

4. ROOF REPLACEMENT PROGRAM - FACILITIES

A. Proposed 2021 Bonding: \$227,000

B. Project Costs and Sources of Funds:

PROJECT COSTS:	2021	2022	2023	2024	2025	Total
Planning & design	\$ 15,400	\$ 9,170	\$ 21,755	\$ 24,700	\$ 12,080	\$ 83,105
Land purchase	-	-	-	-	-	-
Construction	211,600	266,830	314,245	214,300	174,920	1,181,895
Equipment	-	-	-	-	-	-
Other	-	-	-	-	-	-
Total costs	\$ 227,000	\$ 276,000	\$ 336,000	\$ 239,000	\$ 187,000	\$ 1,265,000
PROJECT FUNDS:						
G.O.Bonds or notes	\$ 227,000	\$ 276,000	\$ 336,000	\$ 239,000	\$ 187,000	\$ 1,265,000
Outside funding	-	-	-	-	-	-
Tax levy	-	-	-	-	-	-
Previous bonding	-	-	-	-	-	-
Undesignated General Fund	-	-	-	-	-	-
Total funds	\$ 227,000	\$ 276,000	\$ 336,000	\$ 239,000	\$ 187,000	\$ 1,265,000

C. Description and Justification:

Project Description: This project is to replace the roof surfaces of various County Facilities. Each building will be surveyed on a regular basis to identify potential roof problems before they actually occur. Remedial action will be taken to prevent a building envelope failure and more costly repairs or replacement. The goal of this program is to maximize the life of the roof's surfaces covering the facilities.

Here is a preliminary schedule of projects:

PROJECT COSTS:	2021	2022	2023	2024	2025	Total
PLANNING & DESIGN	\$ 15,400	\$ 9,170	\$ 21,755	\$ 24,700	\$ 12,080	\$ 83,105
CONSTRUCTION:						
<i>Orin King Building</i>	211,600	-	-	-	-	211,600
<i>Neenah Human Services Building</i>	-	266,830	-	-	-	266,830
<i>Otter Street Building</i>	-	-	314,245	-	-	314,245
<i>Second Chance Building</i>	-	-	-	180,510	-	180,510
<i>State Street Building</i>	-	-	-	33,790	-	33,790
<i>Airport Fire Station</i>	-	-	-	-	81,150	81,150
<i>Airport Tower</i>	-	-	-	-	93,770	93,770
TOTAL	\$ 227,000	\$ 276,000	\$ 336,000	\$ 239,000	\$ 187,000	\$ 1,265,000

Relationship to other projects and plans: This project works in conjunction with the Comprehensive Needs Study and all the other projects for each facility. If a facility is scheduled for major renovation, roof replacement will become a part of the project to minimize disruption to the facility occupants and consolidate work done to a facility. If a facility is scheduled for disposal, only the basic maintenance of the roof will be accomplished, avoiding unnecessary costs.

Justification and alternatives considered: There are two alternatives to this program. The first is to do minimal planning. This will continue the current practice of having roofs fail without warning and causing other collateral damage due to water or weather intrusion. Emergency repairs are costly and are usually performed under less than ideal conditions. There usually is no funding for emergency repairs. The repairs are very disruptive to the facility occupants. The collateral damage due to water leakage or weather intrusion can be very costly due to electronic equipment that may be damaged, employee or visitor injuries.

The second alternative is to have a roof replacement program. This program will identify potential roof problems before they occur. Repairs or replacement can be planned and funded through the budget process. Occupants are aware of pending repairs and plans can be established to minimize disruption to the daily activities. Projects can be competitively bid early in the season to get the best price.

