WINTER GARDEN

CITY COMMISSION

AGENDA

300 W. Plant Street
Winter Garden, Florida

Please note: The City of Winter Garden has resumed in-person meetings; however, due to the COVID-19 pandemic, we are accommodating options other than physical attendance. Please visit the link below for details:
http://www.cwgdn.com/Calendar.aspx?EID=158

REGULAR MEETING May 28, 2020 6:30 p.m.

CALL TO ORDER
Determination of a Quorum
Opening Invocation and Pledge of Allegiance

1. **APPROVAL OF MINUTES**
   Regular Meeting Minutes – May 14, 2020

2. **FIRST READING AND PUBLIC HEARING OF PROPOSED ORDINANCES**
   A. **Ordinance 19-47:** AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA AMENDING THE FUTURE LAND USE MAP OF THE WINTER GARDEN COMPREHENSIVE PLAN BY CHANGING THE LAND USE DESIGNATION OF REAL PROPERTY GENERALLY DESCRIBED AS APPROXIMATELY 0.58 ± ACRES LOCATED AT S PARK AVENUE, NORTH OF W PLANT STREET, WEST OF S PARK AVENUE, AND SOUTH OF W BAY STREET, FROM NO FUTURE LAND USE TO MEDIUM DENSITY RESIDENTIAL; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE
   B. **Ordinance 19-48:** AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA, REZONING CERTAIN REAL PROPERTY GENERALLY DESCRIBED AS APPROXIMATELY 0.91 +/- ACRES OF LAND GENERALLY LOCATED AT 30 N PARK AVENUE AND S PARK AVENUE, NORTH OF WEST PLANT STREET, WEST OF N/S PARK AVENUE, AND SOUTH OF W BAY STREET, FROM R-2 (RESIDENTIAL) AND NZ (NO ZONING) TO PUD (PLANNED UNIT DEVELOPMENT); PROVIDING FOR CERTAIN PUD REQUIREMENTS AND DESCRIBING THE DEVELOPMENT AS THE 30 NORTH PARK PUD; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE – **Second reading and public hearing June 11, 2020** – **Community Development Director Pash**

   C. **Ordinance 20-20:** AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA, AMENDING THE FUTURE LAND USE MAP OF THE WINTER GARDEN COMPREHENSIVE PLAN BY CHANGING THE FUTURE LAND USE DESIGNATION OF REAL PROPERTY GENERALLY DESCRIBED AS APPROXIMATELY 6.01 ± ACRES LOCATED AT 1577 & 894 BEARD ROAD, WEST OF BEULAH ROAD, EAST OF 9TH STREET, AND SOUTH OF BEARD ROAD FROM

LOW DENSITY RESIDENTIAL TO COMMERCIAL; PROVIDING FOR SEVERABILITY AND AN EFFECTIVE DATE

D. **Ordinance 20-21:** AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA, REZONING CERTAIN REAL PROPERTY GENERALLY DESCRIBED AS APPROXIMATELY 6.01 ± ACRES LOCATED AT 1577 & 894 BEARD ROAD, WEST OF BEULAH ROAD, EAST OF 9TH STREET, AND SOUTH OF BEARD ROAD, FROM R-1 (RESIDENTIAL DISTRICT) TO PCD (PLANNED COMMERCIAL DEVELOPMENT); PROVIDING FOR CERTAIN PCD REQUIREMENTS AND DESCRIBING THE DEVELOPMENT AS THE WINTER GARDEN SELF STORAGE PCD; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE – **Second reading and public hearing June 11, 2020** – **Community Development Director Pash**

3. REGULAR BUSINESS

A. Recommendation to approve SITE PLAN for 1200 Daniels Road (Daniels Road Business Park), subject to conditions – **Community Development Director Pash**
B. Recommendation to approve SITE PLAN for 504 West Plant Street (504 Building), subject to conditions – **Community Development Director Pash**
C. Recommendation to approve Purchase and Sale Agreement for a portion of 30 North Park Avenue (City Property) - **Community Development Director Pash**

4. MATTERS FROM PUBLIC – (*Limited to 3 minutes per speaker*)

5. MATTERS FROM CITY ATTORNEY - Kurt Ardaman

6. MATTERS FROM CITY MANAGER – Mike Bollhoefer

7. MATTERS FROM MAYOR AND COMMISSIONERS

ADJOURN to **Regular Meeting** on Thursday, **June 11, 2020** at **6:30 p.m.** in City Hall Commission Chambers, 300 W. Plant Street, 1st floor

NOTICES:
In accordance with Florida Statutes 286.0105, if any person decides to appeal any decision made by said body with respect to any matter considered at such meeting, he/she will need a record of the proceedings and, for that purpose, he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. The City of Winter Garden does not prepare or provide such record.

Any opening invocation that is offered before the official start of the Commission meeting shall be the voluntary offering of a private person, to and for the benefit of the Commission. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the City Commission or the city staff, and the City is not allowed by law to endorse the religious or non-religious beliefs or views of such speaker. Persons in attendance at the City Commission meeting are invited to stand during the opening invocation and to stand and recite the Pledge of Allegiance. However, such invitation shall not be construed as a demand, order, or any other type of command. No person in attendance at the meeting shall be required to participate in any opening invocation that is offered or to participate in the Pledge of Allegiance. You may remain seated within the City Commission Chambers or exit the City Commission Chambers and return upon completion of the opening invocation and/or Pledge of Allegiance if you do not wish to participate in or witness the opening invocation and/or the recitation of the Pledge of Allegiance. (Reference Resolutions 15-04 and 16-02)

	Those needing assistance to participate in any of these proceedings should contact the City Clerk's Office at least 48 hours in advance of the meeting (407) 656-4111 x2297.		Help for the hearing impaired is available through the Assistive Listening System. Receivers can be obtained at the meeting from the Information Technology Department (407) 656-4111 x5455.

CITY OF WINTER GARDEN

CITY COMMISSION

REGULAR MEETING MINUTES

May 14, 2020

A **REGULAR MEETING** of the Winter Garden City Commission was called to order by Mayor Rees at 6:30 p.m. at City Hall, 300 West Plant Street, Winter Garden, Florida via Remote Electronic Attendance as per State of Florida, Office of the Governor (Executive Order Number 20-69). An Opening Invocation and Pledge of Allegiance given.

Present: Mayor John Rees and Commissioners
Lisa L. Bennett – District 1 Bob Buchanan – District 2
Mark A. Maciel – District 3 Colin Sharman – District 4

Also Present: City Manager Mike Bollhoefer, City Attorney A. Kurt Ardaman, City Clerk Angee Grimmage, Assistant City Manager of Administrative Services Frank Gilbert, Assistant City Manager of Public Services Jon Williams, Community Development Director Stephen Pash, Economic Development Director Tanja Gerhartz, Finance Director Laura Zielonka, Information Technology Director Chad Morrill, Fire Chief Matt McGrew and Police Chief Stephen Graham

1. **APPROVAL OF MINUTES**

Motion by Commissioner Buchanan to approve Regular meeting minutes of April 23, 2020 and Special Meeting Minutes of May 4, 2020 as submitted. Seconded by Commissioner Sharman and carried unanimously 5-0.

2. **PRESENTATION**

A. **Proclamation 20-01** proclaiming Apraxia Awareness Day was presented by Mayor Rees and the City Commission. I.T. Director Morrill noted that Ashley Maslanka emailed an expression of gratitude and thanks; knowing what this means to her and many other parents. She thanked everyone involved in making this proclamation happen.

3. **SECOND READING AND PUBLIC HEARING OF PROPOSED ORDINANCES**

A. **Ordinance 20-16:** AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA PROVIDING FOR THE ANNEXATION OF CERTAIN ADDITIONAL LANDS GENERALLY DESCRIBED AS APPROXIMATELY 0.82 ± ACRES LOCATED AT 356 E. LAFAYETTE STREET AND 497 W J PETERS LANE; NORTH OF E. CYPRESS STREET, WEST OF 9TH STREET, EAST OF SUMMER STREET, AND SOUTH OF E. LAFAYETTE STREET; REDEFINING THE CITY BOUNDARIES TO GIVE THE CITY JURISDICTION OVER SAID PROPERTY; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE

B. **Ordinance 20-17:** AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA AMENDING THE FUTURE LAND USE MAP OF THE WINTER GARDEN COMPREHENSIVE PLAN BY CHANGING THE LAND USE DESIGNATION OF REAL PROPERTY GENERALLY DESCRIBED AS 0.82 ± ACRES OF LAND LOCATED AT 356 E. LAFAYETTE STREET AND 497 W J PETERS LANE; NORTH OF E. CYPRESS STREET, WEST OF 9TH STREET, EAST OF SUMMER STREET, AND SOUTH OF E. LAFAYETTE STREET FROM ORANGE COUNTY LOW-MEDIUM

DENSITY RESIDENTIAL TO CITY LOW DENSITY RESIDENTIAL; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE

C. **Ordinance 20-18:** AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA REZONING APPROXIMATELY 0.82 ± ACRES LOCATED AT 356 E. LAFAYETTE STREET AND 497 W J PETERS LANE; NORTH OF E. CYPRESS STREET, WEST OF 9TH STREET, EAST OF SUMMER STREET, AND SOUTH OF E. LAFAYETTE STREET; FROM ORANGE COUNTY R-2 RESIDENTIAL DISTRICT TO CITY R-2 RESIDENTIAL DISTRICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE

City Attorney Ardaman read Ordinances 20-16, 20-17 and 20-18 by title only. City Manager Bollhoefer described the location of the properties and noted that the applicant wants to annex these properties in order to extend their pond. He noted that this would be R-2 zoning; matching the predominant zoning of the existing neighborhood. Staff recommends approval.

Mayor Rees clarified the location of the properties. He also commented on demolition of the old Winter Garden Elementary School; noting that afterwards, redevelopment in that area with an R-2 zoning yielded many duplexes. He cautioned that this should be a consideration when allowing future R-2 zoning.

Mayor Rees opened the public hearing; reading a dedicated phone number and instructions for the public's participation in this meeting.

Steven Thorpe, representative from Orange County Public Schools (the applicant), stated that staff recommendations were taken into consideration and he voiced appreciation to staff for assisting them through the process.

After waiting several minutes and receiving no additional public calls or comments, Mayor Rees closed the public hearing.

Motion by Commissioner Sharman to adopt Ordinances 20-16, 20-17 and 20-18. Seconded by Commissioner Maciel and carried unanimously 5-0.

4. REGULAR BUSINESS

A. Recommendation to approve Police Department purchase of gym and exercise equipment utilizing $10,932 from Fiscal Year 2019-2020 Edward Byrne Memorial Justice Assistance Grant (JAG) Program – JAG Countywide – State Solicitation, with public comment

Police Chief Graham stated that the Federal budget year for Fiscal Year 2019-2020 Edward Byrne Memorial Justice Assistance Grant (JAG) Program – JAG Countywide – State Solicitation has allocated $320,718 for Orange County. He noted that earmarked was $10,932 of those funds for the City of Winter Garden and currently requested for the purchase of additional gym and exercise equipment. He indicated that this

equipment would be available for use by all City employees. He also informed that this item requires the allowing for public comment.

Commissioner Buchanan inquired if this was where the old youth center was located. City Manager Bollhoefer responded yes.

Commissioner Maciel inquired as to what $10,000 could purchase. Police Chief Graham responded that there would have to be a delay until the prices come down; noting that since all the gyms are closed, personal home gym equipment is at a premium.

Mayor Rees opened the public hearing; reading a dedicated phone number and instructions for the public's participation in this meeting. After waiting several minutes and receiving no public calls or comments, he closed the public hearing.

Motion by Commissioner Bennett to approve Police Department purchase of gym and exercise equipment utilizing $10,932 from Fiscal Year 2019-2020 Edward Byrne Memorial Justice Assistance Grant (JAG) Program – JAG Countywide – State Solicitation. Seconded by Commissioner Buchanan and carried unanimously 5-0.

5. **MATTERS FROM PUBLIC**

Mayor Rees opened the public hearing; reading a dedicated phone number and instructions for the public's participation in this meeting.

Ron Mueller, 709 Lake Cove Pointe Circle, Winter Garden, Florida noted having earlier sent an email to Mayor Rees. Mayor Rees responded that he would review it and call him the next day. Mr. Mueller then thanked various City staff and the City Commission for their efforts during this time.

After waiting several minutes and receiving no additional public calls or comments, Mayor Rees closed the public hearing.

6. **MATTERS FROM CITY ATTORNEY** – There were no items.

7. **MATTERS FROM CITY MANAGER**

COVID-19 – Downtown Businesses Update

City Manager Bollhoefer gave a status of the efforts related to the downtown businesses regarding tables and seating adjustments. He also noted requirements for masks worn by restaurant employees did not match that of the State. Staff recommends removing the rule and allowing restaurants to decide for themselves, as there had been some objections.

Mayor Rees clarified that the removal of the requirement to wear masks would be mirroring State law, the City recommends it, but it is not required. City Manager Bollhoefer responded, correct.

Commissioner Maciel inquired about the ability to enforce that law. Mr. Bollhoefer replied that it could be enforced, but very difficult when not a requirement for others in the State. Commissioner Maciel inquired of the objections received. Mr. Bollhoefer replied that there are various reasons such as some do not like masks, difficulty in finding them, some find it offensive to their liberty and do not think it is the government's job to tell someone how to be safe. Mayor Rees noted some work in the kitchen and there is difficulty breathing with the heat. Commissioner Buchanan also noted that some have a phobia. City Manager Bollhoefer agreed that claustrophobic people do not like them.

Motion by Commissioner Bennett to follow State law regarding the wearing of masks. Seconded by Commissioner Buchanan and carried unanimously 5-0.

Change Curfew

City Manager Bollhoefer noted that the City implemented a 10:30 p.m. curfew based on Orange County's curfew of 11:00 p.m. He noted that Orange County lifted its curfew. Staff requests that during the interim, the City change its curfew from 10:30 p.m. to 11:00 p.m. for the next two weeks. Afterwards there would be a review of this issue and then possible following of State law. Mr. Bollhoefer explained the reasoning behind this decision, noting the current prohibition to bars being open and restaurant patrons usually done eating by 11:00 p.m. He noted keeping the City Commission informed of any changes or adjustments and their opportunity to discuss those decisions at City Commission meetings.

Motion by Commissioner Buchanan to approve an 11:00 p.m. curfew for the next two weeks. Seconded by Commissioner Maciel and carried unanimously 5-0.

Lakeside Church

City Manager Bollhoefer thanked Lakeside Church for their contribution in putting together 250 bags of food and supplies for East Winter Garden.

Mr. Bollhoefer also thanked the churches in East Winter Garden that joined in and created a group of volunteers to distribute hot meals to those that are immobile and the elderly who cannot prepare their own food.

8. MATTERS FROM MAYOR AND COMMISSIONERS

Commissioner Sharman inquired of sales tax revenues and when the City would see a shortfall; he wondered if it would be months from now. City Manager Bollhoefer responded that he believes it would start sooner. He has heard of a potential reduction with a maximum of 20 percent; although in the long term, he does not think it will be 20 percent. He indicated that department heads are reviewing their operational budgets and finding ways to reduce the budgets by ten percent. He thinks long term would be a ten percent adjustment and adjustments made as we get more information. He stated that we really do not know yet.

Commissioner Bennett stated that she echoes comments on what a good job the City Manager and staff have done. She stated that they have been inventive, creative and approach balanced. She expressed her thanks to staff.

Commissioner Maciel thanked staff and noted that they outdo themselves every week with the efforts getting better and better each week.

City Manager Bollhoefer thanked Economic Development Director Tanja Gerhartz, and Parks and Recreation Director Laura Coar for their downtown preparations; admiring the aesthetics and the table setups downtown.

Mayor Rees inquired as to whether the City had any other requests from businesses around the City regarding fencing. Mr. Bollhoefer responded yes and noted a couple businesses that have contacted the City that are currently in process. Mayor Rees distinguished that these efforts are not just for the downtown, but any restaurant in the City.

The meeting adjourned at 6:59 p.m.

APPROVED:

_____
Mayor John Rees

ATTEST:

_____
City Clerk Angee Grimmage, CMC

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Steve Pash, Community Development Director

Via: City Manager Mike Bollhoefer

Date: May 20, 2020 **Meeting Date:** May 28, 2020

Subject: 30 N Park Ave & S Park Ave (FLU Amendment & Rezone to PUD)
30 N Park - FLU Amendment & PUD
Ordinances 19-47 & 19-48
PARCEL ID # 22-22-27-0000-00-117 (a portion) (Ords 19-47 & 19-48)
22-22-27-0000-00-090 (Ord 19-48)

Issue:

For property located at 30 N Park Ave & S Park Ave, the applicant is requesting to change the Future Land Use Designation of an 0.58 acre portion located at S Park Ave from No Future Land Use to Medium Density Residential and rezone this and the adjacent 0.33 acre property (30 N Park Ave) to PUD (Planned Unit Development). This item was previously tabled at the October 10, 2019 City Commission meeting to a date uncertain.

Discussion:

The applicant is requesting to rezone the +/- 0.91 acre subject property located at 30 N Park Ave & S Park Ave to PUD and change the future land use designation of a portion of the subject property to Medium Density Residential in order to permit development of the property. The proposed development includes 9 new townhome units over two separate buildings: one townhome building will include 5 units and the other will include 4 units. The property will also include associated site development such as common recreation areas, a surface parking lot, sidewalks, and a stormwater retention area (see Staff Report). The proposed FLU amendment and rezoning is consistent with the City's Comprehensive Plan and the City of Winter Garden Code of Ordinances.

Recommended Action:

Staff recommends approval of Ordinances 19-47 & 19-48, with the second reading and adoption hearing anticipated to be on June 11, 2020.

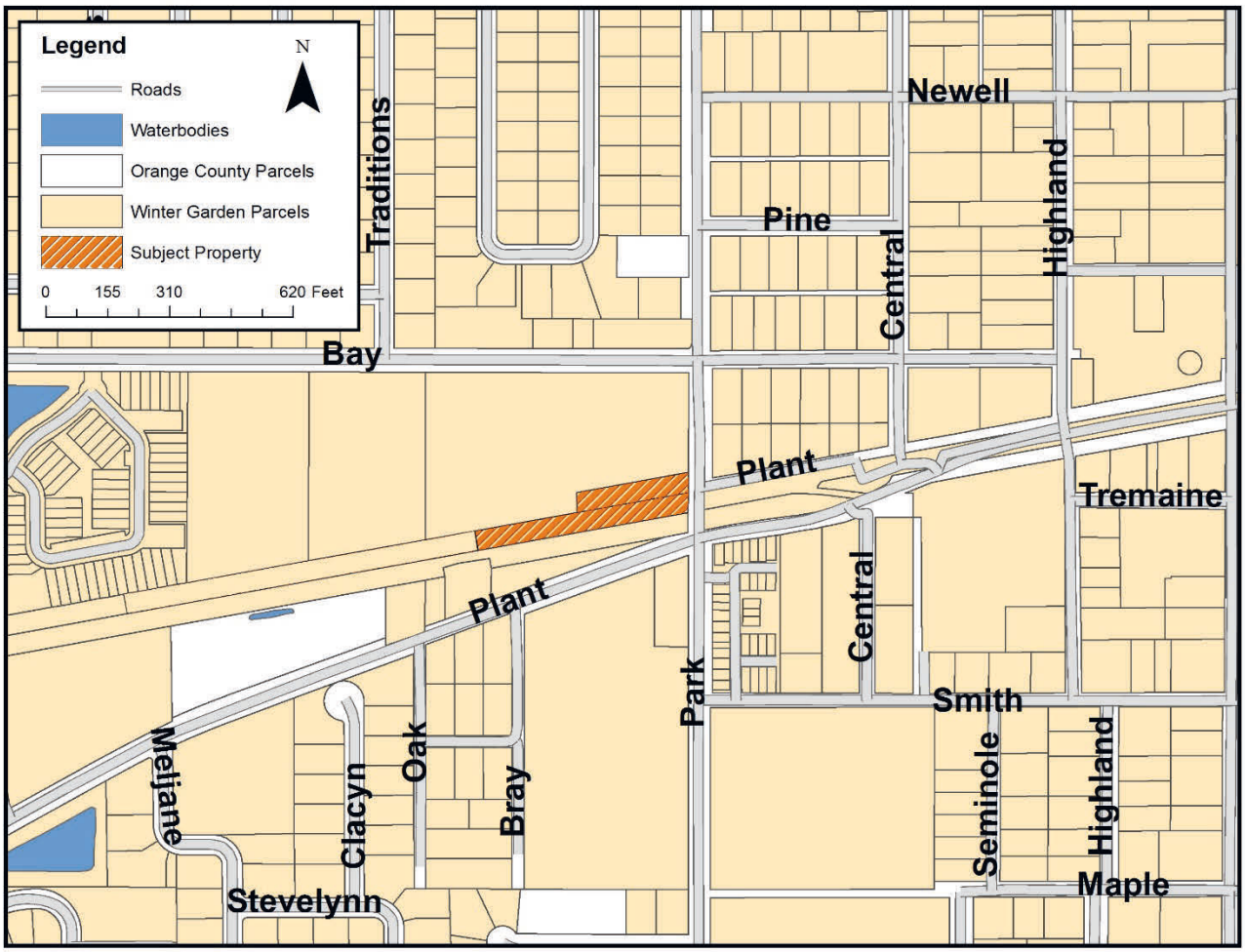
Attachment(s)/References:

Location Map
Staff Report
Ordinances 19-47 & 19-48

LOCATION MAP

30 N Park Ave & S Park Ave

<u>FLU Amendment & PUD Rezoning</u>



ORDINANCE 19-47

AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA AMENDING THE FUTURE LAND USE MAP OF THE WINTER GARDEN COMPREHENSIVE PLAN BY CHANGING THE LAND USE DESIGNATION OF REAL PROPERTY GENERALLY DESCRIBED AS APPROXIMATELY 0.58 ± ACRES LOCATED AT S PARK AVENUE, NORTH OF W PLANT STREET, WEST OF S PARK AVENUE, AND SOUTH OF W BAY STREET, FROM NO FUTURE LAND USE TO MEDIUM DENSITY RESIDENTIAL; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on the 13th of June, 1991, the City Commission of the City of Winter Garden adopted Ordinance 91-16 which adopted a new Comprehensive Plan for the City of Winter Garden, and on the 24th of June, 2010, the City Commission of the City of Winter Garden adopted Ordinance 10-19 readopting and amending the Comprehensive Plan for the City of Winter Garden;

WHEREAS, the owner of that certain real property generally described as approximately 0.58 ± acres located at S Park Avenue, north of W Plant Street, west of S Park Avenue, and south of W Bay Street, and legally described in ATTACHMENT "A" (the "Property") has petitioned the City to amend the Winter Garden Comprehensive Plan to change the Future Land Use classification from No Future Land Use to Medium Density Residential; and

WHEREAS, the City of Winter Garden's Local Planning Agency and City Commission have conducted the prerequisite advertised public hearings pursuant to Chapter 163, Florida Statutes, regarding the adoption of this ordinance; now, therefore,

BE IT ENACTED BY THE CITY OF WINTER GARDEN, FLORIDA:

SECTION I. *FLUM Amendment.* The City of Winter Garden hereby amends the Future Land Use Map of the City of Winter Garden Comprehensive Plan by designating the aforesaid Property from No Future Land Use to Medium Density Residential as set forth in ATTACHMENT "B".

SECTION II. *Effective Date.* This Ordinance shall become effective 31 days after adoption, unless the Ordinance is timely challenged pursuant to § 163.3187(5), Fla. Stat., in which case, the Ordinance shall not be effective until the state land planning agency or the Administrative Commission, respectively, issues a final order determining that the adopted Ordinance is in compliance.

SECTION III. *Severability.* Should any portion of this Ordinance be held invalid, then such portions as are not declared invalid shall remain in full force and effect.

FIRST READING AND PUBLIC HEARING: _____ , 2019.

SECOND READING AND PUBLIC HEARING: _____ , 2019.

ADOPTED this _____ day of _____, 2019, by the City Commission of the City of Winter Garden, Florida.

APPROVED:

_____
JOHN REES, Mayor/Commissioner

ATTEST:

_____
ANGELA GRIMMAGE, City Clerk

ATTACHMENT "A"

LEGAL DESCRIPTION

PARCEL ID#: 22-22-27-0000-00-117 (a portion)

DESCRIPTION:

A parcel of land lying in Section 22, Township 22 South, Range 27 East, Orange County, Florida, being a portion of the land described in Official Records Book 5017, Pages 3567 through 3586, Public Records of Orange County Florida

Being more particularly described as follows:

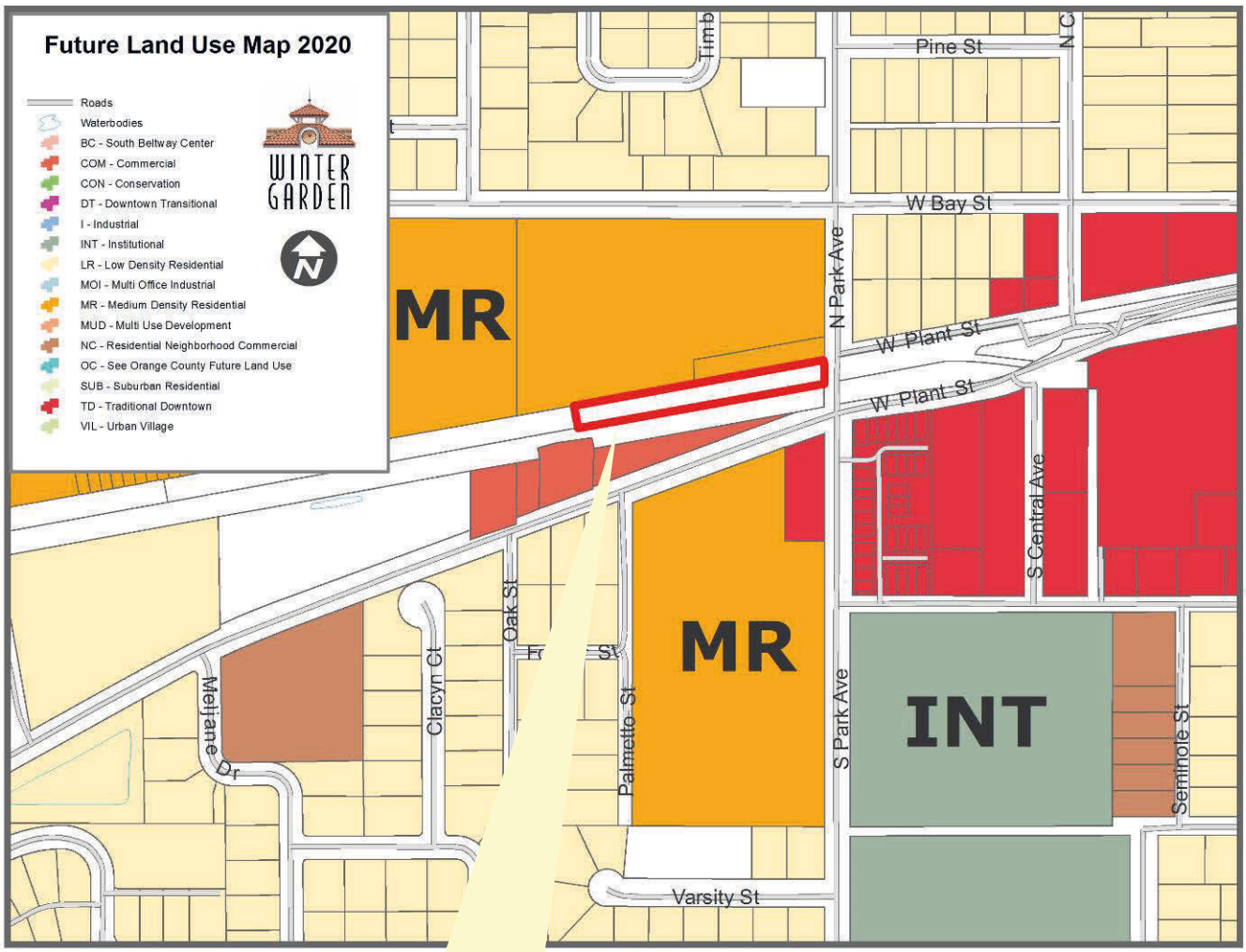
Commencing at the Southeast corner of the Northeast 1/4 of Section 22, Township 22 South, Range 27 East, Orange County, Florida, run North 00°02'23" East for a distance of 2,288.96 feet along the East boundary of said Northeast 1/4 to a point on the Northerly right-of-way line of the former Tavares and Gulf Railroad as described and recorded in Deed Book 104, Page 407, Public Records of Orange County, Florida for the said point also being on the Southerly right-of-way line of the former Orange Belt Railway Company Railroad as described and recorded in Deed Book 40, Page 275, Public Records of Orange County, thence departing aforesaid East boundary line of Section 22, run South 79°45'29" West along said Southerly right-of-way line for a distance of 40.49 feet to the POINT OF BEGINNING; thence continue South 79°45'29" West along aforesaid Southerly right of way for a distance of 411.94 feet to the point on a non-tangent curve, concave Northerly having a radius of 600.00 feet, with a chord bearing of South 89°01'39" West, and a chord distance of 38.99 feet, thence run Westerly through a central angle of 03°43'26"along the arc of said curve for a distance of 39.00 feet to a point of reverse curvature of a curve; concave Southerly having a radius of 600.00 feet and a central angle of 06°34'16" with a chord bearing of South 87°36'14" West, and a chord distance of 68.78 feet, thence run Westerly along the arc of said curve for a distance of 68.81 feet to a point on a non-tangent line; thence run North 10°14'31" West for a distance of 34.33 feet; thence run North 79°45'29" East for a distance of 527.63 feet to a point on the West right of way line of aforesaid North Park Avenue; thence run South 00°02'23" East for a distance of 50.82 feet to the POINT OF BEGINNING.

Containing 25,249 square feet or 0.58 acres, more or less.

ATTACHMENT "B"

FUTURE LAND USE MAP

<u>S Park Avenue</u>



Subject property changed from No Future Land Use to Medium Density Residential

ORDINANCE 19-48

AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA, REZONING CERTAIN REAL PROPERTY GENERALLY DESCRIBED AS APPROXIMATELY 0.91 +/- ACRES OF LAND GENERALLY LOCATED AT 30 N PARK AVENUE AND S PARK AVENUE, NORTH OF WEST PLANT STREET, WEST OF N/S PARK AVENUE, AND SOUTH OF W BAY STREET, FROM R-2 (RESIDENTIAL) AND NZ (NO ZONING) TO PUD (PLANNED UNIT DEVELOPMENT); PROVIDING FOR CERTAIN PUD REQUIREMENTS AND DESCRIBING THE DEVELOPMENT AS THE 30 NORTH PARK PUD; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the owner(s) of real property generally described as approximately 0.91 ± acres of certain real property generally located at 30 N Park Avenue and S Park Avenue, north of West Plant Street, west of N/S Park Avenue, and south of W Bay Street in Winter Garden, Florida, being more particularly described in Exhibit "A" attached hereto and incorporated herein by this reference (the "Property"), desire to rezone their property from R-2 (Residential) and NZ (No Zoning) to PUD (Planned Unit Development"), and

WHEREAS, the Planning and Zoning Board has considered this Ordinance and made a recommendation to the City Commission concerning its adoption; and

WHEREAS, after public notice and due consideration of public comment, the City Commission of the City of Winter Garden hereby finds and declares the adoption of this Ordinance and the proposed development of the Property is consistent with the City of Winter Garden Comprehensive Plan, and the land development regulations set forth in the City of Winter Garden Code of Ordinances; and

WHEREAS, based on competent substantial evidence in the record, the requested rezoning set forth in this Ordinance meets all applicable criteria specified in the City of Winter Garden Comprehensive Plan and the Code of Ordinances; Now therefore;

BE IT ENACTED BY THE CITY OF WINTER GARDEN, FLORIDA:

SECTION 1: *Rezoning.* After due notice and public hearing, the zoning classification of the Property, as described in Exhibit "A" attached hereto, is hereby rezoned from City R-2 and NZ to City PUD in the City of Winter Garden, Florida subject to the following conditions, provisions and restrictions:

a. **Conceptual Plan-** All development on the Property must substantially conform to the requirements identified in the 30 North Park Planned Unit

Development Plan attached hereto as Exhibit "B." Should any conflict be found between this Ordinance and the 30 North Park Planned Unit Development Plan attached hereto as Exhibit "B", then the standards and conditions established by this Ordinance shall control.

b. **Zoning-** Unless specifically noted elsewhere in Exhibit "B" attached hereto, or expressly provided for herein, all development on the Property must comply with the general zoning requirements of the Planned Unit Development zoning district as they pertain to properties that have primary residential uses. These requirements include any approval procedures of the Planned Unit Development zoning district.

c. **Permitted Uses-** The permitted uses for the subject property are as follows:

1. Permitted primary structures and uses:

a) Townhomes.

2. Permitted accessory structures and uses:

a) Customary accessory uses and structures clearly incidental and subordinate to a principal use.

d. **Special Exception Uses-** There are no special exception uses for the property.

e. **Prohibited Uses-** The prohibited uses for all areas of the subject property are as follows:

1. All uses prohibited by Sec. 118-858(5), City of Winter Garden Code of Ordinances.

2. All uses not specifically permitted in this Ordinance; any use not in keeping with a traditional downtown neighborhood character.

f. **Design Criteria/Architectural Standards-**

1. **Architectural Standards-** All development on the Property must maintain the same general design criteria and architectural characteristics as the Building Elevations attached hereto as Exhibit "C".

2. **Maximum Building Height-** The maximum building height shall not exceed 45 feet.

3. **Minimum Living Area-** Minimum living area for each residential unit shall be 1,000 square feet.

4. **Signage-** All signage shall be reviewed and permitted by the City of

Winter Garden.

5. Setbacks and Required Yards-

a) Front (Park Ave): 10' min.
b) Side (North): 30' min.
c) Side (South): 14' min.
d) Rear: 25' min.
e) The distance between townhome buildings shall be no less than 20 feet.

6. Impervious Surface Area Ratio- The maximum impervious surface area ratio for the Property shall be consistent with the overall maximum impervious surface area ratio that the Planned Unit Development is permitted by Saint John's River Water Management District.

g. Staff Conditions- All development on the Property must comply with the following staff conditions:

1. Based on the preliminary layout, the project will be platted and shall follow all provisions of Chapter 110. Preliminary plat will be required, etc.

2. Based on the response the mechanical equipment will be located within the individual garages with a.c. units on the roof. Planning shall dictate screening requirements.

3. Preliminary Utility Plan:

a) Verify the size of the existing water main on Park Avenue. The City's GIS shows this as a 6" water main, not 8".

b) Fire & Building Departments will need to review for fire protection, fire hydrants, etc. Fire sprinklers may be required.

c) Water/sewer impact fees will be required. All costs associated with relocating the 18" force main and 12" reuse main shall be the responsibility of the developer.

4. Options for solid waste pick-up were discussed at the 7/03/19 DRC meeting. Final resolution shall be coordinated with Public Services, Solid Waste Division.

5. The Applicant shall submit plans and documentation showing adherence to Section 118-68, requirements for site plans, as required by the City Code.

6. General Requirements:

a) All gravity sanitary pipe and fittings shall be SDR 26.

b) All compaction shall be 98% of the modified proctor maximum

density (AASHTO T-180).

c) As-built record drawings shall comply with City of Winter Garden requirements available on-line (note on plan).

d) All Storm (≥12") and Sanitary lines (≥6") shall be inspected by CCTV prior to completion.

7. All utilities shall conform to Chapter 78 of the City Code. Impact fees will be required for any utility connections and shall be paid prior to issuance of building permit and City execution of FDEP permit applications. The site shall be served by City water, sewer and reuse. All utilities required for the development shall be run to the site at the Developer's expense, including potable water, reclaimed water and sanitary sewer. 100% of all required water, irrigation and sewer impact fees shall be paid prior to City execution of FDEP permits and issuance of site or building permits.

8. Sanitary laterals shall be 6" minimum.

9. Final plans shall show drainage for the site, historical/adjacent drainage patterns, all to be supported by the soil report and calculations.

10. Minimum 5' wide concrete sidewalks shall be constructed along all street frontages pursuant to Code. Any damaged, broken or cracked sections (including existing curbs and pavement) shall be replaced prior to issuance of certificate of occupancy.

11. If specified, the use of thermoplastic pipe shall meet all City material and installation requirements as specified in the City's Standards & Specifications including Class I bedding, HP polypropylene pipe, laser profiling, installation per ASTM D2321, etc. (see under on-line forms on website).

12. Landscaping shall not encroach on required sight lines at intersections or driveways. Design Engineer shall provide certification that sight distance requirements are being met. All irrigation on the site shall be designed to be supplied by reclaimed water when available and shall be served by a jumper to potable water until that time.

13. A separate tree removal permit is required to remove any trees. Coordinate with Building Department.

14. No trees may be planted over or within 5 feet of any utility lines. Only sod or shrubs may be planted over utility lines.

15. Permit from SJRWMD is required as well as permits or exemptions from FDEP for water, wastewater and NPDES.

16. Streetlighting, both internally and on all street frontages, is required pursuant to City Code – dark skies lighting is required. Provide a

photometric plan to be submitted for review by the Planning Department.

17. Use City Standard Detail Sheets for utilities and public works. All on-site utilities shall be privately owned and maintained.

18. Fire sprinkler systems will be required on all buildings over 6,000 s.f. with Point of Service (POS), backflow prevention, etc. shown. All work downstream of the POS shall be performed by a licensed fire sprinkler contractor.

19. Any screen walls or retaining walls shall require a separate permit from the Building Department.

20. All underdrain pipe shall be double wall HDPE pipe or PVC pipe.

21. Internal sidewalks shall connect to the public sidewalks in the right-of-way per ADA.

22. Recreation mitigation fees may be required for any required recreation areas that are not able to be located on site. This fee is based on the fair market price of the land that would otherwise be dedicated to recreation.

23. The final design of the entry columns / faux gates shall be determined during the Site Plan Approval review.

24. The trash cans shown on Park Ave shall be permitted to be in this location only during the designated trash pickup day and must otherwise be stored inside the buildings.

25. The Owner is responsible for meeting all provisions of ADA and Florida Accessibility Code.

26. All work shall conform to City of Winter Garden standards and specifications.

27. The Contractor is responsible for the notification, location and protection of all utilities that may exist within the project limits.

28. No fill or runoff will be allowed to discharge onto adjacent properties; existing drainage patterns shall not be altered. The City of Winter Garden is not granting rights or easements for drainage from, or onto, property owned by others, including by way of any development order or permit issued. Obtaining permission, easements or other approvals that may be required to drain onto private property is the Owner/Developer's responsibility. Should the flow of stormwater runoff from, or onto adjacent properties be unreasonable or cause problems, the City shall not be responsible and any corrective measures required will be the responsibility of the Owner/Developer. Site construction shall adhere to the City of Winter Garden erosion and sediment control requirements as contained in Chapter 106 - Stormwater. If approval is granted by the

City of Winter Garden, it does not waive any permits that may be required by federal, state, regional, county, municipal or other agencies that may have jurisdiction.

29. After final plan approval, a preconstruction meeting will be required prior to any commencement of construction. The applicant shall provide an erosion control and street lighting plan at the preconstruction meeting and shall pay all engineering review and inspection fees prior to construction. Inspection fees in the amount of **2.25%** of the cost of all site improvements shall be paid prior to issuance of the building permit.

SECTION 2: *General Requirements.*

a. **Development Agreement-** If deemed necessary by City Staff, a Development Agreement shall be drafted, approval obtained and recorded prior to approval of any site or building permits for the Property.

b. **Stand Alone Clause-** Each phase of development of the Property must operate as an individual unit in that each particular phase will be able to stand-alone in the event that no other phase is developed.

c. **Land Development Approvals and Permits-** This Ordinance does not require the City to issue any permits or approval for development, construction, building permit, or other matter by the City relating to the Property or the project or any portion thereof. These and any other required City development approvals and permits shall be processed and issued by the City in accordance with procedures set forth in the City's Code of Ordinances and subject to this Ordinance.

d. **Amendments-** Minor amendments to this Ordinance will be achieved by Resolution of the City Commission of the City of Winter Garden. Major amendments to this Ordinance will require approval of the City Commission of the City of Winter Garden by Ordinance.

e. **Expiration/Extension-** Expiration of this PUD shall be governed in accordance with Section 118-830, City of Winter Garden Code of Ordinances. Time extensions may be granted in accordance with Section 118-829, City of Winter Garden Code of Ordinances.

f. **Violation** - A violation of this Ordinance is considered a violation of the City of Winter Garden Code of Ordinances and zoning of the Property

SECTION 3: *Zoning Map.* The City Planner is hereby authorized and directed to amend the Official Winter Garden Zoning Map in accordance with the provisions of this

ordinance.

SECTION 4: *Non-Severability.* Should any portion of this Ordinance be held invalid, then the entire Ordinance shall be null and void.

SECTION 5: *Effective Date.* This Ordinance shall become effective after its adoption at its second reading upon the occurrence of the effective date of Comprehensive Plan future land use map amendment Ordinance 19-47.

FIRST READING AND PUBLIC HEARING: _____ , 2019.

SECOND READING AND PUBLIC HEARING: _____ , 2019.

ADOPTED this _____ day of _____, 2019, by the City Commission of the City of Winter Garden, Florida.

APPROVED:

_____
JOHN REES, Mayor/Commissioner

ATTEST:

_____
ANGELA GRIMMAGE, City Clerk

Exhibit "A"

PARCEL ID(s): 22-22-27-0000-00-090; 22-22-27-0000-00-117 (portion)

LEGAL DESCRIPTION

A parcel of land lying in Section 22, Township 22 South, Range 27 East, Orange County, Florida, being a portion of the land described in Official Records Book 5017, Pages 3567 through 3586, Public Records of Orange County Florida Being more particularly described as follows:

Commencing at the Southeast corner of the Northeast 1/4 of Section 22, Township 22 South, Range 27 East, Orange County, Florida, run North 00°02'23" East for a distance of 2,288.96 feet along the East boundary of said Northeast 1/4 to a point on the Northerly right-of-way line of the former Tavares and Gulf Railroad as described and recorded in Deed Book 104, Page 407, Public Records of Orange County, Florida for the said point also being on the Southerly right-of-way line of the former Orange Belt Railway Company Railroad as described and recorded in Deed Book 40, Page 275, Public Records of Orange County, thence departing aforesaid East boundary line of Section 22, run South 79°45'29" West along said Southerly right-of-way line for a distance of 30.49 feet to a point on the West right of way line of North Park Avenue and the POINT OF BEGINNING; thence continue South 79°45'29" West along aforesaid Southerly right of way for a distance of 411.94 feet to the point on a non tangent curve, concave Northerly having a radius of 600.00 feet, with a chord bearing of South 89°01'39" West, and a chord distance of 38.99 feet, thence run Westerly through a central angle of 03°43'26"along the arc of said curve for a distance of 39.00 feet to a point of reverse curvature of a curve; concave Southerly having a radius of 600.00 feet and a central angle of 06°34'16" with a chord bearing of South 87°36'14" West, and a chord distance of 68.78 feet, thence run Westerly along the arc of said curve for a distance of 68.81 feet to a point on a non tangent line; thence run North 10°14'31" West for a distance of 34.33 feet; thence run North 79°45'29" East for a distance of 242.87 feet; thence run North 00°02'23" East for a distance of 50.82 feet; thence run North 79°45'29" East a distance of 284.76 feet to a point on the West right of way line of aforesaid North Park Avenue; thence run South 00°02'23" West along said West right of way line for a distance of 101.63 feet to the POINT OF BEGINNING.

Containing 39486.81 square feet or 0.91 acres, more or less.

Exhibit "B"

COVER PAGE

30 North Park
PUD PLAN

(10 PAGES - ATTACHED)

30 North Park PD at Winter Garden

CITY OF WINTER GARDEN, FL

PID: 22-22-27-0000-00-090 and 22-22-27-0000-00-117

PREPARED FOR

Cynergreen Hospitality, Inc

525 W. Plant Street
Winter Garden, FL 34787

OWNER/DEVELOPER

Joe Hoffer, Partner
Cynergreen Hospitality, Inc.
525 West Plant Street
Winter Garden, FL 34787
407-605-3500

ENGINEER

GTC Engineering Corporation
98 S. Semoran Boulevard
Orlando, FL 32807
407-380-0402

ARCHITECT

Michael Morrissey
30 West Smith Street
Winter Garden, FL 34787
407-616-7770

SURVEYOR

Allen & Company
16 East Plant Street
Winter Garden, FL 34787
407-654-5355

LANDSCAPING

Foster-Conant & Asso., Inc.
120 West Robinson St.
Orlando, FL 32801
407-648-2225

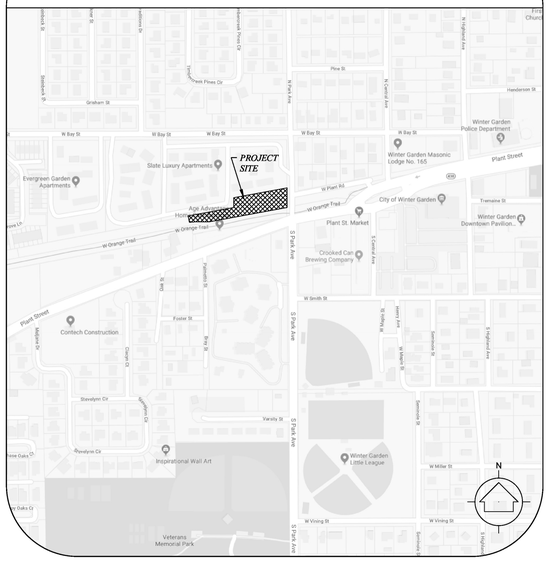
GEOTECHNICAL

GEC Consultants, Inc.
919 Lake Baldwin Lane
Orlando, FL 32814
407-898-1818

ENVIRONMENTAL

Bio-Tech Consulting Inc.
3025 East South Street
Orlando, FL 32803
407-894-5969

SITE LOCATION



SHEET INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2-4	BOUNDARY AND TOPOGRAPHIC SURVEY
5	PRELIMINARY SITE PLAN
6	PRELIMINARY DRAINAGE PLAN
7	PRELIMINARY UTILITY PLAN
8	LOT LAYOUT PLAN
9-10	LANDSCAPE/TREE REMOVAL PLAN
11-12	BUILDING ELEVATIONS

July 29, 2019

GTC Engineering Corporation

98 South Semoran Blvd, Orlando, FL 32807
407-380-0402

Certificate of Authorization Number 6758

Claude L. Cassagnol, P.E.
P.E. Number 35490

H:\Jobs1\CYN01 30 N Park\DGN\PD\CYN01Cov.dgn
7/31/2019 5:50:33 PM

LEGAL DESCRIPTION: (OVERALL PARCEL)
A parcel of land lying in Section 22, Township 22 South, Range 27 East, Orange County, Florida, being a portion of the land described in Official Records Book 5017, Pages 3567 through 3586, Public Records of Orange County Florida Being more particularly described as follows:

Commencing at the Southeast corner of the Northeast 1/4 of Section 22, Township 22 South, Range 27 East, Orange County, Florida, run North 00°02'23" East for a distance of 2,288.96 feet along the East boundary of said Northeast 1/4 to a point on the Northerly right-of-way line of the former Tavares and Gulf Railroad as described and recorded in Deed Book 104, Page 407, Public Records of Orange County, Florida for the said point also being on the Southerly right-of-way line of the former Orange Belt Railway Company Railroad as described and recorded in Deed Book 40, Page 275, Public Records of Orange County, thence departing aforesaid East boundary line of Section 22, run South 79°45'29" West along said Southerly right-of-way line for a distance of 30.49 feet to a point on the West right of way line of North Park Avenue and the POINT OF BEGINNING; thence continue South 79°45'29" West along aforesaid Southerly right of way for a distance of 411.94 feet to the point on a non tangent curve, concave Northerly having a radius of 600.00 feet, with a chord bearing of South 89°01'39" West, and a chord distance of 38.99 feet, thence run Westerly through a central angle of 03°43'26"along the arc of said curve for a distance of 39.00 feet to a point of reverse curvature of a curve; concave Southerly having a radius of 600.00 feet and a central angle of 06°34'16" with a chord bearing of South 87°36'14" West, and a chord distance of 68.78 feet, thence run Westerly along the arc of said curve for a distance of 68.81 feet to a point on a non tangent line; thence run North 10°14'31" West for a distance of 34.33 feet; thence run North 79°45'29" East for a distance of 242.87 feet; thence run North 00°02'23" East for a distance of 50.82 feet; thence run North 79°45'29" East a distance of 284.76 feet to a point on the West right of way line of aforesaid North Park Avenue; thence run South 00°02'23" West along said West right of way line for a distance of 101.63 feet to the POINT OF BEGINNING.

Containing 39486.81 square feet or 0.91 acres, more or less.

SURVEYOR'S NOTES ON SCHEDULE BII OF TITLE COMMITMENTS:

Parcel "A" as prepared by First American Title Insurance, File Number 2037-3714555, Effective Date of February 22, 2017 at 8:00 A.M.

9. Easement Agreement in favor of Florida Power Corporation recorded December 19, 1995 in Book 4989, Page 2317. does not affect subject property and is shown hereon.

Parcel "B" as prepared by Manzo & Associates, P.A., Order Number 6209635, Customer Reference Number 2017023631, Effective Date of February 7, 2017 at 11:00 P.M..

6. Deed recorded in Official Records Book 4989, Page 2317. Affects subject property and is shown hereon.

7. Easement Agreement in favor of Florida Power Corporation recorded December 19, 1995 in Book 4989, Page 2317. does not affect subject property and is shown hereon.

VACINITY MAP (NOT TO SCALE)

SURVEYOR'S NOTES:

1. Bearings shown hereon are based on the West right-of-way line of N. Park Ave. as being N00°02'23"E. (an assumed bearing for angular designation only)

2. There may be easements and restrictions of record and/or private agreements not furnished to this surveyor or shown on this boundary survey that may affect property rights and/or land use rights of the subject property.

3. This Survey was performed with the benefit of Insurance Title Commitments. Parcel "A" as prepared by First American Title Insurance, File Number 2037-3714555, Effective Date of February 22, 2017 at 8:00 A.M. and Parcel "B" as prepared by Manzo & Associates, P.A., Order Number 6209635, Customer Reference Number 2017023631, Effective Date of February 7, 2017 at 11:00 P.M..

4. There may be environmental issues and/or other matters regulated by various Departments of Federal, State or Local Governments affecting the subject property not shown on this survey.

5. This Survey was performed for the sole and exclusive benefit of the entities listed hereon and shall not be relied upon by any other entity or individual whomsoever.

6. This Survey is not valid without the signature and original raised seal of a Florida licensed surveyor and mapper.

7. Underground utilities and improvements were not located, unless shown hereon.

8. Underground utilities shown hereon were located and marked by the individual utility companies. This surveyor only shows these above ground markings as field located and is not responsible for inaccurate and/or possible utilities not shown.

9. Subject property shown hereon is in Zone X, area determined to be outside the 0.2% annual chance floodplain, according to Flood Insurance Rate Map panel number 12095C0205F, map date 9/25/2009.

10. Last date in field: February 24, 2017.

CERTIFICATION TO:

_____

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 8, 11, AND 13 OF TABLE A THEREOF.

FOR THE LICENSED BUSINESS #6723 BY:

5/21/2019

JAMES L. RICKMAN, Jr. PSM #5633

ALLEN & COMPANY
Professional Surveyors & Mappers
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355

SHEET 2

BOUNDARY and TOPOGRAPHIC SURVEY
OF
NORTHWEST CORNER OF PARK AVE. & PLANT ST.
SECTION 22, TOWNSHIP 22 SOUTH, RANGE 27 EAST
ORANGE COUNTY, FLORIDA

FOR:

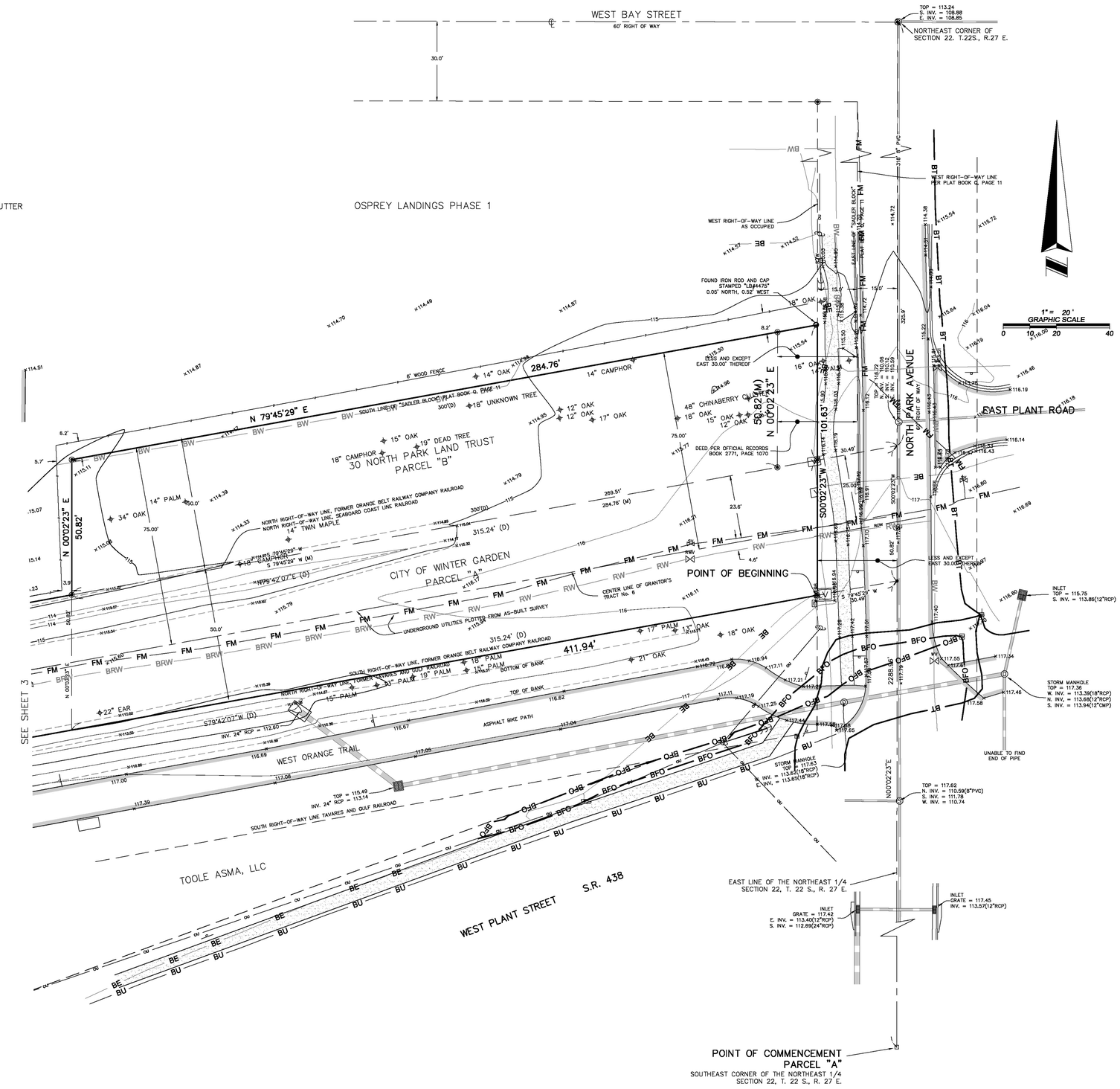
DATE	REVISIONS
5/21/19	ADD NEW LEGAL
4/24/19	ADD TREES AND INVERTS

JOB #	20180751
DATE:	2/15/2019
SCALE:	1" = 20'
CALC BY:	DY/JLR
FIELD BY:	CD/JS/AH
DRAWN BY:	DY/JLR
CHECKED BY:	JJ/JLR

SHEET 1 OF 3

LEGEND

- AIR RELEASE VALVE
- DRAINAGE MANHOLE
- SIGN
- SEWER VALVE
- CONCRETE SIGNAL POLE
- TELEPHONE RISER
- UTILITY POLE
- WOOD PRIVACY FENCE
- POST AND RAIL FENCE
- OVERHEAD UTILITY LINE
- GUY ANCHOR
- CONCRETE
- ASPHALT PAVING WITH 2' CURB & GUTTER
- ASPHALT PAVING
- MITRED END SECTION
- FM — SANITARY FORCE MAIN
- RW — RECLAIMED WATER LINE
- SET 1/2" IRON ROD AND CAP STAMPED "LB#6723"
- BT — BURIED TELEPHONE LINE
- BW — BURIED WATER LINE
- BE — BURIED ELECTRIC LINE
- BFO — BURIED FIBER OPTIC LINE



ALLEN & COMPANY
Professional Surveyors & Mappers

16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355

SHEET 3

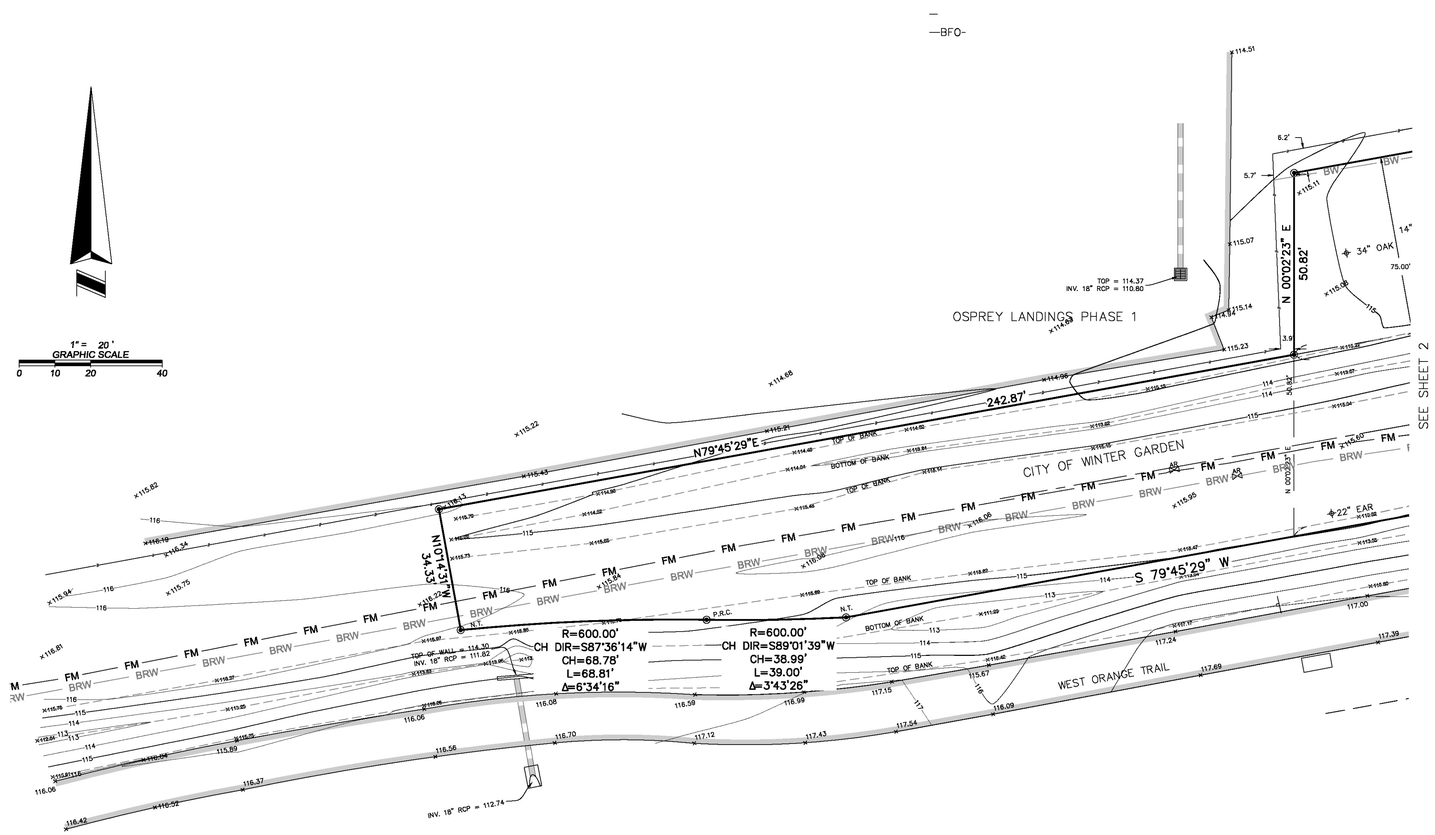
BOUNDARY and TOPOGRAPHIC SURVEY
OF
NORTHWEST CORNER OF PARK AVE. & PLANT ST.
SECTION 22, TOWNSHIP 22 SOUTH, RANGE 27 EAST
ORANGE COUNTY, FLORIDA

FOR:

DATE	REVISIONS
4/24/19	ADD TREES AND INVERTS

JOB #	20180751
DATE:	2/15/2019
SCALE:	1" = 20'
CALC BY:	DY/JLR
FIELD BY:	CD/JS/AH
DRAWN BY:	DY/JLR
CHECKED BY:	JJ/JLR

SHEET 2 OF 3



ALLEN & COMPANY
Professional Surveyors & Mappers
16 EAST PLANT STREET
WINTER GARDEN, FLORIDA 34787
(407) 654-5355

SHEET 4

BOUNDARY and TOPOGRAPHIC SURVEY
OF
NORTHWEST CORNER OF PARK AVE. & PLANT ST.
SECTION 22, TOWNSHIP 22 SOUTH, RANGE 27 EAST
ORANGE COUNTY, FLORIDA

FOR:

DATE	REVISIONS

JOB #	20180751
DATE:	2/15/2019
SCALE:	1" = 20'
CALC BY:	DY/JLR
FIELD BY:	CD/JS/AH
DRAWN BY:	DY/JLR
CHECKED BY:	JJ/JLR

SHEET 3 OF 3

PROPOSED VARIANCE REQUESTS:

SEC. 118-923 - MINIMUM COMMON RECREATION AND OPEN SPACE.
FOR A RESIDENTIAL PLANNED UNIT DEVELOPMENT, THE MINIMUM COMMON RECREATION AND OPEN SPACE SHALL BE 20 PERCENT OF GROSS SITE ACREAGE. THE TERM "COMMON RECREATION AND OPEN SPACE" SHALL BE DEFINED AS THE TOTAL AMOUNT OF IMPROVED USABLE AREA, INCLUDING OUTDOOR SPACE, PERMANENTLY SET ASIDE AND DESIGNATED ON THE SITE PLAN AS RECREATIONAL OR OPEN SPACE FOR USE BY RESIDENTS OF THE PUD. SUCH USABLE SPACE MAY BE IN THE FORM OF ACTIVE OR PASSIVE RECREATION AREAS, INCLUDING BUT NOT LIMITED TO PLAYGROUNDS, GOLF COURSE, WATER FRONTAGE, NATURE TRAILS, LAKES, AND WETLAND AREAS.

VARIANCE REQUEST: REQUEST THAT MINIMUM COMMON RECREATION AND OPEN SPACE BE DEFINED AS SHOWN

SEC. 118-924 C - MINIMUM LOT AREA, FRONTAGE AND SETBACKS.
THE MINIMUM DISTANCE BETWEEN STRUCTURES AND SIDE YARDS SHALL BE AS FOLLOWS: FOR TOWNHOUSES, UNPLATTED RESIDENTIAL DEVELOPMENT, COMMERCIAL DEVELOPMENT, AND ALL DEVELOPMENT OTHER THAN SINGLE-FAMILY PLATTED LOTS, THE DISTANCE BETWEEN STRUCTURES SHALL BE AS FOLLOWS:

A. BETWEEN STRUCTURES OF 20 FEET IN HEIGHT OR LESS: 15 FEET.
B. BETWEEN STRUCTURES OF 20 AND 30 FEET IN HEIGHT: 20 FEET.
C. BETWEEN STRUCTURES OF 30 FEET AND 40 FEET IN HEIGHT: 25 FEET.
D. BETWEEN STRUCTURES OVER 40 FEET IN HEIGHT: 40 FEET, PLUS FIVE FEET FOR EACH ADDITIONAL TEN FEET OF HEIGHT OR FRACTION THEREOF OVER 40 FEET.

VARIANCE REQUEST: REQUEST THAT THE MINIMUM DISTANCE BETWEEN STRUCTURES BE DEFINED AS SHOWN

SEC. 118-924 D - MINIMUM LOT AREA, FRONTAGE AND SETBACKS.
A MINIMUM 25-FOOT YARD SHALL BE REQUIRED FROM THE NEAREST PART OF ANY BUILDING WALL TO THE EDGE OF ANY PUBLIC RIGHT-OF-WAY OR PRIVATE STREET, AND ALL STRUCTRUES SHALL HAVE A MINIMUM 20-FOOT REAR YARD. A MINIMUM 25-FOOT YARD SHALL BE MAINTAINED BETWEEN THE WALLS OF ALL STRUCTURES AND THE PERIMETER OF THE PUD. ADDITIONAL PERIMETER YARD REQUIREMENTS FOR MULTISTORY BUILDINGS SHALL BE FIGURED AT FIVE ADDITIONAL FEET FOR EACH TEN FEET OF HEIGHT OVER THE FIRST STORY.

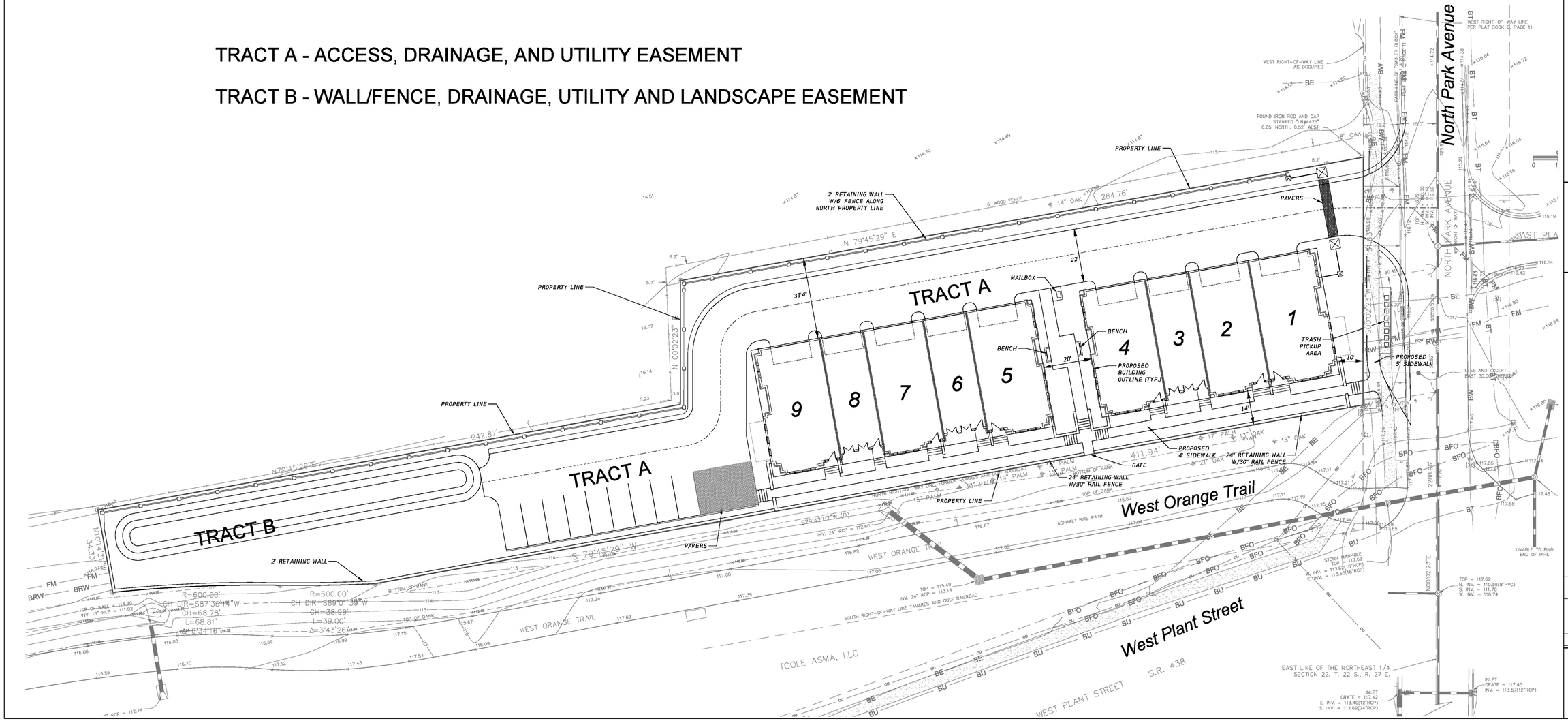
VARIANCE REQUEST: REQUEST THAT BUFFER YARD AND SETBACKS BE DEFINED AS SHOWN

PROJECT DATA:

1.	EXISTING FLU	MR
	EXISTING ZONING	R-2
2.	PROPOSED FLU:	MR
	PROPOSED ZONING:	PUD
3.	ADJACENT ZONING:	NORTH - R-2, WEST - R-3
		SOUTH - R-2/R-NC, EAST - R-1B
4.	UTILITIES:	WATER, SEWER AND STORMWATER TO BE PROVIDED BY CITY OF WINTER GARDEN
5.	POWER UTILITY SERVICE:	DUKE ENERGY
6.	BLDG HEIGHT:	50 FT (MAX)
		45 FT (PROPOSED)
7.	TOTAL BUILDING AREA:	9,500 GSF
8.	NO. OF UNITS	9 TOWNHOME UNITS
9.	DENSITY:	10 DU/AC (MAX)
		9.9 DU/AC (PROPOSED)
10.	GROSS/NET ACREAGE:	0.91 ACRES (39483 SF)
11.	CONSTRUCTION PLAN PHASING:	THIS DEVELOPMENT SHALL BE CONSTRUCTED IN ONE PHASE
12.	STORMWATER UTILITY SERVICE:	STORMWATER RETENTION SHALL COMPLY WITH THE CITY OF WINTER GARDEN REGULATIONS AND THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) REGULATIONS.
13.	SOIL TYPES:	BASINGER FINE SAND, (SOIL UNIT NO. 3)
14.	BUILDING SETBACKS PROVIDED	FRONT (PARK AVENUE) = 10 FT
		SIDE (NORTH) = 35 FT
		SIDE (ORANGE TRAIL/PLANT ST) = 14 FT
		REAR = IN EXCESS OF 50 FT
15.	BUFFER YARDS PROVIDED	FRONT (PARK AVENUE) = 10 FT MIN.
		SIDE (NORTH) = 36 FT
		SIDE (ORANGE TRAIL/PLANT ST) = 14 FT
		REAR = IN EXCESS OF 50 FT
16.	OPEN SPACE PROVIDED	32 %
17.	PARKING SPACES	REQUIRED = 2 SPACES/DU * 9 DU = SPACES
		PROVIDED = 9 UNITS * 2 GARAGE SPACES + 9 SPACES = 27 SPACES

TRACT A - ACCESS, DRAINAGE, AND UTILITY EASEMENT

TRACT B - WALL/FENCE, DRAINAGE, UTILITY AND LANDSCAPE EASEMENT



Florida

City of Winter Garden

PRELIMINARY SITE PLAN

30 North Park PD at Winter Garden

Claude L. Cassagnol, P.E.

P.E. Number 51490

DATE 05-29-19 | JOB NUMBER CYN-01 | SHEET 5

H:\Jobs1\CYN01 30 N Park\DGN\PD\CYN01PSP.dgn

GTC Engineering Corporation
98 South Semoran Blvd, Orlando, FL 32807
(407) 382-0067
Certificate of Authorization Number 6738

FIELD: ALLEN
CADD BY: CMY
CHECKED BY: CLC
DESIGNED BY: CMY/CLC

DATE	BY	DESCRIPTION

REVISIONS

N

SCALE: 1"=20'

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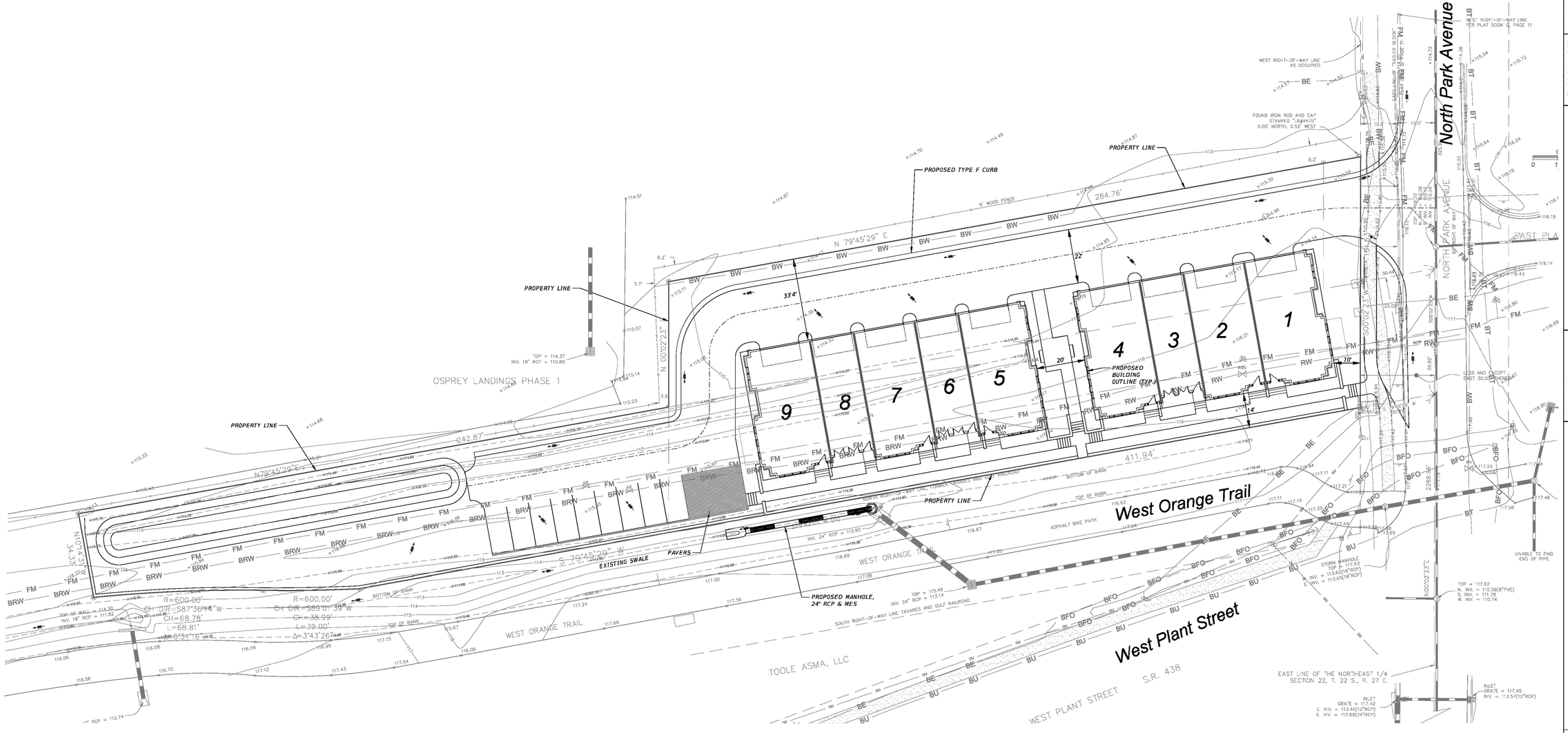

Florida

City of Winter Garden

PRELIMINARY DRAINAGE PLAN

30 North Park PD at Winter Garden

Claude L. Cassagnol, P.E.

P.E. Number 51490

DATE 05-25-19

JOB NUMBER CYN-01

SHEET 6

GTC Engineering Corporation

98 South Semoran Blvd, Orlando, FL 32807
(407) 657-1900
Certificate of Authorization
Number 6738

FIELD: ALLEN

CADD BY: CMY

CHECKED BY: CLC

DESIGNED BY: CMY/CLC

DATE	BY	DESCRIPTION

REVISIONS

N

SCALE: 1"=20'

7/29/2019 10:19:42 AM

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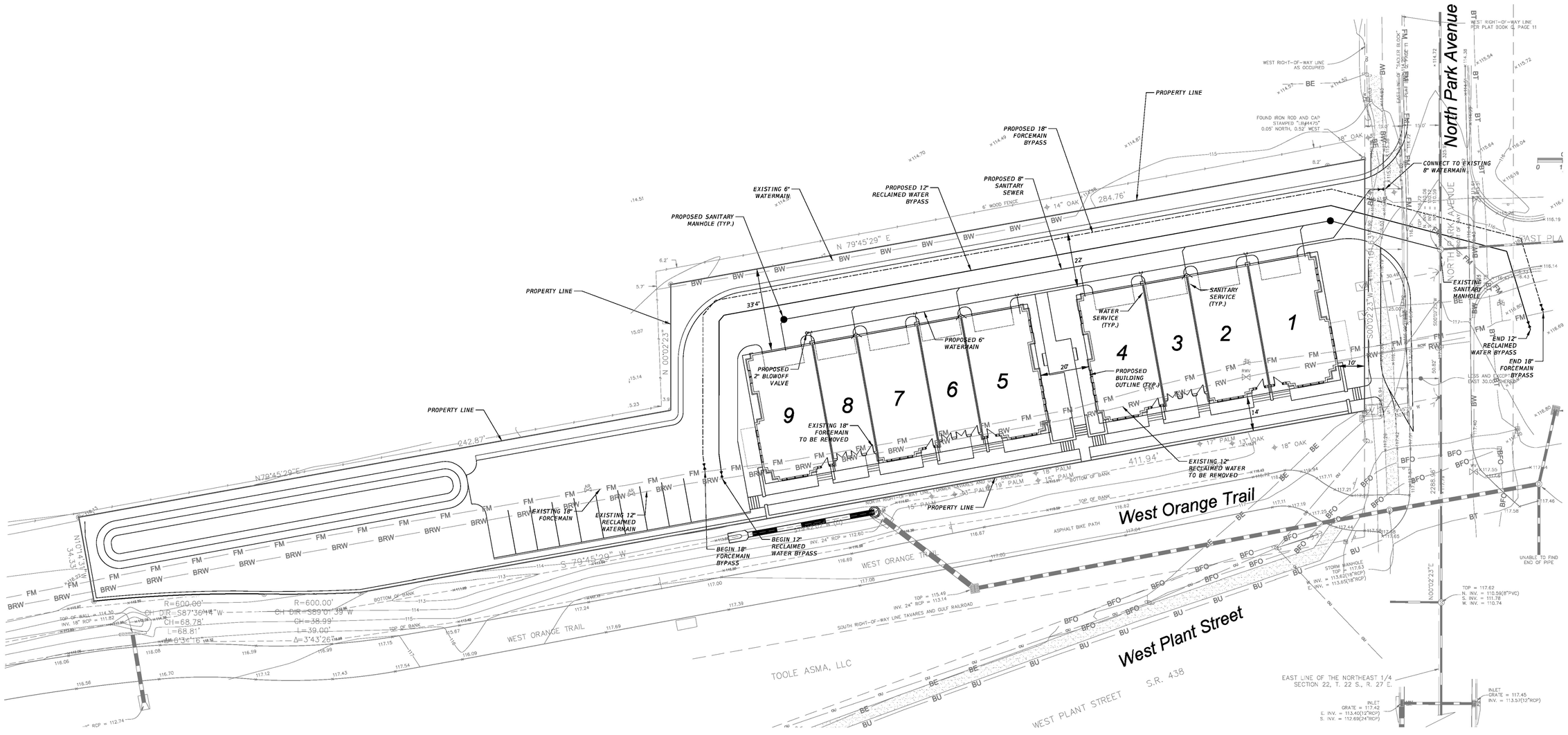
NOTES:

1. WATER AND SEWER TO BE OWNED AND MAINTAINED BY CITY OF WINTER GARDEN UTILITIES.
2. PIPE FLOWS SHALL BE MAINTAINED DURING RELOCATION OF 18" FORCE MAIN AND 12" WATER MAIN.



Florida

City of Winter Garden

PRELIMINARY UTILITY PLAN

30 North Park PD at Winter Garden

Claude L. Cassagnol, P.E.

P.E. Number 15490

DATE 05-25-18

JOB NUMBER CYN-01

SHEET 7

H:\Jobs1\CYN01 30 N Park\DGN\PD\CYN01-UTIL.dgn

GTC Engineering Corporation

98 South Semoran Blvd, Orlando, FL 32807
(407) 657-1000
Certificate of Authorization Number 6738

FIELD: ALLEN

CADD BY: CMY

CHECKED BY: CLC

DESIGNED BY: CMY/CLC

DATE	BY	DESCRIPTION

REVISIONS

N

SCALE: 1"=20'

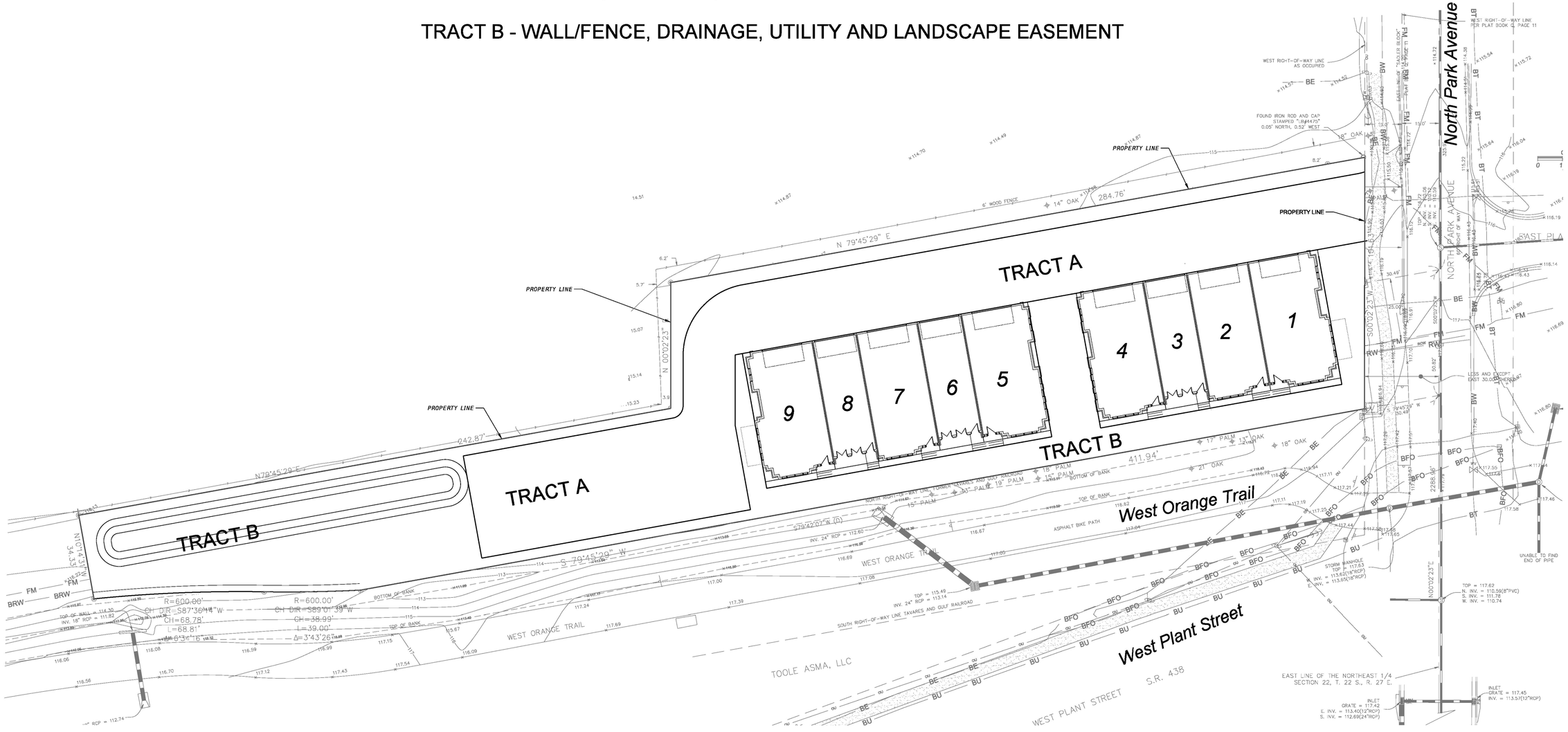
7/26/2019 10:19:53 AM

1. TOWNHOME UNITS TO BE PLATTED.

2. TRACTS A & B WILL BE DEDICATED TO PROPERTY OWNERS ASSOCIATION FOR OWNERSHIP & MAINTENANCE.

TRACT A - ACCESS, DRAINAGE, AND UTILITY EASEMENT

TRACT B - WALL/FENCE, DRAINAGE, UTILITY AND LANDSCAPE EASEMENT



Florida

City of Winter Garden

LOT LAYOUT PLAN

30 North Park PD at Winter Garden

Claude L. Cassagnol, P.E.

P.E. Number 51490

DATE 05-29-19

JOB NUMBER CYN-01

SHEET 8

H:\Jobs1\CYN01 30 N Park\DGN\PD\CYN01-LOT LAYOUT.dgn

GTC Engineering Corporation

98 South Semoran Blvd, Orlando, FL 32807
407-657-1900
Certificate of Authorization Number 6738

FIELD: ALLEN

CADD BY: CMY

CHECKED BY: CLC

DESIGNED BY: CMY/CLC

REVISIONS		
DATE	BY	DESCRIPTION
-	-	
-	-	
-	-	
-	-	
-	-	
-	-	

N

SCALE: 1"=20'

7/26/2019 7:51:21 PM

CANOPY TREE REMOVAL SUMMARY

CAL. SIZE	SPECIES
34"	OAK
15"	OAK
12"	OAK
12"	OAK
17"	OAK
18"	OAK
15"	OAK
12"	OAK
16"	OAK
14"	MAPLE

PALM TREE REMOVAL SUMMARY

CAL. SIZE	SPECIES
14'	PALM

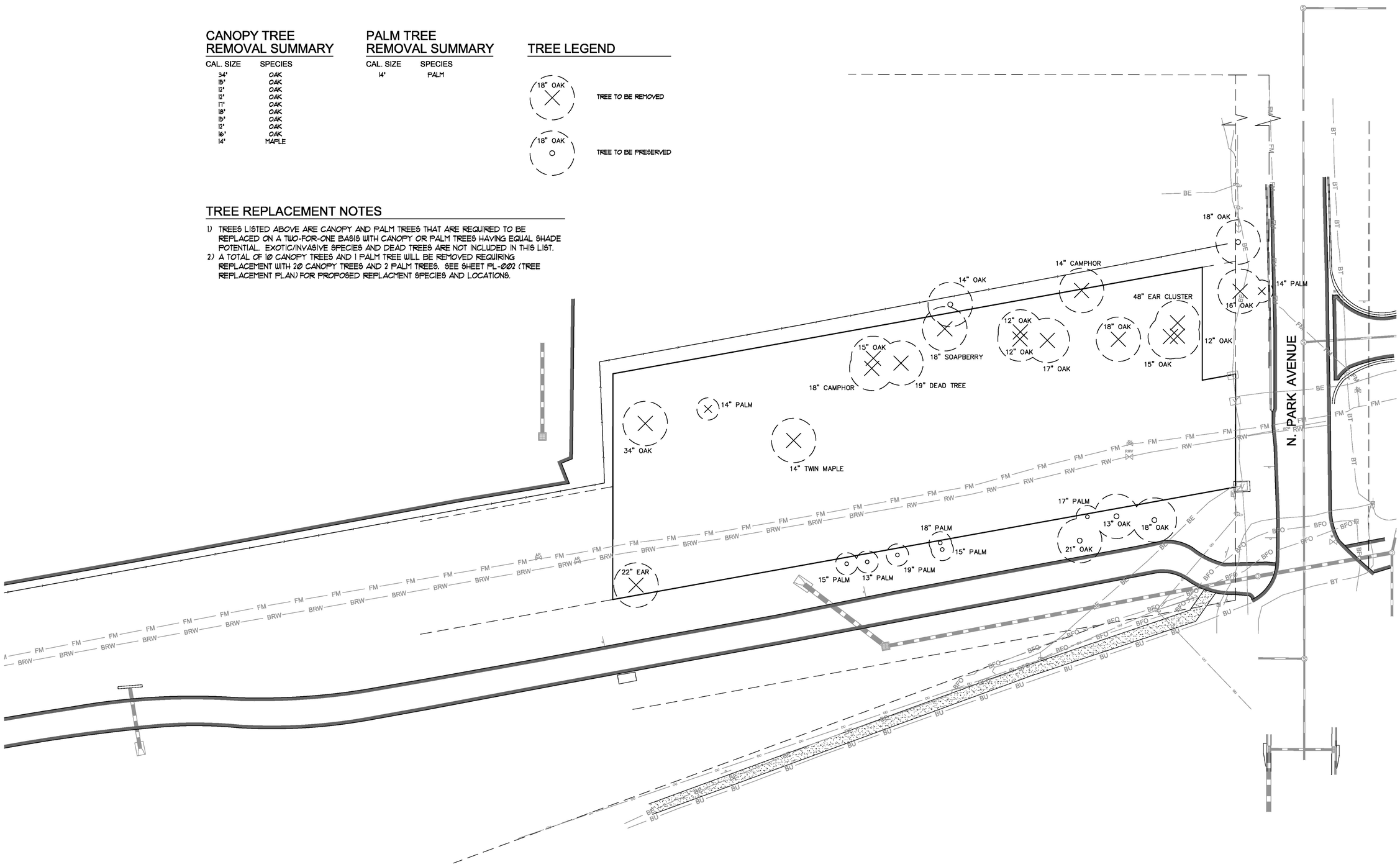
TREE LEGEND

18" OAK — TREE TO BE REMOVED

18" OAK — TREE TO BE PRESERVED

TREE REPLACEMENT NOTES

1) TREES LISTED ABOVE ARE CANOPY AND PALM TREES THAT ARE REQUIRED TO BE REPLACED ON A TWO-FOR-ONE BASIS WITH CANOPY OR PALM TREES HAVING EQUAL SHADE POTENTIAL. EXOTIC/INVASIVE SPECIES AND DEAD TREES ARE NOT INCLUDED IN THIS LIST.
2) A TOTAL OF 10 CANOPY TREES AND 1 PALM TREE WILL BE REMOVED REQUIRING REPLACEMENT WITH 20 CANOPY TREES AND 2 PALM TREES. SEE SHEET PL-002 (TREE REPLACEMENT PLAN) FOR PROPOSED REPLACMENT SPECIES AND LOCATIONS.



