



**Title:** Permit Application 20-071: 4512 North Ave, Edina

**Prepared by:** Name: Will Roach Phone:  
952-641-0580  
wroach@minnehahacreek.org

**Recommendation:**

MCWD staff recommends approval of the variance to Section 3(a) of the [Floodplain Alteration Rule](#). On condition of reimbursement of District mailing and engineering fees.

**Background:**

Jack & Connie Weston (Applicants) have applied for a Minnehaha Creek Watershed District (MCWD) permit for Floodplain Alteration at 4512 North Ave, Edina, a single family home residence. This project proposes to convert a walkout basement created by a previous homeowner into a full basement. Per the Applicants, the current walkout basement has historically been subject to flood risk, with sandbag berms being deployed as temporary protective structures. As high water events become more frequent, as has been the trend in recent history, the Applicants wish to provide more permanent protection from flood risk.

The Variance Request was previously brought before the Board of Managers for consideration on August 13<sup>th</sup>, 2020. At the time, the project proposed 20.4 cubic yards of fill and no compensatory storage. The Board of Managers tabled the Variance Request and directed District Staff to work in conjunction with the Applicant to find a compromise that minimized the amount of floodplain fill, provided a degree of compensatory storage, and preserved the use the Applicant's side yard by providing compensatory storage in the lower shoreline area of the property.

In following the Board's direction, Staff, the District Engineer, and the Applicant met to discuss the project, and identified a solution in keeping with the Board's guidance. The revised work involves a reduction of fill to 16 cubic yards of fill below the floodplain elevation to restore the existing structure to its pre-walkout condition, and to reduce the risk of future high water events impacting the single family home structure. The revised plan further proposes establishing 6.7 cubic yards of floodplain storage, reducing the net floodplain fill to 9.3 cubic yards, comparative to the 20.4 cubic yards in the original Variance proposal. Staff and the District Engineer have reviewed the revised plan and concur the alternative provided meets the intent of the rule, accomplishes the goal of the project, and preserves the use of property with minimal impact to natural resources.

The Applicant is requesting Board consideration of a Variance from Section 3(a) of the MCWD [Floodplain Alteration rule](#), to allow for the placement of 9.3 yards of unmitigated fill below the floodplain of Minnehaha Creek.

**MCWD Rule Analysis:**

Floodplain Alteration Rule Trigger:

The [Floodplain Alteration Rule](#) is applicable whenever land altering activity is proposed below the 100-year high water level (HWL) of any waterbody or watercourse. This is to ensure that floodplain storage capacity is not lost and that any fill does not aggravate high water conditions upstream or downstream of a project site. The 100-year HWL for this reach of Minnehaha Creek has been identified as 888.4' (NGVD 29).

As the Applicants are proposing to fill below the 100-yr HWL, the [Floodplain Alteration rule](#) is triggered.

**Floodplain Alteration Variance Trigger:**

Per Section 3(a) of the rule, fill shall not cause a net decrease in storage capacity below the projected 100-year HWL of a waterbody/watercourse, and any fill brought onsite below the projected 100-year HWL must be mitigated by the creation of compensatory storage.

The Applicants are proposing to fill 16 cubic yards of the Minnehaha Creek floodplain and provide 6.7 cubic yards of compensatory storage (Attachment 2). The proposed mitigation would offset for approximately 42 percent of the proposed fill and would result in 9.3 cubic yards of net fill within the floodplain. This plan would use the lower shoreline area for compensatory storage to partially offset the proposed floodplain fill. Because only partial mitigation of the floodplain fill is proposed the Applicants must seek a variance from this section of the [Floodplain Alteration Rule](#).

**Floodplain Alteration Rule Analysis:**

Section 3(b) of the rule requires no increase in the 100-year flood elevation of a watercourse.

The Applicants had submitted a No-Rise Analysis that demonstrated the originally proposed 20.4 cubic yards would not impact high water elevations upstream or downstream of the project site. As the Applicants are now proposing 9.3 cubic yards of net fill, the no-rise determination is viable as the proposed net fill is less than the original amount. It is the determination of Staff and the District Engineer that this meets the no-rise criteria and complies with Section 3(b). Section 3(c) of the rule is not applicable as the fill in question occurs on a watercourse.

Section 3(d) of the rule is not applicable as no new impervious surface is proposed.

Section 3(e) of the rule is not applicable as no ice ridge grading is proposed this section of the rule is not applicable.

