

PRINCIPALS

Lawrence L. Smith, Jr.
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April 23, 2020

DRMP Job # 19-0274.000

City of Orlando
400 South Orange Avenue
Orlando, Florida, 32801

Subject: Silver Hills At Universal

To Whom It May Concern,

DRMP, Inc. received review comments for Silver Hills At Universal. To facilitate review, we have included this response to comments to provide an explanation for how the concerns have been addressed.

Wastewater – Carl Edquist**WRD C8.1 City Sanitary Details**

1. Installation of Lateral Connection note 10 shall be corrected to call our SDR26 pipe per the ESM (not SDR 35 pipe).

RESPONSE: Note 10 is updated, please see sheet C8.1.

2. The City no longer accepts flat top manholes. Therefore, on the Typical Manhole Cover detail please remove Frame Type II and Frame Type III (on the left). Keep Frame Type I.

RESPONSE: Typical Manhole Cover updated, please see sheet C8.1.

3. Note that City covers are not to be used on Private sanitary sewer manholes.

RESPONSE: City Manhole Cover removed, please see sheet C8.1.**WRD C-7 Utility Plan**

1. MPL2019-10046 was approved 7/11/19 with the following condition: The proposed development entails a high-density residential complex with parking. This development represents an additional load to the existing gravity sanitary sewer infrastructure downstream of the point of connection, with particular emphasis to the gravity system on Universal Blvd north of Carrier Dr. The Applicant shall evaluate the impact of this flow on the gravity system prior to permit application consideration.

These calculations have not been prepared and are required by the Water Reclamation (Wastewater) Division (WRD).

RESPONSE: Initial impacts were sent to Carl Edquist and Julio Morais and additional coordination with the City group is required as inverts do not seem to show an accurate slope on downstream manholes.

OFFICES

Boca Raton, Florida
Cary, North Carolina
Charlotte, North Carolina
Chipley, Florida
Fort Myers, Florida
Gainesville, Florida
Jacksonville, Florida
Lakeland, Florida
Melbourne, Florida
 Mooresville, North Carolina
Orlando, Florida
Panama City, Florida
Pensacola, Florida
Stockbridge, Georgia
Tallahassee, Florida
Tampa, Florida



2. Wastewater Capacity Analysis 344 rooms x 190 gpd/room is the basis of design for Phase I based on the documentation provided, but also please address amenity space (kitchen, bar, breakfast area, meeting room and fitness center) as necessary.
A Wastewater capacity analysis for the building (development) shall be prepared for review by the Water Reclamation (Wastewater) Division. Use the City level of service values. Refer to <http://www.cityoforlando.net/city-planning/wp-content/uploads/sites/27/2014/03/Wastewater.pdf>. This facility will discharge to Water Conserv II (Policy 1.1.3).
Please put this capacity data on the drawings. And in the FDEP calculations.
Provide documentation that the existing 10" sewer has adequate capacity to serve this this project,
Phase II of this project and the proposed users to the north/west.

RESPONSE: Initial impacts were sent to Carl Edquist and Julio Morais and additional coordination with the City group is required as inverts do not seem to show an accurate slope on downstream manholes.

3. Engineer's Certification Note to be added on the Utility Plans prior to Water Reclamation (Wastewater) Division approval of the plans for construction:

"I, <Joe/Jane Engineer>, P.E. hereby certify that to the best of my knowledge all existing utilities have been field located and the location and elevation depicted on these plans is based on actual survey, ground penetrating radar, soft dig excavations, and other industry methods. I further certify that all measures have been taken with regard to Utility Providers' notification to mark utilities in accordance with Chapter 556 F.S., Sunshine State One Call."

RESPONSE: Certification has been added to sheet C7.0.

4. Adjacent to manhole SS2 the 10" sewer shown in the current design is a considered a main sewer as defined in the ESM, Section 9.02.01.B, As such, it shall be not be connected with a tee or a wye as presently shown, rather manholes are required at main pipe interconnection points by ESM Section 9.02.01.H.1./3.
Label all sewer with length, diameter, material of construction such as PVC SDR26, slope and PRIVATE or PUBLIC. This is necessary to help our GIS properly define the sewers.

