



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday, February 21, 2024

Agenda Item

Item 6. B. – RSI Marine Storage (LMRWD No. 2022-031)

Prepared By

Linda Loomis, Administrator

Summary

RSI Marine Storage is a redevelopment project planned for 10500 Great Plains Boulevard, Chanhassen. This address is in the northwest quadrant of the intersection of Flying Cloud Drive/CSAH 61 and TH 101/Great Plains Boulevard. The project will be used for boat storage. RSI Marine is a family operated shop with two locations providing boat storage, transportation, service, and repair.

Young Environmental Consulting Group, LLC reviewed the application on behalf of the LMRWD and recommends approval of a permit for the project subject to the following contingencies:

- Copy of the NPDES construction stormwater permit.
- Statement designating an individual who will remain liable to the LMRWD for performance from the time permitted activities commence until 70% vegetation cover is established and the LMRWD has certified satisfaction with erosion and sediment control requirements.
- Name and contact information for all contractors undertaking land-disturbing activities as part of the proposed project.
- Name and contact information for the person(s) responsible for erosion and sediment control inspections and maintenance.
- Documentation of approval from Carver County allowing the project to discharge to the County ditch.
- Documentation of approval for the project from the City of Chanhassen.
- Executed maintenance agreement for the stormwater facilities with the City of Chanhassen.
- Final construction plans signed by a professional engineer.

Attachments

Technical Memorandum – RSI Marine Storage (LMRWD No. 2022-031) dated February 14, 2024

Recommended Action

Motion to conditionally approve a permit for RSI Marine Storage (LMRWD No. 2022-031) subject to the above listed contingencies

Technical Memorandum



To: Linda Loomis, Administrator
Lower Minnesota River Watershed District (LMRWD)

From: Erica Bock, Water Resources Scientist
Hannah LeClaire, PE, Project Manager

Date: February 14, 2024

Re: RSI Marine Storage (LMRWD No. 2022-031)

RSI Marine Storage has applied for an individual project permit from the Lower Minnesota River Watershed District (LMRWD) for a marine storage development including four proposed buildings and stormwater management facilities at 10500 Great Plains Boulevard, Chanhassen, MN, 55317 (Figure 1). The applicant's engineer, James R. Hill, submitted the permit application, associated application exhibits, and site plans for the RSI Marine Storage project.

The project proposes to remove an existing storage building and gravel lot to be repurposed as a marine storage facility. The project proposes construction of four new buildings, 20,000 square feet each, with access from Flying Cloud Drive in the southeast corner of the property. The project includes construction of a stormwater management system and extension of the existing sanitary and watermain throughout the project site. The project is not located within the High Value Resource Area, Steep Slopes Overlay District (SSOD), or the Minnesota River floodplain. The project disturbs approximately 6.55 acres and constructs 2.38 acres of new impervious surfaces, triggering Rule B—Erosion and Sediment Control and Rule D—Stormwater Management. The project proposes to commence construction in March 2024.

The City of Chanhassen does not have its municipal permit and therefore the project requires a LMRWD individual permit and is subject to a LMRWD permitting review.

Summary

Project Name: RSI Marine Storage

Purpose: Removal of an existing storage building to construct a marine storage facility

Project Size:

Area Disturbed	Existing Impervious Area	Proposed Impervious Area	Net Increase Impervious Area
6.55 acres	0.41 acre	2.79 acre	2.38

Location: 10500 Great Plains Boulevard
Chanhassen, MN, 55317

LMRWD Rules: Rule B – Erosion and Sediment Control
Rule D – Stormwater Management

Recommended Board Action: Conditional approval

Discussion

The LMRWD received the following documents for review:

- LMRWD online permit application, received September 21, 2023.
- LMRWD permit application fee of \$1,000; received November 10, 2023.
- Commitment for title insurance; received November 10, 2023.
- Construction plans by James R. Hill; dated September 22, 2022; revised January 9, 2024; received January 9, 2024.
- Stormwater Management Narrative and Summary by James R. Hill; dated August 23, 2023; revised January 9, 2024; received January 9, 2024.
- Draft maintenance agreement; received December 19, 2023.
- P8 Model by James R. Hill; received January 9, 2024.

