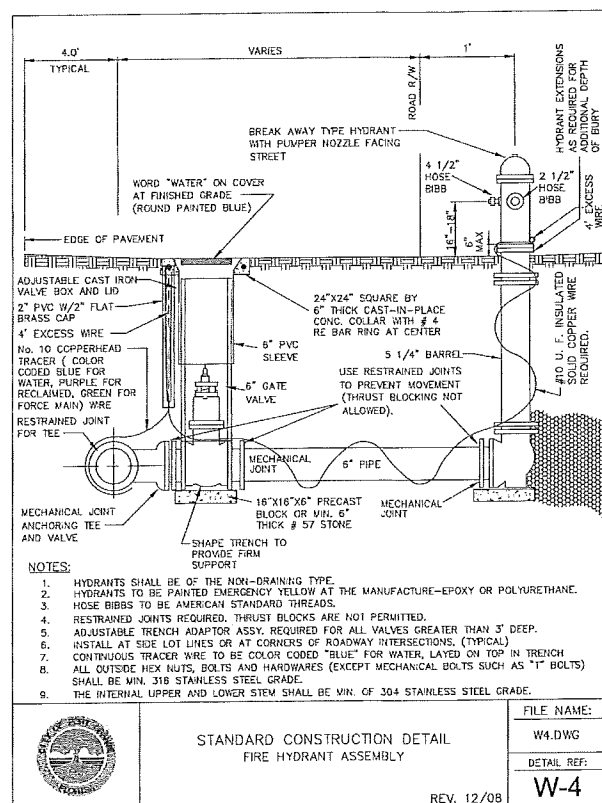
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REV. 12/08

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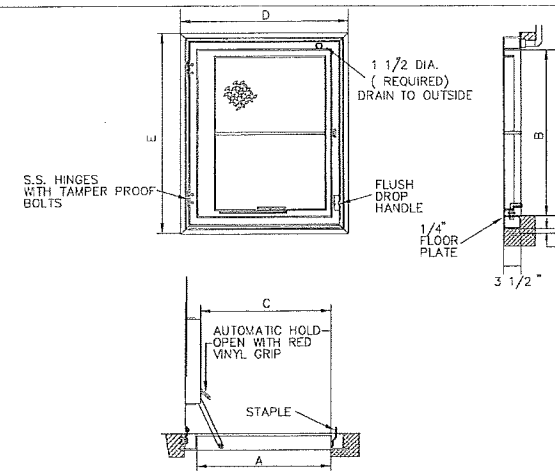
WESTPORT RESERVE
(PHASE 2C)

PORT ORANGE, FL

01/07/17/8

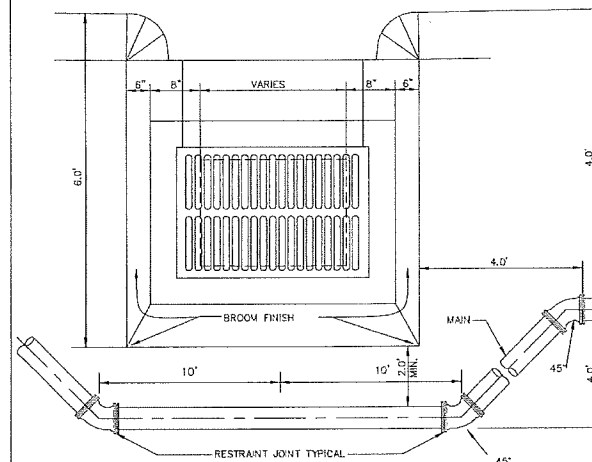
300 P.S.F. LOADING						
TYPE	MAT'L THK	SIZE		ACTUAL OPENING		WEIGHT LB
		A	B	A	B	
TPD	1/4	30	48	30	47	38
TPD	1/4	30	54	30	53	38
TPD	1/4	36	48	36	46	44
TPD	1/4	36	54	36	57	44
TPD	1/4	42	48	42	45	50
TPD	1/4	48	48	48	44	56
TPD	1/4	48	54	48	50	56
TPD	1/4	48	60	48	62	56
TPD	1/4	48	60	48	66	58
TPD	1/4	48	60	48	68	58

- | | | | | | | | | |
|-----|-----|----|----|----|----|----|----|-----|
| TPD | 1/4 | 48 | 72 | 48 | 66 | 36 | 80 | 210 |
| TPD | 1/4 | 60 | 60 | 60 | 56 | 68 | 68 | 220 |
- NOTES:
- HATCH MATERIAL SHALL BE ALUMINUM WITH STAINLESS STEEL BOLTS, NUTS AND HINGES, LOAD RATING OF 300 LBS. PER SQ. FOOT WITH A SELF DRAINING HATCH.
 - THE ACCESS DOOR SHALL BE TYPE TPS AS MANUFACTURED BY U.S. FOUNDRY AND MANUFACTURING CORP., MIAMI, FLORIDA

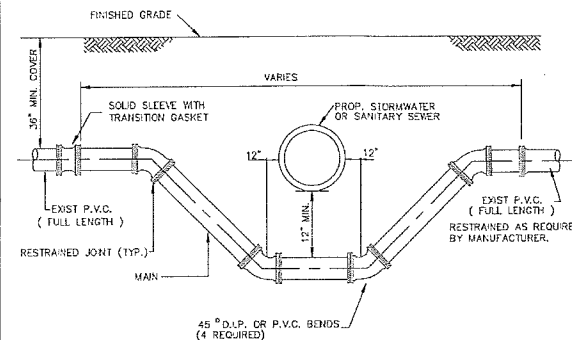


		300 P.S.F. LOADING						
TYPE	MATERIAL	SIZE		ACTUAL		OVERALL	SIZE	WEIGHT
		A	B	A	B			
TPS	1/4	24	24	24	24	32	E	60
TPS	1/4	24	30	24	30	32	38	60
TPS	1/4	24	36	23	36	32	44	74
TPS	1/4	30	30	29	30	38	38	85
TPS	1/4	30	36	29	36	38	44	90
TPS	1/4	30	48	29	48	38	56	106
TPS	1/4	36	36	35	36	44	44	106
TPS	1/4	36	48	35	48	44	56	122
TPS	1/4	42	42	40	42	50	50	122

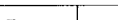
- NOTES:**
- | | | | | | | | | |
|-----|-----|----|----|----|----|----|----|-----|
| TPS | 1/4 | 42 | 42 | 40 | 42 | 50 | 50 | 125 |
|-----|-----|----|----|----|----|----|----|-----|
1. HATCH MATERIAL SHALL BE ALUMINUM WITH STAINLESS STEEL BOLTS, NUTS AND HINGES, LOAD RATING OF 200 LBS PER SQ. FOOT WITH A SELF DRAINING HATCH.
 2. THE ACCESS DOOR SHALL BE TYPE TPS AS MANUFACTURED BY U.S. FOUNDRY AND MANUFACTURING CORP., WIAVA, FLORIDA.



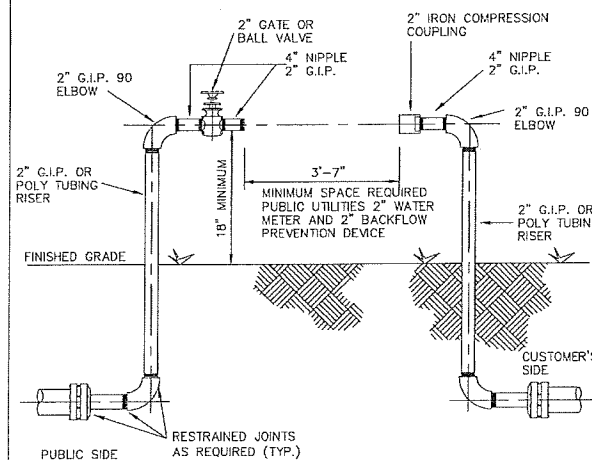
- NOTES:
1. MAIN MAY PASS OVER STORM LINE IF 36" OF COVER IS PROVIDED OVER WATER MAIN OR RECEAIVED WATER LINE AND ADEQUATE CLEARANCE IS PROVIDED FROM THE STORM SEWER PIPE.
 2. PIPE SHALL BE DEFLECTED AROUND DRAINAGE INLET IN ACCORDANCE WITH THE RESTRAINED JOINT GUIDELINES OF THE DIPRA AND ADAPTED TO PVC PIPE AS NECESSARY.



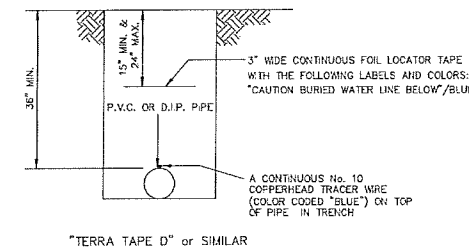
- NOTES:
1. LOWERING OF EXISTING WATER MAIN & FORCE MAIN BY DEFLECTION METHOD ACCEPTABLE IF EXISTING FIELD CONDITIONS PERMIT.
 2. LENGTH OF SECTION BASED ON MINIMUM LENGTH AS DETERMINED BY DIPRA RESTRAINED JOINT MANUAL.
 3. INSTALL RESTRAINED JOINTS, AS REQUIRED, FROM DEFLECTION POINT IN BOTH DIRECTIONS.

	STANDARD CONSTRUCTION DETAIL STORM DRAINAGE PIPE OR SANITARY SEWER MAIN CONFLICT	FILE NAME:	W20.DWG		STANDARD CONSTRUCTION DETAIL MAIN INSTALLATION BETWEEN DRAINAGE INLET AND SIDEWALK	FILE NAME:	W21.DWG		STANDARD CONSTRUCTION DETAIL TROUGH FRAME PEDESTRIAN LOADING ACCESS SINGLE DOOR	FILE NAME:	W24.DWG		STANDARD CONSTRUCTION DETAIL TROUGH FRAME PEDESTRIAN LOADING ACCESS DOUBLE DOOR	FILE NAME:	W25.DWG
		DETAIL REF:	W-20			DETAIL REF:	W-21			DETAIL REF:	W-24			DETAIL REF:	W-25
		REV. 12/08	REV. 12/08			REV. 12/08	REV. 12/08								

U.S. FOUNDRY MODEL NO.	BILCO MODEL NO.	SINGLE LEAF	DOUBLE LEAF	ALUMINUM	TECHNICAL
TPS 24X24 W/OP	J-1AL	*	*	*	*
TPS 30X30 W/OP	J-2AL	*	*	*	*
TPS 30X36 W/OP	J-3AL	*	*	*	*
TPS 36X36 W/OP	J-4AL	*	*	*	*
TPS 42X42 W/OP	J-5AL	*	*	*	*
TPD 48X48 W/OP	JD-2AL	*	*	*	*
TPD 48X72 W/OP	JD-3AL	*	*	*	*
TPD 60X60 W/OP	JD-4AL	*	*	*	*



- NOTE:
1. PROVIDE SUPPORT OR PROTECTIVE POSTS.



- NOTE:**
- 1) A CONTINUOUS No. 10 COPPERHEAD TRACER WIRE TO BE INSTALLED WITH ALL NON-METALLIC PIPE. WIRE SHALL BE BROUGHT UP TO GRADE AT ALL VALVES OUTSIDE P.V.C. SLEEVE, (SEE DETAIL W-6).
 - 2) ALL TRACER WIRES SHALL BE INTERCONNECTED WITH WATER PROOF WIRE NUT CAP OR WITH SIMILAR WATER PROOF SPLICE KIT AT ANY SPLICE AND WHERE SERVICES CONNECT TO MAINS.
 - 3) A SUCCESSFUL CONTINUITY TEST SHALL BE CONDUCTED AND WITNESSED BY A CITY INSPECTOR AT THE COMPLETION OF TRACER WIRE INSTALLATION.

 STANDARD CONSTRUCTION DETAIL ACCESS DOOR CROSS REFERENCE CHART REV. 12/08	FILE NAME: W26.DWG DETAIL REF: W-26		STANDARD CONSTRUCTION DETAIL CONTRACTORS' INSTALLATION REQUIREMENTS FOR A 2" TEMPORARY METER REV. 12/08	FILE NAME: W28.DWG DETAIL REF: W-28		STANDARD CONSTRUCTION DETAIL LOCATOR TAPE/ TRACERWIRE INSTALLATION FOR WATER MAIN, PIPELINES REV. 12/08	FILE NAME: W29.DWG DETAIL REF: W-29
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No.	DATE	BY	Description
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REVISIONS	
DRAWN BY	TFS
APPROVED BY	DMV
CHECKED BY	NPS
DATE	AUGUST 2016
DATUM	NAVD 88

TITLE

CITY WATER DETAILS

PROJECT NO. 50079046 (CC 1)

C28

SHEET NO.

No.	DATE	BY	Description
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REVISIONS

DRAWN BY	IFS
APPROVED BY	DMV
CHECKED BY	NPS
DATE	AUGUST 2016
DATUM	NAVD 88

TITLE

CITY RECLAIMED
WATER DETAILS

PROJECT NO. 50079046 (CC 1)

C29

SHEET NO.

RECLAIMED WATER DESIGN NOTES

- 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 FINAL GRADE EXCEPT AT LOCATIONS OF UTILITY CROSSINGS OR WITH SPECIAL APPROVAL WHEN IT IS DETERMINED TO BE IN THE BEST INTEREST OF THE CITY.
- RECLAIMED WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACINGS OF 1000.0 FEET.
- AT ALL RECLAIMED WATER MAIN TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL LEGS EXCEPT ONE.
- 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.
- 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 RECLAIM 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'.
- 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.
- A 75 FOOT SETBACK DISTANCE SHALL BE PROVIDED FROM PUBLIC ACCESS REUSE WETTED AREAS TO ANY PUBLIC AND ANY PRIVATE POTABLE WATER SUPPLY WELLS.
- LOW TRAJECTORY NOZZLES ARE REQUIRED WITHIN 100 FEET OF PUBLIC EATING, DRINKING OR BATHING FACILITIES.
- 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).
- ALL H.D.P.E. PIPE RECLAIMED WATER MAINS SHALL BE S.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.
- 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.
- 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 OWNER/ DEVELOPER/ CONTRACTOR. THE FEE COLLECTED BY THE CITY IS FOR MATERIALS ONLY. ALL METERS, 1 1/2" AND LESS, SHALL BE INSTALLED BY THE CITY.
- 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

- THE CITY'S PUBLIC UTILITIES DEPARTMENT (386) 506-5750 SHALL BE GIVEN A MINIMUM OF 2 BUSINESS DAYS ADVANCE NOTICE (NOT INCLUDING HOLIDAYS OR WEEKENDS) PRIOR TO BEGINNING ANY RECLAIMED WATER SYSTEM CONSTRUCTION.
- DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW RECLAIMED WATER MAIN BEING LAID.
- 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 FINAL GRADE EXCEPT AT LOCATIONS OF UTILITY CROSSINGS OR WITH SPECIAL APPROVAL WHEN IT IS DETERMINED TO BE IN THE BEST INTEREST OF THE CITY.
- TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE CITY WITH A MINIMUM COMPACTION OF 98% IN PAVED AREAS AND A MINIMUM COMPACTION OF 95 % IN UNPAVED AREAS ACCORDANCE WITH AASHTO T-180.
- IT SHALL BE THE CONTRACTORS 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.
- 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.
- ALL SINGLE RESIDENTIAL WATER SERVICES SHALL BE 1" AND DOUBLE RESIDENTIAL SERVICES SHALL BE 1 1/2". SERVICES SHALL BE CTS 9408 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 LAVENDER 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.D.M. D1248, D3350, D2239, D2737, N.S.F.-14 AND A.W.W.A. C901 AND SHALL COME WITH A LIFETIME WARRANTY. APPROVED SIZES: 1", 1-1/2" AND 2" DIAMETERS.
- ALL RECLAIMED WATER SERVICE ENDINGS SHALL BE MARKED WITH A 2" X 4" LUMBER (PRESSURE TREATED) EXTENDING 4 FEET ABOVE GRADE, WITH WATER SERVICES SECURED 12" MAXIMUM ABOVE THE GROUND AND ANY "U" BRANCHES FOR DOUBLE SERVICES SHALL BE 12" ABOVE GROUND LEVEL. ALL SERVICES SHALL BE LOCKED.
- ALL RECLAIMED WATER VALVES SHALL BE ADJUSTED TO FINISH GRADE AND THE CAPS SHALL BE PAINTED LAVENDER OR PURPLE TO MAKE THEM PLAINLY DISTINGUISHABLE.
- 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.
- ALL RECLAIMED WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR INAPPROPRIATE TO PROVIDE ADEQUATE COVER, DUCTILE IRON PRESSURE CLASS 350 OR CONCRETE ENCASEMENT MAY BE USED AS APPROVED BY THE CITY.
- 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 2 BUSINESS DAYS PRIOR TO BEGINNING ANY FULL DIAMETER FLUSH OF MAINS. THE CONTRACTOR WILL CONDUCT A STANDARD WATER PRESSURE TEST, 150 PSI STATIC 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 LINES WILL THEN BE DISINFECTED WITH CHLORINE, FLUSHED CLEAR AGAIN, WITH A MINIMUM OF 1 POSITIVE CHLORINE RESIDUAL TEST RESULT PROVIDED TO THE CITY.
- THE CONTRACTOR SHALL BE REQUIRED TO PIG ALL RECLAIMED MAINS IN EXCESS OF 6" IN 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.
- 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.
- METALLIZED, BOLTLISS 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.
- 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-BUILTS" ARE PROVIDED TO THE CITY, PRIOR TO ANY USE OF THIS SYSTEM.
- 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.
- 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 "X1" SAW CUT INTO THE CURB OR PAVEMENT WITH THE ARROW POINTING TO THE DIRECTION OF PRESSURE MAIN RUN.
- 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 RECLAIM 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'.
- 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.
- ALL TAPPING OF MAINS SHALL BE PERFORMED BY THE CITY AND BILLED IN ACCORDANCE WITH THE ADOPTED 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)

- DAY.
- 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 EXISTING CUSTOMERS.
- ALL WORK PERFORMED UPON RECLAIMED WATER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE CITY SHALL BE CONSTRUCTED BY AN UNDERGROUND UTILITY OR GENERAL CONTRACTOR LICENSED IN THE STATE OF FLORIDA AND REGISTERED WITH THE CITY.
- 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).
- ALL H.D.P.E. PIPE RECLAIMED WATER MAINS SHALL BE S.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.
- ALL P.V.C. PIPE SHALL BE STORED IN SUCH A WAY AS TO PREVENT WARPING, DEFLECTION, OR ANY DEFORMATION.
- RECLAIMED WATER HYDRANTS MAY BE REQUIRED BY THE CITY. ALL RECLAIMED HYDRANTS SHALL BE PAINTED PURPLE.
- 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'S SERVICE AREA.
- IN AREAS WHERE RECLAIMED WATER IS AVAILABLE, RECLAIMED WATER WILL BE UTILIZED IN THE PRESSURE TESTING OF NEW RECLAIMED WATER LINES.
- RECLAIMED WATER MAINS SHALL BE PVC AWWA CLASS C-900 OR C-905, CL 150 (COLOR PANTONE PURPLE) OR DIP PRESSURE CLASS 350, STANDARD CEMENT LINED UNLESS APPROVED OTHERWISE BY THE CITY.



STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER CONSTRUCTION NOTES

FILE NAME
RW2.DOC

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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 Seated (AWWA C509 and CS15) 24" or Smaller (Valve wedge to be complete enclosed with EPDM rubber)

MANUFACTURER	MODEL #
American AVK Co.	Series 3, 18, 25, 45, 55, & 66
Clow	Model 2638 and 2639
Mueller	A-2360, A-2361, T-2360 & T-2361
American Flow Control	Series 2500

Joints Restrained - DIP and PVC

MANUFACTURER	MODEL #
EBBA Iron Inc	Series 1100/1500/1600 2000/2500/2800
Star Pipe	Star Grip Series 1000/1100/1200/3000/ 4000
Sigma	One-Lock SLD & One-Lock SLC & PV-Lock for PVC
Smith-Blair	Cam-Lock (111 & 120) & Bell-Lock (115 & 165)



STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER APPROVED PRODUCTS

FILE NAME
RW3.DOC

DETAIL REF:
RW-3

REV. 12/08

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 RWT	Endotracer with #10 Copperhead tracer wire

Corporation Stop 1"

MANUFACTURER	MODEL #
Ford	F-1100-4

Corporation Stop 1 1/2"

MANUFACTURER	MODEL #
Ford	FB-1100-6

Curb Stop - Straight Ball Meter Valve w/ Barrel Locks

MANUFACTURER	MODEL #
Ford	B-94-324W (Single Service) B-91-223W (Double Service) BF 43-777W (For 2" meter)

"U" Branch (1 1/2" x 1")

MANUFACTURER	MODEL #
Ford	U-48-63-7.5



STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER APPROVED PRODUCTS

FILE NAME
RW3.DOC

DETAIL REF:
RW-3

REV. 12/08

E

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B

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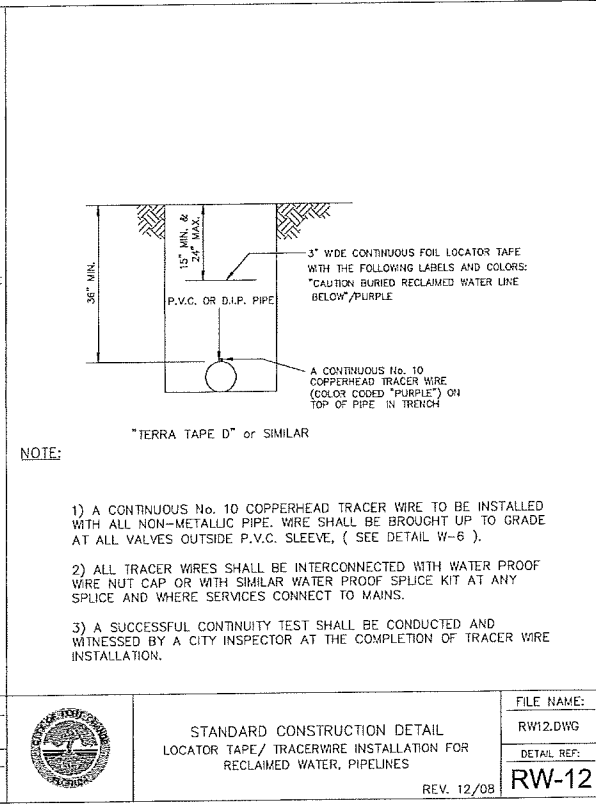
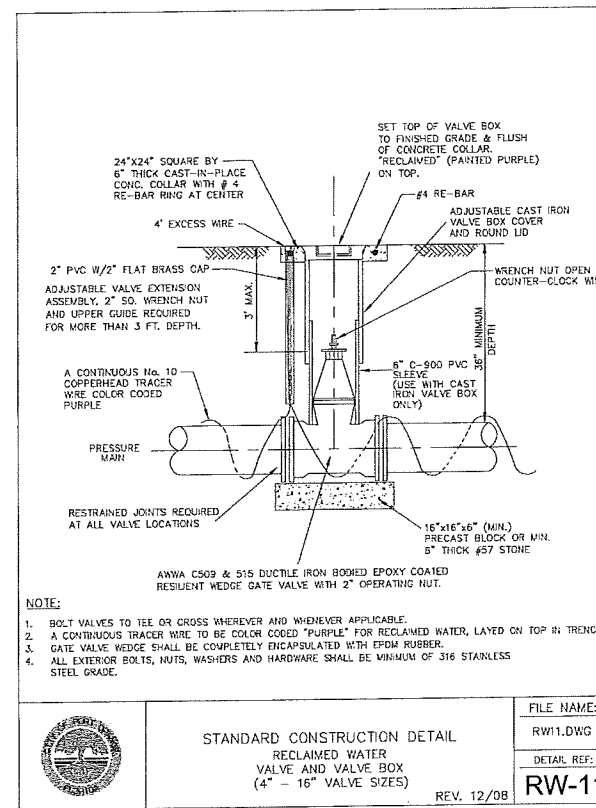
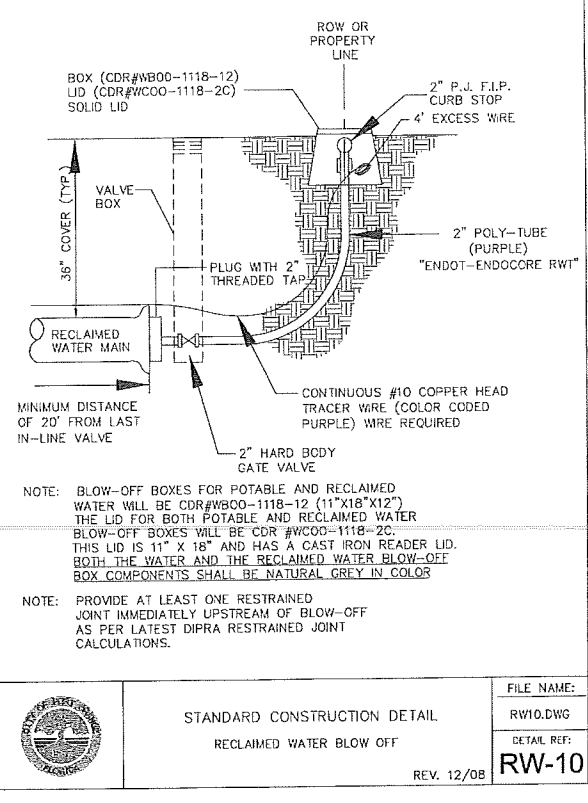
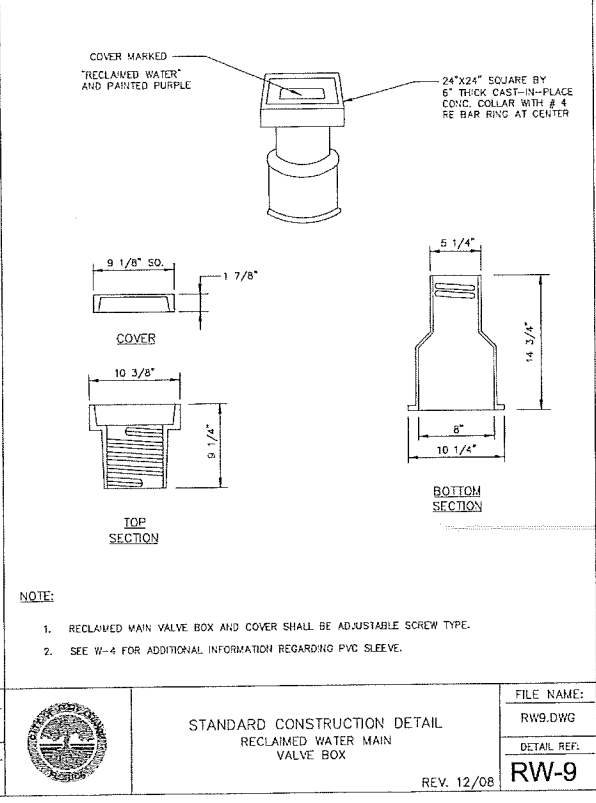
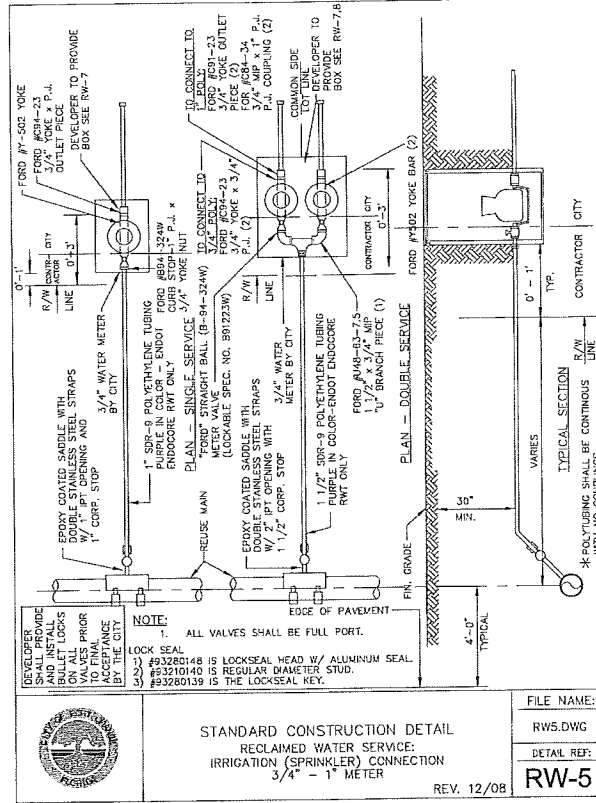


