



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 6. B. – Safety & Security Center Phase 2 (LMRWD No, 2023-022)

Prepared By

Linda Loomis, Administrator

Summary

Young Environmental Consulting Group has reviewed an application for Phase 2 of the Safety & Security Center at the Minneapolis-St. Paul Airport on behalf of the LMRWD. Details of the application review are attached in Technical Memorandum – Safety & Security Center Phase 2 (LMRWD No. 2023-022), dated April 10, 2024.

Attachments

Technical Memorandum – Safety & Security Center Phase 2 (LMRWD No. 2023-022), dated April 10, 2024

Recommended Action

Motion to approve a permit Safety & Security Center Phase 2 (LMRWD No. 2023-022) for site preparation and mass grading only (LMRWD Rule B). The applicant is required to amend the permit before construction of impervious surfaces and stormwater best management practices (BMPs) (LMRWD Rule D)

Technical Memorandum



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

From: Erica Bock, Water Resources Scientist
Hannah LeClaire, PE, Water Resources Engineer

Date: April 10, 2024

Re: Safety and Security Center Phase 2 (LMRWD No. 2023-022)

The Metropolitan Airports Commission (MAC) has applied for an individual project permit from the LMRWD to begin Phase 2 of the Safety and Security Center (SSC) Project. The LMRWD reviewed and conditionally approved the SSC Phase 1 (LMRWD No. 2021-022) project at the November 2021 Board Meeting (Attachment 1) and a permit was issued on March 18, 2022. The SSC Phase 1 project consisted of constructing a fire station, concrete apron, asphalt parking lot, and infiltration basin in Minnehaha Creek Watershed District. The LMRWD is awaiting final construction as-builts for the SSC Phase 1 Project to close out the permit.

The Safety and Security Center Phase 2 Project (SSC Phase 2 Project) is located on the north end of the Minneapolis-Saint Paul International (MSP) Airport (Figure 1). The applicant's engineer, Kimley-Horn and Associates, Inc. (Kimley Horn), has submitted the permit application, associated application exhibits, and construction plans for the SSC Phase 2 Project.

The project proposes building demolition and construction; roadway realignment; utility and parking lot construction; and infiltration basin construction for stormwater management. The project proposes 9 acres of disturbance. There are currently 5.3 acres of impervious surfaces, and the project proposes 8.6 acres of new and reconstructed impervious surfaces. The project proposes construction between May 2024 and December 2026. The project is not located within a High Value Resource Area, Steep Slopes Overlay District, or 100-year floodplain of the Minnesota River. The project triggers LMRWD Rule B—Erosion and Sediment Control and Rule D—Stormwater Management. Because MAC does not have their municipal permit, the project requires an LMRWD individual project permit.

After a meeting with the applicant on February 22, 2024, to discuss the project, time constraints for construction scheduling became apparent. In previous permit applications with similar time constraints, permits have been issued in phases, allowing the applicant to begin initial site preparation activities and mass grading ahead of the impervious surface construction and stormwater management approvals under Rule D. Because of the construction schedule concerns of the applicant, we have segregated our permit review to just the initial site preparation activities and mass grading activities (Rule B). The initial permit will explicitly prohibit the construction of impervious surfaces and stormwater management facilities until LMRWD staff can confirm the project meets all the requirements for Rule D. The applicant will be required to provide updated

stormwater treatment calculations to obtain a permit amendment that includes the construction of impervious surfaces planned for summer 2024.

SUMMARY

Project Name: Safety and Security Center (SSC) Phase 2
Purpose: Building, roadway, and stormwater management facility construction

Project Size:	Area Disturbed	Existing Impervious Area	Proposed Impervious Area	Net Increase Impervious Area
	9 acres	5.3 acres	8.6 acres	3.3 acres

Location: 6320 34th Avenue South
 Saint Paul, MN 55450

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

Recommended Board Action: Approval of Rule B (initial site preparation activities [including building demolition] and mass grading only)

DISCUSSION

The LMRWD received the following documents for review:

