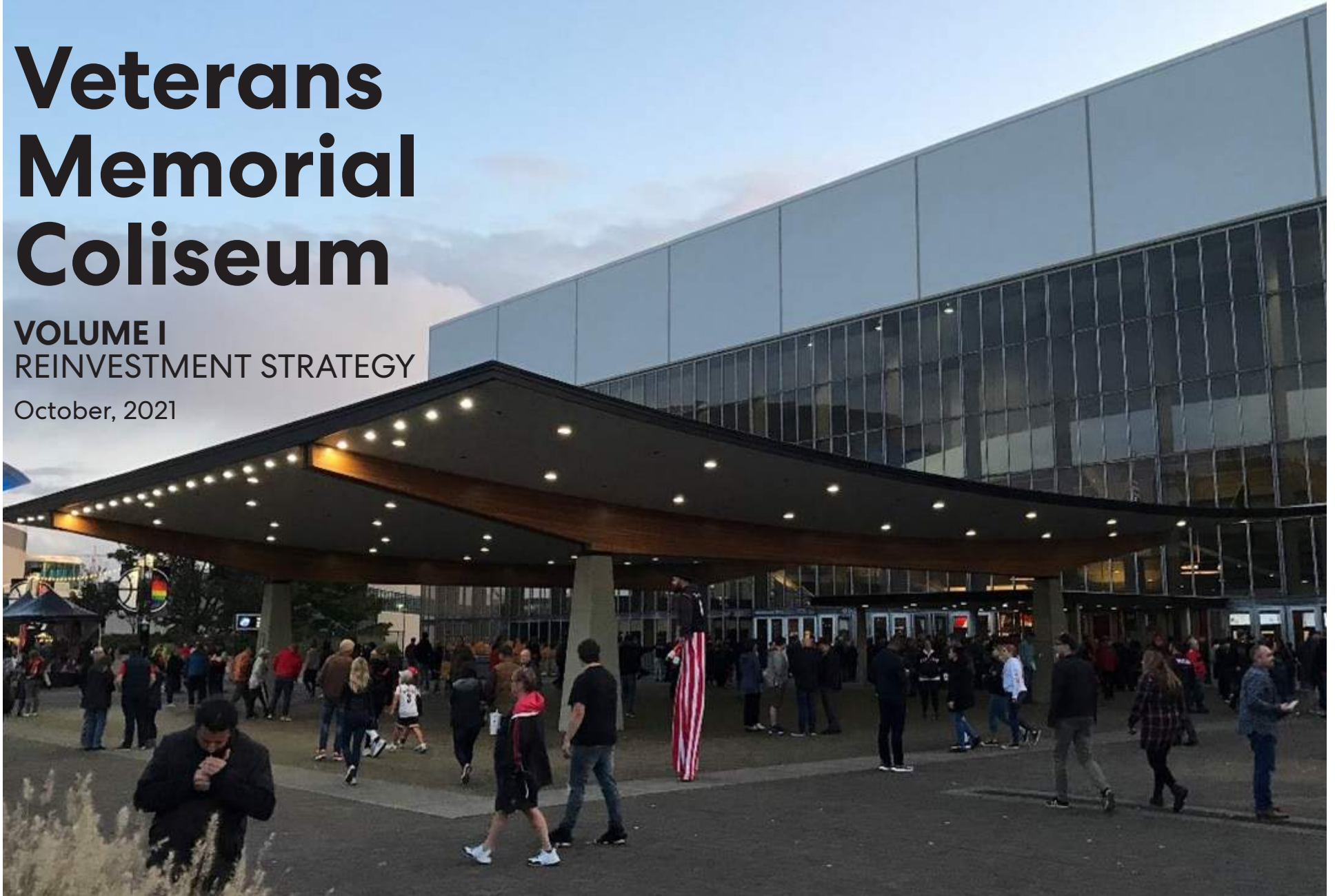


Perkins&Will S|E A  
SCOTT EDWARDS ARCHITECTURE LLP

# Veterans Memorial Coliseum

**VOLUME I**  
REINVESTMENT STRATEGY

October, 2021



# Veterans Memorial Coliseum

## Reinvestment Strategy

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# Part I:

# Introduction



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## How To Use This Document

The entirety of the Portland Veterans Memorial Coliseum: Reinvestment Strategy report provides information regarding existing facility conditions, proposed solutions to address code and deferred maintenance items, along with improvements that will enhance the venue experience for staff and patrons.

Due to the magnitude of information contained within this report, the contents have been divided into two individual volumes.

### Volume I

Volume I is composed of all proposed design solutions to upgrade the Veterans Memorial Coliseum. This document is divided into two overall sections of content; *Part I: Introduction*, *Part II: Proposed Solutions*

**Part I: Introduction** is comprised of an executive summary of the project, acknowledgements to all associated parties, and an explanation of the project *Visions, Goals and Objectives*, which were developed collaboratively by the City of Portland staff, Project Advisory Committee, and the design team.

**Part II: Proposed Solutions** addresses all proposed architectural solutions brought forward by the design team. This document is then divided into three solutions packages; *II.a: Seating Bowl and Code Required Improvements*, *II.b: Critical Deferred Maintenance* and *II.c: Masterplan Packages*.

**Package II.a: Seating Bowl and Code Required Improvements** specifically addresses an overall upgrade of the seating bowl, along with code related items that are triggered by the seating bowl upgrades and are required to be brought into compliance.

**Package II.b: Critical Deferred Maintenance** is composed of all additional items that are required to be updated to keep the building functional. Many systems are beyond their useful life and are at risk of failure - this package intends to address these items before further deterioration occurs.

**Package II.c: Masterplan Packages** compiles the remainder of the Scope of Work Matrix items into five distinct packages, outlining an overall masterplan for the Veterans Memorial Coliseum. The final intent of the masterplan is to create more functional, flexible and engaging facilities to be used by operators, vendors and the community alike. Masterplan packages are as follows:

**Patron Experience:** Upgrades the facility to be more inviting and accessible to patrons during games and other events.

**Arena Enhancements:** Enhancement of acoustics, rigging and loading to make venue more enticing to promoters.

**Conference Center:** Reconfigures the Event level to create a flexible conference center with support space for community use.

**Envelope:** Increases the efficiency and stability of the building's exterior

**Public Spaces:** Engages and enhances outdoor spaces, including the plaza and Memorial Gardens, to promote use and interaction.

## **Volume 2**

Volume II is composed of all supplemental information that supports the design solutions presented within Volume I. Volume II is divided into four overall sections of content; Part I: Introduction, Part II: Consultant Narratives, Part III: Facility Assessment and Part IV: Appendices.

**Part I: Introduction** is comprised of an executive summary of the project, acknowledgements to all associated parties, and an explanation of the Visions, Goals and Objectives which were developed collaboratively by the City of Portland, Project Advisory Committee and the design team.

**Part II: Consultant Narratives** compiles all proposed solutions provided by all consultant teams. Similar to Volume I, this document is also divided into three additional solutions packages; *II.a: Seating Bowl and Code Required Improvements*, *II.b: Critical Deferred Maintenance* and *II.c: Masterplan Packages*. All consultant narratives relate directly to the associated package in *Volume I, Part II: Proposed Solutions*.

**Package II.a: Seating Bowl and Code Required Improvements** explains all building systems work that is triggered by the upgrade of the seating bowl. These code related items intend to bring the building into compliance.

**Package II.b: Critical Deferred Maintenance** provides detailed descriptions of all building systems that are not required by code, but are required to keep the building functioning.

**Package II.c: Masterplan Packages** provides all additional consultant work associated with the five masterplan packages laid out within *Volume I, Part II: Proposed Solutions*. Due to the overlap of items that would be required of these packages, all consultant narratives have been consolidated.

**Part III: Facility Assessment** compiles all information regarding the existing condition of the Veterans Memorial Coliseum. Design and consultant information is addressed holistically within this assessment.

**Part IV: Appendices** include additional studies, meeting minutes, and other documents that are used to support information in both Volume I and Volume II. Additional cost estimating information and the Scope of Work Matrix can also be found within the appendices for reference.

Meeting Notes  
Scope Matrix  
Cost Estimates  
Fire Protection Studies Report  
ASCE 41 Tier 2 Report  
Envelope Energy Analysis  
Owner Project Requirements  
Land Use Narrative

## Executive Summary

The Veterans Memorial Coliseum (VMC) opened in 1960 as Memorial Coliseum, a state-of-the-art arena and conference venue, with a 12,000-seat bowl, a large conference floor, and additional meeting rooms for break-out sessions or other events. For decades, it served as the flagship facility in the region, hosting major convention events, many notable concerts, and serving as the home to local professional and amateur teams including the NBA Portland Trailblazers and the WHL Portland Winterhawks.

Over the years, facility requirements and standards evolved, and as Portland grew, premier events needed larger and better facilities.

In 1990, the Oregon Convention Center was built, and the great majority of convention events left the VMC. In 1995, a new 19,000-seat arena was built next to the VMC with supporting plazas, office space, restaurants, and parking. The complex including the VMC was named the Rose Quarter, a 30-acre sport and entertainment district, and the new arena was named the Rose Garden (now Moda Center.) The Trail Blazers and many of the high-profile events moved into the new venue, and the VMC lost revenue and hosted fewer, smaller events but remained an active and valued community asset. Over the years, many options have been considered for the VMC's future, including conversion to a recreation facility or demolition.

Today, Veterans Memorial Coliseum continues to host sports and entertainment events, including hockey, basketball, concerts, speaker events, and ice shows, but its continued success is hampered by its aged and deteriorating condition. As visitor expectations have evolved, the VMC has become sub-standard in many of its amenities and services. Certain features of the overall configuration and construction make the facility challenging to operate and maintain, including the envelope construction and accessibility. Many of the building systems are original from its construction in 1960 and are

at the end of their useful life. The venue is also operationally challenged for many types of events, especially concerts. However, the regional market for a mid-sized arena venue is strong and the number and range of events the VMC hosts could be expanded with a reinvestment in the building.

The City of Portland is continuing to pursue a multiyear effort to address long deferred improvements at the Veterans Memorial Coliseum (VMC). The strategy described in this document builds on prior work that examined a broad array of possible reuse concepts, the physical needs of the building and its potential to better serve the demands of the Portland market. This document is intended to provide guidance and context for stakeholders, contributors and decision makers as the strategy progresses.

In November 2011, the Portland City Council approved Resolution 36887 which directed the VMC be renovated as an enhanced spectator facility to:

- perform capital repairs and improvements
- generate economic benefit through construction jobs and increased event activity
- enhance the guest experience and increase attendance
- repair and renovate the Memorial Gardens
- catalyze future Rose Quarter Development and grow the tax base
- provide additional community access, support neighborhood livability and attract new area businesses to the area

Since then, the Spectator Venues Program has completed a number of studies and by the end of Fiscal Year 2020-21, had invested almost \$13.5 million in repairs and improvement projects that further Council objectives for the VMC. The results of

these strategic investments have been positive, with a marked improvement in guest reviews, more bookings for concerts and other events, and generation of net operating profits until the COVID-19 pandemic closed the VMC and similar venues.

The reinvestment strategy will define the next steps of work to achieve the 2011 objectives while also integrating the VMC's status as a National Register Historic Place, honoring the war memorials located on the site and acknowledging the VMC's significance in Portland's history, traditions and civic life. The strategy embraces the VMC's past and positions it to contribute more to the area's future development while keeping an eye toward an equity-focused revitalization in the surrounding neighborhood. Additionally the strategy will increase the VMC's positive impact on the City's economy, generating economic benefit through direct spending as well as construction, hospitality and travel and tourism jobs.