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ENGINEERING BUSINESS - 8784

WESTPORT RESERVE (PHASE 2C)

PORT ORANGE, FL

9/21/2016



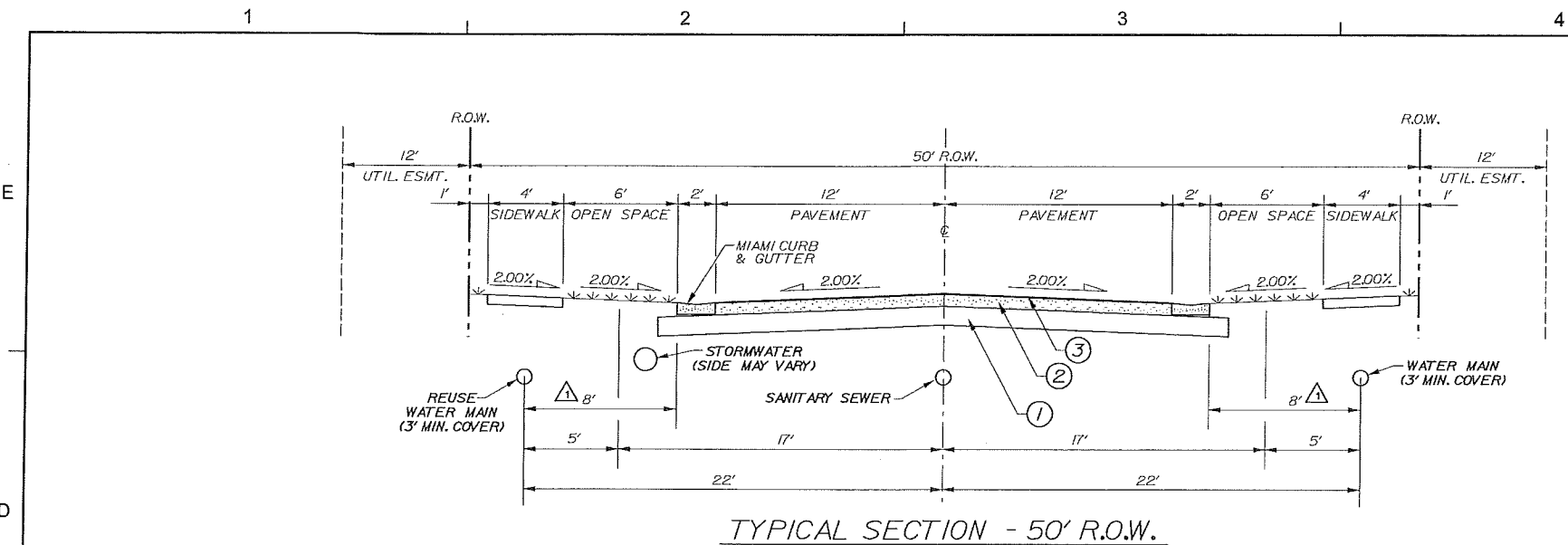
No.	DATE	BY	Description
REVISIONS			
DRAWN BY	IFS		
APPROVED BY	DMV		
CHECKED BY	NPS		
DATE	AUGUST 2016		
DATUM	NAVD 88		

CITY RECLAIMED WATER DETAILS

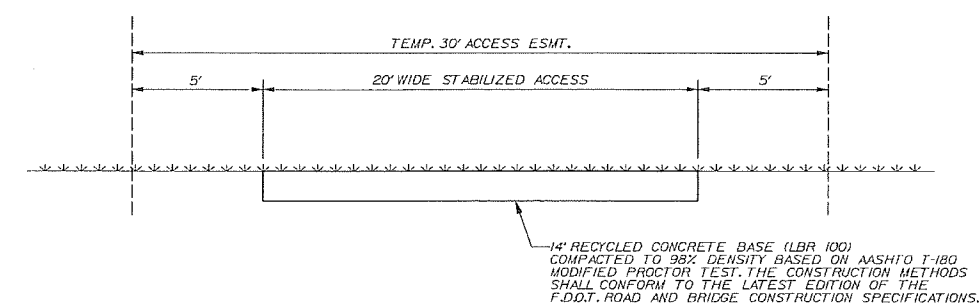
PROJECT NO. 50079046 (CG 1)

C30

SHEET NO.



TYPICAL SECTION - 50' R.O.W.



TEMPORARY EMERGENCY STABILIZED ACCESS

ALTERNATE BASE:
14" 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

NOTE:
THE TYPICAL SECTION STRUCTURE NUMBER OF 21 TO BE MET USING
TABLE 5.4 OF THE F.D.O.T. FLEXIBLE PAVEMENT DESIGN MANUAL
MARCH 2015. DEVIATIONS SHALL BE APPROVED BY THE EOR AND THEN
SUBMITTED FOR APPROVAL TO THE COMMUNITY DEVELOPMENT ENGINEER.

PAVEMENT LEGEND

- ① 12" SUBGRADE/SUB-BASE COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST WITH MINIMUM LBR 40.
- ② 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.
- ③ 1.5" OF FLORIDA DOT ASPHALTIC CONCRETE MIX OF TYPE S-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.

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.

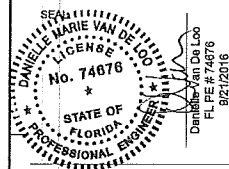
USE OF ALTERNATE BASE MUST FIRST BE APPROVED BY THE COMMUNITY DEVELOPMENT ENGINEER



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PHONE: 407.843.5120
ENGINEERING BUSINESS - 8794

WESTPORT RESERVE
(PHASE 2C)

PORT ORANGE, FL



SCALE NORTH

No.	DATE	BY	DESCRIPTION
1	9-19-16	TFS	REV PER COMMENTS

REVISIONS

DRAWN BY TFS

APPROVED BY DMV

CHECKED BY NPS

DATE AUGUST 2016

DATUM NAVD 88

TITLE

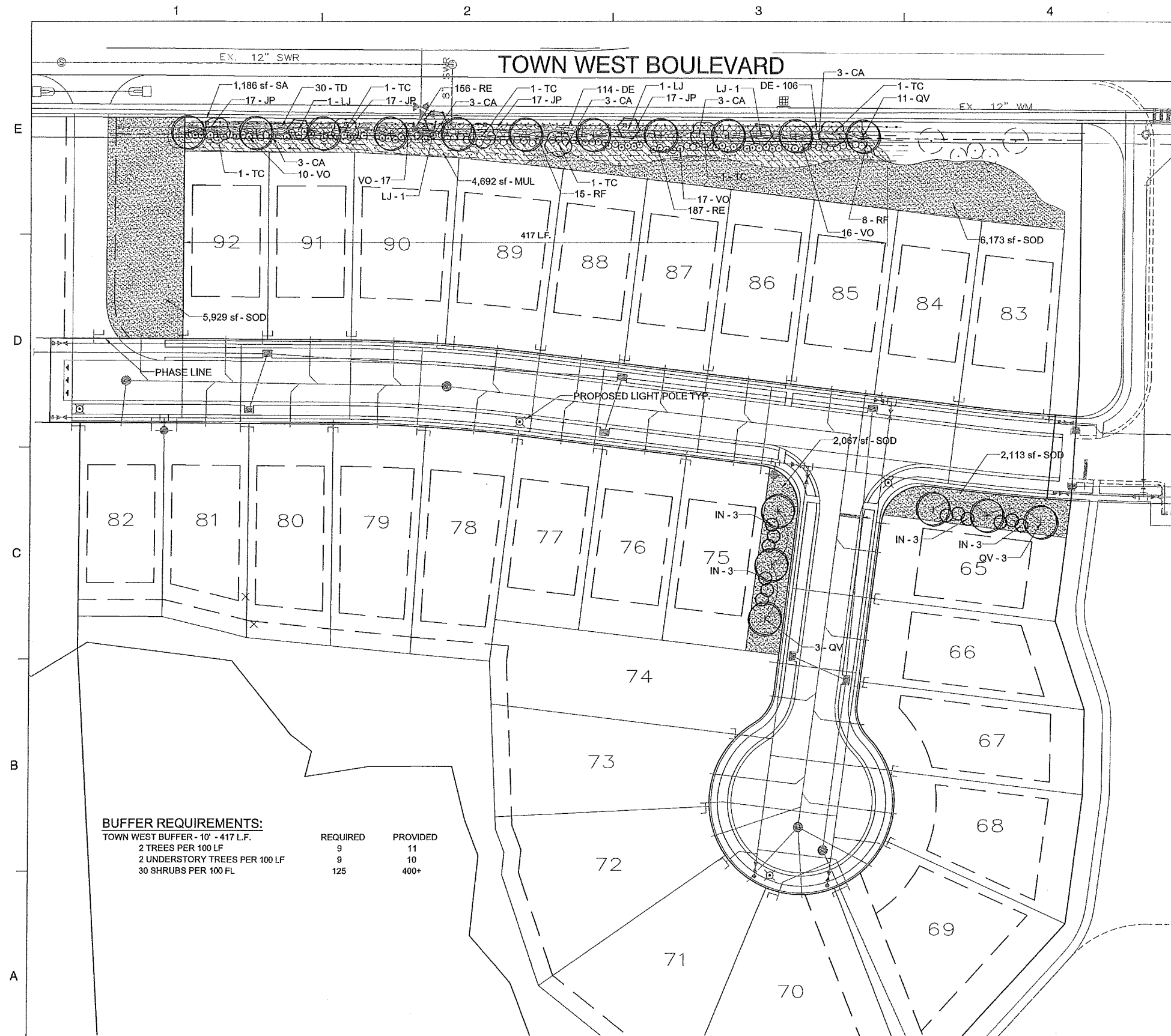
TYPICAL PAVING SECTIONS

PROJECT NO. 50079046 (CC 1)

C31

SHEET NO.



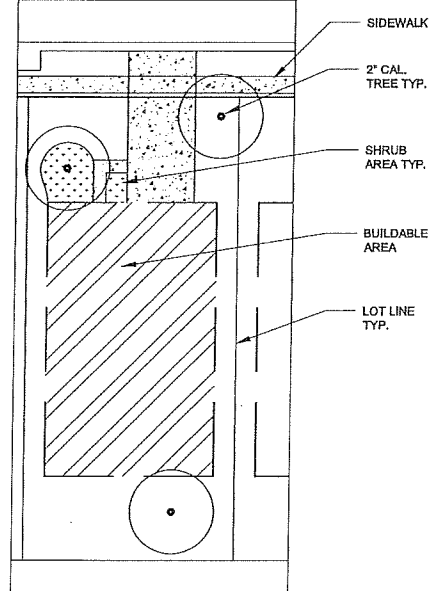


BUFFER REQUIREMENTS:
TOWN WEST BUFFER - 10' - 417 L.F.

2 TREES PER 100 LF	9	11
2 UNDERSTORY TREES PER 100 LF	9	10
30 SHRUBS PER 100 FL	125	400+

PLANT SCHEDULE		
TREES	CODE	COMMON NAME
	IN	Nellie Stevens Holly
	LJ	Japanese Privet
	QV	Southern Live Oak
	TC	Golden Trumpet Tree
SHRUBS		
	CA	Spider Lily
	RF	Azalea
	VO	Walter's Viburnum
SHRUB AREAS		
	DE	Gold Mound Durlanta
	JP	Parson's Juniper
	RE	Firecracker Plant
	TD	Florida Gamagrass
GROUND COVERS		
	MUL	Pine Straw
	SOD	Bahia Grass
	SA	Floritam St. Augustine Sod

- NOTES:**
- THREE SHADE TREES PER LOT OR ONE SHADE TREE PER 2,500 SQUARE FEET OF LOT AREA WHICHEVER IS MORE, AND 25 SHRUBS. TREES SHALL BE NO. 1 GRADE OR BETTER, 2" CALIPER AND A MINIMUM 10' HEIGHT.
 - AT LEAST ONE-HALF OF THE REQUIRED SHADE TREES AND THREE-QUARTERS OF THE REQUIRED SHRUBS SHALL BE LOCATED IN THE FRONT HALF OF THE PROPERTY.



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

TYPICAL LOT LANDSCAPE
SCALE: 1"=20'-0"

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ENGINEERING BUSINESS-8794
LAND ARCH - LC29200569

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

SEAL

KEY PLAN

SCALE
0' 30' 60'
NORTH

No.	DATE	BY	Description
REVISIONS			
DRAWN BY _____			
APPROVED BY _____			
CHECKED BY _____			
DATE _____ Seal/number 21, 2018			

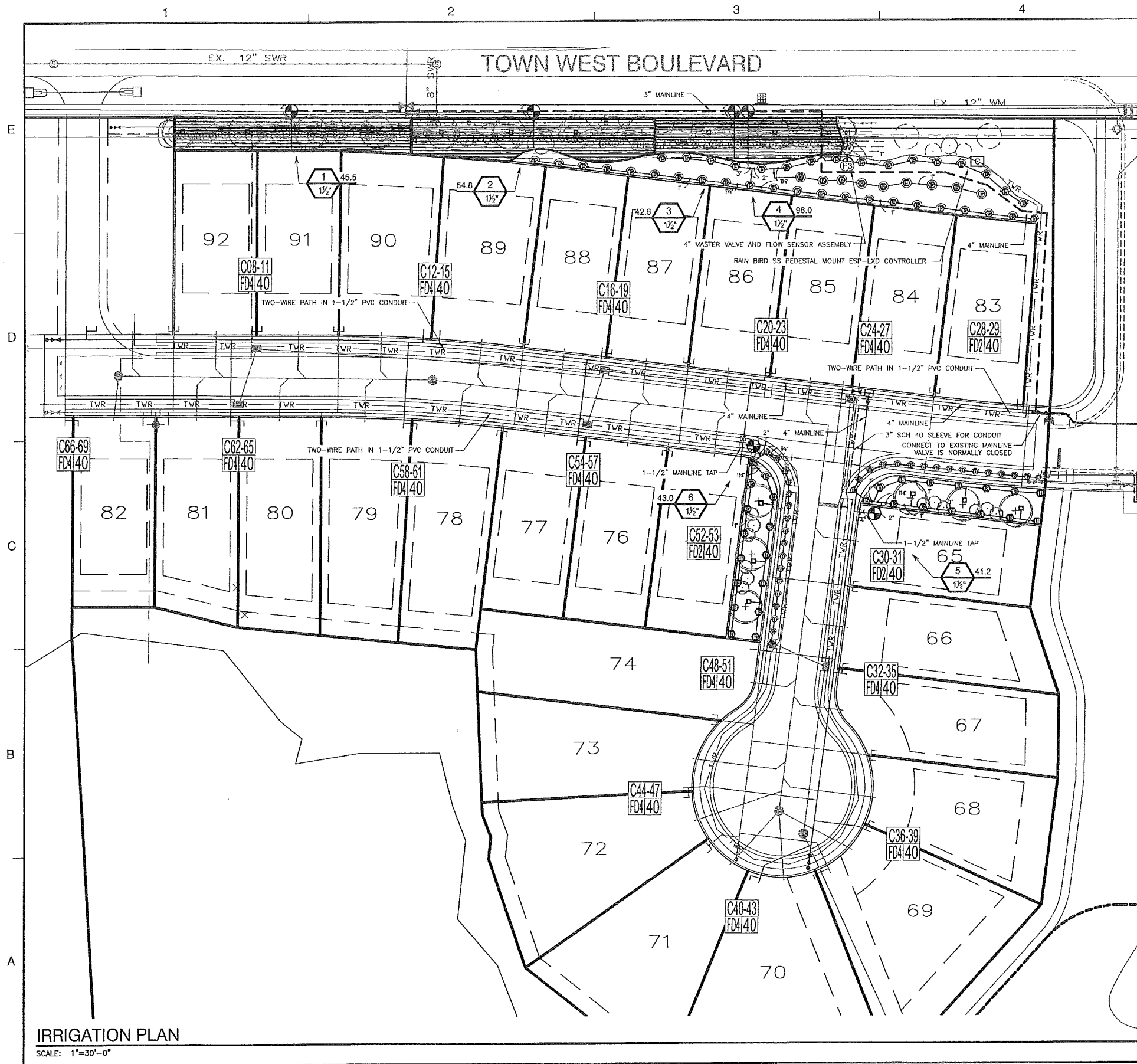
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LANDSCAPE PLAN

PROJECT NO. 50082831

L2.1

SHEET NO. _____ OF _____

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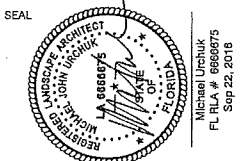


MAINLINE AND LATERAL LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING FDEP GUIDELINES AND TO IRRIGATION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

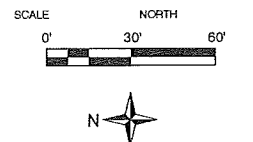


Dewberry Engineers Inc.
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ORLANDO, FL 32803
PHONE: 407 843 5120
ENGINEERING BUSINESS 5794
LAND ARCH - LC2600359

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



KEY PLAN



No.	DATE	BY	Description

REVISIONS
DRAWN BY _____
APPROVED BY _____
CHECKED BY _____
DATE August 10, 2016
TITLE

IRRIGATION
PLAN

PROJECT NO. 50082931

IR-1

SHEET NO. OF



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

IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	GPM	RADIUS
	Rain Bird 1806-FRS-NP 8 Series MPR	27	180	30	0.52	8'
	Rain Bird 1806-FRS-NP 8 Series MPR	6	90	30	0.26	8'
	Rain Bird 1806-FRS-NP 12 Series MPR	5	360	30	2.37	12'
	Rain Bird 1806-FRS-NP 15 Series MPR	4	360	30	3.70	15'
	Rain Bird 1806-FRS-NP 15 Series MPR	40	180	30	1.85	15'
	Rain Bird 1806-FRS-NP 15 Series MPR	3	90	30	0.92	15'
	Rain Bird 1806-FRS-NP VAN Series	24	Adj	30		18'
	Rain Bird 1800-1400 Flood	16	360	30	0.50	1'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Area to Receive Dripline Netafim TLDL-9-12 (12)	1,006 s.f.
	Techline Pressure Compensating Landscape Dripline. 0.96GPH emitters at 12.0' O.C. Dripline 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 PESBR-FRS-D 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, Purple Flow Control Handle, and Pressure Regulator Module.	6
	4" Netafim/Dorot Automatic, Electric, Cast Iron, High Pressure, Normally Open Valve with Heavy Duty, Constant Duty Solenoid	1

	Rain Bird ESP-LXD-LXMM55-LXMM55PED with (1) ESP-LXD-SMT5 125' 1-1/2" 7-wire stainless steel pedestal. Flow sensing.	1
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	Rain Bird FS-350-55 3" and Higher Flow Sensor for use with Rain Bird Maxicom, SiteControl, and ESP-LXD Central Control Systems. Stainless Steel Model. Suggested Operating Range of 12.0 GPM to 45,000 GPM. Sensors should be sized for flow rather than pipe size.	1
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	Point of Connection 4"	1
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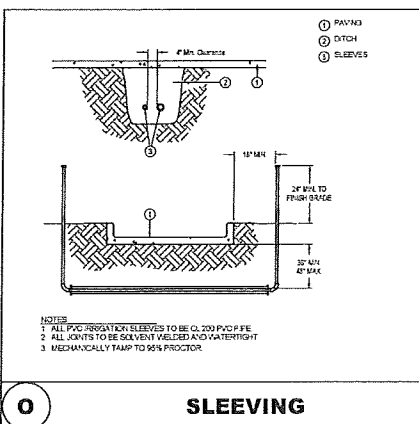
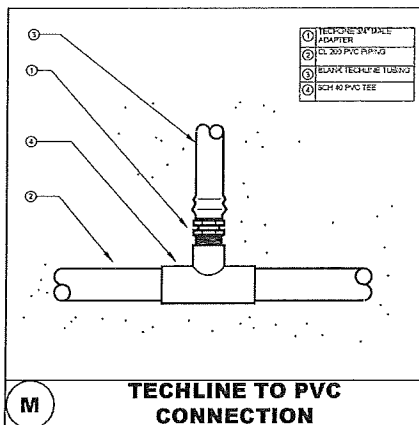
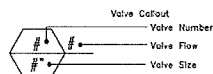
	Point of Connection 1-1/2"	1
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	Point of Connection 1-1/2"	1
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	Irrigation Lateral Line: Blu-Lock and PVC Class 200 Blu-Lock pipe, as manufactured by Hydro Rain, 1/2" to 1", then PVC Class 200 for 1-1/4" and larger. Only lateral transition pipe sizes 1" and above are indicated on the plan, with all others being 3/4" in size.	1,559 l.f.
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	Irrigation Mainline: Blu-Lock and PVC Class 200 Blu-Lock pipe, as manufactured by Hydro Rain, 1/2" to 1", then PVC Class 200 for 1-1/4" and larger.	141.7 l.f.
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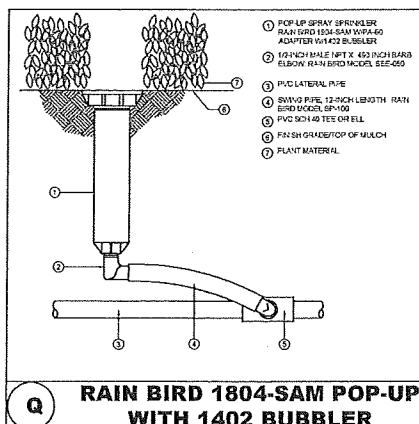
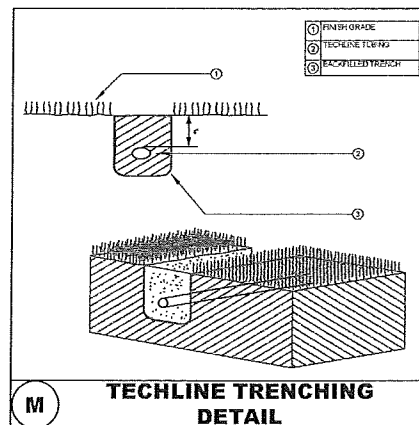
	Pipe Sleeve: PVC Schedule 40	49.4 l.f.
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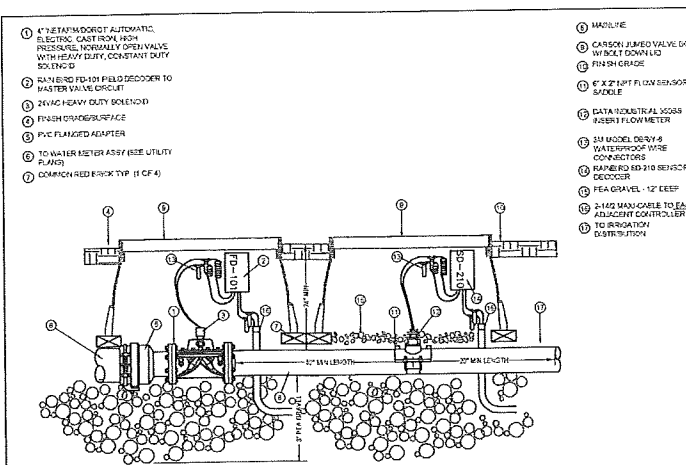


SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
	LOT ISOLATION VALVE ASSEMBLY SINGLE HOME - 1-1/2" POLY WHIP, MAINLINE TAP WITH CURB/CORP STOP, RAIN BIRD FD201 DECODER AND 2 - 1-1/2" RECLAIMED RAIN BIRD PEB VALVES IN SEPARATE JUMBO VALVE BOXES		
	LOT ISOLATION VALVE ASSEMBLY TWO HOMES - 1-1/2" POLY WHIP, MAINLINE TAP WITH CURB/CORP STOP, RAIN BIRD FD401 DECODER AND 4 - 1-1/2" RECLAIMED RAIN BIRD PEB VALVES IN SEPARATE JUMBO VALVE BOXES		
	1/2" MAXI CABLE "RED" PAISE ELECTRIC P1012D SIZE 2G VOLTAGE DIRECT BURIAL "SUNLIGHT RESISTANT FOR MAXI/2-WIRE SYSTEMS IN 1-1/2" PVC CONDUIT.	PER PLAN	L

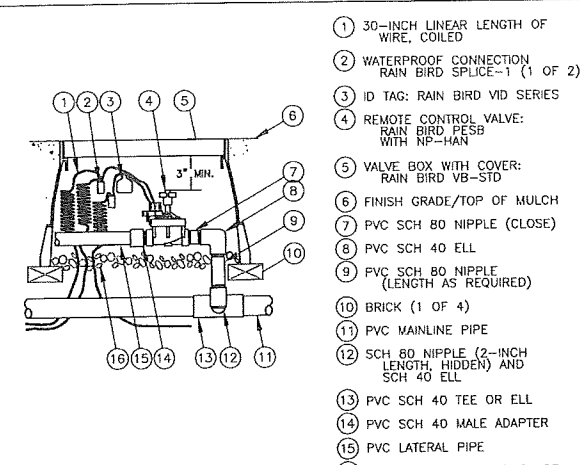
*QUANTITIES GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY. THE ACCURACY IS NOT GUARANTEED. ALL
QUANTITIES SHALL BE *VERIFIED.

