



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting  
Wednesday, November 16, 2022

### Agenda Item

#### Item 6. I. – Permits & Projects Reviews

#### Prepared By

Linda Loomis, Administrator

#### Summary

##### i. **Metropolitan Airports Commission's Municipal Permit Update**

Young Environmental Consulting Group has reviewed the Metropolitan Airport Commission's (MAC) Capital Improvement Program for both the Minneapolis-St. Paul International Airport and Flying Cloud Airport.

The LMRWD is planning to meet with staff from the in December to discuss LMRWD permit requirement for the MAC. MAC is unusual in that it is required to have an MS4 (Municipal Separate Storm Sewer System) Permit, but unlike municipalities does not have ordinance and a Local Stormwater Management Plan. It is required to have a Storm Water Pollution Prevention Program (SWPPP), which is what the LMRWD will use to determine if the MAC meets the LMRWD's requirements to obtain a permit.

#### Attachments

Technical Memorandum – Metropolitan Airports Commission's Municipal Permit Update, dated November 9, 2022

#### Recommended Action

No action recommended – for information only

##### ii. **Peterson Wetland Bank Application (LMRWD No.2022-037)**

The Board may remember that the Peterson family is planning to ask for wetland bank credit by creating a wetland from former agricultural acreage at the intersection of Carver, Hennepin and Scott counties and the cities of Chanhassen, Eden Prairie and Shakopee. The City of Eden Prairie has taken the lead on this project, which will require approval and permits from the US Army Corps of Engineers, BWSR, the MN DNR and the LMRWD. There has been recent activities on this proposal and Young Environmental Consulting Group has provided an update for the Board.

#### Attachments

Technical Memorandum – Peterson Wetland Bank Application (LMRWD No. 2022-037), dated October 26, 2022

#### Recommended Action

No action recommended

##### iii. **Permit Program Summary**

A summary of all outstanding permits is attached

**iv. 535 Lakota Lane, Chanhassen – work without a permit**

Legal Counsel will update the Board at the meeting

**Attachments**

None

**Recommended Action**

No action recommended



# Technical Memorandum

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

**From:** Hannah LeClaire, PE  
Della Schall Young, CPESC, PMP

**cc:** Heather Leide  
Director of Airport Development

**Date:** November 9, 2022

**Re:** Metropolitan Airports Commission's Municipal Permit Update

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On August 31, 2022, the Lower Minnesota River Watershed District (LMRWD) received notice of the Metropolitan Airports Commission's (MAC's) Preliminary Capital Improvement Program (Attachment 1). Each year, MAC staff prepare a seven-year Capital Improvements Program (CIP) that includes projects for the Minneapolis–St. Paul International Airport (MSP) and Flying Cloud Airport. Both of these airports lie within the LMRWD boundary, and therefore, several of the CIP projects have the potential to trigger LMRWD rules, particularly Rule B—Erosion and Sediment Control and Rule D—Stormwater Management. Because the MAC has previously expressed interest in applying for the LMRWD Municipal Permit and partnering with the LMRWD on meeting water management goals, Young Environmental Consulting Group (Young Environmental) provides the following discussion on initiating this process.

## Discussion

Section 2.1.2 of Rule A requires local government units (LGUs) that want to obtain a municipal permit to illustrate how they intend to implement and enforce the LMRWD Rules through official controls. Before officially applying for a Municipal Permit, the LMRWD recommends submitting review materials to allow for a nonbinding, informal review of the official controls. After the LMRWD staff complete their initial review, they will notify the MAC of any threshold requirements that have not been met as well as what needs to be modified in the official controls to bring the local water management into conformance with the LMRWD rules. Official controls should be submitted for the MSP Airport and Flying Cloud Airport and may include but are not limited to the following:

- Storm Water Pollution Prevention Program (SWPPP)
- Ordinances, design requirements, or specifications related to water resources management (Reference MS4 [Minimum Control Measure \(MCM\) 4](#) and [MCM 5](#))

### **Recommendations**

No board action is required at this time. As part of the LMRWD's annual municipal coordination effort, the LMRWD has scheduled a meeting with the MAC on December 15, 2022. One of the objectives of this meeting is to review recent and upcoming LMRWD and MAC projects and programs and discuss progress on the Municipal Permit. Given the extensive list of projects that the MAC has included in their CIP, we recommend the MAC begin the Municipal Permit process to become the primary permitting authority for projects within their boundary. We offer the following summarized comments to the MAC to help facilitate this process:

1. Review LMRWD Rule A, Section 2.1, for details on the Municipal Permit policy, regulation, and application process.
2. Review LMRWD Rules B, C, D, and F to learn about the requirements for compliance with the LMRWD Municipal Permit and determine whether MAC official controls will need modifications.
3. Submit official control review materials such as a SWPPP, water management plan, and/or water management ordinances for preliminary review by the LMRWD. Submit documents to [permit@lowermnriverwd.org](mailto:permit@lowermnriverwd.org)

### **Attachments**

- Attachment 1—Metropolitan Airports Commission's Preliminary Capital Improvement Program



## Metropolitan Airports Commission

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TO: Planning, Development and Environment Committee

FROM: Heather J. Leide, Director – Airport Development (612-726-8128)

SUBJECT: **Preliminary 2023 – 2029 Capital Improvement Program  
Program Overview**

DATE: August 30, 2022

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### FOR ACTION

#### **Summary**

Each year, MAC staff prepares a seven-year Capital Improvements Program (CIP) for review and approval by the full Commission. A preliminary version of the 2023-2029 CIP listing is provided in September in order to give Commissioners, Affected Municipalities and the public an opportunity to see what is planned for the upcoming seven-year program, with specifics included for the proposed projects forthcoming for construction contract award in 2023.

The seven-year CIP includes projects for both the Minneapolis-St. Paul International Airport (MSP) and the six airports in the Reliever Airport System. The majority of projects in the attached project listing focus on the rehabilitation and replacement of airport infrastructure, existing assets, and terminal systems to ensure that airport safety, security and operations are not compromised.

#### **Fiscal Impact**

No Impact       Operating Budget       CIP       Other

The Airport Development Department works closely with Finance staff during the CIP development process to review funding for the seven-year program. Any project changes to the preliminary CIP will be reflected in the final version brought to the Commission in December for final adoption. At that time, Finance will also provide a companion funding analysis for the first three years of the program for information.

## **Action Requested**

- 1. Recommend that the full Commission accept the attached preliminary 2023-2029 Capital Improvement Program for purposes of conducting the affected municipalities review and the Assessment of Environmental Effects (AOEE) process; and**
- 2. Authorize staff to proceed with these processes.**

## **Background**

The 2023-2029 preliminary CIP includes the following (attached to this memo):

- (a) Anticipated CIP process schedule;
- (b) Draft listing of projects by category with proposed year and estimated cost for each;  
and
- (c) Draft project narratives for the projects listed in 2023.

## ***Applicable Legal Authority***

- (a) MAC's Bylaws, Minnesota Statutes Sec. 473.621, Subd. 6 and 7.

## **Analysis**

The projects in the first year of the program (2023) are primarily projects that have been carried forward from past years' programs. MAC staff worked hard to forecast project needs and make requests three to four years or more in the future. This preliminary draft reflects updated scopes and estimates as developed by the project teams in the course of their work authorized with approval of the 2022-2028 CIP. Staff is aware that the MSP Long Term Plan (LTP) will call for additional significant projects, but they will not be reflected in the CIP until the LTP is approved and adopted by the Commission. In particular for Terminal 2, and with the expectation that improvements at that terminal will be recommended in the near term, staff has included fees in 2024 to assist in development of the appropriate timing and budgets for those projects after completion of the LTP.

This preliminary draft ensures that potential projects will be vetted through the affected municipalities review and AOEE processes. Staff will work closely to refine funding plans, coordinate grant opportunities, and consider critical timing with project stakeholders prior to bringing the final draft to the Commission in December.

In 2023, the CIP lists dollars associated with the Terminal 1 arrivals and departures levels (enhancements continuing from previous years) via the Operational Improvements Program. This program provides benefit to the local travelers who utilize the check-in, baggage drop, baggage claim, and security-related passenger processing facilities. Other planned major investments at MSP include necessary pavement reconstruction, the first phase of the infill between Pods 2 and 3 on Concourse G, and the first phase of the Concourse and Gatehold Modernization project to be completed in partnership with Delta Air Lines.

Also note that the CIP includes over \$8 million in 2023 for planning and development work at the Reliever Airports.

The preliminary seven-year program as attached will be made available to affected municipalities for review and comment. Affected municipalities will have 60 days to review the proposed program and offer comments to MAC staff for consideration when preparing the final program recommendations for review by the full Commission in December. The 60-day comment period is anticipated to run from September 22 through November 21, 2022.

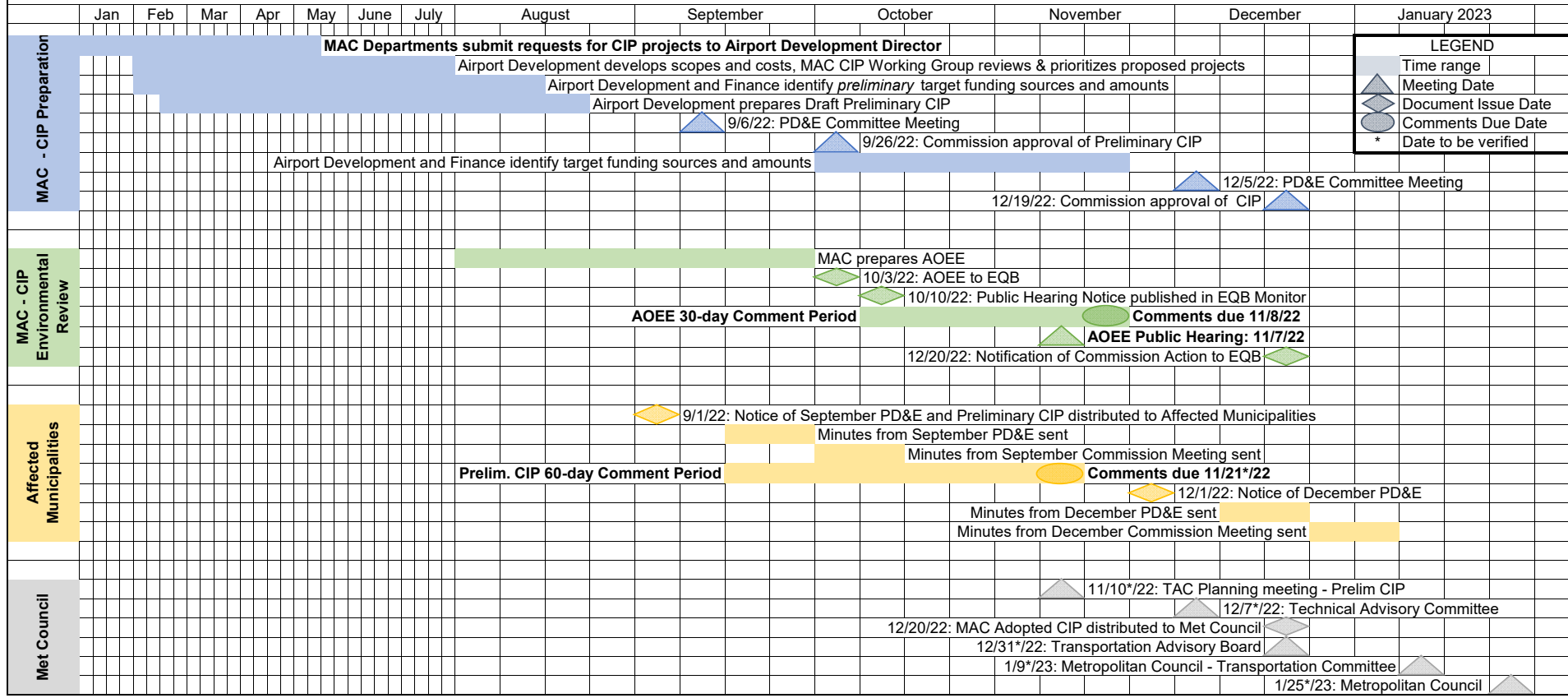
The preliminary program will also be utilized to develop the annual Assessment of Environmental Effects (AOEE) document, as outlined in the companion memorandum to this agenda item.