- LMRWD online permit application; received October 2, 2023.
- LMRWD Application Narrative and Exhibits for SSC Phase 2 by Kimley-Horn, dated September 15, 2023; received October 2, 2023.
- SSC Phase 2 Drainage Plans and Exhibits by Kimley-Horn, dated July 25, 2023; received October 2, 2023.
- XPSWMM Model by Kimley-Horn; received November 20, 2023; revised and received February 1, 2024.
- Stormwater Management Narrative by Kimley-Horn, dated March 4, 2024; received March 7, 2024.
- Existing and Proposed Conditions MIDS Model, by Kimley-Horn; received March 7, 2024.
- SSC Phase 2 Construction Plans by Kimley-Horn, dated November 13, 2023; received March 7, 2024.
- Revised SWPPP by Kimley-Horn; received March 25, 2024.

The application was deemed complete on March 25, 2024, and the documents received provide the minimum information necessary for a Rule B permit review.

Rule B – Erosion and Sediment Control

The LMRWD regulates land-disturbing activities that affect one or more acres under Rule B. The proposed project would disturb approximately 9 acres within the LMRWD boundary. The applicant has provided an erosion and sediment control plan and a Stormwater Pollution Prevention Plan (SWPPP). Temporary erosion and sediment control measures include storm drain inlet protection,

silt fences, construction entrance/exits, sediment control log (woodchip), and rapid stabilization method 3 (MnDOT 2575.3M). The contractor and individuals responsible and liable for the inspection and maintenance of erosion and sediment control features are:

Contractor:

Morcon Construction
612-221-2631
colsen@morcon.com

Erosion and Sediment Control:

Ryan Carolan – Kimley Horn, 763-251-030, ryan.carolan@kimley-horn.com
Allan Sapp – Kimley Horn, 612-280-3851, allan.sapp@kimley-horn.com
Mark Weinhandl – H + U Construction, 612-875-2917, mweinhandl@hu-construction.com
Tim Elmer – MAC, 612-726-8170, tim.elmer@mspmac.org

The project complies with Rule B.

Recommendations

The applicant has made it clear that time is of the essence for the project. Therefore, staff recommend conditional approval of the project for initial site preparation activities (including building demolition) and mass grading only.

As discussed, this permit allows the applicant to begin work on the initial site preparation activities and mass grading but does not allow for the construction of any new impervious surface. Staff recommends the applicant and the LMRWD continue to work together to ensure the stormwater management system complies with LMRWD Rule D. The LMRWD met with Kimley-Horn and MAC Staff on March 27, 2024, to discuss additional items required to comply with LMRWD Rule D. A permit amendment will be required to construct impervious surfaces and stormwater management best management practices (BMPs).

