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## DEVELOPMENT SERVICES

### Commercial Final Development Plan Applicant's Letter

**Date:** Wednesday, April 03, 2019

**To:**

**Property Owner:** MID-CONTINENT PUBLIC LIBRARY Email:  
Fax #: <NO FAX NUMBER>

**Applicant:** MID-CONTINENT PUBLIC LIBRARY Email: QFUNG@MYMCPL.ORG  
Fax #: <NO FAX NUMBER>

**Engineer:** OLSSON ASSOCIATES (BRIAN LADD) Email: BLADD@OLSSONASSOCIATES.COM  
Fax #: (913) 381-1174

**Architect:** SAPP DESIGN ARCHITECTS Email: STUFFLEBEAM@SDAARCHITECTS.COM  
Fax #: <NO FAX NUMBER>

**From:** Shannon McGuire, Planner

**Re:**

**Application Number:** PL2019043

**Application Type:** Commercial Final Development Plan

**Application Name:** MID-CONTINENT PUBLIC LIBRARY

**Location:** 2240 SE BLUE PKWY, LEES SUMMIT, MO 64063

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#### 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 mult-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 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:**

<b>Planning Review</b>	Shannon McGuire (816) 969-1237	Planner Shannon.McGuire@cityofls.net	No Comments
<b>Engineering Review</b>	Gene Williams (816) 969-1223	Senior Staff Engineer Gene.Williams@cityofls.net	Corrections

1. Please be aware that all of the comments presented in this letter were discussed in the last applicant letter dated Mar. 19, 2019. It appears there are issues related to an understanding of what is required by the City of Lee's Summit.
2. Sheet C5.4: Section 5304.8 of the Design and Construction Manual contains specific design requirements and details for all ADA-accessible ramps within right of way. This includes the northwest entrance to the property, and the southeast entrance. In particular, the following items were missing on the northwest entrance ramps: 1) cross-sections of the ramp, with Section A-A along the long axis of the ramp, Section B-B along the width of the ramp, and Section C-C along the curb opening of the ramp.
3. Sheet C5.4: The location of the tactile warning device on the north side of the ADA-accessible ramp is greater than 5.0 feet from the back of curb. This is not allowed by our Design and Construction Manual.
4. Sheet C5.4: The north side of the ADA-accessible ramp is shown with what appears to be an existing sidewalk section that is 3.0% cross-slope on the north side, and 0.22% on the south end of the panel. Is this a typographical error? It is doubtful that this particular panel is twisted in the fashion shown. It is more likely this particular sidewalk panel is at 3.0% on each side. As such, it must be removed and replaced, and a twist incorporated into the design to act as a "sacrificial panel" for future upgrades.
5. Sheet C5.4: It is not clear from this drawing what is being proposed, versus what is existing. Please be specific.
6. General Comment Concerning Missing ADA-Accessible Ramp Detail: It appears the detailed plan for the southeast ADA-accessible ramp was missing. In addition, a receiver ramp to the east was also missing. Please see the above comments related to the minimum design details that are required for this ADA-accessible ramp. These standards will also apply to this set of ADA-accessible ramps.
7. Sheet C8.0: The emergency spillway was not designed in accordance with the Design and Construction Manual. 1.0 feet of freeboard is required between the clogged condition/zero available storage condition, and the top of the dam. A minimum of 0.5 feet between the "nominal" (i.e., all primary outlet structures, orifices, and weirs are functioning normally) 100 year water surface elevation and the crest of the emergency spillway shall be provided. It appears this criteria was reversed during design.
8. The Geotechnical Engineering Report dated Jan. 7, 2019 and received by our Department on Apr. 3, 2019 provides recommendations for pavement type, thickness, subgrade, and chemically-stabilized subgrade that differ

substantially from what is shown in the plans. It appears the recommendations are in excess of what the City requires for a generic pavement design. However, the plans do not meet either: 1) the City standard design contained in the Unified Development Ordinance, or 2) the recommendations contained in the Geotechnical Engineering Report dated Jan. 7, 2019.