FOSTER CONANT & ASSOCIATES

120 West Robinson Street
Orlando, Florida 32801-1617
Phone (407) 648-2225
www.fosterconant.com

Seal

Revisions

Project

30 N. PARK TOWNHOMES

CITY OF WINTER GARDEN, FL

TREE PRESERVATION PLAN

Date: 06/05/19
Scale: 1"=20'
Drawn: CPB Checked: RRC
File Name: 30NPAPL001.DWG
North

Sheet
PL-001

SHEET 9

USER:PW, CHRISBSYS06
FILE NAME: F:\30 N PARK AVE\WP\30NPA-PL001.DWG
XREFS:
TIME: 26 JUL 2019 - 2:47PM

PLANT LIST

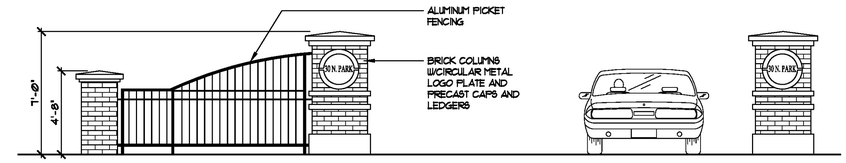
SYMBOL	QUANTITY	PLANT TYPE	SPECIES
	6	CANOPY TREE	LIVE OAK (QUERCUS VIRGINIANA)
	5	CANOPY TREE	RED MAPLE (ACER RUBRUM)
	9	CANOPY TREE	BALD CYPRESS (TAXODIUM DISTICHUM)
	12	UNDERSTORY TREE	JAPANESE BLUEBERRY (ELAEGNUS DECIPIENS)
	4	UNDERSTORY TREE	CABBAGE PALM (SABAL PALMETTO)
	2	UNDERSTORY TREE	RED ROBIN HOLLY (ILEX 'RED ROBIN')
	4	UNDERSTORY TREE	PYGMY DATE PALM (PHOENIX ROEBELENII)
	12	SPECIMEN SHRUB	PODOCARPUS (PODOCARPUS MACROPHYLLUS)
	133	HEDGE SHRUB	DWARF BURFORD HOLLY (ILEX CORNUTA 'NANA BURFORDII')
	TBD	LOW SHRUB/GROUNDCOVER	DWARF YAUPON HOLLY (ILEX VOMITORIA 'STOKES DWARF') DWARF GOLDEN DEWDROP (DURANTA ERECTA 'GOLD MOUND') INDIAN HAWTHORN (RAPHIOLEPIS INDICA) DWARF SCHEFFLERA (SCHEFFLERA ARBORICOLA 'TRINETTE') GIANT BORDER GRASS (LIRIOPE MUSCARI 'EMERALD GODDESS') LILY OF THE NILE (AGAPANTHUS AFRICANUS) DWARF ASIATIC JASMINE (TRACHELOSPERMUM ASIATICUM 'MINIMA') PARSONS JUNIPER (JUNIPERUS CHINENSIS 'PARSONII')

MITIGATION NOTES

1) PER CODE REQUIREMENT, THE 1 REMOVED PALM IS BEING MITIGATED WITH 4 PROPOSED CABBAGE PALMS.
2) PER CODE REQUIREMENT, THE 10 REMOVED CANOPY TREES NEED TO BE MITIGATED FOR WITH 20 NEW CANOPY TREES. THE PROPOSED CANOPY MITIGATION AS SHOWN BELOW CONSISTS OF A TOTAL OF 20 CANOPY TREES AND 22 UNDERSTORY TREES FOR A TOTAL OF 42 MITIGATION TREES.

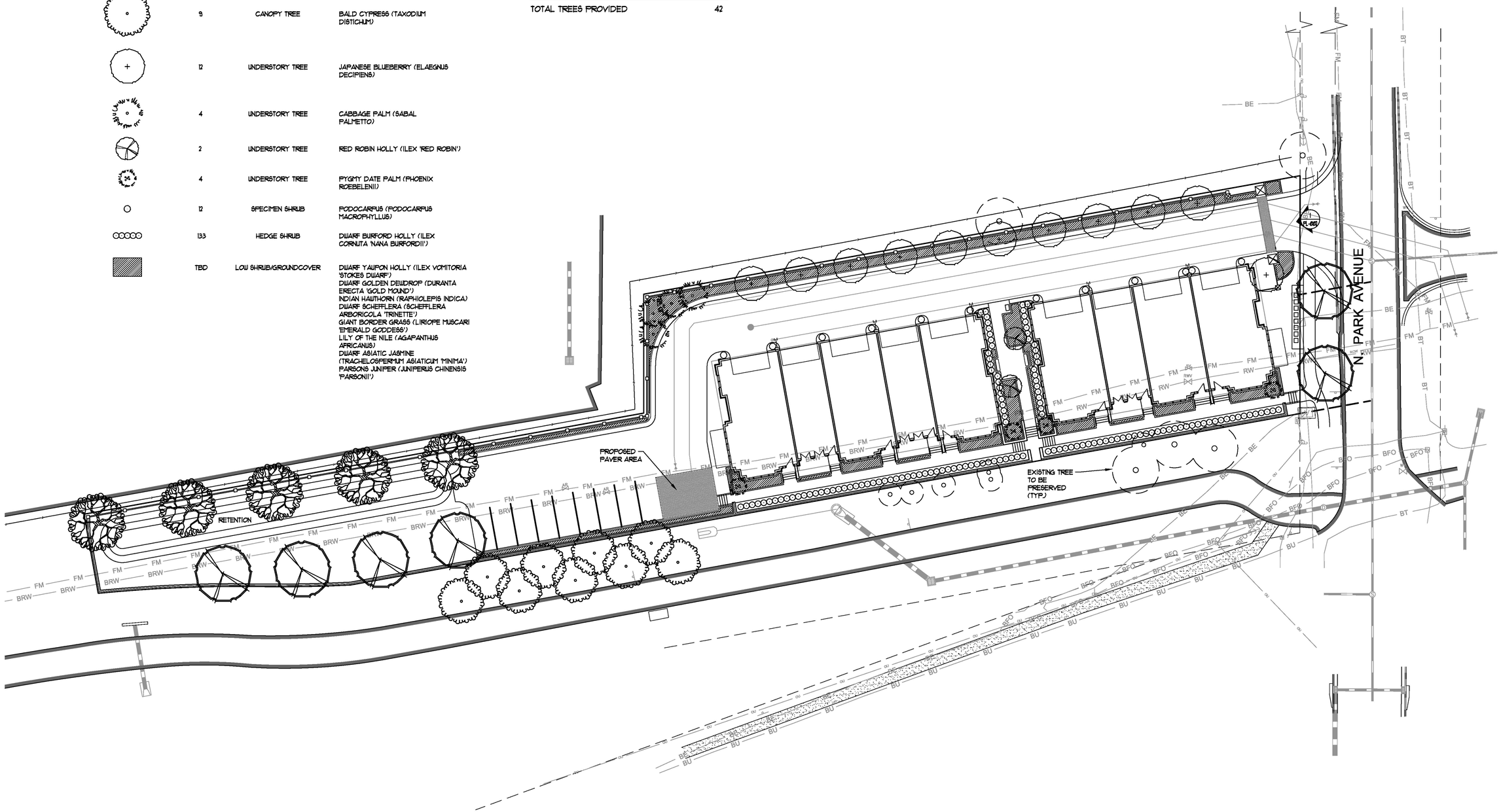
TREE PROVISION SUMMARY

CANOPY TREES PROVIDED ON SITE	11
UNDERSTORY TREES PROVIDED ON SITE	22
CANOPY TREES PROVIDED OFF SITE	9
TOTAL TREES PROVIDED	42



1 ENTRANCE ELEVATION

SCALE: 1/4"=1'-0"



FOSTER CONANT & ASSOCIATES
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Phone (407) 648-2225
www.fosterconant.com

Seal

Revisions

Project

30 N. PARK TOWNHOMES

CITY OF WINTER GARDEN, FL

TREE MITIGATION PLAN

Date: 06/05/19
Scale: 1"=20'
Drawn: CPB Checked: RRC
File Name: 30NPAPL002.DWG
North

Sheet
PL-002

USERPW: CHRISBISYS06
FILE NAME: F:\30 N PARK AVE\WP\30NPA-PL002.DWG
XREFS:
TIME: 26 JUL 2019 - 2:48PM

Exhibit "C"

COVER PAGE

30 North Park

Architectural Elevations

(2 PAGES - ATTACHED)

5 UNIT - SOUTH

4 UNIT - SOUTH

SCALE:
3/32" @ 24x36

AESTHETICS DEPT.

SHEET 11

PROJECT:
30 N PARK TOWNHOMES
WINTER GARDEN FL

CLIENT:
CYNERGREEN
WINTER GARDEN FL

A1

ISSUE DATE
07-31-2019

5 UNIT - WEST

5 UNIT - EAST

4 UNIT - WEST

4 UNIT - EAST

SCALE:
1/8" @ 24x36

AESTHETICS DEPT.

SHEET 12

PROJECT:
30 N PARK TOWNHOMES
WINTER GARDEN FL

CLIENT:
CYNERGREEN
WINTER GARDEN FL

A2

ISSUE DATE
07-31-2019

CITY OF WINTER GARDEN

PLANNING & ZONING DIVISION

300 West Plant Street - Winter Garden, Florida 34787-3011 ● (407) 656-4111

STAFF REPORT

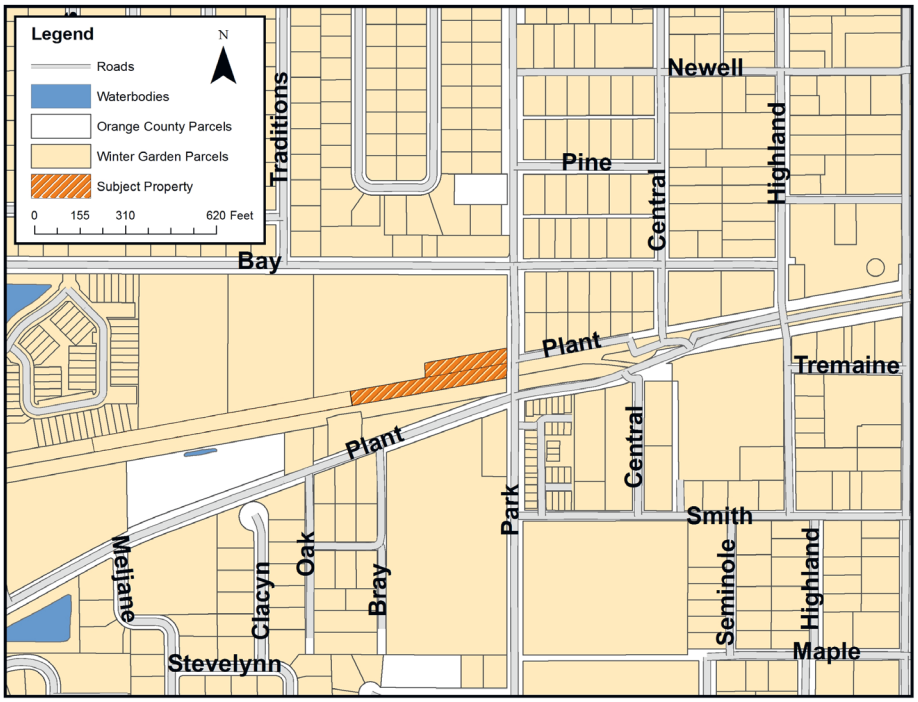
TO: PLANNING AND ZONING BOARD
PREPARED BY: KELLY CARSON, URBAN DESIGNER
DATE: SEPTEMBER 27, 2019
SUBJECT: FUTURE LAND USE & PUD ZONING
30 N Park Ave & S Park Ave (0.91 +/- ACRES)
30 N Park PUD
PARCEL ID # 22-22-27-0000-00-117 (A PORTION) (ORDS 19-47 & 19-48)
22-22-27-0000-00-090 (ORD 19-48)

APPLICANT: 30 North Park LLC

INTRODUCTION

The purpose of this report is to evaluate the proposed project for compliance with the City of Winter Garden Code of Ordinances and Comprehensive Plan.

The subject property consists of two parcels. One parcel is located at 30 N Park Avenue and the other parcel does not have an address, but is labeled as "S Park Avenue" by the Orange County Property Appraiser. The subject property is generally located north of West Plant Street, west of N/S Park Avenue, and south of W Bay Street and is approximately 0.91 ± acres. The map below depicts the location of the subject property within the City of Winter Garden municipal limits:



The applicant is requesting to change the Future Land Use Designation of an 0.58 acre portion of the parcel described as "S Park Ave" from No Future Land Use to Medium Density Residential and rezone this and the adjacent 0.33 acre property (30 N Park Ave) to Planned Unit Development.

The subject property is located in the City of Winter Garden and carries the zoning designations R-2 (Residential) and NZ (No Zoning). The subject property has a Future Land Use Designation of Medium Density Residential and No Future Land Use.

EXISTING USE

The subject property is currently undeveloped, with scattered trees and other vegetation.

ADJACENT LAND USE AND ZONING

The property to the north and west of the subject property is developed with multi-family residential buildings, is zoned R-2, and is located within the City of Winter Garden's jurisdictional limits. Also to the west is a portion of a City–owned parcel that is undeveloped, zoned NZ (No Zoning) and is located in Winter Garden. The property to the south is developed with a segment of the West Orange Trail, is zoned NZ (No Zoning) and is located in the City. The properties to the east of the subject property include another segment of the West Orange Trail and a property that is developed with a single-family residence. This property is zoned R-2 and is located in the City.

PROPOSED USE

The proposed development includes rezoning the property to PUD in order to develop 9 new townhome units over two separate buildings: one townhome building will include 5 units and the other will include 4 units. The property will also include associated site development such as common recreation areas, a surface parking lot, sidewalks, and a stormwater retention area. An existing 12" reclaimed water main and 18" force main are proposed to be moved to accommodate the new development.

APPROVAL CRITERIA

In accordance with the City's Comprehensive Plan and Land Development Regulations, a proposed planned unit development and its associated preliminary development plan may be approved only after competent, substantial evidence has been presented which allows the following determinations to be made: (staff conclusions/findings are underlined)

(1) The proposed PUD is consistent with the land development regulations, comprehensive plan and the future land use map;

The proposed PUD is consistent with the City's land development regulations, comprehensive plan, and the future land use map. See other portions of this report concerning consistency with the land development regulations. PUD Zoning is permitted with a Medium Density Residential (MR) Future Land Use Designation.

(2) The proposed PUD will not substantially devalue or prevent reasonable use and enjoyment of the adjacent properties;

The proposed PUD project will not deprive or prevent adjacent property owners of any rights or abilities to enjoy or continue existing uses of their property or to develop their property in accordance with the city's land development regulations and comprehensive plan goals, objectives, and policies. Further, in accordance with land development regulations and the comprehensive plan, where appropriate, the proposed PUD will provide for adequate buffering against adjoining properties and rights-of-way in the form of either landscaping to create a visual screen and/or perimeter walls/fencing. The site is located adjacent to the City's Historic Downtown District, where higher densities are permitted and connectivity is emphasized and also directly abuts an apartment complex to the north.

(3) Adequate public infrastructure facilities and water and sewer service to support the development of the proposed PUD are available or an agreement or binding conditions have been established that will provide these facilities, improvements and services in a reasonable time frame;

The existing potable water flow pressure of the City's utility system within the surrounding area is sufficient to support the development of the subject property. The property is not currently a water or sewer customer of the City of Winter Garden. At such time that the property is developed, the required utility connections will be made to serve the new townhome buildings. Furthermore, an existing 12" reclaimed water main and 18" force main are proposed to be moved to accommodate the new development. All extension and connection costs shall be borne by the property owner.

Prior to any board approvals, a Developer's Agreement detailing the obligations of the developer associated with the proposed PUD may be required. The requirement for a Developer's Agreement will be determined during the Final Engineering review.

(4) The proposed PUD will not allow a type or intensity of development that is premature or presently out of character in relationship to the surrounding area;

The proposed PUD project is consistent with the comprehensive plan's goals, objectives and policies for the Medium Density Residential future land use designation; the PUD zoning criteria; and the City's land development regulations. The proposed PUD project features a gross residential density of +/- 9.89 dwelling units per acre which is lower than the maximum density of 10 dwelling units per acre permitted within the Medium Density Residential future land use designation.

The proposed PUD is not premature or presently out of character in relationship to the surrounding area. The subject property is located on the northwest corner of W Plant Street and S Park Avenue, which is a prominent gateway site to the Downtown District from the west. The Winter Garden downtown district features a range of uses commercial, residential, institutional, mixed-use, etc. – all of which are located within close proximity to each other. Furthermore, there are many residential and commercial developments within the surrounding area which have similar or greater density and/or intensity than the proposed PUD project. The property to the north of the subject property is developed with numerous multifamily apartment buildings. The property to the south west of the subject property (Park Place) features numerous townhome buildings that have a gross residential density of 21 dwelling units per acre and some units are permitted a live/work component. Furthermore, there is a property in close

proximity to the subject property to the south that features two and three story multi-family residential buildings. Both of these properties feature the same type of development proposed by the applicant.

(5) The rezoning will not interfere with an adjacent property owner's reasonable expectation of use or enjoyment; and

In accordance with the City's comprehensive plan, the zoning designations permitted within the Medium Density Residential future land use designation include Planned Unit Development. Further, in accordance with land development regulations and the comprehensive plan, where appropriate, the proposed PUD will provide for adequate buffering against adjoining properties and rights-of-way in the form of either landscaping to create a visual screen and/or perimeter walls/fencing. The site is located adjacent to the City's Historic Downtown District, where higher densities are permitted and connectivity is emphasized; the new development should not interfere with the adjacent property owner's reasonable expectation of use or enjoyment.

(6) There is availability and adequacy of primary streets and thoroughfares to support traffic to be generated within the proposed PUD and the surrounding area, or an agreement or binding conditions have been established that will provide such transportation facilities to support said traffic in a reasonable time frame.

The adjacent street, N Park Avenue, has sufficient capacity to support the traffic generated by 9 new townhome units. In order to minimize potential trail conflicts, the property will only have one access point along N Park Avenue. The developer will also provide a new sidewalk connection along N Park Avenue and design internal sidewalks to accommodate increased pedestrian traffic. Furthermore, the location of the townhomes in close proximity to the myriad activities and destinations downtown is anticipated to result in a comparatively lower number of vehicular trips.

(7) The degree of departure or conformity of the proposed PUD with surrounding areas in terms of character and density.

The proposed PUD project is consistent with the comprehensive plan's goals, objectives and policies for the Medium Density Residential future land use designation, the PUD zoning criteria, and land development regulations. As stated above, the proposed PUD features a gross density of +/- 9.89 dwelling units per acre, which is lower than the maximum density of 10 dwelling units per acre permitted within the Medium Density Residential future land use designation.

(8) Compatibility of uses and improvements within the PUD and the relationship with surrounding existing or proposed developments.

The proposed PUD project integrates several elements that provide for cohesion between existing and proposed uses surrounding the property. The project includes construction of an internal sidewalk connection to N Park Ave to enhance pedestrian circulation in the area. The project will also include the preservation of open space areas in accordance with City Code requirements for common open space. Overall, the PUD features a medium density residential use that is consistent with the vibrant, mixed-use character of Winter Garden's downtown district. The project is located in

close proximity to the Plant Street Market, Crooked Can Brewery, several professional office buildings, as well as single-family and multi-family residences.

(9) Prevention of erosion and degrading or enhancement of the surrounding areas.

The proposed PUD project will not erode or degrade the environmental quality of the surrounding area. To the greatest extent possible, stormwater management features will be designed as landscape amenities. Proper erosion and sedimentation control measures will be taken during the construction process.

(10) Provision for recreation facilities, surface drainage, flood control and soil conservation as shown in the preliminary development plan.

The PUD must comply with the open space requirements of City Code as well as any recreation requirements for residential developments. The project currently complies with the City's open space requirements. For the recreation areas, the developer is still developing final plans for outdoor recreation spaces. If they are deficient, they will be required to pay into the City's recreation fund to compensate for the required recreation area that is unable to be located on site. The amount that the developer will have to contribute to the fund is based on the fair market value of the land that would have otherwise been dedicated to recreation uses. In addition, there is currently a plan for a new City park that will be located directly east of the property that will soon be available to meet the recreation needs of the new residents.

Stormwater management for the proposed PUD project will be provided in on-site stormwater management areas to satisfy the City of Winter Garden, St. John's Water Management District and strict requirements of the Wekiva Study Area criteria.

(11) The nature, intent and compatibility of any common open space, including the proposed method for the maintenance and conservation of the common open space.

The proposed PUD project will comply with the City's requirements for open space (20% per code section 118-923). The open spaces will be designated as platted tracts dedicated to the 30 N Park Homeowners Association, which will own and maintain them.

(12) The feasibility and compatibility of the specified stage(s) or phase(s) contained in the preliminary development plan to exist as an independent development.

The PUD is anticipated to be built in one phase. However, if the developer decides to phase the project, each phase of development of the proposed PUD project must operate as an individual unit in that each particular phase will be able to stand-alone in the event that no other phase is developed.

(13) The availability of existing or planned reclaimed water service to support the proposed PUD.

Reclaimed water capacity is currently available to serve the property on which the PUD is proposed to be developed. The project must make provisions for connecting to reclaimed lines. All required utility lines will be connected to serve the development, and all connection costs shall be borne by the property owner.

(14) The benefits within the proposed PUD development and to the general public to justify the requested departure from standard land use requirements inherent in a PUD classification.

The proposed PUD includes the requirement that the architecture meet a certain level of design and material quality, and also be consistent with the architectural traditions of downtown Winter Garden as well as exhibit aesthetic harmony with surrounding properties. The project will provide much-needed residential space to the downtown district, increasing the diversity of housing types. The townhomes will provide dwelling options that emphasize walkability and pedestrian activity, which will help create a more vibrant downtown.

(15) The conformity and compatibility of the proposed common open space, residential and/or nonresidential uses within the proposed PUD.

As stated previously, the proposed PUD project will comply with the City's requirements for open space (20% per code section 118-923). The residential use will exist harmoniously within the context of the Winter Garden downtown district. No nonresidential uses are proposed for the property.

(16) Architectural characteristics of proposed residential and/or nonresidential development.

A variety of architectural requirements have been incorporated into the townhome building standards in the proposed PUD project including requirements for architectural character, varying building massing, roof treatments, building projections and recesses, entryways and arcades, building articulation and theming, walls, and signage. While not in the Historic District, the architecture was required to be consistent and compatible with the building styles traditionally found in the Historic Downtown District.

(17) A listing of the specific types of nonresidential uses to be allowed.

The proposed PUD doesn't include any nonresidential uses.

PUBLIC FACILITY ANALYSIS

The City will provide garbage collection, police protection, and all other services regularly provided to City of Winter Garden residents including building permits. The property will be served by both Orange County Fire and Rescue and the City of Winter Garden Fire Department under the First Response System.

All concurrency requirements identified by the City of Winter Garden Code of Ordinances and Comprehensive Plan will be met by the proposed development.

COMMUNITY MEETING

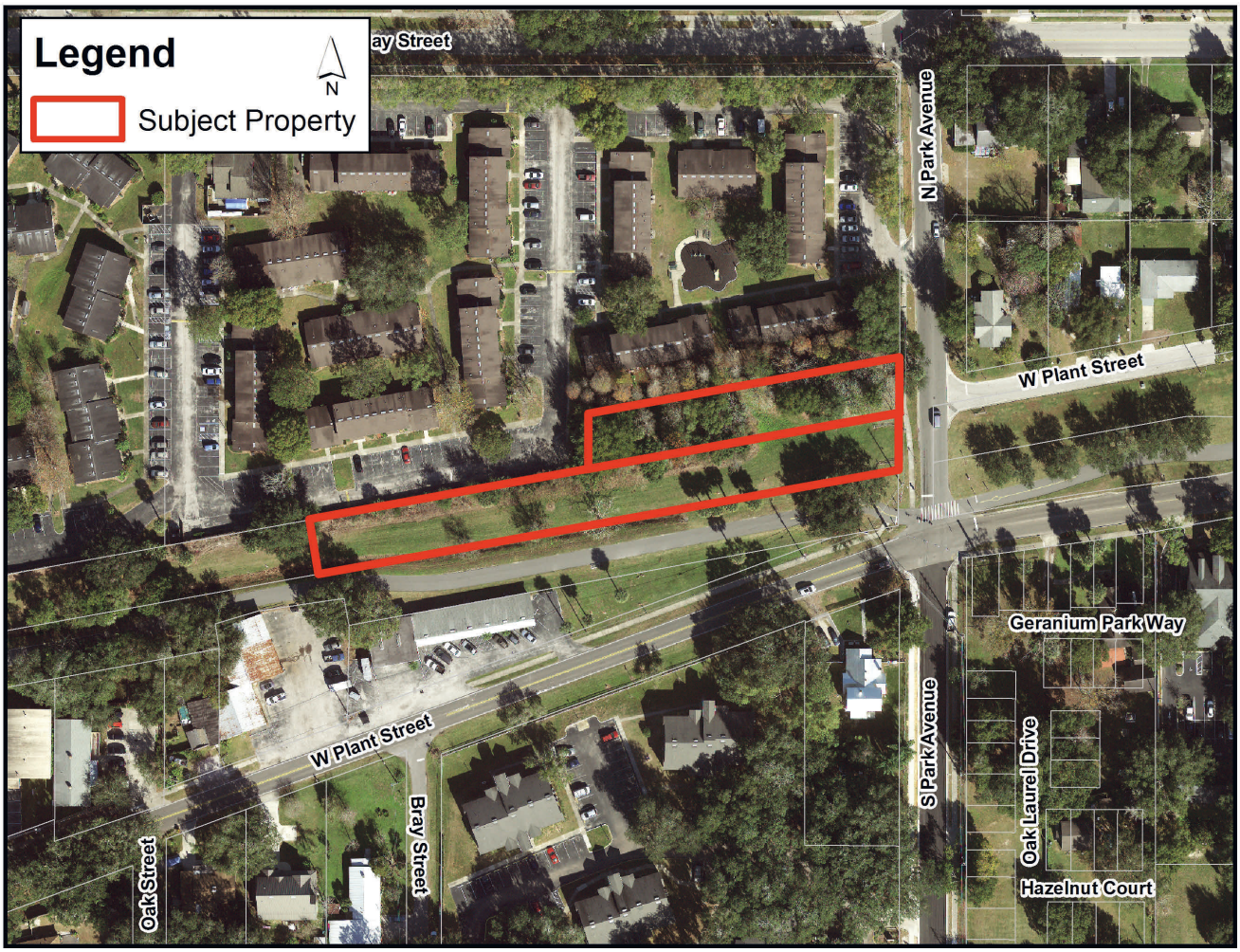
A Community Meeting was held on August 28, 2019 in the Winter Garden City Hall Chambers, at which time the applicant presented the proposal to develop two new townhomes buildings with a combined 9 residential units on the subject property. A brief question and answer session ensued, with the adjacent property owners in attendance inquiring about the existing trees on site, the design of the garages/driveways, and any potential traffic and trail conflicts. The response

was largely positive and no opposition to the proposed project was given at the meeting.

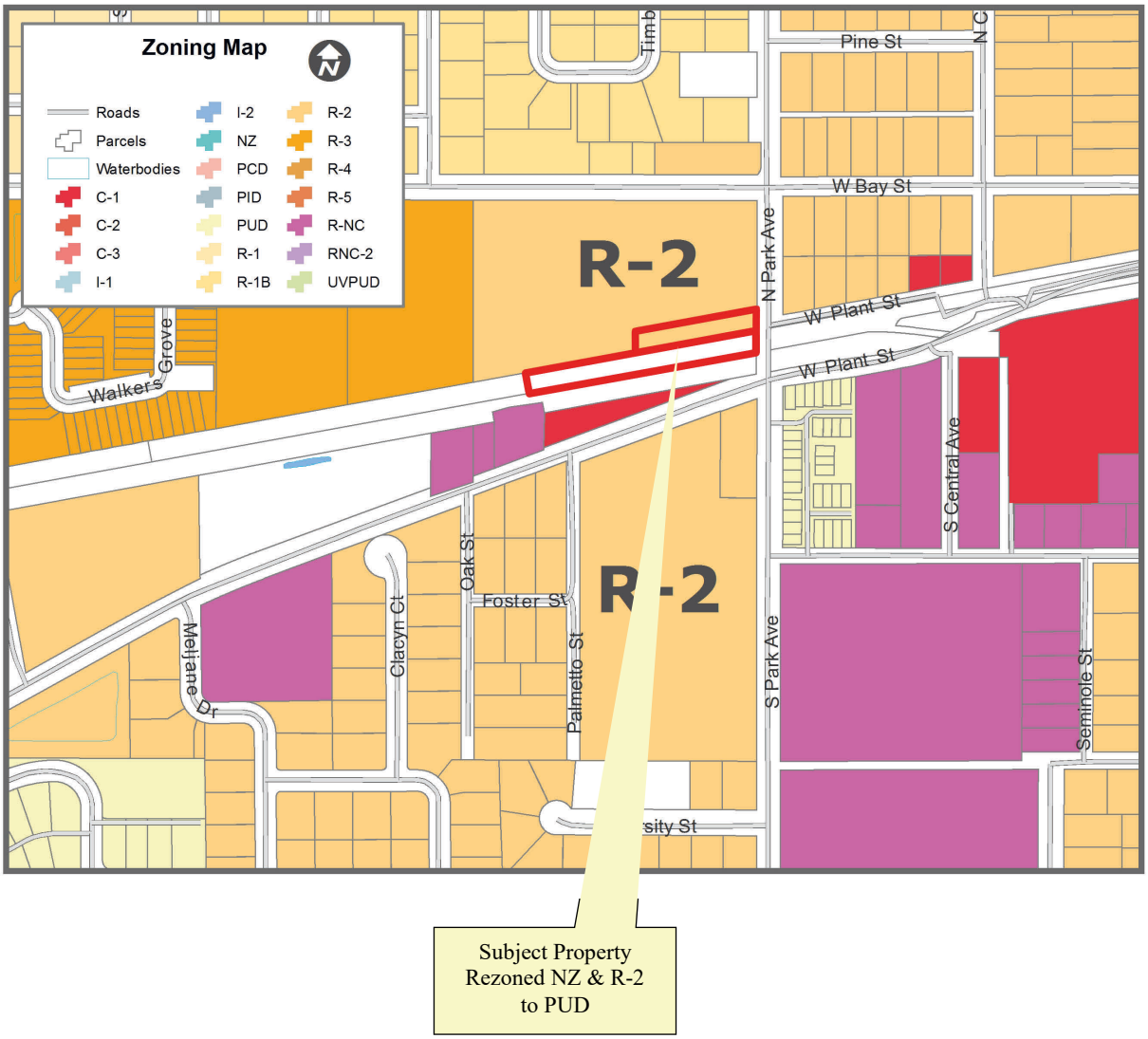
SUMMARY

City Staff recommends approval of the proposed Ordinances 19-47 and 19-48. Amending the future land use designation of a portion of the subject property from No Future Land Use to Medium Density Residential and rezoning the entire subject property from No Zoning and R-2 to PUD is consistent with the City's Comprehensive Plan, Future Land Use Map, and land development regulations, and is consistent with the trend of development in the area.

AERIAL PHOTO
30 N Park Ave & S Park Ave

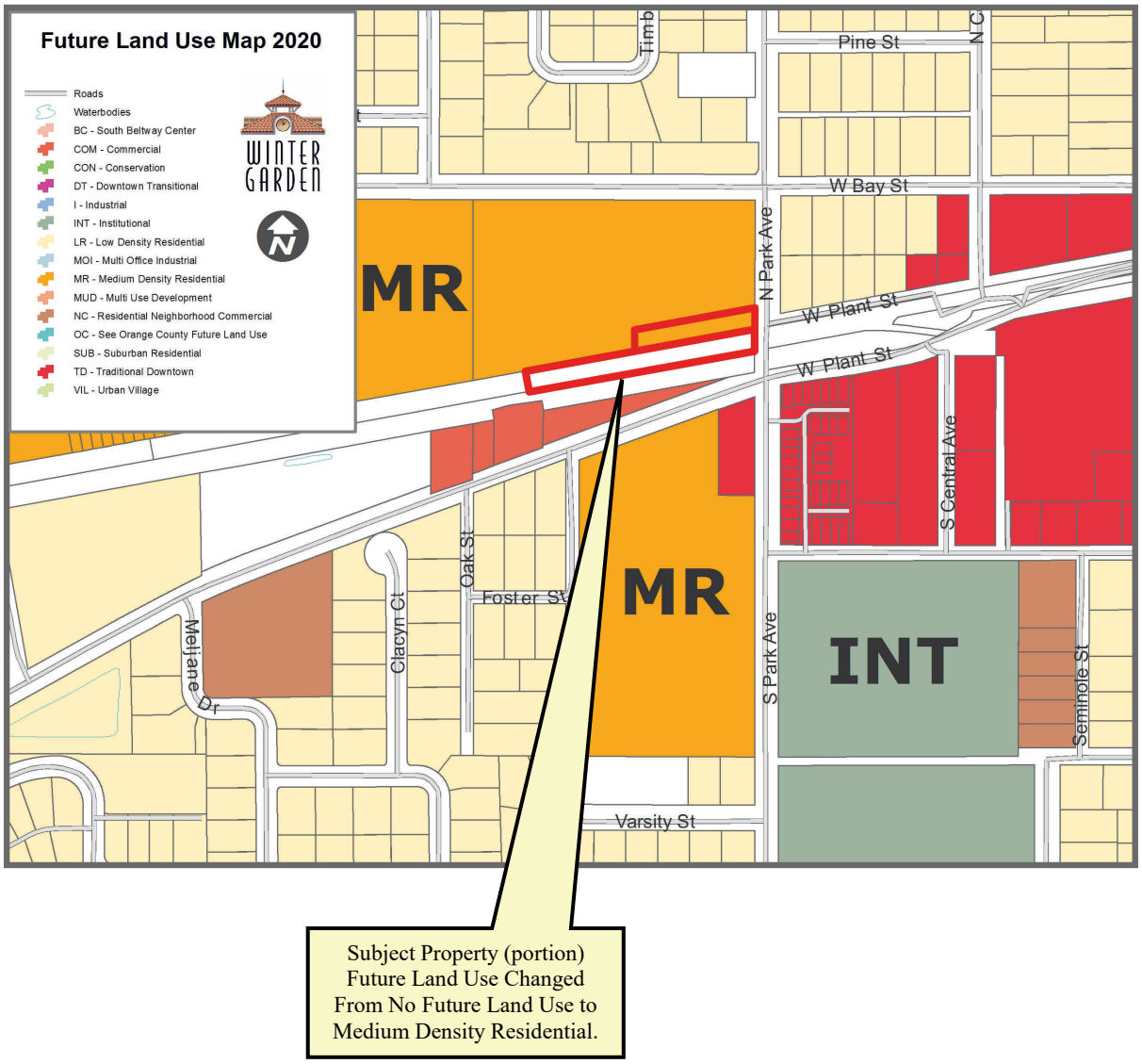


ZONING MAP
30 N Park Ave & S Park Ave



Subject Property
Rezoned NZ & R-2
to PUD

FUTURE LAND USE MAP
30 N Park Ave & S Park Ave



Subject Property (portion)
Future Land Use Changed
From No Future Land Use to
Medium Density Residential.

END OF STAFF REPORT

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Steve Pash, Community Development Director

Via: City Manager Mike Bollhoefer

Date: May 20, 2020 **Meeting Date:** May 28, 2020
Subject: **1577 & 894 Beard Road**
Ordinance 20-20 and 20-21
PARCEL ID # 25-22-27-0000-00-052; #25-22-27-0000-00-002

Issue: The applicant is requesting to requesting to change the future land use to of the 6.01 ± acre property from Low Density Residential to Commercial and rezone the property from R-1 (Residential District) to PCD (Planned Commercial Development).

Discussion: The applicant is requesting to amend the City's Comprehensive Plan to give the 6.01 ± acre property a FLU designation of Commercial and rezone to PCD. The project will consist of one 3-story main building and five single-story storage structures, a total of 114,641 square feet, surrounding an internal vehicle storage area with canopies. The project will also consist of enhanced landscaping, sidewalks, and stormwater pond (See Staff Report). The proposed FLU amendment and rezoning is consistent with the City's Comprehensive Plan and the City's Code of Ordinances.

Recommended Action:

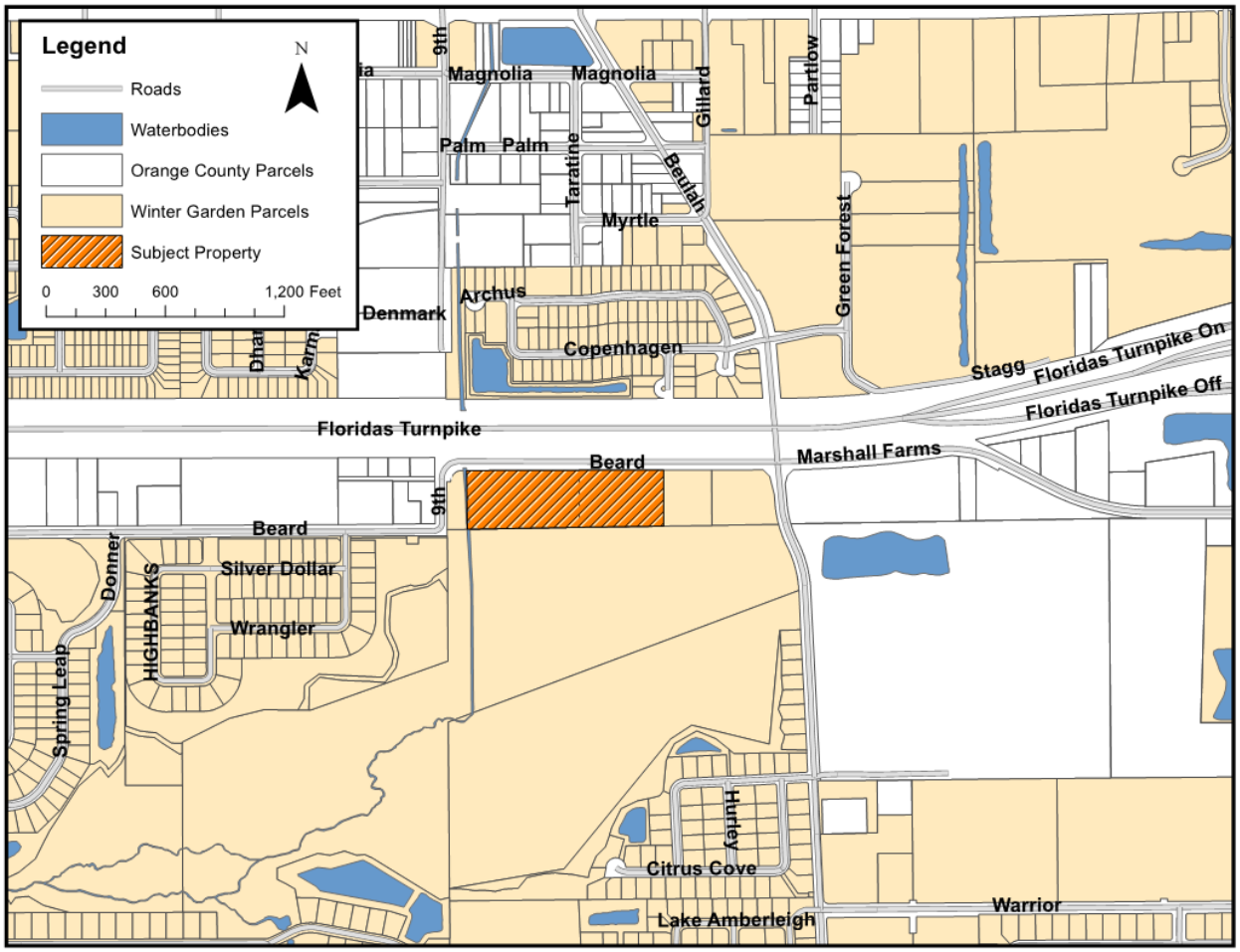
Staff recommends approval of Ordinance 20-20 and 20-21, with the second reading and adoption hearing anticipated to be on the June 11, 2020 City Commission Agenda.

Attachment(s)/References:

Location Map
Ordinance 20-20 and 20-21
Staff Report
Site Plan
Elevations

LOCATION MAP

1577 & 894 Beard Road



ORDINANCE 20-20

AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA, AMENDING THE FUTURE LAND USE MAP OF THE WINTER GARDEN COMPREHENSIVE PLAN BY CHANGING THE FUTURE LAND USE DESIGNATION OF REAL PROPERTY GENERALLY DESCRIBED AS APPROXIMATELY 6.01 ± ACRES LOCATED AT 1577 & 894 BEARD ROAD, WEST OF BEULAH ROAD, EAST OF 9TH STREET, AND SOUTH OF BEARD ROAD FROM LOW DENSITY RESIDENTIAL TO COMMERCIAL; PROVIDING FOR SEVERABILITY AND AN EFFECTIVE DATE.

WHEREAS, on the 13th of June, 1991, the City Commission of the City of Winter Garden adopted Ordinance 91-16 which adopted a new Comprehensive Plan for the City of Winter Garden, and on the 24th of June, 2010, the City Commission of the City of Winter Garden adopted Ordinance 10-19 readopting and amending the Comprehensive Plan for the City of Winter Garden;

WHEREAS, the owner of that certain real property generally described as approximately 6.01 ± acres located at 1577 & 894 Beard Road, west of Beulah Road, east Of 9th Street, and south of Beard Road, and legally described in ATTACHMENT "A" (the "Property") has petitioned the City to amend the Winter Garden Comprehensive Plan to change the Future Land Use classification from Low Density Residential (LR) to Commercial (COM); and

WHEREAS, the City of Winter Garden's Local Planning Agency and City Commission have conducted the prerequisite advertised public hearings pursuant to Chapter 163, Florida Statutes, regarding the adoption of this ordinance; now, therefore,

BE IT ENACTED BY THE CITY OF WINTER GARDEN, FLORIDA:

SECTION I. *FLUM Amendment.* The City of Winter Garden hereby amends the Future Land Use Map of the City of Winter Garden Comprehensive Plan by re-designating the aforesaid Property from Low Density Residential to Commercial as set forth in ATTACHMENT "B".

SECTION II. *Effective Date.* This Ordinance shall become effective 31 days after adoption, unless the Ordinance is timely challenged pursuant to § 163.3187(5), Fla. Stat., in which case, the Ordinance shall not be effective until the state land planning agency or the Administrative Commission, respectively, issues a final order determining that the adopted Ordinance is in compliance.

SECTION III. *Severability.* Should any portion of this Ordinance be held invalid, then such portions as are not declared invalid shall remain in full force and effect.

FIRST READING AND PUBLIC HEARING: _____ , 2020.

SECOND READING AND PUBLIC HEARING: _____ , 2020.

ADOPTED this _____ day of _____, 2020, by the City Commission of the City of Winter Garden, Florida.

APPROVED:

_____
JOHN REES, Mayor/Commissioner

ATTEST:

_____
ANGELA GRIMMAGE, City Clerk

ATTACHMENT "A"

LEGAL DESCRIPTION

PARCEL ID#: 25-22-27-0000-00-052 and 25-22-27-0000-00-002

DESCRIPTION:

PARCEL 1:

THE EAST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, LYING SOUTH OF THE SUNSHINE STATE PARKWAY AND BEARD ROAD. LESS THE EAST 334.00' THEREOF.

PARCEL 2:

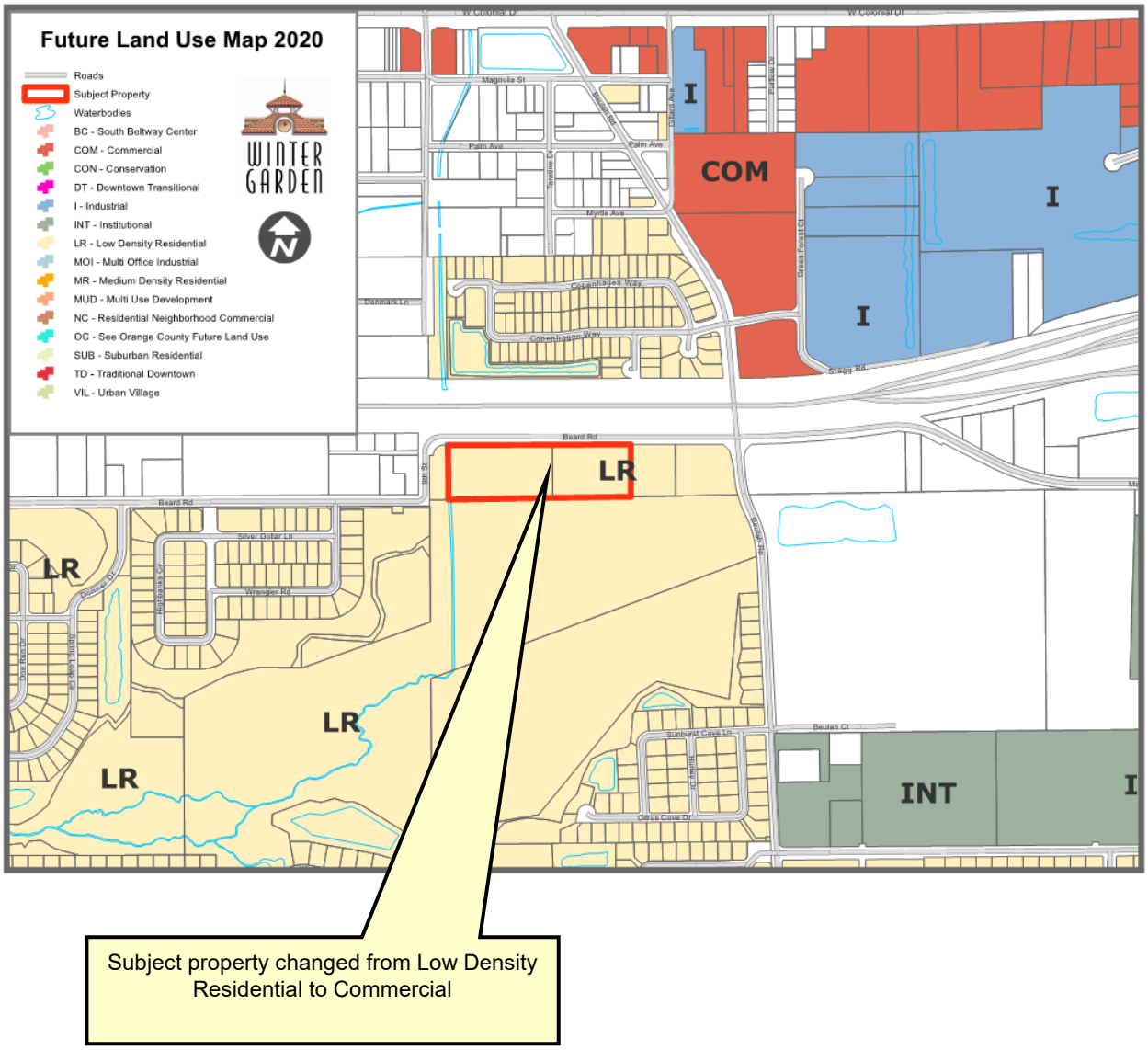
THE SOUTH 297 FEET, MORE OR LESS, OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, LESS THE WEST 100 FEET THEREOF AND EASEMENT REQUIRED FOR DRAINAGE DITCH ON WEST END OF SAID PROPERTY.

Containing 6.01 acres, more or less.

ATTACHMENT "B"

FUTURE LAND USE MAP

<u>1577 & 894 Beard Road</u>



Subject property changed from Low Density Residential to Commercial

ORDINANCE 20-21

AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA, REZONING CERTAIN REAL PROPERTY GENERALLY DESCRIBED AS APPROXIMATELY 6.01 ± ACRES LOCATED AT 1577 & 894 BEARD ROAD, WEST OF BEULAH ROAD, EAST OF 9TH STREET, AND SOUTH OF BEARD ROAD, FROM R-1 (RESIDENTIAL DISTRICT) TO PCD (PLANNED COMMERCIAL DEVELOPMENT); PROVIDING FOR CERTAIN PCD REQUIREMENTS AND DESCRIBING THE DEVELOPMENT AS THE WINTER GARDEN SELF STORAGE PCD; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the owner(s) of that certain real property generally described as approximately 6.01 ± acres located at 1577 & 894 Beard Road, west of Beulah Road, east Of 9th Street, and south of Beard Road in Winter Garden, Florida, being more particularly described on Exhibit "A" attached hereto and incorporated herein by this reference (the "Property"), desire to rezone their property from R-1 (Residential District) to PCD (Planned Commercial Development), and

WHEREAS, the Planning and Zoning Board has considered this Ordinance and made a recommendation to the City Commission concerning its adoption; and

WHEREAS, after public notice and due consideration of public comment, the City Commission of the City of Winter Garden hereby finds and declares the adoption of this Ordinance and the proposed development of the Property is consistent with the City of Winter Garden Comprehensive Plan, and the City of Winter Garden Code of Ordinances, and

WHEREAS, the City Commission finds based on competent substantial evidence in the record that the rezoning approved by this Ordinance meets all applicable criteria for rezoning under the Comprehensive Plan and the Code of Ordinances, therefore;

BE IT ENACTED BY THE CITY OF WINTER GARDEN, FLORIDA:

SECTION 1: *Rezoning.* The above "Whereas" clauses constitute findings by the City Commission. After due notice and public hearing, the zoning classification of real property legally described on Exhibit "A," is hereby rezoned from (R-1) Residential District to (PCD) Planned Commercial Development in the City of Winter Garden, Florida subject to the following conditions provisions and restrictions:

a. **Applicability/Conflict.** All development of or within the Property shall comply with and is subject to the requirements set forth in this Ordinance. Unless specifically identified in this Ordinance, all development on the Property identified in Exhibit "A" must comply with the general development

standards of the C-2 (Arterial Commercial District) zoning district. Notwithstanding anything to the contrary herein, all development of or within the Property shall comply with and is subject to all requirements in the City Code, and ordinances, resolutions, and policies of the City. To the extent of any express conflicts between the express provisions of this Ordinance pertaining to permitted uses, special exception uses, prohibited uses, architectural design criteria, and other development criteria and the City Code and ordinances, resolutions, and policies of the City, the requirements set forth herein shall control to the extent of the conflict.

b. **Intent.** This Ordinance is intended to provide flexibility in the development of the Property in order to provide for proper growth and to guide development and construction in an integrated approach in order to promote an enjoyable, aesthetically pleasing, and pedestrian friendly commercial development.

c. **Development Plans.** The Property shall be developed in substantial conformance with the Preliminary Development Plans attached hereto as Exhibit "B". Should any conflict exist between this Ordinance and the Preliminary Development Plans attached hereto as Exhibit "B", then the standards and conditions established by this Ordinance shall control to the extent of the conflict.

d. **Design Criteria/Architectural Standards-**

1. Minimum Building Setbacks:
   - Front: 15 feet, excluding architectural bump outs or façade treatments.
   - Side interior lot: 20 feet when abutting a residential zoning district.
   - Side corner lot: 40 feet.
   - Rear: 20 feet when abutting a residential zoning district.

2. Maximum Building Heights:
   - All building heights shall conform to the Building Information site data provided in Exhibit "B".
   - Maximum height of all buildings is 3-stories.

3. Boat/RV Storage:
   - A maximum of 38 parking stalls measuring 12' x 40' for Boat and RV storage is permitted for this Property.
4. Elevations:
   - All elevations will adhere to the elevations provided in Exhibit "B".

e. **Permitted Uses-** The permitted uses allowed on the Property are as follows:

1. Self-storage facility with associated management office.

f. **Permitted Accessory Uses-** Permitted accessory uses on the Property are as follows:

1. Accessory uses are not allowed in this PCD.

g. **Special Exception Uses-** The special exception uses for this Property are as follows:

1. There are no special exception uses for this property.

h. **Prohibited Uses-** Any use not specifically set forth in this Ordinance as a Permitted or Special Exception Use is prohibited. Without limiting the foregoing, the following are expressly prohibited:

1. Residential uses.
2. Motels, hotels, rooming houses.
3. Concrete, block, and asphalt plants including batch plants.
4. Automobile junkyards, scrap yards, and salvage yards.
5. Manufacturing activities.
6. Industrial activities.
7. Garages (commercial).
8. Any use deemed objectionable because it may be noxious or injurious because of the production or emission of dust, smoke, refuse matter, odor, gas, fumes, noise, vibration or similar substances or conditions, and any one or combination of these may be prohibited.
9. Storage of liquefied petroleum products and petrochemical products.
10. The on-site operation of businesses by tenants or lessees of individual storage unit(s).
11. Billboard.
12. Adult or pornographic book, magazine, video and novelty stores.
13. Adult entertainment.

i. **Signage –** All proposed signs shall conform Exhibit “B”. All other signage proposed for the Property shall conform to the requirements and regulations pertaining to specified commercial corridors within the City of Winter Garden as defined in Chapter 118, Article X, Division 2 and Chapter 102 of the City of Winter Garden Ordinances. Signs will be permitted separately.

j. **Dark Skies-** All exterior lighting shall be designed to provide safe, convient and efficient lighting for pedestrians and vehicles. Exterior lighting shall be designed as dark skies lighting in a consistent and coordinated manner for the entire project in compliance with the requirements of Chapter 118, Article X, Division 4 of the City Code of Ordinances.

SECTION 2: *Staff Conditions.*

1. A 5' sidewalk will be required along the frontage of Beard Road as shown in the development plan in Exhibit B.
2. All utilities required for the development shall be run to the site at the Developer's expense, including potable water, reclaimed water and sanitary sewer. 100% of all water and sewer impact fees shall be paid prior to City execution of FDEP permits and issuance of site or building permits.
3. An engineered site plan meeting all City Code requirements shall be submitted for review and approval by City Staff and City Commission prior to commencement of any construction.
4. All dumpsters shall be enclosed and shall provide 12' minimum inside clearance (each way inside of bollards), and access by solid waste vehicles. Coordinate additional requirements with Public Services Department, Solid Waste Division.
5. All irrigation on the site shall be designed to be supplied by reclaimed water as shown.
6. Permits or modification from SJRWMD (stormwater) and FDEP (water, wastewater and NPDES) are required prior to issuance of site or building permits.
7. The Owner is responsible for meeting all provisions of ADA and Florida Accessibility Code.
8. All work shall conform to City of Winter Garden standards and specifications.
9. The City of Winter Garden will inspect private site improvements only to the extent that they connect to City owned/maintained systems (roadways, drainage, utilities, etc.). It is the responsibility of the Owner and Design Engineer to ensure that privately owned and maintained systems are constructed to the intended specifications. The City is not responsible for the operation and maintenance of privately owned systems, to include, but not be limited to, roadways, parking lots, drainage, stormwater ponds or on-site utilities.
10. The Contractor is responsible for the notification, location and

protection of all utilities that may exist within the project limits.

11. No fill or runoff will be allowed to discharge onto adjacent properties; existing drainage patterns shall not be altered. The City of Winter Garden is not granting rights or easements for drainage from, or onto, property owned by others, including by way of any development order or permit issued. Obtaining permission, easements or other approvals that may be required to drain onto private property is the Owner/Developer's responsibility. Should the flow of stormwater runoff from, or onto adjacent properties be unreasonable or cause problems, the City shall not be responsible and any corrective measures required will be the responsibility of the Owner/Developer. Site construction shall adhere to the City of Winter Garden erosion and sediment control requirements as contained in Chapter 106 - Stormwater. If approval is granted by the City of Winter Garden, it does not waive any permits that may be required by federal, state, regional, county, municipal or other agencies that may have jurisdiction.

12. After final plan approval, a preconstruction meeting will be required prior to any commencement of construction. The applicant shall provide an erosion control and street lighting plan at the preconstruction meeting and shall pay all engineering review and inspection fees prior to construction. Inspection fees in the amount of **2.25%** of the cost of all site improvements shall be paid prior to issuance of the building permit.

SECTION 3: *General Requirements.*

a. **Land Development Approvals and Permits-** This Ordinance does not require the City to issue any permit or approval for development, construction, building permit, or other matter by the City relating to the Property or the project or any portion thereof. These and any other required City development approvals and permits shall be processed and issued by the City in accordance with procedures set forth in the City's Code of Ordinances and subject to this Ordinance.

b. **Amendments-** Minor amendments to this Ordinance will be achieved by Resolution of the City Commission of the City of Winter Garden. Major amendments to this Ordinance will require approval of the City Commission of the City of Winter Garden by Ordinance.

c. **Expiration/Extension-** Expiration of this PCD shall be governed in accordance with Section 118-830, City of Winter Garden Code of Ordinances. Time extensions may be granted in accordance with Section 118-829, City of Winter Garden Code of Ordinances.

SECTION 4: *Zoning Map.* The City Planner is hereby authorized and directed to amend the Official Winter Garden Zoning Map in accordance with the provisions of this ordinance.

SECTION 5: *Non-Severability.* Should any portion of this Ordinance be held invalid, then the entire Ordinance shall be null and void.

SECTION 6: *Effective Date.* This Ordinance shall become effective upon adoption at its second reading.

FIRST READING AND PUBLIC HEARING: _____ , 2020.

SECOND READING AND PUBLIC HEARING: _____ , 2020.

ADOPTED this _____ day of _____, 2020, by the City Commission of the City of Winter Garden, Florida.

APPROVED:

_____
JOHN REES, Mayor/Commissioner

ATTEST:

_____
ANGELA GRIMMAGE, City Clerk

Exhibit "A"

PARCEL ID#: 25-22-27-0000-00-052 and 25-22-27-0000-00-002

DESCRIPTION:

PARCEL 1:

THE EAST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, LYING SOUTH OF THE SUNSHINE STATE PARKWAY AND BEARD ROAD. LESS THE EAST 334.00' THEREOF.

PARCEL 2:

THE SOUTH 297 FEET, MORE OR LESS, OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, LESS THE WEST 100 FEET THEREOF AND EASEMENT REQUIRED FOR DRAINAGE DITCH ON WEST END OF SAID PROPERTY.

Containing 6.01 acres, more or less.

Exhibit "B"

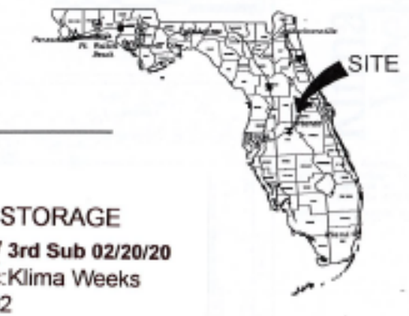
COVER PAGE

WINTER GARDEN SELF-STORAGE PCD PRELIMINARY DEVELOPMENT PLANS

(13 PAGES - ATTACHED)

WINTER GARDEN SELF STORAGE PCD
WINTER GARDEN, FLORIDA

FEBRUARY 2020



Beard Road - 1577 & 894
WINTER GARDEN SELF STORAGE
REZONING/FLU - REV 3rd Sub 02/20/20
o:Flagship Co Group LLC - c:Klima Weeks
25-22-27-0000-00-052 & -002

Beard Road - 1577 & 894
WINTER GARDEN SELF STORAGE
REZONING/FLU - 3rd Sub 02/~~13~~20/2020
o:Flagship Co Group LLC - c:Klima Weeks
25-22-27-0000-00-052 & -002

SHEET INDEX:

C000	COVER SHEET
C001	DEVELOPMENT SITE & UTILITY PLAN
L-1	LANDSCAPE PLAN
L-2	LANDSCAPE NOTES & DETAILS
L-3	TREE REMOVAL PLAN
A001	PERSPECTIVE VIEW
A002	PERSPECTIVE VIEW
A003	NORTH ELEVATION
A004	EAST ELEVATION
A005	SOUTH ELEVATION
A006	WEST ELEVATION
A007	MATERIAL OUTLINE
A008	EXTERIOR STORAGE AND RV CANOPY

PARCEL No.: 25-22-27-0000-00-052
and PORTION of: 25-22-27-0000-00-002

DRAINAGE STATEMENT:

1. ON-SITE STORMWATER MANAGEMENT FACILITIES WILL BE PROVIDED TO MEET ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) AND CITY OF WINTER GARDEN REQUIREMENTS.
2. STORMWATER MANAGEMENT SYSTEM WILL COMPLY WITH SJRWMD LAKE APOPKA BASIN CRITERIA. WEKIVA RECHARGE PROTECTION BASIN RECHARGE STANDARD DOES NOT APPLY AS ON-SITE SOILS ARE NOT NRCS TYPE "A" SOILS PER THE SCS SOILS MAP.

ZONING INFORMATION:

SITE:	R-1
FRONT/NORTH:	BEARD ROAD/PUD/R-1
SIDE/WEST:	R-1
SIDE/EAST:	R-1
REAR/SOUTH:	R-1

CONTACT INFORMATION:

OWNER:
CHARLES D. AND JOSEPH BRYAN DONMARK
1408 9th STREET
WINTER GARDEN, FL. 34787-4308

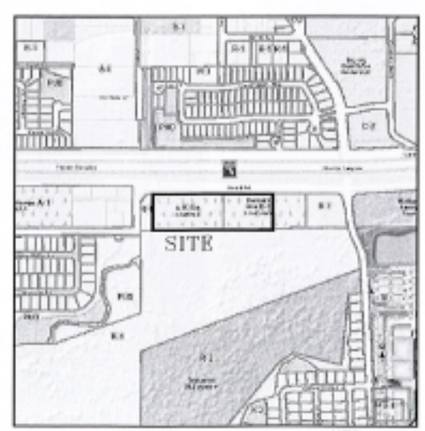
DEVELOPER/CONTRACT PURCHASER:
FLAGSHIP COMPANIES GROUP, LLC
PHILLIP C. HOLLIS, MS/PE, MANAGER
1190 BUSINESS CENTER DRIVE
SUITE 1010
LAKE MARY, FL. 32746
TEL: 407.246.1144
E-MAIL: PHILLIP@PMJS.COM

ENGINEER:
KLIMA WEEKS CIVIL ENGINEERING, INC.
SELBY G. WEEKS, PE, LEED AP
385 DOUGLAS AVE., STE. 2100
ALTAMONTE SPRINGS, FLORIDA 32714
TEL: 407.478.8750
FAX: 407.478.8749
E-MAIL: SWEEKS@KLIMAWEEKS.COM

SURVEYOR:
BENCHMARK SURVEYING & MAPPING, INC.
BILLY JOE KENKINS, JR. PSM
3110 RED FOX RUN
KISSIMMEE, FL. 34746
TEL: 407.654.6183
FAX: 407.654.6184
E-MAIL: BENCHMARKSURVEYINGANDMAPPING.COM

ARCHITECT:
ELEVEN 18 ARCHITECTURE
JARED AKERS
1011 E. COLONIAL DRIVE
ORLANDO, FL. 32803
TEL: 407.745.5300
E-MAIL: ELEVEN18ARCHITECTURE.COM

LANDSCAPE ARCHITECT:
SCHWEIZER BOJACK LANDSCAPE ARCHITECTURE LLC
KATY BOJACK
P.O. BOX 949383
MAITLAND, FL. 32794-8383
TEL: 407.376.1423
E-MAIL: KATY@SCHWEIZERBOJACK.COM



NTS

VICINITY & EXISTING ZONING MAP
1577 BEARD ROAD, WINTER GARDEN, FLORIDA 34787

PROPERTY DESCRIPTION:

PARCEL 1:

THE EAST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, LYING SOUTH OF THE SUNSHINE STATE PARKWAY AND BEARD ROAD. LESS THE EAST 334.00' THEREOF.

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ADDRESS:

1577 BEARD ROAD, WINTER GARDEN, FLORIDA

FLOOD ZONE:

SUBJECT PROPERTY LIES WITHIN ZONE A, A SPECIAL FLOOD HAZARD AREA SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT WITH NO BASE FLOOD ELEVATION DETERMINED AND ZONE X, AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP NUMBER 12095C0215F, DATED SEPTEMBER 25, 2009.

ALLOWABLE USES:

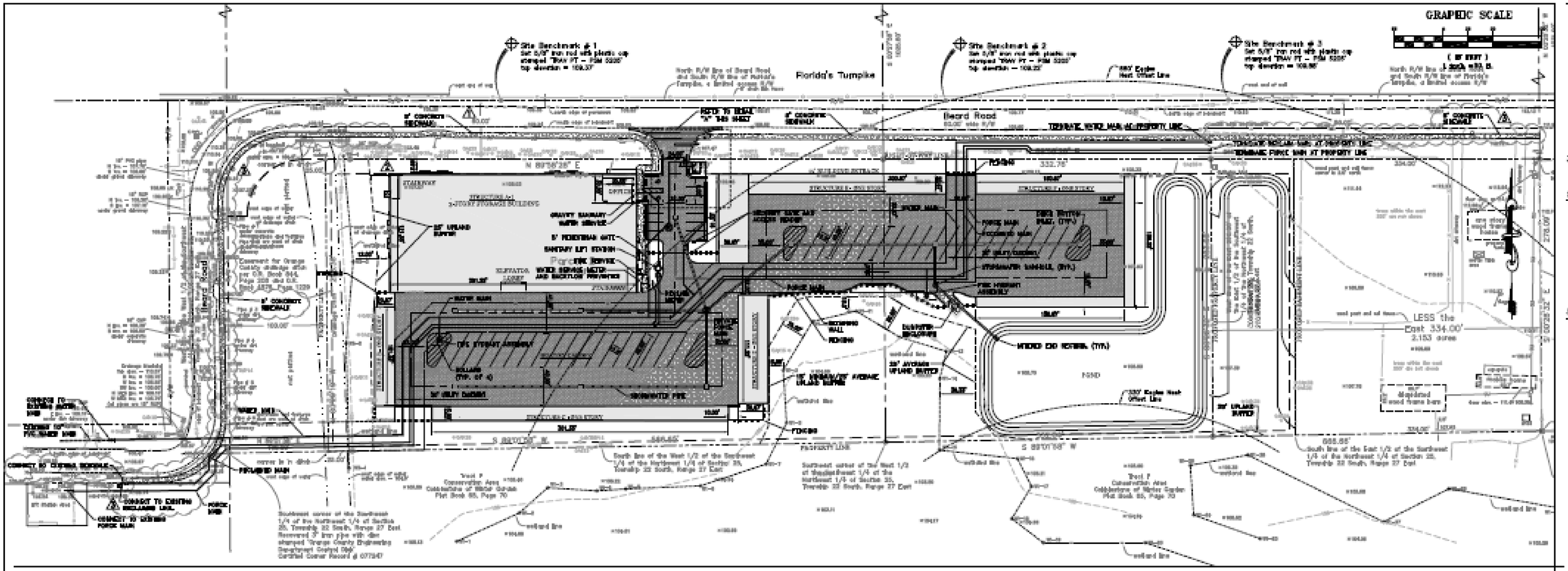
SELF STORAGE AND VEHICLE STORAGE INCLUDING COVERED VEHICLE STORAGE

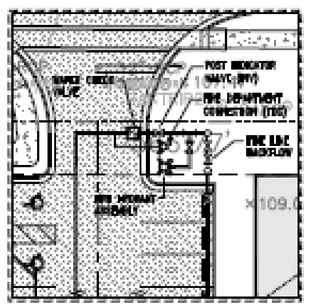
Community Development
Planning & Zoning
FEB 20 2020
Received By:
Project #

Klima Weeks
CIVIL ENGINEERING
385 DOUGLAS AVE
STE 2100
ALTAMONTE SPRINGS
FLORIDA 32714
TELEPHONE 407.478.8750
FACSIMILE 407.478.8749

CERTIFICATE OF AUTHORIZATION No.: 9030

NO.	REVISION	BY	DATE
1	City Comments	SGW	11/21/19
2	Building Revision	SGW	02/07/20
3			
4			





DETAIL "A"
SCALE: 1" = 20 FT.

SITE DATA:

BUILDING INFORMATION:
SELF-STORAGE BUILDINGS:
MAX. BUILDING HEIGHT:
STRUCTURE A-1: 43'-6"
STRUCTURE B: 13'-6"
STRUCTURE C: 13'-6"
STRUCTURE D: 13'-6"
STRUCTURE E: 13'-6"
STRUCTURE F: 13'-6"

BUILDING AREAS:
3-STORY STRUCTURE A-1
LEVEL 1 – 38,495 SF
LEVEL 2 – 38,495 SF
LEVEL 3 – 38,495 SF
TOTAL STRUCTURE A-1 – 115,485 SF
STRUCTURE B – 2,095 SF
STRUCTURE C – 4,520 SF
STRUCTURE D – 3,415 SF
STRUCTURE E – 6,940 SF
STRUCTURE F – 6,177 SF
TOTAL SELF-STORAGE – 137,632 SF

TOTAL PARKING REQUIRED:
1,000 SF. OFFICE X (5 SPACES/1,000 SF.) = 4 SPACES

PARKING PROVIDED:

	REGULAR	ACCESSIBLE	TOTAL
TOTAL PARKING PROVIDED	11	2	13 SPACES

*PROJECT PROVIDES EXTRA WIDE INTERNAL DRIVEWAYS (32 FT. MIN.), ALLOWING INDIVIDUALS TO PARK BY THEIR PERSONAL STORAGE UNITS TO LOAD/UNLOAD.

ESTIMATED SCHEDULE:
START CONSTRUCTION – JUNE 2020
COMPLETE CONSTRUCTION – DECEMBER 2020

EXTERNAL TRAF. LIGHTING:
SITE LIGHTING SHALL BE PROVIDED IN ACCORDANCE WITH CITY OF WINTER GARDEN CODE, SECTION 118: 1500-1508

UTILITY STATEMENT:
THE UTILITY DESIGN SHOWN HEREON IS PRELIMINARY FOR ILLUSTRATIVE PURPOSES AND IS SUBJECT TO CHANGE DURING FINAL DESIGN.

PAVING LEGEND:

CONCRETE WALKS AND PAVEMENT

ASPHALT PAVEMENT SECTION

Klima Weeks
CIVIL ENGINEERING
360 Douglas Avenue, Ste 2100
Altamonte Springs, FL 32714
Telephone 407.478.8750
Facsimile 407.478.8749
Certificate of Authorization No. 9928

Jeffrey D. Weeks 9969

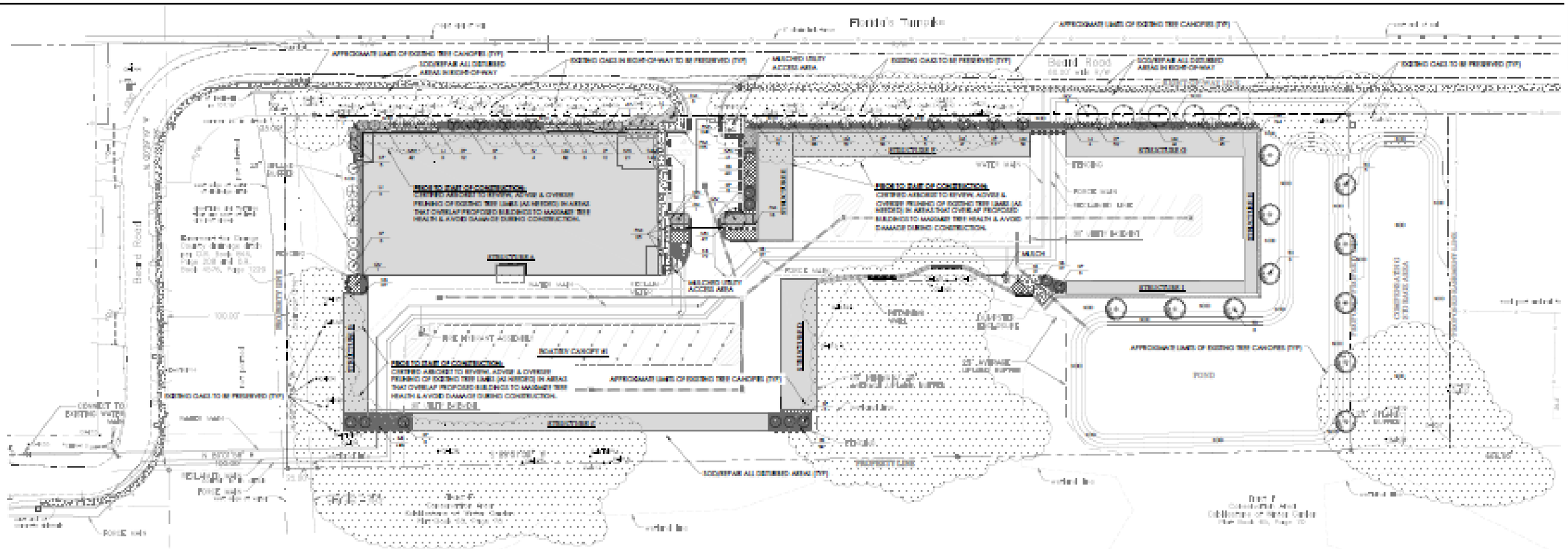
WINTER GARDEN SELF STORAGE PCD
ORANGE COUNTY
WINTER GARDEN, FL

DEVELOPMENT SITE & UTILITY PLAN

revision	description	date
1	City Comment	11/21/19
2	Eng. Revision	02/07/20
3	Sidewalk Revision	02/10/20
4		
5		
6		

drawn by: JAR
checked by: JDW
date: 09/04/19
plot scale: AS SHOWN
project number: 19FLA/Orno
file name: [illegible]

C001



SCHWEIZER BOJACK LANDSCAPE ARCHITECTURE

LANDSCAPE BUFFER TABLE

LOCATION	LENGTH	REQUIRED / PROVIDED
NORTH (R-O-W Buffer)	871 Ln. Ft. (Excluding Drive)	REQUIRED: - 15 Ft. Width - 12 Canopy Trees @ Min. 3.5" Col., 12' Ht., 45 Gal. - 24 Understory Trees @ Min. 11' Ht., 30 Gal. - 36" Ht. Continuous Hedge, Max. 36" O.C. - 50% Coverage with Shrubs & Groundcovers (7.5 Ft. Width) PROVIDED: - 15 Ft. Width - 12 Canopy Trees [2 Existing Oaks (31" & 32") + 5 Proposed Oaks (Min. 3.5" Col., 12' Ht., 45 Gal.) + 4 Proposed Sabal Palms (12' Ht.)] - 27 Understory Trees [18 Proposed Ligustrums (Min. 3" Col., 8' Ht., 45 Gal.) + 9 Proposed Upright Yaupon Hollies (Min. 3" Col., 8' - 10' Ht., 30 Gal.)] - 36" Ht. Continuous Hedge, Spaced 36" O.C. - 50% Coverage with Shrubs & Groundcovers (7.5 Ft. Width)
EAST (Side Yard Buffer + Retention Trees)	350.58 Ln. Ft.	REQUIRED: - 10 Ft. Width - 11 Canopy Trees @ Min. 3" Col., 12' Ht., 30 Gal. - 36" Ht. Continuous Hedge, Max. 36" O.C. PROVIDED: - 20 Ft. Min. Width - 11 Canopy Trees [11 Proposed Bald Cypress (Min. 3" Col., 12' Ht., 45 Gal.)] - 36" Ht. Continuous Hedge, Max. 36" O.C.
SOUTH (Rear Yard Buffer)	899.29 Ln. Ft.	REQUIRED: - 10 Ft. Width - 18 Canopy Trees @ Min. 3" Col., 12' Ht., 30 Gal. - 27 Understory Trees @ Min. 1½" Col., 7' Ht., 15 Gal. - 36" Ht. Continuous Hedge, Max. 36" O.C. PROVIDED: - 24 Ft. Min. Width - 19 Canopy Trees [9 Proposed Sabal Palms (12' Ht.) + 10 Existing Oaks (From Back-to-Front: 24", 40", 42", 30", 18", 14", 14" Triple, 22", 24" & 14")] - Existing Wetlands Vegetation to Meet Understory Tree Requirement - Existing Wetlands Vegetation to Meet 36" Ht. Screening Requirement
WEST (Side Yard Buffer + Building Facade)	298.34 Ln. Ft.	REQUIRED: - 10 Ft. Width - 12 Canopy Trees @ Min. 3" Col., 12' Ht., 30 Gal. - 36" Ht. Continuous Hedge, Max. 36" O.C. PROVIDED: - 67 Ft. Width - 12 Canopy Trees [6 Proposed Sabal Palms (12' Ht.) + 1 Proposed Oak (Min. 3.5" Col.), + 5 Existing Oaks (From South-to-North: 12" Triple, 31", 11", 30", 21")] - Existing Wetlands Vegetation to Meet 36" Ht. Screening Requirement + 36" Ht. Shrubs Provided Along Building Facade Visible from R-O-W

PRELIMINARY PLANT MATERIALS LEGEND

SYMBOL	KEY	QNTY.	COMMON/BOTANICAL NAME	SPECIFICATIONS/DESCRIPTION
	QV	7	Live Oak Quercus virginiana	3½" Min. Col., 12' Min. Ht., R. #1, B&B or 45 Gal.
	TD	11	Bald Cypress Taxodium distichum	3" Min. Col., 12' Min. Ht., R. #1, B&B or 45 Gal.
	LJ	21	Ligustrum Tree Ligustrum japonicum	3" Total Col., Multi Trunk, 8' Ht., R. #1, B&B
	IV	18	Upright Yaupon Holly Ilex vomitoria 'Pride of Houston'	3" Total Col., Multi Trunk, 8'- 10' Ht., R. #1, 30 Gal.
	SP	36	Sabal Palm Sabal palmetto	12' O.A. Ht., Booted Trunks, Matching Specimens
	CP	5	Cardboard Palm Zamia furfuracea	7 Gal., 24" O.A., Matching Specimens
	PM	448	Podocarpus Podocarpus macrophyllus	36" Min. Ht., 7 Gal., 24" O.C.
	ZP	304	Coontie Zamia pumila	12" - 18" Ht., 3 Gal., 30" O.C.
	NYN	139	Dwarf Yaupon Holly Ilex vomitoria 'Nana'	8" - 12" Ht., 3 Gal., 24" O.C.
	SB	490	Sand Cordgrass Spartina bakeri	18" - 24" Ht., 3 Gal., 24" O.C.
	LM	348	Variegated Lilipe Liliope muscari 'Variegata'	Full, 1 Gal., 24" O.C.
	TAM	165	Dwarf Asiatic Jasmine Trachelospermum asiaticum 'Minima'	Full, 1 Gal., 18" O.C.
	SOD	TBD	Argentine Bahia Sod Paspalum notatum 'Argentina'	Solid Sod, Free of Noxious Weeds
	MULCH	TBD	Pine Bark Mulch	3" Min. Depth, All Planting Areas

CALL 811 BEFORE YOU DIG!
It's the Law!
1-800-432-4770

GRAPHIC SCALE

LANDSCAPE PLAN

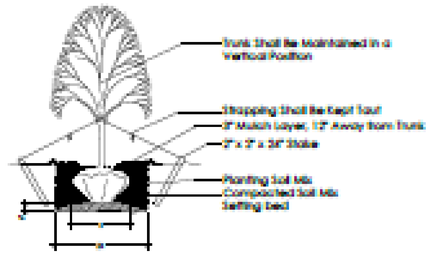
WINTER GARDEN SELF STORAGE
1577 BEARD ROAD - CITY OF WINTER GARDEN, FLORIDA

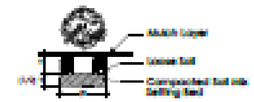
3	3/19/20
2	2/07/20
1	11/20/19
	9/26/19

L-1

All ideas, designs, arrangements and plans indicated or represented by this drawing are owned by and the property of SCHWEIZER BOJACK LANDSCAPE ARCHITECTURE and were created, evolved and developed for use on and in connection with this specific project.

LANDSCAPE PLANTING DETAILS





LANDSCAPE GENERAL NOTES

1. The Landscape Contractor shall insure that this work does not interrupt established or projected drainage patterns. The Landscape Contractor shall insure adequate vertical drainage in all plant beds and planters. Vertical drilling through any compacted fill to native soil shall be accomplished to insure drainage.

2. The Landscape Contractor shall be responsible for all materials and all work as called for on the landscape plans and in the landscape specifications. The list of plant quantities accompanying the plans shall be used as a guide only. Contractor shall verify all quantities and report any discrepancies at the time of bidding.

3. All plant materials shall be graded Florida No. 1 or better, as outlined under Grades and Standards for Nursery Plants, Division of Plant Industry, State of Florida, unless otherwise noted.

4. All plant beds and tree rings shall be top dressed with a 3" minimum depth of pine bark nuggets.

5. The Landscape Contractor shall be wholly responsible for stability and plumb condition of all trees and shrubs. Staking of trees or shrubs, if desired or requested by the Landscape Architect or owner, shall be done utilizing a method agreed upon by the Landscape Architect.

6. No fill material or use of heavy equipment around existing trees is allowed. Existing trees are to be protected by a wood barricade erected in compliance with local codes.

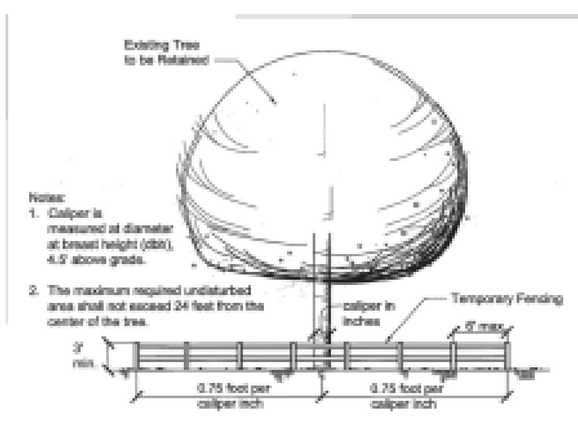
7. All grades, dimensions and existing conditions shall be verified by the Contractor on site before construction begins. Any discrepancies shall be brought to the attention of the Landscape Architect.

8. The Landscape Contractor shall review architectural/engineering plans to become thoroughly familiar with surface and subsurface utilities.

9. The Landscape Contractor shall coordinate with the lighting and irrigation contractors regarding the timing of the installation of plant material.

10. Every possible safeguard shall be taken to protect building surfaces, equipment and furnishings. Landscape Contractor shall be responsible for any damage or injury to person or property which may occur as a result of his negligence in the execution of work.

TREE PROTECTION DETAILS



TREE PROTECTION NOTES

All protected tree shall have the trunk and roots protected by protective barriers erected prior to development activity in accordance with the following:

1. Protective barriers constructed of wood rails, chain link fabric or orange plastic safety netting shall be placed around the tree or trees to form a continuous barricade at least three feet high. Ideally such barriers will form a protection zone described by the drip line.

2. Signs or other markings shall be placed on all sides of the protective barrier to designate the protected area.

3. Protective barriers shall remain in place until landscape operations begin or until construction in the immediate area has been completed.

4. Existing street trees located within rights-of-way interior to, or adjacent to, the development shall have protective barriers before site work begins.

5. Trenching for underground utilities shall be prohibited inside the protective barriers. If underground utilities must be routed through the protected area, tunneling shall be required. All landscape preparation in these areas shall be conducted by hand, except for mechanical tunneling as needed.

6. No vehicles, equipment, materials or fill shall be placed or stored within the protected area.

LANDSCAPE NOTES & DETAILS

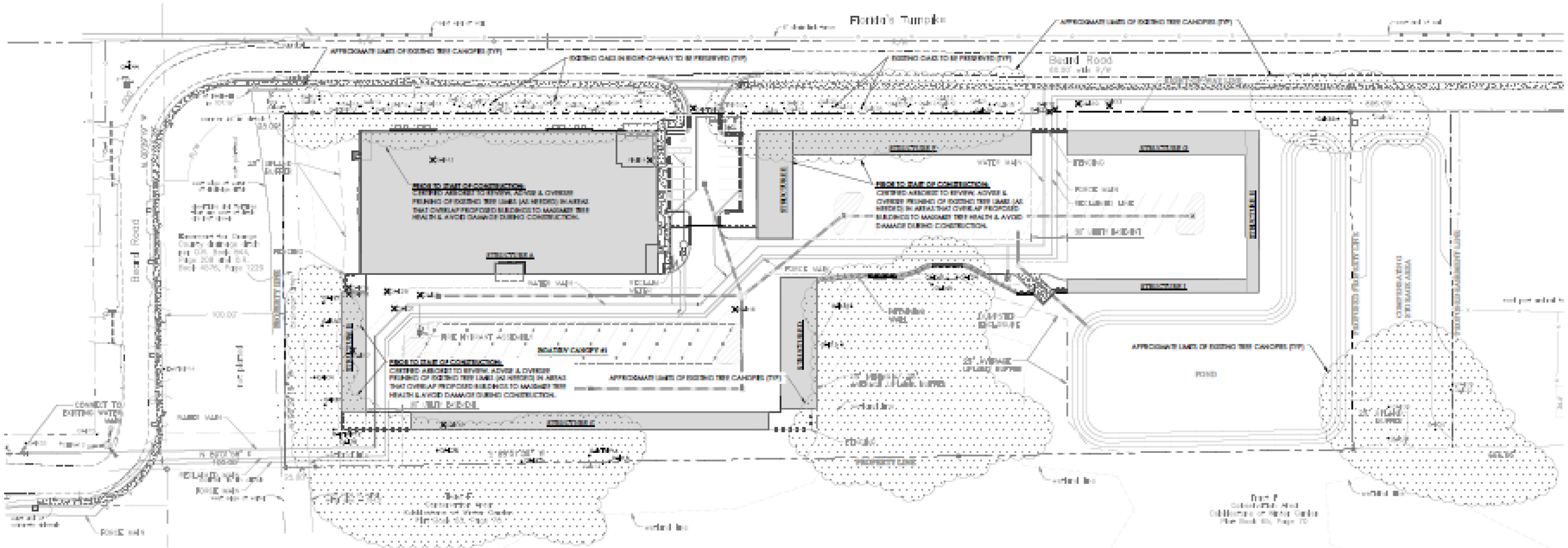
SCHWEIZER BOJACK LANDSCAPE ARCHITECTURE
LANDSCAPE & IRRIGATION DESIGN
PO BOX 540685 • LAKE WORTH, FLORIDA 33460 • Ph. (561) 204-5620
EMAIL: NICK@SCHWEIZERBOJACK.COM

WINTER GARDEN SELF STORAGE
1577 BARD ROAD - CITY OF WINTER GARDEN, FLORIDA

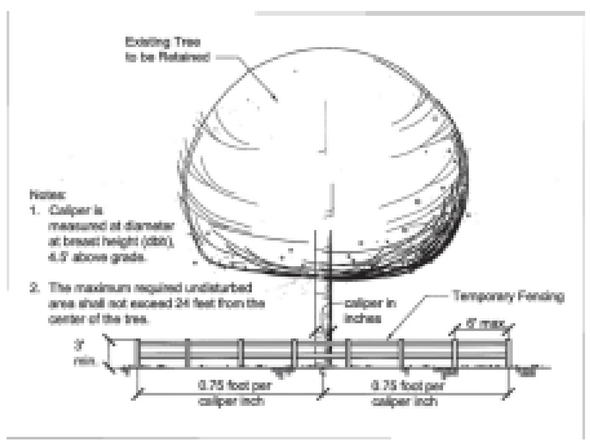
4	2/07/20
3	1/13/20
2	11/20/19
1	9/26/19

SHEET
L-2

All ideas, designs, arrangements and plans indicated or represented by this drawing are owned by and the property of SCHWEIZER BOJACK LANDSCAPE ARCHITECTURE LLC and were created, evolved and developed for the use on and connection with this specific project.