C10-14	ASSIGNED CONTROLLER - STATION NUMBERS
FD4 40	DECODER SIZE FD4=FD401 DECODER FD2=FD201 DECODER
	MAX GALLONS PER MINUTE PER ZONE

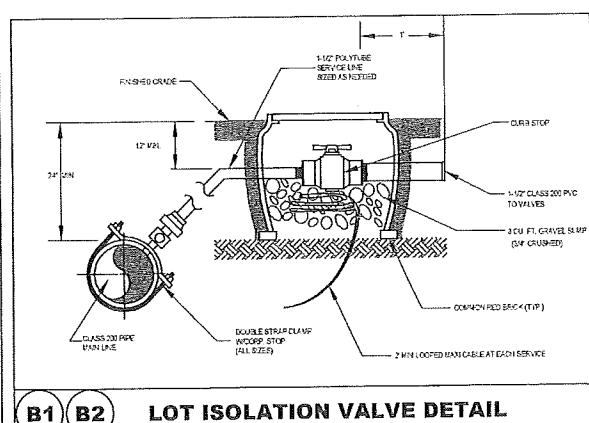




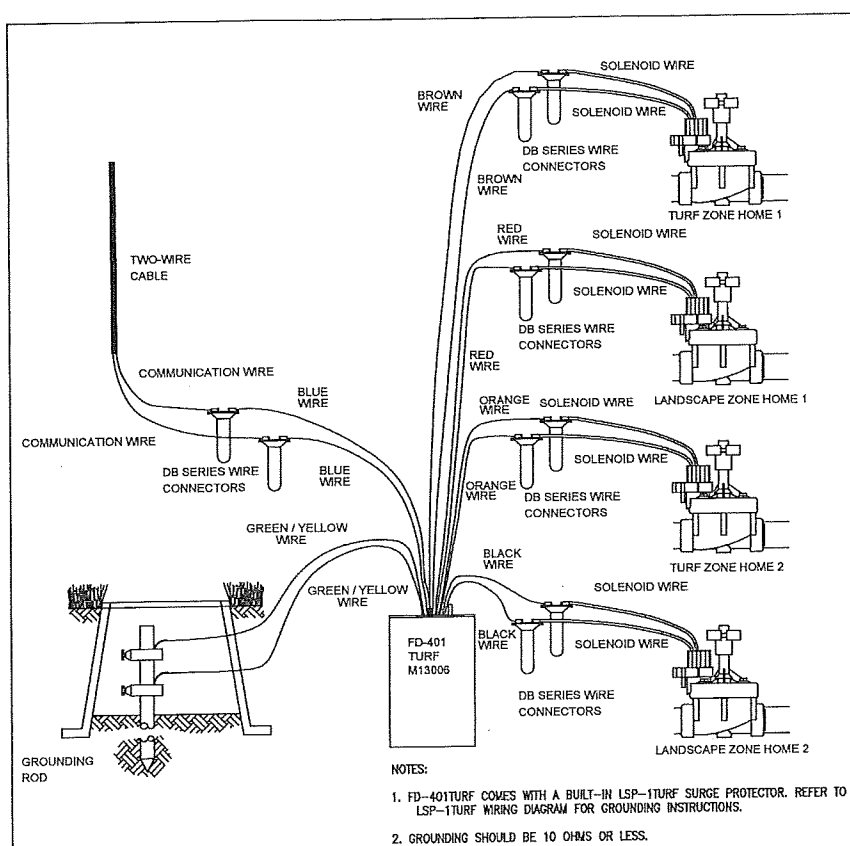
A 4" MASTER VALVE - FLOW SENSOR



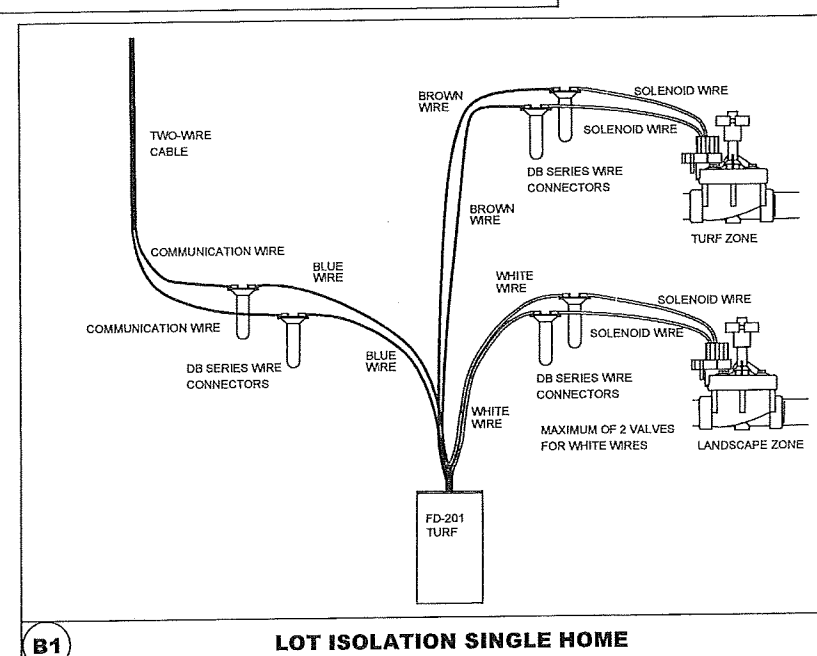
B3 RAIN BIRD PESB VALVE



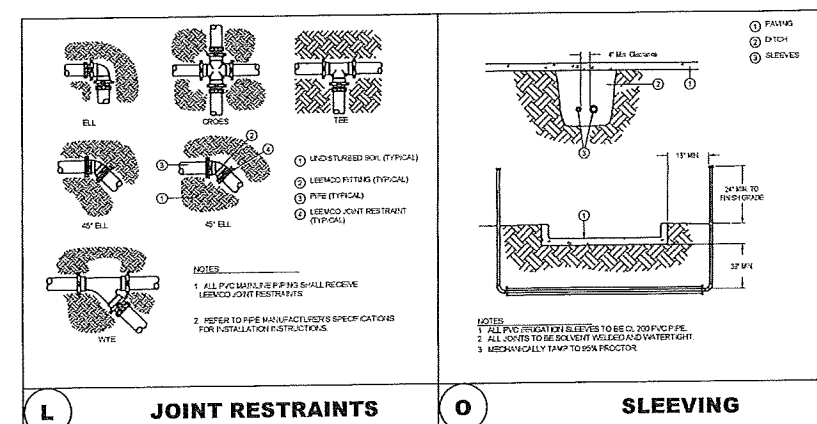
B1 B2 LOT ISOLATION VALVE DETAIL



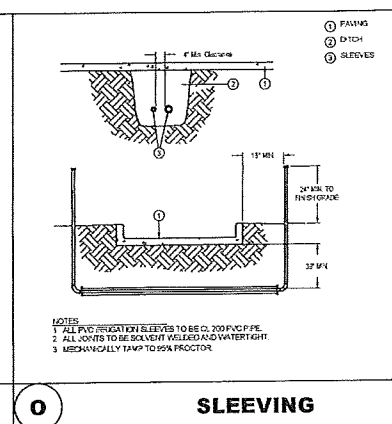
B2 LOT ISOLATION TWO HOMES



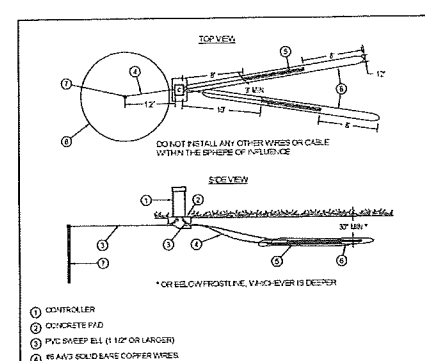
B1 LOT ISOLATION SINGLE HOME



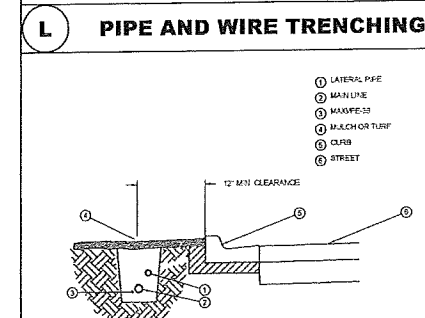
L JOINT RESTRAINTS



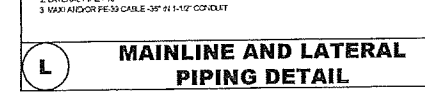
O SLEEVING



C GROUNDING DETAIL



L PIPE AND WIRE TRENCHING



L MAINLINE AND LATERAL PIPING DETAIL

BOUNDARY SURVEY -FOR- EDGE COVE, LLC

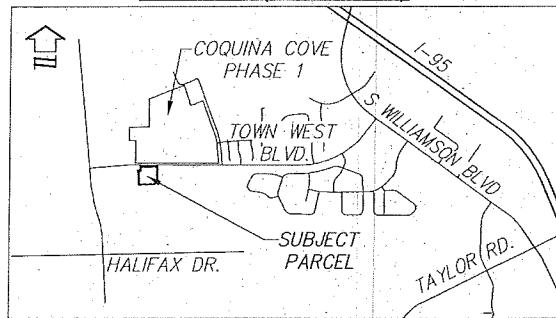
LEGAL DESCRIPTION

A PORTION OF SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, BEING IN THE CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGIN AT THE OCCUPIED SOUTHWEST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION 13, TOWNSHIP 16 SOUTH, RANGE 32 EAST, THENCE RUN S01°05'50"E A DISTANCE OF 190.22 FEET TO THE SOUTHEAST CORNER OF SAID SECTION 14, THENCE RUN S88°57'35"W ALONG THE OCCUPIED NORTHERLY LINE OF TOMOKA FARMS, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN MAP BOOK 6, PAGE 192, AND RE-RECORDED IN MAP BOOK 22, PAGES 168 AND 169, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, AND THE EASTERLY EXTENSION THEREOF, A DISTANCE OF 1759.19; THENCE DEPARTING SAID NORTHERLY LINE, N05°01'17"E, A DISTANCE OF 553.51 FEET; THENCE N01°49'52"E, A DISTANCE OF 273.84 FEET; THENCE N83°41'13", A DISTANCE OF 132.78 FEET; THENCE N01°02'25"W, A DISTANCE OF 326.22 FEET TO THE POINT OF BEGINNING; THENCE N03°23'50"W, A DISTANCE OF 265.22 FEET; THENCE N00°19'56"E, A DISTANCE OF 134.14 FEET; THENCE N89°40'04"W, A DISTANCE OF 18.00 FEET; THENCE N00°19'56"E, A DISTANCE OF 50.00 FEET; THENCE S89°40'04"E, A DISTANCE OF 78.53 FEET; THENCE N00°19'56"E, A DISTANCE OF 131.00 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF TOWN WEST BOULEVARD (100' RIGHT OF WAY) PER OFFICIAL RECORDS BOOK 5310, PAGE 1038, OF AFORESAID PUBLIC RECORDS; THENCE S89°40'04"E, ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 531.71 FEET; THENCE DEPARTING SAID SOUTH RIGHT OF WAY LINE, S00°19'56"W, A DISTANCE OF 148.68 FEET; THENCE S03°20'57"W, A DISTANCE OF 75.00 FEET; THENCE S07°02'00"W, A DISTANCE OF 72.12 FEET; THENCE S18°45'30"E, A DISTANCE OF 55.53 FEET; THENCE S00°22'25"W, A DISTANCE OF 50.34 FEET; THENCE S07°02'00"W, A DISTANCE OF 77.06 FEET; THENCE S42°02'29"W, A DISTANCE OF 123.35 FEET; THENCE S88°47'25"W, A DISTANCE OF 489.84 FEET TO THE POINT OF BEGINNING.
CONTAINING: 325124.54 SQUARE FEET OR 7.464 ACRES.

SURVEY NOTES:

- BEARINGS SHOWN HEREON ARE ASSUMED AND BASED ON OCCUPIED SOUTH LINE OF THE SOUTHEAST 1/4 OF SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA, AS BEING SOUTH 88°57'35" WEST.
- ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (FIRM) NO. 12127C05024, VOLUSIA COUNTY, FLORIDA, REVISED DATE OF FEBRUARY 19, 2014, THE PROPERTY DESCRIBED HEREON LIES WITHIN ZONE(S) "X" (AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN).
- UNDERGROUND FOUNDATIONS WERE NOT LOCATED AS PART OF THIS SURVEY.
- UTILITIES SHOWN HEREON ARE BASED ON ABOVE GROUND EVIDENCE AND AS DETAILED AT STRUCTURES.
- THIS SURVEY WAS PREPARED WITH THE BENEFIT OF A TITLE OPINION PREPARED BY MILGRAM LAW GROUP, DATED JANUARY 28, 2016.
- NORTH-SOUTH AND EAST-WEST TIES TO FOUND MONUMENTATION AND IMPROVEMENTS ARE BASED ON CARDINAL DIRECTION.
- WETLAND AREAS, IF EXISTING, WERE NOT ADDRESSED AS A PART OF THIS SURVEY.
- THE ACCURACY OF THE SURVEY MEASUREMENTS USED FOR THIS SURVEY MEETS OR EXCEEDS THE EXPECTED USE OF THE PROPERTY DESCRIBED HEREON. (SUBURBAN) 1 FOOT IN 7,500 FEET

VICINITY MAP (NOT TO SCALE)



SURVEYOR'S CERTIFICATE:
I HEREBY CERTIFY THIS SURVEY MEETS THE APPLICABLE "STANDARDS OF PRACTICE" AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN RULE 5J17.050-.052, FLORIDA ADMINISTRATIVE CODE.

William D. Donley
WILLIAM D. DONLEY
FLORIDA LICENSED SURVEYOR & MAPPER NO. LS 5381

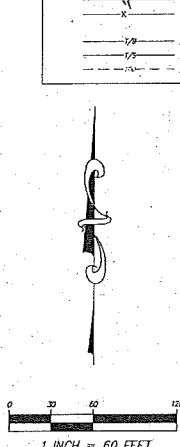
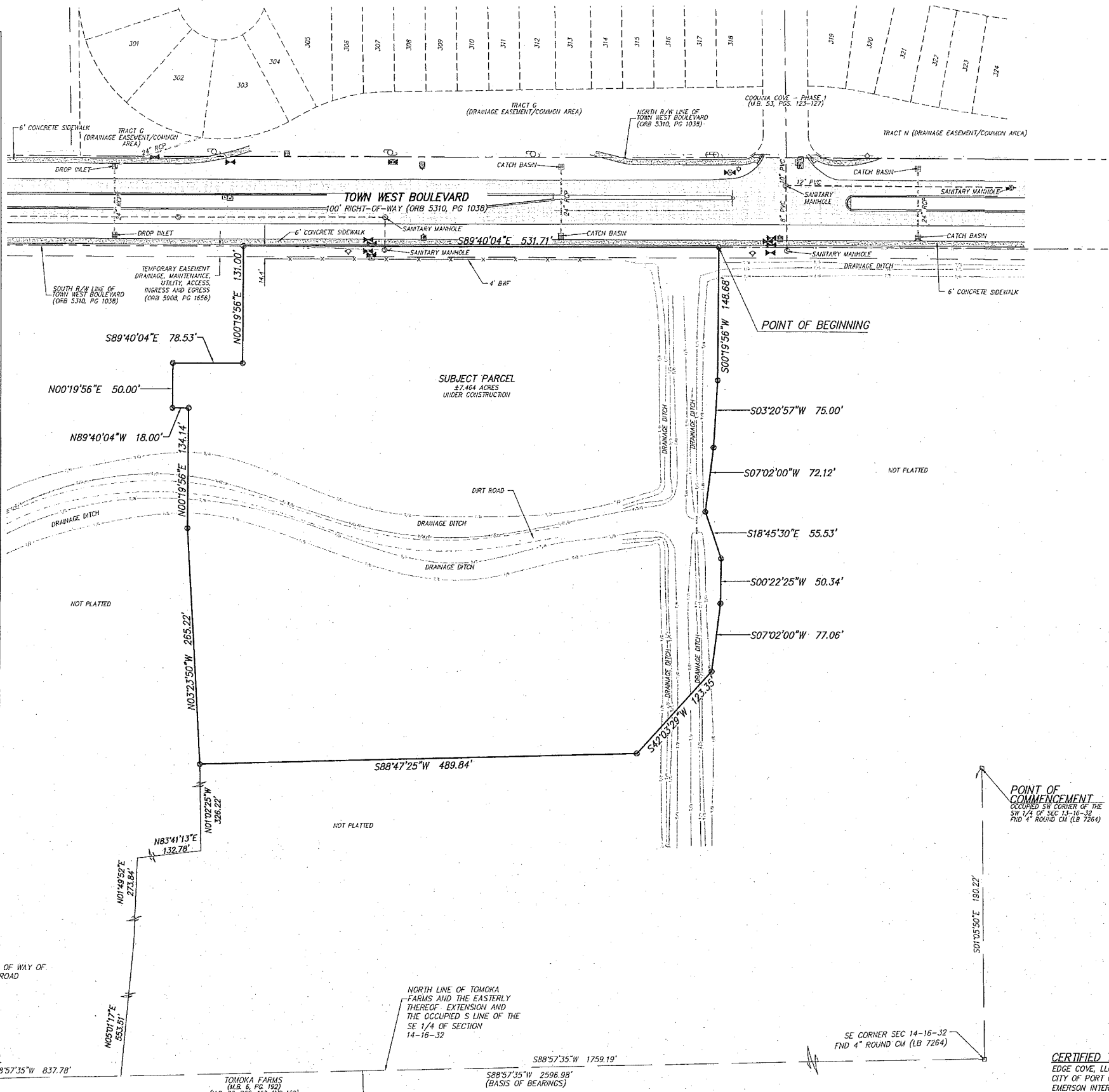
09/22/2016
DATE

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

CERTIFIED TO:
EDGE COVE, LLC
CITY OF PORT ORANGE
EMERSON INTERNATIONAL, INC.

LEGEND AND ABBREVIATIONS:

- 4 MORE OR LESS
- EL ELEVATION
- LB LICENSED BUSINESS
- NO. NUMBER
- LS LAND SURVEYOR
- L.D. IDENTIFICATION
- ORB OFFICIAL RECORDS BOOK
- C CENTERLINE
- R RADIUS
- L ARC LENGTH
- A DELTA (CENTRAL ANGLE)
- C.D. CHORD LENGTH
- C.B. CHORD BEARING
- P.O.C. POINT OF COMMENCEMENT
- P.O.L. POINT ON LINE
- P.O.C. POINT OF COMPOUND CURVATURE
- P.R.C. POINT OF REVERSE CURVATURE
- P.C. POINT OF TANGENCY
- P.T. POINT OF TANGENCY
- P.I. POINT OF INTERSECTION
- P.O.C. POINT OF COMMENCEMENT
- P.D.B. POINT OF BEGINNING
- FEMA FEDERAL EMERGENCY MANAGEMENT AGENCY
- DIP DUCTILE IRON PIPE
- PVC POLYVINYL CHLORIDE
- CCP CORRUGATED METAL PIPE
- RCP REINFORCED CONCRETE PIPE
- NAD NORTH AMERICAN DATUM
- NGVD NATIONAL GEODETIC VERTICAL DATUM
- PB PLAT BOOK
- ORB OFFICIAL RECORDS BOOK
- P.C. PAGE(S)
- R/W RIGHT OF WAY
- ESMT EASEMENT
- SEC SECTION
- FIND FOUND
- REC RECOVERED
- CCR CERTIFIED CORNER RECORD
- RLS REGISTERED LAND SURVEYOR
- CM CONCRETE MONUMENT
- IRC IRON ROD AND CAP
- IR IRON ROD
- IP IRON PIPE
- CLF CHAIN LINK FENCE
- CLF FOUND CONCRETE MONUMENT AS NOTED
- FOUND NAIL AS NOTED
- FOUND NAIL & DISK AS NOTED
- SET NAIL & DISK (LB 801)
- FOUND IRON ROD & CAP AS NOTED
- FOUND IRON ROD AS NOTED
- SET 5/8" IRON ROD & CAP (LB 801)
- CONTROL/BENCHMARK AS DESCRIBED
- CURB INLET GRATE
- CATCH BASIN
- STORM MANHOLE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC RISER BOX
- CABLE TELEVISION RISER BOX
- TELEPHONE RISER BOX
- UTILITY RISER
- WELL
- WATER SPOUT
- IRRIGATION CONTROL VALVE
- WATER METER
- WATER VALVE
- RECLAIM WATER VALVE
- FIRE HYDRANT
- AIR CONDITIONER PAD
- GAS VALVE
- GAS METER
- GAS LINE MARKER
- CONCRETE UTILITY POLE
- METAL UTILITY POLE
- WOOD UTILITY POLE
- UTILITY POLE GUY ANCHOR
- LIGHT POLE
- SPOT/GROUND LIGHT
- ELECTRIC TRANSFORMER
- WETLAND FLAG
- SIGN
- BOLLARD
- FLAG POLE
- MAILBOX
- HEDGE ROW
- LINE BREAK
- FENCE LINE AS NOTED
- OVERHEAD UTILITY LINE
- APPROXIMATE TOP OF BANK
- APPROXIMATE TOE OF SLOPE
- EXISTING CONTOUR



REVISIONS				
FB/PG	DATE	DRAWN	REVISION	CKD

Dewberry
131 WEST KALEY STREET
ORLANDO, FLORIDA 32806
PHONE: 321.354.9826 FAX: 407.648.9104
WWW.DEWBERRY.COM
CERTIFICATE OF AUTHORIZATION NO. LB 8011

SANCTUARY AT WESTPORT PHASE 2C
LOCATED IN SECTIONS 13 AND 14,
TOWNSHIP 16 SOUTH, RANGE 32 EAST
CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA

PLAT OF BOUNDARY SURVEY
-FOR-
EDGE COVE, LLC

FB/PG		FIELD DATE		PROJECT NO.	
14-16-32 / 1-54		12/15/15		50078685	
DRAWING DATE		BY	APPROVED	SCALE	
07/28/16		A.H.	W.D.	1" = 60'	

1 OF 1

GENERAL NOTES:

1. MONUMENTATION:

□ -- DENOTES PERMANENT REFERENCE MONUMENT FOUND STAMPED AS NOTED

■ -- DENOTES PERMANENT REFERENCE MONUMENT SET 4"x4" CONCRETE MONUMENT STAMPED PER LB 8011

⊙ -- DENOTES PERMANENT CONTROL POINT SET NAIL AND DISK STAMPED PCP 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.

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 S88°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 INSTITUTE OF STANDARDS AND TECHNOLOGY. ALL MEASUREMENTS SHALL USE THE 39.37/12=3.28083333333 EQUATION FOR CONVERSION FROM A U.S. FOOT TO METERS.

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

8. THIS PLAT IS SUBJECT TO ALL EASEMENTS OF RECORD AND RESERVATIONS OF EASEMENTS, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITY, AND ACCESS EASEMENTS DEDICATED OR GRANTED HEREON WHICH SHALL BE LOCATED AS FOLLOWS EXCEPT AS OTHERWISE NOTED ON THE PLAT:

ENTIRE STREET FRONTAGES OF LOTS AND COMMON OPEN SPACE AREAS: 12.00 FEET WIDE

9. UTILITIES INCLUDE BUT ARE NOT LIMITED TO SANITARY SEWER, POTABLE WATER, RECLAIMED WATER, STORM DRAINAGE, ELECTRIC, TELEPHONE, CABLE TELEVISION, SECURITY, NATURAL GAS, FIBER OPTIC, TELECOMMUNICATION.

10. ALL PLATTED UTILITY EASEMENTS, EXCLUSIVE OF PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY, SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES PURSUANT TO SECTION 177.091(28), FLORIDA STATUTES. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.

11. ALL OTHER EASEMENTS ARE SUBORDINATE TO ANY CONSERVATION EASEMENTS DEDICATED HEREON. THERE SHALL BE NO REMOVAL OR DISTURBANCE OF ANY VEGETATION WITHIN SUCH CONSERVATION EASEMENTS. ANY PROPOSED CONSTRUCTION OR OTHER USE WITHIN A CONSERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE CONSERVATION EASEMENT.

12. BUILDING SETBACK REQUIREMENTS:

FRONT = 25 FEET

REAR = 20 FEET

SIDE = LOTS ≤ 65' = 5 FEET

LOTS > 65' = 7.5 FEET

SIDE CORNER = 20 FEET

13. LOT COVERAGE REQUIREMENTS:

MAXIMUM COMMON OPEN SPACE = 40%

MAXIMUM BUILDING COVERAGE = 50%

MAXIMUM BUILDING HEIGHT = 36 FEET

14. THE COMMON OPEN SPACE AREAS GRANTED TO THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC. BY THIS PLAT SHALL BE SUBJECT TO EASEMENTS AS SHOWN OR DESCRIBED HEREON OR GRANTED IN ACCORDANCE WITH THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC.'S COVENANTS AND RESTRICTIONS. THE GRANTING OF SUCH COMMON OPEN SPACE AREAS IS NOT INTENDED TO GRANT ANY RIGHT TO THE GENERAL PUBLIC.

15. THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC., A FLORIDA NON-PROFIT CORPORATION SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE DRAINAGE SYSTEM SERVING THE AREA WITHIN THE BOUNDARIES OF THIS PLAT, AS DEPICTED ON THE STORMWATER MANAGEMENT PLAN APPROVED FOR THE DEVELOPMENT BY THE CITY OF PORT ORANGE, FLORIDA. SHOULD THE ASSOCIATION FAIL TO PERFORM THE MAINTENANCE OF THE DRAINAGE AND STORMWATER MANAGEMENT SYSTEMS, THE CITY OF PORT ORANGE SHALL BE ENTITLED TO ENFORCE UPON THE COMMON OPEN SPACE AREAS AND DESIGNATED EASEMENT AREAS TO PERFORM MAINTENANCE, REPAIR OR REPLACE THE FACILITIES; AND, SHALL HAVE THE RIGHT TO LIEN ALL OWNERS OF RECORD IN PROPERTY FOR THE COST OF SUCH MAINTENANCE, REPAIR, AND REPLACEMENT, AS DEEMED BY THE CITY TO BE NECESSARY. IN THE EVENT OF TERMINATION, DISSOLUTION, OR FINAL LIQUIDATION OF THE ASSOCIATION, THE RESPONSIBILITY FOR THE OPERATION AND MAINTENANCE OF THE SURFACE WATER OR STORM WATER MANAGEMENT SYSTEM WILL BE TRANSFERRED TO AND ACCEPTED BY AN ENTITY WHICH COMPLIES WITH SECTION 40C-42.027, F.A.C. AND BE APPROVED BY THE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT PRIOR TO SUCH TERMINATION, DISSOLUTION, OR LIQUIDATION.

16. COMMON OPEN SPACE AREAS ARE GRANTED AS EASEMENTS TO THE CITY OF PORT ORANGE WITH RIGHTS OF ACCESS, INGRESS, AND EGRESS, TOGETHER WITH THE RIGHT TO HARVEST EXCESS STORM WATER / GROUND WATER AS DEEMED APPROPRIATE IN THE DISCRETION OF THE CITY.

17. THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC. SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING AND IRRIGATION IN COMMON OPEN SPACE AREAS.

18. THE ARTICLES OF INCORPORATION FOR THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC. ARE RECORDED IN OFFICIAL RECORDS BOOK _____, PAGES _____ THROUGH _____ OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

19. THIS PLAT IS SUBJECT TO THE DECLARATION OF COVENANTS AND RESTRICTIONS FOR THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC. ARE RECORDED IN OFFICIAL RECORDS BOOK _____, PAGES _____ THROUGH _____, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

20. THIS PLAT SUBJECT TO THE EASEMENT AND COST SHARING AGREEMENT AS RECORDED IN OFFICIAL RECORDS BOOK _____, PAGES _____ THROUGH _____ OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

WESTPORT RESERVE PHASE 2C

BEING A REPLAT OF TRACT H, WESTPORT RESERVE, PLAT BOOK _____, LYING IN SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA

LEGAL DESCRIPTION:

A PORTION OF SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST, BEING IN THE CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE OCCUPIED SOUTHWEST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION 13, TOWNSHIP 16 SOUTH, RANGE 32 EAST; THENCE RUN S01°05'50"E A DISTANCE OF 190.22 FEET TO THE SOUTHEAST CORNER OF SAID SECTION 14; THENCE RUN S88°57'35"W ALONG THE OCCUPIED NORTHERLY LINE OF TOMOKA FARMS, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN MAP BOOK 6, PAGE 192, AND RE-RECORDED IN MAP BOOK 22, PAGES 168 AND 169, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, AND THE EASTERLY EXTENSION THEREOF, A DISTANCE OF 1759.19; THENCE DEPARTING SAID NORTHERLY LINE, N05°01'17"E, A DISTANCE OF 553.51 FEET; THENCE N01°49'52"E, A DISTANCE OF 273.84 FEET; THENCE N83°41'13", A DISTANCE OF 132.78 FEET; THENCE N01°02'25"W, A DISTANCE OF 326.22 FEET TO THE POINT OF BEGINNING; THENCE N03°23'50"W, A DISTANCE OF 265.22 FEET; THENCE N00°19'56"E, A DISTANCE OF 134.14 FEET; THENCE N89°40'04"W, A DISTANCE OF 18.00 FEET; THENCE N00°19'56"E, A DISTANCE OF 50.00 FEET; THENCE S89°40'04"E, A DISTANCE OF 78.53 FEET; THENCE N00°19'56"E, A DISTANCE OF 131.00 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF TOWN WEST BOULEVARD (100' RIGHT OF WAY) PER OFFICIAL RECORDS BOOK 5310, PAGE 1038, OF AFORESAID PUBLIC RECORDS; THENCE S89°40'04"E, ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 531.71 FEET; THENCE DEPARTING SAID SOUTH RIGHT OF WAY LINE, S00°19'56"W, A DISTANCE OF 148.68 FEET; THENCE S03°20'57"W, A DISTANCE OF 75.00 FEET; THENCE S07°02'00"W, A DISTANCE OF 72.12 FEET; THENCE S18°45'30"E, A DISTANCE OF 55.53 FEET; THENCE S00°22'25"W, A DISTANCE OF 50.34 FEET; THENCE S07°02'00"W, A DISTANCE OF 77.06 FEET; THENCE S42°03'29"W, A DISTANCE OF 123.35 FEET; THENCE S88°47'25"W, A DISTANCE OF 489.84 FEET TO THE POINT OF BEGINNING.

CONTAINING: 325124.54 SQUARE FEET OR 7.464 ACRES.

LEGEND AND ABBREVIATIONS:

AC ACRES
CB CHORD BEARING
CCR CERTIFIED CORNER RECORD
CH CHORD DISTANCE
C CENTER LINE
CM CONCRETE MONUMENT
D.E DRAINAGE EASEMENT
FND FOUND IDENTIFICATION
ID IRON PIPE
IP IRON PIPE & CAP
IRC IRON ROD
IRC IRON ROD & CAP
LB ARC LENGTH
LB LICENSED BUSINESS
LB MAP BOOK
N/D NAIL & DISK
NO NUMBER
(NR) NON-RADIAL
ORB OFFICIAL RECORDS BOOK
(OA) OVERALL
(P) PLAT
PC POINT OF CURVATURE
PCP PERMANENT CONTROL POINT
P(CS) PAGE/PAGES
PI POINT OF INTERSECTION
PLS PROFESSIONAL LAND SURVEYOR
PNT POINT OF NON-TANGENCY
PRO POINT OF REVERSE CURVATURE
PRL POINT ON A RADIAL LINE
PRM PERMANENT REFERENCE MONUMENT
PSM PROFESSIONAL SURVEYOR MAPPER
PT POINT OF TANGENCY
R RADIUS
(R) RADIAL
R/W RIGHT OF WAY
SEC SECTION--TOWNSHIP--RANGE
(TYP) TYPICAL
U.E UTILITY EASEMENT
Δ CENTRAL ANGLE
-L- BREAK LINE

MAP BOOK: _____ PAGE: _____

WESTPORT RESERVE PHASE 2C DEDICATION

KNOW ALL MEN BY THESE PRESENTS, THAT EDGE COVE, LLC, BEING THE OWNER IN FEE SIMPLE OF THE LANDS SHOWN AND DESCRIBED HEREON AS THE PLAT ENTITLED WESTPORT RESERVE PHASE 2C LOCATED IN THE CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA, HEREBY DEDICATES THE SAID LANDS AND PLAT FOR THE USES AND PURPOSES HEREON EXPRESSED. ALL STREETS, ROADS, ALLEYS, SIDEWALKS, BIKE PATHS, AND OTHER RIGHTS-OF-WAY SHOWN OR DESCRIBED ON THE PLAT ARE, UNLESS OTHERWISE INDICATED, DEDICATED TO THE CITY OF PORT ORANGE. ALL POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER LINES CONSTRUCTED WITHIN THE AREA ENCOMPASSED WITHIN THE PLAT ARE DEDICATED TO THE CITY OF PORT ORANGE. ALL DRAINAGE, MAINTENANCE, ACCESS, UTILITY, AND VEHICULAR ACCESS CONTROL EASEMENTS SHOWN OR DESCRIBED ON THE PLAT ARE, UNLESS OTHERWISE INDICATED, GRANTED TO THE CITY OF PORT ORANGE. ALL DRAINAGE, MAINTENANCE, AND ACCESS EASEMENTS SHOWN OR DESCRIBED ON THE PLAT ARE ALSO, UNLESS OTHERWISE INDICATED, GRANTED TO THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC. FOR THE PURPOSES DESCRIBED IN THE GENERAL NOTES.

ALL TRACTS AND OTHER AREAS SHOWN OR DEPICTED HEREON AS COMMON OPEN SPACE AREAS ARE HEREBY GRANTED TO THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC. FOR THE PURPOSES AS SET FORTH IN THE GENERAL NOTES.

TRACTS "R", "S", "T", AND "U" DEPICTED HEREON AS COMMON OPEN SPACE AREAS WILL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC. ITS SUCCESSORS AND/OR ASSIGNS FOR THE PURPOSE OF COMMON OPEN SPACE.

IN WITNESS WHEREOF, THE OWNER HAS CAUSED THESE PRESENTS TO BE SIGNED AND ATTESTED TO BY THE OFFICER NAMED BELOW AND ITS CORPORATE SEAL TO BE AFFIXED HERETO ON _____, A.D. 2016.

EDGE COVE, LLC
BY: EMERSON INTERNATIONAL, INC.

BY: _____

NAME: _____

TITLE: _____

SIGNED, SEALED AND DELIVERED IN THE PRESENCE OF:

WITNESS: _____ SIGNED _____ PRINTED NAME _____

WITNESS: _____ SIGNED _____ PRINTED NAME _____

STATE OF FLORIDA, COUNTY OF SEMINOLE

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, 2016 BY _____ AS _____ FOR EMERSON INTERNATIONAL, HE IS PERSONALLY KNOWN TO ME OR WHO HAS PRODUCED _____ AS IDENTIFICATION.

SIGNATURE OF NOTARY PUBLIC _____ PRINTED, TYPED OR STAMPED NOTARY NAME _____

NOTARY PUBLIC, STATE OF _____ (NOTARY SEAL)

COMMISSION NO.: _____ EXPIRATION: _____

CITY COUNCIL CERTIFICATE OF APPROVAL

THIS STATEMENT HEREBY CERTIFIES THAT THE PLAT ENTITLED WESTPORT RESERVE WAS APPROVED BY THE PORT ORANGE CITY COUNCIL ON _____, 2016.

MAYOR OF THE CITY OF PORT ORANGE _____ DATE _____

ATTEST: _____ CITY CLERK OF THE CITY OF PORT ORANGE

REVIEW BY SURVEYOR AND MAPPER FOR THE CITY

I HEREBY CERTIFY TO THE CITY, THAT I HAVE REVIEWED THE FOREGOING PLAT FOR COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES, AND THAT I HAVE PROVIDED BOTH THE CITY AND THE SURVEYOR AND MAPPER OF RECORD A LIST OF DEVIATIONS, IF ANY, FROM SUCH REQUIREMENTS.

SIGNATURE _____ DATE _____

PRINTED NAME: _____ P.L.S. NO. _____

PLANNING COMMISSION CERTIFICATE OF APPROVAL

THIS STATEMENT HEREBY CERTIFIES THAT THE PLAT ENTITLED WESTPORT RESERVE PHASE 2C WAS APPROVED BY THE PORT ORANGE PLANNING COMMISSION ON _____, 2016.

CHAIRMAN OF THE PORT ORANGE PLANNING COMMISSION _____ DATE _____

CERTIFICATE OF CLERK

I HEREBY CERTIFY, THAT I HAVE EXAMINED THE FOREGOING PLAT AND FIND THAT IT COMPLIES IN FORM WITH ALL REQUIREMENTS STATED IN CHAPTER 177, FLORIDA STATUTES, AND THAT IT WAS FILED FOR RECORD ON _____, 2016 AT _____ A.M. / P.M., FILE NO. _____

BY: _____ CLERK OF THE CIRCUIT COURT IN AND FOR VOLUSIA COUNTY, FLORIDA

SHEET 1 OF 2

VICINITY MAP (NOT TO SCALE)

TRACT TABLE

TRACT	USE	AREA (ACRES)
R	COMMON OPEN SPACE	1.593
S	COMMON OPEN SPACE	0.478
T	COMMON OPEN SPACE	0.047
U	COMMON OPEN SPACE	0.049

SHEET INDEX

SHEET 1 - COVER SHEET, NOTES, LEGEND/ABBREVIATIONS

SHEET 2 - DETAIL SHEETS

131 WEST KALEY STREET
ORLANDO, FLORIDA 32806
PHONE: 321.354.9828 FAX: 407.648.9104
WWW.DEWBERRY.COM
CERTIFICATE OF AUTHORIZATION NO. LB 8011



WESTPORT RESERVE PHASE 2C

BEING A REPLAT OF TRACT H, WESTPORT RESERVE, PLAT BOOK
PAGE _____, LYING IN SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST,
CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA

PAGE:

1. MONUMENTATION:
☐ - DENOTES PERMANENT REFERENCE MONUMENT FOUND STAMPED AS NOTED
☒ - DENOTES PERMANENT REFERENCE MONUMENT SET 4"x4"
 CONCRETE MONUMENT STAMPED PRM LB 8011
☒ - DENOTES PERMANENT CONTROL POINT SET NAIL AND DISK
 STAMPED PCP 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.

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 18 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY,
 FLORIDA, HAVING A BEARING OF S88°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 INSTITUTE OF
 STANDARDS AND TECHNOLOGY. ALL MEASUREMENTS SHALL USE THE
 39.37/12 = 3.28083333333 EQUATION FOR CONVERSION FROM A U.S. FOOT TO METERS.

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

8. THIS PLAT IS SUBJECT TO ALL EASEMENTS OF RECORD AND RESERVATIONS OF
 EASEMENTS, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITY, AND ACCESS EASEMENTS
 DEDICATED OR GRANTED HEREON WHICH SHALL BE LOCATED AS FOLLOWS EXCEPT AS
 OTHERWISE NOTED ON THE PLAT:

ENTIRE STREET FRONTAGES OF LOTS AND COMMON OPEN SPACE AREAS: 12.00 FEET WIDE

9. UTILITIES INCLUDE BUT ARE NOT LIMITED TO SANITARY SEWER, POTABLE WATER,
 RECLAIMED WATER, STORM DRAINAGE, ELECTRIC, TELEPHONE, CABLE TELEVISION, SECURITY,
 NATURAL GAS, FIBER OPTIC, TELECOMMUNICATION.

10. ALL PLATTED UTILITY EASEMENTS, EXCLUSIVE OF PRIVATE EASEMENTS GRANTED TO OR
 OBTAINED BY PARTICULAR ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY, SHALL
 ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION
 OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION,
 INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL
 INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS OR OTHER
 PUBLIC UTILITY; IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A
 PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES PURSUANT TO SECTION
 177.09(28), FLORIDA STATUTES. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE AND
 OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY
 THE FLORIDA PUBLIC SERVICE COMMISSION.

11. ALL OTHER EASEMENTS ARE SUBORDINATE TO ANY CONSERVATION EASEMENTS DEDICATED
 HEREON. THERE SHALL BE NO REMOVAL OR DISTURBANCE OF ANY VEGETATION WITHIN SUCH
 CONSERVATION EASEMENTS. ALL PROPOSED CONSTRUCTION OR OTHER USE WITHIN A
 CONSERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE
 AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE CONSERVATION EASEMENT.

12. BUILDING SETBACK REQUIREMENTS: 13. LOT COVERAGE REQUIREMENTS:
 FRONT = 12 FEET MAXIMUM DECK ORY SPACE = 40%
 REAR = 20 FEET MAXIMUM BUILDING COVERAGE = 50%
 SIDE = LOTS ≤ 65' = 5 FEET MAXIMUM BUILDING HEIGHT = 36 FEET
 LOTS > 65' = 7.5 FEET
 SIDE CORNER = 20 FEET

14. THE COMMON OPEN SPACE AREAS GRANTED TO THE HOMEOWNERS ASSOCIATION OF
 WESTPORT RESERVE, INC. BY THIS PLAT SHALL BE SUBJECT TO EASEMENTS AS SHOWN OR
 DESCRIBED HEREON OR GRANTED IN ACCORDANCE WITH THE HOMEOWNERS ASSOCIATION OF
 WESTPORT RESERVE, INC.'S COVENANTS AND RESTRICTIONS. THE GRANTING OF SUCH COMMON
 OPEN SPACE AREAS IS NOT INTENDED TO GRANT ANY RIGHT TO THE GENERAL PUBLIC.

15. THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC., A FLORIDA NON-PROFIT
 CORPORATION SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE
 DRAINAGE SYSTEM AND ALL OWNERS WITHIN THE BOUNDARIES OF THIS PLAT, AS DEPICED
 ON THE STORMWATER MANAGEMENT PLAN APPROVED FOR THE DEVELOPMENT BY THE CITY OF
 PORT ORANGE, FLORIDA. SHOULD THE ASSOCIATION FAIL TO PERFORM THE MAINTENANCE OF
 THE DRAINAGE AND STORMWATER MANAGEMENT SYSTEMS, THE CITY OF PORT ORANGE SHALL
 BE ENTITLED TO ENTER UPON THE COMMON OPEN SPACE AREAS AND DESIGNATED EASEMENT
 AREAS TO PERFORM MAINTENANCE, REPAIR OR REPLACE THE FACILITIES, AND, SHALL HAVE
 THE RIGHT TO LIEV ALL OWNERS OF RECORD IN PROPERTY FOR THE COST OF SUCH
 MAINTENANCE, REPAIR, AND REPLACEMENT, AS DEEMED BY THE CITY TO BE NECESSARY. IN
 THE EVENT OF TERMINATION, DISSOLUTION, OR FINAL LIQUIDATION OF THE ASSOCIATION, THE
 RESPONSIBILITY FOR THE OPERATION AND MAINTENANCE OF THE SURFACE WATER OR STORM
 WATER MANAGEMENT SYSTEM SHALL BE TRANSFERRED TO AND ACCEPTED BY AN ENTITY WHICH
 COMPLIES WITH SECTION 40C-42.027, F.A.C. AND BE APPROVED BY THE SAINT JOHNS RIVER
 WATER MANAGEMENT DISTRICT PRIOR TO SUCH TERMINATION, DISSOLUTION, OR LIQUIDATION.

16. COMMON OPEN SPACE AREAS ARE GRANTED AS EASEMENTS TO THE CITY OF PORT
 ORANGE WITH RIGHTS OF ACCESS, INGRESS, AND EGRESS, TOGETHER WITH THE RIGHT TO
 HARVEST EXCESS STORM WATER / GROUND WATER AS DEEMED APPROPRIATE IN THE
 DISCRETION OF THE CITY.

17. THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC. SHALL BE RESPONSIBLE FOR
 MAINTAINING ALL LANDSCAPING AND IRRIGATION IN COMMON OPEN SPACE AREAS.

18. THE ARTICLES OF INCORPORATION FOR THE HOMEOWNERS ASSOCIATION OF WESTPORT
 RESERVE, INC. ARE RECORDED IN OFFICIAL RECORDS BOOK _____ PAGES _____ THROUGH
 _____ OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

19. THIS PLAT IS SUBJECT TO THE DECLARATION OF COVENANTS AND RESTRICTIONS FOR
 THE HOMEOWNERS ASSOCIATION OF WESTPORT RESERVE, INC. ARE RECORDED IN OFFICIAL
 RECORDS BOOK _____ PAGES _____ THROUGH _____ OF THE PUBLIC RECORDS OF VOLUSIA
 COUNTY, FLORIDA.

20. THIS PLAT SUBJECT TO THE EASEMENT AND COST SHARING AGREEMENT AS RECORDED
 IN OFFICIAL RECORDS BOOK _____ PAGES _____ THROUGH _____ OF THE PUBLIC RECORDS
 OF VOLUSIA COUNTY, FLORIDA.

SHEET 2 OF 2

SHEET 1 OF 2



WESTPORT RESERVE PHASE 2C

BEING A REPLAT OF TRACT H, WESTPORT RESERVE, PLAT BOOK _____
PAGE _____, LYING IN SECTION 14, TOWNSHIP 16 SOUTH, RANGE 32 EAST,
CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA

PAGE:

SHEET 2 OF 2



STAFF REPORT

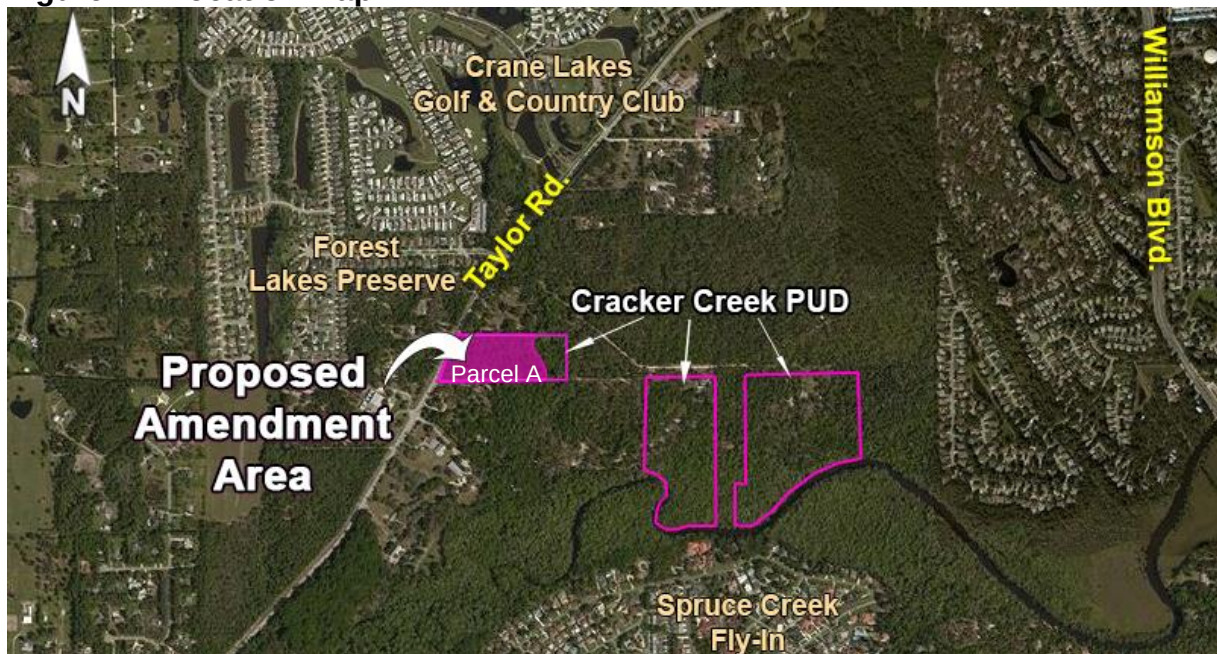
Small-Scale Comprehensive Plan Future Land Use
Amendment/Cracker Creek
CASE NO. 16-20000002

REQUEST:	Change the Comprehensive Plan Future Land Use (FLU) designation for ± 7.5 acres from <i>Public/Institutional</i> to <i>Office/Residential Transition</i> .
LOCATION:	1815 Taylor Rd. (Figure 1 - Location Map)
APPLICANT:	Antares of Port Orange, LLC
OWNER:	Robert and Jill Williams
STAFF RECOMMENDATION:	Approval
STAFF CONTACT:	Penelope Cruz, Principal Planner (386) 506-5671
PLANNING COMMISSION DATE:	October 27, 2016

INTRODUCTION

The subject property (Parcel A) is ± 9.7 -acres and is part of the ± 56 -acre Cracker Creek PUD. The proposed amendment is to change the Future Land Use (FLU) designation from *Public/Institutional* to *Office/Residential Transition* for ± 7.5 -acres (amendment area) of the ± 9.7 -acre "Parcel A" property. The ± 7.5 -acre amendment area is generally located on the south side of Taylor Road, north of the entrance to Cracker Creek. The remaining ± 2.2 -acres are not included in the proposed FLU amendment and would retain the current *Conservation* FLU designation.

Figure 1 – Location Map



If the proposed FLU Amendment is approved, the applicant intends to amend the Cracker Creek PUD Master Development Agreement (MDA) and Conceptual

Development Plan (CDP) to establish the framework to develop an Assisted Living Facility (ALF) and Memory Care Facility on “Parcel A”. The applicant then intends to submit a site plan to develop a ±112,095 square foot ALF and Memory Care Facility. The proposed development of an ALF and Memory Care Facility is consistent with the proposed *Office/Residential Transition* Future Land Use designation which allows for the development of office and institutional uses

DISCUSSION

The following discussion will examine the proposed amendment, the impacts of the proposed amendment, and the existing environmental conditions.

PROPERTY OVERVIEW

The subject property (“Parcel A”) is currently undeveloped and part of the existing Cracker Creek PUD. The surrounding land use, Future Land Use, and Zoning are identified in Table 1. The current adopted and proposed FLU designation for the subject property and the current FLU designation of the adjacent properties is identified on Exhibit A. The current zoning classification of the subject property (PUD) and the adjacent properties is identified on Exhibit B.

Table 1. Surrounding Land Uses and Zoning

Direction	Existing Land Use	FLU Designation	Zoning District
North	Vacant	Volusia County Urban Low Intensity	Volusia County A-2 (Rural Agriculture)
South	Single-family	Volusia County Urban Low Intensity	Volusia County A-2
East	Vacant	Conservation	PUD
West (across Taylor rd.)	Single-family	Volusia County Urban Low Intensity	Volusia County A-2

PROPOSED AMENDMENT

The proposed amendment is to change the FLU designation for ±7.5 acres from *Public/Institutional* to *Office/Residential Transition*. The following tables identify the current adopted and proposed FLU designations by acreage (Table 2) and maximum allowable intensity (Table 3).

Table 2. Current & Proposed Future Land Uses – Acreage by Category

	Current FLU (acres)	Proposed FLU (acres)	Net Change in FLU (acres)
Public/Institutional	7.5	0	- 7.5
Office/Residential Transition	0	7.5	+7.5
TOTAL ACREAGE	7.5	7.5	0

Table 3. Current & Proposed Future Land Uses – Maximum Density/Intensity by Category

	Current FLU	Proposed FLU	Net Change in FLU	Proposed Development (Actual)	Net Change (Based on Actual Sq.Ft.)
	[theoretical max sq.ft.*]				
Public/Institutional (FAR 0.2)	65,340	0	-65,340	0	-65,340
Office/Residential Transition (FAR 1.5)	0	490,050*	+490,050	+112,095	+112,095
TOTAL	65,340	490,050	+424,710	+112,095	+46,755

Notes: FAR is Floor Area Ratio, which is the total covered area on all floors of all buildings on a certain lot divided by the total area of the lot.