The strategy is expected to lead to construction activities that may take place as a single project or multiple projects over time. In addition to physical improvements to the building and site, the strategy will incorporate a stable operating plan for the venue and a funding strategy for both construction and ongoing operations. The current Veterans Memorial Coliseum Operating Agreement with Rip City Management will expire in 2023 and other Rose Quarter agreements will expire in 2025. Currently, \$40 million has been identified for the physical improvements but addressing the full needs of the VMC will require additional funding.

The VMC Reinvestment Strategy is being developed while a larger visioning and redevelopment strategy for the area is also in progress.



**ALBINA VISION MAP**

## Acknowledgments

The City of Portland, Office of Management & Finance,  
Spectator Venues Program

Rip City Management

Veterans Memorial Coliseum Reinvestment Strategy  
Project Advisory Committee



**Veterans Memorial**  
COLISEUM

### Design and Consultant Team

**Architect of Record / Arena Design**  
Perkins and Will

**Architecture**  
Scott Edwards Architecture

**Civil Engineering**  
Vega Civil Engineering LLC

**Landscape Architecture**  
Mayer/Reed, Inc.

**Structural Engineering**  
Madden & Baughman Engineering, Inc.

**Mechanical Engineering**  
**Electrical Engineering**  
ME Engineers

**Plumbing Engineering**  
Bantam Engineers

**AV and Acoustics**  
Wrightson, Johnson, Haddon & Williams, Inc.

**Food Service Design**  
JBK Consulting and Design, Inc.

**Historic Preservation**  
Peter Meijer Architect, PC

**Code and Life Safety**  
FP&C Consultants

**Cost Estimating**  
JLD Cost Consulting

**Sustainability / Enclosure**  
RWDI USA, LLC

**Commissioning**  
Energy Performance Engineering, LLC



# Guiding Principles

## Overview of the Vision, Goals, and Objectives

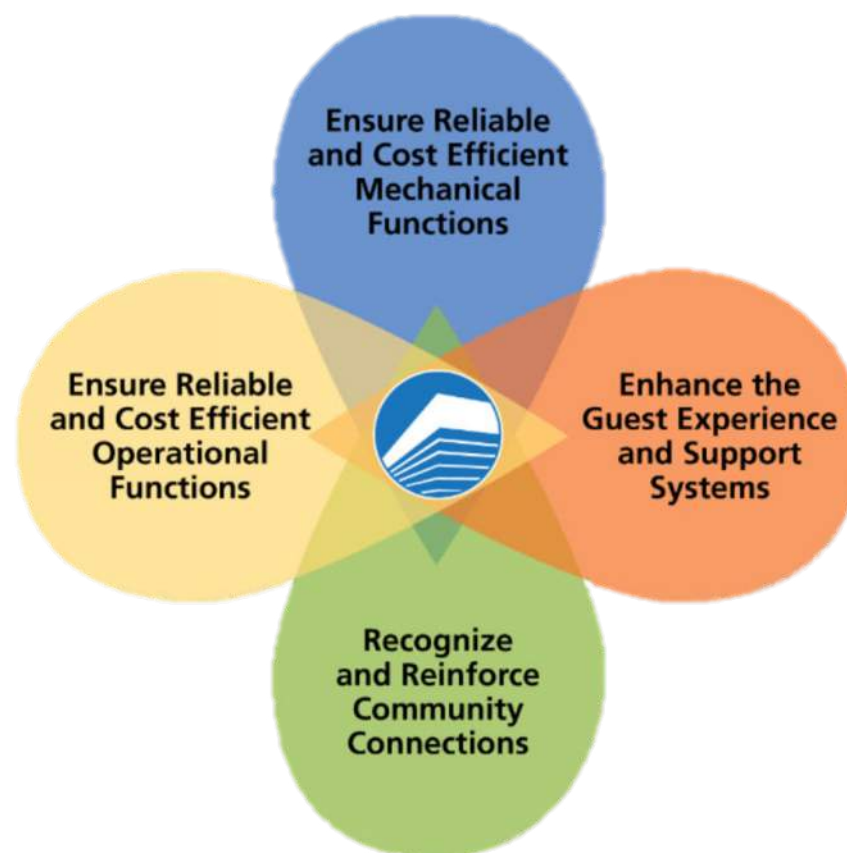
The vision, goals and objectives of the VMC Reinvestment Strategy provide a shared understanding of the effort's desired outcomes, a basis for examining options, and guideposts for decision making.

The vision statement embodies the high-level outcomes desired from the strategy. It is intended to be used, in conjunction with the goals and objectives, to prioritize limited resources, particularly for developing specific reinvestment projects. The goals and objectives provide the next layer of detail to be used in decision making and are highly interrelated: each goal and objective can impact and influence others.

The goals and objectives are not intended to be used to rank potential improvements or for weighting of improvements to achieve a specific hierarchy. Instead, they should be viewed as interactive. As funding constraints and code requirements will involve difficult decisions, solutions that respond to multiple objectives will be given greater consideration.

Initially, the vision, goals and objectives were used during the design phase, and stakeholder engagement process, to evaluate ideas and options for the building and site improvements. As the strategy moves into later stages of design and construction planning, they will continue to be used to help make specific budget and funding-based decisions.

During the design phases of the strategy, the Project Team worked directly with the Project Advisory Committee (PAC) to ensure that stakeholder concerns and aspirations are understood and considered.



**REINVESTMENT STRATEGY'S INTERACTIVE GOALS**



## Vision Statement

Valuing the iconic design of the Veterans Memorial Coliseum, recognizing its role in Portland's community life and acknowledging that its initial siting and development relied on racist urban renewal policies, the City will plan, design, and implement a reinvestment strategy to *extend the life and increase the financial viability* of this flexible, multi-use event, meeting, and exhibition venue for the next 30-50 years.

### Goals and Objectives

#### 1. Ensure Reliable and Cost-Efficient Mechanical Functionality

Repair or replace aged and inefficient building systems to improve operational and mechanical functionality for an appropriate life cycle, a minimum of 30-years where practical.

Objectives:

1. Identify mechanical, electrical and plumbing system components to be repaired, refurbished, replaced or upgraded to:
  - a. Provide cost efficient and reliable essential building services.
  - b. Reduce and control ongoing repair and replacement costs.
  - c. Establish predictable maintenance and cost schedule.
  - d. Reduce operational costs by reducing energy usage.
2. Update audio/visual, communication technology and acoustics.
3. Identify building envelope components to be repaired, refurbished, replaced, or upgraded to:
  - a. Reduce and control ongoing repair and replacement costs.
  - b. Establish predictable maintenance and cost schedule.
  - c. Reduce operational costs by reducing energy usage.
4. Evaluate efficacy of structural and site-related systems such as truss capacity, seismic restraint, security, ADA, and fire/life safety to:
  - a. Increase health, safety, security, and accessibility for guests, staff, and vendors.
  - b. Satisfy applicable code requirements to the degree specified for a renovation project in an historic landmark building.
5. Seek to meet LEED Building Operations and Maintenance (O+M) certification at least at the Silver level to:
  - a. Reduce operational costs by reducing energy usage.
  - b. Adhere to the City's Green Building Policy.

#### 2. Ensure Reliable and Cost-Efficient Operational Functionality to Enhance Conditions for Event Producers and Building Operator

Broaden and deepen the VMC's market range and increase its revenue generation by investing in appropriate repairs and enhancements desired by event producers and building operator.

Objectives:

1. Reinforce and enhance the VMC's capacity to serve its market niche and key community roles identified in the 2015 VMC Options Study.
2. Review and refine the previously developed scope of work for program spaces, functional elements, user amenities and operational capabilities necessary to serve the Rose Quarter campus and the VMC's desired market and range of events, meetings and exhibitions.
3. Determine and "right size" the appropriate physical improvements, missing elements and operational changes, such as loading, rigging, and curtaining needed to:
  - a. Attract the desired range of events, meetings, and exhibitions.
  - b. Address production needs and cost parameters of the desired range of events, meetings, and exhibitions.
  - c. Provide efficient back of house and front of house operations.
4. Update meeting rooms, exhibit hall and building amenities to capture more non-bowl events.
5. Improve revenue generation through:
  - a. Increased opportunities for sponsorship and advertising.
  - b. Expanded food and beverage options and merchandising opportunities.

### 3. Enhance the Guest Experience and Guest Services Support Systems

Increase guest satisfaction and venue revenues by improving the attendee experience at all events.

Objectives:

1. Identify and address building elements and operations to:
  - a. Meet attendee expectations for physical comfort, health, safety, security, and accessibility.
  - b. Provide attendees with greater variety of food and beverage options.
  - c. Expand retail and merchandise opportunities.
2. Improve attendee experience through strategic enhancements to technology, media, acoustics, and wayfinding.
3. Bolster sports fan loyalty opportunities and increase revenue through premium spectator offerings.
4. Encourage broader attendee experience of the VMC by highlighting the health, environmental, and economic benefits of the site's walkability and its connectivity to other Rose Quarter facilities and the surrounding area.
5. Consider the viability of utilizing sponsorship and advertising revenues to fund guest experience improvements.

### 4. Recognize and Reinforce Community Connections

Extend and expand the long history of community life supported by the VMC by integrating improvements that support accessibility to and the variety of community activities, functions and events while prioritizing equity, diversity, and inclusion.

Objectives:

1. Maintain the flexibility and variety of spaces available to community events of different types and at affordable costs.
2. Honor veterans by re-envisioning the Veterans Memorial Gardens to enhance the experience of the memorial space, inspire greater use and improve accessibility to and visibility of the memorials.
3. Activate plaza spaces with new amenities to encourage new and traditional festivals and community events, to increase revenue opportunities and to provide a welcoming public space for programmed and non-programmed neighborhood and community use.
4. Showcase the unique history and culture of the VMC as a National Register Historic building by highlighting its remarkable design and preserving architectural elements including reuse of obsolete elements as decorative or commemorative items
5. Acknowledge the Rose Quarter's past by:
  - a. Recognizing displacement of the Albina's African American community by sharing the story, paying homage, and reactivating the area to be more inclusive.
  - b. Applying an equity lens to decision making.
  - c. Seeking to meet or exceed all City procurement equity goals throughout strategy development and implementation
6. Increase the use of active transportation by capitalizing on VMC's central location and proximity to transit options.

# Part II:

# Proposed Solutions

## PROPOSED SOLUTIONS INTRODUCTION

The solutions proposed by the design team were developed following a Facility Assessment completed in November 2020, to build on work previously undertaken by the City of Portland, and with input from Rip City Management, the current VMC operator, and the Project Advisory Committee. The solutions build on the City's investments in the VMC over the last decade, address deferred maintenance issues, and incorporate valuable upgrades that will enhance the physical and operational performance of the venue. Implementation of these solutions is anticipated to be pursued through more than one construction project and funding will significantly influence the degree to which many of the solutions can be completed.

Some upgrades must be done to bring the Coliseum up to code and keep it operational, while others can be prioritized based on their value to the facility. Given the breadth of potential upgrades, the reinvestment strategy is expected to be phased over multiple projects depending on available funding.

The first two proposed projects (II.a- Seating Bowl and Code Required Improvements and II.b - Critical Deferred Maintenance) have elements that are closely related and to the degree possible, based on funding, these projects should be pursued jointly.

The proposed Seating Bowl and Code Required Improvements package would address many of the existing code and life-safety deficiencies, specifically with regard to the primary space in the building: the seating bowl. These upgrades would immediately benefit visitors to the arena and increase revenue opportunities.

To meet many of the code required improvements, a large number of building system elements would need to be addressed. For example, the required fire and smoke control upgrades necessitate changes and upgrades to the main electrical switch gear and distribution panels. Similarly, the code required restroom improvements will require significant upgrades to the building water distribution and sanitary waste systems. ADA requirements will trigger improvements to doors and accessibility, and life-safety requirements will trigger other changes to egress and sprinklers.

