



Common Council

Regular Meeting

Approved Minutes

335 South Broadway
De Pere, WI 54115
www.deperewi.gov

Tuesday, December 16, 2025

7:30 PM

Council Chambers/Virtual

I. Call to Order

The meeting was called to order at 7:30 PM by Mayor James Boyd.

1. Roll call.

Present: Dan Carpenter, Mike Eserkaln, Pamela Gantz, Jonathon Hansen, Amy Kunding, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

2. Pledge of Allegiance.

3. Approval of the minutes of the December 2, 2025 Common Council meeting.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Dan Carpenter
SECONDER:	Shana Ledvina
AYES:	Dan Carpenter, Mike Eserkaln, Pamela Gantz, Jonathon Hansen, Amy Kunding, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

4. Public Hearing on a request for a zoning map amendment from R2-60 (Two-Unit District) to RM-1 (Multi-Unit [3-6 Units] District) at 815 Fox River Drive.

A. Notice of public hearing.

The clerk reported that the notice was published in the Press Times on November 28 and December 5, 2025.

B. Recommendation from Plan Commission.

Development Services Director Dan Lindstrom reviewed the request, explaining that the applicant is proposing a 3-unit residential development. Staff heard from two interested parties, one with questions and one opposed to the project. Mayor Boyd declared the public hearing open; no one wished to speak so he declared the public hearing closed.

C. Ordinance #25-20 Approving Zoning Map Amendment from R2-60 Two-Unit District to RM-1 Multi-Unit (3-6 Units) Residential District (815 Fox River Drive; Parcel ED-91).

RESULT:	ADOPTED BY ROLL CALL VOTE [UNANIMOUS]
MOVER:	Casey Nelson
SECONDER:	Devin Perock

AYES:	Dan Carpenter, Mike Eserkaln, Pamela Gantz, Jonathon Hansen, Amy Kunding, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd
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5. Public comment upon matters not on the agenda. Comments made during the public comment period shall pertain only to matters under the jurisdiction of the Common Council. §6-3(f) DPMC

None.

6. Consideration and possible action on the following Community Service Grant applications:

A. St. Norbert College Campus Safety: Stop the Bleed - SNC Initiative

B. Sleep in Heavenly Peace, Inc. WI - De Pere Chapter: No Kid Sleeps on the Floor in Our Town!

C. Lovin the Skin I'm In: The Second Annual Trauma Summit - Supporting Black Youth with Trauma Exposure

D. De Pere VFW Post 2113: Bicentennial Park Flagpole Monument Rebuild

Alderson Boyd moved, seconded by Alderson Carpenter to suspend the rules in order to approve awards of \$250 to each of the four applicants with a single roll call vote. Discussion followed. Mayor Boyd moved, seconded by Alderson Carpenter to open the meeting. Upon vote, motion carried unanimously. Randy Hansen from VFW Post 2113 addressed the Council and described the project. Mayor Boyd moved, seconded by Alderson Nelson to close the meeting. Upon vote, motion carried unanimously. Parks Director Marty Kosobucki confirmed that there is a time capsule in the current monument, which the City plans to give to the De Pere Historical Society. There has also been discussion about creating a new one to be installed with the new monument.

RESULT:	ADOPTED BY ROLL CALL VOTE [UNANIMOUS]
MOVER:	James Boyd
SECONDER:	Dan Carpenter
AYES:	Dan Carpenter, Mike Eserkaln, Pamela Gantz, Jonathon Hansen, Amy Kunding, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

7. Recommendation from the Board of Public Works on City Engineer parking and traffic recommendations.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Casey Nelson
SECONDER:	Dan Carpenter
AYES:	Dan Carpenter, Mike Eserkaln, Pamela Gantz, Jonathon Hansen, Amy Kunding, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

8. Recommendation from the Board of Public Works on 2026 private, full-length sanitary sewer lateral reimbursement rates.

Alderson Carpenter urged residents to take advantage of the reimbursement program.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	James Boyd
SECONDER:	Devin Perock
AYES:	Dan Carpenter, Mike Eserkaln, Pamela Gantz, Jonathon Hansen, Amy Kundinger, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

9. Consideration and possible action on updates to the Tax Refund Intercept Program (TRIP) agreements with the Wisconsin Department of Revenue.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Jonathon Hansen
SECONDER:	Pamela Gantz
AYES:	Dan Carpenter, Mike Eserkaln, Pamela Gantz, Jonathon Hansen, Amy Kundinger, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

10. Presentation on De Pere Ice Arena condition and future direction.

Parks Director Marty Kosobucki distributed the 2024 Facility Condition Assessment report to Council members, which has been attached to these minutes as Exhibit A. Kosobucki reported that the ice arena is over 50 years old and in need of repairs; current surcharges and management fees are not adequate to complete projected improvements. He noted that the City owns the land and the building, and leases out operations to Brown County Ice Management (BCIM). The rink currently operates in fall/winter/spring months only. In-floor heat would need to be repaired in order for it to run year round. Kosobucki explained that the rink operates like an enterprise fund, with no levy dollars used for annual operations. Most capital has been funded through the contract with BCIM and the rink fee surcharge (currently \$35/hour). Kosobucki reported that staff has put together three different options for a path going forward: 1) Repair things when they break; work through the project priority list as funds become available; and research non-ice options for summer rentals. 2) Engage in some renovation, at an estimated cost of \$2 million; this plan would include fundraising and bonding in addition to existing revenues. In this scenario, staff projects that annual revenue could roughly cover the debt payments. 3) Engage in renovations including the replacement of the front half of the building at an estimated cost of \$4 million (80% of the problems are in the front part of the facility). This plan would include operation of the facility year round, and would rely on a higher amount of bonding. Staff does not feel that the construction of a brand new facility would be feasible in the current funding environment. Kosobucki then identified several potential sources of additional revenue: rink advertising, summer use revenue, food and beverage sales, and rental of newly created space to a private company. The rink's user groups are open to partnerships wherever possible. Kosobucki then reviewed options for management/operations of the ice arena. Discussion followed on other financial obligations facing the City; management contract options; how to collaborate with user groups; and surcharges/ice time fees.

11. Resolution #25-128 Regarding Fees for 2026 Services.

RESULT:	ADOPTED BY ROLL CALL VOTE [UNANIMOUS]
MOVER:	Casey Nelson
SECONDER:	Dan Carpenter
AYES:	Dan Carpenter, Mike Eserkaln, Pamela Gantz, Jonathon Hansen, Amy Kundinger, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

12. Resolution #25-129 Designating Public Depositories and Authorizing Withdrawal or Disbursement of City Monies.

RESULT:	ADOPTED BY ROLL CALL VOTE [UNANIMOUS]
MOVER:	Shana Ledvina
SECONDER:	Devin Perock
AYES:	Dan Carpenter, Mike Eserkahn, Pamela Gantz, Jonathon Hansen, Amy Kundinger, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

13. Resolution #25-130 Approving State Debt Collection Agreement with the State of Wisconsin Department of Revenue.

RESULT:	ADOPTED BY ROLL CALL VOTE [UNANIMOUS]
MOVER:	Dan Carpenter
SECONDER:	Pamela Gantz
AYES:	Dan Carpenter, Mike Eserkahn, Pamela Gantz, Jonathon Hansen, Amy Kundinger, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

14. Resolution #25-131 Approving Grant Agreement Modification with the State of Wisconsin Department of Health Services for Local Public Health Department Division of Public Health Contract #61880.

RESULT:	ADOPTED BY ROLL CALL VOTE [UNANIMOUS]
MOVER:	James Boyd
SECONDER:	Casey Nelson
AYES:	Dan Carpenter, Mike Eserkahn, Pamela Gantz, Jonathon Hansen, Amy Kundinger, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

15. Resolution #25-132 Authorizing Lease with Amerilux Holdings at 1201 Enterprise Drive (Temporary Office Relocation for Municipal Service Center).

Development Services Director Dan Lindstrom was asked his opinion on the market price of the lease. He stated that the rent amount is within range of other available properties and that he saw no red flags with the price.

RESULT:	ADOPTED BY ROLL CALL VOTE [UNANIMOUS]
MOVER:	Dan Carpenter
SECONDER:	Pamela Gantz
AYES:	Dan Carpenter, Mike Eserkahn, Pamela Gantz, Jonathon Hansen, Amy Kundinger, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

16. Resolution #25-133 Authorizing Miron Construction Co., Inc. to Award Parking Access and Revenue Control Systems (PARCS) Contract 11.12 to Amano McGann, Inc. in the amount of \$108,844.00 and to Award Caulking Contract 07.90 to Caulking Plus, Inc. in the amount of \$52,667.00, related to the Construction of a Public Parking Ramp on Parcel ED-875, 230 North Wisconsin, De Pere, Wisconsin.

RESULT:	ADOPTED BY ROLL CALL VOTE [UNANIMOUS]
MOVER:	Casey Nelson
SECONDER:	James Boyd
AYES:	Dan Carpenter, Mike Eserkahn, Pamela Gantz, Jonathon Hansen, Amy Kundinger, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

17. Appointment of election officials for the 2026-2027 election cycle.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Dan Carpenter
SECONDER:	Casey Nelson
AYES:	Dan Carpenter, Mike Eserkain, Pamela Gantz, Jonathon Hansen, Amy Kunding, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

18. Appointment to the Board of Health by Mayor Boyd: Julie Massey - term to expire December 2026.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Jonathon Hansen
SECONDER:	Amy Kunding
AYES:	Dan Carpenter, Mike Eserkain, Pamela Gantz, Jonathon Hansen, Amy Kunding, Shana Ledvina, Casey Nelson, Devin Perock, James Boyd

19. Consideration and possible action on the Acquisition of Parcel WD-387-1.

Mayor Boyd moved, seconded by Alderperson Ledvina to enter into closed session at 8:55PM. Upon roll call vote, motion carried unanimously. Mayor Boyd moved, seconded by Alderperson Ledvina to return to open session at 9:12 PM. Upon roll call vote, motion carried unanimously. Alderperson Ledvina moved, seconded by Alderperson Gantz to instruct staff to proceed as directed in closed session. Upon vote, motion carried unanimously.

II. Future Agenda Items

Alderperson Carpenter requested a discussion regarding the community service grant program and enacting application guidelines. Alderperson Carpenter also requested a future agenda item to consider the Brown County Ice Management contract. Both items will go to the Finance/Personnel Committee.

III. Adjournment

Mayor Boyd moved, seconded by Alderperson Nelson to adjourn the meeting at 9:15 PM. Upon vote, motion carried unanimously.

Respectfully submitted,
Carey Danen, City Clerk

PROJECT
7840

January 16, 2025 Common Council
Meeting Minutes
Exhibit A



JUNE 2024

City of De Pere | De Pere Ice Arena

Facility Condition Assessment

d e s i g n m a t t e r s .



somerville

architects
engineers



2100 Riverside Drive,
Green Bay, WI 54301-2390
T. 920.437.8136
F. 920.437.8136

somervilleinc.com



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City of De Pere | De Pere Ice Arena
FACILITY CONDITION ASSESSMENT



EXECUTIVE SUMMARY

De Pere Ice Arena

1450 South Fort Howard Drive
De Pere, Wisconsin 54115

INTRODUCTION

Somerville Inc. was hired by the City of De Pere provide a Facility Assessment (FA) of the De Pere Ice Arena. The FA follows the proposal that was agreed to between Somerville Inc. and the City of De Pere.

The purpose of the Facility Assessment is to assist the City in ascertaining the condition of the existing building as it is today and to have a better understanding of the current and future replacement and/or repair needs for building components and systems. Additionally, base line cost estimates are provided to help the City prepare for ongoing capital costs or for future master planning efforts.

Over the years, maintenance has been done on an as-needed basis. As the building ages, these repairs are becoming a greater and greater expense to the City. The most recent large repairs include:

- A. Dehumidification system repaired in 2019
- B. Refrigeration plant repaired in 2019
- C. New bleacher system installed in 2018
- D. Above ground sump tank installed in 2018
- E. Garage door replacement in 2012
- F. Refrigeration plant replaced in 2011
- G. Chemical tank replaced in 2009

METHODOLOGY

Somerville Inc. visited the property on March 25th and April 11th, 2024. During our site visits we visually observed the building and inherent systems that were exposed to view. This was a non-intrusive and non-destructive evaluation. We are not authorized or licensed to inspect for hazardous materials,

No facility assessment can eliminate the uncertainty regarding the property and building deficiencies and their dependent systems. The walkthrough was based on visual observations of the building and the respective systems. The standard for FA's recognizes the subjective nature associated with defining the condition, quality and workmanship of the building components and their respective systems.