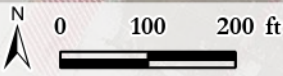
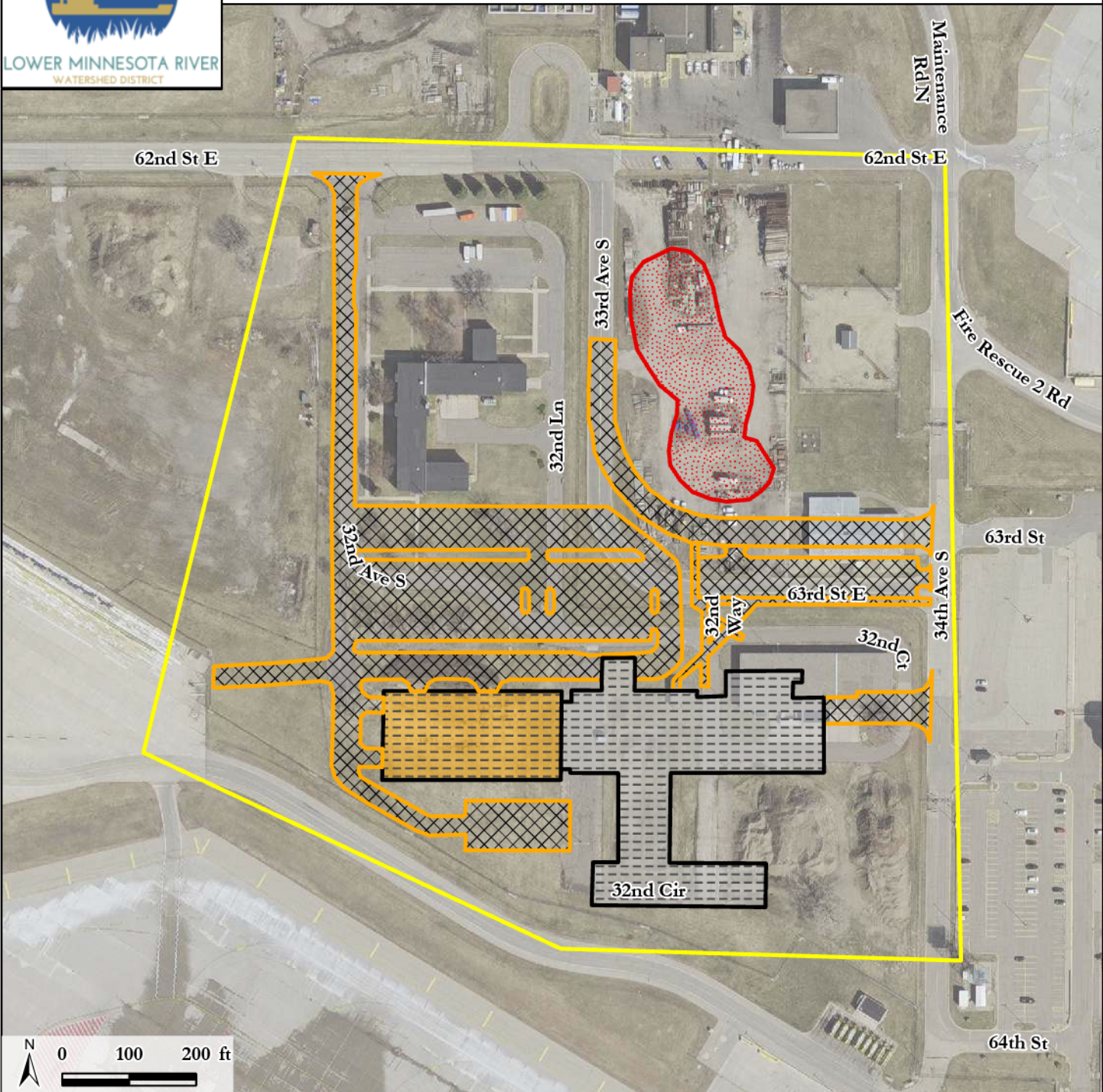
Based on review of the project, we recommend approval of the project for Rule B only.

Attachments

- Figure 1—SSC Phase 2 Project Location Map
- Attachment 1—SSC Phase 1 Project Review Memo



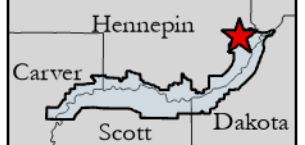
Figure I: Safety and Security Center Phase II Project Location
LMRWD No. 2023-022



Legend

-  Project Location
-  Proposed Covered Parking
-  Proposed Impervious
-  Proposed Infiltration Basin
-  Proposed Safety and Security Center

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: November 10, 2021

Re: 2021 Safety and Security Center Phase I (LMRWD No. 2021-022)

The Metropolitan Airports Commission (MAC, applicant) has applied for an individual project permit from the Lower Minnesota River Watershed District (LMRWD) to construct additional facilities on the Minneapolis St. Paul (MSP) Airport property, as shown in Figure 1. The applicant's engineer, Kimley-Horn, has provided site plans for the 2021 Safety and Security Center Phase I project (Project) along with the permit application.

The proposed Project involves constructing a fire station, emergency shelter, parking lot, and access drive. The Project would disturb approximately 13.3 acres and create approximately 5.0 acres of new impervious surface. The Project is not located within the High Value Resource Area, Steep Slopes Overlay District, or the Minnesota River floodplain; however, it is located in an unincorporated region.

