

City of Ann Arbor

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Legislation Text

File #: 11-0797, Version: 1

Resolution to Petition the Washtenaw County Water Resources Commissioner to Design and Construct Stormwater Controls in the Malletts Creek Drainage District at the E. Stadium Bridges Project to Reduce Downstream Flooding and Improve Water Quality (Total Cost: \$1,284,330.60; City's Apportionment: \$1,188,005.81)

Attached for your approval is a resolution to petition the Washtenaw County Water Resources Commissioner (WCWRC) to undertake a project to design and construct stormwater controls in the Malletts Creek Drainage District at the E. Stadium Bridges Project.

The E. Stadium Bridges Project spans two different watersheds: Allen Creek (46%) and Malletts Creek (54%). As a result, two separate petitions to the Washtenaw County Water Resources Commissioner are required.

The Malletts Creek Restoration Project (2000) and the Malletts Creek Management Plan (2007) both identify construction of stormwater control measures within the creekshed as a high priority to control water quantity and improve water quality within the creekshed during storm events. Both of these endeavors were a collaborative effort with the Washtenaw County Water Resources Commissioner, the City of Ann Arbor, the Malletts Creek Association, the University of Michigan, Ann Arbor Public Schools and the Malletts Creek Coordinating Committee. Goals included the identification, prioritization and selection of stormwater management projects that would reduce flooding and improve water quality in Malletts Creek.

Much of Malletts Creek is contained in underground piping that carries stormwater runoff from the urban core of Ann Arbor. Nearly 37% of the land draining to the creek is impervious, and as a result, stormwater frequently enters the creek too quickly, causing localized flooding during rain events. These rain events also carry pollutants from impervious areas to the creek, lowering water quality. Malletts Creek falls within the Total Maximum Daily Load (TMDL) area of the Huron River for phosphorus and E. coli from storm water. In addition, Malletts Creek has a creek-specific TMDL for Biota, which is attributed to unstable flow regimes, reduced bank stability, bank erosion, sedimentation and reduced stream quality due to excessive runoff/washout throughout the highly urbanized watershed. The metric used for address the TMDL is the amount of Total Suspended Solids (TSS) found within the creek habitat profile.

The E. Stadium Bridges Replacement Project is currently scheduled to begin construction this Fall. It is the City and WCWRC's intent to include stormwater controls as a part of the bridge project. This project will provide needed detention and improves downstream water quality and quantity. It is estimated that 2,746 lbs of total suspended solids (TSS) and 2 lbs of phosphorus per year per acre of the upstream drainage area will be removed from the creek, as a result of stormwater control features being installed during the bridge construction project.

Stormwater controls include underground detention with infiltration. The resolution authorizes repayment of the low interest loans for this project from the Storm Water Fund (Fund 0069).

A formal petition from the City is required to move this project to construction. Malletts Creek is an established Chapter 20 County Drain. Therefore, the work to construct the detention system and other control measures falls under the jurisdiction of the Washtenaw County Water Resources Commissioner. As an established drain, the costs of the project are assessed to the governmental entities within the drainage district area. The total cost of the stormwater portion of this project is estimated at \$1,284,330.60. The cost has been approved for a low interest (2.5%) State Revolving Fund (SRF) loan. The City's apportionment of this drainage district is 92.5% of the district. Therefore, the City's share will be \$1,188,005.81.

As the Water Resources Commissioner will be assessing the City over a maximum of 20 years for this project, the City will not have to expend the full cost of this project at the time of construction. Rather, the reimbursement of the Water Resources Commissioner will be paid over the financing period, with installments not to exceed \$75,544.00 per year.

Prepared by: Jennifer Lawson, Water Quality Manager

Reviewed by: Sue F. McCormick, Public Services Administrator

Approved by: Tom Crawford, Interim City Administrator

Whereas, There is a Total Maximum Daily Load (TMDL) for phosphorus and E. coli reduction within the Huron River;

Whereas, Malletts Creek Drainage District is within the area covered by the phosphorus and E. coli TMDLs;

Whereas, There is a Total Maximum Daily Load (TMDL) for biota within Malletts Creek;

Whereas, The Malletts Creek Restoration Project (2000) and the Malletts Creek Management Plan (2007) have identified the construction of stormwater controls within the creekshed as a high priority to control water quantity and improve water quality during storm events;

Whereas, The City Council intends to file with the Washtenaw County Water Resources Commissioner for a petition to clean out, relocate, widen, deepen, straighten, extend, tile, interconnect, or otherwise improve the E. Stadium Bridges portion of the county drain known as Malletts Creek Drain pursuant to Section 482 of Chapter 20 of the Drain Code of 1956 (MCL 280.482);

Whereas, It is the desire of the City Council to have the Mayor and Clerk sign and file the necessary petition with the Washtenaw County Water Resources Commissioner; and

Whereas, A suggested form of such petition is now presented to the City Council.

RESOLVED, The City Council hereby determines to proceed with the proposed drain project for the Malletts Creek Drain Drainage District as more fully described in the petition attached hereto as Attachment 1:

RESOLVED, The Mayor and Clerk be hereby authorized and directed to execute such petition for and on behalf of the City and to file the same with the Water Resources Commissioner of the County of Washtenaw;

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RESOLVED, The City Council hereby consents to the location of the proposed clean out, relocation, widening, deepening, straightening, extending, tiling, interconnecting or otherwise improving the E. Stadium Bridges Project portion of the Malletts Creek Drain within the limits of the City and the assessment of a portion of the cost of such improvements, so located, against the City; and

RESOLVED, That the assessment (approximately \$1,188,005.81, plus interest) will be paid in twenty annual installments not to exceed \$75,544.00/annum from the Operations and Maintenance Budget of the Stormwater Fund (Fund 0069), upon project completion.