

Permit Application Review

Permit No. 2019-126
Received complete: September 17, 2019

Applicant: Phil Olson, City of Minnetonka; Nate Stanley, City of Hopkins
Consultant:
Project: Shady Oak Road South Regional Treatment Plan
Location: East of Shady Oak Road & South of Excelsior; Minnetonka & Hopkins
Rule(s): 4
Reviewer: BCO (Barr); MW (Smith Partners)

General Background & Comments

The City of Minnetonka and the City of Hopkins have jointly requested approval of a regional stormwater-treatment plan for an 11.2-acre area straddling the border between the two cities and north of the under-construction Southwest Light Rail line. (Please see the area marked on Exhibit 1 to this report.) The regional plan relies on treatment provided by a facility (the Shady Oak South Pond) on property owned by the Metropolitan Council, and the application has been submitted with and necessarily requires the cooperation of the Metropolitan Council. The Shady Oak South Pond will be constructed to contribute to compliance with NMCWD stormwater-management requirements under permit 2016-88. The subwatershed area that is the subject of the regional-plan application will drain to the Shady Oak South Pond through a planned 60-inch culvert under the SWLRT line.

The project site information is:

- Total Site Area: 11.2 acres (487,872 square feet)
- Existing Total Site Impervious Area: approximately 443,476 square feet
- New Total Site Impervious Area: 390,298 (*maximum under regional-plan approval*)
- Existing impervious area to be disturbed and replaced: TBD

The cities' application necessarily relies on treatment provided by the Shady Oak South Pond, which will be located on property owned by the Metropolitan Council that will be the location of a park & ride lot and a rail-support facility. The basin, which has yet to be constructed, is designed to provide stormwater-treatment capacity beyond what is needed for compliance with NMCWD requirements for the portion of the SWLRT project that drains to it. The elements of the SWLRT project that drain to the Shady Oak South Pond include park & ride lots both north and south of the light-rail line, the rail-support facility and a portion of the light-rail line. While Metropolitan Council's plans (as approved under NMCWD permit 2016-88) require it to bring stormwater from the park & ride south through a culvert under the line for treatment in Shady Oak South Pond, the cities' regional plan would require a significant upgrade in the size and cost of the culvert. The utility of the regional plan to the cities is dependent on the cities and Metropolitan Council coming to agreement on cost allocation for the culvert upgrade, which is provided for in the draft agreement among the cities and Metropolitan Council attached.

Exhibits

1. Application for approval of regional plan. May 31, 2019; 60-day review-period extension, minutes of July 17, 2019, meeting of the NMCWD Board of Managers; email correspondence from Philip Olson, engineer, City of Minnetonka, dated September 17, 2019, requesting a 60-day extension of the review period, and minutes of September 18, 2019, meeting of the NMCWD Board of Managers, approving extension.
2. Agreement among Minnetonka, Hopkins and Metropolitan Council (undated, yet to be executed), attached.
3. Shady Oak South Pond Drainage Area Exhibit dated 10/29/2018 prepared by Metropolitan Council consulting engineering staff.
4. P8 modeling, run date September 17, 2019, prepared by WSB.
5. Email dated September 9, 2019 from WSB providing the existing and proposed impervious area percentages for the tributary drainage area to the Shady Oak South Pond.
6. Previous submittals by the Metropolitan Council for permit #2016-88 for the Southwest Light Rail Transit project.
7. Site grading plan for the Shady Oak South Pond dated January 25, 2019 prepared by HTPO.
8. Modified Phase 1 Environmental Site Assessment: SWLRT Operations and Maintenance Facility 9A, dated August 2013.

9. Southwest LRT Response Action Plan; dated November 2015.
10. Hazardous and Contaminated Materials Evaluation Supporting Documentation, May 2016. This is a compilation of the Phase 1 and Phase 2 Environmental Site Assessments for the various segments along the SWLRT corridor.

The submittal is complete.