As required by Minnesota law, MAC's seven-year CIP must be reviewed by the Metropolitan Council. This preliminary program will be submitted to the sub-committees of the Metropolitan Council for initial review and discussion. Upon MAC's adoption of the final December version of the program, MAC will request review by the full Metropolitan Council of the adopted program in January 2023.

Looking forward, please note that the recommended action in December specific to the 2023-2029 CIP will include adoption of a proposed final CIP as well as authorize staff to:

- (a) Prepare plans and specifications and advertise for bids for the 2023 projects.
- (b) Conduct further studies to refine the scopes and costs, and to prepare plans and specifications for the 2024 projects.
- (c) Conduct studies and develop preliminary plans and specifications for the 2025 projects.
- (d) Utilize consultants as necessary in accordance with MAC's consultant use policies.
- (e) Initiate appropriate documentation to apply for federal, state, and PFC funding.
- (f) Forward the adopted 2023-2029 CIP to the Metropolitan Council for their review.

### 2023 - 2029 CAPITAL IMPROVEMENT PROGRAM DEVELOPMENT SCHEDULE



**LEGEND**

- Time range
- Meeting Date
- Document Issue Date
- Comments Due Date
- \* Date to be verified



2023-2029 Capital Improvement Program - Preliminary Draft	2023	2024	2025	2026	2027	2028	2029
<b>MSP End of Life/Replacement Projects</b>							
10 - Terminal 1							
Concourse and Hub Tram Replacement	\$ 500,000			\$ 300,000,000	\$ 300,000,000		
Cooling Unit Replacement		\$ 1,125,000					
Passenger Boarding Bridge Replacements	\$ 10,000,000	\$ 4,000,000	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000
Recarpeting Program change name for E only?			\$ 2,000,000				
Terminal 1 Outbound Baggage Handling System Replacement						\$ 250,000,000	
13 - Energy Management Center							
Concourse E and F Bridge Heating and Cooling System Replacement	\$ 2,100,000	\$ 2,200,000	\$ 1,800,000				
EMC Boiler and Chiller Replacement Study	\$ 155,000						
GTC Dual-temperature Pump Improvements	\$ 1,800,000						
Variable Air Volume (VAV) Box Replacement	\$ 950,000	\$ 950,000	\$ 950,000				
21 - Field and Runway							
30L Deicing Pad Reconstruction	\$ 10,000,000		\$ 10,000,000	\$ 10,000,000			
30L EMAS Replacement				\$ 19,000,000			
Airfield Snow Melter Replacement/Upgrades	\$ 1,800,000	\$ 1,800,000	\$ 1,800,000	\$ 1,800,000	\$ 2,000,000	\$ 2,000,000	
Bituminous Shoulder Reconstruction	\$ 7,000,000	\$ 7,500,000	\$ 7,000,000	\$ 7,000,000	\$ 7,000,000		
Concourse G Apron Pavement Reconstruction	\$ 7,500,000	\$ 18,750,000	\$ 7,500,000		\$ 7,000,000		
Runway 12L-30R and 4-22 Intersection Reconstruction		\$ 11,000,000					
Taxiway A Pavement Reconstruction				\$ 6,500,000	\$ 9,500,000	\$ 8,500,000	
Taxiway B Pavement Reconstruction	\$ 4,000,000		\$ 4,000,000		\$ 4,000,000		
26 - Terminal Roads/Landside							
Terminal 1 Access Roadway Bridge Rehabilitation	\$ 4,750,000						
UPS Loop Pavement Reconstruction		\$ 1,800,000					
Variable Message Signs Replacement, Phase 3		\$ 1,600,000					
31 - Parking							
Parking Ramp Snow Melter Replacement/Upgrades		\$ 1,350,000	\$ 1,350,000				
36 - Terminal 2							
Terminal 2 Pre-Conditioned Air (PCA)	\$ 2,300,000						
Terminal 2 Recarpeting Program	\$ 800,000	\$ 1,300,000	\$ 150,000				
Terminal 2 Ticket Counter/Insert Replacement			\$ 730,000				
39 - Public Areas/Roads							
East 62nd Street Reconstruction					\$ 3,900,000		
East 70th Street Reconstruction		\$ 2,400,000					
Post Road Reconstruction Project				\$ 5,000,000			
56 - Trades/Maintenance Buildings							
MSP Liquid Deicer Storage Facility	\$ 11,200,000						
66 - Fire							
Fire Alarm System Transition	\$ 1,500,000	\$ 2,000,000	\$ 1,200,000	\$ 1,000,000	\$ 1,200,000		
70 - General Office/Administration							
GO Building VAV Replacement and Upgrade			\$ 2,000,000				
<b>MSP End of Life/Replacement Projects Subtotal</b>	<b>\$ 66,355,000</b>	<b>\$ 57,775,000</b>	<b>\$ 50,480,000</b>	<b>\$ 360,300,000</b>	<b>\$ 344,600,000</b>	<b>\$ 270,500,000</b>	<b>\$ 10,000,000</b>

2023-2029 Capital Improvement Program - Preliminary Draft	2023	2024	2025	2026	2027	2028	2029
<b>MSP IT Projects</b>							
10 - Terminal 1							
Concourse C and G Digital Directory Replacement		\$ 200,000					
Customs Border Protection Camera System Upgrade	\$ 850,000					\$ 1,000,000	
MAC Technology Upgrades	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000	\$ 11,000,000	\$ 11,000,000	\$ 11,000,000	\$ 11,000,000
Telecom Room Equipment Continuity (TREC)		\$ 1,510,000					
63 - Police							
Card Access Modifications		\$ 2,500,000		\$ 2,800,000		\$ 2,500,000	
<b>MSP IT Projects Subtotal</b>	<b>\$ 10,850,000</b>	<b>\$ 14,210,000</b>	<b>\$ 10,000,000</b>	<b>\$ 13,800,000</b>	<b>\$ 11,000,000</b>	<b>\$ 14,500,000</b>	<b>\$ 11,000,000</b>
<b>MSP Long Term Comprehensive Plan Projects</b>							
10 - Terminal 1							
Baggage Claim/Ticket Lobby Operational Improvements	\$ 47,675,000	\$ 15,000,000					
Checkpoint Expansion							\$ 11,000,000
Concourse G Infill - Pod 2-3	\$ 23,500,000	\$ 351,500,000					
Design and Construction Standards Update	\$ 350,000						
D-Pod Outbound Baggage System					\$ 15,000,000		
MSP Airport Layout Plan			\$ 1,000,000				
MSP Environmental Review			\$ 2,000,000				
MSP Long Term Plan							\$ 3,000,000
MSP Obstructions Removals				\$ 1,000,000		\$ 1,000,000	
21 - Field and Runway							
NAVAIDS Study for North Campus Development	\$ 350,000						
Runway 30R Parallel Taxiway				\$ 12,000,000	\$ 10,000,000	\$ 14,000,000	
36 - Terminal 2							
Long Term Plan Projects (fees)		\$ 1,000,000					
Terminal 2 North Gate Expansion		\$ 195,000,000					
<b>MSP Long Term Comprehensive Plan Projects Subtotal</b>	<b>\$ 71,875,000</b>	<b>\$ 562,500,000</b>	<b>\$ 3,000,000</b>	<b>\$ 13,000,000</b>	<b>\$ 25,000,000</b>	<b>\$ 15,000,000</b>	<b>\$ 14,000,000</b>

2023-2029 Capital Improvement Program - Preliminary Draft	2023	2024	2025	2026	2027	2028	2029
<b>MSP Maintenance/Facility Upgrade Projects</b>							
10 - Terminal 1							
ADO Office Expansion		\$ 4,000,000					
Art Display Areas	\$ 200,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000
Arts Master Plan	\$ 665,000	\$ 1,240,000	\$ 1,565,000	\$ 565,000	\$ 600,000	\$ 600,000	
C/G Connector Lighting Improvements			\$ 1,000,000				
Concourse A Heating System Upgrade		\$ 11,000,000					
Concourse G Moving Walks			\$ 6,000,000				
Delivery Node Redevelopment	\$ 2,700,000	\$ 2,300,000	\$ 2,700,000	\$ 7,800,000	\$ 4,320,000	\$ 5,000,000	
F/G Connector & Skyclub Repairs and Improvements			\$ 1,100,000				
Folded Plate Repairs			\$ 43,400,000				
Lavatory Buildings Rehab		\$ 4,400,000					
Lighting Infrastructure Technology and Equipment (LITE)	\$ 2,300,000	\$ 1,500,000	\$ 2,550,000	\$ 1,500,000	\$ 2,550,000	\$ 1,500,000	\$ 2,200,000
LRT Stations Updates		\$ -	\$ 1,600,000				
Restroom Upgrade Program	\$ 2,050,000	\$ 2,050,000	\$ 2,050,000	\$ 2,050,000	\$ 2,050,000	\$ 2,050,000	\$ 2,050,000
Steam System Upgrade Program		\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	
Terminal 1 Information Booth Replacements			\$ 850,000				
Terminal 1 Curbside Canopy Repairs and Lighting Upgrades		\$ 350,000					
Terminal 1 Employee Breakroom			\$ 450,000				
Terminal 1 Mechanical Room C-1043	\$ 9,800,000						
Terminal 1 Tug Drive Heater Replacement	\$ 1,500,000	\$ 2,000,000					
Terminal 1 Tug Drive Waterproofing		\$ 2,900,000	\$ 2,900,000	\$ 2,900,000	\$ 2,900,000		
Way-Finding Sign Backlighting Replacement	\$ 2,000,000	\$ 1,000,000	\$ 3,000,000		\$ 2,000,000		\$ 2,000,000
13 - Energy Management Center							
Chiller Plant Optimization		\$ 3,000,000					
Energy Savings Program	\$ 2,000,000		\$ 2,000,000		\$ 2,000,000		
Indoor Air Quality Monitoring System	\$ 1,500,000	\$ 1,000,000					
MAC Automation Infrastructure Program	\$ 2,300,000	\$ 2,300,000	\$ 2,300,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000
Material Storage Building - Boiler Room Addition	\$ 1,830,000						
Steam Trap Monitoring System				\$ 3,000,000			
Terminal 2 Penthouse Chiller Plant Infrastructure Upgrades		\$ 5,500,000					
Victaulic Piping Replacement		\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 2,200,000	\$ 2,300,000	\$ 2,350,000
21 - Field and Runway							
Airfield Security Screening Facility (Study)	\$ 250,000						
Anti-Climb Fencing & Lighting	\$ 275,000						
Apron Lighting LED Upgrade		\$ 5,000,000	\$ 1,000,000	\$ 3,000,000	\$ 1,000,000	\$ 1,000,000	
Field Maintenance Bldg Efficiency Program			\$ 53,000,000		\$ 105,000,000		\$ 46,000,000
Localizer Array Upgrade	\$ 2,000,000						
Runway LED Lighting Upgrade	\$ 1,500,000	\$ 1,700,000	\$ 2,700,000				
Taxiways B & Q Islands	\$ 700,000						
Terminal 2 Glycol Lift Station/forcemain		\$ 1,100,000					
Tunnel Lighting LED Upgrade		\$ 1,100,000	\$ 1,000,000	\$ 900,000	\$ 400,000	\$ 1,200,000	
26 - Terminal Roads/Landside							
Tunnel Approaches Reconstruction	\$ 2,600,000						
<i>MSP Maintenance/Facility Upgrade Projects continues on the next page</i>							