Section 3(f) of the rule requires that all new residential, commercial, industrial, and institutional structures shall be constructed such that all door and window openings are at a minimum of two feet above the 100-year high water elevations. As no new structure is proposed this section of the rule is not applicable. However, per the narrative submitted by the applicants, the conversion from a walkout basement to a full basement would result in the new low opening elevation of the existing structure of 890.4' (attachment 4), which conforms with Section 3(f).

**Variance Analysis:**

**Variance Framework:**

The [Variance and Exception Rule](#) provides a framework for the Board of Managers to consider variances from a provision of District rules. To grant a variance, the Board of Managers must determine, based on a showing by the applicant:

- a) That because of special conditions inherent to the property, which do not apply generally to other land structures in the District, strict compliance with a provision of a District rule will cause undue hardship to the applicant or property owner.
- b) That the hardship was not created by the landowner, the landowner's agent or representative, or a contractor. Economic hardship is not grounds for issuing a variance.
- c) That granting such a variance will not merely serve as a convenience to the applicant.
- d) That there is no feasible and prudent alternative to the proposed activity requiring the variance.
- e) That granting the variance will not impair or be contrary to the intent of these rules

For the purposes of Staff and the Board's review, feasibility and prudence refers to the proposal's consistency with sound engineering practices that, in light of the purpose and intent of the District's rules and comprehensive watershed management plan, do not cause environmental, social, or economic costs that outweigh the public benefit derived from compliance with the otherwise applicable rule provision.

Applicant's Variance Rationale:

The Applicants have submitted a Variance Application (Attachment 1) requesting to place 9.3 cubic yards of net floodplain fill along Minnehaha Creek (referenced as 'proposal', 'option', or 'solution' in the list below).

The following information has been provided as the basis for the variance request:

- The proposal is restoring a previous existing condition that was altered by a previous homeowner without permission of the Watershed District or City.
- The proposed fill will not increase flood elevation upstream or downstream.
- This solution will not create flooding impacts or bring floodwaters nearer to the existing home on this property or adjacent properties.
- This solution will have the same or lesser net effect to flood waters and disturbance as sandbagging which is the only current allowable alternative. This solution is essentially a "permanent sandbag".
- This option preserves mature trees on the property that have an existing net positive effect on creek water levels, natural buffers, and wildlife habitat
- The solution is the most prudent alternative.

Additionally, the Applicant has provided a narrative addressing each criteria of the Variance and Exception Rule. This information has been summarized and addressed in the rule criteria, outlined below. Section 2(a) of the Variance and Exception Rule states that the applicant must demonstrate that because of special conditions inherent to the property, which do not apply generally to other land or structures in the District, strict compliance with a provision of a District rule will cause undue hardship to the applicant or property owner. The Applicant's submitted material outlines that there are several unique or special conditions to the property that make strict compliance with the rule an undue hardship, including:

- A walkout basement that is exposed to the 100-yr HWL of Minnehaha Creek. As a result, the lower level of their home is subject to flooding during high water events. This modification to the home was made prior to the Applicant's purchase of the property by a previous homeowner who conducted the work without City or District approval.
- Full compliance with the compensatory storage provision of the [Floodplain Alteration rule](#) will bring the floodplain much closer to neighboring properties than the existing condition adding undue risk.
- Full compliance with the compensatory storage provision of the [Floodplain Alteration rule](#) will require large hardwood oak tree removal and other overstory trees that provide exclusive shade to the home and are a major asset to the property.
- Full compliance with the compensatory storage provision of the [Floodplain Alteration rule](#) will require retaining wall construction and loss of usable yard.

Variance Analysis:

Pursuant to the direction provided by the Board of Managers at the August 13, 2020 Board Meeting, Staff and the District Engineer coordinated with the Applicant and their engineer to identify an alternative to meet project goals while still achieving the intent of the District's [Floodplain Alteration rule](#).

The revised plans represent the consensus reached by the Applicants, Staff, and the District Engineer. The plan achieves the Applicant's goal of protecting the property, preserving its use, and minimizing floodplain impact. The plan proposes reducing the amount of floodplain fill from 20.4 cubic yards to 16 cubic yards and provides 6.7 cubic yards of compensatory storage, leaving 9.3 cubic yards of fill unmitigated. While there would still be unmitigated fill under this option it is less than half of the amount of unmitigated fill originally proposed and provides partial compensatory storage on site whereas the previous plan proposed none. The proposed area of mitigation would be done on the lower section of the shoreline (Attachment 2).