4.0 Stormwater Management

The cities have applied for regional-plan approval under subsection 4.3.6 of the Nine Mile Creek Watershed District Rules, which allows an applicant or applicants to seek approval of a plan to provide stormwater treatment for an entire defined geographic area in advance of any application for specific proposed land-disturbing activity in the area. Approval of such a regional plan requires NMCWD to find that implementation of the plan will provide for equal or greater stormwater volume control, rate and phosphorus and sediment control than would be achieved through individual permits for development or redevelopment of the parcels within the defined region.

The cities have submitted analyses in phase I and II environmental site assessments and the response action plan for the SWLRT project to support the assertion that the entire 11.2-acre subwatershed is 'restricted'; that it is not reasonably practical to provide stormwater management in compliance with the volume-control and water-quality criteria in subsection 4.3.1 of the NMCWD rule because the area suffers from extensive contamination. The NMCWD engineer, noting that the basis for the site-assessment results and response action plan is consistent with the extensive industrial and landfill-use history of the area, concurs that the entire region is 'restricted.' In addition, Metropolitan Council asserts, and the engineer concurs, that the site of future maintenance facility is 'restricted' as well, because of extensive contamination in this area of Hopkins. Given this, the regional stormwater-management plan need only be found to provide stormwater volume control to 0.55 inches from the impervious area within the subwatershed or, if that cannot be practicably achieved, volume control to the maximum extent practicable. Water-quality treatment and rate control must be provided in accordance with the standards in 4.3.1.

The cities' implementation of the proposed regional plan is effectively provided for in the draft agreement attached to this report. The agreement has yet to be approved by Metropolitan Council. As described in more detail below, the agreement provides for ongoing adjustments to the amount of 'excess' stormwater-management capacity available in the Shady Oak South Pond for use in the 11.2-acre Minnetonka-Hopkins redevelopment area. The agreement provides as an initial step in such calculation and preliminary to any adjustments that the Metropolitan Council must submit (as required under the terms of permit 2016-88) an as-built survey of the Shady Oak South Pond.

Documentation has been provided by WSB, consultants to the Metropolitan Council for the SWLRT project, dated December 5 and 6, 2018, demonstrating that 0.77 acres of excess volume-control will be provided throughout the SWLRT corridor. However, for the proposed regional-treatment plan it has been determined that volume retention cannot be provided because of contaminated soils in both the 11.2-acre Minnetonka-Hopkins drainage area and at the Shady Oak South Pond site, therefore the basin to be constructed and proposed watershed redevelopment reducing the impervious area tributary to the basin will provide the required water quality treatment and rate control to comply with the District's stormwater requirements.

NMCWD requires a 60 percent annual removal efficiency for total phosphorous and 90 percent annual removal efficiency for total suspended solids (4.3.1c). The P8 modeling provided shows that the proposed Shady Oak South Pond will provide an annual removal efficiency of 60.5 percent for total phosphorous (37.4 lbs.) and an annual removal efficiency of 90 percent for total suspended solids (17,379 lbs). This meets the NMCWD treatment standard at a maximum impervious rate for the Minnetonka-Hopkins drainage of 80 percent (and redevelopment of the 23.7 acres of the SWLRT drainage area in accordance with plans approved under 2016-88). The applicants will, through implementation of the agreement attached to this report (once executed) track, first, the amount of treatment capacity ultimately used by the portion of the SWLRT project draining to the pond (23.7 acres), and second, the amount of treatment capacity to be utilized through redevelopment in the 11.2-acre Hopkins-Minnetonka drainage area. Because the water-quality criteria in subsection 4.3.1c of the NMCWD rules must be met in full, the stormwater-management capacity available to the Minnetonka-Hopkins drainage area will be a function of this calculation, as well as the capacity of the Shady Oak South Pond to provide rate control, as discussed below.