TREE PROTECTION DETAILS



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6. No vehicles, equipment, materials or fill shall be placed or stored within the protected area.

TREE REMOVAL

QNTY.	SIZE	TREE TYPE
1	10"	Oak
1	13"	Oak
1	14"	Pine
1	15"	Oak
1	16"	Oak
1	16"	Twin Oak
1	17"	Oak
2	18"	Oak
2	21"	Oak
1	28"	Oak
1	31"	Oak
1	43"	Oak
1	48"	Oak

TOTAL EXISTING TREES TO BE REMOVED: 15

PROPOSED TREES TO BE PLANTED ON SITE:

QNTY.	SPECIFICATIONS
7	Live Oak (3.5" Cal.)
11	Bald Cypress (3" Cal.)
21	Ligustrum (3" Total Cal.)
18	Yaupon Holly (3" Total Cal.)
26	Sabal Palms (12 Ht.)

TOTAL PROPOSED TREES TO BE PLANTED: 83

CALL 48 HOURS BEFORE YOU DIG
It's the Law!
1-800-432-4770

GRAPHIC SCALE

TREE REMOVAL PLAN

SCHWEIZER BOJACK LANDSCAPE ARCHITECTURE

LANDSCAPE & IRRIGATION DESIGN
PO BOX 6000 - WINTER GARDEN, FLORIDA 34787 - PH. (407) 654-6400
EMAIL: INFO@SCHWEIZERBOJACK.COM - WWW.SCHWEIZERBOJACK.COM

WINTER GARDEN SELF STORAGE
1577 BEARD ROAD - CITY OF WINTER GARDEN, FLORIDA

4	2/19/20
3	2/07/20
2	11/20/19
1	9/26/19

SHEET NUMBER
L-3

All ideas, designs, arrangements and plans indicated or represented by this drawing are owned by and the property of SCHWEIZER BOJACK LANDSCAPE ARCHITECTURE LLC and were created, evolved and developed for use on and in connection with this specific project.

PERSPECTIVE: NORTHEAST

N.T.S.

WINTER GARDEN SELF-STORAGE
FLAGSHIP DEVELOPMENT
1577 BEARD RD. WINTER GARDEN, FL
A001-PERSPECTIVE VIEW 02-11-2020

ELEVEN 18 ARCHITECTURE

PERSPECTIVE: NORTHEAST

N.T.S.

WINTER GARDEN SELF-STORAGE

FLAGSHIP DEVELOPMENT

1577 BEARD RD. WINTER GARDEN, FL

A002-PERSPECTIVE VIEW 02-11-2020

ELEVEN 18 ARCHITECTURE

NORTH ELEVATION

3/64" = 1'-0"

WINTER GARDEN SELF-STORAGE

FLAGSHIP DEVELOPMENT

1577 BEARD RD. WINTER GARDEN, FL

A003-NORTH ELEVATION 02-11-2020

ELEVEN 18 ARCHITECTURE

43'-6"

39'-6"

EAST ELEVATION

3/64" = 1'-0"

WINTER GARDEN SELF-STORAGE
FLAGSHIP DEVELOPMENT
1577 BEARD RD. WINTER GARDEN, FL
A004-EAST ELEVATION 02-11-2020

ELEVEN 18 ARCHITECTURE
A WOMAN'S BUSINESS ENTERPRISE

SOUTH ELEVATION

3/64" = 1'-0"

WINTER GARDEN SELF-STORAGE

FLAGSHIP DEVELOPMENT

1577 BEARD RD. WINTER GARDEN, FL

A005-SOUTH ELEVATION 02-11-2020

ELEVEN 18 ARCHITECTURE

A WOMEN'S BUSINESS ENTERPRISE

43'-6"

39'-6"

WEST ELEVATION

3/64" = 1'-0"

WINTER GARDEN SELF-STORAGE

FLAGSHIP DEVELOPMENT

1577 BEARD RD. WINTER GARDEN, FL

A006-WEST ELEVATION 02-11-2020

ELEVEN 18 ARCHITECTURE

A WOMEN'S BUSINESS ENTERPRISE

1. INSULATED PANEL
   - PANEL: CF ARCHITECTURAL
   - FINISH: LIGHT GRAY

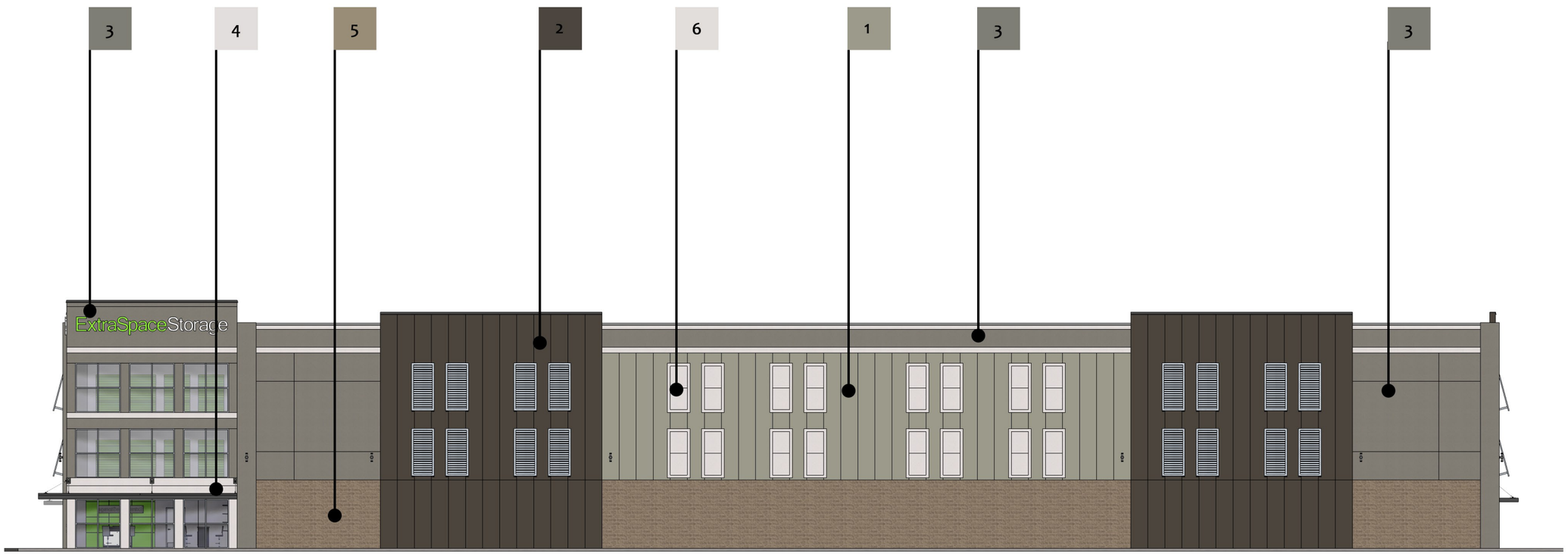
2. INSULATED PANEL
   - PANEL: CF ARCHITECTURAL
   - FINISH: MEDIUM BRONZE

3. EIFS
   - MANUFACTURER: DRYVIT
   - COLOR: 617 WINTER EVE

4. EIFS
   - MANUFACTURER: DRYVIT
   - COLOR: 613 OVERCAST

5. SPLIT FACE BLOCK
   - PAINT: CURIO GRAY- SW 0024

6. FAUX WINDOW OVER INSULATED PANEL
   - PAINT: ORIGINAL WHITE- SW 7077



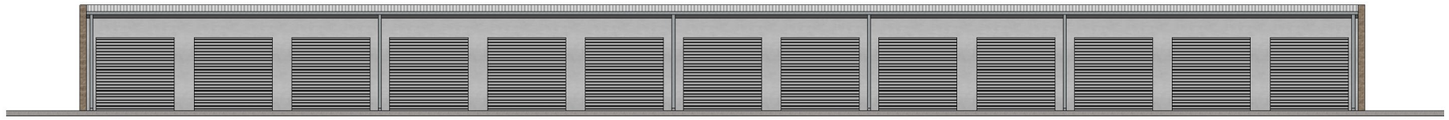
MATERIAL OUTLINE

3/64" = 1'-0"

WINTER GARDEN SELF-STORAGE
FLAGSHIP DEVELOPMENT
1577 BEARD RD. WINTER GARDEN, FL
A007-MATERIAL OUTLINE 02-11-2020

ELEVEN 18 ARCHITECTURE
A WOMEN'S BUSINESS ENTERPRISE

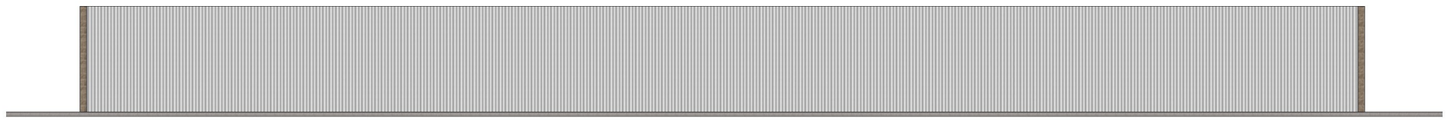
12'-0"



EXTERIOR STORAGE FRONT ELEVATION

1/16" = 1'-0"

12'-0"



EXTERIOR STORAGE REAR NON ST FACING

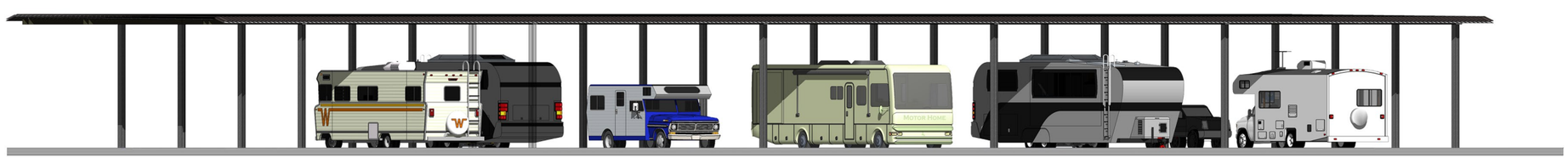
1/16" = 1'-0"

13'-4"

EXTERIOR STORAGE REAR STREET FACING

1/16" = 1'-0"

16'-7"



RV CANOPY ELEVATION

1/16" = 1'-0"

WINTER GARDEN SELF-STORAGE FLAGSHIP DEVELOPMENT

1577 BEARD RD. WINTER GARDEN, FL

A008-EXTERIOR STORAGE & RV CANOPY 02-11-2020

ELEVEN 18 ARCHITECTURE

A WOMEN'S BUSINESS ENTERPRISE

CITY OF WINTER GARDEN

PLANNING & ZONING DIVISION

300 West Plant Street - Winter Garden, Florida 34787-3011 ● (407) 656-4111

STAFF REPORT

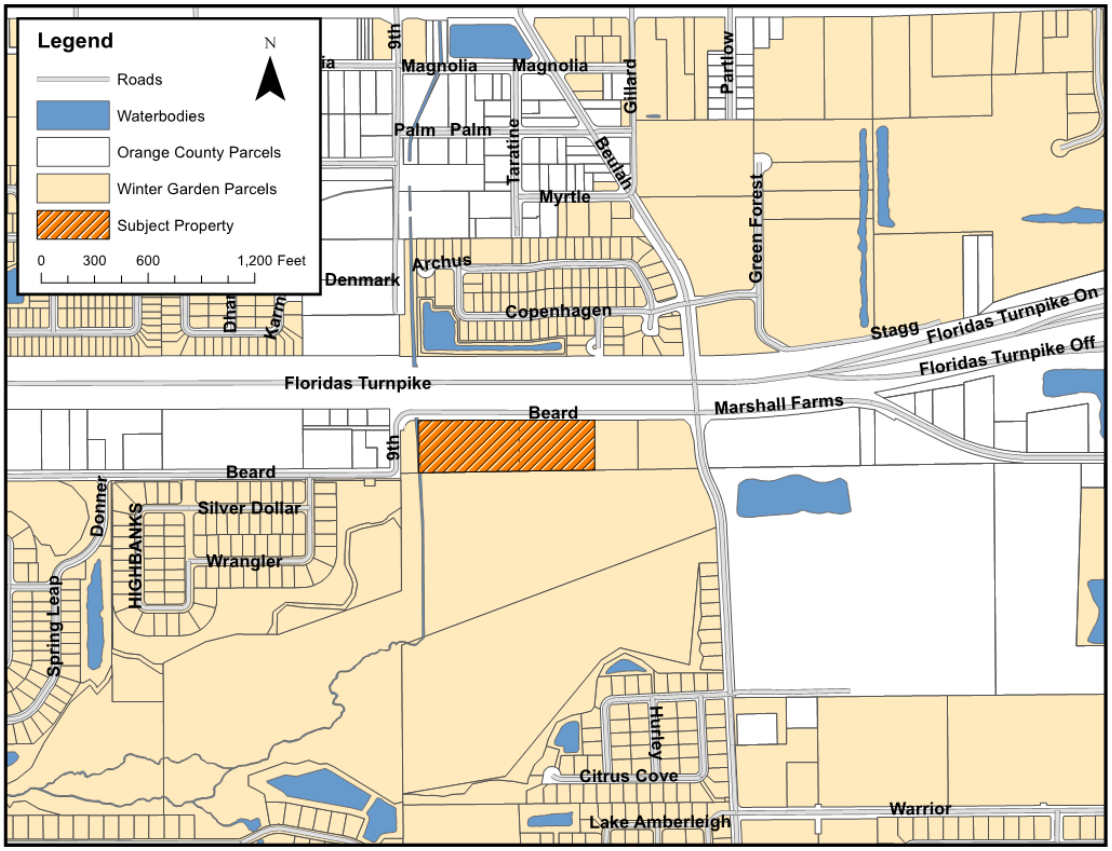
TO: PLANNING AND ZONING BOARD
PREPARED BY: SHANE FRIEDMAN, SENIOR PLANNER
DATE: February 21, 2020
SUBJECT: Future Land Use Amendment and PCD Rezoning
1577 & 894 Beard Road (6.01 +/- ACRES)
PARCEL ID # 25-22-27-0000-00-052 and 25-22-27-0000-00-002

APPLICANT: Klima Weeks Civil Engineering, Inc.

INTRODUCTION

The purpose of this report is to evaluate the proposed project for compliance with the City of Winter Garden Code of Ordinances and Comprehensive Plan.

The subject property is located at 1577 & 894 Beard Road, south of Beard Road, and is approximately 6.01 ± acres. The map below depicts the location of the subject property within the City of Winter Garden municipal limits:



The applicant has requested an amendment to the Future Land Use Map (FLUM) of the City's Comprehensive Plan to designate the property as Commercial and rezoning the property to PCD (Planned Commercial Development).

Properties designated with the Commercial land use category are required to be developed at a floor area ratio not greater than 0.35 and a floor area ratio not greater than 0.5 by development bonus inside Activity Centers. Maximum building height is three stories and up to five stories by development bonus in activity centers. The Commercial land use category shall include retail, service, and professional activities. Uses shall be developed in a manner which is harmonious to nearby noncommercial use and which minimize traffic congestion. All commercial activity in this commercial land use category shall be adjacent to arterials or major collectors. The City shall identify different zoning districts for highway commercial, general commercial, professional / medical districts, and downtown commercial districts in the commercial land use category. Development may exceed the stated 0.35 floor area ratio only by development bonus, no development rights are guaranteed at intensities or densities above the stated permitted range. Additional zoning restrictions per each zoning district may apply. The zoning Classifications what are consistent with the Commercial classification are C-1, C-2, C-3, C-4, PCD, and INT.

EXISTING USE

The project boundary is actually composed of two parcels, located 1577 & 894 Beard Road, however only half of the property located 894 Beard Road is requesting to be rezoned. The property located at 1577 Beard Road is 3.82 ± acres with a small two-story wood frame house built in 1941. The 2.18 ± acre land on the parcel located at 894 Beard Road is undeveloped.

ADJACENT LAND USE AND ZONING

The property to the west of the subject property is zoned R-1 (Residential District), is undeveloped, and currently has several mobile homes residing on the property. The property to the north is the Florida Turnpike. The property to the east, which is currently part of the parcel located at 894 Beard Road, is developed with a single-family home and is zoned R-1 (Residential District). The property to the south is zoned R-1 (Residential District), is undeveloped wetlands, and is Tract F (Conservation) of the Cobblestone of Winter Garden neighborhood plat.

PROPOSED USE

The applicant is requesting PCD rezoning to permit the development of the property for 114,641 sf of personal self-storage. The project will consist of one 3-story main building and five single story storage structures surrounding an internal vehicle storage area with canopies. The project will also consist of enhanced landscaping, sidewalks, and stormwater pond.

PUBLIC FACILITY ANALYSIS

The property will have one vehicle access point off of Beard Road.

Water, sewer, and reclaimed utilities by the City of Winter Garden will be required for any new development of the property. At such time that the property is developed, all necessary utility lines will be extended and connections made, all extension and connection costs shall be borne by the property owner.

The City will provide garbage collection, police protection, and all other services regularly provided to City of Winter Garden residents including building permits. The property will be served by both Orange County Fire and Rescue and the City of Winter Garden Fire Department under the First Response System.

All concurrency requirements identified by the City of Winter Garden Code of Ordinances and Comprehensive Plan will be met by the proposed development.

COMMUNITY MEETING

On January 15, 2020 a community meeting was held at City Hall. Over 390 notices were sent to five neighborhoods and several properties along Beard Road. Around six households came to that meeting. A few of the residents expressed concern about the safety of Beard Road. Specifically the lack of a sidewalk. The City required that the applicant provide a sidewalk along Beard Road frontage starting from the end of the sidewalk at Roper Reserve. The sidewalk is a condition of approval in the Ordinace and is shown on the predevelopment plan of the PCD.

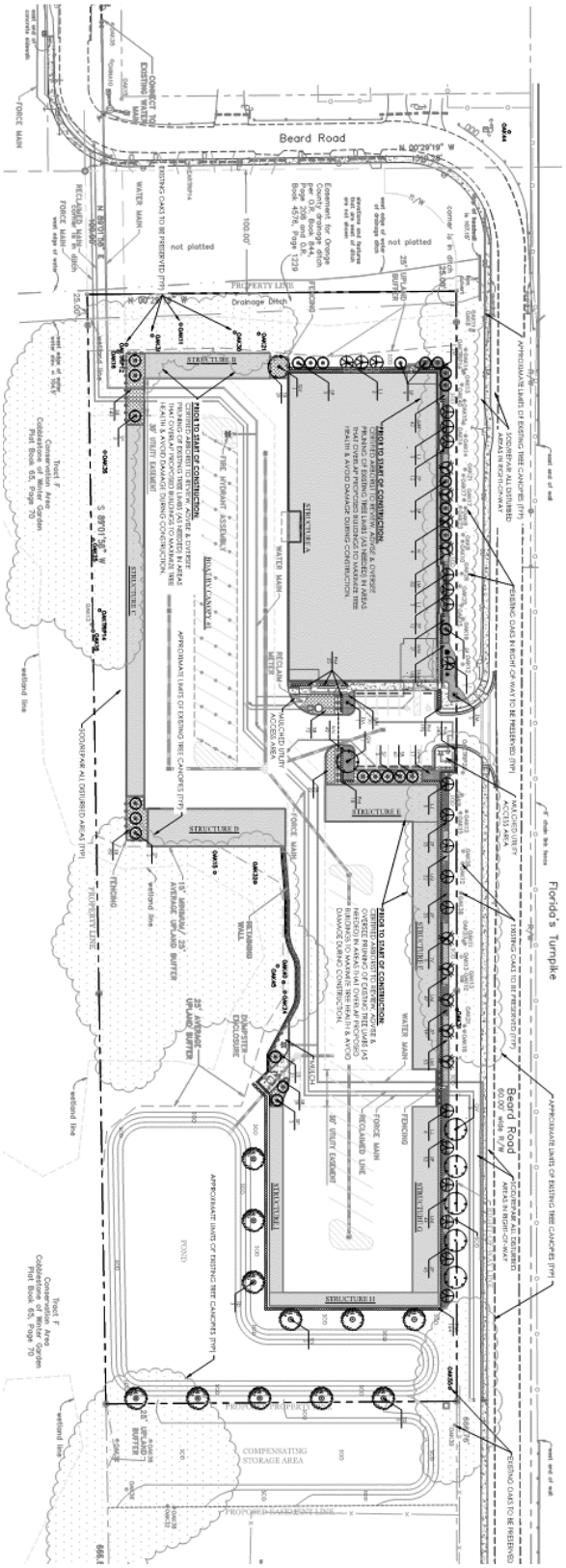
SUMMARY

The proposed development is a reasonable use of the land and this type of low trip generating development is consistent with other developments that exist in this area of the City. With the subject property directly adjacent to the Florida Turnpike the proposed project seems most reasonable for nonresidential uses.

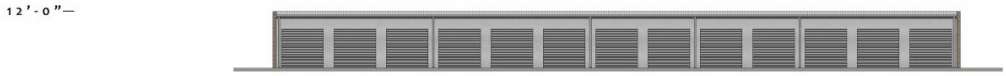
The proposed future land use amendment changing the land use from Low Density Residential to Commercial, and rezoning from R-1 (Residential District) to PCD (Planned Commercial Development), is consistent with the City's Comprehensive Plan and the City of Winter Garden Code of Ordinances. Staff recommends approval of the proposed Ordinance(s) subject to the conditions outlined in Ordinance 20-20 and Ordinance 20-21.

AERIAL PHOTO
1577 & 894 Beard Road

PROPOSED DEVELOPMENT PLAN
<u>1577 & 894 Beard Road</u>



Elevations
<u>1577 & 894 Beard Road</u>



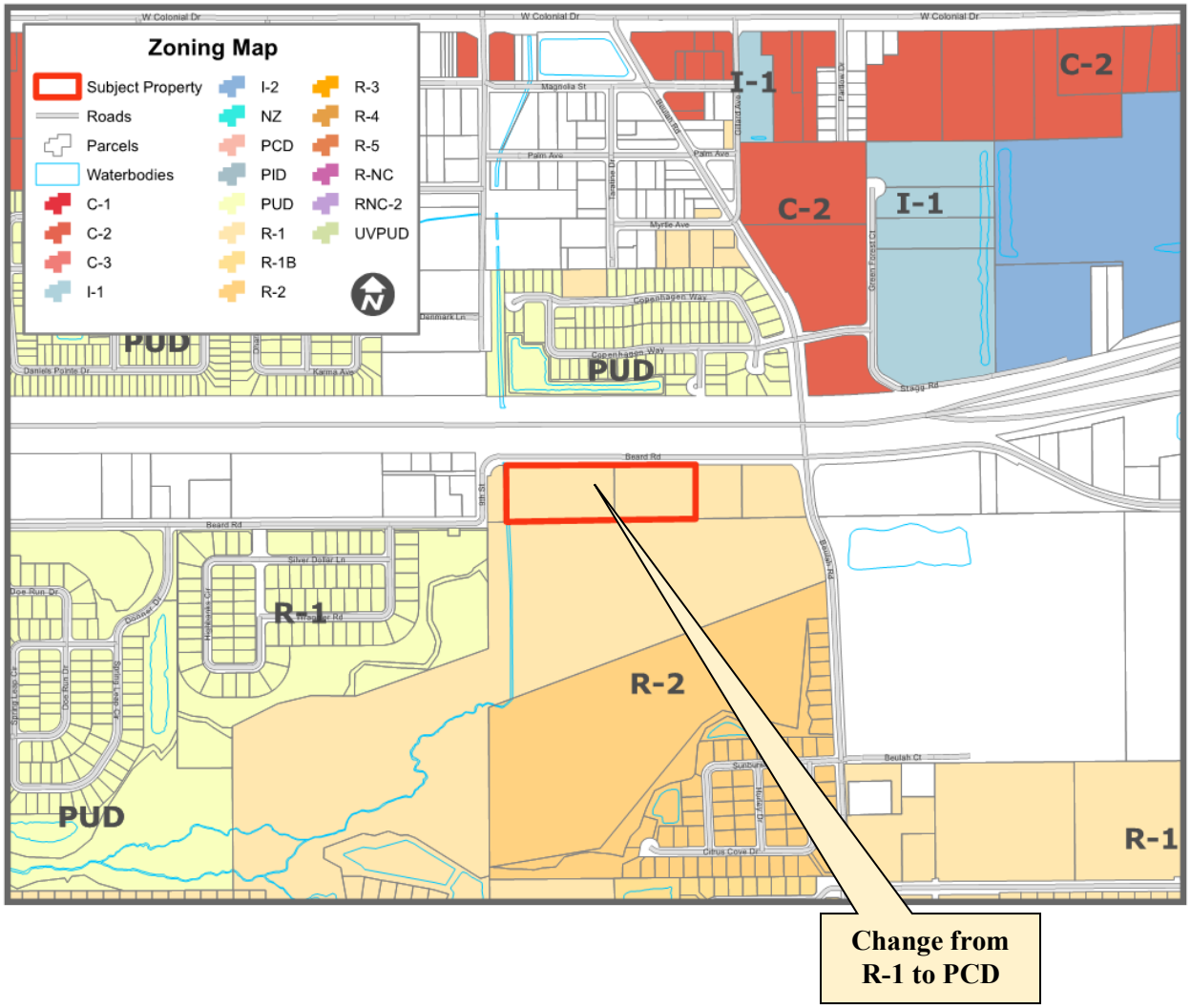
EXTERIOR STORAGE FRONT ELEVATION
1/16" = 1'-0"

EXTERIOR STORAGE REAR NON ST FACING
1/16" = 1'-0"

EXTERIOR STORAGE REAR STREET FACING
1/16" = 1'-0"

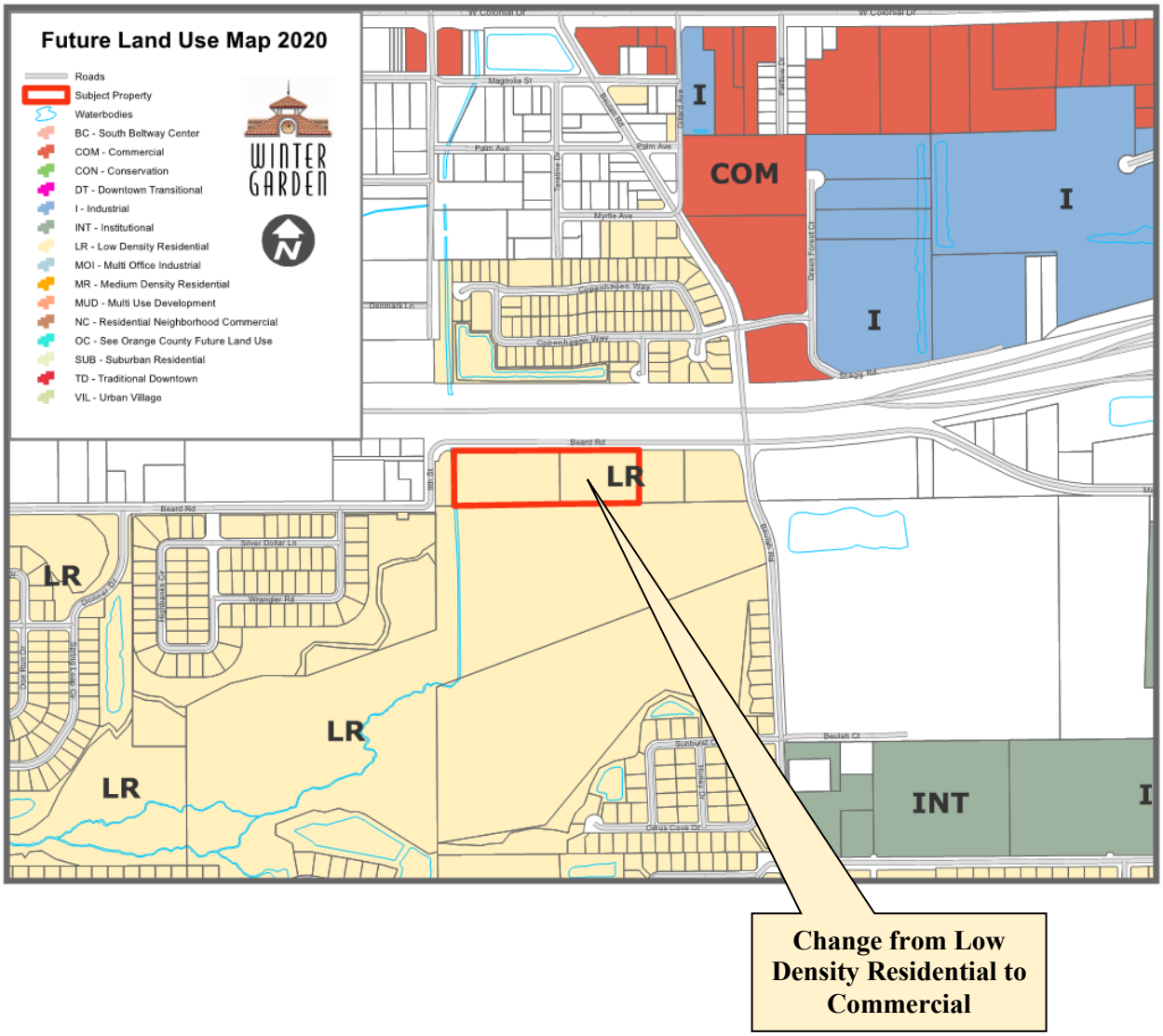
RV CANOPY ELEVATION
1/16" = 1'-0"

ZONING MAP
1577 & 894 Beard Road



Change from R-1 to PCD

FUTURE LAND USE MAP
1577 & 894 Beard Road



Change from Low Density Residential to Commercial

END OF STAFF REPORT

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Steve Pash, Community Development Director

Via: City Manager Mike Bollhoefer

Date: May 20, 2020 **Meeting Date:** May 28, 2020

Subject: 1200 Daniels Road
Daniels Road Business Park - Site Plan Approval
PARCEL ID# 26-22-27-1998-00-030 & 26-22-27-1998-00-001

Issue: The applicant is requesting Site Plan approval to construct four new commercial buildings and associated site improvements on a property located at 1200 Daniels Road.

Discussion:

The proposed project includes the construction of two single-story office/retail buildings and two two-story commercial buildings that have a combined total of 64,680 sq. ft. of commercial space. The project also includes associated site improvements such as parking areas, a dry retention pond, and landscaping.

The 6.25 +/- acre subject property is designated Commercial (COM) on the City's Future Land Use Map and is zoned C-2 Arterial Commercial District.

Recommended Action:

Staff recommends approval of the proposed Site Plan subject to the conditions of the DRC staff report dated May 20, 2020. Development of the property with two single-story office/retail buildings and two two-story commercial buildings is consistent with the City's Comprehensive Plan, and the property's C-2 zoning requirements.

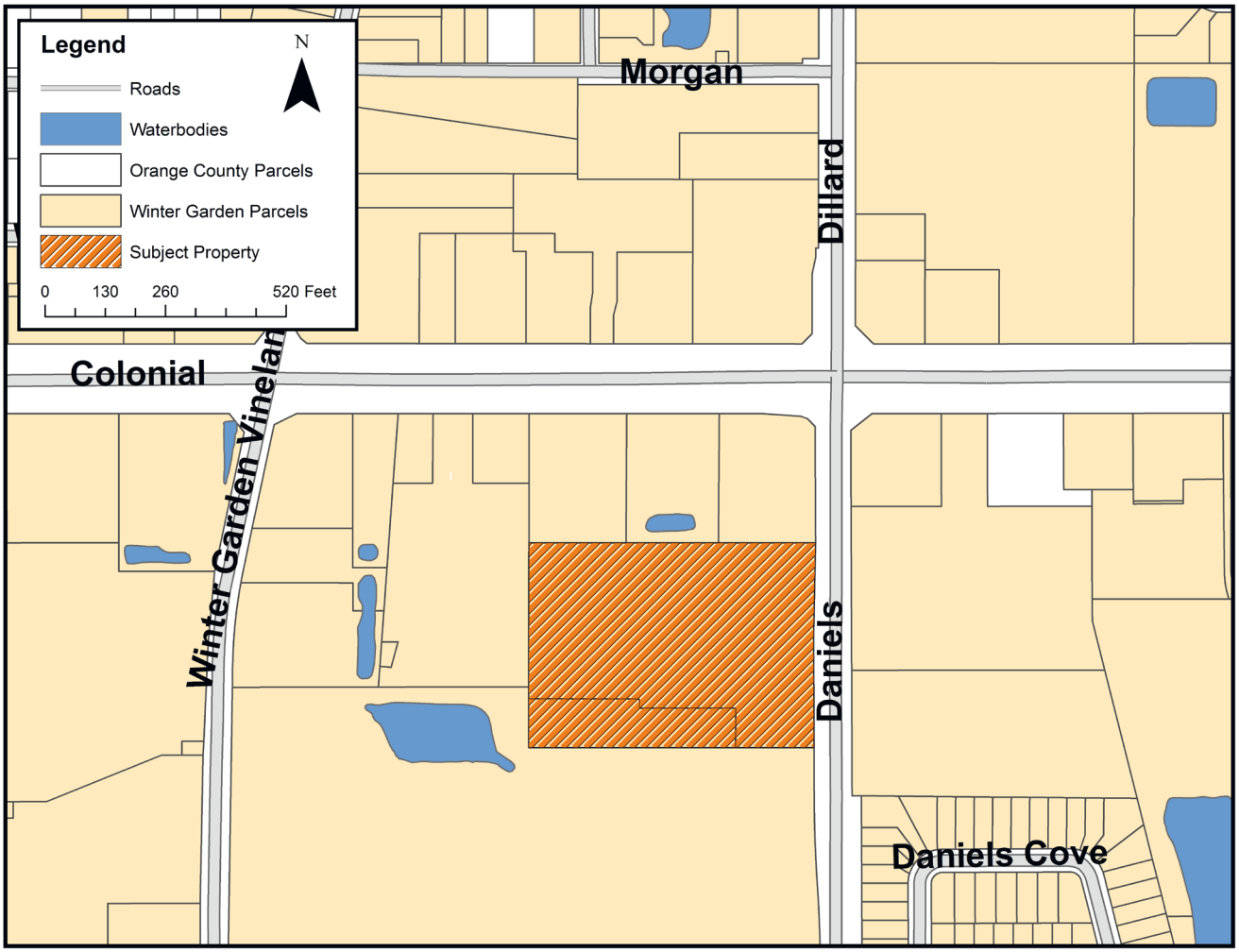
Attachment(s)/References:

Location Map
DRC Staff Report
Site Plan Set

Location Map

Daniels Road Business Park – Site Plan Approval

1200 Daniels Road



FINAL ENGINEERING
FOR
DANIELS ROAD BUSINESS PARK

PARCEL NO: 26–22–27–1998–00–001
and, 26–22–27–1998–00–030

PREPARED FOR:
WINTER GARDEN / DANIELS ROAD LLC

PLAN SHEET INDEX

SHEET	DESCRIPTION
1	COVER SHEET
2	SITE PLAN
3	EROSION CONTROL AND DEMOLITION PLAN
4	GEOMETRY PLAN
5	PAVING, GRADING AND DRAINAGE PLAN
6	UTILITY, STRIPING & SIGNAGE PLAN
7	SITE DETAILS
8	DRAINAGE DETAILS
9	DRAINAGE DETAILS
10	POTABLE WATER DETAILS
11	WASTEWATER DETAILS
12	CITY OF WINTER GARDEN STANDARD NOTES
13	LIFT STATION DETAILS
14	LANDSCAPE PLAN LA–1
15	LANDSCAPE PLAN LA–2
16	LANDSCAPE PLAN LA–3
17	IRRIGATION PLAN IR–1
18	IRRIGATION PLAN IR–2
19	LIGHTING PLAN SL–1

SITE DATA

GENERAL:

CURRENT USE:	VACANT
ZONING:	C–2
LAND AREA:	6.25 ACRES = 272,250 S.F.
FUTURE LAND USE:	COMMERCIAL
MAX FAR:	0.35
PROPOSED BUILDING S.F.:	64,680 S.F.
PROPOSED FAR:	64,680/272,250 = 0.24
IMPERVIOUS AREA:	3.80 AC. = 165,093 S.F. = 61%
REQUIRED PARKING:	3 SPACES PER 1,000 S.F. = 194 SPACES
PROPOSED PARKING:	271 SPACES (261 REGULAR & 10 HC SPACES)

DRAINAGE

ON–SITE STORMWATER MANAGEMENT FACILITIES WILL BE PROVIDED TO MEET ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) AND CITY OF WINTER GARDEN REQUIREMENTS. STORMWATER MANAGEMENT SYSTEM WILL COMPLY WITH SJRWMD LAKE APOPKA BASIN CRITERIA. WEKIVA RECHARGE PROTECTION BASIN RECHARGE STANDARD DOES NOT APPLY AS ON–SITE SOILS ARE NOT TYPE A SOILS PER SCS SOILS MAP.

SERVICE PROVIDERS

WATER:	CITY OF WINTER GARDEN
SEWER:	CITY OF WINTER GARDEN
SOLID WASTE:	LOCAL FRANCHISE
FIRE:	CITY OF WINTER GARDEN
POLICE:	CITY OF WINTER GARDEN

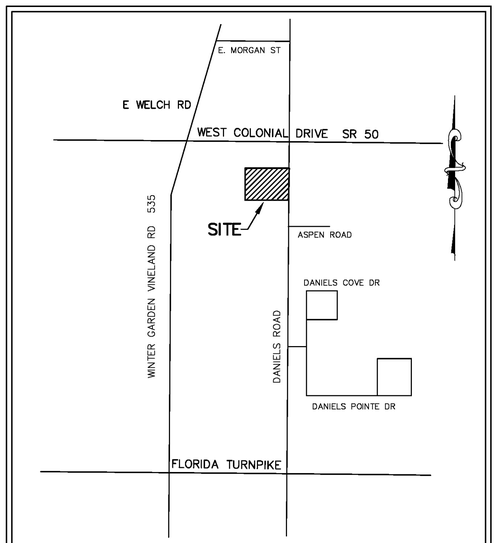
FLOOD ZONE

SUBJECT PROPERTY LIES WITHIN ZONE A, AND ZONE X ACCORDING TO NATIONAL FLOOD INSURANCE RATE MAP NO. 12095C0215F

LEGAL DESCRIPTION

PARCEL 1: LOT 3, DANIELS ROAD BUSINESS PARK, ACCORDING TO PB 71, PG 88, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA

PARCEL 2: TRACT "A" , DANIELS ROAD BUSINESS PARK, PB 71, PG 88, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA



VICINITY MAP
NOT TO SCALE

PROJECT DIRECTORY

DEVELOPER: WINTER GARDEN / DANIELS ROAD LLC
6038 PINE VALLEY DRIVE
ORLANDO, FL 32819

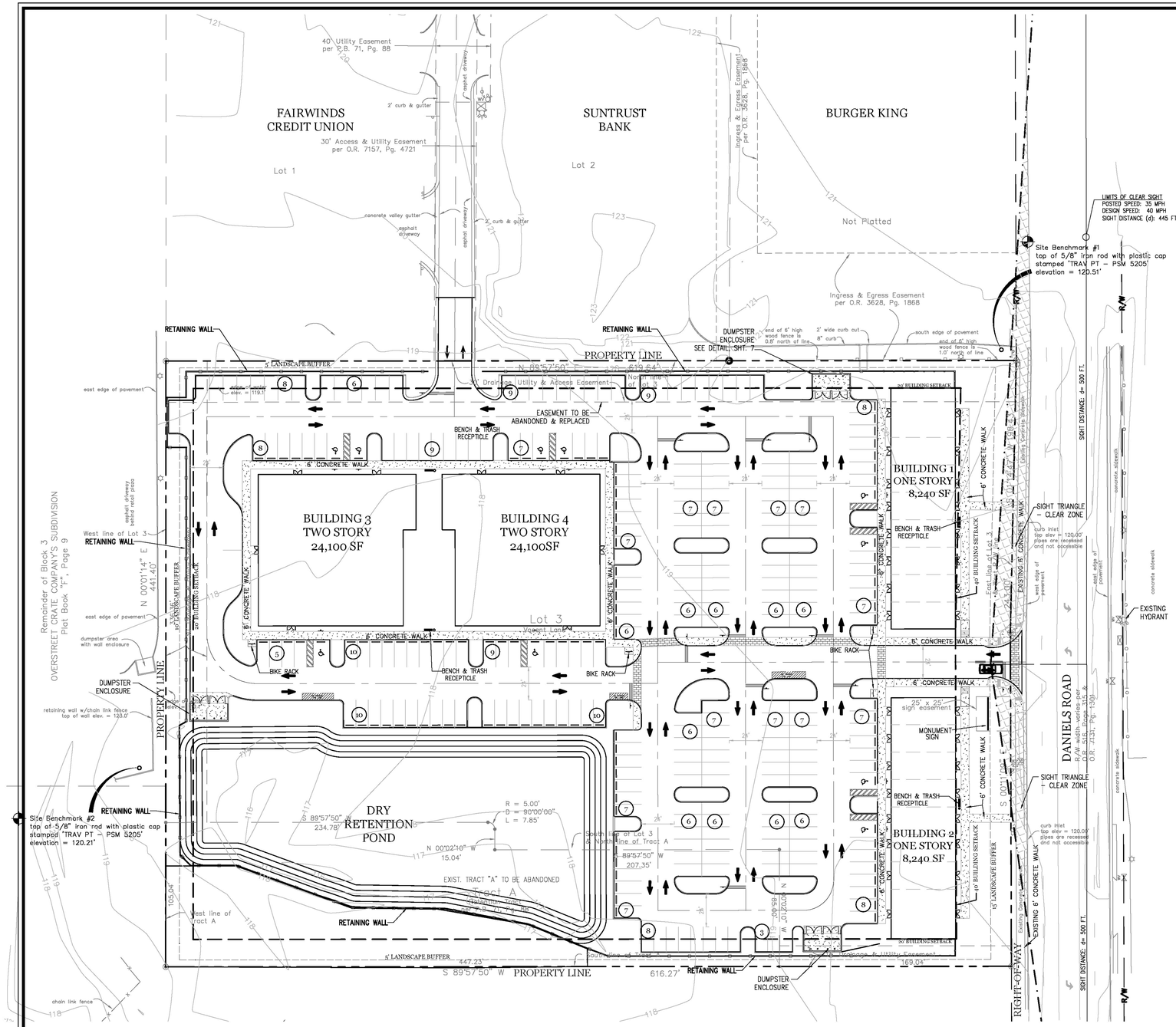
CIVIL ENGINEER: MELLICH–BLENDEN ENGINEERING, INC.
500 NORTH MAITLAND AVENUE
SUITE 209
MAITLAND, FLORIDA 32751
TELEPHONE: (407) 647–4040
FAX: (407) 647–4074
E–MAIL: mbecivil@aol.com

SURVEYOR: AMERICAN SURVEYING & MAPPING
3191 MAGUIRE BLVD
SUITE 200
ORLANDO, FL 32803
TELEPHONE: (407) 426–7979

GEOTECHNICAL ENGINEER: UNIVERSAL ENGINEERING SCIENCES
3532 MAGGIE BLVD.
ORLANDO, FL. 32811
TELEPHONE: (407) 423–0504
FAX: (407) 423–3106

JOB No. 12–002

MBE
MELLICH–BLENDEN ENGINEERING
1177 LOUISANA AVENUE, SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647–4040
COA NO. 6886



SITE DATA:

BUILDING INFORMATION:

BUILDING 1:	8,240 SF
BUILDING 2:	8,240 SF
BUILDING 3:	24,100 SF
BUILDING 4:	24,100 SF

TOTAL BUILDING AREA: 64,680 SF.
MAXIMUM BUILDING HEIGHT – NO MAXIMUM
PROPOSED BUILDING HEIGHT – 35 FT

F.A.R. = 64,680/272,250 = 0.24
FUTURE LAND USE: COMMERCIAL

REQUIRED PARKING (CITY CODE SEC. 118–1386):

THREE PARKING SPACES FOR EACH 1,000 SF GFA (RETAIL BUSINESS, OTHER BUSINESSES)

3 X 64,680 SF/1,000 SF = 194 PARKING SPACES

PROPOSED PARKING:
4.19 SPACES FOR EACH 1,000 SF GFA

261 REGULAR SPACES
10 ACCESSIBLE SPACES
271 TOTAL SPACES

AREA CALCULATIONS:

TOTAL SITE AREA:	272,250 SF = 6.25 AC	= 100%
IMPERVIOUS AREA:	175,373 SF = 4.03 AC	= 64%
PROPOSED PERVIOUS AREA:	96,782 SF = 2.22 AC	= 36%

MAXIMUM ISR = 70%
PROPOSED ISR = 64%

GRAPHIC SCALE
(IN FEET)

GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION ACTIVITY FOR DIG PERMITS, ELECTRICAL PERMITS OR OTHER PERMITS AS APPLICABLE. CONTRACTOR IS ALSO TO COORDINATE FULLY WITH UTILITY COMPANIES ON EXACT LOCATION OF UNDERGROUND UTILITIES AND ANY UTILITY ADJUSTMENT REQUIRED. UTILITY COMPANIES SHALL BE NOTIFIED A MINIMUM OF THREE WORKING DAYS PRIOR TO EXCAVATION.
2. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS WERE DEPICTED FROM ACTUAL FIELD MEASUREMENTS AND/OR DERIVED FROM RECORD DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE LOCATION OF EXISTING UTILITIES TO DETERMINE IF THERE ARE ANY CONFLICTS WITH THE PROPOSED CONSTRUCTION AND TO COORDINATE WITH THE UTILITY OWNERS TO RESOLVE THESE CONFLICTS.
3. THE SUBSURFACE INFORMATION FOR THIS PROJECT WAS OBTAINED FOR DESIGN PURPOSES AND MAY NOT BE AN ADEQUATE REPRESENTATION OF ACTUAL CONDITIONS FOR PROJECT CONSTRUCTION. INFORMATION SHOWN, INCLUDING WATER LEVELS, REPRESENTS EXISTING CONDITIONS AT THE SPECIFIC BORING LOCATIONS AT THE TIME THE BORINGS WERE MADE.
4. ANY DIFFERING SITE CONDITIONS FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER, IN WRITING, WITHIN 48 HOURS OF DISCOVERY. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO SUCH DIFFERING CONDITIONS WILL BE ALLOWED IF HE OR SHE FAILS TO PROVIDE THE WRITTEN NOTIFICATION.
5. ALL MATERIALS, INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH THE CITY OF WINTER GARDEN, FLORIDA BUILDING CODE AND FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
6. THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING AND BRACING REQUIRED TO PROTECT ADJACENT STRUCTURES AND UTILITIES OR MINIMIZE TRENCH WIDTH AS REQUIRED. SHEETING AND SHORING SHALL BE DESIGNED BY A STATE OF FLORIDA PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL ENSURE THAT ALL REQUIRED CONSTRUCTION PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING WORK.
8. ALL DEBRIS AND WASTE MATERIALS GENERATED BY DEMOLITION OR SUBSEQUENT CONSTRUCTION ACTIVITIES SHALL BE DISPOSED OFF–SITE IN A LEGAL MANNER AT AN APPROVED DISPOSAL FACILITY. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED FOR DEMOLITION, CONSTRUCTION WORK AND HAULING WASTE MATERIAL. ALL ASSOCIATED COSTS AND PERMIT FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
9. ANY PUBLIC LAND CORNER, WITHIN THE LIMITS OF CONSTRUCTION, IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING ALTERED AND HAS NOT YET BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER WITHOUT DELAY.
10. COORDINATE VALUES ARE BASED ON A LOCAL GRID ESTABLISHED BY THE ENGINEER AND ARE INDEPENDENT OF VALUES DEPICTED ON THE SURVEY.
11. ALL REFERENCES TO PROPOSED CONSTRUCTION INDICATES CONSTRUCTION INCLUDED IN THIS CONTRACT.
12. ALL PIPING TO HAVE A MINIMUM OF THREE (3) FEET COVER UNLESS OTHERWISE NOTED ON PLANS.
13. THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NECESSARY STRIPING, TRAFFIC CONTROL AND SAFETY DEVICES IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," LATEST EDITION, AND THE LATEST FLORIDA DEPARTMENT OF TRANSPORTATION "ROADWAY DESIGN STANDARDS."
14. MAINTENANCE OF TRAFFIC: ACCESS FOR LOCAL TRAFFIC SHALL BE MAINTAINED. IF, DURING CONSTRUCTION, ACCESS FOR LOCAL TRAFFIC IS CHANGED, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE JURISDICTIONAL AGENCY A MINIMUM OF THREE (3) WORKING DAYS IN ADVANCE. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH INDEX NO. 600 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS.
15. REFER TO FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS FOR THE FOLLOWING:
    A. SILT FENCE (INDEX NO. 102)
    B. TYPE C INLET (INDEX NO. 232)
    C. TYPE D INLET (INDEX NO. 232)
    D. TYPE D CURB (INDEX NO. 300)
    E. TYPE F CURB AND GUTTER (INDEX NO. 300)
    F. CURB RAMP (INDEX NO. 304)
    G. CROSSWALK, STOP BAR (INDEX NO. 17346)
    H. PAVEMENT ARROWS & MESSAGE SIZE & SPACING (INDEX NO. 17346)
    I. CONCRETE BUMPER GUARD (WHEEL STOP) (INDEX NO. 300)
    J. VALLEY GUTTER (INDEX NO. 300)
16. AS–BUILT DRAWINGS, SIGNED AND SEALED BY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA, SHALL BE PROVIDED PER THE PROJECT SPECIFICATIONS AND SHALL COMPLY WITH CITY OF WINTER GARDEN REQUIREMENTS.

CITY OF WINTER GARDEN GENERAL NOTES

1. ALL COMPACTION SHALL BE 98% OF THE MODIFIED PROCTOR MAXIMUM DENSITY (i.e. PAVEMENT SUBBASE DETAIL).
2. ALL GRAVITY SANITARY PIPES AND FITTINGS SHALL BE SDR 26.
3. AS–BUILT RECORD DRAWINGS SHALL COMPLY WITH CITY OF WINTER GARDEN REQUIREMENTS.
4. ALL CONSTRUCTION SHALL CONFORM TO CITY OF WINTER GARDEN STANDARDS, SPECIFICATIONS AND ORDINANCES.
5. NO TREES MAY BE PLANTED OVER OR WITHIN 5 FEET OF ANY UTILITY LINES. ONLY SOD OR SHRUBS MAY BE PLANTED OVER UTILITY LINES.

NOTE: BUILDING PERMIT APPLICATION FOR ANY PADS IN THE MUCK REMOVAL AREA SHALL BE ACCOMPANIED BY A DETAILED REPORT, SIGNED AND SEALED BY A FLORIDA PROFESSIONAL ENGINEER, THAT THESE AREAS ARE SUITABLE FOR CONSTRUCTION, AND SHALL CONTAIN SPECIAL FOUNDATION REQUIREMENTS OR DESIGNS AS APPROPRIATE. PROVIDE TO THE BUILDING AND ENGINEERING DEPARTMENTS.

REV	DATE	DESCRIPTION	BY
4	4-22-20	ADDED NOTE FOR BUILDING PADS WITHIN MUCK AREA	SLM

MELLICH–BLENDEN ENGINEERING, INC.
1177 LOUISIANA AVENUE – SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647-4040

DRAWN SLM
DESIGNED SLM
CHECKED SLM
DATE 3-9-20

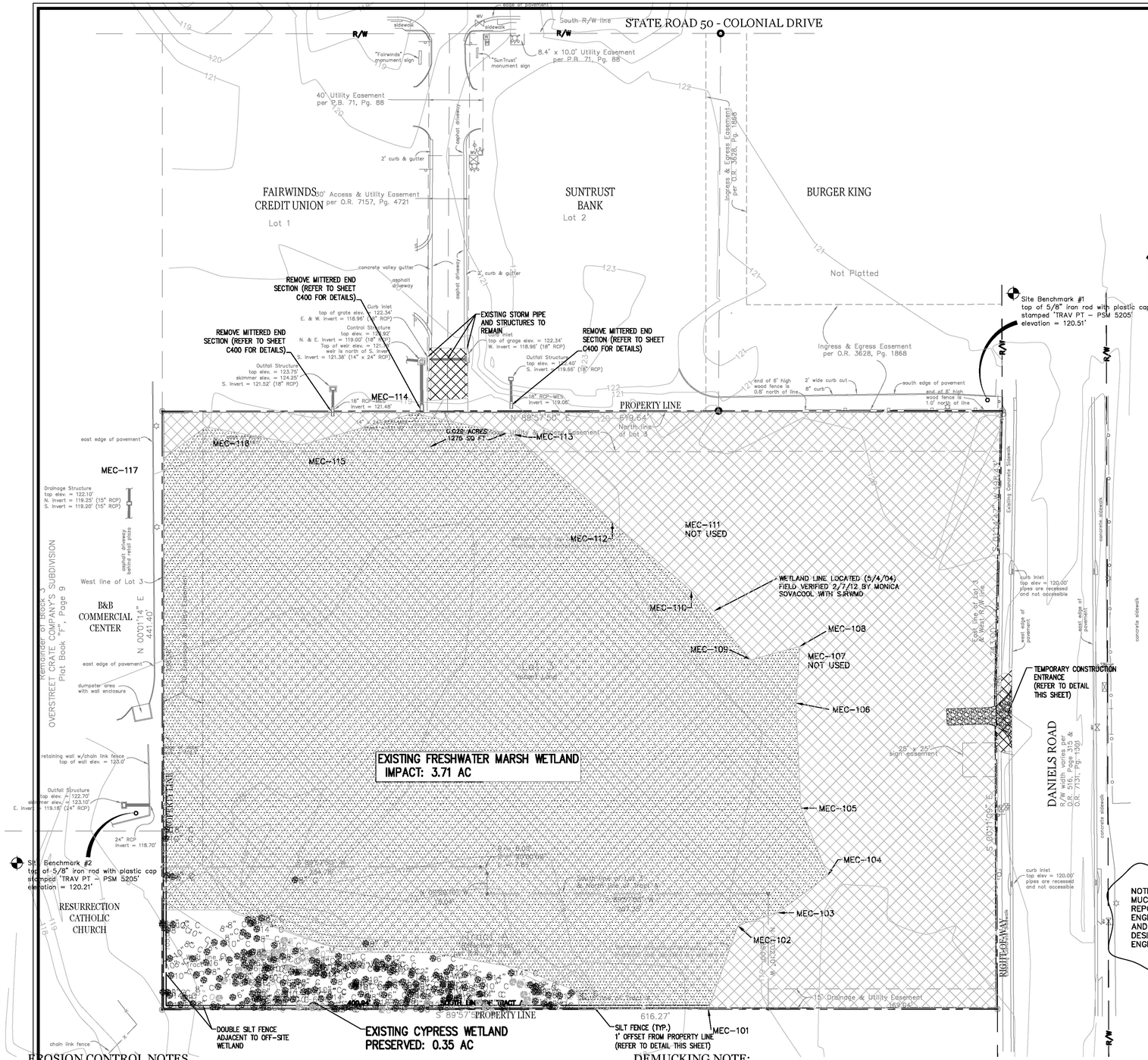
DAINELS ROAD BUSINESS PARK

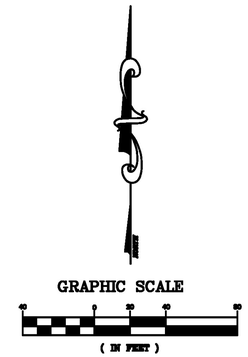
SITE PLAN

SCALE 1" = 40'

PROJECT NO. 12–002

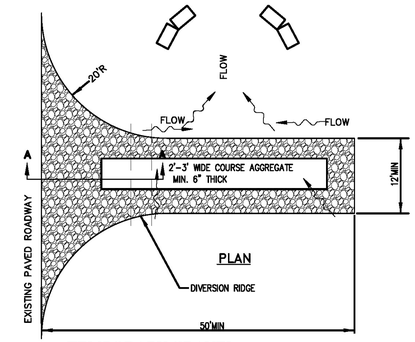
SHEET 2 OF 19





NOTE(S):

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. ALL EROSION CONTROL MATERIALS, CONSTRUCTION & MAINTENANCE TO BE PER APPLICABLE SECTIONS OF FDOT STANDARD SPECIFICATION #104.
5. USE SANDBAGS, SYNTHETIC BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN REQUIRED.
6. COURSE AGGREGATE & FILTER FABRIC TO BE PER SECTIONS OF FDOT STANDARD SPECIFICATION #901 & #985 RESPECTIVELY.

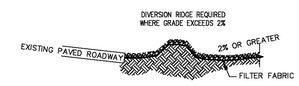


TEMPORARY GRAVEL CONSTRUCTION ENTRANCE DETAIL

N.T.S.

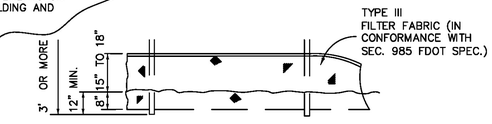
DEMOLITION LEGEND

- SILT FENCE (REFER TO DETAIL THIS SHEET)
- LIMITS OF CLEARING AREA. CONCRETE WALK, PAVEMENT AND BASE, CURB AND TREES. ALL TREES WITHIN THIS AREA SHOULD BE REMOVED UNLESS OTHERWISE NOTED ON PLAN.
- WETLAND IMPACT AREA/LIMITS OF CLEARING IN WETLAND (REFER TO AUSTIN ENVIRONMENTAL REPORT FOR DETAILS)



SECTION A-A

NOTE: BUILDING PERMIT APPLICATION FOR ANY PADS IN THE MUCK REMOVAL AREA SHALL BE ACCOMPANIED BY A DETAILED REPORT, SIGNED AND SEALED BY A FLORIDA PROFESSIONAL ENGINEER, THAT THESE AREAS ARE SUITABLE FOR CONSTRUCTION, AND SHALL CONTAIN SPECIAL FOUNDATION REQUIREMENTS OR DESIGNS AS APPROPRIATE. PROVIDE TO THE BUILDING AND ENGINEERING DEPARTMENTS.



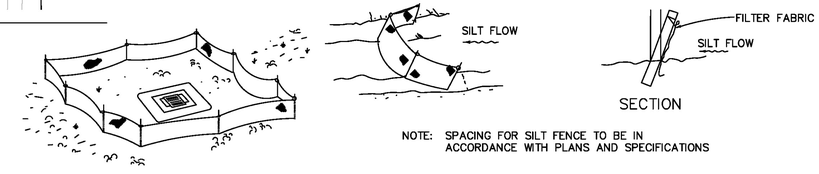
ELEVATION

EROSION CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS OF THE **CITY OF WINTER GARDEN**, FLORIDA, FDOT AND THE **ST. JOHNS RIVER** WATER MANAGEMENT DISTRICT.
2. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN, CONSTRUCTION. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTATION OF SILT OFF THE SITE.
3. SOIL MATERIALS FROM WORK ON THIS PROJECT SHALL BE CONTAINED AND NOT ALLOWED TO COLLECT ON ANY OFF-PERIMETER AREAS OR IN WATERWAYS. THESE INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
4. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE THE EFFECTIVENESS OF EROSION/SEDIMENT CONTROL EFFORTS. ANY NECESSARY REMEDIES SHALL BE PERFORMED WITHOUT DELAY.
5. ALL MUD, DIRT, OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING PUBLIC OR PRIVATE ROADS AND FACILITIES FROM THIS SITE, DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
6. ALL PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS AND ANY DISTURBED LAND AREAS SHALL BE COMPLETED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING.
7. ALL TEMPORARY PROTECTION SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE IN PLACE AND ESTABLISHED.
8. THE EROSION CONTROL MEASURES ARE INTENDED AS MINIMUM STANDARDS. ANY EROSION CONTROL REQUIRED BEYOND THAT SPECIFIED SHALL BE CONSIDERED AS INCLUDED WITHIN THIS CONTRACT.

DEMUCKING NOTE:

SELECTIVLY DEMUCK EXISTING WETLAND AND ADJACENT AREAS PER ON-SITE GEOTECHNICAL ENGINEER IN AREAS OF NEW IMPROVEMENTS AND AS DETERMINED NECESSARY BY STRUCTURAL ENGINEER FOR SUPPORT OF PERIMETER WALL. REFER TO PROJECT GEOTECHNICAL REPORT FOR APPROXIMATE MUCK DEPTHS AND LOCATIONS. GEOTECHNICAL ENGINEER SHALL DOCUMENT QUANTITY OF MUCK REMOVAL, COMPACTION OF APPROPRIATE BACKFILL MATERIAL AND PROVIDE CERTIFICATION IN REPORT FORM THAT ALL REMEDIATED AREAS ARE SUITABLE FOR CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THIS REPORT SHALL INCLUDE ANY SPECIAL PREPARATION OR FOUNDATION REQUIREMENTS AS APPROPRIATE. NOTE THAT ALL STRUCTURAL AREAS SHALL REQUIRE A MINIMUM OF 98% OF THE GEOTECHNICAL ENGINEER APPROVED BACKFILL MATERIALS MAXIMUM MODIFIED PROCTOR DRY DENSITY. LIFT DEPTHS AND COMPACTION DEPTHS SHALL BE PROVIDED PER THE PROJECT GOETECHNICAL REPORT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SCHEDULE THE GEOTECHNICAL ENGINEER AS NECESSARY TO SATISFY THESE REQUIREMENTS. FAILURE TO DO SO WILL REQUIRE ADDITIONAL WORK AT THE CONTRACTOR'S EXPENSE AS REQUIRED TO MEET THE GEOTECHNICAL ENGINEER'S OBSERVATION AND TESTING REQUIREMENTS. MINIMUM OBSERVATION AND TESTING REQUIREMENTS SHALL BE DETERMINED BY THE GOETECHNICAL ENGINEER AT HIS/HER DISCRETION.



SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS.

NOTE: SPACING FOR SILT FENCE TO BE IN ACCORDANCE WITH PLANS AND SPECIFICATIONS

SILT FENCE APPLICATIONS

N.T.S.

REV	DATE	DESCRIPTION	BY
	4-22-20	ADDED NOTE FOR BUILDING PADS WITHIN MUCK AREA	SLM

MELLICH-BLENDEN ENGINEERING, INC.
1177 LOUISIANA AVENUE - SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647-4040

DRAWN
DESIGNED SLM
CHECKED SLM
DATE 10-11-17

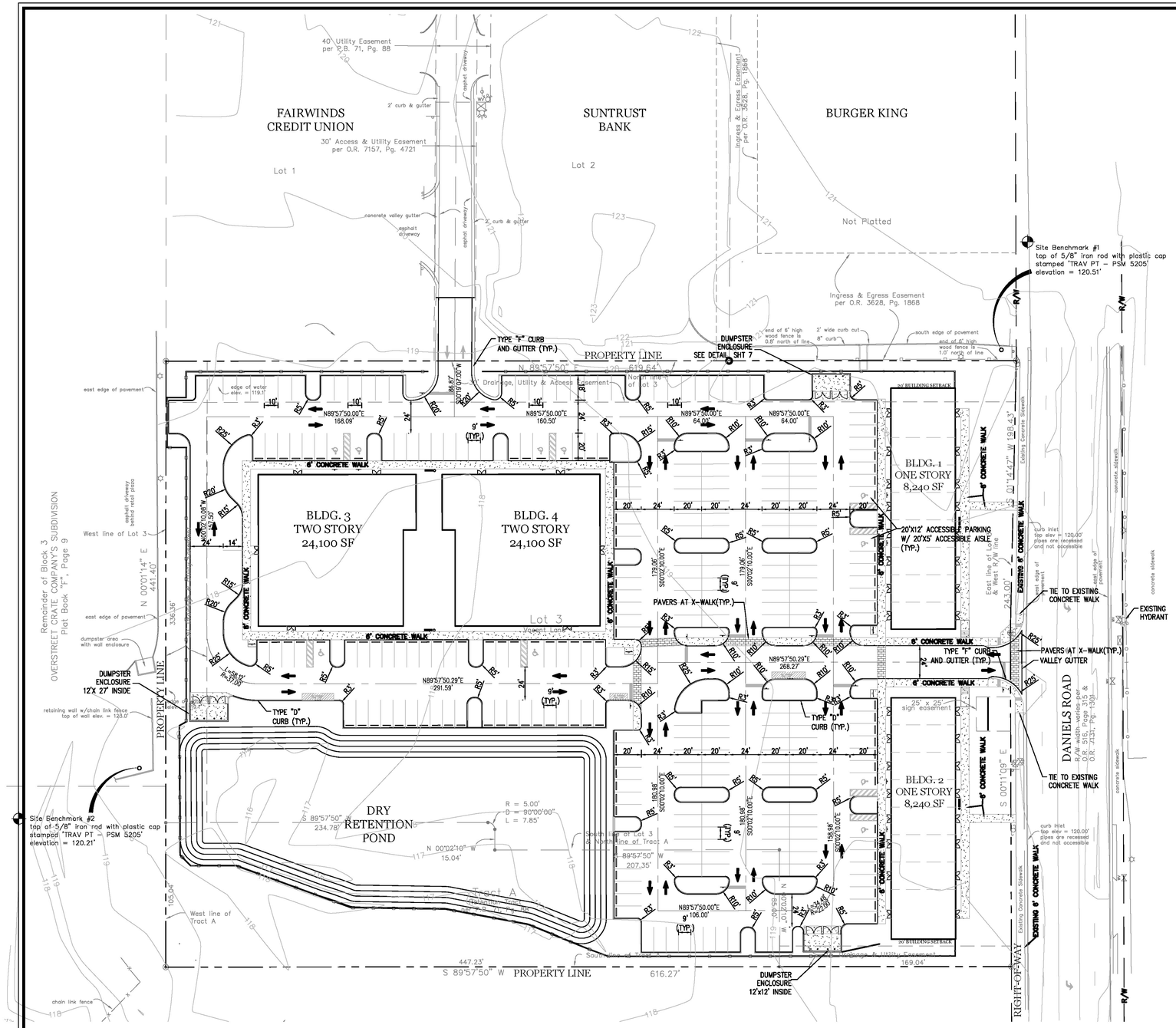
DANIELS ROAD BUSINESS PARK

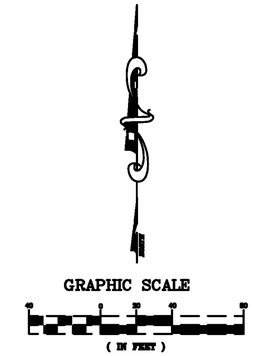
EROSION CONTROL AND DEMO PLAN

SCALE 1" = 40'

PROJECT NO. 12-002

SHEET 3 OF 19





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MELLICH-BLENDEN ENGINEERING, INC.
1177 LOUISIANA AVENUE - SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647-4040

DRAWN
DESIGNED SLM
CHECKED SLM
DATE 10-1-17

DANIELS ROAD BUSINESS PARK

GEOMETRY PLAN

SCALE
1" = 40'

PROJECT NO.
12-002

SHEET
4 OF 19

CITY OF WINTER GARDEN GENERAL NOTES

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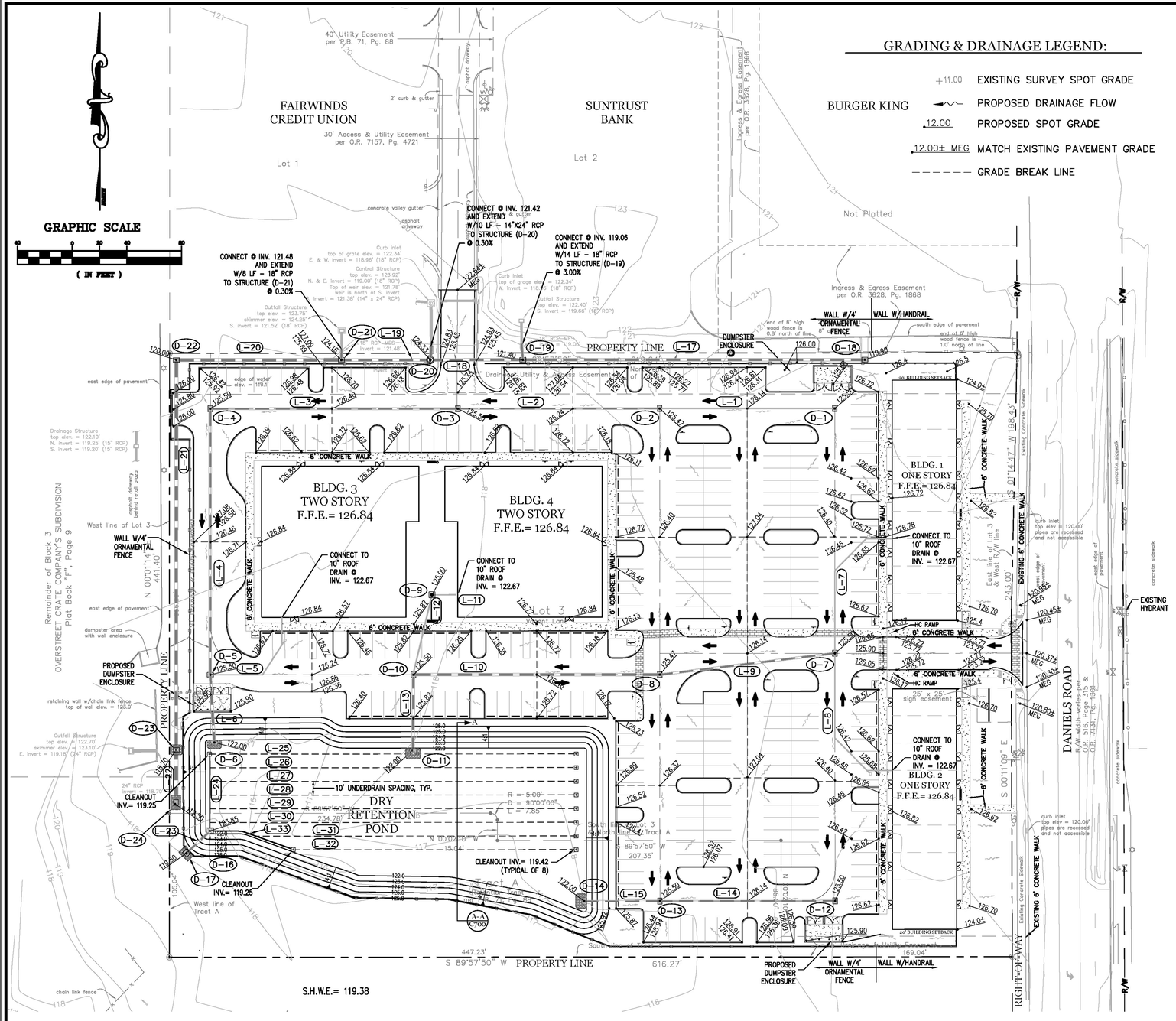


GRADING & DRAINAGE LEGEND:

+11.00	EXISTING SURVEY SPOT GRADE
	PROPOSED DRAINAGE FLOW
12.00	PROPOSED SPOT GRADE
12.00± MEG	MATCH EXISTING PAVEMENT GRADE
	GRADE BREAK LINE

DRAINAGE STRUCTURE TABLE:

D-1 TYPE "C" INLET
TOP EL.= 125.50
INV.= 122.00

D-2 TYPE "C" INLET
TOP EL.= 125.47
E. INV.= 121.61
W. INV.= 121.36

D-3 TYPE "C" INLET
TOP EL.= 125.50
E. INV.= 120.84
W. INV.= 120.59

D-4 TYPE "C" INLET
TOP EL.= 125.50
E. INV.= 120.08
S. INV.= 119.58

D-5 TYPE "C" INLET
TOP EL.= 125.50
N. INV.= 119.34
E. INV.= 122.42
S. INV.= 118.84

D-6 TYPE "D" INLET W/RETICULINE STEEL GRATE AND ENERGY DISSIPATOR (BUBBLE-UP STRUCTURE)
TOP EL.= 122.00
INV.= 118.75

D-7 TYPE "C" INLET
TOP EL.= 125.50
N. INV.= 121.98
S. INV.= 121.98
W. INV.= 121.31

D-8 TYPE "C" INLET
TOP EL.= 125.47
E. INV.= 120.79
W. INV.= 120.29

D-9 24" DRAIN BASIN
TOP EL.= 125.00
E. INV.= 122.43
S. INV.= 122.26

D-10 TYPE "C" INLET W/J BOTTOM
TOP EL.= 125.50
E. INV.= 119.94
N. INV.= 122.14
SW. INV.= 119.03

D-11 TYPE "D" INLET W/RETICULINE STEEL GRATE AND ENERGY DISSIPATOR (BUBBLE-UP STRUCTURE)
TOP EL.= 122.00
INV.= 118.75

D-12 TYPE "C" INLET
TOP EL.= 125.50
INV.= 122.00

D-13 TYPE "C" INLET
TOP EL.= 125.50
E. INV.= 121.74
W. INV.= 121.49

D-14 TYPE "D" INLET W/RETICULINE STEEL GRATE AND ENERGY DISSIPATOR (BUBBLE-UP STRUCTURE)
TOP EL.= 122.00
INV.= 119.56

D-15 ~~FILTERED END SECTION W/ENERGY DISSIPATOR~~ NOT USED
INV.= 122.00

D-16 TYPE "D" INLET W/RETICULINE STEEL GRATE (CONTROL STRUCTURE) (REFER TO SHEET 9 FOR DETAIL)
TOP EL.= 123.85
N. INV.= 119.25
SW. INV.= 112.67

D-17 TYPE "D" INLET W/RETICULINE STEEL GRATE AND ENERGY DISSIPATOR (BUBBLE-UP STRUCTURE)
TOP EL.= 119.50
INV. 18" RCP = 112.59
BOTTOM EL. 111.00
(SEE SHT. 9 FOR DETAIL)

D-18 TYPE "D" INLET W/RETICULINE STEEL GRATE
TOP EL.= 119.90
INV.= 116.65

D-19 TYPE "D" INLET W/RETICULINE STEEL GRATE
TOP EL.= 121.40
24" WIDE SLOTS IN E. AND W. SIDES
INV.= 119.50
N. INV.= 118.64
E. INV.= 116.25
W. INV.= 116.15

D-20 TYPE "P" MANHOLE
TOP EL.= 124.33
N. INV.= 121.39
E. INV.= 115.95
W. INV.= 115.85

D-21 TYPE "D" INLET W/RETICULINE STEEL GRATE
TOP EL.= 124.16
24" WIDE SLOTS IN E. AND W. SIDES
INV.= 119.38
N. INV.= 121.45
E. INV.= 115.59
W. INV.= 115.09

D-22 TYPE "D" INLET W/RETICULINE STEEL GRATE AND "J" BOTTOM
TOP EL.= 120.00
E. INV.= 114.87
S. INV.= 114.77

D-23 TYPE "D" INLET W/RETICULINE STEEL GRATE AND ENERGY DISSIPATOR
TOP EL.= 118.70
N. INV.= 114.25
S. INV.= 113.75

D-24 TYPE "D" INLET W/RETICULINE STEEL GRATE AND ENERGY DISSIPATOR (BUBBLE-UP STRUCTURE-SEE SHT 9)
TOP EL.= 119.50
INV. 36" RCP = 113.44
BOTTOM EL. 111.94

DRAINAGE PIPE TABLE:

L-1	127 LF – 12" PVC @ 0.30%
L-2	147 LF – 15" RCP @ 0.35%
L-3	180 LF – 18" RCP @ 0.28%
L-4	193 LF – 24" RCP @ 0.12%
L-5	83 LF – 10" PVC @ 0.30%
L-6	54 LF – 24" RCP @ 0.17%
L-7	115 LF – 10" PVC @ 0.60%
L-8	115 LF – 10" PVC @ 0.60%
L-9	128 LF – 18" RCP @ 0.40%
L-10	179 LF – 24" RCP @ 0.19%
L-11	18 LF – 10" PVC @ 0.30%
L-12	60 LF – 12" PVC @ 0.20%
L-13	27 LF – 24" RCP @ 0.34%
L-14	127 LF – 12" PVC @ 0.20%
L-15	66 LF – 15" RCP @ 0.30%
~~L-16~~	~~26 LF – 10" PVC @ 1.00%~~ NOT USED
L-17	250 LF – 24" RCP @ 0.16%
L-18	68 LF – 24" RCP @ 0.29%
L-19	65 LF – 24" RCP @ 0.39%
L-20	120 LF – 30" RCP @ 0.18%
L-21	285 LF – 30" RCP @ 0.18%
L-22	37 LF – 36" RCP @ 0.21%
L-23	20 LF – 18" RCP @ 0.30%
L-24	55 LF – 6" PVC @ 0.00%
L-25	266 LF – 4" PERFORATED UNDERDRAIN @ 0.00%
L-26	266 LF – 4" PERFORATED UNDERDRAIN @ 0.00%
L-27	266 LF – 4" PERFORATED UNDERDRAIN @ 0.00%
L-28	266 LF – 4" PERFORATED UNDERDRAIN @ 0.00%
L-29	266 LF – 4" PERFORATED UNDERDRAIN @ 0.00%
L-30	266 LF – 4" PERFORATED UNDERDRAIN @ 0.00%
L-31	235 LF – 4" PERFORATED UNDERDRAIN @ 0.00%
L-32	207 LF – 4" PERFORATED UNDERDRAIN @ 0.00%
L-33	250 LF – 4" PERFORATED UNDERDRAIN @ 0.00%
L-34	93 LF – 6" PVC @ 0.00%

PROJECT BENCHMARK:

THE ELEVATIONS SHOWN HEREON ARE BASED ON THE ORANGE COUNTY VERTICAL CONTROL NETWORK. SPECIFICALLY, BENCHMARK DESIGNATION NUMBER C-134-6053, BEING A 3 1/2" ALUMINUM SURVEY MARKER IN CONCRETE WALL BEHIND MCDONALDS RESTAURANT. PUBLISHED ELEVATION IS 124.23 FEET, RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

FLOOD INSURANCE RATE MAP:

SUBJECT PROPERTY LIES WITHIN ZONE A, AREA WITHIN THE SPECIAL FLOOD HAZARD AREA SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT (NO BASE FLOOD ELEVATION DETERMINED) AND ZONE X, AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP NUMBER 12095C0215F, DATED SEPTEMBER 25, 2009.

GRADING AND DRAINAGE NOTES

1. CONTRACTOR SHALL VERIFY EXISTING TOPOGRAPHIC DATA, LOCATION OF EXISTING UTILITIES AND ALL OTHER SITE CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL GRADES SHOWN, WITH THE EXCEPTION OF THOSE INDICATED ON THE SURVEY BASE DRAWING, ARE FINISHED GRADES UNLESS INDICATED OTHERWISE.
3. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE GRADED TO ORIGINAL GROUND LINES AND FINISHED WITH SOD PER PROJECT SPECIFICATIONS UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL MAINTAIN ALL AREAS UNTIL FINAL ACCEPTANCE.
4. ALL INLET AND MANHOLE TOPS SHALL BE TRAFFIC BEARING UNLESS OTHERWISE NOTED.
5. SIDEWALK CROSS-SLOPES SHALL NOT EXCEED 2%. SIDEWALK LONGITUDINAL SLOPES SHALL NOT EXCEED 5%.

PAVING & FILL LEGEND:

CONCRETE WALKS AND PAVEMENT

ALL FILL MATERIAL IN POND BOTTOM SHALL BE INDIGENOUS SOIL TAKEN FROM THIS SITE (CLEAN INORGANIC GRANULAR SOIL WITH A FINES CONTENT NO GREATER THAN 5%, UNIFIED SOIL CLASSIFICATION SP WITH A MINIMUM Kh OF 20 FT/DAY PERMEABILITY). EMPLOY SEDIMENT CONTROL MEASURES DURING THE CONSTRUCTION PROCESS TO KEEP UNRESTRICTED SHEET FLOW FROM ENTERING POND. AFTER POND GRADING PLACE SILT FENCE ALONG POND NORTH AND EAST TOPS-OF-BANK TO PROTECT POND FROM FINES ACCUMULATION.

NOTE: BUILDING PERMIT APPLICATION FOR ANY PADS IN THE MUCK REMOVAL AREA SHALL BE ACCOMPANIED BY A DETAILED REPORT, SIGNED AND SEALED BY A FLORIDA PROFESSIONAL ENGINEER, THAT THESE AREAS ARE SUITABLE FOR CONSTRUCTION, AND SHALL CONTAIN SPECIAL FOUNDATION REQUIREMENTS OR DESIGNS AS APPROPRIATE. PROVIDE TO THE BUILDING AND ENGINEERING DEPARTMENTS.

REV	DATE	DESCRIPTION	BY
			SLM
			SLM

MELLICH-BLENDEN ENGINEERING, INC.
1177 LOUISIANA AVENUE - SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647-4040

DRAWN ____ DESIGNED SLM
CHECKED SLM
DATE 10-11-17

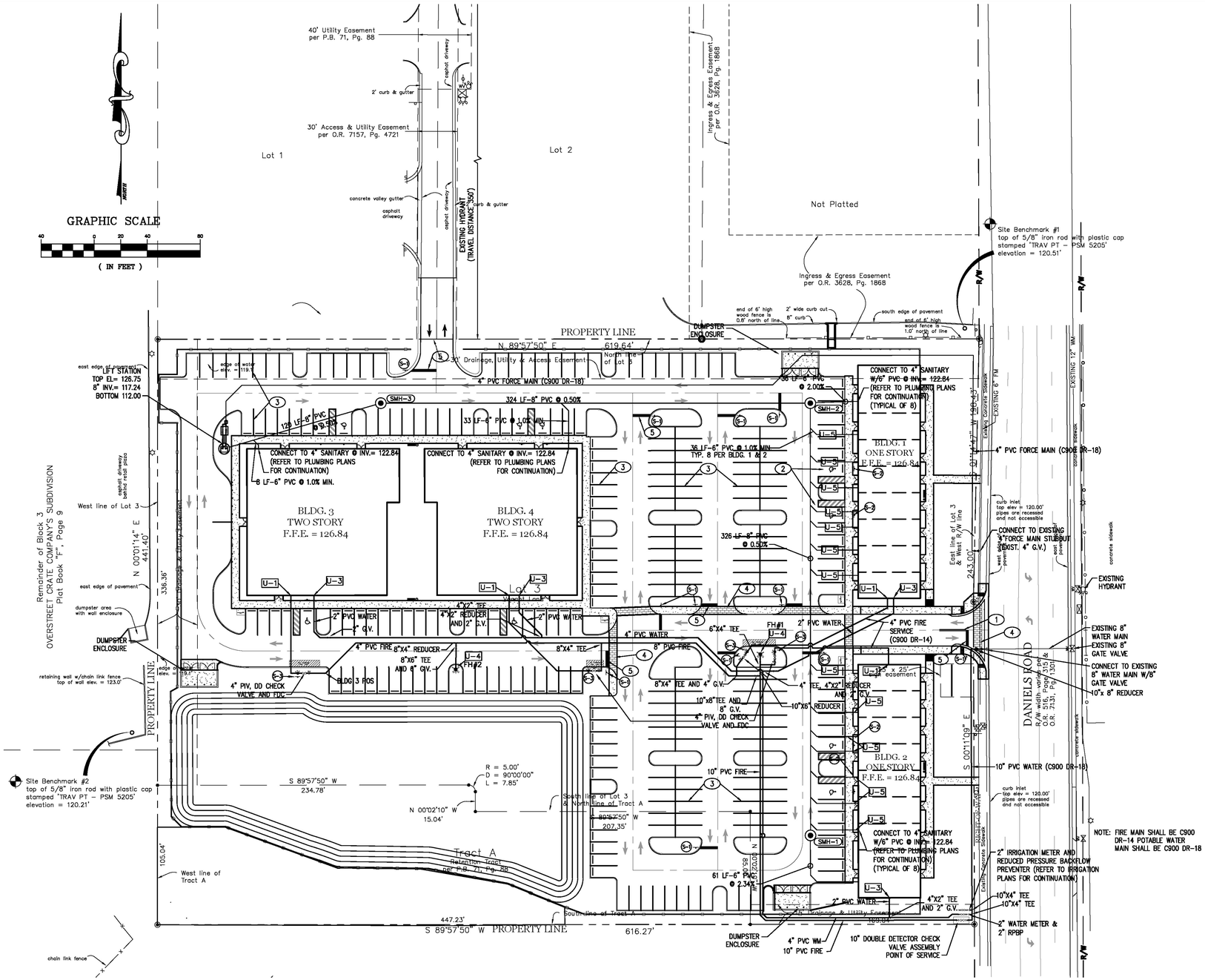
DANIELS ROAD BUSINESS PARK

PAVING, GRADING & DRAINAGE PLAN

SCALE 1" = 40'

PROJECT NO. 12-002

SHEET 5 OF 19



BUILDING FIRE FLOW REQUIREMENTS:

BASIS: NFPA 1,2015,TABLE 18.4.5.2.1
BLDG. CONST. TYPE: II B, SPRINKLERED
BLDG. AREA: 13,000 SF
FLOW REQUIRED: 2,500 GPM
SPRINKLER CREDIT: 75%
ADJUSTED FLOW: 1,000 GPM (MINIMUM)
HYDRANTS REQUIRED: 1
HYDRANTS PROVIDED: 2

UTILITY NOTES

1. MANHOLE ELEVATIONS ARE TOP OF RIM.
2. ALL WATER MAIN MATERIALS AND APPURTENANCES SHALL CONFORM TO AND SHALL BE INSTALLED, TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF WINTER GARDEN AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
3. ALL ON-SITE UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED.
4. RESTRAIN POTABLE WATER (DR-18) PER DETAIL, SHEET C803.
5. ALL GRAVITY SANITARY PIPE & FITTINGS SHALL BE SDR 26.

STRIPING AND MARKING LEGEND:

(1) 20'- 4" WIDE DOUBLE YELLOW STRIPES (THERMOPLASTIC)

(2) 12'X 20' ACCESSIBLE PARKING SPACES W/ 5' ACCESS AISLE REFER TO SHEET C600 FOR STRIPING LAYOUT & REQUIREMENTS

(3) 4" WIDE PARKING STRIPE (WHITE TRAFFIC PAINT) (TYPICAL)

(4) SPECIAL EMPHASIS CROSSWALK (PAVERS OR SIMILAR)

(5) 24" WIDE STOP BAR (WHITE TRAFFIC PAINT)

SIGNAGE LEGEND:

(S-1) STOP — R1-1 "STOP" SIGN (30" HIGH INTENSITY GRADE SIGN)

(S-2) PARKING BY DISABLED PERMIT ONLY — $250 FINE — HANDICAP PARKING SIGN. REFER TO SHEET C600 FOR DETAIL.

(S-3) F.D.C. — 12"X 18" FIRE DEPARTMENT CONNECTION SIGN. (RED LETTERING - WHITE BACKGROND). ARROW FACES TOWARD FDC.

SANITARY STRUCTURES:

(SMH-1) SANITARY MANHOLE No.2
TOP EL.= 125.85
S. INV.= 121.41
W. INV.= 121.41
N. INV.= 121.31

(SMH-2) SANITARY MANHOLE No.3
TOP EL.= 125.72
S. INV.= 119.68
W. INV.= 119.58

(SMH-3) SANITARY MANHOLE No.4
TOP EL.= 126.10
E. INV.= 117.96
W. INV.= 117.86

UTILITY LEGEND:

U-1 CONNECT TO 4" FIRE SERVICE (REFER TO FIRE PROTECTION PLANS FOR CONTINUATION. TYPICAL OF 5)

U-2 CONNECT TO 1.5" POTABLE WATER SERVICE (REFER TO PLUMBING PLANS FOR CONTINUATION)

U-3 CONNECT TO 2" POTABLE WATER SERVICE (REFER TO PLUMBING PLANS FOR CONTINUATION)

U-4 FIRE HYDRANT ASSEMBLY

U-5 36 LF-6" PVC @ 1.00% MIN.