RESPONSE: Please see updated sheet C7.0.

5. The 17' of 10" sewer coming into the 10" line north of Manhole SS-1 does not comply with the ESM as previously noted about the line by manhole SS-2. a manhole is required at the connection point.

RESPONSE: Please see updated sheet C7.0.

6. Utility Notes: Do not plant trees within 10 feet of the gravity sewer.

RESPONSE: Conflicts have been mitigated by attaching laterals to the sewer main with doghouse manholes, see updated sheet C7.0.

7. Demonstrate compliance with utility separation requirements where watermain is crossing proposed sanitary sewer lines.

RESPONSE: Please see callout added to crossing on updated sheet C7.0.

8. Pipe P-3 must enter SS-E1 at a 90-degree angle to the 12" downstream sanitary sewer. Refer to ESM Section 9.02.01.H. 7. Please move manhole SS-3 south to make this angle and adjust the design accordingly.

RESPONSE: Please see updated sheet C7.0.

9. C7.0 Trade Work Division The trade work division between Civil/Site Work to be designed in accordance with the City of Orlando Engineering Standards Manual (ESM) and Building/Plumbing Work in accordance with Florida Building Code is 5' from the outside building wall, which is industry standard. Work within 5' of the building will be under jurisdiction of Building/Plumbing in accordance with Florida Building Code. Work outside of 5' from the building will be Civil/Site Work jurisdiction in accordance with the ESM. Exception to this may be allowed if the Site Plans and Plumbing Plans clearly depict the trade work jurisdiction lines that deviate from the 5' rule. Otherwise, the industry standard 5' rule applies. i.e. cleanouts can be used within 5' of the building

RESPONSE: Understood, lines have been adjusted slightly to a 5' setback from the building.

Transportation – Akil Toussaint

Sheet C-5

1. At all project entrances, clear sight distances for drivers and pedestrians shall not be blocked by signs, buildings, building columns, landscaping, or other visual impediments. No structure, fence, wall, or other visual impediment shall obstruct vision between 3 feet and 8 feet in height above street level. The street corner/driveway visibility area shall be shown and noted on construction plans and any future site plan submittals. The applicant shall design the site plan as necessary to comply with the Florida Greenbook requirements for sight distance at intersections. Sight lines shall be shown on both the site plan and landscape plan. Landscaping located within intersection triangles as defined by the Florida Greenbook shall be trimmed or spaced according to FDOT Design Index 546.

RESPONSE: See updated sheet C4.0.

2. For any construction work planned or required within a public right-of-way or City sidewalk easement adjacent to a public right-of-way (including but not limited to: irrigation, drainage, utility, cable, sidewalk, driveway, road construction/reconstruction or landscaping), the Owner/Applicant shall submit the following: Maintenance of traffic plans (M.O.T.)

A review will be added for the traffic control manager

RESPONSE: Please see the MOT Plan Sheet C11.0 included in this submittal.