The proposed ALF and Memory Care Facility is a permitted use in the current and proposed FLU designation. The request to change the FLU designation from *Public/Institutional* to *Office/Residential Transition* is the Floor Area Ratio (FAR). The current FLU designation has a maximum FAR of 0.2 and would allow for a maximum of 65,340 sq.ft. to be developed on Parcel A. The requested FLU designation has a FAR of 1.5 and would allow for a theoretical maximum of up to 490,050 sq. ft. The actual ALF and Memory Care Facility is proposed to be approximately 112,095 sq.ft., which is 23% of the allowable FAR (or a ± 0.35 FAR).

INFRASTRUCTURE IMPACT ASSESSMENT

In accordance with standard practice from the Florida Department of Economic Opportunity (DEO) and other review agencies, an impact comparison analysis of the proposed amendment has been completed based upon the theoretical maximum development potential under the currently adopted future land use designation versus the proposed designation. The following seven public facilities and services were examined (Table 4):

- | | |
|-------------------|------------------------|
| 1. Transportation | 5. Stormwater Drainage |
| 2. Sanitary Sewer | 6. Recreation |
| 3. Potable Water | 7. Schools |
| 4. Solid Waste | |

Table 4. Impact Analysis (Theoretical Max.)

Development Variable	Current Future Land Use (Theoretical Max.)	Proposed Future Land Use (Theoretical Max.)	Net Change (Theoretical Max.)	Proposed Development (Actual)	Net Change (Based on Actual Sq.Ft.)
Square-footage	65,340	490,050	+424,710	112,095	+46,755
P.M. Peak Hour Trips/Daily Trips ²	66/497	495/3,724	+429/+3,227*	113/852	+47/+355*
Sanitary Sewer (gallons/day) ³	6,534	49,005	+42,471	11,210	+4,676
Potable Water (gallons/day) ⁴	6,534	49,005	+42,471	11,210	+4,676
Solid Waste (lbs./day) ⁵	653	4,901	+4,247	1,121	+468
Stormwater Drainage ⁶	-	addressed with site plan	-	addressed with site plan	-
Recreation/Open Space ⁷	-	n/a	-	n/a	-

Notes:

- | | |
|-------------------------|---|
| 1. Population: | 2.25 persons per household (per 2010 Census) |
| 2. Transportation: | 7.6 Daily Trips per 1,000 sq.ft; 1.01 P.M. Peak Hour Trips per 1,000 sq.ft., Nursing Home (620), ITE Trip Generation Manual, 9 th Edition
*The overall Cracker Creek PUD property has a trip limitation cap of 1,815 Average Daily Trips in the Comprehensive Plan. |
| 3. Sanitary Sewer: | 1/10 gallon per square foot per day of non-residential development |
| 4. Potable Water: | 1/10 gallon per square foot per day of non-residential development |
| 5. Solid Waste | 10 lbs. per 1,000 square feet of non-residential development per day |
| 6. Stormwater Drainage: | LOS standard = 25 year, 24 hour event. Drainage system will be designed to meet the requirements of the Land Development Code. |
| 7. Rec. & Open Space: | 7 acres/1,000 persons (0.007 acres/person); n/a for non-residential development |

The proposed amendment results in increased impacts to public infrastructure based on theoretical maximum impact analysis.

TRANSPORTATION

An increase in the number of daily trips and P.M. peak hour trips is likely as a result of the proposed FLU amendment. Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, the proposed *Office/Residential Transition* FLU designation could generate an additional 429 P.M. peak hour trips and an additional 3,227 daily trips based on the theoretical maximum development analysis. However, based on the proposed development of Parcel A as an 112,095 sq.ft. ALF and Memory Care Facility, the proposed use is anticipated to generate 113 PM peak hours trips and 852 daily trips. In addition, there is a policy in the City's Comprehensive Plan that limits the 56-area Cracker Creek PUD properties to a daily trip cap limit of 1,815 daily trips. As site plans are submitted for development of the Cracker Creek PUD properties staff will track the daily trips associated with each development to verify compliance with the trip cap.

Transportation Mobility Element, Policy 3.2.4: The City shall limit trips from Cracker Creek [parcel numbers 6330-00-00-0160; 6330-00-00-0180; 6330-00-00-0170; 6225-03-00-0070] to 1,815 Average Daily Trips, so as to not create a significant impact on the Volusia County thoroughfare network and State roadway facilities.

According to the latest traffic counts for Taylor Road, there is capacity on this roadway for traffic estimated to be generated by future development of this property as an ALF and Memory Care Facility.

Taylor Road Segments	Adopted Level-of-Service Standard	Maximum Capacity	Vehicles per Day	Remaining Capacity	Volume to Capacity Ratio
Tomoka Farms Rd. to Spruce Creek Blvd	E	17,050	8,910	8,140	52.26%
Spruce Creek Blvd. to Crane Lakes Blvd	E	17,050	11,440	5,610	67.10%
Crane Lakes Blvd. to Summertrees Rd.	E	17,050	15,370	1,680	90.15%
Summertrees Rd. to Williamson Blvd.	E	37,970	15,560	22,410	40.98%
Williamson Blvd. to I-95	E	47,560	40,210	7,350	84.55%

Source: Volusia County 2015 Traffic Counts

No deficiencies have been identified on the existing and future roadway network in this area in the short term (2020) or the long-term (2030). The Applicant has identified in the First Amendment to the Cracker Creek MDA that additional right-of-way to be dedicated to Volusia County for widening of Taylor Road. The additional right-of-way will be dedicated to Volusia County at the time Parcel A is developed.

SANITARY SEWER

The City has available sewer capacity to accommodate the proposed land use change. The City's adopted level-of-service (LOS) standard for sanitary sewer is 1/10 gallon per square foot per day of non-residential development. Using this standard, the proposed FLU designation would theoretically generate a net increase 6,534 gallons of waste water per day.

POTABLE WATER

The City has available well and Consumptive Use Permit (CUP) capacity to serve the proposed land use change (Exhibit C). The City's adopted LOS standard for potable water is 1/10 gallon per square foot per day of non-residential development. Using this standard, the proposed FLU designation would theoretically demand a net increase of 6,534 gallons of potable water per day.

SOLID WASTE COLLECTION

There is available capacity at the landfill to address the City's solid waste disposal needs. Solid waste generated within the City of Port Orange is delivered to the Volusia County landfill, a 3,000-acre Class I landfill with a projected life span to the year 2050. The City's adopted LOS standard for solid waste is 10 lbs. per 1,000 square feet of non-residential development per day. Using this standard, the proposed FLU designation would theoretically generate a net increase of 4,247 pounds per day of solid waste.

STORMWATER DRAINAGE

There is no anticipated impact to the City's drainage system from the proposed land use change. Stormwater management in the City of Port Orange deals with both quality and quantity. The City's adopted LOS standard for stormwater is the 25-year, 24-hour storm event. More specifically, the stormwater facilities must be capable of treating and conveying the runoff from such a storm without causing flooding of adjacent properties or polluting any receiving water bodies. In addition, the Comprehensive Plan and Land Development Code require that there be no net loss of stormwater retention function as a result of development. In other words, a given parcel must have the same ability to store and discharge water after development as it does before development occurs. Any future development of the property will be required to address stormwater retention on the property in accordance with these City standards.

RECREATION AND OPEN SPACE

There is no anticipated impact to the City's recreational facilities or parkland from the proposed FLU amendment. The development of this property with non-residential uses would not require additional parkland or recreation facilities. Nonetheless, according to the City's 2015 Concurrency Management Report, the City has an excess of 73 acres of parkland beyond the currently adopted level-of-service requirement.

SCHOOLS

The Volusia County School District determined that the proposed development of an ALF and Memory Care Facility is exempt from School Concurrency review (Exhibit D).

ENVIRONMENTAL CONDITIONS

The amendment area is classified as upland habitat, specifically Sand Pine communities. The only identified potential development constraint would be the presence of the gopher tortoise along the southern property line of Parcel A. Any subsequent development will be required to comply with all federal, state, regional and local regulations pertaining to the protection and preservation of valuable environmental resources.

REVIEW CRITERIA AND STAFF FINDINGS

1. *Consistency with the City's Comprehensive Plan.*

Staff finding: The proposed FLU amendment is generally consistent with the pertinent Goals, Objectives, and Policies of the City's Comprehensive Plan. The proposed FLU category meets the locational criteria for the *Office/Residential Transition* FLU designation of being located along arterial roads, adjacent to commercial nodes, light industrial/heavy commercial areas, and residential areas, to provide for an appropriate mix of uses along arterial roadways as a means to keep intensive commercial uses at major intersections. All public facilities have adequate capacity to accommodate the proposed amendment.

2. *Compatibility with land use designations for adjacent parcels and neighborhoods.*

Staff finding: The proposed FLU amendment is compatible with the adjacent properties. Compatibility is defined in the Comprehensive Plan as a condition in which dissimilar land uses can co-exist in relative proximity to one another in a stable fashion over time, such that neither use is unduly negatively impacted by the other. The subject property is located on a principal arterial roadway (Taylor Road) and is adjacent to single-family homes to the west (across Taylor Road) and south, vacant land proposed to be developed as a house of worship to the north, and vacant land designated *Conservation* to the east that is part of the Cracker Creek PUD (see Table 1 – page 2).

3. *Impacts on public facilities/infrastructure/services.*

Staff finding: The proposed amendment is anticipated to have no impact on recreation and public school facilities and increase impacts on roadways, potable water, sanitary sewer, and solid waste; however, capacity exists to serve the projected increases. In addition, there is a policy in the City's Comprehensive Plan that limits the overall 56-area Cracker Creek PUD properties to a daily vehicular trip cap limit of 1,815 daily trips. As site plans are submitted for development of the Cracker Creek PUD properties staff will track the daily vehicular trips associated with each development to verify compliance with the trip cap.

4. *Whether the amendment increases the clearance time for evacuation of the population in the Hurricane Vulnerability Zone above twelve hours.*

Staff finding: The subject property does not lie within the Hurricane Vulnerability Zone. The proposed amendment will not negatively impact the clearance time for evacuation of the population in the Hurricane Vulnerability Zone.

5. *Whether the amendment discourages the proliferation of urban sprawl.*

Staff finding: The proposed amendment will not encourage sprawl. The amendment area is adjacent to existing development, with access to existing infrastructure.

PUBLIC NOTICE

In September 2016, staff posted the property notifying the public of the proposed amendment. The proposed amendment has also been advertised in the *New-Journal* pursuant to Florida Statutes.

STAFF RECOMMENDATION

Staff recommends **approval** of the request to change the FLU designation of ±7.5 acres from *Public/Institutional* to *Office/Residential Transition*, and authorizing staff to send the amendment to the required review agencies.

ATTACHMENTS:

- Exhibit A – Current and Proposed Future Land Use
- Exhibit B – Zoning
- Exhibit C – SJRWMD Potable Water Availability Worksheet
- Exhibit D – School District Review Letter

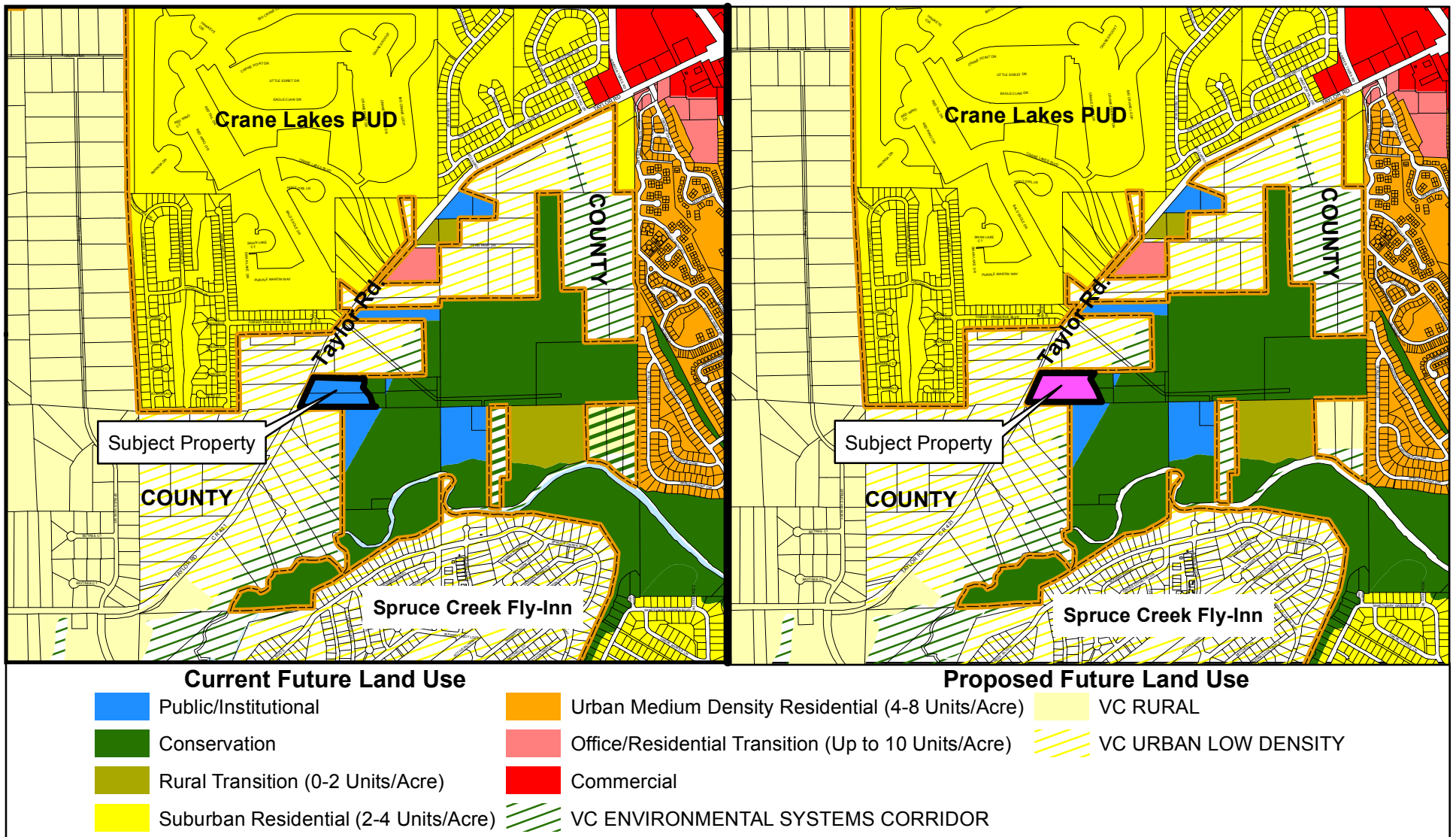


EXHIBIT A

CASE NO. 16-20000002 and 16-40000005

DEPARTMENT OF COMMUNITY DEVELOPMENT



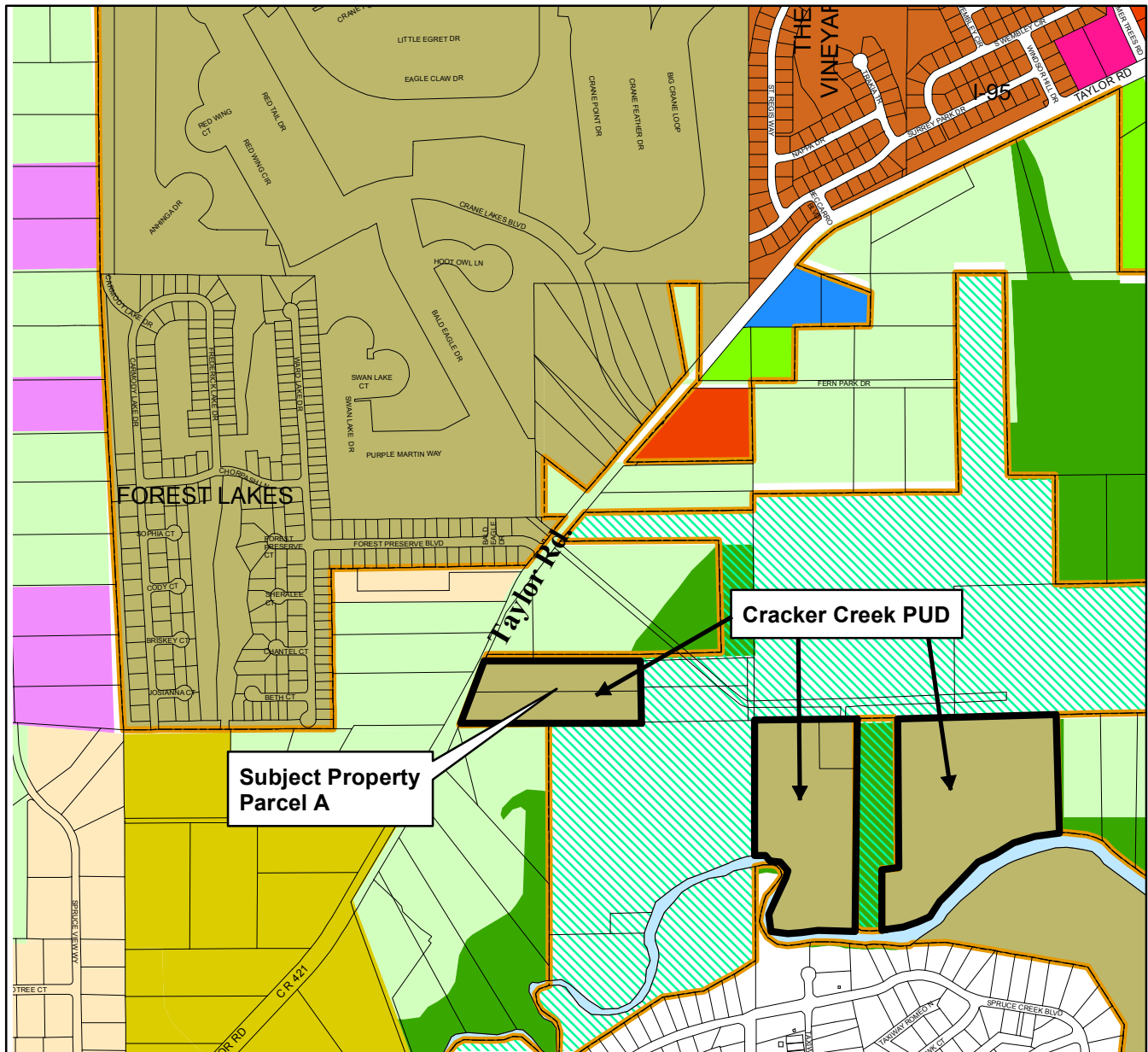
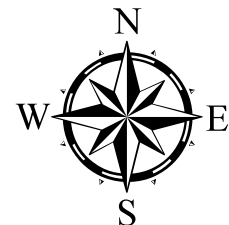


Exhibit B- Zoning

CITY OF PORT ORANGE

DEPARTMENT OF COMMUNITY DEVELOPMENT





St. Johns River Water Management District Potable Water Availability Worksheet

This worksheet is for use by local governments submitting comprehensive plan amendments to determine the availability of potable water resources to serve proposed development. Instructions and St. Johns River Water Management District (SJRWMD) staff contact information are attached.

1. General Information

Date: September 2016 Case No. 16-20000002 (Cracker Creek ALF and Memory Care Facility)
 Contact name: Penelelope Cruz/ Kenny Ho, P.E. Phone: 386-506-5671 E-mail: pcruz@port-orange.org
 Local government: City of Port Orange
 Potable water supplier: City of Port Orange

2. Infrastructure Information

Water treatment plant permit number: 3641044 Permitting agency: FDEP
 Permitted capacity of the water treatment plant(s): 15 million gallons a day (mgd)
 Total design capacity of the water treatment plant(s): 15 mgd
 Are distribution lines available to serve the property? Yes ☒ No ☐
 If not, indicate how and when the lines will be provided: _____

 Are reuse distribution lines available to serve the property? Yes ☒ No ☐
 If not, indicate if, how and when the lines will be provided: _____

3. SJRWMD Consumptive Use Permit (CUP) Information

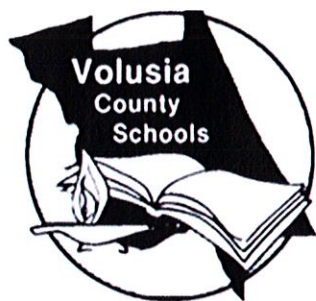
CUP number: 8595 Expiration date: 6/1/22
 Total CUP duration (years): 20
 CUP allocation in last year of permit: 8.97 MGD (annual average)
 Current status of CUP: In compliance ☒ Not in compliance ☐
 Allocations to other local governments: Ponce Inlet as a whole sale customer; Daytona Beach Shores & Volusia County are partially served as retail customers; No specific water usage amount has been recorded or agreed for these local goverments
 Reserved capacity: 0.013 MGD (Based on a estimated 77 ELUs that are permitted but unbuilt at 180 GPD/ELU.) Total committed capacity built and unbuilt is 7.11 MGD - based on 39,509 ELUs at 180 GPD/ELU.

4. Consumptive Use Analysis

	Designate mgd ☒ or mgy ☐
A. Current year CUP allocation:	<u>8.50</u>
B. Consumption in the previous calendar year:	<u>5.94</u>
C. Reserved capacity ☐ or growth projection ☒ (check the one used):	<u>0.18</u>
D. Projected consumption by proposed comprehensive plan amendment areas	<u>0</u>
E. Amount available for all other future uses (A - B - C - D = E):	<u>2.38</u>

If the amount in E is zero or a negative number, explain how potable water will be made available for future uses: Please note for "C" - the growth projection is based a historical growth rate of 0.15 MGD - 0.18 MGD calculated from monthly operating reports data (MORs, DEP form 17.1.122 (40)) of the City's Garnsey Water Plant.

This worksheet is available electronically at http://www.sjrwmd.com/programs/outreach/local_gov/



James T. Russell
Superintendent of Schools

FACILITIES SERVICES

3750 Olson Drive, Daytona Beach, Florida 32124
PHONE: 386/734-7190 FAX: 386/506-5056

School Board of Volusia County

Mrs. Linda Costello, Chairman
Mrs. Ida White, Vice-Chairman
Mrs. Linda Cuthbert
Dr. John Hill
Mrs. Melody Johnson

06 September, 2016

Mr. Dennis Devenport
4348 Southpointe Blvd., Suite 101
Jacksonville, FL 32216

RE: Cracker Creek ALF
School Concurrency Case #16-08-26-001-NI

Dear Mr. Devenport:

School district staff has reviewed the project information for a ±9.75 acre parcel located at 1815 Taylor Road in the City of Port Orange. The development proposed is for a 124 bed Assisted Living Facility and Memory Care facility. The FLU amendment requested for approximately 7.55 acres of the property would change the land use from Government/Public Use to Office/Resident Transition. An MDA Amendment will add the ALF use and amend the concept plan. This project will not require a school concurrency certificate. This letter serves to provide the appropriate jurisdiction and applicant with documentation that the project has been reviewed and evaluated by the school district and is considered a project of no impact for school concurrency purposes.

If you should have additional questions or require more information, please feel free to contact me at extension 50810.

Sincerely,

Eric A. Kozielski
Planning & GIS Specialist

Cc: James Russell, Superintendent of Schools
Penelope Cruz, City of Port Orange
Project File



STAFF REPORT

First Amendment to the Cracker Creek PUD Master Development Agreement and Conceptual Development Plan CASE NO. 16-40000005

REQUEST:	To approve the First Amendment to the Cracker Creek PUD Master Development Agreement (MDA) and Conceptual Development Plan (CDP)
APPLICANT:	Antares of Port Orange, LLC
PROPERTY OWNER:	Robert and Jill Williams
LOCATION:	1815 Taylor Rd. (Figure 1 - Location Map)
STAFF CONTACT:	Penelope Cruz, Principal Planner (386) 506-5671
STAFF RECOMMENDATION:	Approval
PLANNING COMMISSION DATE:	October 27, 2016

INTRODUCTION

The applicant proposes to modify the Cracker Creek PUD Master Development Agreement (MDA) and Conceptual Development Plan (CDP) to establish the framework for the development of an Assisted Living Facility (ALF) and Memory Care Facility that provides fulltime long-term care to individuals who, by reason of advanced age, chronic illness or infirmity, are unable to care for themselves. If approved, the applicant intends to develop the parcel located at 1815 Taylor Road (Parcel A) as an ALF and Memory Care Facility with associated site improvements.

The Cracker Creek PUD is located on the south side of Taylor Road and north of Spruce Creek (Figure 1 - Location Map).

Figure 1. Location Map



CONSISTENCY WITH COMPREHENSIVE PLAN

The applicant has applied to change the Future Land Use (FLU) designation of ± 7.5 acres of the overall 56-acre PUD property from *Public/Institutional* to *Office/Residential Transition*. The proposed amendment to the MDA and CDP is consistent with the type of land use and intensity allowed by the City of Port Orange FLU designation proposed for the property.

General infrastructure capacity for the proposed FLU amendment of the ± 7.5 acres was evaluated with the FLU amendment (Case No. 16-20000002). There is a policy in the City's Comprehensive Plan (*Transportation Mobility Element, Policy 3.2.4*) that limits the overall 56-acre Cracker Creek PUD properties to a daily trip cap limit of 1,815 daily trips. As site plans are submitted for development of the Cracker Creek PUD properties staff will track the daily trips associated with each development to verify compliance with the trip cap. A detailed review of water, sewer, reclaimed water, stormwater, and traffic for the proposed development of a $\pm 112,095$ square-foot ALF and Memory Care Facility will be evaluated when the site plan is submitted for the subject property.