Staff and the District Engineer have reviewed the materials supplied by the Applicant, and the rationale and reasoning provided to address section 2(a) of the Variance Criteria. It is the assessment of staff and the District Engineer that the topography change associated with the excavation of the walkout constitutes a unique feature, and that the reduced useable yard space and removal of mature trees to provide mitigation elsewhere on site would result in undue hardship on the property owners. As such Section 2(a) of the variance criteria is met.

The walkout feature was constructed by a previous property owner without first receiving approval from either the City or the District to ensure the proposed work was in compliance with any applicable rules and ordinances. As the walkout feature was constructed by a past property owner and not the Applicant it is the assessment of staff and the District Engineer that Section 2(b) of the variance criteria is met.

The Variance will not merely serve as a convenience to the Applicant as the intent of the project is to provide protection for their home against high water levels along the Creek and in addition to reducing the amount of proposed fill have provided partial compensatory storage so as to minimize floodplain impact as much as possible on the property. It is the assessment of staff and the District Engineer that Section 3(c) of the Variance Criteria has been met.

As the proposed plan represents a consensus between the Applicants, staff, and the District Engineer that it presents the best opportunity to minimize floodplain impacts at the site while allowing the Applicants to completed their desired goal and as such there are no feasible and prudent alternatives. It is the assessment of staff and the District Engineer that the Section 2(d) of the Variance Criteria has been met.

Lastly, as floodplain impact has been minimized under the current proposal and partial mitigation is being provided on site it is the assessment of staff and the District Engineer that the requested variance would not impede or be contrary to the intent of the rules. As such it is the assessment of Staff and the District Engineer that Section 2 (e) of the Variance Criteria has been met.

It is the assessment of staff and the District Engineer that the requested Variance has met the required conditions of the Variance and Exception rule and recommend approval to the Board of Managers.

**Summary:**

The Applicants are proposing to convert a walkout basement that was created by a previous property owner into a full basement with the goal of protecting their home from high water events along Minnehaha Creek. To accomplish this, the Applicants are proposing to place 9.3 cubic yards of net floodplain fill along the exposed foundation to restore the site to its pre-walkout condition. As fill is being placed below the 100-yr HWL (888.4 ft, NGVD) of Minnehaha Creek, the District's [Floodplain Alteration rule](#) is applicable to the project. The District's [Floodplain Alteration rule](#) requires the Applicant to provide compensatory storage for any fill placed below the 100-yr HWL of a waterbody or watercourse. This plan represents an alternative solution that was determined to be feasible and prudent by the Applicants, Staff, and the District Engineer following direction given by the Board of Managers to examine additional possible solutions.

The current plans propose to bring in 16 cubic yards of fill within the 100-yr HWL of Minnehaha Creek and provide 6.7 cubic yards of compensatory storage. As a result, 9.3 cubic yards of net fill would remain unmitigated, however, this amount is less than half of the original proposals unmitigated fill. It is the assessment of Staff and the District Engineer that the current proposal has satisfied the requirements of the District's Variance and Exemption rule and as such find it reasonable to grant the Variance. It is for this reason that it is the recommendation that staff and the District Engineer recommend to approve the Variance Request from Section 3(a) of the District's [Floodplain Alteration rule](#), on condition of reimbursement of the District's mailing and engineering fees.

**Supporting documents (list attachments):**

- 1) Variance Support Narrative & Water Resource Permit Application Form
- 2) Compensatory Storage Grading Plan
- 3) Wenck Analysis Memo

---

## Project Variance Narrative 4512 North Avenue, Edina, MN

Date 8/25/20 – Modified after Board meeting on 8/13/20

Matt Pavek PE

### **Purpose:**

This narrative accompanies the variance application for the subject property submitted to Minnehaha Creek Watershed District. The information provided below details the proposed unmitigated floodplain fill, the reasoning for the proposal, several alternate design options and a conclusion as to why the current proposal is the only reasonable and prudent solution.

### **Existing Flooding Issue:**

The property has a low floor / low opening elevation that is exposed to flood waters from Minnehaha Creek. In high flow events the flood waters directly enter the lower level of the home. The home was converted to a "walkout" and the low opening elevation lowered by a previous homeowner by excavating material in this location. The current homeowner did not create this condition. In past high water events, the homeowner has been forced to use sandbags and pumps in attempts to protect the home from flooding damage. Currently the low floor / low opening elevation of the home is 886.61. The 100-year elevation of the creek at this location is 888.40. This results in 1.79 feet of flooding in the basement of the subject property.

