

**ITEM:** Floodplain Permit application for proposed construction of a stormwater nature park located at the northeast corner of E. Alameda St. and S. Carter Ave. in the Tributary B of Bishop Creek floodplain.

**BACKGROUND:**

APPLICANT: City of Norman

ENGINEER: Reza Khakpour, P.E. (LMRK Engineering)

This project will provide a Nature Park in the heart of the City of Norman. The park features will include a play ground, walking trails, lookout station, and a raingarden. The park will allow the opportunity to provide compensatory storage for the stormwater to help with local flooding and an opportunity to showcase its use of low impact development (LID) features such as pervious pavement in the proposed parking area. It will also provide a chance to improve the stormwater quality for the overall watershed through features such as the rain garden. The proposed rain garden and lookout station will also be used for educational purposes to introduce the visitors to native vegetation and wetland functions.

The proposed park will be located on the northeast corner of the intersection of East Alameda Street and South Carter Avenue. The construction cost of the project is estimated at \$1,200,000. Tributary B of Bishop Creek is located within the limits of proposed park and the proposed improvement will impact that creek's floodplain area. The project engineer has submitted documentation that the proposed improvements will not adversely impact any of the neighboring properties.

**STAFF ANALYSIS:**

Site located in Little River Basin or Tributaries?                      yes\_\_\_ no✓

According to the latest DFIRM, portions of this project are located within the Bishop Creek floodplain and floodway (Zone AE).

**Applicable Ordinance Sections:**

36-533 (e)(2)(a).....  
(e)(2)(e).....  
(f)(3)(8) .....

**Subject Area:**

Fill restrictions in the floodplain  
Compensatory storage  
No rise considerations

(e)(2)(a) and (e)(2)(e) Fill Restrictions in the Floodplain and Compensatory Storage – The use of fill is restricted in the floodplain unless compensatory storage is provided.

The project engineer has indicated that 325 cubic yards are being brought into the floodplain for construction of the park features such as the parking lot, a retaining wall and small sections of the new trail system. There are 1185 cubic yards of fill being removed mostly from the observation area. This equates to an approximate net increase of 860 cubic yards of storage being created, thus meeting the ordinance requirements.

(f)(3)(8) No Rise Considerations – For proposed development within any flood hazard area (except for those designated as regulatory floodways), certification 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 is required.

The project engineer has provided calculations indicating that the proposed project will cause no rise in the BFE on any adjacent properties. In addition, verification from a

USACE review of the project submitted by the applicant has confirmed that no adverse impact on the stream will occur and consequently no individual 404 permit is required.

**RECOMMENDATION:** Staff recommends Floodplain Permit Application #690 be approved.

**ACTION TAKEN:** \_\_\_\_\_