2023-2029 Capital Improvement Program - Preliminary Draft	2023	2024	2025	2026	2027	2028	2029
<i>MSP Maintenance/Facility Upgrade Projects (continued)</i>							
31 - Parking							
Parking Guidance System			\$ 6,500,000				
Parking Ramp Railing Refinishing		\$ 1,000,000		\$ 1,000,000		\$ 1,000,000	
Red/Blue Parking Levels 2 & 3			\$ 9,200,000				
Rental Car EV Charging Infrastructure	\$ 1,500,000						
36 - Terminal 2							
Ramp Information Display System (RIDS)			\$ 3,600,000				
Terminal 2 Baggage Handling System			\$ 410,000				
Terminal 2 Gate Area Passenger Amenities			\$ 1,000,000				
Terminal 2 Gate Desk/Podium Replacement					\$ 450,000		
Terminal 2 Ground Transportation Waiting Area Expansion			\$ 400,000				
Terminal 2 lobby passenger flow program		\$ 1,000,000					
Terminal 2 MUFIDS/EVIDS Millwork Upgrades			\$ 350,000				
Terminal 2 Skyway to LRT Flooring Installation			\$ 800,000				
Terminal Door Locks and Emergency Egress Upgrades		\$ 400,000					
39 - Public Areas/Roads							
34th Avenue Bus Area Reconstruction		\$ 800,000					
34th Avenue Reconstruction				\$ 7,800,000	\$ 7,800,000		
34th Avenue Sanitary Sewer Replacement				\$ 2,200,000			
34th Avenue Traffic Control Improvements		\$ 200,000					
Diverging Diamond Intersection Rehabilitation					\$ 380,000		
Highway 494 Terminal and Airline Signs	\$ 300,000						
Taxi Cab Holding Lot Rehabilitation for Cell Phone Lot				\$ 650,000			
Terminal 1 Ground Transportation Modifications	\$ 1,140,000						
Terminal 1 Inbound Roadway Median Improvements			\$ 3,300,000				
Tunnel Fan Replacement		\$ 4,700,000	\$ 6,800,000				
46 - Hangars and Other Buildings							
MAC Storage Facility		\$ 30,000,000					
Safety and Security Center		\$ 150,000,000					
56 - Trades/Maintenance Buildings							
South Field Maintenance Building Wash Bay		\$ 3,500,000					
63 - Police							
Perimeter Fence Intrusion Detection System			\$ 1,000,000				
Perimeter Gate Security Improvements		\$ 6,500,000	\$ 6,500,000				
Police Department Improvements at Terminals 1 & 2						\$ 1,500,000	
Public Safety Modifications	\$ 1,000,000		\$ 1,000,000		\$ 850,000		\$ 850,000
Squad Parking Modifications				\$ 140,000			
66 - Fire							
Campus Fire Protection		\$ 2,400,000		\$ 3,400,000		\$ 1,900,000	\$ 3,500,000
76 - Environment							
Glycol Sewer & Storm Sewer Inspection/Rehabilitation		\$ 1,700,000	\$ 600,000				
Ground Service Equipment (GSE) Electrical Charging Stations	\$ 3,000,000						
Infield Fueling Facility Secondary Containment			\$ 400,000				
Lift Station at Ponds 1 and 2			\$ 2,300,000				
MSP Pond 3 / 494 Pond Sediment Removal & Repairs			\$ 5,500,000				
Runway 12R-30L Glycol Forcemain Environmental Improvements	\$ 2,000,000						
Terminal 2 Remote Ramp Lot/Drainage Improvements		\$ 2,000,000					
<b>MSP Maintenance/Facility Upgrade Projects Subtotal</b>	<b>\$ 45,110,000</b>	<b>\$ 263,490,000</b>	<b>\$ 186,675,000</b>	<b>\$ 45,155,000</b>	<b>\$ 138,750,000</b>	<b>\$ 22,300,000</b>	<b>\$ 61,600,000</b>
<b>MSP Noise Mitigation Projects</b>	<b>\$ 500,000</b>	<b>\$ 1,000,000</b>	<b>\$ 500,000</b>				

2023-2029 Capital Improvement Program - Preliminary Draft	2023	2024	2025	2026	2027	2028	2029
<b>MSP Ongoing Maintenance Programs</b>							
10 - Terminal 1							
Air Handling Unit Replacement	\$ 6,500,000	\$ 6,500,000	\$ 13,000,000	\$ 13,000,000	\$ 13,000,000	\$ 13,000,000	\$ 13,000,000
Baggage System Upgrades	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Concourse G Rehabilitation		\$ 10,000,000					
Conveyance System Upgrades			\$ 3,000,000				
Electrical Infrastructure Program (EIP)	\$ 2,500,000	\$ 2,500,000		\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000
Electrical Substation Replacement	\$ 7,500,000	\$ 3,300,000	\$ 1,500,000	\$ 10,000,000	\$ 10,000,000		
Emergency Power Upgrades	\$ 6,600,000	\$ 2,500,000		\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000
Plumbing Infrastructure Upgrade Program	\$ 600,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000
Terminal Building Remediation Program	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000
Terminal Miscellaneous Modifications	\$ 2,600,000	\$ 2,600,000	\$ 2,600,000	\$ 2,600,000	\$ 2,600,000	\$ 3,100,000	\$ 3,100,000
13 - Energy Management Center							
EMC Life Safety Infrastructure Program		\$ 1,900,000	\$ 1,900,000	\$ 1,900,000	\$ 1,900,000	\$ 1,900,000	\$ 1,900,000
EMC Plant Upgrades (T1 & T2)	\$ 2,000,000	\$ 2,100,000	\$ 2,150,000	\$ 2,200,000	\$ 2,300,000	\$ 2,400,000	\$ 2,500,000
21 - Field and Runway							
Airside Electrical Construction	\$ 2,000,000	\$ 2,500,000	\$ 4,500,000				
Airside Roadway Pavement Restoration	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000
Miscellaneous Airfield Construction	\$ 3,500,000	\$ 1,500,000					
Pavement Joint Sealing/Repair	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
26 - Terminal Roads/Landside							
Tunnel/Bridge Inspections	\$ 100,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 150,000	\$ 150,000
Tunnel/Bridge Miscellaneous Modifications			\$ 1,000,000		\$ 1,000,000		\$ 1,000,000
31 - Parking							
Parking Structure Rehabilitation	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000
39 - Public Areas/Roads							
Concrete Joint Repair	\$ 900,000	\$ 1,000,000	\$ 300,000	\$ 400,000	\$ 1,200,000	\$ 2,900,000	\$ 750,000
Landside Pavement Rehabilitation	\$ 500,000	\$ 500,000	\$ 500,000		\$ 500,000	\$ 600,000	\$ 600,000
Landside Utility Rehabilitation	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000
Roadway Fixture Refurbishment	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
46 - Hangars and Other Buildings							
Campus Building Rehab Program	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000		\$ 1,500,000		\$ 1,500,000
Campus Parking Lot Reconstructions	\$ 650,000	\$ 650,000				\$ 700,000	
End of Life Campus Building Demolition			\$ 400,000	\$ 3,700,000			
MSP Campus Building Roof Replacements	\$ 8,300,000	\$ 6,100,000	\$ 12,500,000	\$ 10,200,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
56 - Trades/Maintenance Buildings							
Sump Pump Controls		\$ 4,000,000	\$ 4,000,000	\$ 3,500,000			
70 - General Office/Administration							
GO Building Improvements		\$ 500,000		\$ 500,000		\$ 500,000	
<b>MSP Ongoing Maintenance Programs Subtotal</b>	<b>\$ 55,150,000</b>	<b>\$ 59,870,000</b>	<b>\$ 59,070,000</b>	<b>\$ 63,220,000</b>	<b>\$ 50,420,000</b>	<b>\$ 41,550,000</b>	<b>\$ 40,800,000</b>

2023-2029 Capital Improvement Program - Preliminary Draft	2023	2024	2025	2026	2027	2028	2029
<b>MSP Tenant Projects</b>							
10 - Terminal 1							
Concessions Upgrades/Revenue Development	\$ 100,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Concourse and Gatehold Modernization	\$ 23,800,000	\$ 85,600,000	\$ 73,100,000				
Delta Re-booking Station		\$ 350,000					
Elevator and concourse improvements related to relocated United Club	\$ 200,000					\$ 1,000,000	
Terminal 1 FIS Gate Common Use Additions	\$ 1,500,000		\$ 5,000,000				
Terminal 1 Pre-Conditioned Air (PCA)		\$ 2,500,000					
36 - Terminal 2							
Terminal 2 Concessions Development	\$ 2,800,000						
39 - Public Areas/Roads							
Tenant Parking Lot Reconstruction			\$ 2,900,000				
46 - Hangars and Other Buildings							
Ground Service Equipment (GSE) Maintenance Facility	\$ 200,000					\$ 2,000,000	
<b>MSP Tenant Projects Subtotal</b>	<b>\$ 28,600,000</b>	<b>\$ 88,650,000</b>	<b>\$ 81,200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 3,200,000</b>	<b>\$ 200,000</b>
<b>Reliever Airports Long Term Comprehensive Plan Projects</b>							
81 - St. Paul							
STP Airport Layout Plan	\$ 500,000						
STP Environmental Review			\$ 800,000				
STP Long Term Comprehensive Plan	\$ 800,000						
82 - Lake Elmo							
21D Airport Layout Plan		\$ 100,000					
21D Long Term Comp Plan							\$ 500,000
83 - Airlake							
LVN Airport Layout Plan			\$ 100,000				
LVN Long Term Comp Plan							\$ 500,000
LVN Runway 12-30 Improvements		\$ 4,400,000					
84 - Flying Cloud							
FCM Environmental Review		\$ 800,000					
FCM Purchase and Demolition of Hangars	\$ 1,300,000						
FCM South Building Area Utilities				\$ 800,000			
85 - Crystal							
MIC Long Term Comp Plan						\$ 500,000	
86 - Anoka County - Blaine							
ANE Airport Layout Plan		\$ 500,000					
ANE Building Area Development - Xylite St. Relocation			\$ 1,000,000				
ANE LTCP Update		\$ 800,000					
<b>Reliever Airports Long Term Comprehensive Plan Projects Subtotal</b>	<b>\$ 2,600,000</b>	<b>\$ 6,600,000</b>	<b>\$ 1,900,000</b>	<b>\$ 800,000</b>	<b>\$ -</b>	<b>\$ 500,000</b>	<b>\$ 1,000,000</b>

2023-2029 Capital Improvement Program - Preliminary Draft	2023	2024	2025	2026	2027	2028	2029
<b>Reliever Airports Maintenance/Facility Upgrade Projects</b>							
<b>80 - Reliever Airports</b>							
Relievers Building Miscellaneous Modifications	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000
Relievers Obstruction Removal	\$ 300,000		\$ 300,000		\$ 300,000		\$ 300,000
Relievers Pavement Rehabilitation Miscellaneous Modifications	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Relievers Used Oil Sheds & Tanks			\$ 550,000				
<b>81 - St. Paul</b>							
STP Airport Perimeter Roads			\$ 500,000				
STP Airport Road and Eaton Street Retaining Wall						\$ 700,000	
STP Cold Equipment Storage Building				\$ 750,000			
STP Customs and Border Protection General Aviation Facility		\$ 4,500,000					
STP Floodwall Inspection and Repairs	\$ 200,000						
STP Intelligent Monitoring and Control System (IMACS) Expansion		\$ 2,250,000					
STP LED Edge Lighting Upgrades	\$ 500,000	\$ 1,500,000					
STP MAC Building Improvements	\$ 200,000		\$ 200,000		\$ 200,000		\$ 200,000
STP Pavement Rehabilitation-Taxilanes/Tower Road				\$ 750,000			
STP Runway 13-31 Pavement Reconstruction			\$ 5,000,000				
STP Runway 14-32 EMAS Replacement					\$ 10,000,000		
STP Runway 14-32 Reconstruction			\$ 5,000,000	\$ 5,000,000			
STP Storm Sewer Improvements		\$ 1,500,000					
STP Taxiway B Rehabilitation			\$ 800,000				
STP Taxiway Lima Rehabilitation					\$ 200,000		
STP Vehicle Gate Replacement	\$ 500,000						
<b>82 - Lake Elmo</b>							
21D AWOS Replacement			\$ 100,000				
21D Intelligent Monitoring and Control System (IMACS)			\$ 1,150,000				
21D Materials Storage Building		\$ 500,000					
21D North Building Area Pavement Rehabilitation		\$ 900,000					
21D North Service Roads Rehabilitation			\$ 500,000				
21D Northside Taxiway Reconstruction			\$ 600,000				\$ 600,000
21D Runway 04-22 Pavement Rehabilitation		\$ 4,000,000					
<b>83 - Airlake</b>							
LVN AWOS Replacement			\$ 100,000				
LVN Existing Runway 12-30 Reconstruction		\$ 3,500,000					
LVN Intelligent Monitoring and Control System (IMACS)				\$ 1,150,000			
LVN LED Edge Lighting	\$ 200,000						
LVN Maintenance Building Renovation			\$ 750,000				
LVN North Service Road Pavement Rehabilitation					\$ 500,000		
LVN North Taxilanes Pavement Rehabilitation					\$ 1,250,000		
LVN South Building Area Utilities and Taxilanes		\$ 1,300,000					
LVN Taxiway Bravo Pavement Rehabilitation		\$ 600,000					
<i>Reliever Airports Maintenance/Facility Upgrade Projects continues on the next page</i>							