### **Proposed solution:**

The **original** proposed solution to this flooding issue is filling the previously dredged area with soil returning the landscape to the original design when the home was constructed. This would convert the home from a walkout style home back into a full basement with lookout style windows. The new low opening elevation of the home is proposed to be a minimum of 890.40 which is 2.0 feet above the 100-year high water elevation. This proposed design requires unmitigated floodplain fill of 20.4 cubic yards. This is equivalent to approximately one dump truck of material.

Subsequent to the meeting of the board of managers on 8/13/2020, the applicant and the district staff were directed to look closer at an alternative that would reduce the required fill (but still protect the home) and mitigate some (but not all) of the reduced fill volume in a way that would not require the major tree loss and retaining wall relocation/construction. We have redesigned the proposed fill to pull back from the historic creek bank to reduce the proposed fill to 16 Cubic Yards. We are also proposing to remove 6.7 cubic yards of existing soil from the creek bank below the existing retaining wall as to not disturb the wall or large trees adjacent to it. The updated proposed solution is shown on revised Exhibit A - Attached.

### Reasoning for the proposed solution:

- This proposal is restoring a previous existing condition that was altered by a previous homeowner without permission of the Watershed District or City.
- The proposed fill will not increase flood elevation upstream or downstream (See no-rise calculation)
- ~~The proposed solution will have minimal construction impacts or disturbance to the creek shoreline, bottom, and vegetation. Only 15 lineal feet of shoreline will be impacted at a distance of 10 feet from the edge of the waterline.~~
- This solution will not create flooding impacts or bring floodwaters nearer to the existing home on this property or adjacent properties.
- This solution will have the same or lesser net effect to flood waters and disturbance as sandbagging which is the only current allowable alternative. This solution is essentially a "permanent sandbag".
- ~~This option has the smallest disturbed areas of the alternatives investigated at 340 square feet since only fill is required and not excavation.~~
- This option preserves mature trees on the property that have an existing net positive effect on creek water levels, natural buffers and wildlife habitat.
- The solution is the most prudent alternative that provides **partial mitigation**.

Requirements for a variance:

Minnehaha Creek watershed district clearly defines that to grant a variance the Board of Managers must determine the following:

1. That because of special conditions inherent to the property, which do not apply generally to other land or structures in the District, strict compliance with the provision of a district rule will cause undue hardship to the property owner.

Response: The conditions and reasoning for the variance are completely unique to this property in that in this property and its challenges are not a carbon copy of any other in the district. This property has unique characteristics including, low opening created by previous owner with no permission or permit, mature overstory trees, small potential mitigation area affecting adjacent properties and proof of no rise caused by unmitigated fill.

For example, there may be other structures within the district that have low openings below the floodplain, however they are not necessarily situations where a previous homeowner improperly excavated without permits or permission and the request is to restore the bank to its previous location. There may be other properties in the district that may have small lots where mitigation is not ideal, however they may not have the only feasible mitigation option that brings flood plain much closer to neighboring adjacent properties than the existing condition adding undue risk. There also may be other properties within the district that require tree removal to provide mitigation, but not necessarily large hardwood oak trees and other overstory trees that provide the only shade to the home and are a major asset to the property. There may be other properties in the district that request unmitigated fill but not necessarily able to provide a no-rise certification that shows there is no impact of flood elevation to neighboring properties upstream or downstream. There is zero evidence that this unmitigated fill will measurably affect flood levels. All of these conditions being considered together certainly demonstrates this property is entirely unique and not setting up any vague precedent. No two properties are entirely alike and thus precedent that considers a combination of factors cannot be established.

Undue hardship means unnecessary hardship. It is entirely unnecessary to require mitigation, excavation, retaining wall construction, loss of usable yard, loss of large trees, risk to neighboring properties, continued sandbagging etc. all to provide mitigation for a volume that has no effect on flood elevations, proven by a no-rise certification. Strict compliance to provide mitigation in this case is an undue hardship. Destroying the homeowner's creek frontage, large trees and small amount of existing usable yard is an undue hardship. Condition satisfied.

2. That the hardship was not created by the landowner, the landowner's agent or representative, or a contractor. Very simply, this hardship was caused by a previous homeowner without permission of the district city or any permitting obtained. Condition satisfied.
3. That granting such a variance will not merely serve as a convenience to the applicant. The variance is not merely for convenience, it is for preservation and protection of the lower level of their home and protecting the life and safety of its occupants from flood waters. Condition satisfied.
4. That there is no feasible and prudent alternative to the proposed activity requiring the variance. The activity here (creating flood mitigation) may be technically feasible, but it is certainly not prudent based on the litany of reasons listed above. If the threshold were only if something were technically feasible, then there would be no need for variances whatsoever as there is always a possible technical way to do something. However, in the wisdom of those who crafted the variance language it was clearly stated that the solution must also be prudent. Prudent means "wise or judicious in practical affairs; sagacious; discreet or circumspect; sober. Careful in providing for the future; provident; a prudent decision". This inclusion of the word prudent clearly is intended to be inclusive of any and all practical and reasonable arguments against unnecessary requirements, not just solely left to the term "technically feasible". Just because mitigation is technically feasible is not enough reasoning to deny a

variance request. The mitigation must also be proven to be a prudent measure. This mitigation is not a prudent measure. Condition satisfied.

5. That granting the variance will not impair or be contrary to the intent of these rules. The intent of the flood mitigation rule is simple and straight forward. It is intended to provide mitigation for areas of floodplain fill so that there is no negative affect upstream or downstream on adjacent properties due to alterations in the flood elevations. We have provided a no-rise modeling study that shows exactly that. There is no affect to flood elevations as a result of this unmitigated fill. The spirit of this requirement is met. Condition satisfied.

Establishing precedence. We are aware that there is concern that this variance application and approval could potentially establish precedence for other homeowners to propose and construct unmitigated fill on their properties. That would only be the case if the other properties had the exact same set of unique qualities as this property. They would not just need to demonstrate one or two similar qualities but all factors being the same to establish a precedent. This is extremely unlikely as the unique combination of characteristics of this property are not typical and common. Furthermore, if there is another property on the creek in this exact same situation the watershed district should wholeheartedly support helping that homeowner permanently protect their property, especially when it poses no negative affects as a result of the project and the alternatives pose many negative consequences (loss of usable property, tree loss, environmental impacts etc.).

The watershed district's goals are not intended to force people to flood their homes for no reason, or to force people to choose between destroying their yards and trees or flooding their homes, or forcing people to haphazardly sandbag instead of installing a permanent thoughtful solution. Its purpose should be to help all those within the district address flooding problems in the most reasonable and prudent way possible. For example, sandbagging to protect property is allowed...but a "permanent sandbag" to protect a property more safely and in perpetuity is not allowed.... that is an unreasonable policy and conflicts with the watershed stated vision. Situations like this is precisely why the variance option exists.

The vision of the district mentions improving the quality of life in the community and being flexible and creative in adapting practices to those of its partners. The proposed solution to this easily solvable problem directly speaks to that vision.

### Design Alternates:

The design alternates described below have been investigated and deemed not reasonable or feasible and prudent.

ALTERNATIVE 1 - Excavation of a portion of the yard and retaining wall and converting to floodplain. The limits of this option are shown on **Exhibit B**. Excavation of the upland portion of the yard and converting it to a floodplain as mitigation for the filled portion is not feasible because it would bring flood waters closer to the existing structure on the subject property as well as existing adjacent homes adding flood risk. The north side of 4512 North is very close to the neighbor's home (4508 North) which is vulnerable to flooding of it's basement due to dirt crawlspaces being located on both sides of it's foundation. This was discussed at the MCWD meeting on 1/15/20 and Tom Dietrich agreed then that this aspect was a mitigation issue. These dirt crawl spaces are below the flood elevation of the creek. This mitigation option would also reduce the flood separation to the adjacent property from 30 feet to 10 feet and only provides 10' of horizontal separation to the existing house. Also, mitigation in this area would only yields 10 cubic yards of material and creates a disturbed area of 590 square feet. Any design solution should not be implemented if it increases risk to an upstream or downstream property. Therefore, mitigation on the north side of the lot is not feasible and prudent.

ALTERNATIVE 2 – Excavation of the lower portion of the shoreline on the creek side of the granite retaining wall to approximately 5' from the bottom of the existing granite retaining wall. The limits of this option are shown on **Exhibit B**. Excavation of the upland portion of this area (elevations above 885.30) only yields 3



cubic yards of material. This proposal would also uproot the existing well-established vegetation and disturb the entire frontage of the property a distance of 110 lineal feet and creates a disturbed area of 1060 square feet. Therefore, this option is not feasible and prudent.