The District's rate-control requirements, section 4.3.1b of the District rules, will be met through by the reduction in the impervious area with the drainage area (including the 11.2-acre Minnetonka-Hopkins drainage area, redeveloped at a 80 percent impervious rate) to the Shady Oak South Pond from approximately 90.9 percent to 75.6 percent (rounded to 80 percent).

With regard to the primary standard for approval of a regional stormwater-management plan, the proposed Minnetonka-Hopkins plan will achieve stormwater management under the criteria and conditions stated above (e.g., redevelopment of the 11.2-acre area to 80 percent impervious) equivalent to the results that would be achieved through individual permitting because 1. stormwater volume retention is not required; and 2. Under the analysis above, the NMCWD standards will be achieved.

In addition to meeting the requirement stated above for approval of a regional plan, the applicant must also demonstrate that 1. Implementation of the regional approach will

not likely result in degradation of downstream receiving waters; 2. Will not result in adverse impacts to local groundwater or natural resources upstream of the treatment facility/ies, and 3. The regional plan includes provision for individual best management practices as land-disturbing activities are proposed for sites within the subwatershed to mitigate adverse impacts and provide local benefits not provided by the regional facility. In addition, the plan must provide for annual accounting of the dedication of the treatment capacity to individual sites. The cities and Metropolitan Council have provided for such an accounting in the agreement that will provide staff with sufficient information to ensure the administration of the plan in accordance with the NMCWD rules.

To address the additional requirements in 4.3.6b for approval of a regional plan, 1) the project will provide water-quality treatment complying with the District's rule 4.3.1c for the total tributary drainage area of 34.9 acres that is currently untreated, improving the quality of flow to downstream receiving waters and 2) with the proposed lining (sealing) of the bottom of the Shady Oak South Pond, infiltration/seepage of surface water will be prohibited from reaching the groundwater system thereby minimizing the potential migration of contaminants identified in the environmental assessment work for the project area and 3) the regional plan will provide an orderly framework for the management of surface water runoff as the area is redeveloped.

If the regional plan is approved, individual redevelopment permits from NMCWD will still be required as specific individual land-disturbing activities are proposed, and implementation of individual BMPs will be required as necessary on a case-by-case basis to meet the requirement in 4.3.6b. In each case the application also will have to show compliance with stormwater-management and other NMCWD regulatory criteria other than rate, volume and water quality addressed above, including the chloride-management plan requirements in subsection 4.3.4.

11.0 Fees

No fees for the approval are required because the cities are governmental entities. Permit fees will be assessed for permits for land-disturbing activities proposed by private entities within the subwatershed.

Rules 2.0-6.0

N/A

12.0 Financial Assurances

No financial assurances for the approval are required because the cities are governmental entities. Financial assurances will be required as applicable for permits for land-disturbing activities proposed by private entities within the subwatershed.

Rule 4.o Volume Retention:	N/A
Chloride Management:	N/A
Contingency and Administration	N/A

Findings

The proposed project includes the information necessary for review.

1. Subsection 4.3.6b will be met on satisfaction of the conditions cited below, along with any other conditions the board of managers wish to require.

Recommendation

Approval, contingent upon:

1. Submission of the necessary documentation to support a determination of compliance with permit 2016-88, as may be modified, for modification of the SWLRT project to include the 60-inch culvert.
2. Submission of a draft agreement (or amendment of existing maintenance agreement with Metropolitan Council for permit 2016-88) providing for maintenance of the 60-inch culvert under the SWLRT line for approval by the NMCWD administrator prior to execution, and submission of final, fully executed agreement after approval.
3. Execution by all parties of an agreement for the implementation and administration of the regional plan substantially conforming to the attached, and submission of a final, fully executed agreement to the NMCWD administrator after approval.

