

Date: Friday November 15, 2024

To: Grant White

From: Chris Krumrei

Re:

Application Number: PL2024188

Application Type: Commercial Final Development Plan

Application Name: Joint Operations Facility

Location: 2 NE TUDOR RD, LEES SUMMIT, MO 64086

Analysis of Commercial Preliminary Development Plan:

Review Status:

Required Corrections:

Planning Review	Hector Soto Jr. (816) 969-1238	Senior Planner Hector.Soto@cityofls.net	Corrections
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1. PROPERTY BOUNDARY INFORMATION. Label the subject lot's dimensions and bearings.
 - a. [Response: Bearings and distances of the subject property have been added to the site plan.](#)
2. STREETS. Label the right-of-way widths for NW Sloan St, NE Tudor Rd and NE Douglas St. Variable width rights-of-way may be labeled as such.
 - a. [Response: Right-of-way widths have been added to the rights-of-way adjacent to the subject property.](#)
3. SIDEWALKS. Label the existing sidewalk widths along the public rights-of-way that border the subject property.
 - a. [Response: Sidewalk labels have been added to site plan sheets.](#)

4. OIL AND GAS WELLS. Add a note to the plans regarding the presence of any active, inactive or capped oil and gas wells on the subject property. Cite the source of information used to make the determination. Mo DNR keeps an online database of wells that can be used to obtain well information.
 - a. Response: The general note "According to the 'Oil and Gas Permits' database published by the Missouri Department of Natural Resources, as of November 13, 2024, no oil or gas wells (of any status) are listed within subject property site" has been added to the Site-Civil General Information sheet.
5. LIGHTING PLAN. 1) A note on Sheet EF101 states that the subject property is not adjacent to residential properties. This statement is incorrect. The subject property abuts 6 acres of residentially zoned property to the immediate north, behind (west of) the existing commercial retail center that is also to the north. Said abutting residentially zoned property has an approved preliminary plan for its development with a multi-family residential complex and is in the final development plan process for building permit issuance.
 - a. Response: The statement, mounting heights, and calculations have been updated to account for this residentially zoned boundary.
6. (2) Because the subject property abuts residentially zoned property, pole mounted light fixtures located within 100' of the residential zoning district boundary are limited to a height no greater than 15' above finished grade (per UDO Section 8.250.D). The pole mounted fixtures subject to the 15' height limit are the first four (4) fixtures along the northern property boundary east of the detention basin identified as SP1. Pole Base Detail 3 on Sheet EF103 shows the pole mounted fixtures as being 24' above finished grade. Revise to no more than 15' per the ordinance requirement.
 - a. Response: 100' zoning boundary has been added to the FDP drawing. The pole-mounted fixtures have been updated per the ordinance requirement.
7. (3) Because the subject property abuts residentially zoned property, pole mounted light fixtures located greater than 100' of the residential zoning district boundary are limited to a height no greater than 20' above finished grade (per UDO Section 8.250.D). The pole mounted fixtures subject to the 20' height limit are the remaining new pole mounted fixtures to be located on the subject property identified as fixture SP1. Pole Base Detail 3 on Sheet EF103 shows the pole mounted fixtures as being 24' above finished grade. Revise to no more than 20' per the ordinance requirement for those fixtures located greater than 100' from the abutting residentially zoned property.

- a. Response: 100' zoning boundary has been added to the FDP drawing. The pole-mounted fixtures have been updated per the ordinance requirement.
8. (6) ROOF-TOP MECHANICAL SCREENING. Dash in the location and height of the RTUs on the building elevations in order to confirm that all RTUs shall be fully screened from view by the building parapet walls in accordance with City ordinance. Take into account any additional height from any curbs on which the RTUs will be mounted when determining the final parapet wall heights.
 - a. Response: There is only one exposed RTU on the proposed addition to the police, note has been revised to clarify screen. All other mechanical equipment is located in screened-in yards that are not visible to the public.
9. (7) SITE DATA TABLE. Revise the site data table on Sheet C2.0 to list the gross existing building area and the gross proposed building areas. The existing and proposed building area square footages listed in the table are only the building footprints and do not account for the multiple floors of the existing and proposed buildings. Also revise the listed FAR with the gross building area figures.
 - a. Response: Revised to include gross building floor areas.
10. (8) LANDSCAPE PLAN. The associated preliminary development plan has not yet completed the public hearing approval process. The Planning Commission's action on said application includes a recommendation to the City Council to deny a request for relief from landscaping along the northern property boundary. The associated preliminary development plan is not scheduled to be heard by the City Council until November 12th. The landscape plan may or may not require any revisions based on the outcome of that meeting.
 - a. Response Landscape plan has been updated per November 12th city council decision.
11. (9) FINAL DEVELOPMENT PLAN APPROVAL. Staff cannot issue final approval on the subject final development plan application until such time as final action is taken on the associated preliminary development plan application that is currently going through the public hearing approval process. The public hearing with City Council will not take place until November 12th, with a tentative ordinance approval date of November 19th. So at earliest, the subject final development plan cannot be approved until after November 19th once any outstanding plan review comments are satisfied.
 - a. Response: Noted

