



City of Harrisonburg, Virginia

OFFICE OF THE PUBLIC WORKS DEPARTMENT
320 EAST MOSBY ROAD
HARRISONBURG, VIRGINIA 22801
(540) 434-5928

STREET MAINTENANCE
TRAFFIC ENGINEERING
TRANSPORTATION PLANNING
REFUSE/ RECYCLING
CENTRAL STORES

TO: Kurt Hodgen, City Manager

FROM: Thomas Hartman, PE, Assistant Director of Public Works

DATE: February 24, 2016

RE: Budget Reallocation for the East Market Street RSC Project

Summary: The Department of Public Works (DPW) requests a budget reallocation of \$166,000 from the Sampson Park Stormwater Capital Project to the East Market Street Stormwater Improvement Capital Project. This reallocation will allow the DPW to expand this existing project to include an additional bioretention basin near the intersection of East Market Street and Country Club Road. This additional bioretention basin will increase the annual phosphorus removal by roughly 4 lbs annual, bringing the total to 22.5 lbs of phosphorus removed annually.

Background: In 2015, the City was awarded the Stormwater Local Assistance Fund (SLAF) grant from the Virginia Department of Environmental Quality (VA DEQ) for the design and construction of a regenerative stormwater conveyance (RSC) channel and dry swale within East Market Street median between Chestnut Ridge Drive and the Kohl's department store entrance. During the engineering design of this project the aesthetics of the median was discussed and the remaining channel from the Kohl's crossover to the Country Club Road intersection was reviewed. This portion of the channel is currently protected by guardrail due to the channel depth in this area. Options for piping this area were discussed and from those discussions the idea of piping the channel and constructing a bioretention above the pipe was studied. As a result of that study it was determined that the addition of a bioretention basin to the project would produce an additional pollutant removal of roughly 4 lbs of phosphorus per year, as well as improving the aesthetics of the median.

Current Chesapeake Bay TMDL models and guidance, estimate that the City will be required to implement stormwater management projects and practices to remove 673 lbs of phosphorus per year by 2028. The East Market Street RSC project is estimated to remove 18.56 lbs of phosphorus per year, with the addition of the bioretention basin the estimated removal increases to 22.56 lbs of phosphorus per year. DPW contacted DEQ to notify them of the revision to the scope of the project, and asked if the SLAF grant funding could be increased due to the additional pollutant removal generated by the bioretention basin. DEQ stated that they could not increase the grant funding for this project. Therefore, the estimated revised cost per pound of phosphorus removed is \$34,219 per lb of phosphorus. With the SLAF grant covering a portion of the project costs, which equates to cost effectiveness for city dollars at \$20,797 per lb of phosphorus removed. For comparison, the SLAF grant's maximum threshold for projects to be considered was \$50,000 per lb of phosphorus removed.

DPW reviewed the Stormwater Capital Project budget to determine if funds could be reallocated from another project to allow for this bioretention basin to be included in this project. The other Stormwater

capital project is the Sampson Park Stormwater project, which is currently funded at \$200,000. DPW has a SLAF grant application currently submitted for the Sampson Park Stormwater project, and if awarded would only require \$58,500 in local funds. Therefore, DPW is requesting to reallocate \$166,000 from the Sampson Park Stormwater project to the East Market Street RSC project to allow for the bioretention basin. The FY17 budget request for Stormwater Capital Projects includes a request of \$24,500 for the Sampson Park Stormwater project, which will place \$58,500 in the project budget, and thus provide the required match to the SLAF grant if awarded.

Key Issues: This project will help the City meet its Municipal Separate Storm Sewer System (MS4) permit requirements for Local TMDL and Chesapeake Bay TMDL pollution reduction.

Environmental Impact: This project will reduce stormwater pollution entering Blacks Run and the Chesapeake Bay.

Fiscal Impact: As stated above this reallocation would reallocate \$166,000 from the Sampson Park Stormwater capital project, and subsequent FY17 requests for the Sampson Park Stormwater project.

Prior Actions: Approval of FY15-16 Budget for East Market Street Stormwater Improvements.

Alternatives: Don't include the bioretention basin as part of this project, and construction project as originally planned.

Community Engagement: This project was shared with citizens at open house meetings and presentations to organizations during the development of the Stormwater Utility Fee Ordinance. However, no formal public engagement process took place specifically for this project, and none is required.

Recommendation: DPW staff recommends approval of this reallocation as presented.

Attachments: Project location map.

Review:

The initiating Department Director will place in Legistar, in sequence of transmittal, the names of each department that must initial their review in order for this item to be placed on the City Council agenda. The completion of review only addresses the readiness of the issue for Council consideration. This does not address the recommendation for approval or denial of the issue.

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