U-6 CONNECT TO 1" WATER SERVICE (REFER TO PLUMBING PLANS FOR CONTINUATION)

REV	DATE	DESCRIPTION	BY

MELLICH-BLENDEN ENGINEERING, INC.
1177 LOUISIANA AVENUE - SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647-4040

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DESIGNED SLM
CHECKED SLM
DATE 10-11-17

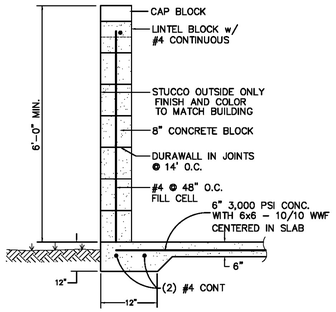
DANIELS ROAD BUSINESS PARK

UTILITY, STRIPING, SIGNAGE PLAN

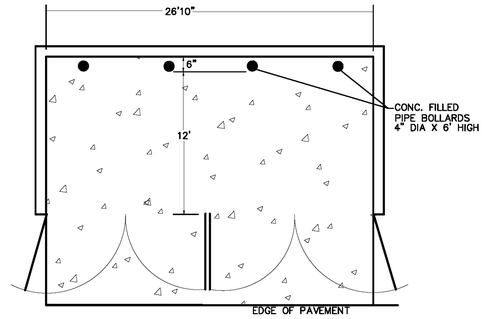
SCALE 1" = 40'

PROJECT NO. 12-002

SHEET 6 OF 19



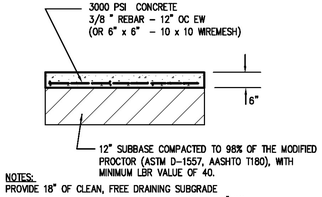
WALL SECTION



PLAN

DUMPSTER DETAIL

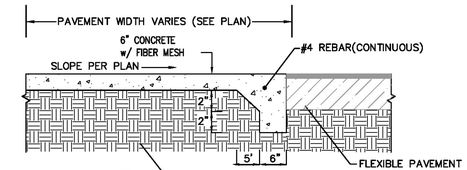
N.T.S.



NOTES:
PROVIDE 18" OF CLEAN, FREE DRAINING SUBGRADE BENEATH CONCRETE PAVEMENT. COMPACT BOTTOM 6" TO 98% OF THE MODIFIED PROCTOR (ASTM D-1557, AASHTO T-180).

DUMPSTER PAD SECTION

N.T.S.

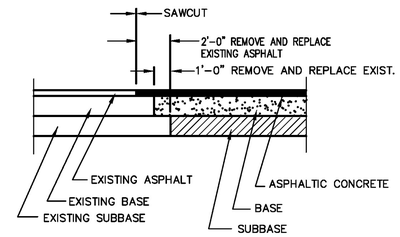


NOTES:
ALL CONCRETE PAVEMENT SHALL HAVE A FULL, ½" ISOLATION JOINT WHERE IT ABUTS EXISTING CONCRETE PAVEMENT AND OTHER RIGID STRUCTURES, SUCH AS BUILDING FOUNDATIONS AND WALLS. PROVIDE 2" SAW CUT OR DUMMY CONTRACTION JOINT AT EVENLY SPACED INTERVALS NOT TO EXCEED 20 FEET.
PORTLAND CEMENT CONCRETE PAVEMENT TO BE 4,000-PSI COMPRESSIVE STRENGTH, MIN.

NOTES:
PROVIDE 18" OF CLEAN, FREE DRAINING SUBGRADE BENEATH CONCRETE PAVEMENT. COMPACT BOTTOM 6" TO 98% OF THE MODIFIED PROCTOR (ASTM D-1557, AASHTO T-180).

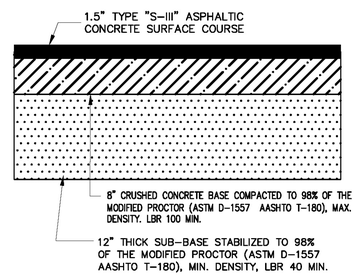
CONCRETE PAVEMENT DETAIL

N.T.S.



SAWCUT DETAIL

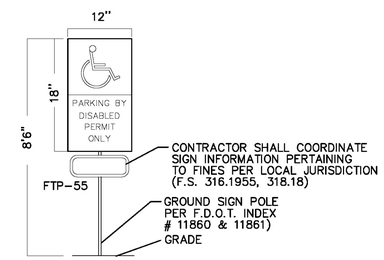
N.T.S



NOTE: PROVIDE 18" OF CLEAN FILL BELOW PAVEMENT SUBBASE PER CITY REQUIREMENTS. COMPACT TO 98% OF THE MODIFIED PROCTOR (ASTM D-1557, AASHTO T-180).

TYPICAL PAVEMENT SECTION

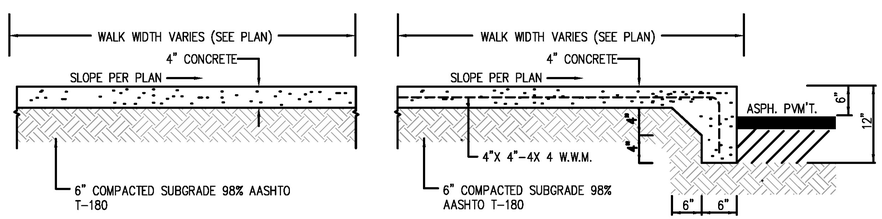
N.T.S.



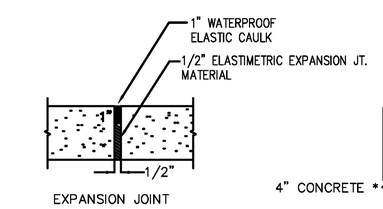
HANDICAP PARKING SIGN – DETAIL

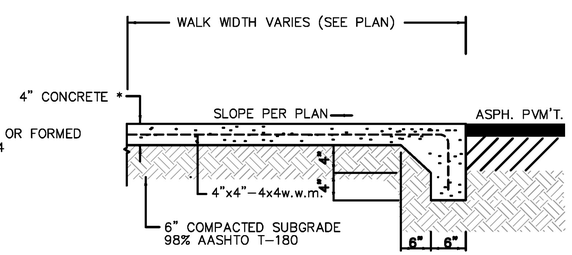
N.T.S

NOTES
1. TOP PORTION OF FTP 25 & 26 SHALL HAVE A REFLECTIVE SYMBOL AND BORDER.
2. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP 25 & 26 MAY BE FABRICATED ON ONE PANEL OR TWO.
4. FTP 25 MAY BE SUBSTITUTED FOR THE FTP 26 IN AREAS WHERE SPACE IS LIMITED.
5. SIGNS ARE TO BE MOUNTED AT STANDARD HEIGHT. (7'-6" FROM PAVEMENT TO BOTTOM OF SIGN).



TYPICAL THICKENED EDGE RAISED CONCRETE WALK ADJACENT TO PAVEMENT



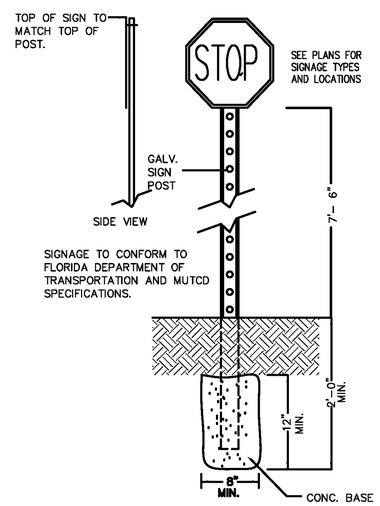


TYPICAL THICKENED EDGE FLUSH CONCRETE WALK ADJACENT TO PAVEMENT

NOTES:
1. SIDEWALK W/LIGHT BROOM FINISH & TROWELED EDGE.
2. FOR APPLICATIONS WHERE SIDEWALKS ARE ADJACENT TO GRASSED AREAS, THE GRASS AREA SHALL NOT EXCEED A 3% SLOPE FOR A MINIMUM OF 5 FEET.
3. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI CONCRETE AT 28 DAYS
4. ALL CONCRETE SIDEWALKS SHALL HAVE A FULL 1/2" EXPANSION JOINT AT A MAXIMUM DISTANCE OF 40 LINEAR FEET AND A SAW CUT OR FORMED DUMMY CONTRACTION JOINT AT EVENLY SPACED INTERVALS NOT TO EXCEED WIDTH OF THE WALK OR 8 LINEAR FEET WHICH EVER IS THE SMALLEST.
5. AN ¼" CONSTRUCTION JOINT SHALL BE CONSTRUCTED AT ALL P.C. AND P.T. OF CURVES AND WHERE EXISTING AND NEW SIDEWALKS MEET.

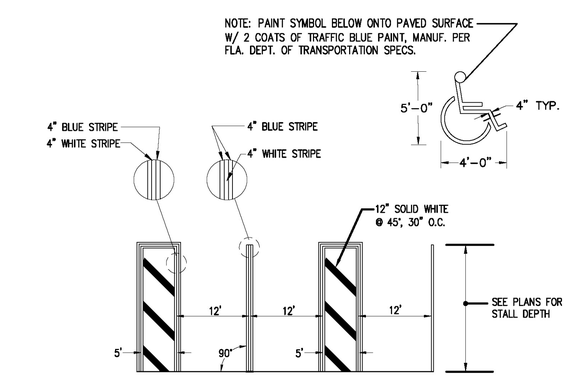
CONCRETE WALK DETAILS

N.T.S.



TYPICAL SIGN

N.T.S.



HANDICAP DETAILS

N.T.S

REV	DATE	DESCRIPTION	BY
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MEB
MELLICH–BLENDEN ENGINEERING, INC.
1177 LOUISIANA AVENUE, SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647-4040

DRAWN STM
DESIGNED STM
CHECKED STM
DATE 10-11-17

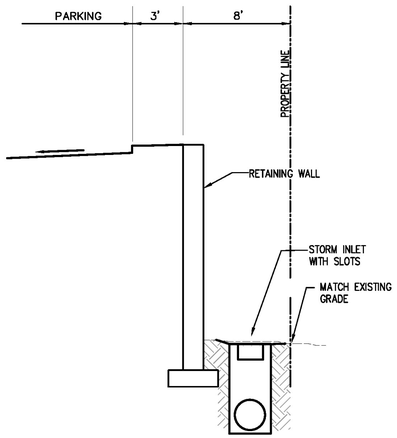
DANIELS ROAD BUSINESS PARK

SITE DETAILS

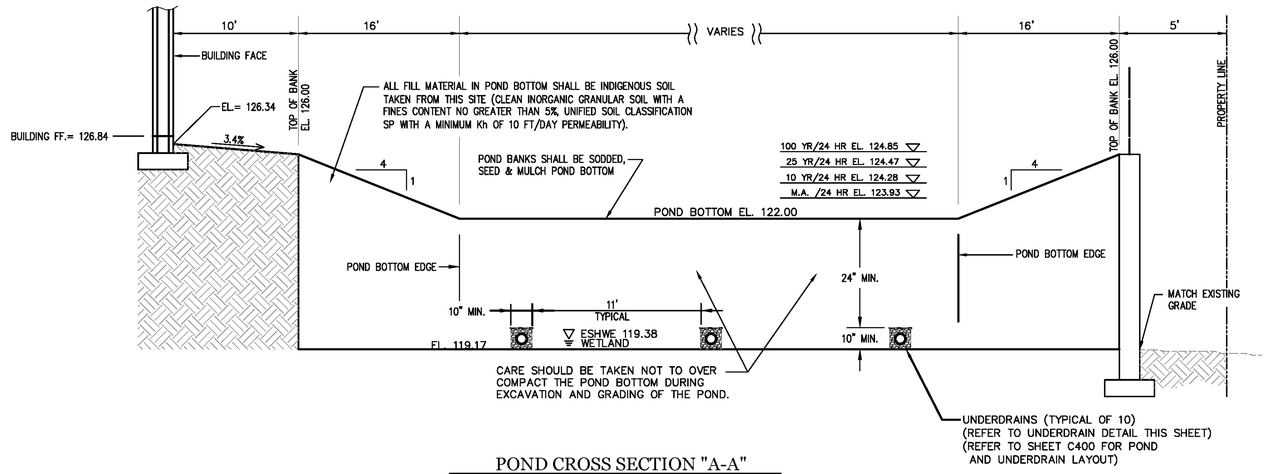
SCALE 1" = 40'

PROJECT NO. 12-002

SHEET 7 OF 19

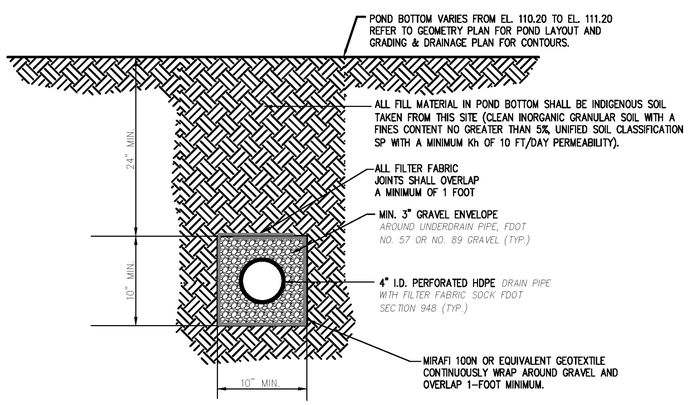


TYP. SECTION @ N. PROPERTY LINE



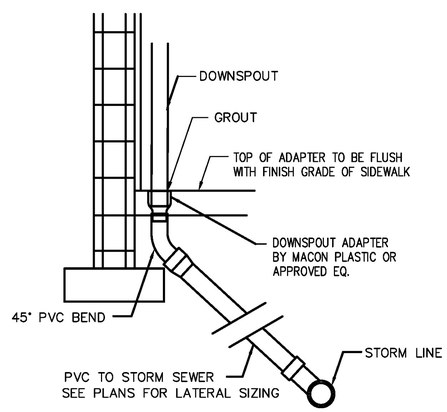
POND CROSS SECTION "A-A"

N.T.S.



POND UNDERDRAIN DETAIL

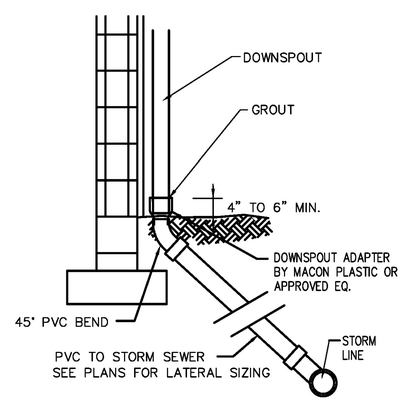
N.T.S.



NOTES:
1. VERIFY THAT THERE ARE NO CONFLICTS WITH BUILDING/WALK FOUNDATION. PROVIDE FITTINGS AS REQUIRED TO MITIGATE CONFLICT.
2. ENSURE THAT CENTERLINE OF HUB MATCHES CENTERLINE OF DOWNSPOUT AT JUNCTION.
3. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

DOWNSPOUT CONNECTION DETAIL IN SIDEWALK

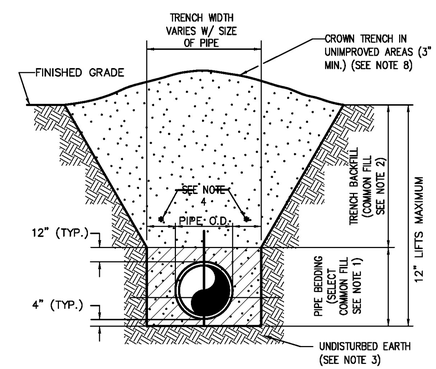
N.T.S.



NOTES:
1. VERIFY THAT THERE ARE NO CONFLICTS WITH BUILDING/WALK FOUNDATION. PROVIDE FITTINGS AS REQUIRED TO MITIGATE CONFLICT.
2. ENSURE THAT CENTERLINE OF HUB MATCHES CENTERLINE OF DOWNSPOUT AT JUNCTION.
3. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

DOWNSPOUT CONNECTION DETAIL IN GRASS

N.T.S.



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING MAY BE REQUIRED AS DIRECTED BY THE CITY OF WINTER GARDEN.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 32.5 OF THE CITY OF WINTER GARDEN MANUAL OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION FOR SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OF WINTER GARDEN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

STANDARD BEDDING DETAIL

N.T.S.

REV	DATE	DESCRIPTION	BY
△			
△			
△			
△			
△			

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(407) 647-4040

DRAWN
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DATE 10-11-17

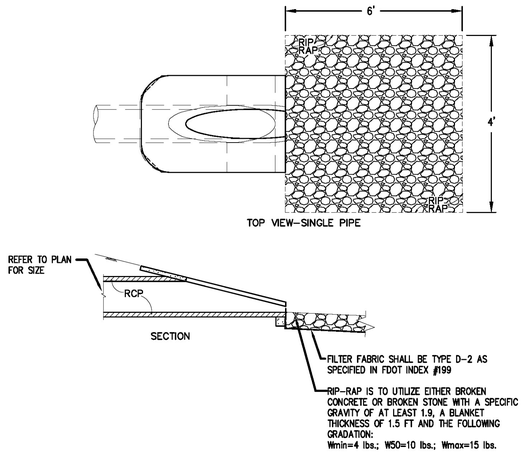
DANIELS ROAD BUSINESS PARK

DRAINAGE DETAILS

SCALE N.T.S.

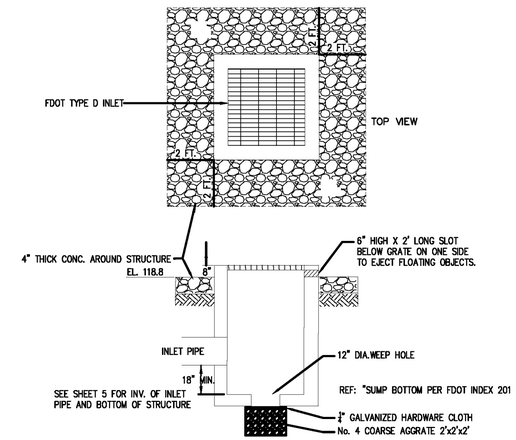
PROJECT NO. 12-002

SHEET 8 OF 19



RIP RAP ENERGY DISSIPATOR FOR D-17 MITERED END SECTIONS

N.T.S.

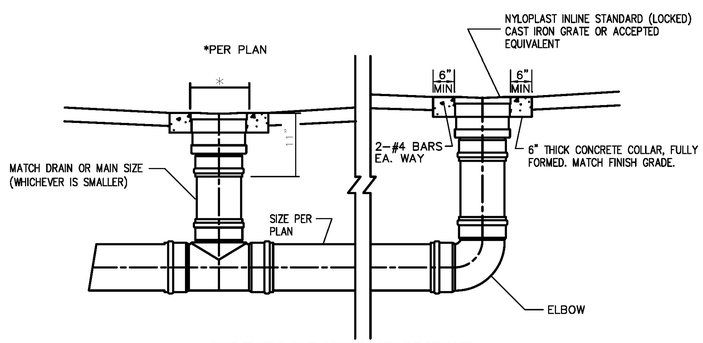


BUBBLE-UP ENERGY DISSIPATOR
with SUMP BOTTOM

N.T.S.

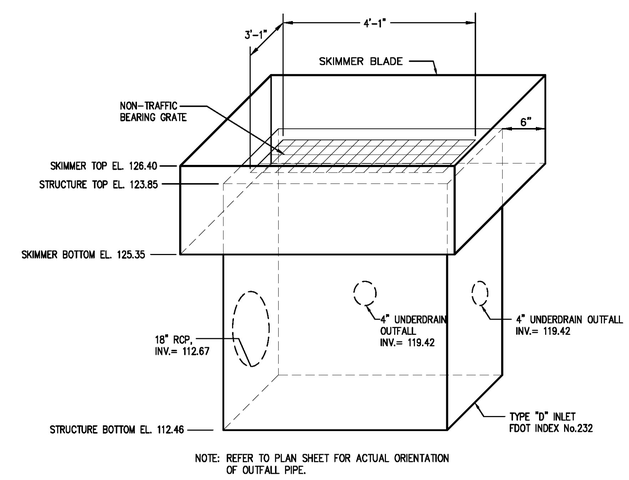
CITY TV INSPECTION REQUIREMENTS:

1. ALL STORM SEWERS SHALL BE VIDEO INSPECTED BEFORE PAVING AND AGAIN PRIOR TO THE END OF THE ONE YEAR WARRANTY PERIOD. STORM SEWERS WITH LESS THAN 5' COVER SHALL BE VIDEO INSPECTED AFTER BASE INSTALLATION.
2. REFER TO SHEET C803 FOR VIDEO INSPECTION SPECIFICATIONS.



INLINE & DRAIN BASIN DETAIL

N.T.S.



CONTROL STRUCTURE WITH SKIMMER DETAIL (D-16)

N.T.S.

REV	DATE	DESCRIPTION	BY

MELLICH–BLENDEN ENGINEERING, INC.
1177 LOUISIANA AVENUE – SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647-4040

DRAWN ____
DESIGNED SLM
CHECKED SLM
DATE 10-11-12

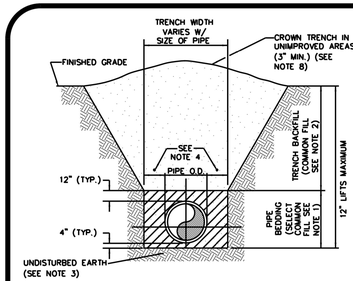
DANIELS ROAD BUSINESS PARK

DRAINAGE DETAILS

SCALE
1" = 40'

PROJECT NO.
12–002

SHEET
9 OF 19



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINNING NO MORE THAN 5% PASSING #200 SIEVE.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
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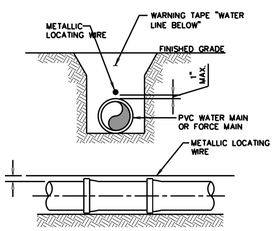
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OF WINTER GARDEN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

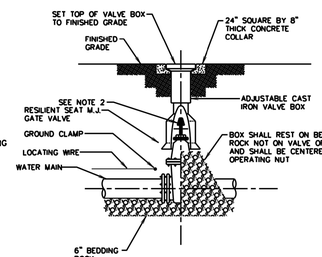
STANDARD BEDDING DETAIL
N.T.S.



NOTES:

1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE ATTACHED TO THE TOP OF PIPE WITH DUCT TAPE, AT LEAST 5 TIMES PER JOINT.
2. LOCATING ROD SHALL TERMINATE AT THE TOP OF EACH VALVE BOX AND BE CAPABLE OF EXTENDING ABOVE TOP OF BOX 1/2" SO AS NOT TO INTERFERE WITH VALVE OPERATION.

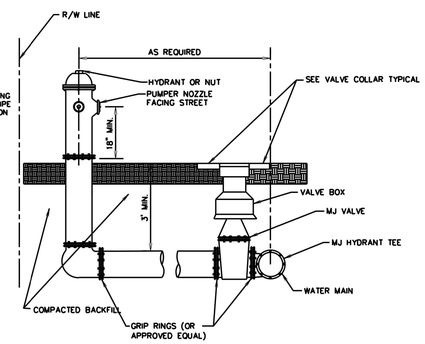
PVC PIPE LOCATING WIRE DETAIL
N.T.S.



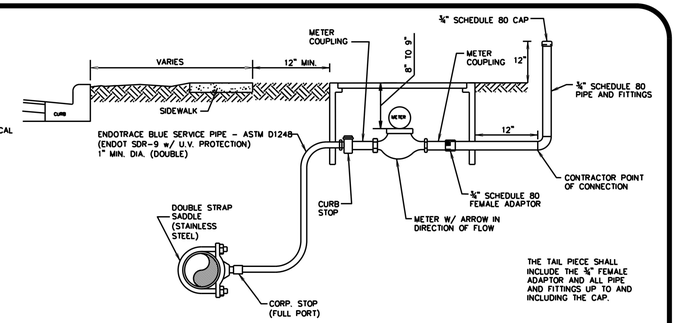
GENERAL NOTES:

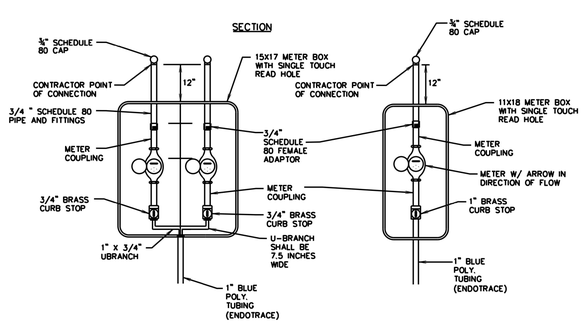
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.

GATE VALVE AND VALVE BOX DETAIL
N.T.S.



FIRE HYDRANT ASSEMBLY DETAIL
N.T.S.





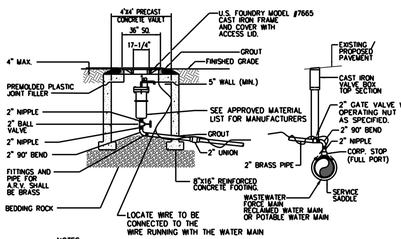
DOUBLE SERVICE (TOP VIEW)
N.T.S.

SINGLE SERVICE (TOP VIEW)
N.T.S.

NOTES:

1. ALL FITTINGS BETWEEN THE WATER MAIN AND THE METER COUPLING SHALL BE BRASS WITH COMPRESSION/PACK JOINT CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE IN A METER BOX ASSEMBLY, WHICH SHALL BE PLACED TO GRADE IN THE UTILITY EASEMENT AT THE PROPERTY LINE(S) OF THE LOT(S) TO BE SERVED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTRUCTION TO AND INCLUDING THE METER BOX ASSEMBLY. THE CITY SHALL FURNISH THE METER AND THE TAIL PIECE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING THE METER BOX ASSEMBLY TO FINISH GRADE AND MAKING ANY GRADE ADJUSTMENTS TO THE METER BOX IF REGRADING OCCURS.
5. ALL SERVICE LINES SHALL BE POLY ENDOTRACE PIPE AND SHALL BE BLUE IN COLOR W/WIRE.
6. THE POINT OF CONNECTION IS LOCATED ONE FOOT BEYOND THE METER BOX. THE PLUMBER/CUSTOMER SHALL BE RESPONSIBLE FOR MAINTENANCE BEYOND THE POINT OF CONNECTION.
7. IN NO CASE IS METER TO BE INSTALLED IN SIDEWALK OR OTHER PAVED AREAS.

POTABLE WATER SINGLE AND DOUBLE SERVICE DETAIL
N.T.S.



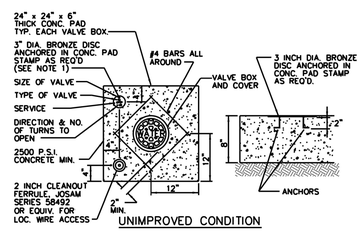
NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION, "SEWER" "RECLAIMED WATER OR POTABLE WATER".
7. NO GALVANIZED PIPE/VALVES.
8. LOCATE WIRE IN THE ARV VAULT SHALL BE SPLICED TO THE WIRE RUNNING WITH THE WATER MAIN AND EXCESS WIRE TO BE PLACED IN ARV VAULT. THE POINT OF CONNECTION AT THE MAIN SHALL HAVE A WATER PROOF CONNECTOR.

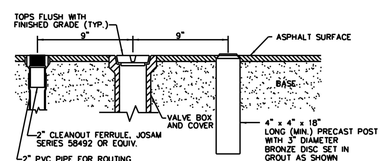
OFFSET TYPE

AIR RELEASE VALVE ASSEMBLY

N.T.S.



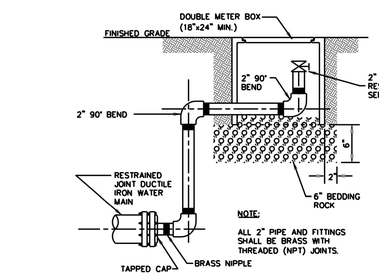
UNIMPROVED CONDITION



IMPROVED CONDITION

NOTES:
1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES.

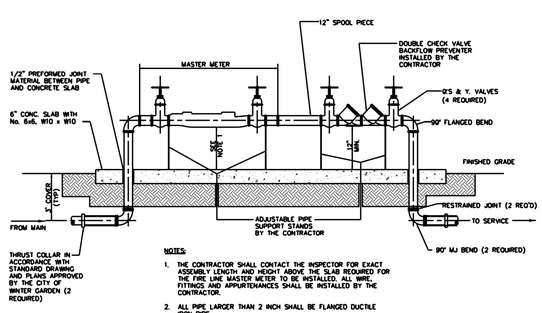
VALVE BOX COLLAR
N.T.S.



NOTE:

ALL 2" PIPE AND FITTINGS SHALL BE BRASS WITH THREADED (NPT) JOINTS.

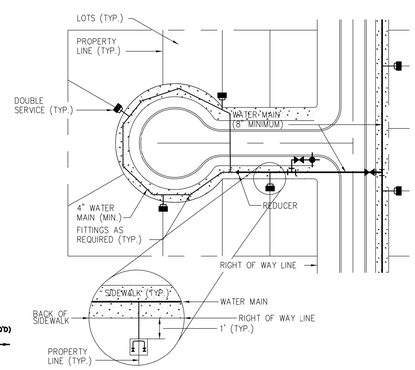
BLOWOFF VALVE DETAIL
N.T.S.



NOTES:

1. THE CONTRACTOR SHALL CONTACT THE INSPECTOR FOR EXACT ASSEMBLY LENGTH AND HEIGHT ABOVE THE SLAB REQUIRED FOR THE FIRE LINE MASTER METER TO BE INSTALLED. ALL WIRE, FITTINGS AND APPURTENANCES SHALL BE INSTALLED BY THE CONTRACTOR.
2. ALL PIPE LARGER THAN 2 INCH SHALL BE FLANGED DUCTILE IRON PIPE.
3. SENSUS METER REQUIRED.
4. 2" BYPASS METER SHALL BE CONSTRUCTED ON ALL MASTER METER ASSEMBLIES THREE INCHES AND LARGER.

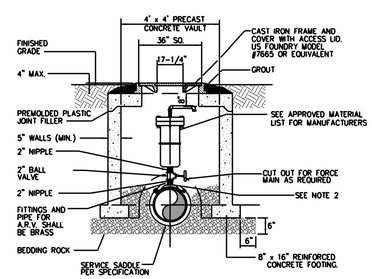
MASTER METER ASSEMBLY
N.T.S.



NOTES:

1. ANCHORING TYPE 90° BEND SHALL ONLY BE USED WHERE RIGHT-OF-WAY CONSTRICTIONS WILL NOT ALLOW INSTALLATION OF A STRAIGHT ASSEMBLY.
2. METER BOX TO BE INSTALLED BY THE CONTRACTOR.

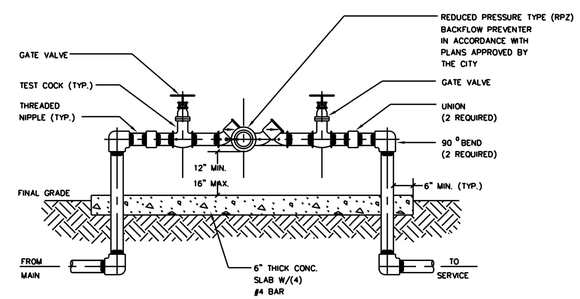
CUL-DE-SAC LOOPING AND METER BOX PLACEMENT DETAIL



NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 3.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION AND "POTABLE WATER".
7. NO GALVANIZED PIPE/VALVES.

POTABLE WATER SYSTEM AIR RELEASE VALVE AND VAULT
N.T.S.



NOTES:

1. ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED SCHEDULE 80 PVC. NO GALVANIZED PIPE WILL BE APPROVED.
2. ALL PIPE LARGER THAN 2" SHALL BE FLANGED DUCTILE IRON PIPE.
3. NO GALVANIZED PIPE ALLOWED.

BACKFLOW PREVENTER DETAIL
N.T.S.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

No.	ITEM	DATE
1	WATER SERVICE	4/3/14
2	ARV DETAILS	4/3/14

REVISIONS

REV	DATE	DESCRIPTION	BY

City of Winter Garden, Florida
STANDARDS AND SPECIFICATIONS
For Utilities Construction

MELLICH-BLENDEN ENGINEERING, INC.
1177 LOUISIANA AVENUE - SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647-4040

WINTER GARDEN

STANDARD DETAILS FOR POTABLE WATER SYSTEMS

DATE
JANUARY 2008

SHEET
2
2 OF 10

DRAWN
DESIGNED SLM
CHECKED SLM
DATE 10-11-17

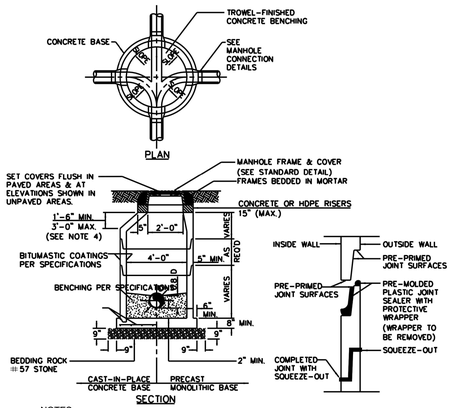
DANIELS ROAD BUSINESS PARK

POTABLE WATER DETAILS

SCALE
N.T.S.

PROJECT NO.
12-002

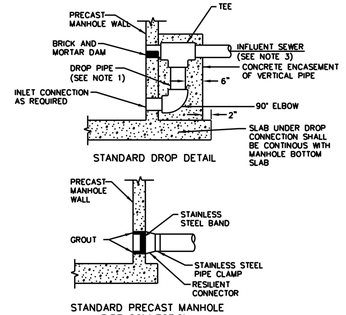
SHEET
10 OF 19



NOTES:

1. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS. ALL DROPS TO BE OUTSIDE OF THE MANHOLE.
2. E-Z RAPP OUTSIDE ALL JOINTS
3. GROUT WITH NON-SHRINKING GROUT INSIDE JOINTS
4. NO CONES OVER 3 FT. TALL
5. ALL PRECAST CONCRETE SHALL BE COATED INSIDE AND OUTSIDE WITH COAL TAR EPOXY, MINIMUM 16 MIL DMT.

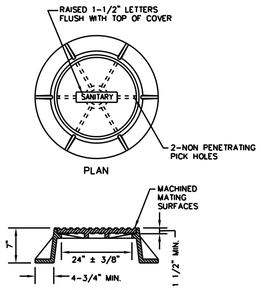
PRECAST CONCRETE SANITARY MANHOLE
N.T.S.



NOTES:

1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 2' OR MORE ABOVE THEN MANHOLE INVERT.

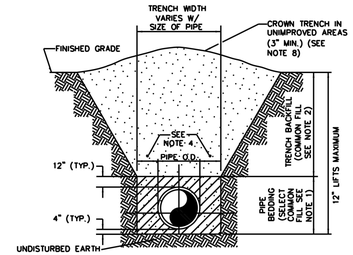
SANITARY MANHOLE CONNECTION DETAILS
N.T.S.



NOTES:

1. MANHOLE FRAME & COVER SHALL BE 24" OPENINGS, USE #AS-225 AS MANUFACTURED BY U.S. FOUNDRY & MFG. CORP. OR APPROVED EQUAL
2. RAIN STOPPER LIDS OR RAIN GUARD LIDS (LFVHS) REQUIRED.

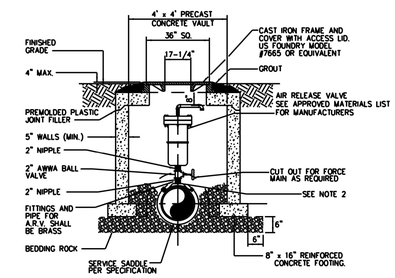
STANDARD MANHOLE FRAME AND COVER
N.T.S.



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING MAY BE REQUIRED AS DIRECTED BY THE CITY OF WINTER GARDEN.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 32.5 OF THE ORANGE COUNTY MANUAL OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION FOR SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OF WINTER GARDEN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

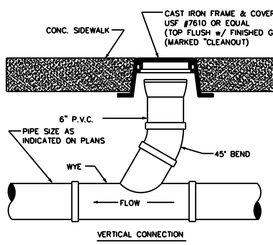
STANDARD BEDDING DETAIL
N.T.S.



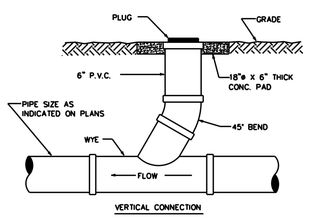
NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 3.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION AND "WASTEWATER".
7. NO GALVANIZED PIPE/VALVES.

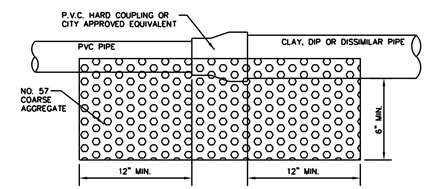
SEWAGE COMBINATION AIR VALVE (SCAV) AND VALVE VAULT
N.T.S.



CLEAN OUT DETAIL FINISHED BUILDOUT (IN PAVED AREA)
N.T.S.



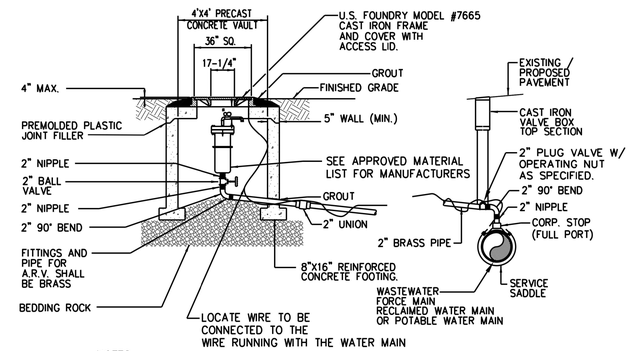
CLEAN OUT DETAIL FINISHED BUILDOUT (IN UNPAVED AREA)
N.T.S.



NOTE:

1. FIELD VERIFY MATERIALS OF EXISTING PIPES TO SELECT PROPER CONNECTOR.
2. HARBCO COUPLING OR APPROVED EQUIVALENT FOR ALL PIPE MATERIALS, UNLESS APPROVED IN WRITING BY THE CITY.

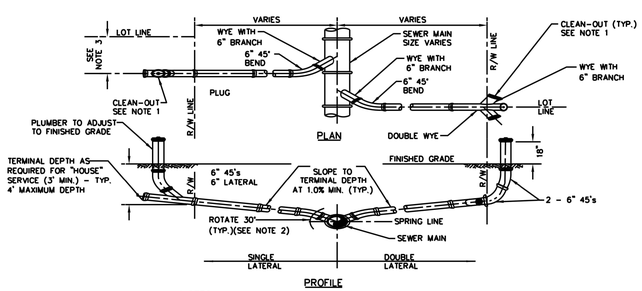
SEWER MAIN CONNECTION DETAIL
N.T.S.



NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION, "SEWER" "RECLAIMED WATER OR POTABLE WATER".
7. NO GALVANIZED PIPE/VALVES.
8. LOCATE WIRE IN THE ARV VAULT SHALL BE SPLICED TO THE WIRE RUNNING WITH THE WATER MAIN AND EXCESS WIRE TO BE PLACED IN ARV VAULT. THE POINT OF CONNECTION AT THE MAIN SHALL HAVE A WATER PROOF CONNECTOR.

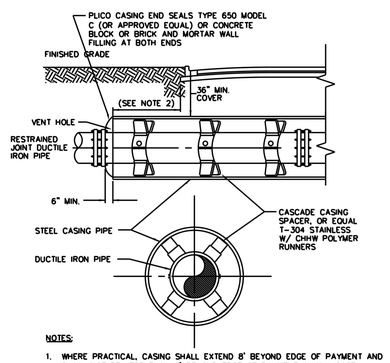
OFFSET TYPE AIR RELEASE VALVE ASSEMBLY



NOTES:

1. CLEANOUT SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
3. WYES AND 45° BENDS SHALL BE PVC (SDR 26).
4. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE, 25' MAXIMUM.

SANITARY SEWER SERVICE LATERAL DETAIL
N.T.S.



NOTES:

1. WHERE PRACTICAL, CASING SHALL EXTEND 8' BEYOND EDGE OF PAYMENT AND SHALL NOT BE LESS THAN 6' BEYOND EDGE OF PAYMENT IN ANY CASE.
2. CASING SPACERS AND END SEALS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
3. DESIGN ENGINEER TO DETERMINE NEED FOR SACRIFICIAL ANODE (S) FOR CORROSION CONTROL.

BORE AND JACK DETAIL
N.T.S.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

No.	ITEM	DATE
1	SANITARY MANHOLE	4/7/14
2	OFFSET ARV DETAIL	4/7/14

REVISIONS

REV	DATE	DESCRIPTION	BY

City of Winter Garden, Florida
STANDARDS AND SPECIFICATIONS
For Utilities Construction

MELLICH-BLENDEN ENGINEERING, INC.
1177 LOUISIANA AVENUE - SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647-4040

WINTER GARDEN

DRAWN ____
DESIGNED SLM
CHECKED SLM
DATE 10-11-12

DANIELS ROAD BUSINESS PARK

WASTEWATER DETAILS

STANDARD DETAILS FOR WASTEWATER SYSTEMS

DATE
JANUARY 2008

SHEET
3
3 OF 10

SCALE
N.T.S.

PROJECT NO.
12-002

SHEET
11 OF 19

CITY OF WINTER GARDEN - GENERAL NOTES:

1. ALL UTILITY SYSTEMS AND IMPROVEMENTS CONSTRUCTED IN THE CITY OF WINTER GARDEN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MANUAL OF STANDARDS AND SPECIFICATIONS FOR UTILITY CONSTRUCTION FOR THE CITY OF WINTER GARDEN, TO BE REFERRED TO AS MSS/CWG. THE LATEST EDITION AT THE TIME PERMITS ARE APPROVED SHALL BE EFFECTIVE FOR THE DURATION OF THE SUBJECT WORK OR PROJECT DEVELOPMENT.

2. THE CITY OF WINTER GARDEN GENERAL NOTES AND DETAILS ARE PROVIDED FOR THE CONVENIENCE OF FIELD PERSONNEL. THEY DO NOT INCLUDE ALL REQUIREMENTS OF THE MSS/CWG. THE CONTRACTOR SHALL REFER TO THE FULL TEXT OF THE MSS/CWG FOR FURTHER DETAIL AND CLARITY WHEN NEEDED.

3. ANY REQUEST FOR VARIANCE OR NONCOMPLIANCE FROM THE MSS/CWG NOTED ABOVE MUST BE APPROVED BY THE CITY ENGINEER OR UTILITIES DIRECTOR.

4. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN CLOSE PROXIMITY TO WATER, WASTEWATER, RECLAIMED WATER AND OTHER UTILITY SYSTEMS. THE CONTRACTOR SHALL COORDINATE UTILITY LOCATIONS WITH RESPECTIVE UTILITY OWNERS AND/OR CALL,"SUNSHINE ONE CALL", 1-800-432-4770 A MINIMUM OF 72 HOURS IN ADVANCE.

5. CONTRACTOR'S DAMAGE OF WINTER GARDEN UTILITY SYSTEM: THE CONTRACTOR SHALL IMMEDIATELY NOTIFY AND REPORT DAMAGE TO THE CITY OF WINTER GARDEN UTILITY DIVISION, (NO MASSAGE) PHONE # 407-656-4100.

6. IMMEDIATELY REPAIR OF DAMAGED UTILITY SYSTEM: THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY DAMAGE TO THE CITY OF WINTER GARDEN UTILITY SYSTEM AS REQUIRED BY THE UTILITY OWNER AT CONTRACTORS COST. IN CASE OF UNRESPONSIVE ACTION BY THE CONTRACTOR, THE CITY RESERVES RIGHT TO REPAIR DAMAGE. THE CONTRACTOR SHALL REIMBURSE THE CITY OF WINTER GARDEN OF ALL REPAIR COST.

7. ADVANCE NOTIFICATION OF CONSTRUCTION: THE CONTRACTOR SHALL NOTIFY CITY OF WINTER GARDEN, UTILITY DIVISION, PH # 407-656-4100, AT LEAST SEVEN (7) CALENDAR DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY.

8. ADVANCE NOTIFICATION OF UTILITY CONNECTION: THE CONTRACTOR SHALL NOTIFY THE CITY OF WINTER GARDEN AT LEAST SEVEN CALENDAR DAYS IN ADVANCE TO SCHEDULE CONNECTIONS TO UTILITY SYSTEM.

9. UTILITY VALVE OPERATION: ONLY CITY OF WINTER GARDEN UTILITY PERSONNEL SHALL OPERATE VALVES AND FIRE HYDRANTS. THE CONTRACTOR, WHEN NEEDED, SHALL CALL THE CITY TO REQUEST VALVE OPERATIONS AT LEAST TWO (2) DAYS IN ADVANCE OF CONSTRUCTION WORK.

10. OPERATIONS INVOLVING WATER OR WASTEWATER FACILITIES INCLUDING PUMPING STATIONS: THE CONTRACTOR SHALL COORDINATE AT LEAST TWO (2) WEEKS IN ADVANCE, ANY CONSTRUCTION OPERATION THAT MAY REQUIRE THE DISCONTINUATION OF SERVICE OR OPERATION OF A FACILITY. THE CITY WILL PROVIDE PERSONNEL TO OPERATE THE CITY FACILITIES.

11. REQUIRED TESTING BY CONTRACTOR: THE CONTRACTOR SHALL NOTIFY THE CITY OF WINTER GARDEN AT LEAST TWO (2) DAYS PRIOR TO SAMPLING ACTIVITIES FOR PURPOSE OF TESTING AS REQUIRED BY THE CITY. THE CONTRACTOR SHALL NOT TEST OR SAMPLE WITHOUT OBSERVATION BY CITY INSPECTION PERSONNEL.

12. TEMPORARY OR CONSTRUCTION WATER SERVICE CONNECTIONS PROVIDED BY FIRE HYDRANT CONNECTION: THE CITY WILL PROVIDE METER ON FIRE HYDRANT. THE CONTRACTOR SHALL PROVIDE NON-REFUNDABLE ACCOUNT INITIATION FEE, A REFUNDABLE SECURITY DEPOSIT FOR THE METER APPARATUS AND PAY ALL COST FOR WATER USED.

13. ALL AS BUILT MEASUREMENTS & ELEVATIONS ARE TO BE MADE BY A LICENSED LAND SURVEYOR.

CoWG WATER SYSTEM NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL A CITY APPROVED BACKFLOW DEVICE ASSEMBLY AT EACH CONNECTION POINT TO THE CITY WATER SYSTEM.

2. REPAIRS TO NEW WATER LINES, TO OBTAIN SPECIFIED PRESSURE TEST, WILL BE ALLOWED ONLY UP TO A NUMBER EQUAL TO 10% OF THE TOTAL NUMBER OF JOINT CONNECTIONS.

3. THE CONTRACTOR SHALL HYDROSTATICALLY TEST ALL WATER MAINS AND SERVICE LATERALS AT 150 PSI FOR A TWO HOUR PERIOD. TESTING MUST BE OBSERVED BY A CITY INSPECTOR.

4. THE CONTRACTOR SHALL INSTALL WARNING TAPE OVER ALL NEW WATER MAINS. WARNING TAPE SHALL BE AS FOLLOWS: NON-DETECTABLE, SIZE 2" WITH "WATER LINE BELOW", MUST BE PLACED 8" TO 12" BELOW FINISHED GRADE ON ALL PVC WATER MAINS, LATERALS AND HEADER TEES, NUMBER 10 GAUGE TRACER WIRE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH DUCT TAPE, AT LEAST FIVE TIMES PER JOINT. THE TRACER WIRE SHALL ALSO BE ATTACHED TO ALL PVC LATERALS AND ATTACHED TO THE OUTSIDE OF EACH VALVE BOX SO THAT A PIPE LOCATOR CAN BE CONNECTED TO IT.

5. THE CONTRACTOR SHALL INSTALL WATER MAINS PER MoSS/CoWG SPECIFICATIONS. SOLVENT CEMENTED JOINTS AND THRUST BLOCKS ON PIPING SYSTEMS SHALL NOT BE ALLOWED.

6. THE CONTRACTOR SHALL INSTALL ALL WATER MAINS TO A MINIMUM DEPTH OF 36 INCHES AND A MAXIMUM DEPTH OF 42 INCHES BELOW FINAL GRADE.

7. THE CONTRACTOR SHALL INSTALL ALL SERVICE LATERALS A UNIFORM DISTANCE APART. LOCATED ON PROPERTY LOT LINE AT 90° FROM THE WATER MAIN. SERVICE LATERALS SHALL BE SEPARATELY CONNECTED TO THE WATER MAIN, NOT SPLICED TOGETHER.

8. THE CONTRACTOR SHALL CUT A "W" INTO CONCRETE CURB, LOCATED INSIDE OF A PAINTED BLUE SQUARE, LOCATED DIRECTLY IN FRONT OF EACH SERVICE LATERAL.

9. THE CONTRACTOR SHALL INSTALL CURB STOP, IN METER BOX, CURB STOP SHALL BE SET 8" BELOW FINISHED GRADE.

10. THE CONTRACTOR SHALL PROVIDE AND INSTALL IN-LINE VALVES ON WATER MAINS AT 1,000 FOOT MAXIMUM SPACING BETWEEN VALVES. VALVES SHALL BE LOCATED ON ALL TEE'S AND CROSSES. WATER MAINS SHALL BE PLACED UNDER SIDEWALKS WHERE POSSIBLE.

11. ALL WATERMAINS SHALL BE CLEANED BY PIGGING THE LINE WITH A FOAM PIG (MINIMUM OF 2 TIMES). A FULL BORE FLUSH MAY BE REQUIRED AFTER PIGGING TO ENSURE THE PIPE IS CLEAN AND READY FOR SERVICE. THE CONTRACTOR SHALL COORDINATE LINE PIGGING AND FULL BORE FLUSH WITH THE CITY INSPECTOR.

12. THE CONTRACTOR SHALL DEMONSTRATE THAT LOCATION WIRE INSTALLED OVER ALL WATER MAINS IS IN WORKING CONDITION AT TIME OF ACCEPTANCE BY THE CITY.

13. ALL NEW SUBDIVISION CONSTRUCTION SHALL INSTALL DOUBLE POTABLE WATER SERVICES AT THE PROPERTY LINES.

CoWG - WASTEWATER SYSTEM NOTES:

1. SANITARY SEWER MAINS AND SERVICES SHALL BE PVC SDR-26 (MINIMUM). FITTINGS SHALL BE SDR-26. DUCTILE IRON IS NOT APPROVED FOR SANITARY SEWERS.

2. ALL SERVICES SHALL BE 6" (MINIMUM) DIAMETER AND TERMINATE AT THE PROPERTY LINE WITH 6" CLEAN OUT. (36" TO 48" DEEP AT LOT LINE)

3. MAGNETIC TAPE MUST BE PLACED 2' ABOVE THE TOP OF PIPE FOR THE ENTIRE LENGTH OF ALL MAINS AND SERVICES.

4. ALL SANITARY MANHOLES SHALL BE PAINTED INSIDE AND OUT WITH "BITUMASTIC SUPER SERVICE BLACK", BY KOPPERS OR APPROVED EQUAL. MANHOLES RECIEVING FLOW FROM FORCE MAINS SHALL BE LINED WITH FIBERGLASS OR HDPE AT THE PRECASTERS FACILITY.

5. ALL PIPE CONNECTIONS TO PRE-CAST MANHOLES SHALL BE MADE USING A FLEXIBLE EPDM RUBBER BOOT AND STAINLESS STEEL STRAP OR CAST IN BOOT BY A-LOK, Z-LOK OR EQUAL.

6. CONNECTIONS MADE TO EXISTING MANHOLES SHALL BE CORE BORED WITH A MINIMUM 6" BORE AND CONNECTION SEALED WITH FLEXIBLE BOOT AND STAINLESS STEEL CLAMP.

7. DEAD END MANHOLES SHALL HAVE A MINIMUM OF 5 FEET OF COVER FROM FINISHED GRADE TO OUTLET PIPE INVERT.

8. ALL PRECAST SEWER MANHOLES SHALL HAVE A 4 FOOT MINIMUM HIGH BARREL. CONE SECTIONS SHALL BE 3 FOOT MAXIMUM. CONCRETE DONUTS FOR EXTENDING ARE ACCEPTABLE TO RAISE MANHOLES UP TO 1 FOOT MAXIMUM.

9. THE CONTRACTOR SHALL PROVIDE AND INSTALL BALLCENTRIC PLUG VALVES IN FORCE MAINS AT 1000 FOOT MAXIMUM SPACING BETWEEN VALVES. VALVES SHALL BE LOCATED AT ALL TEES AND CROSSES.

10. THE CONTRACTOR SHALL CUT A "S" INTO CONCRETE CURB LOCATED INSIDE OF A PAINTED GREEN SQUARE BOX, IN FRONT OF EACH SERVICE LOCATION.

11. THE CONTRACTOR SHALL PROVIDE TV INSPECTION OF ALL SANITARY SEWER MAINS AFTER SYSTEM IS COMPLETED, THOROUGHLY CLEANED, DRAINED AND FULLY VISIBLE. TV INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS. FAULTY INSPECTION DUE TO POOR CONDITIONS WILL REQUIRE REINSPECTION BY CONTRACTOR.

12. THE CONTRACTOR SHALL PROVIDE A (WARRANTY) TV INSPECTION AT THE TWO YEAR IN SERVICE MILESTONE FOR EACH SYSTEM.

13. THE CONTRACTOR SHALL PROVIDE SANITARY SEWER TESTING, EXFILTRATION OR AIR, AS REQUIRED BY DESIGN ENGINEER AND SUBMIT CERTIFIED RESULTS TO THE CITY ENGINEER.

14. GRAVITY SEWERS DEPTHS SHALL NOT EXCEED 18 FEET.

15. THE DESIGN ENGINEER SHALL PROVIDE A MINIMUM OF ONE FOOT OF FREEBOARD BETWEEN THE LOWEST FINISHED FLOOR ELEVATION AND THE TOP ELEVATION OF THE WET WELL.

16. ALL PENETRATIONS INTO CONCRETE STRUCTURES SHALL BE PRE-CAST OR CORE-DRILLED.

17. WARRANTY - ALL MATERIALS & EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR SHALL BE WARRANTED FOR A PERIOD OF TWO YEARS FROM THE DATE OF FINAL ACCEPTANCE THEREOF AGAINST DEFECTIVE MATERIALS, DESIGN, AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE CITY OF FAILURE OF ANY PART OF THE WARRANTED EQUIPMENT OR MATERIALS DURING THE WARRANTY PERIOD, THE AFFECTED PART, PARTS, OR MATERIALS SHALL BE PROMPLY REPLACED BY THE CONTRACTOR WITH NEW PARTS OR MATERIALS AT NO EXPENSE TO THE CITY. IN THE EVENT THE CONTRACTOR FAILS TO MAKE THE NECESSARY REPLACEMENT OR REPAIRS IMMEDIATELY AFTER NOTIFICATION, THE CITY MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE CONTRACTOR.

CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION OF SEWER LINES

GENERAL:

1. ALL NEW SANITARY SEWER LINES, PRIVATE OR CITY MAINTAINED, IN THE CITY OF WINTER GARDEN'S SERVICE AREA SHALL BE INSPECTED BY CLOSED CIRCUIT TV INSPECTION BY THE CONTRACTOR WITH A CITY INSPECTOR PRESENT PRIOR TO BEING ACCEPTED BY THE CITY.

REQUIREMENTS PRIOR TO INSPECTION RELEASE:

1. ALL ELEMENTS OF THE SEWER SYSTEM MUST BE INSTALLED AND BE COMPLETELY FINISHED, INCLUDING MAIN SEWER LINES, LATERALS, CLEAN OUTS, AND MANHOLES PRIOR TO CCTV INSPECTION.

2. ALL SEWER LINES SHALL BE COMPLETELY CLEANED OF ALL DEBRIS, SAND, WATER, ETC. PRIOR TO THE CCTV INSPECTION. ANY OBJECT OR MATTER THAT PREVENTS CCTV INSPECTION FROM VIEWING CONDITION OF PIPELINE IS CONSIDERED AN OBSTRUCTION REQUIRING ADDITIONAL CLEANING. WHEN CCTV VIEW IS OBSTRUCTED, INSPECTION SHALL BE TERMINATED. THE CONTRACTOR SHALL CLEAN THE SEWER SYSTEM COMPLETELY AND RESCHEDULE CCTV RE-INSPECTION WITH THE CITY.

3. A HYDRAULIC SEWER CLEANER SHALL NOT BE USED DURING THE CCTV INSPECTION. IF LINES ARE FOUND TO BE OBSCURED BY WATER OR DEBRIS DURING THE CCTV INSPECTION, THE INSPECTION SHALL BE TERMINATED AND RESCHEDULED TO A TIME WHEN SEWER CLEANING IS COMPLETE.

4. WHEN A SEWER LINE IS UNDER A PAVED AREA, THE AREA SHALL BE COMPACTED AND PRIMED BEFORE THE SYSTEM SHALL BE RELEASED FOR TV INSPECTION.

TELEVISION EQUIPMENT MINIMUM REQUIREMENTS:

1. THE CLOSED CIRCUIT TV CAMERA SHALL PRODUCE A CLEAR COLOR PICTURE ON THE MONITOR AND ON THE DVD RECORDING. THE CAMERA SHALL BE ABLE TO SHOW DETAIL TO THE POINT THAT ALL JOINTS AND ANY DEFECTS MAY BE READILY SEEN AT THE TIME OF THE INSPECTION. THE CAMERA SHALL STOP AND PAN AT EACH JOINT FOR COMPLETE 360 DEGREE INSPECTION.

2. REFER TO APPENDIX B OF THE REFERENCED STANDARDS FOR SPECIFICATION OF CLOSED CIRCUIT TELEVISION INSPECTION EQUIPMENT.

3. THE VIDEO RECORDER SHALL PRODUCE A NO NOISE STILL PICTURE, AND PROVIDE BOTH AUDIO AND VIDEO DURING THE INSPECTION.

4. A MEASURING DEVICE, APPROVED BY THE CITY, TO CHECK THE GRADE OF THE PIPE DURING THE INSPECTION, SHALL BE REQUIRED. GAUGE DEPTH, 0" TO 2" MIN. WITH 1/2" MARKINGS.

5. AUDIO OF THE INSPECTION SHALL BE SIMULTANEOUSLY RECORDED ON DVD DISC. THE AUDIO SHALL CONSIST OF ORDINARY DESCRIPTION AND COMMENTARY. A TAPE WILL BE GIVEN TO THE INSPECTOR ON SITE AT THE END OF THE DAY.

PROCEDURE FOR TELEVISING

1. THE CITY'S ENGINEERING INSPECTION DIVISION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS NOTICE PRIOR TO THE TIME PLANNED FOR THE TV INSPECTION TO COMMENCE. A DEFINITE TIME AND DATE WILL BE AGREED UPON BY THE CONTRACTOR AND INSPECTOR AT THAT TIME.

2. NO INSPECTION SHALL COMMENCE WITHOUT THE PRESENCE OF THE INSPECTOR, EXCEPT WHEN PRIOR ARRANGEMENTS HAVE BEEN MADE BETWEEN THE CONTRACTOR, INSPECTOR, AND THE CITY. TV INSPECTION SHALL BE PERFORMED BY THE CONTRACTOR AT THE EXPENSE OF THE CONTRACTOR.

3. ALL CCTV INSPECTIONS SHALL COMMENCE UP STREAM OF THE SYSTEM TO PREVENT FOREIGN SUBSTANCES FROM ENTERING A SECTION PREVIOUSLY TELEVISED. THE CAMERA SHALL BE STARTED FROM THE DOWNSTREAM MANHOLE AND PROCEED UPSTREAM IN DIRECTION OPPOSING THE NORMAL FLOW IN THE LINE. THIS PROCEDURE WILL ALLOW FOR THE VIEWING OF THE SERVICE LATERALS.

4. BEFORE THE CAMERA IS PLACED IN THE SEWER LINE, WATER WITH YELLOW OR ORANGE DYE SHALL BE PUT INTO THE UPSTREAM MANHOLE OF THE SECTION BEING TELEVISED. CAMERA WILL HAVE A GAUGE SHOWING 1/2" MARKS FROM 1/2" TO 2-1/2". THIS WILL ENABLE THE CAMERA TO DETECT ANY CHANGES IN GRADE THAT MAY BE PRESENT IN THE SYSTEM.

5. THE CCTV AND DVD RECORDER SHALL BE TURNED ON BEFORE THE CAMERA IS PLACED IN THE MANHOLE FOR INSPECTION AND SHALL NOT BE TURNED OFF UNTIL THE CAMERA IS REMOVED FROM THE MANHOLE. THE CAMERA SHALL BE MOVED THROUGH THE LINE UNDER THE CONTROL OF THE CCTV CAMERA OPERATOR. THE CAMERA SHALL BE DRAWN THROUGH THE LINE AT A RATE NOT TO EXCEED THIRTY (30) FEET PER MINUTE AND SHALL STOP AT ALL SERVICE CONNECTIONS AND PIPE JOINTS IN THE PIPELINE.

6. A DVD RECORDING SHALL BE MADE OF THE ENTIRE SYSTEM BEING TELEVISED. THIS SHALL BECOME THE PROPERTY OF THE CITY UPON COMPLETION OF THE TV INSPECTION (NOT A COPY). THE TAPE(S) SHALL BE LABELED IN SUCH A MANNER THAT STATES THE PROJECT NAME, DATE OF INSPECTION AND LINE SECTION ACCORDING TO CONSTRUCTION PLANS CONTAINED ON EACH TAPE. A WRITTEN REPORT SHALL ACCOMPANY THE DVD DISC.

CoWG RECLAIMED WATER SYSTEM GENERAL NOTES:

1. ALL PRIVATE RECLAIMED WATER SYSTEMS SHALL HAVE A CITY APPROVED BACKFLOW DEVICE ASSEMBLY AT EACH CONNECTION POINT TO THE CITY WATER SYSTEM.

2. REPAIRS TO NEW WATER LINES, TO OBTAIN SPECIFIED PRESSURE TEST, WILL BE ALLOWED ONLY UP TO A NUMBER EQUAL TO 10% OF THE TOTAL NUMBER OF JOINT CONNECTIONS.

3. ALL MAINS AND SERVICE LATERALS SHALL BE HYDROSTATICALLY TESTED AT 150 PSI FOR A TWO HOUR PERIOD.

4. WARNING TAPE, NON-DETECTABLE, SIZE 2" WITH "REUSE WATER LINE BELOW", MUST BE PLACED 8" TO 12" BELOW FINISHED GRADE ON ALL PVC WATER MAINS, LATERALS AND HEADER TEES, NUMBER 10 GAUGE TRACER WIRE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH DUCT TAPE, AT LEAST FIVE TIMES PER JOINT. THE TRACER WIRE SHALL ALSO BE ATTACHED TO ALL PVC LATERALS AND ATTACHED TO THE OUTSIDE OF EACH VALVE BOX SO THAT A PIPE LOCATOR CAN BE CONNECTED TO IT. THE CONTRACTOR SHALL DEMONSTRATE THE LOCATE WIRE TO BE IN WORKING CONDITION AT PROJECT COMPLETION.

5. THE CONTRACTOR SHALL INSTALL RECLAIMED WATER MAINS PER MoSS/CoWG. SOLVENT CEMENTED JOINTS AND THRUST BLOCKS SHALL NOT BE ALLOWED.

6. REUSE WATER MAIN SHALL BE BURIED TO A MINIMUM DEPTH OF 36" AND A MAXIMUM DEPTH 42" BELOW FINAL GRADE.

7. SERVICE LATERALS MUST BE LOCATED A UNIFORM DISTANCE APART AND ALIGNED TO PROPERTY LOT LINE AT 90° FROM THE RECLAIMED WATERMAIN.

8. CUSTOMER SERVICE LATERALS SHALL NOT BE SPLICED TOGETHER BETWEEN THE WATER MAIN AND CURB STOP.

9. THE CONTRACTOR SHALL CUT CURB A "RW" INTO CONCRETE CURB LOCATED INSIDE OF A PAINTED SQUARE (PURPLE), DIRECTLY IN FRONT OF EACH SERVICE LATERAL AND VALVE.

10. THE CONTRACTOR SHALL SET DEPTH OF CURB STOP, IN METER BOX, 8" BELOW FINISHED GRADE.

11. THE CONTRACTOR SHALL INSTALL VALVE(S) IN MAIN, NO MORE THAN 1,000 FEET APART IN BETWEEN TEES AND CROSSES. VALVES SHALL BE PROVIDED AT EACH TEE OR CROSS LOCATED IN MAIN LINE.

12. RECLAIMED WATER MAINS MAY BE LOCATED UNDER SIDEWALKS. RECLAIMED MAINS LOCATED UNDER PAVEMENT SHOULD BE MINIMIZED.

13. ALL WATERMAINS SHALL BE CLEANED BY PIGGING THE LINE WITH A FOAM PIG (MINIMUM OF 2 TIMES). A FULL BORE FLUSH MAY BE REQUIRED AFTER PIGGING TO ENSURE THE PIPE IS CLEAN AND READY FOR SERVICE. THE CONTRACTOR SHALL COORDINATE LINE PIGGING AND FULL BORE FLUSH WITH THE CITY INSPECTOR.

14. RECLAIMED WATERMAIN MAINS SHALL BE 8 INCH DIAMETER MINIMUM, 4 INCH IS ALLOWED ON DEAD END RUNS SERVING LESS THAN 20 HOMES. THE DESIGN ENGINEER SHALL SUBMIT HYDRAULIC CALCULATIONS THAT DEMONSTRATE THE PROPOSED SYSTEM WILL PROVIDE REQUIRED FLOWS AND MAINTAIN SYSTEM ABOVE MINIMUM PRESSURE. PEAK IRRIGATION RATE SHALL BE SIX(6) TIMES GREATER THAN THE AVERAGE IRRIGATION RATE OF FLOW.

15. RECLAIMED WATER SYSTEM COMPONENTS INCLUDING PIPE, VALVE BOX TOPS AND METER BOX TOPS SHALL BE RECLAIMED PURPLE IN COLOR.

CoWG - THRUST RESTRAINT TABLE

RESTRAINED FORCE MAIN PIPE TABLE

MINIMUM LENGTH(FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)								
	PIPE SIZE							
	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	19	25	30	34	44	52	60	70	80
45° BEND	8	10	12	14	18	21	25	30	34
22-1/2° BEND	4	5	6	7	9	10	12	14	16
11-1/4° BEND	2	3	4	5	6	7	8	9	10
PLUG, DEAD END OR BRANCH OF TEE	40	52	63	72	93	111	130	155	178
VALVE	20	25	32	36	47	56	78	116	89

RESTRAINED WATER AND RECLAIMED PIPE TABLE

MINIMUM LENGTH(FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)								
	PIPE SIZE							
	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	29	37	44	51	65	77	89	105	120
45° BEND	12	15	18	21	27	32	37	44	50
22-1/2° BEND	6	7	9	10	13	15	18	21	24
11-1/4° BEND	3	4	5	6	7	8	9	10	12
PLUG, DEAD END OR BRANCH OF TEE	59	77	93	108	138	166	194	231	265
VALVE	59	77	93	108	138	166	194	231	265

CoWG THRUST RESTRAINT NOTES:

1. THE TABLES INDICATE MINIMUM LENGTHS OF RESTRAINED JOINTS ON EACH SIDE OF FITTINGS AND CHANGES IN DIRECTION. WHERE PRACTICAL, FULL LENGTHS OF RESTRAINED PIPE SHALL BE LAID TO ACHEVE THE REQUIRED MINIMUM RESTRAINT.

2. WHERE COMBINATIONS OF FITTINGS ARE USED, THE PIPING BETWEEN THE FITTINGS SHALL BE RESTRAINED. THE MINIMUM RESTRAINED LENGTH OF PIPE REQUIRED UPSTREAM AND DOWNSTREAM OF THE COMBINATION OF FITTINGS SHALL BE DETERMINED ON THE BASIS OF ONE EQUIVALENT FITTING (I.E., 2-45 DEGREE BENDS WILL BE CONSIDERED AS THOUGH A 90° BEND WERE LOCATED MIDWAY BETWEEN THE TWO 45° BENDS).

3. FOR PIPE THAT IS ENCASED IN POLYETHYLENE, RESTRAINED JOINTS MINIMUM LENGTHS SHALL BE INCREASED BY 50 PERCENT.

4. FOR FITTINGS OTHER THAN THOSE PRESENTED IN THE ABOVE TABLES, RESTRAINED JOINT LENGTHS SHALL BE DETERMINED IN ACCORDANCE WITH "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION. RESTRAINED JOINT LENGTHS FOR A GIVEN PRESSURE RANGE SHALL BE BASED ON THE MAXIMUM PRESSURE FOR THE TEST PRESSURE RANGE, SM (SAND SILT) SOIL, 3-FEET DEPTH, LAYING CONDITION NO. 3 AND FACTOR OF SAFETY OF 1.5.

5. IN-LINE VALVES: PROVIDE MECHANICAL RESTRAINT ON EACH SIDE OF THE VALVE.

6. ALL RECLAIMED WATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF 150 PSI. ALL WASTEWATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF 100 PSI.

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

PROPOSED UTILITY	POTABLE WATER		RECLAIMED WATER*		SANITARY SEWER (GRAVITY)		SANITARY SEWER (FORCEMAIN)		STORM WATER		ACCEPTABLE VARIANCES
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	
POTABLE WATER	-	-	3'	12"	6'	12"	6'	12"	3'	6" A 12" B	SEE GENERAL NOTES: NO. 4 & 5
RECLAIMED WATER*	3'	12"	-	-	3'	6" A 12" B	3'	12"	-	-	
SANITARY SEWER (GRAVITY)	6'	12"	3'	6" A 12" B	-	-	-	-	-	-	
SANITARY SEWER FORCEMAIN	6'	12"	3'	12"	-	-	-	-	-	-	

GENERAL NOTES:

1. THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.). THESE SEPARATION REQUIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.

2. * FOR THE PURPOSE OF THIS TABLE, RECLAIMED WATER SHALL MEAN UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 162-610, CHAPTER III. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.

3. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATER CLEARANCE SHALL BE USED.

A - DENOTES POTABLE WATER ABOVE RECLAIMED WATER, SANITARY SEWER OR STORM WATER; OR RECLAIMED WATER ABOVE SANITARY SEWER.

B - DENOTES POTABLE WATER BELOW RECLAIMED WATER, SANITARY SEWER OR STORM WATER; OR RECLAIMED WATER BELOW SANITARY SEWER.

4. UTILITY SEPARATION - VERTICAL CLEARANCE MITIGATION

A. WHERE WATER AND GRAVITY SANITARY SEWER MAINS CROSS WITH LESS THAN REQUIRED VERTICAL CLEARANCE OR THE SEWER MAIN IS ABOVE THE WATER MAIN, THE SANITARY SEWER WILL BE 20 FEET OF EITHER:

1. DUCTILE IRON PIPE, CENTERED ON THE POINT OF CROSSING, OR;

2. CONCRETE ENCASED VITRIFIED CLAY, OR;

3. PVC PIPE UPGRADED TO WATER MAIN STANDARDS AND PRESSURE TESTED.

B. WHERE WATER MAINS AND STORM SEWER PIPES CROSS WITH LESS THAN REQUIRED VERTICAL CLEARANCE, THE WATER MAIN SHALL BE 20 FEET OF DUCTILE IRON PIPE CENTERED ON THE POINT OF CROSSING.

C. SEPARATION REQUIREMENTS BETWEEN FORCE MAINS AND POTABLE WATER MAINS MUST BE MAINTAINED UNLESS APPROVED IN ADVANCE BY THE DEPARTMENT.

5. UTILITY SEPARATION - HORIZONTAL SEPARATION MITIGATION

A. WHEN A WATER MAIN PARALLELS A GRAVITY SANITARY SEWER MAIN, A SEPARATION (MEASURED EDGE TO EDGE) OF AT LEAST SIX FEET SHOULD BE MAINTAINED. WHERE THIS SEPARATION IS NOT MET, ONE OF THE FOLLOWING MUST OCCUR.

1. THE WATER MAIN IS LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER, OR:

2. IF BOTH SANITARY SEWER AND POTABLE WATER MAINS ARE PROPOSED AND THE ABOVE (1.)

IS NOT MET, THE SANITARY SEWER PIPES SHALL BE UPGRADED TO THE EQUIVALENT PIPE MATERIAL AS THE WATER MAIN AND PRESSURE TESTED.

3. IF THE SANITARY SEWER IS EXISTING AND THE POTABLE WATER MAIN IS PROPOSED, THE WATER MAIN SHALL, AT A MINIMUM, BE UPGRADED TO DUCTILE IRON PIPE, CONSTRUCTED IN SEPARATE TRENCHES, LAID AT A HIGHER ELEVATION THAN THE SANITARY SEWER, AND UTILIZE STAGGERED JOINTS.

B. SEPARATION REQUIREMENTS BETWEEN FORCE MAINS AND POTABLE WATER MAINS MUST BE MAINTAINED UNLESS APPROVED IN ADVANCE BY THE DEPARTMENT.

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

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

REVISIONS						
No.	ITEM	DATE				
1	Revised General Notes	4/4/14				
2	Revised Water & Reuse Notes	4/4/14				
REV	DATE	DESCRIPTION	BY			

City of Winter Garden, Florida
STANDARDS AND SPECIFICATIONS
For Utilities Construction

WINTER GARDEN

STANDARD DETAILS
FOR
UTILITIES SYSTEMS

DATE
JANUARY 2008

SHEET
1
1 OF 10

MELLICH-BLENDEN ENGINEERING, INC.
1177 LOUISIANA AVENUE - SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647-4040

DRAWN ____
DESIGNED SLM
CHECKED SLM
DATE 10-11-12

DANIELS ROAD BUSINESS PARK

CITY OF WINTER GARDEN STD. NOTES

SCALE
N.T.S.

PROJECT NO.
12-002

SHEET
12 OF 19

RILEY & Company, Inc. (H-20 GP)

w/ BATTERY BACK-UP FOR AUDIO AND VISUAL ALARMS ©

SCOPE: Supply one complete H-20 GP Pre-Fab Lift Station, per design. Pumps shall be capable of grinding and pumping domestic & commercial sewage.

Complete system shall be supplied by:
RILEY & Company, Inc.
Sanford, FL 32773 (Ph. 407-265-9963)
NO SUBSTITUTIONS – NO ALTERNATES

PUMPS AND ELECTRICAL CONTROL PANEL MUST BE WARRANTED FOR A MINIMUM OF 3 YEARS.

FIBERGLASS WETWELL MUST BE WARRANTED FOR A MINIMUM OF 20 YEARS.

The H-20 Load Rated Fiberglass Wetwell Must Be Manufactured By L.F. Manufacturing, Giddings, Texas, Which Includes A Written 20 Yr. Warranty

Certification of the wetwell H-20 load rating must be supplied with submittals. H-20 certification must be signed and sealed by an engineer registered in the State of Florida.

After the H-20 load rated wetwell has been installed, the ASTM Certification Number and Serial Tracking Number must be visible.

PUMPS: (3 YEAR WARRANTY)
Submersible grinder pumps shall be HOMA Model GRP. The pumps shall be installed in the H-20 GP FRP wetwell utilizing a dual slide rail system.
The grinder unit shall be capable of macerating materials normally found in domestic and commercial sewage into a fine slurry which will pass through the pump and the Sch.80 PVC discharge piping.

Stator winding shall be open type with Class F insulation and shall be heat-shrink fitted into the stator housing. The use of pins, bolts, or other fastening devices is not acceptable.
A heat sensor thermostat shall be attached to the top end of the motor winding and shall be connected in series with the magnetic contactor coil in the control panel to stop motor if winding temperature exceeds 140 C., but shall automatically reset when the winding temperature returns to normal.
Two heat sensor thermostats shall be used on three phase motors.

The pump motor grinder shaft shall be AISI 430F SS threaded to take the pump impeller and the grinder impeller.
Upper & lower mechanical seals shall be Silicon Carbide vs Silicon Carbide.

DUPLEX CONTROL PANEL: (3 YEAR WARRANTY)
To insure complete unit and warranty responsibility the electrical control panel must be manufactured and built by the pump supplier. The pump supplier must be a TUV (UL508A CERTIFIED) manufacturing facility, with a minuimum of 5 years history in the manufacturing of electrical control panels.

The Enclosure shall be NEMA 4X, minimum 30" high x 30" wide x 10" deep fiberglass with pad lockable draw latches.

The enclosure shall have external mounting feet to allow for wall mounting.

The following components shall be mounted through the enclosure:
1- ea. Red Alarm Beacon (Light)
1- ea. Alarm Horn
1- ea. Generator Receptacle w/ weatherproof cover
1- ea. Alarm Silence Pushbutton

The back panel shall be fabricated from .125, 5052-H32 marine alloy aluminum. All components shall be mounted by machined stainless steel screws.

The following components shall be mounted to back panel:
2- ea. Motor Contactors
1- ea. Volt Monitor (Single Phase) Phase Monitor (Three Phase)
1- ea. Control Transformer (480 Volt Only)
1- ea. Silence Relay
1- ea. Duplex Alternator
1- ea. Model RCBB5AH Battery Back-Up w/ Smart Charger
20- ea. Terminals For Field Connections
6- ea. Terminals For Motor Connections (Single Phase Only)
3- ea. Grounding Lugs

The inner door shall be fabricated from .080, 5052-H32 marine alloy aluminum. The inner door shall have a continuous aluminum piano hinge.

The following components shall be mounted through the inner door:
1- ea. Main Circuit Breaker
1- ea. Emergency Circuit Breaker
1- ea. Mechanical Interlock For Emergency And Main Breakers
2- ea. Short Circuit Protectors
1- ea. Control Circuit Breaker
2- ea. Seal Failure Indicator Lights
1- ea. Hand-Off-Auto Selector Switches
2- ea. Pump Run Pilot Lights
1- ea. Power On Pilot Light
2- ea. Elapse Time Meters (Non-Resetable)
1- ea. GFI Duplex Convenience Outlet

COMPONENT SPECIFICATIONS:
All circuit breakers shall be molded thermal magnetic.
The mechanical interlock shall prevent the normal and emergency main breakers being energized at the same time.
An emergency generator receptacle shall be supplied in accordance with DEP standards. The generator receptacle shall be adequately sized to meet the equipment operating conditions.

NEUTRAL TO BE SUPPLIED FOR BOTH 230V 3PHASE OR 230V SINGLE PHASE POWER

All motor short circuit protection devices must provide for under voltage release and class 10 overload protection on all three phases. Visible trip indication, test, and reset capability must be provided without opening inner door.
Open frame, across the line, contactors shall be rated per IEC standards and properly sized per the motor requirements.
Contactors shall provide for safe touch power and control terminals.
Lightning Arrestor shall meet or exceed the requirements of ANSI/IEEE Std. C62.21-1984 section 8.6.1. and 8.7.3 shall be supplied by electrician and mounted on the bottom side of the switch disconnect ahead of the pump control panel.
A voltage monitor shall be supplied for single phase service.
A phase monitor shall be supplied for (3) phase service.
A green pilot light shall be supplied for each motor. The pilot light shall illuminate each time the motor is called to run.
Each pump shall have an Elapse Time Meter to record the accumulated run time. The ETM shall be 2" diameter, non-resettable, six digit, totally encapsulated unit.
A Red pilot light shall be supplied for control power. The pilot light shall illuminate when the control power is available inside the control panel.
Relays shall be ice-cube plug in type. Relay contacts shall be rated 10 amp minimum, DPDT.
Twenty (20) terminals shall be supplied for field connections.
The terminals shall be rated 25 amps minimum.
Each motors over-temperature contact shall be connected to the terminal strip and shall open a contact to de-energize the appropriate motor upon a high temperature within the motor.
A 15 Amp GFI duplex receptacle shall be supplied and mounted on the innerdoor.
Ground lugs shall be supplied and appropriately sized for each motor and for service entrance.
Nameplates for the inner door and back panel shall be of a graphic design, specifically depicting the intent for each device.

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

PUMP DATA		ELEVATIONS	
PRIMARY PUMP CAPACITY	" GPM	TOP OF WETWELL	126.75
PRIMARY TDH	" 'TDH	INLET INVERT	117.24
PUMP MANUFACTURER	"	HIGH LEVEL ALARM (HLA)	116.50
PUMP MODEL #	"	2nd PUMP ON (LAG)	115.50
R.P.M.	"	1st PUMP ON (LEAD)	114.50
HORSEPOWER	"	PUMPS OFF (OFF)	112.50
ELECTRICAL/ VOLTS / PHASE	"	BOTTOM OF WETWELL	112.00
PUMP DISCHARGE SIZE	"	WETWELL DIAMETER	48"

* ELECTRICIAN NOTES:

1. DRAWING NOT TO SCALE
* 2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES
* 3. ELECTRICIAN SHALL SEAL OFF CONDUIT RUNS
* 4. ELECTRICIAN TO MOUNT LIGHTNING ARRESTOR AT SWITCH DISCONNECT
* 5. CONTRACTOR SHALL VERIFY POWER SOURCE PRIOR TO ORDERING EQUIPMENT
* 6. NEUTRAL TO BE SUPPLIED FOR 23OV-3 PHASE OR 230V-SINGLE PHASE POWER.

RILEY & CO. / H-20 GP 09-08-10

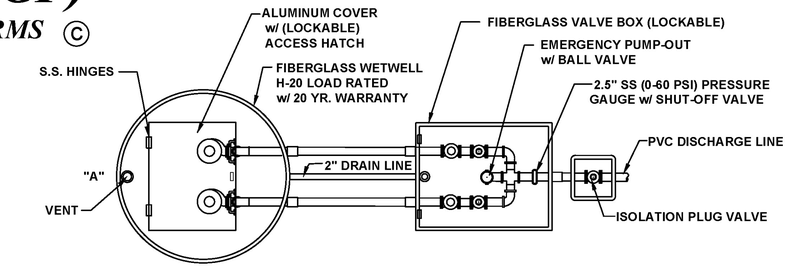
FASTENERS & APPURTANCES: All fasteners, lifting cables, float cable bracket, hinges, and appurtenances shall be made of AISI 304SS.
A 304SS slide/latch assembly shall be provided tor holding the doors open on the wetwell and valve box.
Slide rails shall be made of SCH.40 AISI 304SS pipe.
Pump lifting cables shall be made of AISI 304 SS.
Pump lifting bales shall be made of AISI 304 SS.

H-20 LOAD RATED WETWELL WITH LIFTING LUGS:
The fiberglass wetwell must be H-20 load rated with integral lifting lugs, fiberglass slope in bottom of wetwell and valve box.
Certification of the H-20 load rating must be supplied at the time of submittals to Engineer.
The wetwell shall be manufactured of fiberglass reinforced polyester (FRP) of depth and diameter as shown on the lift station elevation detail. The wall thickness shall be adequate for the depth of the wetwell to maintain the H-20 LOAD RATING.

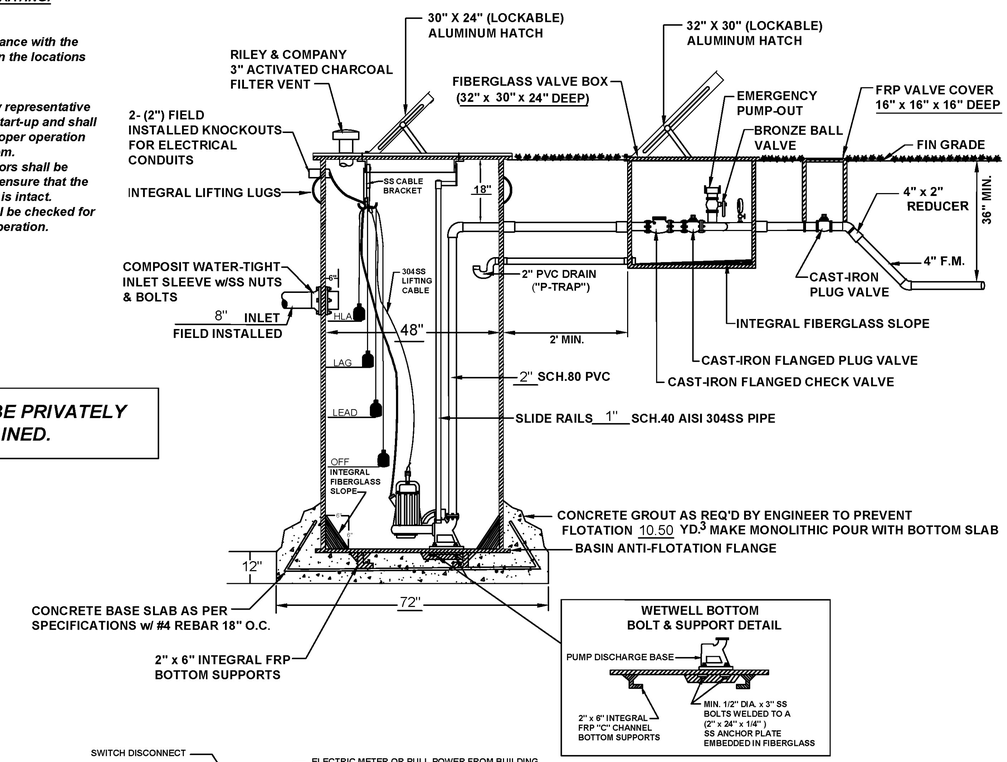
EXECUTION:
Installation shall be in strict accordance with the manufacturer's recommendations in the locations shown on the drawing.

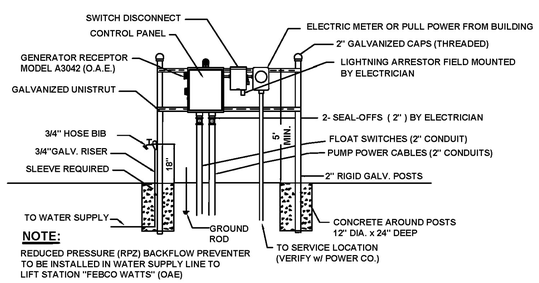
INSPECTION & TESTING: A factory representative shall be provide for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance of complete system.
Megger the motors. The pump motors shall be megged out prior to the start-up to ensure that the insulation of the pump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

LIFT STATION WILL BE PRIVATELY OWNED AND MAINTAINED.