9. Sheet C10.0: Please update the typical section views for "Typical Subgrade Placement Under Curbs", "PCC Pavement Section", "Asphalt Pavement". Please be aware the City does not differentiate between parking stalls, and drive aisles as you have shown. They are both considered "drive aisles" for purposes of design.

10. The following questions relate to the "Final Stormwater Study" revised on Mar. 26, 2019. The "Pond Data" summary sheet on the second page of Appendix D shows what appears to be an "inactive" structure A. It is our understanding that "Structure A" is the outlet pipe for the system, and would therefore be 18 inches based on your plans. However, this column appears to have been deactivated for some reason. In addition, it is set to 15 inches rather than 18 inches. The concern is that the cross-sectional area of the area above the weir is well in excess (i.e., twice?) the area of the 18 inch pipe. Why was Structure A turned off in the settings? Where are the calculations of the discharge from the detention basin if this structure has been deactivated in the model?

11. Based on the above comments, it is likely a revised stormwater report is required.

12. Based on the comments related to the pavement design, it is likely that a revised cost estimate is required.

13. Utility Sheet: This sheet still shows "tapping the 12 inch line". Taps are only allowed for the 2 inch and lower water meter connections, not the fire line. A specific note is required stating this connection shall be a "cut-in tee".

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

# **Engineering Review Comments Response for Commercial Final Development Plan Review Comments**

(Dated:04-03-2019)

**for**

## **Mid Continent Public Library – East Lee's Summit Branch**

**Application #: PL2019043**

**Prepared by Olsson (Terry Parsons 913-634-0903)**

***Olsson Response***

1. Please be aware that all of the comments presented in this letter were discussed in the last applicant letter dated Mar. 19, 2019. It appears there are issues related to an understanding of what is required by the City of Lee's Summit. *I have had several phone conversations with Gene Williams regarding these comments to ensure that we are providing the information the city requested. I requested a face to face meeting with Mr. Williams to go though our final revisions to reduce review time. Mr. Williams could not accommodate this request prior to our submittal. We are still requesting a face to face meeting with Gene at his earliest convenience.*
2. Sheet C5.4: Section 5304.8 of the Design and Construction Manual contains specific design requirements and details for all ADA-accessible ramps within right of way. This includes the northwest entrance to the property, and the southeast entrance. In particular, the following items were missing on the northwest entrance ramps: 1) cross-sections of the ramp, with Section A-A along the long axis of the ramp, Section B-B along the width of the ramp, and Section C-C along the curb opening of the ramp. *The requested sections have been added for all of the ADA ramps. They are shown on C5.4 and C5.5*
3. Sheet C5.4: The location of the tactile warning device on the north side of the ADA-accessible ramp is greater than 5.0 feet from the back of curb. This is not allowed by our Design and Construction Manual. *Per a phone conversation with Gene Williams, I have removed the tactile warning devices on all the ramps except for the existing ramp on Battery (that is to be reconstructed), because it currently has the domes. This is shown on Detail F on C5.5.*
4. Sheet C5.4: The north side of the ADA-accessible ramp is shown with what appears to be an existing sidewalk section that is 3.0% cross-slope on the north side, and 0.22% on the south end of the panel. Is this a typographical error? It is doubtful that this particular panel is twisted in the fashion shown. It is more likely this particular sidewalk panel is at 3.0% on each side. As such, it must be removed and replaced, and a twist incorporated into the design to act as a "sacrificial panel" for future upgrades. *The proposed sidewalk has been extended. This is shown on Detail B on Sheet 5.4.*

5. Sheet C5.4: It is not clear from this drawing what is being proposed, versus what is existing. Please be specific. *Extents of proposed and existing are clearly defined on site dimension plans. The line weights have been revised on C5.0 through C5.5 to better define limits of proposed and existing sidewalks.*