3. Per MPL2019-10046

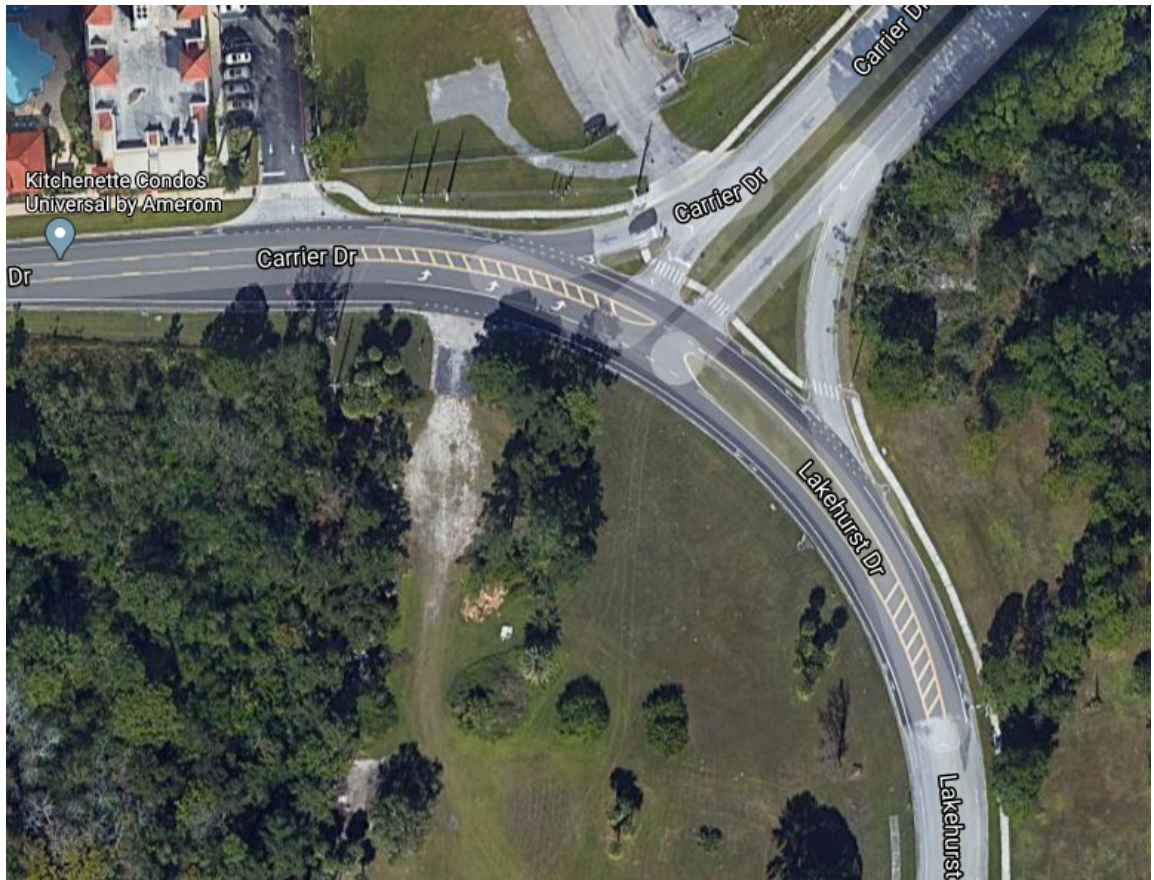
1. Driveways. All driveways should align with existing driveways on the east side or be offset from those driveways by sufficient distances to prevent turning movement conflicts. AutoTurn diagrams should be provided with plans submitted to Permitting Services for all driveways to demonstrate that conflicts will be minimized.

2. Please show the existing driveways on east side of Lake Hurst show offset distance and provide auturn

CLARIFICATION from Akil Toussaint below:

1. Any crossing across Lakehurst must be constructed with raised concrete refuge areas. Due to a future planned roundabout and lack of possible refuge area for the crossing on the west side of the new driveway we do not recommend installation of this crossing. The crossing on the east side of the new driveway should be installed with a raised concrete refuge area per DET2019-10220. Additionally 10 ft wide Lakehurst NB and Carrier EB left turn lanes are required. Please see the attached determination.

RESPONSE: Please see updated sheet C5.0 for crossing and image below showing the existing 10' left Carrier EB left turn lane.



2. The driveways on the east side of Lakehurst should also be shown on sheet C-5.

RESPONSE: Please see updated sheet C5.0.

4. Transportation engineering recommends removal of the two uncontrolled crosswalks across Lakehurst Dr. If a crosswalk is needed, then one should only be installed on the south leg and a portion of the median must remain as a refuge for the crossing pedestrians.

RESPONSE: Please see updated sheets C6.0 and detail on sheet C9.1.

5. Please provide detail for accessible spaces. must be per FDOT 2019-20 standard plan index 711-001. sheet 12 of 13

RESPONSE: Please see the General Details Sheet C9.0 included in this submittal for the detail.