<b>2023-2029 Capital Improvement Program - Preliminary Draft</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
<i>Reliever Airports Maintenance/Facility Upgrade Projects (continued)</i>							
<b>84 - Flying Cloud</b>							
FCM Airport Access Roads and Tango Lane				\$ 500,000			
FCM Airport Access Roads Pavement Rehabilitation					\$ 500,000	\$ 500,000	\$ 500,000
FCM Electrical Vault Modifications				\$ 500,000			
FCM Executive Aviation/MAC Maint Apron				\$ 600,000			
FCM Gate Replacements			\$ 500,000				
FCM Intelligent Monitoring and Control System (IMACS)		\$ 2,250,000					
FCM MAC Building Improvements				\$ 600,000			
FCM Parcel 7 Sewer and Water	\$ 300,000						
FCM Runway 10R-28L Pavement Rehabilitation		\$ 2,700,000					
FCM Runway 18-36 Pavement Rehabilitation							\$ 700,000
FCM Spring Lane Extension and Taxilane Connector	\$ 600,000						
FCM Tower Equipment for Airfield Lighting and Utilities			\$ 1,000,000				
FCM Underground Fuel Storage Tank Replacement		\$ 500,000					
<b>85 - Crystal</b>							
MIC Existing Hangar Revitalization				\$ 800,000			
MIC Intelligent Monitoring and Control System (IMACS)				\$ 1,150,000			
MIC LED Edge Lighting Upgrade	\$ 400,000						
MIC Runway 6L-24R Pavement Rehabilitation					\$ 2,500,000		
MIC Service Roads	\$ 1,200,000						
MIC Taxilanes Pavement Rehabilitation	\$ 750,000		\$ 600,000		\$ 600,000		
MIC Taxiway Alpha Pavement Reconstruction							\$ 1,200,000
MIC Tower Parking Lot Reconstruction		\$ 675,000					
MIC Underground Fuel Storage Tank Replacement		\$ 500,000					
<b>86 - Anoka County - Blaine</b>							
ANE AWQS Replacement	\$ 100,000						
ANE Electrical Vault Improvements			\$ 750,000				
ANE Equipment Storage and Maintenance Building	\$ 700,000						
ANE Gate Controller Upgrades				\$ 400,000			
ANE Intelligent Monitoring and Control System (IMACS)			\$ 1,150,000				
ANE Pavement Rehabilitation - Taxiway A and Edge Lights	\$ 1,800,000						
ANE Runway 18-36 Pavement Rehabilitation					\$ 3,000,000		
ANE Runway 9-27 Pavement Rehabilitation						\$ 3,750,000	
ANE Taxiway B Pavement Rehabilitation							\$ 1,400,000
ANE Underground Fuel Storage Tank Replacement		\$ 500,000					
ANE West Perimeter Road		\$ 1,800,000					
<b>Reliever Airports Maintenance/Facility Upgrade Projects Subtotal</b>	<b>\$ 8,450,000</b>	<b>\$ 30,175,000</b>	<b>\$ 20,250,000</b>	<b>\$ 12,900,000</b>	<b>\$ 19,750,000</b>	<b>\$ 5,650,000</b>	<b>\$ 5,600,000</b>
MSP Subtotal	\$ 278,440,000	\$ 1,047,495,000	\$ 390,925,000	\$ 495,675,000	\$ 569,970,000	\$ 367,050,000	\$ 137,600,000
Relievers Subtotal	\$ 11,050,000	\$ 36,775,000	\$ 22,150,000	\$ 13,700,000	\$ 19,750,000	\$ 6,150,000	\$ 6,600,000
<b>Total</b>	<b>\$ 289,490,000</b>	<b>\$ 1,084,270,000</b>	<b>\$ 413,075,000</b>	<b>\$ 509,375,000</b>	<b>\$ 589,720,000</b>	<b>\$ 373,200,000</b>	<b>\$ 144,200,000</b>



## 2023 Capital Improvement Program Narratives

### **MSP END OF LIFE/REPLACEMENT PROJECTS**

End of Life/Replacement projects include systems, components, and pavements that can no longer be economically or feasibly maintained and must be replaced.

#### **10 – Terminal 1**

##### **Concourse and Hub Tram Replacement \$500,000**

This project funds a study to evaluate equipment and procurement options for the replacement of the Hub Core and Concourse C Trams which are nearing the end of their useful life.

##### **Passenger Boarding Bridge Replacements \$10,000,000**

This program replaces jet bridges at Terminal 1. Bridges to be replaced will be determined based on a condition assessment and input from the airlines. Aircraft parking positions will be optimized at the impacted gates and fuel pits adjusted as necessary. Podiums and door openings may also be adjusted to optimize gate hold area. It is assumed fixed walkways may need to be replaced or added to meet ADA slope requirements and all gate hold areas will be upgraded with security doors, card readers, and cameras.

#### **13 – Energy Management Center**

##### **Concourse E and F Bridge Heating and Cooling System Replacement \$2,100,000**

This is the first of three phases of work to replace and improve the heating and cooling systems on the bridges to Concourses E and F. In this phase, the original chilled water piping will be replaced and located in an accessible soffit. A redundant cooling loop will be added as well to minimize impacts to the concourses during disruptions and construction relocations.

##### **EMC Boiler and Chiller Replacement Study \$155,000**

This is a study to review the Terminal 1 boilers and chillers for replacement. The study will look at replacement equipment with a more efficient design, as well as building impacts to remove the old equipment and bring the new equipment into the building.

##### **GTC Dual-temperature Pump Improvements \$1,800,000**

This project will replace end of life pumps and supporting infrastructure.

##### **Variable Air Volume (VAV) Box Replacement \$950,000**

This program will replace Variable Air Volume (VAV) boxes throughout Terminal 1 with more efficient equipment connected to the IMACS system and located for maintenance accessibility.

#### **21 – Field and Runway**

##### **30L Deicing Pad Reconstruction \$10,000,000**

This is the first of three phases to reconstruct the deicing pad at Runway 30L.

##### **Airfield Snow Melter Replacement/Upgrades \$1,800,000**

This project will replace, modify and/or upgrade snow melters on the airfield that are beyond their useful life.

**Bituminous Shoulder Reconstruction** **\$7,000,000**

This project provides for the reconstruction of full depth bituminous shoulder at the end of Runway 30R from Taxiway P1 to Taxiway P3. Work will include removals, crushed aggregate base, bituminous pavement, pavement marking, and electrical construction.

**Concourse G Apron Pavement Reconstruction** **\$7,500,000**

This project will reconstruct a portion of the apron area adjacent to Concourse G. Work will include removals, excavation, granular material, crushed aggregate base, concrete pavement, fuel pits, and pavement marking.

**Taxiway B Pavement Reconstruction** **\$4,000,000**

This project will reconstruct a portion of Taxiway B. Work will include removals, excavation, granular material, crushed aggregate base, concrete pavement, bituminous shoulders, pavement marking, and taxiway centerline lights.

**26 – Terminal Roads/Landside**

**Terminal 1 Access Roadway Bridge Rehabilitation** **\$4,750,000**

This project will repair the bridge deck, replace expansion joints, paint to protect the steel beams, and complete other repairs as needed.

**36– Terminal 2**

**Terminal 2 Pre-conditioned Air (PCA)** **\$2,300,000**

This project will replace outdated pre-conditioned air (PCA) units at Gates H1-H10 at Terminal 2 with new units that meet the MAC standard.

**Terminal 2 Recarpeting Program** **\$800,000**

This multi-year program will replace end of life carpeting throughout Terminal 2.

**56– Trades/Maintenance Buildings**

**MSP Liquid Deicer Storage Facility** **\$11,200,000**

This project includes construction of a new airfield runway deicer storage and off-loading facility with additional offload ports, upload ports, and increased liquid capacity for airfield runway deicing chemicals.

**66 – Fire**

**Fire Alarm System Transition** **\$1,500,000**

In an effort to improve monitoring reliability and eliminate the existing single point of failure configuration, this multi-year project will include database redundant systems, device controller upgrades and the decentralization of the fire alarm master control equipment.

## **MSP IT PROJECTS**

MSP IT Projects include those that have a significant amount, if not all, technology-related enhancements, maintenance, or restructuring.

### **10 – Terminal 1**

#### **Customs and Border Protection Camera System Upgrade \$850,000**

The Customs and Border Protection’s security camera system has reached the end of its functional and repairable life. The agency requires a standalone camera system rather than one integrated with the MAC IVISN system. The 2023 project will complete gaps in coverage and additional cameras to support CBP operational needs.

#### **MAC Technology Upgrades \$10,000,000**

Each year, there are several IT projects that are beyond the resources of MAC’s staff and operating budget to accomplish. These projects are prioritized and completed either as a series of contracts or as purchase orders. Work may include Fiber Optic Cable Upgrades, MACNet maintenance and upgrades, EVIDs/MUFIDs digital signs, Wireless System enhancements, and MAC Public Address System maintenance and upgrades. The list of potential projects will be compiled and prioritized in early 2022.

## **MSP LONG TERM COMPREHENSIVE PLAN PROJECTS**

MSP Long Term Comp Plan projects include projects that enhance or expand the airport facilities in order to meet existing or forecasted passenger needs.

### **10 – Terminal 1**

#### **2023 Baggage Claim / Ticket Lobby Operational Improvements \$47,675,000**

This program addresses issues of congestion and functionality in the Baggage Claim and Ticket Lobby. It will provide the level of service requirements for short and medium-term growth of the origin and destination passengers, including walkways that meet required codes, public seating areas, centralized meet and greet space, unclaimed baggage storage, baggage service offices, concessions, improved lighting, fire protection throughout the space, structural enhancements, improved sight lines, curbside lighting and access, ticket counter consolidations, airline ticket offices, improved vestibules and access, east mezzanine removal/reduction, structural enhancements, curtain wall replacement, and other operational improvements.

#### **2023 Concourse G Infill – Pod 2-3 \$23,500,000**

This project includes an expansion/redevelopment of Concourse G. The expansion includes an infill between the existing Pods 2 and 3, which will provide enlarged gate hold areas. The redevelopment will include new and upgraded restrooms, new moving walkways, new mechanical rooms and air handling equipment, redevelopment of concessions space and miscellaneous relocations of tenant space within the project footprint

#### **Design and Construction Standards Update \$350,000**

This project will fund consultant support of updating the MAC’s Design and Construction Standards to improve consistency and clarity for project teams, including those for tenant construction projects.

### **21 – Field and Runway**

#### **NAVAIDS Study for North Campus Development \$350,000**

This project funds a one-time study of navigational aids related to development on the MSP campus in conjunction with the airport long term plan efforts. This study is needed for analysis of north field development potential.

## **MSP MAINTENANCE/FACILITY UPGRADE PROJECTS**

MSP Maintenance/Facility Upgrade projects include those that provide improvements to individual buildings or systems across the campus on a one-time or short-term basis.

### **10 – Terminal 1**

#### **Art Display Areas \$200,000**

This program is a continuation of the existing program, in partnership with the MSP Foundation, to provide opportunities and space build out for the display of permanent and temporary/rotating art exhibits.

#### **Arts Master Plan \$665,000**

This program supports procurement of commissioned art and rotating exhibits as part of the Percent for Arts program.

#### **Delivery Node Redevelopment \$2,700,000**

MAC's existing node delivery and storage system requires long-term improvements at Terminal 2, and Terminal 1 (Concourses A, C, E, F, and G) to provide for safe and efficient delivery, by the logistics company, to MAC and airport tenants. This program will improve or replace existing nodes with more centralized locations that should include loading docks, elevators where needed, adjacent storage, trash and recycling, etc. The 2023 project is planned to redevelop the former main dock under Concourse C at Terminal 1, replaced by the MAC Receiving and Distribution Center, to achieve highest use.

#### **Lighting Infrastructure Technology and Equipment (LITE) \$2,300,000**

This is a multi-year program that will analyze, assemble, and organize lighting system upgrade recommendations for the MSP campus. Annual investment in lighting infrastructure is necessary to ensure its safe operation, reduce energy and maintenance costs, and to implement technology upgrades to improve lighting quality. Light fixtures age and degrade due to time, heat or exterior elements. Lighting technologies upgrades will also provide for more energy efficient lighting systems.