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>	2021 Safety and Security Center Phase I
<u>Purpose:</u>	Construction of a fire station, emergency shelter, parking lot, and access drive within the MSP airport property
<u>Project Size:</u>	13.3 acres disturbed; 5.0 acres proposed new

impervious

Location: 4300 Glumack Dr., St. Paul, MN 55111 (Parcel 3002823110001)

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

Recommended Board Action: Conditional approval

Discussion

The District received the following documents for review:

- LMRWD online permit application; received May 18, 2021
- Project Map by Burns & McDonnell Engineering; dated May 8, 2018; received May 18, 2021
- Master drainage plans by MAC; dated June 12, 2003; received May 18, 2021
- Construction plans by Kimley-Horn; dated May 17, 2021; received May 18, 2021
- Revised construction plans by Kimley-Horn; dated October 18, 2021; received October 18, 2021
- Integrated Spill Response & Coordination Plan by MSP International Airport and MAC; dated December 7, 2004; revised April 23, 2014; received May 18, 2021
- SWPPP Inspection and Onsite Amendment Log by Kimley-Horn; dated June 14, 2021; received May 18, 2021
- Concrete Washout Guidance by MPCA; dated February 2009; received May 18, 2021
- Stormwater Best Management Practice Concrete Washout by EPA; dated February 2012; received May 18, 2021
- Construction implementation schedule via email by Kimley-Horn; received May 27, 2021
- Stormwater narrative via email by Kimley-Horn; received May 27, 2021
- Revised stormwater narrative via email by Kimley-Horn; received October 18, 2021

The application was deemed complete on October 29, 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 one acre or more under Rule B. The proposed Project would disturb approximately 13.3 acres. The applicant has provided a Stormwater Pollution Prevention Plan and generally complies with Rule B;

however, 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 will still be needed before a final permit can be issued.

Rule D – Stormwater Management

The District regulates land-disturbing activities that create new impervious areas greater than one acre. The Project proposes a total of 5.0 acres of impervious surfaces. The applicant originally submitted plans in May 2021 with the intention of directing the Project’s stormwater to MSP pond #2. Staff met with the applicant on June 7, 2021, to discuss if the pond could handle the additional proposed stormwater. Because there was a lack of data about MSP pond #2, the applicant agreed to revise the stormwater management plan.

The revised application submitted on October 18, 2021, and discussed with the applicant on October 29, 2021, now proposes constructing an infiltration pond with an infiltration swale for Phase I of the Project. A second infiltration pond is proposed for Phase II, but it is not part of this review. The Phase I infiltration pond and a small amount of the new impervious surface is located within the Minnehaha Creek Watershed District (MCWD) and will be permitted by MCWD. The applicant met with both MCWD and the District on October 29, 2021, to discuss the different regulations and permitting processes for the two jurisdictions.

Section 4.4.1 of Rule D requires that applicants demonstrate no increase in proposed runoff rates. The applicant submitted XSPWMM analysis demonstrating the proposed infiltration basins will provide rate control for the new impervious surfaces the Project will create. 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	918	918	0
10-year/24-hour	1,462	1,462	0
100-year/24-hour	2,329	2,329	0

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 the MAC project, the required volume reduction is 18,173 cubic feet. The proposed infiltration pond is sized to be 10,759 square feet by 1.8 feet deep with an assumed infiltration rate of 0.45 inches per hour to meet the volume requirement. The soils data indicate the infiltration rate could be closer to 0.8 inches per hour. The applicant has stated that they will conduct infiltration testing during construction and augment the soils at the infiltration basin, if needed, to achieve a minimum infiltration rate of 0.50 inches per hour. Even with the

lower infiltration rate of 0.45 inches per hour, the Project will provide a minimum of 19,366 cubic feet, which meets the volume reduction requirement.

Because the Project meets the volume requirement, it also meets the no net increase in total phosphorus and total suspended solids water quality requirements. As presented, the Project complies with Rule D.

