



August 26, 2021

Jennifer Thompson
City of Lee's Summit
220 SE Green Street
Lee's Summit, MO 64064

**RE: LAKEWOOD SELF STORAGE – PL2021278
4101 NE PORT DR, LEE'S SUMMIT
COMMERCIAL FINAL DEVELOPMENT PLAN – REVIEW DATED 8-23-2021**

Dear Jennifer,

This letter is regarding the above-referenced project staff review comments to which we have the following responses:

Planning Review

1. The exterior of the trash enclosure (beside the gate), is required to be of a masonry, stucco material. It seemed the call out for the exterior walls were metal paneling.

Response: Updated as requested.

Engineering Review

1. Please refer to comment 14 within the previous applicant letter. We do not agree the detention basin is in a "cut" situation. Only a small portion of the basin is shown in this condition. An emergency spillway is warranted, and justification for its location to minimize risk shall be discussed within a revised stormwater report. According to the grading plan, there will be instances where the top of dam is 12 feet higher than existing round. If the primary outlet works becomes clogged, the dam will overtop. This is not allowed by the Design and Construction Manual.

Response: Provided the Emergency Spillway with calculations and updated the SWMR.

2. Further discussion was held between the applicant's design professionals and City staff concerning Port Dr/Lakewood Way ADA ramp design that was missing from the previous submittal (see comment 12 previous applicant letter). As discussed during an email to Jeff Skidmore and Ryan McGinnis August 9, 2021, an ADA accessible receiver ramp is required on the northwest corner of Port Dr. It shall be designed to receive pedestrian traffic from the opposite side of Port Dr. Please provide an ADA accessible ramp on the west side of Port Dr. terminating at a turning space that is designed to be "flat" (as defined by no more than 1.5% slope in any direction). Ensure crosswalk between the two (2) ADA accessible ramps is after the stop sign. Min. distance if 4 feet, maximum is 6 feet.

Response: Provided ramp as requested.

3. Please see previous applicant letter comment 12. Although on Port Dr./Lakewood Way ADA accessible ramp detail has been provided on Sheet C1.0, it does not meet the standards set forth in Section 5305 of the city of Lee's Summit Design and Construction Manual in terms of slopes. In particular, ramp exceeds the max. Longitudinal design slope of 7.5% from the truncated domes to the gutter when using the elevation callouts provided on this sheet. Cross slopes exceed 1.5% max. Turning space was not defined, and appears to exceed 1.5% in one or more directions. As a guide, Section 5304.8 of the Design and Construction manual includes a list of items that are required within plans. Please review this list and provide the detailing necessary to construct the ramps in accordance with City of Lee's Summit standards.

Response: Updated the slopes and ramps as requested.

4. Please see previous applicant letter comment 12. Cross slope at the stop-controlled ADA route across the intersection of Port Dr. and Lakewood Way appears to exceed the max. slope at the proposed crossing. Stop signs should be relocated to a point no further than the PC of the curb return. The relocated crosswalk at that location (ie. 4 feet after the relocated stop sign) appears to meet the cross slope standards based on the elevation callouts. It would appear the ADA route across the intersection was planned further north than shown, because the slopes appear compliant near the PC of the curb return.

Response: Resolved slope issues and received additional existing curb elevations from surveyor.

5. Please eliminate the truncated domes from the ADA ramps shown at the commercial entrance. These are only required at public street intersection s or other high volume entrances.

Response: Eliminated truncated domes as requested.

6. Please see comment 2 and 16 contained within the previous applicant letter. Although Sheet C5.0 was provided, and included some of the items listed, it did not include the grading plan in the form of contours within the detention basin, labeling of line 300 as “section view of dam at outlet structure” (or equivalent language), top of dam elevation in numeric format, emergency spillway in plan view and profile view, elevation of emergency spillway crest in plan and profile view, proposed storage for the 100 year event, slope callouts for dam face (e.g, 3:1), and slope within the bottom of the basin (the profile view shows “less than 1%min.”, which does not appear to make sense).

Response: Updated Sheet C5.0 with the requested information above.

7. Conclusions and Recommendations contained within the Stormwater Study: This section contained a statement concerning the emergency spillway being comprised of the grated top of the outlet structure. This does not meet the requirements contained in Section 5600 of the KC APWA, as adopted by the City of Lee’s Summit. The top of an outlet structure may be used, provided it is not connected to the primary outlet works. In this case, the top of the grate is acting as a portion of the primary outlet works since the nominal 100 year water surface elevation is above the crest of the grated top. If it is desired to utilize the grated top for the emergency spillway, a minimum of 6 inches freeboard is required between the top of this grated inlet and the 100-year nominal water surface elevation with the basin. Additionally, any downstream pipe connection shall be able to manage the 100% clogged/zero available storage 100 year water surface elevation without overtopping the dame, and with a minimum 1.0 feet of freeboard. Discussion within the text of the report shall be provided, in addition to calculations in the appendix.

Response: Updated the SMWR to reflect the use of an Emergency Spillway and Not the outlet structure for the 100-year and 100-year (Clogged) storm events.

8. See comment 3 in the previous applicant letter. The response states that the receiving pipe shall be used to constrict flows, but unclear whether overtopping of the dam shall occur during the 100% clogged / zero available storage condition and still maintain a minimum 1.0 feet of freeboard. Please see above comments concerning the emergency spillway for additional clarification.

Response: Updated the SWMR to include the 100-Yr (Clogged) HydroCAD and it’s elevation was used to design the Emergency Spillway.

9. Previous submittal showed no casing carrier pipe for the fire line beneath Port Dr. The most recent submittal (utility sheet was not included on the previous submittal shows casing carrier pipe for the fire line. Please remove the casing carrier pipe since it is not desired by Water Utilities. It shall be bored, but a casing carrier pipe is not needed or desired.

Response: Removed casing carrier pipe as requested.

10. Please label the gate valve on the west side of Port Dr. in addition to the label. See opposite side of Port Dr, for example.

Response: Labeled the Gate Valve as requested.

Building Codes Review

1. Utility plan references sheet C9 for water meter installation detail (WAT-11) but it is actually on sheet 7.1. Installation of copper piping as designed on detail will be field verified.

Response: Updated this sheet as requested.

If you have any questions, please do not hesitate to contact me. Thank you.

Sincerely,

SCHLAGEL & ASSOCIATES, P.A.

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Enclosures