The proposed Critical Deferred Maintenance package would prioritize additional deferred maintenance needs currently being faced. Overall, to ensure the long-term operational needs of the arena, improvements must be made to the HVAC, audio/video and security systems.

Beyond these priority projects, a masterplan has been developed (II.c - Masterplan Packages) to capture the remaining improvements and ensure that they are compatible with one another creating a holistic event and community building. These scopes of work are consolidated into five project packages (Patron Experience, Arena Enhancements, Conference Center, Envelope, and Public Spaces) and can be implemented based on renovation priorities and available funding.

Volume II is composed of all supplemental information that supports the design solutions presented within Volume I, including Consultant Narratives that provide more details about the work needed to implement the proposed solutions.

# **Package II.a.**

Seating Bowl and Code Required  
Improvements

## OVERVIEW

The Facilities Assessment Report, completed in November 2020 as the first step to developing the proposed solutions, identified many potential projects for Veterans Memorial Coliseum. These initial ideas were evaluated against the City Council's stated goals in Resolution 36887, which envisions a revitalized multi-purpose venue, with a focus on enhancing diversity, improving guest experience, and increasing economic impact as well as the project's vision, goals and objectives. The master plan presented here prioritizes the solutions and proposes a specific sequence of projects based on the greatest need, the greatest impact, construction sequencing, and available funding.

Through the prioritization process, improving the seating bowl was identified as the project that most clearly aligns with the project vision, goals and objectives. The seating bowl has not had any significant improvements since the facility was built in 1960, and the great majority of seats are over sixty years old. The seating bowl is the heart of any multi-purpose arena and is the place where the action happens and memories are made. This is also where the most visitors spend the most time. An enhanced and revitalized bowl is also able to attract more shows and sell more tickets, resulting in greater revenue for the coliseum and a greater economic impact to the surrounding community and the region.

As the primary assembly space, the seating bowl is more than just seats, and many of the spaces and facilities in the coliseum directly support the bowl, such as circulation to and from the seats, restrooms, and concessions. In addition, many codes and standards have evolved over the years, and a bowl

renovation is an opportunity to bring the facility into compliance with requirements for restrooms, accessibility, exit pathways, emergency notification, fire prevention, and fire suppression. All of these improvements need to happen together as part of a Phase 1 package, and all are part of the proposed Seating Bowl and Code Required Improvements project.

Most of the improvements in this package are in the bowl itself, but the most notable exception is the expansion and improvement of restroom facilities. The quantity of restroom fixtures to be provided is code-mandated, based on the number of spectators in the bowl and the whole building occupancy. The current restrooms are largely based on 1960's standards, and do not meet current code for quantity, accessibility, or clearance requirements. As part of this package, restrooms throughout the facility will be renovated and expanded to meet current standards.

Some of the other ancillary improvements that are required as part of a seating replacement relate to life-safety, including fire alarms and notification, emergency lighting, and smoke evacuation required for this type of assembly space. These systems rely on emergency power, and some improvements to the electrical system will also be made as part of this initial project.

## Architectural Summary

Perkins & Will / Scott Edwards Architecture

### SEATING BOWL

In many ways, the existing seating bowl is unchanged from its original construction. The seating, aisles, and railings all fall short of current code compliance and standards of comfort. A major deficiency is the lack of ADA seating. Like many older arenas, there are limited locations where wheelchair platforms can be reached from an accessible route. In the VMC, the only potential location for these platforms is at the concourse level at the existing cross-aisle. Except for a few positions at the event floor, all of the required wheelchair seating will be located here. To accommodate sightlines for wheelchair patrons, the platforms will extend over the first two rows of seats. Additional accessible seats are required to provide other patrons with seating options. These are located along the stepped aisles and include lifting armrests to facilitate easy access to the chair.

In addition to increasing the quantity of accessible seats, the existing bowl seats are heavily worn and need to be replaced. The existing chairs are narrow by current standards and will be replaced with wider chairs. The new seating may include padded seats and backs, cupholders, and will average 21 inches in width.

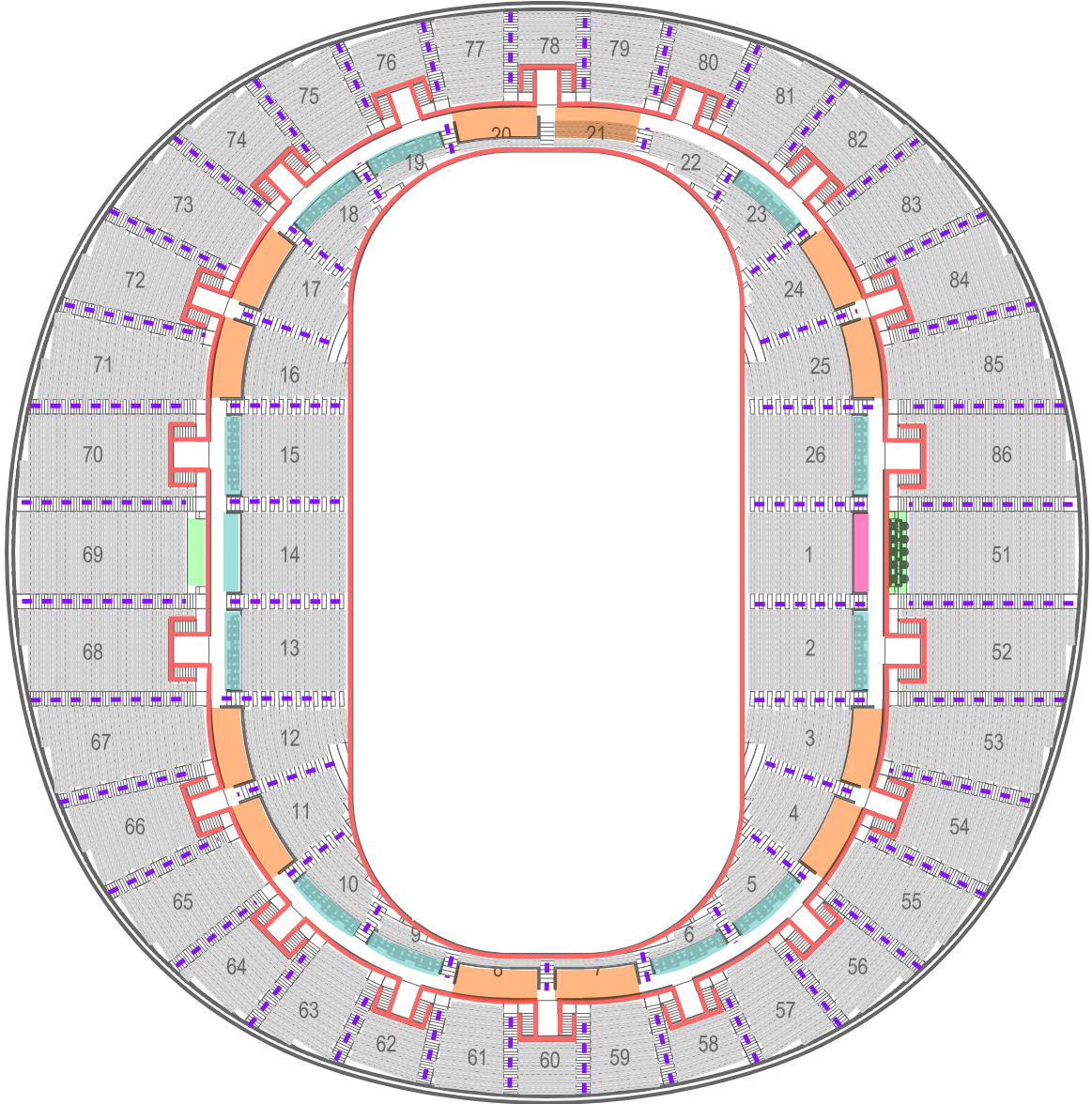
Providing options for premium seating is also desirable. At areas of the existing cross-aisle that aren't prioritized for wheelchair seating, loge boxes can be easily integrated.

The combination of these upgrades will result in a reduction of seating capacity. Fortunately, based on the types of events currently held and those planned for the future, a smaller, more intimate capacity is preferred.

Considering the required modifications to the seating and the potential layouts for various events, which are shown on the following pages, a target maximum seating capacity of 9,200 has been established.

Folding chairs on existing retractable seating platforms are worn and are intended to be replaced within the II.a - Bowl Upgrades and Code Required Improvements package. However, new telescopic seating is not included in this initial package. These proposals are referenced in II.c - Masterplan Packages: Arena Enhancements.





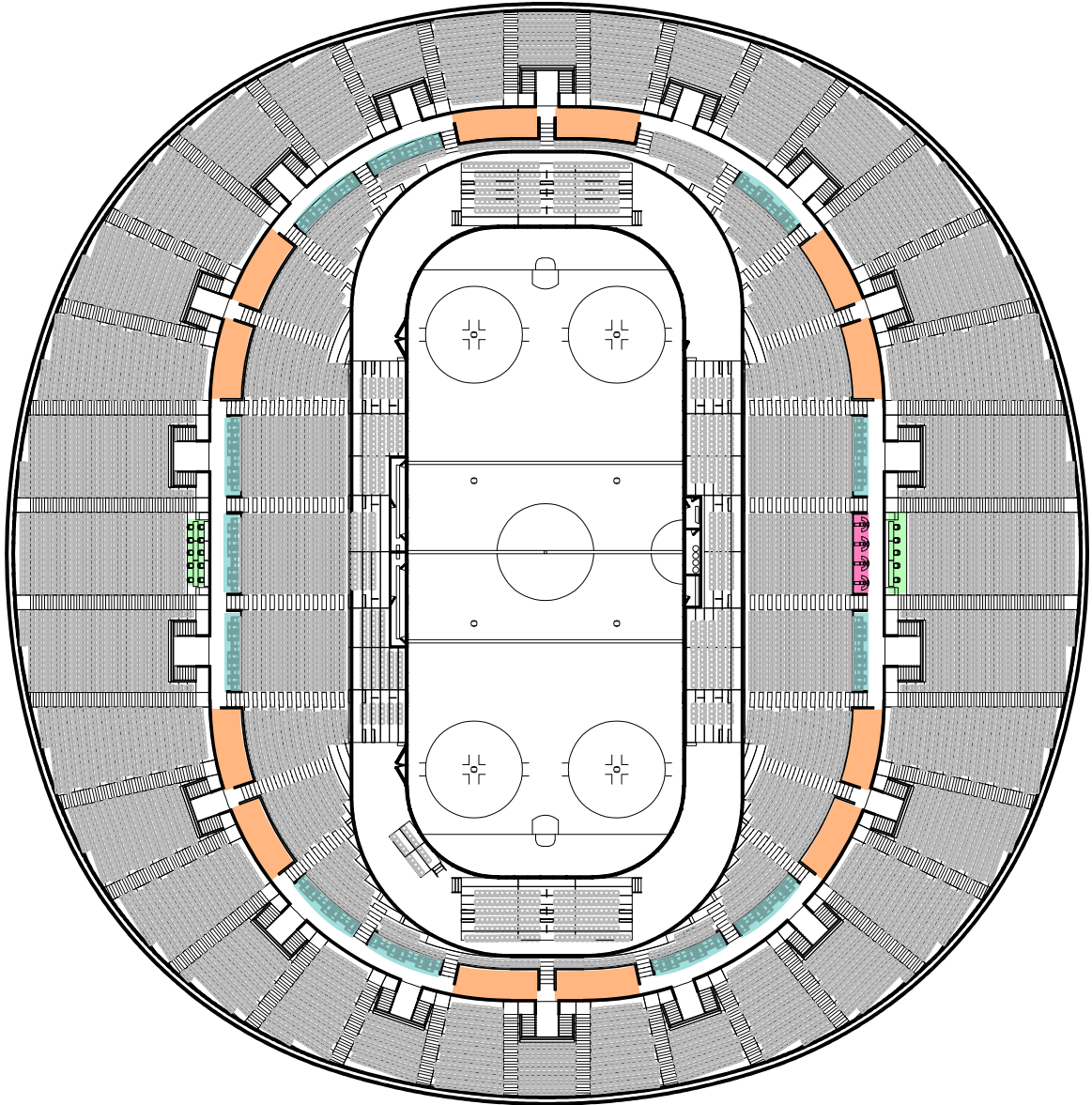
- New Handrails
- New Guardrails
- Camera Platforms
- Press Locations
- New ADA Platform
- New Loge Boxes

