STAFF DEVELOPMENT REVIEW COMMITTEE MEETING MINUTES

MEETING DATE: April 17, 2019
LOCATION: CITY HALL COMMUNITY DEVELOPMENT
2ND FLOOR CONFERENCE ROOM
CITY HALL, 1000 CITY CENTER CIRCLE

PROJECT REVIEW #1:
9:00AM- 10:00AM

APPLICATION: Site Plan/Central Parc at Oakwater
CASE NO.: 19-80000002
LOCATION: Northeast corner of S. Williamson Boulevard and Oakwater Lane

ATTENDING CITY STAFF REPRESENTATIVES
Penelope Cruz, Planning Manager
Melanie Schmotzer, Development Review Technician
Briana Conlan-King, Senior Planner
Junos Reed, Public Works and Utilities Engineer
Greg Marino, Public Utilities Engineer
Valery Duhl, Community Development Engineering Intern
Linda Johnson, Right-of-Way Agent
Shannon Balmer, Assistant City Attorney

ATTENDING REPRESENTATIVES FOR APPLICANT
Jarrod Stubbs, P.E., Kimley-Horn & Associates

ATTENDING CITIZENS
N/A

COMMENTS/OTHER DISCUSSION ITEMS:

- See attached SDRC staff comments discussed at the meeting for more detailed information on the discussion item(s).

ACCEPTED

4-18-19

Melanie Schmotzer
Development Review Technician

DATE

SDRC MEETING DATE OF APRIL 17, 2019

SITE PLAN/
CENTRAL PARC AT OAKWATER
CASE NO. 19-80000002
OUTSTANDING TECHNICAL COMMENTS AS OF APRIL 12, 2019

The comments below may be revised and/or supplemented following staff discussion with the development team at SDRC meeting.

PLANNING DIVISION REVIEW COMMENTS:

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

1. Revise the Cover Sheet as follows:
   - Provide the property owner contact information
   - Include in the Case Number in the title of project, "Central Parc at Oakwater, Case No. 19-80000002" [LDC Ch. 6, Sec. 5].
   - Add the site address: 6225 S. Williamson Boulevard.
2. Clarify if the intent is to subdivide the property into different parcels in the future?
3. Revise the Survey to reflect the rezoning of the subject property from Planned Commercial Development to Community Commercial (Ordinance 2018-23), voiding the Oakwater Plaza PCD Master Development Agreement from 2008.
4. Provide on the data table the proposed height for each proposed building.
5. Provide the vehicle stacking calculations for the drive-through. Six vehicle staking spaces are required for the proposed drive-thru lane with a minimum of 3 spaces behind the order station or menu drive-through. The vehicle stacking spaces must be designed based on a 10'x22' dimension for each required vehicle staking spaces [LDC, Ch. 12, Sec. 7(a) and (c)].
6. One loading zone space is required for each restaurant, and the retail building. Indicate the location of each of the 12' x 25' loading zones. If deliveries are to be made during non-business hours, specify in the written response to these comments. If deliveries are to be made during business hours, an identified loading space (12'x25') will need to be provided [LDC, Ch. 12, Sec. 5(b) and Sec. 6(b)(2)].
7. **Suggestion:** Consider moving the Accessible parking spaces currently located along the southern side of the building to the western side of the drive-through buildings, to prevent access to the Accessible parking spaces be blocked by drive-through traffic.
8. Where the width of the proposed seven-foot sidewalk reduces to five-feet in width, either widen the full length of the sidewalk adjacent to parking spaces to 7' or provide a bollard or wheel stop for said spaces, located a minimum of 30 inches from the sidewalk [LDC, Ch. 12, Sec. 6(g)(2)].
9. Verify angle of parking spaces adjacent to the 2,150 sf drive-thru restaurant to determine the length of the parking space meets the requirements of the LDC [LDC, Ch. 12, Sec. 6(c)(2), see Figure 12:2].