12. (10) FAA FORM 7460. Because the project site is located within 2 miles of the municipal airport, an FAA Form 7460 shall be completed and submitted to the FAA, and comments received back prior to any issuance of building permits for construction.

- a. Response: Acknowledged, the proposed building structures and light poles have been submitted to the FAA and assigned the following aeronautical study numbers (ASNs) 2024-ACE-6158-OE, 2024-ACE-6159-OE, 2024-ACE-6160-OE, 2024-ACE-6161-OE, 2024-ACE-6162-OE, 2024-ACE-6163-OE, 2024-ACE-6164-OE, 2024-ACE-6165-OE, 2024-ACE-6166-OE, 2024-ACE-6167-OE, 2024-ACE-6168-OE, 2024-ACE-6169-OE, 2024-ACE-6170-OE, 2024-ACE-6171-OE, 2024-ACE-6172-OE.

Engineering Review

Gene Williams, P.E.
(816) 969-1223

Senior Staff Engineer
Gene.Williams@cityofls.net

Corrections

1. Final Stormwater Report dated Oct. 16, 2024 (hereinafter referred to as "the stormwater report") appears to be presented as a preliminary stormwater detention report. There are numerous references to "final design to provided with the Final Development Plan". Report shall be final in terms of the design, including the relationship between the clogged condition and the top of dam, which appears to conflict what is discussed in the text of this preliminary stormwater report, and what is shown in one of the exhibits towards the end of the preliminary stormwater report. Corrections required.

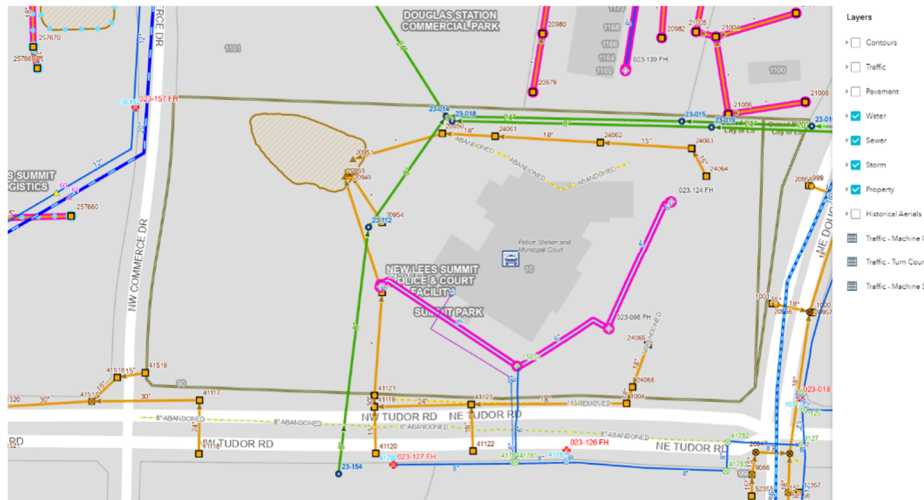
- a. Response: Acknowledged. Report will be updated to remove any references to final design. All design information will incorporated into the report or project plans.

2. There are conflicts in the text of the stormwater report versus what is shown in the appendix of said report. This includes the exhibit towards the end of the stormwater report with the 100 year clogged/zero available storage condition. It would appear 0.8 feet of freeboard is shown, but the body of the report discusses 0.7 feet. If 0.8 feet is provided, no waiver is required. Evaluation and correction required.