By accepting the permit, when issued, the applicants agree to the following stipulations:

1. Land-disturbing activities within the subwatershed may rely on the regional stormwater-management plan only as authorized by the cities in accordance with the terms of the agreement.
2. The cities will maintain and advise NMCWD of remaining treatment capacity within the Shady Oak South Pond.
3. Compliance under the NMCWD Stormwater-Management Rule under the regional plan, if approved, is applicable only properties within the drainage area described in Exhibit 1.

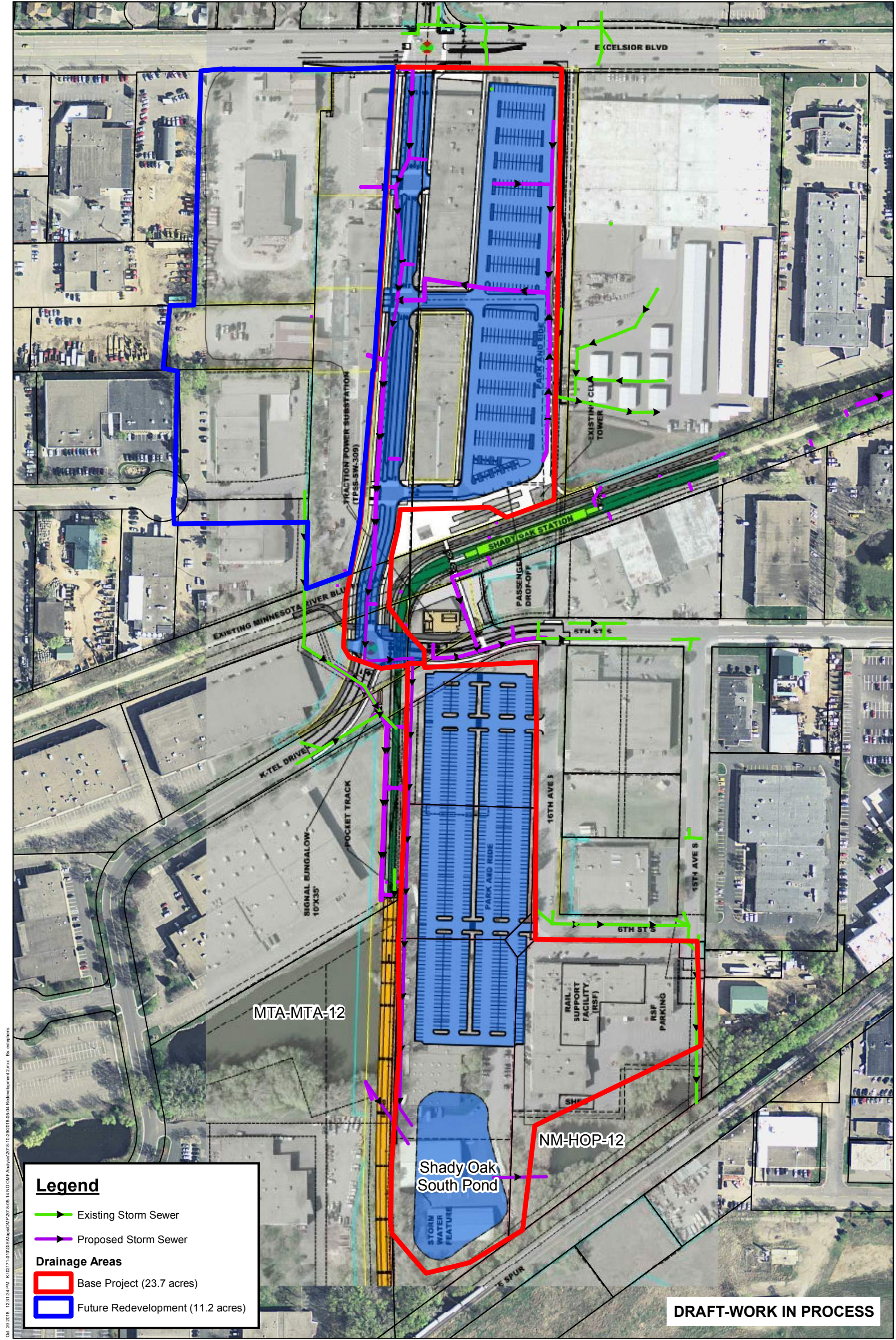
4. Actual stormwater-management capacity available for land-disturbing activities the Minnetonka-Hopkins drainage area in Exhibit 1 will be determined as a function of final calculation of the capacity of the Shady Oak South Pond (through submission of as-builts) and calculation of drainage to the pond from the SWLRT project. Once the stormwater-management capacity of the Shady Oak South Pond is fully committed, land-disturbing activity with the subwatershed will be subject to all NMCWD permitting requirements applicable at the time of application.