Figure 12:2

Minimum Dimensions for Parking Spaces

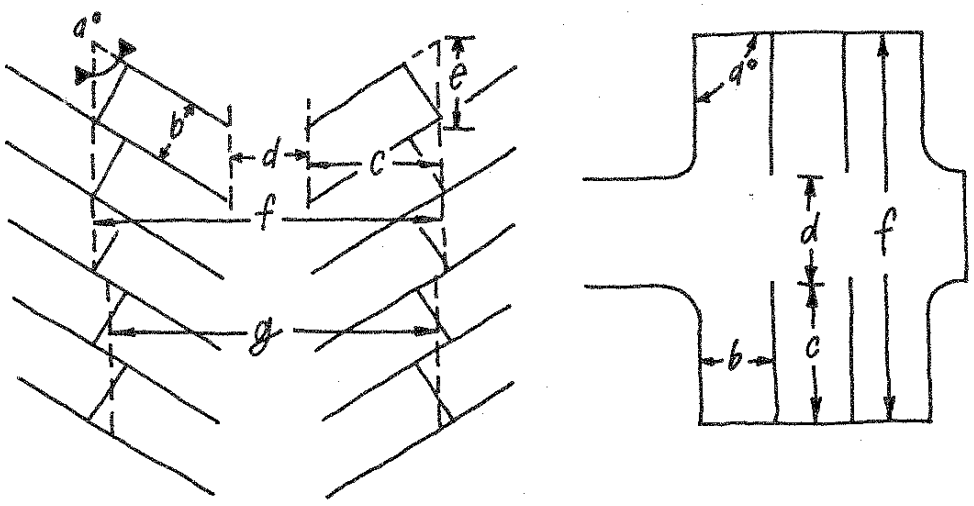


TABLE FOR PARKING LOT DIMENSIONS

a	b	c	d	e	f	g
20	10'	16.2'	11.0'	29.2'	43.4'	43.0'
30	10'	18.7'	11.0'	20.0'	48.4'	39.7'
40	10'	20.5'	12.0'	15.6'	53.0'	45.3'
45	10'	21.2'	13.0'	14.1'	55.4'	48.3'
50	10'	21.8'	12.0'	13.1'	55.6'	49.2'
60	10'	22.4'	18.0'	11.5'	62.8'	57.8'
70	10'	22.1'	18.0'	10.6'	62.2'	58.8'
80	10'	21.5'	24.0'	10.2'	67.0'	65.3'
90	10'	20.0'	24.0'	10.0'	64.0'	—

10. The monument sign must be set back a minimum of 5’ from the property/right-of-way line and outside of the required 10-foot sight-distance triangle required along the private access drive and S Williamson Blvd. and the private access drive and Oakwater Ln. [LDC, Ch. 16, Sec. 6(a)(2)].
    - The height of the sign along Williamson Boulevard cannot exceed 12’ and the sign area cannot exceed, 84 square feet, and 5 tenant panels. The base of the sign must be landscaped in accordance with the LDC [LDC Ch. 15, Sec. 4(a)].
    - The sign area along Oakwater Ln. may not exceed 21-square-feet and 8-feet in height, and 5 tenant panels. A secondary sign along a local road, (Oakwater Ln.), is allowed 25% of the primary sign square footage [LDC Ch. 15, Sec. 3(c)].

11. One freestanding monument sign is permitted per parcel street frontage. Revise the all sheets and remove the additional monument signs along the Williamson Blvd. frontage as they are not permitted [LDC Ch. 15, Sec. 4(a)(1)(a)].
12. Identify the location of all parking lot light poles on the site plan, landscape plan, irrigation plan, and utility plan. Provide a photometric plan identifying compliance with the requirement that site lighting emits no more than 0.5 footcandles at the property line [Code of Ordinances, Ch. 42, Art. IV, Sec. 42-81(14)] and add a note on the site plan and the site lighting detail that states, "The lighting from the parking lot lights must not shine directly upon any adjacent residence and must not produce excessive glare. Glare guards will be installed if needed." [LDC, Ch. 12, Sec. 6(l)].
13. Add a note stating utilities will be installed underground. The LDC requires electric, cable, and other telecommunications utilities be provided underground to the building [LDC, Ch. 11, Sec. 8].
14. Architectural comments are to be addressed during the site plan review and not deferred to building plans:
    a) Provide architectural building elevations for the two drive-thru restaurants and the retail building. Include and label all colors and materials and all roof slopes [LDC Ch. 6, Sec. 5(a)(3)] [LDC, Ch. 14, Sec. 4].
    b) The site plan and building elevations did not indicate where the A/C units would be located. Provide the location of the A/C units (ground or rooftops) with the next submittal and verify compliance with the requirements listed below. All service areas and mechanical equipment (ground, wall, or roof), including, but not limited to, air conditioning condensers, heating units, satellite dishes, irrigation pumps, and propane tanks, displays and refilling areas, must be screened using architectural features consistent with the structure, or landscaping of sufficient density and maturity at planting to provide opaque screening. [LDC, Ch. 14, Sec. 4(g)].
    c) Provide a note on the site plan and architectural plans that "All wall-mounted equipment including, but not limited to, electric boxes, meters, and vents must be painted to match the building [LDC, Ch. 14, Sec. 4(g)]."
    d) External downspouts were not identified or labeled on the building elevations provided. If external downspouts are proposed, they are to be enclosed within the building structure on the front and side elevations or any other building elevation visible from a public right-of-way. In locations that are clearly visible from a public right-of-way, downspouts may be installed externally only if they have a high-quality, decorative design and appearance of copper, steel, tin, or silver or similar natural metallic material. In locations that are mostly or completely screened from a public right-of-way, external downspouts are not required to be decorative as above, but must be painted to match the building exterior on which they are mounted [LDC, Ch. 14, Sec. 4(i)].
    e) The design of each dumpster enclosure must be consistent with each building (i.e. materials, colors, etc.). The enclosure must have an opaque gate, such as PVC fencing, to match the style of the building [LDC, Ch. 14, Sec. 4(j)]. According to the LDC, the opaque gate must be decorative and architecturally

compatible with the building. The use of chain-link is not permitted by the LDC [LDC, Ch. 14, Sec. 4(h].

