Permit Application Review

Permit No. 2019-87
Received complete: July 31, 2019

Applicant:	Neal Wunderlich: Wunderlich Properties
Consultant:	Christian Froemke; Westwood Professional Services
Project:	Parking Lot Expansion
Location:	6101 Blue Circle Drive: Eden Prairie
Rule(s):	4, 5, 11 and 12
Reviewer:	BCO

General Background & Comments

The project proposes a 14,621 square foot parking lot expansion (41 stalls) for the Wunderlich – Malec building at 6101 Blue Circle Drive in Opus II in Eden Prairie.

The project site information is:

- Site Area: 5.13 acres (223,463 square feet)
- Existing Impervious Area: 2.15 acres (93,654 square feet)
- Proposed Impervious Area: 108,275 square feet
- Increase in impervious area from the parking lot expansion: 14,621 square feet
- 15.6% increase in the total site impervious area
- Proposed Disturbed and Reconstructed Impervious Area: 225 square feet
- 0.2% of the existing site impervious area will be disturbed and replaced.

The Nine Mile Creek Watershed District's Rule for Redevelopment, Rule 4.2.3, states, if a proposed activity will disturb more than 50% of the existing impervious surface on a parcel or will increase the imperviousness of the parcel by more than 50%, storm water management will apply to the entire project parcel. Otherwise, the storm water requirements will apply only to the disturbed areas and additional impervious area on the parcel. The project will disturbed and replace 0.2% of the impervious surfaces of the property with an increase in imperviousness of the property by 14,621 square feet, 15.6%. The storm water criteria in Section 4.3.1 applies to the new and disturbed and reconstructed imperious area – 14,846 square feet.

The District's requirements for both storm water management and erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and more than 5000 square feet altered, Rules 4.2.1a and b and 5.2.1a and b.

Silt fence, inlet protection and a rock construction entrance are shown to be installed to provide for erosion control.

Exhibits

1. Permit Application dated July 16, 2019.
2. Plan sheets dated July 22, 2019 prepared by Westwood Professional Services.
3. Storm water management computations dated July 15, 2019 prepared by Westwood Professional Services.
4. Soil boring summary dated July 17, 2019 prepared by Westwood Professional Services.
5. E-mail correspondence dated July 26 and 29, 2019 requesting 1) a breakdown of the new impervious area and the disturbed and reconstructed impervious area proposed for the project, 2) the P8 model output showing the annual removal efficiencies of both TP and TSS of the proposed rainwater garden and 3) the low floor elevation and low opening elevation of the on-site building.

The project submittal is now complete.

4.0 Stormwater Management

Stormwater management, volume retention, rate control and water quality management will be provided within a proposed rainwater garden.

The 2, 10 and 100-year frequency discharges for existing and proposed conditions from the two discharge points are as follows:

Frequency	Existing Discharge to the north c.f.s.	Proposed Discharge to the north c.f.s.
2 year	1.1	<1.0
10 year	2.5	1.8
100 year	6.1	3.8

Frequency	Existing Discharge to the south c.f.s.	Proposed Discharge to the south c.f.s.
2 year	<1.0	<1.0
10 year	1.5	<1.0
100 year	3.4	2.1

Rule 4.3.1b is met.

A volume retention of 1,361 cubic feet is required for 1.1-inches of runoff from the 14,846 square feet of new and disturbed and reconstructed impervious area. The rainwater garden will provide 1,881 cubic feet of volume retention. With the on-site underlying soils being classified as a clayey sand (SC), an infiltration rate of 0.2 inches/hour has been used based on

the Minnesota Stormwater Manual. Using this infiltration rate, an area of 1,698 square feet at a maximum depth of 0.8 feet is required for the 1,361 cubic feet of volume retention to be drawn down within 48 hours. An area of 2,243 square feet is to be provided within the rainwater garden. Rule 4.3.1a is met.

The District's water quality criterion requires a 60% annual removal efficiency for phosphorus and 90% annual removal efficiency for total suspended solids. The results of a P8 model indicate the rainwater garden will provide an annual removal efficiency of 96.9% for total suspended solids (121 lbs.) and an annual removal efficiency of 89.8% for total phosphorus (0.9 lbs.). Rule 4.3.1c is met.