Recommendations

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

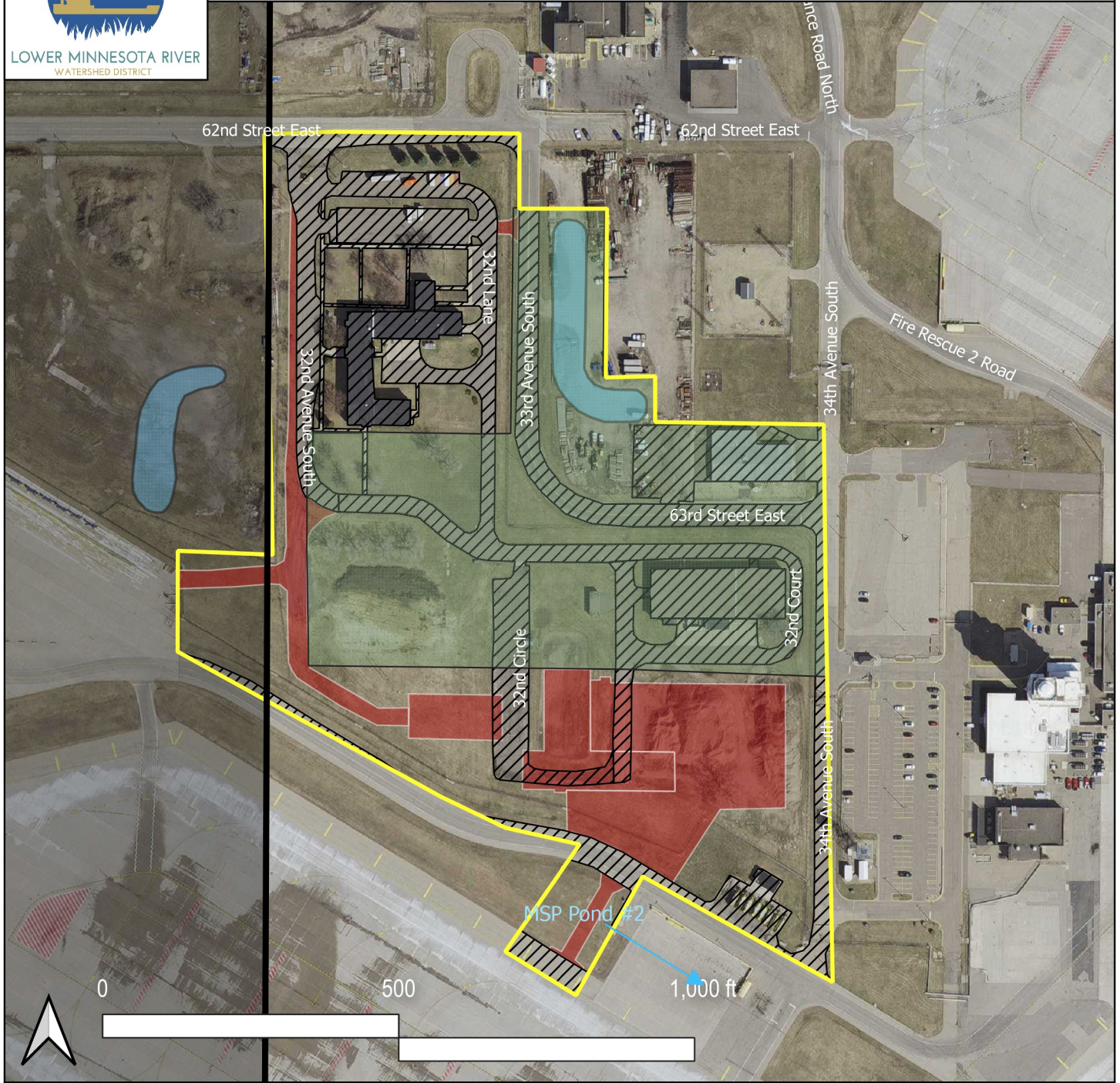
- Copy of NPDES permit, either construction stormwater permit or individual permit if it states a construction stormwater permit is not needed
- Contact information of the contractor
- Contact information for the person(s) responsible for erosion and sediment control

Attachments














- Figure 1—2021 Safety and Security Center Phase I Location Map



Figure I: 2021 Safety and Security Center
Project Location



LEGEND

-  Project Location
-  2021 Security & Safety Center
-  Existing Impervious
-  New Impervious
-  Infiltration Basin
-  Phase 2
-  Public Waters
-  LMRWD Boundary
-  Steep Slopes Overlay District
-  High Value Resource Area
-  100-yr Floodplain
-  Floodway
-  MCWD

LMRWD Watershed Location Map