#### **Restroom Upgrade Program \$2,050,000**

A study of all restrooms in Terminal 1 was completed in 2010 and a program developed to upgrade/modernize the restrooms at Terminal 1. From this study, each restroom was prioritized based on its condition. This program will provide for the phased modernization of the Terminal 1 restrooms to include upgraded finishes, lighting, air quality, energy saving upgrades, and ADA compliance.

#### **Terminal 1 Mechanical Room C-1043 \$9,800,000**

Concourse C Mechanical Room C-1043 is a mechanical room that houses a very large aging high pressure steam pressure reducing station, an aging domestic water main meter assembly, aging HVAC pumps, fire protection valves, electrical conduits etc. This project will expand and separate portions of the system into unused rooms and replace systems which will be safer, more efficient, meet current code requirements and be reliable.

#### **Terminal 1 Tug Drive Heater Replacement \$1,500,000**

This project will replace all existing Terminal 1 tug drive steam unit heaters with hot water unit heaters.

**Way-Finding Sign Backlighting Replacement** **\$2,000,000**

Wayfinding is a critical customer service piece of our passenger's experience at MSP. Existing wayfinding signs are outdated, provide information no longer relevant, or are no longer illuminated. This program replaces the failed cold-cathode illumination with LED backlit signs as it is not practical or cost effective to repair them. This program updates sign information, locations, and provides new illuminated signs and/or digital signs where needed at Terminal 1 and Terminal 2 and supports repair that exceeds routine maintenance budgets.

**13 – Energy Management Center**

**Energy Savings Program** **\$2,000,000**

The scope of this year's project involves work at both Terminal 1 and Terminal 2 and in general includes the replacement of valves, boilers, lighting controls, and motors with high efficiency models.

**Indoor Air Quality Monitoring System** **\$1,500,000**

This project continues efforts begun in 2021 to add CO2 and NO2 sensors where required and tie new and existing sensors to the IMACS system for remote monitoring and automatic safety ventilation. It will provide the Energy Management Center with advanced modular Indoor Air Quality sensors to install temporarily at any location with IMACS connectivity. The project will also upgrade controls wiring for the post fire smoke evacuation systems.

**MAC Automation Infrastructure Program** **\$2,300,000**

This is a continuation of a multi-year program to upgrade all MAC building automation systems to an open architecture protocol so that MAC can bid maintenance and construction contracts more competitively. This project will replace sole-source controllers such as Siemens and Legacy Honeywell with controllers from Honeywell, Circon, Distech, and TAC systems that are LonMark certified products.

**Material Storage Building – Boiler Room Addition** **\$1,830,000**

This project will replace the corrosion damaged boiler equipment and install it in a new boiler room. The equipment to be replaced is dangerous to maintain due to the corrosion and has already begun to fail and has caused safety concerns. This CIP would build a new boiler room, new boilers, pumps, piping, controls, electrical power and VFD's, unit heater and remove existing boiler equipment in existing mechanical spaces.

**21 – Field and Runway**

**Airfield Security Screening Facility Study** **\$250,000**

This study will assist MAC staff to determine location, type, and number of staffed field gates or midfield inspection areas to maximize the number of badge holders screened on the airfield. A subsequent project to execute the study's recommendations will be proposed to enhance both airfield and terminal security.

**Anti-Climb Fencing and Lighting** **\$275,000**

Fencing, CCTV cameras, and lighting will be added between Gate 124 and the Terminal 1 inbound roadway rock wall.

**Localizer Array Upgrade** **\$2,000,000**

This project will upgrade the parallel runways' localizer arrays to improve instrument approaches signal clarity.

<b><u>Runway LED Lighting Upgrade</u></b>	<b>\$1,500,000</b>
This project will replace lighting on Runway 12R-30L with LED lighting.	
<b><u>Taxiways B and Q Islands</u></b>	<b>\$700,000</b>
This project will construct taxiway islands created by Taxiways A and B, C and D, and P and Q.	
<b>26 – Terminal Roads/Landside</b>	
<b><u>Tunnel Approaches Reconstruction</u></b>	<b>\$2,600,000</b>
This project will provide for the reconstruction of the approaches to Tunnel Y-3 and 17-35 Tunnel. These tunnels were constructed in the early 2000's and have had periodic maintenance activities to date. The existing concrete tunnel approaches for Tunnel Y-3 are in need of reconstruction as the pavement has been repaired but the repairs require yearly maintenance efforts that provide a temporary solution. A permanent solution is to reconstruct the approaches to correct the panel movements and other ongoing issues of the approach sections. The tunnel approaches to the 17-35 Tunnel is similar to Tunnel Y-3 on maintenance with less panel and other issues such that rehabilitation and/or reconstruction should be reviewed.	
<b>31 – Parking</b>	
<b><u>Rental Car EV Charging Infrastructure</u></b>	<b>\$1,500,000</b>
This project will install electrical infrastructure on levels 2-5 of the Silver Parking Ramp at Terminal 1 for the rental car agencies to support the agencies' installation of electric vehicle (EV) charging stations as they add EVs to their fleets.	
<b>39 – Public Areas/Roads</b>	
<b><u>Highway 494 Terminal and Airline Signs</u></b>	<b>\$300,000</b>
This project will fund replacement of overhead signage on Interstate Highway 494 and Minnesota Highway 5 to accommodate eight airline names per sign instead of the existing signs' limit of six.	
<b><u>Terminal 1 Ground Transportation Modifications</u></b>	<b>\$1,140,000</b>
This project will relocate the Taxi, Transportation Network Companies (TNCs), and other transportation services at the Terminal 1 Ground Transportation Center. Configuration of existing east and west commercial areas will be revised. Anticipated work includes variable message sign relocation, pavement marking, signage, and other related items.	
<b>63 – Police</b>	
<b><u>Public Safety Modifications</u></b>	<b>\$1,000,000</b>
This program enhances the safety of the MSP campus through door hardware, signage, security controls, and other equipment to provide for egress requirements, code compliance, security conformity, and emergency responder access.	
<b>76 – Environment</b>	
<b><u>Ground Service Equipment (GSE) Electrical Charging Stations</u></b>	<b>\$3,000,000</b>
This project will purchase and install charging stations for airline electric ground support equipment (GSE). These fast, energy-efficient charging stations allow for simultaneous charging, adjustable charging rates, and automatic shut-off when the GSE are fully charged. The charging stations are to be installed at Terminal 1 for use by Delta GSE. This project fits into the proposed long-term goal of converting all Delta GSE to electric power thereby reducing overall air emissions and noise pollution at MSP from fossil fuel-burning GSE. Delta will pay for electric usage of the charging units.	

**Runway 12R-30L Glycol Forcemain Environmental Improvements** **\$2,000,000**

This project provides for construction of glycol pumping stations and forcemains to convey glycol-impacted stormwater from the Runway 30R and 30L deicing pads to the existing glycol sewers west of Runway 4-22 and the glycol management facility.

**MSP NOISE MITIGATION PROJECTS**

**Noise Mitigation Consent Decree Amendment** **\$500,000**

The Consent Decree First Amendment Program is a residential noise mitigation program that began in March 2014 under the terms of an amended legal agreement (Consent Decree) between the Metropolitan Airports Commission (MAC) and the cities of Richfield, Minneapolis, and Eagan, and approved by the Hennepin County District Court (effective until December 31, 2024). Under this program, eligibility of single-family and multi-family homes will be determined annually, based upon actual noise contours that are developed for the preceding calendar year, beginning in March 2014. This project will provide noise mitigation for those single family and multifamily homes meeting the eligibility requirements of the program.

**MSP ONGOING MAINTENANCE PROJECTS**

MSP On-Going Maintenance projects include buildings, systems, pavements, and other infrastructure that require improvements on an annual basis in order to maintain the facilities and manage MAC assets.

**10 – Terminal 1**

**Air Handling Unit Replacement** **\$6,500,000**

There are existing air handling units serving Terminal 1 that were installed with the original terminal construction in 1958-60 and are over 50 years old. A study of these units has been completed that evaluated each unit's age, condition, and its ability to adequately heat or cool the spaces it serves. A multi-year program has been implemented to provide for the replacement of the units that have been identified as needing replacement. The project costs include modifications to building walls to facilitate the removal of existing equipment and installation of the new units, upgraded electrical and temperature controls, and asbestos abatement.

**Baggage System Upgrades** **\$500,000**

This multi-year program will provide necessary upgrades to the inbound and outbound baggage system not covered by general system maintenance.

**Electrical Infrastructure Program** **\$2,500,000**

There are 53 electrical substations that serve the Terminal 1 complex. It is imperative that these substations be routinely inspected, cleaned, and upgraded to ensure their continued performance.

**Electrical Substation Replacement** **\$7,500,000**

This is a multi-year program to replace electrical substations which are at or very near end of life. This program will also improve redundancy.

**Emergency Power Upgrades** **\$6,600,000**

A study and survey of Terminal 1 transfer switches and emergency lighting was completed in 2008. This year's project is part of a multi-year program that will continue the design and implementation of emergency power and lighting corrective work identified in this study.

**Plumbing Infrastructure Upgrades** **\$600,000**

In 2010, MAC staff prepared a preliminary study of the reliability and maintainability of the existing plumbing infrastructure. Portions of the existing plumbing infrastructure serving Terminal 1 are over 40 years old, have systems that are undersized for today's demands, contain isolation valves that are either inaccessible or no longer functional, and utilize aging water meter systems. There are also deteriorated sections of the existing sanitary and storm water systems. This ongoing program was implemented in 2012 to upgrade the plumbing infrastructure system to meet current code requirements and MAC standards. The focus of the 2023 project is to continue the replacement of aging plumbing systems.

**Terminal Building Remediation Program** **\$3,000,000**

Continual maintenance of the terminal buildings is imperative to passenger comfort and safety as well as sustainability of the MAC asset. Age and weather contribute to building deterioration, mold, and other health issues. Building and concourse envelope issues include curtain wall systems, glazing, sealant repair/replacement, louver repair/replacement, metal panel repair/replacement, and soffit repair/replacement and insulation systems.

**Terminal Miscellaneous Modifications** **\$2,600,000**

Each year, there is a list of maintenance projects that are beyond the resources of MAC's maintenance and trades staff to accomplish. These projects are prioritized and completed either as a series of contracts or as purchase orders. Typical work includes door replacements, emergency upgrades to mechanical, electrical, plumbing or HVAC systems, loading dock work, etc. The list of potential projects will be compiled and prioritized in early 2023.

**13 – Energy Management Center**

**EMC Plant Upgrades (T1 & T2)** **\$2,000,000**

This multi-year program provides upgrades to the MAC's Energy Management Center (EMC) Boiler and Chiller Plants at both Terminal 1 and Terminal 2. The work includes upgrades to the aging Chilled Water and Heating Water systems throughout both terminals. The pumping and piping systems on both the heating and cooling systems are aging and in need of repair work beyond regular maintenance.

**21 – Field and Runway**

**Airside Electrical Construction** **\$2,000,000**

This program provides for the removal and replacement of airfield lighting and signage with LED technology, and lighting control upgrades.

**Airside Roadway Pavement Restoration** **\$1,200,000**

This is an ongoing program to rehabilitate roadways on the airfield through bituminous overlays, seal coats, or in some instances, reconstruction, to restore the surfaces to a smooth, even condition and improve overall operating conditions. The pavement condition index report as well as an inspection of the pavement will be completed to determine the areas most in need of repair on an annual basis.



**Miscellaneous Airfield Construction** **\$3,500,000**

This program supports Part 139 Airport Certification through grading and drainage improvements within runway safety areas, airfield pavement marking modifications, and other miscellaneous airside projects that are too small to accomplish independently or arise unexpectedly.

**Pavement Joint Sealing/Repair** **\$800,000**

This is an ongoing program to provide for the resealing of joints, sealing of cracks, and limited surface repairs on existing concrete pavements. The areas scheduled for sealing will be as defined in the overall joint sealing program or as identified by staff inspection in the early spring of each year.

**26 – Terminal Roads/Landside**

**Tunnel/Bridge Inspections** **\$100,000**

The MSP Campus has MAC-owned bridges and tunnels. Bridge and tunnel inspections are conducted each year to identify maintenance and repairs which are then implemented in a timely fashion.

**31 – Parking**

**Parking Structure Rehabilitation** **\$3,000,000**

This is an annual program to maintain the integrity of the airport’s multi-level parking structures. Projects typically include concrete repair, joint sealant replacement, expansion joint repairs, concrete sealing, and lighting improvements.

