

## **Barr Engineering Co.**

### **MEMORANDUM**

**To:** Board of Managers: Nine Mile Creek Watershed District  
**From:** Barr Engineering Company  
**Subject:** Opus II Volume Banking: Minnetonka  
**Date:** February 3, 2020

The City of Minnetonka is seeking approval of permit #2020-01 from the District for the reconstruction of ten bridges throughout the Opus II development. Since seeks approval of a linear project, as defined in the rules, it will result in an increase of 0.14 acres of new impervious area (i.e., less than 1 acre), stormwater management meeting the criteria in District Rule 4.3.1 will not be required for the project. However as part of the Phase 1 construction, the City is proposing to construct a stormwater management basin with the runoff retention and water quality Volume Credits to be banked for future projects in accordance with District Rule 4.4.1.

The proposed basin is estimated to provide 638 cubic feet of retention volume (to be confirmed upon completion of constructed with as-builts) equating to 1.1-inches of runoff from 6,960 square feet of impervious area. A P8 model provided by the applicant indicates the proposed basin will provide a total annual removal efficiency of 81.5% total phosphorus (1.3 lbs.) and an annual removal efficiency of 92.1% total suspended solids (447 lbs.) from an impervious area of 6,960 square feet. We are in agreement with this estimated credit amount and recommend that the managers approve the applicant's request to deposit 638 cubic feet of treatment credit, subject to adjustment by the NMCWD engineer as may be warranted after submission of an as-built of the basin.

Importantly, banked volume credits can only be used (under the present rules) if an applicant demonstrates that stormwater volume management in accordance with the retention standard in subsection 4.3.1a in the NMCWD Stormwater Management Rule cannot practicably be met and further demonstrates that onsite treatment cannot meet the standards in 4.3.2a and b. Conversely, excess stormwater management capacity can be used onsite by an applicant to meet –in whole or part- future stormwater management requirements in accordance with the rules then in effect and on demonstration of remaining available capacity.



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## Stormwater Volume Retention Credit Banking Application

**Stormwater Volume Credit Bank Account Information** Date: 1/17/2020

Bank Account Owner/Applicant: City of Minnetonka

Project/Bank Name: Opus

NMCWD SW Volume Retention Bank Account # : City: Minnetonka

NMCWD Major Subwatershed: North Fork of Nine Mile Creek NMCWD Minor Subwatershed: 582E

In order to meet District Stormwater (SW) Volume standards, an applicant for a stormwater management permit must demonstrate to the District that the proposed land altering activity will provide for the retention on-site of 1.1-inch of runoff from all impervious surface of the parcel. Excess volume reduction or runoff retention achieved onsite, may be banked (credit) for use on other projects within the District that are unable to fully meet the District stormwater volume retention standard onsite.

- The District has established and will maintain a list of available banked runoff retention Volume Credits.
- Stormwater management facilities or practices relied upon to create volume credits must be included in the recorded maintenance instrument or maintenance plan specified in District Rules.
- Volume credits may be utilized by permit applicants to meet the requirements of paragraph 4.3.1a and 4.3.1c and pursuant to paragraph 4.3.2c of the District's Rules. The District's Rules can be found at <https://www.ninemilecreek.org/wp-content/uploads/Nine-Mile-Creek-Watershed-District-Rules.pdf>.
- Permit applicants are responsible for contacting a seller of volume credits and arranging the sale on terms established by the interested parties. NMCWD maintains a list of available credits. The District will certify the sale through a form established by the District and completed by the buyer and seller of the volume credits.

**This Stormwater Volume Retention Credit Banking Application must be submitted as part of the Project's District permit application.**

### Stormwater Volume Compliance Requirements and Capacity

Is some part of the capacity to be used for compliance with NMCWD requirements or those of another regulatory body?

If so, permit number(s) and volume dedicated for compliance:

**Table 1. SW Credits To Be Credited**

SW Facility	SW Facility Type	SW Volume Retention Credit (ft <sup>3</sup> )	City	NMCWD Major Subwatershed/Minor Subwatershed	Action (District office only)
Red Circle BMP	Infiltration basin	<del>638</del> 638	Minnetonka	North Fork NMC/582E	
<b>TOTAL</b>					

Facility Type = (infiltration basin, raingarden, etc...)

Subwatershed ID can be found in NMCWD Watershed Management Plan or through consultation with District staff

#### Required Exhibits

- This stormwater volume retention credit banking application will require all exhibits shown in section 4.5 and 4.6 of the District's Rules found at [www.ninemilecreek.org/permits](http://www.ninemilecreek.org/permits) SEE PERMIT SUBMITTAL

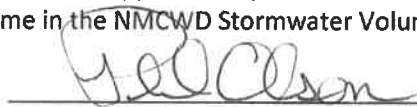
**\*Following construction of the volume control feature(s), an as-built survey to verify volumes eligible for entry into the District bank, and results of two performance monitoring events to ensure the feature(s) ability to draw down within 48 hours of an 1.1-inch (approximate) rainfall event, will need to be submitted.**

#### Stormwater Volume Credit Bank Applicant Affirmation

By signature below, the Stormwater Volume Credit Bank applicant requests that the credit deposit identified in Table 1 of this form be deposited under the applicant's name in the NMCWD Stormwater Volume Credit Bank.

Phil Olson

Name (Print)



Signature

1/17/20  
Date

Do you want NMCWD to advertise availability of volume credits for sale to the general public? Yes No

If yes, then please provide the contact name and phone number and/or e-mail address that you wish to make available to the general public:

Contact Name \_\_\_\_\_ Phone \_\_\_\_\_ e-mail \_\_\_\_\_

#### For District Office Use Only

The NMCWD Administrator certifies that the volume credits (verified through NMCWD certification) have been properly deposited into the NMCWD Stormwater Volume Credit Bank.

Account Number \_\_\_\_\_

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

As-Builts for SW Facilities on File: Yes No Do They Conform to Plans: Yes No

Are There Signed/Recorded Maintenance Instrument(s) for SW Facilities: Yes No

District Certified Stormwater Volume Credit \_\_\_\_\_

Other Requirements: