

LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting Wednesday, June 20, 2024

Agenda Item

Item 6. F. – 535 Lakota Lane After-the-fact Project Review (LMRWD No. 2023-001)

Prepared By

Linda Loomis, Administrator

Summary

The City of Chanhassen brought this project to the attention of the LMRWD in April of 2022. Since that time the LMRWD has been working to get an after-the-fact permit issued for this project. Young Environmental Consulting Group (YECG), on behalf of the LMRWD, has been working to bring the project up to LMRWD standards. The activities of YECG are detailed in Technical Memorandum – 535 Lakota Lane After-the-fact Project Review (LMRWD No. 2023-001), dated June 12, 2024.

The LMRWD began legal proceedings against the property owner to get the project completed. The property owner's legal counsel has been informed of the recommendations and the conditions for approval. The property owner was unable to provide the LMRWD with the required certifications necessary to issue and after-the-fact permit for the retaining wall, so the LMRWD will not issue a permit for that work. It has been determined that the retaining wall will be allowed to remain, because removing the retaining wall may make the slope more unstable than leaving it intact. This will be noted when the LMRWD dismisses the legal action once all the contingencies have been met, so that it will be discoverable by future prospective property owners.

Attachments

Technical Memorandum - 535 Lakota Lane After-the-fact Project Review (LMRWD No. 2023-001) dated June 12, 2024

Recommended Action

Motion to approve an after-the-fact permit for the following property improvements at 535 Lakota Lane:

- Reestablishment of permanent vegetation on the bluff
- Drain tile installation with energy dissipation, and
- Installation of riprap of fill the gaps in the existing riprap located on the bluff side of the retaining wall

Contingent upon receipt of \$4,875 for the investigation and inspection of the unauthorized work, and the notation that the retaining wall on the property was not constructed with a permit from the LMRWD and is not certified by a professional engineer. Though constructed in a manner not in compliance with LMRWD Rules, the LMRWD deems removal of the existing retaining wall to be of equal risk to the integrity of the adjoining slope as allowing it to remain. The LMRWD assumes no responsibility for the wall's structural integrity or future performance. The current homeowner/permittee is advised to notify any future purchaser of the property of the compliance status of the retaining wall.

Technical Memorandum



То:	Linda Loomis, Administrator Lower Minnesota River Watershed District (LMRWD)
From:	Hannah LeClaire, PE, Water Resources Engineer
Date:	June 12, 2024
Re:	535 Lakota Lane After-the-fact Project Review (LMRWD No. 2023-001)

The City of Chanhassen (City) contacted the LMRWD on April 13, 2022, regarding a resident, Mr. Andy Polski, who had done work to their property at 535 Lakota Lane, Chanhassen, MN 55318, without a permit. The City was concerned that grading, construction of a retaining wall and drain tile, and vegetation removal work may have occurred in the LMRWD Steep Slopes Overlay District (SSOD). The City became aware of the completed work when Mr. Polski listed the property for sale, and the information included a list of improvements that required City permits; however, no permits had been acquired. The property improvements related to the LMRWD SSOD include the following:

- Encroachment into the SSOD from the pool pad and retaining wall,
- Shrub and vegetation removal on the bluff,
- Drain tile installation, and
- Permanent site stabilization to prevent erosion.

LMRWD staff determined that the listed improvements triggered LMRWD Rule F—Steep Slopes, requiring an after-the-fact permit. The drain tile installation and construction of the pool pad and retaining wall do not comply with Rule F. To address the violations, the LMRWD requested that the homeowner:

- 1. Provide documentation of shrub and vegetation clearing activities within the SSOD.
- 2. Redirect stormwater runoff from the new drain tile away from the bluff or provide energy dissipation to protect the steep slopes from concentrated flows.
- 3. Provide an evaluation by a professional engineer showing that the slope can withstand the constructed improvements, including the pool pad, and retaining wall.

The following timeline summarizes the work and communication that has been completed as part of this after-the-fact permit process.

April 13, 2022	LMRWD received notice of property improvements at 535 Lakota Lane.		
June 12, 2022	LMRWD requested a survey of the property improvements.		
January 2023	Applicant submitted permit application (2023-001). The LMRWD notified the applicant that their permit application was incomplete and recommended scheduling a meeting to discuss application requirements.		
November 2023	LMRWD received the property survey from the applicant (Attachment 1).		
March 2024	LMRWD met with the applicant's engineer to discuss LMRWD Rule requirements.		
April 2024	 LMRWD met with the applicant and the applicant's engineer to discuss stormwater management on the property and certification of the stability of the steep slope. LMRWD staff met with LMRWD's attorney to discuss options for moving forward with an after-the-fact permit without certification for the pool pad and retaining wall. LMRWD staff and attorney determined the existing pool pad and retaining wall will be allowed to remain in-place. The LMRWD will issue an after-the-fact permit with the express condition that the wall does not comply with current LMRWD regulations to ensure future property owners are notified of this non-compliance. The applicant's engineer submitted a stormwater and erosion control narrative and plans for review. 		
May 2024	 Applicant's application was deemed complete, and the proposed stormwater management and erosion control complies with LMRWD Rule F. The applicant proposes to start construction as soon as an after-the-fact permit is issued by the LMRWD. 		

SUMMARY

Project Name:

Purpose:

Project Size:

535 Lakota Lane After-The-Fact Project Review

Property improvements including a deck addition, pool pad, grading, drain tile installation, vegetation management, and permanent site stabilization to prevent erosion.

			Net
	Existing	Proposed	Change in
Area	Impervious	Impervious	Impervious
Disturbed	Area	Area	Area
0.10 acres	0.16 acres	0.24 acres	+0.08 acres

Location:	535 Lakota Lane Chanhassen, MN 55318
LMRWD Rules:	Rule F – Steep Slopes

Recommended Board Action:

DISCUSSION

The LMRWD received the following documents for review:

• Work without a permit notification by the City of Chanhassen, dated July 25, 2022; received July 26, 2022.

Approval

- Individual online permit application; received January 10, 2023.
- Property survey by LHB, dated May 17, 2023; received May 18, 2023; revised November 1, 2023.
- Erosion and Sediment Control Plan by LHB, dated April 17, 2024; received April 17, 2024.
- Erosion Control and Stormwater Management Narrative by LHB, dated April 17, 2024; received April 17, 2024.
- Responses to LMRWD comments by LHB, dated May 8, 2024; received May 8, 2024.
- Minnesota Department of Transportation (MnDOT) riprap typical detail dated December 9, 2013; received May 8, 2024.
- Shooting Star Native Seeds Savanna & Woodland Edge Mix; received May 8, 2024.
- HydroCAD report by LHB, dated May 30, 2024; received May 30, 2024.
- StormCAD report by LHB, dated May 30, 2024; received May 30, 2024.

The application was deemed complete on May 30, 2024, and the documents received provide the minimum information necessary for permit review.

Rule F - Steep Slopes

The LMRWD regulates land-disturbing activities within the SSOD and requires a permit for activities that involve the excavation of 50 cubic yards or more of earth or the displacement or removal of 5,000 square feet or more of surface area or vegetation within the overlay area. The applicant provided the following documentation to comply with Rule F.

Documentation of shrub and vegetation clearing activities within the SSOD:

Shrubs and grass were removed to construct the gravel parking pad on the east side of the house as well as the pool pad, and riprap area on the south side of the house. On November 2, 2023, the applicant indicated in an email that no vegetation removal occurred beyond the extents of the gravel, pool pad, and riprap (Attachment 1). The applicant's engineer proposes to stabilize the exposed gravel side slopes on the east side of the property by seeding the area with a woodland edge mix and using erosion control blanket to help establish vegetation. The proposed erosion and sediment control measures comply with Rule F.

Redirection of stormwater runoff away from the bluff or energy dissipation to protect the steep slopes from concentrated flows:

There are two rainwater downspouts that are piped below grade to a discharge point on the south side of the covered deck, west of the riprap (Attachment 1). The drain tile receives runoff from a portion of the roof and a small portion of the gravel area. There is insufficient grade to route the discharge to the storm sewer in the front of the house. The applicant's engineer proposes to install a riprap apron using MnDOT Class II riprap to provide energy dissipation for the concentrated flow at the outlet of the drain tile. The engineer provided calculations indicating that the maximum flow velocity exiting the drain tile is approximately 6.1 feet-per-second (ft/s) for a 10-year storm event and 7.3 ft/s for a 100-year storm event. The apron meets MnDOT specifications and is appropriately sized for the modeled velocity. The riprap will disperse flows as they enter the SSOD. Additionally, the area downstream of the riprap will be vegetated with a woodland edge mix, and an erosion control blanket will be installed to help establish vegetation and mitigate soil erosion. The proposed stormwater management complies with Rule F.

Evaluation by a professional engineer showing that the slope can withstand the constructed improvements, including the pool pad and retaining wall:

A retaining wall was installed at the south side of the home to create a flat yard area, initially used as a pool pad. The flat area is no longer used to hold an above ground pool due to maintenance issues with leaves in the pool. The retaining wall was not designed or evaluated by an engineer and the applicant's engineer cannot certify its stability. The retaining wall has been in place for approximately 4 years. The applicant's engineer completed a field visit and confirmed no visible failure, movement, or erosion has occurred. Riprap is installed on the bluff side of the wall. The applicant's engineer proposes filling all gaps in the riprap to prevent scouring of the soil under the riprap due to runoff.

The applicant's engineer's evaluation did not fully meet Rule F requirements because they were not able to certify the stability of the slope. During a meeting on April 3, 2024, the engineer indicated that to complete a geotechnical evaluation, they would have to obtain a soil boring starting at the ground surface at the top of the bluff down to the riverbed elevation, which would be over 200 feet deep. Without a boring, the engineer cannot certify the slopes stability, and obtaining a boring could

range from \$10,000-\$15,000. Alternatively, the landowner could remove the retaining wall and restore the steep slope to existing conditions. However, this would disturb an area that is well vegetated and could cause more instability on the slope. Additionally, it may be difficult to reestablish vegetation after removal of the retaining wall due to the steep slopes and tree cover. After consulting the LMRWD attorney, staff determined the most feasible option is to allow the retaining wall to remain. The issued permit should include express conditions highlighting the wall's non-compliance with regulations to inform future property owners.

Recommendations

Based on review of the project, we recommend conditional approval of an after-the-fact permit for the following property improvements at 535 Lakota Lane:

- Reestablishment of permanent vegetation on the bluff
- Drain tile installation with energy dissipation, and
- Installation of riprap to fill the gaps in the existing riprap located on the bluff side of the retaining wall.

Approval is contingent upon receipt of \$4,875 for the investigation and inspection of the unauthorized work. See Attachment 2 for a summary of costs related to LMRWD staff's review of the project.

Additionally, the permit will include the following condition:

• The retaining wall on the property at 535 Lakota Lane Chanhassen, MN 55318, was not constructed with a permit from the LMRWD and is not certified by a professional engineer. Though constructed in a manner not in compliance with LMRWD Rules, the LMRWD deems removal of the existing retaining wall to be of equal risk to the integrity of the adjoining steep slopes as allowing it to remain. The LMRWD assumes no responsibility for the wall's structural integrity or future performance. The current landowner/permittee is advised to notify any future purchaser of the property of the compliance status of the retaining wall.

Attachments

- Attachment 1 Location Survey for ECO Real Estate Holdings Lot 2
- Attachment 2 Summary of costs for investigation and inspection



Date: <u>11/1/2023</u> gnature:

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FILE: \230368\500 Drawings\Sunvev\230368 dwg

ATTACHMENT 2



The following table summarizes the estimated dollars spent reviewing the 535 Lakota Lane after-thefact permit between the dates of April 13, 2022, and June 12, 2024. Correspondence includes exchanging emails with the applicant, applicant's engineer, and the City of Chanhassen, meetings with the applicant and the applicant's engineer, and a phone call with the applicant's engineer. The LMRWD's consultant records show that over 50 emails were exchanged and a minimum of two Microsoft Teams meetings were hosted by the consultant. LMRWD staff inspected the site in April 2022, and reviewed the project several times over the course of two years to analyze existing conditions, identify violations, and assess whether proposed corrections would satisfy the LMRWD Rules. Additionally, LMRWD staff wrote two technical memorandums summarizing the work completed, one in May 2022, and one in June 2024. The hours shown in the table are estimates.

Correspondence	5 hours (50 emails, 2 virtual meetings, 1 phone call)	\$ 625.00
Site Inspection	4 hours (1 site inspection)	\$ 500.00
Project Review	16 hours	\$ 2,000.00
Project Documentation	14 hours	\$ 1,750.00
	TOTAL	\$ 4,875.00