The only drawings available of the building were a basic floor plan and the precast floor plank shop drawings. These provided little useful information. The majority of this report is based on field observations. Our Team was able to discuss the building with Marty Kosobucki, Director of Parks, Recreation and Forestry for the City of De Pere, Don Chilson and Todd Gordon from Brown County Ice Management based on their experience in managing facility. Brown County Ice Management also operates the Cornerstone Community Center.

The following building condition assessment looks to document current physical conditions of the building as of our field visits mentioned on the previous page, and includes the following:

- Building Exterior – Walls, windows, roof, exterior doors
- Building Interiors – Floors, walls, ceilings, interior doors
- ADA and code deficiencies
- Plumbing Systems
- Heating/ventilating/air conditioning Systems (HVAC)
- Electrical Systems – Power, lighting, fire alarm, telecommunications
- Ice Plant refrigeration system
- Exterior site conditions

EVALUATION

Each assessment looks to comment on the general state of the building as well as point out deficiencies. The condition of each deficiency was evaluated and assigned a priority.

- 1** Immediate, requires attention within the next 3-6 months
- 2** Should be addressed in the next 2 years.
- 3** Should be addressed in the next 3 – 5 years.
- 4** 5 - 10 years – noted for planning purposes
- 5** 10+ years – noted for long term planning purposes

RECOMMENDATIONS AND COSTS

Each deficiency was then assigned a recommended correction, along with an opinion of probable cost. These costs are meant to give an order of magnitude to the recommendation, not provide fixed budget for the item. The full costs involved would only be known after a full repair/replacement scope is defined, and costs submitted by those vendors actually doing the work. Graphs in Appendix A shows a graphical summary of the costs involved by priority and by discipline. The costs are in today's dollars and are not pro-rated to account for future inflation.



NEW CONSTRUCTION – Example

This Facility Condition Assessment is a resource to help explore the cost benefit of repairing the existing facility or constructing a new facility. The existing building is approximately 40,000 sq.ft., including basement locker rooms and the 2nd floor assembly space. This does not include the Deacons locker room addition. By using RS Means, a national construction cost database, and projecting 2 years into the future, a similar sized building would cost approximately \$250/SF for a total of \$10,000,000.

It's envisioned that the building would all be on one level, with fixed seating for 500 spectators and 4 lockers rooms. Safety features would include a fire sprinkler system, addressable fire alarm, emergency lighting, and a generator.

TEAM MEMBERS:

Duane Grove, Senior Project Architect

Shelia Downing, Plumbing Project Designer

Travis Grell, Mechanical Project Engineer

Troy Theis, Electrical Project Designer

Kevin Byrne, Senior Landscape Architect, **JSD Professional Services**

Kyle Gillespie, President/CEO, **Rink Tec Arena Specialists**

CONCLUSION

ARCHITECTURE

The building falls into the "Grandfathered" status when reviewing building codes and the ADA guidelines. The facility did meet the building code in affect when it was constructed, and it can remain as-is as long as it is not reconfigured in any way. Building systems and equipment can be repaired and even totally replaced without requiring items outside that work to be upgraded. For example, a new ice sheet will not require that the toilet rooms be remodeled to accommodate ADA. However, what is the image of the facility to the community in not providing an ADA toilet room? The facility analysis that follows will point out where the codes have changed since the building was built.

PLUMBING

Condition of the entire sanitary system below floor is unknown and should be scoped to fully evaluate the condition. Supply piping needs to be insulated to help maintain temperature and reduce condensation. Updating the hot water recirculation piping system would increase hot water availability at hand wash lavatories and sinks. The hot water boiler and storage tank are beyond the expected service life and will require replacement in the near future. Plumbing fixtures that were upgraded in 2012 work as they should but the corroded p-traps and supply stops need eventual replacement.



MECHANICAL

Heating, ventilating and refrigeration systems primarily operate between the months of October to May. Some equipment has been replaced recently. Infrared tube heaters above Spectator/Bleacher Seating and suspended unit heater in Zamboni Storage have been replaced within the past 5 years. Major systems and/or their components are aging and will likely require replacement in near future. Upgrading systems to conform with current Building and Mechanical Codes will likely be a significant capital investment.

ELECTRICAL

The Main Distribution Panel and associated circuit breakers are aging and will likely require replacement in the near future. Multiple branch panels will need to be updated due to condition and being outdated. Updating luminaires to L.E.D. type. Updating to automated lighting controls. Installing a new Fire Alarm System to conform with current Building Codes.

SITE CIVIL

The property has experienced general degradation and deferred maintenance, mostly typical with a facility of this age, with no major site deficiencies. Improved grading to direct water away from the building was the most notable site challenge that could improve conditions. Additional observations and recommendations are provided in the report.

ICE PLANT AND RINK

The existing refrigeration system with the issues that arose based on the old calcium chloride being used is now in fairly good condition with the chiller barrel and compressors being replaced.

The Freon is R507. This refrigerant will be accessible for many years to come and has a phase-out date only for importing and manufacturing that is yet to be determined.

Most importantly the floor system is what causes the most concern from my standpoint. It is very unlevel and the subfloor heating system is non-functional. The more use the floor gets over extended periods of time, the worse the floor will heave and a frost problem will develop in the subgrade.



De Pere Ice Arena

SITE PLAN

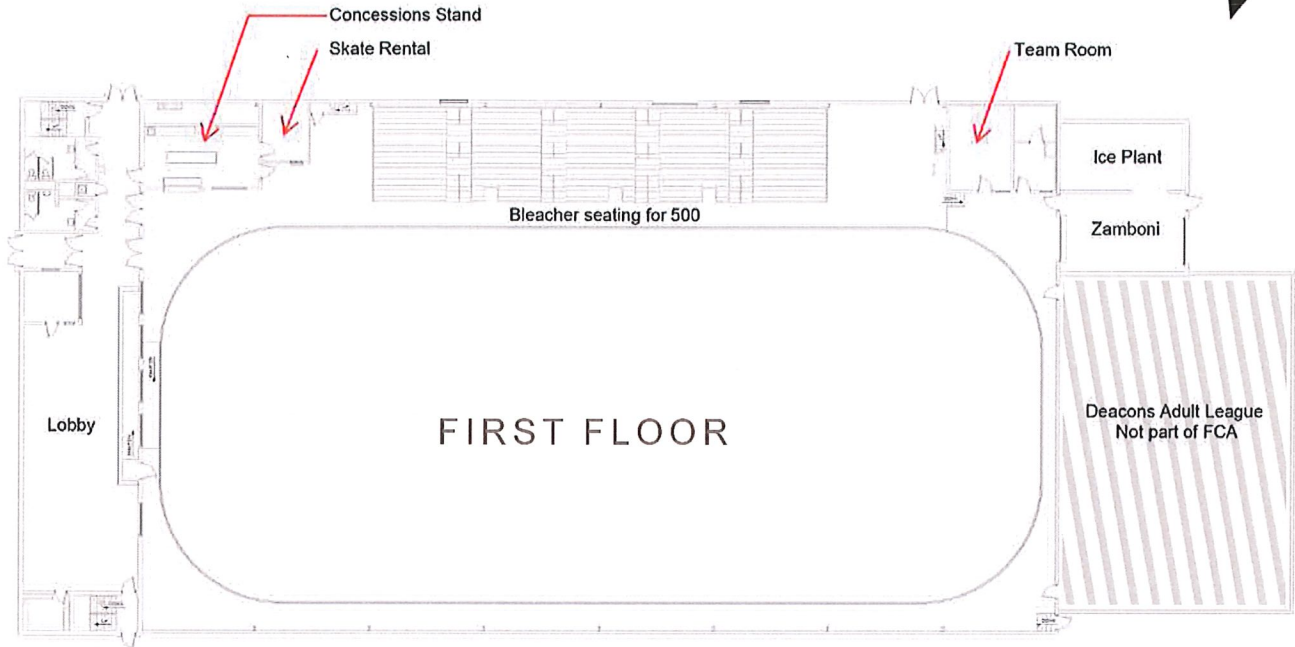






De Pere Ice Arena

FLOOR PLANS



BASEMENT





CITY OF DE PERE – DE PERE ICE ARENA

Building Description / Condition

The De Pere Ice Area, built in 1974, sits on 3.45 acres adjacent to the Brown County Fair Ground on the City's west side. This site area includes the building's immediate site and the parking lot to the west. The main level is 29,500 sq.ft., the basement and second floors are both 3,400 sq.ft. each, and the Zamboni parking and ice plant are 1,000 sq.ft. with a total gross area is 37,300 sq.ft. Note that in the eastern section of the building there are locker rooms managed by the Deacons Adult Hockey League and are not part of this facility assessment. The square footage of this area is not accounted for in the above numbers. The arena section of the building contains one ice rink, bleacher seating for 500 persons, concessions stand, and skate rental. The entry section contains (3) levels: main entry with lobby and restrooms, a second floor with a large assembly space looking over the ice and restrooms, and a basement with (4) locker rooms.

SITE SUMMARY

Over the course of two site visits, by JSD Professional Services, in May of 2024, including a site walk-through with De Pere Ice Arena and Cornerstone Community Center Manager Don Chilson on May 15th, 2024, the current site conditions around the exterior of the De Pere Ice Arena were observed and documented, including a history of the facility over the approximately twelve years since Don Chilson became manager.

Located at 1450 Fort Howard Avenue in the City of De Pere, Wisconsin, the ice arena facility is approximately 50 years old, built on City of De Pere property, and adjacent to the Brown County Fair Grounds, City of De Pere Fairgrounds, Perkofski Public Boat Launch, and a residential neighborhood. Owned by the City of De Pere, the facility is operated by Brown County Ice Management, which also operates the privately owned Cornerstone Community Center, an Ice facility with three rinks, also in the City of De Pere. Parking is accommodated by a main parking lot adjacent to the front entry on the west side of the building, with additional gravel parking along the north façade and east of the building. The building is serviced by public utilities.

Challenges exist between the ice arena and adjacent residential properties to the south, as discussed during the walkthrough with the operator, and include noise complaints from vent fan use during ice removal and music during game events. Vandalism has been documented and includes dented and damaged fan shrouds along the south building façade.

No known construction plans or documents are available for the site design, utilities, etc.

PARKING AND ACCESS

Access to the property comes via a two-lane entry / exit from Fort Howard Avenue directly into the main parking lot, with secondary access from the fairgrounds on the north. An access drive through the park to the boat launch traverses along the north façade and provides access to the north and east / rear parking areas, and the east / rear service area.



PARKING LOT



The main parking area is located on the west side of the building, adjacent to the main entry, and accommodates 85 vehicles, including 4 accessible parking stalls, 2 of which are van accessible. The main parking lot appears accessibly compliant. A more efficient parking configuration may provide additional stalls.

Un-striped gravel parking along the north façade accommodates approximately 22 vehicles.

Un-striped gravel parking / service area at the east / rear side of the building can accommodate approximately 37 vehicles. Recycled asphalt millings were added to the rear parking lot, raising the elevation and causing water to drain towards the service entrances.

Striping of the current gravel parking areas will require additional accessible parking stalls.

Pedestrian walkways from the rear and north parking lots to the main entry do not exist.

During boating season, competition for parking with boat launch users causes a lack of parking for ice rink events. Unless barricaded and signed "For Rink Use Only", at times boater traffic has occupied most of the parking areas for the rink, causing parking issues for rink users.



GRAVEL PARKING LOT EAST OF THE ARENA

ENTRY

Around the building, there are 5 main egress doors with walks or concrete landings, along with several emergency exits discharging to gravel or grass. The entries have experienced settling of slabs or walkways, creating trip hazards and accessibility compliance issues. The main entry has been patched with asphalt as a temporary solution.

GRADING AND DRAINAGE

Along the front, or west side of the building, landscape beds, poor grading, soil build-up against the building above the floor slab, and roof discharge have caused water seepage into the building and damage to lower-level locker rooms. A minimal slope away from the building provides challenges for directing water. Operators have installed an above ground PVC drainage pipe to direct roof water away from the foundation in attempts to alleviate the problem.



