LEE'S SUMMIT
MISSOURI

PLANNING AND DEVELOPMENT

Commercial Final Development Plan
Applicant's Letter

Date: Thursday, May 24, 2018

To:

Property Owner: TOWNSEND SUMMIT LLC	Email: Fax #: (410) 321-1901
Applicant: NORTH POINT DEVELOPMENT	Email: Fax #: <NO FAX NUMBER>
Engineer: RENAISSANCE INFRASTRUCTURE CONSULTING	Email: MSLUTTER@RIC-CONSULT.COM Fax #: (913) 317-9501

From: Christina Stanton, Senior Planner

Re:

Application Number:	PL2018058
Application Type:	Commercial Final Development Plan
Application Name:	SUMMIT ORCHARDS 2ND PLAT LOT 1A
Location:	837 NW DONOVAN RD, LEES SUMMIT, MO 64086

Electronic Plans for Resubmittal

Beginning Monday, May 23, 2016, all Planning application and development engineering plan resubmittals shall include an electronic copy of the documents as well as the required number of paper copies.

Electronic copies shall be provided on CD in the following formats

- Plats – All plats shall be provided in Tagged Image Format File (TIFF) Group 4 compression.
- Engineered Civil Plans – All engineered civil plans shall be provided in Tagged Image Format File (TIFF) Group 4 compression. All sheets shall be individually saved and titled with the sheet title.
- Architectural and other plan drawings – Architectural and other plan drawings, such as site electrical and landscaping, shall be provided in Portable Document Format (PDF).
- Studies – Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).
- It is requested that each plan sheet be a maximum of 2MB.

Please contact Staff with any questions or concerns.

Excise Tax

On April 1, 1998, an excise tax on new development for road construction went into effect. This tax is levied based on the type of development and trips generated. If you require additional information about this development cost, as well as other permit costs and related fees, please contact the Development Services Department at (816) 969-1200.

Review Status:

Revisions Required: One or more departments have unresolved issues regarding this development application. See comments below to determine the required revisions and resubmit to the Development Services Department. Resubmit six (6) full size sets of plans (no larger than 24”x36”) folded to 8-½”x11”, four (4) copies of the comment response letter, and one (1) digital copy following the electronic plan submittal guides as stated above. Revised plans will be reviewed within five (5) business days of the date received.

Required Corrections:

Planning Review	Christina Stanton (816) 969-1607	Senior Planner Christina.Stanton@cityofls.net	Corrections

1. There are still discrepancies between the data represented on Sheets C02 and SP1.00. Specifically, the building information table on Sheet C02 does not match the dwelling units on Sheet SP1.00. Please reconcile these and any other differences on these sheets and throughout the plans.

2. It does not appear that the total linear feet along NW Tudor Road was adjusted to removed the drive entry in the street frontage landscape calculations. By adjusting this calculation and counting the trees along NW Ward Road from the angle down to right before the corner; then counting those for NW Donovan Road from corner to corner the trees provided meet the requirement.

3. It appears there may still be some drives that does not meet the minimum (24' exclusive of the curb and gutter, 28' if you include the curb and gutter). The drive onto NW Ward Road on Sheet C05 and the drive onto NW Tudor Road on Sheet C06 are a couple examples.

Engineering Review	Gene Williams (816) 969-1223	Senior Staff Engineer Gene.Williams@cityofls.net	Corrections

1. Please refer to the applicant's letter dated Apr. 27, 2018 (hereinfafter referred to the previous applicant's letter). Comment #2 requested the applicant check whether the connection across Ward Rd. at the interesection of Ward Rd. and Pryor Rd. existed. Our records indicate this connection is not present, and if not present, please remove this from the Utility Plan sheets.

2. Please refer to the previous applicant's letter. comment #7 requested specific ADA-accessible ramp details for the two (2) commercial entrances, including the ADA-accessible route across the entrances. Sheet C13 shows the south entrance detail, but the following issues remain unresolved: 1) please label the street for a frame of reference, 2) the cross-slope across the 5 foot wide ADA-accessible route on the driveway was not labeled as 1.5% or less cross-slope, 3) a section view across the driveway was not provided showing the 1.5% or less cross-slope, 4) Section CC appears to show 2.8% cross-slope across the ramp, which is not in compliance with City standards

3. Please refer to the previous applicant's letter. comment #7 requested specific ADA-accessible ramp details for the two (2) commercial entrances, including the ADA-accessible route across the entrances. Sheet C14 shows the north entrance details, but the following issues remain unresolved: 1) street name was not provided for a frame of reference, 2) Section B-B appears to show a cross-slope that contradicts that which is shown on the plan view, 3) a section view across the driveway appeared to be missing which shows the maximum cross-slope is less than or equal to 1.5% across the 5 foot wide ADA-accessible route.