**39 – Public Areas/Roads**

**Concrete Joint Repair** **\$900,000**

This project is to complete landside pavement joint repair on MSP campus roadways as a preventative maintenance activity to prolong the existing pavement from reconstruction.

**Landside Pavement Rehabilitation** **\$500,000**

This is an ongoing program of preventative maintenance activities such as crack sealing, surface treatments, and resurfacing on roadways located outside of the Air Operations Area (AOA). This program effectively slows deterioration rates, extends service life and delays need for total reconstruction of bituminous and concrete pavements. Inspection of pavements and appurtenances determines what areas are to be prioritized for rehabilitation under each year’s project.

**Landside Utility Rehabilitation** **\$750,000**

Each year there are numerous landside utility projects that are beyond the resources of MAC’s staff and operating budget to accomplish. These projects are prioritized annually and completed with either a series of contracts or purchase orders. Electric power, sanitary sewer, storm sewer and watermain improvements will be addressed with this program. Also, a study will be conducted as part of the first year’s project to identify future potential projects. The study will be updated annually reflect current priorities.

**Roadway Fixture Refurbishment** **\$150,000**

Many of the light poles, clearance restriction boards, sign units, fence sections, and canopies on the airport roadways need repainting and maintenance. This project provides for fixture refurbishment.

## **46 – Hangars and Other Buildings**

### **Campus Building Rehab Program \$1,500,000**

Continual maintenance of MAC non-terminal buildings is imperative in providing a stable infrastructure and meeting the MAC’s sustainability goals. Age and weather contribute to building deterioration, mold and other health issues. Building envelope issues include curtain wall systems, glazing, sealant repair/replacement, louver repair/replacement, metal panel replacement and/or painting/tuck-pointing, structural repair and insulation systems. This program will also include repair/replacement related to interior issues. This is part of an on-going program to maintain MAC buildings as assets.

### **Campus Parking Lot Reconstruction \$650,000**

This is an ongoing program of preventative maintenance activities such as crack sealing, surface treatments and resurfacing of parking lots. This program effectively slows, deterioration rates, extends service life and delays need for total reconstruction of parking lot pavements is required. Inspection of pavements and appurtenances determines what areas are to be prioritized for rehabilitation under each year’s project. The 2023 project is planned to reconstruct the pavement around the MAC Field Maintenance facility.

### **MSP Campus Building Roof Replacement \$8,300,000**

A report has been developed within the MAC that evaluates one-half of the roofs every other year. This on-going program allows these roofs that have been evaluated to be prioritized and programmed for repair. The focus of the 2023 project is anticipated to be on replacement of portions of the South Field Maintenance, North Field Maintenance, and Cold Storage buildings’ roofs. Emergency repairs may also be needed on some other roofs; this program will provide dollars for such instances.

## **MSP Tenant Projects**

MSP Tenant projects include those that enhance or expand tenant or leasehold facilities that MAC supports, with the tenants reimbursing the costs to MAC for work within leasehold spaces.

## **10-Terminal 1**

### **Concessions Upgrades/Revenue Development \$100,000**

This is an annual program to fund miscellaneous upgrades such as finishes, furniture, signage, and/or modified connections to utilities for the concession programs or other revenue generating programs at the airport.

### **2023 Concourse and Gatehold Modernization \$23,800,000**

This is the first phase of the Concourse and Gatehold Modernization program and will complete work in Concourses D and F. Through a reimbursable agreement, Delta Air Lines will complete MAC-funded work including ceiling and lighting improvements, window tint, wainscoting, column wraps (excluding branding), paint (excluding branding), wayfinding information displays (“WIDS”), and flooring in the public area concourse corridors (including terrazzo, tile, and carpet where applicable). The program budget will also support MAC consultant fees for design collaboration and project oversight.

### **Elevator and Concourse Improvements Related to Relocated United Club \$200,000**

This project allocates fees to study the feasibility of relocating the United Club to the area above Concourse E that will be vacated by Airside Operations when the Safety and Security Center, Phase 2 is complete.

### **Terminal 1 FIS Gate Common Use Additions \$1,500,000**

This project will install two common use podiums, backwalls, and boarding pass reader podiums, along with all associated IT equipment for two existing Concourse G gates to be connected to the Terminal 1 FIS facility.

### **36-Terminal 2**

#### **Terminal 2 Concessions Development \$2,800,000**

This project relates to the restaurants and news stores in the middle of Terminal 2. The Terminal 2 concessions program is expiring in the next 3-5 years. It needs to be redeveloped to include a much needed back of house corridor for the delivery of products to the concessions, expanded seating areas, vending alcoves, and mobile ordering kiosks to assist with the relief of long que lines. The CIP budget will go to right sizing concessions and positioning them to maximum efficiency.

### **46-Hangars and Other Buildings**

#### **Ground Service Equipment (GSE) Maintenance Facility \$200,000**

This project allocates fees to study the programmatic needs for a Ground Service Equipment (GSE) Maintenance Facility and identify a site on campus for the stand-alone facility.

### **RELIEVER AIRPORTS LONG TERM COMPREHENSIVE PLAN PROJECTS**

Reliever Airport Long Term Comp Plan projects include projects that enhance or expand the airport facilities in order to meet existing or forecasted operational needs.

### **81 – St. Paul**

#### **STP Airport Layout Plan \$500,000**

The new ALP will show current conditions and any development proposed in the Long-Term Comprehensive Plan (LTCP). A portion of the budget will be used to acquire new AGIS base mapping to create a new Airport Layout Plan (ALP) set that complies with current FAA guidelines and criteria.

#### **STP Long Term Comprehensive Plan \$800,000**

This project will review current airport facilities, identify service gaps, and better facilitate the safe movement of aircraft at St. Paul Downtown Airport, which is part of the MAC's system of reliever airports designated by the FAA to reduce congestion at the Minneapolis-St. Paul International Airport and to provide improved general aviation facilities in the overall community.

### **84 – Flying Cloud**

#### **FCM Purchase and Demolition of Hangars \$1,300,000**

This will purchase and demo all or portions of five hangars within the object free area of Flying Cloud's Taxiway Alpha.

### **RELIEVER AIRPORTS MAINTENANCE/FACILITY UPGRADE PROJECTS**

Reliever Airport Maintenance / Facility Upgrade projects include improvements to buildings, systems, pavements and other infrastructure across the Reliever Airport system on a one-time or short-term basis.

### **80 – Reliever Airports**

#### **Relievers Building Miscellaneous Modifications \$400,000**

This program will address ongoing needs for repairs and modifications of MAC-owned buildings at the five of the reliever airports, excluding St. Paul. These items may include crew rest areas, heating, air conditioning, structural repairs, and aesthetic updates. The list of potential projects will be compiled and prioritized in early 2023.

<b><u>Relievers Obstruction Removal</u></b>	<b>\$300,000</b>
This program will address ongoing needs for obstruction removals at the six reliever airports. The list of potential projects will be compiled and prioritized in early 2023.	
<b><u>Relievers Pavement Rehabilitation Miscellaneous Modifications</u></b>	<b>\$300,000</b>
This program will address ongoing needs for crack sealing, joint repairs, pavement rejuvenation, and pavement repairs at the six reliever airports. The list of potential projects will be compiled and prioritized in early 2023.	
<b>81 – St. Paul</b>	
<b><u>STP Floodwall Inspection and Repairs</u></b>	<b>\$200,000</b>
This will include a complete inspection of all floodwall components and repairs to these components as identified during the inspection. This project will save time when the wall is put up by ensuring all components are functioning properly.	
<b><u>STP LED Edge Lighting Upgrades</u></b>	<b>\$500,000</b>
This project will replace taxiway edge lighting and signage with LED lighting.	
<b><u>STP MAC Building Improvements</u></b>	<b>\$200,000</b>
This is an ongoing program to provide for facility modifications to ensure continued efficient operation of MAC buildings or modifications necessary to meet the requirements of the tenants. This year's project priorities will be set early in 2023.	
<b><u>STP Vehicle Gate Replacement</u></b>	<b>\$500,000</b>
There are several gates that are aging at the airport. Many of these gates have ongoing maintenance issues and are in need of replacement. This project would replace the gates that are in the worst shape and provide the highest level of vehicles accessing the airport.	
<b><u>LVN LED Edge Lighting</u></b>	<b>\$200,000</b>
This project will replace edge lighting and signs with new LED lighting.	
<b>84 – Flying Cloud</b>	
<b><u>FCM Parcel 7 Sewer and Water</u></b>	<b>\$300,000</b>
These funds will reimburse the City of Eden Prairie for installing water and sanitary sewer connections to the MAC non-aeronautical development parcels adjacent to Pioneer Trail as part of a City street reconstruction project.	
<b><u>FCM Spring Lane Extension and Taxilane Connector</u></b>	<b>\$600,000</b>
This project will extend Spring Lane Taxilane to the east and provide a connector to Taxiway B. The project is operationally necessary for the development of a site near the south building area for a flight school.	
<b>85 – Crystal</b>	
<b><u>MIC LED Edge Lighting Upgrade</u></b>	<b>\$400,000</b>
This project will replace edge lighting and signs with new LED lighting.	
<b><u>MIC Service Roads</u></b>	<b>\$1,200,000</b>
This project will develop three new service roads which were identified in the LTCP to improve safety on the airport.	

**MIC Taxilanes Pavement Rehabilitation**

**\$750,000**

This is an ongoing program to rehabilitate aircraft operational areas (runways, taxiways, aprons) through bituminous overlays, seal coats, or in some instances, reconstruction, to restore the surfaces to a smooth, even condition and improve overall operating conditions. The pavement condition index report as well as an inspection of the pavement will be completed to determine the area most in need of repair.

**86 – Anoka County - Blaine**

**ANE AWOS Replacement**

**\$100,000**

This project is to cover the civil work associated with a MnDOT Aeronautics project to replace the existing Automated Weather Observing System (AWOS) with a new system. The new system will be placed adjacent to the existing system.

**ANE Equipment Storage and Maintenance Building**

**\$700,000**

This project will construct a new equipment storage and maintenance building for the Anoka County-Blaine airport to replace airport staff's use of a leasable hangar to support this function.

**ANE Pavement Rehabilitation – Taxiway A and Edge Lights**

**\$1,800,000**

This project will rehabilitate the taxiway and add edge lighting. The work begins at taxiway A1 and ends at the north end of taxiway A.



# Technical Memorandum

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

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

**Cc:** Lori Haak, Water Resources Coordinator  
City of Eden Prairie

**Date:** October 26, 2022

**Re:** Peterson Wetland Bank Application | LMRWD No. 2022-037

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On October 3, 2022, the City of Eden Prairie (City) submitted an application review request to the Lower Minnesota River Watershed District (LMRWD) and requested comments on the proposed Peterson Wetland Bank Application (Project). Stantec Consulting Services Inc. (Stantec), the engineer for the Project, prepared the application and associated documents. The proposed wetland easement encompasses several parcels owned by the Peterson Family on the south side of Rice Lake and the north side of the Minnesota River. The easement is primarily in Hennepin County (City of Eden Prairie) with portions in Carver County (City of Chanhassen) and Scott County (City of Shakopee). United States Fish and Wildlife Service land is to the west and east of the site, as shown in Figure 1. The existing site was row cropped for several decades. However, starting in 2020, the Petersons stopped farming portions of the parcels and allowed natural vegetation to grow. The Project proposes to restore the easement area to a natural wetland and upland system by disabling the existing drainage ditches that drain north to Rice Lake. The Project is not located in a High Value Resource Area (HVRA) or the Steep Slopes Overlay District, but the project is in the Minnesota River Floodplain.

Because the cities of Chanhassen and Eden Prairie do not have their LMRWD Municipal LGU permits, this Project will require an LMRWD Individual Project Permit under Rule B—Erosion and Sediment Control for the disturbance of more than one

acre. In addition, the project will require an LMRWD Individual Project Permit under Rule C—Floodplain and Drainage Alteration because the entirety of the site is located within the floodplain. The purpose of this memo is to summarize the preliminary review that Young Environmental Consulting Group LLC has completed in response to the City’s request for comments on the Peterson Wetland Bank application and to provide preliminary recommendations to the prospective applicant.