Roof Evaluation and Budgetary Estimate

Orrin King Building – 448 Algoma Boulevard, Oshkosh

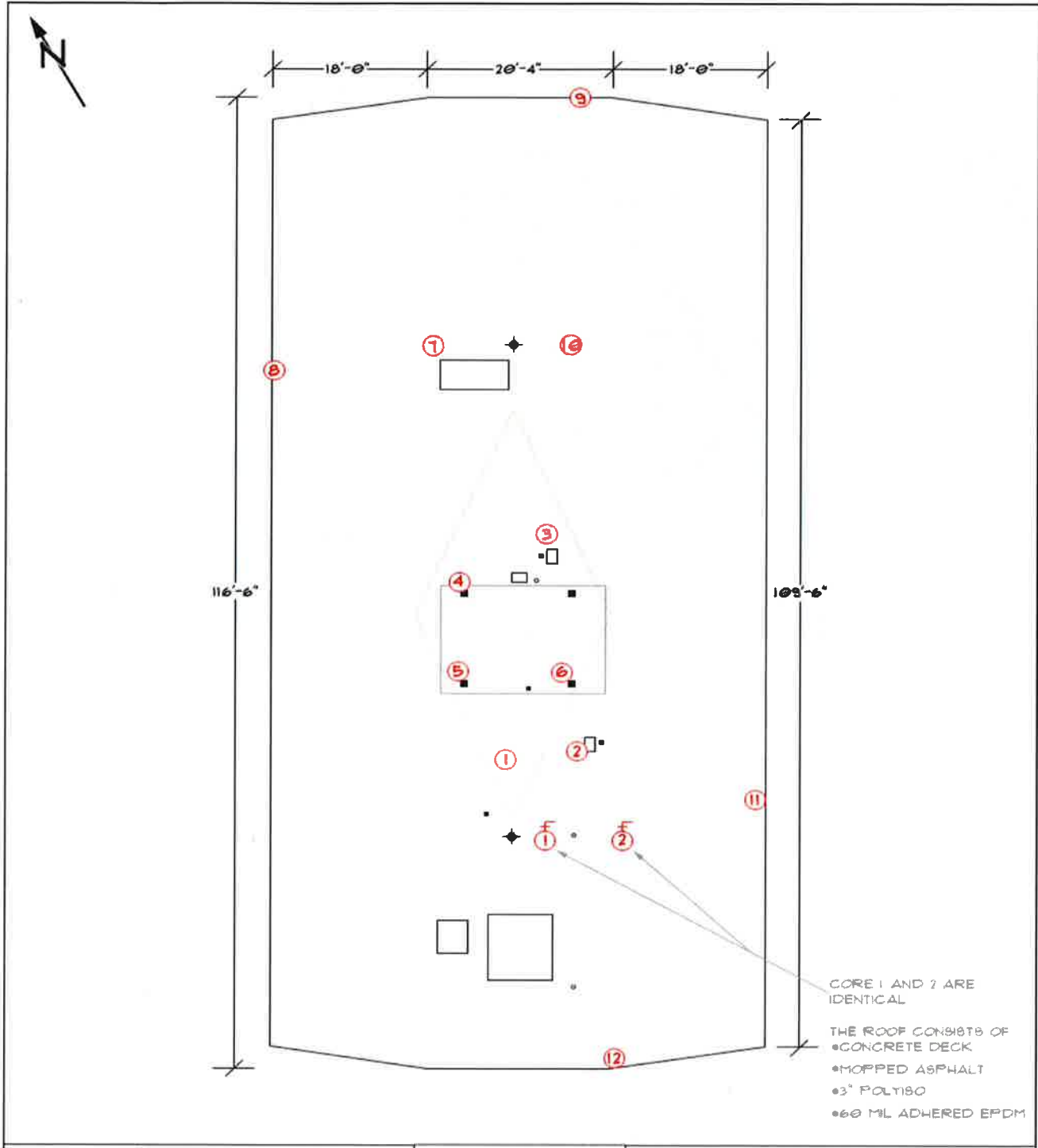


Report/Proposal Date: July 21, 2017

Prepared for: Winnebago County
Facilities and Property Management
1221 Knapp Street
Oshkosh, WI 54902

Prepared by: Oshkosh Industrial Roofing & Sheetmetal, LLC.
P.O. Box 1
Winnebago, WI 54985

Defect Map



Roof Inspection / Defect Images

Image #1 – Defect 1

Note: There is a large area of detached insulation, evident as a protruding blister.

The area of detached insulation is susceptible to wind uplift forces, and could cause a catastrophic loss in the event of a windstorm.



Image #2 – Defect 2

Note: Seams and flashings on this roof exhibit aging. The glue on this coverpatch has deteriorated and is separating from the substrate.



Image #3 – Defect 2 (Continued)

Note: Aging flashings on this roof exhibit weatherchecking and dry rot. There is a hole into the roof system at the base of this curb.



Image #4 – Defect 3 (Continued)

Note: Aging flashings on this roof exhibit weatherchecking and dry rot. There is a hole into the roof system at the base of this curb.



Image #5 – Defect 3 (Continued)

Note: Aging flashings on this roof exhibit weatherchecking and dry rot. There is a hole into the roof system at the base of this curb.



Image #6 – Defect 3 (Continued)

Note: Aging flashings on this roof exhibit weatherchecking and dry rot. There is a hole into the roof system at the base of this curb.