Board Action

It was moved by Manager _____, seconded by Manager _____ to approve the Shady Oak South Pond regional stormwater plan with the conditions recommended above.

Exhibit 1

**Hopkins-Minnetonka Drainage Area -
Labeled "Future Redevelopment (11.2 acres)"**



Legend

- Existing Storm Sewer
- Proposed Storm Sewer

Drainage Areas

- Base Project (23.7 acres)
- Future Redevelopment (11.2 acres)

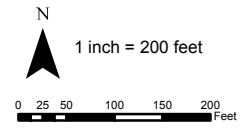
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**Shady Oak South Pond
Drainage Area Exhibit**

DATE: 10/29/2018



JOINT COOPERATIVE AGREEMENT REGARDING
SHADY OAK SOUTH POND

This Joint Cooperative Agreement (Agreement) is made by and among METROPOLITAN COUNCIL, a political subdivision of the State of Minnesota (Council), CITY OF HOPKINS, a Minnesota municipal corporation (Hopkins) and CITY OF MINNETONKA, a Minnesota municipal corporation (Minnetonka), pursuant to Minn. Stat. § 471.59. This Agreement pertains to the Council's proposed Shady Oak South Pond (Pond), to be constructed as part of Council's Southwest Light Rail Transit (SWLRT) Project, referred to hereinafter as the "Project."

Recitals and Statement of Purpose

- A. Council has undertaken a the Project, an approximately 16-mile extension of the METRO Green Line which will operate from downtown Minneapolis through the cities of St. Louis Park, Hopkins, Minnetonka and Eden Prairie.
- B. Council has obtained a permit from Nine Mile Creek Watershed District (NMCWD), permit no. 2016-88 (Permit), for the portions of the Project that lie within the boundaries of NMCWD. Council has entered into a Maintenance Agreement with NMCWD dated November 15, 2017, Metropolitan Contract No. 171041, as amended, regarding the Council's obligations to maintain wetland buffer, stormwater management facilities and waterbody crossings for the Project, pursuant to NMCWD permit no. 2016-88 (Maintenance Agreement).
- C. For purposes of this Agreement, the term "Permitted Facilities" refers to all stormwater management facilities covered by the Permit.
- D. One of the Permitted Facilities is a proposed stormwater pond on real property located at 610 16th Avenue South in the city of Hopkins, adjacent to the station known as the Shady Oak Station (the "Pond"). The proposed location of the Pond is depicted on Attachment 1.
- E. The Pond will provide stormwater treatment for approximately 23.7 acres of land currently owned by Council (the "Project Contributing Area"). The original plans for the Project call for the installation of a 60-inch pipe to convey stormwater from the Project Contributing Area to the Pond.
- F. Council has estimated that the Pond and SWLRT project will have more capacity than will be necessary to meet NMCWD's permitting requirements (with respect to rate, and retention) for the Project Contributing Area ("Excess Capacity"), presuming redevelopment of the Private Contributing Area in a manner that results in 80 percent impervious cover. A specific quantity of stormwater volume retention for the Private Contributing Area is not required because the NMCWD engineer has concurred in the determination that the Private Contributing Area is "restricted," for purposes of application of the NMCWD Stormwater Management Rule.