ALTERNATIVE 3 - Excavation of the entirety of the lower shoreline all the way to the retaining wall would yield about 15 cubic yards of material but would undermine the existing granite retaining wall. The limits of this option are shown on **Exhibit B**. This would result in an unstable and failed wall that would require reconstruction at an overly burdensome cost to the landowner and heavy site disturbance. Further excavation behind the retaining wall would be needed to achieve 20 cubic yards of soil. This solution also desecrates the shoreline whereby the property owner would no longer have use of their shoreline property. This proposal would also uproot the existing well-established vegetation and disturb the entire frontage of the property a distance of 110 lineal feet and creates a disturbed area of 2040 square feet. Therefore this full mitigation along the entire creek frontage is not feasible and prudent. **We have partially used this alternative option except we are not excavating all the way to the wall as to not undermine it. We are excavating to a 2.5:1 slope down from the bottom of the wall so it remains in place and stable. This yields 6.7 Cubic feet of mitigation volume.**

ALTERNATIVE 4 - Excavation of the southern portion of the subject property would yield 20 cubic yards, however it would require the removal of a large oak tree and basswood tree, reconstruction of a granite retaining wall and bring creek waters closer to the neighboring property to the south. This property to the south (4604 Cascade) has a lower basement and a sump pump that runs continuously. Therefore, this option is not feasible and prudent mainly due to unnecessary increased risk to an adjacent property.

ALTERNATIVE 5 – Minimize the proposed fill to something less than 20.4 cubic yards. The proposed fill of 20.4 cubic yards is the reasonable amount required to restore the original shoreline location with the upstream and downstream locations of the stream bank. This provides a separation distance from flood waters to the home foundation of 20.0 feet. The alternative of something less only increases the potential for flood waters and groundwater seepage to enter the foundation of the subject property and is not a good design, not a solution that can be recommend by Civil Site Group and thus not a feasible solution. – **We have partially used this alternative in the proposed solution and reduced the proposed fill to 16 Cubic Yards.**

## Conclusion:

The preferred proposed design solution (**partially mitigated fill**) is the only reasonable and prudent option that does not bring undue hardship to the landowner for this situation. It is a restoration to a pre-existing condition, it has no impacts to upstream or downstream properties, no measurable impacts to flood elevations upstream or downstream and has the minimum environmental impacts to the creek in the short term and long term. This entirely unique property and its challenges and solution is precisely the reason the variance process exists.

### WATER RESOURCE PERMIT APPLICATION FORM

Use this form to notify/apply to the Minnehaha Creek Watershed District (MCWD) of a proposed project or work which may fall within their jurisdiction. Fill out this form completely and submit with your site plan, maps, etc. to the MCWD at:  
15320 Minnetonka Blvd. Minnetonka, MN 55345.

Keep a copy for your records.

**YOU MUST OBTAIN ALL REQUIRED AUTHORIZATIONS BEFORE BEGINNING WORK.**

1. Name of each property owner: Jack Weston  
Mailing Address: 4512 North Ave City: Edina State: MN Zip: 55346  
Email Address: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

2. Property Owner Representative Information (not required) (licensed contractor, architect, engineer, etc...)  
Business Name: \_\_\_\_\_ Representative Name: \_\_\_\_\_  
Business Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Email Address: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

3. Project Address: 4512 North Ave City: Edina  
State: MN Zip: 55346 Qtr Section(s): \_\_\_\_\_ Section(s): \_\_\_\_\_ Township(s): \_\_\_\_\_ Range(s): \_\_\_\_\_  
Lot: 016 Block: \_\_\_\_\_ Subdivision: \_\_\_\_\_ PID: 2811721210040

4. Size of project parcel (square feet or acres): 0.56 ac  
Area of disturbance (square feet): 0.77 sf Volume of excavation/fill (cubic yards): 20.4  
Area of existing impervious surface: 5646 Area of proposed impervious surface: 5342  
Length of shoreline affected (feet): 0 Waterbody (& bay if applicable): N/A

5. Type of permit being applied for (Check all that apply):  
 EROSION CONTROL  WATERBODY CROSSINGS/STRUCTURES  
 FLOODPLAIN ALTERATION  STORMWATER MANAGEMENT  
 WETLAND PROTECTION  APPROPRIATIONS  
 DREDGING  ILLICIT DISCHARGE  
 SHORELINE/STREAMBANK STABILIZATION

