

ITEM: This Floodplain Permit Application is for the proposed construction of Summit Valley Section 4 in the Dave Blue Creek floodplain.

BACKGROUND:

APPLICANT: Summit Valley Development LLC

ENGINEER: SMC Consulting Engineers

The applicant is seeking a floodplain permit for the proposed development of Summit Valley Section 4. This is a housing development, a portion of which is in the floodplain of Upper Dave Blue Creek. The proposed development is located north of the intersection of State Highway 9 and 36th Ave. SE. Work in the floodplain includes two road crossings, installation of box culverts and water and sanitary sewer line crossings.

STAFF ANALYSIS:

Site located in Lake Thunderbird Watershed? Yes ☒ no ☐

According to the latest FIRM, the site of the proposed work is located in the Dave Blue Creek floodplain. The BFE at the southern road crossing (Area 1 on the cut/fill plan) is 1127.0' and 1131.0' at the northern crossing (Area 2 on the cut/fill plan). The proposed southern crossing at Waterford Way contains a two-lane, 50-foot ROW road built on a double 12' x 10' RCB. There will be a 30" RCP storm pipe installed in the headwall that drains to channel to provide drainage for the roadway, as well as 4' W x 6" D concrete overflow flume. 12" sanitary sewer and water lines will also be connected across this section. Cut/fill calculations are shown in the attached report for Area 1. Plans indicate that the lowest elevation of the proposed top of curb (TOC) for this crossing will be installed at an elevation of 1132.50', which is approximately 5.5' above the BFE.

The proposed northern crossing (Area 2) on Glenview Lane, contains a two-lane, 50-foot ROW road built on a double 6' x 6' RCB. There is a 24" RCP storm pipe that will be installed in the headwall that drains to channel to provide drainage for the roadway, as well as a 4' x 6" overflow flume. There is a proposed 12" waterline and 8" sanitary sewer line at this crossing as well. Cut/fill calculations are provided in the attached report for Area 2. Plans indicate that the lowest elevation for the proposed TOC for this crossing will be installed at an elevation of 1139.30', which is approximately 8.3 feet above the BFE.

The provided plans also indicate an area south of the northern (Area 2) crossing that will be excavated to provide mandatory compensatory storage. This area is indicated at "Compensation Area" on the plans and includes an average cut of 3.68 feet over a 1.53 acre area.

Applicable Ordinance Sections:**Subject Area:**

| | | |
|--------|-----------------|--|
| 36-533 | (e)2(a)..... | Fill restrictions |
| | (e)2(e)..... | Compensatory storage |
| | (e)2(j)..... | Utilities constructed to minimize flood damage |
| | (e)2(k)..... | Water supply systems constructed to minimize flood damage |
| | (e)2(l)..... | In/exfiltration of flood waters in sanitary sewage systems |
| | (f)3(a)(8)..... | No rise considerations |

(e)2(a) and (e)2(e) 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 plans submitted by the applicant's engineer, there will be 10,356.6 cubic yards of cut and 9,954.5 cubic yards of fill in the project area (see attached Floodplain Cut/Fill plans). This equals a net removal of 402.1 cubic yards of fill from the floodplain.

(e)2(j), (e)2(k), and (e)2(l) Utilities constructed to minimize flood damage and to prevent in/exfiltration of flood waters in utility systems. All public utilities and facilities shall be constructed to minimize flood damage. New and replacement water lines and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters.

The utility line pipe joints have gaskets making the system watertight, and the entire system is leak tested prior to going into service.

(f)3(a)(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. 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 certified that no rise in the BFE is expected with this project as demonstrated in a previously submitted and accepted Watershed Hydrology report.

RECOMMENDATION: Staff recommends Floodplain Permit Application #728 be approved.

ACTION TAKEN: _____