NO CONCRETE STOOP AT MAIN ENTRY



WOODEN RETAINER WALLS



EAST DRAINAGE SWALE



SOUTH DRAINAGE SWOLE



DOWNSPOUT WASHOUT



SURFACE ROOF DRAINAGE PIPE



NORTH SIDE OF PROPERTY



DEBRIS AT SURFACE DRAIN



SURFACE DEBRIS

Along the south, a swale between the ice arena and the residential properties captures water and directs it east, towards the Fox River. The swale is graded at a minimal slope in some areas, causing wet pockets that are soft for mowers to traverse, and it meanders through several evergreen trees, inhibiting drainage and causing trash collection. Downspouts along the east façade drain into the swale, however years of damage from vandalism and maintenance mowing have left the downspouts in disrepair or missing all together. Some downspouts drain straight down against the building into the foundation, while others are heavily eroded adjacent to the building from discharge. Discharge from an internal roof drain for the rear locker room has caused significant erosion to the rear swale.

At the rear, or east face of the building, is where the De Pere Deacons locker room and mechanical / service areas are located, several entries and the Zamboni garage are below grade, with grated inlets to remove storm water. Due to numerous trees on the property and adjacent grounds, leaf debris clogging the drains is a constant challenge, requiring regular cleaning of the drains, and water seepage into the building occurs. Water from the rear parking lot drains down the Zamboni access drive, and occasionally into the building, through the Zamboni garage door and mechanical service door, as well as down the sidewalk and into the locker room addition. The Zamboni access drive and rear locker room sidewalk concrete is cracked and settled.

Along the north façade, downspouts drain to grade, and many are damaged similar to the south façade, with water discharging directly against the foundation. A minimal slope away from the building provides challenges to move water away from the building.

The main parking lot east of the building, along Fort Howard Avenue, appears to surface drain to the southeast corner of the lot, into the swale that drains east towards the Fox River. Portions of the parking lot also appear to drain west to Fort Howard Avenue and to the north to a drain inlet in the grass adjacent to the pavement.

The north and east parking areas surface drain with no observable direction, though drain inlets are adjacent to both parking areas, either in the paved access lane or adjacent grass.

From discussion with operation staff, the main parking lot was repaved by the City of De Pere in approximately 2012 and appears in good condition. The city maintains the parking lot, and at the time of the walk-through it had recently been crack sealed.

A front planting area with curbing and fencing exists along the Fort Howard Avenue frontage, and is in disrepair with cracked curbs, no vegetation, damaged 4-foot-tall fencing, and a damaged pedestrian gate to the sidewalk along Fort Howard



RETAINING CURB AT FORT HOWARD DRIVE



OVERGROWN TREES AT SOUTH PROPERTY LINE



WOODEN RETNING WALL



ZAMBONI ACCESS DOOR

Avenue. The operator shared that a 6-foot-tall chain link fence is temporarily attached along the frontage during the County Fair for access control, causing damage and leaving temporary connectors.

Box elder trees on the south neighboring residential property at the Fort Howard Avenue frontage have grown into and damaged the existing chain link fence along the south property line. Many of the trees are in poor condition and lean over the property line onto the facility property. The operator mentioned that several times debris, limbs, and entire trees have fallen into the parking lot and required removal.

RETAINING WALLS

At the rear of the building, several timber retaining walls adjacent to the rear locker room entry and Zamboni / mechanical / service area were observed in poor condition. The timber is rotted and past its life expectancy, and the walls have shifted and settled. The retaining wall adjacent to the mechanical / service room has shifted across the face of the service door.



GAS SERVICE ENTRANCE



ICE EQUIPMENT CONDENSER



TELECOM BUILDING ENTRANCE



SITE PARKING LOT DRAIN

UTILITIES

Electrical utility services come overhead from Fort Howard Avenue to a pole adjacent to the northeast corner of the building, near the exterior chiller and mechanical room, and overhead from the pole to the building with a meter and switchgear located on the building face. Refer to the electrical assessment for additional information.

Gas utility services come underground to a meter on the north building face near the northwest corner. Refer to the mechanical assessment for additional information.

Sanitary sewer service appears to be located on the north side, near the northwest corner of the building, with a manhole adjacent to the building. Size and routing to the public sewer were not determined, though the Green Bay Metropolitan Sewerage District treatment facility is located north on the other side of the Brown County Fairgrounds. No known challenges were expressed by the operator.

Storm sewer service appears to be located along the north façade, traversing through the adjacent park and discharging to the Fox River. Several inlets exist along the north side to capture runoff, either in pavement or the adjacent grass



area. Sump pumps from the building, in the front northwest corner and the rear mechanical room at the northeast corner discharge to the storm sewer. The northeast storm connection from the mechanical room has presented challenges, and has been cleared several times, televised, and replaced due to damage and failure. It is currently functioning without issue. Exterior drains adjacent to the rear locker room and Zamboni / mechanical room clog regularly with dirt and debris and require regular cleaning and maintenance.

Water service was not observed but appeared to enter near the rear mechanical room. Size and route were unavailable. It is unknown if the water service, or any adjacent public water main, could accommodate a fire suppression system if required for renovation. The current water service satisfies the facility's requirements.

REFUSE COLLECTION

Currently, refuse collection is handled by the City of De Pere using numerous smaller, residential style collection carts. Illegal public refuse disposal is a challenge as the carts are located in the open in the rear parking lot.

PARKING LOT LIGHTING

The current main and rear parking lots are illuminated with pole lighting, including newer LED fixtures. Parking lot lighting has been acknowledged as deficient by operating staff, particularly the rear parking lot, where illegal public refuse disposal and vandalism regularly occurs.

SCREENING AND BUFFERS

No screening is observed between the residential neighborhood to the south and the building, main parking lot, and rear parking lot / service area. No screening is observed around the refuse collection carts or mechanical units in the service area. Fencing around the service area, to screen and direct leaf debris, is in disrepair and settling.

SITE CONCERNS

- Parking and access
- Foundation drainage
- Foundation damage from mowers and maintenance
- Pavement settling at entries
- Drainage at rear entries
- Retaining wall conditions
- Utility confirmation
- Refuse collection
- Parking lot lighting
- Screening and buffers



SITE RECOMMENDATIONS

■ Parking and Access

- Install permanent signage displaying parking is for rink users only. Install an access control gate at the rear parking lot / service area. Regrade and pave the north and rear parking lot areas for drainage and striped parking, along with sidewalks to the main entrance and additional accessible stalls as required by code. Discussions with the southwest neighbor regarding tree and fence removal and replacement with a newer fence and screening plants is recommended as trees continue to decline.

■ Foundation Drainage

- Regrade the front foundation to drain to the south swale. Remove landscape beds and rocks and return the area to grass. Install permanent underground drainage pipe from the front roof collector and perforated draitile pipe along the front foundation and direct towards south swale. Repair downspouts and extensions. Install 6-8-inch riprap at downspout discharge locations and repair grade. Re-grade swales and remove evergreen trees. Investigate adding storm sewer inlets along north façade and connecting to the storm sewer system.

■ Foundation damage from mowers and maintenance

- Install a gravel maintenance strip around the building, extending 2-feet from foundation, with metal landscape edging, in conjunction with rip rap at downspout discharge locations. Extend rip rap further into swale as necessary to minimize erosion.

■ Pavement settling at entries

- Remove and Replace pavement at entries to create safe, flush access to doors. Recommend concrete sidewalks.

■ Drainage at rear entries

- Remove and replace concrete walkways and Zamboni service drive at rear service area and locker room. Enlarge catch basins and grates, and/or add trench drains. Install new pavement to minimize water directed towards entries. Institute a regular maintenance schedule for catch basin debris removal.

■ Retaining wall conditions

- Remove and replace retaining walls with modular block retaining walls, including drainage backfill and draitile.

■ Utility confirmation

- Converse with utility owners, locate, and televise utilities to document condition and provide additional recommendations for utility services.

■ Refuse Collection

- Consider privatization of refuse and recycling collection using larger dumpsters in a fenced and/or locked enclosure.

■ Parking Lot Lighting

- Analyze current light levels and install additional pole and building mounted lighting to provide illumination around the site.

■ Screening and buffers

- Install screening along the south property line to provide a buffer to the residential neighborhood. Install screen fencing and vegetation around mechanical units and service areas, including refuse containers. Replace fencing around mechanical unit area and service entry.



STRUCTURAL SUMMARY

The Arena's main structure is a typical moment frame "metal building" girder system with 8" purlins on the roof and a clear span of 118' across the arena. The Entry Section of the building is a single width load bearing concrete masonry unit exterior walls with precast floor and roof structure. No major structural issues were observed, and Staff did not mention any.

STRUCTURAL CONCERNS

- There is evidence of water infiltration through the basement locker rooms walls along the western side of the building. We believe a contributing factor to this is the main roof downspout was draining on to grade too close the building.

STRUCTURAL RECOMMENDATIONS

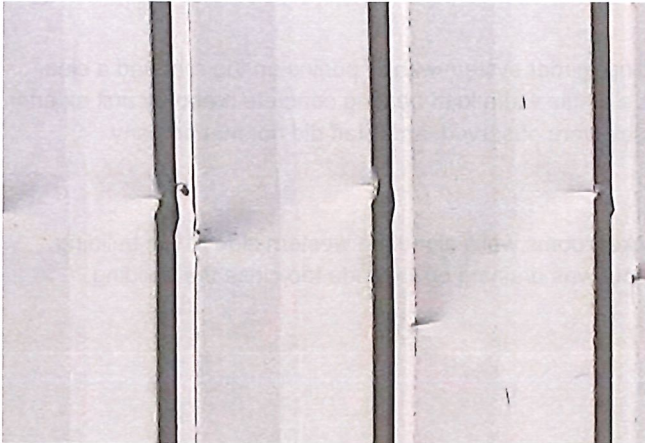
- Route the downspout drain line further away from the building.

EXTERIOR WALLS

The Arena walls consist of exterior sheet metal siding and the interior finish is painted plywood. Wall insulation appears to be 6" fiberglass batts sandwiched between horizontal framing members and the exterior sheet metal siding. The entry section is a 6-scored split face concrete masonry unit, with heavily textured stucco plaster accent bands. The ice plant is painted concrete masonry units.

EXTERIOR CONCERNS

- The metal siding shows areas of buckling where it's either been hit, or the foundation has settled. The folds created are now starting to rust.
- At the base of some siding panels, the screw connections have rusted completely through the siding, and no longer hold the panel in place.
- Gaps in the metal siding, at the base of the wall, could easily allow rodents to enter into the insulation cavity, gaining access into the building.
- Gaps at the top of a few metal siding panels appear to have allowed birds or bats to construct nests in the insulation cavity.
- The jagged nature of the split face concrete masonry units allows dirt to accumulate and create streaks down the face of the walls.
- The heavily textured, white painted stucco also allows dirt to accumulate and contributes to the "old and dirty" feel of the exterior.



CRIMPED METAL SIDING AT ARENA BASE



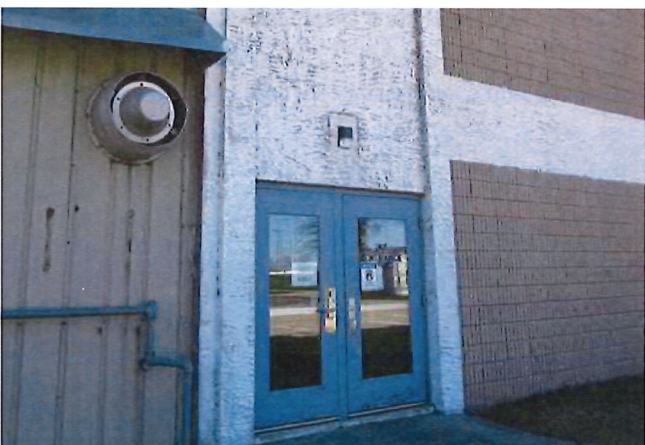
METAL SIDING CONNECTION RUSTED THROUGH



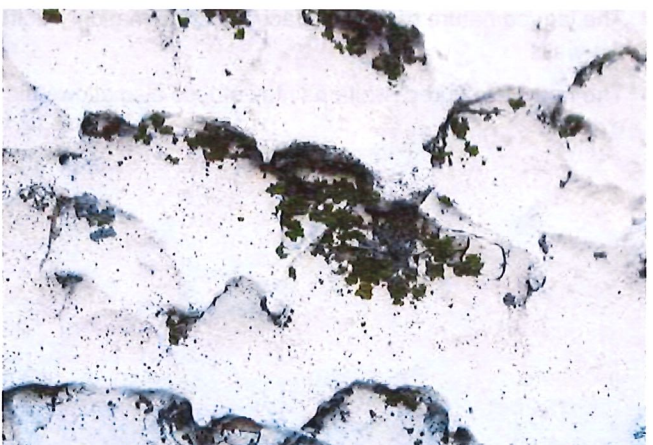
EXPOSED WALL INSULATION AT WALL BASE



NEST IN SIDING GAPS UNDER THE ROOF GUTTERS



TEXTURED STUCCO HOLDING DIRT



LICHEN GROWING ON BUILDING FACE



EXTERIOR RECOMMENDATIONS

- Reattach the metal siding at the base of the wall and seal off the entire length of the bottom of the siding panels.
- Inspect the top of the siding panels to remove any foreign material and seal off with metal trim.
- The Entry Section should be thoroughly pressure washed. The heavy textured stucco should be cleaned and repainted.