Image #7 – Defect 3 (Continued)

Note: Aging flashings on this roof exhibit weatherchecking and dry rot. There is a hole into the roof system at the base of this pitchpocket.



Image #8 – Defect 4

Note: The equipment stand sealer pockets have detached from the pipes due to rusting.



Image #9 – Defect 6 (Continued)

Note: The equipment stand sealer pockets have detached from the pipes due to rusting.



Image #10 – Defect 6

Note: The equipment stand sealer pockets have detached from the pipes due to rusting.



Image #11 – Defect 7 (Continued)

Note: Aging flashings on this roof exhibit weatherchecking and dry rot. There is a hole into the roof system at the base of this curb.



Image #12 – Defect 8 (Overview)

Note: There are numerous issues with the coping cap and wall base. The original flashing material is weatherchecked, and at the end of its service life. The coping seam cover sealant is deteriorated and likely permits water into the copings.



Image #13– Defect 8 (Detail)

Note: Coping seam cover sealant is suspect, and the EPDM flashing material below is aging and weatherchecked. The lower arrow indicates a hole through the flashing..

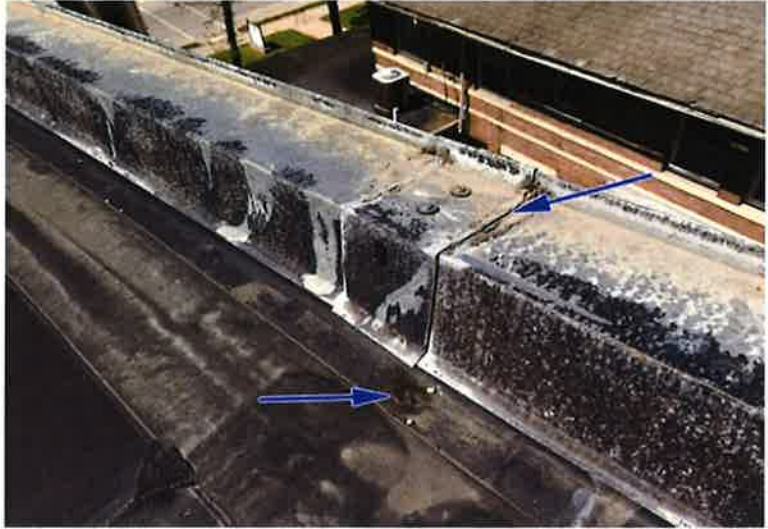


Image #14 – Defect 9

Note: Hole in coping cap metal.



Image #15 – Defect 10 (Continued)

Note: There are numerous prior repairs and patches in Area 10.



Image #16 – Defect 11

Note: Flashing material at the base of the copings is aging and weatherchecked. The protruding fastener head at the base of the wall will be a source of water entry.



Image #17 – Core Sample 1

Note: There are numerous protruding fastener heads at the base of the coping, all exist under the weatherchecked EPDM flashing.

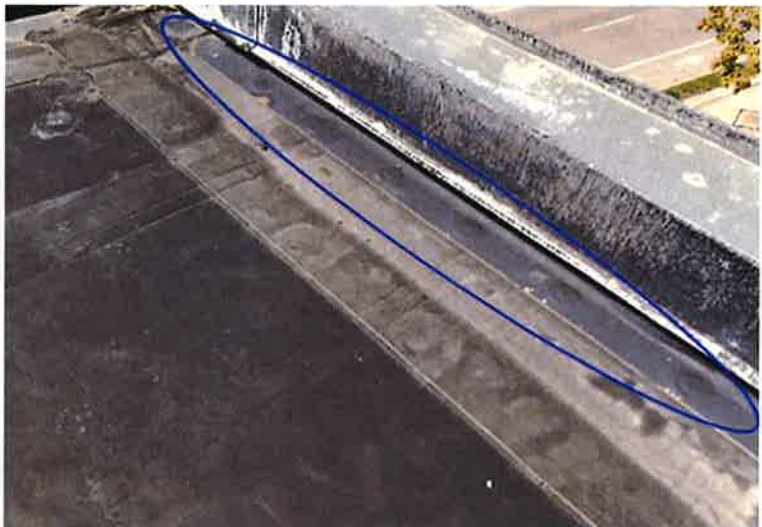


Image #18 – Core Sample 1

Note: The sample collected at Core #1 consists of one layer of 3" thick polyisocyanurate board insulation mopped to the concrete deck.

