



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting  
Wednesday, January 19, 2022

### Agenda Item

#### Item 7. L. – Permits & Projects Reviews

#### Prepared By

Linda Loomis, Administrator

#### Summary

##### i. I 35W Trail Realignment (LMRWD No. 2021-035)

This project will re-align the connection of the trail along the Minnesota River to the new I 35W Bridge pedestrian access. The Board may remember the City invited the LMRWD to contribute to these improvements. The city has prepared plans for the trail and applied for a LMRWD permit. Young Environmental Consulting Group has reviewed the documents provided on behalf of the LMRWD and recommends conditional approval of the project subject to receipt of the NPDES permit, contact information for the contractor and the name and contact information of the person(s) responsible for erosion and sediment control.

#### Attachments

I-35W Trail Realignment (LMRWD No. 2021-025) Technical Memorandum dated January 12, 2022

#### Recommended Action

Motion to conditionally approve a permit for I-35W Trail Realignment (LMRWD No. 2021-025) subject to receipt of the NPDES permit, contact information for the contractor and the name and contact information of the person(s) responsible for erosion and sediment control

##### ii. Cliff Road Ramps (LMRWD No. 2021-057)

The City of Burnsville proposes to make improvement to the I 35W off ramps at Cliff Road. The City has provide site plans for the project and applied for a LMRWD permit. Young Environmental Consulting Group has reviewed the documentation on behalf of the LMRWD and recommends conditional approval of the project subject to receipt of the NPDES permit, contact information for the contractor and the name and contact information of the person(s) responsible for erosion and sediment control.

#### Attachments

Cliff Road Ramps (LMRWD No. 2021-057) Technical Memorandum dated January 12, 2022

#### Recommended Action

Motion to conditionally approve a permit for Cliff Road Ramps (LMRWD No. 2021-057) subject to receipt of the NPDES permit, contact information for the contractor and the name and contact information of the person(s) responsible for erosion and sediment control

**iii. MAC 2022 Perimeter Gate Security Improvements (LMRWD No. 2021-058)**

The Metropolitan Airport Commission (MAC) has applied for a LMRWD permit to make perimeter gate security improvements. The Minneapolis/St. Paul Airport is located in an unincorporated area of the LMRWD and therefore requires a LMRWD permit. MAC has its own MS4 (Municipal Separate Storm Sewer System) permit. Young Environmental Consulting Group has reviewed the documentation on behalf of the LMRWD and recommends conditional approval of the project subject to receipt of the NPDES permit, contact information for the contractor and the name and contact information of the person(s) responsible for erosion and sediment control.

**Attachments**

MAC 2022 Perimeter Gate Security Improvements (LMRWD No. 2021-058) Technical Memorandum dated January 12, 2022

**Recommended Action**

Motion to conditionally approve a permit for MAC 2022 Perimeter Gate Security Improvements (LMRWD No. 2021-058) subject to receipt of the NPDES permit, contact information for the contractor and the name and contact information of the person(s) responsible for erosion and sediment control

# Technical Memorandum

**To:** Linda Loomis, Administrator  
Lower Minnesota River Watershed District

**From:** Kaci Fisher, Environmental Scientist  
Katy Thompson, PE, CFM

**Date:** January 12, 2022

**Re:** I-35W Trail Realignment (LMRWD No. 2021-035)

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The City of Burnsville (the applicant) has applied for an individual project permit from the Lower Minnesota River Watershed District (LMRWD) to realign a trail segment adjacent to the east side of the I-35W highway within the City of Burnsville (City), as shown in Figure 1. The applicant's engineer, SEH, has provided site plans for the I-35W Trail Realignment Project (Project) along with the permit application.

The Project consists of constructing a new 10-foot-wide pedestrian trail immediately adjacent to the northbound I-35W exit ramp to Black Dog Road. The proposed trail will be part of a larger regional trail system from Burnsville to Lilydale. The current trail is prone to flooding and frequent closures due to high water elevations in the Minnesota River. To reduce trail closures, the proposed trail will be moved higher and within the existing Minnesota Department of Transportation right-of-way, and the existing trail and fill will be removed, with the area restored with topsoil and native seeding. The Project will disturb approximately 1.73 acres, create 0.39 acres of new impervious surfaces, and remove 0.40 acres of existing impervious surfaces. The Project is located within the Black Dog Lake Fen High Value Resource Area (HVRA) and the Minnesota River 100-year floodplain, but it is not within the Steep Slopes Overlay District.