ROOFING

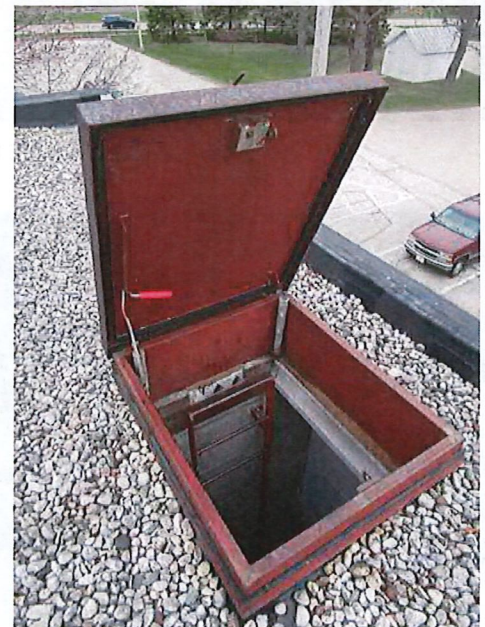
No records or drawings of the Arena roof replacement were available. We believe the original roof was high density fiberglass insulation board covered with standing seam metal roofing panels. Approximately 20 years ago, 4 inches of foam insulation board and a fully adhered white TPO (Thermoplastic Polyolefin) membrane was added on top of the metal roofing. Along the ridge of the roof there are (8) vent hoods. The interior ceiling is covered with a reflective membrane under the purlins.

The Entry Section contains a 10-year-old ballasted black rubber roofing membrane. The entire 3,400 sq.ft. roof drains to a single roof scupper on the front of the building, with (2) relief overflow scuppers on the north and south ends. It's this roof drain we believe was contributing to the water infiltration in the basement.

The Ice Plant is roofed with what appears to be a tan, fully adhered TPO membrane. However, the TOP is covered with a loose laid black EPDM membrane and covered with ballast stones.

ROOFING CONCERNS

- The roof hatch cover is rotated 180 degrees from where it should be relative to the access ladder. This is a major safety concern for maintenance staff accessing the roof. This opening is directly against a roof edge.
- The adjacent honey locust tree deposits it's seed pods onto the roof. This organic material will break down and promote other organic material to grow between the ballast stones.
- At the Ice Plant area, the black layer of roofing membrane is held in place by the roofing ballast and is not continuous over the tan layer. It has exposed edges which will allow water to seep under it and become trapped.



ROOF HATCH INSTALLED BACKWARDS

ROOFING RECOMMENDATIONS

- Rotate the roof access hatch 180 degrees. The proximity of the hatch opening to the roof edge requires a fall protection safety guard rail. Not only is this a building code requirement, but it's also an OSHA mandate.
- The Arena roofing membrane is in good shape for its age. It should be inspected yearly by a qualified roofer as part of a yearly maintenance routine. Budgetary Planning could start now for a replacement in 2034.



- It's not understood why the ice plant has effectively two roofing membranes. Our theory is that the new tan membrane is not very thick and is not attached to the insulation below. The black rubber membrane is heavy enough to support ballast stones which holds the roof in place. Again, we do not know why there are two membranes at this location.



SEED PODS ON ROOF



ARENA AND ICE PLANT ROOF



ICE PLANT ROOF



EXTERIOR METAL DOOR FRAME RUSTING



METAL WINDOW FRAME RUSTING FROM THE INSIDE



WINDOWS

The building contains one single-pane window above the main entry doors. There is evidence of rust inside the frame working its way out. This glass and frame should be replaced with a new thermally broken aluminum frame and double pane insulated glass panel.

DOORS/ FRAMES

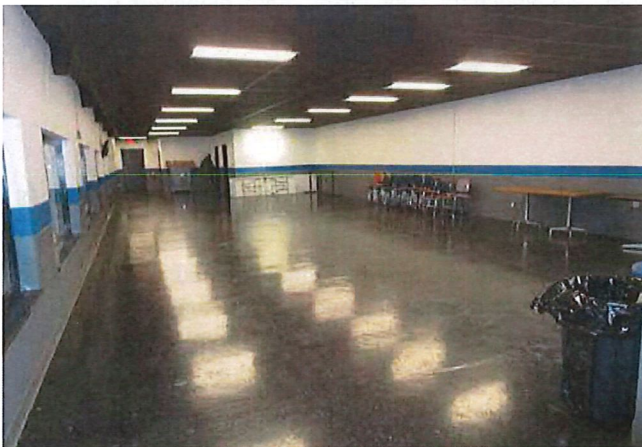
Interior and exterior doors and frames throughout the facility are hollow metal. Overall, most frames are in good to fair condition depending on their location.

DOOR/ FRAME CONCERNS

- The north entry lobby doors are rusting at the bottom and the frame is rusting through where it meets the floor.

DOOR/ FRAME RECOMMENDATIONS

- Replace the north lobby doors and frame.



SECOND FLOOR ASSEMBLY SPACE



WOOD FRAMED STORAGE ROOM

COMMON AREAS

The main entry lobby and the 2nd floor assembly space are in good condition overall.

COMMON AREAS CONCERNS

- On the second floor, there are (3) storage rooms made of wood construction equaling 436 sq.ft. Storage rooms of this size, in an un-sprinkled building, should be made of 1-hour noncombustible construction.

COMMON AREAS RECOMMENDATIONS

- Remove storage rooms, or construct a fire rated wall assembly at the 2nd floor storage rooms.



WOODEN STORAGE ROOM ABOVE CONCESSIONS



ALUMINUM BLEACHERS

SPECTATOR AREA OF THE ARENA

The spectator area contains the concession stand, skate rental room, and bleachers. Galvanized metal bleachers have aluminum seats and contain notches for wheelchair ADA seating. There is rubber flooring from the locker room access ramp, past the concessions stand, and in front of the bleachers. A double set of doors exit to the exterior east of the bleachers.

SPECTATOR AREA CONCERNS

- The rubber flooring in front of the bleachers appears aged, and is shrinking and pulling apart. In places tape is used to fill the gap in the flooring.
- The closest exit to the bleachers contains two doors, one has a round door handle and the other is pinned in place by a floor bolt. This is a code issue as the number of persons required to exit through that opening requires that both doors be active with push bar panic hardware. Current code requires there be a stoop outside the door. Currently there is a 6" drop into the grass.
- There are presently items stored under the bleachers. The current building code does not allow storage under bleachers unless it's protected by a fire sprinkler system or is separated by 1-hour rated construction.
- At the concessions stand, there are wooden stairs leading up to a storage room above. The room is 440 sq.ft. and appears to be sparsely used. As a storage room, it should be 1-hour rated construction or protected by a sprinkler system. The stairs and guard rails of the platform do not meet code and appear to have been constructed after the building was originally built.
- Above the Team Rooms, there is a similar set of stairs leading to the dehumidification equipment surrounded by wooden walls. Again, the stairs and platform guardrails do not meet code.
- There is a foil faced insulation below the roof purlins. At the goal ends, the foil facing has been damaged apparently by impacts with hockey pucks.



GAPS IN THE RUBBER FLOORING



WOODEN STAIRS TO DEHUMIDIFIER EQUIPMENT



DROP OFF AT EXTERIOR EXIT DOOR



REFLECTIVE MEMBRANE RIPPED BY PUCKS

SPECTATOR AREA RECOMMENDATIONS

- Replace the rubber flooring in front of the bleachers.
- Add panic door hardware to the exterior exit door and provide a concrete stoop on the exterior.
- Remove items stored under the bleachers. Provide chain link fencing to prevent unauthorized access to the space.
- If the storage room is needed above the concessions stand, rebuild it with fire rated construction and provide code compliant stairs and guard rails. Similar recommendation above the Team Rooms.
- Replace the foil faced insulation under the roof purlins and add protective netting above the goals to prevent future damage.



RESTROOMS

The current restrooms are extremely small, but did meet the code requirements at the time they were constructed. However, by today's codes they are undersized and not ADA compliant. See the expanded discussion on ADA issues in the Accessibility section of this report. For comparison, today's code would require (4) toilet fixtures for men and (7) toilet fixtures for women to serve the occupant load of the bleachers.

RESTROOM RECOMMENDATIONS

- At least one ADA accessible toilet room should be constructed in the facility. Often single ADA toilet rooms are called out as Family Restrooms as they are private and big enough for wheelchairs, baby strollers and used by families with small children who can not use the regular restrooms.



TYPICAL NON-ADA RESTROOM

LOCKER ROOMS

Each group of (2) basement locker rooms share a single toilet, and group shower room for (8) persons. In operation, only one locker room at a time would have access to the shower and toilet with the other locker room access being locked. This lower level is not code compliant ADA accessible. There is a ramp for users in skates to walk up to the ice level, however it does not meet the current ADA or building codes. Again, at the time it was constructed it met code. However, if upgrades to the facility are undertaken, ADA accessibility to this level will need to be addressed. Once accessibility to this level is created, then at least one accessible toilet and shower needs to be provided on this level. If the existing toilet and shower rooms are reconfigured, then both elements would need to meet ADA. The lower level is tight on available square footage and reconfiguring to meet ADA would be a challenge.

STAIRWELLS - CIRCULATION

Existing stairways met code in 1974. Codes have changed over the years and the existing railings don't meet the code compliance for rails built today. Only a reconfiguration of more than 50% of the building would require these to be upgraded to current codes.



STAIR GUARD RAILS DO NOT MEET THE
CURRENT CODE

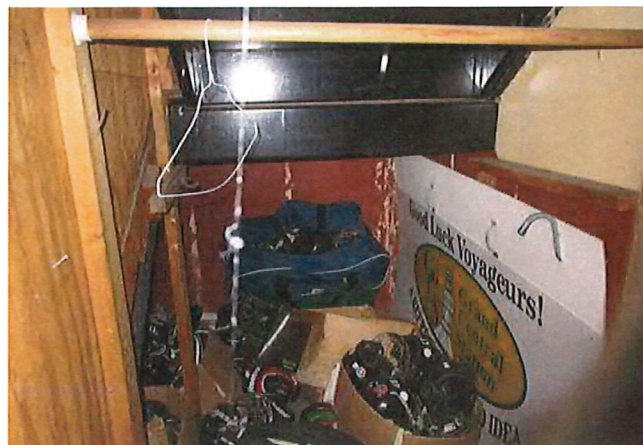


STAIRWELL - CIRCULATION CONCERNS

- On the lower level, the area under the stairs has been walled off to create additional storage.

STAIRWELL - CIRCULATION RECOMMENDATIONS

- All storage items and combustible construction under the stairs should be removed.



STORAGE UNDER EXIT STAIRWAYS

ACCESSIBILITY OBSERVATIONS

The American with Disabilities Act (ADA) of 1992 is a civil rights law that protects individuals with disabilities against discrimination in buildings classified as public due to physical barriers that may impede them from accessing the site, elements of a building or floors of a certain size or use. There are four important factors when considering the accessibility of a building.

The first factor is the approach to a building from a parking lot. This factor is satisfied with dedicated ADA parking directly in front of the building.

