## Permit Application Review

Permit No. 2018-54 Received complete: June 6, 2018

Applicant: Stephanie Rasley; property owner

Consultant: Brandon Merrill; MA Peterson

Project: Home Reconstruction

Location: 6612 Cornelia Drive: Edina

Rule(s): 4,5 and 10

Reviewer: BCO

#### **General Background & Comments**

The project proposes to raze the existing single-family home at 6612 Cornelia Drive in Edina and construct a new home on the 12,041 square foot lot. The existing site impervious area is 3,135 square feet. The proposed site impervious area will be 3,396 square feet, an increase of 260 square feet – an 8.3% increase. Rule 4.2.3a i, Redevelopment of single-family home properties, states if the proposed activity will increase total impervious surface by less than 25%, no demonstration of compliance with the criteria (stormwater management) is required. A permit from the District for Erosion and Sediment Control is required since the project will involve excavation of 50 cubic yards or more or earth, Rule 5.2.1a, and alter or remove 5,000 square feet or more of surface area, Rule 5.2.1b. The erosion control plans shows silt fence and bio-rolls at the limits of construction. The existing driveway will be used as a construction entrance.

The lot is riparian to South Lake Cornelia. South Lake Cornelia is identified as Public Water #28P by the Minnesota Department of Natural Resources. Since the water body is not a public water wetland, the District's wetland buffer requirements, Rule 3.4, do not apply.

The Atlas 14 100-year frequency flood elevation for South Lake Cornelia as designated in the Edina Comprehensive Water Management Plan is 864.6 M.S.L. The pre-Atlas 14 management elevation for the lake was 863.3 M.S.L. – 1.3 feet lower than the update Atlas 14 management elevation. The existing house, constructed in 1955 prior to any management elevation for the lake, is a rambler walk-out with a low floor elevation of 862.5 M.S.L. The proposed home will match the existing first floor elevation of the existing structure, 870.1 M.S.L., and will be constructed without a basement but with a 3'-4" crawl space beneath the main floor of the house. The existing main floor elevation is being maintained is to provide consistency with the elevations of the surrounding neighborhood homes. The crawl space is for storm protection for the occupants and will have a low floor elevation of 865.6 M.S.L.

District Rule 4.3.3 a, Low floor elevation, states all new and reconstructed buildings must be constructed such that the low floor is at least two feet above the 100-year high water elevation or one foot above the natural overflow of a water body. The floor elevation of the crawl space will be one foot above the Atlas 14 flood elevation of the lake. There is no exterior access or windows to the crawl space, the only access is interior from the main level of the house. Within the crawl space, duct work (HVAC) will be hung from the underside of the main floor trusses, providing a 2'6" dimension from the floor of the crawl space to the bottom of the duct work. The bottom of the duct work will be at elevation 868.1 M.S.L. or 3.5 feet above the flood elevation of the lake.

The only access for water to reach the crawl space is through seepage – beneath the foundation walls and footing to the crawl space floor. Both interior and exterior drain tile with a sump are to be installed to minimize the migration of groundwater affecting the crawl space. The elevation of the lake would need to reach elevation 870.1 M.S.L, the main floor elevation of the proposed structure - 5.5 feet above the Atlas 14 flood elevation of the lake, to enter the structure.

Because the proposed crawl space floor elevation will only be one foot above the flood elevation of South Lake Cornelia, a variance from Rule 4.3.3 is necessary.

#### **Exhibits**

- 1. Permit Application dated May 2, 2018.
- 2. Erosion Control plan dated April 23, 2018 prepared by Advance Surveying & Engineering.
- Existing Lot survey, revised date March 28, 2018, prepared by Advance Surveying & Engineering.
- 4. Correspondence dated March 13, 2018 from CALYX Design Group showing the breakdown of existing and proposed impervious area for the site.
- 5. Proposed cross-section of the lower level of the proposed home prepared by MA Peterson.
- 6. Variance request prepared for the applicant by MA Peterson addressing the questions presented in Rule 10, Variances and Exceptions.