Because the City does not have its LMRWD municipal LGU permit, this Project requires an LMRWD individual permit and, as such, is subject to an LMRWD permitting review.

## Summary

Project Name: I-35W Trail Realignment

<u>Purpose:</u>	Recreational trail
<u>Project Size:</u>	1.73 acres disturbed; 0.40 acres existing impervious; 0.39 acres proposed impervious; net decrease of 0.01 acres new impervious
<u>Location:</u>	Adjacent to east side of I-35W south of Lower Minnesota River, Burnsville, MN 55337
<u>LMRWD Rules:</u>	Rule B—Erosion and Sediment Control Rule C—Floodplain and Drainage Alteration
<u>Recommended Board Action:</u>	Conditional approval

## Discussion

The District received the following documents for review:

- LMRWD online permit application; received December 15, 2021
- 100-year High Water Level map by SEH; dated December 15, 2021; received December 15, 2021
- No-Rise Certification by SEH; dated November 24, 2021; received December 15, 2021
- Preliminary construction plans by SEH; dated December 13, 2021; received December 15, 2021

The application was deemed complete on December 22, 2021, and the documents received provide the minimum information necessary for permit review.

### Rule B—Erosion and Sediment Control

The District regulates land-disturbing activities that affect 5,000 square feet or more within the HVRA and one acre or more in the general district under Rule B. The proposed Project would disturb approximately 1.73 acres within the LMRWD boundary and approximately 7,000 square feet within the HVRA. The applicant has provided an erosion and sediment control plan and a Stormwater Pollution Prevention Plan and generally complies with Rule B. However, before a final permit can be issued, a copy of the NPDES permit and contact information for the contractor and person(s) responsible for all erosion and sediment control will need to be submitted to the District.

### Rule C—Floodplain and Drainage Alteration

The Project is located in the Minnesota River floodway and floodplain, which is shown on the Dakota County Flood Insurance Rate Map Panel 27037C0070E (effective

December 2, 2011). The 100-year flood elevation is 715.1 feet through the Project area. The existing trail and fill will be removed, creating some floodplain storage, and the proposed trail will be located at a higher elevation to minimize the frequency of inundation. The proposed trail has crown elevations around 702 feet; although still below the 100-year flood elevation, it is higher than the existing trail that has a low point at 696 feet. Because the trail is being moved to a higher elevation and the old trail will be removed, the Project may benefit the river hydraulics, and the overall effect on the Minnesota River appears to be a slight reduction in water surface elevations for the 100-year event. The applicant provided a no-rise certification and HEC-RAS results, which demonstrates that the Project complies with Rule C.

### **Recommendations**

Staff recommends conditional approval of the Project, conditioned on the receipt of the following:

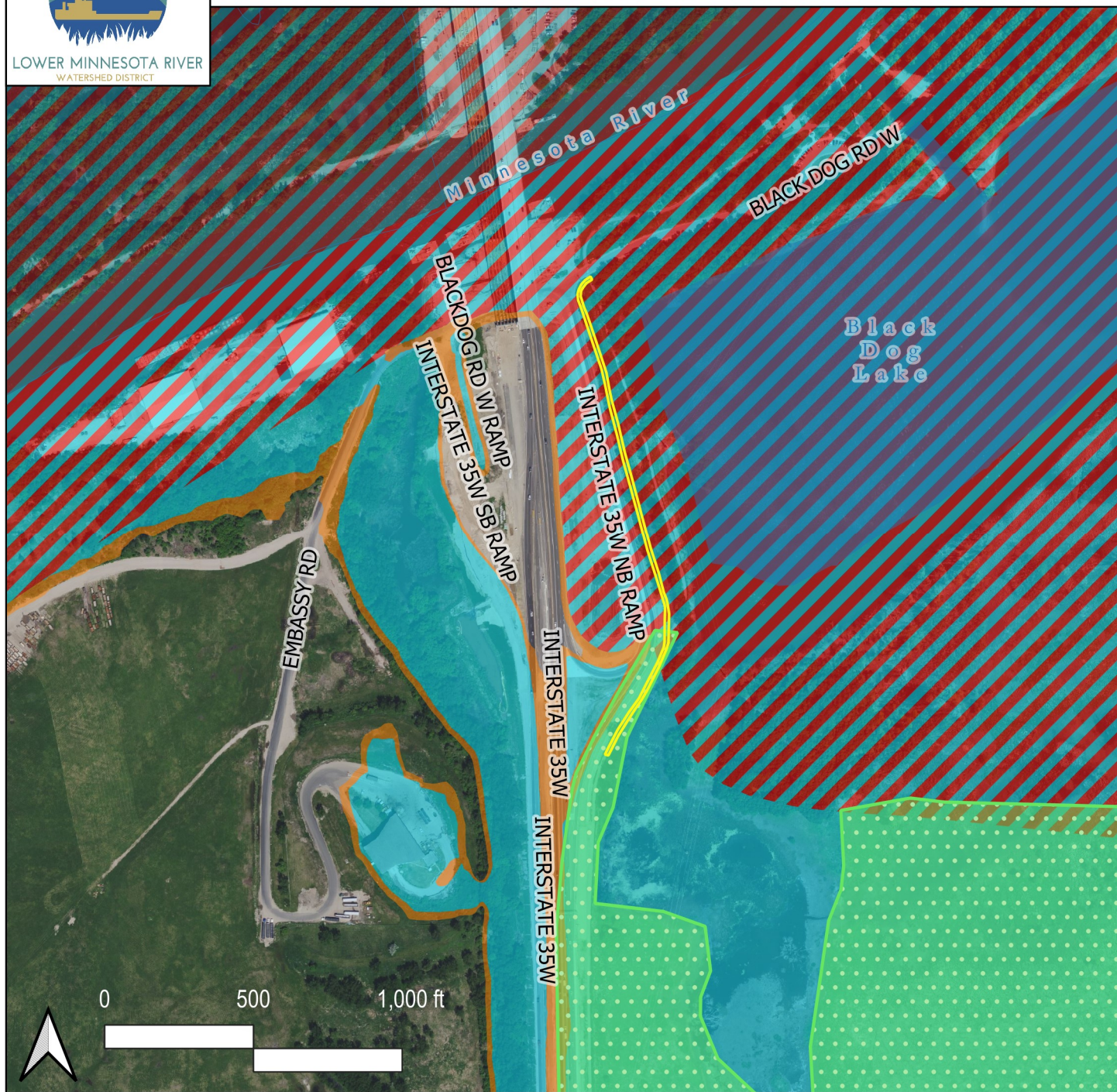
- Copy of the NPDES permit
- Contact information for the contractor
- Contact information for the person(s) responsible for erosion and sediment control

### **Attachments**

- Figure 1 – I-35W Trail Project Location Map



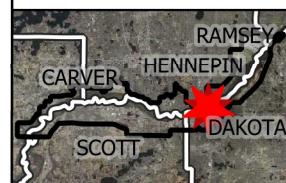
Figure I: I35W Trail Project Location



## LEGEND

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|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
|  Project Location         |  Trout Streams                 |
|  I35W Trail               |  Steep Slopes Overlay District |
|  Public Waterways         |  100-yr Floodplain             |
|  Public Waterbodies       |  Floodway                      |
|  High Value Resource Area |  500-yr Floodplain             |
|  Calcareous Fens          |  County Boundaries             |
|                                                                                                              |  LMRWD Boundary                |

## LMRWD Watershed Location Map





# Technical Memorandum

**To:** Linda Loomis, Administrator  
Lower Minnesota River Watershed District

**From:** Kaci Fisher, Environmental Scientist  
Katy Thompson, PE, CFM

**Date:** January 12, 2022

**Re:** Cliff Road at I-35 Ramp Realignment (LMRWD No. 2021-057)

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The City of Burnsville (the Applicant) has applied for an individual project permit from the Lower Minnesota River Watershed District (LMRWD) for a linear project in the City of Burnsville (City), as shown in Figure 1. The Applicant's engineer, Bolton & Menk, has provided site plans for the Cliff Road at I-35 Ramp Realignment project (Project) along with the LMRWD individual project permit application.

The Project consists of constructing a roundabout at the Cliff Road and I-35W off-ramp intersection, realigning Cliff Road, and reconstructing Dupont Avenue. The Project would disturb approximately seven acres, create 0.3 acres of new impervious surfaces, and reconstruct three acres of existing impervious area. The site is not located within the High Value Resource Area, the Steep Slopes Overlay District, or the Minnesota River floodplain. The Applicant proposes to commence construction on March 1, 2022.