PROPOSED SEATING BOWL

## Architectural Summary

Seating Capacities - Hockey Layout	
	Proposed Seating Capacity
<b>Bowl Seating</b>	
New Bowl Seating (Upper Bowl)	5,412
New Bowl Seating (Lower Bowl)	2,162
New WC Accessible Seats	60
New Companion Seats	60
<b>Bowl Seating Total</b>	<b>7,694</b>
<b>Loge Boxes</b>	
Loge Seats (Includes ADA)	144
<b>Loge Boxes Seating Total</b>	<b>144</b>
<b>Telescopic Seating</b>	
Seats	765
<b>Telescopic Seating Total</b>	<b>765</b>
<b>Total Seating Capacity (Including ADA)</b>	<b>8,603</b>
<b>Accessible Seating Totals (Wheelchair + Companion)</b>	<b>60+60</b>

\*Additional WC and companion seating can be accommodated in Loge Boxes



**PROPOSED HOCKEY LAYOUT - REUSE EXISTING TELESCOPICS**

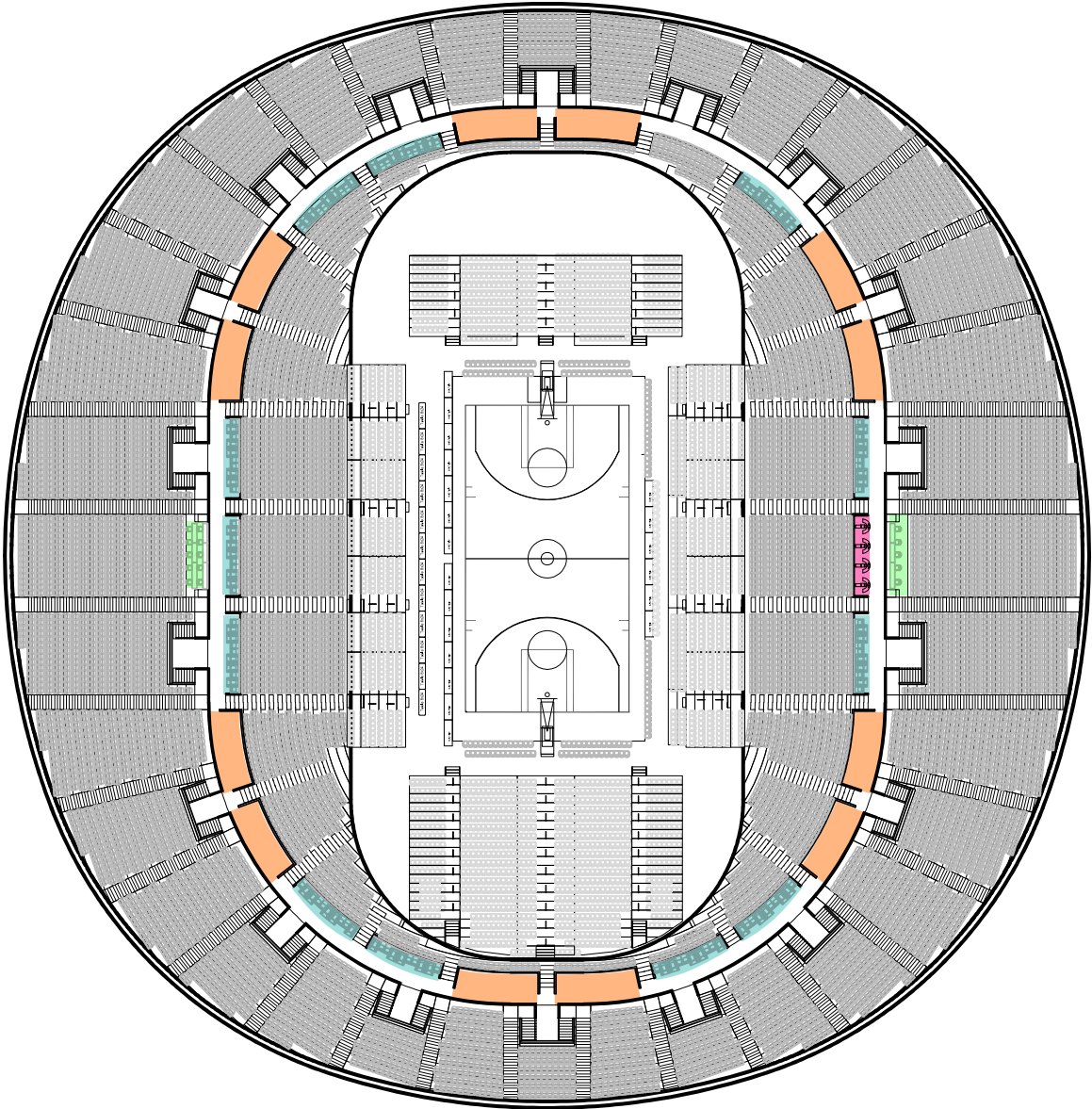
- Camera Platforms
- Press Locations
- New ADA Platform
- New Loge Boxes

# Architectural Summary

Seating Capacities - Basketball Layout	
	Proposed Seating Capacity
<b>Bowl Seating</b>	
New Bowl Seating (Upper Bowl)	5,412
New Bowl Seating (Lower Bowl)	2,162
New WC Accessible Seats	60
New Companion Seats	60
<b>Bowl Seating Total</b>	<b>7,694</b>
<b>Loge Boxes</b>	
Loge Seats (Includes ADA)	144
<b>Loge Boxes Seating Total</b>	<b>144</b>
<b>Floor Seats - Basketball Layout</b>	
Seats	148
WC Accessible Seats	4
Companion Seats	4
<b>Floor Seating Total</b>	<b>156</b>
<b>Telescopic Seating</b>	
Seats	2,057
<b>Telescopic Seating Total</b>	<b>2,057</b>
<b>Total Seating Capacity (Including ADA) *</b>	<b>10,051</b>
<b>Accessible Seating Totals (Wheelchair + Companion) **</b>	<b>64+64</b>

\*Seating capacity will be restricted by code to 9,200 occupants

\*\*Additional WC and companion seating can be accommodated in Loge Boxes



- Camera Platforms
- Press Locations
- New ADA Platform
- New Loge Boxes

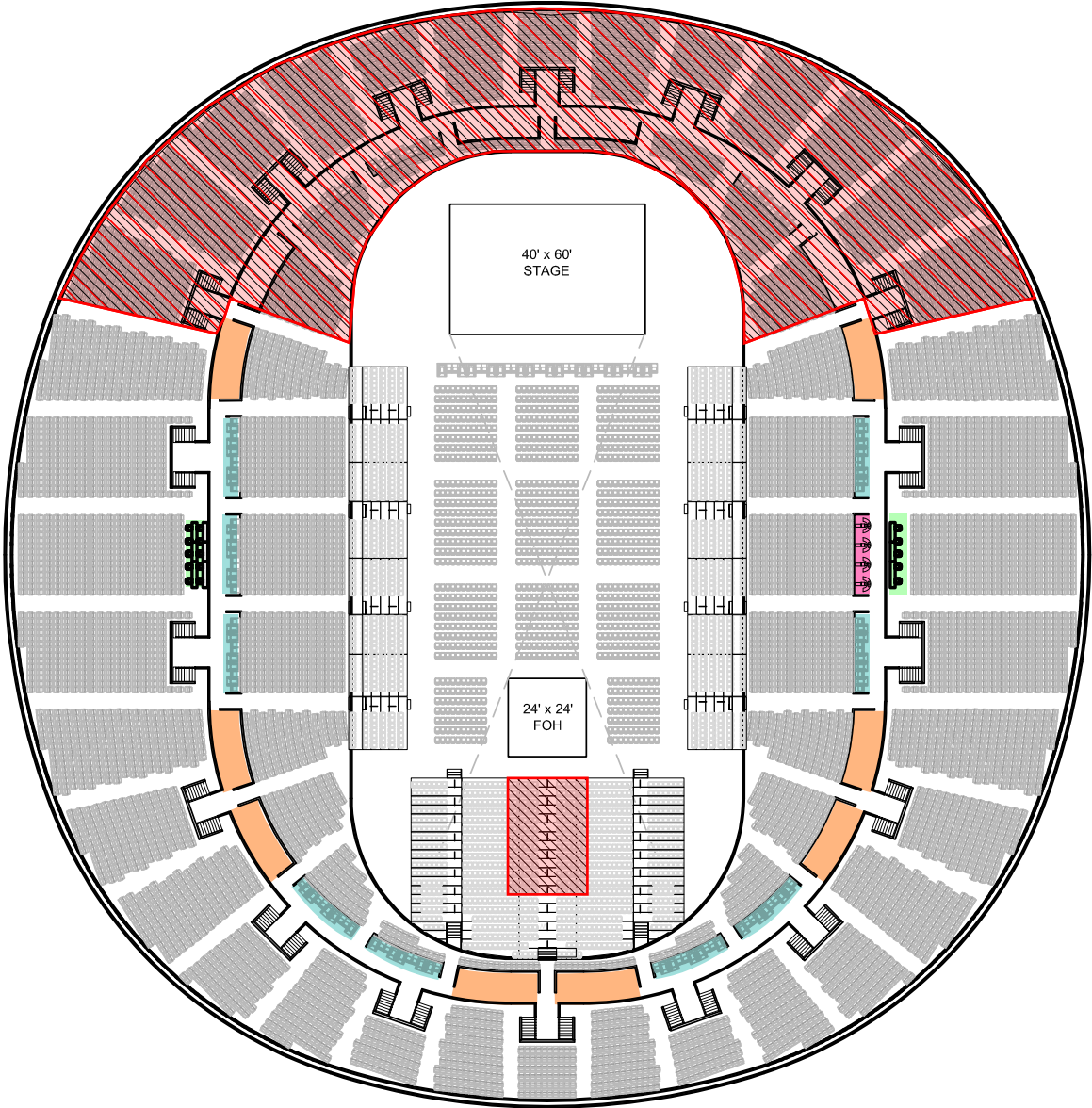
**PROPOSED BASKETBALL LAYOUT - REUSE EXISTING TELESCOPICS**






## Architectural Summary

Seating Capacities - End Stage Seated Layout	
	Proposed Seating Capacity
<b>Bowl Seating</b>	
New Bowl Seating (Upper Bowl)	4,186
New Bowl Seating (Lower Bowl)	1,776
New WC Accessible Seats	45
New Companion Seats	45
<b>Bowl Seating Total</b>	<b>6,052</b>
<b>Loge Boxes</b>	
Loge Seats (Includes ADA)	96
<b>Loge Boxes Seating Total</b>	<b>96</b>
<b>Floor Seats - End Stage Seated Layout</b>	
Seats	1,040
WC Accessible Seats	15
Companion Seats	15
<b>Floor Seating Total</b>	<b>1,070</b>
<b>Telescopic Seating</b>	
Seats	1,367
<b>Telescopic Seating Total</b>	<b>1,367</b>
<b>Total Seating Capacity (Including ADA)</b>	<b>8,585</b>
<b>Accessible Seating Totals (Wheelchair + Companion)*</b>	<b>45+45</b>