6. Provide handicap parking sign detail to FTP-20-06 per FDOT 2018-19 standard plan index 700-102 (Sheet 4 of 11). Add \$250.00 FINE (F.S. 316.008(4)) supplemental sign, 7'-0" min to ground clearance.

RESPONSE: Please see the General Details Sheet C9.0 included in this submittal for the detail.

7. Plans must call out FDOT curb ramp type being installed and provide detail.

RESPONSE: FDOT curb ramp call outs updated on Sheet C5.0. Please see the General Details Sheet C9.0 included in this submittal for the detail.

1. Center turn lane skip must be shown and called out on plans as 10'-30' skips. Please update all sheets

RESPONSE: See updated sheet C5.1.

1. Center Sign Installation Specifications – Please add this note to your site plan.
Installation within City of Orlando ROW
2" Square Galvanized Poles, Quick Punch (not pre-punched)
Bolts, nuts and washers are to be stainless steel (5/16th inch)
Stop Signs at intersections shall be 3" aluminum round poles with Z-Bars and U-Bolt Attachments (drilling through the pole to attach the sign is not allowed)
All Signs are to be installed per FDOT Design Specification with anchors and concrete.
Signs within sidewalks are to be core bored through the sidewalk not surface mounted.
Sign blade sheeting shall be diamond grade with EC film.

RESPONSE: See updated sheet C5.1.

Engineering Zoning – Dalia Sidrak

FDEP Application

1. Please revise the calculations for the flow using rate of 190 gpd per unit.

RESPONSE: Please see updated application.

Sheet C-4

1. All new construction, change in use, additions, or redevelopments are required to submit a Concurrency Management application as a part of the building plan review process. Please submit for encumbrance. Email it to dalia.sidrak@cityoforlando.net

RESPONSE: Concurrency application has been emailed to Dalia Sidrak.



1. Orange County Public Schools (OCPS) Capacity Enhancement Program (CEP) determination required prior to permit issuance. Sewnd

RESPONSE: Please see capacity letter included in this resubmittal.

2. A School Impact Fee in the amount of \$2,042,055.00 (estimated) will be due at the time of building permit issuance.

RESPONSE: Understood.

1. A Sewer Benefit Fee in the amount of \$665,332.50 (estimated) will be due at the time of building permit issuance.

RESPONSE: Understood.

1. A Parks Impact Fee in the amount of \$284,625.00 (estimated) will be due at the time of building permit issuance.

RESPONSE: Understood.

1. A Transportation Impact Fee in the amount of \$ 941505.00 (estimated) will be due at the time of building permit issuance.

RESPONSE: Understood.

1. Any exemptions or credits against the Transportation Impact Fee must be reviewed. Please contact Nancy Jurus-Ottini at (407) 246-3529 or nancy.jurus-ottini@cityoforlando.net

RESPONSE: Understood.

1. Per Orlando Municipal Code Chapter 60, Section 60.228: All landscape plans must achieve the Minimum Required Landscape Score (MRLS) required for the proposed type and intensity of development. Applicants shall submit a completed copy of the Non-Residential and Multifamily Landscape Worksheet with the application for landscape plan approval. Conformance with the minimum standards of this Section shall be required prior to the issuance of a site development permit. Increase the landscape score by 10% per MPL2019-10046

RESPONSE: Please see Landscape plans included in this resubmittal.

1. All landscaped areas shall be irrigated in accordance with Section 60.232 (e) Orlando Land Development Code. Provide irrigation plan.

RESPONSE: Please see Landscape plans included in this resubmittal.

1. Per Orlando Municipal Code Chapter 60, Section 60.228: All landscape plans must achieve the Minimum Required Landscape Score (MRLS) required for the proposed type and intensity of development. Applicants shall submit a completed copy of the Non-Residential and Multifamily Landscape Worksheet with the



application for landscape plan approval. Conformance with the minimum standards of this Section shall be required prior to the issuance of a site development permit. Increase the landscape score by 10% per MPL2019-10046

RESPONSE: Please see Landscape plans included in this resubmittal.

1. See Chapter 60 Part 2 Orlando Land Development Code for all Landscaping, Buffering and Tree Protection Requirements. Provide landscape plan.

