

ITEM: This Floodplain Permit Application is for installation of a residential swimming pool at 1700 Echo Trail, which is located in the Canadian River Special Flood Hazard Area (SFHA).

BACKGROUND:

APPLICANT: Dirk O'Hara

ENGINEER: SMC Consulting Engineers, P.C.

The property is located on Echo Trail, just off Meadow Ave. south of W. Imhoff Road. The property is surrounded on two sides by the Canadian River floodplain. The Applicant is proposing to construct an approximately 46' x 20' in-ground pool and a concrete deck/patio surrounding the pool. According to the Applicant's engineering plans, the approximate total area for the pool is 1087 square feet, of which 172 square feet is located the floodplain. The total sidewalk area is 626 square feet with 39 square feet located in the floodplain. The pool and deck will be located to the southwest of the house.

STAFF ANALYSIS:

Site located in Little River Basin or its Tributaries? yes___ no✓

According to the latest FIRM, the site of the proposed work is located in the Canadian River floodplain (Zone AE). At the proposed site, the BFE is 1101.0 ft., which is approximately existing ground level based on GIS 1 ft. contours.

Applicable Ordinance Sections:**Subject Area:**

429.1	4(b)(1)(i).....	Fill restrictions in the floodplain
	4(b)(5)	Compensatory storage
	5(a)(1)(viii)	No rise considerations

4(b)(1)(i) and 4(b)(5) Fill Restrictions in the Floodplain and Compensatory Storage – Fill is restricted because storage capacity is removed from floodplains, natural drainage patterns are adversely altered, and erosion problems can develop. Compensatory storage must be provided within the general location of any storage that is displaced by fill or other development activity and must serve the equivalent hydrologic function as the portion which is displaced with respect to the area and elevation of the floodplain.

According to the engineer's calculations, approximately 1.71 cubic yards of fill in the form of concrete will be brought into the floodplain and approximately 2.70 cubic yards of existing material will be cut and removed from the property at the location of the pool and patio, creating compensatory storage, which meets the ordinance requirements.

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 is required. For proposed development within a designated regulatory floodway, certification that no increase in the BFE on any adjacent property as a result of the proposed work is required.

The project engineer has provided a hydraulic analysis and determined that the proposed swimming pool will not cause a rise in the BFE, which meets the ordinance requirement.

RECOMMENDATION: Staff recommends Floodplain Permit Application #669 be approved.

ACTION TAKEN: _____