

DEVELOPMENT SERVICES

**Commercial Final Development Plan
Applicant's Letter**

Date: Thursday, October 29, 2020

To:

Property Owner: SCHOOL DISTRICT 7
REORGANIZED

Email:

Applicant: DLR GROUP

Email:

Engineer: OLSSON ASSOCIATES

Email:

Other: MCCOWN GORDON CONSTRUCTION LLC Email: MDUNLAP@MCCOWNGORDON.COM

From: Hector Soto Jr., Planning Division Manager

Re:

Application Number: PL2020259

Application Type: Commercial Final Development Plan

Application Name: Middle School #4 - Bailey Rd

Location: 1001 SE BAILEY RD, LEES SUMMIT, MO 64081

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 multi-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:

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

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	Hector Soto Jr. (816) 969-1238	Planning Division Manager Hector.Soto@cityofls.net	Corrections
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1. PARKING AISLES. The comment below that was made on the initial review has not been addressed:

The north and south entrances to each row of parking spaces that is flanked by landscape islands shall have a minimum driveable pavement width of 24' (28' from back-of-curb to back-of-curb). Sheets C1002, C1005 and C1007 show a driveable pavement width between the landscape islands as 20'. The noses of the islands shall be pulled back to gain the additional 4' pavement width at the entrances.

Engineering Review	Gene Williams, P.E. (816) 969-1223	Senior Staff Engineer Gene.Williams@cityofls.net	Corrections
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1. Please refer to the previous applicant letter regarding the emergency spillways. None of the grading plans or grading details show the location of the emergency spillways, other than the contours. They are also missing a label for the emergency spillway, the location of the spillway, the critical dimensions, such as width, length, elevation of the spillway, minimum top of dam elevation. There is a reference to Sheet 1050 which show in schematic profile format the general section view of the spillway, but the information should also be shown on the plan view for these critical features. Finally, the general location of the emergency spillway for the southern detention basin is shown on the general drainage sheet in the wrong location (or at least it is assumed the wrong location since it is directed directly toward the off-site property to the south).

2. Concerning the above comment, each detention basin should be provided with a dedicated plan sheet showing the details concerning its construction, including the name of the basin (e.g., EDD-1, EDD-2, EDD-3). As presented, the scale is too small to determine what is being proposed. These dedicated plan sheets must include all information necessary to construct the basins, including minimum top of dam elevations, location and dimensions of emergency spillways, elevation of the emergency spillway, dimensions of the spillway, and all other information already provided. If details are provided on other sheets, standard drafting references must be provided showing where these additional details are contained within the plan set. Finally, grading near the southern portion of EDD-3 appears to have an adverse impact on the adjacent property owner. Stormwater is now altered at their property line. There are several ways to eliminate this issue, either by engineering methods, or entering into an agreement with the adjacent property owner.

3. Please be aware that as-graded and as-built Record Drawings will be required for all detention basins.

4. Please provide a note on the detailed detention basin plan(s) stating that the detention basins and silt basins and temporary siltation basins will be constructed prior to any other activities, (with the exception of erosion and sediment control and mass grading).

