LEE'S SUMMIT
MISSOURI

DEVELOPMENT SERVICES

Commercial Final Development Plan
Applicant's Letter

Date: Thursday, November 07, 2024

To:

Property Owner: VIVION PROPERTIES LLC Email:

Applicant: Todd Minnis Email: todd@drivenassets.com

From: Daniel Fernandez, Project Manager

Re:

Application Number:	PL2024199
Application Type:	Commercial Final Development Plan
Application Name:	Take 5 Oil and Tire
Location:	400 NE M 291 HWY, LEES SUMMIT, MO 64086

Electronic Plans for Resubmittal

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 in the following formats:

- Plats – All plats shall be provided in mulit-page Portable Document Format (PDF).
- Engineered Civil Plans – All engineered civil plans shall be provided in multipage Portable Document Format (PDF).
- Architectural and other plan drawings – Architectural and other plan drawings, such as site electrical and landscaping, shall be provided in multi-page Portable Document Format (PDF).
- Studies – Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).

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:
Required Corrections:

Planning Review	Ian Trefren (816) 969-1605	Planner Ian.Trefren@cityofls.net	Approved with Conditions

1. All signage will have to be permitted via separate application.

2. Since this property adjoins a residential one, the light fixtures are limited to 15' in height within 100' of the residential property line and 20' in height everywhere else. Current specs show a 25' tall pole. Sec.8.250(D)(1)

Plans have been udpated.

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

1. Detention Basin Sheet: Outlet structure flowline of pipe is 981.0. Contour is shown at 981 ft approximately 30 feet from the outlet structure. In other words, this area is flat, with no way to drain. A minimum slope of 1% is required. Callout the slope for the bottom of the detention basin, including any grade breaks that are planned. Correction required.

We have revised the bottom of the pond to show a 1% slope on the bottom of the pond leading towards the outlet structure.

2. Detention Basin Sheet: 100 year clogged/zero available storage elevation is called-out as 984.45 in the plan view, but 984.61 in the weir detail. Reconcile and correct as necessary.

The discrepancy has been corrected.

3. Detention Basin Sheet: No clog prevention was shown. This is especially concerning for the 2 inch orifice, which will most likely become clogged during the first few months of operation. Correction required. (Note, please contact me if you would like to see examples of acceptable anti-clog measures used for small diameter orifices).

Trash racks have been added to Outlet Control Structure 2

4. Is the 12 inch exit pipe sufficient for the 100 year event? In accordance with KCAPWA and City standards, all primary outlet works including the discharge pipe shall at a minimum, manage up to the 100 year event without utilization of the emergency spillway. Evaluation and correction required if applicable.

Yes, it is sized for the 100-year event.

5. Detention Basin Sheet: I would like to see better notation and rendering of the retaining wall. Only one (1) elevation of the top of wall/bottom of wall is given. More are necessary. Correction required.

Top of wall/bottom of wall callouts have been added to the plans. Retaining wall details have been added to the plans.

6. Detention Basin Sheet: Bottom of basin is called-out as 981.0. Outlet structure pipe flowlines for the 12 inch and 2 inch orifice are 981.0. Minimum slope is 1% in the bottom of the basin. Correction required.

We have shown a 1% slope on the bottom of the pond leading towards the outlet structure.

7. Detention Basin Sheet: Outlet Control Structure Detail is missing the following items: 1) top view showing baffling, 2) side view showing incoming and outgoing pipes. Correction required.

A plan view and side views have been added to the details.

8. Retaining wall for the detention basin shall be designed by a design professional licensed in the State of Missouri. Informational comment.

Understood

9. Profile Views of Storm Lines: Missing the design storm HGL. Without the design storm, HGL callout is meaningless. Correction required.

The lines have been labed as the 10-year HGL

10. Underground storm system to be designed to manage, at a minimum, up to the 100 year event. If the pipe cannot manage the 100 year event without surcharging out of the inlets, overflow routes shall be designed for excess over and above what can be managed in the pipe. Evaluation and correction required if applicable.

Yes, it is sized for the 100-year event and more.

11. Underground detention system is not shown on the overall site plan view, detention plans, or other relevant sheets. The plan view shall include the appropriate number of chambers, along with a reference note specifying the sheet to reference when constructing the underground detention basin. Correction required.

The plans have been revised to show the linework of the actual underground dentention system, including the chambers. A note referencing the detail sheet has been added to the plans.

12. Sheet C-4.5: Outlet control structure 1 does not appear to agree with the design table on the bottom portion of the sheet. It would appear the "Underground Detention Finish Grade" label should be changed to read "Discharge of Underground Detention Basin Flowline Elevation"? Correction required.

The callout on Outlet control structure 1 has been updated to say "Discharge of Underground Detention Basin Flowline Elevation"

13. Sheet C-4.5: Outlet Control Structure 1 should be drawn to scale, or at least show the fall between the incoming orifice and the outgoing pipe. As shown, it is flat and not representative of what is to be constructed. Correction required. A slope is now shown on the detail

14. Sheet C-4.5: Outlet Control Structure 2: There is zero fall between the incoming and outgoing pipes. This is not acceptable. Recommend a minimum of 6 inches fall. Correction required. A slope is now shown on the detail

15. Sheet C-4.5: Why is the discharge end of Outlet Control Structure 2 shown as "Detention Pond Finish Grade"? This is on the downstream side, not the detention basin side. Correction required. This callout has been updated.

