



7800 Golden Valley Road
Golden Valley, MN 55427

March 8, 2016

Laura Jester, Administrator
Bassett Creek Watershed Management Commission
c/o Barr Engineering
4300 MarketPointe Drive
Minneapolis, MN 55435

Subject: City of Golden Valley 2016 Pavement Management Program

Dear Laura:

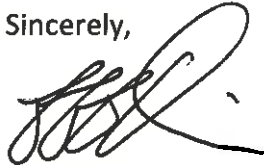
The City of Golden Valley is requesting a variance from the Bassett Creek Watershed Management Commission (BCWMC) water quality standards for the 2016 Pavement Management Project.

As discussed in the attached memo from the City's consulting engineers at Short Elliott Hendrickson, Inc. (SHE), the City will be constructing all the water quality best management practices that are practical and feasible with this project. These best management practices include installation of sump manholes with SAFL baffles, and reduction of the impervious pavement surfaces to the extent possible. Despite these efforts we are unable to meet the Minimum Impact Design Standards (MIDS) water quality requirements of the BCWMC. The improvements being constructed are consistent with the water quality requirements for linear projects prior to adoption of the BCWMC Comprehensive Plan in September, 2015, and will result in water quality improvements from the existing conditions.

The City will continue reconstructing streets within the Lakeview Park area of Golden Valley for the next several years. The City will strive to meet the MIDS requirements to the extent feasible as these projects are designed and constructed. These projects will include acquisition of four flood prone homes north of Olympia Street between Mendelssohn and Gettysburg Avenues immediately north of the 2016 Pavement Management Project. There is no feasible way to protect these homes from repeat flooding and therefore the long term use of the property will be the construction of a water quality best management facility as part of the upcoming street reconstruction projects. This facility has not yet been designed, but will provide nutrient and sediment removal from storm water runoff, and most likely include volume reduction, prior to its discharge into Medicine Lake.

Please feel free to contact me at 763-593-8034, or joliver@goldenvalleymn.gov if you would like to discuss this issue further.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Oliver', with a large, stylized loop at the end.

Jeff Oliver, PE
City Engineer

Enclosure

C: Marc Nevinski, Physical Development Director
 Sue Mason, SEH
 Brian Dahlberg, Engineering Technician



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MEMORANDUM

TO: Jeff Oliver, PE City Engineer, City of Golden Valley

FROM: Susan Mason PE, Project Manager

DATE: March 8, 2016

RE: 2016 PMP Watershed Permit
SEH No. SEH 125641, City Project No. 16-1 14.00

Dear Jeff,

The following information has been compiled regarding our review of the Basset Creek Watershed MIDS Design Sequence Flow Chart. As you know, the 2016 PMP project was started in 2015 and is now needing to comply with the changes in the BCWMO rules. Currently, the 2016 PMP project is not conforming.

Background

The 2015/2016/2017 Pavement Management Projects were originally one project that were separated into 3 projects during preliminary design for financial reasons. The feasibility report/preliminary design was prepared in 2015 and addressed the entire project area, most all of which is part of the Medicine Lake sub-watershed area. The City invested in a Lakeview Park Pond study to try to provide water quality treatment, solve flooding in the neighborhood, and provide relief to the undersized storm sewer system that discharges from the project area, under TH 169 and in to Medicine Lake (an impaired water).

The Lakeview Park Pond study concluded that construction of a pond for water quality or rate control was not feasible in the park due to poor soils and homes with flooding risk. Later study found that four homes located north of Olympia Street between Independence Ave N and Mendelssohn Ave N, were experiencing frequent flooding without a feasible solution to mitigate other than to purchase the homes. The City has since committed to purchase of these 4 parcels, but must do over time as funding becomes available.

MIDS Performance Goals

SEH reviewed the 2016 PMP with the watershed's MIDS Design Sequence Flow Chart. As a linear street reconstruction project creating more than an acre of fully reconstructed impervious surface, the 2016 PMP is required to retain a volume of 0.55 inches of runoff from all new and fully reconstructed surfaces. The calculated performance goal requirement for the project is 3,614 cu ft. The project is able to reduce the impervious surface to the extent possible, from 1.98 acres to 1.81 acres, resulting in a credit of 522 cu ft. Full compliance with the performance goal of 3,614 cu ft. is not feasible due to lack of available ROW and soil conditions leading to the evaluation of Flexible Treatment Option (FTO) #2.

FTO #2 Feasibility

By minimizing and reducing the impervious surface with the project the City has achieved volume reduction to the greatest extent possible. FTO part 2.b requires the removal of 60% of the annual TP load. Barr's SHSAM model was utilized to evaluate the amount of total suspended solids (TSS) removed

in the project's proposed four, four foot deep sump manholes with SAFL baffles. The four inline treatment manholes are providing 14 to 25% TSS removal. Solids removal in that range is likely only settling out coarse solids, so phosphorus removal would be negligible. Removal of 60% of the annual TP load is not achieved and compliance with FTO#2 is not realized leading to the evaluation of FTO #3.

FTO #3 Feasibility

FTO #3 allows off-site mitigation (including banking or cash or treatment on another project), equivalent to the volume reduction performance goal, to be used in areas within the watershed's stated order of preference. The first order of preference is to complete the mitigation in an area where the same receiving waters are benefited.

Performing treatment in the same receiving waters would provide the best benefit to the sub-watershed, given the downstream receiving waters (Medicine Lake), the lack of capacity of the downstream pipe and the current difficult flooding situation north of Olympia. While the FTO #3 path could be pursued, a variance request from the performance requirement for this project is a preferred option, to give the City time to develop a water quality option that provides the best long term benefit to the most direct problem area.

Variance Request

Given that this project has clear constraints due to the linear nature of the project, poor soils not conducive to volume reduction and limited available right of way that is not feasible for the amount of treatment required (Lakeview Park is not feasible as a treatment or pond site), the City is not able to meet the performance goal and therefore should respectfully request a variance.

The granting of this variance will not be detrimental to the public welfare or injurious to the other property in the territory in which the property is situated. The granting of the variance will not be contrary to the intent of taking all reasonable and practical steps to improve water quality within the watershed, but rather only delay responsible and reasonable actions that will ultimately achieve the best outcome for the watershed, the City of Golden Valley and its residents.

smm

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