\*Additional WC and companion seating can be accommodated in Loge Boxes





-  Obstructed View Seats
-  Camera Platforms
-  Press Locations
-  New ADA Platform
-  New Loge Boxes

**PROPOSED END STAGE SEATED LAYOUT - REUSE EXISTING TELESCOPICS**

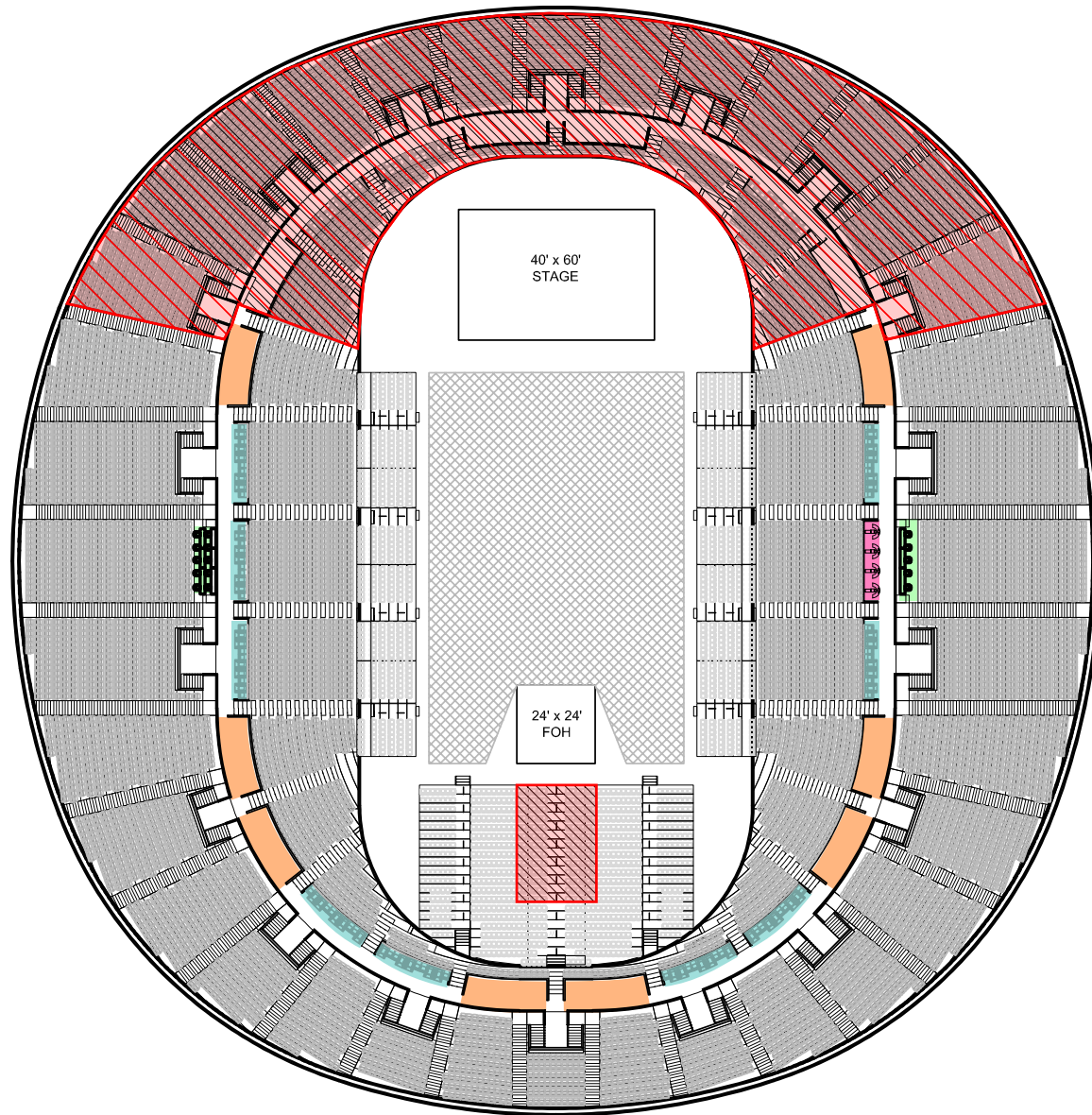







## Architectural Summary

Seating Capacities - End Stage General Admission Layout	
	Proposed Seating Capacity
<b>Bowl Seating</b>	
New Bowl Seating (Upper Bowl)	4,186
New Bowl Seating (Lower Bowl)	1,776
New WC Accessible Seats	45
New Companion Seats	45
<b>Bowl Seating Total</b>	<b>6,052</b>
<b>Loge Boxes</b>	
Loge Seats (Includes ADA)	96
<b>Loge Boxes Seating Total</b>	<b>96</b>
<b>Floor Seats - End Stage General Admission Layout</b>	
Seats	1,710
WC Accessible Seats	20
Companion Seats	20
<b>Floor Seating Total</b>	<b>1,750</b>
<b>Telescopic Seating</b>	
Seats	1,367
<b>Telescopic Seating Total</b>	<b>1,367</b>
<b>Total Seating Capacity (Including ADA) *</b>	<b>9,265</b>
<b>Accessible Seating Totals (Wheelchair + Companion) **</b>	<b>45+45</b>

\*Seating capacity will be restricted by code to 9,200 occupants

\*\*Additional WC and companion seating can be accommodated in Loge Boxes



-  Obstructed View Seats
-  Camera Platforms
-  Press Locations
-  New ADA Platform
-  New Loge Boxes

**PROPOSED END STAGE GENERAL ADMISSION LAYOUT - REUSE EXISTING TELESCOPICS**

# Architectural Summary

## Overview - Public Restrooms

Most of the improvements in this package are in the bowl itself, but the most notable exception is the expansion and improvement of restroom facilities. The quantity of restroom fixtures to be provided is code-mandated, based on the number of spectators in the bowl and the whole building occupancy. The current restrooms are largely based on 1960's standards, and do not meet current code for quantity, accessibility, or clearance requirements. As part of this project, restrooms throughout the facility will be renovated and expanded to meet current standards.

This is accomplished primarily by expanding the restrooms on the concourse, where they are most visible and most easily accessed. Most existing restrooms on the concourse will be enlarged by about four feet, expanding them into the concourse area, allowing fixtures to be installed more efficiently, and allowing them to be configured to meet required clearances for accessibility and plumbing code requirements. Two of the restrooms on the event level will also be renovated and expanded.

## Existing Conditions - Public Restrooms, Concourse Level

Although the proposed updates to the seating bowl will reduce capacity, the Coliseum contains less than the code required number of toilet fixtures for women and more than the number required for men. As shown in the table below, the deficiency in women's fixtures is significant: 90 toilets are required for 9,200 seats, and only 54 are currently provided.

In contrast to women's fixtures, there is currently an excess of men's fixtures within the Coliseum. In order to provide an adequate and balanced number of facilities, an existing men's restroom will be converted to a women's restroom along with other changes to the restrooms on the Concourse Level.

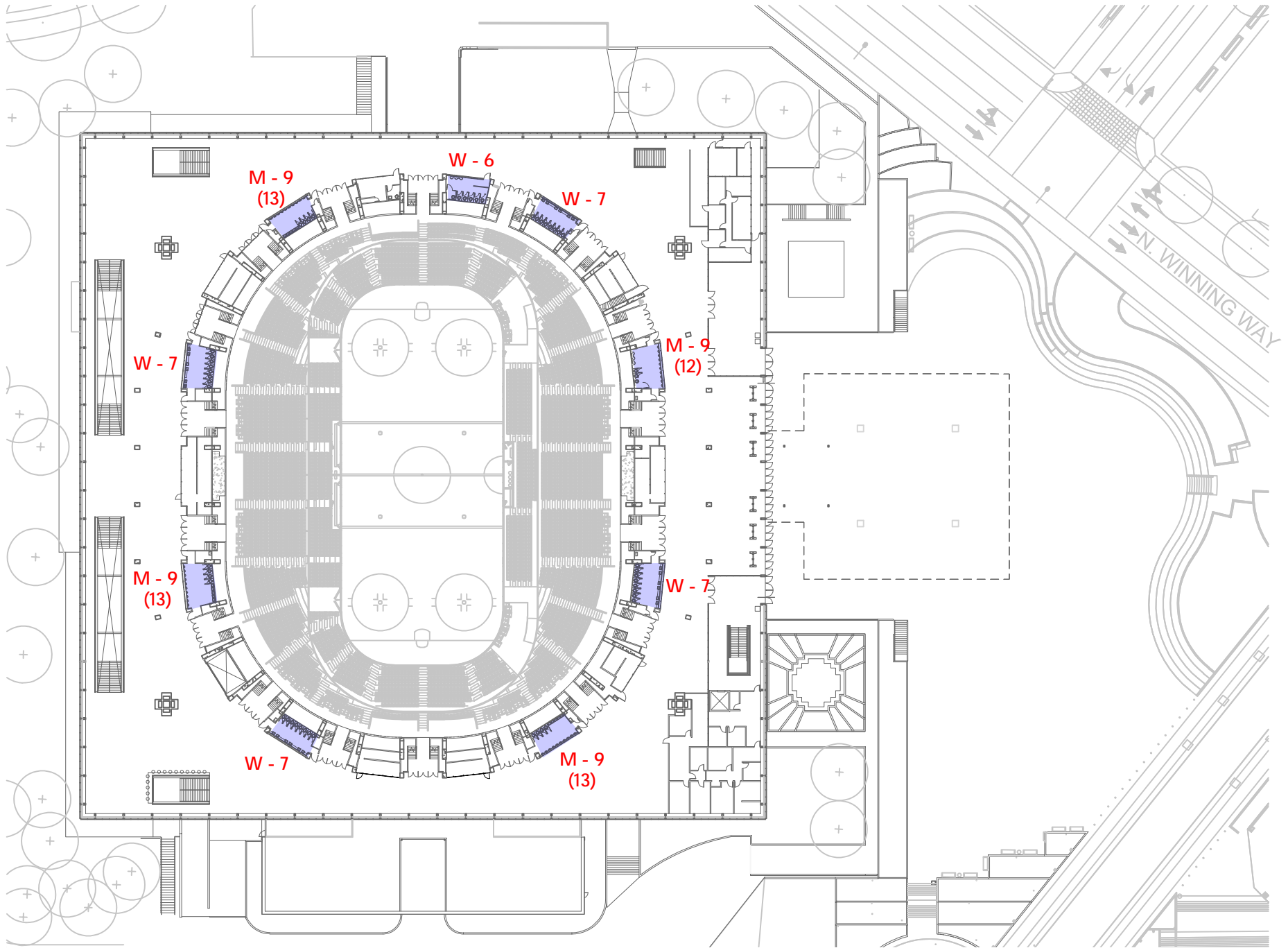
	Existing Waterclosets Concourse Level	Existing Waterclosets Event Level	Existing Watercloset Total	Required Watercloset Total <sup>1</sup>
Women	34	20	54	90
Men <sup>2</sup>	36 (50)	24 (32)	60 (82)	46

<sup>1</sup> Required fixture counts are based on a final bowl capacity of 9,200 seats

<sup>2</sup> Men's urinals are counted as 2/3 of a fixture. Displayed in title above as: "code fixture count (total fixture count)"

Even though new telescopic seating platforms are not planned for this initial design package, total occupant counts related to restrooms anticipates the seats associated with the future telescopic seating counts. Information on the telescopic seating plans can be found in package II.c - Masterplan Packages: Arena Enhancements.

Overall, restroom finishes are heavily worn and hard to clean properly. Sinks, toilets, and associated valves and piping are very old and worn and need to be replaced. Space and clearance for fixtures is not code compliant. None of the restrooms on the concourse level are fully accessible.



