

MAYO CLINIC HEALTH SYSTEM EVENT CENTER ARENA LOBBY AND CONCOURSE ROOF REPLACEMENT

Project Feasibility Report

City Project Number 11138

February 17, 2025



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Mayo Clinic Health System Event Center- Arena Lobby & Concourse Roof Replacement

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City of Mankato

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II. PROJECT CONTACTS

TITLE	NAME	PHONE	EMAIL
Mayor	Najwa Massad	507.387.9693	nmassad@mankatomn.gov
Councilor at Large	Mike Laven	507.720.8674	mlaven@mankatomn.gov
Councilor Ward 1	Michael McLaughlin	507.720.1093	mmclaughlin@mankatomn.gov
Councilor Ward 2	Dennis Dieken	507.720.1817	ddieken@mankatomn.gov
Councilor Ward 3	Kevin Mettler	507.995.0070	kmettler@mankatomn.gov
Councilor Ward 4	Jenn Melby-Kelley	507.720.2502	jmelby-kelley@mankatomn.gov
Councilor Ward 5	Jessica Hatanpa	507.613.8067	jhatanpa@mankatomn.gov
City Manager	Susan Arntz	507.387.8695	sarntz@mankatomn.gov
Director of Admin. Services	Parker Skophammer	507.387.8739	pskophammer@mankatomn.gov
Facilities Manager	Jim Tatge	507.387.8504	jtatge@mankatomn.gov

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III. EXECUTIVE SUMMARY

The existing roof is a ballasted ethylene propylene diene terpolymer (EPDM) rubber roof that is original to the 1995 building construction. There have been numerous repairs performed over the years. There are two roof sections remaining from the original building that are proposed for replacement in 2025 which total nearly 21,000 square feet. The expected useful life of this type of roof at the time of installation was 15-20 years. It is now over 29 years old. The roof has reached its end of life and should be replaced.

Suggested improvements include removal and disposal of the current ballasted EPDM membrane, ballast material and all insulation and replacing it with a fully adhered 90-mil EPDM with the addition of one roof access ladder.

The estimated cost of these necessary improvements is approximately \$995,000.

From a maintenance standpoint, the proposed improvements are necessary, cost effective, and feasible. This can best be accomplished by letting competitive bids for the work. It is recommended that the City Council accept this project feasibility report and direct staff to advertise for bids in accordance with law.

IV. PROJECT INTRODUCTION

The recommended roof replacement at the Mayo Clinic Health System Event Center is proposed for the summer of 2025. The City Council has authorized the preparation of a project feasibility report to define the scope and determine the reasonableness of the project. The specific objectives of this preliminary feasibility report are to:

- Evaluate the need for this project
- Determine the necessary improvements
- Provide information on the estimated costs for the proposed project
- Determine the project schedule
- Determine the feasibility of the proposed project

This project, as proposed, is approximately 21,000 square feet. Specific items that will be included in the construction are as follows:

- Remove and dispose of existing ballasted EPDM membrane, ballast material and all insulation
- Install vapor barrier over roof deck
- Replace the removed insulation, and add additional insulation to meet current energy code
- Install new perimeter flashing
- Install cover board
- Install 90-mil adhered EPDM roof system per manufacturer's specifications
- Replace existing overflow scuppers with new, at existing locations
- Fabricate and install metal counter-flashings at wall locations as required
- Provide contractor warranty and EPDM manufacturer 30-year system warranty
- Provide 20-year fade warranty on sheet metal flashings

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V. EXISTING CONDITIONS

A. MAYO CLINIC HEALTH SYSTEM EVENT CENTER ROOF

The roof is a ballasted EPDM rubber roof that is original to the 1995 building construction. There have been multiple repairs, associated with leaks, performed over the years. It is nearly 21,000 square feet. The expected useful life of this type of roof when it was installed was 15-20 years. It is now over 29 years old. The mil thickness could not be confirmed but based on the date of installation it is assumed to be 30-mil. The condition of the insulation installed during construction could not be verified as no core samples were taken. Photo documentation of the existing roof system is in Figure 1 in the Appendix. The roof has reached its end of life and is recommended for replacement.

VI. PROPOSED IMPROVEMENTS

A. MAYO CLINIC HEALTH SYSTEM EVENT CENTER ARENA ROOF

Due to the roof system being past its useful life and rising maintenance costs, it is recommended the roof be replaced. The proposed roof replacement will increase the EPDM membrane thickness to 90-mil with a 30-year manufacturer warranty. In addition, the existing insulation will be replaced. The new installed insulation will meet current energy code and provide utility savings over the life of the roof system. A roof ladder will be installed to the western upper concourse roof thus completing the safe access plan developed with the initial replacement project nearly 10 years ago.

Staff intend to bid the project out with a base bid and two alternates. Alternate No. 1 will be the second roof section over the northeast end of the concourse. Alternate No. 2 will be the addition of the final roof ladder on the west side of the building. By utilizing alternates, it will allow the council the most flexibility when it reviews the bids at the time of award.

VII. APPROVALS/PERMITS

Approvals and permits are required from various agencies for the construction of the project. They include:

- City of Mankato building permit

VIII. PROJECT COST ESTIMATE AND FINANCING

Estimated projections for the cost of this project are summarized below. A detailed cost estimate is included at the end of the report.

ITEM	COST
Arena Lobby and west concourse roof replacement – base bid	\$733,178
Northeast concourse roof replacement – Alt #1	\$125,977
West upper concourse roof access ladder – Alt #2	\$45,000
TOTAL CONSTRUCTION	\$904,155
Construction Contingency	\$90,845
TOTAL PROJECT COST	\$995,000

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Funding for the proposed improvements is shown in the table below.

FUNDING SOURCE	AMOUNT	PERCENT
Civic Center Capital Fund	\$995,000	100%
TOTAL FUNDS	\$995,000	100%

IX. POSSIBLE SCHEDULE

The following is a possible schedule for the proposed improvements at the Mayo Clinic Health System Event Center:

02/27/2025	Final Design
02/28/2025	Advertise for Bids
04/02/2025	Open Bids
04/14/2025	Award Bids
06/09/2025	Start Construction
08/29/2025	Project Substantial Completion

X. CONCLUSION AND RECOMMENDATIONS

The existing conditions of the Mayo Clinic Health System Event Center Arena Lobby and Concourse Roof are unfavorable with only further deteriorations to come. If these improvements are not made, maintenance costs will continue to be an issue, and failure of the roof system will occur. From a maintenance standpoint, this project is cost effective, necessary, and feasible. The best way to accomplish this project is by letting competitive bids for the work. Feasibility is contingent upon City Council findings with respect to project financing.

Staff recommends the Council accept this project feasibility report, order city staff to procure final plans and specifications and instruct the City Manager to advertise for bids in accordance with the requirement of law.

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XI. APPENDIX

A. FIGURE 1: EXISTING ARENA LOBBY & CONCOURSE ROOF SYSTEM



- Base Bid - 17,774 SqFt
- Alternate #1 - 3,054 SqFt
- Roof Access Ladder

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation. Thomas Olson - February 2025



Mayo Clinic Health System Event Center - Figure 1