6. General Comment Concerning Missing ADA-Accessible Ramp Detail: It appears the detailed plan for the southeast ADA-accessible ramp was missing. In addition, a receiver ramp to the east was also missing. Please see the above comments related to the minimum design details that are required for this ADA-accessible ramp. These standards will also apply to this set of ADA-accessible ramps. *This detail was shown in the reviewed plans on Sheet 5.5 – Detail D. Titles have been expanded to more clearly show what the detail is referring to. Sheet references have also been added to Sheet 5.0 to indicate where the grading detail is located.*

7. Sheet C8.0: The emergency spillway was not designed in accordance with the Design and Construction Manual. 1.0 feet of freeboard is required between the clogged condition/zero available storage condition, and the top of the dam. A minimum of 0.5 feet between the "nominal" (i.e., all primary outlet structures, orifices, and weirs are functioning normally) 100 year water surface elevation and the crest of the emergency spillway shall be provided. It appears this criteria was reversed during design. *The emergency spillway detail has been revised on Sheet C8.0. It has also been revised to reflect the detention basin routing revisions caused by comment #10.*

8. The Geotechnical Engineering Report dated Jan. 7, 2019 and received by our Department on Apr. 3, 2019 provides recommendations for pavement type, thickness, subgrade, and chemically-stabilized subgrade that differ substantially from what is shown in the plans. It appears the recommendations are in excess of what the City requires for a generic pavement design. However, the plans do not meet either: 1) the City standard design contained in the Unified Development Ordinance, or 2) the recommendations contained in the Geotechnical Engineering Report dated Jan. 7, 2019. *The pavement details have been revised on to meet city of LS standards on Sheet C10.0.*

9. Sheet C10.0: Please update the typical section views for "Typical Subgrade Placement Under Curbs", "PCC Pavement Section", "Asphalt Pavement". Please be aware the City does not differentiate between parking stalls, and drive aisles as you have shown. They are both considered "drive aisles" for purposes of design. *The detail Sheet C10.0 has been revised to reflect the chemically stabilized subgrade under the curb. All asphalt pavement has been revised to the city standard pavement and our "Heavy Duty Section".*

10. The following questions relate to the "Final Stormwater Study" revised on Mar. 26, 2019. The "Pond Data" summary sheet on the second page of Appendix D shows what appears to be an "inactive" structure A. It is our understanding that "Structure A" is the outlet pipe for the system, and would therefore be 18 inches based on your plans. However, this column appears to have been deactivated for some reason. In addition, it is set to 15 inches rather than 18 inches. The concern is that the cross-sectional area of the area above the weir is well in excess (i.e., twice?) the area of the 18 inch pipe. Why was Structure A turned off in the settings? Where are the calculations of the discharge from the detention basin if this structure has been deactivated in the model? *It was not possible to have Hydrograph's program analyze the outlet structure has requested. So I analyzed the outlet structure at the outlet pipe, the control plate and the inlet pipe. Attached is a table that I created showing the water surface elevation at each point for the 2, 10 and 100 year storm. Based on this analysis I did revise the*

*inlet pipe into the structure from a 15" pipe to a 24" pipe based on inlet control. The pipe size has been revised on C7.1 and the Outlet Detail on Sheet 10.6.*

11. Based on the above comments, it is likely a revised stormwater report is required. *I am finalizing the storm water report based on the comments above and will submit it electronically by Thursday (April 11).*

12. Based on the comments related to the pavement design, it is likely that a revised cost estimate is required. *I am revising the estimate based on the comments above and will submit it electronically by Thursday (April 11).*

13. Utility Sheet: This sheet still shows "tapping the 12 inch line". Taps are only allowed for the 2 inch and lower water meter connections, not the fire line. A specific note is required stating this connection shall be a "cut-in tee". *In the reviewed documents, Keynote W2a on Sheet 6.0 indicates that a "cut-in" is required for the fire line. The tap in Keynote W1a is for the domestic water service only.*