NOTE: PUMP CONTROL PANEL SHALL BE LOCATED 3 FEET FROM WETWELL PERIMETER AT POINT "A"





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

ELECTRICAL RISER FOR ILLUSTRATION PURPOSES ONLY

REV	DATE	DESCRIPTION	BY
	1-22-18	REVISED PER CITY COMMENTS OF 11-6-17	

MELLICH-BLENDEN ENGINEERING, INC.
1177 LOUISIANA AVENUE – SUITE 111
WINTER PARK, FLORIDA 32789
(407) 647-4040

DRAWN ____
DESIGNED SLM
CHECKED SLM
DATE 10-11-17

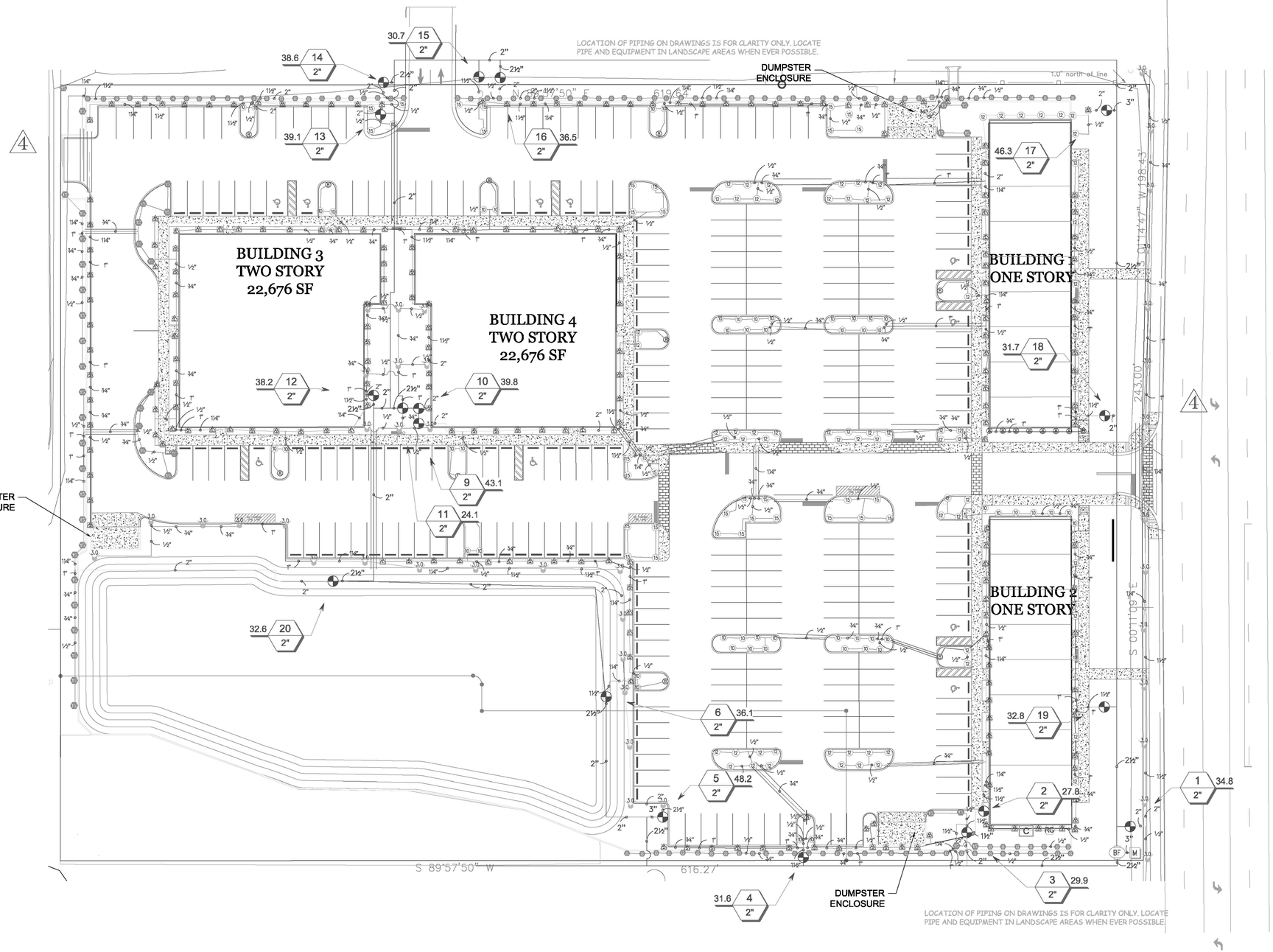
DANIELS ROAD BUSINESS PARK

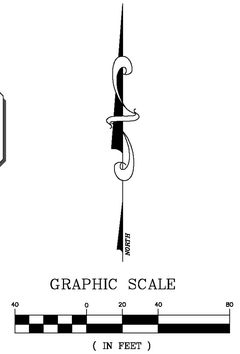
LIFT STATION

SCALE 1" = 40'

PROJECT NO. 12-002

SHEET 13 OF 19





CRITICAL ANALYSIS

Generated:	2017-10-03 16:47
P.O.C. NUMBER: 01	
Water Source Information:	
FLOW AVAILABLE	
Water Meter Size:	2"
Flow Available:	120.00 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	80.00 psi
Elevation Change:	5.00 ft
Service Line Size:	6"
Length of Service Line:	20.00 ft
Pressure Available:	78.00 psi
DESIGN ANALYSIS	
Maximum Station Flow:	56.16 gpm
Flow Available at POC:	120.00 gpm
Residual Flow Available:	63.84 gpm
Critical Station:	5
Pressure Req. at Critical Station:	46.56 psi
Loss for Fittings:	0.06 psi
Loss for Main Line:	0.57 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	15.00 psi
Loss for Water Meter:	4.15 psi
Critical Station Pressure at POC:	66.34 psi
Pressure Available:	78.00 psi
Residual Pressure Available:	11.66 psi

NOTE: CHECK WATER FLOW FROM POC TO MAKE SURE YIELD EXCEEDS CRITICAL ANALYSIS REQUIREMENTS (STATIC PRESSURE AND FLOW AVAILABILITY). IF METER DOESN'T MEET THE REQUIREMENT GUIDE LINES AS SPELLED OUT IN THE CRITICAL ANALYSIS, PLEASE CONTACT THE LANDSCAPE ARCHITECT BEFORE INSTALLING IRRIGATION EQUIPMENT.

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IRRIGATION PLAN FOR:

WINTER GARDEN BUSINESS PARK

DANIELS ROAD
WINTER GARDEN, FL

THIS DRAWING HAS BEEN ISSUED:

- [ ] FOR REVIEW ONLY
- [x] FOR PERMITTING ONLY
- [ ] SCHEMATIC DESIGN
- [ ] DESIGN DEVELOPMENT
- [ ] CONSTRUCTION DOCUMENTS

Drawing Title:
IRRIGATION PLAN

Date: 10.01.17

Designed By: JAP
Drawn By: JSP
Reviewed By: JAP

Comm. No. 170144

Revisions:

REV01	02.09.18
REV02	04.27.18
REV03	06.28.18
REV04	10.23.18
REV05	05.19.20

Sheet: Sheet No. IR-1

JAY A. PETERSON
LA0000757

LANDSCAPE NOTES

1. CARE IS TO BE TAKEN TO PROTECT ALL UNDERGROUND UTILITIES. THE GENERAL CONTRACTOR IS TO VERIFY AND MARK THE EXACT LOCATION OF ALL EXISTING UTILITIES (WATER, SEWER, GAS, ELECTRIC, SEPTIC TANKS, ETC.)
2. SOIL USED IN THE BACKFILL OF PLANTING PITS AND LANDSCAPE BEDS SHALL BE CLEAN AND WEED FREE, AND SHALL BE MIXED WITH 25% PEAT MOSS/PINE BARK BY VOLUME.
3. 12:6:6 PENNINGTON NURSERY FERTILIZER OR EQUAL SHALL BE USED IN ALL PLANTING PITS.
4. HERBICIDE, TREFLAN OR EQUAL TO BE APPLIED TO PLANTING BEDS FOR NOXIOUS WEED CONTROL.
5. ALL PLANTING BEDS TO HAVE A MINIMUM 3" OF PINE BARK MULCH.
6. PRESSURE TREATED WOODEN STAKES SHALL BE USED FOR TREES OVER 2" CALIPER OR IN AREAS WHERE HEAVY WIND IS A FACTOR.
7. ALL LANDSCAPING MATERIAL SHALL BE INSTALLED IN A PROFESSIONAL MANNER, AND ACCORDING TO ACCEPTED PLANTING PROCEDURES.
8. TOPSOIL FURNISHED BY THE LANDSCAPE CONTRACTOR SHALL BE NATURAL, FERTILE,FRIABLE SOIL POSSESSING CHARACTERISTICS REPRESENTATIVE OF PRODUCTIVE SOILS IN THE AREA. SOIL SHALL NOT BE EXCESSIVELY ACIDIC, ALKALINE OR TOXIC THAT IT MAY BE HARMFUL TO PLANT GROWTH. TOPSOIL SHOULD BE FREE OF CLAY LUMPS, STONES, STUMPS, ROOTS, OR SUBSTANCE 2" OR MORE IN DIAMETER.
9. ALL TREES RETAINED OR NEW SHALL BE PROPERLY MAINTAINED TO ENSURE THEIR SURVIVAL FOR 3 MONTHS AFTER DATE OF SUBSTANTIAL COMPLETION. ANY TREE WHICH FAILS TO SURVIVE AFTER 3 MONTHS SHALL BE REPLACED WITHIN 1 MONTHS OF LOSS.
10. SOD TYPE SHALL BE STRONGLY ROOTED, FRESHLY CULTIVATED BAHIA SOD NOT LESS THAN 1 YEAR OLD, FREE OF WEEDS UNDESIRABLE AND NATIVE GRASSES IRRIGATED.
11. PROPOSED PLANT MATERIAL WILL NOT INTERFERE WITH ANY EXISTING AND/OR PLANNED UNDERGROUND OR OVERHEAD UTILITIES.
12. THE GUYING OF TREES IS OPTIONAL BUT, THE LANDSCAPE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR THE STABILITY AND PLUMB CONDITION OF ALL TREES AND SHRUBS AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY THE INSTABILITY OF ANY PLANT MATERIALS. THE GUYING DETAILS #2 IS AN APPROVED METHOD OF TREE GUYING, OR EQUAL.
13. AUTOMATIC IRRIGATION WILL BE PROVIDED IN ALL AREAS.
14. CALIPER FOR ALL NEW TREES IS MEASURED SIX (6) INCHES ABOVE GROUND.
15. ALL NEW PLANTS ARE TO BE FLORIDA #1 OR BETTER.
16. ALL MINIMUM SIZES MUST BE MET OR EXCEEDED. (CALIPER, WIDTH, AND HEIGHT)
17. ALL TREES WILL BE REMOVED FROM THIS SITE AND REPLACED WITH TREES ON A 2 FOR 1 BASIS WITH SUITABLE REPLACEMENT TREES. THE REPLACEMENT TREES SHALL HAVE AT LEAST EQUAL SHADE POTENTIAL AND SHALL BE A MINIMUM OF TEN FEET AT THE TIME OF PLANTING.
18. NO TREES SHALL BE PLANTED OVER OR WITHIN 5 FEET OF ANY UTILITY LINES. ONLY SOD OR SHRUBS MAY E PLANTED OVER UTILITY LINES.
19. ALL IRRIGATION SHALL UTILIZE RECLAIMED WATER OR BE DESIGNED TO CONNECT TO FUTURE RECLAIMED WATER LINES IF NOT CURRENTLY AVAILABLE.

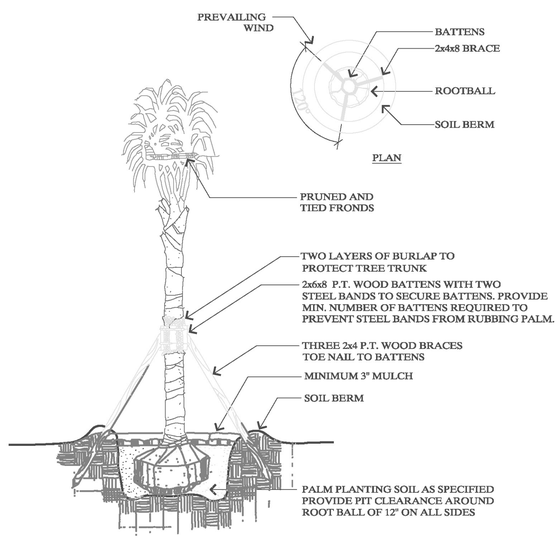
PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	FIELD4	FIELD5	QTY
AR	Acer rubrum / Red Maple	45 gal	3"Cal	12' oa 6' ct	NATIVE	WATER USAGE MEDIUM	10
ED	Elaeocarpus decipiens TM / Japanese Blueberry Tree	45 gal	3"Cal	8'–10'oa	NOT NATIVE	WATER USAGE LOW–MED	11
IO	Ilex x 'Oak Leaf' / Oak Leaf Holly	45 gal	3"Cal	8'–10'oa	NATIVE	WATER USAGE LOW–MED	15
LM	Lagerstroemia indica 'Muskogee' / Muskogee Crape Myrtle	15 gal	1.5"Cal	7'–8' OA	NATIVE	WATER USAGE LOW–MED	108
LJ2	Ligustrum japonicum / Japanese Privet	65 gal	3"Cal	12'oa,4'ct			21
MB	Magnolia grandiflora 'D.D. Blanchard' TM / Southern Magnolia	65 gal	3.5"Cal	13' OA	NATIVE	WATER USAGE MEDIUM	44
QV	Quercus virginiana / Southern Live Oak	65 gal	3"Cal	12' oa 6' ct	NATIVE	WATER USAGE LOW–MED	32
SR	Sabal palmetto Regenerated / Cabbage Palmetto	B & B	staggard hts.		NATIVE	WATER USAGE LOW–MED	52
TD	Taxodium distichum / Bald Cypress	65 gal	3"Cal	12' OA	NATIVE	WATER USAGE MEDIUM	32
UA	Ulmus alata / Winged Elm	65 gal	3"Cal	12' oa 6' ct	NOT NATIVE	WATER USAGE MEDIUM	16

SHRUBS	BOTANICAL / COMMON NAME	SIZE	FIELD2	FIELD3	QTY
AF	Azalea Southern Indica Hybrid 'Formosa' / Formose Azalea	7 gal	36"OA X 30"OC	WATER USAGE MED, NATIVE	67
IS	Ilex vomitoria 'Schillings' / Schillings Holly	3 gal	18"x18"OA	WATER USAGE LOW, NATIVE	144
NH	Nerium oleander 'Hardy Pink' / Oleander	3 gal	36"OA X 30"OC	WATER USAGE LOW, NATIVE	257
PI	Plumbago auriculata 'Imperial Blue' / Plumbago	7 gal	36"OA X 30"OC	WATER USAGE LOW	240
PM3	Podocarpus macrophyllus / Podocarpus	7 gal	36"OA X 30"OC	WATER USAGE MED, NATIVE	253
ST	Schefflera arboricola 'Trinette' / Schefflera	7 gal	36"OA X 30"OC	WATER USAGE MED	83
TF	Tripsacum dactyloides / Fakahatchee Grass	3 gal	30"oax30"spr	WATER USAGE LOW, NATIVE	18
VO	Viburnum odoratissimum / Sweet Viburnum	7 gal	36"OA X 30"OC	WATER USAGE MED	482

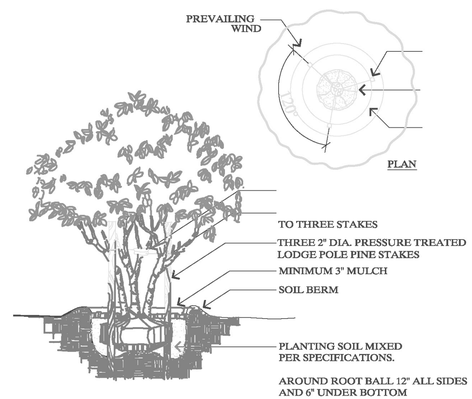
SHRUB AREAS	BOTANICAL / COMMON NAME	CONT	FIELD2	FIELD3	SPACING	QTY
LC4	Loropetalum chinense 'Hines Purpleleaf Plum Delight' TM / Plum Delight Fringe–Flower	7 gal	36"oaX 30"spr	WATER USAGE MED	24" o.c.	253
MP	Muhlenbergia capillaris 'Pink Cloud' / Pink Muhly	3 gal			24" o.c.	48
ST2	Schefflera arboricola 'Trinette' / Schefflera	7 gal	36"oaX 30"spr	WATER USAGE MED	24" o.c.	111
TF4	Tripsacum dactyloides / Fakahatchee Grass	7 gal	36"oaX 30"spr	WATER USAGE LOW NATIVE	24" o.c.	221
ZF3	Zamia floridana / Coontie Palm	3 gal	18"X18"OA	WATER USAGE LOW, NATIVE	18" o.c.	1,039

GROUND COVERS	BOTANICAL / COMMON NAME	CONT	FIELD2	FIELD3	SPACING	QTY
DV2	Dianella revoluta 'Variegated' / Variegated Flax Lily	1 gal			12" o.c.	538
SA2	Stenotaphrum secundatum 'Floritam' / Floritam St. Augustine Sod	sod	WATER USAGE MED			6,997 sf
TA	Trachelospermum asiaticum 'Asiatic' / Asiatic Jasmine	4"pot	WATER USAGE MED		12" o.c.	4,061
TV	Trachelospermum asiaticum 'Variegata' / Variegated Dwarf Jasmine	4"pot	WATER USAGE MED		12" o.c.	2,238

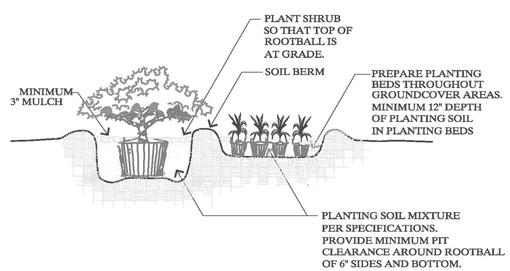


PALM PLANTING DETAIL

not to scale



MULTI-TRUNKED TREE PLANTING DETAIL



SHRUB AND GROUNDCOVER PLANTING DETAIL

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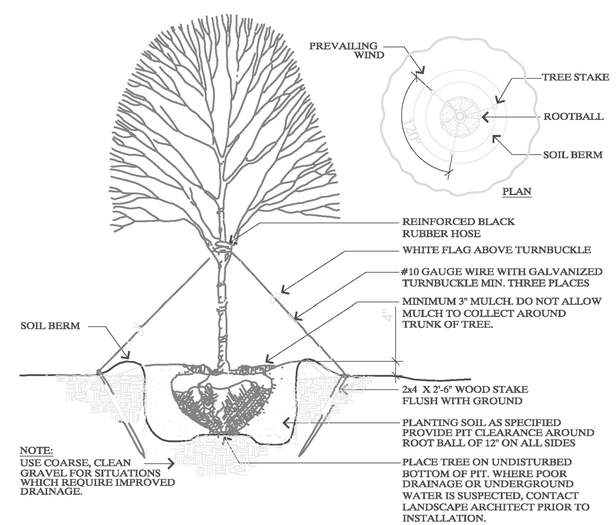

TREE PLANTING DETAIL

not to scale

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IRRIGATION PLAN FOR:

WINTER GARDEN BUSINESS PARK

DANIELS ROAD
WINTER GARDEN, FL

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- [ ] DESIGN DEVELOPMENT
- [ ] CONSTRUCTION DOCUMENTS

Drawing Title:
LANDSCAPE PLAN
LANDSCAPE NOTES
SCHEDULES

Date: 04.24.2020

Designed By: JAP
Drawn By: JSP
Reviewed By: JAP

Comm. No. 170144

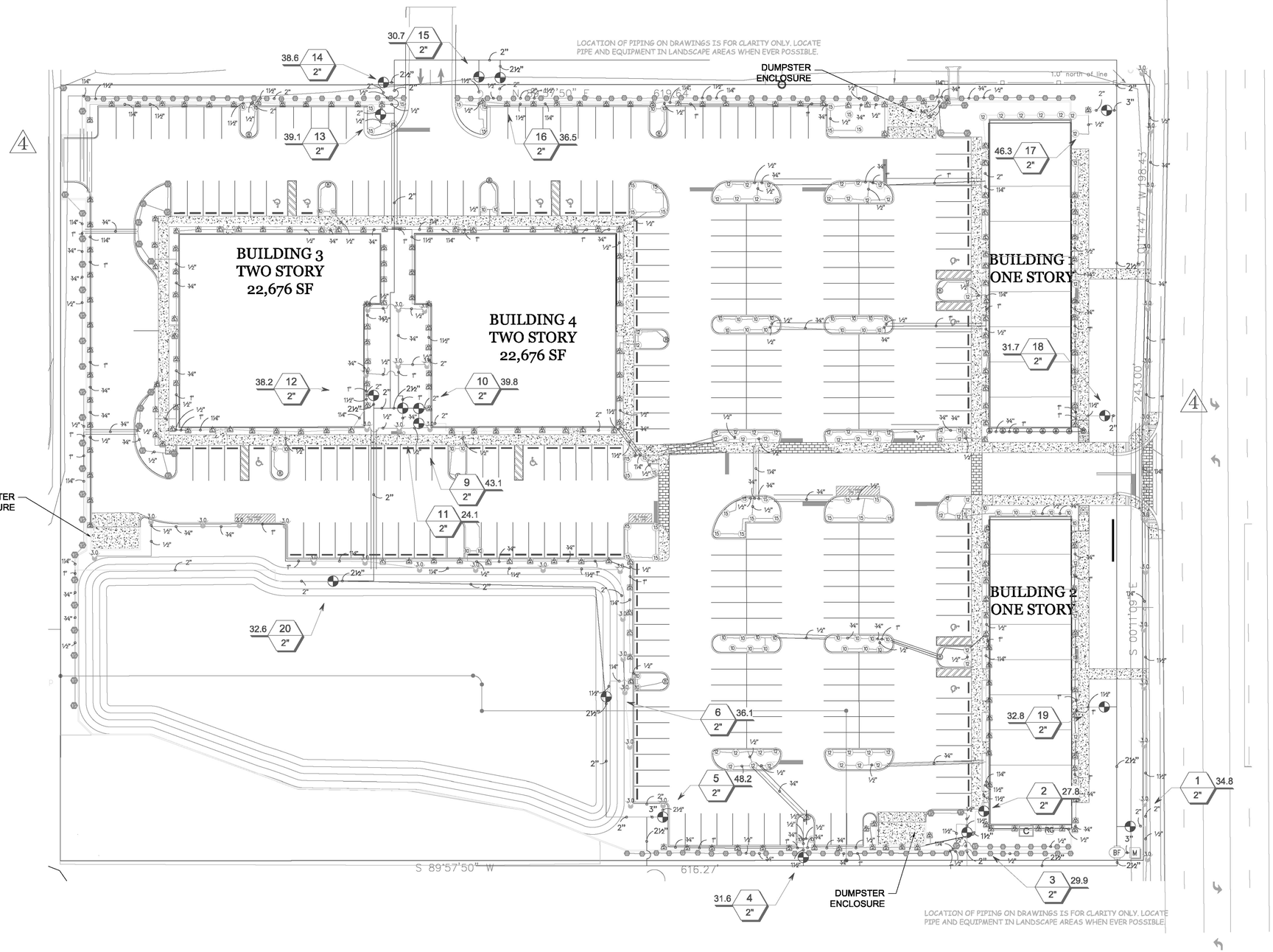
Revisions:

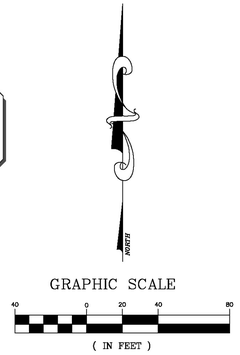
REV01	04.24.2020
REV02	06.27.18
REV03	06.28.18

Sheet: of

Sheet No. LA-2

JAY A. PETERSON
LA0000757





CRITICAL ANALYSIS

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Water Source Information:	
FLOW AVAILABLE	
Water Meter Size:	2"
Flow Available:	120.00 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	80.00 psi
Elevation Change:	5.00 ft
Service Line Size:	6"
Length of Service Line:	20.00 ft
Pressure Available:	78.00 psi
DESIGN ANALYSIS	
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Residual Flow Available:	63.84 gpm
Critical Station:	5
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Loss for Backflow:	15.00 psi
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Critical Station Pressure at POC:	66.34 psi
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NOTE: CHECK WATER FLOW FROM POC TO MAKE SURE YIELD EXCEEDS CRITICAL ANALYSIS REQUIREMENTS (STATIC PRESSURE AND FLOW AVAILABILITY). IF METER DOESN'T MEET THE REQUIREMENT GUIDE LINES AS SPELLED OUT IN THE CRITICAL ANALYSIS, PLEASE CONTACT THE LANDSCAPE ARCHITECT BEFORE INSTALLING IRRIGATION EQUIPMENT.

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IRRIGATION PLAN FOR:

WINTER GARDEN BUSINESS PARK

DANIELS ROAD
WINTER GARDEN, FL

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Drawing Title:
IRRIGATION PLAN

Date: 10.01.17

Designed By: JAP
Drawn By: JSP
Reviewed By: JAP

Comm. No. 170144

Revisions:

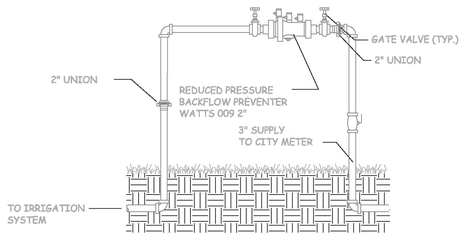
REV01	02.09.18
REV02	04.27.18
REV03	06.28.18
REV04	10.23.18
REV05	05.19.20

Sheet: Sheet No. IR-1

JAY A. PETERSON
LA0000757

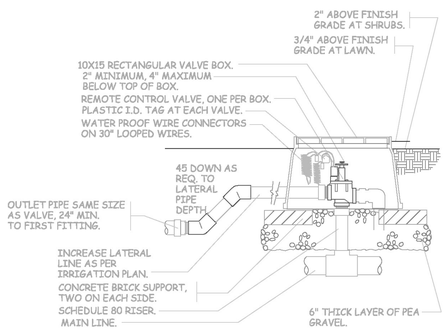
VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	HEADS	PIPE	WIRE	DESIGN PSI	FRICTION LOSS	VALVE LOSS	PSI	PSI @ POC	PRECIP
Unknown	Rain Bird PEB	2"	Shrub Spray	32.77	31	360.1		30	5.31	4.80	40.12	55.46	1.14 in/h
Unknown	Rain Bird PEB	2"	Turf Spray	29.88	46	396.7		30	5.59	4.80	40.39	52.91	0.92 in/h
Unknown	Rain Bird PEB	2"	Shrub Spray	31.61	30	413.4		30	5.14	4.80	39.94	52.52	1.59 in/h
Unknown	Rain Bird PEB	2"	Shrub Spray	27.79	39	514.9		30	5.81	4.80	40.61		1.44 in/h
Unknown	Rain Bird PEB	2"	Turf Rotor	48.24	18	563.2		35	6.77	4.80	46.57	60.85	0.84 in/h
Unknown	Rain Bird PEB	2"	Shrub Spray	33.88	28	436.8		30	5.27	4.80	40.07		1.69 in/h
Unknown	Rain Bird PEB	2"	Turf Spray	36.65	27	369.7		30	5.99	4.80	40.79	54.57	1.35 in/h
Unknown	Rain Bird PEB	2"	Shrub Spray	36.14	37	519.5		30	4.96	4.80	39.76	53.15	1.47 in/h
Unknown	Rain Bird PEB	2"	Turf Rotor	24.12	9	229.5		35	2.31	4.80	42.11	55.02	11.77 in/h
Unknown	Rain Bird PEB	2"	Shrub Spray	39.78	42	585.6		30	5.64	4.80	40.44	56.35	1.39 in/h
Unknown	Rain Bird PEB	2"	Shrub Spray	43.09	41	640.9		30	5.35	4.80	40.15	56.88	1.32 in/h
Unknown	Rain Bird PEB	2"	Shrub Spray	38.18	39	513.2		30	5.89	4.80	40.69	56.13	1.66 in/h
Unknown	Rain Bird PEB	2"	Turf Spray	32.58	21	466.1		30	4.51	4.80	39.31	53.11	0.85 in/h
Unknown	Rain Bird PEB	2"	Turf Spray	38.61	40	452.5		30	5.93	4.80	40.73	57.23	0.85 in/h
Unknown	Rain Bird PEB	2"	Shrub Spray	39.10	35	474.5		30	5.82	4.80	40.62		1.76 in/h
Unknown	Rain Bird PEB	2"	Shrub Spray	30.66	31	416.4		30	5.38	4.80	40.18	55.11	1.48 in/h
Unknown	Rain Bird PEB	2"	Turf Spray	36.45	53	485.6		30	5.79	4.80	40.59	56.82	0.96 in/h
Unknown	Rain Bird PEB	2"	Shrub Spray	46.29	56	759.2		30	4.95	4.80	39.75	57.85	1.25 in/h
Unknown	Rain Bird PEB	2"	Shrub Spray	31.69	34	381.6		30	5.87	4.80	40.67		1.13 in/h
Unknown	Rain Bird PEB	2"	Turf Rotor	34.84	13	462.5		35	6.90	4.80	46.70	62.22	0.76 in/h



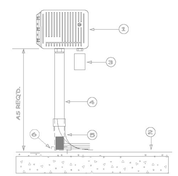
BACKFLOW ASSEMBLY 2

SCALE: NTS



VALVE 3

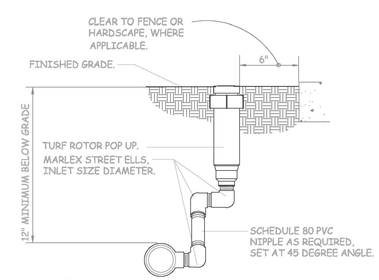
SCALE: NTS



1. AN AUTOMATIC SPRINKLER CONTROLLER (EXTERIOR WALL MOUNT
2. FINISH SURFACE OF EXTERIOR SPACE WHERE CONTROLLER IS LOCATED
3. ELECTRICAL CONNECTION
4. PVC SCHEDULE 40 CONTROL WIRE CONDUIT (SIZE AS REQUIRED)
5. PVC SWEEP ELL (PROTECTING LOW VOLTAGE CONTROL WIRES TO OUTSIDE PLANTER AREA)
6. OPTIONAL JUNCTION BOX TO ROUTE CONTROL WIRES TO OUTSIDE PLANTING AREA

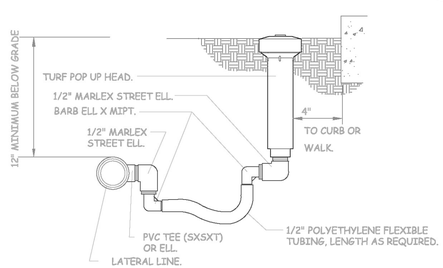
CONTROLLER 1

SCALE: NTS



TURF ROTOR 4

SCALE: NTS



TURF SPRAY 2

SCALE: NTS

BEFORE YOU DIG
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FLORIDA ONE CALL

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	DETAIL
EST LCS RCS CST SST	Rain Bird 1806-U-NP 15 Strip Series Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. With Non Potable Purple Cap.	21	30	
8 08HE-VAN 12 12HE-VAN 10 10HE-VAN 15 15HE-VAN	Rain Bird 1806-U-NP ADJ Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. With Non Potable Purple Cap.	167	30	
8 08HE-VAN 12 12HE-VAN 10 10HE-VAN 15 15HE-VAN	Rain Bird 1806-NP-U ADJ Shrub Spray, 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. With Non Potable Purple Cap.	181	30	
EST LCS RCS CST SST	Rain Bird 1800-PA-8S-NP-U 15 Strip Series Shrub Spray on fixed riser with the PA-8S Plastic Shrub Adapter. Use with 1/2" MPT threaded risers. With Purple Shrub Adapter. U series nozzles.	267	30	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS	DETAIL
3.0	Rain Bird 5004-PL-PC, FC-NP-LA Turf Rotor, 4.0" Pop-Up, Plastic Riser. Adjustable and Full Circle. Low Angle Nozzle and Flow Shut-Off Device. With Non-Potable Purple Cover.	41	45	3.07	35'	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
	Rain Bird PEB 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration.	20	
BF	Watts U009 2" Reduced Pressure Backflow Preventer	1	
C	Rain Bird ESP4-SMTE with (3) ESP-SM6 22 Station Outdoor Smart Modular Control System for Residential and Light Commercial Use. Wall Mount, Tipping Bucket Rain Sensor that Measures Rainfall.	1	
RG	Rain Bird WR2-RFS Wireless Rain/Freeze Sensor.	1	
M	Water Meter 2"	1	
	Irrigation Lateral Line: PVC Class 160 SDR 26-NP	9,305 l.f.	
	Irrigation Mainline: PVC Schedule 40-NP	2,120 l.f.	
	Pipe Sleeve: PVC Schedule 40	703.1 l.f.	

Valve Number
Valve Flow
Valve Size

GENERAL IRRIGATION NOTES

1. INSTALL 4" DIA. SCH 40 PVC SLEEVES UNDER PAVEMENT AS REQUIRED TO INSTALL IRRIGATION SYSTEM.
2. IRRIGATION MANUFACTURERS ACCEPTABLE AS FOLLOWS: NO ALTERNATES ACCEPTED. THE TORO CO. IRRIGATION DIVISION, IRRITROL SYSTEMS CO., HUNTER IRRIGATION, AND RAIN BIRD SPRINKLER MFG. CORP.
3. IRRIGATION CONTROLLER LOCATION, SEE PROJECT MANAGER FOR MORE DETAILS.
4. PROVIDE 100% SPRINKLER COVERAGE IN AREAS LANDSCAPED WITH TREES, SHRUBS, PERENNIALS, AND ANNUALS. ADJUST AS REQUIRED. NOTIFY ARCHITECT OF ANY DISCREPANCIES.
5. PROVIDE AN AUTOMATIC SPRINKLER CONTROLLER. THE UNIT MUST PROVIDE SUFFICIENT STATIONS FOR SITE, 7 DAY PROGRAMMING, MANUAL WATERING DELAY, MANUAL START OF EACH STATION, BATTERY BACK UP, AND A 120 VOLT GFI RECEPTICAL (COORDINATE LOCATION WITH ELECTRICAL CONTRACTOR).
6. CONTRACTOR SHALL MINIMIZE THE NUMBER OF TRENCHES FOR PIPING.
7. CONTRACTOR SHALL PROVIDE A RAIN SENSOR WHICH WILL SUSPEND IRRIGATION DURING AND AFTER RAIN.
8. LOCATION OF PIPING ON DRAWINGS IS FOR CLARITY ONLY. LOCATE PIPE AND EQUIPMENT IN LANDSCAPE AREAS WHEN EVER POSSIBLE.
9. ZONE VALVES SHALL NOT BE LOCATED WITHIN 3 FEET OF ANY DRIVEWAY, TRAFFIC AISLE, ISLAND, ETC. WHERE THEY COULD BE DAMAGED BY VEHICLE DRIVING OVER THE CURB.
10. WIRING NOT LESS THAN 14 GAUGE. PROVIDE DIRECT BURIAL TYPE FOR BURIED WIRE. USE WATERPROOF WIRE NUTS THROUGHOUT. DISTANCES OVER 1000' MAY REQUIRE 12 GAUGE WIRE.
11. ALL LOW VOLTAGE CONTROLLER TO SOLENOID WIRES TO BE LOCATED UNDER MAINLINE OR LATERAL, WHERE POSSIBLE, ON DOWNSTREAM PIPING OR LOCATED IN GRAY SCHEDULE 80 PVC CONDUIT. PROVIDE SLACK AND A LOOP OF WIRE AROUND EACH VALVE AND AT TURNS IN TRENCH. WIRE SPLICES SHALL BE LOCATED IN VALVE BOX.
12. ALL ELECTRICAL WORK MUST CONFORM TO LOCAL CODES. REFER TO PRODUCT LITERATURE FOR ADDITIONAL INSTALLATION REQUIREMENTS.
13. THIS DRAWING IS PROVIDED FOR REFERENCE ONLY. INDIVIDUAL PROJECT REQUIREMENTS AND LOCAL CODES MAY DICTATE DIFFERENCES IN INSTALLATION PROCEDURES THAT ARE NOT IDENTIFIED HERE.
14. ALL IRRIGATION SHALL UTILIZE RECLAIMED WATER OR BE DESIGNED TO CONNECT TO FUTURE RECLAIMED WATER LINES IF NOT CURRENTLY AVAILABLE.

CRITICAL ANALYSIS

Generated:	2017-10-03 16:47
P.O.C. NUMBER: 01	
Water Source Information:	
FLOW AVAILABLE	
Water Meter Size:	2"
Flow Available:	120.00 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	80.00 psi
Elevation Change:	5.00 ft
Service Line Size:	6"
Length of Service Line:	20.00 ft
Pressure Available:	78.00 psi
DESIGN ANALYSIS	
Maximum Station Flow:	56.16 gpm
Flow Available at POC:	120.00 gpm
Residual Flow Available:	63.84 gpm
Critical Station:	5
Pressure Req. at Critical Station:	46.56 psi
Loss for Fittings:	0.06 psi
Loss for Main Line:	0.57 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	15.00 psi
Loss for Water Meter:	4.15 psi
Critical Station Pressure at POC:	66.34 psi
Pressure Available:	78.00 psi
Residual Pressure Available:	11.66 psi

NOTE: CHECK WATER FLOW FROM POC TO MAKE SURE YIELD EXCEEDS CRITICAL ANALYSIS REQUIREMENTS (STATIC PRESSURE AND FLOW AVAILABILITY). IF METER DOESN'T MEET THE REQUIREMENT GUIDE LINES AS SPELLED OUT IN THE CRITICAL ANALYSIS, PLEASE CONTACT THE LANDSCAPE ARCHITECT BEFORE INSTALLING IRRIGATION EQUIPMENT.

JAY PETERSON
Landscape Architecture
342 True Place
Phone: (407) 687-0210
Lake Mary, FL 32746
jaypeterson@bellsouth.net

THE DESIGN PROFESSIONAL DENIES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE DESIGN PROFESSIONAL'S AUTHORITY WITH RESPECT TO ANY ENGINEERING DESIGN, ERRORS, OMISSIONS, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

IRRIGATION PLAN FOR:
WINTER GARDEN BUSINESS PARK
DANIELS ROAD
WINTER GARDEN, FL

THIS DRAWING HAS BEEN ISSUED:
- [ ] FOR REVIEW ONLY
- [x] FOR PERMITTING ONLY
- [ ] SCHEMATIC DESIGN
- [ ] DESIGN DEVELOPMENT
- [ ] CONSTRUCTION DOCUMENTS

Drawing Title:
IRRIGATION

Date: 10.01.17

Designed By: JAP
Drawn By: JSP
Reviewed By: JAP

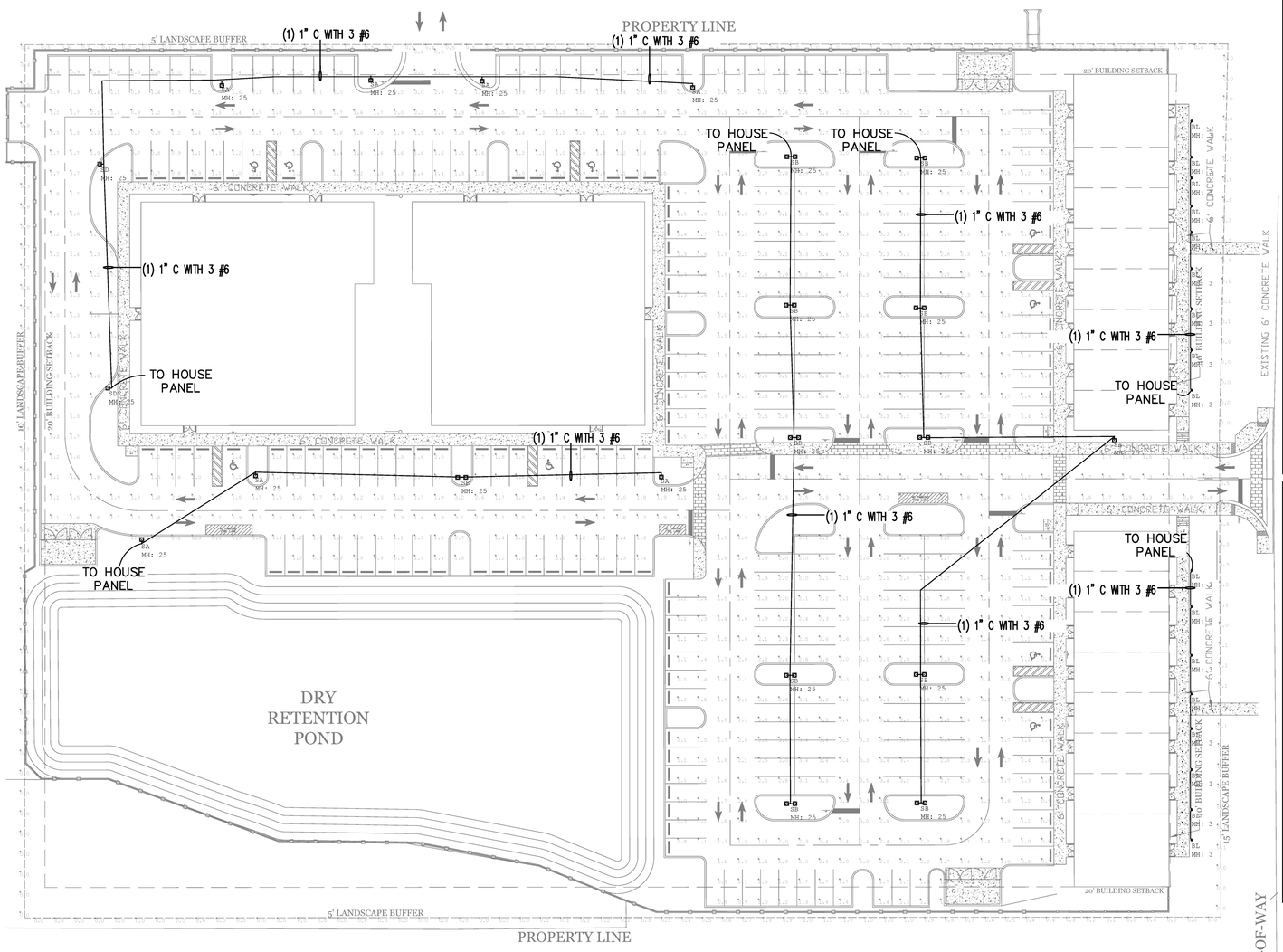
Comm. No. 170144

Revisions:

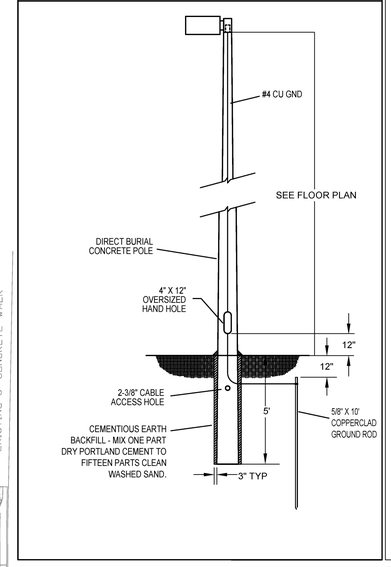
REV01	02.09.18
REV02	04.27.18
REV03	06.28.18
REV04	10.23.18
REV05	05.19.20

Sheet: Sheet No. C6.1

JAY A. PETERSON
LA0000757



POLE MOUNTING DETAIL



Lumark

DESCRIPTION

The Prevail LED area, site luminaire combines optical performance, energy efficiency and long term reliability in an advanced, patent pending modern design. Utilizing the latest LED technology, the Prevail luminaire delivers unparalelled uniformity resulting in greater pole spacing. A versatile mount standard arm facilitates ease of installation for both retrofit and new installations. With energy savings greater than 62%, the Prevail fixture replaces 150-400W metal halide fixtures in general area lighting applications such as parking lots, walkways, roadways and building areas.

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Construction
Construction is comprised of a heavy-duty, single-piece die-cast aluminum housing. The LED drivers are mounted in direct contact with the casting to promote heat operating temperatures for long life. The die-cast aluminum door is tethered to provide easy access to the driver if replacement is required. A one-piece silicone gasket seals the door to the fixture housing. The optics is mounted on a versatile, aluminum plate that dissipates heat from the LEDs resulting in longer life of the fixture. The fixture is IP66 and 3G vibration rated (ANSI C136.31) to insure strength of construction and longevity in the selected application.

Optics
Precision molded, high efficiency optics are precisely designed to optimize distribution, maximizing efficiency and application spacing. Available in Type II, III, IV and V distributions with lumen packages ranging from 6,100 to 15,100 nominal lumens. Light engine configurations consist of 1 or 2 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L92/60,000 hours at 25°C) per IESNA TM-21. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed.

Electrical
LED drivers are mounted to the fixture for optimal heat sinking and ease of maintenance. Thermal management incorporates both conduction and convection to deliver a cool operating temperature for long life. The die-cast aluminum door is tethered to provide easy access to the driver if replacement is required. A one-piece silicone gasket seals the door to the fixture housing. The optics is mounted on a versatile, aluminum plate that dissipates heat from the LEDs resulting in longer life of the fixture. The fixture is IP66 and 3G vibration rated (ANSI C136.31) to insure strength of construction and longevity in the selected application.

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Controls
The Prevail LED luminaire control options are designed to be simple and cost-effective ASHRAE and California Title 24 compliant solutions. The ANSI C136.41 compliant NEMA 7-PIN receptacle enables wireless dimming when used with compatible photocontrol. An integrated dimming and occupancy sensor is a standalone control option available in on/off (MSP) and bi-level dimming (MSP/DIM) operation. The optional LumaWatt system is best described as a peer-to-peer wireless network of luminaire-integral sensors that operate in accordance with programmable profiles. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication.

Mounting
Standard pole mount arm is bolted directly to the pole and the fixture slides onto the arm and locks in place with a bolt facilitating quick and easy installation. The versatile, patent pending, standard mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the standard mounting arm enables wiring of the fixture without having to access the driver compartment. A knock-out on the standard mounting arm facilitates wall pole mounting. Wall mount and mast arm mounting options are available. Mast arm adapter fits 2-3/8" O.D. tenon.

Finish
Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard color is bronze. Additional colors available in white, grey, black, dark platinum and graphite metallic.

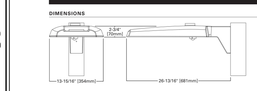
Warranty
Five-year warranty.

PRV PREVAIL

LED

AREA / SITE / ROADWAY LUMINAIRE

DIMENSIONS



CERTIFICATION DATA
UL and cUL Wet Location Listed
IP66 Rated
3G Vibration Rated
ISO 9001
DesignLights Consortium™ Qualified*

ENERGY DATA
Electronic LED Driver
>0.9 Ballast Factor
<20% Total Harmonic Distortion
120-277V/50 and 60Hz,
347V/60Hz, 480V/60Hz
-40°C Minimum Temperature Rating
+40°C Ambient Temperature Rating

EPA
Effective Projected Area (Sq. Ft.): 0.75

SHIPPING DATA
Approximate Net Weight:
25 lbs. (9.05 kgs.)

EATON Powering Business Worldwide

*www.designlights.org

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LED ROUND TOP BOLLARD

LS32B/R

Model:
AXB7R

Housing:
Heavy duty aluminum housing with flush mounting base & vandal-resistant screws, round top, powdercoat finish over a chromate conversion coating, internal driver tray for easy maintenance.

Reflector:
Specially designed aluminum cone reflector for LED.

Mounting:
Mounting kit with 8" anchor bolts (included).

LED System:
LB32 (n=3A)
LB32 (n=5K)
LB32 (n=7K)
CCT: 3000K,4000K,5000K
Aluminum LED Board

Lens:
Clear polycarbonate lens

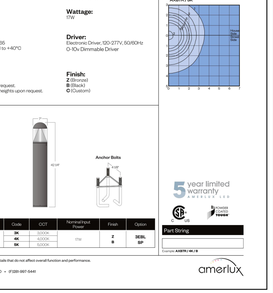
Wattage:
17W

Driver:
Electronic Driver, 120-277V, 50/60Hz
O-10v Dimmable Driver

Listing & Ratings:
CSA: Listed for wet locations, IP65
Operating Temperature: -40°C to +40°C

Options:
• Surge Protection (**SP**)
• Battery Backup (**BCBL**)
• Custom colors available upon request.
• Bollards can be cut to custom heights upon request.

Finish:
Z Bronze
B Black
C Custom



Ordering Information

Model	Light Distribution	Color	CCT	Nominal Lumen Power	Finish	Option
AXB7R	Medium Beam Spread	3K	3000K	17W	Z	BCBL
		4K	4000K		B	SP
		5K	5000K			

Ordering Lead Time: 4-6 Weeks

Amerlux reserves the right to change details that do not affect overall function and performance.

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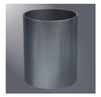
amerlux

Steel Poles



RTS ROUND TAPERED STEEL

Catalog #	Type
Project	
Comments	Date
Prepared by	

FEATURES
- ASTM Grade steel base plate with ASTM A366 base cover
- Hand hole assembly 3" x 5" on RTS poles
- 20'-50' mounting heights
- Drilled or tenon (specify)

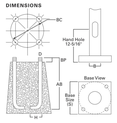
ORDERING INFORMATION

SAMPLE NUMBER: RTS6A305F2XXG

Product Family	Shaft Size (Inches)	Wall Thickness (Inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Position of Arms	Arm Lengths (Feet)	Options (Add as Suffix)
RTS—Round Tapered Steel	6=6" 7=7" 8=8" 9=9" Steel; 10=10" Aluminum	A=0.120" 0=0.188"	20=20' 25=25' 30=30' 35=35' 40=40' 50=50'	S=Square Steel Base	K=Dark Bronze G=Galvanized Steel A=Summit White B=Textured White L=Dark Platinum P=Primer Powder Coat R=Hartford Green S=Silver T=Graphite Metallic V=Black W=White X=Custom Color Y=Black	2=2-3/8" O.D Tenon (4" Long) 3=3-1/2" O.D Tenon (5" Long) 4=4" O.D Tenon (6" Long) 6=6" O.D. Tenon (4" Long) 7=7" O.D. Tenon (5" Long) 7=4" O.D. Tenon (10" Long) A=Type A Drilling B=Type B Drilling E=Type E Drilling F=Type F Drilling G=Type G Drilling J=Type J Drilling K=Type K Drilling M=Type M Drilling R=Type R Drilling Y=Type Y Mast Arm Drilling Z=Type Z Drilling	1=Single 2=2 at 180° 3=Triple 4=4 at 90° 5=5 at 72° 6=2 at 90° 7=2 at 120° X=None	X=None	A=1/2" Tapped Hub (Specify location desired) B=3/4" Tapped Hub (Specify location desired) C=Convenience Outlet E=GFCI Convenience Outlet* G=Ground Lug H=3" Diameter Hand Hole* L=Drilled for Luminaire Clamp V=Vibration Dampener

NOTES: 1. All shaft sizes nominal. 2. Square poles are 3 at 90°, round poles are 2 at 120°. 3. Outlet is located 6" above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. 4. Additional hand hole is located 12" below pole top and 90° from standard hand hole location, unless otherwise specified.

DIMENSIONS



WARNING: Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to pole white paper WPX130015EN for additional support information. Before installing, make sure proper anchor bolts and templates are obtained. The use of unauthorized accessories such as banners, signs, cameras or pennants for which the pole was not designed voids the pole warranty. Contact your local Eaton representative for assistance with pole selection, accessories and ordering information upon request. The pole warranty is void unless poles are used and installed as a complete pole and luminaire combination. This warranty specifically excludes failure as the result of a third party act or omission, misuse, unanticipated uses, fatigue failure or similar phenomena resulting from induced vibration, harmonic oscillation or resonance associated with movement of air currents around the product.

Specifications and dimensions subject to change without notice. Consult your lighting representative at Eaton or visit www.eaton.com/lighting for available options, accessories and ordering information.

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Xref N:\All proj

Mohsen Faraji PE#43599

DANIEL'S ROAD BUSINESS PARK
WINTER GARDEN, FLORIDA
SITE LIGHTING PLAN

Lighting Partners of CF Luminaire Schedule										
Symbol	Qty	Label	Arrangement	Lum. Watts	Arr. Watts	Lum. Lumens	LLF	[MANUFAC]	Description	BUG Rating
	8	SA	SINGLE	87	87	10261	0.912	EATON - LUMARK (FORMER COOPER LIGHTING)	PRV-A25-D-UNV-T4-BZ	B2-U0-G3
	10	SB	D180	87	174	10627	0.912	EATON - LUMARK (FORMER COOPER LIGHTING)	PRV-A25-D-UNV-T5-BZ	B4-U0-G3
	2	SD	SINGLE	87	87	9370	0.912	EATON - LUMARK (FORMER COOPER LIGHTING)	PRV-A25-D-UNV-T3-BZ-HSS	B1-U0-G3
	1	SE	D180	87	174	10261	0.912	EATON - LUMARK (FORMER COOPER LIGHTING)	PRV-A25-D-UNV-T4-BZ	B2-U0-G3
	17	BL	SINGLE	16.9	16.9	1458	0.912	AMERLUX	AXB7R-4K	B1-U3-G1

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PROPERTY LINE	Illuminance	Fc	0.33	1.0	0.0	N.A.	N.A.
SIDEWALK 1	Illuminance	Fc	0.96	2.8	0.1	9.60	28.00
SIDEWALK 2	Illuminance	Fc	0.75	2.5	0.1	7.50	25.00
SITE LIGHTING	Illuminance	Fc	1.91	3.6	0.6	3.18	6.00

SITE LIGHTING NOTES

- REFER TO ELECTRICAL DRAWINGS FOR POWER RUNS/CIRCUITRY & SLEEVE LOCATIONS.
- STUB OUT SERVICE TO LANDSCAPE LIGHTS IN BROOKS BOX IN APPROX. TREE/PALM LOCATIONS PER PLAN. EXACT LANDSCAPE LIGHT FIXTURE LOCATION WILL BE FLAGGED IN FIELD BY LANDSCAPE ARCHITECT W/ ELECTRICAL CONTRACTOR AFTER TREES/PALMS ARE INSTALLED & BEFORE SHRUBS/GROUND COVER ARE INSTALLED.
- LAYOUT/STAKE IN FIELD FOR APPROVAL BY OWNER. FIELD ADJUST STREET LIGHT FIXTURE IF UNDER TREE LIMS/CANOPY.
- LIGHT POLES OR BOLLARDS TO BE A MIN. 6'-0" FROM EDGE OF CURB (ON ROAD WAYS, TYP.)
- PROVIDE LIGHTING TIME CLOCK WITH CONTACTORS, BATTERY BACKUP & ASTRONOMICAL SETTINGS FOR NEW LIGHTING CIRCUITS.
- ALL MATERIALS SHALL BE NEW, FREE FROM DEFECTS AND SHALL BE EITHER U.L. LABELED, U.L. LISTING OR THE SEAL OF A NATIONALLY RECOGNIZED ELECTRICAL TESTING LABORATORY.
- ALL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL AND STATE CODES.
- FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS REQUIRED FOR A COMPLETE ELECTRICAL SYSTEM AS HEREINAFTER SPECIFIED AND SHOWN ON THE DWG'S AND SPECIFICATIONS, WHETHER OR NOT SPECIFICALLY SHOWN OR CALLED FOR.
- CONTRACT BID PRICE TO INCLUDE THE FOREGOING AS WELL AS ALL FEES REQUIRED FOR PERMITS, INSPECTIONS AND ENGINEERS DWG'S / STAMP IF REQUIRED.
- COORDINATE WITH OWNERS REPRESENTATIVE REGARDING ELECTRICAL SERVICE WITH POWER COMPANY.
- PROVIDE SHOP DRAWINGS OF FIXTURES TO OWNER & ARCHITECT FOR APPROVAL

SITE LIGHTING PLAN

1 / SL-1

SCALE = NONE

revision	description	date
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drawn by:	OC
checked by:	MTF
date:	04/23/20
plot scale:	AS SHOWN
project number:	EPG17120
file name:	

SL-1

File Location : C:\Users\mohsen8\appdata\local\temp\AcPublish_41228\

Filename : EPG17120 SITE LIGHTING rev 1.dwg Plot Date : Apr. 23, 2020 1:20pm

CITY OF WINTER GARDEN

DEVELOPMENT REVIEW COMMITTEE

300 West Plant Street - Winter Garden, Florida 34787-3011
(407) 656-4111

M E M O R A N D U M

TO: STEVE PASH, COMMUNITY DEVELOPMENT DIRECTOR
FROM: DEVELOPMENT REVIEW COMMITTEE
DATE: MAY 20, 2020
SUBJECT: 1200 DANIELS ROAD – DANIELS ROAD BUSINESS PARK SITE PLAN APPROVAL

We recommend approval subject to the following conditions and comments:

ENGINEERING

Underlined comments shall be addressed prior to pre-con:

1. Tree removal shall adhere to the City's Tree Protection Ordinance – separate review, approval and permit is required. Coordinate with the Building Department (Steve Pash) on any tree removal and protection. Additional landscaping and tree replacement may be required with final plan.
2. The plans (Sheet 3 of 19) delineate a wetland line and contain a demucking note requiring an on-site Geotechnical Engineer to ensure that all areas containing building pads are suitable. Specifications for muck removal on what will be parking or building pads have been shown, with specific instructions as to muck removal, testing and building permit application.

   As note on the final construction plans: ***Building Permit application for any pads in the muck removal area shall be accompanied by a detailed report, signed and sealed by a Florida Professional Engineer, that these areas are suitable for construction, and shall contain special foundation requirements or designs as appropriate. Provide to the Building and Engineering Departments***.
3. Parking spaces shall either be 9' X 20' or 10' X 18' per City Code.
4. 5' wide concrete sidewalks are required on all street frontages. Any damaged, cracked or broken sidewalks or curbs shall be replaced prior to final completion.
5. All on-site utilities shall be privately owned and maintained and shall conform to Chapter 78 of the City Code. 100% of all required water and sewer impact fees shall be paid prior to City execution of FDEP permits or issuance of site or building permits. Meter sizes shall be confirmed for review by the Utilities Department for verification of impact fees at time of Building Permit application. Final plans will not be approved for construction until utility impact fees have been paid and FDEP permits or exemptions have been issued.
6. Any new water, sewer, or irrigation connections are required to pay utility impact fees, to be paid prior to issuance of site or building permits or execution of FDEP permits. The plan currently shows 1 - 2" potable meter, and a single 2" irrigation meter. Based on the current plan the following impact fees will be due:

2" Potable water meter	1 ea. @ $8,688.00	=	$8,688.00
Wastewater for 2" meter	1 ea. @ $14,136.00	=	$14,136.00
2" Irrigation meter	1 ea. @ $8,688.00	=	$8,688.00
	TOTAL	**=**	**$31,512.00**

(does not include connection/installation fee)

7. Point of Services (POS) for the fire protection system have been shown at the DDCVA. All work

downstream of the POS shall be performed by a licensed fire sprinkler contractor. Coordinate fire protection review and approval with the Fire Department.

8. All gravity sanitary pipe and fittings shall be SDR 26. Sanitary laterals from buildings shall be 6".
9. Public Services Solid Waste Division shall approve dumpster location/alignment. All dumpsters shall be enclosed and shall provide **12'** minimum inside clearance (each way inside of bollards). Please provide details of the dumpster enclosure.
10. Landscaping shall not encroach on required sight lines at intersections or driveways. Design Engineer shall provide certification that sight distance requirements are being met.
11. Site lighting is required including street frontage; all lighting shall meet dark skies requirements per City Code. A site lighting plan has been provided for Planning Department review.
12. No trees may be planted over or within 5 feet of any utility lines. Only sod or shrubs may be planted over utility lines.
13. Design Engineer shall provide drainage certification to the City showing that the requirements of the original SJRWMD permit have been met: Maximum impervious coverage cannot exceed 70%, excluding the retention easement based on C-2 zoning.
14. Vacation of existing platted easements, tracts, cross easements for ingress/egress, and drainage and utilities will be required – please coordinate with the City Attorney.
15. Previous responses indicate that the project will remain in one ownership. Platting will be required if individual parcels are sold off.
16. No fill or runoff will be allowed onto adjacent parcels. Transition slopes shall be provided to match existing grade at property line. Existing drainage patterns shall not be altered. Providing positive drainage within the site is the responsibility of the Design Engineer. The City will not maintain any portion of the on-site or off-site drainage systems or parking lot.
17. SJRWMD Permit is acknowledged; <u>permits or exemptions from FDEP for water, wastewater and NPDES NOI are required</u>. <u>Reminder that 100% of the utility impact fees noted above shall be paid prior to the City processing the FDEP permits</u>.

<u>PLANNING</u>

18. Note: The irrigation system shall utilize reclaimed water or be designed to connect to future reclaimed water lines if not currently available.
19. Note: A condition of Site Plan approval is that the applicant continue to work with City Staff to fine tune the architecture of the buildings fronting Daniels Road, addressing the following comment:

    Staff has some concerns about the length of the two buildings fronting on Daniels Road (170' +/-) that do not appear to have any variation in horizontal massing (i.e. recesses or projections of the building footprint) and limited variation in vertical massing.

<u>STANDARD GENERAL CONDITIONS</u>

20. The Owner is responsible for meeting all provisions of ADA and Florida Accessibility Code.
21. All work shall conform to City of Winter Garden standards and specifications.
22. The City of Winter Garden will inspect private site improvements only to the extent that they connect to City owned/maintained systems (roadways, drainage, utilities, etc.). It is the responsibility of the Owner and Design Engineer to ensure that privately owned and maintained systems are constructed to the intended specifications. The City is not responsible for the operation and maintenance of privately owned systems, to include, but not be limited to, roadways, parking lots, drainage, stormwater ponds or on-site utilities.
23. The Contractor is responsible for the notification, location and protection of all utilities that may exist within the project limits.

24. No fill or runoff will be allowed to discharge onto adjacent properties; existing drainage patterns shall not be altered. The applicant should note that if approval is granted, the City of Winter Garden is not granting rights or easements for drainage from, or onto, property owned by others. Obtaining permission, easements or other approvals that may be required to drain onto private property is the Owner/Developer's responsibility. Should the flow of stormwater runoff from, or onto adjacent properties be unreasonable or cause problems, the City will not be responsible and any corrective measures required will be the responsibility of the Owner. Site construction shall adhere to the City of Winter Garden erosion and sediment control requirements as contained in Chapter 106 - Stormwater. If approval is granted by the City of Winter Garden, it does not waive any permits that may be required by federal, state, regional, county, municipal or other agencies that may have jurisdiction.

25. After final plan approval, a preconstruction meeting will be required prior to any commencement of construction. The applicant shall provide an erosion control and street lighting plan at the preconstruction meeting and shall pay all engineering review and inspection fees prior to construction. Inspection fees in the amount of **2.25%** of the cost of all site improvements shall be paid prior to issuance of the site or building permit (less what has already been paid).

Additional comments may be generated at subsequent reviews
Please review this information and contact our office if you have any questions. Thank you.

END OF MEMORANDUM

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Steve Pash, Community Development Director

Via: City Manager Mike Bollhoefer

Date: May 13, 2020 **Meeting Date:** May 28, 2020

Subject: 504 W Plant St
504 Building - Site Plan Approval
PARCEL ID# 22-22-27-0000-00-076

Issue: The applicant is requesting Site Plan approval to construct a new two-story commercial building and associated site improvements on a property located at 504 W Plant St.

Discussion:

The proposed project includes a new 9,998 +/- square foot, 2-story office building. The development also includes associated site development such as new parking areas, sidewalks, and common space. The property is currently vacant because an existing 1,600 +/- sq. ft. single family residential structure and all associated structures were recently demolished.

The 0.42 +/- acre subject property is designated Traditional Downtown (TD) on the City's Future Land Use Map and is zoned PCD Planned Commercial Development (Ord 19-40).

Recommended Action:

Staff recommends approval of the proposed Site Plan subject to the conditions of the DRC staff report dated May 12, 2020. Development of the property with a two-story office building is consistent with the City's Comprehensive Plan, the property's PCD zoning requirements, and the design requirements of the Historic Downtown District Overlay.

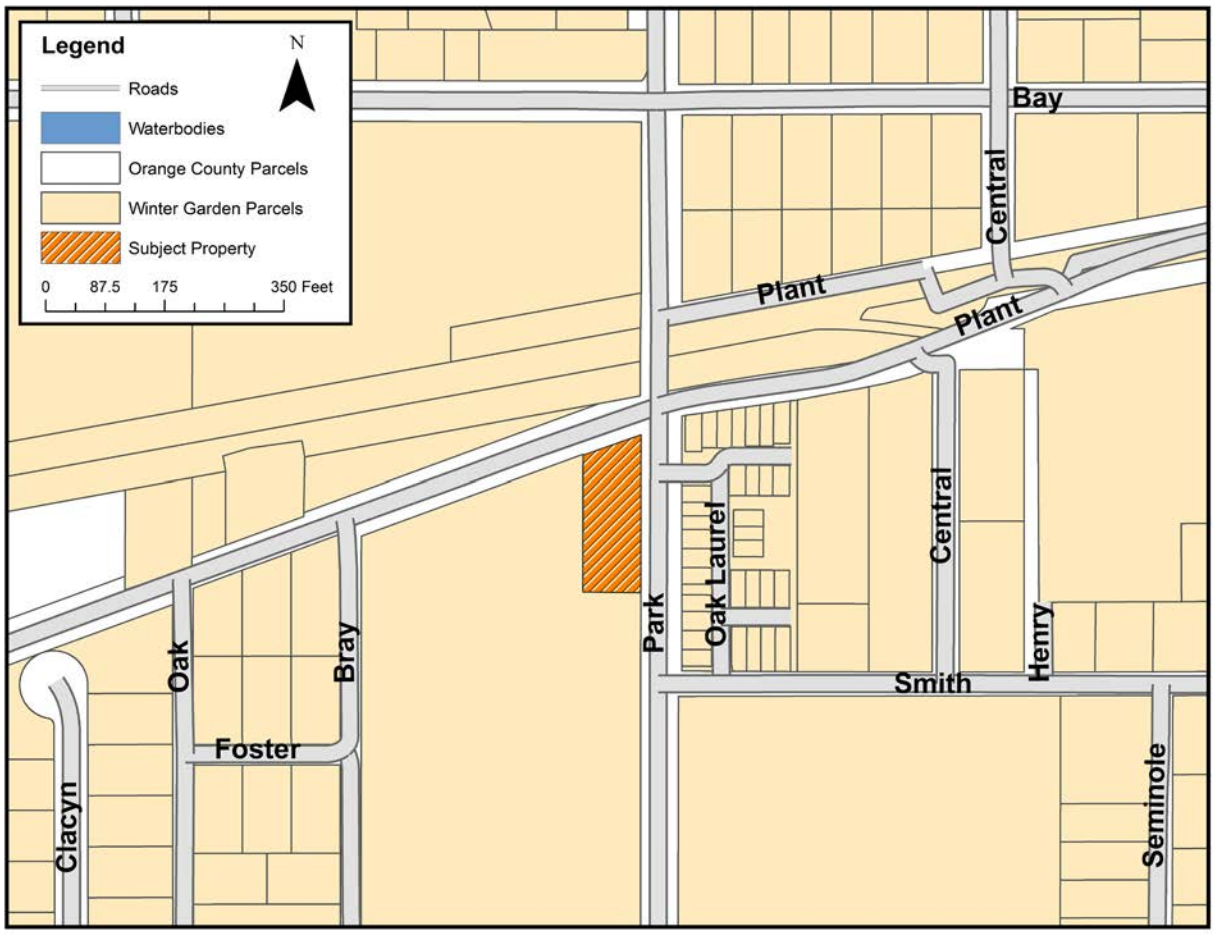
Attachment(s)/References:

Location Map
DRC Staff Report
Site Plan Set

Location Map

504 Building – Site Plan Approval

504 W Plant Street



504 BUILDING
CONSTRUCTION PLANS
504 W. PLANT STREET
WINTER GARDEN, FLORIDA

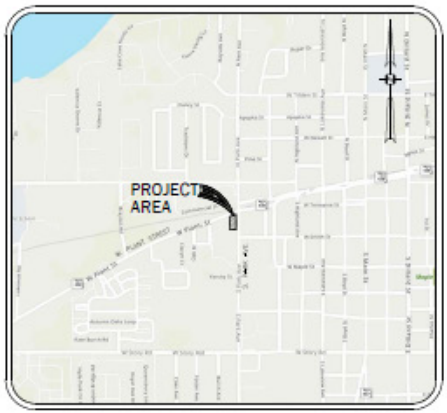
PARCEL I.D. No. 22-22-27-0000-00-076

OWNER: JJ PARK, LLC
6965 PIAZZA GRANDE AVE. SUITE 204
ORLANDO, FL. 32835
PHONE: 407-593-5148

ARCHITECT: MORRISSEY DESIGN STUDIO
30 WEST SMITH STREET
WINTER GARDEN, FL. 34787
PHONE: 407-616-7770

SURVEYOR: BISHMAN SURVEYING & MAPPING, INC.
32 W. PLANT STREET
WINTER GARDEN, FL. 34787
PHONE: 407-905-8877
FAX: 407-905-8875

SITE VICINITY MAP



NOT TO SCALE

PLAN INDEX

C-1 COVER SHEET
C-2 BOUNDARY AND TOPOGRAPHIC SURVEY
C-3 LEGEND, NOTES, AND SPECIFICATIONS
C-4 SITE DEMOLITION and STORMWATER POLLUTION PREVENTION PLAN
C-5 SITE GEOMETRY PLAN
C-6 SITE PAVING, GRADING AND DRAINAGE PLAN
C-7 EXFILTRATION TRENCH PLAN & DETAILS
C-8 CHAMBER SYSTEM PLAN AND DETAILS (ALTERNATE DESIGN)
C-9 SITE UTILITY PLAN
C-10 SITE CROSS SECTIONS
C-11 SITE CONSTRUCTION DETAILS
C-12 CITY OF WINTER GARDEN DETAILS (1 OF 2)
C-13 CITY OF WINTER GARDEN DETAILS (2 OF 2)
C-14 SITE LANDSCAPE PLAN AND DETAILS
C-15 SITE IRRIGATION PLAN AND DETAILS
C-16 SCREEN WALL DETAIL

PERMITTING AGENCIES
S.J.R.W.M.D.: ENVIRONMENTAL RESOURCE PERMIT
F.D.E.P.: WATER AND WASTEWATER SYSTEM PERMITS
CITY OF WINTER GARDEN: SITE PLAN APPROVAL

UTILITY COMPANIES

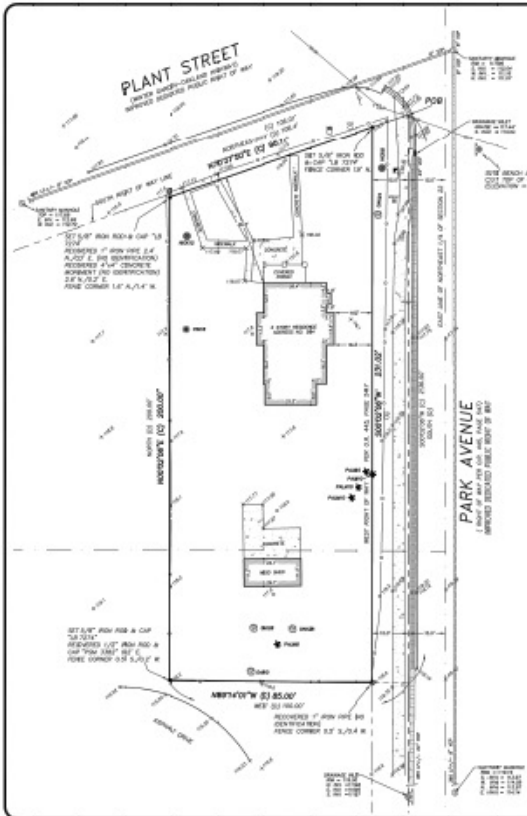
WATER:	(407) 656-4111	CITY OF WINTER GARDEN
SEWER:	(407) 656-4111	CITY OF WINTER GARDEN
ELECTRIC:	(407) 905-3376	DUKE ENERGY
TELEPHONE:	(407) 814-5293	CENTURYLINK WINTER GARDEN
CABLE:	(407) 532-8509	CHARTER COMMUNICATIONS
GAS:	(407) 656-2734	LAKE APOPKA NATURAL GAS

FEG FLORIDA ENGINEERING GROUP
Engineering the Future

5127 S. Orange Avenue, Suite 200
Orlando, FL 32809
Phone: 407-895-0324
Fax: 407-895-0325

www.feg-inc.us

BOUNDARY AND TOPOGRAPHIC SURVEY



DESCRIPTION:

BEGINNING AT A POINT ON THE SOUTH RIGHT OF WAY LINE OF THE WINTER GARDEN-OAKLAND HIGHWAY 75 FEET WEST OF THE EAST LINE OF SECTION 22, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, RUN THENCE SOUTH 200.00 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF PARK AVENUE; THENCE WEST 85.00 FEET; THENCE NORTH 200.00 FEET TO THE SOUTH RIGHT OF WAY LINE OF THE WINTER GARDEN-OAKLAND HIGHWAY; THENCE EAST 85.00 FEET TO THE POINT OF BEGINNING. ALL OF THIS LAND LYING AND BEING IN SECTION 22, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA. LESS AND EXCEPT THE RIGHT-OF-WAY LANDS SPECIFICALLY.

LEGEND:

NOT ALL SYMBOLS ARE ABBREVIATED SHOWN/NOTED MAY BE USED

A	ANGLE
AB	ANCHOR BOLT
L	ARCHER
AR	ARCHER
CB	CHORD BEARING
CD	CHORD DISTANCE
BC	BEGINNING
EC	END
CL	CALCULATED
DE	DESCRIPTION
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
IPP	IRON PIPE
PC	PAGE
TOB	TOP OF BANK
P.T.	POINT OF TANGENCY
P.C.	POINT OF CURVATURE
	IRON ROD & CAP
	NAIL & DISK
	4"x4" CONCRETE MONUMENT
	IRON PIPE
	WOOD PICKET FENCE
	BOX FENCE
	CHAIN LINK FENCE
	EDGE OF ASPHALT PAVEMENT
	CONCRETE
LP	LICENSED PROPERTY
PSM	PROFESSIONAL SURVEYOR & MAPPER
P.L.S.	PROFESSIONAL LAND SURVEYOR
P.R.C.	POLYVINYL CHLORIDE PIPE
R.C.P.	REINFORCED CONCRETE PIPE
C.M.P.	CORRUGATED METAL PIPE
V.C.P.	VITRIFIED CLAY PIPE
C.P.P.	CORRUGATED PLASTIC PIPE
H.D.P.E.	HIGH DENSITY POLYETHYLENE PIPE
P.V.C.	POLYVINYL CHLORIDE PIPE
	OVERHEAD UTILITY WIRES
	UNDERGROUND POWER LINE
	UNDERGROUND GAS LINE
	UNDERGROUND TELEPHONE LINE
	UNDERGROUND CABLE TELEVISION
	FIBER OPTIC CABLE
	WATER LINE
	WOODEN UTILITY POLE
	CONCRETE UTILITY POLE
	GUY POLE
	GUY ANCHOR
	PROPOSED FIN. FLOOR ELEV.
	EXISTING GROUND ELEVATION
	EXISTING GROUND ELEVATION
	FIBER OPTIC CABLE
	CABLE TV BOX
	HANDICAPPED PARKING SPACE (S.A.)
	2004 - SITE BENCH MARK
	CAST IRON MANHOLE
	FIRE HYDRANT
	CONCRETE MANHOLE
	PALM TREE-17'
	WOOD
	ASPHALT
	CONCRETE
	BRICK
	STONE
	GRAVEL
	EARTH
	SAND
	WATER
	CONCRETE BLOCK
	STEEL
	ALUMINUM
	TELEPHONE BOOTH
	FIRE HYDRANT
	WATER METER ASSEMBLY
	GATE VALVE
	WATER VALVE
	RECLAIMED WATER VALVE
	IRRIGATION VALVE
	GAS VALVE
	CLEANOUT MANHOLE
	DRAINAGE MANHOLE
	TELEPHONE MANHOLE
	GREASE TRAP MANHOLE
	POWER MANHOLE
	WATER SHUT-OFF VALVE
	POWER TRANSFORMER
	WATER METER
	GAS METER
	POWER METER
	WATER SHUT-OFF VALVE
	RESERVATION PREVENTER
	CLEAN-OUT
	FIRE DEPARTMENT CONTROL VALVE
	ELECTRIC HAND HOLE
	FIBER TELEPHONE HAND
	TELEPHONE ACCESS CABINET
	CATCH BASIN
	DRAIN
	CURB INLET
	CURB INLET INTENSIVE DRAINAGE
	INTENSE CAP SECTION
	UTILITY HOLE
	AIR CONDITIONER
	POWER BOX
	POWER PEDESTAL
	LIGHTENING ROD
	LIGHT POLE
	RAILROAD LIGHT
	TRAFFIC SIGNAL BOX
	BOLLARD
	FLAG POLE
	PARKING METER
	TRAFFIC FLOW ARROW
	GAS BARRIER
	DRAINAGE DIRECTION
	LARGE TREE

SURVEYOR'S NOTES:

1. NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
2. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR EASEMENTS OF WAY, EASEMENTS, OWNERSHIP, OR OTHER INSTRUMENTS OF RECORD BY THIS FIRM.
3. REVISIONS DO NOT CONSTITUTE A RE-CERTIFICATION OF THE EXISTING FIELD CONDITIONS OF THIS SURVEY.
4. BEARINGS SHOWN HEREON ARE BASED ON THE EAST LINE OF THE NORTHEAST 1/4 OF SECTION 22 AS N00°26'00"W (ASSUMED).
5. THE DESCRIPTION SHOWN HEREON WAS SUPPLIED BY THE CLIENT.
6. UNDERGROUND IMPROVEMENTS AND INSTALLATIONS HAVE NOT BEEN LOCATED.
7. THE LANDS SHOWN HEREON LIE ENTIRELY WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD) ACCORDING TO "FIRM" MAP NO. 12095C0230F, DATED SEPTEMBER 25, 2009.
8. THE ELEVATIONS SHOWN HEREON ARE BASED ON ORANGE COUNTY DATUM REF BENCH NAME: NUMBER L-88-036, ELEVATION = 116.72 (NAVD 1988)
9. THE ELECTRONIC FILE FOR THIS PROJECT IS THE PROPERTY OF BISHMAN SURVEYING AND MAPPING, INC. AND IS NOT THE PROPERTY OF THE CLIENT.

REVISIONS:

4/15/2019 – ADDITIONAL TOPOGRAPHIC INFORMATION

F.I.S. PROJECT NO.	18-148
SHEET NO.	C-2
SHEET 2 OF 16	

SHEET 1 OF 1

SECTION 22
TOWNSHIP 22 SOUTH
RANGE 27 EAST

BISHMAN
Surveying & Mapping, Inc.
CERTIFICATE OF AUTHORIZATION LB 7214
32 SOUTH ORANGE AVENUE
WINTER GARDEN, FL 34787
PHONE No. 407-656-0872
FAX No. 407-656-0873

Donald W. Bishman
Digitally signed by Donald W. Bishman
Date: 2019.11.19 09:09:02 -05'00'

JOB NO.: 19024.000

SURVEY DATE	03/27/2018
FIELD BOOK	N/A
FIELD CREW	CD
DRAWN BY	CD
SHEET NAME	SHEETS.MAP
DRAWING FILE	19024.DWG

DONALD W. BISHMAN, P.S.M. FLORIDA REGISTRATION No. 4316

GENERAL NOTES:

1. THESE GENERAL NOTES APPLY TO ALL WORK IN THIS SET OF DRAWINGS.
2. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND ARE IN HAND AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL ABIDE BY ALL CONDITIONS CONTAINED THEREIN.
3. THE SPECIFICATIONS, NOTES, AND PLANS CALL ATTENTION TO CERTAIN REQUIRED FEATURES OF THE CONSTRUCTION BUT DO NOT PURPORT TO INCLUDE ALL ITEMS OF DESIGN AND CONSTRUCTION. HOWEVER, THE CONTRACTOR SHALL FURNISH & INSTALL THE WORK IN ALL DETAILS AND IN ACCORDANCE WITH THE DESIGN.
4. ALL EQUIPMENT SHALL BE HANDLED, STORED, INSTALLED, TESTED, AND OPERATED IN STRICT ACCORDANCE WITH THE APPLICABLE MANUFACTURER'S WRITTEN INSTRUCTIONS.
5. ALL WORK SHALL BE ACCOMPLISHED TO THE HIGHEST QUALITY CRAFTSMANSHIP STANDARDS AS APPROVED BY THE ENGINEER.
6. ALL WORK SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS.
7. APPARENT ERRORS, DISCREPANCIES, OR OMISSIONS ON THE DRAWINGS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION BEFORE BIDDING.
8. AFTER COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PERFORM SITE CLEAN-UP OPERATIONS FOR REMOVAL OF ALL TRASH, DEBRIS, EXCESS MATERIAL AND EQUIPMENT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE THE PROJECT SITE CLEAN AND IN GOOD CONDITION AT THE TIME OF FINAL ACCEPTANCE.
9. THE CONTRACTOR SHALL COMPLY WITH ALL RULES, REGULATIONS, AND SPECIFICATIONS OF CITY OF WINTER GARDEN FOR SITE IMPROVEMENT IN THE ABSENCE OF A PARTICULAR REQUIREMENT.
10. PLANS LAW, F.S. 553.851, PROVIDES, IN PERTINENT GROUND, THE UNDERGROUND UTILITIES THAT YOU CONTACT OR REPAIR ANY EXCAVATION IN ANY PUBLIC OR PRIVATE RIGHT-OF-WAY OR EASEMENT. THE CONTRACTOR SHALL COMMENCE OR REPAIR ANY EXCAVATION WITHIN FIRST OBTAINING INFORMATION CONCERNING THE POSSIBLE LOCATION OF GAS PIPELINES IN THE AREA OF THE PROPOSED EXCAVATION. THIS INCLUDES A TELEPHONE CALL TO THE NATIONAL PLANS LAW CALL CENTER (1-800-432-4770) AND ANY OTHER PERSON OR ENTITY THAT THE CONTRACTOR BELIEVES MAY HAVE GAS PIPELINES IN THE AREA OF THE PROPOSED EXCAVATION. THE CONTRACTOR MUST WAIT THE LAW'S MINIMUM OF 48 HOURS AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATION (EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS).
11. CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD PROCEDURES. UTILITIES INCLUDE, BUT NOT LIMITED TO, WATER, SEWER, POWER, TELEPHONE, GAS, AND CABLE TV COMPANIES.
12. ANY DEPICTED SITE CONDITIONS FROM THAT WHICH EXISTS ACTUALLY, WHETHER ABOVE ON, OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND ONLY IN WRITING. NO CLAIM FOR EXTRA COSTS INCURRED BY THE CONTRACTOR DUE TO DIFFERING SITE CONDITIONS SHALL BE ALLOWED IF CONTRACTOR FAILS TO PROVIDE THE REQUIRED WRITTEN NOTIFICATION OF SUCH CONDITIONS PRIOR TO REPAIR BY THE ENGINEER AND OWNER.
13. THE CONTRACTOR SHALL PLACE IN CONJUNCTION WITH THE CONSTRUCTION PLANS, BY A LICENSED PROFESSIONAL SURVEYOR, SHOWING ALL CONSTRUCTED IMPROVEMENTS, INCLUDING ELEVATIONS OF THE WORK. THE INITIAL COST OF THE RECORD DRAWINGS SHALL NOT BE DEFERRED. THE RECORD DRAWINGS OR A REPRODUCIBLE COPY THEREOF, BY THE ENGINEER, SHALL BE ENTERED BY THE CONTRACTOR AS CONTRACT ALL INFORMATION WHICH IS DIFFERENT AND CURRENT SHALL BE NOTED IN RED INK. ANY OR ALL ADDITIONAL INFORMATION SHALL BE CROSSED THROUGH AND NEW DATA ADDED. ADDITIONAL REQUIREMENTS ARE NOTED IN PAVING, GRADING, DRAINAGE, WATER, AND SEWER NOTES.
14. ALL ON-SITE AND OFF-SITE IMPROVEMENTS AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO THE START OF WORK. THE COST FOR SUCH RESTORATION SHALL BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.
15. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS IN PREPARING THE SITE FOR CONSTRUCTION. THE INCLUDES REMOVAL OF ANY EXISTING UNSUITABLE MATERIALS, MATERIAL RELOCATION, AND/OR FILL FROM THE SITE. THE LIMITS OF CLEARING, GRUBBING, AND EXCAVATION ARE DEFINED BY THE GEOTECHNICAL REPORT. IF THERE IS CONFLICT BETWEEN THE GEOTECHNICAL REPORT AND THE APPLICABLE DESIGN DOCUMENTS AND GEOTECHNICAL ENGINEER'S RECOMMENDATIONS, IF THERE IS A CONFLICT BETWEEN THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AND THE DESIGN DOCUMENTS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

GEOMETRY NOTES:

1. THESE PLANS ARE BASED ON A SURVEY PREPARED FOR THE OWNER BY HIGHWAY SURVEYING & MAPPING, INC. AND DATED FEBRUARY 22, 2019.
2. REFER TO SHEET C-2 FOR REFERENCED BENCHMARK.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PROVIDED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ACCURATELY PLACE A NEW FACILITY ON THE SITE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY PRIOR TO THE INSTALLATION OF ANY FACILITY IF THE DIMENSIONS OR ELEVATIONS DO NOT MATCH THE PLANS OR IF ANY ERRORS ARE FOUND.
4. ALL DIMENSIONS ARE TO THE FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

MARKING, STRIPING, & SIGNAGE NOTES:

1. ALL MARKINGS MUST CONFORM WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) TRAFFIC STANDARDS, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND THE CITY OF WINTER GARDEN LAND DEVELOPMENT CODE. PAINTED SYMBOLS MAY BE FOUND IN THE FDOT PLANS INDEX. ALL OTHER CONTROL MUST BE APPROVED.
2. HANDICAP PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH FLORIDA STATUTE 316, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND OTHER APPLICABLE STANDARDS. REFER TO F.D.O.T. ROADWAY & TRAFFIC DESIGN STANDARDS INDEX 17355 FOR HANDICAP SYMBOL.
3. HANDICAP SIGN SHALL BE F.D.O.T. SPECIFICATION FTP 25.

PAVING, GRADING, & DRAINAGE NOTES:

1. ALL CONSTRUCTION, INCLUDING MATERIALS, SHALL BE IN ACCORDANCE WITH CITY OF WINTER GARDEN CONSTRUCTION SPECIFICATIONS AND OTHER GENERAL AND SPECIAL SPECIFICATIONS, AND THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, UNLESS STATED OTHERWISE IN THE SPECIFICATIONS OR ON THE PLANS.
2. SUBSURFACE INFORMATION PROVIDED WITH THESE DRAWINGS WAS OBTAINED FOR USE IN DETERMINING DESIGN CRITERIA FOR THE PROJECT. THE ACCURACY OF THE INFORMATION IS NOT GUARANTEED AND IS NOT TO BE CONSTRUED AS PART OF THE PLAN DRAWING FOR CONSTRUCTION OF THE PROJECT.
3. THE LOCATIONS OF EXISTING UTILITIES AND STORM DRAINAGE SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. ENGINEER ASSUMES NO RESPONSIBILITY FOR INACCURACY, PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXACT LOCATIONS AND FIELD ADJUSTMENTS OF THE WHOLE EXISTING UTILITIES WITH THE UTILITY OWNERS WHICH SHALL BE DONE IN A TIMELY FASHION TO MINIMIZE IMPACT ON THE CONSTRUCTION SCHEDULE AND DELAY OR INCONVENIENCE CAUSED THE CONTRACTOR BY THE RELOCATION OF THE VARIOUS UTILITIES. SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
4. ALL FILL MATERIAL IN GENERAL IMPROVEMENT AREAS SHALL BE CONSTRUCTED TO A MINIMUM OF 95% OF THE SOIL'S MODIFIED PROCTOR MAXIMUM DRY DENSITY AS ASTM D-1557 USING SITE PREPARATION METHODS TYPE C OR ALL TYPES USED FOR PARKING AREAS. ROAD AND BUILDING AREAS, AND COMPACTION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. SEE GEOTECHNICAL REPORT PREPARED BY ROBERTS & ASSOCIATES, INC. PROJECT NO. 19-4-5661. REFER TO STRUCTURAL, ARCHITECTURAL AND GEOTECHNICAL DOCUMENTS FOR ANY WORK RELATED TO BUILDING FOUNDATIONS AND OTHER VERTICAL ELEMENTS. FOR SITE IMPROVEMENT AND FILL REQUIREMENTS, THE PLAN ONLY COVERS SITE RELATED IMPROVEMENTS AND INFRASTRUCTURE. REFER TO PAVEMENT SECTION DETAILS FOR MATERIAL AND COMPACTION REQUIREMENTS OF PAVEMENT SUBGRADE.
5. ALL UNDERGROUND UTILITIES INCLUDING CONDUIT FOR ELECTRICAL, CABLE TV, AND TELEPHONE SHALL BE INSTALLED PRIOR TO PAVEMENT CONSTRUCTION.
6. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY PROBLEMS REQUIRING DEVIATION FROM THESE PLANS AND SPECIFICATIONS.
7. THE CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS OF ALL MAJOR ITEMS PROPOSED FOR THIS PROJECT TO THE ENGINEER, PRIOR TO ORDERING ANY OF THE EQUIPMENT. UPON THE CONTRACTOR'S RECEIPT OF APPROVED SHOP DRAWINGS FROM THE ENGINEER, THE CONTRACTOR MAY PROCEED WITH THE WORK.
8. ALL DISTURBED AREAS MUST BE SODDED UNLESS OTHERWISE NOTED ON THE PLANS. ALL SODDING MUST BE DONE IN ACCORDANCE WITH SECTION 570 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, LATEST EDITION.
9. PROVIDE HANDICAP ACCESS WHERE SIDEWALKS MEET CURBS.

