

ITEM: Floodplain Permit application for the construction of a patio and installation of a fence at 3126 Meadow Ave. in the Canadian River floodplain.

BACKGROUND:

APPLICANT: Cynthia Pichot
ENGINEER: Gary Keen, P.E.

The applicant owns a condo that is one of four units in the same structure on the fringe of the Canadian River floodplain. The applicant had portions of the backyard excavated to prevent flood waters from backing up into the residence, then pavers and various raised flower beds, planters, etc. were installed in the yard. Additionally, there was fencing built around the perimeter of the yard. This work was completed without a floodplain permit as the applicant wasn't aware that one was needed. There is a FEMA approved LOMA on the structure but it does not cover the backyard.

For this permit application, the applicant has proposed that the fence be cut off at the elevation of the BFE and either wire mesh replaced in that section or left open. Since the applicant and the contractor for the work completed at this address have indicated that approximately 4 to 6 inches of soil were removed when renovations were done, there is likely a net negative fill for this location as indicated in the engineer report. However, the applicant's engineer is proposing the removal of several of the borders created with landscape blocks to ensure that fill volume in the floodplain has not increased. There is also a small berm in the southwest corner of the yard that is being recommended for removal. A complete description of the proposed work and evidence of historical conditions are included in the engineer's report attached to the application.

The applicant's engineer also provided a detailed report related to drainage across this property onto and from adjacent properties. Detailed surveying was done of this property and adjacent properties (3122 and 3124 Meadow Ave.). That report indicates that drainage should occur south and east across the 3124 Meadow Ave and should not hinder flow off of adjacent properties.

STAFF ANALYSIS:

Site located in Little River Basin or its Tributaries? Yes ___ no

According to the DFIRM, the patio and fence were installed on the fringe of the Canadian River floodplain. The BFE at the planned location is approximately 1100.0'.

Applicable Ordinance Sections:	Subject Area:
36-533 (e)2(a)	Fill Restrictions in the Floodplain
(e)2(e)	Compensatory storage
(e)3(j).....	Fencing in the floodplain
(f)3(a)8	No Rise Considerations

(e)2(a) and (e)2(e) - Fill Restrictions in the Floodplain and Compensatory Storage – The use of fill in the floodplain is restricted. However, the placement of fill is allowed to elevate structures if compensatory storage is provided.

Since this work was performed without a floodplain permit, determining fill amounts is difficult in this case. Based on reports from the applicant and the contractor who completed the work, there was significant fill removed from the floodplain to facilitate the moving stormwater away from the residence. Photos were provided of a gas meter that appears to show that approximately 4 inches of soil depth was removed. No complaints have been filed to indicate that any new flooding or capacity loss has

occurred. The engineer report indicates that some of the additional borders blocks and a small earthen berm be removed. Calculations show in the report that an estimated 4.6 cubic yards of storage was created as a result of the work completed.

(e)(3)(j) Fencing in the Floodplain – All new fences or replacement of existing fences in the SFHA require a floodplain permit. Approved fences shall be designed and installed to be breakaway or in some other manner so that flows will not be impeded.

The applicant has proposed to remove the sections of the fence below the BFE and install a wire mesh type fence along this section. This would allow the free flow of flood waters and meet this ordinance requirement.

5(a)(viii) 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 must be provided. For proposed development within a regulatory floodway, certification of no increase in the BFE is required.

The engineer has certified that the project will not cause a rise of more than 0.05 feet to the BFE which meets this ordinance requirement.

RECOMMENDATION: Staff recommends that Floodplain Permit Application #703 be approved with the following condition:

1. Images should be taken before any work is started and after work has completed to help City staff verify that the work was done in accordance with the proposal.

ACTION TAKEN: _____