The application was deemed complete on January 24, 2024, and the documents received provide the minimum information necessary for permit review.

Rule B – Erosion and Sediment Control

The LMRWD regulates land-disturbing activities that affect one acre or more under Rule B. The proposed project would disturb approximately 6.55 acres within the LMRWD boundary. The applicant has provided an erosion and sediment control plan and a

Stormwater Pollution Prevention Plan (SWPPP). The project generally complies with Rule B, but a copy of the National Pollutant Discharge Elimination System (NPDES) permit and contact information for the contractor and person(s) responsible for the inspection and maintenance of erosion and sediment control features are needed before the LMRWD can issue a permit.

Rule D – Stormwater Management

The project proposes a total of 2.38 acres of new impervious surface. Runoff from newly constructed pavement for the project will be collected via local storm sewer and directed into the proposed Nationwide Urban Runoff Program (NURP) pond and proposed infiltration basin. Discharge will be reduced by infiltration and an outlet control structure and directed into a Carver County ditch, which will require a permit from Carver County and is required as a conditional approval item.

Rule 5.4.1 of Rule D requires that applicants demonstrate no increase in the proposed runoff rates compared with existing conditions.

Table 1. RSI Marine Storage Runoff Rate Summary

Rainfall Event (24-hour depth)	Existing (cfs)	Proposed (cfs)	Change (cfs)
2-year (2.87")	5.99	3.82	-2.17
10-year (4.27")	15.18	15.07	-0.11
100-year (7.38")	40.08	26.81	-13.27

The reported runoff rates show a decrease from existing conditions for the 2-, 10-, and 100-year events, meeting the rate control requirements of Rule D.

Section 5.4.2 of Rule D requires projects to retain one inch of runoff from the new and fully reconstructed impervious areas. There are 2.38 acres of proposed impervious. Therefore, the project must provide 10,127 cubic feet of volume retention to meet Rule D requirements. The applicant proposes to use a NURP pond and infiltration basin for volume control to meet Rule D requirements.

Table 2. RSI Marine Storage Volume Control Summary

Best Management Practice (BMP)	Volume (CF) – Live Storage
Proposed Infiltration Basin	13,263

The project’s volume control has been achieved through storage in the proposed NURP pond and infiltration basin, and the project complies with Rule D volume requirements.

Section 5.4.3 of Rule D requires a no-net-increase in total phosphorus (TP) or total suspended solids (TSS) to receiving waterbodies when compared to existing conditions. The applicant proposed using the NURP pond and infiltration basin to meet the water

quality requirements of the LMRWD. Water quality calculations were completed using a P8 model and the supporting documentation was submitted.

Table 3. RSI Marine Storage Water Quality Summary

	TP (lb/yr)	TSS (lb/yr)
Existing	2.5	787.0
Proposed	0.9	151.7
Difference	-1.6	-635.3
% Reduction	64%	81%

As presented, the pollutant load would be reduced for both TP and TSS, ensuring the project meets the water quality requirements established under Rule D.

Recommendations

Based on review of the project, we recommend conditional approval contingent on the receipt of the following:

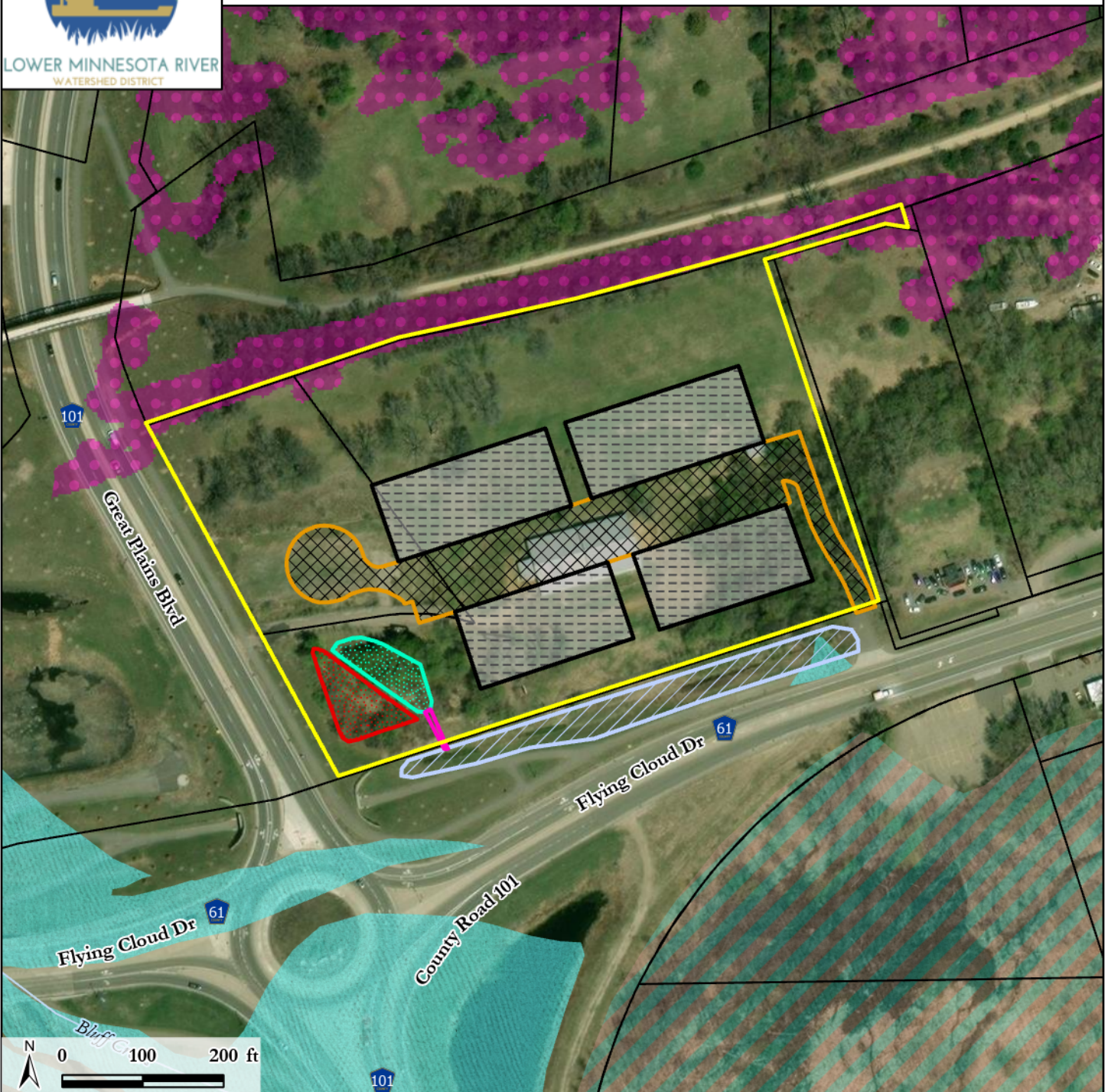
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Attachments

- Figure 1—RSI Marine Storage Project Location Map



Figure I: RSI Marine Project Location
LMRWD Permit No. 2022-031



Legend

- | | |
|-----------------------------|------------------------------|
| Project Location | Carver County Ditch |
| Proposed Building | Public Waters |
| Proposed Infiltration Basin | 100-yr Floodplain |
| Proposed NURP Pond | Floodway |
| Proposed Pavement | Steep Slope Overlay District |
| Proposed Outlet | Parcels |

LMRWD Watershed Location Map