Because the City does not have its LMRWD municipal LGU permit, the Project requires an LMRWD individual permit and thus is subject to an LMRWD permitting review.

## Summary

<u>Project Name:</u>	Cliff Road at I-35 Ramp Realignment
<u>Purpose:</u>	Road construction and reconstruction
<u>Project Size:</u>	7 acres disturbed; 3 acres existing impervious; 0.3 acres proposed new impervious

<u>Location:</u>	I-35W and Cliff Road, Burnsville, MN 55377
<u>LMRWD Rules:</u>	Rule B—Erosion and Sediment Control
<u>Recommended Board Action:</u>	Conditional approval, see Recommendations

## Discussion

The District received the following documents for review:

- LMRWD online permit application, received December 14, 2021
- Project map by Bolton & Menk, dated October 7, 2021, and received December 14, 2021
- Plan sheets by Bolton & Menk, dated October 7, 2021, and received December 14, 2021

The application was deemed complete on January 4, 2022, and the documents received provide the minimum information necessary for permit review.

### Rule B—Erosion and Sediment Control

The District regulates land-disturbing activities that affect one or more acres under Rule B. The Project would disturb approximately seven acres within the LMRWD boundary. The Applicant has provided an erosion and sediment control plan and a Stormwater Pollution Prevention Plan and generally complies with Rule B. However, before the District can issue a final permit, the Applicant will need to submit to the District a copy of the NPDES permit and contact information for the contractor and person(s) responsible for all erosion and sediment control.

## Recommendations

Staff recommends conditional approval of the Project, dependent on the receipt of the following:

- Copy of the NPDES permit
- Contact information for the contractor
- Contact information for the person(s) responsible for erosion and sediment control

## Attachments

- Figure 1—Cliff Road at I-35 Ramp Realignment Project Location Map





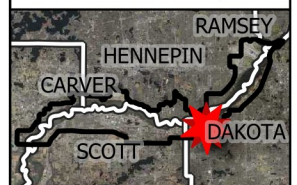
Figure I: Cliff Road at I-35 Ramp Realignment Project Location



## LEGEND

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|-------------------------------|--------------------------|-------------------|
| Project Location              | Public Waterbodies       | Floodway          |
| Cliff Road Ramp               | High Value Resource Area | 500-yr Floodplain |
| Ramp Realignment              | Calcareous Fens          | Parcel Boundaries |
| Public Waterways              | Trout Streams            | County Boundaries |
| Steep Slopes Overlay District | LMRWD Boundary           |                   |
| 100-yr Floodplain             |                          |                   |

## LMRWD Watershed Location Map



# Technical Memorandum

**To:** Linda Loomis, Administrator  
Lower Minnesota River Watershed District

**From:** Kaci Fisher, Environmental Scientist  
Katy Thompson, PE, CFM

**Date:** January 12, 2022

**Re:** 2022 Perimeter Gate Security Improvements (LMRWD No. 2021-058)

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Metropolitan Airports Commission (MAC, the applicant) has applied for an individual project permit from the Lower Minnesota River Watershed District (LMRWD) for an improvement project within the Minneapolis–Saint Paul Airport, as shown in Figure 1. The applicant's engineer, TKDA, has provided site plans for the 2022 Perimeter Gate Security Improvements Project (Project) along with the permit application.

The proposed Project consists of constructing paved parking, a paved access roadway, utilities, a security gate building, and a stormwater basin. The Project would disturb approximately 4.89 acres and create 2.55 acres of new paved impervious surfaces while removing 2.68 acres of existing impervious and compacted surfaces. The Project is not located within the High Value Resource Area, Steep Slopes Overlay District, or 100-year floodplain.

Because it is located in an unincorporated area, this Project requires an LMRWD individual permit and, as such, is subject to an LMRWD permitting review.