4. Please refer to the previous applicant letter. Comment #9 requested the 100 year water surface elevation for the ponds. While the lower pond elevation was shown, the upper pond elevation was shown with a 100 year water

surface elevation which did not differ from the normal pool elevation. This does not appear valid. In addition, what is the 100% clogged outlet structure 100 year water surface elevation? Where is the emergency spillway? The grading plan appears to be missing elevations of proposed contours, and without this information, it is difficult to determine where the overflow route will be directed in the event of a clogging event.

5. Sheet C08 and Sheet C09: Please add elevations to the contours, especially in the vicinity of any potential emergency overflow from the 2 ponds.

6. Sheet C04: What is the feature shown within the 100 year water surface elevation surrounding the lower pond? It appears to be flooded during the 100 year event?

7. Sheet C04: Please label the upper pond in the correct location. As shown, it appears to be south of the pond rather than on the pond.

8. Sheet C06: The sanitary sewer manhole shown on the north side of the project is a public manhole. Please label it as a public manhole (i.e., City manhole #23-163). Since this manhole is being relocated, please label it as being a public manhole to be relocated as a public manhole.

9. Sheet C15: Please specify cut-in tees at all public water main locations. Provide sufficient notes that a maximum shut-down of the lines is limited to 8 hours, and night work must be performed to make these connections.

10. Sheet C15: Please label the location and size of the water main along Ward Rd.

11. Sheet C15: A separate detail must be provided for the meter well. The City standard detail does not include meter wells for 3 inch water meters, so a special design is required.

12. Sheet C15: The domestic water line should be connected on the same side of the street as the backflow vault. The location of the connection should be just prior to the gate valve to be installed prior to the backflow vault. In other words, only one street crossing is required since the water main is located on the opposite side of the street.

13. Sheet C15: Show the location of a gate valve just prior to the backflow vaults. Ensure the gate valve is located within an easement, and ensure the backflow vault is located outside the easement, on the private side.

14. Sheet C15: Ensure all domestic water meters are located within an easement or right of way.

15. Sheet C15: A valve is required on the public water main if a valve is located greater than 500 feet on either side of the new cut-in tee. According to our records, it appears that a new gate valve shall be required at each new connection point, unless it can be demonstrated that a valve(s) exists within 500 feet of the new connection(s).

16. Sheet C15: Please add a label which specifies that the street crossings for the water lines shall be bored. Casing is not required.

17. Sheet C15: At all street crossings for the water lines, an additional valve is required near the connection point. In other words, there will be 2 valves total on each private leg; 1 on the connection side of the street, and another just prior to the backflow vault.

18. Sheet C15: Ensure that the water meter is connected to the private leg just prior to the gate valve feeding the backflow vault.

19. Sheet C16: All comments above related to Sheet C15 also apply to Sheet C16. Please revise as appropriate.

20. Sheet C16: Please specify the sanitary sewer on the northeast corner of the project is private, up to the public sanitary sewer manhole (relocated) near the commercial entrance.

21. Sheet C19: Manhole 2A is a public manhole, and should be labeled as such. The notes showing removal of the private manhole should be revised to read "...public manhole to be removed".

22. Sheet C19: There is a question of constructability of the sanitary sewer from private manhole 2B to the new public sanitary sewer manhole. As shown, there is a significant drop, and it is unclear whether the invert can be poured. Was there any consideration to deepening the connection point at that location? Please be aware that the standard drawing for an invert at the bottom of a manhole shows a 3:1 slope from incoming pipe, to the middle of the manhole.

23. Sheet C29: The pond plan is inadequate from a review standpoint, and a construction and inspection standpoint. It is unclear what is being proposed, and it is unclear what will occur in the event of a 100% clogging event at the outlet structure. A 6" by 6 foot "orifice" is called out, but this would appear to be a weir rather than an "orifice". It is unclear what measures are being taken to prevent clogging. The storage curve and weir report are hard to read, and there is reference to an emergency spillway, but no details are provided for said emergency spillway. In other words, additional design details must be provided. These design details must be clear in terms of what is being proposed, where it is being built, how it is being built, and locations of any emergency spillway, crest elevation of emergency spillway, etc.

