

DESIGN & CONSTRUCTION MANUAL DESIGN CRITERIA MODIFICATION REQUEST

PROJECT NAME: Summit Point Apartments, Phase II			
ADDRESS: 504 NE Chipman Road			
PERMIT NUMBER: PL2022056, Commercial Final Developmen	nt Plan	_	
OWNER'S NAME: Summit Point Phase II, LLC		-	
TO: Deputy Director of Public Works / City Engineer			
In accordance with the City of Lee's Summit's Design and Cons modification to one or more provisions of the code as I feel th the public health, welfare and safety are assured. The followir action. (NOTE: Cite specific code sections, justification and all Please see attached Letter and Exhibit	at the sping articula	rit and intent of the ites my request for	DCM is observed and your review and
SUBMITTED BY:			
NAME: <u>CFS Engineers, PA, Thomas E. Ingram, PE</u> ADDRESS: <u>1421 E 104th St, Kansas City, MO 64131</u>			
CITY, STATE, ZIP:Email: _tingram@cfse.com	SIGNAT	URE:	
KENT MONTER, P.E. DEVELOPMENT ENGINEERING MANAGER SIGNATURE:	_ DATE: _	() APPROVAL	
JEFF THORN, P.E. WATER UTILITIES ASSITANT DIRECTOR OF ENGINEERING SERVI SIGNATURE:		() APPROVED	
GEORGE M. BINGER III, P.E. DEPUTY DIRECTOR OF PUBLIC WORKS/CITY ENGINEER SIGNATURE:			
COMMENTS:			





July 12, 2022

1421 E. 104th Street Suite 100 Kansas City, Missouri 64131 (816) 333-4477 Office

cfse.com

Other Offices: Kansas City, Kansas Lawrence, Kansas Holton, Kansas Topeka, Kansas Springfield, Missouri Jefferson City, Missouri To: Kent Monter, PE
Lee's Summit Public Works
Development Engineering Manager
220 SE Green Street
Lee's Summit, Missouri 64063
816-969-1229
Kent.Monter@cityofls.net

Re: Summit Point Apartments Request for a Waiver 20 ft Clearance Between a Building and Maximum 100-Year Overflow Elevation Under Clogged Outlet Conditions CFS Project #21-5065

Dear Kent,

On behalf of the Developers of the proposed Summit Point Apartments, CFS Engineers, PA, would like to request a waiver from the City's requirement for providing a minimum 20 ft setback between a proposed building and the peak 100 year water surface elevation for the clogged condition/zero available storage in a stormwater detention basin (See Exhibit-1, Detention Basin Setback Waiver).

Board of Directors: Kenneth M. Blair, P.E. Kevin K. Holland, P.E. Daniel W. Holloway, P.E. Lance W. Scott, P.E. Sabin A. Yañez, P.E.

Senior Associates: Aaron J. Gaspers, P.E. Michelle L. Mahoney, P.E. Michael J. Morrissey, P.E. Todd R. Polk, P.E. Lucas W. Williams, P.E.

Associates: Adam M. McEachron, P.E. Gene E. Petersen, P.E. Andrew Robertson, PE, PTOE, PTP Jimmy L. Adams, CWI Casey Moore

The Summit Point Apartments has a proposed stormwater detention basin located by the northeast corner of the site, and the proposed multi-family residential building C1-2 would be located directly to the west. Drainage calculations were performed for the proposed stormwater detention basin to calculate the maximum 100-year water surface elevation in the event that the primary outlet works were clogged. The proposed building C1-2 has a finish floor elevation of 1005.00 ft (there is no basement). The proposed stormwater detention basin was designed with a 30 ft wide emergency overflow spillway with a crest elevation of 1001.31 ft. In the event that the detention basin was completely full up to the emergency overflow spillway's crest elevation and the outlet pipes were completely clogged and unable to convey any outflow, the maximum water surface elevation from a second 100-year storm event was calculated to rise to approximately 1002.31 ft. Based on the grading configuration for the proposed stormwater detention basin and the location of proposed multi-family residential building C1-2, the closest separation distance between the building wall and the peak 100-year clogged water surface elevation would be approximately 16.0 ft. The building's finish floor elevation of 1005.00 ft would be 2.69 ft higher than the peak 100-year clogged water surface elevation of approximately 1002.31 ft.



On the eastern side of the proposed stormwater detention basin, the peak 100-year clogged water surface elevation of approximately 1002.31 ft would be approximately 15.0 ft from the east property line of the site. The neighboring houses in the English Manor residential subdivision are setback approximately 20 ft from the property line, and would be over 35 ft from the peak 100-year clogged water surface elevation.

The proposed stormwater detention basin was designed with an outlet structure utilizing a 4 inch diameter low-flow orifice at flowline 994.85 ft, and a 33 inch wide rectangular overflow weir at crest elevation 997.50 ft. The calculated 100-year water surface elevation with the proposed outlet structure operating unobstructed was approximately 1000.81 ft.

The finish floor of Building C1-2 would be approximately 2.69 ft higher and separated by a distance of approximately 16.0 ft from the limits of an extreme storm event with 100-year clogged conditions in the site's stormwater detention basin. The eastern property line would be approximately 15.0 ft from the extreme storm clogged conditions limits. Based on the elevation difference between the building and the extreme clogged flood condition limits, CFS Engineers, PA, is requesting that the City grant the project a waiver from the minimum 20 ft setback to a 15 ft setback distance for Building C1-2 and for the east property line. If you have questions or need additional information, please call of email.

CFS Engineers, PA

Sincerely

Thomas E. Ingram, PE