District Rule 4.3.3c states that all new and reconstructed buildings must be constructed such that the low floor elevation is at least two feet above the 100-year high water elevation or one foot above the emergency overflow of a constructed facility. In addition, all new and reconstructed buildings must be constructed such that no opening where surface flow can enter the structure is less than two feet above the 100-year high water elevation of an adjacent facility or waterbody. The finished floor and low opening of the existing on-site building is 924 M.S.L. The calculated 100-year frequency high water elevation of the rainwater garden is 919.6 M.S.L. – a separation of 4.4 feet is to be provided for compliance with Rule 4.3.3c.

The geotechnical report indicates that groundwater was not encountered to a depth of 10 feet, approximately elevation 914 M.S.L. The bottom of the proposed rainwater garden is to be elevation 918.8 M.S.L, a separation of 4.5 feet. A minimum separation of 3 feet is required between the bottom of an infiltration facility and groundwater.

Pretreatment of stormwater prior to discharging to an infiltration facility, Rule 4.3.1a (i), will be provided by a Rain Guardian structure upstream of the rainwater garden.

In accordance with Rule 4.3.4, a post-project chloride management plan must be provided that will, 1) designate an individual authorized to implement the chloride-use plan and 2) designate a MPCA certified salt applicator engaged in the implementation of the chloride-use plan for the site.

5.0 Erosion and Sediment Control

The submitted erosion and sediment control plan includes silt fence at the limits of construction, inlet protection and a rock construction entrance at the entryway onto the site. The project contact is Christian Froemke, Westwood Professional Services.

11.0 Permit Fees

Fees for the project are:

Rules 2.0-6.0	$1,500

12.0 Financial Assurances

Financial Assurances for the project are:

Rule 4.0 Volume Retention: 1,698 sq. ft. x $12/sq. ft. = $20,376	$20,376
Chloride Management:	$5000

Rule 5: Silt fence: 600 L.F. x $2.50/L.F. = $1,500

Inlet Protection: 3 x $100/each = $300

Site restoration: 0.8 acres x $2500/ acre = $2,000	$3,800
Contingency and Administration	$10,424

Findings
The proposed project includes the information necessary, plan sheets and erosion control plan, for review.

1. Rules 4 and 5 are met.

Recommendation
Approval, contingent upon:

1. General Conditions
2. Financial Assurance in the amount of $39,600 - $34,600 for stormwater management, erosion control and site restoration and $5,000 for compliance with the chloride management requirements.
3. Submission of documentation that a drainage easement over the stormwater-management facility has been submitted to Eden Prairie (4.5.4i), if such easements are required by the city.
4. A receipt showing recordation of a maintenance declaration for the on-site storm water management facility. A draft of the declaration must be approved by the District prior to recordation.

By accepting the permit, when issued, the applicant agrees to the following stipulations:

1. Per Rule 4.5.6, an as-built drawing of the storm water facility, including a stage-volume relationship in tabular form for the rainwater garden, conforming to the design specifications as approved by the District must be submitted.
2. Submission of a plan for post-project management of Chloride use on the site. The plan must include 1) the designation of an individual authorized to implement the chloride use plan and 2) the designation of a Minnesota Pollution Control Agency certified salt applicator engaged in the implementation of the chloride-use plan for the site. The release of the $5,000 of the financial assurance required for the chloride-management plan requires that chloride-management plan has been provided and approved by the District's Administrator.
3. For the release of the $34,600 financial assurance required in Recommendation #2, Rule 12.4.1b requires demonstration and confirmation that the storm water management facilities have been constructed or installed and are functioning as designed and permitted. Verification, through daily observation logs and photographs, must be provided showing the storm water facilities used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.

Board Action

It was moved by Manager _____, seconded by Manager _____ to approve permit application No. 2019-87 with the conditions recommended by staff.

Permit #:	2019-87
Project Name:	Parking Lot Expansion for the Wunderlich – Malec Building; 6101 Blue Circle Drive – Opus II: Eden Prairie
Approval Date:	August 21, 2019

General Provisions

1. All temporary erosion control measures shown on the erosion and sedimentation control plans must be installed prior to commencement of surface or vegetation alteration and be maintained until completion of construction and vegetation is established as determined by NMCWD.

   If silt fence is used, the bottom flap must be buried and the maximum allowable spacing between posts is 4-foot on center. All posts must be either 2-inch x 2-inch pine, hardwood, or steel fence posts. If hay bales are used, all bales must be staked in place and reinforced on the downstream side with snow fence.