The second important factor in the accessibility of a building is the entry into the building from an accessible route. Code requires that the space on the exterior of the door is flat and that there is no more of a 1/2" high threshold at the door itself. Currently both the lobby doors do not have stoops and the drop off is approximately 1" at the west entry door, and 2" at the north entry door.

The third important factor is having an accessible route to common amenities and public spaces such as the bleachers, restrooms, locker rooms, and assembly rooms. An elevator should be provided in the entry section of the building for access to the locker rooms and the 2nd floor assembly room.

The fourth important factor would be to provide accessibility within all common spaces including arena seating and lobby, restrooms, locker/ shower rooms, assembly rooms, etc. As previously outlined, there are accessibility issues with the current restrooms and locker rooms due to their clearance constraints and barriers. Future renovations would mandate that up to 20% of the overall construction budget be allocated to increasing the accessibility of the buildings.





CITY OF DE PERE – DE PERE ICE ARENA Plumbing Description / Condition

SANITARY SEWER LATERAL

The original building was built in 1974 with a recent locker room addition when Voyager Youth Hockey Association and De Pere Deacon Amateur ice hockey teams took it over. The sanitary sewer appears to be adequate for a building of this size and could handle subsequent additions.

There are no existing mechanical drawings for the original building or renovations that were done assuming it was a design build from the 70's. Condition of the sanitary sewer lateral is unknown given that it is underground. There were minor issues reported by facilities maintenance personnel.

SANITARY SEWER LATERAL RECOMMENDATION

- It is recommended to have the sanitary sewer scoped to determine its condition prior to any additions or alterations.

WATER SERVICE LATERAL

A 1 1/2" water service lateral enters the lower level mechanical room from the northwest corner of the facility.



WATER SERVICE SHUT-OFF VALVE



WATER SERVICE AND METER



GUTTER AND DOWNSPOUTS



DOWNSPOUT PVC EXTENSION



CRUSHED DOWNSPOUTS



MISSING DOWNSPOUT EXTENSIONS



MISSING DOWNSPOUT EXTENSIONS



SEVERE PERIMETER GRADE EROSION



MISSING DOWNSPOUT



MISSING DOWNSPOUT

GENERAL STORM/ ROOF DRAINAGE

The building is served by gutter and downspouts to grade.

- Interior storm piping at sump pump is galvanized steel and was replaced/ repaired in PVC.

STORM/ ROOF DRAINAGE CONCERNS

- Missing and damaged downspouts do not allow storm water to be carried away from the building properly. Missing extensions are causing the grade at the perimeter of building to erode due to stormwater.

STORM/ ROOF DRAINAGE RECOMMENDATIONS

- Repair downspouts to gutter, add extensions, pipe stormwater away from building.



SUMP PUMP

SANITARY DRAINAGE

The original building was constructed in 1974. Condition of the entire system below floor is unknown. The above grade sanitary and vent piping is primarily cast iron with additions and repairs made in PVC.

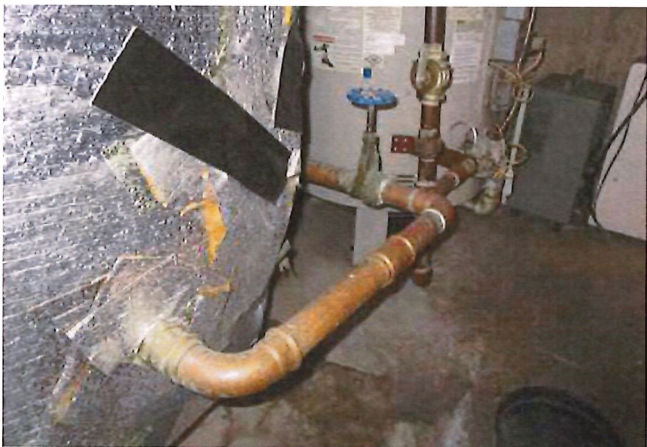
The sanitary pipe serving the large grated drain in the Zamboni room was replaced about 10 years ago. It is piped directly to the exterior to a sanitary manhole.



REPAIRS IN PVC



PAINTED CAST IRON PIPING



PRO-PRESS FITTINGS



BROKEN THERMOMETER ON HOT WATER STORAGE TANK



SANITARY DRAINAGE CONCERNS

- No current issues were mentioned during the site visit and is assumed to be adequate for the building use.

SANITARY DRAINAGE RECOMMENDATIONS

- It is recommended to have the interior sanitary sewer scoped to determine its condition prior to any additions or alterations.

DOMESTIC WATER DISTRIBUTION SYSTEMS

The building has a 1 1/2" domestic water distribution system which is supplied from the 1 1/2" water service. Majority of the domestic supply piping is copper. Additions and/or repairs utilize Pro-Press fittings.

Water pressure was gauged at 62 psi at the first level service sink.

Hot and cold supply piping within the building is not insulated or labeled.

The domestic hot water recirculation system for this building is served by a Bell & Gossett #NBF-22 circulator and appears to be newer.



HOT WATER RECIRCULATING PUMP



COPPER SUPPLY PIPING – NO INSULATION/NO LABELING



1 1/2" SUPPLY TO BELOW FLOOR – UNINSULATED/NOT LABELED AND HEAT TRACED



WATERCLOSETS REPLACED 2012



WATERCLOSETS REPLACED 2012



SUPPLY STOPS



WALL HUNG LAVATORIES



WALLHUNG LAVATORIES



STALL TYPE URINALS W/SENSOR
OPERATED FLUSH



DOMESTIC WATER DISTRIBUTION CONCERNS

- Lack of recirculation piping at branches limits the availability of hot water to most fixtures without running them for extended periods of time.
- Supply piping should be fully insulated and labeled throughout the facility.
- Outlet supply pipe of storage tank has a broken thermometer.

DOMESTIC WATER DISTRIBUTION RECOMMENDATIONS

- Per the Wisconsin Plumbing Code adoption, 2015, from the IECC (International Energy Conservation Code) effective May 1, 2018, regarding maximum pipe lengths on hot water supply to public lavatories and other fixtures by definition as being for public hand washing, shall provide hot water supply piping to within 2'-0" of the fixture for 1/2" supply pipe size. The entire hot water system would need updating/replacement to provide the necessary hot water at all hand washing fixtures to meet this code adoption.
- Insulate and label domestic water supply
- Replace/repair thermometer at hot water storage tank outlet.

PLUMBING FIXTURES

All the waterclosets and lavatories were replaced in 2012 which puts them at 12 years old at the time of this report. Existing p-traps and supply stops appear to have been installed prior to 2012. Stops are corroded.

- Waterclosets are tank type. Supply stops are corroded.
- Lavatories are wall hung with manual faucets.
- One dual height electric water cooler with bottle filler (EWC) located at the first level is in good condition and meets ADA.
- Urinals are stall type with sensor operated flush valve and a manual flush valve on second level.
- The first level service sink is a molded basin with spout threaded on vacuum breaker. The second level has an older mop basin with a two-handle faucet and plain end spout. No vacuum breaker required since it is not a threaded outlet.
- Lavatory p-traps are missing trap wrap to meet ADA code requirements.
- Some floor drain grates are broken and/or clogged.



REMOTE URINAL FLUSH VALVE



URINAL SENSOR OPERATED FLUSH



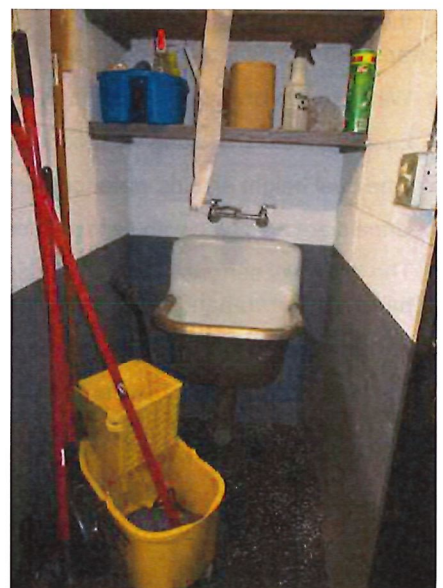
2ND LEVEL STALL URINAL
MANUAL FLUSH



ADA ACCESSIBLE EWC
WBOTTLE FILLER



1ST FLOOR SERVICE SINK



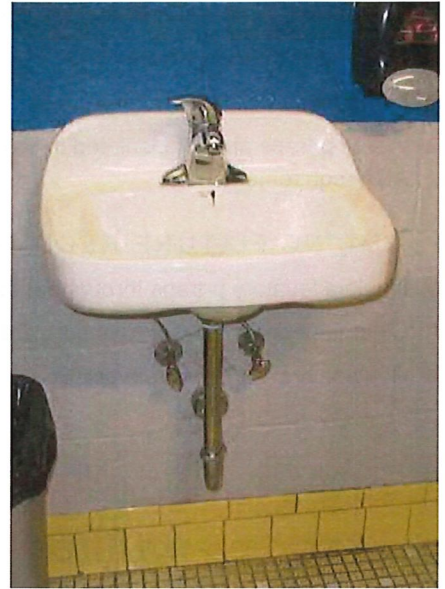
2ND FLOOR SERVICE SINK



SERVICE SINK MISSING SUPPLY
SHUT-OFF VALVE HANDLES AND
VACUUM BREAKER



MISSING TRAP WRAP



MISSING TRAP WRAP



MISSING TRAP WRAP



SHOWER ROOM FLOOR DRAIN GRATE



BROKEN FLOOR DRAIN GRATE



PLUMBING FIXTURE CONCERNS

- Clogged floor drain grates.
- Floor drains missing grates.
- Waste p-traps are not insulated to protect against sharp edges or burns by a wheelchair bound individual not meeting ADA requirements.

PLUMBING FIXTURE RECOMMENDATIONS

- Insulate lavatory p-traps throughout the facility to meet ADA.
- Clear floor drain gates and ensure drains are functioning properly.
- Replace broken floor drain grates.

RESTROOM FIXTURES

Overall, a majority of the plumbing fixtures within the building are in acceptable working condition.

The water closets are 1.6 gallons per flush (gpf) tank type and appear to be in adequate condition.

Urinal is a wall hung 1.0 gpf with a sensor-operated flush valve.

The lavatories are wall mounted with manual single lever faucets.

Plumbing fixtures have a service life of 30 years, but the faucets and valves have a service life of between 10 and 15 years, with regular maintenance and parts replacement.

RESTROOM FIXTURE CONCERNS

- All fixtures appear to be operating as expected with no concerns.

EQUIPMENT

The hot water is served by an A.O.Smith "Burkay" gas fired boiler (dated 2005) and a 350 gallon vertical storage tank in the mechanical room. The recirculation pump appears to be newer and in good condition.

The expected service life of water heaters is 10 – 20 years depending upon water quality and maintenance.

The expected service life of recirculation pumps is 10 years depending upon water quality and maintenance.



EQUIPMENT CONCERNS

- Age of water heater and storage tank are exceeding normal service life and efficiency is in question.
- Storage tank has torn insulation blanket and condition of tank interior is in question
- Recirculation pump appears to be in good condition.

EQUIPMENT RECOMMENDATIONS

- Replacement of water heater and storage tank is recommended due to age, questionable efficiency, and overall condition.

FIRE PROTECTION

Building is unsprinklered



WATER HEATER/STORAGE TANK



RECIRCULATION PUMP





CITY OF DE PERE – DE PERE ICE ARENA HVAC Description / Condition

The mechanical systems serving west areas of the Arena consist of natural gas-fired furnaces and a packaged rooftop unit. Spaces served by the systems include lobby, viewing area, conference room, rest rooms, concessions, storage and locker rooms.

An indoor, modular air handling unit with chilled water coil and hot water reheat coil, provides dehumidification for the Arena.

Natural gas-fired infrared heaters provide supplemental heat for the Arena spectator area.

A suspended natural gas-fired unit heater provides heating for storage room housing Zamboni ice resurfacing machine.

