

Oklahoma State Highway Dept.

File SWO 2180(11)

Date July 5, 1955

To Mr. C. A. Stoldt

From Earl Anderson

Subject

Mrs. J. A. Futch's Complaint of Flood Damage - Beaver Creek Bridge near 75th Street and Northeast 4-lane Highway - US 66 in Oklahoma County. Project FI 602(2) Station 401 + 03, (13'x17'x13')x 15'x122' Hwy., RCB

On June 9th, the next day after Mrs. Futch was in your office delivering the attached letter dated June 6, I contacted her at her place and viewed the alleged flood damage.

I asked Mrs. Futch if they had arrived at the amount of the damage in money; she stated that they were not so much interested in collecting money, as they were in getting the highway department to correct the restriction of the flow of flood water at the Beaver Creek bridge on the highway.

This flash flood of May 19th, mentioned in Mrs. Futch's letter was caused by a rain of severe intensity and comparatively of short duration, and could be classed beyond a normal rainfall for any one time. May 19th, you perhaps will recall, was the day flooding occurred in parts of Oklahoma City in the Deep Fork water shed and in the Village area north of Nichols Hills, which is partly served by this Beaver Creek.

A resident living approximately 1500 feet upstream from the Highway on Beaver Creek stated this recent highwater was the third time she had seen the water that high since 1940 and pointed out what she called the ordinary high water, which had an elevation of 1048.4, the elevation of the top of the upstream inlet of the highway bridge is 1048.0. The highwater elevation at the upstream end of the highway bridge this time was 1052.5, which is 1.0 higher than the highwater elevation shown on the plans. The information for the highwater mark shown on the plans was obtained from a resident of 30 years in this area. The highwater elevation at a County bridge 1460 feet up stream was 1053.2 which is approximately the top of the handrail and the highwater elevation at Mrs. Futch's, according to observed drift elevations was 1053.8.

Mrs. Futch pointed out a highwater elevation some 2.2 feet higher which would make the highwater elevation 1056.0. Had the water been at this elevation 1056.0 it would probably have caused several inches of water on the west two lanes of the highway 100 feet south of the Beaver Creek bridge, where the plans show a finished grade elevation of 1054.49 at Station 400+00. Mrs. Futch stated in her letter that water rose to six or seven feet over the top of the bridge opening within a period of approximately 30 minutes and the water going all over the highway in that area, substantiated by a signed statement of two persons who actually saw the water over the highway. According to our observations the water was 4.5 feet above the opening and would have had to have risen another 3 feet to have been even with the top of the west curb of the median strip which is at an elevation of 1055.46. We could find no evidence of the flood water being over the highway. The owner of the nearby Deep Rock Filling Station states the flood

cc. Tolar Eng. Co 9/26/58

water was not over the highway and he pointed out a highwater mark that was an elevation of 1053.0 which is 0.5 feet higher than our observed highwater elevation at the upstream end of the Beaver Creek bridge.

Some 500 or 600 feet east of the highway Beaver creek makes a junction with Deep Fork creek. During this particular highwater in question, Deep Fork was also at flood stage. An observed highwater from drift at the location where Beaver creek flows into Deep Fork was found to be an elevation of 1052.8, which is 1.0 foot higher than the highwater mark of elevation 1051.8 as observed on the highway fill slope, directly above the downstream headwall of the bridge, which indicates the downstream opening of the bridge was also under 4.1 feet of water. With both ends of the highway bridge being under water, the restriction to the flow of water in Beaver creek was not caused by the highway bridge as Mrs. Futch claims, but was due to the highwater in Deep Fork creek. Had the highway and bridge not been in place during this particular flood the highwater at Mrs. Futch's place would not have been materially affected and would have probably been at about the same elevation. The difference in elevation of the highwater on the upstream and downstream ends of the bridge was 0.7 foot, being 0.7 higher on the upstream end, due to the flow of water through the submerged bridge. This difference would have been dissipated in a short distance upstream and would not have affected the elevation of the water at Mrs. Futch's place some 2343 feet upstream, as the flow line elevation of the upstream end of the highway bridge is 1032.4 and the flow line of Beaver creek back of her place is 5.3 feet higher at elevation 1037.7.

As previously mentioned, Mrs. Futch's place is located approximately 2343 feet upstream from the highway, the house being 68 feet from the right bank of the creek, which is the high bank and on the highway side. There apparently was not any extraordinary flood damage on their property other than could normally be expected from a highwater such as occurred on May 19th of this year. Their foot bridge was floated from its supports a few feet downstream, the lateral drains from the septic tank, at elevation 1040.5, which is practically the normal highwater elevation, was washed astew. Some rock work not too securely anchored in the creek bank sunk down and toppled over in places, also a large tree had fallen across the creek channel.

The creek did not overflow the high bank, thus the yard surrounding the house escaped any flood damage, some flood water got into a chicken house across the creek and drowned a few chickens that were not on the roost. Probably the most damage or inconvenience was from water backing through the lateral drains and septic tank, entering the basement of the house through a drain and toilet stool. The drain was successfully plugged but water from the stool could not be stopped and a water line on the base boards indicated the water got only an inch or two deep. Mrs. Futch stated they carried lots of water out of the basement, up stairs, during the night of the highwater.

EARL ANDERSON
MAINTENANCE DEPARTMENT

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