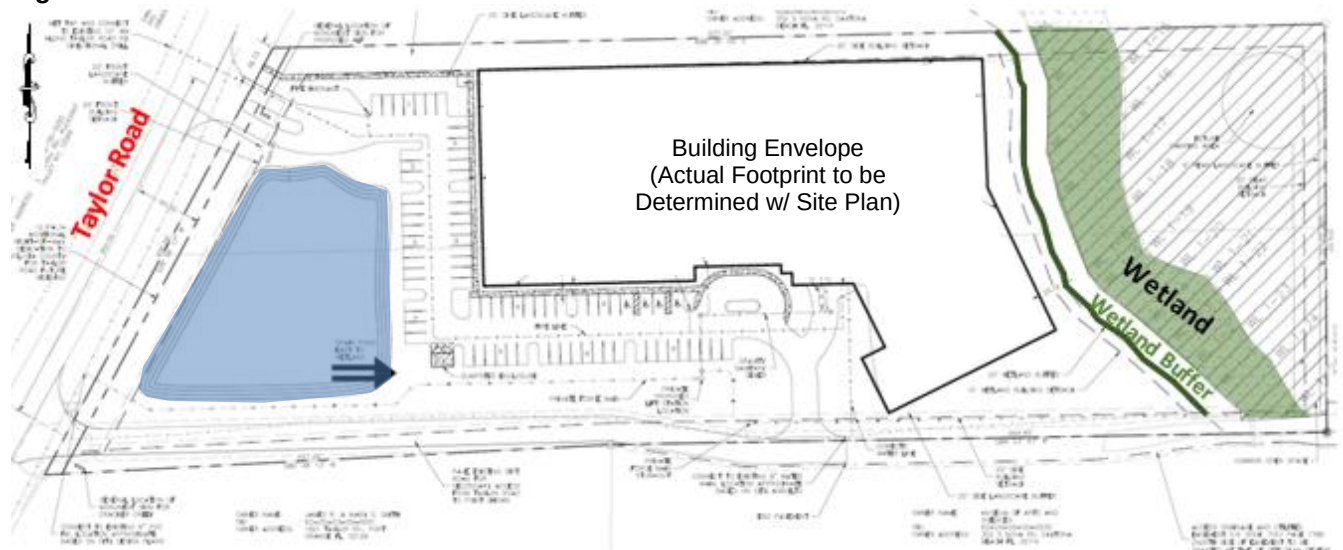
DEVELOPMENT PROPOSAL

If approved, the amendment to the original MDA and the CDP (Exhibit 1) will provide the regulatory framework for the development of the "Parcel A" and extend the timeframe that all structures within the PUD need to connect to City sewer. The following discussion will focus on the significant aspects of the amendment to the original MDA and CDP such as the use, size and development impacts.

General Layout

The Conceptual Development Plan (CDP) for this amendment shows the general lot layout for the proposed ALF and Memory Care Facility (Figure 1 of the Staff Report and Exhibit C of the MDA). The general site layout and improvements associated with this amendment will comply with the requirements of the Land Development Code (LDC), original MDA, and the 1st Amendment.

Figure 2. Cracker Creek PUD CDP for Parcel A



Roadway and Access

Access to the proposed development will be provided to Taylor Road from the existing Cracker Creek driveway and a new driveway at the north property boundary. As part of the site improvements to Parcel A, the existing dirt driveway will be paved from Taylor Road to the secondary access drive of the facility. The MDA also requires dedication of land to Volusia County for the ultimate 120-foot right-of-way for Taylor Road prior to approval of the site plan for Parcel A. The land to be dedicated for the Taylor Road right-of-way is shown on the CDP. The widening of Taylor Road is currently on the County's Unfunded Needs List, which means it is not in the 5-year Work Plan, but would likely get funded prior to projects on the Long Term Plan List (possibly within 10 -15 years).

Traffic

Based on the ITE Trip Generation Manual, 9th Edition, the proposed development of a ±112,095 square-foot ALF and Memory Care Facility could generate ±113 p.m. peak hour trips and ±852 daily trips¹. According to the latest traffic counts for Taylor Road, there is sufficient roadway capacity for the traffic that could be generated by the proposed development of the subject property. The site plan for this property will be required to comply with the concurrency management requirements in the City's LDC.

Table 1. Roadway Capacity

Roadway Segment: Taylor Road	Adopted Level-of- Service Standard	Maximum Capacity	Vehicles per Day	Remaining Capacity	Volume to Capacity Ratio
Tomoka Farms Rd. to Spruce Creek Blvd	E	17,050	8,910	8,140	52.26%
Spruce Creek Blvd. to Crane Lakes Blvd	E	17,050	11,440	5,610	67.10%
Crane Lakes Blvd. to Summertrees Rd.	E	17,050	15,370	1,680	90.15%
Summertrees Rd. to Williamson Blvd.	E	37,970	15,560	22,410	40.98%
Williamson Blvd. to I-95 (at Dunlawton Ave.)	E	47,560	40,210	7,350	84.55%

Source: Volusia County 2015 Traffic Counts

Tree Preservation, Landscaping, and Wetlands

The proposed development will comply with the tree preservation, landscaping and wetland protection requirements of the LDC. This includes the preservation of 15% of the square-footage of the overall PUD for the protection of existing trees and perimeter buffers. The wetland area on the east side of Parcel A will remain, as depicted on the CDP. No wetland impacts are anticipated. Any wetland impacts identified during site plan review will require permitting and appropriate mitigation through St. Johns water Management District.

Potable Water, Sanitary Sewer, and Reclaimed Water

The proposed development will comply with the requirements of the LDC for improvements related to water, sewer, and reclaimed water. Potable water, sanitary sewer and reclaimed water lines are available and connections will be made from Taylor Road.

¹ 7.6 Daily Trips per 1,000 sq.ft; 1.01 P.M. Peak Hour Trips per 1,000 sq.ft., Nursing Home (620), ITE Trip Generation Manual, 9th Edition

Stormwater Management

Stormwater will be retained as generally depicted on the CDP. The City's Comprehensive Plan and Land Development Code require that there be no net loss of stormwater retention function as a result of development. As a result, a given parcel must have the same ability to store and discharge water after development as it does before development occurs. The future development will be required to address stormwater retention on the property in accordance with City standards.

Schools

The Volusia County School District determined that the proposed development of an ALF and Memory Care Facility is exempt from School Concurrency review.

Architecture

The architecture of the buildings and accessory structures on Parcel A will be designed with a common architectural theme and comply with LDC requirements, such as exterior color, screening of mechanical equipment, and providing full architectural treatment on all visible sides. A formal review of the architecture design will occur during the site plan review process to verify compliance with the MDA and LDC.

POLICY ISSUES

The PUD zoning district allows an applicant to request deviations from the Land Development Code (LDC) as part of the approval process for an amendment to a Master Development Agreement or Conceptual Development Plan (CDP) for a Planned Unit Development (PUD).

- 1. Sidewalk along Taylor Road:** The applicant has requested that the requirement to construct a 5-foot sidewalk along Taylor Road on Parcel A and a sidewalk connection from the proposed building to the Taylor Road right-of-way be waived. According to the LDC, a 5-foot sidewalk is required with the development of Parcel A along with a sidewalk from the building to the sidewalk located in the right-of-way.

According to the applicant, the request to not install the sidewalk is based on current conditions and the future widening plans for Taylor Road by Volusia County. There are currently no sidewalks on the south side of Taylor Road to connect to (until the east side of Summertrees Rd.), so a side walk on the Cracker Creek frontage would not connect to anything. Volusia County staff has stated that the County will construct the sidewalk as part of their future widening of Taylor Road.

- 2. Parcel Frontage for Driveways:** The access drives and parking lot layout shown on the Conceptual Development Plan will be developed in compliance with the requirements of the LDC, with the exception of the minimum lot frontage for two points of access. The LDC requires the roadway frontage on Taylor Road be 500 feet in order to have two driveways. Parcel A has 450 feet of roadway frontage. The width and setback for the proposed driveway will be designed as required by the LDC and MDA.

According to the project engineer, the 450 feet of frontage meets Volusia County standards and is sufficient for the two proposed access drives onto Taylor Road and the design of the driveways will provide adequate separation. Volusia County has jurisdiction of Taylor Road. For this segment of Taylor Road, Volusia County requires a minimum of 335' of frontage for a parcel to have two points of access with 100' separation between the two driveways. According to the applicant, there have been preliminary discussions with Volusia County about having two points of access but an official application has not been made. If the PUD amendment was approved, the property owner would still need approval from Volusia County to construct the additional driveway.

The main entrance to the building will be oriented towards Taylor Road. According to the applicant, the proposed driveway at the north end of Parcel A will serve as the main access drive for employees, visitors, and clients of the facility. The existing driveway, located at the south end of Parcel A will continue to serve as the main driveway to access the existing Cracker Creek business and a secondary driveway to the ALF for deliveries and emergency vehicles.

3. **Parking Ratio:** The applicant has proposed a parking ratio of 1 space per 4 beds and 1 space per employee on the largest shift for an Assisted Living Facility (ALF) and 1 space per 10 beds and 1 space per employee on the largest shift for a Memory Care Facility instead of the LDC required parking ratio of 1 space per 2 beds and 1 space per employee on the largest shift.

The applicant's proposed parking ratio requires 32 parking spaces be provided for the proposed 128 bed ALF, 5 parking spaces for the proposed 50 bed Memory Care Facility, and 40 parking spaces for the proposed 40 employees on the largest shift, for a total of 77 required parking spaces (78 provided on the CDP). The requested reduction in parking spaces amounts to 52 less parking spaces than required by City code (129 spaces). The proposed parking ratio is similar to other comparison cities (Table 2).

Table 2. Parking Ratio Comparison

	Assisted Living Facility Parking	Memory Care Facility Parking	Employee Parking	Total Parking
ITE Manual	64	25	52	141
Port Orange	64	25	40	129
Proposed per MDA	32	5	40	77
Ormond Beach	32	5	40	77
DeLand	32	13	-	45
New Smyrna Beach	43	17	20	80

The existing LDC parking requirements for ALF was last updated in 1996. The applicants have stated that the proposed parking ratio will provide sufficient parking for an ALF and Memory Care Facility based on the typical traffic generated by this use. The Institute of Transportation Engineers (ITE) Parking Generation Manual, 4th edition (2010) indicates that the average parking ratio for the proposed

facility is between 0.5 spaces per bed and 1.3 spaces per employee, which is slightly higher than the LDC requirement.

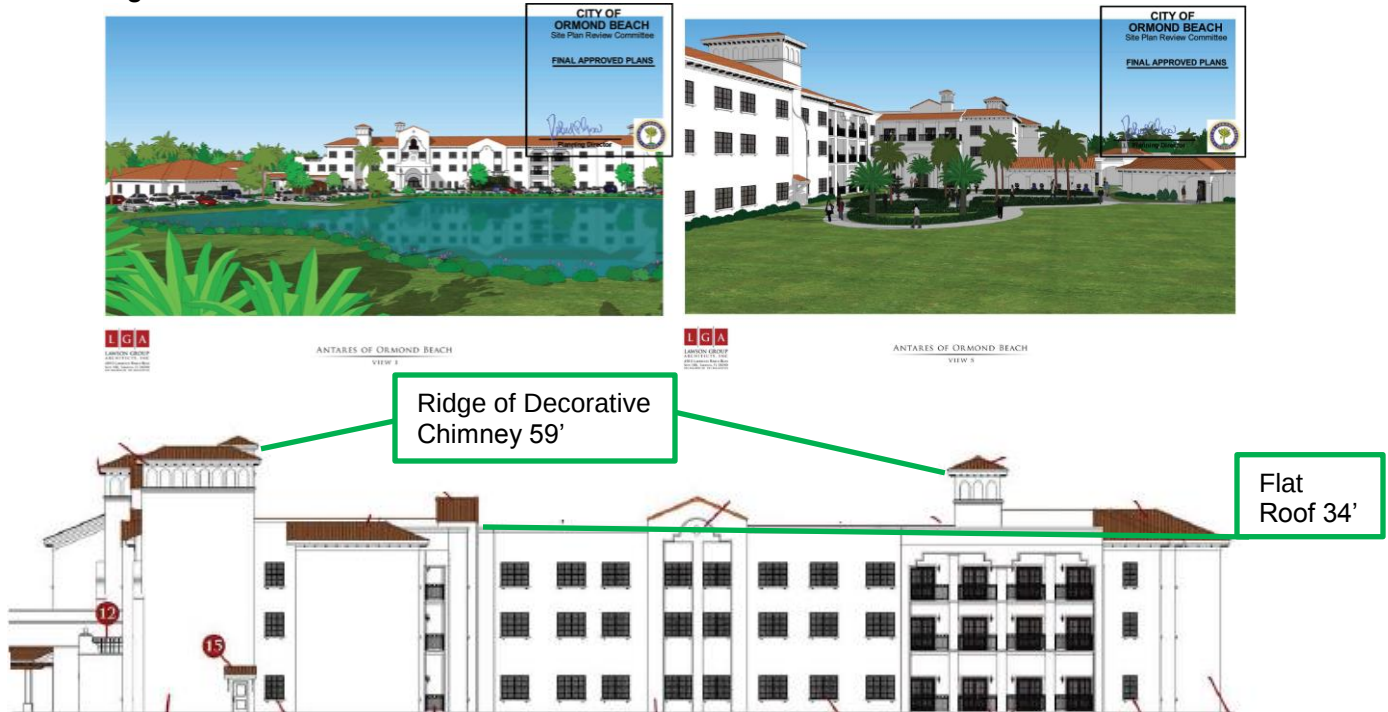
According to the applicant, the proposed parking ratio will provide a sufficient number of parking spaces for the proposed ALF and Memory Care Facility because the parking is mainly for visitors and employees. According to the applicant, only 5% to 10% of ALF residents drive and none of the Memory Care residents drive or own a vehicle.

4. **Building Height:** For the PUD zoning category, the Land Development Code (LDC) requires a maximum building height of the most similar conventional zoning category (LDC, Ch. 17, Sec. 27). The applicant has applied to change the Future Land Use (FLU) designation of a portion of Parcel A to *Office/Residential Transition* (ORT). The proposed amendment to the MDA and CDP is required to be consistent with the type of land use and intensity allowed by this proposed FLU designation. The nearest conventional zoning category that is consistent with the ORT FLU designation is the Office/Residential Transition (ORT) zoning category. The ORT zoning category has a maximum building height of 45 feet. The LDC also allows decorative architectural features on the top of a building to be above the maximum height limit established for a zoning category. The additional height allowed by the LDC ranges between 5 feet to 20 feet for architectural features such as chimneys, cupolas, mechanical rooms, belfries, and spires.

The MDA allows for a maximum building height of 59 feet for Parcel A. According to the applicant, the maximum building height is for decorative architectural features. According to the applicant, the additional height is needed so the features can be designed to be proportional to the building's height. The proposed building will meet the 45-foot height requirement of the nearest like conventional zoning category and under the current code could have 10-foot tall decorative architectural features on the roof making the overall height of the building and decorative architectural features allowed 55 feet.

The applicants are requesting that additional height for decorative architectural features be 14 feet instead of 10 feet, for an overall maximum height of 59 feet. The applicant is proposing the development of a three-story ALF and Memory Care Facility with decorative architectural features. An example of the ALF and Memory Care Facility to be developed by the applicant, Antares of Port Orange, LLC, in the City of Ormond Beach is depicted in Figure 3.

Figure 3. Antares of Ormond Beach



5. **Off-site Signage for Cracker Creek:** The applicant is requesting to have an off-site sign on Parcel A to identify the Cracker Creek use (outdoor venue, watercraft rental, boat tours, and camping). According to the LDC, off-site signage is any sign that directs attention to a business not conducted or available on the premises where their sign is located. According to the applicant, the off-site signage is requested due to the configuration of the properties within the PUD and to advertise on Taylor Road.

The proposed off-site sign would be located along Taylor Road, near the existing access drive at the west end of Parcel A. The sign would identify the Cracker Creek business located on the PUD properties, east of Parcel A. The proposed sign could have up to 48 square feet and will conform to all LDC requirements (height, design, landscaping, visual clearance, setback, etc.).

According to the applicant, the off-site signage is being requested due to the configuration of the property layout for the PUD (see Figure 1). The business located on the properties behind Parcel A would not have any frontage on Taylor Road. The intent of the sign is to alert customers traveling on Taylor Road of the Cracker Creek business.

6. **Connection to Sewer:** The Land Development Code (LDC) requires that a property must connect to sanitary sewer within one year of availability. The MDA states that connection to City sewer for the remainder of the PUD (beyond Parcel A) is required within 5 years from the execution of MDA amendment.

The MDA requires that potable water, reclaimed water, and sewer lines for Parcel A will be designed and built with the development of the ALF and Memory Care Facility consistent with the LDC. The 5 year window for connection to sewer for the

remainder of the PUD is a continuation of what was previously approved with the initial adoption of the Cracker Creek PUD for the phased development of the overall PUD.

OUTSTANDING TECHNICAL COMMENTS:

The Staff Development Review Committee (SDRC) has reviewed this project and there are no outstanding technical comments other than the policy issues identified in that section of this report.

RECOMMENDATION

Staff recommends **approval** of the First Amendment to the Cracker Creek PUD Master Development Agreement and Conceptual Development Plan, subject to the following:

1. Approval of the Future Land Use amendment (Case No. 16-20000002);
2. Approval of the Policy Issues; and
3. Review and approval of the MDA and CDP by the City Attorney's Office for legal form and content.

ATTACHMENTS

- Exhibit A – Current and Proposed Future Land Use
- Exhibit B – Zoning
- Exhibit C – First Amendment to the Cracker Creek PUD Master Development Agreement and Conceptual Development Plan

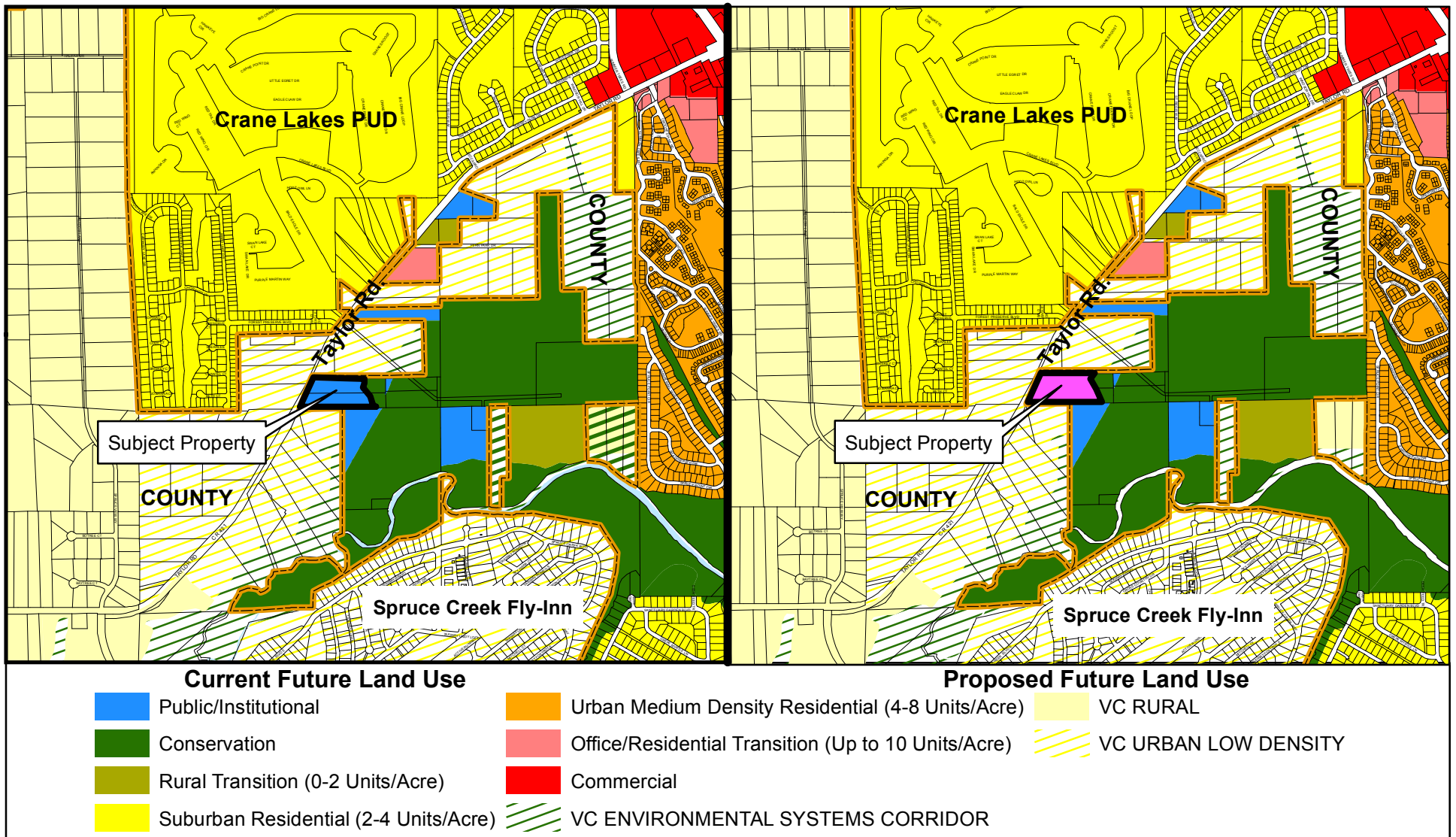


EXHIBIT A

CASE NO. 16-20000002 and 16-40000005

DEPARTMENT OF COMMUNITY DEVELOPMENT



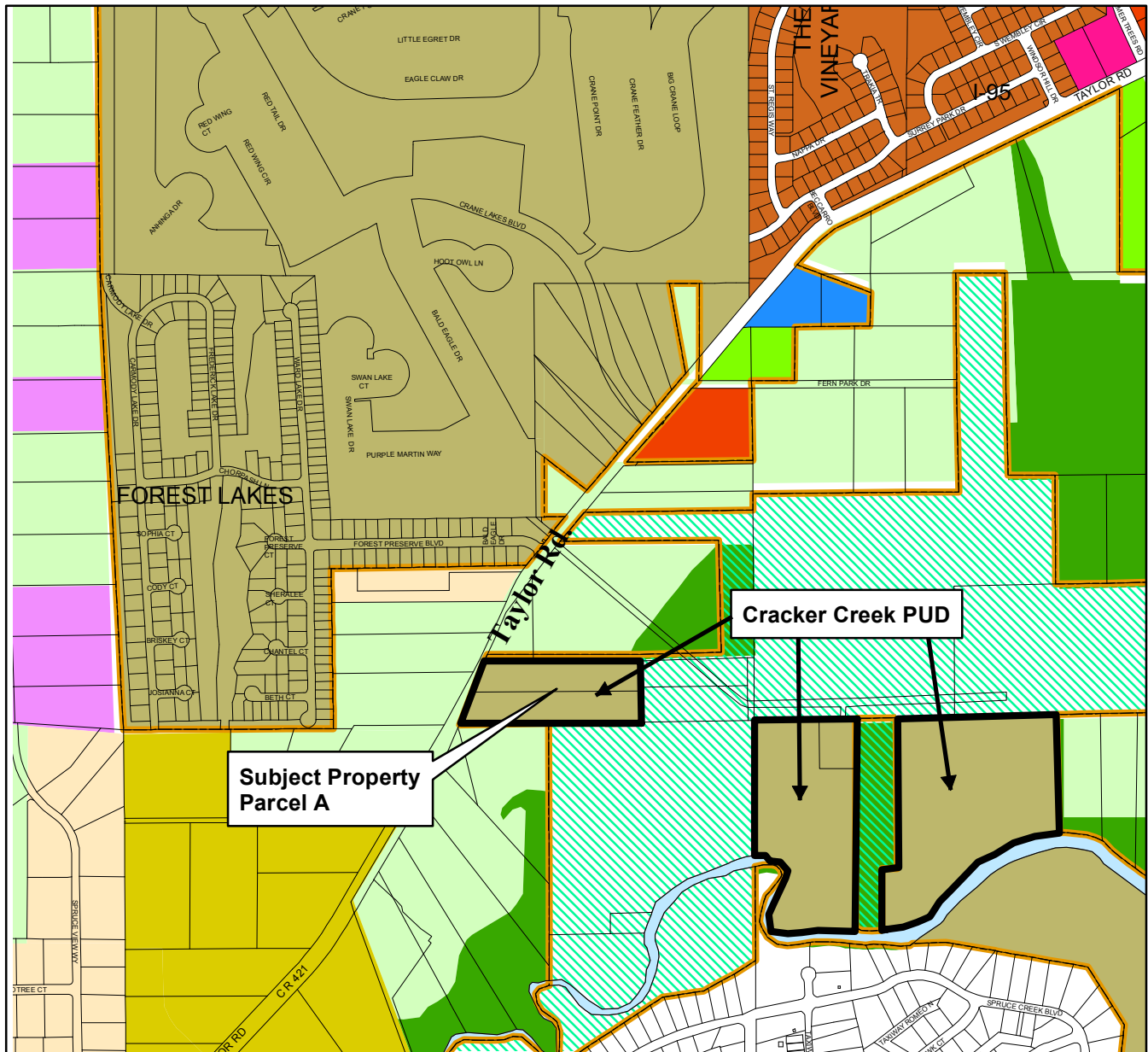


Exhibit B- Zoning

CITY OF PORT ORANGE

DEPARTMENT OF COMMUNITY DEVELOPMENT

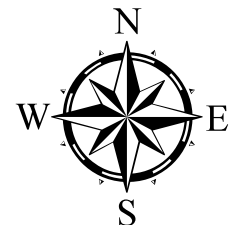


Exhibit C

First Amendment to the
Cracker Creek PUD Master Development Agreement
and Conceptual Development Plan



FIRST AMENDMENT TO THE
CRACKER CREEK PUD
MASTER DEVELOPMENT AGREEMENT

This Agreement, is entered into by and between the City of Port Orange, a Florida municipal corporation whose address is 1000 City Center Circle, Port Orange, FL 32129 (hereinafter the “City”) and Antares of Port Orange, LLC, a Florida Limited Liability Company Whose Address is 4348 Southpoint Blvd., Suite 101, Jacksonville, FL 32116, (the “Developer”) and Robert L. Williams and Jill M. Williams and Jill M. Williams as Successor Trustee Under Instrument dated November 23, 1998, (collectively the “Owner”) shall constitute the first amendment to the Cracker Creek PUD Master Development Agreement hereinafter referred to the First Amendment.

WHEREAS, the Owner developed certain real property (the “Property”) located in Port Orange, Florida more particularly described in **Exhibit “A”**, as a private enterprise known as Cracker Creek.

WHEREAS, The Owner and the City previously entered into a Master Development Agreement to accommodate the development of the Cracker Creek PUD recorded in Official Records Book 6201, Page 4612, the Public Records of Volusia County Florida which included the Property.

WHEREAS, the Owner recently entered into a purchase agreement with the Developer for the parcel of land located adjacent to Taylor Road herein after referred to as “Parcel A”, more particularly described in **Exhibit “B”**.

WHEREAS, there is an amendment to the City’s Comprehensive Plan that change the Future Land Use designation for a portion of the Cracker Creek PUD. The amendments to the City’s Comprehensive Plan impact the Cracker Creek PUD so that there are increases to the allowed uses and intensity for approximately 7.5-acre portion of “Parcel A” of the Cracker Creek PUD; and

WHEREAS, the Master Development Agreement and Conceptual Development Plan for the Cracker Creek PUD need to be amended to incorporate the changes resulting from the Future Land Use Amendment and the development of an Assisted Living Facility and Memory Care Facility; and

WHEREAS, The Cracker Creek PUD Master Development Agreement recorded in O.R. Book 6201, Page 4618, shall continue in full force and effect except with respect to those matters specifically amended by this First Amendment. With respect to those matters specifically amended, this First Amendment shall govern.

