# City of Broken Arrow

**Drainage Advisory Committee** 



# PROJECT REPORT

| DATE:               | 10/15/19   |
|---------------------|--|
| NAME:               | Pembrooke Park HOA   |
| ADDRESS / LOCATION: | In vicinity of 3704 West Boston Street, Pembrooke Park Subdivision |
| WATERSHED:          | Haikey Creek – East Branch   |
| ESTIMATE:           | \$300,000 - \$500,000  |
| CASE:               | No. 19-003   |

#### DESCRIPTION

Erosion of the west bank of the E. Branch of Haikey Creek at Pembrooke Park playground and pond. This may may have been caused by the undermining of a large tree that fell into the creek and force the high waters into the west bank at this location. The installation of the rip rap in the ditch did not cause the erosion.

There may be a safety issue with this erosion due to the proximity of the private park. Environmental issues on Haikey Creek, such as loss of sediment, due to the pond dike completely eroding would be minimal. Trees

Trees could create jams that could lead to minor flooding in the riparian zone. The down trees could create debris jams leading to minor flooding in the riparian zone. No flow restrictions were observed.

Restoration of the bank to prevent further deterioration is an extremely expensive capital improvement That may or may not work. The eroded portion is on the order of 25-30 feet deep. Several hundred feet long.

### BENEFIT

Repairing erosion to the pond may prevent potential failure to the dike and reduce possible blockage of the creek;

But the benefit to the public versus the cost to repair (B/C) is very low.

## **RECOMMENDATION**

Because the benefit to the public versus the cost to repair is so low, staff recommends the denial of the request for the City to participate in the repair effort. However, staff does recommend that the Committee recommend a one-Time expenditure up to \$10,000 be recommended to Council to clear the creek of the downed trees.

COMPLETED BY: PPW DATE: 10/16/19

Rev. 0 09-30-19