- a. Response: Acknowledged these have been corrected.

3. Plans and details were missing on the detention basin, emergency spillway, outlet works, anti-clog measures, utilization as a sediment basin during construction along with skimmer design details within the erosion and sediment control plan, and all other details needed to construct the detention basin. No further review was conducted on the detention basin. Correction required.

- a. Response: Acknowledged these have been corrected.
- 4. The detention basin plan, including outlet structure, shall be included on one (1) sheet (or two (2) sheets if absolutely necessary). It shall include the following information: 1) Top of dam elevation, 2) Emergency spillway crest elevation, 3) All weir and orifice elevations that are part of the outlet structure, 4) 100 year nominal (i.e., design) storage volume, 5) Bottom of basin elevation, 6) Bottom of basin slope callouts, which may be less than 2% to achieve water quality objectives (i.e., we have seen as little as 0.7% in some instances to achieve water quality objectives), 7) 100 year nominal (i.e., design) water surface elevation (WSE), 8) 100 year clogged/zero available storage WSE, 9) graphical limits of the 100 year clogged/zero available storage WSE (i.e., shown on the plan view with callouts), along with dimensional callouts from property lines and buildings to ensure a minimum 20 foot setback, 10) Typical section view of the outlet works and dam, along with elevation callouts for the 100 year nominal and 100 year clogged/zero available storage to ensure there is a minimum 0.5 feet freeboard between the nominal condition and the crest of the emergency spillway, and a minimum 1.0 feet from the clogged condition/zero available storage and the top of dam, 11) Location and callouts showing the emergency spillway, and a clear path that is not directed towards buildings or other other vulnerable features. Correction required.
 - a. Response: Acknowledged, this information has been added to the detention plan sheet.
- 5. There are two (2) water mains on the west side of Commerce Dr. (misabeled as Sloan St.) according to our records. Verify the location of these lines based on Record Drawings available from Public Works or field verification, keeping in mind that field verification is the only definitive way to know where the lines are located. You are only allowed to utilize the 12 inch line, not the transmission line which appears to be closer to the project. Show the locations of these lines on the plan view, including the size of each line. Correction required.
 - a. Response: Acknowledged. The waterline routing has been updated to align with previous conversations. The design includes a backflow meter, a domestic water meter, and a separate irrigation meter. All meters will be a displacement meter.
- 6. There seems to be no good reason to connect as far north as you are showing for the fire line and domestic waterline. Doing so will penetrate the emergency spillway, and also lead to excessive length of pipe. Move the connection point further south to avoid this conflict, and to minimize the amount of pipe needed. Correction required.
 - a. Response: Understood, the meter has been moved further south to meet the general location of the waterlines where they remain adjacent to Commerce Drive. This is based on utility information provided by the city in June of 2024. The contractor will pothole and identify location prior to commencing construction.



7. An extraneous water meter is shown after the backflow vault. No water meter is desired at this location. Fire lines are not metered. Correction required.
 - a. Response: The location has been corrected. The project will include two meters, a domestic meter and separate irrigation meter.
8. Place the backflow vault as close to the new commercial entrance as possible. This will place the domestic water meter close to the driveway for Water Utilities access. Correction required.
 - a. Response: Acknowledged, the connection has been moved further south however, the backflow is kept close to the street crossing location which has been moved further south.
9. Overall Site Plan sheet was missing the detention basin. Show the general location of the detention basin on the sheet. Correction required.
 - a. Response: This has been corrected.
10. Sheet C3.0: In addition to the detention basin detail sheet discussed earlier, show the 100 year design WSE and 100 year clogged/zero available storage in graphic format (i.e., as a polyline with elevation callouts). Provide dimension callouts to property lines and buildings to ensure there is a minimum 20 feet to each as measured to the clogged condition. Correction required.