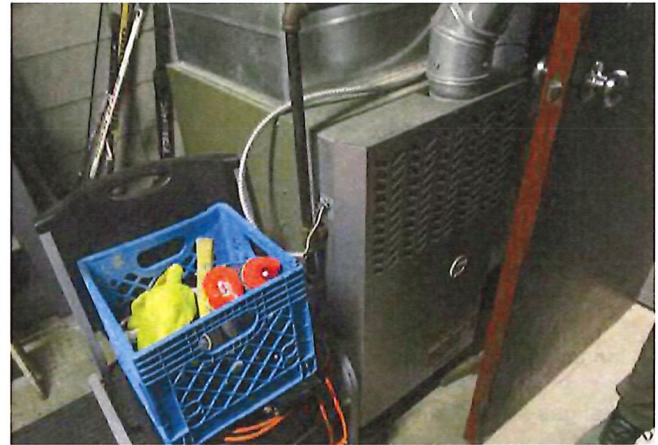
The table below provides applicable values of service life as compared to the actual age and condition of the equipment explored herein. Service life is defined as the economic life of a system or component as it relates to obsolescence, reduced reliability, excessive maintenance cost, changed system requirements, or failure.

Equipment	Actual Equipment Age	ASHRAE Estimated Service Life ¹	Observed Condition
Gas-fired Furnaces	15-34 Years	18 Years	Poor
Packaged Rooftop Unit	25 Years	15 Years	Poor
Indoor Air Handling Unit with Coils	18 Years	20-25 Years	Fair
Inline Pump (Pipe Mounted)	18 Years	10 Years	Fair
Heat Exchangers (Shell-and-Tube)	18 Years	24 Years	Good
Gas-fired Infrared Heaters	1 Year	20 Years	Good
Gas-fired Unit Heater	5 Years	13 Years	Good
Powered Roof Ventilators	50 Years	20 Years	Poor
Electric Baseboard Heaters	50 Years	13 Years	Poor
Electronic Controls	2-25 Years	15 Years	Fair

¹ 1999 ASHRAE APPLICATIONS HANDBOOK



FURNACE #1



FURNACE #2



FURNACE #3



PACKAGED ROOFTOP UNIT

HEATING

There are (3) ducted, non-condensing furnaces serving the main entrance portion of the original building.

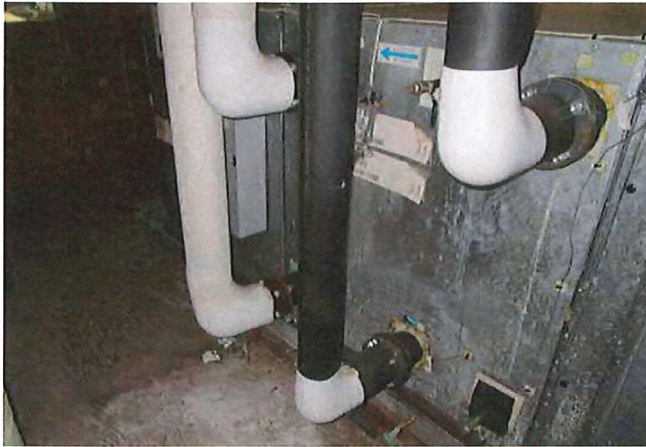
Furnace #1 (200,000 Btu/hr Input; 152,000 Btu/hr Output) is 34 years old and serves First Floor Office, Lobby, Restrooms and Skate Sharpening Room.

Furnace #2 (135,000 Btu/hr Input; 108,000 Btu/hr Output) is 15 years old and serves First Floor Concessions/Skate Rental.

Furnace #3 (125,000 Btu/hr Input; 100,000 Btu/hr Output) is 27 years old and serves Basement Locker Rooms.

A packaged rooftop unit with gas-fired heating serves Second Floor Viewing Area, Restrooms and Storage Rooms.

A ducted, indoor air handling unit with supply air blower; filtration; chilled water, cooling coil and hot water reheat coil provides humidity control for the Ice Arena. Heat rejection (waste heat) from the Ice Arena chiller is converted to hot water via (2) shell and tube heat exchangers and distribution of hot water to the reheat coil via an inline pump.



DEHUMIDIFICATION UNIT



HEAT EXCHANGERS



REHEAT COIL PUMP



INFRARED HEATERS

To provide some comfort for spectators, the bleachers are served by (2) natural gas-fired infrared tube heaters.

The northeast corner storage and locker areas are served by electric baseboard heaters.

Storage room, housing electric operated Zamboni, has a suspended gas-fired unit heater to maintain heating temperature in space when cold outdoor temperatures are experienced.



ELECTRIC BASEBOARD HEATER



HEATING CONCERNS

- Common flue venting termination on roof for furnaces does not have a rain cap. Venting inside the Basement mechanical room housing the furnaces is rusted and deteriorated. Openings in venting caused by deterioration may allow spread of harmful flue gases (carbon monoxide) into building.
- Furnace #1 and #3 are well past their estimated service life expectancy, according to American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE). Furnace #2 is nearing its estimated service life expectancy. Due to age, maintenance can be expected to increase further.
- Electric baseboard heaters are well past their estimated service life. Due to age, they could eventually fail to energize.
- When unit heater was replaced five years ago, existing venting was reused. Unit heater (low heat gas appliance) flue venting through roof is less than 10 feet horizontally from higher portion of building, so its vent termination should be installed a minimum of 2 feet higher than taller portion of building. When unit heater was replaced less than five years ago, venting should have been addressed to comply with Fuel and Gas Code.
- Gas piping routed on Ice Arena roof is rusted and supported by rotten wood blocks. Improperly supported piping could cause damage to roof. The gas piping feeds units serving the east building addition utilized by Voyagers and Deacons teams.

HEATING RECOMMENDATIONS

- Implement a contingency plan to replace furnaces that have exceeded their estimated service life expectancy. Recommend replacement to be with sealed combustion, high efficiency, condensing furnaces.
- Consider replacing flue venting for unit heater.
- Consider replacing wood gas piping supports on roof with UV resistant rubber or plastic supports with Unistrut for pipe attachment.



UNIT HEATER



UNIT HEATER FLUE VENT



GAS PIPING ON ROOF



DEHUMIDIFICATION UNIT SUPPLY DUCTWORK



POWERED ROOF VENTILATORS AND
COMMON FURNACE FLUE VENT

COOLING AND VENTILATION

Fresh air (outside air) brought into the building for spaces served by furnaces utilizes a common ventilation duct system connected to an exterior wall louver on the west side of building. Individual outside air ducts with motorized dampers, connected to the common ventilation duct, branch out to associated furnace return air ductwork. The common ventilation duct system also provides the room with fresh air for domestic water heater combustion.

The packaged rooftop unit has an air-cooled compressor and condensing section for mechanical Direct Expansion (DX) cooling, but no economizer section and controls to bypass mechanical cooling to allow the unit to bring in outdoor air for cooling when outdoor conditions (cool and dry) warrant use. Without an economizer section, the unit does not directly bring in fresh air for ventilation.

The dehumidification unit utilizes chilled water (glycol mixture) from the ice surface chiller system to maintain cooling setpoint in Arena. Sheet metal supply air ductwork discharges 10,000 CFM (Cubic Feet per Minute) from the unit's blower section, out into Arena. The sheet metal ductwork transitions to fabric ductwork with perforations for air distribution.

Several exhaust systems are installed in the building.

Ducted, power roof ventilators on Viewing Area roof provide exhaust for restrooms, locker rooms and storage.

A ducted, sidewall exhaust fan mounted on southwest corner of building provided exhaust when smoking was allowed in Lobby. This fan is activated by a wall mounted switch.

A ducted, sidewall exhaust fan mounted on north wall of building served concession area. It is no longer in use and has been abandoned for some time.

The Arena has (4) exhaust fans. Three (3) south, wall mounted exhaust fans are manually activated to provide an air exchange during summer and keep sand floor dry. An additional inline exhaust fan with discharge ductwork terminating outdoors to a vent on south wall of building is activated in the same manner.

In the mechanical room, housing the chiller, there is a ventilation system consisting of north wall mounted propeller fan and east wall mounted intake louver with damper. This system is no longer in use.



COOLING AND VENTILATION CONCERNS

- The furnace systems do not have means for cooling (air-conditioning for human comfort). This is only a concern if there is a desire to maintain comfortable cooling temperatures for occupants during summer months.
- Based on size of furnace system outside air ducts, they are not sized to provide adequate ventilation to conform with current Mechanical Code, based on occupancy classifications served.
- Outside air / combustion air ductwork is not insulated. Uninsulated, condensation on surface of duct will occur. With moisture buildup, dripping on building materials, it can lead to mold growth.
- The packaged rooftop unit serving Second Floor does not conform with current Mechanical and Energy Codes for ventilation and economizer requirement. According to ASHRAE, the unit is well past its estimated service life, so increased maintenance can be expected.
- Due to age of powered roof ventilators and exhaust fans, maintenance for fans should be expected to increase as they age further.

COOLING AND VENTILATION RECOMMENDATIONS

- If air-conditioning is desired in areas served by furnaces, recommendation is to add DX cooling coils to replacement furnaces. The coils would be piped with refrigerant to air-cooled compressor condensing units that could be mounted on the roof.
- Replace packaged rooftop unit.
- Replace aging powered roof ventilators for Restrooms, Showers and Locker Rooms.

HVAC CONTROLS

Furnaces and rooftop unit each have wall mounted, electronic, 7-day programmable thermostat for temperature control.

Dehumidification unit has electronic controls that act on input signals from space temperature and humidity sensors for operation.

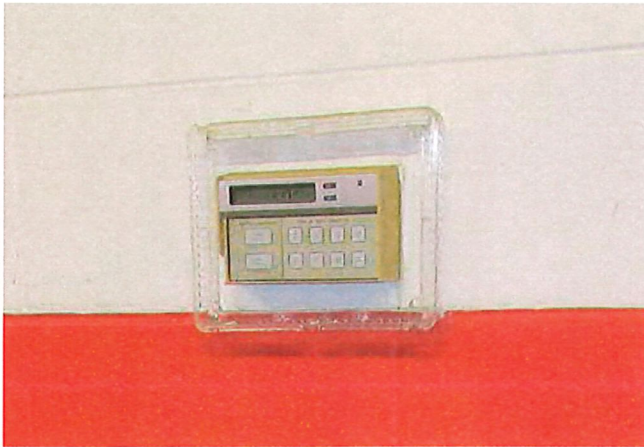
Infrared and suspended unit heaters have electronic, non-programmable thermostats, set to maintain desired heating temperature.

Electric baseboard heaters have factory integral controls that can be adjusted to maintain a set heating temperature.

Wall mounted toggle (On/Off) switches were installed to energize powered roof ventilators and exhaust fans.

HVAC CONTROLS CONCERNS

- Overall, control components have exceeded their estimated service life expectancy and should be replaced.



BASEMENT LOCKERS PROGRAMMABLE THERMOSTAT



SHOWER AND RESTROOM FAN SWITCHES

HVAC CONTROLS RECOMMENDATIONS

- Implement a contingency plan to replace components and wiring as needed to ensure systems operate properly.
- At a minimum, consider implementing electronic time clocks for automatic management of powered roof ventilators and exhaust fans serving restrooms, showers and locker rooms when building is occupied and shutdown when building is unoccupied. This can be interlocked with furnace outside air (ventilation) dampers to open at same occupied hours, for building pressure management and energy conservation measure.





CITY OF DE PERE – DE PERE ICE ARENA Electrical Systems Description / Condition

ELECTRICAL SERVICE/ POWER DISTRIBUTION

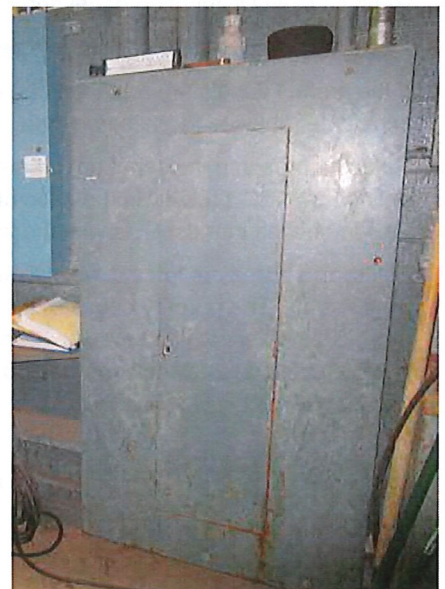
The building electrical service is provided by Wisconsin Public Service (W.P.S.) and is a 277/480V, 400A, 3-phase service with a 400A disconnect switch that feeds the Main Distribution Panel (MDP) located in the electrical / Ice Plant on the first level. The MDP feeds several branch panels and equipment. The original service was upgraded with a new disconnect switch in approximately 2010 to feed the MDP. The existing pole mounted utility transformer is located outside of the main electrical / Ice Plant, to the north of the building. The switchgear equipment and branch panels are manufactured by Square-D, I.T.E. and Siemens. Some pieces of equipment are original to building construction in 1974. Upgraded electrical equipment is limited to the main disconnect switch and two branch panels.