# **4.0 Stormwater Management**

As previously stated, the project as submitted does not trigger the requirements of Rule 4.3.1 since the proposed increase in the site imperious area is less than 25%, Rule 4.2.3a i. However, the Low floor elevation requirements, Rule 4.3.3, are applicable since the site abuts South Lake Cornelia. A variance request has been submitted for compliance with Rule 4.3.3 since the proposed crawl space beneath the main floor of the proposed structure will only be one foot above the flood elevation of the lake.

#### 5.0 Erosion and Sediment Control

The submitted erosion and sediment control plan includes silt fence and bio-rolls at the limits of construction, and the existing driveway is to be used as the construction entrance. The project contact is Merrill Brandon, MA Peterson.

# 10.0 Variances and Exceptions

The Atlas 14 100-year flood elevation for South Lake Cornelia as designated in the Edina Comprehensive Water Management Plan is 864.6 M.S.L. The pre-Atlas 14 management elevation for the lake was 863.3 M.S.L. The existing house, constructed in 1955, is a rambler walk-out with a low floor elevation of 862.5 M.S.L. The proposed home will match the existing first floor elevation of the existing structure, 870.1 M.S.L., and will be constructed without a basement but with a 3'-4" crawl space beneath the house. The crawl space having a floor elevation of 865.6 M.S.L is for storm protection for the home owners. A variance from the District's low floor requirement, Rule 4.3.3a, is being requested. (The provisions of 4.3.3b and c do not apply.) The attached correspondence from MA Peterson has been submitted on behalf of the permit applicant to address Rules 10.11.1 – 10.1.4. The plan will provide protection for the 100-year storm event with 5.5 feet of freeboard (separation) provided between the elevation surface water can enter the structure and the flood elevation of the lake. Interior and exterior drain tile will be installed along the perimeter of the foundation to minimize the potential impacts from groundwater seepage. In the event of a 100-year flood event or an extended period of high water conditions within the lake, this condition could result in the potential of the crawl space being affected by water than would occur if the low-floor elevation requirement were adhered to. Therefore, if the board finds that the applicant has met the criteria of the Variances and Exceptions Rule, we recommend that approval of the variance be conditioned on the applicant's submission of a letter acknowledging and accepting the risk of flooding and recording the noncompliant condition on the deed.

## **11.0 Fees**

Fees for the project are:

Rules 2.0-6.0 \$300

#### **Findings**

- 1. The proposed project includes the information necessary, plan sheets and erosion control plan, for review.
- 2. A variance needs to be approved for compliance with Rule 4.3.3a based on the documentation submitted. The City of Edina does not allow reconstructed structures to be raised more than one foot from the existing low floor elevation for compatibility with the surrounding homes. The low floor elevation is for a crawl space beneath the main floor of the structure that, 1) has no exterior access for the surface water to enter the crawl space, 2) is one foot above the Atlas 14 100-year frequency flood elevation of South Lake Cornelia, 3) has duct work within the crawl space that is 3.5 feet above the flood elevation of the lake, 4) could potentially be affected by the seepage of groundwater but will have both interior and exterior drain tile installed at the bottom of the foundation walls to convey groundwater away from the structure. Therefore, if the board of managers finds that the applicant has met the criteria of the Variances and Exceptions Rule, we recommend that approval of the variance be conditioned on the applicant's submission of a letter of acknowledgement and accepting the risk of flooding and recording the noncompliant condition on the deed.
- 3. Rules 4 and 5 are met.

#### Recommendation

Approval, contingent upon:

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2.	Submission of a receipt showing recordation of a declaration for the existence of a noncompliant low-floor elevation with specification of the compliant and constructed elevations. A draft of the declaration must be approved by the District prior to recordation
Во	eard Action

It was moved by Manager \_\_\_\_\_\_ to approve permit application No. 2018-54 with the conditions recommended by staff.

