

ITEM: This Floodplain Permit Application is for the proposed replacement of an existing natural gas pipeline in the Bishop Creek floodplain near the intersection of Merrimac St. and Dewey Ave. and north of State Highway 9.

BACKGROUND:

APPLICANT: Oklahoma Natural Gas – Drew Nixon

ENGINEER: Johnson and Associates – Brian Rowe

The applicant is proposing a project to bore under Bishop Creek to replace a gas main. The proposed bore pits will be located outside of the regulatory floodplain in the gas line easement. The bore pits will be approximately 410' apart according to the submitted plans. The width of the floodplain at this location is approximately 260'. Plans indicate that no ground disturbance within the floodplain will occur.

STAFF ANALYSIS:

Site located in the Lake Thunderbird Watershed? Yes ☐ No ☒

According to the latest FIRM, the site of the proposed work is located in the Bishop Creek Floodplain (Zone AE). The BFE for this location is 1109.0'.

Applicable Ordinance Sections:

Subject Area:

36-533	(e)2(a).....	Fill restrictions
	(e)2(e).....	Compensatory storage
	(e)4(c).....	Special requirements for drilling oil and gas wells
	(f)3)(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.

No ground disturbance or fill will be brought into the floodplain as a result of this project. Only boring will occur within the floodplain. Bore pits will be located outside of the floodplain.

(e)4(c) Special Requirements for drilling oil and gas wells in a special flood hazard area (SFHA) – ... The drilling operation shall comply with all other local, State and federal requirements prior to issuance of a floodplain development permit. All new or replacement flowlines, pipelines, etc., that will cross rivers, streams, creeks, and channels, shall be bored to be below the bed. The depth below the bed shall be a minimum of ten feet. The pipe used for the crossing shall be one pipe grade higher, or have a wall thickness twice the thickness of the standard pipe used for the flowline, pipeline, etc. If the flowline, pipeline, etc. becomes exposed, the crossing must be rebored. The ground surface shall not be disturbed within 50 feet of the river, stream, creek, or channel banks.

The applicant has indicated in their plans that the replacement gas main will be a minimum of 10' below Bishop Creek and the bore pits are located out of the SFHA and greater than 50' from the edge of channel.

(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 submitted a No Rise statement and floodplain analysis report indicating that this project will not cause a rise in the BFE at this location, meeting the ordinance requirements.

RECOMMENDATION: Staff recommends Floodplain Permit Application #724 be approved.

ACTION TAKEN: _____