## Summary

Project Name: Peterson Wetland Bank

Purpose: Wetland restoration of drained agricultural land to obtain wetland bank credits

Project Size:

Project Area	Wetland Bank Credit Amount
218 acres	180 acres

Location: 44.807187°N, -93.512448°W

LMRWD Rules: Rule B—Erosion and Sediment Control  
Rule C—Floodplain and Drainage Alteration

Recommended Board Action: Information Only

## Discussion

The LMRWD received the following documents for review:

- WCA Notice of Application Peterson Wetland Bank, Received October 3, 2022
- Peterson Wetland Bank Mitigation Plan (Full Application), Received October 3, 2022

### Rule B—Erosion and Sediment Control

The LMRWD regulates land-disturbing activities that affect one acre or more outside the HVRA District under Rule B. Based on the information provided, the applicant proposes to remove existing drainage ditches on-site by grading them out to blend with the surrounding topography. The proposed grading would disturb a minimum of 18 acres, triggering Rule B.

To comply with Rule B, we recommend the applicant review [LMRWD Rule B](#), Sections 3.4 and 3.5 for further information regarding compliance. Additionally, based on the information submitted and the parcel data available to the LMRWD, there is a

discrepancy regarding the ownership of the parcel in Scott County on the southwest easement of the proposed wetland boundary. The Peterson Wetland Bank Application states that Peterson Farms owns the property, but the available Scott County parcel data shows a different owner. Compliance with Rule B requires the name, address, telephone number, and signature of all property owners.

### Rule C—Floodplain and Drainage Alteration

The LMRWD regulates the placement of fill and alterations to drainageways below the 100-year flood elevation. The project is located in the Minnesota Rover Floodplain, shown on the FEMA Flood Insurance Rate Map (FIRM), Panel 27053C0420F (effective November 4, 2016). The project disturbs areas within FEMA Zone AE (or the 100-year floodplain) as well as within the floodway. The effective FIRM shows the project at cross sections A, BJ, and BI, with regulatory 100-year elevations of 720.7, 720.5, and 720.5 NAVD88 respectively, as shown in Figure 2. Shallow grading is proposed using on-site materials to disable the surface drainage ditches by regrading them so they no longer drain north to Rice Lake, restoring the site's natural wetland hydrology. To comply with Rule C, the applicant must provide a no-rise certification signed by a professional engineer and a supporting hydraulic model to demonstrate that the proposed grading would not result in a loss of flood conveyance capacity nor cause a rise in the 100-year flood elevation of the Minnesota River. We recommend the applicant review [LMRWD Rule C](#), Sections 4.4 and 4.5 for further information regarding compliance.

### **Recommendations**

No board action is required at this time. As presented, Peterson Wetland Bank must obtain an LMRWD Individual Project permit before the start of construction activities for the applicable LMRWD rules. The full wetland bank application provided helpful insight into the project plans and details. We offer the following summarized comments to the applicant to help facilitate the permit review process:

- Review LMRWD [Rule B](#) and [Rule C](#), especially the “Criteria” and “Required Information” and “Exhibits” sections to determine the requirements for compliance.
- Clarify proposed easement ownership. Scott County parcel data show the proposed bank area is owned by several entities. Compliance with Rule B requires the name, address, phone number, and signature of all property owners.
- For compliance with LMRWD Rule C, provide a no-rise certification signed by a professional engineer and a supporting hydraulic model to demonstrate that the proposed grading would not result in a loss of flood conveyance capacity nor cause a rise in the 100-year flood elevation of the Minnesota River.
- The LMRWD encourages early coordination for complex projects and suggests scheduling a pre-application meeting to discuss the LMRWD permitting process and requirements.



## Attachments

- Figure 1—Peterson Wetland Bank Project Location Map
- Figure 2—Proposed Project Grading

Permit No.	Project Name	City	Status	Pre-Permit Meeting	Date Received	Date Applicant Considered Complete	Board Actions			On Hold / Cancelled	Permit Issued	Permit Expiration Date	Renewed	Inspection Date	Date Permit Closed
							Information Only	Conditional Approval	Approval						
2019-085	Minnesota Bluffs LRT Regional Trail Repair	Chanhassen	Closed	-	12/12/2019		-			-	5/20/2020	June 2023	-	7/6/2022	7/22/2022
2019-065	Trunk Highway 101 Improvements	Chanhassen	Active Permit		11/8/2019				11/20/2019		11/20/2019			7/6/2022	
2020-100	Peterson Farms Road Maintenance	Chanhassen	Closed	-	5/6/2020	5/6/2020	-	-	5/20/2020	-	5/21/2020	5/21/2021	-	7/19/2022	8/11/2022
2020-103	Prairie Heights Development	Eden Prairie	Expired	-	5/27/2020	6/5/2020	-	6/17/2020	-	-	10/23/2020	10/23/2021	-	7/6/2022	-
2020-105	Freeway Landfill Expansion	Burnsville	Pre-Permit	-	8/19/2022		9/21/2022								
2020-108	Hawthorne Ridge (2019-066)	Carver	Incomplete	-	6/23/2020	-	7/15/2020	-	-	-	-	-	-	-	-
2020-110	CSAH 11 Reconstruction	Carver	Active Permit	-	9/28/2020	11/3/2020	-	12/16/2020	-	-	4/13/2021	4/13/2022	4/20/2022	7/26/2022	-
2020-112	Vierling Industrial Project	Shakopee	Expired	-	6/25/2020	6/29/2020	-	7/15/2020	-	-	Not Issued		-	7/19/2022	10/14/2022
2020-113	Fort Snelling Redevelopment (2019-057)	Fort Snelling	Active Permit	-	7/20/2020	8/12/2020	-	8/19/2020	-	-	9/11/2020	8/19/2022	7/20/2022	7/20/2022	-
2020-115	Quarry Lake Park Improvements and Mountain Bike Trail	Shakopee	Closed	-	7/23/2020	9/8/2020	-	9/16/2020	-	-	9/16/2020	9/16/2021	-	8/5/2022	3/17/2022
2020-116	Shakopee Memorial Park Pedestrian Bridge	Shakopee	Closed	-	8/24/2020	10/5/2020	-	10/21/2020	-	-	10/23/2020	10/23/2021	-	7/6/2022	7/20/2022
2020-117	Greystone Headquarters	Shakopee	Closed	-	7/24/2020	9/10/2020	-	-	9/16/2020	-	9/16/2020	9/16/2021	-	7/19/2022	10/3/2022
2020-118	10117 1st Ave Demolition	Bloomington	No Permit Required	-	8/18/2020	-	-	-	-	-	-	-	-	-	-
2020-122	Cargo Van-Go	Shakopee	No Permit Required	-	8/20/2020	-	-	-	-	-	-	-	-	-	-
2020-123	Gaughan Companies Demolition	Shakopee	Closed	-	8/27/2020	8/27/2020	-	-	9/16/2020	-	9/17/2020	9/17/2021	-	7/6/2022	10/15/2021
2020-123 (amended)	Shakopee Flats	Shakopee	Closed								2/17/2021	9/17/2021		7/6/2022	
2020-124	Southbridge Crossings 6th Addition	Shakopee	Cancelled by Applicant	-	8/24/2020	-	-	-	-	3/5/2021	-	-	-	-	-
2020-126	Texas Roadhouse	Shakopee	Closed	-	9/17/2020	11/5/2020	-	-	11/18/2020	-	11/19/2020	11/18/2021	-	7/1/2022	7/26/2022
2020-131	Watermark at Savage	Savage	Cancelled by Applicant	10/7/2020	9/25/2020	-	-	-	-	-	-	-	-	-	-
2020-132	77th Street Underpass	Bloomington	Active Permit	10/18/2020	10/21/2020	11/12/2020	11/18/2020	12/16/2020	-	-	7/27/2021	7/27/2022	7/20/2022	7/28/2022	-
2020-133	Shakopee Mix Use	Shakopee	Closed	10/29/2020	11/2/2020	11/2/2020	-	-	11/18/2020	-	Not Issued				-
2020-135	Canterbury Crossings	Shakopee	Active Permit	-	11/19/2020	12/3/2020	-	12/16/2020	-	-	5/11/2021	5/11/2022	4/20/2022	7/26/2022	-



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2020-137	5501 Warehouse South Improvements	Bloomington	No Permit Required	-	12/9/2020	-	-	-	-	-	-	-	-	-	-
2020-140	10029 Trails End Rd	Chanhassen	No Permit Required	-	12/29/2020	-	-	-	-	-	-	-	-	-	-
2021-001	Mallard Farms	Eden Prairie	No Permit Required	-	1/30/2021	-	-	-	-	-	-	-	-	-	-
2021-002	CSAH 61 Drainage Ditch	Chanhassen	Active Permit	-	2/1/2021	10/11/2021	-	-	10/20/2021	-	10/21/2021	5/31/2022	5/18/2022	-	-
2021-003	Southwest Logistics Center	Shakopee	Active Permit	-	2/11/2021	3/12/2021	-	3/17/2021	-	-	4/21/2021	4/21/2022	4/20/2022	7/1/2022	-
2021-005	Jefferson Chiller Project	Bloomington	No Permit Required	-	3/2/2021	-	-	-	-	-	-	-	-	-	-
2021-007	Burnsville Cemetery Expansion	Burnsville	Active Permit	3/5/2021	9/2/2021	9/17/2021	-	10/20/2021	-	-	11/17/2021	10/20/2022	-	7/28/2022	-
2021-009	Burnsville Industrial IV	Burnsville	Closed	4/2/2021	3/22/2021	3/31/2021	-	4/21/2021	-	-	4/23/2021	4/21/2022	-	7/28/2022	10/5/2022
2021-011	2021 Street & Utility Reconstruction	Shakopee	Closed	3/30/2021	3/30/2021	4/16/2021	-	4/21/2021	-	-	4/28/2021	4/28/2022	-	7/6/2022	7/25/2022
2021-012	Canterbury Park Parking Lots Phase 2	Shakopee	Closed	4/1/2021	4/2/2021	4/10/2021	-	4/21/2021	-	-	5/11/2021	5/11/2022	-	7/19/2022	7/25/2022
2021-013	Summerland Place	Shakopee	Closed	-	4/8/2021	5/27/2021	-	4/21/2021	-	-	4/26/2021	4/22/2022	-	6/20/2022	3/22/2022
2021-014	Quarry Lake Outlet	Shakopee	Cancelled by Applicant	6/7/2021	4/9/2021	9/29/2021	-	10/22/2021	-	11/19/2021	-	-	-	-	-
2021-015	Stagecoach Rd Improvements	Shakopee	Closed	4/16/2021	4/12/2021	4/30/2021	-	5/5/2021	-	-	5/7/2021	5/5/2022	-	7/1/2022	3/23/2022
2021-016	Whispering Waters	Shakopee	Active Permit	-	4/14/2021	6/4/2021	-	6/16/2021	-	-	7/13/2021	7/13/2022	7/20/2022	7/13/2022	-
2021-017	Capstone 35	Burnsville	Active Permit	-	4/20/2021	5/12/2021	-	5/19/2021	-	-	8/19/2021	8/17/2022	7/20/2022	7/13/2022	-
2021-018	Jefferson Court	Shakopee	Active Permit	-	4/22/2021	5/17/2021	-	6/2/2021	-	-	6/3/2021	6/2/2023	7/20/2022	7/6/2022	-
2021-019	Cretex Site	Shakopee	Expired	4/23/2021	4/26/2021	4/30/2021	-	5/5/2021	-	-	5/7/2021	5/5/2022	-	7/1/2022	5/5/2022
2021-020	Core Crossings Apartments (Prev. Southbridge)	Shakopee	Active Permit	-	6/14/2021	7/13/2021	-	7/21/2021	-	-	8/5/2021	6/15/2023	6/17/2022	7/26/2022	-
2021-021	Spirit of Truth Church	Burnsville	Cancelled by Applicant	5/13/2021	6/16/2021	-	-	-	-	7/16/2021	-	-	-	-	-
2021-022	2021 Safety and Security Center	Fort Snelling	Active Permit	-	5/18/2021	10/29/2021	-	11/17/2021	-	-	3/18/2022	3/18/2023	-	7/20/2022	-
2021-023	106th St Improvements	Bloomington	Active Permit	-	5/25/2021	5/28/2021	-	6/2/2021	-	-	6/17/2022	6/17/2022	4/20/2022	7/28/2022	-
2021-025	TH 13	Savage	Active Permit	-	6/11/2021	6/15/2021	-	2/16/2022	-	-	5/20/2022	5/20/2023	-	7/13/2022	-