SERVICE/ POWER DISTRIBUTION CONCERNS

- Main distribution panel is original to the building. It is outdated and in poor condition with surface rust and corrosion throughout the panel. Finding replacement parts can be difficult and the actual operation of the breakers may be questionable due to the environment where it is located. If one of these breakers would happen to get overloaded, it may not trip into the “open” state to shut off the circuit. This situation would be considered a fire hazard.
- A few branch panels are original to building construction and dated. One branch panel located in the Ice Plant is outdated and in poor condition with surface rust and corrosion throughout the panel. Finding replacement parts can be difficult and the actual operation of the “toggle” type breakers is questionable. If one of these breakers would happen to get overloaded, it may not trip into the “open” state to shut off the circuit. This situation would be considered a fire hazard.
- The branch panels in the Ice Plant and Janitor’s Closet need to have clear floor space in front of them per National Electrical Code (NEC) 110.26 Working Space. There is a work bench in front of the branch panels in the Ice Plant that impedes into the working space.
- On the second floor above the concession stand, there is an open junction box with live conductor terminations exposed to the space.



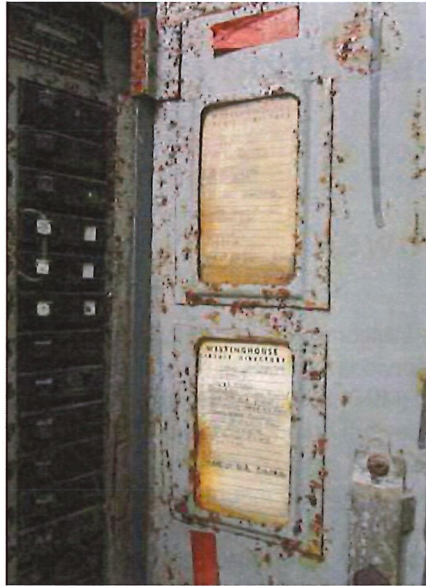
400 AMP MAIN DISCONNECT



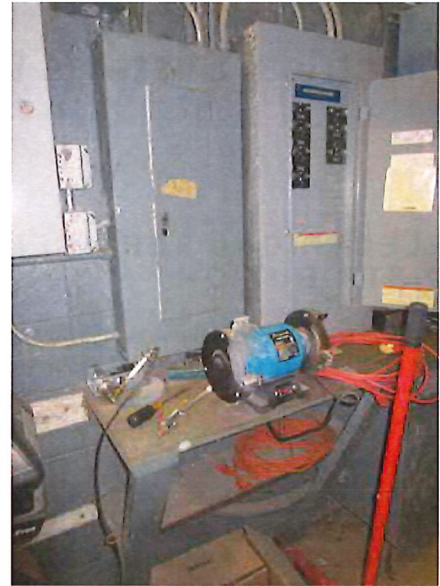
MAIN DISTRIBUTION PANEL



BRANCH PANEL



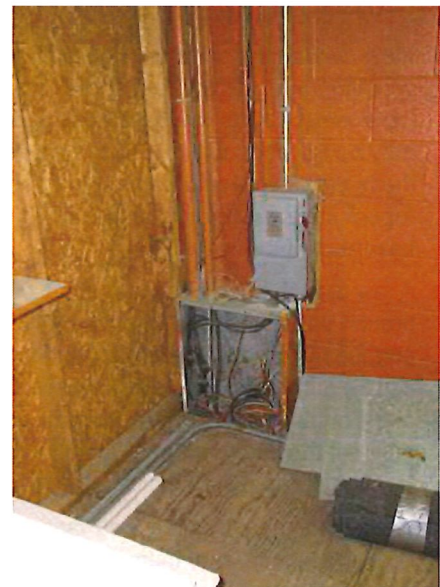
BRANCH PANEL



WORK BENCH CONFLICTS WITH
WORKING SPACE OF BRANCH PANEL

SERVICE/ POWER DISTRIBUTION RECOMMENDATIONS

- Exercise each of the MDP breakers that feed the branch panels and equipment, to verify that they are functional and operate as required.
- Replace Main Distribution panel and breakers with new.
- Replace certain Branch panels with new.
- If the branch panels are replaced, the conductors feeding these panels should be replaced at the same time.
- Relocate branch panels that do not meet the required working space as defined by NEC 110.26. In the case of the panels in the Ice Plant; remove the workbench that conflicts with the working space.
- Electrical service equipment typically has a service life of approximately 30-40 years. The primary cause of the replacement is the inability to produce breakers which properly fit and operate within the existing branch and distribution panels toward the end of life.



OPEN JUNCTION BOX



GENERATOR SYSTEM

The Ice Arena facility does not have a back-up or standby generator for emergency power systems or egress lighting. A generator is not required per code.

GENERATOR CONCERNS

- If any facility has a back-up generator, the current National Electrical Code (N.E.C.) Article 700 requires two separate distribution systems from the generator, or Emergency Power Source. One distribution for Life Safety (lighting and fire alarm) to protect the occupants and one distribution for Equipment (security, circulation pumps, boilers, HVAC units) to protect the building. The facility should consider the installation of a back-up generator system if major remodel or any building additions are done to the property.

GENERATOR RECOMMENDATIONS

- Generators typically have a service life of approximately 20-25 years, with the issue of finding replacement parts that will keep the generator operating properly.
- Consider updating the facility by adding a generator and two separate distributions to meet current code requirements of generator installations.

LIGHTING/ LIGHTING CONTROLS

For interior lighting; all of the ceiling lighting in the lobby areas and over the ice rink (low-bay luminaires) has been changed over to Light Emitting Diode (L.E.D.) type luminaires within the last two years. These have replaced the older / existing fluorescent tube type luminaires. This type of luminaire replacement is an ongoing conversion to L.E.D. luminaires and will result in a much more energy-efficient lighting system.

For exterior lighting; all lighting appears to have been converted to L.E.D. luminaires.

For emergency egress lighting; most of the exit signs have integral lamp heads that will illuminate when normal power is lost. An internal battery unit will energize the lamp heads.

There are areas that still use fluorescent type lamps within the luminaire for illumination; these areas are the lower-level locker rooms, concession stand, seating area in the rink and mechanical spaces. All areas have simple toggle switch for lighting control. There was no observation of automated lighting controls, such as occupancy / vacancy sensors or a lighting control system.

LIGHTING/ LIGHTING CONTROLS CONCERNS

- Lack of automated controls such as occupancy sensors can result in energy over-usage. An occupancy sensor has the ability to automatically turn off luminaires in areas when unoccupied. The International Energy Conservation Code (IECC), Chapter 4, section C405 requires the use of automated controls.
- Although the exit signs have battery back-up lamp heads for emergency egress lighting, that may not be sufficient to cover the "path of egress" in all areas of the building. The "path of egress" is an unobstructed path to exit buildings or structures and shall be illuminated as required by the International Building Code (IBC), Chapter 10, Section 1008. This code requires illumination level of 1.0 footcandle at the walking surface and 10 footcandles in exit stairways.



EMERGENCY LIGHTING



EMERGENCY LIGHTING

LIGHTING/ LIGHTING CONTROLS RECOMMENDATIONS

- Provide automated controls, such as occupancy or vacancy sensors, to turn off lighting when a space is unoccupied.
- Measure the current “path of egress” footcandle levels to determine if any additional battery lighting units are needed to achieve IBC footcandle requirements.

FIRE ALARM

The Ice Arena facility does not have a Fire Alarm system. A Fire Alarm system is required per code NFPA 72 (Group A-4).

FIRE ALARM CONCERNS

- Lack of Fire Alarm system for an assembly type building.

FIRE ALARM RECOMMENDATIONS

- Provide new Fire Alarm system to meet latest code of the National Fire Protection Agency (NFPA) 72 and International Building Code (IBC) 907.2.2.

TELECOMMUNICATIONS SYSTEM

The incoming Telecommunications service is located near the front entrance of the building and is provided by Ameritech. There do not appear to be any issues with this service, and it meets the current needs of the facility.



TELECOMMUNICATIONS

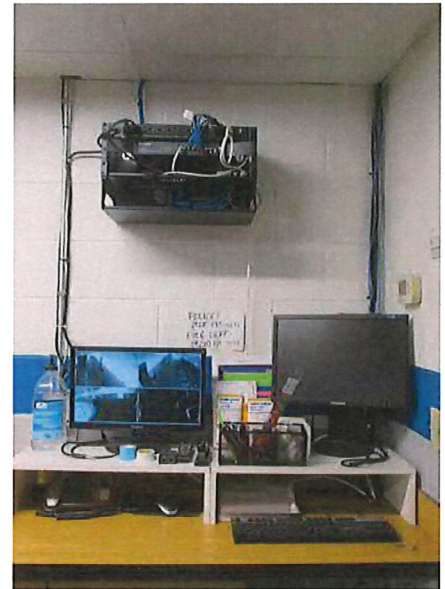


TELECOMMUNICATIONS SYSTEM CONCERNS

- No major concerns at this time. Any future additions or large remodeling may require an updated service to a fiber optic service and upgraded data distribution within the building.
- Data racking and head-end equipment should be located in conditioned rooms dedicated for such use. The controlled environment extends the longevity of the system.

TELECOMMUNICATIONS SYSTEM RECOMMENDATIONS

- No recommendations at this time.
- Any major upgrades to the system should be installed in a room designed for that use.



TELECOMMUNICATIONS

SECURITY ACCESS CONTROLS

Security card access is used on doors where required by the occupants for private access to the building.

SECURITY ACCESS CONTROLS CONCERNS

- The system is no longer working.

SECURITY ACCESS CONTROLS RECOMMENDATIONS

- Security systems should be replaced.



CARD ACCESS





CITY OF DE PERE – DE PERE ICE ARENA Ice Refrigeration Description / Condition

BACKGROUND | ORIGINAL INSTALLATION AND DESIGN

Rink-Tec was selected by the City of De Pere for the ice plant modernization at the De Pere Ice Arena in April of 2011. This consisted of removing an ammonia-based system using calcium chloride and installing the present-day system. The existing system is a Freon-based, split-circuit, 100-ton refrigeration system using R507 as its refrigerant. The refrigeration system is coupled with a Baltimore Aircoil evaporative condenser. The condenser is a combination of air and water and uses a VFD on the condenser fan motor for energy efficiency.

When the system was initially installed, it was coupled with a BRR Technologies dehumidifier. This design uses waste heat from the refrigeration system as well as cold fluid (calcium chloride) returning from the rink floor to dehumidify the rink space.

EMERGENCY SERVICE IN 2018

In September of 2018 an emergency service call was requested by rink management. It was noticed that the relief valve for the rink floor system had burst due to an increase in pressure. The chiller barrel for the refrigeration system was built specifically for use with calcium chloride as the secondary fluid. However, the PH level became acidic and the integrity of the tube sheet on the chiller vessel was compromised. The Freon side of the refrigeration system was also then compromised as calcium chloride infiltrated into the compressors and oil system.

Because the original fluid was used with the new system it became necessary to drain the floor system, flush the floor system, and replace the calcium chloride with ethylene glycol. The chiller barrel was replaced and the entire refrigeration circuit both on the A side and the B side of the system was cut open and cleaned and then purged with nitrogen. All four original compressors were replaced over the next year due to damage brought on by this catastrophic event.

The new chiller vessel has a life expectancy of 30 years with ethylene glycol as the new heat transfer fluid. The compressors, with continued preventative maintenance should be good for 10 plus years of use.

PREVENTATIVE MAINTENANCE

The refrigeration system has been serviced under a maintenance contract since 2012 and is currently serviced quarterly by Rink-Tec International. Refrigerant and oil filters are changed annually in the first quarter of every year. Refrigerant and oil levels are logged and checked on every visit.



Quarterly maintenance includes checking and tightening all electrical controls and components, inspecting pump seals, lubricating all motors, and tightening of fan belt fans on the condenser fan motor. The system is in good operating condition.

SYSTEM UPGRADES

A new condenser fan motor was installed in August of 2021.

A new Variable Frequency drive was added to the condenser fan motor in 2022.

