



Date: October 22, 2019

To: Thomas J. Bonfield - City Manager
Through: W. Bowman Ferguson - Deputy City Manager
From: Marvin G. Williams – Director of Public Works
Subject: Emergency Watershed Protection and Watershed Restoration Project Grant Project Ordinance

Executive Summary

The City of Durham has received an Emergency Watershed Protection (EWP) grant award from the United States Department of Agriculture – Natural Resources Conservation Service (USDA – NRCS) to stabilize multiple streams that were impacted by Hurricane Florence in September 2018. The grant seeks to reduce the risk of flooding by removing debris and sediment as well as stabilizing and restoring stream banks to protect infrastructure and property adjacent to impacted streams. Federal funds typically cover 75% of project costs. The City has also received a Watershed Restoration Project (WRP) grant award from the North Carolina Department of Agriculture that will fund the remaining 25% of project costs. The Public Works Department recommends that the City Council adopt the EWP and WRP grant project ordinance, authorize the City manager to execute the associated grant agreements, and amend the Stormwater Capital Improvements Ordinance for the purpose of adding the EWP and WRP project amount.

Recommendation

To adopt the City of Durham Fiscal Year 2019-20 Emergency Watershed Protection and Watershed Restoration Project grant project ordinance;

To authorize the City Manager to execute the grant agreements and other documents that are required or appropriate in order for the City to receive the grants and to undertake the projects; and

To adopt an ordinance amending the Stormwater Capital Improvements Project Ordinance, Fiscal Year 2019-20, as amended, the same being Ordinance #15488, for the purpose of adding the Emergency Watershed Protection project in the amount of \$1,074,177.00.

Background

The remnants of Hurricane Florence passed through the City of Durham on September 17, 2018 causing widespread flooding that damaged homes and infrastructure located near streams. Durham County was not included in the initial disaster declaration of September 14, 2018. City of Durham and Durham County staff was able to provide evidence that assisted with a subsequent disaster declaration on November 15, 2018 for Durham County. This declaration made the City and County eligible for federal and state grant programs designed to assist with recovery including the EWP and WRP programs. Specifically these programs assist with removing debris and sediment in streams as well as stabilizing stream banks impacted by storm events.

The City initially requested federal assistance under the provisions of the EWP program on December 28, 2019. State assistance was requested through the WRP program on January 18, 2019. USDA-NRCS staff conducted site visits and prepared Damage Survey Reports (DSRs) for five locations within the City (see attached Project Locations Map).

- DSR No. 37-07-18-5038-057, South Ellerbe Creek, between Interstate 85 and the confluence with Ellerbe Creek
- DSR No. 37-07-18-5038-160, Ellerbe Creek, between West Club Boulevard and North Roxboro Street
- DSR No. 37-07-18-5038-161, Northeast Creek Tributary C, south of Sedwick Road and parallel to Dedmon Court
- DSR No. 37-07-18-5038-194, Northeast Creek Tributary C, parallel to Revere Road, south of Seaton Road
- DSR No. 37-07-18-5038-195, Unnamed tributary to Third Fork Creek, between Ward Street and Cliff Street

USDA-NRCS awarded the City federal funds in the amount of \$805,230 on September 16, 2019 (see attachment 3). The North Carolina Department of Agriculture awarded the City state funds in the amount of \$268,947 (see attachment 4). The total award (\$1,074,177) is expected to cover the total cost of implementing the five project locations.

The work included at the five project locations includes debris removal, sediment removal, and stream bank stabilization. Stream bank stabilization may include vegetation planting as well as more structural approaches such as stone placement, natural structural elements, and walls to protect infrastructure and property in specific locations. Vegetative measures will be employed throughout the majority of the locations. Hardened structural measures will be implemented only to protect specific infrastructure and property. Debris and sediment removal will reduce the risk of flooding. Stream bank stabilization will protect vital infrastructure and property adjacent to the impacted streams.

Issues and Analysis

The federal and state grant funds are anticipated to cover all costs associated with this project. Estimates were prepared as part of the application process. In the event that additional funds are needed to complete the project, the City may request additional funding from the federal and state agencies. Staff is recommending the authorization of the grant project ordinance as well as authorization for the City Manager to execute agreements needed to implement the project.

Alternatives

One alternative was identified; do not approve the recommendations. Debris and sediment remain in the impacted streams elevating the risk of flooding. Stream banks in the impacted areas will continue to erode threatening vital infrastructure and property.

Financial Impact

The EWP grant will provide the City with \$805,230 in federal funding and the WRP grant will provide the City with \$268,947 in state funding. The total grant amount (\$1,074,177) is expected to cover the project costs for the five proposed sites.

Equal Business Opportunity Summary

Not applicable at this time.

Attachments

1. Emergency Watershed Protection Program and Watershed Restoration Project Grant Project Ordinance and Authorization to Fulfill Grant Agreements
2. Project Locations Map
3. Emergency Watershed Protection Notice of Grant and Agreement Award, dated September 16, 2019
4. Watershed Restoration Project Draft Contract, dated September 27, 2019
5. Stormwater Capital Improvement Project Ordinance Amendment, Fiscal Year 2019-20