6. Project purpose (Check all that apply):  
 SINGLE FAMILY HOME  MULTI FAMILY RESIDENTIAL (apartments)  
 ROAD CONSTRUCTION  COMMERCIAL or INSTITUTIONAL  
 UTILITIES  SUBDIVISIONS (include number of lots)  
 DREDGING  LANDSCAPING (pools, berms, etc.)  
 SHORELINE/STREAMBANK STABILIZATION  OTHER (DESCRIBE): Flood Protection

7. NPDES/SDS General Stormwater Permit Number (if applicable): \_\_\_\_\_

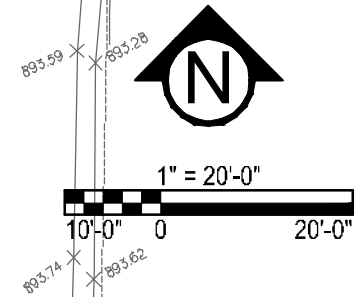
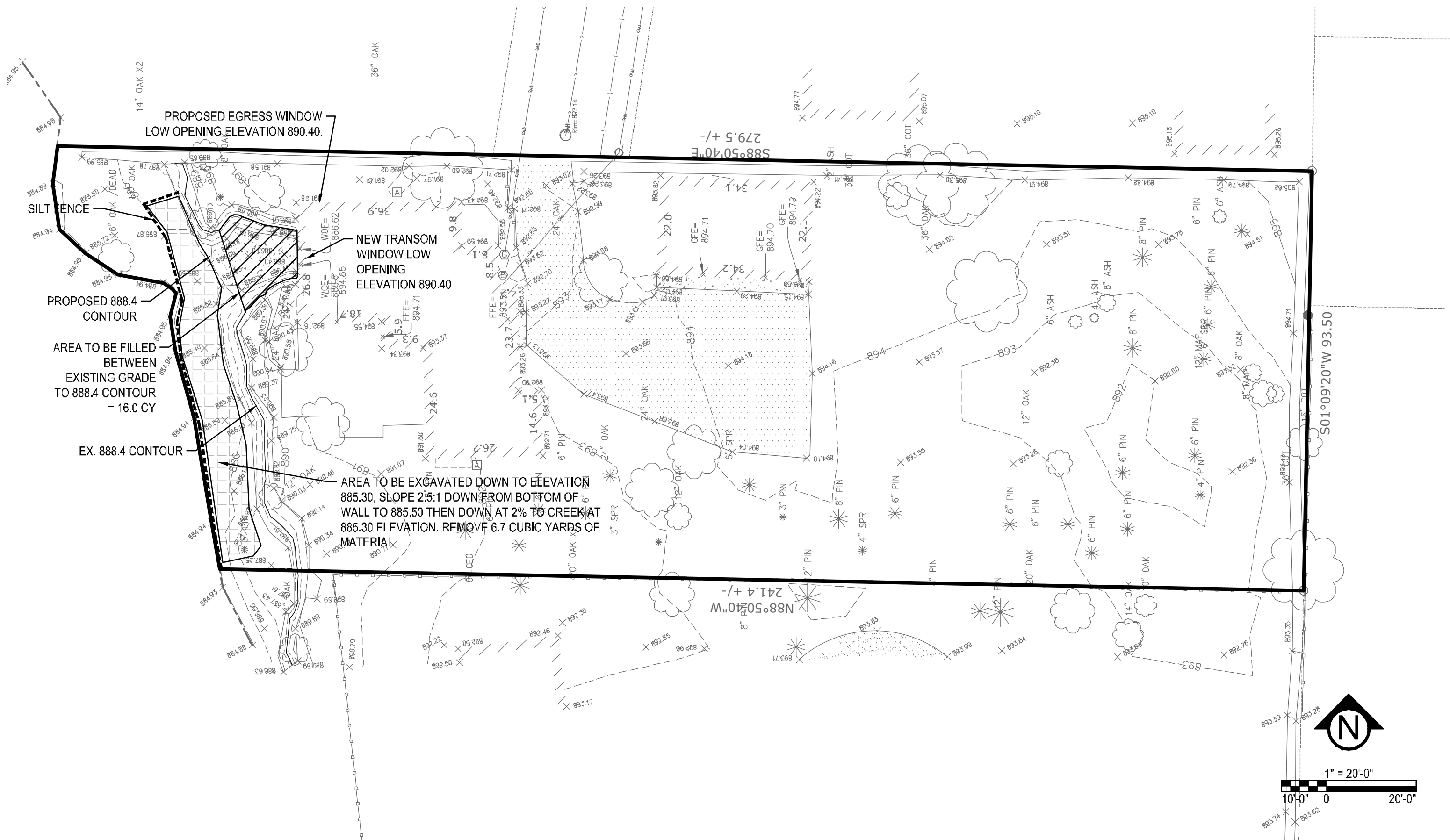
8. Waterbody receiving runoff from site: Minnehaha Creek