24. Sheet C33: The pavement section details are still not in compliance with the Unified Development Ordiance (UDO) Article 12 "Parking". In particular, the City of Lee's Summit requires either 6 inches of chemically-stabilized subgrade, or geogrid. This is in addition to the 6 inch layer of aggregate. Compacted soil shall always be required, but is no substitute for chemially-stabilized subgrade or geogrid. In addition, it appears there is confusion concerning heavy duty pavement, and vehicle parking and drive aisle pavement thickness and base. The UDO makes no distinction between drive aisles and parking stalls, but does differentitate between fire lands and truck access lanes. It may be beneficial for the applicant to review these design standards, since it may be possible to eliminate some of the "heavy duty" pavement sections.

25. Sheet C33: The upper pond spillway section is missing the elevation call-outs. In addition, what is the 100 year water surface elevation within this spillway? Please show this on the section view, along with a specific elevation call-out.

26. Sheet C33: GEN-4 is shown, but we still require that a detail be shown with the 6 inch aggregate base, and the chemically-stabilized soil or geogrid be shown a minimum of 1 foot beyond the back of curb. GEN-4 does not show this required feature.

27. Sheet C36: A trench check detail is shown, but there appear to be no notes concerning their location. They should be located on the sanitary sewer laterals. Sufficient notes must be placed on the plans specifying their use at these locations.

28. Sheet C35: How will the sump within the backflow vault be drained? Shall it be daylighted? Shall a gravel sump be constructed? How will the gravel sump be constructed? Details must be provided showing how the backflow vault will be drained.

29. Engineer's Estimate of Probable Construction Costs dated May 11, 2018 appeared to be missing the following items: 1) backflow vaults and backflow assembly, 2) valves, elbows, valve boxes, and valve covers, 3) commercial entrances, 4) sodding, 5) seeding, 6) fertilizer and other final restoraton meaures, 7) sanitay sewer manholes, 8) storm structures, 9) chemically-stabilized subgrade or geogrid, including the area 1 foot beyond the back of curb, 10)

cut-in tees, 11) sanitary sewer relocation, 12) pond construction, 13) pond outlet construction, 14) emergency spillway construction, 15) thrust blocks, saddle blocks, 16) boring beneath street for water line.

Fire Review	Jim Eden (816) 969-1303	Assistant Chief Jim.Eden@cityofls.net	Corrections

1. All issues pertaining to life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and to the safety to fire fighters and emergency responders during emergency operations, shall be in accordance with the 2012 International Fire Code.

2. IFC 507.5.1 - Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 300 feet from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Action required: Provide a hydrant plan that meets this requirement for all buildings and provides fire flow and distribution of hydrants in accordance with IFC App. B-105 and App. C-103. All hydrants shall be readily acessible.on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

5/22/2018 Hydrant distances are measured AROUND the buildings and shall be accessible from the fire lane;not obstructed by buildings, parked cars and canopies. Provide aceesible hydrant coverage for Building 5. Move the hydrant to the fire lane between Buildings 3 and 4.

3. IFC 903.3.7 - Fire department connections. The location of fire department connections shall be approved by the fire code official. Connections shall be a 4 inch Storz type fitting and located within 100 feet of a fire hydrant, or as approved by the code official.

4. IFC 503.2.1 - Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

Action required: Calculate turning movements for a 47' aerial with a 22' foot wheelbase.

5. IFC 503.3 - Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING—FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

5/22/18 Action required: All fire lanes shall be marked.Mark the fire lanes, including the in front of the buildings, using either signage or painted curbs. Painted curbs shall be red with white stencil.

Traffic Review	Michael Park (816) 969-1820	City Traffic Engineer Michael.Park@cityofls.net	Corrections

1. The driveway along Donovan needs to be relocated. The PDP showed the driveway 265’ from the edge of Ward Road. The proposed driveway is less than 150 feet from the edge of Ward Road. Queue conflicts and operational

issues aside, this location will not work for development south of Donovan to align; being too close to Ward Road. It is inconsistent with the PDP approved and conceptual FDP we have seen for the development south of Donovan.

Building Codes Review	Joe Frogge (816) 969-1241	Plans Examiner Joe.Frogge@cityofls.net	Approved with Conditions

1. Water meter sizes are not specified.

Action required: Specify sizes of water meters based on calculated flow rates.
5/23/18 - meters shown. final approval pending justification of sizes.

2. Sewer design incomplete.

Action required: Specify size of building sewer pipes (per 2012 IPC Section 710) as they exit structures and provide cleanouts as applicable (per 2012 IPC Section 708.3.2).

3. Retaining walls are proposed to be built but we are unable to find the construction details.

Action required: Provide complete retaining wall designs.
5/23/18 - deferred to construction and/or building permit