EROSION CONTROL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM WITH CITY OF WINTER GARDEN SPECIFICATIONS, SUBJECT TO AUTHORIZED AND APPROVED VARIANCES, VARIANCES AND/OR CONDITIONAL CHANGES.
2. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A DEFENSE DEFENSE AGAINST ANY TRANSPORTATION OF SILT OFF THE SITE.
3. CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICES IN CONTROLLING EROSION AND SEDIMENTATION DURING CONSTRUCTION.
4. ALL CLEARED AREAS FOR IMPROVEMENT AND/OR CONSTRUCTION SHALL BE WATERED TO PREVENT WIND EROSION.
5. PRIOR TO LAND CLEARING THE CONTRACTOR SHALL PROVIDE TREE PROTECTION BARRIERS TO MEET THE REQUIREMENTS OF CITY OF WINTER GARDEN.
6. THE CONTRACTOR SHALL SELECTIVELY CLEAR ONLY THE AREAS REQUIRED FOR CONSTRUCTION AND STABILIZE ANY POTENTIAL EROSION AREAS IMMEDIATELY FOLLOWING COMPLETION OF CONSTRUCTION.

WATER & SEWER UTILITY NOTES:

1. CONTRACTOR SHALL COORDINATE WITH CITY OF WINTER GARDEN FOR CONSTRUCTION OF THE WATER AND SEWER SYSTEM. DEPENDING ON THE MATERIAL AND WORKMANSHIP THAT CONFORMS TO THE CITY STANDARDS AND SPECIFICATIONS, THE CITY WILL BE RESPONSIBLE FOR THE INSPECTION AND ACCEPTANCE.
2. CONTRACTOR SHALL COORDINATE ALL WATER AND SEWER SYSTEM TEST SCHEDULING TO ALLOW ENGINEERS WITNESSING AND PROVIDE FIVE (5) WORKING DAYS NOTICE OF WATER AND SEWER TEST. CONTRACTOR'S FAILURE TO PROVIDE NOTICE SHALL RESULT IN RETESTING AT ENGINEER'S OPTION AND AT CONTRACTOR'S EXPENSE.
3. ENGINEER RESERVES THE RIGHT TO WITHHOLD APPROVAL FOR ANY PORTION OF THE WATER OR SEWER PIPE WORK WHICH HAS NOT BEEN TESTED (OBSERVED BY ENGINEER) AND REPORTED TO CONFORM TO PROJECT SPECIFICATIONS.
4. SITE CONTRACTOR SHALL COORDINATE AND VERIFY ALL UTILITY SERVICES WITH FINAL ARCHITECTURAL DRAWINGS AND BUILDING CONTRACTOR.
5. CONTRACTOR SHALL VERIFY SIZE AND TYPE OF EXISTING MAIN PRIOR TO ORDERING FITTING MATERIALS FOR TIE-INS.
6. CONTRACTOR SHALL MAINTAIN A SET OF RECORD DRAWINGS MARKED UP WITH HORIZONTAL AND VERTICAL AS-BUILT INFORMATION ON LOCATION OF WATER MAINS, FITTINGS, AND WATER SERVICE LOCATE FROM CENTERLINE OF NEAREST FIRE HYDRANT OR NEAREST MANHOLE.
7. SITE UTILITY WORK SHALL TERMINATE 5 FEET FROM BUILDINGS UNLESS OTHERWISE STATED.
8. CONTRACTOR SHALL NOT ACTIVATE WATER SERVICE UNTIL THE FIRE MAIN HAS CLEARED THE SYSTEM FOR USE AND THE CLEARANCE LETTER HAS BEEN RECEIVED BY THE OWNER.

F.D.E.P. CONSTRUCTION NOTES:

UTILITY SEPARATION – VERTICAL CLEARANCE:

1. NEW OR RELOCATED UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THE PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY SANITARY SEWER, STORM SEWER, OR FORCE MAIN SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE OUTSIDE OF THE OTHER FACILITY. WHEN THE WATER MAIN IS BELOW THE OTHER FACILITY, THE WATER MAIN SHALL ALSO BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 18 INCHES BELOW THE OTHER FACILITY. EXCEPTIONS MAY BE PERMITTED WHEN THE PROPOSED WATER MAIN IS BELOW A STORM SEWER OR FORCE MAIN. WHEN THE WATER MAIN IS BELOW A SANITARY SEWER, THE WATER MAIN SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 18 INCHES BELOW THE OUTSIDE OF THE SANITARY SEWER.
2. ALL UTILITY PROPERTIES DESCRIBED ABOVE ARE EXPLICITLY INCLUDED IN THE PROJECT AND THE PROJECT PLANS.
3. WHEN THE PROPOSED WATER MAIN CROSSES ABOVE OR BELOW AN EXISTING OR PROPOSED SANITARY SEWER, THE WATER MAIN SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF WATER PIPE IS CENTERED OVER THE SEWER SO THAT THE WATER PIPE JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHEN THE WATER MAIN IS BELOW A SANITARY SEWER, THE WATER MAIN SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF WATER PIPE IS CENTERED OVER THE SEWER SO THAT THE WATER PIPE JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. EXCEPTIONS MAY BE PERMITTED WHEN THE PROPOSED WATER MAIN IS BELOW A STORM SEWER OR FORCE MAIN.

UTILITY SEPARATION HORIZONTAL SEPARATION:

1. NEW OR RELOCATED UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THE PROJECT SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF 6 FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ANY EXISTING OR PROPOSED STORM SEWER, SANITARY SEWER, OR FORCE MAIN. EXCEPTIONS MAY BE PERMITTED WHEN THE PROPOSED WATER MAIN IS LAID IN A SEPARATE TRENCH WITH A HORIZONTAL DISTANCE OF AT LEAST 3 FEET. WHEN THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER OR FORCE MAIN, A HORIZONTAL DISTANCE OF AT LEAST 3 FEET MAY BE PERMITTED PROVIDED THE WATER MAIN IS LAID ON A SHELF EXCAVATED ALONGSIDE AND ABOVE THE SEWER OR FORCE MAIN, SUCH THAT THE WATER MAIN WILL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER OR FORCE MAIN. IN THE EVENT THE WATER MAIN CANNOT BE LAID IN A SEPARATE TRENCH OR ON A SHELF, THE WATER MAIN MAY BE LAID IN THE SAME TRENCH WITH THE SEWER OR FORCE MAIN PROVIDED THE WATER MAIN IS LAID ON A SHELF EXCAVATED ALONGSIDE AND ABOVE THE SEWER OR FORCE MAIN, SUCH THAT THE WATER MAIN WILL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER OR FORCE MAIN.
2. THE CONTRACTOR SHALL PERFORM PRESSURE TESTING OF ALL NEW OR RELOCATED WATER DISTRIBUTION SYSTEM IN ACCORDANCE WITH THE DRAWINGS, UNLESS OTHERWISE NOTED, IN ACCORDANCE WITH AWWA STANDARD C600 FOR DUCTILE IRON PIPE. TESTING SHALL BE IN ACCORDANCE WITH AWWA MANUAL M23 FOR PVC PIPE.
3. THE CONTRACTOR SHALL INSPECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM IN ACCORDANCE WITH THE PLANS, WATER PERMIT & ENGINEER APPROVAL. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, LABOR, MATERIALS, AND SERVICES NECESSARY TO ADEQUATELY PERFORM THE INSPECTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE WATER PERMIT FROM THE OWNER & MAINTAIN THEM ON THE JOB SITE AT ALL TIMES. DEFINITIONS OF THE WATER DISTRIBUTION SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING: WATER MAINS, FITTINGS, VALVES, FIRE HYDRANTS, SERVICE LINES, AND CORPORATION STOPS. ALL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH AWWA M31 "DISTRIBUTION WATER MAINS". SHALL BE PERFORMED IN ACCORDANCE WITH AWWA M31 "DISTRIBUTION WATER MAINS".

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR APPROPRIATE CONSTRUCTION, DISINFECTION & TESTING BEYOND THE METER TO ASSURE PROPER SERVICE TO THE PUBLIC OF USE.
2. PETROLEUM WATER MAIN WILL BE DISINFECTED IN ACCORDANCE WITH AWWA SPECIFICATIONS C651.
3. PETROLEUM WATER WILL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH SPECIFICATION NUMBERS C600 & C605/M23 FOR DUCTILE IRON & PVC PIPES, RESPECTIVELY.
   A. PETROLEUM WATER MAIN MUST BE MANUFACTURED IN ACCORDANCE WITH THE FOLLOWING AWWA SPECIFICATIONS:
   B. DUCTILE IRON PIPE (3" TO 64") — AWWA C100/ANSI A21.51, LINING PER AWWA C104, COATING PER AWWA C116, ENCASEMENT PER AWWA C105, RATING PER AWWA C150, GASKET JOINTS PER AWWA C111 AND FITTINGS PER AWWA C110 OR AWWA C153.
   C. PVC (WITH NATIONAL SANITATION FOUNDATION SEAL)
      1. AWWA C900/ASTM D1785 (4" TO 12") WITH DR25 MINIMUM.
      2. AWWA C905 (14" TO 48")
   D. PRESSURE RATED PIPE (NON FERROUS) SHALL BE ASTM D2241, SCHEDULE 40, 80, & 120 PVC PIPES PER ASTM D1785. THE COMPOUNDS USED FOR EITHER OF THESE TYPES SHALL BE PER ASTM D1784.
   E. POLYETHYLENE PIPE (1/2" – 3") — AWWA C901 WITH VALVES & FITTINGS (AWWA C800).
   F. POLYETHYLENE (4" – 63") — AWWA C906.
   G. FIRE HYDRANTS & VALVES PER AWWA SERIES C500 THROUGH C540.
   H. METERS PER AWWA SERIES C700 THROUGH C712.
   I. MEMBRANE PVC TYPE SANITARY SEWER PIPE PER ASTM D3034 SHALL BE USED FOR PIPES LESS THAN 4 INCHES MUST HAVE A MINIMUM PRESSURE CLASS OF 200 PSI AND MUST HEAT THE MOF MARK ON EACH INDIVIDUAL LENGTH.

CONNECTION TO EXISTING WATER MAINS:

1. IF CONNECTION OF THE PROPOSED ACTIVITY TO THE WATER MAIN WILL RESULT IN DEPRESSURIZATION OF THE EXISTING SYSTEM BELOW 20 POUNDS PER SQUARE INCH, ONE OF THE FOLLOWING MUST OCCUR:
   A. PRECAUTIONARY BOIL WATER NOTICES MUST BE ISSUED IN CASES OF PLANNED DISTRIBUTION INTERRUPTIONS, WHICH DEPRESS AN IMMINENT PUBLIC HEALTH THREAT BY THE LOCAL CENTRAL DISTRICT OR WILL AFFECT BACTERIOLOGICAL QUALITY OF THE OWNING WATER UNLESS THE PUBLIC WATER SYSTEM CAN DEMONSTRATE, BY SOUND ENGINEERING JUDGMENT, THAT THE INTEGRITY OF THE WATER SYSTEM WILL NOT BE DEGRADED TO CAUSE AN IMMINENT PUBLIC HEALTH RISK.
   B. IN CASES OF BRIEF INTERRUPTION IN SERVICE ADDRESSED (NOT BOIL WATER NOTICES) SHOULD BE ISSUED IF TEMPORARY CHANGES IN WATER QUALITY ARE EXPECTED TO OCCUR & NOT DEEMED AN IMMINENT PUBLIC HEALTH RISK.

FILLING OF WATERMAINS:

1. FILLING OF PROPOSED WATER MAINS FROM EXISTING WATER MAINS WILL BE DONE IN ACCORDANCE WITH AWWA SPECIFICATIONS C651.

MATERIAL SPECIFICATIONS:

PAVING, GRADING & DRAINAGE:

1. PAVING MATERIALS SHALL CONFORM WITH F.D.O.T. STANDARDS & SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, LATEST EDITION.
2. STORM DRAINS SHALL BE REINFORCED CONCRETE PIPE, FOR ASTM C-76 (CLASS III UNLESS OTHERWISE SPECIFIED, LIFTING HOLES ARE PROHIBITED).
3. ALL STORM STRUCTURES SHALL CONFORM WITH F.D.O.T. STANDARD INDEX DRAWINGS & SPECIFICATIONS EXCEPT THAT WITH BOTTOM SLAB, IN PLACE AND TRIANGULAR SLAB, HAVE TWO WEEPHOLES. GRATES, GRILLS, CURBS SUPPORTED BY STEEL ANGLE BEAM OR SUPPORTED ON FRAME INDEX. GRATES SHALL BE CAST IRON UNLESS OTHERWISE NOTED.
4. ALL TYPE "P" STRUCTURE BOTTOMS SHALL BE ROUND UNLESS OTHERWISE SPECIFIED & SHALL HAVE 4 FEET MINIMUM DIAMETER.

CITY OF WINTER GARDEN NOTES:

1. GENERAL REQUIREMENTS:
   A) ALL GRAVITY SANITARY PIPE AND FITTINGS SHALL BE SDR 26.
   B) ALL COMPACTION SHALL BE 98% OF THE MODIFIED PROCTOR MAXIMUM DENSITY (AASHTO T-180).
   C) AS-BUILT RECORD DRAWINGS SHALL COMPLY WITH CITY OF WINTER GARDEN REQUIREMENTS AVAILABLE ON-LINE.
   D) ALL STORM (>12") AND SANITARY SEWER (>6") SHALL BE INSPECTED BY CCTV PRIOR TO COMPLETION.
2. ALL UTILITIES SHALL CONFORM TO CHAPTER 76 OF THE CITY CODE. IMPACT FEES WILL BE REQUIRED FOR ANY UTILITY CONNECTIONS AND SHALL BE PAID PRIOR TO ISSUANCE OF BUILDING PERMIT AND CERTIFICATION OF FINAL PERMIT APPLICATIONS. THE SITE SHALL BE SERVED BY CITY WATER, SEWER, AND REUSE. ALL UTILITIES REQUIRED FOR THE DEVELOPMENT SHALL BE NEW TO THE SITE AT THE DEVELOPER'S EXPENSE, INCLUDING POTABLE WATER, REUSE WATER, AND SANITARY SEWER. FEES OF BUILDER REQUIRED WATER, IRRIGATION AND SEWER IMPACT FEES SHALL BE PAID PRIOR TO CITY EXECUTION OF FINAL PERMITS AND ISSUANCE OF SITE OR BUILDING PERMITS.
3. SANITARY LINES FOR COMMERCIAL BUILDINGS SHALL BE 6" MINIMUM.
4. MINIMUM 5' WIDE CONCRETE SIDEWALKS SHALL BE CONSTRUCTED ALONG ALL STREET FRONTAGES PURSUANT TO CODE. ANY DAMAGED, BROKEN OR CRACKED SIDEWALKS, CURBS AND PAVEMENT SHALL BE REPAIRED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
5. THE USE OF MORE THAN ONE SHALL MEET ALL CITY MATERIAL AND INSTALLATION REQUIREMENTS AS SPECIFIED IN THE CITY'S STANDARDS & SPECIFICATIONS INCLUDING CLASS I, DEPENDING, HP POLYPROPYLENE PIPE LATEST PROFILING, INSTALLATION PER ASTM D3037, ETC. (SEE UNDER DRAWING FORMS ON WEBSITE).
6. LANDSCAPING SHALL NOT ENCROACH ON REQUIRED SIGHT LINES AT INTERSECTIONS OR DRIVEWAYS. DESIGN ENGINEER SHALL PROVIDE CERTIFICATION THAT SIGHT DISTANCE REQUIREMENTS ARE BEING MET. ALL IRRIGATION ON THE SITE SHALL BE DESIGNED TO BE SUPPLIED BY RECLAIMED WATER WHEN AVAILABLE AND SHALL BE SERVED BY A LICENSED POTABLE WATER UNTIL THAT TIME.
7. A SEPARATE TREE REMOVAL PERMIT IS REQUIRED TO REMOVE ANY TREES. COORDINATE WITH BUILDING DEPARTMENT (STEVE HASH).
8. NO TREES MAY BE PLANTED OVER OR WITHIN 5 FEET OF ANY UTILITY LINES. ONLY SOD OR SHRUBS MAY BE PLANTED OVER UTILITY LINES.
9. STREETLIGHTING, BOTH INTERNALLY AND ON ALL STREET FRONTAGES, IS REQUIRED PURSUANT TO CITY CODE – DARK SKIES LIGHTING IS REQUIRED. PROVIDE A PHOTOMETRIC PLAN TO BE SUBMITTED FOR REVIEW BY THE PLANNING DEPARTMENT.
10. ALL ON-SITE UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED.
11. FIRE SPRINKLER SYSTEMS WILL BE REQUIRED ON ALL BUILDINGS OVER 6,000 S.F. WITH POINT OF SERVICE (POS), BACKFLOW PREVENTION, ETC. ALL WORK DOWNSTREAM OF THE POS SHALL BE PERFORMED BY A LICENSED FIRE SPRINKLER CONTRACTOR.
12. ANY SCREEN WALLS OR RETAINING WALLS SHALL REQUIRE A SEPARATE PERMIT FROM THE BUILDING DEPARTMENT.
13. ALL UNDERGRAIN PIPE SHALL BE DOUBLE WALL HDPE PIPE OR PVC PIPE.
14. THE OWNER IS RESPONSIBLE FOR MEETING ALL PROVISIONS OF ADA AND FLORIDA ACCESSIBILITY CODE.
15. ALL WORK SHALL CONFORM TO CITY OF WINTER GARDEN STANDARDS AND SPECIFICATIONS.
16. THE CITY OF WINTER GARDEN WILL INSPECT PRIVATE SITE IMPROVEMENTS ONLY TO THE EXTENT THAT THEY CONNECT TO CITY OWNED/MAINTAINED SYSTEMS (ROADWAYS, DRAINAGE, UTILITIES, ETC.). IT IS THE RESPONSIBILITY OF THE OWNER AND DESIGN ENGINEER TO ENSURE THAT PRIVATELY OWNED AND MAINTAINED SYSTEMS ARE CONSTRUCTED TO THE INTENDED SPECIFICATIONS. THE CITY IS NOT RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF PRIVATELY OWNED SYSTEMS, TO INCLUDE, BUT NOT BE LIMITED TO, ROADWAYS, PARKING LOTS, DRAINAGE, STORMWATER PONDS OR OTHER UTILITIES.
17. THE CONTRACTOR IS RESPONSIBLE FOR THE NOTIFICATION, LOCATION AND PROTECTION OF ALL UTILITIES THAT MAY EXIST WITHIN THE PROJECT LIMITS.
18. NO FILL OR RUNOFF WILL BE ALLOWED TO DISCHARGE ONTO ADJACENT PROPERTIES. EXISTING DRAINAGE PATTERNS SHALL NOT BE ALTERED. THE APPLICANT SHOULD NOTE THAT IF APPROVAL IS GRANTED, THE CITY OF WINTER GARDEN IS NOT GRANTING RIGHTS OR EASEMENTS FOR DRAINAGE FROM, OR ONTO, PROPERTY OWNED OF OTHERS. OBTAINING PERMISSION, EASEMENTS OR OTHER APPROVALS THAT MAY BE REQUIRED TO DRAIN ONTO PRIVATE PROPERTY IS THE OWNER/DEVELOPER'S RESPONSIBILITY. SHOULD THE FLOW OF STORMWATER RUNOFF FROM, OR ONTO ADJACENT PROPERTIES BE UNFAVORABLE OR CAUSE PROBLEMS, THE CITY WILL NOT BE RESPONSIBLE AND ANY CORRECTIVE MEASURES REQUIRED WILL BE THE RESPONSIBILITY OF THE OWNER. SITE CONSTRUCTION SHALL ADHERE TO THE CITY OF WINTER GARDEN EROSION AND SEDIMENT CONTROL REQUIREMENTS AS CONTAINED IN CHAPTER 106 – STORMWATER. IF APPROVAL IS GRANTED BY THE CITY OF WINTER GARDEN, IT DOES NOT WAIVE ANY PERMITS THAT MAY BE REQUIRED BY REGIONAL, STATE, FEDERAL, COUNTY, MUNICIPAL OR OTHER AGENCIES THAT MAY HAVE JURISDICTION.
19. AFTER FINAL PLAN APPROVAL A PRECONSTRUCTION MEETING WILL BE REQUIRED PRIOR TO ANY COMMENCEMENT OF CONSTRUCTION. THE APPLICANT SHALL PROVIDE AN EROSION CONTROL AND STREET LIGHTING PLAN AT THE PRECONSTRUCTION MEETING AND SHALL PAY ALL ENGINEERING REVIEW AND INSPECTION FEES PRIOR TO CONSTRUCTION INSPECTION FEES IN THE AMOUNT OF 0.25% OF THE COST OF ALL SITE IMPROVEMENTS SHALL BE PAID PRIOR TO ISSUANCE OF THE SITE OR BUILDING PERMIT (LESS WHAT HAS ALREADY BEEN PAID).

CITY OF WINTER GARDEN REQUIREMENTS:

1. AS BUILT RECORD DRAWINGS SHALL COMPLY WITH THE CITY OF WINTER GARDEN REQUIREMENTS. SEE SHEET C-11
2. ALL STORM PIPES (12" AND GREATER) AND SANITARY (6" AND GREATER) SHALL BE INSPECTED BY CCTV PRIOR TO COMPLETION.
3. ALL SCREEN WALLS SHALL REQUIRE A SEPARATE PERMIT FROM THE BUILDING DEPARTMENT.
4. ALL WORK SHALL CONFORM TO CITY OF WINTER GARDEN STANDARDS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION, LOCATION AND PROTECTION OF ALL UTILITIES THAT MAY EXIST WITHIN THE PROJECT LIMITS.
6. ALL DISTURBED RIGHT OF WAY SHALL BE SODDED.

LEGEND

SITE

POLE SIGN
SMALL PYLON SIGN
LARGE PYLON SIGN
RIGHT TURN DIRECTIONAL ARROW
STRAIGHT DIRECTIONAL ARROW
LEFT TURN DIRECTIONAL ARROW
STRAIGHT AND LEFT T

EROSION CONTROL SITE DESCRIPTION NOTES:

1. THE PROPOSED CONSTRUCTION ACTIVITY WILL INITIAL CLEARING AND GRUBBING ACTIVITIES OF A 0.42± ACRE SITE LOCATED AT PLANT STREET TO BUILD A GENERAL OFFICE BUILDING, ITS ASSOCIATED PARKING, DRAINAGE & UTILITIES.
2. THE SEQUENCE OF SOILS DISTURBANCE ACTIVITY IS AS FOLLOWS:
   A. INSTALL SILT FENCE AS SHOWN ON THE PLANS & PROVIDE TREE PROTECTION ON SITE IF APPLICABLE.
   B. CLEAR & GRUB THE AREA TO BE DISTURBED.
   C. PLACE FILL ON-SITE TO BRING THE SITE UP TO THE PROPOSED GRADES.
   D. BEGIN COMPACTION / STABILIZATION PROCESS.
3. THE TOTAL SITE AREA IS 0.42 ACRES AND THE AREA TO BE DISTURBED IS APPROXIMATELY 0.42 ACRES.
4. THE EXISTING SOIL ARE IMMEASURABLE FINE SAND AND SUBSOIL FINE SAND. THE QUALITY OF THE STORMWATER DISCHARGE IS CONSISTENT WITH THE RUNOFF GENERATED BY THE COMMERCIAL SITE.
5. THE TOTAL DRAINAGE AREA FOR THE PROJECT IS APPROXIMATELY 0.42 ACRE.
6. THE LATITUDE & LONGITUDE FOR THE DISCHARGE POINTS IS LAT. N 28°33'50" WEST LONG. W 81°37'33" AS THE DISCHARGE POINT FOR THE PROPOSED ONSITE STORMWATER SYSTEM.
7. WASTE DISPOSAL SHALL BE IMPLEMENTED IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS. ALL TRASH EXISTING THE SITE WILL BE HAULED TO LAND CONSIDERED AND THE OWNER PROPERLY DISPOSED. THE STORAGE, APPLICATION, GENERATION & DISPOSAL OF ALL FERTILIZERS, PESTICIDES, HERBICIDES, FERTILIZER & TOXIC MATERIAL SHALL BE IN ACCORDANCE W/ LOCAL, STATE & FEDERAL REGULATIONS.
8. CONTRACTOR SHALL IDENTIFY THE INDIVIDUAL RESPONSIBLE FOR THE WEEKLY & RAINFALL INSPECTIONS. A REPORTING SYSTEM DETAILING THE ITEMS TO BE INSPECTED & THEIR CONDITION SHOULD BE DOCUMENTED & KEPT IN A DEDICATED FILING SYSTEM THAT WILL REMAIN ON THE PROJECT SITE AVAILABLE TO THE CONSTRUCTION TEAM & TO THE FIELD INSPECTORS.
9. INSPECTIONS: CONSTRUCTION SITE WILL BE INSPECTED FOR EROSION PROBLEMS DAILY AND AFTER AFTER EACH RAINFALL GREATER THAN 0.5 INCH. A RAIN GAUGE WILL BE ON SITE TO MEASURE THE RAINFALL AMOUNT.

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE & LOCAL CODES, ORDINANCES, & REGULATIONS GOVERNING POLLUTION OF THE ENVIRONMENT & SHALL IMPLEMENT ALL MEASURES NEEDED TO ENSURE ADEQUATE EROSION & SEDIMENT CONTROL DURING THE ENTIRE DURATION OF CONSTRUCTION. EROSION & SEDIMENT CONTROL MEASURES SHALL CONFORM TO ORANGE COUNTY, SOUTH FLORIDA WATER MANAGEMENT DISTRICT, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, & FLORIDA DEPARTMENT OF TRANSPORTATION REQUIREMENTS. INSTALLATION OF SILT FENCE IN TURBIDITY WARNING SHALL BE IN ACCORDANCE WITH FDOT ROADWAY & TRAFFIC DESIGN STANDARDS & STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, LATEST EDITION. EROSION & SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST SITE IN CONSTRUCTION.
2. EROSION & SEDIMENT CONTROL MEASURES ARE TO BE APPLIED AS A DEFENSE AGAINST THE TRANSPORTATION OF SILT & SEDIMENTS BY THE PROJECT SITE OR INTO ADJACENT WATER BODIES OR WETLANDS. THE CONTRACTOR SHALL PREPARE & IMPLEMENT AN EROSION CONTROL PLAN AS PART OF THE SCOPE OF WORK COVERED BY THESE PLANS. THE CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICES IN CONTINUOUS EROSION & SEDIMENT TRANSPORT DURING CONSTRUCTION. THE FLORIDA DEVELOPMENT MANUAL "A GUIDE TO SOUND LAND & WATER MANAGEMENT" MAY BE USED AS REFERENCE FOR RECOMMENDED BEST MANAGEMENT PRACTICES RELATED TO EROSION & SEDIMENT CONTROL.
3. THE CONTRACTOR SHALL SUBMIT THE EROSION CONTROL PLAN TO THE OWNER FOR APPROVAL PRIOR TO THE PRE-CONSTRUCTION MEETING.
4. ALL EROSION & SEDIMENT CONTROL MEASURES WHICH ARE NECESSARY TO LIMIT THE TRANSPORT OF SILT & SEDIMENTS TO OUTSIDE THE LIMITS OF THE WORK AREA OR TO WATER BODIES OR WETLANDS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL PROVIDE BEST MANAGEMENT PRACTICES & IMPLEMENT STRUCTURAL MEASURES AS NEEDED TO PREVENT EROSION & SEDIMENT TRANSPORT FROM THE WORK AREA. THE FOLLOWING ARE MINIMUM RECOMMENDED GUIDELINES TO BE IMPLEMENTED DURING CONSTRUCTION AS PART OF THE EROSION & SEDIMENT CONTROL PLAN:

   A. STOCKPILING OF MATERIAL
   NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.

   B. EXPOSED AREA LIMITATION & PROTECTION
   THE SURFACE AREA OF OPEN, TIME-BECOME SOIL EXPOSED BY CLEARING & GRUBBING OPERATIONS OR EXCAVATION & FILLING OPERATIONS SHALL BE LIMITED AS NEEDED TO MINIMIZE THE POTENTIAL OF OFF-SITE SEDIMENT TRANSPORT. ALL EXPOSED AREAS SHALL BE PROTECTED BY INSTALLING EFFECTIVE EROSION & SEDIMENT CONTROL MEASURES SUCH AS SILT FENCES, SYNTHETIC BALES, TURBIDITY BARRIERS, SANDBAG, OR A COMBINATION OF THESE & OTHER MEASURES AS WARRANTED.

   C. INLET PROTECTION
   INLETS & BATCH BASINS SHALL BE PROTECTED DURING CONSTRUCTION FROM SEDIMENT LADEN STORMWATER RUNOFF BY PROVIDING A COMBINATION OF SILT SCREENS, SYNTHETIC BALES, FILTER FABRIC COVERS OR OTHER MEASURES AS NECESSARY TO CONTROL THE TRANSPORT OF SEDIMENT.

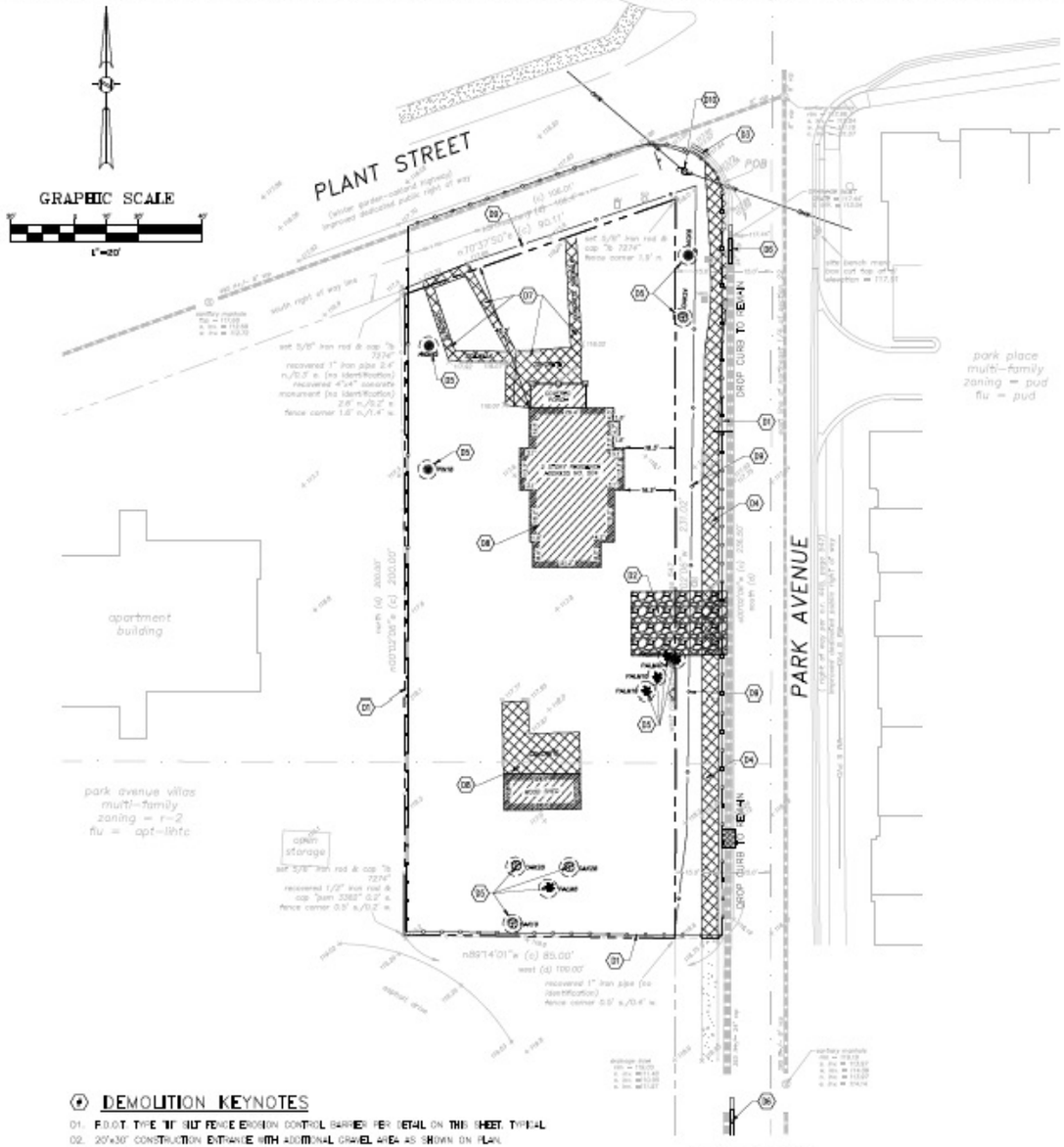
   D. TEMPORARY GRASSING
   AREAS DISTURBED BY CONSTRUCTION OPERATIONS THAT ARE NOT ANTICIPATED TO BE DISTURBED OR REVISED FINAL GRADING TREATMENT WITHIN THIRTY DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED. TEMPORARY SEEDING SHALL BE CONTINUED AS THAT AREA IS ON CONTACT WITH PERMANENT GRASSING. SLOPES STEEPER THAN 3:1 SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES OF LOOSE MEDIUM OF MULCH MATERIAL OUT INTO THE WILL OF THE SEEDED AREA TO A DEPTH OF 1 INCHES. THE SEEDED OR SODDED & MULCHED AREAS SHALL BE FERTILIZED & WATERED AS NEEDED TO ENSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. IF AFTER 14 DAYS THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75% OF GOOD GRASS COVER, THE AREA WILL BE REWORKED & ADDITIONAL SEED APPLIED TO ESTABLISH THE DESIRED VEGETATION COVER. REWORKED & ADDITIONAL SEED APPLIED.

   E. MAINTENANCE
   EROSION & SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED DURING THE ENTIRE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL INSPECT THE EROSION & CONTROL MEASURES ON A WEEKLY BASIS & 24 HOURS FOLLOWING RAINFALL EVENTS OF 0.5" OR GREATER & IMMEDIATELY REPAIR ANY DISCOVERED DAMAGED CONTROLS. ALL EROSION & SEDIMENT CONTROLS SHALL BE MAINTAINED AS TO FUNCTION PROPERLY WITHOUT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT.

4. APPROXIMATE SLOPES AFTER MAJOR GRADING WARES BETWEEN 2% TO 1:5%
5. AREAS OF SOILS DISTURBANCE IS LIMITED TO THE AREA WITHIN THE SILT FENCE LIMITS AS SHOWN ON THIS PLAN.
6. ALL REMOVED AREAS WILL BE SODDED, UNLESS OTHERWISE NOTED.
7. NO WETLANDS & SURFACE WATERS EXIST ON THIS PROJECT.

CITY OF WINTER GARDEN REQUIREMENTS:

1. ANY DAMAGED, BROKEN OR CRACKED CURBS SHALL BE REPLACED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
2. A SEPARATE TREE REMOVAL PERMIT IS REQUIRED.
3. SITE CONSTRUCTION SHALL ADHERE TO THE CITY OF WINTER GARDEN EROSION AND SEDIMENT CONTROL REQUIREMENTS AS CONTAINED IN CHAPTER 105 (STORMWATER)



DEMOLITION KEYNOTES

01. F.D.O.T. TYPE "III" SILT FENCE EROSION CONTROL BARRIER PER DETAIL ON THIS SHEET. TYPICAL
02. 20'x30' CONSTRUCTION ENTRANCE WITH ADDITIONAL GRAVEL AREA AS SHOWN ON PLAN.
03. SAW CUT AND REMOVE EXISTING CURBING, WITHIN HATCH AREA.
04. REMOVE EXISTING SIDEWALK AND BASE WITHIN HATCH AREA.
05. TREES TO BE REMOVED.
06. INSTALL SYNTHETIC EROSION CONTROL BARRIER AT INLETS.
07. REMOVE EXISTING DRIVEWAY & SIDEWALK.
08. HOUSE AND SHED PREVIOUSLY DEMOLISHED.
09. REMOVE EXISTING CHAIN LINK FENCE.
010. EXISTING LIGHT POLE TO BE REMOVED. CONTRACTOR SHALL COORDINATE WITH POWER COMPANY.

PLAN LEGEND

- SILT FENCE EROSION CONTROL BARRIER
- SYNTHETIC EROSION CONTROL BARRIER
- REMOVE EXISTING CONCRETE WITHIN HATCH AREA
- EXISTING TREE TO BE REMOVED

DEMOLITION NOTES

1. THE LOCATIONS, ELEVATIONS, & DIMENSIONS OF EXISTING UTILITIES & OTHER FEATURES ARE SHOWN ON THE PLANS BASED UPON THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, & DIMENSIONS OF ALL EXISTING UTILITIES & OTHER FEATURES THAT MAY BE AFFECTED BY THE CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER WHICH MAY AFFECT THE PROPOSED WORK.
2. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE EXCAVATION.
3. THE CONTRACTOR SHALL PRIOR TO INITIATION OF ANY SITE CLEARING OR OTHER CONSTRUCTION ACTIVITIES, INSTALL SILT FENCE, SANDBAGS, DRY STEAM, OR ALL BARRIERS TO PREVENT SEDIMENT TRANSPORT OFFSITE OR TO WATER BODIES. THE CONTRACTOR SHALL INSTALL THE STRUCTURAL EROSION CONTROL MEASURES IF REQUIRED TO PREVENT SEDIMENT TRANSPORT TO OFF-SITE AREAS & WATER BODIES.
4. ALL TRASH, DEBRIS, & OTHER MATERIAL REMOVED FROM THE SITE SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE, & FEDERAL REGULATIONS.
5. ANY EXCAVATED TRENCHES ARE TO BE BACKFILLED WITH CLEAN SAND COMPACTED TO AT LEAST 95% OF THE ASTM D-1557 PROCTOR MAXIMUM DRY DENSITY. VALVE BOXES, METER BOXES, & OTHER FINAL ADJUSTMENTS TO GRADE SHALL BE MADE TO THE SATISFACTION OF THE ENGINEER & OTHER OWNERS.
6. ALL EXISTING CONCRETE TO BE REMOVED SHALL BE SAWCUT & REMOVED @ THE FIRST AVAILABLE GOOD JOINT & REPLACED TO MATCH EXISTING.
7. THE CONTRACTOR SHALL CONTACT THE GAS UTILITY FOR LOCATION BEFORE EXCAVATION. CHAPTER 556.105 F.S. REQUIRES THAT AN EXCAVATOR NOTIFIES ALL GAS UTILITIES AT LEAST TWO DAYS PRIOR TO EXCAVATING. ALSO CALL 1-800-432-4770 FOR SUNSHINE LOCATES. F.S. 556.101 THROUGH 111.
8. CONTRACTOR TO PROVIDE TREE PROTECTION AS REQUIRED BY THE LOCAL JURISDICTION.

SOIL TRACKING PREVENTION

1. A SOIL TRACKING PREVENTION DEVICE (STPD) SHALL BE CONSTRUCTED AT THE LOCATION SHOWN ON THE PLANS. TRAFFIC FROM CONSTRUCTION AREAS OF CONSTRUCTION SHALL BE DIRECTED THRU THE STPD. BARRIER FLAGGING OR OTHER PROMINENT MEANS SHALL BE USED AT ENTRANCE TO LIMIT & DIRECT VEHICULAR EGRESS ACROSS THE STPD.
2. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TECHNIQUE TO MINIMIZE OFFSITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED & APPROVED BY THE ENGINEER &/OR ORANGE COUNTY PRIOR TO ITS USE.
3. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO PUBLIC ROADS INCLUDING THE STPD AGGREGATE & CONSTRUCTION MUD SHALL BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER &/OR ORANGE COUNTY.
4. AGGREGATES SHALL BE AS DESCRIBED IN SECTION 901 EXCLUDING 901-2.3. AGGREGATES SHALL BE FOUR INCHES. IF THE SIZE IS NOT AVAILABLE THE NEXT AVAILABLE SMALLER SIZE AGGREGATE MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER. SITES CONTAINING EXCESSIVE SMALL AGGREGATE WILL TRACK OFF THE PROJECT & ARE UNSUITABLE.
5. THE STPD SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM ITS FUNCTION, TO PREVENT OFFSITE TRACKING. THE STPD SHALL BE REVISED (SHALL WHEN IN USE) TO MOVE ACCUMULATED MUD SOONWARD. THE TOP LAYER OF AGGREGATE MAY BE REMOVED TO MAINTAIN THE TRANSLOCATION OF THE VEHICULAR ROUTE LEADING TO THE STPD. THE STPD MAY BE REQUIRED TO LIMIT THE MUD TRACKED.

EROSION CONTROLS FOR NON STORMWATER DISCHARGES:

A) WASTE DISPOSAL:

WASTE MATERIAL

ALL WASTE MATERIAL WILL BE COLLECTED AND STORED IN A METAL DUMPSTER WHICH WILL BE MAINTAINED BY A LICENSED SOLID WASTE MANAGEMENT COMPANY IN ORANGE COUNTY. THE DUMPSTER WILL MEET ALL LOCAL, STATE AND FEDERAL REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED AS OFTEN AS NECESSARY TO NOT CAUSE ON-SITE DISPOSAL OF WASTE. THE TRASH WILL BE HAULED TO AN APPROVED ORANGE COUNTY LANDFILL. NO CONSTRUCTION WASTE WILL BE BURIED ON SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE SUPERINTENDENT CONSTRUCTION TRAILER. THE INDIVIDUAL RESPONSIBLE FOR MANAGING THIS TASK WILL BE IDENTIFIED BY THE CONTRACTOR.

HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN ACCORDANCE WITH THE APPLICABLE LOCAL, STATE & FEDERAL REGULATIONS. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR HAZARDOUS WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE SUPERINTENDENT CONSTRUCTION TRAILER. THE INDIVIDUAL RESPONSIBLE FOR MANAGING THIS TASK WILL BE IDENTIFIED BY THE CONTRACTOR.

SANITARY WASTE

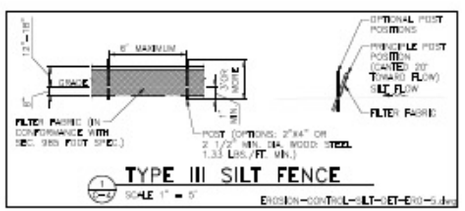
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF THREE TIMES PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR AS REQUIRED BY LOCAL REGULATION.

B) OFFSITE VEHICLE TRACKING:

A GRAVEL CONSTRUCTION ENTRANCE HAS BEEN PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

DUST CONTROL:

1. THE CONTRACTOR SHALL CONTROL DUST BY WATERING DOWN THE SITE AS REQUIRED. POTABLE WATER EXISTS AT THE SITE.



TYPE III SILT FENCE

SCALE 1" = 5'

EROSION-CONTROL-SILT-DET-EXO-3.dwg

DATE	REVISIONS	BY	CHECKED
02/11/2020	PER CITY COMMENTS DATED 12/16/2019	JV	WRH
03/16/2020	PER CITY COMMENTS DATED 03/12/2020	WRH	WRH
04/17/2020	PER CITY COMMENTS DATED 04/15/2020	CB	WRH

504 BUILDING
CONSTRUCTION PLANS
504 W. PLANT STREET
WINTER GARDEN, FLORIDA

FEG FLORIDA ENGINEERING GROUP
Engineering the Future

5127 S. Orange Avenue, Suite 200
Orlando, FL 32809
Phone: 407-895-0324
Fax: 407-895-0325
www.feg-inc.us

SITE DEMOLITION AND STORMWATER POLLUTION PREVENTION PLAN

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
WRH	HA	WRH	WRH

PROJECT NO. 18-148
SCALE 1" = 20'
DATE NOVEMBER 15, 2019
SHEET NO. C-4
SHEET 4 OF 16

FLORIDA ENGINEERING GROUP, INC.
CERTIFICATE OF AUTHORIZATION No. 27580

LICENSED No. 35040 STATE OF FLORIDA
WILLIAM R. HOOPINGARNER P.E.
LICENSED PLANNER

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY [SIGNERS]. P.E. ON [DATE] USING A DIGITAL SIGNATURE.

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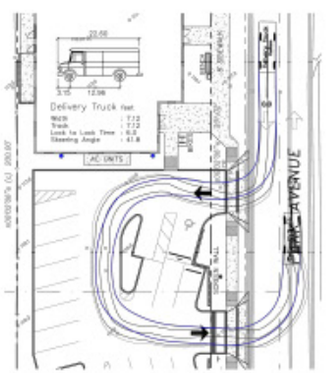
18-148_Plans.dwg

SITE CONSTRUCTION KEYNOTES

C1. 6" HEAD CURB, TYPICAL — 6/C-11
C2. ASPHALT PAVEMENT, LIGHT (PARKING AREAS) — 10/C-11
C3. ASPHALT PAVEMENT, MEDIUM (DRIVE AISLES) — 11/C-11
C4. CONCRETE PAVEMENT 6" THICK, 4,000 PSI TO BACK OF SIDEWALK.
C5. CONCRETE SIDEWALK, TYPICAL — 16/C-11
C6. CONCRETE WHEELSTOP PER F.D.O.T. STANDARD PLANS INDEX 520-001, TYPICAL — 4/C-11
C7. F.D.O.T. CURB CUT RAMPS PER F.D.O.T. STANDARD PLANS INDEX 522-002. FOR HANDICAP ACCESS ROADWAY @ ALL SIDEWALK CROSSINGS NOT TO EXCEED 2% CROSS SLOPE, TYPICAL — 5/C-11
C8. HANDICAP ACCESS RAMP WITH A MAXIMUM 12:1 SLOPE, TYPICAL — 5/C-11
C9. DETECTABLE WARNING SURFACE PER FLORIDA BUILDING CODE.
C10. NOT USED
C11. BICYCLE BIKE RACK, (TWO DOUBLE RACKS). — 9/C-11
C12. BENCH, SEE DETAIL SHEET FOR CITY STANDARD. — 14/C-11
C13. WALLED GARBAGE CAN STORAGE — 12/C-11
C14. TRASH CAN, SEE DETAIL SHEET PER CITY STANDARD — 15/C-11
C15. CONCRETE MONOLITHIC SIDEWALK — 5/C-11
C16. AC UNIT CONCRETE PAD PER BUILDING PLANS
C17. SCREEN WALL PER ARCHITECTURAL PLANS — 13/C-11
C18. LIGHT POLE
C19. SAW CUT PAVEMENT AND INSTALL 8' WIDE BRICK CROSSWALKS. PATTERN AND COLOR TO MATCH CITY DOWNTOWN INTERSECTION LAYOUT. △1
C20. 5' x 5' PLANTING AREA WITH RUBBERIZED TREE SURFACE PER CITY REQUIREMENTS.

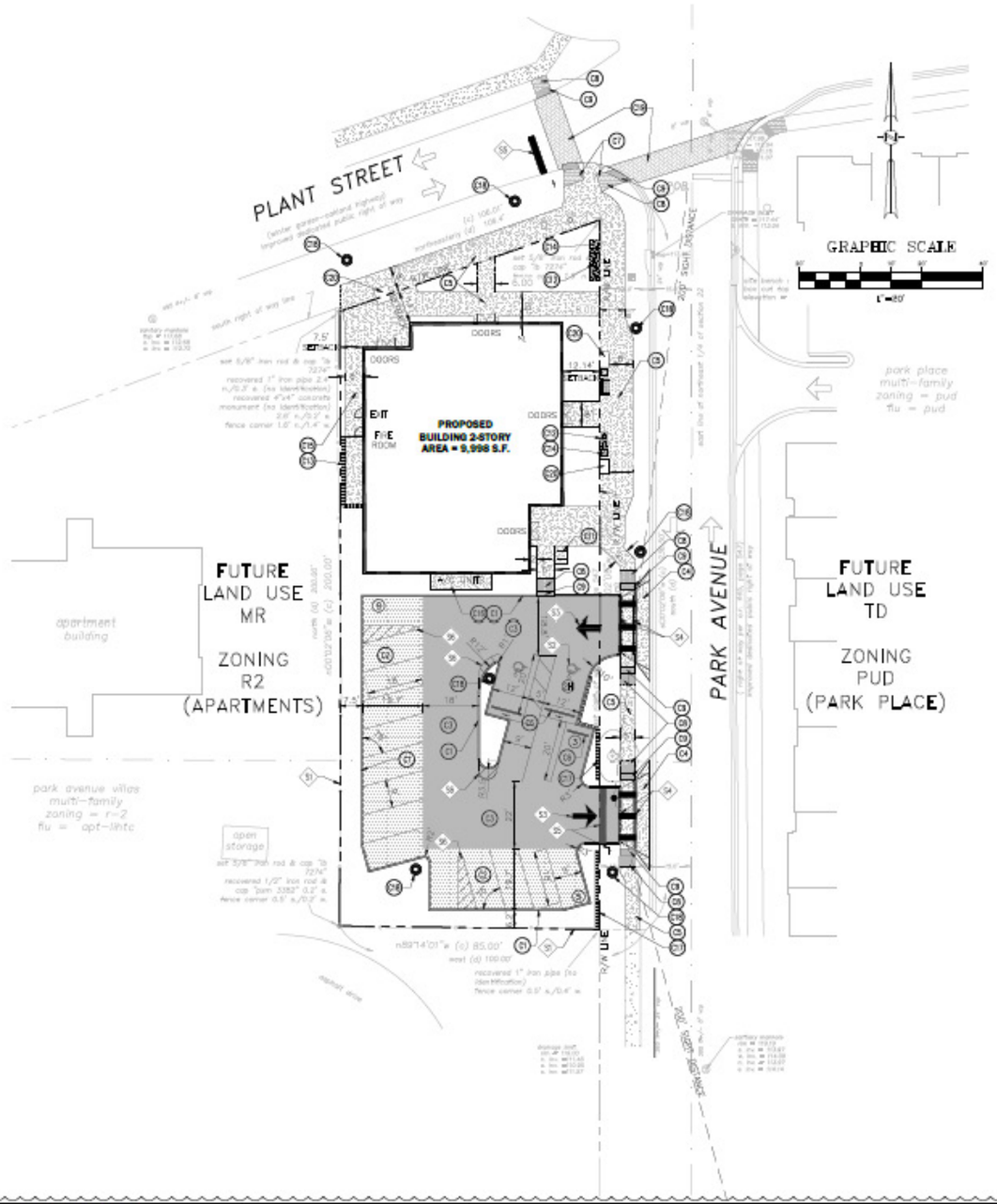
SITE STRIPING & SIGNAGE KEYNOTES

S1. PROPERTY BOUNDARY.
S2. HANDICAP PARKING STALL
S3. DIRECTIONAL ARROW PER F.D.O.T. STANDARD PLANS INDEX 711-001, (WHITE PAINT).
S4. SPECIAL EMPHASIS CROSSWALK STRIPING PER F.D.O.T. STANDARD PLANS INDEX 711-001, (WHITE THERMOPLASTIC).
S5. 24" THERMOPLASTIC STOP BAR WITH R1-1 HIGH INTENSITY REFLECTORIZED "STOP" SIGN.
S6. CURB STRIPING (6" WHITE PAINT) ON 3' CENTERS.



AUTOTURN – DELIVERY TRUCK
NOT TO SCALE

△2



SITE DATA:

PROPERTY LOCATION:	504 W. PLANT ST. WINTER GARDEN, FL 34787
PARCEL ID:	22-22-27-0000-00-076
PROPERTY FUTURE LAND USE DESIGNATION:	TD TRADITIONAL (CITY)
EXISTING ZONING:	R-2/TRADITIONAL DOWNTOWN ACTIVITY CENTER
PROPOSED ZONING:	PUD
EXISTING USE:	SINGLE-FAMILY
PROPOSED USE:	OFFICE/RETAIL
PROJECT AREA:	0.42± ACRES
PROPOSED GROSS FLOOR AREA:	9,998 S.F.
ALLOWABLE FLOOR AREA RATIO:	N/A
PROPOSED FLOOR AREA RATIO:	0.5466

MAXIMUM ALLOWABLE BUILDING HEIGHT: NONE
BUILDING HEIGHT PROPOSED: TWO STORY

BUILDING SETBACKS	(REQUIRED)	(PROPOSED)
FRONT (NORTH – PLANT STREET)	0' – 5'	11.0' (PUD)
SIDE (EAST – PARK AVENUE)	2' – 12'	12'
SIDE (WEST)	0'	2.5'
REAR (SOUTH)	25'	120.4'

PARKING

PARKING REQUIRED

GENERAL OFFICE	9,998 S.F. X (3 SPACES PER 1,000 S.F.)	30 SPACES
TOTAL PARKING REQUIRED		30 SPACES

PARKING PROVIDED

PARKING SPACES	17 SPACES
HANDICAP PARKING SPACES	2 SPACES
TOTAL PARKING PROVIDED	19 SPACES

BICYCLE PARKING: TWO RACKS — 4 BIKES

SITE AREA CALCULATIONS

	(EXISTING)		(PROPOSED)			
BUILDING FOOTPRINT	1,542	±S.F.	4,999	±S.F.		
PAVED/CONCRETE AREAS	1,192	±S.F.	8,855	±S.F.		
IMPERVIOUS AREA	2,734	±S.F.	13,854	±S.F.	0.32	±AC. 75.2 %
PERVIOUS AREA	15,583	±S.F.	4,463	±S.F.	0.10	±AC. 24.8 %
TOTAL SITE AREA	18,317	±S.F.	18,317	±S.F.	0.42	±AC. 100.0 %

FLOOD ZONE

FLOOD ZONE X PER FEMA F.I.R.M. PANEL 12095C0205F DATED 09/25/2009

SOILS

TILLMAN-URBAN LAND COMPLEX, BARNETT FINE SAND, WABASSO URBAN LAND COMPLEX.

WETLAND STATEMENT

THERE ARE NO JURISDICTIONAL WETLANDS WITHIN THE PROJECT SITE.

HAZARDOUS MATERIALS STATEMENT

DURING CONSTRUCTION, NO HAZARDOUS MATERIALS ARE BROUGHT ONTO THE SITE IN SUCH QUANTITIES AS REQUIRED HAZARDOUS BY THE FIRE DEPTH. ACCESS ROADS & A SUITABLE TEMPORARY SUPPLY OF WATER ACCEPTABLE TO THE FIRE DEPARTMENT SHALL BE PROVIDED & MAINTAINED.

LIGHTING NOTE

LIGHTING SHALL COMPLY WITH WINTER GARDEN STANDARDS.

COMMERCIAL DESIGN STANDARDS NOTE

THE PROJECT SHALL COMPLY WITH THE ARCHITECTURAL AND HISTORICAL STANDARDS FOR THE CITY OF WINTER GARDEN.

TRASH ENCLOSURE NOTE

THE TRASH ENCLOSURE SHALL HAVE WALLS 6' HIGH, ENCLOSURE AND SHALL BE ARCHITECTURALLY COMPATIBLE MATERIAL TO THE PRINCIPLE BUILDING.

SIGNAGE NOTE

TELEGRAPH & POLE SIGNS SHALL BE PROHIBITED. GROUND & FASCIA SIGNS SHALL BE PER CHAPTER 31.5.

SITE NOTES

1. ALL CURB RADII ARE TO BE 5.0', TYPICAL, UNLESS NOTED OTHERWISE. EXCEPTION: RADII @ ISLANDS ARE TO FIT ISLAND WIDTHS, UNLESS NOTED OTHERWISE.
2. LANDSCAPE ISLAND NOSE NOT TO EXCEED THE PARKING STALL DEPTH &/OR PROTRUDE INTO DRIVE AISLES, TYPICAL.
3. ALL DIMENSIONS ARE PARALLEL & PERPENDICULAR TO A BEARING OF N 00°03'06" E UNLESS OTHERWISE INDICATED WITH A "T" OR BEARING.
4. LOWER CASE TEXT DENOTES SURVEY &/OR EXISTING CONDITION INFORMATION.

SIGHT DISTANCE

200' BASED ON FDOT GREENBOOK, TABLE 3-17 FOR 30 MPH POSTED SPEED LIMIT

△3 △4

DATE	REVISIONS	BY	CHECKED
02/11/2020	△1 PER CITY COMMENTS DATED 12/16/2019	JV	WRH
03/16/2020	△2 PER CITY COMMENTS DATED 03/12/2020	WRH	WRH
04/17/2020	△3 PER CITY COMMENTS DATED 04/15/2020	CB	WRH

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SITE GEOMETRY PLAN

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
WRH	HA	WRH	WRH

PROJECT NO. 18-148
SCALE 1" = 20'
DATE NOVEMBER 15, 2019
SHEET NO. C-5
SHEET 5 OF 16

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DRAINAGE STRUCTURE LEGEND

S0-1
OUTFALL STRUCTURE
TYPE "D" INLET MODIFIED
(BY F.D.O.T. STANDARD PLANS INDEX 425-081)

TOP ELEV.	117.85
INV. ELEV.	114.25 N
INV. ELEV.	113.85 W
INV. ELEV.	113.00 E

S0-2
TYPE "C" INLET

TOP ELEV.	117.85
INV. ELEV.	114.25 N
INV. ELEV.	113.85 W
INV. ELEV.	113.85 S

S0-3
TYPE "C" INLET

TOP ELEV.	117.85
INV. ELEV.	113.85 N
INV. ELEV.	113.85 E
INV. ELEV.	113.85 S

S0-4
TYPE "C" INLET

TOP ELEV.	117.85
INV. ELEV.	113.85 N
INV. ELEV.	113.85 E

S0-5
F.D.O.T. GUTTER INLET
(BY F.D.O.T. STANDARD PLANS INDEX 425-081)

TOP ELEV.	118.10±
INV. ELEV.	112.24 N ±
INV. ELEV.	112.24 S ±
INV. ELEV.	112.75 W

EXFILTRATION TRENCH MANHOLES

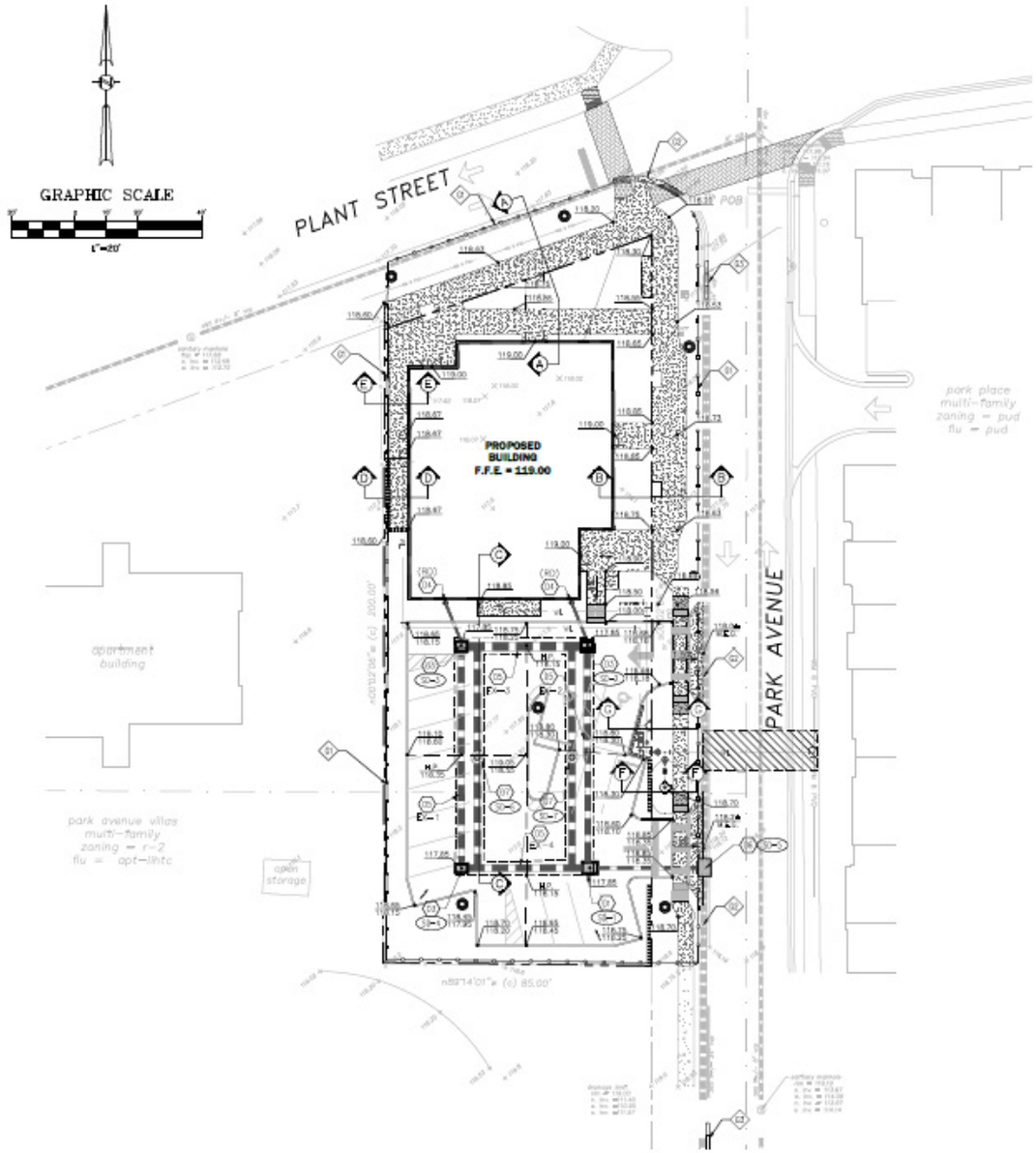
S0-6
STORM MANHOLE
(BY F.D.O.T. STANDARD PLANS INDEX 425-081)

TOP ELEV.	117.93±
INV. ELEV.	113.35 S

S0-7
STORM MANHOLE
(BY F.D.O.T. STANDARD PLANS INDEX 425-081)

TOP ELEV.	117.93±
INV. ELEV.	113.35 N
INV. ELEV.	113.35 S

ALL THERMOPLASTIC PIPE SHALL MEET CITY MATERIALS AND INSTALLATION REQUIREMENTS AS SPECIFIED IN THE CITY'S STANDARDS AND SPECIFICATIONS INCLUDING CLASS I BEDDING, HP POLYPROPYLENE PIPE, LASER PROFILING, INSTALLATION PER ASTM D321, ETC.



CONCRETE CONSTRUCTION NOTES

1. CONCRETE PRE-CONSTRUCTION MEETING
   A. THE CONCRETE CONTRACTOR ALONG WITH THE CONCRETE PRODUCER MAY REQUEST THROUGH THE GENERAL CONTRACTOR FOR A PRE-CONSTRUCTION MEETING PRIOR TO CONCRETE PLACEMENT.
   B. ATTENDEE CONCRETE CONTRACTOR, CONCRETE PRODUCER, GENERAL CONTRACTOR, OWNER OR OWNER'S REPRESENTATIVE(S), ENGINEER OF RECORD, ARCHITECT, SITE CONTRACTOR, GEOTECHNICAL REPRESENTATIVE(S), ETC.
   C. AGENDA - INCLUDE BUT NOT LIMITED TO THE FOLLOWING. CONTRACTOR MAY CONTACT THE FLORIDA CONCRETE & PRODUCTS ASSOCIATION FOR PRE-CONSTRUCTION MEETING CHECK LISTS.
      UNFINISHED APPROVAL
      - CONCRETE TESTING, TIME, LOCATION OF SAMPLINGS, ETC.
      - CONCRETE DELIVERY, QUANTITIES, PUMP, CONVEYOR, ETC.
      - PLACEMENT METHOD, QUANTITY/ACT, STAGING & CLEAN OUT LOCATION, ETC.
      - FINISHING, CURING, JOINTING, ETC.

3. JOINTS FOR CONCRETE SLABS
   A. GENERAL – A JOINTING PLAN FOR THE ENTIRE PAVING AREA SHALL BE PREPARED BY THE CONCRETE CONTRACTOR & SUBMITTED TO THE ENGINEER OF RECORD (EOR) 2 WEEKS PRIOR TO PLACEMENT OF CONCRETE FOR THE EOR APPROVAL. THE CONTRACTOR MAY ALSO CONTACT THE FLORIDA CONCRETE & PRODUCTS ASSOCIATION (FCPA) FOR TECHNICAL RESOURCES AND ASSISTANCE.
      1. SQUARE JOINTING PATTERN IS RECOMMENDED. THESE PRODUCE IDEAL RECTANGULAR PANELS. CAN BE USED IF THE LONG DIMENSION IS NO MORE THAN 1.5 TIMES THE SHORT (e.g. 8' x 12'). JOINT SPACING SHALL NOT EXCEED THE FOLLOWING: 10 FEET IN A 4" THICK SLAB, 12 FEET IN A 5" THICK SLAB OR 15 FEET IN SLAB WITH THICKNESS OF 6" OR GREATER.
      - SAW CUT AREA AROUND MANHOLES, WITH GRATES, DRAINAGE STRUCTURES & OTHER BUILT-IN STRUCTURES WITH THE JOINTING AREAS SHALL BE REGULAR WHERE POSSIBLE. A MINIMUM OFFSET OF 12" FROM ANY EDGE OF THE STRUCTURE. OBTAIN A COPY OF THE FDOT STANDARD DETAILS FOR REFERENCE. CONSTRUCTION & CONTROL JOINTS SHALL BE CONTINUOUS THROUGH ADJACENT LANES & EXTEND THROUGH INTEGRAL CURB. JOINTS CAN BE TERMINATED & OFFSET AT INSULATION JOINTS. WHERE JOINTS INTERSECT ANY RADIUS OR CURVATURE, OFFSET A MINIMUM OF 12" FROM EDGE OF PAVEMENT AND TURN JOINT 90 DEGREES TO EDGE (IF PAVEMENT TO AVOID ACUTE ANGLE OR SMALL REMNANT OF CONCRETE AT CURVATURE). OBTAIN A COPY OF THE FDOT STANDARD DETAILS FOR REFERENCE.

   B. CONSTRUCTION JOINTS – A CONSTRUCTION JOINT SEPARATES ONE DAY PLACEMENT TO THE NEXT DAY PLACEMENT. A CONSTRUCTION JOINT SHALL BE A MINIMUM OF 5 FEET FROM ANY ADJACENT CONTROL JOINT. NEXT DAY PLACEMENT SHALL BUTT UP TO THE EXISTING PAVEMENT AS A COLD JOINT. THE CONSTRUCTION JOINT MAY BE MACHINE-TOOLED WITH MINIMUM 0.25" RADIUS AT THE EDGE OF THE JOINT. CONTROL JOINTS FROM BOTH PLACEMENT AREAS SHALL MATCH AND BE CONTINUOUS ACROSS THE CONSTRUCTION JOINT.

   C. CONTROL/CONTRACTION JOINTS – CONTROL JOINTS ARE JOINTS WITHIN THE PAVING AREA FORMED THROUGH TOOLING OR SAW CUTTING. CONTROL JOINTS ESTABLISH WEAK PLANES TO REDUCE STRESSES DUE TO SHRINKAGE OR TEMPERATURE CHANGES. INSTALL CONTROL JOINTS WITHIN 12 HRS FROM THE TIME THE CONCRETE HITS THE GROUND OR OBTAIN IN WRITING APPROVAL FROM THE EOR BEYOND THE 12-HR TIME LIMIT.
      - HEAVY-DUTY SAW CUTTING METHOD: CUT JOINT TO A MINIMUM OF 1/4" DEEP FOR PAVEMENT THICKNESS UP TO 8". DEPTH OF JOINT SHALL NOT CAUSE FAILURE TO THE EDGE OR DEFORMATION OF THE SURFACE DUE TO EQUIPMENT OR WORKER.
      - OTHER METHODS: INSTALL JOINT TO A MINIMUM OF 1/3 OF PAVEMENT DEPTH. FINISH EDGES WITH 0.25" RADIUS. OPERATION SHALL NOT CAUSE ANY DEFORMATION OF THE SURFACE.

   D. ISOLATION JOINTS – THESE JOINTS USE ISOLATION MATERIALS TO PREVENT FROM CONCRETE FROM BONDING TO HARDENED CONCRETE SUCH AS, BUT NOT LIMITED TO, BUILDING FOUNDATIONS, SIDEWALKS, DRAINAGE STRUCTURES, LIGHTING & SIGNAGE BASES, RETAINING WALLS, CURBS, ETC. THE ISOLATION MATERIAL SHALL EXTEND THE FULL-DEPTH OF THE FINISH CONCRETE THICKNESS. FROM ONE DAY PLACEMENT TO THE NEXT, WHERE JOINTS ARE MATCHED, ISOLATION MATERIAL IS NOT NECESSARY. (E.G. ONE LANE PAVING TO THE NEXT, INTEGRAL CURBS)

   E. ISOLATION JOINTS BETWEEN SLABS AT SAME GRADE SHALL BE FORMED WITH 0.25 INCH THICK INCOMPRESSIBLE OR 0.50 INCH THICK ASPHALT IMPREGNATED FIBER FILLER WITH HYDROCARBON RESISTANT ELASTOMERIC FILL MATERIAL AS SEALER. ALL EDGES TO BE HAND TOOLED WITH MINIMUM 0.50 INCH RADIUS.

   F. A SATISFACTORY ISOLATION JOINT CAN BE FORMED AT METAL BUILDING CURBS BY PLACING A STRIP OF CURING PAPER AGAINST THE METAL FORM & THEN PLACING THE FINISH CONCRETE AGAINST THE PAPER. THE EDGES OF THE SLAB SHALL BE HAND TOOLED WITH MINIMUM 0.50 INCH RADIUS.

3. JOINT SEALANT – A JOINT SEALING PLAN FOR THE AFFECTED AREA SHALL BE PREPARED BY THE CONCRETE CONTRACTOR & SUBMITTED TO THE EOR ALONG WITH THE JOINTING PLAN, 2 WEEKS PRIOR TO PLACEMENT OF CONCRETE FOR THE EOR APPROVAL. NOT ALL JOINT WILL BE REQUIRED SEALING. THE CONCRETE CONTRACTOR IS TO RECOMMEND THE NECESSARY LOCATION AND TO PROVIDE SUPPORTING DOCUMENTATION FOR NON-SEALING AREAS. USE A POLYURETHANE SEALANT THIOKOL TH-400/TH-401 MULTI-COMPONENT COMPOUND OR EQUIVALENT. THE CONCRETE CONTRACTOR IS TO SUBMIT SEALANT TYPE AND MANUFACTURER INFORMATION TO THE EOR FOR APPROVAL AND TECHNICALLY TO USE. JOINTS SHALL BE PREPARED BY FOLLOWING MANUFACTURER'S RECOMMENDATIONS PRIOR TO SEALING.

GRADING KEYNOTES

G1. F.D.O.T. TYPE "III" SILT FENCE EROSION CONTROL BARRIER, TYPICAL
G2. MATCH EXISTING PAVEMENT GRADE
G3. SYNTHETIC EROSION CONTROL BARRIER

SITE DRAINAGE KEYNOTES

D1. OUTFALL STRUCTURE F.D.O.T. TYPE "D" WITH BOTTOM INLET (MODIFIED) PER F.D.O.T. STANDARD PLANS INDEX 425-052. SEE DETAIL ON SHEET C-6A.
D2. NOT USED
D3. FDOT TYPE "C" INLET PER F.D.O.T. STANDARD PLANS INDEX 425-052
D4. ROOF DRAIN (RD). COORDINATE LOCATION WITH BUILDING PLANS.
D5. EXFILTRATION TRENCH. SEE DETAILS ON SHEET 7 AND 8.
D6. FDOT GUTTER INLET TYPE V PER F.D.O.T. STANDARD PLANS INDEX 425-041
D7. CONSTRUCT STORM MANHOLES FOR EXFILTRATION SYSTEM.
D8. CHAMBER SYSTEM INSPECTION PORT PER MANUFACTURER STANDARDS.

DRAINAGE NOTES:

1. ROOF DRAINS (RD) SHALL CONNECT DIRECTLY TO EXFILTRATION TRENCH SYSTEM WITH 6" PVC PIPES.
2. CONTRACTOR TO VERIFY THE EXISTING DRAINAGE PIPE LOCATION & INVERT AT THE COSMBLUE INLET CONNECTION PRIOR TO CONSTRUCTION. NOTIFY TO FEG IF ANY DISCREPANCY.

PLAN LEGEND

SILT FENCE EROSION CONTROL BARRIER
SYNTHETIC EROSION CONTROL BARRIER

DATE	REVISIONS	BY	CHECKED
02/11/2020	1 PER CITY COMMENTS DATED 12/16/2019	JV	WHR
03/16/2020	2 PER CITY COMMENTS DATED 03/12/2020	WRH	WHR
04/17/2020	3 PER CITY COMMENTS DATED 04/15/2020	CB	WHR

504 BUILDING
CONSTRUCTION PLANS
504 W. PLANT STREET
WINTER GARDEN, FLORIDA

FEG FLORIDA ENGINEERING GROUP
Engineering the Future
5127 S. Orange Avenue, Suite 200
Orlando, FL 32809
Phone: 407-895-0324
Fax: 407-895-0325
www.feg-inc.us

SITE PAVING, GRADING AND DRAINAGE PLAN

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
WRH	HA	WRH	WRH

PROJECT NO. 18-148
SCALE 1" = 20'
DATE NOVEMBER 15, 2019
SHEET NO. C-6
SHEET 6 OF 16

FLORIDA ENGINEERING GROUP, INC.
CERTIFICATE OF AUTHORIZATION
No. 30940
STATE OF FLORIDA
WILLIAM H. HOCKENBERRY, P.E.
LICENSE NO. 53940

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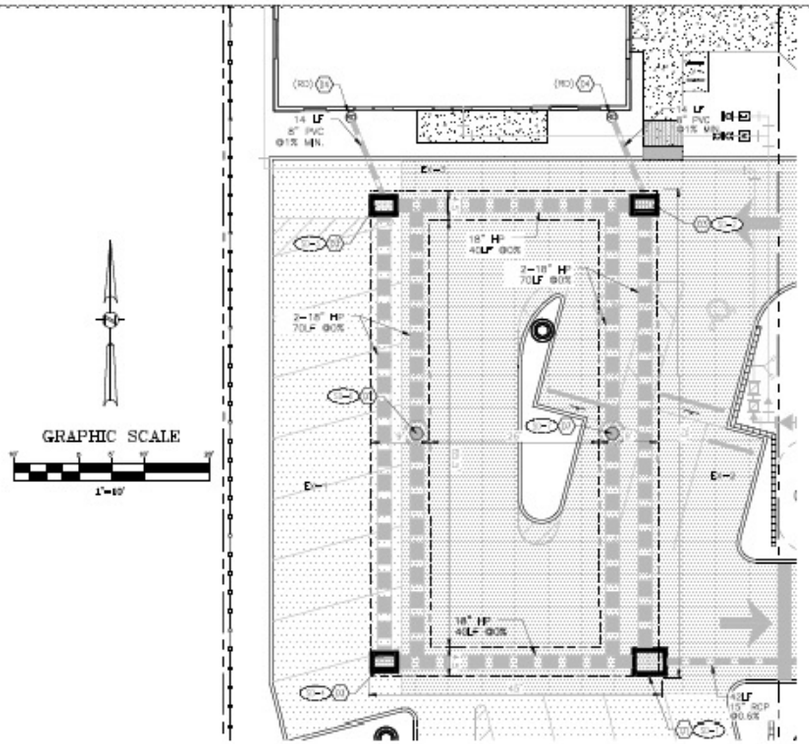


NOTES:

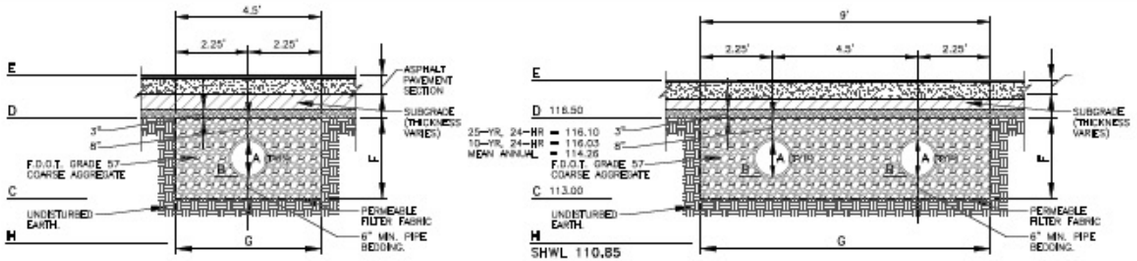
1. ALL EXFILTRATION PIPE TO BE 18" PERFORATED HP UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL PROVIDE THE ENGINEER INFORMATION VERIFYING THE 40% GRAVEL VOID RATIO AND PROVIDE TRENCH AS BUILT INFORMATION INCLUDING LENGTH, WIDTH, TOP ELEVATION AND BOTTOM ELEVATION.
3. ALL GRAVEL USED IN THE EXFILTRATION TRENCH SYSTEM SHALL BE NON CALCAREOUS.
4. CITY NOTES:
   ALL PIPE JOINTS SHALL BE WRAPPED PER FDOT DESIGN STANDARD INDEX NO. 280.

EXFILTRATION TRENCH PLAN

SCALE 1" = 10'

SITE DRAINAGE KEYNOTES

01. OUTFALL STRUCTURE, F.D.O.T. TYPE "D" DITCH BOTTOM INLET (MODIFIED) PER F.D.O.T. STANDARD PLANS INDEX 425-052. SEE DETAIL ON SHEET C-6A.
02. NOT USED
03. FDOT TYPE "C" INLET PER F.D.O.T. STANDARD PLANS INDEX 425-052
04. ROOF DRAIN (RD), COORDINATE LOCATION WITH BUILDING PLANS.
05. EXFILTRATION TRENCH. SEE DETAILS ON SHEET 7 AND 8.
06. FDOT GUTTER INLET TYPE V PER F.D.O.T. STANDARD PLANS INDEX 425-041
07. CONSTRUCT STORM MANHOLES FOR EXFILTRATION SYSTEM.
08. CHAMBER SYSTEM INSPECTION PORT PER MANUFACTURER STANDARDS.



SINGLE PIPE
N.T.S.

DOUBLE PIPE
N.T.S.

NOTES:

1. REFER TO A.D.S. DETAILS FOR CONSTRUCTION CRITERIA FOR A.D.S. PIPES AND ADDITIONAL CRITERIA FOR TRENCH CONSTRUCTION.
2. FILTER FABRIC SHALL BE SUBSURFACE DRAINAGE TYPE MEETING THE REQUIREMENTS OF F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, SECTION 985. ALL FILTER FABRIC JOINTS SHALL LAP A MINIMUM OF ONE FOOT.
3. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PREVENT CONTAMINATION OF THE TRENCH WITH SAND, SILT AND FOREIGN MATERIALS.
4. COARSE AGGREGATE SHALL BE GRAVEL OR STONE MEETING THE REQUIREMENTS OF SECTIONS 901-2 OR 901-3, RESPECTIVELY. THE GRADATION SHALL MEET SECTION 901-6, GRADE 57, MINIMUM 40% VOID RATIO. STONE SHALL BE NON-CALCAREOUS (GRANITE, ETC.) NOT LIMEROCK.
5. STORM PIPE SHALL BE HP PIPE (N-12 NOT ALLOWED) WITH CLASS 1 BEDDING AND TRENCH PER ASTM D 2321.
6. WHERE A STORM CROSS DRAIN PENETRATES THROUGH AN EXFILTRATION TRENCH, ADJUST FILTER FABRIC TO PROVIDE A CONTINUOUS WRAP BELLOW CROSS DRAIN.

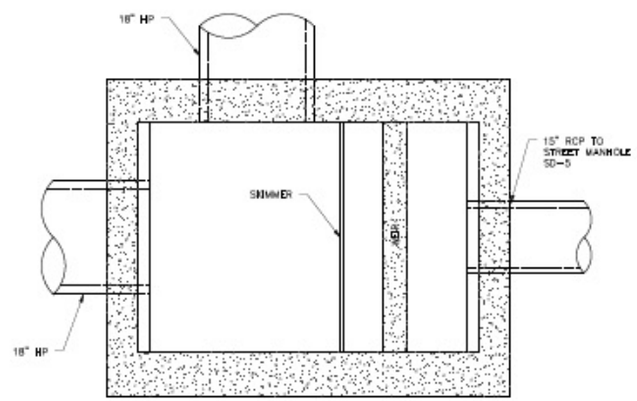
EXFILTRATION TRENCH SCHEDULE

EXFILTRATION TRENCH		A	B	C	D	E	F	G	H
NAMED	LENGTH	PIPE SIZE	PIPE INVERT ELEVATION	BOTTOM OF TRENCH ELEVATION	TOP OF TRENCH ELEVATION	MEDIAN GRADE ELEVATION	TRENCH DEPTH	EXFILTRATION TRENCH WIDTH	HEIGHT ELEVATION BELOW TRENCH
EX-1	70 LF	1-18" HDPE	113.85	113.00	116.50	117.85	3.5'	9'	116.85
EX-2	70 LF	2-18" HDPE	113.85	113.00	116.50	117.85	3.5'	9'	116.85
EX-3	40 LF	1-18" HDPE	113.85	113.00	116.50	117.85	3.5'	4.5'	116.85
EX-4	40 LF	1-18" HDPE	113.85	113.00	116.50	117.85	3.5'	4.5'	116.85

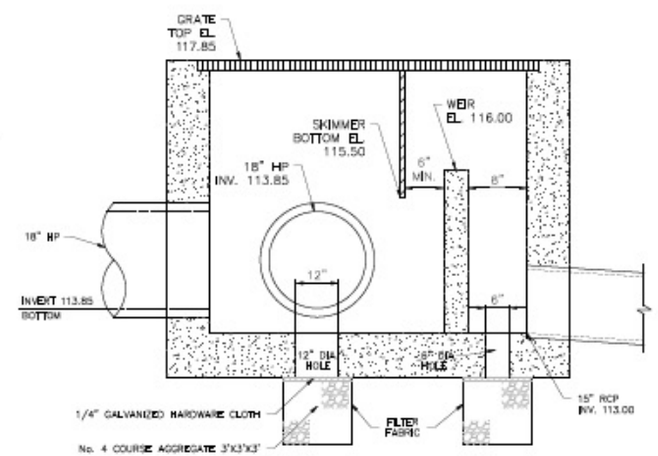
EXFILTRATION TRENCH SECTIONS

N.T.S.

TOTAL TRENCH DRAIN LENGTH = 220'



TOP VIEW



SIDE VIEW

SD-1 OUTFALL STRUCTURE
TYPE "D" INLET (MODIFIED)
NOT TO SCALE

DATE	REVISIONS	BY	CHECKED
02/11/2020	PER CITY COMMENTS DATED 12/16/2019	JV	WRH
03/16/2020	PER CITY COMMENTS DATED 03/12/2020	WRH	WRH
04/17/2020	PER CITY COMMENTS DATED 04/15/2020	CB	WRH

504 BUILDING
CONSTRUCTION PLANS
504 W. PLANT STREET
WINTER GARDEN, FLORIDA

FEG FLORIDA ENGINEERING GROUP
Engineering the Future
5127 S. Orange Avenue, Suite 200
Orlando, FL 32809
Phone: 407-895-0324
Fax: 407-895-0325
www.feg-inc.us

EXFILTRATION TRENCH PLAN & DETAILS

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
WRH	HA	WRH	WRH

PROJECT NO. 18-148
SCALE 1" = 10'
DATE NOVEMBER 15, 2019
SHEET NO. C-7
SHEET 7 OF 16

FLORIDA ENGINEERING GROUP, INC. CERTIFICATE NO. 8660 00
No. 35940 STATE OF FLORIDA
WILLIAM R. HOCKENSMITH, P.E. LICENSE NO. 35940

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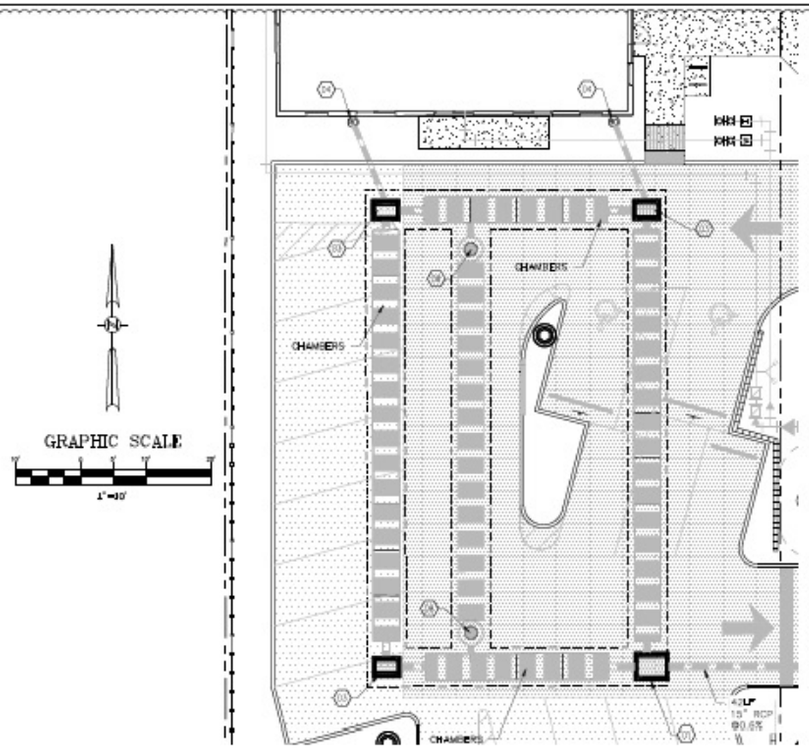
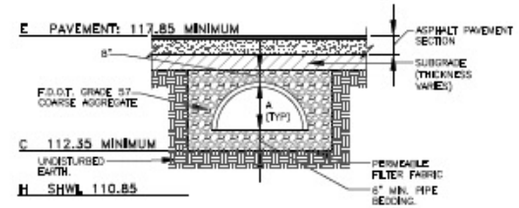
18-148_Exfiltration Plan.dwg



NOTE:

AN ALTERNATE SYSTEM UTILIZING STORM CHAMBER SYSTEMS WILL BE ALLOWED IF APPROVED BY THE DESIGN ENGINEER OF RECORD.
THE SYSTEM MUST PROVIDE A MINIMUM OF 2,214 CF OF WATER QUALITY STORAGE BELOW THE WEIR AND PROVIDE SUFFICIENT COVER ABOVE THE CHAMBERS FOR THE PARKING LOT PAVEMENT. THE CHAMBER SYSTEM SHALL ALSO MEET RECOVERY OF THE WATER QUALITY VOLUME PER SJRWMD STANDARDS.



STORM CHAMBER DETAIL
N.T.S.
(WIDTH AND HEIGHT DEPEND ON TYPE OF CHAMBER SYSTEM)

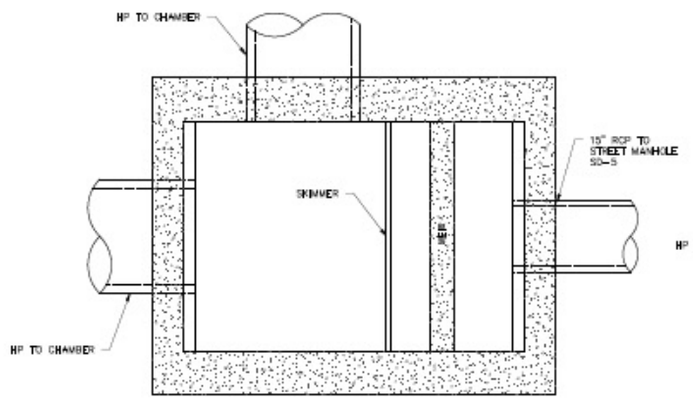
NOTES:

1. ALL PIPE TO BE HP UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL PROVIDE THE ENGINEER INFORMATION VERIFYING THE 40% GRAVEL VOID RATIO AND PROVIDE TRENCH AS BUILT INFORMATION INCLUDING LENGTH, WIDTH, TOP ELEVATION AND BOTTOM ELEVATION.
3. ALL GRAVEL USED IN THE CHAMBER SYSTEM SHALL BE NON CALCAREOUS.
4. CITY NOTES:
   ALL PIPE JOINTS SHALL BE WRAPPED PER FDOT DESIGN STANDARD INDEX NO. 280.