WHEREAS, the Owners desire to amend the Cracker Creek PUD Master Development Agreement and Conceptual Development Plan subject to the terms and conditions set forth herein.

NOW THEREFORE, the City and the Owner hereby agree as follows:

1. The recitals stated above are true and correct and are incorporated herein by reference.
2. Paragraph 3 of the original MDA, "DEVELOPMENT AGREEMENT AND CONCEPTUAL DEVELOPMENT PLAN" is hereby amended to read as follows:

The City Council has reviewed the Cracker Creek PUD and determined that the uses proposed by the development are consistent with the City's Comprehensive Plan. Further, City has determined that all public infrastructure facilities and service have sufficient capacity to serve this development; or, those improvements necessary to bring facilities up to the adopted level of service will be in place or otherwise accommodated for concurrent with the impacts of this development.

Development of the Property shall be controlled by the terms and provisions of the original Master Development Agreement ("Original MDA"), the original Conceptual Development Plan ("Original CDP"), attached as Exhibit "B" to the Original MDA, this First Amendment to the Original MDA, and the Revised Conceptual Development Plan, prepared by Allen Engineering and dated September 21, 2016, referenced herein as Exhibit "C" and depicts the revised planned layout of "Parcel A" and the required force main extensions within the "Property". ("Revised CDP"). The Original CDP generally depicts the planned layout of streets, buildings and other planned features or improvements to the Property. Collectively, the Original MDA, the Original CDP, First Amendment to the Master Development Agreement and

the Revised Conceptual Development Plan for "Parcel A" may be referred to as the "Plan". In the event of a conflict between the terms and provisions of the First Amendment and the graphic illustrations of the Revised Conceptual Development Plan (Exhibit "C") for "Parcel A", the First Amendment shall control. If the First Amendment is silent regarding a particular subject or requirement, such silence shall not be construed as a conflict with the Conceptual Development Plan. Except as otherwise provided in this First Amendment, in the event of a conflict between the terms and provisions of the Plan and the City's ordinances, the requirements of the Plan shall control. If the Plan fails to address a particular subject or requirements, the requirements of the applicable City ordinance(s) in effect at the time of development plan approval shall control. The parties acknowledge that compliance with the City's Land Development Code may necessitate modification of the Conceptual Development Plan. In the event modification to comply with the LDC is required, and the modifications to the Conceptual Development Plan are not in conflict with the textual provisions of the Original MDA and any City ordinances not superseded by this First Amendment, the modifications shall be deemed "minor" and may be approved without formal amendment of this First Amendment. Minor modifications shall require the City Administrative Official's written approval. If the Developer is not satisfied with the suggested resolution of any problem or the decision by the City Administrative Official categorizing the modification as minor or major, the Developer may appeal the decision to the Planning Commission. Appeals from the Planning Commission may be made to the City Council.

3. Paragraph 4A of the original MDA, "USE" is hereby amended to read as follows:

The Property shall be used for outdoor recreational and related commercial uses and single family residential uses. Specific uses may include conference centers/clubhouse, lodging (which can include bed and breakfasts, camping, recreational vehicle camping and bunkhouses), recreational uses, non-motorized boat launches, motorized boat tours, restaurants (including beer and wine sales and concession sales), outfitter shops, picnic facilities, recreational trails (for motorized and non-motorized vehicles and horse), domesticated animals and livestock with related facilities, and uses related and incidental to the above permitted uses that are approved by the Administrative official. In addition, the following uses are permitted on Parcel "A" only: Assisted Living Facility and Memory Care Facility that provides full time long-term care to individuals who, by reason of advanced age, chronic illness or infirmity, are unable to care for themselves. This type of facility shall be licensed by the Florida Department of Health

and Rehabilitative Services and meet their criteria, pursuant to Florida Statue. Accessory uses to an Assisted Living Facility and Memory Care Facility shall include but not limited to restaurant, hair salon, bar that service alcohol and liquor, medical offices, outdoor amenities such as gazebos, patios, garden and outdoor activities area. All accessory uses are limited to residents and guest of residents.

4. Paragraph 4C of the original MDA, “DIMENSIONAL REQUIREMENTS” is hereby amended to read as follows:

Building dimensions and configurations within the PUD are generally depicted on the Original CDP. The specific layout of trails and other recreational areas is approximate and flexibility in the layout and design of such areas shall be encouraged to preserve and emphasize the unique environmental features of the Property. Except as set forth herein, building sizes may vary from those depicted generally on the Original CDP.

The dimensional requirements for “Parcel A” are as follows:

- a. Front Building Setback – 25 feet
 - b. Rear Building Setback – 20 feet
 - c. Side Building Setback – 20 feet
 - d. Open Space – 30%
 - e. Building Coverage – 30%
 - f. Lot Width – 350 feet
 - g. Lot Area – 9 acres
5. Paragraph 4D of the original MDA, “NUMBER OF UNITY/DENSITY” is hereby amended to read as follows:

Density and intensity of the “Property” shall be limited to the underling Future Land Use designations and the total number of primitive campground spaces shall not exceed fifty (50) units. Bed and Breakfast and bunkhouse facilities shall provide for no more than twenty-five (25) units. Single family residential development shall be limited to a total of five (5) units. Recreation vehicle camping spaces shall be limited to twenty-five (25) spaces.

Density and intensity of "Parcel A" shall be limited to the underlying Future Land Use designations

6. Paragraph 4E of the original MDA "MAXIMUM BUILDING HEIGHT" is hereby amended to read as follows:

The maximum building height requirement for the Property is 35 ft. except as otherwise stated herein. The maximum building height for "Parcel A" only is 59 feet.

7. Paragraph 4J of the original MDA, "PARKING," is hereby amended to read as follows:

Except as otherwise stated herein, required parking shall be provided in accordance with the LDC. Grass parking areas may be provided as depicted on the CDP. The parking requirements on "Parcel A" shall be provided in accordance with the LDC except for the following uses:

- a. Assisted Living Facility is 1 space/4 beds and 1 space per employees on largest shift.
- b. Memory Care Facility is 1 space/10 beds and 1 space per employees on largest shift.

8. Paragraph 5 of the original MDA, "ARCHITECTURAL STANDARDS AND REVIEW" is hereby amended to read as follows:

- a. The architectural appearance of the project shall be eclectic, but shall generally exhibit a "Florida Cracker" style. Architectural style elements shall be reviewed and approved by the City for compliance with the architectural standards in the LDC. A sample of the Florida Cracker" style is attached to the Original MDA as Exhibit "C."
- b. Signage for the "Property" including "Parcel A" shall be in compliance with the LDC unless modified herein.
- c. One (1) off-site monument sign shall be permitted on "Parcel A" for Cracker Creek. The off-site monument sign shall be in compliance with the LDC

9. Paragraph 8 of the original MDA, "SANITARY WASTE, STORMWATER, POTABLE WATER, AND RECLAIMED WATER" is hereby amended to read as follows:

It is anticipated that the Developers will ultimately extend water and sewer lines to serve the PUD Property in the development authorized herein. Potable water lines already serve portions of the PUD Property and will be extended as the PUD is developed. Sanitary

sewer is currently private onsite septic systems.

- a. Potable water, reclaimed water, and sewer lines for the “Property” including “Parcel A” shall be designed and built in compliance with all applicable City laws, ordinances, resolutions and regulations.
 - b. For “Parcel A”, the public force main will need to be stubbed out to the western property line. The force main along the existing access road will be a public force main designed to City standards at the time of site plan submittal for” Parcel A”.
 - c. The “Property” can continue to use septic systems but within (5) five years of the execution of the First Amendment a public sewer force main shall be installed to serve the “Property” and all structures on the “Property” shall connect to the public sewer within one (1) year of sewer becoming available.
 - d. Stormwater retention/detention facilities to service the “Property” including “Parcel A” shall be designed and built in conformance all applicable Federal, State and local laws, ordinances, resolutions and regulations, including the environmental provisions thereof.
10. Paragraph 9 of the original MDA, “ROADS, SIDEWALKS,” is hereby amended to read as follows:
- a. Roads, drives, and sidewalks within the Development shall be private, unless joint access is provided by separate agreement with the City. Existing access easement is recorded in the Volusia County Clerk of Court records at OR Book 4849, Page 975.
 - b. Construction of a 5’ sidewalk along the Taylor Road frontage of “Parcel A” is not required with the development of “Parcel A”
 - c. The minimum distance between two-way access points on “Parcel A” is 350 feet. The minimum distance is measured between the centerlines of the two-way access points.
 - d. Dedication of land to Volusia County for the ultimate 120-foot right-of-way for Taylor Road shall be required prior to issuance of a site plan Development Order for “Parcel A”. Land to be dedicated toward Taylor Road right-of-way is shown on the 1st Amendment CDP.

11. Paragraph 13 of the original MDA, “EXPIRATION,” is hereby amended to read as follows:

Development of the Cracker Creek PUD shall commence within two (2) years from the effective date of this First Amendment as defined in paragraph 14 of the Original MDA. Failure to comply with the schedule set out above shall cause this Original MDA, as

amended herein, to lapse unless the schedule is modified by mutual agreement of the Developers and the City. Development shall be as defined by the LDC. Development shall be defined by the LDC.

12. All the provisions of the Original MDA shall remain in full force and effect and shall be supplemented for the matters specifically amended herein by this First Amendment. The Original Master Development Agreement shall survive the execution of this First Amendment.

IN WITNESS WHEREOF, the parties have executed this Amendment to the MDA Agreement by and through their duly authorized representatives, on the respective dates below.

WITNESSES:

**CITY OF PORT ORANGE, a Florida
Municipal Corporation**

By: _____
Allen Green, Mayor

Printed Name

Printed Name

Attest _____
Robin Fenwick, Deputy City Clerk

Printed Name

Printed Name

STATE OF FLORIDA
COUNTY OF VOLUSIA

The foregoing instrument was acknowledged before me this _____ day of _____, 2016, by Allen Green, Mayor of the CITY OF PORT ORANGE, FLORIDA, a Florida Municipal Corporation, on behalf of the City. He is personally known to me and did not take an oath.

Notary Public, State of Florida at Large
Printed Name, Commission Seal and Term Expiration Date

STATE OF FLORIDA
COUNTY OF VOLUSIA

The foregoing instrument was acknowledged before me this _____ day of _____, 2016, by _____, City Clerk of the CITY OF PORT ORANGE, FLORIDA, a Florida Municipal Corporation, on behalf of the City. He is personally known to me and did not take an oath.

Notary Public, State of Florida at Large
Printed Name, Commission Seal and Term Expiration Date

WITNESSES:

Printed Name _____

Printed Name _____

DEVELOPER:

Antares of Port Orange, LLC, a Florida Limited Liability Company

By: ALMC Property Investments, LLC, a
Florida Limited Liability Company, its
Manager

By: JRBD Partners, LLC, a Florida Limited
Liability Company, its Manager

By: _____
Dennis Devenport, Manager

Date: _____, 2016

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 2016,
by Dennis Devenport, Manager of Antares of Port Orange, LLC, a Florida Limited Liability Company.
He ____ is personally known to me OR ____ produced _____ as
identification.

Notary Public, State of Nevada
Printed Name, Commission Seal and Term Expiration Date

OWNER:

Robert L. Williams and Jill M. Williams, Husband
and Wife

Robert L. Williams

Jill M. Williams

STATE OF _____
COUNTY OF _____

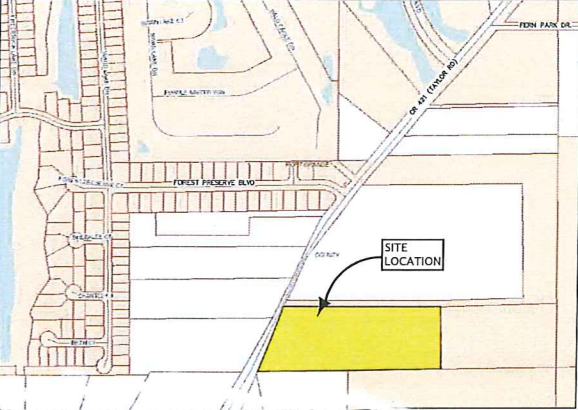
The foregoing instrument was acknowledged before me this _____ day of _____, 2016,
by Robert L. Williams and Jill M. Williams, Husband and Wife. They _____ are personally known to
me OR _____ produced _____ as identification.

Notary Public, State of Florida at Large
Printed Name, Commission Seal and Term Expiration Date

CRACKER CREEK CDP PDU (PARCEL A)

EXHIBIT C

LOCATION MAP



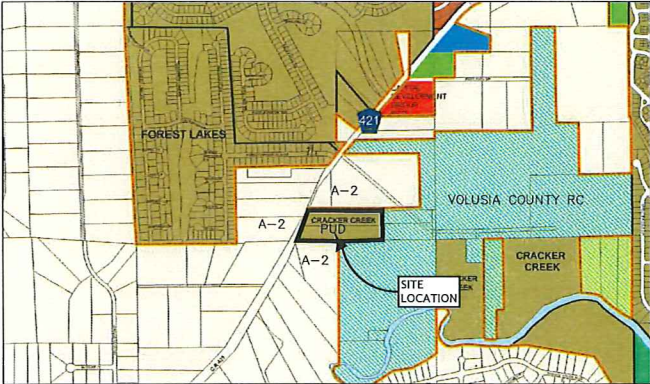
TAX PARCEL ID NUMBER: 25-16-32-03-00-0070

SOILS MAP



ASTATULA FINE SAND 4 HYDROLOGICAL GROUP A
PAOLA FINE SAND 42 HYDROLOGICAL GROUP A
PLACID FINE SAND 48 HYDROLOGICAL GROUP A/D
TAVARES FINE SAND 63 HYDROLOGICAL GROUP A

ZONING MAP



LEGAL DESCRIPTION

DESCRIPTION:
(OFFICIAL RECORD BOOK 1867, PAGE 1756)
THAT PORTION OF SECTION 30, TOWNSHIP 16 SOUTH, RANGE 33 EAST, LYING WESTERLY OF LINE WHICH IS PARALLEL TO AND 660 FEET EAST OF THE WESTERLY LINE OF SAID SECTION 30, AND SOUTHERLY OF A LINE WHICH IS PARALLEL TO AND 1320 FEET SOUTH OF THE NORTH LINE OF SAID SECTION 30, AND BOUNDED ON THE SOUTH BY SPRUCE CREEK.

TOGETHER WITH: (OFFICIAL RECORD BOOK 1985, PAGE 0905)
THE WEST 1/2 OF THE NW 1/4 OF THE NW 1/4, SECTION 30, TOWNSHIP 16 SOUTH, RANGE 33 EAST, EXCEPT RIGHT OF WAY EASEMENT TO FLORIDA GAS TRANSMISSION COMPANY 30 FEET IN WIDTH TRAVERSING THE ABOVE DESCRIBED PROPERTY EXCEPT THE NORTH 10 FEET THEREOF.

TOGETHER WITH: LOT 7 AND LOT 8, RESUBDIVISION OF LIVINGSTON HOMESTEAD SPRUCE CREEK DISTRICT, IN THE SOUTHEAST 1/4 OF SECTION 24, TOWNSHIP 16 SOUTH, RANGE 32 EAST, AS PER MAP IN MAP BOOK 10, PAGE 240 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

OWNER:
WILLIAM SELL
4348 SOUTHPOINT BLVD., SUITE 101
JACKSONVILLE, FL 32216
PH. (904) 543-4300

APPLICANT:
ANTARES OF PORT ORANGE, LLC.
4348 SOUTHPOINT BLVD., SUITE 101
JACKSONVILLE, FL 32216
PH. (904) 543-4300

ENGINEER:
THE ALANN ENGINEERING GROUP, INC.
CONSULTING ENGINEERS
880 AIRPORT RD. STE. 113
ORMOND BEACH, FL 32174
PH. (386) 673-7640 FAX: (386) 673-3927
EMAIL: KAB@AE-GROUP.COM

SURVEYOR:
SLIGER AND ASSOCIATES, INC.
PROFESSIONAL LAND SURVEYORS
3921 NOVA ROAD
PORT ORANGE, FL. 32127
(904) 761-5385

SITE DATA:

FLOOD ZONE: "X" - 12127C0508H REV. 2-19-2014
EXISTING ZONING: PUD
ADJACENT ZONING (SEE ZONING MAP FOR CLARIFICATION):
SOUTH: VOLUSIA COUNTY RC/A-2
WEST: A-2
NORTH: VOLUSIA COUNTY RC/A-2
EAST: VOLUSIA COUNTY RC

EXISTING FUTURE LAND USE: PUBLIC/INSTITUTIONAL/CONSERVATION
PROPOSED FUTURE LAND USE: OFFICE/RESIDENTIAL TRANSITION/CONSERVATION

BUILDING FOOTPRINT: TBD W/ SITE PLAN (APPROX. 65,000 SQFT ±)
FLOOR AREA RATIO (FAR): 0.30± (MAXIMUM OF 1.5)
BUILDING HEIGHT: 59'
NUMBER OF FLOORS: 3
LOT SIZE: 9.44 ACRES (411,369 SF)

OPEN SPACE REQUIREMENTS:
FOR MASTER PUD (56 ACRES):
OPEN SPACE REQUIRED = 60% (33.6 ACRES)
COMMON OPEN SPACE = 20% (11.2 ACRES)
OPEN SPACE PROVIDED IN PARCEL A = 30% (2.83 ACRES)
BALANCE OF 30.77 ACRES TO BE PROVIDED IN MASTER PUD
COMMON OPEN SPACE PROVIDED IN PARCEL A = 18.7% (1.78 ACRES)

MAX IMPERVIOUS SURFACE RATIO (ISR): 70%

BUILDING SETBACKS REQUIRED:
FRONT-25'; REAR-20'; SIDE-20';

BUILDING SETBACKS PROVIDED:
FRONT-204'; REAR-251'; SIDE-25'; SIDE STREET-25'

LANDSCAPE BUFFER REQUIRED:
FRONT-20'; REAR-6'; SIDE-25'

LANDSCAPE BUFFER PROVIDED:
FRONT-39'; REAR-251'; SIDE-25'; SIDE STREET-25'

VEHICULAR USE AREA (VUA) CALCULATION:
41,574 (0.95 AC.) PAVED DRIVE/PARKING AREA

PARKING REQUIRED:
1 SPACE/4 BEDS (ALF)
1 SPACE/10 BEDS (MEMORY CARE)
1 SPACE/1 EMPLOYEE (DURING LARGEST SHIFT)

PARKING PROVIDED:
REGULAR: 74 SPACES
HANDICAP: 4 SPACES
78 SPACES

EXISTING USES:

VACANT

PROPOSED USES:

ASSISTED LIVING FACILITY AND MEMORY CARE

STATEMENT OF INTENT

TO CONSTRUCT AN ASSISTED LIVING FACILITY WITH PARKING, STORMWATER AND INFRASTRUCTURE TO SERVE THE SITE.

SHEET #	TITLE
C000	COVER SHEET
C001	EXISTING SITE CONDITIONS
C002	CONCEPTUAL DEVELOPMENT PLAN



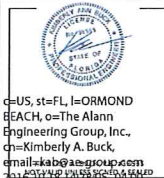
ALANN ENGINEERING GROUP, INC.
CONSULTING ENGINEERS
CERTIFICATE NO. 185479
880 AIRPORT ROAD, SUITE 113
ORMOND BEACH, FL 32174
TEL: (386) 673-7640
FAX: (386) 673-3927



CRACKER CREEK CDP PDU (PARCEL A)
PORT ORANGE, FLORIDA
COVER SHEET

NO.	DATE	REVISION	BY

DESIGNER	FILE	DATE	DRAWN BY	PROJECT	SCALE
KAB	1603-1	8-19-16	CTB	1603-1	N/A



c=US, st=FL, l=ORMOND BEACH, o=The Alann Engineering Group, Inc., cn=Kimberly A. Buck, email=kab@ae-group.com, 20161018 142805-04100

SHEET
C000

**ALANN ENGINEERING
GROUP, INC.**
CONSULTING ENGINEERS
CERTIFICATE No. EB5479
880 AIRPORT ROAD, SUITE 113
ORMOND BEACH, FL 32174
TEL: (386) 673-7640
FAX: (386) 673-3927

CRACKER CREEK PUD CDP (PARCEL A)
PORT ORANGE, FLORIDA
EXISTING SITE CONDITIONS

[illegible]

DESIGNER	FILE	DATE
KAB	1603-1	8-19-16
DRAWN BY	PROJECT	SCALE
CTB	1603-1	1"=40'



c=US, st=FL, l=ORMOND BEACH
o=The Alann Engineering
Group, Inc., cn=Kimberly A.
Buck, email=kab@ae-group.com

SHEET
C001

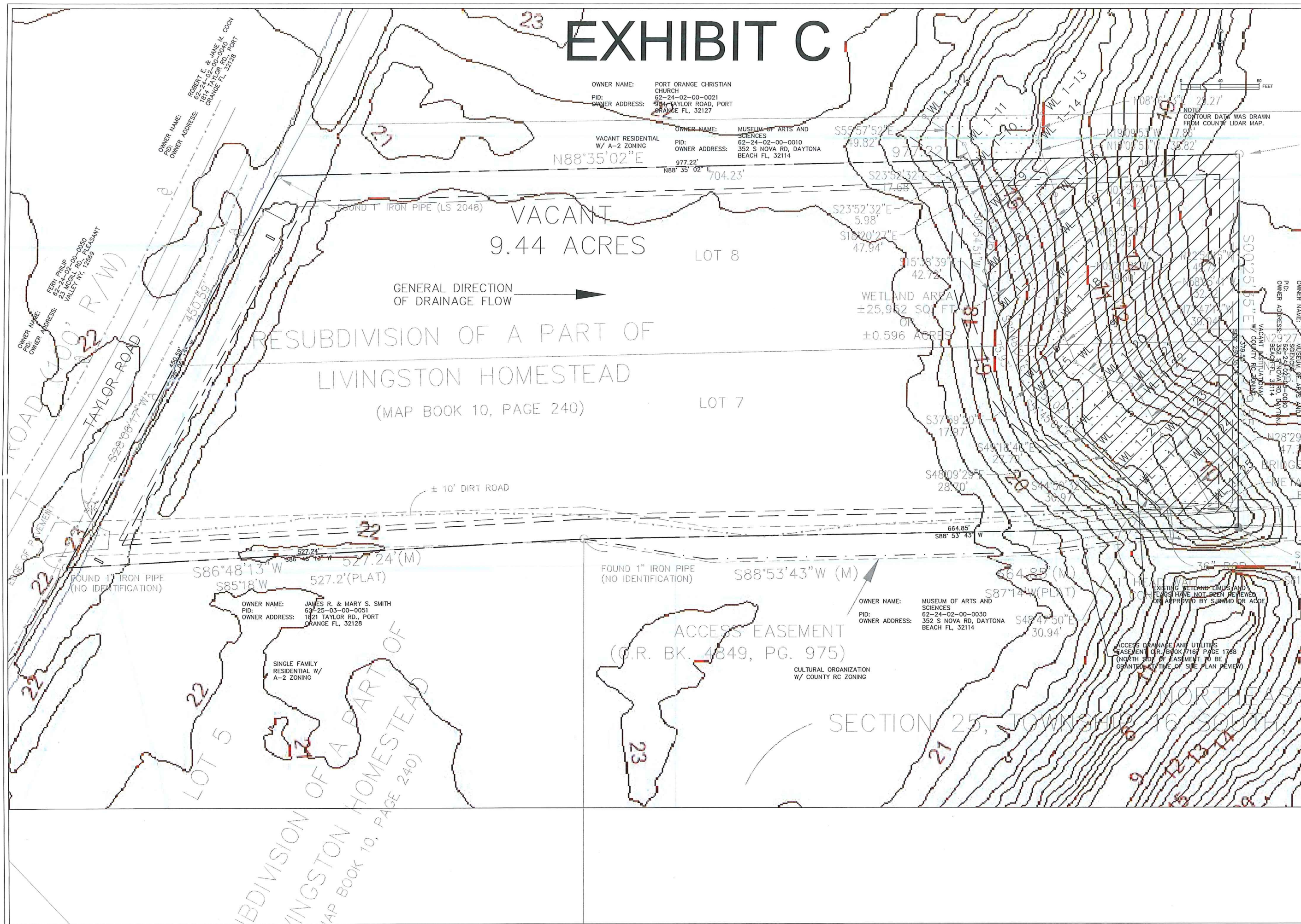
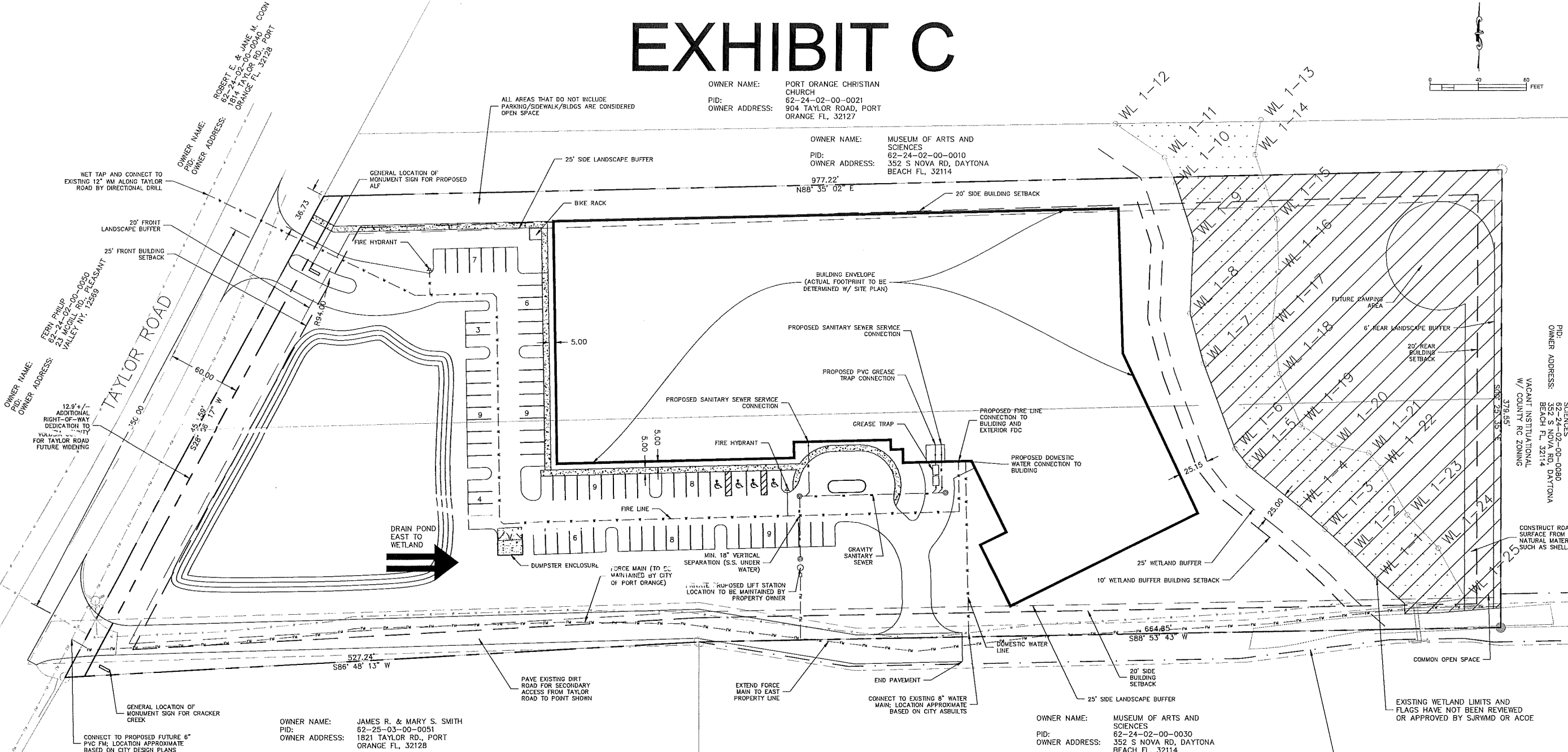


EXHIBIT C

OWNER NAME: PORT ORANGE CHRISTIAN CHURCH
PID: 62-24-02-00-0021
OWNER ADDRESS: 904 TAYLOR ROAD, PORT ORANGE FL, 32127

OWNER NAME: MUSEUM OF ARTS AND SCIENCES
PID: 62-24-02-00-0010
OWNER ADDRESS: 352 S NOVA RD, DAYTONA BEACH FL, 32114



OWNER NAME: JAMES R. & MARY S. SMITH
PID: 62-25-03-00-0051
OWNER ADDRESS: 1821 TAYLOR RD., PORT ORANGE FL, 32128

OWNER NAME: MUSEUM OF ARTS AND SCIENCES
PID: 62-24-02-00-0030
OWNER ADDRESS: 352 S NOVA RD, DAYTONA BEACH FL, 32114

SINGLE FAMILY RESIDENTIAL W/ A-2 ZONING

CULTURAL ORGANIZATION W/ COUNTY RC ZONING

ACCESS DRAINAGE AND UTILITIES EASEMENT O.R. BOOK 7167 PAGE 1788 (NORTH SIDE OF EASEMENT TO BE GRANTED AT TIME OF SITE PLAN REVIEW)

NOTES:
1. COMPLIANCE WITH THE ENVIRONMENTAL PRESERVATION CODE MAY NECESSITATE MODIFICATION OF THE CONCEPTUAL DEVELOPMENT PLAN.
2. UTILITIES SHALL BE CONSTRUCTED PER CITY OF PORT ORANGE STANDARD SPECIFICATIONS.