**CONCOURSE LEVEL - EXISTING RESTROOM LAYOUTS**

 Existing Restrooms

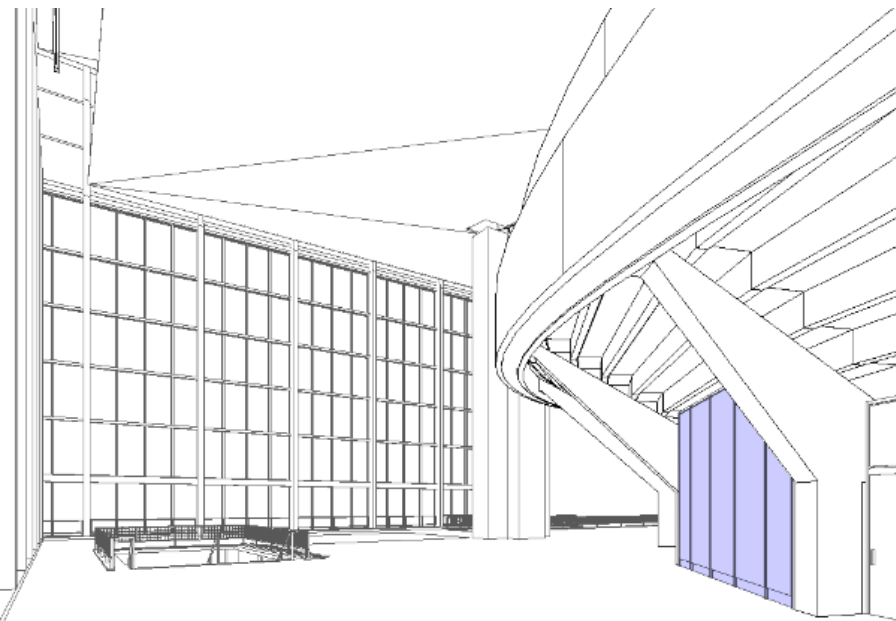
# Architectural Summary

## Proposed Restrooms - Required Restroom Expansion, Concourse Level

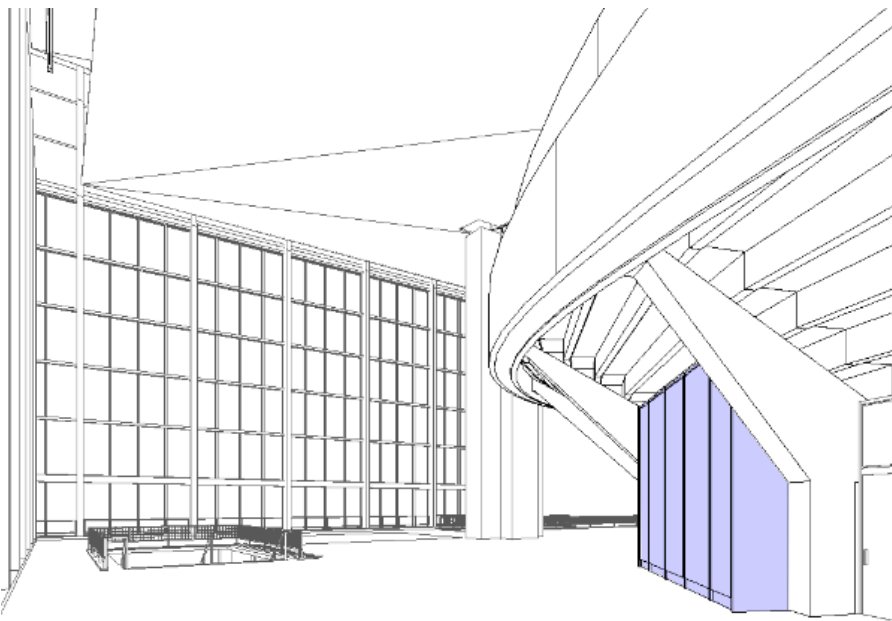
	Proposed Waterclosets Concourse Level	Proposed Waterclosets Event Level	Proposed Watercloset Total	Required Watercloset Total <sup>1</sup>
Women	69 <sup>3</sup>	21	90	90
Men <sup>2</sup>	34 (45)	16 (20)	50 (65)	46

<sup>1</sup> Required fixture counts are based on a final bowl capacity of 9,200 seats  
<sup>2</sup> Men's urinals are counted as 2/3 of a fixture. Displayed in title above as: "code fixture count (total fixture count)"  
<sup>3</sup> Women's watercloset count includes 1 Family Restroom

For hockey and other bowl events with limited or no floor seating, the concourse restrooms are the primary location available to spectators. Maximizing the quantity of fixtures on the concourse level will provide the best access for the most patrons. To increase the restroom capacity without overtaking other necessary functions like concessions, the existing restrooms will be expanded into the concourse by approximately 4 feet. By converting one men's restroom into a women's restroom, the total fixture count is rebalanced and evenly distributed between men and women. In addition, a minimum of one family restroom is being provided at this level.

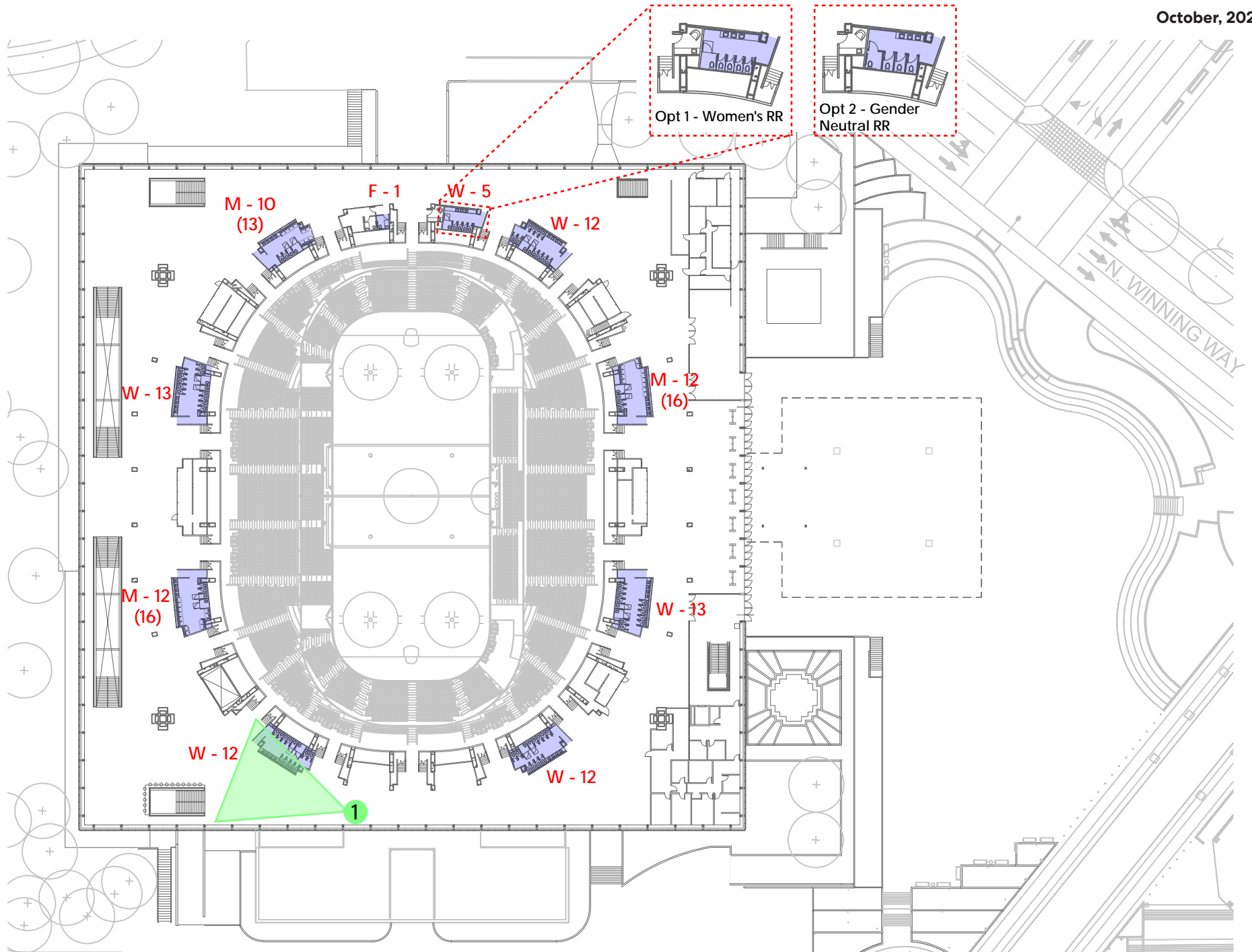


Existing Restroom - Southwest Corner




1 Restroom Expansion - Southwest Corner





**CONCOURSE LEVEL - PROPOSED RESTROOM LAYOUTS**

 Proposed Restrooms

# Architectural Summary

## Existing Conditions - Public Restrooms, Event Level

	Existing Waterclosets Concourse Level	Existing Waterclosets Event Level	Existing Watercloset Total	Required Watercloset Total <sup>1</sup>
Women	34	20	54	90
Men <sup>2</sup>	36 (50)	24 (32)	60 (82)	46

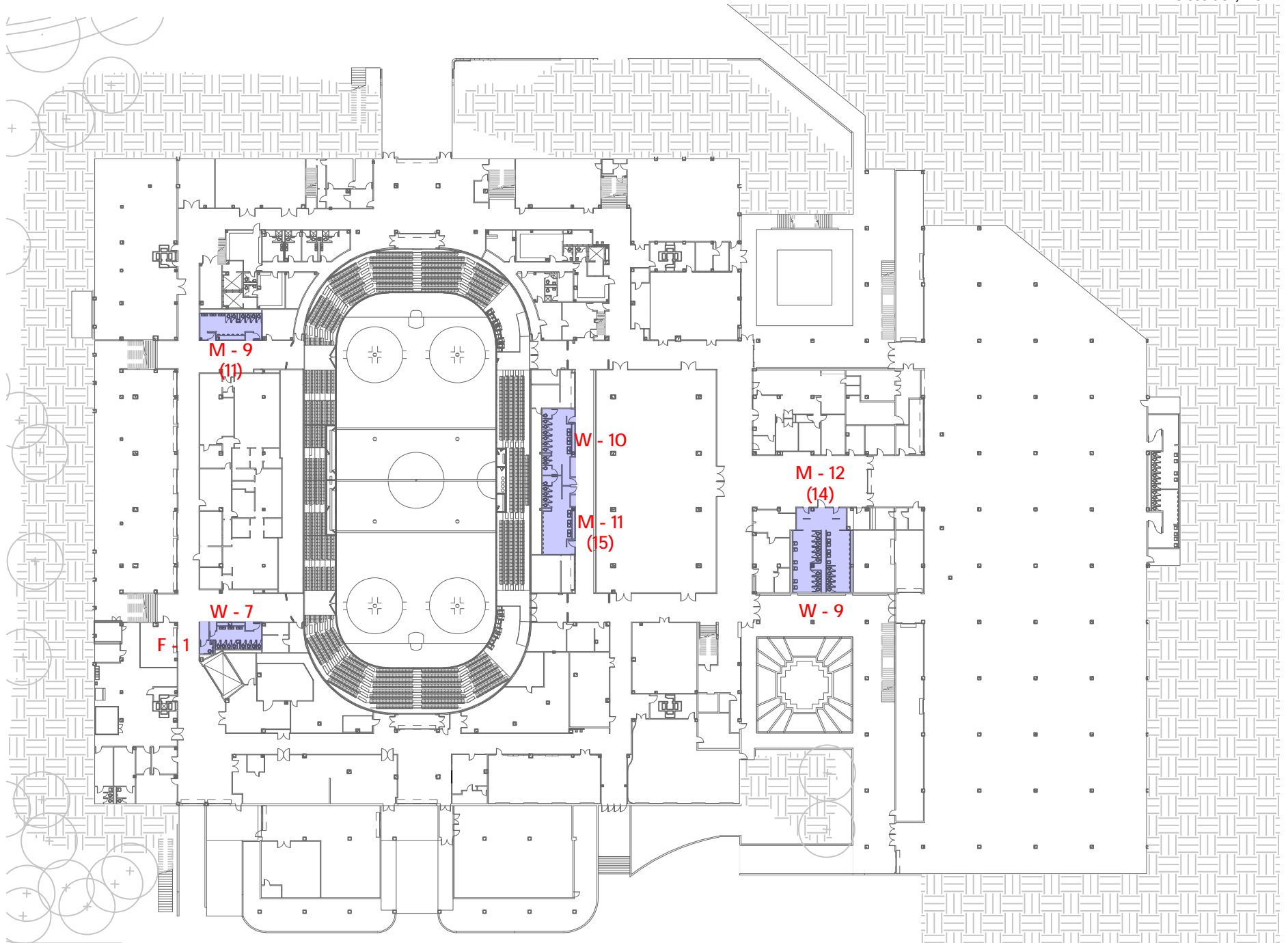
<sup>1</sup> Required fixture counts are based on a final bowl capacity of 9,200 seats  
<sup>2</sup> Men's urinals are counted as 2/3 of a fixture. Displayed in title above as: "code fixture count (total fixture count)"

In general, access to spectator areas on the event level is limited and the majority of the arena seats are accessed from the Concourse. As such, minimizing the quantity of restrooms on the event level better aligns with spectator circulation.