RESPONSE: Please see Landscape plans included in this resubmittal.

1. A tree removal permit shall be required prior to removing any 6" caliper or larger tree. Please contact Andy Kittsley, Parks Division, to apply for tree removal permit. Phone: 407-246-2701.

RESPONSE: Tree removal permit has been applied for and is currently under review: Permit# 46380.

1. Street trees are required between the property line and the street pavement edge. A 12' high with a 2" caliper canopy tree is required to be installed every 50'-100' along the parkway or \$350 per tree paid to the Street Tree Trust Fund is required (as determined by the City), per Section 61.226 of the Land Development Code.

RESPONSE: Please see Landscape plans included in this resubmittal.

1. Contact the Bureau of Parks at (407) 246-2701 for a Tree Encroachment permit prior to encroaching any trees as per Orlando Land Development Code, Section 60.211.

RESPONSE: Please see Landscape plans included in this resubmittal.

1. See Chapter 64 Orlando Land Development Code for sign requirements and regulations. Separate building permit applications are required for signs.

RESPONSE: Understood.

1. The property must be platted prior to Engineering/Zoning approval for building permit issuance. Contact the Zoning Official, at zoningofficial@cityoforlando.net.

RESPONSE: Understood.

1. This project requires a Florida Department of Environmental Protection (FDEP) permit for the sanitary sewer system. The FDEP application provided needs to be filled and signed it can be processed. Please email it to dalia.sidrak@cityoforlando.net

RESPONSE: Updated application has been mailed to Dalia Sidrak.

1. Municode of orlando, chapter 58, section 58.933:



[Temporary Construction Fences. A temporary fence not exceeding 8 feet in height may be erected during construction in any district. Such fence shall be removed prior to any Certificate of Occupancy or Certificate of Completion being approved.]

RESPONSE: Understood.

1. Show method of screening for mechanical equipment according to the Municode of Orlando, Chapter 58, Section 58.982. Show parapets to screen rooftop equipment.

RESPONSE: See MEP plans.

1. Transformers are to be screened on three sides according to MPL2019-10046

RESPONSE: Please see Landscape plans included in this resubmittal.

1. In accordance with City Code Section 28.15, as approved by City Council on March 11, 2019, all new Multi-Family and Commercial developments are required to participate in the Recycling Program. Provide recycling location and information.

RESPONSE: See Architectural plans for recycling center location inside of building.

1. Provide all dimensions for the dumpster and compactor pad, according to the Engineering Standards Manual sheet 6. The dumpster must have a minimum opening of 12' wide and a clear depth of 10' forward of any bollards within the enclosure. A straight 50' backup forward of the dumpster opening is required. And 6' concrete approach pad.

RESPONSE: See dimensions on sheet C5.0, a separate dumpster permit application will be provided in the future.

1. On the photometric plan, adjust the illumination levels all around the property line according to Municode chapter 63 section 2M, 63.405.

RESPONSE: See photometric plan.

According to MPL2019-10046, the lighting fixtures must not exceed 15' in height.

RESPONSE: See MEP plans.

1. Provide the following Site Data: Total Land Area: _____ square feet. IS
""Impervious Surface"" Area Shown: _____ square feet

RESPONSE: See updated table on sheet C4.0.



1. Sheet C-4 has 344 units and sheet A0-00 has 345 units, how many units are proposed? Please show consistency on all plans.

RESPONSE: Please see updated sheet C4.0.

1. Provide 3 feet knee wall to screen the main entry surface parking lot per MPL2019-10046

RESPONSE: Please see updated civil sheets and sheet C6.0 for knee wall grading.

1. Playground area is required per MPL2019-10046

RESPONSE: Please see landscape plans.

1. Florida Building Code Section 424.2.17.1.8 [Access gates, when provided, shall comply with the requirements of Sections 424.2.17.1.1 through 424.2.17.1.7 and shall be equipped with a self-latching locking device located on the pool side of the gate.] (see code for full text)

RESPONSE: Please see landscape plans.