- a. Response: This has been corrected.
11. Sheet C3.4: Discrepancy in design slope shown at 15%+/- . Correction required.
- a. Response: This has been corrected.
12. Sheet C3.4: 3% callout on one of the ADA-accessible stalls is too high. Maximum design slope is 1.5%. Correction required.
- a. Response: Slope and elevations corrected.
13. Sheet C3.4: One of the ADA-accessible parking stalls is missing the slope callouts. Elevation callouts are necessary, but slope callouts are also required. Correction required.
- a. Response: Slope callouts are corrected.
14. Sheet C3.4: The ADA-accessible route to the building appears to be non-compliant in several locations. It is called out at 4.99%, 7.78%, 7.83%, and 1.96% at these locations of sidewalk sections. Isn't this slope supposed to be no more than 1.5% design slope with an allowance of 2.00% for construction tolerance? If so, correction required.
- a. Response: Regarding the ramp design at the front of the building the ramp includes and (handrail specified in the architectural plans). The installation of the handrail allows for a slope of 8.33% for up 30" of rise.
15. Utility plan is missing domestic water line size, material, length, and location. Correction required.
- a. Response: Acknowledged, these have been corrected.
16. Utility plan is missing meter size, meter type (displacement or compound), water line size, water line material, and location of domestic water lines. Correction required.
- a. Response: The updated design documents are corrected to incorporate line material and sizes. Regarding the meters. The domestic line is separated to allow for use of a displacement meter. This has been updated and indicated on the plans.
17. Provide two (2) 45 degree bends rather than 90 degree bends for the fire line at both bend locations at the north(i.e., at the new commercial entrance as discussed in previous comments above), and the south where the fire line proceeds east to feed the new private fire hydrant. Correction required.
- a. Response: Acknowledged. 90-degree bends replaced with 45-degree bends.

18. Provide a profile view of the fire line, including pipe material. Label the line as "PRIVATE".
Correction required.

a. [Response: Acknowledged. Profile line of fire line provided with updated plans.](#)

19. Include a note on the detention basin detailed plan sheet (see previous comments related to this sheet) stating "an as-built detention basin plan sheet shall be submitted to the City and reviewed by the City prior to issuance of any occupancy permit", or equivalent language.
Correction required.

a. [Response: Acknowledged, note added.](#)

20. Include a note on the detention basin detailed plan sheet stating that all upgrades and construction of the detention basin shall be conducted prior to any other construction activities with the exception of erosion and sediment control. Correction required.

a. [Response: Acknowledged, note added.](#)

21. Utility plan calls out a saddle tap for the sanitary sewer. These are prohibited in Lee's Summit. A wye in accordance with our standard detail is required. Correction required.

a. [Response: Acknowledged, note corrected to state wye connection.](#)

22. Standard details were missing for the sanitary sewer wye connection, water meter pit and connection detail, trench backfill for pipes (water, sanitary sewer, and storm lines), backflow vault, storm boxes, curb inlets, junction boxes, and all other missing standard details used for the project. Correction required.

a. [Response: Standard utility details have been added to the plans.](#)

23. Does it make sense to utilize the detention basin as a temporary sediment basin with skimmer designed to limit off site migration of sediment? If so, correction required to erosion and sediment control plan to show how this will be accomplished. Sufficient notes shall be provided on the detention basin detail sheet(s) showing how to remove the skimmer structure, remaining sediment within the basin, and bringing the new detention "online" after being utilized for temporary sediment control. Evaluation and correction required.

a. [Response: We agree with this recommendation. A skimmer detail has been added to the plans.](#)

24. Asphaltic concrete shall be KCMMB mix. Correction required.

a. [Response: This has been corrected.](#)

25. Commerce Dr. is mislabeled as Sloan St. throughout the plan set. Correction required.
- a. Response: This has been corrected.
26. New entrance shall be 8 inch minimum thickness KCMMB concrete mix from the sawcut to the right of way(property line). Correction required.
- a. Response: The city standard detail has been incorporated into the plan set.
27. Detail sheet shall be provided for the new ADA-accessible ramps and ADA-accessible route across the new commercial entrance. It shall include elevation callouts, numerical slope callouts, widths, lengths, and distance from back of curb to truncated domes not to exceed 5.00 feet. Correction required.
- a. Response: This detail has been added.
28. Same details as above required for private ADA-accessible ramps internal to the project. Remove the wings and merely grade to the ramp. Correction required.
- a. Response: These have been corrected.
29. Line 200 is shown with excessive slope on the discharge side, and is also discharging too high on the slope. Lower the slope to less than critical flow if possible, and set the elevation towards the bottom of the basin. Correction required.
- a. Response: This has been corrected.
30. Where are the stormwater calculations? Normal procedure is to provide a table. Correction required.
- a. Response: These have been added.
31. HGL for the design storm required on the profile view of all storm lines greater than 10 inches in diameter, including the discharge line for the detention basin. If 100 year event cannot be managed by the underground system without surcharging, an overflow route shall be shown on the plan, and designed appropriately with sufficient freeboard (i.e., 2.0 feet) from the 100 year HGL to the lowest floor. Correction required.
- a. Response: These have been added.
32. Where are the energy dissipation measures such as rip rap? It would appear this is appropriate for the discharge points of the two entrance lines into the detention basin. Correction required.