Since there are more fixtures than required at this level, the restrooms to be renovated can be prioritized based on location.

The existing restroom finishes are heavily worn and hard to clean properly. Sinks, toilets, and associated valves and piping need to be replaced. Space and clearance for fixtures is not code compliant. None of the restrooms on the event level are fully accessible.





## EVENT LEVEL - EXISTING RESTROOM LAYOUTS

Existing Restrooms

# Architectural Summary

## Required Restroom Expansion, Event Level

	Proposed Waterclosets Concourse Level	Proposed Waterclosets Event Level	Proposed Watercloset Total	Required Watercloset Total <sup>1</sup>
Women	69 <sup>3</sup>	21	90	90
Men <sup>2</sup>	34 (45)	16 (20)	50 (65)	46

<sup>1</sup> Required fixture counts are based on a final bowl capacity of 9,200 seats  
<sup>2</sup> Men's urinals are counted as 2/3 of a fixture. Displayed in title above as: "code fixture count (total fixture count)"  
<sup>3</sup> Women's watercloset count includes 1 Family Restroom

In order to make the Event Level restrooms accessible to accomodate floor events, all restrooms on the east side of the building should be renovated to maximize their functionality.

Currently, the main existing restrooms (1104 and 1004) are accessed through a narrow corridor adjacent to the only functioning concession on the Event Level. This limited access causes congestion and queuing conflicts within this small area. Additional restrooms are available in the corridor leading to the Exhibit Hall, but many visitors are not aware of them.

Future phases of work propose changes to the meeting rooms and will close off this narrow access point. They will also reduce the restroom quantity required in this area.

The initial phase of renovation in this area is designed to fully support the future masterplan proposal for the Event level and will reduce the number of fixtures in this area. At the same time, the initial phase of work will reroute patrons to a new, larger and fully accessible restroom provided off the main corridor.

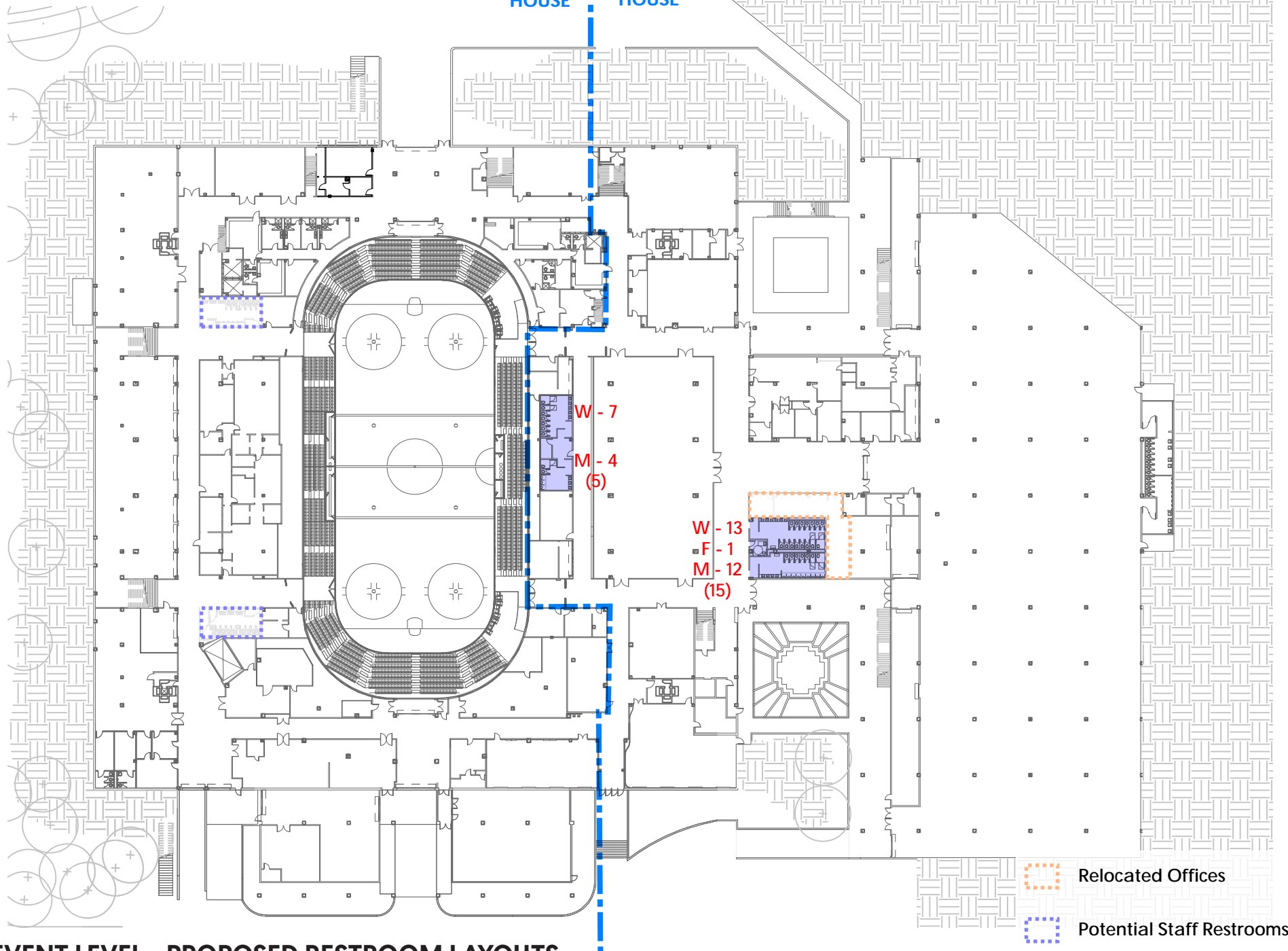
Rotation of restrooms 116 and 117 will relocate the entry points of the facilities to the main spectator circulation corridor. Existing office space will need to be rearranged to accommodate this renovation.

More information about the planned changes to the meeting rooms can be found in package II.c - Masterplan Packages: Conference Center.

Other existing restrooms on the Event Level are located in the back-of-house circulation cooridors and are not required to meet code minimums for public access. However, there is still the potential to reuse these facilites for employee use, or for convenience to accomodate larger floor events.

By addressing all restrooms on the east side of the Event Level to meet code requirements, a delineation between public patron front-of-house spaces and employee use back-of-house spaces is easily distinguished. This will result in clear patron wayfinding during events while also providing more security to the back-of-house facilities.

BACK OF HOUSE FRONT OF HOUSE



EVENT LEVEL - PROPOSED RESTROOM LAYOUTS

- Relocated Offices
- Potential Staff Restrooms
- Proposed Restrooms

## Architectural Summary

### Additional Code Related Updates, Concourse Level

#### First Aid and Family Restroom

During this initial renovation, the existing first aid room will be reconfigured to include a new first aid room with attached bathroom, along with an additional code required family restroom.

#### Lactation Room

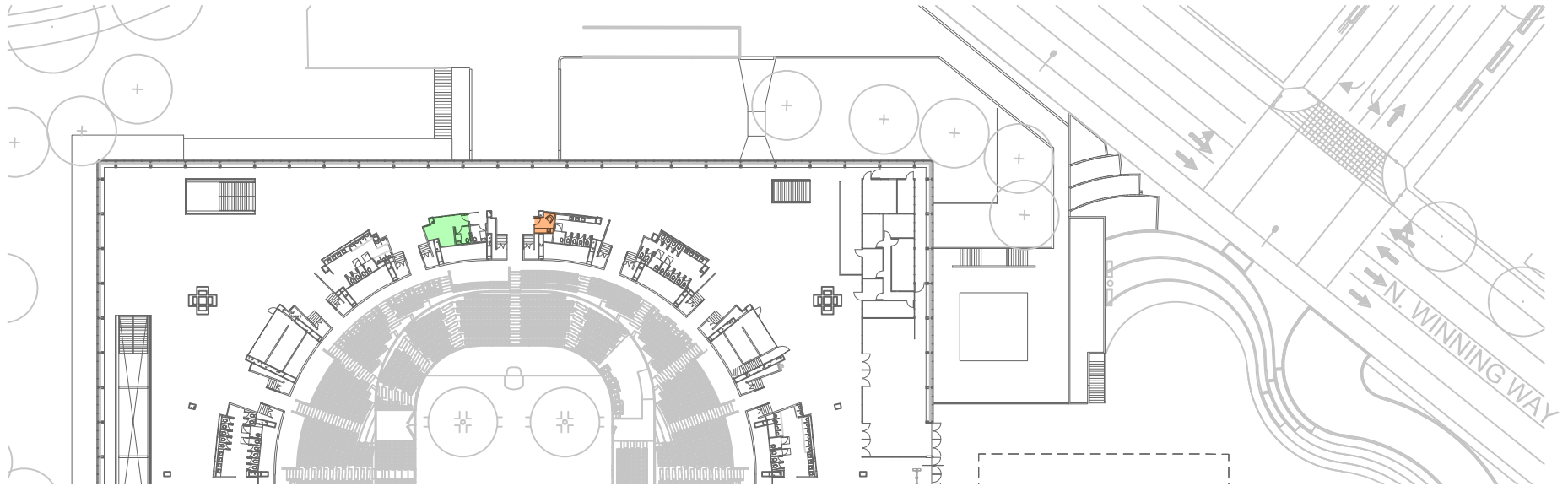
Currently additional space within the box office is being temporarily used as a lactation room. During the renovation and expansion of the Concourse restrooms, a private and comfortable lactation room will be incorporated within an existing restroom footprint.