15. Provide a minimum 6'-tall opaque fence or wall between the existing single-family development and the proposed development along the eastern landscape buffer line and outside of the wetland buffer. This fence/wall is required in addition to any bufferyard plantings required by Chapter 13 of the LDC [LDC, Ch. 13, Sec. 3.5]. The wall/fence will need to be designed as an integral feature of the architectural design of the principal structure. Such design shall include the use of similar materials, colors and finishes as the principal structure [LDC, Ch. 14, Sec. 4(h)]. Include a fence or wall detail in the next submittal and add a label to clearly identify the screening wall on both the site plan and landscape plan.
16. On the architectural plans and site plan, revise the height and type of both fences around the child care center's play area. The play area must be completely enclosed with a minimum 6' high opaque wall or fence. The use of chain-link is not permitted by the LDC [LDC, Ch. 14, Sec. 4(h].
17. Illustrate and label the wetland line, wetland buffer and conservation easement over the wetland and wetland buffer on all sheets [LDC Ch. 6, Sec. 4(b)(3)(c)].
18. Update the tree survey to reflect the specific type of trees on the site (e.g. "laurel oak" vs "oak").
19. The tree survey submitted specifies multiple trees as "historic oak trees", which according to the arborist report by Don Spence, PhD, "many of the tree measurements made by the surveyor were not accurate and not all were live oaks". Also, Don Spence found that some trees that the surveyor reported on the survey that are being counted towards the tree count are no longer on site. The tree survey needs to be updated to reflect this as it impacts your tree preservation requirements.
20. **Advisory:** According to the LDC, the following are specimen trees:

Common Name	**Botanical Name**	**Size**
Turkey Oak	(Quercus Laevis)	12 inches and larger
Other Oak species	(Quercus spp.)	18 inches and larger
Maple	(Acer spp.)	18 inches and larger
Cypress	(Taxodium distichum)	18 inches and larger
Sweet Gum	(Liquidambar styraciflua)	18 inches and larger
Hickory	(Carya spp.)	18 inches and larger
Elm	(Ulmus spp.)	18 inches and larger
Loblolly Bay	(Gordonia lasianthus)	12 inches and larger
Sweet Bay	(Magnolia virginiana)	12 inches and larger
Red Bay	(Persea borbonia)	12 inches and larger
Swamp Bay	(Persea palustris)	12 inches and larger
Sycamore	(Platanus occidentalis)	18 inches and larger
Magnolia	(Magnolia/grandiflora)	12 inches and larger
Red Cedar	(Juniperus silicicola)	12 inches and larger

21. Provide a table of the trees included in the tree survey to verify the following:
    - The number of trees that are currently on site, the number of trees that are proposed to be removed, the number of trees that are required to remain, and the number of trees that will remain (see attached example) [LDC, Ch. 9, Art. II. Sec. 16(b)].
    - Provide calculations that 65% of any landscape buffer over ten feet in width is set aside for the preservation of existing trees and indicate which trees meet this requirement [LDC, Ch. 13, Sec. 3(g)(3)(a)].
    - Provide calculations to demonstrate that 50% of the number of existing trees to remain are located within the 15% tree preservation area and indicate which trees meet this requirement [LDC, Ch. 9, Art. II, Sec 17].
22. The mitigation tabulation calculations will have to be updated to reflect the revised specimen and historic tree list to determine if replacements or a mitigation payment will have to be made.
23. Revise the rear landscape buffer to exclude new landscape plantings in the wetland buffer area. Only native species vegetation may be planted in the 25' wetland buffer area. No disturbance to the wetland may occur [LDC, Ch. 9, Art. I, Sec 5(c)].
24. Relocate the tree protection fence and silt fence from the 25' wetland line to the 25' wetland buffer line.
25. Sheet L1.00: Update the northern landscape buffer from 50' to 5'.
26. **Suggestion:** Selection of a different shade tree, such as a Sweet Bay Magnolia, rather than the Live Oaks in the small interior landscape islands located throughout the site, to prevent future tree removals due to root vs. pavement conditions that continue to arise throughout the City.
27. Label all the tree conservation easements on the landscape plan and site plan. The minimum size of such easement shall be one-foot diameter for every one-inch diameter at breast height or the dripline of the tree, whichever is greater [LDC, Ch. 9, Art. II, Sec. 16 (b)]. Exclude parking lot area from the tree conservation easement.
28. Sheet L1.00: Label and identify all landscape materials and quantities on the Landscape plan (see attached example).
29. Revise the foundation planting table for each building by elevation (see example below). Two foundation plants for every three feet of the exterior building perimeter and one understory tree for every 30 feet of the exterior building perimeter [LDC, Ch. 13, Sec. 5(a)(1)(b)(1)].
    - Example: Along the (n,s,e,w) side of building, based on the ___ feet of exterior building perimeter, ___ understory trees and ___ shrubs are required.
30. Provide a table to identify the required foundation plantings around each dumpster enclosure. One shrub per two lineal feet [LDC Ch. 13, Sec. 5(c)].
31. Verify a continuous 3'-high vehicular use screening hedge is provided along the access drives and parking areas which are visible from any right-of-way. The 3'-high hedges can be located within the landscape buffer, but the required right-of-way buffer plantings must also be in said buffer. The hedge must provide a minimum three-foot high visual barrier within a maximum of two years after installation [LDC, Ch. 13, Sec. 4(f)]. Add the following note on the landscape

plans, “A continuous 3’-high vehicular use screening hedge will be provided along all parking areas visible from any right-of-way [LDC, Ch. 13, Sec. 4(f)]. Areas where existing vegetation is to be preserved may require supplemental plantings if sufficient vehicular screening is not provided.”