2. All areas altered because of construction must be restored with seed and disced mulch, sod, wood fiber blanket, or be hard surfaced within two weeks after completion of land alteration and no later than the end of the permit period.

3. Upon final stabilization, the permit applicant is responsible for the removal of all erosion control measures installed throughout the project site.

4. At the entryway onto the site, a rock filter dike being a minimum of two feet in height and having maximum side slopes of 4:1 must be constructed. This rock filter dike will enable construction traffic to enter the site and also provide an erosion control facility.

5. If dewatering is required and sump pumps are used, all pumped water must be discharged through an erosion control facility prior to leaving the construction site. Proper energy dissipation must be provided at the outlet of the pump system.

6. The NMCWD must be notified a minimum of 48 hours prior to commencement of construction.

7. The NMCWD, its officers, employees and agents review, comment upon, and approve plans and specifications prepared by permit applicants and their consultants for the limited administrative purpose of determining whether there is reasonable assurance that the proposed project will comply with the regulations and criteria of the NMCWD. The determination of the NMCWD that issuance of this permit is appropriate was made in reliance on the information provided by the applicant.

8. The grant of this permit shall not in any way relieve the permittee, its engineer, or other professional consultants of responsibility, nor shall it make the NMCWD responsible for the technical adequacy of the engineer's or consultant's work. The grant of this permit shall not relieve the permittee from complying with all conditions and requirements of the permit which shall be retained by the permittee with the permit.

9. The issue of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

10. This permit is permissive only. No liability shall be imposed upon the NMCWD or any of its officers, agents or employees, officially or personally, on account of the granting of this permit or on account of any damage to any person or property resulting from any act or omission of the permittee or any of its agents, employees, or contractors.

11. In all cases where the doing by the permittee of anything authorized by this permit shall involve the taking, using, or damaging of any property, rights or interests of any other person or persons, or of any publicly-owned lands or improvements or interests, the permittee, before proceeding therewith, shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all necessary property, rights, and interest.

12. The permit is transferable only with the approval of the NMCWD (see NMCWD Rule 1.0). The permittee shall make no changes, without written permission previously obtained from the NMCWD, in the dimensions, capacity, or location of any items of work authorized by this permit.

13. The permittee shall grant access to the site at all reasonable times during and after construction to authorized representatives of the NMCWD for inspection of the work authorized by this permit.

14. This permit may be terminated by the NMCWD at any time deemed necessary in the interest of public health and welfare, or for violation of any of the provisions of this permit.

15. Construction work authorized under this permit shall be completed on or before date specified above. The permittee may, in writing, request that the NMCWD extend the time to complete the project in accordance with NMCWD Rule 1.0.

Permit No.2019-87

Is hereby issued to Neal Wunderlich, Wunderlich Properties, LLC, subject to the conditions specified in the attached form:

For the expansion of the parking at the Wunderlich – Malec building located at 6101 Blue Circle Drive in the Opus II development in Eden Prairie.

Jodi Peterson, Chair
Nine Mile Creek Watershed District

This permit expires on: September 1, 2020

GRADING LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
	980	INDEX CONTOUR
	982	INTERVAL CONTOUR
		CURB AND GUTTER
		POND NORMAL WATER LEVEL
		STORM SEWER
		FLARED END SECTION (WITH RIPRAP)
		RETAINING WALL
		DRAIN TILE
	× 900.00	SPOT ELEVATION
	0.00%	FLOW DIRECTION
	TW=XXX.XX BW=XXX.XX	TOP AND BOTTOM OF RETAINING WALL
	E.O.F.	EMERGENCY OVERFLOW
		ROCK CONSTRUCTION ENTRANCE
		EROSION CONTROL BLANKET
		INLET PROTECTION