1. Provide fence/screen around pool.

RESPONSE: Please see landscape plans.

1. Provide screening for any pool equipment.

RESPONSE: Please see landscape plans.

1. Additional conditions may be provided with revisions.

RESPONSE: Understood.

Fire – Nathan Hutton

C-7

1. Plans indicate that fire main terminates outside of the building envelope.
Per F.S. 633.334(3), for contracts written after June 30, 2005, the contractor who installs the underground piping from the point of service is responsible for completing the installation to the aboveground connection flange, which by definition in this chapter is no more than 1 foot above the finished floor.
Please revise plans to indicate that scope of work will be from POS to 1' AFF.
Please also revise plans to indicate a lead-in detail terminating at 1' AFF.

RESPONSE: See callout added to sheet C7.0.



1. Per the City of Orlando Fire Prevention Code, sec. 24.27(a)(2), two Siamese connections, one at each end of the building or as remotely located as possible, shall be provided in the path of fire department access.

Per NFPA 14, sec. 6.4.5.1.1, fire department connections shall be located and arranged so that hose lines can be attached to the inlets without interference from nearby objects, including buildings, fences, posts, landscaping, vehicles, or other fire department connections.

Per NFPA 14, sec. 6.4.5.4, fire department connections shall be located not more than 100 ft (30.5 m) from the nearest fire hydrant connected to an approved water supply.

Please revise Sheet C7.0 to indicate two remotely located FDCs.

NOTE: Coordinate with FPE for approved FDC locations, and ensure compliance with the positioning requirements of NFPA 14 listed above.

RESPONSE: Please see updated sheet C7.0

2. FP Water Supply Control Valve at DDCVA is too close to the structure.

Per NFPA 24, sec. 6.2.11, all connections to private fire service mains for fire protection systems shall be arranged in accordance with one of the following so that they can be isolated:

- (1) A post indicator valve installed not less than 40' from the building
 - (a) For buildings less than 40' in height, a post indicator valve shall be permitted to be installed closer than 40' but at least as far from the building as the height of the wall facing the post indicator valve.
- (2) A wall post indicator valve
- (3) An indicating valve in a pit, installed in accordance with Section 6.4
- (4) A backflow preventer with at least one indicating valve not less than 40' from the building
 - (a) For buildings less than 40' in height, a backflow preventer with at least one indicating valve shall be permitted to be installed closer than 40' but at least as far from the building as the height of the wall facing the backflow preventer.
- (5) [This arrangement is not permitted in the City of Orlando.]
- (6) Control valves installed in a fire-rated room accessible from the exterior
- (7) Control valves in a fire-rated stair enclosure accessible from the exterior as permitted by the authority having jurisdiction

Please revise plans to clarify which of the required valving arrangements will be utilized.

NOTE: Coordinate with FPE for approved valving arrangement.

RESPONSE: DDCVA has been moved to meet the criteria of being at least 40' from the building.



1. Underground main contractor must apply for a Fire permit for the installation or modification of any underground mains serving fire hydrants and/or fire protection systems prior to any installation.

*** NOTE: THIS INCLUDES BOTH DEDICATED FIRE MAINS AND COMBINATION MAINS. ***

Fire hydrants must be in compliance with hydrant spacing, location, distribution, color coding, and needed fire flow minimums as specified in City Fire Code.

Underground fire main and fire hydrant installations on private property will require an FIR permit and full compliance with NFPA 24.

Issuance of any ENG permit will occur when a FIR permit is issued for the installation of fire hydrants and underground mains. [City Fire Code, Section 24.13(t)(13)]

RESPONSE: Understood.

1. The private dedicated underground fire mains and fire hydrants must be installed by a licensed Fire Contractor Class I, II, or V. Combination fire mains (shared domestic and fire protection service) and fire hydrants up to the dedicated fire protection system "point of service" can be installed by a licensed Underground Utility/ Excavation Contractor, General Contractor, or Plumbing Contractor. [F.S. 633.021, 633.539, 489.105]

RESPONSE: Understood.