Permit #: 2018-54

**Project Name:** Home Reconstruction – 6612 Cornelia Drive: Edina

Approval Date: June 20, 2018

# **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.



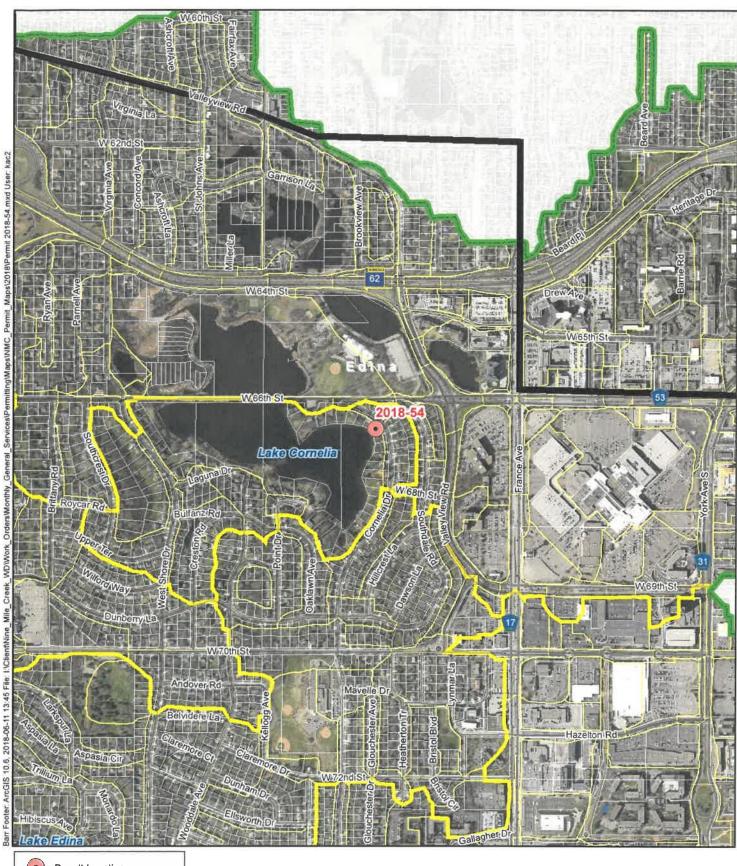
# Permit No.2018-54

Is hereby	issued	to !	Stephanie	Rasley	subject	to	the	conditions	specified	in th	ie.	attached
form:												

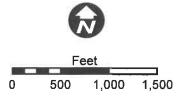
For the reconstruction of the single-family residential home located at 6612 Cornelia Drive in Edina.

Steve Kloiber Chair, Board of Managers

This permit expires on: July 1, 2019







PERMIT LOCATION MAP PERMIT 2018-54 Nine Mile Creek Watershed District



# 9 MILE CREEK WATER DISTRICT VARIANCE:

6612 Cornelia Drive Explanation of requests: M A Peterson is requesting a Variance to lower our proposed concrete crawl space slab 12" (865.6') from the 100 year Atlas 14 flood elevation for South Lake Cornelia requirement of 866.6' M.S.L. The new main level floor height of 870.05' is to match with the Existing / demoed main level floor height (3) steps above grade. Our floor structure is designed to maximize our Crawl space height (a) 3'-4" so the HVAC hanging from the underside of the trusses providing space for installation and future services. This would also provide 2'-6" +/- HVAC clearance from the new Crawl space concrete slab (865.6').

#### 10.1.2

- This hardship was not created by the landowner re-locating the new construction home. Our proposed new construction complies with all front, side and rear setbacks. The rear foundation line to remain as is

#### 10.1.3

- Our rear existing grade will remain as is (862.2') to lower the impact to adversely affect water resources, flood levels, drainage or the general welfare in the district and not effect neighboring properties. Lowering our new crawl space concrete slab 12" will have no access from the exterior of the structure.

#### 10.1.4

- The proposed new home construction main level floor height to set at (870.05') to match neighboring area homes entrance heights. This will create only access located at the interior underside of the staircase.