32. Add the following note on the landscape plans, “Landscape materials adjacent to parking spaces must be setback a minimum of 2’ behind the back of the curb to provide for vehicle access” [LDC, Ch. 13, Sec. 4(e)(4)(a)].
33. Provide a diagram of the vehicular use area to verify that the 10% vehicular use area landscaping requirement is met [LDC, Ch. 13, Sec. 4].
34. Removal of the 15” oak tree along the Oakwater Lane right-of-way will require a separate tree removal permit and require replacement according to Chapter 9, Article II, Section 19(b) of the City’s Land Development Code. Two shade trees will be required to be replaced at 4” caliper, 14’ tall at the time of planting, prior to the issuance of a CO along Oakwater Lane, or the developer can coordinate with the HOA from Ashton Lakes to replant them somewhere else in the Ashton Lakes subdivision. Coordination between the developer and the City for inspections will occur at the time of CO.
35. Clarify why no tree aeration plan is provided for the 43” oak near the 2,150 SF drive-through restaurant.
36. **Advisory:** Approval of irrigation system by Volusia County (Environmental Health, Health Dept.) shall be provided to the City prior to the release or acceptance of any project. [Volusia County Water-wise Landscape Irrigation Ordinance]
37. **Advisory:** Gopher tortoise relocation permits from FWC, if applicable, shall be required prior to any land clearing.

TRANSPORTATION CONCURRENCY REVIEW COMMENTS: (Tim Burman, Community Development Director (386) 506-5675/tburman@port-orange.org):
Below are the City’s comments on the March 22 TIA Methodology. This is the first review of the TIA Methodology by the City of Port Orange.

1. According to Section 4(g) of the R2CTPO TIA Guidelines, a City is able to add segments and/or intersections to be analyzed based on traffic capacity or safety concerns and there are concerns for the following intersections in the City of Port Orange. Include the following intersection in the analysis: 1) Taylor Road/Williamson Boulevard; 2) I-95 on & off ramps/Dunlawton Avenue; 3) Taylor Branch Road/Dunlawton Avenue; and 4) Yorktowne Boulevard/Dunlawton Avenue. While there is only a small percentage (5% to 10%) of the project trips using these intersections, staff wants to ensure capacity exist in future build out as there are a number of vested projects in the area that are anticipated to come online over the next 2-3 years.
2. Provide statement that the TIA will determine the Summer Trees Road FS Calculation for this project. If PM trips from the project impact the intersection of Williamson Blvd/Taylor Road, the following will need to be provided to calculate the development’s fair-share contribution. The project’s largest critical movement combination of the below four combinations will be used as the numerator of the fair-share equation.

- eastbound left, westbound through, northbound left, and southbound through
- eastbound left, westbound through, northbound through, and southbound left
- westbound left, eastbound through, northbound left, and southbound through
- westbound left, eastbound through, northbound through, and southbound left

EXAMPLE PROJECT - CRITICAL MOVEMENT COMBINATION SUMMARY

EL/WT/SL/NT 7 (**maximum critical lane contribution)**
EL/WT/NL/ST 3
WL/ET/SL/NT 6
WL/ET/NL/ST 2
Example - Fair Share = Maximum Critical Lane Contribution / Added Capacity at Taylor/Williamson Provided by Summer Trees = 7 / 860 = 0.8% and the fair-share payment would be 0.8% of $3,152,938.60

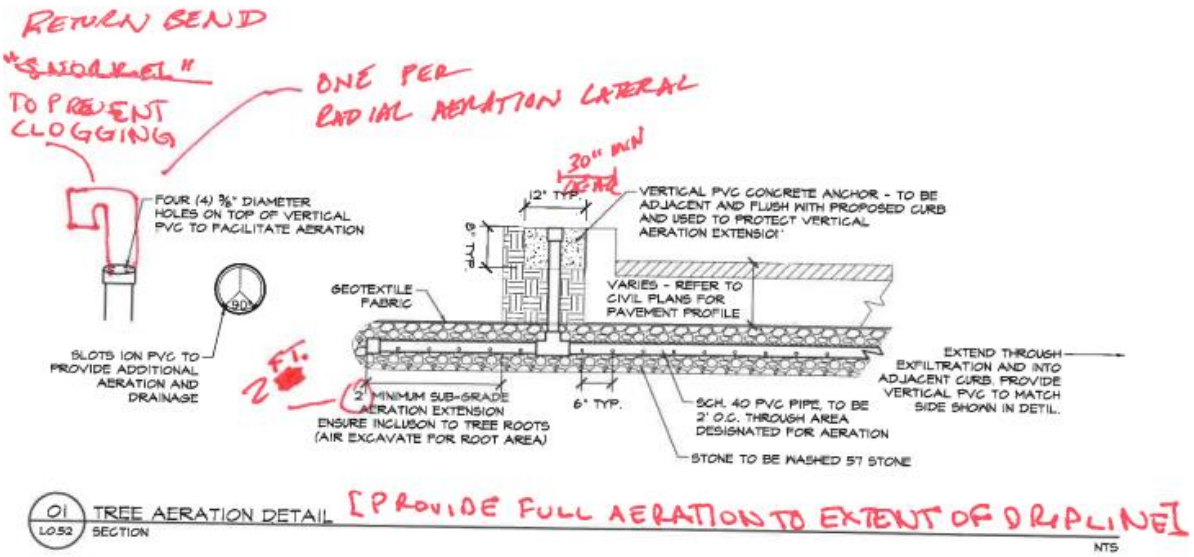
3. Volusia County Traffic Engineering were emailed to the applicant on 4/12/19. A revised methodology will need to be resubmitted to the City to address City and County comments.