ALLAN ENGINEERING GROUP, INC.
CONSULTING ENGINEERS
880 AIRPORT ROAD, SUITE 113
ORMOND BEACH, FL 32174
TEL (386) 673-7640
FAX (386) 673-3927

CRACKER CREEK PUD CDP (PARCEL A)
PORT ORANGE, FLORIDA
CONCEPTUAL DEVELOPMENT PLAN (EXHIBIT C)

NO.	DATE	REVISION	BY

DATE	8-19-16	SCALE	1"=40'
FILE	1603.1	PROJECT	1603.1
DESIGNER	KAB	DRAWN BY	CTB

US, st=FL, l=ORMOND BEACH
The Allan Engineering Group, Inc. cns-kimberly A. Buck, email=kab@ae-group.com
2016.10.19.14.27.24.1010
101 VALLEY DR. SUITE 200

CITY OF PORT ORANGE MONTHLY DEVELOPMENT ACTIVITY REPORT



VyStar Credit Union – 750 Dunlawton Ave.

CITY COUNCIL

allen green, mayor
drew bastian, vice mayor
bob ford, councilman
donald burnette, councilman
scott stiltner, councilman
jake johansson, city manager

PLANNING COMMISSION

john junco, chairperson
lance green, vice chairperson
michael arminio, commissioner
darrel bofamy, commissioner
thomas jordan, commissioner
maria mills-benat, commissioner
newton white, commissioner

UPDATE: OCTOBER 20, 2016

RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT PROJECTS

UPDATE: OCTOBER 20, 2016

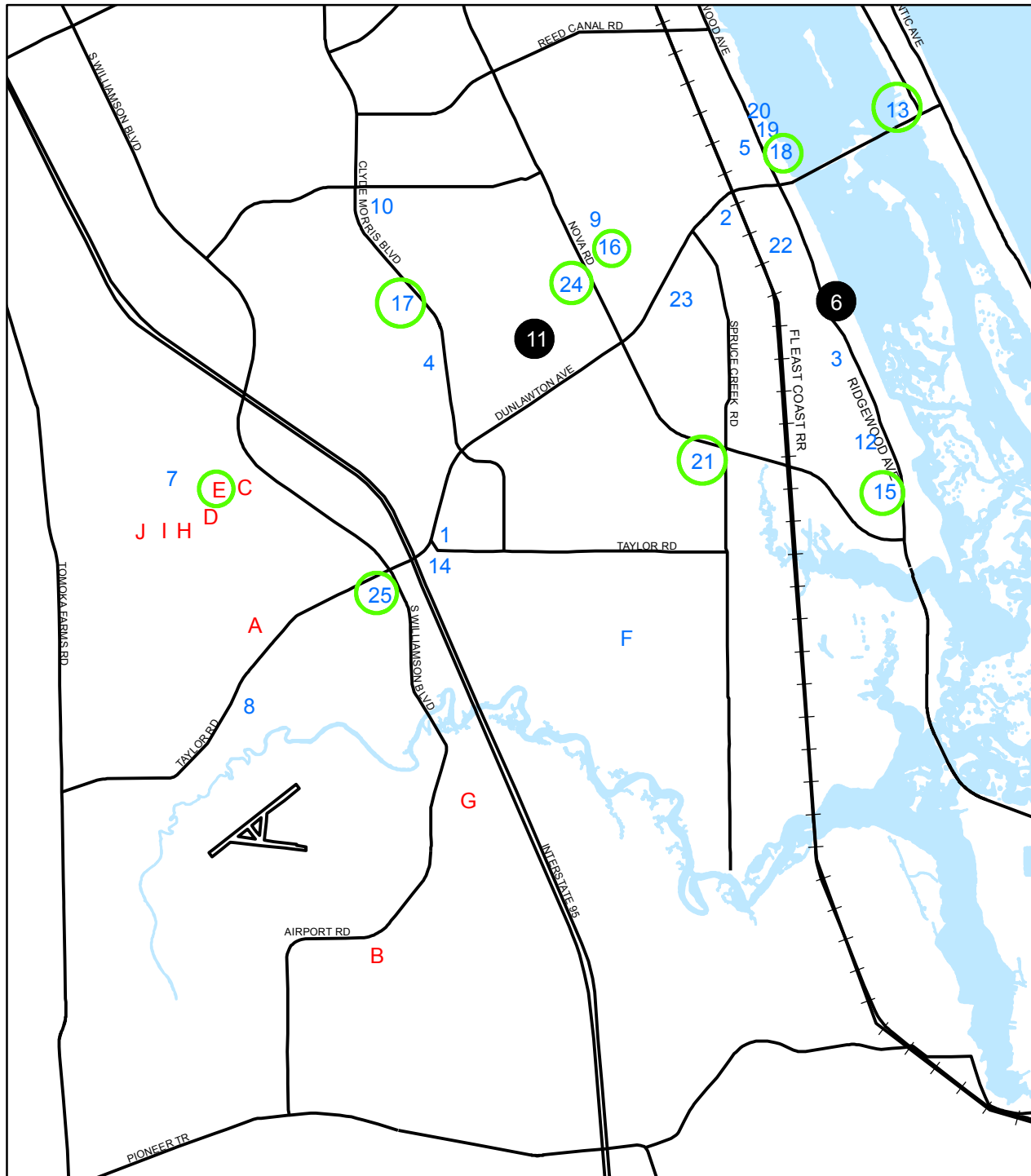
Residential

- A Crane Lakes Golf & Country Club
- B Golf Homes at Cypress Head
- C Hawks Preserve, Phase I
- D Hawks Preserve, Phase II
- E Hawks Preserve Amenity Center
- F King's Landing, Phase I
- G The Pinnacle PUD, Phase II
- H The Sanctuary at Westport
- I Westport Reserve, Phase 2B
- J Westport Reserve, Phase 2C

Non-Residential

- 1 Altamira Shopping Village
- 2 Atlantic Marine
- 3 Auto Sales Lot
- 4 Badcock Furniture & More
- 5 Charles Street Center
- 6 Clark Prof. Center & Wedding Chapel PCD
- 7 Coraci Sports Park - Pop Warner Field
- 8 Cracker Creek PUD - MDA Amendment
- 9 Cumberland Farms (Nova Road)
- 10 Cumberland Farms (Palmetto Pointe)
- 11 Elite Plaza
- 12 Faris Car Wash
- 13 Hunter Building
- 14 Journey's End Tiki Bar and Grill
- 15 Little C's Custom (fka Florida Truck Sales)
- 16 Port Hole Retail Center
- 17 Ravenwood Veterinary Hospital expansion
- 18 Riverwalk Marina & Riverboat PCD
- 19 Riverwalk Condo & Point Restaurant
- 20 Riverwalk Park, Phase 1B
- 21 Spruce Creek Center
- 22 Virginia Industrial Park
- 23 Vystar Credit Union
- 24 Waffle House - Nova Rd.
- 25 Waffle House - Taylor Rd.

● New Project ○ Change In Status



RESIDENTIAL DEVELOPMENT PROJECTS

■ = addition to the development activity report

□ = change of status to a particular project

Update: October 20, 2016

MAP ID	Project	Location	Description	Status							Comments	Case No./Planner
				Under staff review	D. O. issued	Pre-con held	ABC completed	Const. Permit issued	Under construction	Final inspection	C.O. issued	
A	Crane Lakes Golf & Country Club / site plan modification	1780 Taylor Rd.	Construction of a second driveway into the site, additional 8 mobile home lots, storage area for the golf course, pickle ball courts, and associated site improvements	X							Awaiting resubmittal	16-82000003 PGC
B	Golf Homes at Cypress Head / site plan	S. side of Airport Rd. between Cypress Head and Waters Edge	52 townhomes on ±6.62 acres	X	X						DO issued 4/18/16	15-80000009 GKP
C	Hawks Preserve, Phase I / subdivision (fka Port Orange Plantation, Phase IV A & B)	E. side of Coraci Blvd, N. of Town West Blvd.	123 single-family lots on ±57 acres	X	X	X	-	X	X		Under construction	14-50000006 16-52000001 PGC
D	Hawks Preserve, Phase II / subdivision (fka Port Orange Plantation, Phase IV D & E)	E. side of Coraci Blvd, N. of Town West Blvd.	66 single-family lots on ±23 acres	X	X	X	-				DO modification issued 6/16/16	14-50000007 16-52000002 PGC
E	Hawks Preserve Amenity Center / site plan	5200 Bear Corn Run	696 SF amenity center building with swimming pool, restrooms, and associated site improvements on 0.54 acres	X	X	X	-				Pre-construction meeting held 9/22/16	16-80000009 PGC
F	King's Landing, Phase I / subdivision	5931 Hensel Rd.	19 single-family lots on ±32.15 acres of the total 82.2 acres	X							Awaiting resubmittal	16-50000004 TPB
G	The Pinnacle PUD	Phase II, D. O. Modification	64 single-family lots on ±29.72 acres	X	X	X					Pre-construction meeting held 9/13/16	15-52000001 PGC
		1st Amendment to the MDA & CDP	Expand the boundary of the subdivision, increase total number of single-family lots to 150, modify stormwater retention area, and construction of a stabilized emergency access	X							Tentatively scheduled for CC 2nd reading 11/15/16	16-40000004 PGC
H	The Sanctuary at Westport, Phase 2A / site plan	S. side of Town West Blvd., W. of Coraci Blvd., E. of Tomoka Farms Rd.	360 multi-family apartment units on ±33.63 acres	X	X	X	X	X	X		Under construction	16-80000001 GKP
I	Westport Reserve, Phase 2B / subdivision	S. side of Town West Blvd., W. of Coraci Blvd., E. of Tomoka Farms Rd.	64 single-family lots on ±140.85 acres	X	X	X	-	X	X		Under construction	16-50000002 GKP
J	Westport Reserve, Phase 2C / subdivision	S. side of Town West Blvd., W. of Coraci Blvd., E. of Tomoka Farms Rd.	28 single-family lots on ±7.46 acres	X							Under review	16-50000003 GKP

NON-RESIDENTIAL DEVELOPMENT PROJECTS

Update: October 20, 2016

= addition to the development activity report = change of status to a particular project

MAP ID	Project		Location	Description	Status								Comments	Case No./Planner
					Under staff review	D. O. issued	Pre-con meeting	ABC permit completed	Const. permit issued	Under construction	Final inspection	C. O. issued		
1	Altamira Shopping Village	Commercial Subdivision Replat	1790 Dunlawton Ave.	5-lot commercial subdivision replat of +/- 27 acres	X								On hold	14-50000001 TPB
		Crosby Property / site plan	1736 Dunlawton Ave.	4,500 SF retail building on 1.24 acres with associated site improvements	X								On hold	14-80000014 TPB
2	Atlantic Marine / site plan		520 Dunlawton Ave. (619, 621, 627, & 631 Lemon St. 630 & 632 Ruth St.)	16,910 SF building for boat sales and boat repair and areas for outdoor boat storage for Atlantic Marine along with associated site and off-site improvements	X	X	X	X	X	X			Under construction	14-80000006 BP #16-0813 TPB
3	Auto Sales Lot / redevelopment		5164 Ridgewood Ave.	800 SF auto sales building with associated site improvements on 0.76 acres	X	X							DO issued 9/9/16	16-80000008 GKP
4	Badcock Furniture & More / site plan		4610 Clyde Morris Blvd.	18,000 SF retail building along with associated site improvements on 1.37 acres	X	X							Pre-construction meeting held 10/3/16	16-80000006 BP #16-3668 PGC
5	Charles Street Center / redevelopment		3670 Ridgewood Ave.	Redevelopment of a 0.60 acre property including a 3,625 SF building and associated site improvements	X								Under review	16-82000004 BRK
6	Clark Professional Center & Wedding Chapel PCD	MDA Amendment	5111 & 5131 Ridgewood Ave.	5th Amendment to the Master Development Agreement and Conceptual Development Plan to provide permitted uses and dimensional requirements	X								Under review	16-40000006 GKP
		Replat		Replat of subject property as a 6-lot subdivision	X								Under review	16-50000005 GKP
7	Coraci Sports Park, Pop Warner field / site plan modification		5200 Coraci Blvd.	Modifications to an existing football field including the construction of permanent grandstands with press box, storage facilities, restrooms, shelter pavilions, and associated site improvements	X	X	X	X	X	X			Awaiting request for final inspection	15-82000002 BP #15-2549 GKP
8	Cracker Creek PUD / 1st Amendment to the MDA & CDP		1815 Taylor Rd.	Amendment to the Master Development Agreement and Conceptual Development Plan to add Assisted Living Facility to the list of permitted uses on 9.75 acres	X								Scheduled for PC 10/27/16	16-20000002 16-40000005 PGC
9	Cumberland Farms (Nova Rd./Herbert St.) (Fka Booth's Bowery) / site plan		3657 Nova Rd.	Demolition of a 15,000 SF building (Booth's Bowery) and construction of a 5,000 convenience store and 10 fueling dispensers and associated site improvements on 1.35 acres	X	X							DO issued 8/31/16	16-80000004 GKP
10	Cumberland Farms (Palmetto Pointe) / site plan		3803 Clyde Morris Blvd.	4,952 SF convenience store with 8 fueling dispensers and associated site improvements on 1.44 acres	X								DO issued 9/23/16	16-80000002 BP #16-2288 GKP

NON-RESIDENTIAL DEVELOPMENT PROJECTS

Update: October 20, 2016

= addition to the development activity report = change of status to a particular project

MAP ID	Project	Location	Description	Under staff review	D. O. issued	Pre-con meeting	ABC permit completed	Const. Permit issued	Under construction	Final inspection	C. O. issued	Comments	Case No./ Planner
11	Elite Plaza / site plan	3821 Woodbriar Tr.	9,912 SF medical office building and associated site improvements on 1.5 acres	X								Awaiting resubmittal	16-80000011 GKP
12	Faris Car Wash / redevelopment	5476 Ridgewood Ave.	3,000 SF 4-bay car wash building and associated site improvements on 0.95 acres	X								DO pending approval of minor subdivision	16-80000007 16-55000002 BP #16-4046 PGC
13	Hunter Building / redevelopment	59 Dunlawton Ave.	Redevelopment of a 0.57 acre property including a 5,132 SF warehouse building and associated site improvements	X	X	X						Pre-construction meeting held 10/18/16	16-80000005 BP #16-2573 PGC
14	Journey's End Tiki Bar and Grill / site plan	5800 Journey's End Way	6,000 SF restaurant and associated site improvements on 1.4 acres	X								Awaiting resubmittal	16-80000010 BRK
15	Little C's Custom (fka Florida Truck Sales) / redevelopment	5536 Ridgewood Ave.	Redevelopment of a 0.68 acre commercial property into a car/truck sales lot with associated site improvements	X	X	X	X	X	X	X	X	Complete	15-80000006 PGC
16	The Port Hole Retail Center	930 Herbert St.	Redevelopment of an existing 5,562 SF bar/retail store with associated site improvements on 0.50 acres	X	X	X						Pre-construction meeting held 10/05/16	15-80000010 GKP
17	Ravenwood Veterinary Hospital Expansion / site plan	4542 Clyde Morris Blvd.	Expansion of the veterinary hospital to include an 8,500 SF fenced dog run area, parking, and associated site improvements	X	X	X						Pre-construction meeting held 10/20/16	16-82000001 GKP
18	Riverwalk Marina and Riverboat PCD	Restatement of MDA & CDP	East and West sides of Halifax Dr. between Ocean Ave. and Herbert St. Restatement of the MDA & CDP to state the framework for development of 2 residential condominium buildings, a restaurant on the point, 58-slip marina, linear park with 20-foot wide path, multi-purpose dock building, off-site signage along Dunlawton and Ridgewood and associated site improvements	X	X	-	-	-	-	-	-	Approved by CC on 9/20/16	16-40000003 TPB
19	Riverwalk Condominium & Point Restaurant	Subdivision Replat	Replat of subject property as an 8-lot subdivision	X	X	-	-	-	-	-	-	Approved by CC on 9/20/16	16-50000001 TPB
		Site plan	Development of 2 residential condominium buildings, a restaurant on the point, 58-slip marina, linear park with 20-foot wide path, multi-purpose dock building, off-site signage along Dunlawton and Ridgewood and associated site improvements	X								Awaiting 2nd resubmittal	16-80000003 TPB

NON-RESIDENTIAL DEVELOPMENT PROJECTS

Update: October 20, 2016

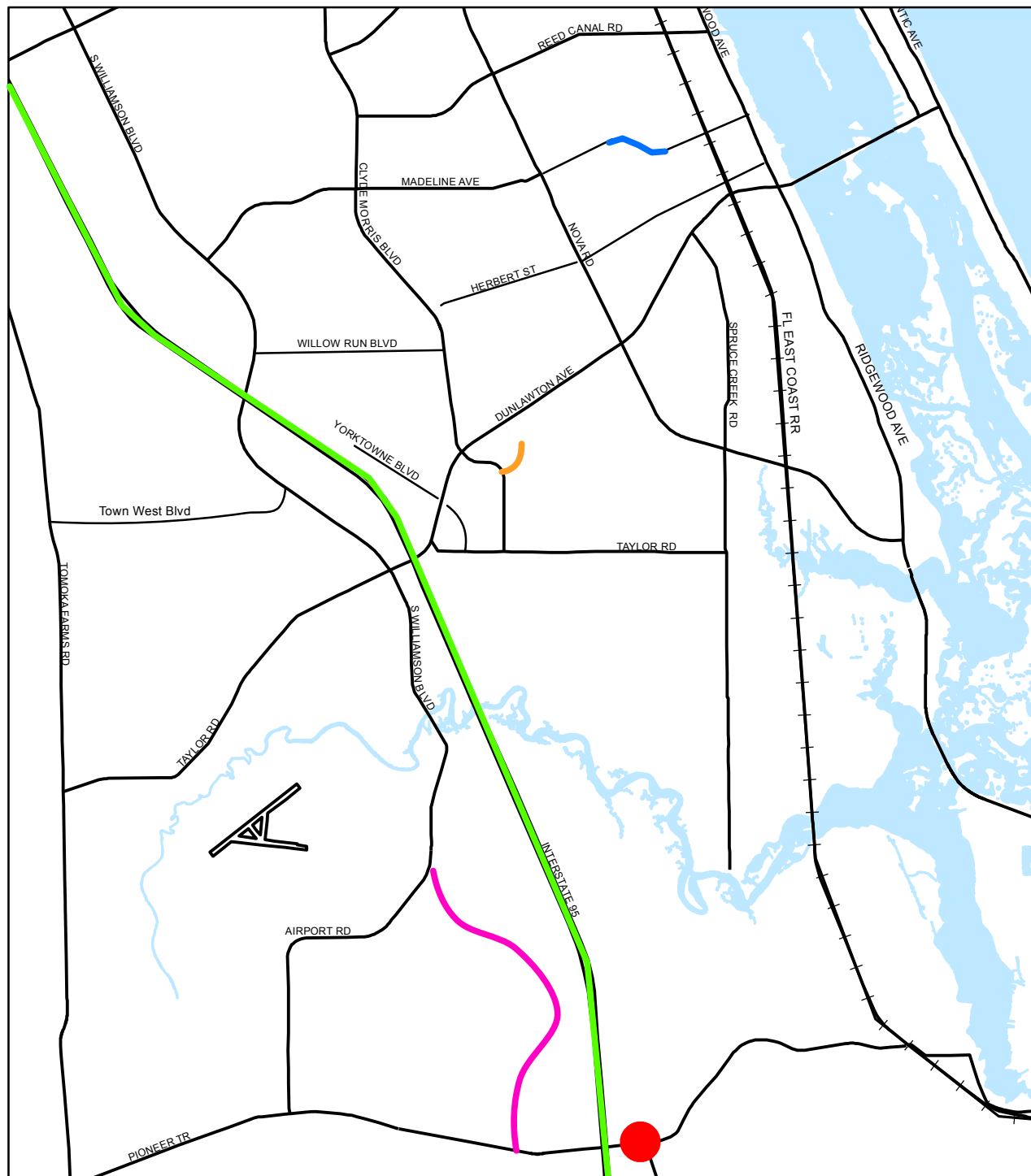
 = addition to the development activity report = change of status to a particular project

MAP ID	Project	Location	Description	Status								Comments	Case No./Planner
				Under staff review	D. O. issued	Pre-con meeting	ABC permit completed	Const. Permit issued	Under construction	Final inspection	C. O. issued		
20	Riverwalk Park / new construction	Phase 1B	3459 Ridgewood Ave.	Playground, splash park, picnic facilities, pavilions, shade structures, additional restrooms, concession building, portion of the boardwalk, event lawn, parking, and the southern portion of the 12' wide trailway, along with associated site improvements	X	X	X	-	X	X		Under construction	15-80000005 PGC
21	Spruce Creek Center / site plan modification		4020 Nova Rd.	Modifications to a parking lot for an existing shopping center with associated site improvements on 3.99 acres	X	X	X	X	X	X		1st Final inspection held 9/20/16	14-82000008 GKP
22	Virginia Industrial Park / new construction		515 Virginia Ave.	5 building office/warehouse complex with associated site improvements	X	X	X	X	X	X		Building permits issued for 531 & 535 Virginia Ave.	01-80000019 TPB
23	Vystar Credit Union / new construction		750 Dunlawton Ave	4,000 SF bank with 5 drive-thru lanes on 2.5 acres with associated on-site and off-site improvements	X	X	X	X	X	X		Under construction	14-80000010 15-82000003 16-82000002 BP #16-0370 GKP
24	Waffle House Nova Rd. / new construction		3740 Nova Rd.	1,875 SF restaurant with associated site improvements on 0.80 acres	X	X						Pre-construction meeting held 9/22/16	15-80000007 BP #15-2908 GKP
25	Waffle House Taylor Rd. / new construction		1633 A Taylor Rd.	1,875 SF restaurant with associated site improvements on 0.92 acres	X	X	X	X	X	X	X	Complete	15-80000008 BP #15-2907 GKP

ROADWAY DEVELOPMENT PROJECTS

UPDATE: OCTOBER 20, 2016

-  I-95 Widening
-  McDonald Road Sidewalk
-  Pioneer Trail at Turnbull Bay Road
-  S. Williamson Blvd. Extension
-  Victoria Gardens Blvd. Sidewalk



Project	Description	Jurisdiction	Status
I-95 Widening	Construction to widen I-95 from SR44 to I-4/SR400 from 4 lanes to 6 lanes	FDOT	Under construction / 49% Complete Est. completion 04/2018
McDonald Road Sidewalk	Construct an 5'-wide sidewalk on the south side of Madeline Ave., the west side of McDonald Rd., and the south side of Charles St. from Sugar House Dr. to 6th St.	City/TPO	100% plans and bid package submitted to FDOT
Pioneer Trail at Turnbull Bay Road	Intersection improvement	Volusia County/TPO	Intersection open for use
S. Williamson Blvd. Extension	Extension of Williamson Blvd. as a 4-lane divided roadway from Airport Rd. to Pioneer Trail	Developer/ Volusia County	Under construction / Est. completion 12/2016
Victoria Gardens Blvd. Sidewalk	Construct a 5' to 8'-wide sidewalk along the east/south side of Victoria Gardens Blvd. from Clyde Morris Blvd. to Appleview Way	City/TPO	Survey complete; Design in progress