- a. Response: Energy dissipation measures have been added.
- 33. Line 100 is shown discharging too high into the detention basin. Lower the discharge point. Correction required.
 - a. Response: Discharge point has been lowered.
- 34. Rip rap shall be detailed with length, width, taper, depth, and sizing (i.e., D50), geotextile. Correction required.
 - a. Response: Rip-rap noted added on site plan.
- 35. A SWPPP is required prior to formal approval. Correction required.
 - a. Response: SWPPP provided with erosion control permit application, copy included with this plans set.
- 36. A cost estimate for the sitework is required prior to formal approval. Informational comment.
 - a. Response: Understood.
- 37. The waiver request was missing an exhibit showing in concise format what is being proposed, including a general location map, detention basin including contours, emergency spillway, water level in relation to top of dam, and any other information that can be shown to help the City Engineer decide whether to grant a waiver. Correction required.
 - a. Response: 0.8-ft of freeboard can be achieved.
- 38. If 0.8 freeboard can be demonstrated from the 100 year clogged/zero available storage condition, no waiver shall be required. Informational comment.
 - a. Response: 0.8-ft of freeboard can be achieved.
- 39. As previously commented, the stormwater report appeared to be preliminary in nature rather than a final report. Correction required.
 - a. Response: This has been corrected.
- 40. Standard detail for grated inlet was missing. Correction required.
 - a. Response: Standard details corrected.
- 41. Standard detail for flared end section concrete treatment was missing. Correction required.

- a. Response: Premanufactured flared end sections to be utilized contractors will submit as shop drawings for design team review.

Traffic Review	Erin Ralovo	Erin.Ravolo@cityofls.net	No Comments
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Fire Review	Jim Eden (816) 969-1303	Assistant Chief Jim.Eden@cityofls.net	Approved with Conditions
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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 2018 International Fire Code.

- a. Response: Noted. Design shall comply with the 2018 International Fire Code.

Building Codes Review	Joe Frogge (816) 969-1241	Plans Examiner Joe.Frogge@cityofls.net	Corrections
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2. Unified Development Ordinance Article 8, Section 8.180.F Ground mounted equipment – Ground mounted equipment shall be totally screened from view by landscaping or masonry wall up to a height of the units to be screened. Action required: Make needed corrections to drawings that provide details as to how mechanical equipment will be screened from all 4 sides per referenced UDO section. Re: New generator.

- a. Response: There is only one exposed RTU on the proposed addition to the police, note has been revised to clarify screen. All other mechanical equipment is located in screened-in yards that are not visible to the public. Generators, transformer, and condensing units for JOC building are located within enclosed utility yard with grated lid. The alternate vehicle building has a small condenser on the east side, that is screened with landscaping.

3. 2018 IPC 708.1 Cleanouts Required. Cleanouts shall be provided for drainage piping in accordance with Sections 708.1.1 through 708.1.11. 2018 IPC 708.1.3 Building drain and building sewer junction. The junction of the building drain and the building sewer shall be served by a cleanout that is located at the

junction or within 10 feet of the developed length of piping upstream of the junction. For the requirements of this section, the removal of a water closet shall not be required to provide cleanout access. Action required: Provide cleanout where sanitary leaves foundation.

a. Response: Cleanouts are provided. Re: P-101 in permit drawings for more information.

4. Exterior lighting designs inadequate. Action required: Provide complete lighting system design that includes all circuitry and a light pole base detail(s). Pole base details on EF103 reference structural drawings not included in submittal.

a. Response: Complete lighting design and structural drawings are included in the permit submittal. Please defer this comment to the permit drawings.