November 9, 2022

City of Lee's Summit 220 SE Green Street Lee's Summit. MO 64063

Re: <u>Lee's Summit Summer Moon Coffee Shop – Storm Memo</u>

To Whom it May Concern:

This memo has been prepared to assess the stormwater impact of the proposed Lee's Summit Summer Moon Coffee Shop redevelopment located at 699 NW Blue Parkway, Lee's Summit, MO 64063. This memo has been prepared in accordance with the American Public Works Association (APWA) Section 5600 "Storm Drainage Systems and Facilities," revised July 2020, per the Kansas City Metropolitan Chapter of the APWA.

The existing site consists of an existing retail building with associated parking infrastructure. The proposed project consists of a tenant finish to the existing building, along with a new drive-thru and associated parking infrastructure. The site has an existing detention basin that has been previously sized for the site. The information listed below in Table 1 is from the previously approved site development plan for the existing retail building. The calculated CN value for the previous approved site is 90.00. See Exhibit A for an Existing Impervious Area Plan.

Table 1 – Previous Approved Site Development Data

Impervious Drainage Area	Area (Ac)
Sidewalk	0.083
Buildings	0.176
Pavement	0.913
Total Impervious Area:	1.172

The TR-55 Curve Number (CN) for the newly proposed project was calculated as **90.00** based on the total existing/proposed impervious area. The information listed below in Table 2 is for the proposed project. See Exhibit B for a Proposed Impervious Area Plan.

Table 2 – New Proposed Site Development Data

Impervious Drainage Area	Area (Ac)
Sidewalk	0.088
Buildings	0.176
Pavement	0.907
Total Impervious Area:	1.171

The previously approved site development plan consisted of 1.172-acres of impervious area on the 1.740-acre lot. A total proposed impervious area of 67.34% was calculated for the previous approved site plan. The new proposed site development plan will consist of 1.171-acres of impervious area. A total proposed impervious area of 67.30% was calculated for the proposed site plan. The proposed CN for this project was calculated as **90.00** based on the total proposed impervious area of 67.30%, resulting in no change from the original approved site plan with a CN value of **90.00**. Therefore, no additional detention design or BMP implementations are necessary.



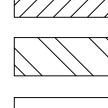
Mick Slutter, PE

RENAISSANCE INFRASTRUCTURE CONSULTING

Site Data Table
Pavement & Sidewalk Area: 0.996 ac
Building Impervious Area: 0.176 ac
Total Impervious Area: 1.172 ac
Total Site Area: 1.740 ac

LEGEND:

Impervious Area (Pavement/Sidewalks)



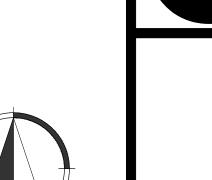
Impervious Area (Buildings)

Pervious Area

Existing Impervious





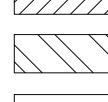


Sheet Exhibit A

Site Data Table
Pavement & Sidewalk Area: 0.995 ac
Building Impervious Area: 0.176 ac
Total Impervious Area: 1.171 ac
Total Site Area: 1.740 ac

LEGEND:

Impervious Area (Pavement/Sidewalks)



Impervious Area (Buildings)

Pervious Area

22-0188 Summer Moon C ummit, Jackson C Proposed Impervious







Sheet Exhibit B