ENGINEERING DIVISION REVIEW COMMENTS: (Larry A. Roberts, Engineer (386) 506-5665 lroberts@port-orange.org; Lisa Epstein, Engineering Specialist (386) 506-5662 lepstein@port-orange.org; Valerie Duhl, Engineering Intern (386) 506-5664 vduhl@port-orange.org):

1. **Suggestions:** On the Site Plan (C4.0), extend the length of landscape islands to the length of the adjacent parking space to protect the vehicles and provide a minimum 5' radius for vehicle turning movements especially at west side of Day Care porte-cochere and northern most space by the dumpster; review the locations of stop signs relative to stop bars to ensure they're properly located especially on the southeast side; for crosswalk striping, use 2 parallel lines versus 12" lines 3' O.C.; for clarity, show concrete for dumpster pads per City Standard Detail Dumpster Pad (M-13).
2. On the Site Plan (C4.0), conform dumpster size on north side of property to City Standard Detail Dumpster Pad (M-13).
3. On the Site Plan (C4.0), per City Standard Detail Accessible Parking Spaces M-11, when only header curb is used for protection, sidewalk width in front of Accessible Parking Spaces shall be 68". If the design is not intended to rely on header curb alone, the City prefers Accessible signs within bollards rather than wheel stops which have been found to be a hazard. Ensure Accessible Parking Space signs are appropriately located.
4. **Suggestions:** On the Paving, Grading, and Drainage Plan (C5.0), review the tree well top and bottom of wall elevations especially at the center of the wall to ensure tree flooding will not occur; turn on existing contour elevations and tie in proposed contours to existing contours at the perimeter of the property to ensure City's maximum slope of 1:4 is not exceeded; add a spot grade at existing trees

and ensure the City's maximum slope of 1:4 is not exceeded or add retaining wall details if required because it looks like some tree natural grades are 3.5' below the proposed top of curb.

5. Per City Standard Detail Dry Retention Pond ST-9, minimum dry retention pond berm width is 2' and per note 3, installation of impervious soils or other barrier is required to prevent transmission of water. Please add berm width to east side of pond and update Detail A on C7.1. In addition, note that because Type A soils are present, sand grown sodding of the entire bottom of pond is required.
6. **Advisory:** This soil is corrosive to Concrete applications, so evaluate the type of concrete used for storm conveyance. Suggestion: Consider wrapping concrete pipe in 5 mil plastic sheeting.
7. Add grades for southern QSR dumpster. **Suggestion:** Stagger and/or rotate dumpster array so that solid waste vehicle does not need to back up into the high-value menu ordering communication array.
8. **Suggestion:** Add Storm Event elevations to Control Structure CS-2 on General Construction Details C7.1.
9. Conform Details found on C7.1 with City Standard Details because details are conflicting:
    a. Sidewalk integral curb
    b. Typical asphalt pavement section
    c. Concrete pavement detail
    d. Concrete sidewalk detail
    e. Accessible parking signage
    f. Typical handicap striping
    g. Tree protection detail
    h. Type III Silt Fence
10. Add an analysis of the 100-year 24-hour storm to the drainage report and show on CS-2 Construction Details C7.1. Choose top of containment berm as higher of 25-year 24-hour high water plus one-foot freeboard or 100-year 24-hour high water plus zero feet of freeboard.
11. Add City Standard Detail for Roadway Intersection Valley Gutter R-10 for driveway connections.
12. The Tree Mitigation Plan (L0.50) shows square tree barricades, but they are to follow the tree's dripline. Tree Aeration Fence Plan (L0.51) shows post grading tree protection conforming to shape of landscape islands, not the tree dripline.
13. On the Tree Mitigation Details (L0.52), the Tree Protection Fencing detail shows the fence at the dripline, but it is not drawn at the dripline in the plans. Conform the Tree Protection Fencing detail to the City's Standard Detail Tree Protection Barricade R-23 to avoid conflicting information.
14. On Sheet L0.52, revise the Tree Aeration Detail per the redline image below.



15. **Advisory:** Prior to the Preconstruction meeting, provide a construction cost estimate signed and sealed by the engineer of record and/or landscape architect, as appropriate, detailing the tabulation of quantities and costs of any proposed site improvements including landscaping and irrigation but not including buildings or similar structures. [LDC Chpt. 6, Sec. 5 (a) (4)]
16. **Advisory:** Prior to the Preconstruction meeting, provide copies of letters notifying all franchised utilities of the size, location, and layout of the proposed development. [LDC Chpt. 6, Sec. 5 (a) (5)]

BUILDING DIVISION REVIEW COMMENTS: Allan Tischler, Chief Building Official (386) 506-5627/atischler@port–orange.org):

1. **Advisory:** Review for applicable code requirements for proposed buildings will be performed at the time of permit submittal.
2. **Advisory:** Separate permit applications are required for: New Buildings, Light Poles, Fencing, Dumpster Enclosure, retaining wall and Signs. Contact the building division if there are any questions or concerns about permit requirements for work specifically mentioned.
3. **Advisory:** SDRC review does not include: Buildings, Dumpster Enclosure, Signs, Light Poles Fence, etc. unless otherwise noted in this report.
4. **Advisory:** Permits for wells and irrigation systems must be obtained from Volusia County.