The specific amount of Excess Capacity cannot be determined until the Permitted Facilities have been constructed and field verified, because infiltration rates must be determined based on post-construction conditions. The designed Excess Capacity is expected to be sufficient to provide for required rate control and water-quality treatment for the approximately 11.2-acre privately owned land located within the cities of Minnetonka and Hopkins (the “Private Contributing Area”), that could potentially use the Pond to satisfy NMCWD stormwater-management criteria for redevelopment in the Private Contributing Area. The Private Contributing Area is depicted in Attachment 1.

G. The originally-planned 60-inch stormwater pipe is not adequate to serve both the Project Contributing Area and the Private Contributing Area. Council has determined that a 7-foot-wide-by-4-foot-high box culvert (Box Culvert) is necessary to serve both the Private Contributing Area and the Project Contributing Area.

H. Council has negotiated a change order to the Project contract, to provide for the construction of the Box Culvert in lieu of the 60-inch stormwater pipe, at an additional cost of \$_____ (“Added Cost”).

I. Council, Hopkins and Minnetonka desire to enter into this Agreement in order to address ownership and related responsibilities for the Pond and Box Culvert, payment of the Added Costs, and allocation of Excess Capacity in the Pond.

Terms of Agreement

1. Recitals incorporated. The recitals above are incorporated into this Agreement by reference.

2. Ownership and Maintenance Responsibilities. Council shall be the owner of the Pond and the Box Culvert. Council represents to and agrees with Hopkins and Minnetonka that Council shall be solely responsible for the construction, operation, maintenance, repair and replacement of the Pond and Box Culvert. Council will at all times comply with the requirements of NMCWD permit no. 2016-88 and the Maintenance Agreement with respect to the Pond and Box Culvert. Council agrees that it will allow future connections to the Box Culvert, as allowed under this Agreement, by owners of property within the Private Contributing Area, at no cost, charge, fee or assessment to the connecting property owner or to Hopkins or Minnetonka.

3. Added Costs; Payment to Council. Minnetonka agrees to pay the Added Costs to Council as provided in that certain Subordinate Funding Agreement; City of Minnetonka – 07 (Local Work – Construction) by and between the Council and the City, approved contemporaneously with Council and Minnetonka’s approval of this Agreement.

4. Determination of Excess Capacity. The exact Excess Capacity of the Pond cannot be determined until the Pond is constructed and as-built drawings are completed. The parties

understand and agree that whether Excess Capacity exists and the amount of Excess Capacity that exists cannot be determined until completion of construction. After construction is completed, Council agrees to determine the amount of Excess Capacity of the Pond and to submit documentation of its analysis and determination to NMCWD for review and concurrence. Council agrees to use due diligence to obtain the NMCWD's concurrence in Council's determination of Excess Capacity and agrees to provide Hopkins and Minnetonka of all documentation submitted to NMCWD .

5. Allocation of Excess Capacity. With respect to future use of Excess Capacity, the parties agree as follows:

- a. Council agrees to make any and all Excess Capacity available to Hopkins and Minnetonka, collectively, for use by properties within the Private Contributing Area (as that area is determined under paragraph 4 above).
- b. Properties within the Private Contributing Area may submit applications for land use approval to the local zoning authority (Hopkins or Minnetonka, as appropriate) and, as part of those applications, may request connection to the Box Culvert. Any connection to the Box Culvert will also require an application to NMCWD for a permit.
- c. Nothing in this Agreement creates any rights in favor of any person or entity that is not a party to this Agreement; specifically, this Agreement does not entitle any owner of property within the Private Contributing Area to connect to the Box Culvert or to enforce any provision of this Agreement.
- d. Nothing in this Agreement entitles either Hopkins or Minnetonka individually to any specified portion of the Excess Capacity. Hopkins and Minnetonka understand and agree they will consider applications for connection to the Box Culvert on a first-come-first served basis, as development proposals are submitted and in accordance with the following process: When an application is submitted to either city for the development or redevelopment of a property within the Private Contributing Area, the city receiving the application will notify the other city that the application is pending. The cities will mutually develop and share a spreadsheet that maintains a running balance of Excess Capacity as originally determined under paragraph 4 above, minus Excess Capacity utilized by developments that have received final approvals. The spreadsheet will show an estimate of the Excess Capacity that would be utilized by any development application that has been received but not yet finally approved, for planning purposes, but allocations of Excess Capacity will require final project approval.
- e. At all times, the extent and availability of Excess Capacity will be determined based upon NMCWD's permit-approval determinations. When NMCWD determines that the Excess Capacity has been fully exhausted, no further connections to the Box Culvert will be allowed.