9. Project Timeline: Start Date: 4/1/2020 Completion Date: 4/15/2020

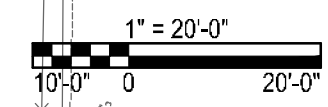
Permits have been applied for: City  County  MN Pollution Control Agency  DNR  COE   
Permits have been received: City  County  MN Pollution Control Agency  DNR  COE

By signing below, I hereby request a permit to authorize the activities described herein. I certify that I am familiar with MCWD Rules and that the proposed activity will be conducted in compliance with these Rules. I am familiar with the information contained in this application and, to the best of my knowledge and belief, all information is true, complete and accurate. I understand that proceeding with work before all required authorizations are obtained may be subject to federal, state and/or local administrative, civil and/or criminal penalties.

Constance M Weston 2.19.2020  
Signature of Each Property Owner \_\_\_\_\_ Date \_\_\_\_\_  
Jack Weston



4512 NORTH AVE EDINA, MN 55436		FLOOD PLAIN FILL EXHIBIT	
 4931 W. 35TH ST., #200 ST. LOUIS PARK, MN 55416 952.250.2003 / 763.213.394 www.CivilSiteGroup.com	Project Number:	19419	Revision Number:
	Issue Date:	8/25/20	Revision Date:
			<b>EXHIBIT A</b>



4512 NORTH AVE EDINA, MN 55436



4931 W. 35TH ST., #200  
 ST. LOUIS PARK, MN 55416  
 952.250.2003 / 763.213.394  
 www.CivilSiteGroup.com

Project Number: 19419		Revision Number:		<b>ALTERNATIVE OPTIONS</b>
Issue Date: 8/25/20		Revision Date:		
<b>EXHIBIT B</b>				

# Technical Memo



**To:** Will Roach, *Permitting Technician*, Minnehaha Creek Watershed District  
Tom Dietrich, *Permitting Manager*, Minnehaha Creek Watershed District

**From:** Chris Meehan, PE, CFM, Wenck Associates, Inc.

**Date:** September 2, 2020

**Permit Name:** 4512 North Avenue, Edina - Floodplain Alteration

**Permit Number:** 20-071

---

This memo is a supplement to the original permit review memo based on revised information provided by the applicant for Permit 20-071. The review of the material was based on evaluating solutions which minimize floodplain encroachment while limiting potential hardship to the property owner based on MCWD Board feedback at the 8-13-20 meeting.

## Reviewed Exhibits

- Revised 4512 Variance Narrative form Civil Site Group dated 8-25-20, received 8-25-20 (**Attachment 1**).

## Floodplain Alteration

The applicant in review of the proposed design has made two modifications to minimize floodplain fill on the site. They modifications were:

1. Reducing the amount of floodplain fill to be placed in front of the existing walkout from 20 CY to 16 CY. This was done by pulling back the area of fill in front of the structure while ensuring the property will be better protected from potential future flood events.
2. Creating floodplain storage in front of the existing retaining wall by scraping the existing banks to remove soil and create 6.7 CY of floodplain storage. This approach will also preserve existing mature trees on site.

Overall the project will cause a net decrease in storage capacity of 9.3 CY below the project 100-year high water elevation of Minnehaha Creek.

Per Section 3(a) of the Floodplain Alteration Rule, the project is required to provide mitigation volume at a 1:1 ratio. The applicant states that they are unable to provide the mitigation on-site and are seeking a variance (Attachment 1) from the requirement.

## Variance and Exceptions Rule

The applicant has provided a Variance Narrative (Attachment 1) which states that floodplain mitigation cannot be fully provided on-site due to site constraints which would create

hardship, but through the proposed design modifications they are minimizing floodplain encroachment on-site to the maximum extent which is feasible.

As a result of the site modifications the proposed variance is recommended to be approved as it minimizes floodplain encroachment while balancing hardship on the site for the property.