CITY ATTORNEY REVIEW COMMENTS: (Shannon Balmer, Assistant City Attorney (386) 506-5535/sbalmer@port-orange.org; or Matthew Jones, Deputy City Attorney (386 506-5527/mjones@port-orange.org):

1. Owner needs to be listed on front of plans.
2. Site Improvement Agreement for public improvements in the course of development will be required pursuant to *Ch. 6 Sec. 5(b), LDC*.
3. Transportation Concurrency and Fair Share Agreement will be required.
4. Tree conservation easements required per *Ch.6, Sec. 4(b)(3)(b), LDC.*

5. Easements over drainage facilities need to be shown on the site plan. Retention areas shall be covered by easement extending 10 feet beyond top of bank. Storm sewers shall be covered by easement no less than 20 feet centered on centerline of pipe (*Chap. 6, Sec. 4(b)(1), LDC*).
6. Illustrate and label on all sheets the standard lot easement to the City, 12 feet across the fronts of all lots adjacent to any street (*Chap. 6, Sec. (4)(b)(4), LDC*).
7. Potable water, sanitary sewer, and reclaimed water lines shall be covered by an easement of no less than 20 feet, centered on the centerline of the pipe (*Chap. 6, Sec. (b)(2)(a), LDC)*.
8. Show cross access easement labelled with ORB and PG for connection to gas station property.
9. Provide Statement of Authority for authorized agent on the application as the name does not appear on Sunbiz report.
10. **Advisory:** The easements conveyed to the city require sketch and legal descriptions, including acreage or square footage, by a licensed surveyor, preferably provided to the city staff no later than (60) days to issuance of the certificate of occupancy (CO). This allows sufficient time for staff to prepare the original legal instruments to be properly executed by the property owner and recorded in the public records prior to CO. For recording purposes, the legal description font needs to be 12 or larger. (E-Mail copy or other duplication of the legal description will not be accepted).]

FIRE DEPARTMENT REVIEW COMMENTS: (Beau Gardner, Fire Marshal (386) 506-5905/bgardner@port-orange.org):

1. A minimum of 20' clearance for FD access per NFPA 1, Ch. 18 (FD Access and Water Supply) is required for all access drives. Verify if drive-through lanes will be curbed or utilize pavement marking? If curbing is proposed, revise plans to provide required clear width in outer access drive adjacent to proposed drive-through lanes.

PUBLIC UTILITIES DEPARTMENT REVIEW COMMENTS: (Junos Reed (386) 506-5754; jureed@port-orange.org):

1. Add to the General Notes stating: "All construction shall be in conformance with the City Standard Construction Details, Latest Version, unless otherwise specifically approved." [LDC, Ch. 11, Sec. 2 (b)]
2. Sheet C1.1: Revise the "Potable Water System" Section:
   a) Add an additional item to include Detail W-1 note 22 and Detail W-2 note 22.
   b) Remove/ Replace existing items #7 & 8 with Detail W-1 note 13.
   c) Add that "all meters 2in and less shall be installed by the City of Port Orange" where applicable.
   d) Item #4 should be modified from class 50 to pressure class 350.
   e) Item #9 Add C-900 "PVC or C-905 CL 150 (Color "Blue")"
3. Sheet C1.1: Revise the "Potable Water Testing/Inspection" Section: Add an additional item to include Detail W-2 Notes 10, 19, and 25
4. Sheet C1.1: Revise the "Sanitary System" Section:
   a) Remove items #3, 9, & 10. No force main or lift stations are proposed.

b) Item #4 Revise manhole spacing from 400 to 350 feet spacing
c) Item #5 Revise 6" from 1.00% to 2.00%

5. Sheet C1.1: Revise the "Sanitary Testing/Inspection" Section:
   a) Add an additional Item #6 to include Detail S-1 note 6.
   b) Add an additional item #7 to include Detail S-2 note 19, 20, 21, and 31.
6. Sheet C8.9: Remove the following City Standard Construction Details as none are proposed:
   a) Outside Drop Manhole New Construction (S-9)
   b) Outside Drop Manhole Std. (S-10)
7. For design crossings of potable water mains, gravity sanitary sewers, force mains, reclaimed water mains, or storm sewers, clearly indicate which utilities are located over or under other utilities. This is also a requirement of the as-built drawings. Sheet C6: Two (2) additional crossing details needed where EACH QSR's sewer lateral crossing under Day Care water service. One (1) additional crossing needed where 213' 8in sewer main crosses under Retail water service(s) near structure "S3". It appears there will be adequate cover given depth to sewer.
8. **Suggestion:** While the soils report submitted as part of the application package did not mention the corrosivity of the existing Tavares Fine Sand (63), a quick review determined this soil to be acidic and being "highly corrosive" to concrete. Per City detail cement used in concrete mix for precast structures shall be type II, Acid & Sulfide resistant. Additionally, City staff recommends inspection of the existing sewer main upon removal and further coordination with staff on any concerns contractor and/or engineer may have at that time, if any. [Standard Detail S-2, note 37]
9. Per LDC and City Standard Details, all commercial sewer laterals are to be minimum 6in inside diameter. Sheet C6: Label the Retail and 2,600 SF QSR sewer laterals as 6in in size having minimum 2% slope. Please update plans to show 6in sewer lateral's having minimum 2% slope for the Day Care and the 2,150 SF QSR per City's standard detail [Standard Detail S-1 note 11 & S-15]
10. Sheet C6: Per City's standard notes, LDC, and construction details ALL proposed 8in sanitary sewer mains are to be installed at a 0.4% minimum slope. Plans currently call out a slope of 0.35%. Advise, review and revise plans, structure table, inverts, and call out the 8in sewer main at 0.4%. [S-1, note3]
11. **Advisory**: Each owner and customer shall be responsible for the inspection and maintenance of backflow prevention device(s) and shall file a test certification from a certified tester for each device [Ordinance Ch. 74 Utilities, Article VIII, Sec. 74-249]
12. Provide fire flow calculations from a Florida registered engineer to the City of Port Orange. Per Table 11-1 of the Land Development Code, minimum design fire flow of 1,500 gpm (Day Care Facility) & 1,200 gpm (Retail use), while maintaining a residual pressure of 20 psi. Per review of the site there are existing fire hydrants within the Williamson Blvd right-of-way adjacent to the site as necessary to perform these calculations. [LDC Ch 11 Sec 3 Table 11-1].
13. Sheet C5: Where existing grades are shown to be increased by fill and/or where existing utilities are located in areas of proposed pavement, note on the plans