16. Outlet Control Structure 1 on Sheet C-4.5: Steps should be shown. In addition, steps will be required on Outlet Control Structure 2 after re-design (see subsequent comments below). Correction required.

Steps have been added to both details

17. Sheet C-4.5: Dots per inch on pdf file is too small on the ADS Storm Tech details. Provide the ADA Storm Tech details so they do not pixelate under high zoom or large print size. Correction required.

ADS Storm Tech details have been provided for review

18. Underground detention void space allowance is 30% in the City of Lee's Summit. Correction required to stormwater report and underground detention basin design since the effective storage will decrease. Correction required. The calculations have been revised to now use a 30% void space instead of 40%. Plans and the report have been updated accordingly.

19. A profile view of the underground detention system is required to gain a general sense of where it is located in relation to the pavement surface. Correction required.

The MC-3500 Cross Section Detail shows a profile view and lists the actual design elevations of the pavement, fill, etc.

20. Stormwater report dated Oct. 24, 2024: The pond setup table for the underground detention basin shows 40 barrels of 3.5 by 5.6 span, and 7.1 feet length for each barrel. Is this correct? Evaluation required.

I have attached Technical Note TN 6.35 for your reference. The rise, span and length are confirmed on the note. Also, please reference how the end caps were counted as barrels. This accounts for 38 barrels.

21. Much of the review of the underground detention system will need to be deferred until a full review package for this system has been submitted with the plans. Informational comment.

Understood

22. According to the appendix within the stormwater report, the underground detention system must incorporate a minimum of 955 cubic feet of storage. Verify this figure, and verify the design meets or exceeds this storage volume, including the decrease of the voids to 30% in accordance with City of Lee's Summit special addendum. Evaluation required. The calculations have been revised to now use a 30% void space instead of 40%. Plans and the report have been updated accordingly.

23. Outlet Control Structure 2 on Sheet C-4.5: This structure is set too shallow, and will lead to excess slope of the outgoing pipe, and subsequent erosion of the discharge end. Recommend no more than 2% slope in outgoing pipe. Correction required. The depth of the outlet structure has been increased in order to lower the slope of the outfall pipe.

24. As an alternate to the above comment, an additional junction box could be installed downstream of Outlet Control Structure 2, and lessen the slope from that point to the MoDOT right of way. Evalation required.

See the response above

25. MoDOT approval of the stormwater discharge and installation shall be required prior to formal approval. Informational comment. Understood.

26. It is unclear how both of the 12 inch HDPE pipes will be connected to the MoDOT concrete flume. No details are provided, and the profile view of both pipes show approximately 20 feet of pipe exposed on the surface. Correction required. I sent you 3 options and am waiting on feedback on how you would like us to approach this.

27. Utility Plan Sheet C-3: Two (2) separate water taps to the public water main are required when installing a separate meter for irrigation and a separate meter for domestic water. The detail at the bottom of this sheet cannot be approved. Corrections required. A new water tap has now been shown for the irrigation line in addition to the domestic tap.

28. Sheet C-3 Utility Plan: Sanitary sewer note specifies a cut-in tee for service. A cut-in wye is required, not a tee. Correction required. A cut-in wye has been called out.

29. Sheet C-3 Utility Plan: Meter size and meter type (i.e., displacement meter or compound) shall be specified on the plan view. Meter sizes and types have been called out.

30. Sheet C-3 Utility Plan: Pipe size for copper line from main to meter shall be specified. Correction required. Copper pipe size has been called out.

31. Sheet C-3 Utility Plan: Pipe size for copper line from meter to minimum 10 feet from the meter shall be specified. Correction required. Copper pipe size has been called out.

32. Sheet C-3 Utility Plan: Provide a reference on plan view to the standard detail for sanitary sewer wye connection and tracer wire box, and meter setup detail shown elsewhere in plan set. SAN-1 and WAT-11 respectively. Correction required. Callouts to standard details have been added and standard details have been added to the plans.

33. Engineer's Estimate of Probable Construction Costs required prior to formal approval. Informational comment. Understood. The cost estimate will be created once the design has been finalized.

34. Off-site easement for water line required prior to formal approval. Informational comment. Will there be any further comments on off-site water, or can we establish the easement?

35. MoDOT approval for drainage improvements and commercial drive improvements required prior to formal approval of plans. Informational comment. Understood.

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 2018 International Fire Code.

Correct code information to the correct edition. 2018 building code was called out on sheet G1.00

Traffic Review	Erin Ralovo	Erin.Ravolo@cityofls.net	Not Required

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

1. Architectural, structural, & MEP designs are not being reviewed under this report.

Action required: Comment is informational.

3. -
Specify water pipe materials.
10/31/2024 - Note provided is incorrect. Copper required from main to 10' past meter. Re: #5 in Utility Notes on sheet C-3.

Note has been updated.

Specify diameter of light pole base.
10/31/2024 - Detail 2/E10.1 still does not specify diameter.

Plans have been updated.