6. Reimbursement to Minnetonka of Added Costs. Hopkins and Minnetonka will each adopt land use policies or ordinances, as each deems appropriate for its jurisdiction, to require that approved land use applicants pay a development fee equal to their proportionate share of the Added Costs. The amount of the development fee must be calculated as follows for all developments with 80 percent or less of total land area as impervious surface : [Added Cost – use actual number] **divided by** the total number of acres in the Private Contributing Area (as that area is determined under paragraph 4 above).**times** 1.05 (5% administrative fee). The five percent administrative fee is attributable to developments in both Hopkins and Minnetonka, for the purpose of reimbursing Minnetonka for its costs in providing up-front financing and administration of the Added Costs.

For example only, if the final Private Contributing Area is 11.2 acres, the development fee will be calculated as:

$$[\text{insert actual Added Cost}] \div 11.2 = \$______ \times 1.05 = \$______ \text{ per acre.}$$

If a development has greater than 80 percent impervious surface area, the development fee will be increased by 10 percent for each 5 percent incremental increase in impervious surface area; for example, a development with 85 percent impervious surface area would pay a fee of \$_____. Each city is responsible for collecting the development fee from the land use applicant in the manner it deems appropriate. Hopkins agrees to pay Minnetonka the full amount of the development fee within 30 days after Hopkins provides final approval of the application to which the fee is related, regardless of whether Hopkins has received payment from the land use applicant.

7. Revised development fee; city responsibilities. Hopkins and Minnetonka recognize that, based on the development fee formula in paragraph 6 above, any decrease in the amount of Excess Capacity (based on the post-construction determination to be made under paragraph 4 above) will reduce the acreage of the Private Contributing Area, which will result in an increase in the development fee to be collected. In addition, Hopkins and Minnetonka recognize that, if the Excess Capacity is materially less than estimated, it is possible that the amount of the development fee as calculated under paragraph 6 above could be financially unrealistic for developers, when compared to the cost of constructing on-site stormwater systems. In that event, Hopkins and Minnetonka agree to cooperate in good faith in establishing a development fee that is financially viable, and each city will be responsible for the difference between the revised development fee and the development fee determined under paragraph 6 above. Hopkins and Minnetonka also recognize that the development may not occur for several years. Accordingly, on a date that is seven years after Council provides the notice of Excess Capacity as required in paragraph 4 above, Hopkins must pay to Minnetonka its proportionate share of the Added Cost, minus any development fees that Hopkins has previously paid to Minnetonka. Hopkins' proportionate share shall be determined as a percentage of \$_____ (the Added Cost

times 1.05), the percentage being equal to the percentage of the Private Contributing Area that is located within Hopkins.

[signature pages follow]

DRAFT

Signature page – Metropolitan Council

METROPOLITAN COUNCIL

By: _____

Its _____

Date: _____

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Signature page – City of Hopkins

CITY OF HOPKINS

By: _____
Its Mayor

By: _____
Its: City Manager

Date: _____

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Signature page – City of Minnetonka

CITY OF MINNETONKA

By: _____
Its Mayor

By: _____
Its City Manager

Date: _____

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