"that all valves and boxes, manhole lids and covers, and similar appurtenances must be adjusted accordingly to match the finished grade."

14. Manhole rims shall match flush with finish grade in paved areas and min 0.2-max 0.5ft above grade in unpaved areas. It appears "S-1" rim elevation is too low as proposed where shown on plans. Staff expects this rim elevation to be more on the order of 27.00 +/- in this area of fill behind the Day Care Facility [Standard Detail S-2, note 11)]
15. Sheet C5: Show sewer Manhole rim elevations and locations on plans. Sewer can be shown as an existing layer here for plan legibility.
16. Sheet C6: Ensure Top of Cover (TC) elevation will match proposed grade with top being modified where required. The City of Port Orange only allows a finished grade adjustment of 12in Maximum by detail. Please note on plan that structure "EX-2" is to require removal/replacement of structure top to within this 12in of final grade to accomplish meeting the requirement [Standard Detail S-6]
17. **Advisory**: A temporary construction easement will be required at the adjacent gas sttaion lot's existing sewer tie-in.
18. **Advisory:** Maintenance of Traffic (MOT) plan will need to account for water tap activities adjacent to sidewalks within the Oakwater Ln right-of-way. Additional "sidewalk closed" signage along with railing and any other devices will be anticipated.
19. Sheet C-0: Revise Coversheet Water & Sewer City of Port Orange contact from Kenny Ho to Junos Reed.
20. No interruption in sewer service will be allowed during construction. Advise staff on how service to the gas lot will be maintained during construction activities.
21. Sheet C6 and wherever applicable: Show all existing and proposed easements. It appears some easements are not indicated on plans, namely the 10ft dry pond maintenance/drainage easement, the gas lot cross access, the existing 20 ft Utility/Access Easement (over the existing sewer main through the site; per O.R. Book 4165, pg 3595), the proposed 20 ft Utility Easement over the proposed sewer line (centered on sewer main) and a 12ft Utility & Drainage easements along both Williamson Blvd & Oakwater Ln right-of-ways. Label easements as "proposed" or "existing to be vacated". [LDC Ch 6 Sec 4(b)(4)]
22. **Advisory:** Note that per City's standard construction details, meters are to be located within an easement. If meters are outside of the 12 ft Utility & Drainage Easement, it will be necessary to provide easement(s) to encompass meters.
23. Sheet C6: Where an existing structure exceeds 10,000sq.ft., required fire hydrant spacing is 400 ft. with a 200 ft hose lay distance. The proposed hydrant spacing appears to meet this requirement for the Day Care Facility everywhere but along the building wall facing Williamson Blvd. Dimension the location from the existing fire hydrant to the western building corner for confirmation. [Table 11-1 b, LDC, Ch.11 Sec. 3(c)(1)]
24. Sheet L1: Show/call-out irrigation source and location of service with meter size and backflow prevention and connection details as shown on Sheet C-6
25. Sheet L2 & C6: There appears to be conflicting information for what size irrigation meter and backflow preventer will be used. The utility plan provides a 2in meter & backflow while irrigation plan provides a 1-1/2in meter & backflow. Be consistent between all plan sheets and specify the proper size to be used.