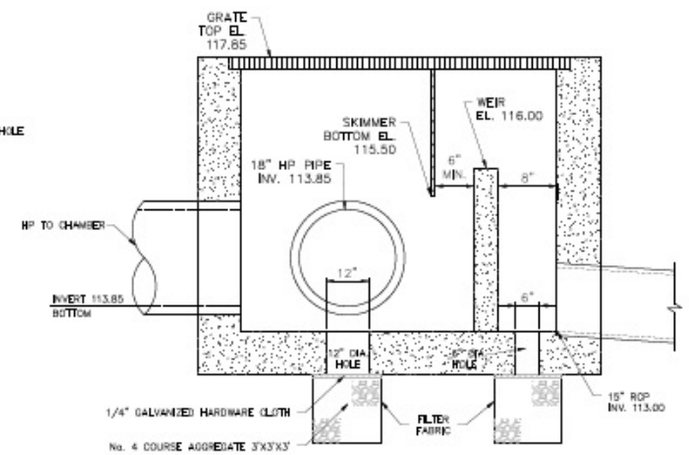
CHAMBER SYSTEM PLAN
SCALE 1" = 10'

SITE DRAINAGE KEYNOTES

D1. OUTFALL STRUCTURE F.D.O.T. TYPE "D" DITCH BOTTOM INLET (MODIFIED) PER F.D.O.T. STANDARD PLANS INDEX 425-052. SEE DETAIL ON SHEET C-9.
D2. NOT USED
D3. FDOT TYPE "C" INLET PER F.D.O.T. STANDARD PLANS INDEX 425-052
D4. ROOF DRAIN (RD). COORDINATE LOCATION WITH BUILDING PLANS.
D5. EXFILTRATION TRENCH. SEE DETAILS ON SHEET 7 AND 8.
D6. FDOT GUTTER INLET TYPE V PER F.D.O.T. STANDARD PLANS INDEX 425-041
D7. CONSTRUCT STORM MANHOLES FOR EXFILTRATION SYSTEM.
D8. CHAMBER SYSTEM INSPECTION PORT PER MANUFACTURER STANDARDS.



TOP VIEW



SIDE VIEW

SD-1 OUTFALL STRUCTURE
TYPE "D" INLET (MODIFIED)
NOT TO SCALE

DATE	REVISIONS	BY	CHECKED
02/11/2020	1 PER CITY COMMENTS DATED 12/16/2019	JV	WRH
03/16/2020	2 PER CITY COMMENTS DATED 03/12/2020	WRH	WRH
04/17/2020	3 PER CITY COMMENTS DATED 04/15/2020	CB	WRH

504 BUILDING
CONSTRUCTION PLANS
504 W. PLANT STREET
WINTER GARDEN, FLORIDA

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Phone: 407-895-0324
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CHAMBER SYSTEM PLAN AND DETAILS
(ALTERNATE DESIGN)

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
WRH	HA	WRH	WRH

PROJECT NO. 18-148
SCALE 1" = 10'
DATE NOVEMBER 15, 2019
SHEET NO. C-8
SHEET 8 OF 16

FLORIDA ENGINEERING GROUP, INC.
CERTIFICATE NO. 27420
LICENSE No. 35040 STATE OF FLORIDA
WILLIAM R. HOCKENSMITH P.E.
LICENSED PE

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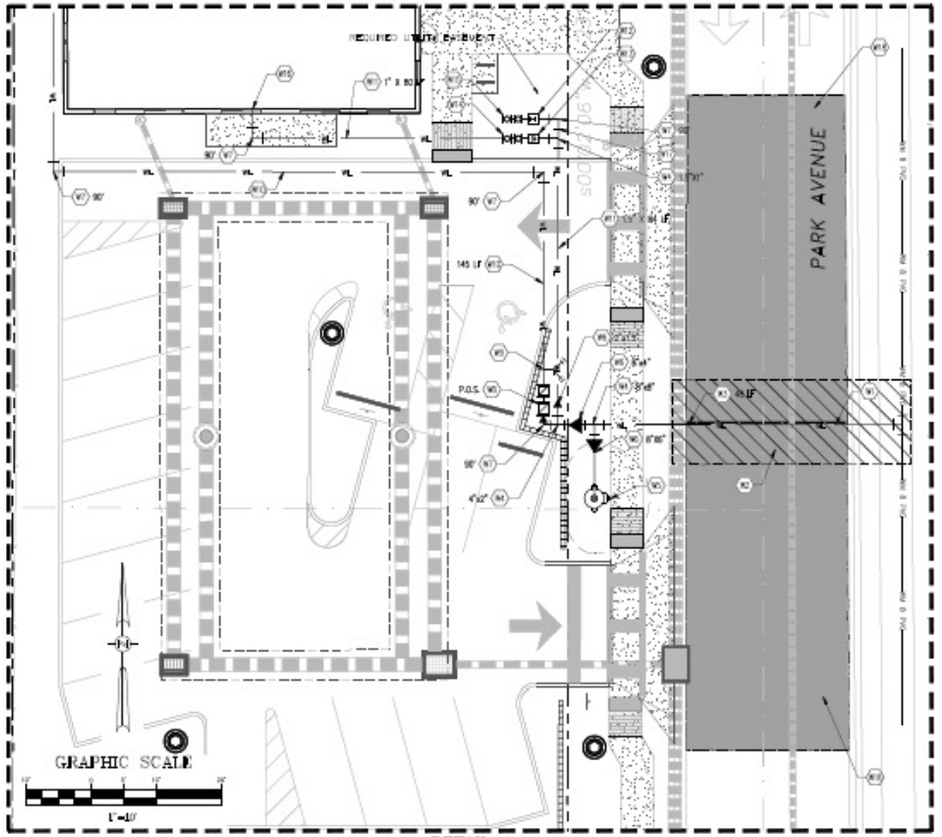
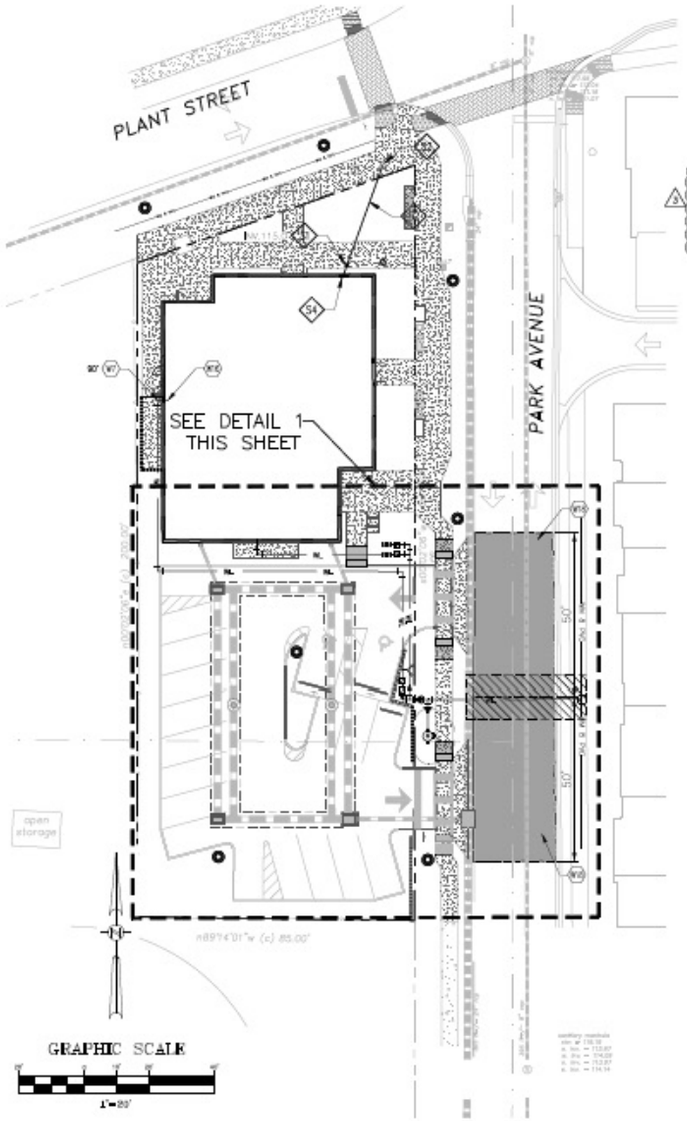
18-148_ExfiltrationPlan.dwg



DETAIL 1
SCALE: 1"=10'



WATER UTILITY KEYNOTES

W1. 8"x6" WET TAP CONNECTION TO EXISTING 8" WATER MAIN WITH A TAPPING SLEEVE & VALVE.

W2. OPEN CUT ROAD. RESTORE ROAD, CURB AND SIDEWALK (SEE DETAIL THIS SHEET).

W3. 8" PVC C-900 DR-18 WATER MAIN. SEE PLAN FOR LENGTH.

W4. TEE. SEE PLAN FOR SIZE. TYPICAL.

W5. FIRE HYDRANT ASSEMBLY (PUBLIC) WITH GATE VALVE.

W6. REDUCER. SEE PLAN FOR SIZE. TYPICAL.

W7. BEND W/ RESTRAINED JOINTS. TYPICAL. SEE PLAN FOR ANGLE.

W8. 4" (DCDA) REDUCED PRESSURE DETECTOR ASSEMBLY WITH BY PASS METER TO BE INSTALLED BY DEVELOPER'S UTILITY CONTRACTOR. THE DCDA SHALL BE MONITORED IN ACCORDANCE WITH N.F.P.A. 72.

W9. STAND ALONE FDC, MIN 40' FROM BUILDING.

W10. 4" PVC C-900 DR-14 WATER MAIN. SEE PLAN FOR LENGTH.

W11. 1" POLYETHYLENE (PE) WATER SERVICE LINE. SEE PLAN FOR LENGTH AND SIZE.

W12. 1" DOMESTIC IRRIGATION METER TO BE INSTALLED BY CITY OF WINTER GARDEN. DEVELOPER'S CONTRACTOR IS RESPONSIBLE FOR BACKFLOW PREVENTER AND SERVICE LINE FROM BACKFLOW PREVENTER TO BUILDING.

W13. 1" DOMESTIC WATER METER TO BE INSTALLED BY CITY OF WINTER GARDEN. DEVELOPER'S CONTRACTOR IS RESPONSIBLE FOR BACKFLOW PREVENTER AND SERVICE LINE FROM BACKFLOW PREVENTER TO BUILDING.

W14. 1" DOMESTIC WATER REDUCED PRESSURE BACKFLOW PREVENTER (BY CONTRACTOR).

W15. 1" DOMESTIC IRRIGATION REDUCED PRESSURE BACKFLOW PREVENTER (BY CONTRACTOR).

W16. COORDINATE CONTINUATION WITH PLUMBING AND ARCHITECTURAL PLANS.

W17. INSTALL TEMPORARY JUMPER FOR IRRIGATION METER UNTIL RECLAIM WATER IS AVAILABLE.

W18. MILL AND RESURFACE 1" FOR 50' EACH SIDE OF OPEN CUT.

SANITARY SEWER UTILITY KEYNOTES

S1. 6" PVC SANITARY CLEAN-OUT. TYPICAL TOP ELEVATION TO MATCH PROPOSED GRADE.

S2. 6" PVC ASTM D3034 SDR 26 SANITARY LATERAL. SEE PLAN FOR SLOPE AND LENGTH.

S3. CONNECT TO EXISTING 6" CLEAN-OUT. CONTRACTOR TO VERIFY INVERT PRIOR TO CONSTRUCTION AND PROVIDE TO ENGINEER.

S4. COORDINATE CONTINUATION WITH PLUMBING AND ARCHITECTURAL PLANS.

UTILITY NOTES

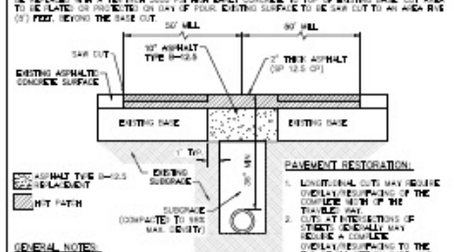
1. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY EXISTING UTILITY CONDITIONS TO INCLUDE LOCATING THE WATER AND SEWER SERVICES, VERIFY SIZES AND THEIR RESPECTIVE INVERT ELEVATIONS. THIS INFORMATION SHALL BE PROVIDED TO F.E.G., INC. FOR REVIEW AND VERIFICATION PRIOR TO ANY CONSTRUCTION.
2. PROVIDE A MINIMUM OF 3 FT. OF COVER OVER ALL WATER AND SEWER UTILITY PIPES.
3. CONTRACTOR SHALL VERIFY LOCATION AND SIZE OF ALL EXISTING UTILITIES.
4. REFER TO CITY OF WINTER GARDEN STANDARD DETAILS FOR ALL UTILITY DESIGN INFORMATION. ALL WATER & SANITARY SEWER UTILITY CONSTRUCTION TO BE PER CITY OF WINTER GARDEN REQUIREMENTS.
5. THE CONSTRUCTION OF ALL UTILITIES PROPOSED FOR CONNECTION TO THE UTILITY SYSTEM SHALL BE IN CONFORMANCE WITH THE CITY OF WINTER GARDEN STANDARDS & CONSTRUCTION SPECIFICATIONS.
6. ALL ONSITE UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED.
7. ALL COMPACTION SHALL BE 98% OF THE MODIFIED PROCTOR MAXIMUM DENSITY (AASHTO T-180).
8. THE DCDA SHALL BE THE FIRE SYSTEM POINT OF SERVICE. ALL WORK DOWNSTREAM SHALL BE PERFORMED BY A LICENSED FIRE SPRINKLER CONTRACTOR WITH A CLASS V LICENSE.
9. THE FIRE SPRINKLER SYSTEM SHALL BE A MONITORED ALARM SYSTEM. A LOCK BOX SHALL BE INSTALLED NO HIGHER THAN 7' FROM FINISH FLOOR AND SHALL BE MONITORED BY THE FIRE ALARM SYSTEM OR THE BURGLAR ALARM SYSTEM.

CLEAN-OUT NOTE

CLEAN-OUT TOPS SHALL MATCH SIDEWALK FINISHED GRADES OR DIRT GRADES AS APPLICABLE. ALL CLEAN-OUTS IN PAVED OR HARDWAY AREAS SHALL HAVE BRASS RING & PLUG TOPS. REFER TO DETAIL ON SHEET C-11 FOR CLEAN-OUTS IN TRAFFIC BEARING AREAS. ALL SANITARY CLEAN-OUT TOPS SHALL HAVE COVERS WHICH ARE IDENTIFIED AS "SANITARY".

NOTE:

SUB-GRADE CUT TO BE COMPACTED TO 98% MAX. DENSITY AS DETERMINED BY AASHTO T-180. CUT TO BE REPLACED WITH A TEN INCH 3000 PSI HIGH EARLY CONCRETE TO TOP OF EXISTING BASE. CUT AREA TO BE PLATED OR PROTECTED ON DAY OF POUR. EXISTING SURFACE TO BE SAW CUT TO AN AREA FIVE (5') FEET BEYOND THE BASE CUT.



GENERAL NOTES:

1. BASE REPLACEMENT SHALL BE ASPHALT TYPE S-12.5.
2. ASPHALTIC CONCRETE SURFACE MATERIAL SHALL BE REPLACED WITH THE SAME TYPE OF MATERIAL THAT EXISTED AT TIME OF REMOVAL OR AS APPROVED BY THE COUNTY ENGINEER.
3. ALL JOINT CUT SHALL BE MECHANICALLY SAW CUT.

PAVEMENT RESTORATION:

1. LONGITUDINAL CUTS MAY REQUIRE OVERLAY/RESURFACING OF THE COMPLETE WIDTH OF THE TRAVELED WAY.
2. CUTS AT INTERSECTIONS OF STREETS GENERALLY MAY REQUIRE A COMPLETE OVERLAY/RESURFACING TO THE END OF ALL RETURN RADII AND ALSO TO A POINT TEN (10') FEET BEYOND THE CUT, WHICHEVER IS GREATER.
3. ACTUAL REQUIREMENTS WILL BE AS STATED ON THE APPROVED PERMIT OR AS DIRECTED BY INSPECTION.

STANDARD ROADWAY OPENCUT CROSS SECTION DETAIL
FINAL RESTORATION - TYPICAL OF MAJOR OPEN CUTS

DATE	REVISIONS	BY	CHECKED
02/11/2020	1 PER CITY COMMENTS DATED 12/16/2019	JV	WRH
03/16/2020	2 PER CITY COMMENTS DATED 03/12/2020	WRH	WRH
04/17/2020	3 PER CITY COMMENTS DATED 04/15/2020	CB	WRH

504 BUILDING
CONSTRUCTION PLANS
504 W. PLANT STREET
WINTER GARDEN, FLORIDA

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Orlando, FL 32809
Phone: 407-895-0324
Fax: 407-895-0325
www.feg-inc.us

SITE UTILITY PLAN

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
WRH	HA	WRH	WRH

PROJECT NO. 18-148
SCALE 1" = 20'
DATE NOVEMBER 15, 2019
SHEET NO. C-9
SHEET 9 OF 16

FLORIDA ENGINEERING GROUP, INC.
CERTIFICATE OF AUTHORIZATION
No. 30040
STATE OF FLORIDA
WILLIAM R. HOOPER, P.E.
LICENSE NO. 55840

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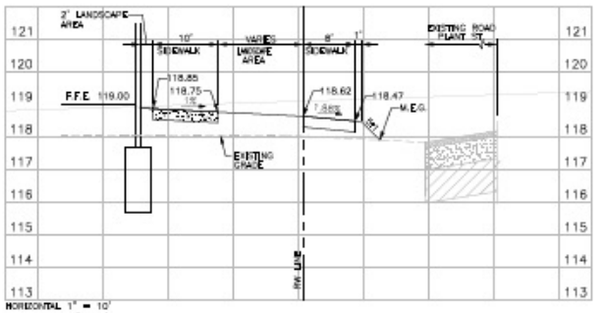
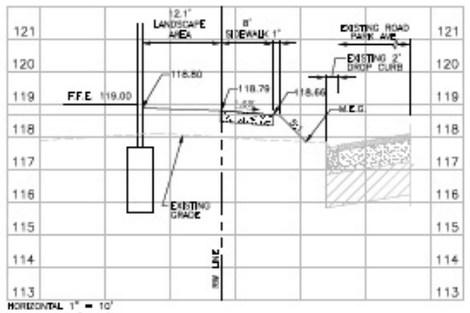
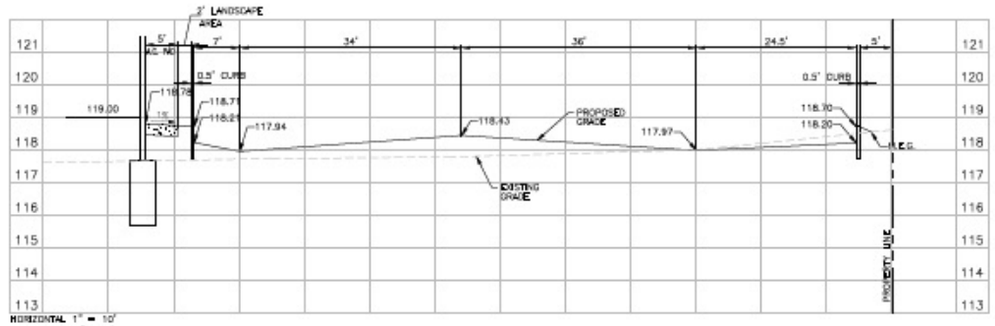
18-148_Plans.dwg



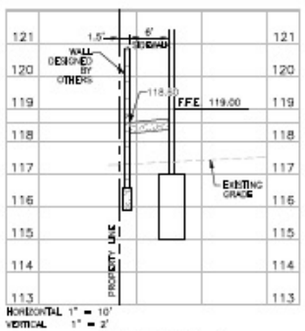
SECTION A–A



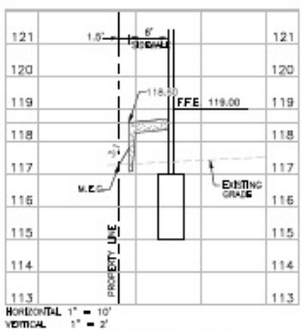
SECTION B–B



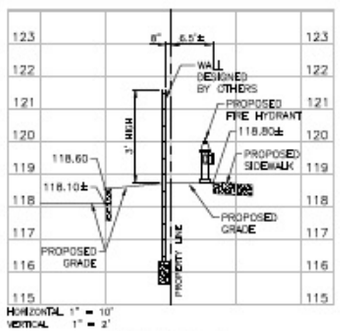
SECTION C–C



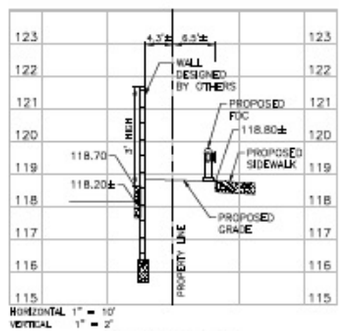
SECTION D–D



SECTION E–E



SECTION F–F



SECTION G–G

DATE	REVISIONS	BY	CHECKED
02/11/2020	1 PER CITY COMMENTS DATED 12/16/2019	JV	WRH
03/16/2020	2 PER CITY COMMENTS DATED 03/12/2020	WRH	WRH
04/17/2020	3 PER CITY COMMENTS DATED 04/15/2020	CB	WRH

504 BUILDING
CONSTRUCTION PLANS
504 W. PLANT STREET
WINTER GARDEN, FLORIDA

FEG FLORIDA ENGINEERING GROUP
Engineering the Future
5127 S. Orange Avenue, Suite 200
Orlando, FL 32809
Phone: 407-895-0324
Fax: 407-895-0325
www.feg-inc.us

SITE CROSS SECTIONS

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
WRH	HA	WRH	WRH

PROJECT NO. 18-148
SCALE H: 1" = 10', V: 1" = 2'
DATE NOVEMBER 15, 2019
SHEET NO. C-10
SHEET 10 OF 16

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (ENGINEER), P.E. ON (DATE) USING A DIGITAL SIGNATURE.
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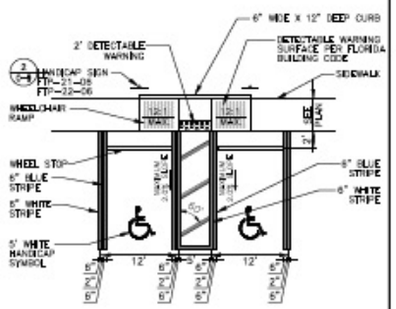
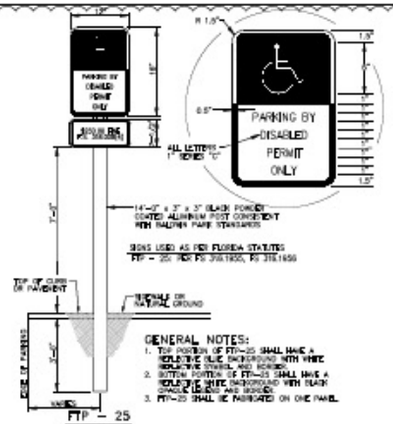
18-148_CrossSections.dwg



1 (C-11) HANDICAP PARKING DETAIL
SCALE 1" = 10'

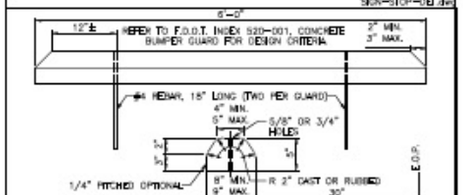


2 (C-11) HANDICAP SIGN DETAIL
SCALE 1" = 1'

30" HIGH INTENSITY REFLECTORIZED MATERIAL REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION

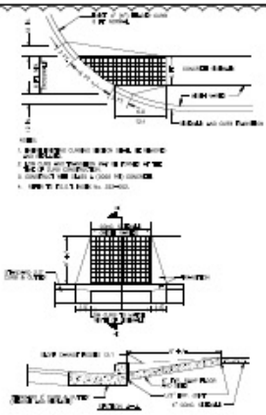
3 (C-3) R1-1 STOP SIGN DETAIL
NOT TO SCALE

SIGN-STOP-DET.dwg



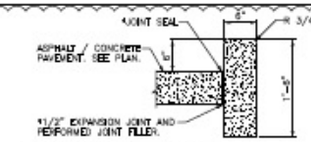
4 (C-11) WHEEL STOP DETAIL
SCALE 1" = 1'

WHL-STOP-DET.dwg



5 (C-11) WHEELCHAIR RAMP-STRAIGHT
N.T.S.

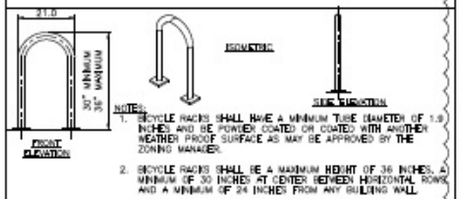
SW-HC-RAMP-FOOT-DET.dwg



1. PROVIDE 1/8" CONTROL JOINTS @ 10' O.C.
2. * PROVIDE EXPANSION JOINT WHERE CONCRETE CURB ABUTS CONCRETE PAVEMENT, CURB AND ANY FIXED STRUCTURE.

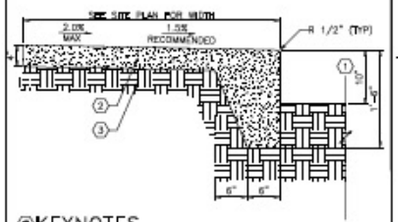
6 (C-11) HEAD CURB
SCALE 1" = 1'

CURB-HEAD-DET.dwg



NOTES:
1. BICYCLE RACKS SHALL HAVE A MINIMUM TUBE DIAMETER OF 1.9 INCHES AND BE POWDER COATED OR COATED WITH ANOTHER WEATHER PROOF SURFACE AS MAY BE APPROVED BY THE ZONING MANAGER.
2. BICYCLE RACKS SHALL BE A MAXIMUM HEIGHT OF 36 INCHES, A MINIMUM OF 30 INCHES AT CENTER BETWEEN HORIZONTAL ROWS, AND A MINIMUM OF 24 INCHES FROM ANY BUILDING WALL.

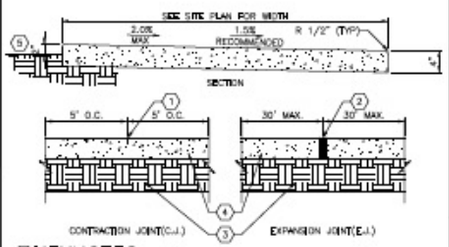
9 (C-11) INVERTED U BIKE RACK



KEYNOTES
1. MINIMUM HEIGHT OF CURB ABOVE GRADE SHALL BE 10". REFER TO GRADING PLANS FOR ELEVATIONS.
2. 3000 PSI CONCRETE WITH FIBER MESH, TYPICAL.
3. 6" COMPACTED SUB-GRADE TO @ LEAST 95% OF THE MODIFIED PROTOR MAXIMUM DRY DENSITY VALUE (ASTM D-1557, AASHTO T-180).
4. SIDEWALK SHALL BE PICTURE FRAME WITH BROOM FINISH.

8 (C-11) SIDEWALK WITH MONOLITHIC CURB
SCALE 1" = 1'

SW-MONO-CURB-CONC-PG.dwg



KEYNOTES
1. 1" DEEP 1/8"R TOOLED JOINT.
2. PREMOLDED EXPANSION JOINT FILLER STRIP & JOINT SEALER W/1/8"R TOOLED EDGES.
3. 6" COMPACTED SUBGRADE
4. 3000 P.S.I. CONC. W/FIBER MESH(TYP)
5. FINISHED GRADE (TYP.)
6. SIDEWALK SHALL BE PICTURE FRAME WITH BROOM FINISH.

16 (C-11) CONCRETE SIDEWALK
SCALE 1" = 1'

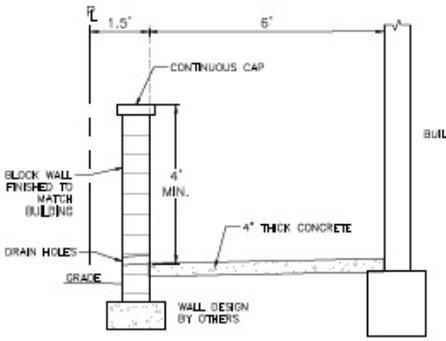
SW-CONC-PS-PLAN.DWG

KEYNOTES
1. 1-1/2" MINIMUM, TYPE SP-9.5 OR SP-12.5 ASPHALTIC CONCRETE WEARING SURFACE COMPACTED TO 95% OF LAB DENSITY (MINIMUM MARSHALL STABILITY OF 1,500 LBS.)
2. 6" CRUSHED CONCRETE BASE COURSE WITH MINIMUM LBR OF 150, COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557, AASHTO T-180) AND GRADATION TO MEET F.D.O.T. STANDARD SPECIFICATIONS OF ROAD & BRIDGE CONSTRUCTION.
OR 6" LIMEROCK BASE LBR 100, COMPACTED TO 98% MAXIMUM DENSITY.
3. 12" SUBGRADE TO A MINIMUM FBV OF 75 PSI. ENTIRE 12" DEPTH TO BE COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY VALUE (ASTM D-1557, AASHTO T-180).

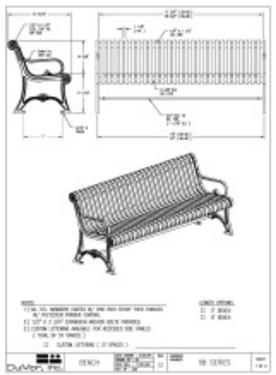
10 (C-6) ASPHALT PAVING SECTION (LIGHT)
NOT TO SCALE

KEYNOTES
1. 2" MINIMUM, TYPE SP-9.5 OR SP-12.5 ASPHALTIC CONCRETE WEARING SURFACE COMPACTED TO 95% OF LAB DENSITY (MINIMUM MARSHALL STABILITY OF 1,500 LBS.)
2. 8" CRUSHED CONCRETE BASE COURSE WITH MINIMUM LBR OF 150, COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557, AASHTO T-180) AND GRADATION TO MEET F.D.O.T. STANDARD SPECIFICATIONS OF ROAD & BRIDGE CONSTRUCTION.
OR 8" LIMEROCK BASE LBR 100, COMPACTED TO 98% MAXIMUM DENSITY.
3. 12" SUBGRADE TO A MINIMUM FBV OF 75 PSI. ENTIRE 12" DEPTH TO BE COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY VALUE (ASTM D-1557, AASHTO T-180).

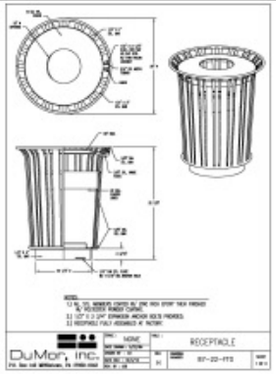
11 (C-11) ASPHALT PAVING SECTION (MEDIUM)
NOT TO SCALE



12 (C-11) TRASH CAN DETAIL
N.T.S.



14 (C-11) BENCH DETAIL
SCALE 1" = 1'



15 (C-11) RECEPTACLE

From the City of Winter Garden's
Manual of Standards and Specifications for Utilities Construction

12.4 AS BUILT REQUIREMENTS/RECORD DRAWINGS

12.4.1 RECEIVABLES

The DESIGN ENGINEER shall submit FOUR (4) certified sets (24"X36") of Record Drawings to the CITY prior to issuance of Certificate of Completion for the improvements. The DESIGN ENGINEER shall be responsible for recording information on the approved PLANS concurrently with construction progress. Record Drawings submitted to the CITY as part of the project acceptance shall comply with the following requirements:

- 1-CD or DVD* in a jewel case to include Two (2) electronic files of record drawings shall be provided to the City. One Drawing file shall be PDF format (Signed and Sealed) and the second shall be in AutoCAD format. *The disk label shall include the following:
  1. Engineering and/or Survey Company Name with prepared by statement
  2. Project Name, City of Winter Garden Project Number
  3. Date the disk is burned onto disk
  4. Designate "Record Drawing", "Preliminary Record Drawing" or "Other".
- Auto CAD Files must be submitted in DWG format minimally.
- Each file should be for one section of development and one layer included below. Multiple sections will not be accepted in one file.
- Provide outline of layers on the Auto CAD file.
- Auto CAD files shall be saved by using the ETRANSMIT command.
- Drawings shall clearly show all field changes of dimension and detail indicating changes made by field order or by change order. Everything in the ground shall be "as-built" and turned in to Engineering Dept. in a Signed & Sealed scanned PDF format.
- Drawings shall clearly show all details not on original contract drawings but constructed in the field. All equipment and piping relocation shall be clearly shown.
- Tie into section corners in the Florida State Plane Coordinate System East to insure proper orientation at each end of baseline. Section corner tie sheets can be obtained from the Orange County Surveyor's web page.
- Each sheet of the PLANS shall be signed, sealed and dated by the DESIGN ENGINEER as being "Record Drawings". Construction PLANS simply stamped "As-Built" or "Record Drawings" not bearing in above requirements will not be accepted, and will be returned to the DESIGN ENGINEER. The "Certificate of Completion" will not be issued until correct "Record Drawings" have been submitted.

12-1 Digital and CAD Requirements

12.4.2 DATUM

- As used in the design and shown on the Record Drawing, Horizontal datum shall be referenced to North American Datum of 1983, on the 1990 adjustment for Florida Transverse Mercator - East Zone. **The same datum used in the design and shall be shown as the datum used in the Record Drawing.** Vertical datum shall be referenced to the National Geodetic Vertical Datum of 1929 or to the North American Vertical Datum of 1988. THIS SHALL BE CLEARLY NOTED ON THE PLANS.
- Where there is no baseline, the baseline for water main should be the sanitary sewer. Where no sanitary sewer than the storm sewer. If no sanitary sewer or storm sewer, then the water main. Sanitary sewer should be the sanitary sewer, baseline for sanitary sewer should be the sewer pipe.
- All record data shall be digitally positioned on the design drawings prepared by the engineer of record. Said design drawings shall be complete and include both plan and profile views of the infrastructure.
- In all cases, State Plane Coordinates shall be used in the electronic datum, station, offset and elevations shall be shown on the plan.

12.4.3 GENERAL (FOR ALL LAYERS)

- All references to "proposed" and "plan" are to be removed from the Record Drawing.
- All lines, structures, and other items that are relocated will be removed and shown in the proper location (hand written notes and "Ving out will not be allowed).
- All record drawings will be signed and sealed by Certified Land Surveyor or Professional Engineer licensed to practice in the State of Florida. If certifying a Surveyor, P.E. will sign off Stating that the record drawings were checked by the engineer, verifying that they inspected the work.
- Lot numbers on the as-built shall match the lot numbers on the recorded plat.
- Clearly mark existing infrastructure which is to remain.
- Clearly mark existing infrastructure which has been abandoned, and how it was abandoned.
- Station, length, with and depth of floatable fill used.
- Record Drawings shall not be greater than 1" equals 50'.
- All Detail sheets shall be included with each record drawing.
- Location by station and elevation, width, depth and length of floatable fill used for all uses.
- Supply all surveys of the project and or property.

12.4.4 WATER, REUSE AND FORCE MAINS (EACH TO BE LOCATED ON A SEPARATE LAYER)

- Location of all meter boxes, valves, tees, bends, reducers, caps, plugs, fire hydrants, backflow preventers, water services, taps, air release valves, including top of pipe at APPC and centerline of water main on station and offset not to exceed 100'. All horizontal deflections shall be called out.
- Top of pipe elevations should be shown on all tees, valves, bends, reducers, caps, plugs, centerline of water main not to exceed 100 linear feet, and bottom flange of bend section of the fire hydrant. All vertical deflections shall be called out.
- Fastened joint pipe length (station to station).
- Manufacturer, model, usage, type and size of valves shall be shown on the plan.
- Numbered sample gorne locations needed for BOP submittal (to be removed from "final" as-built).
- Length of run between fittings, type of and size of pipe material.
- Call out variation of it exists in stationing of concentration compared to main line.

12.4.5 SANITARY SEWERS: (TO BE LOCATED ON A SEPARATE LAYER)

- Manhole rim elevation, invert elevations and flowline.
- Length of run between sanitary structures, type of and size of pipe material with calculated percentage of slope for the run of pipe.
- Location of sanitary service wyes with station and offset, together with the invert elevation, station and offset, pipe diameter and material (only at clean-out).
- Applicable rim station information should be filled out on the detail sheet for US stations.

12.4.6 WATER MAINS AND FORCEMAINS, AND CROSSINGS AND SEPARATIONS (PART OF EACH APPLICABLE LAYER) WITH SANITARY SEWER AND OR STORM SEWER

- Pipe types, sizes and material.
- Crossings: Top and bottom elevations of pipes crossing each other and the distance between the outside of the two lines.
- Separation: Distance between the outside of the two lines.

12.4.7 CONFLICT STRUCTURES/SANITARY/REUSE STRUCTURES (PART OF EACH APPLICABLE LAYER)

- Top and bottom of casing.
- All info asked for in storm or sanitary manhole descriptions with the addition of top of all pipes.

12.4.8 CASINGS (PART OF EACH APPLICABLE LAYER)

- Material and thickness.
- Top of and invert of casing.
- Length and station and offset of ends.
- If used, station and offset for vent, indicating tap location, and fittings.

12.4.9 STORM SEWERS AND UNDERDRAIN (TO BE LOCATED ON A SEPARATE LAYER)

- Manhole and catch basin rim elevation, outfalls and top of headwall invert elevations and direction, weir elevations, bottom of manholes and catch basins (sumps).
- Length of run between storm structures, type of and size of pipe material with calculated percentage of slope for the run of pipe.
- Location of service connections (without manholes) together with the invert elevation, pipe diameter and material.
- Dry retention, wet retention, dry detention, wet detention areas.
- Estimation trenches, Station at beginning and end of system, width, depth.
- Top of and top of slope on berm elevation designed to stop flooding.
- Underdrain, Station at beginning and end of the system, type of and size of pipe with clean-out locations.

12.4.10 STREET LIGHTS (TO BE LOCATED ON A SEPARATE LAYER)

- Manufacturer, model, and height of poles shall be shown on the record drawings.
- Manufacturer, model, and wattage and voltage of lights shall be shown on the record drawings.
- Pull boxes, station and offset.
- Length of conduit runs between boxes and poles, type of, and size of pipe material. Shown as, backfill the ground not as a writing schematic, with amount, by color, type of backfill of writing material.
- Service connection, type (Duke Energy owned, City metered) station and offset.

12.4.11 IRRIGATION (TO BE LOCATED ON A SEPARATE LAYER)

- Backflow preventer, control stand location. Control valve, zone, station and offset.
- Main line piping size, material, lengths, depth.
- Heads, Type (1/4, half, 3/4, full) zone, station and offset.
- Control Stand, station and offset.

12.4.12 LANDSCAPING (TO BE LOCATED ON A SEPARATE LAYER)

- Tree type, caliper, and height.
- Tree grate, size, and model.
- Station, elevation, length, width, and depth of Structural Soil used.
- Top of and top of slope on berm elevation for landscaping.

12.4.13 PRIVATE CONSTRUCTION IMPACTS TO RIGHT-OF-WAY (TO BE LOCATED ON A SEPARATE LAYER)

- Private utility or revocable easements in the City ROWs or on City property must be shown on the plan. Any improvements within the easement need to be shown and called out as private. The recording information should be on the as-built.
- Privately owned lighting, irrigation and landscaping in the City right-of-way needs to be called out as private and identified.
- All aerial and underground holder easements (or ROW).

12.4.14 FLOWABLE FILL (PART OF EACH APPLICABLE LAYER)

- Limits of flowable fill shall be noted on the as-built (Location, Length, Width, & Depth).

12-4 Digital and CAD Requirements

12-5 Digital and CAD Requirements

CITY OF WINTER GARDEN AS BUILT REQUIREMENTS

DATE	REVISIONS	BY	CHECKED
02/11/2020	1 PER CITY COMMENTS DATED 12/16/2019	JV	WRH
03/16/2020	2 PER CITY COMMENTS DATED 03/12/2020	WRH	WRH
04/17/2020	3 PER CITY COMMENTS DATED 04/15/2020	CB	WRH

504 BUILDING
CONSTRUCTION PLANS
504 W. PLANT STREET
WINTER GARDEN, FLORIDA

FEG FLORIDA ENGINEERING GROUP
Engineering the Future
5127 S. Orange Avenue, Suite 200
Orlando, FL 32809
Phone: 407-895-0324
Fax: 407-895-0325
www.feg-inc.us

SITE CONSTRUCTION DETAILS

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
WRH	HA	WRH	WRH

PROJECT NO. 18-148
SCALE AS-SHOWN
DATE NOVEMBER 15, 2019
SHEET NO. C-11
SHEET 11 OF 16

FLORIDA ENGINEERING GROUP, INC.
CERTIFICATE NO. 27-00021855
LICENSE No. 35040 STATE OF FLORIDA
WILLIAM R. HOOVER, P.E.
LICENSED STATE OF FLORIDA

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY [SIGNER(S)], P.E. ON [DATE] USING A DIGITAL SIGNATURE.

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18-148_Details.dwg

CITY OF WINTER GARDEN – GENERAL NOTES:

1. ALL UTILITY SYSTEMS AND IMPROVEMENTS CONSTRUCTED IN THE CITY OF WINTER GARDEN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MANUAL OF STANDARDS AND SPECIFICATIONS FOR UTILITY CONSTRUCTION FOR THE CITY OF WINTER GARDEN, TO BE REFERRED TO AS MSS/CWG. THE LATEST EDITION AT THE TIME PERMITS ARE APPROVED SHALL BE EFFECTIVE FOR THE DURATION OF THE SUBJECT WORK OR PROJECT DEVELOPMENT.

2. THE CITY OF WINTER GARDEN GENERAL NOTES AND DETAILS ARE PROVIDED FOR THE CONVENIENCE OF FIELD PERSONNEL. THEY DO NOT INCLUDE ALL REQUIREMENTS OF THE MSS/CWG. THE CONTRACTOR SHALL REFER TO THE FULL TEXT OF THE MSS/CWG FOR FURTHER DETAIL AND CLARITY WHEN NEEDED.

3. ANY REQUEST FOR VARIANCE OR NONCOMPLIANCE FROM THE MSS/CWG NOTED ABOVE MUST BE APPROVED BY THE CITY ENGINEER OR UTILITIES DIRECTOR.

4. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN CLOSE PROXIMITY TO WATER, WASTEWATER, RECLAIMED WATER AND OTHER UTILITY SYSTEMS. THE CONTRACTOR SHALL COORDINATE UTILITY LOCATIONS WITH RESPECTIVE UTILITY OWNERS AND/OR CALL,"SUNSHINE ONE CALL", 1–800–432–4770 A MINIMUM OF 72 HOURS IN ADVANCE.

5. CONTRACTOR'S DAMAGE OF WINTER GARDEN UTILITY SYSTEM: THE CONTRACTOR SHALL IMMEDIATELY NOTIFY AND REPORT DAMAGE TO THE CITY OF WINTER GARDEN UTILITY DIVISION, (NO MASSAGE) PHONE # 407–656–4100.

6. IMMEDIATELY REPAIR OF DAMAGED UTILITY SYSTEM: THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY DAMAGE TO THE CITY OF WINTER GARDEN UTILITY SYSTEM AS REQUIRED BY THE UTILITY OWNER AT CONTRACTORS COST. IN CASE OF UNRESPONSIVE ACTION BY THE CONTRACTOR, THE CITY RESERVES RIGHT TO REPAIR DAMAGE. THE CONTRACTOR SHALL REIMBURSE THE CITY OF WINTER GARDEN OF ALL REPAIR COST.

7. ADVANCE NOTIFICATION OF CONSTRUCTION: THE CONTRACTOR SHALL NOTIFY CITY OF WINTER GARDEN, UTILITY DIVISION, PH.# 407–656–4100, AT LEAST SEVEN (7) CALENDAR DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY.

8. ADVANCE NOTIFICATION OF UTILITY CONNECTION: THE CONTRACTOR SHALL NOTIFY THE CITY OF WINTER GARDEN AT LEAST SEVEN CALENDAR DAYS IN ADVANCE TO SCHEDULE CONNECTIONS TO UTILITY SYSTEM.

9. UTILITY VALVE OPERATION: ONLY CITY OF WINTER GARDEN UTILITY PERSONNEL SHALL OPERATE VALVES AND FIRE HYDRANTS. THE CONTRACTOR, WHEN NEEDED, SHALL CALL THE CITY TO REQUEST VALVE OPERATIONS AT LEAST TWO (2) DAYS IN ADVANCE OF CONSTRUCTION WORK.

10. OPERATIONS INVOLVING WATER OR WASTEWATER FACILITIES INCLUDING PUMPING STATIONS: THE CONTRACTOR SHALL COORDINATE AT LEAST TWO (2) WEEKS IN ADVANCE, ANY CONSTRUCTION OPERATION THAT MAY REQUIRE THE DISCONTINUATION OF SERVICE OR OPERATION OF A FACILITY. THE CITY WILL PROVIDE PERSONNEL TO OPERATE THE CITY FACILITIES.

11. REQUIRED TESTING BY CONTRACTOR: THE CONTRACTOR SHALL NOTIFY THE CITY OF WINTER GARDEN AT LEAST TWO (2) DAYS PRIOR TO SAMPLING ACTIVITIES FOR PURPOSE OF TESTING AS REQUIRED BY THE CITY. THE CONTRACTOR SHALL NOT TEST OR SAMPLE WITHOUT OBSERVATION BY CITY INSPECTION PERSONNEL.

12. TEMPORARY OR CONSTRUCTION WATER SERVICE CONNECTIONS PROVIDED BY FIRE HYDRANT CONNECTION: THE CITY WILL PROVIDE METER ON FIRE HYDRANT. THE CONTRACTOR SHALL PROVIDE NON–REFUNDABLE ACCOUNT INITIATION FEE, A REFUNDABLE SECURITY DEPOSIT FOR THE METER APPARATUS AND PAY ALL COST FOR WATER USED.

13. ALL AS BUILT MEASUREMENTS & ELEVATIONS ARE TO BE MADE BY A LICENSED LAND SURVEYOR.

CoWG WATER SYSTEM NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL A CITY APPROVED BACKFLOW DEVICE ASSEMBLY AT EACH CONNECTION POINT TO THE CITY WATER SYSTEM.
2. REPAIRS TO NEW WATER LINES, TO OBTAIN SPECIFIED PRESSURE TEST, WILL BE ALLOWED ONLY UP TO A NUMBER EQUAL TO 10% OF THE TOTAL NUMBER OF JOINT CONNECTIONS.
3. THE CONTRACTOR SHALL HYDROSTATICALLY TEST ALL WATER MAINS AND SERVICE LATERALS AT 150 PSI FOR A TWO HOUR PERIOD. TESTING MUST BE OBSERVED BY A CITY INSPECTOR.
4. THE CONTRACTOR SHALL INSTALL WARNING TAPE OVER ALL NEW WATER MAINS. WARNING TAPE SHALL BE AS FOLLOWS: NON–DETECTABLE, SIZE 2" WITH "WATER LINE BELOW", MUST BE PLACED 8" TO 12" BELOW FINISHED GRADE ON ALL PVC WATER MAINS, LATERALS AND HEADER TEES, NUMBER 10 GAUGE TRACER WIRE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH DUCT TAPE, AT LEAST FIVE TIMES PER JOINT. THE TRACER WIRE SHALL ALSO BE ATTACHED TO ALL PVC LATERALS AND ATTACHED TO THE OUTSIDE OF EACH VALVE BOX SO THAT A PIPE LOCATOR CAN BE CONNECTED TO IT.
5. THE CONTRACTOR SHALL INSTALL WATER MAINS PER MoSS/CoWG SPECIFICATIONS. SOLVENT CEMENTED JOINTS AND THRUST BLOCKS ON PIPING SYSTEMS SHALL NOT BE ALLOWED.
6. THE CONTRACTOR SHALL INSTALL ALL WATER MAINS TO A MINIMUM DEPTH OF 36 INCHES AND A MAXIMUM DEPTH OF 42 INCHES BELOW FINAL GRADE.
7. THE CONTRACTOR SHALL INSTALL ALL SERVICE LATERALS A UNIFORM DISTANCE APART. LOCATED ON PROPERTY LOT LINE AT 90° FROM THE WATER MAIN. SERVICE LATERALS SHALL BE SEPARATELY CONNECTED TO THE WATER MAIN, NOT SPLICED TOGETHER.
8. THE CONTRACTOR SHALL CUT A "W" INTO CONCRETE CURB, LOCATED INSIDE OF A PAINTED BLUE SQUARE, LOCATED DIRECTLY IN FRONT OF EACH SERVICE LATERAL.
9. THE CONTRACTOR SHALL INSTALL CURB STOP, IN METER BOX, CURB STOP SHALL BE SET 8" BELOW FINISHED GRADE.
10. THE CONTRACTOR SHALL PROVIDE AND INSTALL IN–LINE VALVES ON WATER MAINS AT 1,000 FOOT MAXIMUM SPACING BETWEEN VALVES. VALVES SHALL BE LOCATED ON ALL TEE'S AND CROSSES. WATER MAINS SHALL BE PLACED UNDER SIDEWALKS WHERE POSSIBLE.
11. ALL WATERMAINS SHALL BE CLEANED BY PIGGING THE LINE WITH A FOAM PIG (MINIMUM OF 2 TIMES). A FULL BORE FLUSH MAY BE REQUIRED AFTER PIGGING TO ENSURE THE PIPE IS CLEAN AND READY FOR SERVICE. THE CONTRACTOR SHALL COORDINATE LINE PIGGING AND FULL BORE FLUSH WITH THE CITY INSPECTOR.
12. THE CONTRACTOR SHALL DEMONSTRATE THAT LOCATION WIRE INSTALLED OVER ALL WATER MAINS IS IN WORKING CONDITION AT TIME OF ACCEPTANCE BY THE CITY.
13. ALL NEW SUBDIVISION CONSTRUCTION SHALL INSTALL DOUBLE POTABLE WATER SERVICES AT THE PROPERTY LINES.

CoWG – WASTEWATER SYSTEM NOTES:

1. SANITARY SEWER MAINS AND SERVICES SHALL BE PVC SDR–26 (MINIMUM). FITTINGS SHALL BE SDR–26. DUCTILE IRON IS NOT APPROVED FOR SANITARY SEWERS.
2. ALL SERVICES SHALL BE 6" (MINIMUM) DIAMETER AND TERMINATE AT THE PROPERTY LINE WITH 6" CLEAN OUT. (36" TO 48" DEEP AT LOT LINE)
3. MAGNETIC TAPE MUST BE PLACED 2' ABOVE THE TOP OF PIPE FOR THE ENTIRE LENGTH OF ALL MAINS AND SERVICES.
4. ALL SANITARY MANHOLES SHALL BE PAINTED INSIDE AND OUT WITH "BITUMASTIC SUPER SERVICE BLACK", BY KOPPERS OR APPROVED EQUAL. MANHOLES RECIEVING FLOW FROM FORCE MAINS SHALL BE LINED WITH FIBERGLASS OR HDPE AT THE PRECASTERS FACILITY.
5. ALL PIPE CONNECTIONS TO PRE–CAST MANHOLES SHALL BE MADE USING A FLEXIBLE EPDM RUBBER BOOT AND STAINLESS STEEL STRAP OR CAST IN BOOT BY A–LOK, Z–LOK OR EQUAL.
6. CONNECTIONS MADE TO EXISTING MANHOLES SHALL BE CORE BORED WITH A MINIMUM 6" BORE AND CONNECTION SEALED WITH FLEXIBLE BOOT AND STAINLESS STEEL CLAMP.
7. DEAD END MANHOLES SHALL HAVE A MINIMUM OF 5 FEET OF COVER FROM FINISHED GRADE TO OUTLET PIPE INVERT.
8. ALL PRECAST SEWER MANHOLES SHALL HAVE A 4 FOOT MINIMUM HIGH BARREL. CONE SECTIONS SHALL BE 3 FOOT MAXIMUM. CONCRETE DONUTS FOR EXTENDING ARE ACCEPTABLE TO RAISE MANHOLES UP TO 1 FOOT MAXIMUM.
9. THE CONTRACTOR SHALL PROVIDE AND INSTALL BALLCENTRIC PLUG VALVES IN FORCE MAINS AT 1000 FOOT MAXIMUM SPACING BETWEEN VALVES. VALVES SHALL BE LOCATED AT ALL TEES AND CROSSES.
10. THE CONTRACTOR SHALL CUT A "S" INTO CONCRETE CURB LOCATED INSIDE OF A PAINTED GREEN SQUARE BOX, IN FRONT OF EACH SERVICE LOCATION.
11. THE CONTRACTOR SHALL PROVIDE TV INSPECTION OF ALL SANITARY SEWER MAINS AFTER SYSTEM IS COMPLETED, THOROUGHLY CLEANED, DRAINED AND FULLY VISIBLE. TV INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS. FAULTY INSPECTION DUE TO POOR CONDITIONS WILL REQUIRE REINSPECTION BY CONTRACTOR.
12. THE CONTRACTOR SHALL PROVIDE A (WARRANTY) TV INSPECTION AT THE TWO YEAR IN SERVICE MILESTONE FOR EACH SYSTEM.
13. THE CONTRACTOR SHALL PROVIDE SANITARY SEWER TESTING, EXFILTRATION OR AIR, AS REQUIRED BY DESIGN ENGINEER AND SUBMIT CERTIFIED RESULTS TO THE CITY ENGINEER.
14. GRAVITY SEWERS DEPTHS SHALL NOT EXCEED 18 FEET.
15. THE DESIGN ENGINEER SHALL PROVIDE A MINIMUM OF ONE FOOT OF FREEBOARD BETWEEN THE LOWEST FINISHED FLOOR ELEVATION AND THE TOP ELEVATION OF THE WET WELL.
16. ALL PENETRATIONS INTO CONCRETE STRUCTURES SHALL BE PRE–CAST OR CORE–DRILLED.
17. WARRANTY – ALL MATERIALS & EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR SHALL BE WARRANTED FOR A PERIOD OF TWO YEARS FROM THE DATE OF FINAL ACCEPTANCE THEREOF AGAINST DEFECTIVE MATERIALS, DESIGN, AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE CITY OF FAILURE OF ANY PART OF THE WARRANTED EQUIPMENT OR MATERIALS DURING THE WARRANTY PERIOD, THE AFFECTED PART, PARTS, OR MATERIALS SHALL BE PROMPLY REPLACED BY THE CONTRACTOR WITH NEW PARTS OR MATERIALS AT NO EXPENSE TO THE CITY. IN THE EVENT THE CONTRACTOR FAILS TO MAKE THE NECESSARY REPLACEMENT OR REPAIRS IMMEDIATELY AFTER NOTIFICATION, THE CITY MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE CONTRACTOR.

CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION OF SEWER LINES

GENERAL:

1. ALL NEW SANITARY SEWER LINES, PRIVATE OR CITY MAINTAINED, IN THE CITY OF WINTER GARDEN'S SERVICE AREA SHALL BE INSPECTED BY CLOSED CIRCUIT TV INSPECTION BY THE CONTRACTOR WITH A CITY INSPECTOR PRESENT PRIOR TO BEING ACCEPTED BY THE CITY.

REQUIREMENTS PRIOR TO INSPECTION RELEASE:

1. ALL ELEMENTS OF THE SEWER SYSTEM MUST BE INSTALLED AND BE COMPLETELY FINISHED. INCLUDING MAIN SEWER LINES, LATERALS, CLEAN OUTS, AND MANHOLES PRIOR TO CCTV INSPECTION.
2. ALL SEWER LINES SHALL BE COMPLETELY CLEANED OF ALL DEBRIS, SAND, WATER, ETC. PRIOR TO THE CCTV INSPECTION. ANY OBJECT OR MATTER THAT PREVENTS CCTV INSPECTION FROM VIEWING CONDITION OF PIPELINE IS CONSIDERED AN OBSTRUCTION REQUIRING ADDITIONAL CLEANING. WHEN CCTV VIEW IS OBSTRUCTED, INSPECTION SHALL BE TERMINATED. THE CONTRACTOR SHALL CLEAN THE SEWER SYSTEM COMPLETELY AND RESCHEDULE CCTV RE–INSPECTION WITH THE CITY.
3. A HYDRAULIC SEWER CLEANER SHALL NOT BE USED DURING THE CCTV INSPECTION. IF LINES ARE FOUND TO BE OBSCURED BY WATER OR DEBRIS DURING THE CCTV INSPECTION, THE INSPECTION SHALL BE TERMINATED AND RESCHEDULED TO A TIME WHEN SEWER CLEANING IS COMPLETE.
4. WHEN A SEWER LINE IS UNDER A PAVED AREA, THE AREA SHALL BE COMPACTED AND PRIMED BEFORE THE SYSTEM SHALL BE RELEASED FOR TV INSPECTION.

TELEVISION EQUIPMENT MINIMUM REQUIREMENTS:

1. THE CLOSED CIRCUIT TV CAMERA SHALL PRODUCE A CLEAR COLOR PICTURE ON THE MONITOR AND ON THE DVD RECORDING. THE CAMERA SHALL BE ABLE TO SHOW DETAIL TO THE POINT THAT ALL JOINTS AND ANY DEFECTS MAY BE READILY SEEN AT THE TIME OF THE INSPECTION. THE CAMERA SHALL STOP AND PAN AT EACH JOINT FOR COMPLETE 360 DEGREE INSPECTION.
2. REFER TO APPENDIX B OF THE REFERENCED STANDARDS FOR SPECIFICATION OF CLOSED CIRCUIT TELEVISION INSPECTION EQUIPMENT.
3. THE VIDEO RECORDER SHALL PRODUCE A NO NOISE STILL PICTURE, AND PROVIDE BOTH AUDIO AND VIDEO DURING THE INSPECTION.
4. A MEASURING DEVICE, APPROVED BY THE CITY, TO CHECK THE GRADE OF THE PIPE DURING THE INSPECTION, SHALL BE REQUIRED. GAUGE DEPTH, 0" TO 2" MIN. WITH 1/2" MARKINGS.
5. AUDIO OF THE INSPECTION SHALL BE SIMULTANEOUSLY RECORDED ON DVD DISC. THE AUDIO SHALL CONSIST OF ORDINARY DESCRIPTION AND COMMENTARY. A TAPE WILL BE GIVEN TO THE INSPECTOR ON SITE AT THE END OF THE DAY.

PROCEDURE FOR TELEVISING

1. THE CITY'S ENGINEERING INSPECTION DIVISION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS NOTICE PRIOR TO THE TIME PLANNED FOR THE TV INSPECTION TO COMMENCE. A DEFINITE TIME AND DATE WILL BE AGREED UPON BY THE CONTRACTOR AND INSPECTOR AT THAT TIME.
2. NO INSPECTION SHALL COMMENCE WITHOUT THE PRESENCE OF THE INSPECTOR, EXCEPT WHEN PRIOR ARRANGEMENTS HAVE BEEN MADE BETWEEN THE CONTRACTOR, INSPECTOR, AND THE CITY. TV INSPECTION SHALL BE PERFORMED BY THE CONTRACTOR AT THE EXPENSE OF THE CONTRACTOR.
3. ALL CCTV INSPECTIONS SHALL COMMENCE UP STREAM OF THE SYSTEM TO PREVENT FOREIGN SUBSTANCES FROM ENTERING A SECTION PREVIOUSLY TELEVISED. THE CAMERA SHALL BE STARTED FROM THE DOWNSTREAM MANHOLE AND PROCEED UPSTREAM IN DIRECTION OPPOSING THE NORMAL FLOW IN THE LINE. THIS PROCEDURE WILL ALLOW FOR THE VIEWING OF THE SERVICE LATERALS.
4. BEFORE THE CAMERA IS PLACED IN THE SEWER LINE, WATER WITH YELLOW OR ORANGE DYE SHALL BE PUT INTO THE UPSTREAM MANHOLE OF THE SECTION BEING TELEVISED. CAMERA WILL HAVE A GAUGE SHOWING 1/2" MARKS FROM 1/2" TO 2–1/2". THIS WILL ENABLE THE CAMERA TO DETECT ANY CHANGES IN GRADE THAT MAY BE PRESENT IN THE SYSTEM.
5. THE CCTV AND DVD RECORDER SHALL BE TURNED ON BEFORE THE CAMERA IS PLACED IN THE MANHOLE FOR INSPECTION AND SHALL NOT BE TURNED OFF UNTIL THE CAMERA IS REMOVED FROM THE MANHOLE. THE CAMERA SHALL BE MOVED THROUGH THE LINE UNDER THE CONTROL OF THE CCTV CAMERA OPERATOR. THE CAMERA SHALL BE DRAWN THROUGH THE LINE AT A RATE NOT TO EXCEED THIRTY (30) FEET PER MINUTE AND SHALL STOP AT ALL SERVICE CONNECTIONS AND PIPE JOINTS IN THE PIPELINE.
6. A DVD RECORDING SHALL BE MADE OF THE ENTIRE SYSTEM BEING TELEVISED. THIS SHALL BECOME THE PROPERTY OF THE CITY UPON COMPLETION OF THE TV INSPECTION (NOT A COPY). THE TAPE(S) SHALL BE LABELED IN SUCH A MANNER THAT STATES THE PROJECT NAME, DATE OF INSPECTION AND LINE SECTION ACCORDING TO CONSTRUCTION PLANS CONTAINED ON EACH TAPE. A WRITTEN REPORT SHALL ACCOMPANY THE DVD DISC.

CoWG RECLAIMED WATER SYSTEM GENERAL NOTES:

1. ALL PRIVATE RECLAIMED WATER SYSTEMS SHALL HAVE A CITY APPROVED BACKFLOW DEVICE ASSEMBLY AT EACH CONNECTION POINT TO THE CITY WATER SYSTEM.
2. REPAIRS TO NEW WATER LINES, TO OBTAIN SPECIFIED PRESSURE TEST, WILL BE ALLOWED ONLY UP TO A NUMBER EQUAL TO 10% OF THE TOTAL NUMBER OF JOINT CONNECTIONS.
3. ALL MAINS AND SERVICE LATERALS SHALL BE HYDROSTATICALLY TESTED AT 150 PSI FOR A TWO HOUR PERIOD.
4. WARNING TAPE, NON–DETECTABLE, SIZE 2" WITH "REUSE WATER LINE BELOW", MUST BE PLACED 8" TO 12" BELOW FINISHED GRADE ON ALL PVC WATER MAINS, LATERALS AND HEADER TEES, NUMBER 10 GAUGE TRACER WIRE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH DUCT TAPE, AT LEAST FIVE TIMES PER JOINT. THE TRACER WIRE SHALL ALSO BE ATTACHED TO ALL PVC LATERALS AND ATTACHED TO THE OUTSIDE OF EACH VALVE BOX SO THAT A PIPE LOCATOR CAN BE CONNECTED TO IT. THE CONTRACTOR SHALL DEMONSTRATE THE LOCATE WIRE TO BE IN WORKING CONDITION AT PROJECT COMPLETION.
5. THE CONTRACTOR SHALL INSTALL RECLAIMED WATER MAINS PER MoSS/CoWG. SOLVENT CEMENTED JOINTS AND THRUST BLOCKS SHALL NOT BE ALLOWED.
6. REUSE WATER MAIN SHALL BE BURIED TO A MINIMUM DEPTH OF 36" AND A MAXIMUM DEPTH 42" BELOW FINAL GRADE.
7. SERVICE LATERALS MUST BE LOCATED A UNIFORM DISTANCE APART AND ALIGNED TO PROPERTY LOT LINE AT 90° FROM THE RECLAIMED WATERMAIN.
8. CUSTOMER SERVICE LATERALS SHALL NOT BE SPLICED TOGETHER BETWEEN THE WATER MAIN AND CURB STOP.
9. THE CONTRACTOR SHALL CUT CURB A "RW" INTO CONCRETE CURB LOCATED INSIDE OF A PAINTED SQUARE (PURPLE), DIRECTLY IN FRONT OF EACH SERVICE LATERAL AND VALVE.
10. THE CONTRACTOR SHALL SET DEPTH OF CURB STOP, IN METER BOX, 8" BELOW FINISHED GRADE.
11. THE CONTRACTOR SHALL INSTALL VALVE(S) IN MAIN, NO MORE THAN 1,000 FEET APART IN BETWEEN TEES AND CROSSES. VALVES SHALL BE PROVIDED AT EACH TEE OR CROSS LOCATED IN MAIN LINE.
12. RECLAIMED WATER MAINS MAY BE LOCATED UNDER SIDEWALKS. RECLAIMED MAINS LOCATED UNDER PAVEMENT SHOULD BE MINIMIZED.
13. ALL WATERMAINS SHALL BE CLEANED BY PIGGING THE LINE WITH A FOAM PIG (MINIMUM OF 2 TIMES). A FULL BORE FLUSH MAY BE REQUIRED AFTER PIGGING TO ENSURE THE PIPE IS CLEAN AND READY FOR SERVICE. THE CONTRACTOR SHALL COORDINATE LINE PIGGING AND FULL BORE FLUSH WITH THE CITY INSPECTOR.
14. RECLAIMED WATERMAIN MAINS SHALL BE 8 INCH DIAMETER MINIMUM, 4 INCH IS ALLOWED ON DEAD END RUNS SERVING LESS THAN 20 HOMES. THE DESIGN ENGINEER SHALL SUBMIT HYDRAULIC CALCULATIONS THAT DEMONSTRATE THE PROPOSED SYSTEM WILL PROVIDE REQUIRED FLOWS AND MAINTAIN SYSTEM ABOVE MINIMUM PRESSURE. PEAK IRRIGATION RATE SHALL BE SIX(6) TIMES GREATER THAN THE AVERAGE IRRIGATION RATE OF FLOW.
15. RECLAIMED WATER SYSTEM COMPONENTS INCLUDING PIPE, VALVE BOX TOPS AND METER BOX TOPS SHALL BE RECLAIMED PURPLE IN COLOR.

CoWG – THRUST RESTRAINT TABLE

RESTRAINED FORCE MAIN PIPE TABLE

MINIMUM LENGTH(FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

	PIPE SIZE								
	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	19	25	30	34	44	52	60	70	80
45° BEND	8	10	12	14	18	21	25	30	34
22–1/2° BEND	4	5	6	7	9	10	12	14	16
11–1/4° BEND	2	3	4	5	6	7	8	9	10
PLUG, DEAD END OR BRANCH OF TEE	40	52	63	72	93	111	130	155	178
VALVE	20	25	32	36	47	56	78	116	89

RESTRAINED WATER AND RECLAIMED PIPE TABLE

MINIMUM LENGTH(FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

	PIPE SIZE								
	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	29	37	44	51	65	77	89	105	120
45° BEND	12	15	18	21	27	32	37	44	50
22–1/2° BEND	6	7	9	10	13	15	18	21	24
11–1/4° BEND	3	4	5	6	7	8	9	10	12
PLUG, DEAD END OR BRANCH OF TEE	59	77	93	108	138	166	194	231	265
VALVE	59	77	93	108	138	166	194	231	265

CoWG THRUST RESTRAINT NOTES:

1. THE TABLES INDICATE MINIMUM LENGTHS OF RESTRAINED JOINTS ON EACH SIDE OF FITTINGS AND CHANGES IN DIRECTION. WHERE PRACTICAL, FULL LENGTHS OF RESTRAINED PIPE SHALL BE LAID TO ACHIEVE THE REQUIRED MINIMUM RESTRAINT.
2. WHERE COMBINATIONS OF FITTINGS ARE USED, THE PIPING BETWEEN THE FITTINGS SHALL BE RESTRAINED. THE MINIMUM RESTRAINED LENGTH OF PIPE REQUIRED UPSTREAM AND DOWNSTREAM OF THE COMBINATION OF FITTINGS SHALL BE DETERMINED ON THE BASIS OF ONE EQUIVALENT FITTING (I.E., 2–45 DEGREE BENDS WILL BE CONSIDERED AS THOUGH A 90° BEND WERE LOCATED MIDWAY BETWEEN THE TWO 45° BENDS).
3. FOR PIPE THAT IS ENCASED IN POLYETHYLENE, RESTRAINED JOINTS MINIMUM LENGTHS SHALL BE INCREASED BY 50 PERCENT.
4. FOR FITTINGS OTHER THAN THOSE PRESENTED IN THE ABOVE TABLES, RESTRAINED JOINT LENGTHS SHALL BE DETERMINED IN ACCORDANCE WITH "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION. RESTRAINED JOINT LENGTHS FOR A GIVEN PRESSURE RANGE SHALL BE BASED ON THE MAXIMUM PRESSURE FOR THE TEST PRESSURE RANGE, SM (SAND SILT) SOIL, 3–FEET DEPTH, LAYING CONDITION NO. 3 AND FACTOR OF SAFETY OF 1.5.
5. IN–LINE VALVES: PROVIDE MECHANICAL RESTRAINT ON EACH SIDE OF THE VALVE.
6. ALL RECLAIMED WATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF 150 PSI. ALL WASTEWATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF 100 PSI.

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

PROPOSED UTILITY	POTABLE WATER		RECLAIMED WATER✳		SANITARY SEWER (GRAVITY)		SANITARY SEWER (FORCEMAIN)		STORM WATER		ACCEPTABLE VARIANCES
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	
POTABLE WATER	–	–	3'	12"	6'	12"	6'	12"	3'	6" A 12" B	SEE GENERAL NOTES: NO. 4 & 5
RECLAIMED WATER✳	3'	12"	–	–	3'	6" A 12" B	3'	12"	–	–	
SANITARY SEWER (GRAVITY)	6'	12"	3'	6" A 12" B	–	–	–	–	–	–	
SANITARY SEWER (FORCEMAIN)	6'	12"	3'	12"	–	–	–	–	–	–	

GENERAL NOTES:

1. THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.). THESE SEPARATION REQUIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.

2. ✳ FOR THE PURPOSE OF THIS TABLE, RECLAIMED WATER SHALL MEAN UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 162–610, CHAPTER III. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.

3. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATER CLEARANCE SHALL BE USED.

   A – DENOTES POTABLE WATER ABOVE RECLAIMED WATER, SANITARY SEWER OR STORM WATER; OR RECLAIMED WATER ABOVE SANITARY SEWER.

   B – DENOTES POTABLE WATER BELOW RECLAIMED WATER, SANITARY SEWER OR STORM WATER; OR RECLAIMED WATER BELOW SANITARY SEWER.

4. UTILITY SEPARATION – VERTICAL CLEARANCE MITIGATION

   A. WHERE WATER AND GRAVITY SANITARY SEWER MAINS CROSS WITH LESS THAN REQUIRED VERTICAL CLEARANCE OR THE SEWER MAIN IS ABOVE THE WATER MAIN, THE SANITARY SEWER WILL BE 20 FEET OF EITHER:

      1. DUCTILE IRON PIPE, CENTERED ON THE POINT OF CROSSING, OR;

      2. CONCRETE ENCASED VITRIFIED CLAY, OR;

      3. PVC PIPE UPGRADED TO WATER MAIN STANDARDS AND PRESSURE TESTED.

   B. WHERE WATER MAINS AND STORM SEWER PIPES CROSS WITH LESS THAN REQUIRED VERTICAL CLEARANCE, THE WATER MAIN SHALL BE 20 FEET OF DUCTILE IRON PIPE CENTERED ON THE POINT OF CROSSING.

   C. SEPARATION REQUIREMENTS BETWEEN FORCE MAINS AND POTABLE WATER MAINS MUST BE MAINTAINED UNLESS APPROVED IN ADVANCE BY THE DEPARTMENT.

5. UTILITY SEPARATION – HORIZONTAL SEPARATION MITIGATION

   A. WHEN A WATER MAIN PARALLELS A GRAVITY SANITARY SEWER MAIN, A SEPARATION (MEASURED EDGE TO EDGE) OF AT LEAST SIX FEET SHOULD BE MAINTAINED. WHERE THIS SEPARATION IS NOT MET, ONE OF THE FOLLOWING MUST OCCUR.

      1. THE WATER MAIN IS LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER, OR:

      2. IF BOTH SANITARY SEWER AND POTABLE WATER MAINS ARE PROPOSED AND THE ABOVE (1.) IS NOT MET, THE SANITARY SEWER PIPES SHALL BE UPGRADED TO THE EQUIVALENT PIPE MATERIAL AS THE WATER MAIN AND PRESSURE TESTED.

      3. IF THE SANITARY SEWER IS EXISTING AND THE POTABLE WATER MAIN IS PROPOSED, THE WATER MAIN SHALL, AT A MINIMUM, BE UPGRADED TO DUCTILE IRON PIPE, CONSTRUCTED IN SEPARATE TRENCHES, LAID AT A HIGHER ELEVATION THAN THE SANITARY SEWER, AND UTILIZE STAGGERED JOINTS.

   B. SEPARATION REQUIREMENTS BETWEEN FORCE MAINS AND POTABLE WATER MAINS MUST BE MAINTAINED UNLESS APPROVED IN ADVANCE BY THE DEPARTMENT.

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

F.E.G. PROJECT NO.
18-148
SHEET NO.
C-12
SHEET 12 OF 16

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

NO.	ITEM	DATE
1	Revised General Notes	4/4/14
2	Revised Water & Reuse Notes	4/4/14

REVISIONS

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
For Utilities Construction

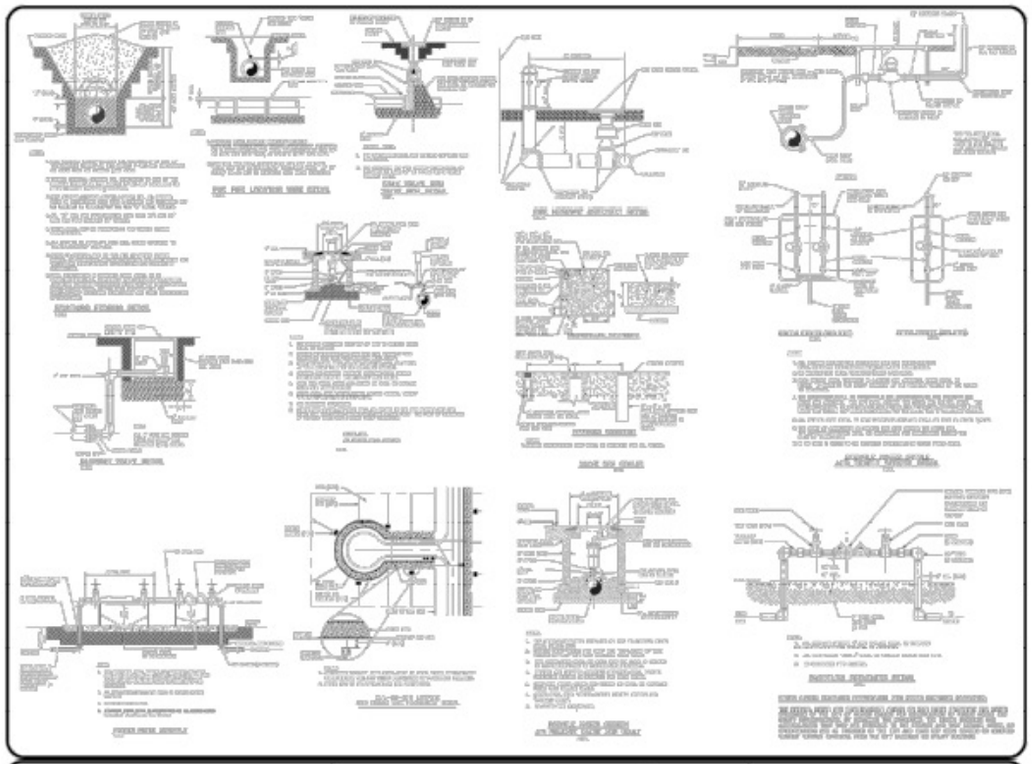
WINTER GARDEN

STANDARD DETAILS FOR UTILITIES SYSTEMS

DATE
JANUARY 2008

SHEET
1

1 OF 11

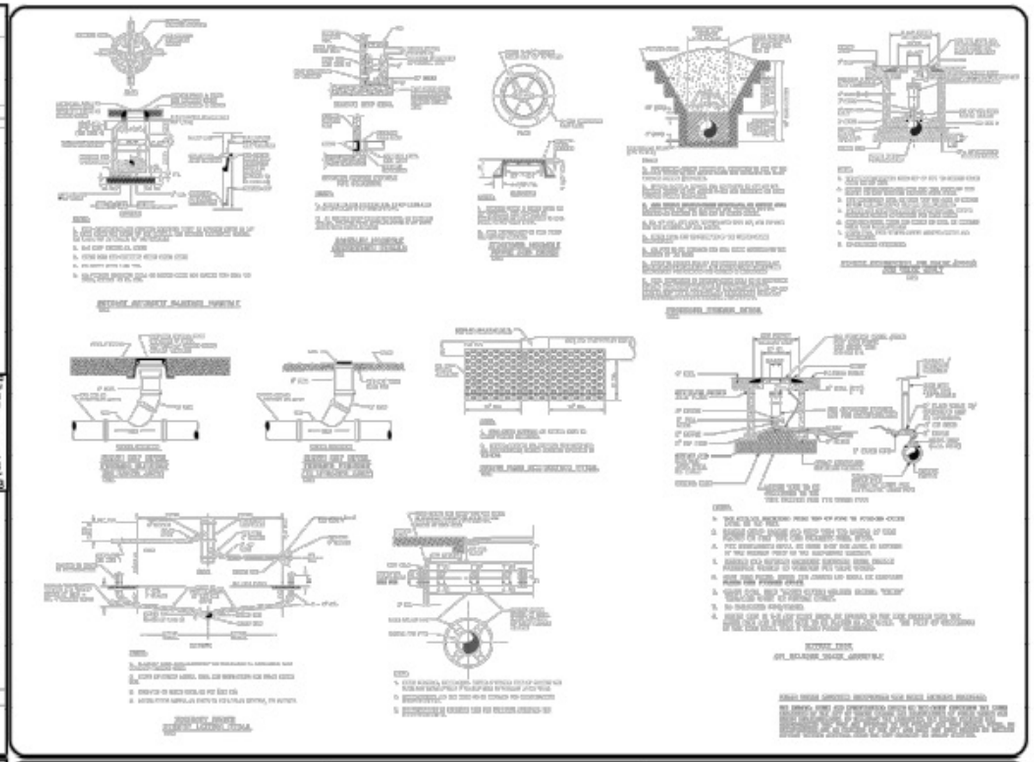


CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
For Utilities Construction

WINTER GARDEN

STANDARD DETAILS
FOR
POTABLE WATER SYSTEMS

2

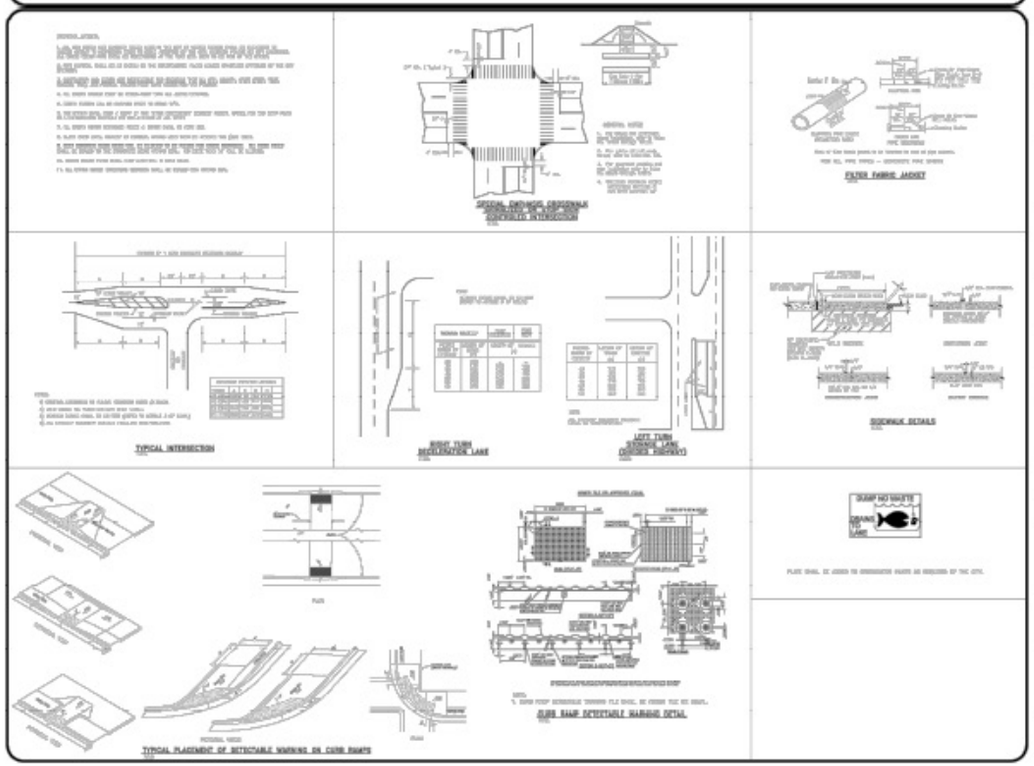


CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
For Utilities Construction

WINTER GARDEN

STANDARD DETAILS
FOR
WASTEWATER SYSTEMS

3

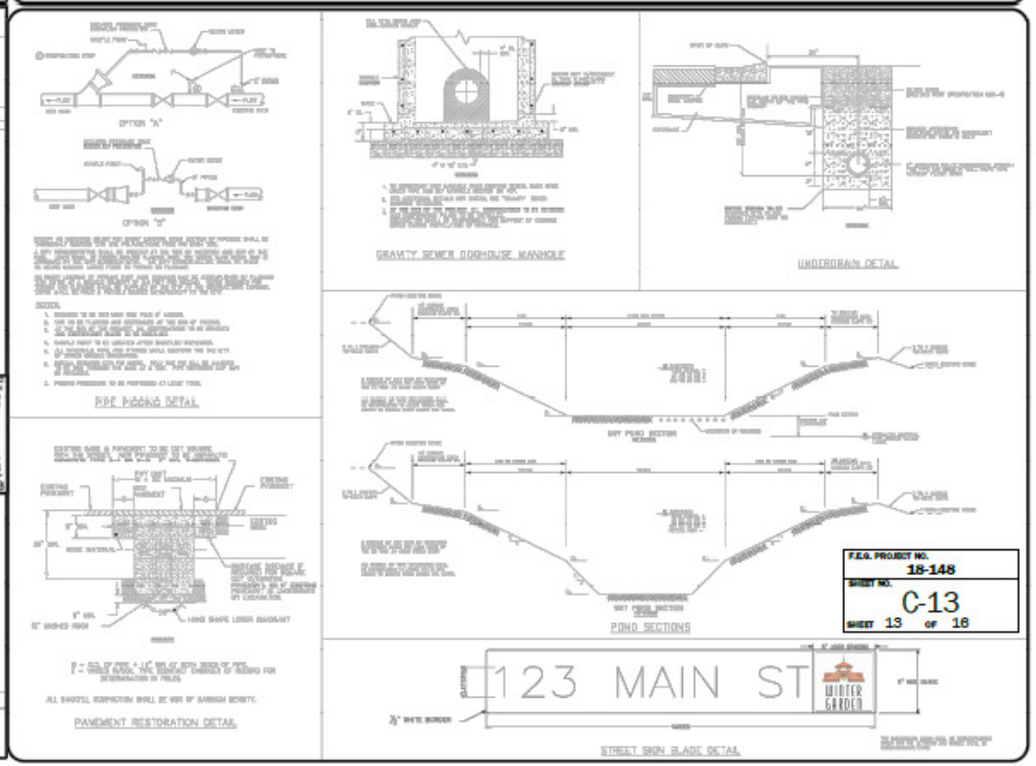


CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
For Roadway & Drainage Construction

WINTER GARDEN

GENERAL NOTES
FOR
PUBLIC SERVICES

9



CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS

WINTER GARDEN

STANDARD DETAILS
FOR
MISCELLANEOUS DETAILS

11

F.E.G. PROJECT NO.
18-148
SHEET NO.
C-13
SHEET 13 OF 16

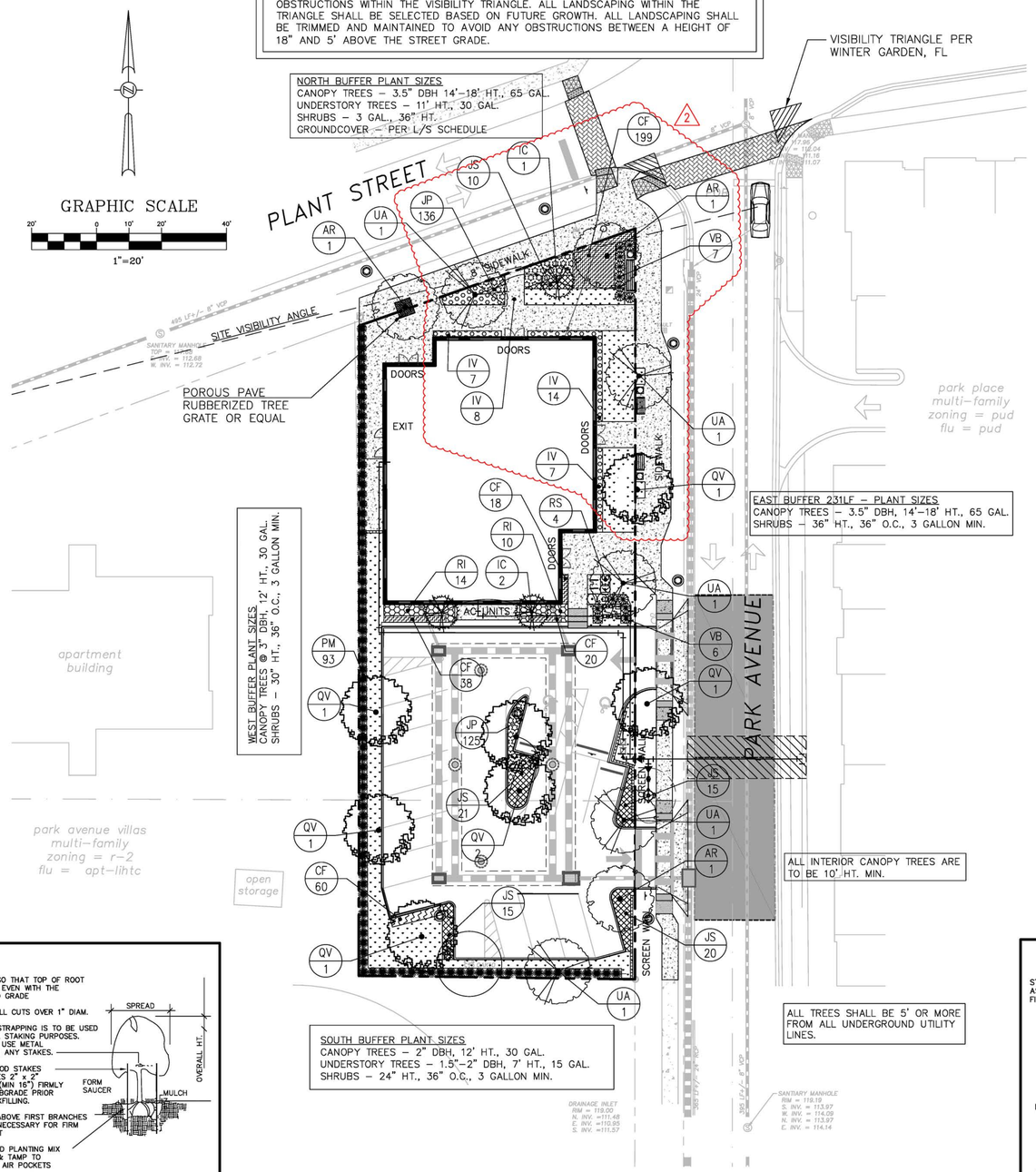
LANDSCAPE NOTES

1. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANT LIST AND THE ACTUAL NUMBER OF PLANTS SHOWN ON THE PLAN, THE PLAN SHALL CONTROL. THE LANDSCAPE CONTRACTOR SHALL NOTIFY FEG OF ANY DISCREPANCY PRIOR TO ISSUANCE OF BIDS.
2. ALL NEW PLANTINGS MUST COMPLY WITH THE SIZES AND QUANTITIES SHOWN IN THE PLANT LIST. ALL PLANTS MUST COMPLY WITH THE APPLICABLE JURISDICTIONAL CODE. PER THE FLORIDA GUIDES AND STANDARDS MANUAL ALL NEW TREES SHALL HAVE THEIR CALIPER MEASURED AT 6" ABOVE GRADE FOR ALL TREES UP TO AND INCLUDING 4" CALIPER TREES AND 12" ABOVE GRADE FOR ALL LARGER TREES.
3. ALL PLANTING BEDS AND TREE SAUCERS TO HAVE ORGANIC MULCH TO A DEPTH OF 2" MINIMUM. AREAS WITH SLOPES GREATER THAN 4:1 SHALL HAVE MULCH RINGS OR TERRACED IN LONGER BEDS DESIGNED TO CAPTURE WATER AND REDUCE EROSION. TOPS OF MULCH RINGS OR TERRACES ARE TO BE LEVEL WITH RESPECT TO GRADE AND MULCH ON THE HIGH SIDE OF THE PLANTS.
4. A TWELVE MONTH WARRANTY IS TO BE PROVIDED FOR ALL NEW PLANT MATERIALS STARTING FROM THE DATE OF FINAL CERTIFICATE OF OCCUPANCY OR ACCEPTANCE BY THE OWNER. WARRANTY CAN EXCLUDE PLANTS LOST DUE TO ACTS OF GOD OR VANDALISM. REPLACEMENT OF DEAD OR UNHEALTHY PLANT MATERIALS SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR WITHIN 30 DAYS OF NOTIFICATION IN CONFORMANCE WITH THE APPROVED LANDSCAPE PLAN.
5. ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS SHALL BE FULLY SODDED ASIDE FROM DEFINED PLANTING BEDS. SOD SHALL BE FREE OF WEEDS AND NOXIOUS PESTS OR DISEASES. DISTURBED AREAS OUTSIDE OF PROJECT LIMITS SHALL BE SEEDED AND MULCHED UNLESS STEEPER THAN 5:1. PROVIDE SOD ON SLOPES STEEPER THAN 5:1. ALL DRY PONDS CAN BE SEEDED AND MULCHED ON THE BOTTOMS AND SIDE SLOPES. WET PONDS ARE TO BE SODDED DOWN TO THE DESIGNED HIGH WATER LINE.
6. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OCCURRING ON SITE OR ADJACENT AREAS, INCLUDING, BUT NOT LIMITED TO BUILDINGS, PAVING, UTILITIES, ETC., WHICH IS CAUSED BY PREPARING OR INSTALLING ANY AND ALL PLANT MATERIAL.
7. GRADE, DRESS AND SOD OR SEED AREAS THAT HAVE BEEN DISTURBED AS SOON AS POSSIBLE TO PREVENT EROSION.
8. ALL PLANT MATERIAL SHALL BE SET BACK FROM THE BACK OF CURBS OR PAVEMENT. SET TREES 3 FEET BACK FROM CURBS.
9. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF THERE ARE ANY INVASIVE OR EXOTIC TREES LOCATED ON THE SITE AND IS REQUIRED TO REMOVE ALL INVASIVE SPECIES PER THE LOCAL JURISDICTION'S INVASIVE SPECIES LIST LOCATED IN THEIR CODE OF ORDINANCES. GENERAL CONTRACTOR TO CONFIRM WITH THE LANDSCAPE INSTALLER THAT NO INVASIVE OR EXOTIC PLANT MATERIALS EXIST ON SITE. INFORM LANDSCAPE ARCHITECT IF ANY OF THESE PLANTS EXIST.
10. ANY PRUNING OF EXISTING TREES OR VEGETATION TO REMAIN AS A LANDSCAPE ELEMENT MUST BE CONDUCTED BY A CERTIFIED ARBORIST HOLDING A CURRENT CREDENTIAL WITH THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA). ALL PRUNING SHALL CONFORMING TO THE ANSI A300 STANDARDS, PART 1; PRUNING. THE SPECIFICATIONS FOR PRUNING SHALL BE DETERMINED BY THE CERTIFIED ARBORIST OR A PERSON QUALIFIED TO CREATE PRUNING SPECIFICATIONS ACCORDING TO THE ANSI STANDARD. THE GREATEST EMPHASIS IN PRUNING SHALL BE THE SAFETY, HEALTH AND WELFARE OF THE TRAVELING OR PEDESTRIAN TRAFFIC ESPECIALLY AS IT RELATES TO PEOPLE OR PROPERTY WITHIN THE FAILURE FOOTPRINT OF THE TREE OR VEGETATION TO BE PRUNED. WHEN THERE ARE EXISTING TREES OR VEGETATION TO REMAIN, CONTRACTOR SHALL EMPLOY A CERTIFIED TREE SURGEON TO SELECTIVELY PRUNE AND TRIM ALL EXISTING PLANT MATERIALS TO PROVIDE A BALANCED APPEARANCE WHILE ALSO ELIMINATING ANY INTERFERENCE WITH THE NEW CONSTRUCTION OR SAFETY, VISIBILITY CORRIDORS.
11. IRRIGATION (100% COVERAGE) SHALL BE PROVIDED IN ALL NEWLY PROPOSED PLANTING AREAS IN ACCORDANCE WITH THE JURISDICTIONAL LAND DEVELOPMENT CODE. SEE SHEET L-2, IRRIGATION PLAN FOR SPECIFICS.

TREE MITIGATION CALCULATIONS
TOTAL DESIRABLE TREES REMOVED: (3) 10" PALMS, (1) 12" HICKORY, (1) 18" PINE
TOTAL INCHES REMOVED: 60"
TOTAL TREES TO REMAIN: 66"
EXCESS TOTAL INCHES: 6"
TOTAL NEW TREE INCHES FAR EXCEED THE DEFICIT; THEREFORE; OKAY

VUA LANDSCAPE CALCULATIONS
VUA AREA: 6,942 SF
REQUIRED LANDSCAPE = 10% X 6,942 = 694 SF
PROVIDED: 869 SF (12.5%)

FDOT SITE VISIBILITY TRIANGLE NOTE:
ALL SITE IMPROVEMENTS AND LANDSCAPING ARE TO COMPLY WITH FDOT INDEX 546 (5 OF 6). THERE SHALL BE NO SIGNS, BUILDINGS, FENCES, WALLS OR OTHER OBSTRUCTIONS WITHIN THE VISIBILITY TRIANGLE. ALL LANDSCAPING WITHIN THE TRIANGLE SHALL BE SELECTED BASED ON FUTURE GROWTH. ALL LANDSCAPING SHALL BE TRIMMED AND MAINTAINED TO AVOID ANY OBSTRUCTIONS BETWEEN A HEIGHT OF 18" AND 5' ABOVE THE STREET GRADE.



	LANDSCAPE SCHEDULE					
	TREES					
SYMBOL	ABR.	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	QUANTITY	REMARKS
	QV	QUERCUS VIRIGINIA	LIVE OAK	SEE PLAN FOR SIZES	6	SINGLE STRAIGHT TRUNK
	UA	ULMUS ALATA	WINGED ELM	SEE PLAN FOR SIZES	5	SINGLE STRAIGHT TRUNK
	AR	ACER RUBRUM	RED MAPLE	SEE PLAN FOR SIZES	3	SPECIMEN
	IC	ILEX CORNUTA BURFORDII	BURFORD HOLLY	SEE PLAN FOR SIZES	3	
	RS	RHODODENDRON SP.	DUC DE ROHAN AZALEA	3 GAL. 24" HT. 36" O.C.	4	FULL
	VB	VIBURNUM SUSPENSUM	SANDANKWA VIBURNUM	SEE PLAN FOR SIZES	20	2
	PM	PODOCARPUS MACROPHYLLUS	PODOCARPUS	3 GAL. 30" HT. 30" O.C.	90	FULL
	RI	RAPHIOLEPIS INDICA ALBA	INDIAN HAWTHORN	3 GAL. 12"X15" 30" O.C.	24	
	IV	ILEX VOMITORIA	SCHELLINGS DWARF HOLLY	3 GAL. 12"x15" 30" O.C.	22	2
	CF	CYRTOMIUM FALCATUM	HOLLY FERN	1 GAL. 12" O.C.	331	
	JS	JUNIPERUS CONFERTA	DWARF SHORE JUNIPER	1 GAL. 24" O.C.	81	FULL
	JP	JASMINUM PARKERI	DWARF JASMINE	1 GAL. 12" O.C.	224	2
	SOD	BAHIA HYBRID	QTY. BY CONTRACTOR			

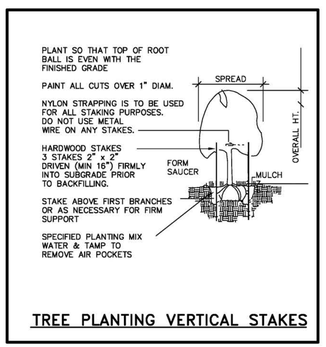
BUFFER CALCULATIONS
EAST BUFFER (ROW FRONTAGE) (231 LF) – BUILDING (82 LF) – DRIVEWAYS 40 LF) = 109 LF:
REQUIRED: 1 CANOPY TREE/50'+ 36" HEDGE 3'O.C.+ GROUNDCOVER ALONG 50%
PROVIDED: 6 CANOPY TREES + HEDGE AND G/C (50%);
THEREFORE; OKAY

NORTH BUFFER (ROW FRONTAGE) (90 LF) – BUILDING (65 LF) = 25 LF:
REQUIRED: 1 CANOPY TREE/50'+ 3 U/S TREES/100 LF + 36" HEDGE 3'O.C.+ GROUNDCOVER ALONG 50%
PROVIDED: 2 CANOPY TREE + 1 U/S TREE + HEDGE AND G/C (50%);
THEREFORE; OKAY

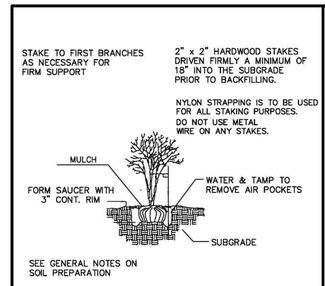
WEST BUFFER (200 LF):
REQUIRED: 1 CANOPY TREE/75' + 30" HEDGE
PROVIDED: 3 CANOPY TREES + 30" HEDGE; THEREFORE; OKAY

SOUTH BUFFER (85 LF):
REQUIRED: 1 CANOPY TREE/50' + 36" HEDGE
PROVIDED: 1 EXISTING TREES + 1 CANOPY TREE + 36" HEDGE; THEREFORE; OKAY

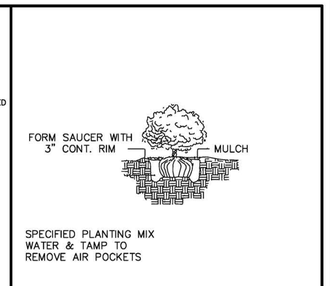
BUILDING PERIMETER 295 LF
REQUIRED: 1 TREE/50 LF = 6 TREES + 30% SHRUBS/GROUNDCOVER
PROVIDED: 6 TREES + 30% COVERAGE; THERFORE; OK



TREE PLANTING VERTICAL STAKES



MULTI–TRUNK TREE STAKES



SHRUB PLANTING

DATE	REVISIONS	BY	CHECKED
02/11/2020	1 PER CITY COMMENTS DATED 12/16/2019	JV	WHR
03/16/2020	2 PER CITY COMMENTS DATED 03/12/2020	WRH	WHR

504 BUILDING
CONSTRUCTION PLANS
504 W. PLANT STREET
WINTER GARDEN, FLORIDA

FEG FLORIDA ENGINEERING GROUP
Engineering the Future
5127 S. Orange Avenue, Suite 200
Orlando, FL 32809
Phone: 407-895-0324
Fax: 407-895-0325
www.feg-inc.us

SITE LANDSCAPE PLAN AND DETAILS

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
RTA	SMH	RTA	WRH

PROJECT NO. 18-148
SCALE 1' = 20'
DATE NOVEMBER 15, 2019
SHEET NO. L-1
SHEET 14 OF 15

FLORIDA ENGINEERING GROUP, INC.
CERTIFICATE OF AUTHORIZATION #27595
REGISTERED LANDSCAPE ARCHITECT
STATE OF FLORIDA
LICENSE NO. 1325

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (ENGINEER). P.E. ON (DATE) USING A DIGITAL SIGNATURE.

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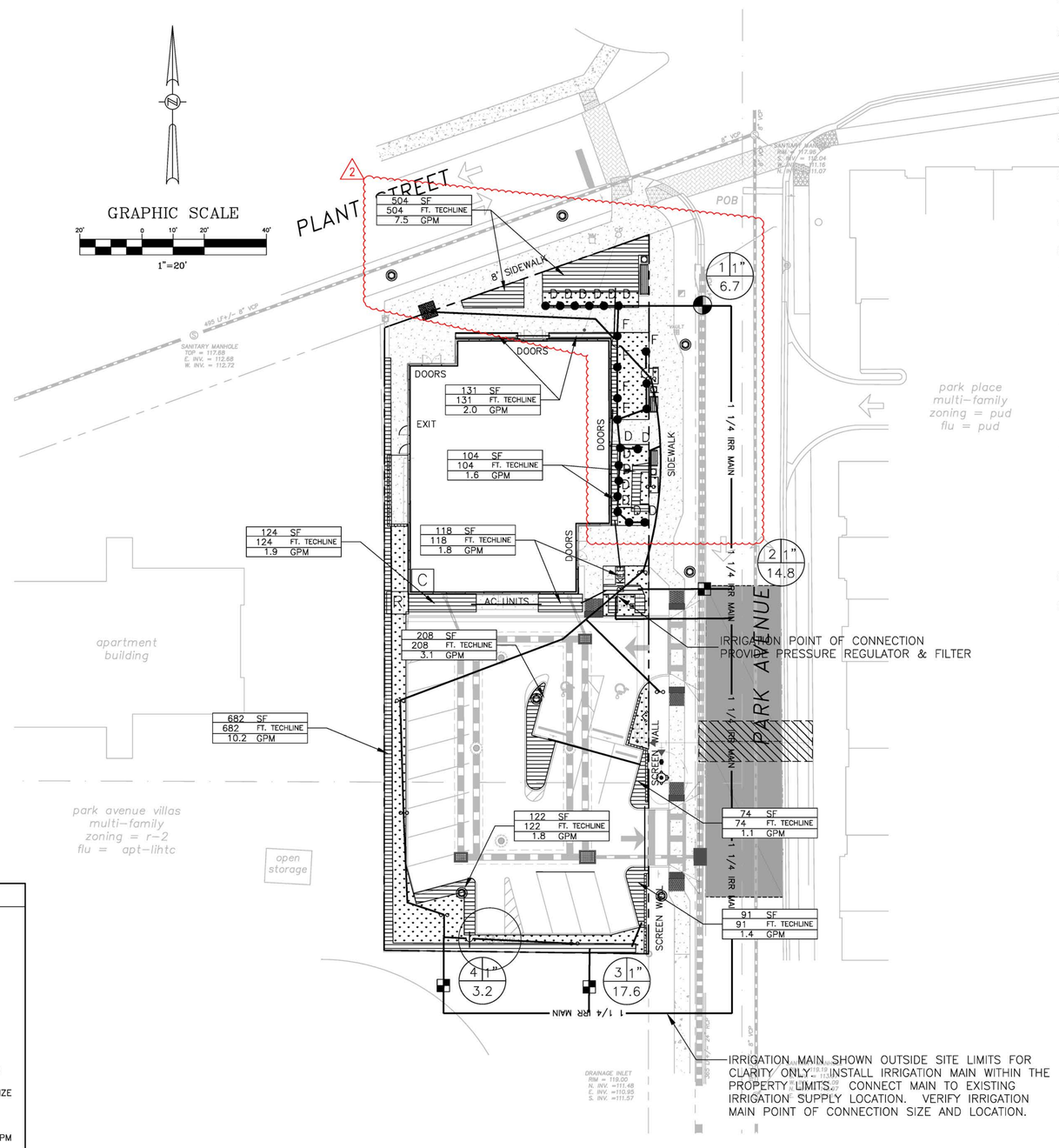
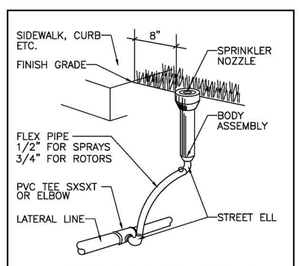
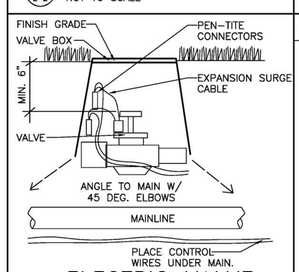




SPRINKLER HEAD DETAIL
X / L-2 NOT TO SCALE



ELECTRIC VALVE DETAIL
1 / L-2 NOT TO SCALE

IRRIGATION LEGEND

- DRIP EMITTER – 2 PER TREE
- DRIPLINE ZONE VALVE
- 12" POP-UP SPRAY HEAD
- DRIPLINE ZONE 12" ON CENTER
- C — CONTROLLER
- R — RAIN SENSOR
- PVC SLEEVE–2 SIZES LARGER
- VALVE ZONE NO. — X; VALVE SIZE — 1"; VALVE GPM — XX.X

IRRIGATION NOTES:

1. SPRINKLER LINES & HEAD LOCATIONS SHOWN ARE ESSENTIALLY DIAGRAMMATIC. THE IRRIGATION SYSTEM SHALL BE CONSTRUCTED WITHIN THE PROPERTY BOUNDARIES.
2. CONTRACTOR SHALL INSTALL A COMPLETE IRRIGATION SYSTEM WHICH PROVIDES 100% COVERAGE OF ALL SHRUB & GROUNDCOVER AREAS. PROVIDE ALL PIPING, VALVES, VALVE BOXES, SPRINKLER HEADS & WIRING AS REQUIRED FOR A COMPLETE & OPERATIONAL IRRIGATION SYSTEM.
3. ALL IRRIGATION SLEEVES ARE TO HAVE BEEN INSTALLED BY GENERAL CONTRACTOR AT TIME OF UTILITY CONSTRUCTION.
4. ALL IRRIGATION PIPING WHICH IS LOCATED UNDER PAVEMENT SHALL BE ENCASED IN A SLEEVE TWO SIZES LARGER THAN THE IRRIGATION LINE.
5. CONTRACTOR TO PROVIDE A DOUBLE DETECTOR CHECK VALVE AT THE POINT OF WATER SERVICE IN ADDITION TO AN IRRIGATION METER. COORDINATE LOCATION WITH OTHER UTILITIES & GENERAL CONTRACTOR.
6. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY & ALL PERMITS REQUIRED FOR THE INSTALLATION OR CONSTRUCTION OF THE WORK INCLUDED IN THIS CONTRACT.
7. COORDINATE LOCATION OF IRRIGATION CONTROLLER WITH OWNER & GENERAL CONTRACTOR.
8. PROVIDE A RAIN SWITCH EQUIVALENT TO TORO RAIN SWITCH #850–74. MOUNT ON BUILDING IN AN INCONSPICUOUS LOCATION EXPOSED TO NORMAL RAINFALL & PER MFRS. SUGGESTIONS.
9. OBTAIN INSPECTION & APPROVAL OF ALL BURIED PIPING PRIOR TO BACKFILLING.
10. SPRINKLER HEAD MODEL NUMBERS SHOWN REFLECT TORO SPRINKLERS. ANY SPRINKLERS OF EQUAL QUALITY MAY BE USED WITH THE APPROVAL OF THE OWNER.
11. ADJUST DESIGN OF SYSTEM WHERE NECESSARY TO AVOID CONFLICTS IN THE FIELD WITH LANDSCAPING OR UTILITY LINES.
12. IRRIGATION CONTROLLER IS HUNTER ET IRRIGATION CONTROLLER WITH SOIL SENSORS. MODEL # ACC–99D DECODER CONTROLLER AND MODEL # SOLAR–SYNC–WSS–SEN SOIL SENSORS. SENSOR MUST BE PLACED IN FULL SUN PER MANUFACTURER SPECIFICATIONS.
13. PROGRAM IRRIGATION CONTROLLER TO PROVIDE 0.5 INCH OF WATER PER WEEK. SCHEDULE HEADS TO OPERATE DURING MORNING HOURS.
14. ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER. ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 12" OF COVER.
15. ALL POP–UP ROTORS & SPRAYS SHALL BE INSTALLED USING AN 18" PVC FLEX PIPE CONNECTION. DO NOT USE FUNNY PIPE.
16. THROTTLE ALL VALVES ON SHRUB LINES AS REQUIRED TO PREVENT FOGGING.
17. ALL CONTROL WIRE SPLICES SHALL BE MADE IN VALVE BOXES USING SNAP–TITE CONNECTORS & SEALANT.
18. THE CONTRACTOR SHALL PREPARE AN AS–BUILT DRAWING SHOWING ALL IRRIGATION INSTALLATIONS. THE DRAWING SHALL LOCATE ALL VALVES & MAINLINES BY SHOWING EXACT MEASUREMENTS FROM HARD SURFACES OR STRUCTURES.
19. ANY PIPING SHOWN OUTSIDE THE PROPERTY LINE OR RUNNING OUTSIDE A IRRIGATION AREA IS SHOWN THERE FOR CLARITY ONLY. ALL LINES SHALL BE INSTALLED ON THE PROPERTY & INSIDE THE IRRIGATIOND AREAS.
20. ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST ALL DEFECTS IN EQUIPMENT & WORKMANSHIP.
21. ELECTRICAL SERVICE TO ALL EQUIPMENT SHALL BE PROVIDED TO A JUNCTION BOX AT THE EQUIPMENT LOCATION BY OTHERS.

ALL IRRIGATION HEADS, PIPING AND VALVES SHALL BE PURPLE IN COLOR. PROVIDE JUMPER TO POTABLE SYSTEM UNTIL RECLAIM WATER IS AVAILABLE AT WHICH TIME SYSTEM WILL BE CONNECTED TO RECLAIM SUPPLY.

SPRINKLER HEADS

SYMBOL	MODEL NO.	GPM	RADIUS
A	570–4EST	.45	4'x15'
B	570–4SST	.90	4'x30'
C	570–9SST	1.43	9'x18'
D	570–5F	.4	5'
E	570–8F	1.00	8'
F	570–10F	1.50	10'
G	570–12F	2.20	12'
H	570–15F	3.60	15'
J	316–00–02	2.90	21'
K	316–00–63	2.72	28'
L	S600–FC–2.5	2.60	40'
◐	254–06–04	1" VALVES	

NOTE: MODEL NUMBERS SHOWN REFLECT TORO SPRINKLER HEADS. ANY HEADS OF EQUAL QUALITY MAY BE USED WITH THE APPROVAL OF THE OWNER.

TOTAL IRRIGATED AREA = 2,145 SF
REQUIRED IRRIGATION = 0.5"/WEEK
TOTAL IRRIGATION DEMAND = 668 GAL/WEEK = 95 GPD
IRRIGATION TO BE PROVIDED THRU 1" IRRIGATION METER

DATE	REVISIONS	BY	CHECKED
02/11/2020	1 PER CITY COMMENTS DATED 12/16/2019	JV	WHR
03/16/2020	2 PER CITY COMMENTS DATED 03/12/2020	WRH	WHR

504 BUILDING
CONSTRUCTION PLANS
504 W. PLANT STREET
WINTER GARDEN, FLORIDA

FEG FLORIDA ENGINEERING GROUP
Engineering the Future

5127 S. Orange Avenue, Suite 200
Orlando, FL 32809
Phone: 407-895-0324
Fax: 407-895-0325
www.feg-inc.us

SITE IRRIGATION PLAN AND DETAILS

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
RTA	SMH	RTA	WRH

PROJECT NO. 18-148
SCALE 1' = 20'
DATE NOVEMBER 15, 2019
SHEET NO. L-2
SHEET 15 OF 15

FLORIDA ENGINEERING GROUP, INC.
CERT. OF AUTH. NO. 6915

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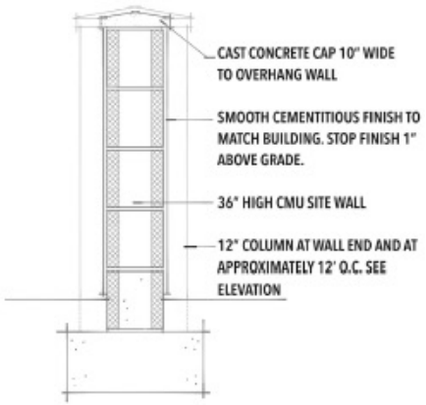

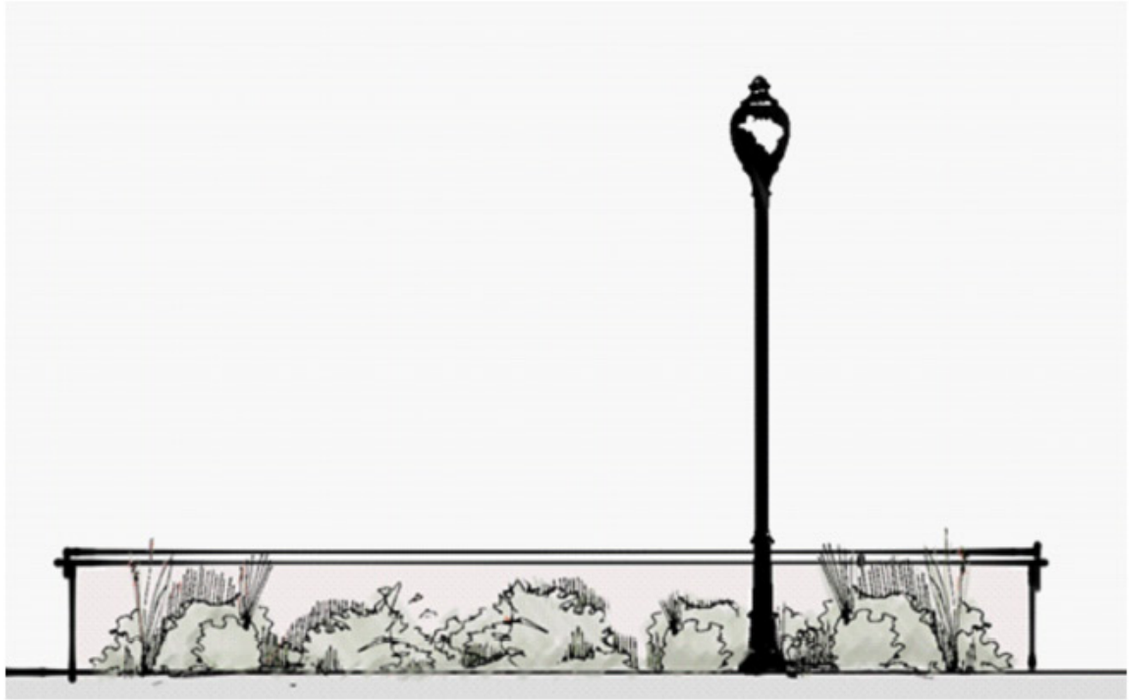

SCREEN WALL ELEVATION
SOUTH PROPERTY LINE TO SOUTH DRIVEWAY

SCREEN WALL ELEVATION
BETWEEN DRIVEWAYS

SCREEN WALL DETAILS ARE PROVIDED FOR INFORMATION ONLY.
FINAL WALL DETAILS TO BE PROVIDED WITH ARCHITECTURAL PLANS.

DATE	REVISIONS	BY	CHECKED
02/11/2020	1 PER CITY COMMENTS DATED 12/16/2019	JV	WHR
03/16/2020	2 PER CITY COMMENTS DATED 03/12/2020	WRH	WHR
04/17/2020	3 PER CITY COMMENTS DATED 04/15/2020	CB	WHR

504 BUILDING
CONSTRUCTION PLANS
504 W. PLANT STREET
WINTER GARDEN, FLORIDA

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SCREEN WALL DETAIL

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
WRH	HA	WRH	WRH

PROJECT NO. 18-148
SCALE NTS
DATE NOVEMBER 15, 2019
SHEET NO. C-16
SHEET 16 OF 16

FLORIDA ENGINEERING GROUP, INC.
CERTIFICATE NO. 31-00000
WILLIAM R. HOCKENSMITH, P.E.
LICENSE NO. 35040
STATE OF FLORIDA

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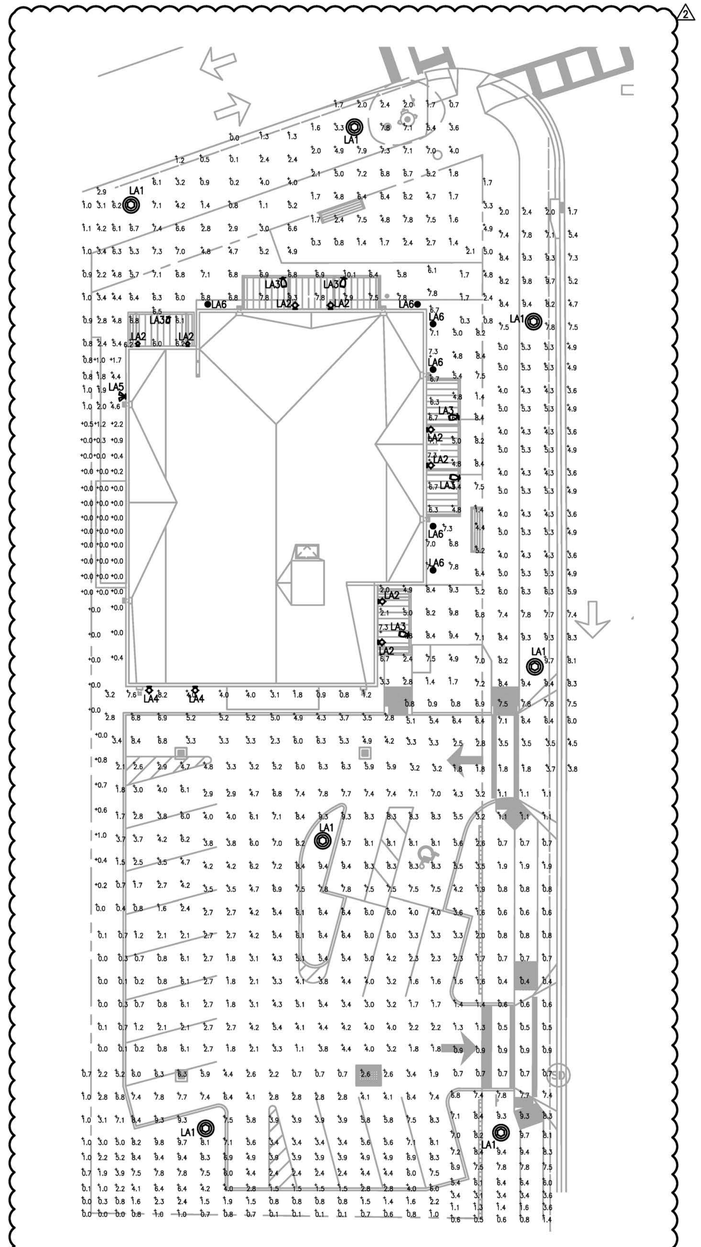
18-148_ScreenWallDetails.dwg

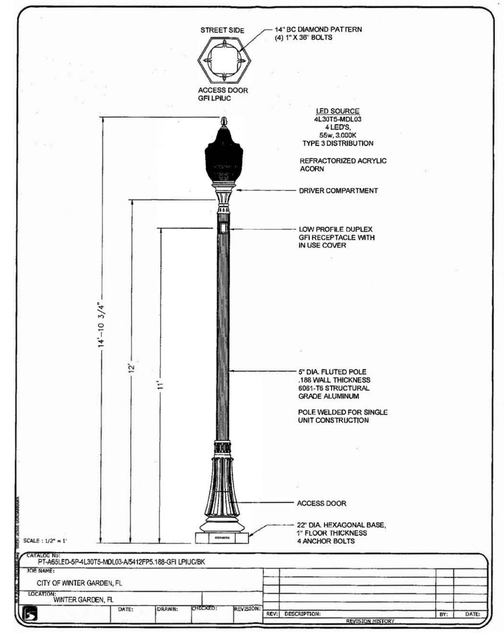
Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
Site	Fc	4.76	9.7	0.1	8.3	16.40



1 E100B

SITE LIGHTING PHOTOMETRY PLAN

SCALE: 1/16" = 1'-0"



aspectLED
A WILDEN TOOL COMPANY

4900 Constellation Drive
White Bear Lake, MN 55127
888.503.1317
sales@aspectled.com

6 LED Large In-Ground/In-Wall LED Light - Ultra Bright (18W)

MODEL: AL-IG-L-18

DESCRIPTION

This 18W large 6.5" diameter x 3.3" deep light with 6 high power LEDs can be mounted in-ground or in-wall. Also available in an standard brightness (6W) version. Perfect for patios, garden walls, decks, docks, gazebos, and many other locations.

aspectLED's in-ground/in-wall recessed lights are bright, energy efficient, and attractively styled, making them perfect for virtually any application. Ideal for installation in stair safety/accent lighting, garden walls, building entrances, pathways, decks, gazebos, public parks, docks, and marine environments.

These recessed in-ground/in-wall lights are waterproof (with an IP67 rating) and feature a #304 stainless steel trim and aluminum body. These lights come standard with a clear glass trim with stainless steel bezel.

CERTIFICATIONS

RoHS Compliant · 1YR WARRANTY

PHYSICAL DIMENSIONS + SPECIFICATIONS

Light Fixture Dimensions	6.5" (165mm) Diameter, 3.3" (83mm) Deep
LED Driver Input Voltage	12VDC, 24VDC, 120VAC
Dimmable	No
Nominal Power Consumption	18 Watts
Max Luminous Flux of LED Array	1050 Lumens for Single Color, 1000 Lumens for RGB (may vary based on LED color choice)
LED Type	SMD LED Chips
LED Quantity	6 - High Power 3 Watt LEDs
Beam Angle	30 Degrees
Housing Material	Die-cast Aluminum
Trim Material	Polished 304 Stainless Steel, Contact us for info on 316 Stainless, painted, or powder coated finishes, Clear Glass Lens
Operating Temperature	-4 to 113 Fahrenheit (-20 to +45 Celsius)
Weight	6.5 lbs
IP Rating	IP67
Lens	Optical, >85% efficient
Glass	Step-tempered 12mm thickness glass
Waterproof Seal	Double silicon gasketed seal
Mounting Sleeve	Included Die-Cast Aluminum
Suitable Uses	Dry, Damp, or Wet Locations
Estimated Lifespan	Up to 50,000 hours
Warranty	1 Year
Standards/Certifications	RoHS

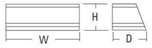
WSTM LED
LED Mini Wall Sconce

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications
Luminaire

Height:	5-3/4" (14.6 cm)
Width:	12-1/2" (31.8 cm)
Depth:	7-1/2" (19.1 cm)
Weight:	6 lbs. (2.7 kg)



Introduction

The Architectural WSTM Mini-Wall Sconce is now available with the latest in LED technology. The result is a long-life, maintenance-free product with typical energy savings of 87% over metal halide versions. The diffuse lens eliminates harsh glare while producing comfortable illumination.

The WSTM LED is ideal for replacing existing 50-100W metal halide or 26-42W compact fluorescent wall-mounted products and can be mounted in either lens up or lens down orientation. The expected service life is over 10 years of nighttime use.

Ordering Information

EXAMPLE: WSTM LED 2A 40K 120 DDBTXD

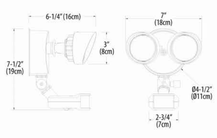
OLF
LED Security Floodlight with Motion Sensor

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Width:	7.00" (17.8 cm)
Height:	7.5" (19.1 cm)
Depth:	6.25" (15.9 cm)
Weight:	1.5 lbs. (0.68 kg)
Lumen Output:	2,160
Input Power:	25W
Efficacy:	86 Lumens per Watt
Input volage:	120V



Introduction

The OLF LED security floodlight combines energyefficient LEDs with motion sensing (or occupancy sensing) technology. OLF motion response feature includes 180 degree range, 70 feet forward detection, sensitivity adjustment switch and a test / time switch to adjust the duration to stay illuminated when motion is detected.

OLF 2RH contains two round heads delivering 2,160 lumens using only 25W power. OLF 2RH replaces up to two 90W PAR incandescent lamps and saves 86% energy. A built-in photocell prevents daylight operation, and reduces energy costs further. OLF family is the ideal solution for residential and commercial security floodlighting applications.

Ordering Information

EXAMPLE: OLF 2RH 40K 120 MO DDB

OLF

Series	Number of heads		Color Temperature[1]		Voltage		Control		Finish	
OLF	2RH	2 heads, round	40K	4000K [1]	120	120 volts	MO	PIR motion detection with photocell	DDB	Dark Bronze
									WH	White

Complete list of configurations available:

OLF 2RH 40K 120 MO DDB
OLF 2RH 40K 120 MO WH

NOTES
1. Correlated color temperature (CCT) shown is nominal per ANSI C78.377-2008.
2. LED lifespan based on IESNA LM-80-08 results and calculated per IESNA TM-21-11 methodology.

LITHONIA LIGHTING. COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 800-705-SERV (7378) • www.lithonia.com

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OLF 2RH MO
Rev. 09/11/19

HINKLEY & PR.

HINKLEY LIGHTING, INC.
33000 PIN OAK PARKWAY | AVON LAKE, OHIO 44012
[PH] 440.653.5500 [F] 440.653.5555
HINKLEYLIGHTING.COM | FREDRICKRAMOND.COM

SHELTER 1326KZ-LED	
BUCKEYE BRONZE	
WIDTH:	4.5"
HEIGHT:	15.5"
WEIGHT:	3.0 LBS
MATERIAL:	SOLID ALUMINUM
GLASS:	CLEAR SEEDY
BACKPLATE WIDTH:	4.5"
BACKPLATE HEIGHT:	12.0"
SOCKET:	1-5W LED *INCLUDED
DARK SKY:	YES
LED INFO:	
LUMENS:	400
COLOR TEMP:	2700k
CRI:	90
LED WATTAGE:	5w
INCANDESCENT EQUIVALENCY:	40w
DIMMABLE:	No
EXTENSION:	4.8"
TTO:	5.8"
CERTIFICATION:	C-US WET RATED
VOLTAGE:	120V
UPC:	640665132687

Elite UNIVERSAL
ARCHITECTURE · ENGINEERING · INTERIORS
3210 S. Osceola Ave.
Orlando, FL 32806
407.325.3550
www.eliteuniversalarchitects.com
AR 0018658

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CONSULTANT

www.mpdesigneng.com

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MP DESIGN ENGINEERING, INC.
SUSTAINABLE DESIGN & ENERGY MANAGEMENT SOLUTIONS
6001 Brick Court, Suite 201, Winter Park, FL 32792
(407)-756-8239 / Certificate #28618
CONTACT: Sam Ahmad
nsamahmad@mpdesigneng.com

PROJECT

504 BUILDING
504 W. PLANT STREET,
WINTER GARDEN, FLORIDA 34787
CITY OF WINTER GARDEN

SITE LIGHTING PHOTOMETRY PLAN

SEAL

Naweed Ahmad, PE
56095 (FL)

REVISIONS:

#	DATE	DESCRIPTION
	10/01/19	SUBMIT
1	02/14/20	REV#1
2	04/22/20	REV#2

DRAWN BY: AFS
CHECKED BY: AFS
DATE: OCTOBER 1, 2019

SHEET:
E100B

Elite Universal Job No.
08009

CITY OF WINTER GARDEN

DEVELOPMENT REVIEW COMMITTEE

300 West Plant Street - Winter Garden, Florida 34787-3011
(407) 656-4111

M E M O R A N D U M

TO: STEVE PASH, COMMUNITY DEVELOPMENT DIRECTOR
FROM: DEVELOPMENT REVIEW COMMITTEE
DATE: MAY 12, 2020
SUBJECT: 504 W PLANT STREET – 504 BUILDING
SITE PLAN APPROVAL

We recommend approval subject to the following conditions and comments:

ENGINEERING

Underlined comments – payment of utility impact fees - shall be addressed prior to pre-con:

1. General Requirements (as noted):
   a. All gravity sanitary pipe and fittings shall be SDR 26.
   b. All compaction shall be 98% of the modified proctor maximum density (AASHTO T-180).
   c. As-built record drawings shall comply with City of Winter Garden requirements available on-line (note on plan).
   d. All Storm (≥12") and Sanitary lines (≥6") shall be inspected by CCTV prior to completion.
2. Paving, Grading & Drainage:
   a. The use of Thermoplastic pipe shall meet all City material and installation requirements as specified in the City's Standards & Specifications including Class I bedding, HP polypropylene pipe, laser profiling, installation per ASTM D2321, etc. (see under on-line forms on website). **ADS N-12 is not an approved material**.
3. Utilities:
   a. The Point of Supply (POS) for the dedicated fire protection system has been shown with a note that all work downstream of it shall be performed by a licensed fire sprinkler contractor.
   b. A utility easement will be required as shown to access and maintain the domestic and irrigation water meters and **shall be recorded prior to issuance of the certificate of occupancy**.
   c. The water main crossing Park Avenue shall be 8" diameter, C-900, DR 18 as shown.
   d. The Open Cut across Park Avenue shall be to mill and resurface for 50 feet either side of the trench; minimum 10" thick base and minimum 2" thick AC (SP 12.5 CP) as shown.
4. All utilities shall conform to Chapter 78 of the City Code. Impact fees will be required for any utility connections and shall be paid prior to issuance of building permit and City execution of FDEP permit applications. The site shall be served by City water, sewer and reuse. All utilities required for the development shall be run to the site at the Developer's expense, including potable water, reclaimed water and sanitary sewer. 100% of all required water, irrigation and sewer impact fees shall be paid prior to City execution of FDEP permits and issuance of site or building permits.

   According to the plans there will be (1) 1" potable meter and (1) 1" irrigation meter. Based on the above, the utility impact fees are as follows:

1" Irrigation meter	1 ea. @ $2,715.00	=	$2,715.00
1" Potable water meter	1 ea. @ $2,715.00	=	$2,715.00

Wastewater for 1" meter	1 ea. @ $4,418.00	=	$4,418.00
	TOTAL	**=**	**$9,848.00**
	(does not include connection/installation fee)		

5. Drainage Report & Soil Report:
   a. We still question the use of the SHWT depth of 7 feet below ground surface but will accept it as certified by the Design & Geotechnical Engineers. **The system will be monitored periodically by the City and if not functioning as designed, provisions shall be made to correct it**.
6. Minimum 5' wide concrete sidewalks shall be constructed along all street frontages pursuant to Code. Any damaged, broken or cracked sections (including existing curbs and pavement) shall be replaced prior to issuance of certificate of occupancy.
7. Landscaping shall not encroach on required sight lines at intersections or driveways. Design Engineer shall provide certification that sight distance requirements are being met. All irrigation on the site shall be designed to be supplied by reclaimed water when available and shall be served by a jumper to potable water until that time.
8. A separate tree removal permit is required to remove any trees. Coordinate with Building Department (Steve Pash).
9. No trees may be planted over or within 5 feet of any utility lines. Only sod or shrubs may be planted over utility lines.
10. FDEP 10-2 self-certification is acknowledged as provided. Permits or exemptions from FDEP for water and wastewater are required.
11. Streetlighting, both internally and on all street frontages, is required pursuant to City Code – dark skies lighting is required. A photometric plan has been submitted for review by the Planning Department. Streetlights shall match the City's "downtown" decorative streetlights at the Developer's expense.
12. All on-site utilities shall be privately owned and maintained as noted.
13. Fire sprinkler systems will be required on all buildings over 6,000 s.f. with Point of Service (POS), backflow prevention, etc. shown. All work downstream of the POS shall be performed by a licensed fire sprinkler contractor.
14. No dumpsters are shown. All dumpsters shall be enclosed and shall provide 12' minimum inside clearance (each way inside of bollards), and access by solid waste vehicles. Coordinate additional requirements and approval to use carts with Public Services Department, Solid Waste Division.
15. Any screen walls or retaining walls shall require a separate permit from the Building Department.

PLANNING

16. Note: The proposed building must be consistent with the design approved by the Architectural Review and Historic Preservation Board on August 20, 2019.
17. The new line work added to the knee wall detail shown on sheet C-16 is too vague. A condition of site plan approval will be to provide additional details during permitting to ensure there are columns (that rise above the wall elevation) at the wall ends and along the wall at max. 12' O.C. to visually break it up.

STANDARD GENERAL CONDITIONS

18. The Owner is responsible for meeting all provisions of ADA and Florida Accessibility Code.
19. All work shall conform to City of Winter Garden standards and specifications.

20. The City of Winter Garden will inspect private site improvements only to the extent that they connect to City owned/maintained systems (roadways, drainage, utilities, etc.). It is the responsibility of the Owner and Design Engineer to ensure that privately owned and maintained systems are constructed to the intended specifications. The City is not responsible for the operation and maintenance of privately owned systems, to include, but not be limited to, roadways, parking lots, drainage, stormwater ponds or on-site utilities.

21. The Contractor is responsible for the notification, location and protection of all utilities that may exist within the project limits.

22. No fill or runoff will be allowed to discharge onto adjacent properties; existing drainage patterns shall not be altered. The applicant should note that if approval is granted, the City of Winter Garden is not granting rights or easements for drainage from, or onto, property owned by others. Obtaining permission, easements or other approvals that may be required to drain onto private property is the Owner/Developer's responsibility. Should the flow of stormwater runoff from, or onto adjacent properties be unreasonable or cause problems, the City will not be responsible and any corrective measures required will be the responsibility of the Owner. Site construction shall adhere to the City of Winter Garden erosion and sediment control requirements as contained in Chapter 106 - Stormwater. If approval is granted by the City of Winter Garden, it does not waive any permits that may be required by federal, state, regional, county, municipal or other agencies that may have jurisdiction.

23. After final plan approval, a preconstruction meeting will be required prior to any commencement of construction. The applicant shall provide an erosion control and street lighting plan at the preconstruction meeting and shall pay all engineering review and inspection fees prior to construction. Inspection fees in the amount of **2.25%** of the cost of all site improvements shall be paid prior to issuance of the site or building permit (less what has already been paid).

Additional comments may be generated at subsequent reviews
Please review this information and contact our office if you have any questions. Thank you.

END OF MEMORANDUM

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Steve Pash, Community Development Director

Via: City Manager Mike Bollhoefer

Date: May 20, 2020 **Meeting Date:** May 28, 2020

Subject: Sale of City Property

PARCEL ID # 22-22-27-0000-00-117 (a portion)

Issue:

For property located at 30 N Park Ave & S Park Ave, the City of Winter Garden is the fee simple owner of that certain approximately 1.62 +/- acre parcel of land situated in Orange County, Florida adjacent to North Park Avenue having Orange County Tax Parcel Identification Number 22-22-27-0000-00-117 and that certain approximately 0.018 +/- acre (50' by 15') strip parcel lying east of and adjacent to the North Park Property and west of North Park Avenue right-of-way.

Discussion:

The applicant requesting to rezone the 30 N Park Ave & S Park Ave to PUD desires to acquire fee simple ownership of an approximately 26,011 square foot portion of the City's Property, which is described on the legal description attached hereto as Exhibit "A" (herein "Property") in order to combine such lands with the North Park Property for up to nine (9) unit townhome development purposes.

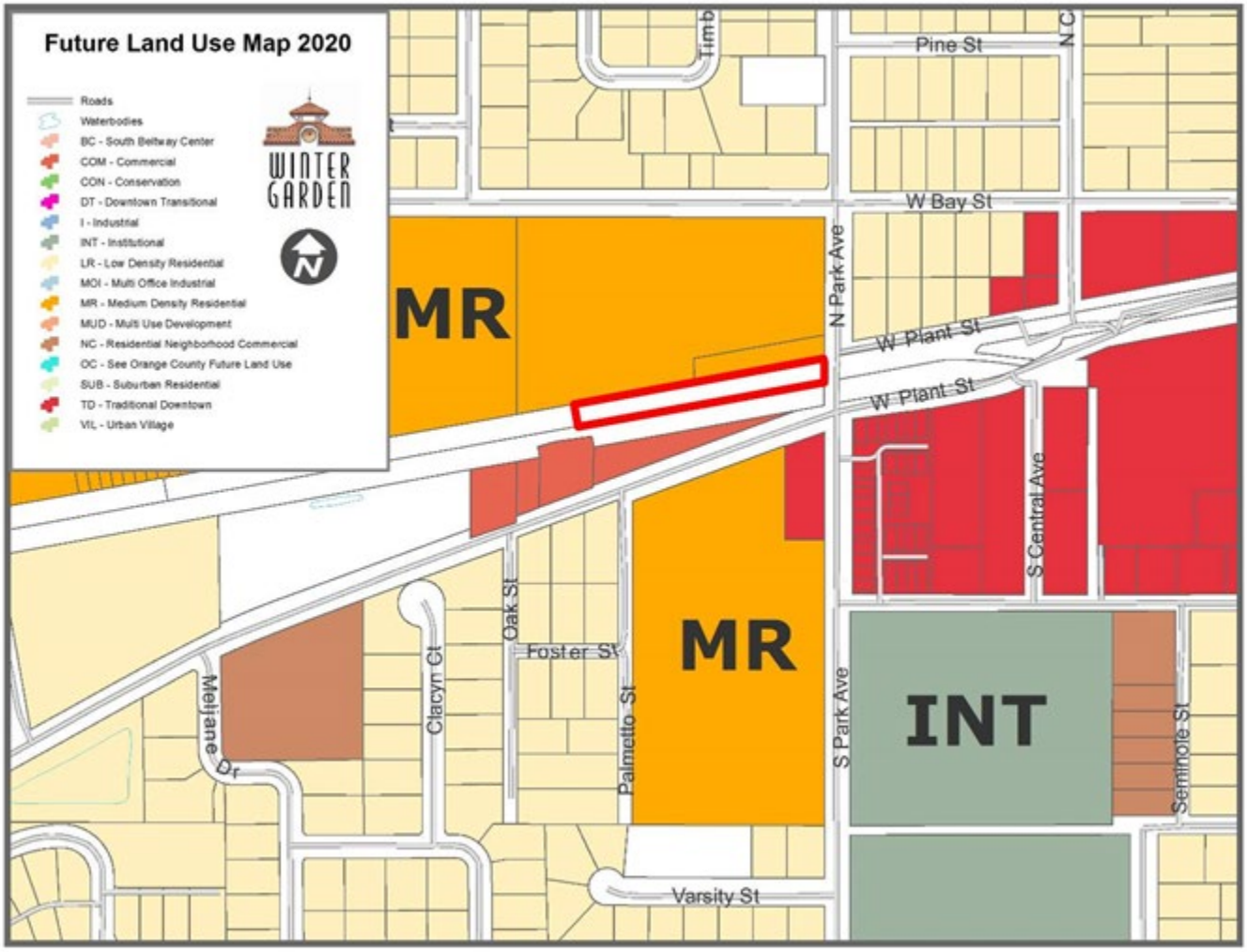
Recommended Action:

Staff recommends approval of the Purchase and Sale Agreement.

Attachment(s)/References:

Location Map
Purchase and Sale Agreement
Exhibit B

LOCATION MAP



AGREEMENT FOR ACQUISITION OF PROPERTY

THIS AGREEMENT FOR ACQUISITION OF PROPERTY (herein called this "Agreement"), is made this ____ day of _____, 2020, ("Effective Date") by and between the CITY OF WINTER GARDEN, a Florida municipal corporation ("CITY") and 30 North Park, LLC ("BUYER").

WHEREAS, the BUYER is the fee simple owner of an approximately 0.33 acres +/- acre parcel of land situated in Orange County, Florida adjacent to North Park Avenue and the City's Property and having Orange County Tax Parcel Identification 22-22-27-0000-00-090 ("North Park Property"); and

WHEREAS, CITY is the fee simple owner of that certain approximately 1.62 +/- acre parcel of land situated in Orange County, Florida adjacent to North Park Avenue having Orange County Tax Parcel Identification Number 22-22-27-0000-00-117 and that certain approximately 0.018 +/- acre (50' by 15') strip parcel lying east of and adjacent to the North Park Property and west of North Park Avenue right-of-way ("City's Property"); and

WHEREAS, the BUYER desires to acquire fee simple ownership of an approximately 26,011 square foot portion of the City's Property, which is described on the legal description attached hereto as **Exhibit "A"** (herein "Property") in order to combine such lands with the North Park Property for up to nine (9) unit townhome development purposes (the "Development"); and

WHEREAS, the CITY desires to convey fee simple ownership of the Property to BUYER pursuant to the terms and conditions of this Agreement.

For and in consideration of the provisions set forth in this Agreement, the parties agree as follows:

I. AGREEMENT TO SELL AND PURCHASE; CONSIDERATION; CLOSING DATE; DEPOSIT:

A. Agreement to Sell and Convey. That the CITY, hereby agrees to sell and convey to BUYER in fee simple and BUYER hereby agrees to purchase and accept conveyance from CITY, subject to the terms, conditions and provisions hereinafter set forth, the Property lying and being situated in the Orange County, State of Florida.

B. Consideration for Conveyance.

I. Utility Relocation/Utility Easement. In consideration for City's conveyance of the Property, after the Closing occurs, Buyer, at Buyer's sole expense, shall cause the design, permitting and relocation of the City's sanitary force main and reclaimed water line ("Utility Relocation") located upon the Property to the northern portion of the North Park Property and

convey and grant to the City a utility easement of sufficient width to accommodate the 18" diameter force main and the 12" diameter reclaim water main over, under and through such area of the North Park Property for the operation, maintenance and repair of the relocated utilities pursuant to the terms and conditions of the utility easement form attached hereto as **Exhibit "B"** ("Utility Easement").

II. Utility Relocation Security. At Closing, Buyer shall deposit into escrow with Escrow Agent the sum of $235,340.00, which sum shall serve as security for Buyer's timely and proper completion of the Utility Relocation as set forth herein (the "Utility Relocation Security"). Escrow Agent shall deposit the Utility Relocation Security into an interest-bearing account. The Utility Relocation Security shall be released in accordance with the terms herein.

The engineering design of the Utility Relocation shall be subject to the prior review and approval (or rejection) of the CITY. BUYER shall submit the Utility Relocation engineering design drawings to the CITY for review and approval no later than ninety (90) days after Closing ("Design Drawing Deadline"). The BUYER shall hire a licensed and experienced utility contractor to perform the Utility Relocation work and such contractor shall be subject to approval by the City Manager. The BUYER (and its successors and assigns) shall not commence any construction or development activities upon the Property or commence the Utility Relocation work unless and until the CITY: (i) approves the engineering design for the Utility Relocation, (ii) receives evidence that the necessary permits for the Utility Relocation have been obtained, (iii) approves BUYER's proposed contractor for such work, (iv) a payment and performance bond pursuant to Section 255.05, Florida Statutes with terms and amount acceptable to the CITY is provided by the BUYER's contractor performing the Utility Relocation work, and (v) BUYER grants and conveys the required Utility Easement to City (collectively the "Commencement Conditions"). BUYER shall meet and satisfy all the Commencement Conditions on or before one hundred and twenty (120) days after Closing ("Commencement Conditions Deadline"). If BUYER proceeds with the commencement of any construction or development activities upon the Property or commences the Utility Relocation work before meeting the Commencement Conditions, then BUYER shall forfeit and the CITY shall receive the Utility Relocation Security along with the CITY reserving and being able to assert any other rights and remedies it may have for BUYER's default.

At all times during the Utility Relocation work, the BUYER's contractor shall ensure that utility service is not interrupted. BUYER and BUYER's contractor shall ensure that no liens shall be recorded on the Property concerning any Utility Relocation work. The final completion of the Utility Relocation, including FDEP clearance and CITY inspection approval (collectively called "Final Completion"), must all occur on or before six (6) months after Closing ("Utility Relocation Deadline").

If the BUYER fails to timely meet either the Design Drawing Deadline or Commencement Conditions Deadline, the BUYER shall cease and not proceed with any

construction and development activities upon the Property regardless of the status of any development orders or building permits issued, and BUYER shall, at its sole expense, immediately (not later than within twenty (20) days from the applicable missed deadline) convey fee simple ownership of the Property back to the CITY via special warranty, free and clear of all mortgages, liens, easements and all other encumbrances and with the past due and pro-rated ad valorem taxes and special assessments to the date of the reconveyance of the Property to the CITY and closing costs to be paid by BUYER, including without limitation, the costs of documentary stamp taxes, recording costs and providing a title insurance policy to the CITY. If the BUYER timely reconveys the Property back to this CITY as required herein, the Utility Relocation Security will be released to the BUYER within three (3) business days after the conveyance of the Property back to the CITY occurs, provided that BUYER did not previously proceed with commencement of any construction or development activities upon the Property or with commencement of the Utility Relocation work.

If the BUYER fails to timely meet the Utility Relocation Deadline, the BUYER shall forfeit and the CITY shall be entitled to the receive the Utility Relocation Security as partial compensation for BUYER's default of its Utility Relocation obligations and the Escrow Agent is authorized to disperse such funds to CITY upon CITY's request for such funds or interplead the such funds as set forth in Section X of this Agreement in the event of a dispute between the parties. If BUYER defaults and the commencement of the Utility Relocation has occurred, the CITY shall have the right to complete (including, the right-of-entry upon the North Park Property and Property to cause such) the Utility Relocation or restore the sanitary force main and reclaimed water line in their existing or previously existing condition and recover the costs for same from BUYER to the extent the Utility Relocation Security received by CITY does not fully pay for such costs.

In the event that the Final Completion occurs on or before the Utility Relocation Deadline, Escrow Agent shall release the Utility Relocation Security to BUYER no later than five (5) business days following Final Completion. The City Manager shall have the right to extend the Utility Relocation Deadline for up to sixty (60) days upon request by BUYER upon good cause shown. Once the BUYER's contractor commences onsite work for the Utility Relocation, BUYER shall have the obligation to complete such to Final Completion unless the CITY and BUYER otherwise agree by way of a written amendment to this Agreement; this obligation survives termination of this Agreement. The provisions of Section I B I. & II. shall survive the Closing and a memorandum of such provisions in a form acceptable to the CITY shall be recorded in the public records of Orange County, Florida upon Closing on the Property and such shall be binding upon and run with the land and be binding upon BUYER's successors and assigns in interest.

III. Option to Repurchase. As part consideration for the CITY's conveyance of the Property to the BUYER, at Closing, the BUYER shall give and grant unto CITY an irrevocable, exclusive right and option to repurchase the Property subject to the terms herein (the "Option").

The price that the CITY shall pay for the Property if it exercises the Option is $5,000.00, except in the event the CITY exercises the Option after BUYER fails to timely meet the Design Drawing Deadline or the Commencement Deadline then the CITY shall pay $10.00 for the Property. If BUYER fails to timely meet the Design Drawing Deadline, Commencement Conditions Deadline or the Utility Relocation Deadline, the CITY shall have the right to exercise its Option to repurchase the Property during any period of time that is within 60 days from each of any of the aforesaid deadlines being missed by BUYER ("First Option Expiration Date"). Further, if BUYER fails to secure architectural approval, site plan approval, obtain building permits and commence construction of townhome buildings on the Property and North Park Property on or before 270 days after the Closing date, the CITY shall have the right to exercise its Option to repurchase the Property during the period of time that is between 270 days from the Closing date and 365 days from the Closing date ("Second Option Expiration Date"). If CITY elects to exercise its Option to repurchase the Property, CITY must give BUYER, prior to or on the applicable First Option Expiration Date or Second Option Expiration Date, written notice of CITY's decision to exercise its Option delivered by hand, United States mail, certified mail, express mail service, or courier service to the BUYER at the address for the BUYER in Section IX. If the First Option Expiration Date or Second Option Expiration Date falls on Saturday, Sunday or a legal holiday recognized by the State of Florida or federal government, CITY's Option may be exercised by giving written notice in the above manner on or before 5:00 p.m. the next business day. The Option is in addition to the CITY's other rights granted herein, including as set forth in subsection B. II. Provided that this Option is exercised after the commencement of the Utility Relocation, the CITY's exercise of this Option shall not affect or invalidate the Utility Easement or require the CITY to remove the Relocated Utilities from the North Park Property. If this Option is exercised prior to the commencement of the Utility Relocation, the CITY and BUYER shall execute a termination of the Utility Easement intended to serve the Relocated Utilities at the closing contemplated by the exercised Option.

If CITY timely exercises its Option, the Closing of the transaction contemplated by the exercise of the Option to repurchase shall occur within forty-five (45) days after the CITY's exercise of the Option pursuant to the following terms:

(i) The Property shall be conveyed by BUYER to CITY via special warranty deed and shall be free and clear of all liens, easements, mortgages, restrictions and encumbrances and taxes and special assessments, if any, for the year of closing and subsequent years;

(ii) All taxes, liens, and assessments to the date of closing shall be paid by BUYER before or at closing. BUYER shall pay for the cost of recording any corrective instruments and recording the special warranty deed, BUYER's attorney's fees, costs for clearing encumbrances and curing title defects and costs for satisfying mortgages and liens on the Property and for obtaining any necessary releases of mortgages, and for documentary stamp taxes on the special warranty deed. CITY shall pay all costs

associated with the title commitment and the title insurance policy (to be purchased at the CITY's option) and closing document preparation; and

(iii) The transaction contemplated by exercise of the CITY's Option to repurchase the Property shall occur at the office of Fishback, Dominick, Bennett, Ardaman, Ahlers, Langley & Geller LLP at 1947 Lee Road, Winter Park, Florida 32789, or Winter Garden City Hall at 300 West Plant Street, Winter Garden, Florida, whichever the CITY may choose.

This subsection B. III. shall survive Closing and conveyance of the Property and a memorandum of this provision in a form acceptable to the CITY shall be recorded in the public records of Orange County, Florida upon Closing on the Property and such shall be binding upon and run with the land and be binding upon BUYER's successors and assigns in interest. Said memorandum of this provision shall also be listed as a permitted exception to the Special Warranty Deed and to the title insurance policy. This Option to repurchase the Property granted to CITY shall be superior in right to any and all mortgages, liens and encumbrances upon the Property. The CITY's reacquisition of the Property by way of exercising the Option shall cause the automatic extinguishment and release of any and all mortgages, liens and encumbrances upon the Property recorded after the Special Warranty Deed from CITY to BUYER.

IV. Restrictive Covenant. As part consideration for the CITY's conveyance of the Property to the BUYER, at Closing, the BUYER shall enter into a declaration of restrictive covenant instrument in a form acceptable to the CITY in favor of and enforceable by the CITY and have such recorded in the Public Records of Orange County, Florida, and binding upon and running with title of the North Park Property and the Property ("Restrictive Covenant"), which reads:

"On the Effective Date of this Declaration, the lands subject to this Declaration ("Property") are vacant. The Property shall be developed in a manner consistent with the City of Winter Garden Comprehensive Plan, Code of Ordinances and approved development orders and building permits. Once building permits are issued for any structure, the Declarant or its successors and assigns shall cause the final completion of all site improvements and structures ("Final Completion") in accordance with City of Winter Garden approved permits and plans and receive inspection approvals and certificates of occupancy for all structures within twelve (12) months from the issuance of the first building permit ("Completion Deadline"). The Completion Deadline may be extended by the City of Winter Garden City Manager upon request by the Declarant or its successors and assigns for up to one-hundred and eighty (180) additional days upon good cause shown. If Final Completion does not occur by the Completion Deadline, as may be extended by the City Manager, upon at least thirty (30) days advance written notice by the City of Winter Garden and an opportunity for Declarant or its successors and

assigns to cure, the City of Winter Garden shall have the right, but not obligation, to enter upon the Property and cause demolition and removal of all vertical structures upon Property and restoration of the Property to a vacant condition (including the planting of sod and landscaping) and recover the cost for such against the Declarant or its successors and assigns. The City of Winter Garden shall have the right to place a lien against the Property as security for recovery of any costs incurred by the City for the demolition and removal of all structures upon the Property and restoration of the Property to a vacant condition plus interest accruing at the rate of twelve percent per annum on all amounts owed to the City by recording a notice of lien in the Public Records of Orange County, Florida referencing this Declaration. Any notice of lien recorded by the City of Winter Garden pursuant to this Declaration shall relate back in time to the date of the recording of this Declaration and shall be superior in priority to any mortgage, lien or other encumbrance recorded after this Declaration and to any mortgage or lien subordinated to this Declaration. Upon sending a copy of the notice of lien to the Declarant or its successors and assigns via hand delivery or Certified Mail to the address on file with the Orange County Property Appraiser, the City of Winter Garden shall have the right to foreclose the lien against the Property at any time that is not less than forty-five (45) days after the City sends such notice of lien to the Declarant or its successors and assigns. Without limiting the foregoing remedies, the City of Winter Garden shall have all rights and remedies afforded at law and in equity to enforce the terms and conditions of this Declaration. This Declaration shall automatically terminate on a date that is the later of: (i) five (5) years from the Effective Date of this Declaration, and (ii) one (1) year after the issuance of certificates of occupancy for all structures intended to be developed upon the Property pursuant to approved plans on file with the City of Winter Garden. This Declaration is for the benefit of and enforceable by the City of Winter Garden."

The Restrictive Covenant shall be superior to any and all mortgages and liens upon the North Park Property. If there are any existing mortgages or liens on the North Park Property, the BUYER shall cause the joinder, consent and subordination of such mortgages and liens to the Restrictive Covenant prior to the Closing on the Property occurring.

C. Closing. The Closing of the transaction contemplated by this Agreement shall occur on or before thirty (30) days after the expiration of the Inspection Period, unless this Agreement is terminated earlier as set forth in this Agreement. The Closing may be moved up to an earlier date upon agreement between the CITY's City Manager and BUYER and in coordination Fishback Law Firm. The Closing of the transaction contemplated by this Agreement shall occur at the office of Fishback, Dominick, Bennett, Ardaman, Ahlers, Langley & Geller LLP ("Fishback Law Firm"), at 1947 Lee Road, Winter Park, Florida 32789, or Winter Garden City Hall at 300 West Plant Street, Winter Garden, Florida, whichever the CITY may choose.

II. TITLE COMMITMENT, CONVEYANCE & INSURANCE:

A. Title Commitment. BUYER, at BUYER's expense, shall obtain, by or through the Fishback Law Firm as Title Agent within forty-five (45) days from the effective date of this Agreement, an A.L.T.A. Form B (Florida) title commitment for title insurance (the "Commitment") on the Property. The Property shall be free and clear of all liens, easements, restrictions and encumbrances except for Restrictive Covenant, easements and restrictions of record, which shall not, in BUYER's reasonable judgment, interfere with the BUYER's Intended Use of the property (the "Permitted Exceptions"). In the event the Commitment shows any exceptions to title, exclusive of the Permitted Exceptions, that are unacceptable to the BUYER, the BUYER shall notify CITY of any objections in writing within ten (10) days of BUYER's receipt of the Commitment specifying the defects which exist with respect to the title to the Property, and CITY shall have a period of three (3) days after receipt of such written notice within which (i) elect to cure any defects in title to the satisfaction of BUYER or (ii) notify BUYER that it elects not to cure any defects. If CITY elects by written notice to cure the defects in title, CITY shall have thirty (30) days to cure such defects. Upon CITY's election not to cure or failure to cure defects in title within the time limit aforesaid, the BUYER may, at its option, either (i) terminate this Agreement and upon such termination all rights and liabilities arising hereunder shall terminate; or (ii) waive all conditions in this subsection II A and, subject to all the other terms and provisions of this Agreement, close this transaction in the same manner as if no such defect or defects had been found, provided however, that exceptions may be made to the title insurance policy for such uncured defects. The Closing date shall be extended as necessary to effectuate the intent of this section.

B. Title. The Property shall be conveyed by Special Warranty Deed and shall be free and clear of all liens, easements, restrictions and encumbrances except the Restrictive Covenant, the memorandum of the Option, easements of record and taxes and special assessments, if any, for the year of closing and subsequent years, and the Permitted Exceptions. A proration shall be made as of the date of closing on the following items: real estate taxes and special assessments provided the CITY shall have no obligation for real estate taxes. At or subsequent to closing, BUYER will, without additional consideration, sign, acknowledge, and deliver a further assurances agreement and any other documents and take any other action necessary or appropriate, and reasonably requested by the CITY or the Closing Agent, to carry out the intent and purpose of this Agreement, including for the issuance of title insurance.

C. As-Is. The Property is to be conveyed "as-is" without warranties or representations. Without limiting the foregoing sentence, the CITY extends and intends no warranty and makes no representations of any type, either express or implied, as to the physical condition, environmental condition, or history of the Property, including without limitation, with respect to land use, zoning, development orders and permits matters. Given the nature of this transaction, in the event certain statutory disclosures or any other disclosures required by law were not made to the BUYER and/or the CITY herein, the BUYER and CITY each for themselves and for their

successors and assigns, hereby waive any and all statutorily required disclosures, and release each other from any and all claims or right to terminate this Agreement on the basis that such disclosures have not or were not made.

D. Title Insurance. Owner's title insurance policy to be issued pursuant to the Commitment is to be purchased and issued to BUYER at BUYER's expense after closing and this paragraph II. D shall survive closing. The title insurance policy will be issued in the amount of $350,000, unless the title insurance underwriter requires a lower amount.

III. INSPECTION PERIOD:

A. Inspection. BUYER shall have ninety (90) days from the Effective Date ("Inspection Period") within which to have such inspections of the Property performed as BUYER shall desire during the Inspection Period. Further, during the Inspection Period, the BUYER may proceed with seeking a Planned Unit Development rezoning approval for Development upon the combined North Park Property and Property. BUYER shall at all times during the Inspection Period have the privilege of going upon the Property with its agents, consultants, and contractors as needed to inspect, examine, survey and otherwise undertake those actions which BUYER, in its reasonable discretion, deems necessary or desirable to determine the suitability of the Property for BUYER's intended uses thereof. Said privilege shall include, without limitation, the right to make surveys, appraisals, soils tests, environmental tests and tests to obtain any other information relating to the surface, subsurface and topographic conditions of the Property; provided however, in no event shall BUYER touch, disturb or damage the utilities located on the Property. BUYER covenants and agrees that if such activities cause any harm to the Property, that the Property shall be restored to the same or better condition, at BUYER's expense, in the event BUYER does not acquire same. BUYER shall indemnify and hold harmless the CITY and the CITY's elected and appointed officials, employees and agents for any and all claims, damages, judgments, lawsuits, torts, personal injuries (including death), attorneys' fees, penalties and other adverse matters arising out of or concerning BUYER's and its employees', consultants' and agents' access to and from the Property and inspection activities on the Property.

B. Termination. If BUYER determines, in BUYER's sole discretion, that the condition of the Property is not acceptable to BUYER, BUYER may terminate this Agreement without penalty by delivering written notice of such election to CITY on or before expiration of the Inspection Period. If BUYER timely cancels this Agreement, the parties shall be released of all further obligations under this Agreement.

C. Construction Loan Commitment. On or before seventy-five (75) days from the Effective Date, the Buyer shall seek, obtain and provide the CITY with a copy of a construction loan commitment letter from a lender agreeing to finance approximately 75% of the costs of the Development ("Construction Loan Commitment Contingency"). If Buyer does not timely satisfy the Construction Loan Commitment Contingency, then either the CITY or Buyer shall have the

right to terminate this Agreement upon written notice to the other party, and thereafter each party will be released from their rights and obligations hereunder, except to the extent of survival under the express terms herein.

D. PUD Rezoning Contingency. If the BUYER does not obtain a Planned Unit Development rezoning approval for the North Park Property and Property for the Development on or before at least ten (10) days prior to the intended Closing Date or if the City Commission denies BUYER's request for a Planned Unit Development rezoning, the CITY shall have the right to terminate this Agreement upon written notice to BUYER, and thereafter the parties shall be released of their rights and obligations hereunder, except to the extent of survival as stated herein.

IV. CLOSING COSTS: All past due taxes, liens, and assessments to the date of closing shall be paid by CITY before or at closing. CITY will pay the cost of CITY's attorney's fees, costs for clearing encumbrances and curing title defects. BUYER shall pay documentary stamp tax on the warranty deed, and all costs associated with the title commitment and the title insurance policy, recording costs associated with the warranty deed and closing document preparation.

V. OTHER AGREEMENTS: No prior or present agreements or representations shall be binding upon any of the parties hereto unless incorporated in this Agreement. No modification or change in this Agreement shall be valid or binding upon the parties unless in writing, executed by the parties to be bound thereby. Typewritten or handwritten provisions inserted herein or attached hereto as Addenda, and initialed by all parties, shall control all printed provisions in conflict therewith.

VII. DISCLOSURES: In the event the property subject to this Agreement is held by an entity or form of ownership as set forth in Florida Statute 286.23, BUYER agrees to fully comply with said statutes disclosure requirements and such disclosures shall be made under oath by affidavit, subject to the penalties prescribed for perjury.

VIII. RADON GAS/MOLD: Radon is naturally occurring radioactive gas that, when it has accumulated in a building in sufficient quantities, may present health risks to persons who are exposed to it over time. Levels of radon that exceed federal and state guidelines have been found in buildings in Florida. Additional information regarding radon and radon testing may be obtained from your county public health unit. Pursuant to § 404.056(8), Florida Statutes. Mold is naturally occurring and may cause health risks or damage of property. If either party is concerned or desires additional information regarding mold, such party should contact an appropriate professional.

IX. NOTICE: Any notice or demand to be given or that may be given hereunder shall be in writing and shall be (i) delivered by hand, or (ii) delivered through United States mail, postage prepaid, certified, return receipt requested, or (iii) delivered through Federal Express, UPS, or other expedited mail or package service, addressed to the parties at the address shown below.

Any notice or demand that may be given hereunder shall be deemed complete (i) upon deposition of such notice or demand in the United States mail with property postage affixed thereto, certified, return receipt requested, or (ii) upon depositing any such notice or demand with Federal Express, UPS or other expedited mail with package delivery, or (iii) upon hand-delivery to the appropriate address as herein provided. Any party hereto may change said address by notice in writing to the other parties in the manner herein provided. All notices shall be sent to BUYER and the CITY as the following addresses:

CITY:	Mike Bollhoefer, City Manager City of Winter Garden 300 West Plant Street Winter Garden, Florida 34787 Telecopy: (407) 656-4952
With a copy to:	City Attorney City of Winter Garden 300 West Plant Street Winter Garden, Florida 34787 Telecopy: (407) 656-4952
BUYER:	30 North Park, LLC Attn: Danelle Hoffer 525 West Plant Street Winter Garden, Florida 34787

X. <u>ESCROW / CLOSING AGENT</u>: BUYER and CITY agree that Fishback Law Firm shall serve as counsel to CITY, the Escrow Agent, Title Agent and Closing Agent, and in the event of any dispute, conflict or lawsuit, either between BUYER and CITY, BUYER and Escrow Agent or otherwise, BUYER agrees that the Fishback Law Firm may serve as Escrow Agent, Title Agent, Closing Agent and attorneys for CITY in this transaction and in any dispute concerning or arising from this Agreement. Further, in the event of any dispute, conflict or lawsuit, involving any deposit, or this Agreement or the transaction or obligations or rights under this Agreement, the Escrow Agent may interplead the disputed funds or documents with the Clerk of the Circuit Court. BUYER and CITY shall each pay Escrow Agent attorneys' fees and costs related to any dispute, conflict and litigation relating to this Agreement, or the transaction, or obligations or rights provided in this Agreement. All parties agree that the Escrow Agent shall not be liable to any party or person whomsoever for misdelivery to CITY or BUYER of monies subject to escrow, unless such misdelivery shall be due to gross negligence on the part of the Escrow Agent. Further, CITY and BUYER each indemnify and hold harmless the Escrow Agent from all losses, damages, claims, disputes, lawsuits, interests, and other adverse matters caused by Escrow Agent excluding gross negligence of Escrow Agent. Monies held by Escrow Agent under this Agreement shall be placed in a non-interest bearing account, unless otherwise stated herein.

XI. BROKERS: This Agreement was not brought about, directly or indirectly, by any real estate agency or broker and no commission or fee will be payable on the sale hereunder. BUYER shall and hereby indemnifies CITY against and holds CITY harmless from all liabilities, costs, damages and expenses (including reasonable attorneys fees), arising from any claims for commissions or other similar fees in connection with the transactions covered by this Agreement, based upon alleged arrangements or agreements made by BUYER. CITY shall and hereby indemnifies BUYER against and holds BUYER harmless from all liabilities, costs, damages and expenses (including reasonable attorneys fees), arising from any claims for commissions or other similar fees in connection with the transactions covered by this Agreement, based upon alleged arrangements or agreements made by CITY. This Section XI survives termination of this Agreement and Closing.

XII. DEFAULT. Should CITY be in default pursuant to the terms of this Agreement prior to the Closing, upon BUYER's written notice of default to CITY, CITY shall have ten (10) days to cure said default and if CITY fails to timely cure said default, BUYER shall have as its sole and exclusive remedy the right to terminate this Agreement and the CITY shall be released from all other obligations. Should CITY be in default pursuant to the terms of this Agreement after the Closing, upon BUYER's written notice of default to CITY, CITY shall have ten (10) days to cure said default and if CITY fails to timely cure said default, BUYER shall have as its sole and exclusive remedy the right of specific performance, which may include a claim for return of the Utility Relocation Security if such funds are being unreasonably withheld pursuant to the terms of this Agreement. Except as otherwise provided herein, if BUYER fails to perform any of the terms or covenants of this Agreement, CITY shall (i) have the right to terminate this Agreement, or (ii) seek monetary damages, specific performance of this Agreement, and other remedies afforded at law or in equity, or any combination thereof. The prevailing party in any lawsuit filed concerning the breach of this Agreement shall be entitled to reimbursement of attorney's fees and litigation costs incurred in such lawsuit against the non-prevailing party.

XIII. DISPUTES.

A. Mediation. Any disputes, claims or counterclaims between CITY and BUYER arising out of or in connection with this Agreement which cannot be amicably resolved by the Parties through good faith negotiations shall first be submitted to nonbinding mediation for resolution. As a condition precedent to the filing of any suit or other legal proceeding, the Parties shall endeavor to resolve claims, disputes or other matters in question by mediation. Mediation shall be initiated by any party by serving a written request for same on the other party. The Parties shall, by mutual agreement, select a mediator within twenty (20) days of the date of the request for mediation. If the Parties cannot agree on the selection of a mediator, then the CITY shall select the mediator who, if selected solely by the CITY, shall be a mediator certified by the Supreme Court of Florida. No suit or other legal proceeding shall be filed until (i) the mediator declares an impasse, which declaration, in any event, shall be issued by the mediator not later than sixty (60) days after the initial mediation conference; or (ii) sixty (60) days has elapsed

since the written mediation request was made in the event the other party refuses to or has not committed to attend mediation; provided however, a lawsuit may be filed prior to the satisfaction of the mediation requirement in order to preserve a claim that will elapse due to an immediate forthcoming expiration of an applicable statute of limitation. In the event a lawsuit is filed prior to the completion of the mediation requirement, the lawsuit shall be abated upon motion of either party until such time as the mediation requirement has been satisfied. The Parties shall share the mediator's fee equally. The mediation shall be held in Orange County, Florida, unless another location is mutually agreed upon by the Parties. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

B. Laws/Venue. All of the terms and conditions stated herein shall be construed under the laws of the State of Florida. Exclusive venue for any lawsuits filed relating to or arising from this Agreement shall be in a court of proper jurisdiction in Orange County, Florida.

C. Attorneys' Fees. The prevailing party in any lawsuit filed concerning the breach of this Agreement shall be entitled to reimbursement of reasonable attorney's fees, experts' fees and other litigation costs incurred in such lawsuit against the non-prevailing party.

XIII. MISCELLANEOUS: Time is of the essence in this Agreement. All covenants and agreements herein contained shall extend to and be obligatory upon the heirs, executors, administrators, trustees, successors and assigns of the respective parties. All of the terms and conditions stated herein shall be construed under the laws of the State of Florida. In the event any date or time period in this Agreement falls on a Saturday, Sunday or legal holiday recognized by the State of Florida, the date or time period shall be extended to the next business day. Nothing herein shall constitute a waiver of or be deemed a waiver of the CITY's sovereign immunity protections. Nothing herein shall constitute or be deemed a waiver or limitation of CITY's home rule and police power authority. If the date on the first page of this Agreement designated Effective Date is blank, the Effective Date of this Agreement shall be upon the date of the last of the Parties to execute this Agreement and after City Commission approval. Electronic and/or facsimile signatures to this Agreement shall be deemed original signatures. This Agreement may be executed in any number of counterparts, the aggregate of which shall constitute a single document. This Agreement is subject to City of Winter Garden City Commission approval.

XIV. FORCE MAJEURE. BUYER shall not be held liable or responsible nor be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement to the extent, and for so long as, such failure or delay is caused by fire, floods, embargoes, war, acts of war (whether war be declared or not), acts of terrorism, insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, or acts of God, which are beyond BUYER's reasonable control. .

XV. SIGNAGE. Upon execution of this Agreement, Buyer shall be permitted to install signage at the Property compliant with City of Winter Garden Code requirements to advertise the

Development. If this Agreement is terminated, any such signage installed shall be removed within three (3) business days thereafter.

IN WITNESS WHEREOF, the BUYER and the CITY have hereunto set their hands and seals the day and year above written.

Signed, sealed and delivered in
the presence of:

"CITY"

CITY OF WINTER GARDEN

_____
John Rees, Mayor-Commissioner

_____
Attest: Angela Grimmage, City Clerk

"BUYER"

30 North Park, LLC

_____
By: _____

Its:_____

Date:_____

Witnesses:

_____
Signature

_____
Print

_____
Signature

_____
Print

EXHIBIT "A"

A parcel of land lying in Section 22, Township 22 South, Range 27 East, Orange County, Florida, being a portion of the land described in Official Records Book 5017, Pages 3567 through 3586, Public Records of Orange County Florida

Being more particularly described as follows:
Commencing at the Southeast corner of the Northeast 1/4 of Section 22, Township 22 South, Range 27 East, Orange County, Florida, run North 00°02'23" East for a distance of 2,288.96 feet along the East boundary of said Northeast 1/4 to a point on the Northerly right-of-way line of the former Tavares and Gulf Railroad as described and recorded in Deed Book 104, Page 407, Public Records of Orange County, Florida for the said point also being on the Southerly right-of-way line of the former Orange Belt Railway Company Railroad as described and recorded in Deed Book 40, Page 275, Public Records of Orange County, thence departing aforesaid East boundary line of Section 22, run South 79°45'29" West along said Southerly right-of-way line for a distance of 40.49 feet to the POINT OF BEGINNING; thence continue South 79°45'29" West along aforesaid Southerly right of way for a distance of 411.94feet to the point on a non-tangent curve, concave Northerly having a radius of 600.00 feet, with a chord bearing of South 89°01'39" West, and a chord distance of 38.99 feet, thence run Westerly through a central angle of 03°43'26"along the arc of said curve for a distance of 39.00 feet to a point of reverse curvature of a curve; concave Southerly having a radius of 600.00 feet and a central angle of 06°34'16" with a chord bearing of South 87°36'14" West, and a chord distance of 68.78 feet, thence run Westerly along the arc of said curve for a distance of 68.81 feet to a point on a non-tangent line; thence run North 10°14'31" West for a distance of 34.33 feet; thence run North 79°45'29" East for a distance of 527.63 feet to a point on the West right of way line of aforesaid North Park Avenue; thence run South 00°02'23" East for a distance of 50.82 feet to the POINT OF BEGINNING.
Containing 25,249 square feet or 0.58 acres, more or less.

PLUS

A parcel of land lying in Section 22, Township 22 South, Range 27 East, Orange County, Florida, being a portion of the land described in Official Records Book 5017, Pages 3567 through 3586, Public Records of Orange County Florida

Being more particularly described as follows:
Commencing at the Southeast corner of the Northeast 1/4 of Section 22, Township 22 South, Range 27 East, Orange County, Florida, run North 00°02'23" East for a distance of 2,339.78 feet along the East boundary of said Northeast 1/4 to a point on the Northerly right-of-way line of the former Orange Belt Railway Railroad as described and recorded in Deed Book 40, Page 275, Public Records of Orange County, Florida; thence departing aforesaid East boundary line of Section 22, run South 79°45'29" West along said Southerly right-of-way line for a distance of 30.49 feet to a point on the West right of way line of North Park Avenue and the POINT OF BEGINNING; thence continue South 79°45'29" West along aforesaid Northerly right of way line for a distance of 15.24; thence run North 00°02'23" East for a distance of 50.82 feet; thence run

North 79°45'29" East a distance of 15.24 feet to a point on the West right of way line of aforesaid North Park Avenue; thence run South 00°02'23" West along said West right of way line for a distance of 50.82 feet to the POINT OF BEGINNING.
Containing 762 square feet or 0.018 acres, more or less.

This Instrument was Prepared by and Return to:

EXHIBIT "B"

City of Winter Garden, Florida
Director of Public Services
300 West Plant Street
Winter Garden, Florida 34787

SPACE ABOVE THIS LINE FOR PROCESSING DATA

UTILITIES EASEMENT

THIS UTILITIES EASEMENT, made this _____ day of _____, 2020, by _____ with a principal business address of _____, hereinafter called the "Grantor(s)", in favor of the **CITY OF WINTER GARDEN,** a Florida municipal corporation, with its permanent address at 300 West Plant Street, Winter Garden, Florida 34787, hereinafter call the "Grantee".

WITNESSETH:

That the Grantor(s), for and in consideration of the sum of ONE DOLLAR AND NO CENTS ($1.00) and the benefits to Grantor's property across which this easement is granted and certain other good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, hereby grants and conveys unto the Grantee, its successors and assigns an exclusive perpetual easement (the "Easement") for construction, installation, repair, replacement, reconstruction, maintenance, control, operation, use, and modification of public and private franchise utilities and facilities, including but not limited to stormwater drainage lines, lighting facilities, sewer lines, water lines, reclaimed water lines, gas lines, electric lines, cable television lines, telecommunications lines, fiber optic cables and other public utilities and facilities of every type. The Easement shall be over, under, through, and across the real property described in **Exhibit "A"**, a copy of which is attached hereto and incorporated herein by this reference.

The rights granted to Grantee by Grantor specifically include, but are not limited to, the right to control, construct, reconstruct, repair, replace, operate, use, maintain, and modify public and private stormwater drainage lines, lighting facilities, sewer lines, water lines, reclaimed water lines, gas lines, electric lines, cable television lines, telecommunications lines, fiber optic cables and other public utilities and facilities of every type within the Easement, at Grantee's sole discretion, including the right to allow other utility providers to use the Easement. Grantor shall maintain the surface improvements including pavement, sod and landscaping within the Easement at Grantor's sole cost and expense. Grantee shall not be responsible for repair, replacement or maintenance of pavement, sod and landscaping disturbed, damaged or destroyed during or through the exercise of the intended purposes of the Easement. Grantee shall only be responsible for the maintenance and repair of improvements within the Easement that Grantee constructs or accepts responsibility for maintenance.

The Grantee shall be responsible for any liability imposed by law as the result of persons being injured on or by the improvements within the Easement that are constructed by Grantee or accepted in writing for maintenance by Grantee; provided however, nothing herein is intended as or constitutes a waiver of the Grantee's sovereign immunity protections and defenses or any other protections and defenses afforded under law. All covenants, terms, rights, and provisions herein contained shall inure and extend to and be obligatory upon the successors and assigns of the respective parties hereto.

TO HAVE AND TO HOLD, this Easement unto the Grantee and its successors and assigns forever.

THE Grantee herein and its successors and assigns shall have the right to clear and keep all trees, undergrowth and other obstructions that may interfere with the normal use, operation or maintenance of the Easement and the utilities and facilities therein, out of and away from the Easement. The Grantor, its heirs, successors and assigns, shall not build, construct or create, nor permit others to build, construct or create any buildings or other structures within the Easement and Grantor shall not construct or create, nor permit others to construct or create any other improvement or obstruction that may interfere with Grantee's normal operation, use or maintenance of the Easement and the utilities and facilities therein, and Grantor shall not interfere with the utilities and facilities within the Easement. The Grantor warrants that Grantor is fee simple owner of the Easement area and has the authority to grant the Easement herein.

Wherever used herein, the terms "Grantor" and "Grantee" include their respective heirs, legal representatives, successors and assigns of individuals, and the successors and assigns of corporations.

IN WITNESS WHEREOF, Grantor(s) has/have executed this Easement by the day and year first written above.

Signed, sealed and delivered
In the presence of these witnesses:

_____
(Signature)

_____
(Print Name)

_____
(Signature)

_____
(Print Name)

GRANTOR:

_____
(Signature)

By:_____
(Print Name)

Its:_____

STATE OF _____}
COUNTY OF _____}

The foregoing instrument was acknowledged before me this ___ day of _____, 2020, by _____ who is _____of _____, who is personally known to me (__) or who has produced identification (___) of the following type(s): _____.

NOTARY PUBLIC

NOTARY STAMP

_____
(Signature)

_____
(Print Name)

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