STAFF REPORT 11/7/2022 **PERMIT NO. 665**

ITEM: Floodplain Permit application is for the demolition of an existing motel complex and church building in the Bishop Creek floodplain to allow construction of a new student housing complex. The entire project site is approximately 9.7 acres.

BACKGROUND:
APPLICANT: Subtext - Bethany Rooney
BUILDER: TBD
ENGINEER: Ellen Stevens, PhD, P.E.
ENGINEER: Kimley-Horn and Associates, Inc.

The Verve Student Housing is a proposed 5-story Multi-family/student housing building that will be developed with approximately 260 units, 625 beds, and 563 parking spaces. The project is located on connecting properties at 2404/2420/2456 Classen Blvd. near the intersection of Classen Blvd. and 12th Ave. SE. Runoff from the northern end of the site flows west to the railroad right of way. The rest of the site flows south to Bishop Creek which is south of the project area.

2404 and 2420 Classen Blvd. are currently developed lots and the site of the old Hope Community Church and OU Motel respectively. These structures will be demolished for the construction of this project. The southernmost lot, 2456 Classen Blvd., is the only section of this project located in the floodplain and is currently undeveloped with the exception of an existing concrete pad and driveway that served structures that have been previously demolished. As depicted on the project maps, the only area of this project located in the floodplain would be the southern section of the parking lot. A preliminary drainage report has been submitted with the preliminary plat and includes an underground detention pond system to detain the additional stormwater runoff generated by the project.

Site located in Little River Basin or Tributaries? Yes__ No✓

STAFF ANALYSIS:
The construction of the southern parking lot for this project would require the installation of a retaining wall, not to exceed three feet in height according to the plans submitted by Kimley-Horn. The retaining wall and subsequent fill would be used to raise the south section of the parking lot above the BFE. The plans indicate that the estimated net fill from the construction of this retaining wall and parking lot is approximately 3500 cubic yards. The plans show a proposed cut of approximately 4000 cubic yards from the adjacent floodplain to create the required compensatory storage.

The Flood Insurance Rate Map (FIRM) indicates the flood zone on this property is Zone AE, which is a studied area of Tributary "A" of Bishop Creek. Based on the FIRM, the BFE at this site is 1129.5'. The applicant submitted a Floodplain Analysis Study developed by Ellen Stevens, PhD, P.E. on their behalf, which includes a HEC-RAS model of the existing and proposed conditions of the floodplain due to this project. This existing conditions model of the floodplain predicts a BFE of 1128' which is approximately 1.5' lower than shown in the published FEMA study from 2008. The model indicates this discrepancy can be attributed to both the Reinforced Concrete Box (RCB) under 12th Ave SE and Classen Blvd. and the railroad bridge west of the site being larger than shown in the current FEMA model.

If this permit application is approved by the Floodplain Permit Committee, the flood study and as built construction information would be forwarded to FEMA by the applicant's engineer to obtain a Letter of Map Revision (LOMR). The LOMR would effectively change the FIRM for this section of Bishop Creek to the new floodplain boundaries established by this project. Since this change to the floodplain boundary would be greater than ten percent (10%) of the width of the

floodplain, City Council approval is also necessary. This information would be submitted to Council for their consideration along with the preliminary plat and rezoning request.

Applicable Ordinance Sections:		Subject Area:
429.1	4(b)(1)… ……..……..	Fill restrictions in the floodplain
	4(b)(5) ……..……..	Compensatory storage
	4(b)(18)(i)……	City Council Approval
	5(a)(viii)……..	No rise considerations

4(b)(1) Fill Restrictions in the Flood Plain – The use of fill in the floodplain is restricted because storage capacity is removed from floodplains, natural drainage patterns are adversely altered, and erosion problems can develop. Because this project involves changing the floodplain boundary and lowering the BFE on the north side of the floodplain, a LOMR is required from FEMA. Since adequate compensatory storage will be provided, this project meets this section of the ordinance.

4(b)(5) Compensatory Storage – Compensatory storage must be provided within the general location of any storage that is displaced by fill. According to the drawings, compensatory storage will be provided by excavation on the south side of the new retaining wall. The plans indicate that approximately 500 more cubic yards of material will be removed from the floodplain than what is required due to the fill.

4(b)(18) The following floodplain modifications approved by the Floodplain Permit Committee shall also require approval by the City Council. A project report and the recommendations of the Floodplain Permit Committee's conditional approval will be provided to City Council at the time of Council's consideration of approval of such a Floodplain Permit. For projects that require platting, this information will be presented at the time Council considers the preliminary plat. For projects that do not require platting, the report will be made to Council prior to issuance of the floodplain permits (O-1617-34):

(i) A modification of the floodplain that results in a change of ten percent (10%) or more in the width of the floodplain.

5(a)(viii) No Rise Considerations – For proposed development within any flood hazard area (except for those designated as regulatory floodways), certification is required stating that a rise of no more than 0.05 ft. will occur in the BFE on any adjacent property as a result of the proposed work. The applicant's engineer has certified that the project will not cause a rise in the BFE, which meets the ordinance requirements.

RECOMMENDATION: Staff recommends Floodplain Permit application #665 be approved with the following conditions:

- As built drawings based on actual survey information be provided for the compensatory storage area upon completion.
- The floodplain permit application information be forwarded to City Council for their consideration along with the preliminary plat and rezoning request.
- A LOMR for this section of Bishop Creek be obtained prior to a Certificate of Occupancy being issued.

ACTION TAKEN: _____