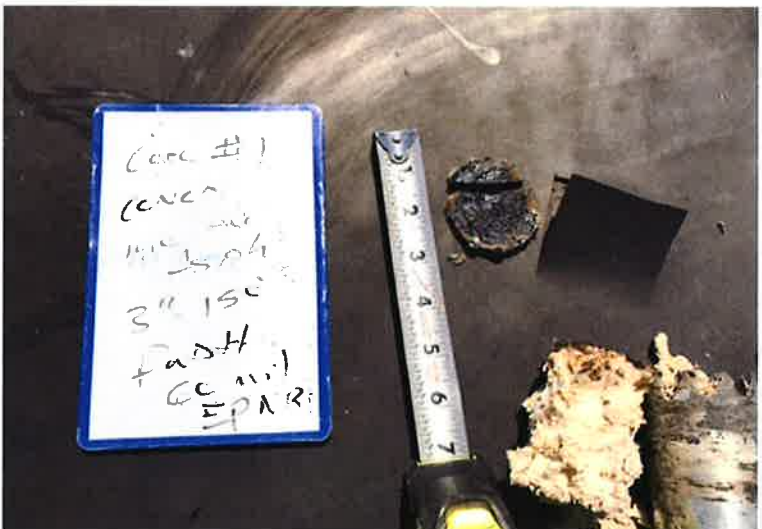


Image #19 – Core Sample 2

Note: The core sample location was repaired properly using appropriate materials and methods.

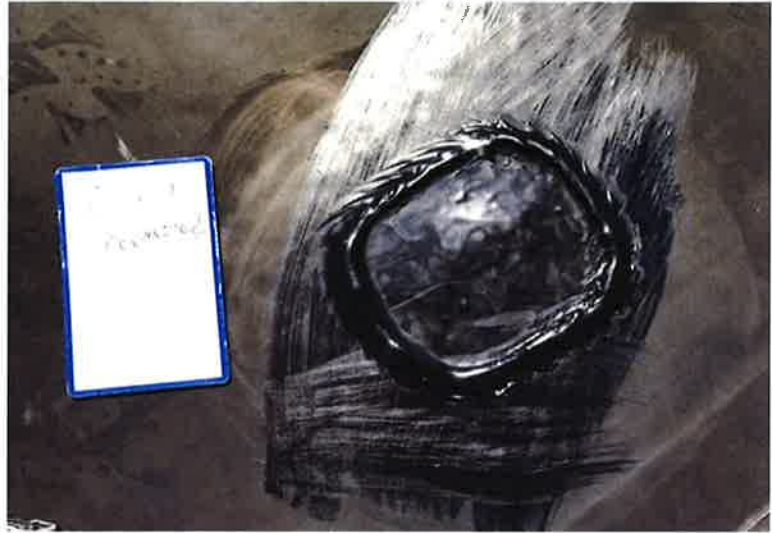


Image #20 – Core Sample 2 Repair

Note: Core #2 consisted of the same materials as Core #1.

The core sample location was repaired properly using appropriate materials and methods.

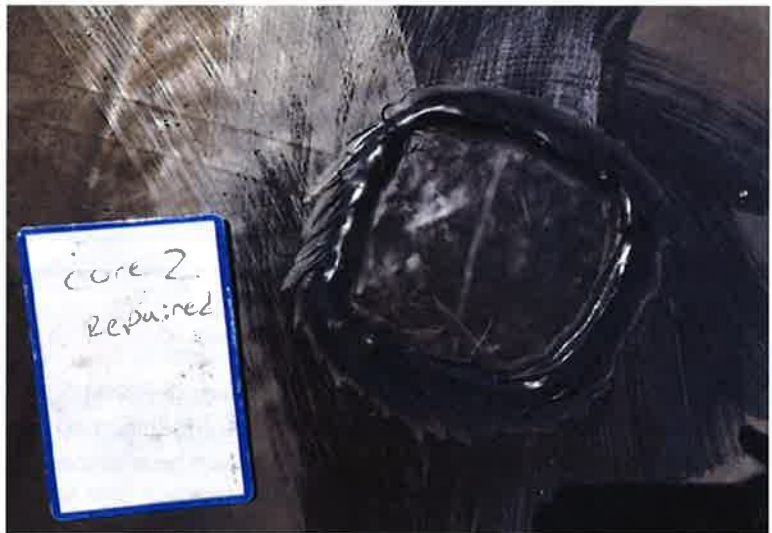


Image #20 – Core Sample Repair Overview

Note: The core sample locations are located on the south end of the building, on the east side of the drain.