5. Typical drafting standards dictate the use of appropriate notes and references to details contained elsewhere within the plan set. The plan views for the detention basins must provide these notes and references to the detention basin outlet structures, emergency spillways, or any other detail needed to construct the detention basins. As shown, there is only mention of a "modified junction box", with no other information concerning their location in the plan set.
6. Please see previous applicant letter. The note on the typical pavement section still references "additional requirements" in the geotechnical report. The contractor and the City inspector will not have access to this report, nor would this be standard practice to require our City inspector to read this document. In addition, we are not aware of any "additional requirements" contained within this report, and as such, perhaps this note should be eliminated? The City is in agreement with the proposed typical pavement details, however, based on the conclusions contained within the geotechnical report.
7. Please add the HEC-HMS screenshots to the appendix of the stormwater report. These screenshots contain the pond setup tables, which include the elevation and sizing of the weirs and orifices making up the detention basin outlet structure.
8. Please see previous applicant letter concerning the hydraulic grade line shown for the pipe. The most recent submittal omitted the labels for the design storm. Was a layer turned off from that submittal to this particular submittal? In addition, it does not appear the comment was addressed, because the design storm is still above the crown of the pipe. Typically, the design storm for this application would be the 10 year event, with overflow capacity shown for the 100 year event. In this case, it would appear the 100 year event is managed under pressure flow, but it is unclear whether the 10 year event is managed under gravity flow (i.e., without surcharging over the crown of the pipe). Please be aware that the City of Lee's Summit has adopted a design standard different than APWA, in that the hydraulic grade line for the design storm (i.e., 10 year in this case, at a minimum) be at or below the crown of the pipe.
9. It appears the most recent submittal omitted the existing grade and proposed grade labels from the stormwater profile views. This appears to be the case for all sheets. Was a layer turned off from the previous submittal?
10. Please see previous applicant letter. It was assumed the private sanitary sewer was an 8 inch based on the wye dimensions. It now appears the private sanitary sewer line is a 6 inch. A 6 inch line cannot direct connect to a public manhole. The remedy in this case would be to upgrade the last segment of sanitary sewer line to an 8 inch line, just upstream of the new public manhole to be constructed.
12. Please ensure the public sanitary sewer will be no greater than 20 feet deep from the finish grade of the extended roadway (i.e., the elevation of the roadway to be constructed in the future). Although it appears it will be acceptable, this would be the time to make any changes. The City cannot support any waivers to this rule, since the old 15 foot standard was recently changed to 20 feet. This distance is measured from the future ground surface or roadway surface, to the flowline of the pipe or flowline of any manhole. All segments must be no greater than 20 feet in depth.
13. Although not necessarily needed for these plans, please ensure the public water line plans show a 6 inch gate valve on the north side of Bailey Rd., just south of the new cut-in tee. In addition, another valve is required on the south side of Cape Dr. in addition to the gate valve just prior to the backflow vault. Street crossings require two (2) gate valves with one on each side (with the one valve before the backflow vault counting towards the 2 valves).
14. Please refer to the standard detail for the water meters. A site-specific design is required for the 4 inch meter vault located near Cape Dr. The standard detail includes a note concerning this issue, because the standard detail will not accept a 4 inch meter. The standard drawing is only applicable for 2 inch meters and smaller.

15. The stream buffer waiver shall be required prior to formal approval. This waiver is currently under review.

16. Please be aware that retaining wall design shall be provided separately to the City. No review was performed, other than to ensure none were installed over public sanitary sewer, public water lines, or public storm lines, and to ensure none were being installed within public easements, including any tie-back structures, geogrid, or footings. These requirements appear to have been met.

17. An Engineer's Estimate of Probable Construction costs should accompany your final submittal drawings and revised stormwater report. This estimate should include all sitework, less the building and exterior lighting (and also less the items to be covered under separate public infrastructure plans noted in the Final Development Plan). Items to include in the estimate are: 1) storm lines greater than 6 inches in diameter, 2) storm structures such as inlets, junction boxes, and manholes, 3) detention basins, 4) detention basin outlet structures, 5) rip rap and turf reinforcement mat and associated materials, 6) water lines, 7) valves, fittings, elbows, tees, and sleeves, 8) fire hydrants and backflow vaults, 9) thrust blocks and straddle blocks, 10) sanitary sewer lines, 11) sanitary sewer manholes, 12) parking lot and drives, 13) curb and gutter, 13) grading for parking lot, 14) compaction for parking lot, 15) aggregate for parking lot, including the area one (1) foot beyond the back of curb, 16) chemically-stabilized subgrade or geogrid, including the area one (1) foot beyond the back of curb, 17) public sidewalks, 18) commercial entrances and 19) special water meter vault. Please be aware these items do not include the public infrastructure noted on the plans as to be covered under separate public plans.

Fire Review	Jim Eden (816) 969-1303	Assistant Chief Jim.Eden@cityofls.net	Approved with Conditions
Traffic Review	Michael Park (816) 969-1820	City Traffic Engineer Michael.Park@cityofls.net	No Comments
Building Codes Review	Joe Frogge (816) 969-1241	Plans Examiner Joe.Frogge@cityofls.net	Approved with Conditions

1. 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: Cleanouts required near locations where sewers leave buildings. May be field verified.
10/7/20 - acknowledged in letter. To be field verified.

2. A-series & E-series drawings not included in this review.
10/7/20 - acknowledged in letter