## Summary

<u>Project Name:</u>	2022 Perimeter Gate Security Improvements
<u>Purpose:</u>	Security gate building, parking, road, and utility improvements
<u>Project Size:</u>	4.89 acres disturbed; 2.68 acres existing impervious; 2.55 acres proposed impervious



<u>Location:</u>	Southwest quadrant of Minneapolis–Saint Paul Airport
<u>LMRWD Rules:</u>	Rule B—Erosion and Sediment Control Rule D—Stormwater Management
<u>Recommended Board Action:</u>	Conditional approval

## Discussion

The District received the following documents for review:

- LMRWD individual project permit application; dated December 2, 2021; received December 15, 2021
- Memorandum by TKDA; dated December 3, 2021; received December 15, 2021
- Location map; received December 15, 2021
- Proposed and existing drainage areas by TKDA; dated November 1, 2021; received December 15, 2021
- Hydrologic soil group map; dated November 23, 2021; received December 15, 2021
- Geotechnical Exploration Services by Element Materials Technology St. Paul Inc.; dated August 23, 2021; received December 15, 2021
- HydroCAD; dated December 2, 2021; received December 15, 2021
- MIDS; dated December 2, 2021; received December 15, 2021
- Ninety percent design plans by TKDA; dated November 1, 2021; received December 15, 2021

The application was deemed complete on January 10, 2022, and the documents received provide the minimum information necessary for permit review.

### Rule B—Erosion and Sediment Control

The District regulates land-disturbing activities that affect one acre or more under Rule B. The proposed project would disturb approximately 4.89 acres within the LMRWD boundary. The applicant has provided an erosion and sediment control plan and generally complies with Rule B. However, before a final permit can be issued, a copy of the NPDES permit (either stormwater construction or individual) and contact information for the contractor and person(s) responsible for all erosion and sediment control are needed.

### Rule D—Stormwater Management

The District regulates land-disturbing activities that create new impervious areas greater

than one acre. The Project proposes 2.55 acres of new impervious surfaces. The existing site consists of a paved parking lot; a paved access roadway; and a contractor laydown area for construction staging, which consists of compacted gravel, bare soil, pavement, and vegetation. Most of the contractor laydown area and existing access road will be removed, as will a portion of the existing parking lot. A screening facility/security gate building and a new access road will be constructed, and the existing parking lot will be expanded to the west. A filtration basin is also proposed to treat the stormwater.

Section 4.4.1. of Rule D requires that applicants demonstrate no increase in proposed runoff rates. The applicant submitted a HydroCAD analysis demonstrating the proposed infiltration basin will provide rate control for the new impervious surfaces. Pretreatment for the infiltration basin will include a rock weeper at the storm sewer inlet, and the basin will also include an underdrain system to prevent water from ponding in case the soils become clogged. The infiltration basin has a one-foot ponded depth with an overflow structure and orifice plate for rate control. The existing and proposed rates are provided in Table 1 and meet the District's rate control requirements.

*Table 1. Rate Control Summary*

Design Event	Existing Rates (cfs)	Proposed Rates (cfs)	Change (cfs)
2-year/24-hour	10.3	7.2	3.1
10-year/24-hour	22.7	12.9	9.8
100-year/24-hour	46.0	24.7	21.3

Section 4.4.2. of Rule D requires stormwater runoff volume retention on-site to be equivalent to one inch of runoff from impervious surfaces. For this Project, the required volume retention is 9,276 cubic feet, and the applicant is proposing 12,200 cubic feet of volume retention. The Project meets the volume reduction requirement.

Section 4.4.3. of Rule D requires a no net increase from existing conditions in total phosphorus (TP) and total suspended solids (TSS) to receiving water bodies. The applicant provided MIDS calculations, which are summarized in Table 2. The Project meets the water quality requirements.

*Table 2. Water Quality MIDS Summary*

Parameter	Existing Load (lb/yr)	Proposed Load (lb/yr)	Change (lb/yr)
TP	10.3	5.8	4.5
TSS	1,869	1,056	813

The Project meets all of Rule D's requirements.

## **Recommendations**

Staff recommends conditional approval of the Project, conditioned on the receipt of the following:

- A copy of the NPDES permit
- Contact information for the contractor
- Contact information for the person(s) responsible for erosion and sediment control

## **Attachments**

- Figure 1—2022 Perimeter Gate Security Improvements Location Map





Figure I: 2022 Perimeter Gate Security Improvements Location



## LEGEND

- |                    |                               |                   |
|--------------------|-------------------------------|-------------------|
| Project Location   | Stormwater Basin              | Floodway          |
| Perimeter Gate     | Public Waterways              | 100-yr Floodplain |
| Access Road        | Public Waterbodies            | 500-yr Floodplain |
| Paved Parking      | High Value Resource Area      | Parcel Boundaries |
| Screening Facility | Calcareous Fens               | County Boundaries |
| Trout Streams      | Steep Slopes Overlay District | LMRWD Boundary    |

## LMRWD Watershed Location Map