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							Information Only	Conditional Approval	Approval						
2021-026	TH 55	Ft Snelling, Mendota, Mendota Heights	No Permit Required	-	6/30/2021	-	-	-	-	-	-	-	-	-	-
2021-027	Minnesota River Greenway Trail	Eagan	Conditional Approval	-	8/17/2021	11/2/2021	-	11/17/2021	-	-	-	-	-	-	-
2021-029	Northland Paving	Burnsville	No Permit Required	6/29/2021	7/6/2021	-	-	-	-	-	-	-	-	-	-
2021-030	Building Renovation Park Jeep	Burnsville	Active Permit	-	7/9/2021	7/16/2021	-	9/15/2021	-	-	6/21/2022	6/21/2023	-	-	-
2021-031	Caribou Coffee	Savage	Closed	6/1/2021	7/9/2021	8/10/2021	-	8/18/2021	-	-	8/19/2021	-	-	7/13/2022	10/4/2022
2021-032	I-35W Auxiliary Lane	Bloomington	Pre-Permit	5/24/2021; 8/31/21	-	-	-	-	-	-	-	-	-	-	-
2021-033	Minnesota MASH & 130th St Extension	Savage	Active Permit	6/23/2021	9/17/2021	-	-	-	6/15/2022	-	6/17/2022	6/17/2023	-	-	-
2021-034	Circle K Holiday Station Stores	Savage	Closed	8/25/2021	7/26/2021	9/10/2021	-	9/15/2021	-	-	10/19/2021	9/15/2022	-	7/13/2022	7/12/2022
2021-035	I35W Frontage Trail	Burnsville	Conditional Approval	-	12/15/2021	12/22/2021	-	1/19/2022	-	-	11/3/2022	11/3/2023	-	-	-
2021-039	River Bluffs Improvements	Shakopee	Active Permit	-	7/23/2021	8/12/2021	-	8/18/2021	-	-	10/1/2021	8/18/2022	-	7/6/2022	-
2021-040	Canterbury Independent Senior Living	Shakopee	Active Permit	-	8/11/2021	8/19/2021	-	9/15/2021	9/15/2022	-	8/19/2022	10/1/2023	-	7/26/2022	-
2021-041	Line 0832	Burnsville	Closed	-	9/7/2021	9/7/2021	-	9/15/2021	-	-	9/17/2021	9/15/2022	-	7/28/2022	6/27/2022
2021-042	Hwy 13 & Lone Oak	Eagan	Active Permit	-	8/27/2021	9/16/2021	-	10/20/2021	-	-	10/22/2021	6/30/2023	9/21/2022	-	-
2021-043	Junction 35W & 13, LLC	Burnsville	No Permit Required	-	9/2/2021	-	-	-	-	-	-	-	-	-	-
2021-044	Storage Mart Phase 4 (1900 Stoughton Ave)	Chanhassen	No Permit Required	-	9/7/2021	-	-	-	-	-	-	-	-	-	-
2021-045	Triple Crown Residences Phase II	Shakopee	Active Permit	-	9/22/2021	10/27/2021	-	11/17/2021	-	-	11/19/2021	11/17/2023	10/19/2022	7/26/2022	-
2021-046	CenterPoint Dakota Station Facility	Burnsville	Closed	-	9/21/2021	10/15/2021	-	10/20/2021	-	-	10/22/2021	10/22/2022	-	7/28/2022	9/12/2022
2021-047	River Valley Industrial Center	Chanhassen	On Hold	-	9/21/2021	-	-	-	-	10/1/2021	-	-	-	-	-
2021-048	Minnesota River Greenway Railroad Bridge	Eagan	Pre-Permit	9/28/2021	-	-	-	-	-	-	-	-	-	-	-
2021-049	Stump Road Maintenance	Bloomington	Closed	10/20/2021	10/22/2021	10/29/2021	-	11/17/2021	-	-	11/19/2021	11/17/2022	-	7/28/2022	9/5/2022
2021-050	Spring Valley Cir & Wentworth Ave S	Bloomington	No Permit Required	10/27/2021	-	-	-	-	-	-	-	-	-	-	-
2021-051	Blue Lake Siphon Landscape Restoration	Eden Prairie	No Permit Required	10/5/2021	10/28/2021	-	-	-	-	-	-	-	-	-	-

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2021-052	Shakopee Dental Office	Shakopee	Active Permit	-	11/3/2021	12/14/2021	-	12/15/2021	-	-	12/17/2021	12/15/2022	-	7/13/2022	-
2021-056	Twin Overlook	Bloomington	No Permit Required	-	12/7/2021	-	-	-	-	-	-	-	-	-	-
2021-057	Cliff Road Ramp	Burnsville	Active Permit	-	12/14/2021	1/4/2022	-	1/19/2022	-	-	6/8/2022	6/8/2023	-	7/13/2022	-
2021-058	MAC Gate Security Improvements	Fort Snelling	Active Permit	-	12/15/2021	12/16/2021	-	1/19/2022	-	-	4/27/2022	4/27/2023	-	7/28/2022	-
2021-061	Merriam Junction Trail	Burnsville	Pre-Permit	1/31/2022	-	-	-	-	-	-	-	-	-	-	-
2022-001	Centerpoint Shakopee Piggings	Shakopee	No Permit Required	-	1/12/2022	-	-	-	-	-	-	-	-	-	-
2022-002	2022 MBL Nicollet River Crossing	Bloomington, Burnsville	Active Permit	-	1/18/2022	-	-	3/16/2022	-	-	4/25/2022	4/25/2023	-	-	-
2022-003	Ivy Brook Parking East	Burnsville	Active Permit	-	1/19/2022	2/25/2022	-	3/16/2022	-	-	5/16/2022	5/16/2023	-	-	-
2022-004	CHS Savage Terminal	Savage	Incomplete	-	1/27/2022	-	-	-	-	-	-	-	-	-	-
2022-005	Chaska West Creek Apartments	Chaska	Incomplete	-	2/8/2022	-	-	-	-	-	-	-	-	-	-
2022-006	Quality Forklift	Shakopee	No Permit Required	-	2/10/2022	-	-	-	-	-	-	-	-	-	-
2022-007	Engineered Hillside	Eden Prairie	Active Permit	-	2/15/2022	3/14/2022	-	-	4/20/2022	-	4/21/2022	4/21/2023	-	-	-
2022-008	Ivy Brook Parking West	Burnsville	Active Permit	-	2/16/2022	2/25/2022	-	3/16/2022	-	-	5/31/2022	5/31/2023	-	-	-
2022-010	Quarry Lake Pedestrian Bridge and Trail	Shakopee	Conditional Approval	-	2/24/2022	-	-	4/20/2022	-	-	-	-	-	-	-
2022-011	Biffs Inc.	Burnsville	Active Permit	-	2/28/2022	3/29/2022	-	4/20/2022	-	-	8/16/2022	8/16/2023	-	-	-
2022-012	Quarry Lake Park Improvements - Roadway and Boat Launch	Shakopee	Cancelled by Applicant	-	3/17/2022	-	-	-	-	5/24/2022	-	-	-	-	-
2022-013	Normandale & 98th Intersection Improvements	Bloomington	Active Permit	-	3/22/2022	4/1/2022	-	4/20/2022	-	-	4/22/2022	4/22/2023	-	-	-
2022-014	TH 41/CSAH 61 Improvements	Chaska	Conditional Approval	2/16/2021; 1/6/2022	3/23/2022	5/11/2022	-	5/18/2022	-	-	-	-	-	-	-
2022-015	Xcel Driveway	Shakopee	Incomplete	-	4/20/2022	-	-	-	-	-	-	-	-	-	-
2022-016	Organice Recycling Facility Relocation	Louisville Township	Incomplete	-	4/20/2022	-	-	-	-	-	-	-	-	-	-
2022-017	PLOC Channel Stabilization	Shakopee	Active Permit	-	6/30/2022	7/5/2022	-	-	7/20/2022	-	7/21/2022	7/21/2023	-	-	-
2022-018	Lakota Lane	Chanhassen	Under Review	-	4/19/2022	-	5/18/2022	-	-	-	-	-	-	-	-

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2022-019	TH 494 SP 2785-433	Eagan and Bloomington	Conditional Approval	-	4/21/2022	6/24/2022	-	7/20/2022	-	-	-	-	-	-	-
2022-020	New Century School	Bloomington	No Permit Required	-	4/28/2022	-	-	-	-	-	-	-	-	-	-
2022-021	Oak St N (CenterPoint Energy)	Chaska	Active Permit	-	4/29/2022	-	-	-	6/15/2022	-	6/17/2022	6/17/2023	-	-	-
2022-022	Ace Rent A Car	Fort Snelling	Incomplete	-	5/10/2022	-	-	-	-	-	-	-	-	-	-
2022-023	494 Corridors of Commerce	Fort Snelling	Pre-Permit	5/3/2022	5/19/2022	-	7/20/2022	-	-	-	-	-	-	-	-
2022-024	Gedney Pickles Holding Pond Restoration	Chanhassen	Conditional Approval	6/16/2022	8/10/2022	-	-	9/21/2022	-	-	-	-	-	-	-
2022-025	10561 E Riverview Drive	Eden Prairie	No Permit Required	-	6/22/2022	-	-	-	-	-	-	-	-	-	-
2022-026	10521 Spyglass Drive	Eden Prairie	Active Permit	5/31/2022	7/13/2022	8/8/2022	-	-	7/20/2022	-	8/8/2022	8/8/2023	-	-	-
2022-027	Ivy Brook Parking Northeast	Burnsville	Active Permit	-	7/5/2022	-	-	8/17/2022	-	-	8/31/2022	8/31/2023	-	-	-
2022-028	Quarry Lake Park Restroom	Fort Snelling	Active Permit	-	7/6/2022	7/8/2022	-	7/20/2022	-	-	7/22/2022	7/22/2023	-	-	-
2022-029	Reliakor	Shakopee	Closed	-	7/20/2022	-	-	8/17/2022	-	-	9/19/2022	9/19/2023	-	-	10/28/2022
2022-030	Frenchies Metals	Chaska	Incomplete	-	7/22/2022	-	-	-	-	-	-	-	-	-	-
2022-031	RSI Marine (Great Plains Blvd)	Chanhassen	Pre-Permit	-	7/18/2022	-	8/17/2022	-	-	-	-	-	-	-	-
2022-032	PMP Street Maintenance	Bloomington	No Permit Required	-	8/31/2022	-	-	-	-	-	-	-	-	-	-
2022-033	Dred Scott Fields Area	Bloomington	No Permit Required	-	8/31/2022	-	-	-	-	-	-	-	-	-	-
2022-034	Valleyfair Parking Lot Expansion	Shakopee	Conditional Approval	-	9/26/2022	10/11/2022	-	10/19/2022	-	-	-	-	-	-	-
2022-035	Concourse G Infill Pods 2-3 EAW Review	Fort Snelling	No Permit Required	-	9/30/2022	-	-	-	-	-	-	-	-	-	-
2022-036	Structures, Inc.	Chaska	Under Review	-	10/6/2022	-	-	-	-	-	-	-	-	-	-
2022-037	Peterson Wetland Bank	Eden Prairie	Pre-Permit	-	10/3/2022	-	-	-	-	-	-	-	-	-	-
2022-038	Xcel Energy Line 5516	Chaska	No Permit Required	-	10/14/2022	-	-	-	-	-	-	-	-	-	-
2022-039	Former Knox Site	Burnsville	Under Review	-	11/3/2022	-	-	-	-	-	-	-	-	-	-

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**STATUS DEFINITIONS:**

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- Active Permit:** Applicant has a valid permit issued by LMRWD
  - Cancelled by Applicant:** Applicant withdrew their application for a LMRWD permit
  - Closed:** Applicant has indicated the project has completed construction and that the permit file may be closed
  - Conditional Approval:** LMRWD managers conditionally approved the permit application, pending receipt of additional information from applicant
  - Expired:** Applicant either obtained conditional approval, approval, and/or was issued a permit and the expiration date has passed
  - Incomplete:** Applicant applied for a permit, but the application is incomplete
  - No Permit Required:** Applicant applied for a permit, but during the completeness review, it was determined that the project did not trigger the regulatory thresholds
  - On Hold:** Applicant requested their application be placed on hold
  - Pre-Permit:** Applicant has requested pre-permit application reviews or meetings, but has not yet applied for a permit from LMRWD
  - Under Review:** Permit application is complete and under review by LMRWD staff
- \* Staff recommendation only, has not yet been presented to the Board for action*