26. Sheet L2: Provide irrigation meter sizing calculations to ensure proper sizing of irrigation meter. 642gpm has been specified on plans as peak demand.
27. All proposed site developments over five (5) acres shall be “interruptible” and have a back-up source of irrigation water (i.e. pond, on-site tanks, well, and/or potable). Indicate the back-up source of irrigation to serve the site. [LDC Ch 11 Sec 5(b)(2)].
28. Sheet L1: Landscape plans shall clearly depict the design location of plantings relative to the location of (public) utilities and stormwater infrastructure in order to evaluate potential conflicts. Show proposed water service(s) [Standard Construction Detail S-1(23)]
29. Provide the maximum estimated sewer demand for the site so staff can determine if the existing sewer system and lift station has the capacity to serve the development.
30. Have a design engineer prepare and submit to the City, for review, flotation calculations to size the proposed manholes given the high water table anticipated at the site. Thicker manhole walls and bases may be required [S-1 note 13 & S-2 note 39]
31. Sheet C6: All sewer lines constructed outside of row within yards, backyards, other poorly accessible areas shall be constructed of green C-900 PVC. No use of plastic styrene fittings shall be allowed. Revise plans to show callout for the 29 LF and 184 LF 8in PVC sewer mains downstream of structure “EX1” to be “Green C-900 PVC” and update Note #6 on construction drawing on same. [Detail S-1, note 19]
32. All manholes constructed in side yards, backyards, and easements outside of right-of-way shall be outfitted with fiberglass or epoxy liners in accordance with ASTM-3753 or other types of liners approved by the city. Please appropriately note for structure “S1” [Detail S-1 note 18]
33. Sheet C6: Provide dimension showing distance between 8in sewer main and closest water service to Day Care Center. 10ft preferred but 6ft separation between water & sewer mains are allowed provided water installed in separate trench (or on an undisturbed earth shelf) with water main minimum 18in above top of sewer. Plans appear to meet the 6ft separation, however, please note requirement accordingly for separation less than 10ft. Sewer appears to be proposed at a much deeper elevation than the water service(s). [Detail S-2, note 36]
34. Sheet C6: Profile views shall be provided for all sewer mains and shall be on same sheet as the associated plan view. Provide a profile view on the construction drawing. [Standard Detail S-1, note 28]
35. Sheet C6: Provide additional detail for proposed design of the on-site 10in meter bank/ manifold. Given City’s experience with similarly designed systems, the 10in meter bank/ manifold will need to be specified as Ductile Iron, DI, pipe. Revise plans accordingly.
36. Sheet L2: Concrete thrust blocks are not allowed per City details. Remove concrete thrust block details, provide, and reference joint restrained fittings.

PUBLIC WORKS REVIEW COMMENTS: (Alex Popovic, Engineering Intern (386) 506-5572/apopovic@port-orange.org; Kristine Martin, Engineering Inspector (386) 506-5597/kmartin@port-orange.org; Mick Neals, Solid Waste Manager (386) 506-5571/mneals@port-orange.org):

1. Kimley Horn details and specifications need to be removed where City of Port Orange Standard Specifications are provided. Example: Sheet C1.0 – Paving/Grading Testing and Inspection, etc.; Sheet C7.0 – Sidewalk Detail, Accessible Parking Sign, Silt Fence, etc.
2. Pavement markings plans is needed. Please use standard markings, not special emphasis markings, at crossings and driveway at Oakwater Lane and if possible, Williamson Boulevard (FDOT Index 17346).
3. Sheets C4.0 and 4.2: The minimum clear access approach for refuse service vehicle at the 2,600sf building does not appear to be 40'. Please review the layout (possibly moving 2,150 building and parking northerly) and match the perpendicular layout shown for the 2,150sf building.
4. Sheet C4.0: Call out the angle of parking spaces north of 2,150sf building (it appears to be 45 degrees). Please note City of Port Orange parking spaces are 10' by 20'. The separation between the type "D" curb and drive isle should be 20', not 18', to fit a vehicle using the type "D" curb as a wheel stop.
5. Sheet C5.0: Update drawing with information for pavement specifications for work on-site, Williamson Boulevard and Oakwater Lane. Please copy the City with use permit for work on Williamson Boulevard.
6. Sheet C5.0: Update drawing with elevations, cross sections and cross slopes at sidewalks and driveways at Williamson Boulevard and Oakwater Lane.

PUBLIC UTILITIES/RIGHT-OF-WAY REVIEW COMMENTS: (Linda Johnson, Right-of-Way Agent (386) 506-5755/ljohnson@port-orange.org):

1. Sheet C3.0, Existing Conditions. Records on file with the City indicate the sanitary sewer pipeline crossing the Central Parc site, together with the 20-ft. utility easement is owned by the adjacent private property owner, Port Orange Petro, LLC (see Warranty Deed at OR Bk 6319, Page 6, PRVCF). As mentioned in comments by others, service to that adjacent property must be maintained continuously throughout the proposed construction of new sanitary sewer line by Central Parc. Permissions as appropriate must be procured from the adjacent property owner.
2. Sanitary Sewer Connection is proposed at MH #4, identified on site plan for "Outpost," 6223 S Williamson Blvd. Prior to pre-construction meeting, owner/develop should obtain a temporary construction easement from the owner of 6223 S Williamson Blvd. of sufficient size to allow off-site connection work around the manhole.
3. Sheet C6.0 Utility Plan. Graphically depict the (proposed) off-site temporary construction area around MH#4 referenced above. Include label for OR Book___ and Page____ PRVCF for temporary construction easement.
4. Sheet C6.0. Graphically depict and label as "Proposed" a 20-ft. wide, utility easement centered over the proposed, relocated sanitary sewer gravity pipeline, up to and including cleanouts for proposed future construction. Utility easement

to be granted to the City of Port Orange. (See comments from City Attorney for additional guidance on document preparation.)

5. Standard Street Frontage Easements. Per LDC Ch. 6, Sec. 4(b)(4). Graphically depict on Site Plan “Proposed 12-ft. Drainage and Utility Easement” along all street frontages.
6. Cross Access with adjacent property (LDC Ch.6, Sec. 4(b)(5). Graphically depict a 24-ft. wide cross-access drive aligned with the adjacent, existing access easement filed of record at OR Book 5564, Page 2019 PRVCF.
7. LDC Ch. 6, Sec. 5(a)(1)(f), Show all existing improvements and easements. Specifically requested here is the apparent 30-ft. x 30-ft. telecommunications equipment at the northwest corner of the site. Add label to identify size and easement recording information (OR Bk 3498, Pg 631).