1. The plans must indicate the applicable codes with editions used in design. [City Fire Code, Chapter 24, Section 24.15(c)]

Please revise plans to indicate the following adopted design code editions:

-6th Edition (2017) of the Florida Fire Prevention Code

-NFPA 24, 2013 edition, Standards for the Installation of Private Fire Service Mains and Their Appurtenances.

RESPONSE: Design codes added to specifications list on sheet C2.0.

1. Plans shall indicate the "point-of-service" for any "fire protection system".

Per FL Statute 633.102(24), "Point-of-service" means the point at which the underground piping for a fire protection system using water as the extinguishing agent becomes used exclusively for the fire protection system.

Please revise sheet C7.0 to indicate the FP POS at the 8" Cross feeding the RPDA for Fire Service.



RESPONSE: See updated callout on sheet C7.0.

1. Per the City of Orlando Fire Prevention Code, sec. 24.30(d)(1), fire department access road shall have an unobstructed width of not less than 20 ft (6.1 m) and a vertical clearance of not less than 13 ft 6 in (4.1 m). If a center median is included, the required width shall be on both sides.
 - a. Minimum widths for apparatus access shall be measured curb face to curb face or, where there are no curbs, edge of pavement to edge of pavement.

Please revise civil plans to increase road width to 20' on both sides of median at this entrance/exit.

RESPONSE: See updated sheets and C5.0.

1. Per NFPA 1, sec. 18.2.3.4.3.1 The turning radius of a fire department access road shall be as approved by the AHJ. (The turning radius for fire department vehicles shall be 30 ft inside and 50 ft outside with a 20 clear unobstructed width.)

Please provide a turning radius analysis indicating compliance.

Turning radius analysis shall indicate FD access throughout site, including but not limited to all FP appliances such as fire hydrants, BFPs, PIVs, and FDCs.

RESPONSE: Please see turning analysis on sheet C4.0. The Fire path is along Carrier Drive and the drive aisle of the surface parking. The front entrance does not provide the turning radii required but the entrance driveways have been widened to allow for a truck to enter and back up in a pinch. The intended fire path is still along Carrier Drive and the surface parking. All FP appliances are located along this path.

1. Per NFPA 1, sec. 18.2.3.4.4 Dead-end fire department access roads in excess of 150 ft (46 m) in length shall be provided with approved provisions for the fire apparatus to turn around. (Acceptable turnarounds can include a cul-de-sac with appropriate turning radii; or a T-turn or Y-turn with a minimum length equal to the length of the longest fire apparatus.)

Please revise civil plans to indicate required turnaround for dead-end FD access road at south side of site.

RESPONSE: Please see turning analysis on sheet C4.0, south FDC is accessible along the fire route.

1. Per the City of Orlando Fire Prevention Code, sec. 24.30(e)(4), the required fire flow for commercial structures shall be determined as specified in the standard: Determination of Required Fire Flow as published by the Insurance Services Office (ISO). The fire flow for a building when sprinkler protected in accordance with NFPA 13 will be calculated at 50% of a non-sprinkler protected building, but



shall not be less than 1000 gpm. (Reduction is not permitted for NFPA 13R systems.) Calculations and a water supply analysis shall be provided to demonstrate delivering of fire flow.

Please revise civil plans to indicate required NFF Calcs per the ISO method.

RESPONSE: Please see updated sheet C7.0 and the Hydraulic Analysis report included in this resubmittal.

1. Unable to locate 3rd party verification of engineer's digital signature.
Per the FAC 61G15-23.003(2)(b), engineer's digital signatures shall be capable of verification.

Please revise all civil engineering sheets to indicate required third-party verification.

We accept a variety of third-party verified digital signatures.

Some companies that offer this service include:

Adobe Entrust, VeriSign, IdenTrust, DocuSign, Cosign and Globalsign.

RESPONSE: Resubmittal includes digital verifiable signature.

If you should have any questions or comments regarding these responses, please contact me at 407-896-0594 or JGonzalez@drmp.com.

Sincerely,
DRMP, Inc.

Juan Gonzalez, P.E.
Project Manager

CC: file