GRADING NOTES

1. LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
2. ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR TRENCH EXCAVATION AND BACKFILL/SURFACE RESTORATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
3. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL AND SOD OR SEED. THESE AREAS SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
4. ALL SLOPES SHALL BE GRADED TO 3:1 OR FLATTER, UNLESS OTHERWISE INDICATED ON THIS SHEET.
5. CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AND PROVIDE A SMOOTH FINISHED SURFACE WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN OR BETWEEN SUCH POINTS AND EXISTING GRADES.
6. SPOT ELEVATIONS SHOWN INDICATE FINISHED PAVEMENT ELEVATIONS & GUTTER FLOW LINE UNLESS OTHERWISE NOTED. PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE.
7. CONTRACTOR SHALL DISPOSE OF ANY EXCESS SOIL MATERIAL THAT EXISTS AFTER THE SITE GRADING AND UTILITY CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS SOIL MATERIAL IN A MANNER ACCEPTABLE TO THE OWNER AND THE REGULATING AGENCIES.
8. CONTRACTOR SHALL PROVIDE A STRUCTURAL RETAINING WALL DESIGN CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER.
9. ALL CONSTRUCTION SHALL CONFORM TO LOCAL, STATE AND FEDERAL RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
10. PRIOR TO PLACEMENT OF ANY STRUCTURE OR PAVEMENT, A PROOF ROLL, AT MINIMUM, WILL BE REQUIRED ON THE SUBGRADE. PROOF ROLLING SHALL BE ACCOMPLISHED BY MAKING MINIMUM OF 2 COMPLETE PASSES WITH FULLY-LOADED TANDEM-AXLE DUMP TRUCK, OR APPROVED EQUAL, IN EACH OF 2 PERPENDICULAR DIRECTIONS WHILE UNDER SUPERVISION AND DIRECTION OF THE INDEPENDENT TESTING LABORATORY. AREAS OF FAILURE SHALL BE EXCAVATED AND RE-COMPACTED AS SPECIFIED HEREIN.
11. EMBANKMENT MATERIAL PLACED BENEATH BUILDINGS AND STREET OR PARKING AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFIED DENSITY METHOD AS OUTLINED IN MNDOT 2105.3F1 AND THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
12. EMBANKMENT MATERIAL NOT PLACED IN THE BUILDING PAD, STREETS OR PARKING AREA, SHALL BE COMPACTED IN ACCORDANCE WITH REQUIREMENTS OF THE ORDINARY COMPACTION METHOD AS OUTLINED IN MNDOT 2105.3F2.
13. ALL SOILS AND MATERIALS TESTING SHALL BE COMPLETED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. EXCAVATION FOR THE PURPOSE OF REMOVING UNSTABLE OR UNSUITABLE SOILS SHALL BE COMPLETED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOILS TESTS AND INSPECTIONS WITH THE GEOTECHNICAL ENGINEER.

FILTRATION/INFILTRATION BASIN NOTES

1. BASIN EXCAVATION AND PIPE INSTALLATION MAY TAKE PLACE BEFORE CURB INSTALLATION. ALL OTHER BASIN CONSTRUCTION MUST WAIT UNTIL FINAL SITE LANDSCAPING. REMOVE SEDIMENT FROM EXCAVATED BASIN PRIOR TO PLACEMENT OF FILTER MEDIA. PLACE SAND BAGS OR SIMILAR ITEM IN CURB CUTS TO PRE-FILTER STORM WATER UNTIL PLANTS ARE ESTABLISHED IN BASINS. MAINTAIN INLET PROTECTION ON DOWN STREAM INLETS UNTIL BASINS ARE ON-LINE.
2. BASIN EXCAVATION SHALL BE WITH TOOTHED-BUCKETS TO SCARIFY THE BOTTOM.
3. PLACE SILT FENCE AROUND BASINS AS SHOWN IMMEDIATELY AFTER BASIN CONSTRUCTION.

N:\0022979.00\DWG\CIVIL\0022979-GD.DWG

WUNERLICH-MALEC PARKING EXPANSION

DESIGNED:	CHF
CHECKED:	RMB
DRAWN:	CHF
HORIZONTAL SCALE:	30'
VERTICAL SCALE:	6' OR 3'

INITIAL ISSUE: 07/22/19
REVISIONS:
1 ---- ----
2 ----
3 ----
4 ----
5 ----

PREPARED FOR:

WUNDERLICH PROPERTIES, LLC
5000 FRANCE AVENUE SOUTH, UNIT 28
EDINA, MINNESOTA 55410

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

CHRISTIAN H. FROEMKE
DATE: 07/22/19 LICENSE NO. 56208

WUNERLICH-MALEC PARKING EXPANSION
EDEN PRAIRIE, MN

Westwood
Phone (952) 937-5150 12701 Whitewater Drive, Suite #300
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

GRADING, EROSION CONTROL AND STORM SEWER PLAN
PROJECT NUMBER: 0022979.00

SHEET NUMBER: 4 OF 5
DATE: 07/22/19

#2019-87