RINK FLOOR CONCERNS AND OBSERVATIONS

In 2021, prior to ice being reinstalled in the rink, it was discovered that the surround pipe that holds the tubing system in place at both ends of the rink had pulled away from the concrete perimeter. This was the main reason for the poor ice conditions around the rink circumference. At this time, we reconnected the perimeter pipe where possible and reconnected the u-bends and tubing system to the surround pipe.

A levelness check was also completed on the rink floor using a laser at the same time. The rink floor level is out of tolerance of current industry standards. A new sand floor today is plus or minus a quarter inch from the benchmark. This floor is plus or minus 2 inches and is a concern based on ice quality and energy efficiency.

RECOMMENDATIONS

- Preventative maintenance on the chiller system should continue. The condenser is in excellent shape if the water treatment is managed properly. I anticipate a replacement for the condenser within a 10-year period. I would budget \$200,000 based on current cost and rate of inflation.
- A new dehumidification system is something that needs to be considered, not only for keeping the arena space dry, but also to make the system more energy efficient by disconnecting the BRR System from the rack system. A Desiccant dehumidification system is industry standard now. This would also take care of fresh air requirements per today's code. I would budget \$200,000 for a new Desiccant system with minimal ductwork.
- Most importantly the floor system is of the most concern. It is very unlevel and the subfloor heating system is non-functional. The more use the floor gets over extended periods of time, the worse the floor will heave and a frost problem will develop in the subgrade. The replacement of the under floor heating system and a sand floor could cost \$600,000 to upgrade to a concrete floor, and the system could cost \$900,000.



APPENDIX A
Cost Data Summary





Ice Arena Projected Maintenance Costs





ESTIMATED REMODEL COST SUMMARY - June 2024

- 1 - Immediate - 1 year
- 2 - Within 2 years
- 3 - 3-5 years
- 4 - 5-10 years
- 5 - 10+ years

Priority



Line NO.	Priority	Discipline (A,C,P,H,E,I)	Description	Installed Date	Typical Life Expectancy (Years)	Condition Adjustment (Years)	Adjusted Life Span	Scheduled Replacement Date	Service Life Remaining (Years)	Cost			
										Qty	Units	\$/Unit	Estimated Total
1	A	A	Repair- Reattach exterior metal siding and seal off bottom	1974			0	1974		1	Allowance	\$10,000.00	\$ 10,000.00
1	A	A	Repair- Seal top of exterior metal siding	1974			0	1974		1	Allowance	\$10,000.00	\$ 10,000.00
1	A	A	Rotate roof hatch 180 degrees add safety rails	1974			0	1974		10	LF	\$120.00	\$ 1,200.00
1	H	H	Replace electric baseboard heaters	1974	13		13	1987	(37)	3	EA	\$1,000.00	\$ 3,000.00
1	H	H	Replace Ice Arena inline summer ventilation fan	1974	20		20	1984	(30)	1	EA	\$3,000.00	\$ 3,000.00
1	H	H	Replace Ice Arena sidewall summer ventilation fans	1974	20		20	1984	(30)	3	EA	\$5,000.00	\$ 15,000.00
1	H	H	Replace restroom, locker and shower room powered roof	1974	20		20	1984	(30)	3	EA	\$5,000.00	\$ 15,000.00
1	H	H	Replace gas-fired furnace No. 1 (80% efficiency) + controls	1990	18		18	2006	(16)	1	LS	\$8,500.00	\$ 8,500.00
1	H	H	Replace gas-fired furnace No. 3 (80% efficiency) + controls	1997	18		18	2015	(9)	1	LS	\$6,000.00	\$ 6,000.00
1	H	H	Replace packaged HVAC rooftop unit	1999	15		15	2014	(10)	1	EA	\$20,000.00	\$ 20,000.00
1	H	H	Replace dehumidification unit heating coil pump	2006	10		10	2016	(8)	1	EA	\$5,000.00	\$ 5,000.00
1	E	E	Provide Fire Alarm System	2024	40		40	2064	41	1	EA	\$60,000.00	\$ 60,000.00
1	A	A	Rebuild 2nd floor storage rooms with fire rated walls				0			900	SF	\$9.00	\$ 8,100.00
1	A	A	Replace rubber flooring in front of bleachers				0			600	SF	\$10.00	\$ 6,000.00
1	A	A	New Arena north exit doors and stoop				0	0		1	EA	\$5,000.00	\$ 5,000.00
1	A	A	Demolish wood storage area above the concessions stand				0	0		1	Allowance	\$3,000.00	\$ 3,000.00
1	A	A	Provide Ladder to dehumidification equipment				0	0		1	EA	\$2,500.00	\$ 2,500.00
1	A	A	Demolish wood storage area below basement stairs				0	0		2	Allowance	\$1,000.00	\$ 2,000.00
1	H	H	Replace gas-fired unit heater-venting				0			1	LS	\$2,000.00	\$ 2,000.00
1	P	P	Insulate and label supply piping				0	0		800	LF	\$15.00	\$ 12,000.00
1	P	P	Replace temperature gauge at hot water storage tank				0	0		1	EA	\$340.00	\$ 340.00
1	C	C	Signage displaying parking is for rink users only				0	0		1	EA	\$8,000.00	\$ 8,000.00
1	C	C	Regrade the front foundation to drain to the south swale				0	0		1	EA	\$4,000.00	\$ 4,000.00
1	C	C	Remove landscape beds and rocks and return to grass.				0	0		1	EA	\$3,000.00	\$ 3,000.00
1	C	C	Front underground drain pipe to swale				0	0		1	EA	\$3,500.00	\$ 3,500.00
1	C	C	Rip-Rap at downspout discharge				0	0		1	EA	\$10,000.00	\$ 10,000.00
1	C	C	Gravel maintenance strip around the building				0	0		1	EA	\$25,000.00	\$ 25,000.00
1	C	C	Concrete sidewalks at entries				0	0		1	EA	\$8,000.00	\$ 8,000.00
2	A	A	Pressure wash exterior CMU and stucco at main entry	1974			0	1974		4,000	SF	\$0.80	\$ 3,200.00
2	A	A	Repair exterior stucco at main entry	1974			0	1974		1,850	SF	\$3.50	\$ 6,475.00
2	E	E	Replace existing MDP	1974	40		40	2014	(9)	1	EA	\$23,000.00	\$ 23,000.00
2	E	E	Replace existing branch panel & transformer	1974	40		40	2014	(9)	3	EA	\$16,500.00	\$ 49,500.00
2	P	P	Replace Water heater & Storage tank	2005	15		15	2020	(3)	1	EA	\$15,000.00	\$ 15,000.00
2	E	E	Lighting controls - occupancy sensors (several locations)	2024	20		20	2044	21	45	EA	\$300.00	\$ 13,500.00
2	A	A	Add ceiling netting above goal area to protect ceiling				0	0		4,500	SF	\$3.00	\$ 13,500.00
2	A	A	Provide ADA / Family Restroom				0	0		1	Allowance	\$15,000.00	\$ 15,000.00
2	P	P	Replace clogged/broken floor drain grates				0	0		6	EA	\$300.00	\$ 1,800.00
2	C	C	Replace east concrete walkways & Zamboni service drive				0	0		1	EA	\$9,000.00	\$ 9,000.00
2	C	C	Enlarge catch basins at front entry				0	0		1	EA	\$20,000.00	\$ 20,000.00
2	I	I	Replace Ice Rink Floor System				0	0		1	EA	\$600,000.00	\$ 600,000.00
3	A	A	Replace west window	1974			0	1974		1	EA	\$1,500.00	\$ 1,500.00
3	A	A	Replace north and west facing lobby doors and frames	1974			0	1974		2	EA	\$3,800.00	\$ 7,600.00
3	H	H	Replace gas-fired furnace No. 2 (80% efficiency) + controls	2009	18		18	2027	3	1	LS	\$6,000.00	\$ 6,000.00
3	A	A	Replace arena reflective ceiling membrane				0	0		4,500	SF	\$3.00	\$ 13,500.00



- 1 - Immediate - 1 year
- 2 - Within 2 years
- 3 - 3-5 years
- 4 - 5-10 years
- 5 - 10+ years

Priority



Line NO.	Priority	Discipline (A,C,P,H,E,I)	Description	Installed Date	Typical Life Expectancy (Years)	Condition Adjustment (Years)	Adjusted Life Span	Scheduled Replacement Date	Service Life Remaining (Years)	Cost			
										Qty	Units	\$/Unit	Estimated Total
3	P		Provide trap wrap on ADA accessible lavatories				0	0		EA	8	\$110.00	\$ 880.00
3	C		Access control gate at the rear parking lot / service area				0	0		EA		\$10,000.00	\$ 10,000.00
3	C		Sidewalks to the main entrance				0	0		EA		\$25,500.00	\$ 25,500.00
3	C		New south property line fencing				0	0		EA		\$15,000.00	\$ 15,000.00
3	C		Re-grade swales and remove evergreen trees				0	0		EA		\$6,000.00	\$ 6,000.00
3	C		Storm sewer inlets along north facade				0	0		EA		\$45,000.00	\$ 45,000.00
3	C		Replace retaining walls				0	0		EA		\$9,500.00	\$ 9,500.00
3	I		Desiccant dehumidification system to replace the existing				0	0		EA		\$200,000.00	\$ 200,000.00
4	A		Replace Arena roof membrane	2004	25		25	2029	6	SF	26,000	\$7.50	\$ 195,000.00
4	A		Replace Ice Plant roof membrane	2004	25		25	2029	6	SF	1,100	\$7.50	\$ 8,250.00
4	H		Replace dehumidification unit-HW heat exchangers	2006	24		24	2030	6	EA	2	\$17,500.00	\$ 35,000.00
4	H		Replace Ice Arena dehumidification unit	2006	25		25	2031	7	EA	1	\$75,000.00	\$ 75,000.00
4	C		Regrade and pave the north and rear parking areas				0	0		EA		\$115,000.00	\$ 115,000.00
4	C		Televise utilities to document conditions				0	0		EA		\$5,000.00	\$ 5,000.00
4	C		Additional pole and building lighting				0	0		EA		\$50,000.00	\$ 50,000.00
4	C		Screening along south property line				0	0		EA		\$18,000.00	\$ 18,000.00
4	C		Screening around mechanical units and trash area				0	0		EA		\$15,000.00	\$ 15,000.00
4	I		Replace the ice making exterior condenser unit	1974	50		50	2024		EA	3,120	\$200,000.00	\$ 200,000.00
5	A		Replace exterior wall siding	2019	13		13	2032	8	SF	1	\$12.00	\$ 37,440.00
5	H		Replace gas-fired unit heater				13			LS	1	\$5,000.00	\$ 5,000.00





APPENDIX B
Major Improvements To Modernize



City of De Pere | De Pere Ice Arena
FACILITY CONDITION ASSESSMENT



MAJOR IMPROVEMENTS TO MODERNIZE

This report has documented the many existing items that need ongoing maintenance in order to keep the facility operating in its current configurations. As also noted, the building's current state is lacking many Code required safety and ADA features that have been added to the model building codes since it was built. Building Codes are not retroactive, and do not require an owner to upgrade a building every time the code changes. However, as soon as the facility goes through a reconfiguration of its spaces or systems, then any new construction is required to be built to the current codes. This gets complicated because complying with the new codes may require work outside the intended work area and more than the intended work scope.

For example, if the locker rooms in the basement are reconfigured, an elevator will be required to meet ADA, and the basement would need a fire sprinkler system and fire alarm system since this floor is below the level of exit discharge. These are major expenses resulting from even minor work. The code does allow for maintenance and repair of existing features and system. But these are still existing items and not reconfigured.

Two simple ADA improvement outlined earlier, the stand-alone ADA toilet room and the concrete doorway stoops at the building's entry ways, would be an easily achievable upgrade which would not require further upgrades inside the facility.

If the intent is to modernize the facility and bring it up to current codes, one major remodeling concept is worth consideration. The building's greatest liability from a code standpoint is the basement and the 2nd floor. The concept would be to demolish the front 2-story western section of the building, filling in the basement and constructing a new one-story addition in its place. The new section would provide for locker rooms at ice rink level, allow ADA access to the building and the ice rink, and allow for the code required toilet fixture count. The cost for this 10,000 SF(+/-) addition could range from \$2.5 - 3.0 million dollars.



somerville

architects
engineers