### Additional Code Related Updates, Event Level

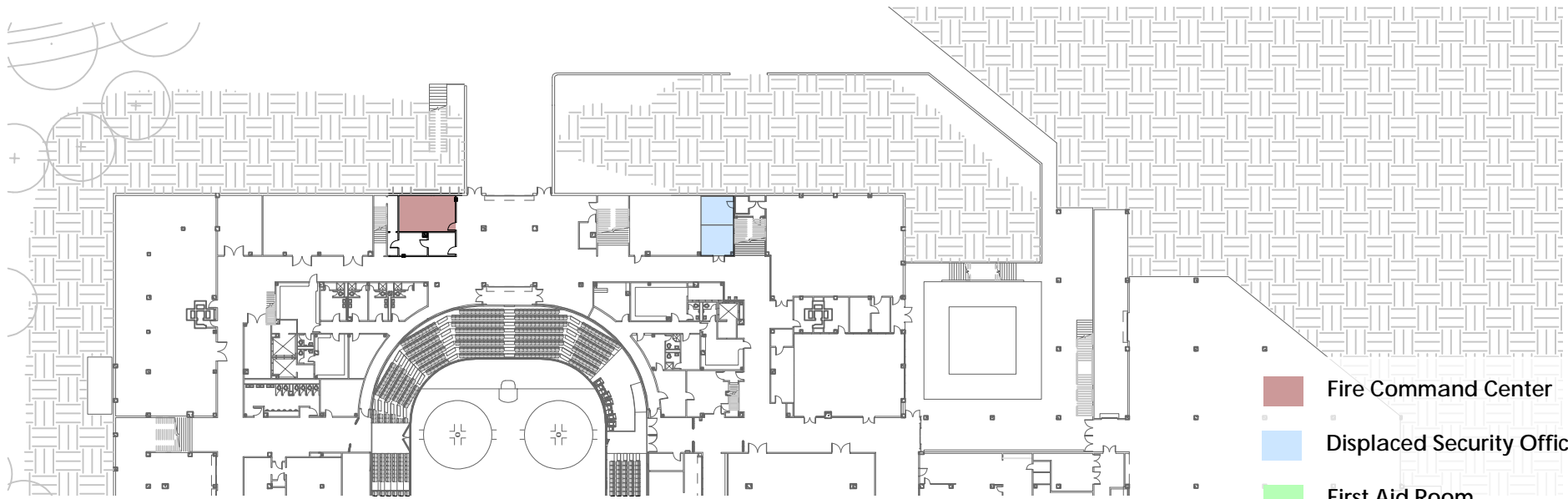
In addition to the restroom renovations, other upgrades are necessary to meet code and increase operational efficiency.

#### Fire Command Center (FCC)

As part of the seating bowl renovation, a fire command center is required to support the smoke control system. This room displaces existing functions which are relocated to the Pope and Talbot Room.



**FIRST AID, FAMILY RESTROOM & LACTATION ROOM**



**FIRE COMMAND CENTER**

- Fire Command Center
- Displaced Security Offices
- First Aid Room
- Lactation Room

## Seating Bowl and Code Required Improvements Summary

### Seating Bowl and Code Required Improvements Architectural Items needing action:

For more information regarding these Seating Bowl and Code Required Improvement Items, including additional consultant items and narratives, refer to Volume II: Reinvestment Strategy, Part II: Consultant Narratives, Package II.a: Seating Bowl and Code Required Improvements

- B.01.a - Replace and reconfigure existing fixed seating in upper Bowl. Estimated count = 5,464.
- B.01.b - Replace and reconfigure existing fixed seating in lower Bowl. Estimated count = 2,190.
- B.01.c - New folding chairs (1,973) for existing retractable seating platforms and floor.
- B.01.f - New accessible seating platforms in lower Bowl. Estimated count = 60 ADA and 60 Companion.
- B.01.g - New Loge Box seating area in lower Bowl. Estimated count = 144 seats.
- B.02.a - Upgrade handrails in upper seating Bowl to meet code requirements.
- B.02.b - Upgrade guardrails in upper seating Bowl to meet code requirements.
- B.02.c - Upgrade handrails in lower seating Bowl to meet code requirements.
- B.02.d - Upgrade guardrails in lower seating Bowl to meet code requirements.

- B.03.a - Install stair nosing in upper Bowl to meet code requirements.
- B.03.b - Install stair nosing in lower Bowl to meet code requirements.
- C.01.a - Renovate Concourse level restrooms to meet code requirement.
- C.01.b - Add new Lactation Room.
- C.01.c - Redesign and renovate existing First Aid and add new Family/All User restroom.
- C.02.a - Replace all toilets and flushometers.
- C.02.b - Replace all urinals and associated flushometers.
- C.02.c - Replace and add lavatories including counters. Include changing stations as required.
- EL.02.a - Replace all toilets and flushometers on east side of event level.
- EL.02.b - Replace all urinals and associated flushometers on east side of event level.
- EL.02.c - Replace and add lavatories including counters.
- L.02.c - Replace and add lavatories including counters in Link restrooms.

- L.01.a - Renovate and expand Link restrooms and reorient entrances to Event Level lobby area.
- L.02.a - Replace all toilets and flushometers in Link restrooms.
- L.02.b - Replace all urinals and associated flushometers in Link restrooms.



## Estimate of Probable Cost

### Seating Bowl and Code Required Improvements Only

The total project cost for the Bowl Upgrades and Code Required Improvements project as a stand-alone project is estimated at \$34 million.

This estimate is based on limited information and could vary greatly up or down as the project work is further defined. The estimate is based on a combination of quantity take-offs with regional unit pricing for similar work and historical pricing for similar scope of work nationwide, adjusted for the region. The estimate includes hard costs for materials and labor plus contractors' overhead and profit, plus project costs including:

- Professional Fees:
  - Architect and consultants, survey, geotech, special inspections, legal, HazMat, arborist, commissioning, project management)
- Other Fees:
  - Zoning, building, system development charges, transportation, utilities, LEED)
- Fixtures, Furniture, and Equipment, including food service equipment, bowl seating, and video boards
- A contingency of 20% of construction cost

Given the uncertainty of the construction market and the timing of the project, no adjustments have been made for inflation. The costs are estimated as of October 2021, and should be adjusted for a future construction start.

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# **Package II.b.**

## Critical Deferred Maintenance

## Overview

As part of the Facilities Assessment phase, completed as the first step to the Reinvestment Strategy, the design team evaluated the condition of heating, ventilating, air conditioning, plumbing, electrical, fire sprinkler, fire alarm, and low voltage systems. A team of architects and engineers reviewed existing drawings and other documentation, reviewed past studies, conducted on-site observations, and interviewed City Officials, users, operators, sub-contractors, and utility providers.

The overall conclusion is that although some critical improvements have been done to keep the building open, most building systems are original construction from 1960 and are beyond the end of their useful life and need to be replaced entirely from the utility connections. Although not directly addressing the needs as identified in Portland City Council Resolution 36887, these building system upgrades are critical to keeping Veterans Memorial Coliseum open and functioning, and in that way, are fundamental to meeting any goals in the resolution.

The owners and operators have done an exceptional job of keeping things running, but the antiquated systems are increasingly difficult to repair, and piecemeal replacement is not a viable option, as replacing failing components with old technology as they fail will cost much more than upgrading the whole system at once with new technology. These changes will also eliminate the risks of a sudden equipment failure that closes the venue, potentially cancelling events. In addition, new HVAC equipment, along with repair or replacement of other system elements such as air handling equipment, ducts and vents, is expected to yield significant utility cost savings, improve temperature and humidity control, and greatly enhance patron and staff comfort.



EXISTING BOILER



EXISTING PLUMBING CONDITIONS



EXISTING GENERATOR

## Critical Deferred Maintenance Summary

Due to the age of the building many of the building systems are far beyond their useful life and at risk of failure. In order to ensure the that the Veterans Memorial Coliseum remains functional, it is recommended that these systems be updated in addition to the code required items addressed in Package II.a (Seating Bowl Upgrades and Code Required Improvements). For more information regarding these Seating Bowl and Code Required Improvement Items, including additional consultant items and narratives, refer to Volume II: Reinvestment Strategy, Part II: Consultant Narratives, Package II.

### Critical Deferred Maintenance Items needing action:

#### Structural

- EB.04.a - Replace Boiler
- EB.07.a - Seismic Restraint of MEP Equipment
- EB.04.b - Replace Roof Cooling Towers
- A.02.a - Strengthen Roof Truss-to-Column Connection

#### Mechanical

- EB.04.a - Replace Boiler
- EB.04.b - Replace Roof Cooling Towers
- EB.04.d - Recondition and Recommission Air Handlers
- EB.06.b - Electrical Distribution and Branching
- EB.12.b-d - Lighting and Controls

#### Plumbing

- EB.05.f - Replace Roof Hydrant with New Hose Bib
- EB.20.a-d- Replace Drinking Fountains

#### Miscellaneous

- EB.14.a-e - New Access Control System
- EB.05.b - Replace Domestic Hot Water Heater
- EB.10.a-b - Replace Metal Coiling Doors
- A.02.a - Curtain Wall Base Isolation

For related scope items and costing information refer to Volume II: Reinvestment Strategy, Part IV: Appendices

## Estimate of Probable Cost

### Critical Deferred Maintenance Only

The total project cost for the Critical Deferred Maintenance Improvements project as a stand-alone project is estimated at \$43 million.

This estimate is based on limited information and could vary greatly up or down as the project work is further defined. The estimate is based on a combination of quantity take-offs with regional unit pricing for similar work and historical pricing for similar scope of work nationwide, adjusted for the region. The estimate includes hard costs for materials and labor plus contractors' overhead and profit, plus project costs including:

Professional Fees (architect and consultants, survey, geotech, special inspections, legal, HazMat, arborist, commissioning, project management)

Other Fees (zoning, building, system development charges, transportation, utilities, LEED)

Fixtures, Furniture, and Equipment, including food service equipment, bowl seating, and video boards

A contingency of at least 20% of construction cost, with more for some items with a greater degree of uncertainty.

Given the uncertainty of the construction market and the timing of the project, no adjustments have been made for inflation. The costs are estimated as of October 2021 and should be adjusted for a future construction start.



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# Package II.c.

## Masterplan Packages

Patron Experience

Arena Enhancements

Conference Center

Envelope

Public Spaces

## Overview

Although packages II.a (Seating Bowl and Code Required Improvements) and II.b (Critical Deferred Maintenance) do a lot to address the areas of the VMC that require modification, achieving the complete vision for the VMC will require additional investment. The following master plan packages take a phased approach while grouping the scope items into logical projects that can be done independently or together. These are divided into 5 packages:

### Patron Experience

Open the concourse and upgrade the food and beverage

### Arena Enhancements

Upgrade operational efficiency and arena support, and add new telescopic seating

### Conference Center

Create a modern conference center

### Envelope

Replace the curtainwall - to improve structural safety, resiliency and thermal efficiency

### Public Spaces

Entry Plaza and Memorials

# **Masterplan Package:** Patron Experience

## Overview

Ample circulation and clear access to spectator services are necessary to create a successful patron experience. The original vision for the VMC represented a simple approach to this by locating all of the concourse program space under the seating bowl, allowing the perimeter glass enclosure to be clear and open. Over time, functional demands at the arena led to partitioning off some of the concourse which constricts the flow of people and complicates wayfinding.

To create the best experience for patrons, the master plan proposes reverting to the original concept of openness and maximizing the available space on the concourse. This will be accomplished by both clearing the added partitions and infilling floor openings that are no longer required.

A more open concourse will also accommodate greater variety in the number and types of concession offerings. This combined with the restroom improvements in package IIa will elevate the VMC to a modern patron experience.

In order to ensure sufficient egress with the proposed concourse modifications, an exit analysis was performed.

## Work within this package will include the following scope items:

- C.08 - Infill Stairs at the West Concourse
- C.10 - Remove Existing Partitions at the East Concourse
- P.03.b - New Box Office Location
- C.03 - New Concessions
- C.05 - New Concessions
- EB.17 - New Retail Opportunities
- C.10 - Relocate Offices at the East Concourse
- EB.11.a - New Data Room and Hub
- EI.07 - New Kitchen, Commissary and Support Spaces

## Masterplan Packages

### Patron Experience

#### Exit Analysis

The existing exit system has excess capacity after the proposed seating bowl renovation in project II.a is completed. Reductions in total seating capacity and the inclusion of a code compliant smoke control system reduces the existing loads on the concourse and stairways.

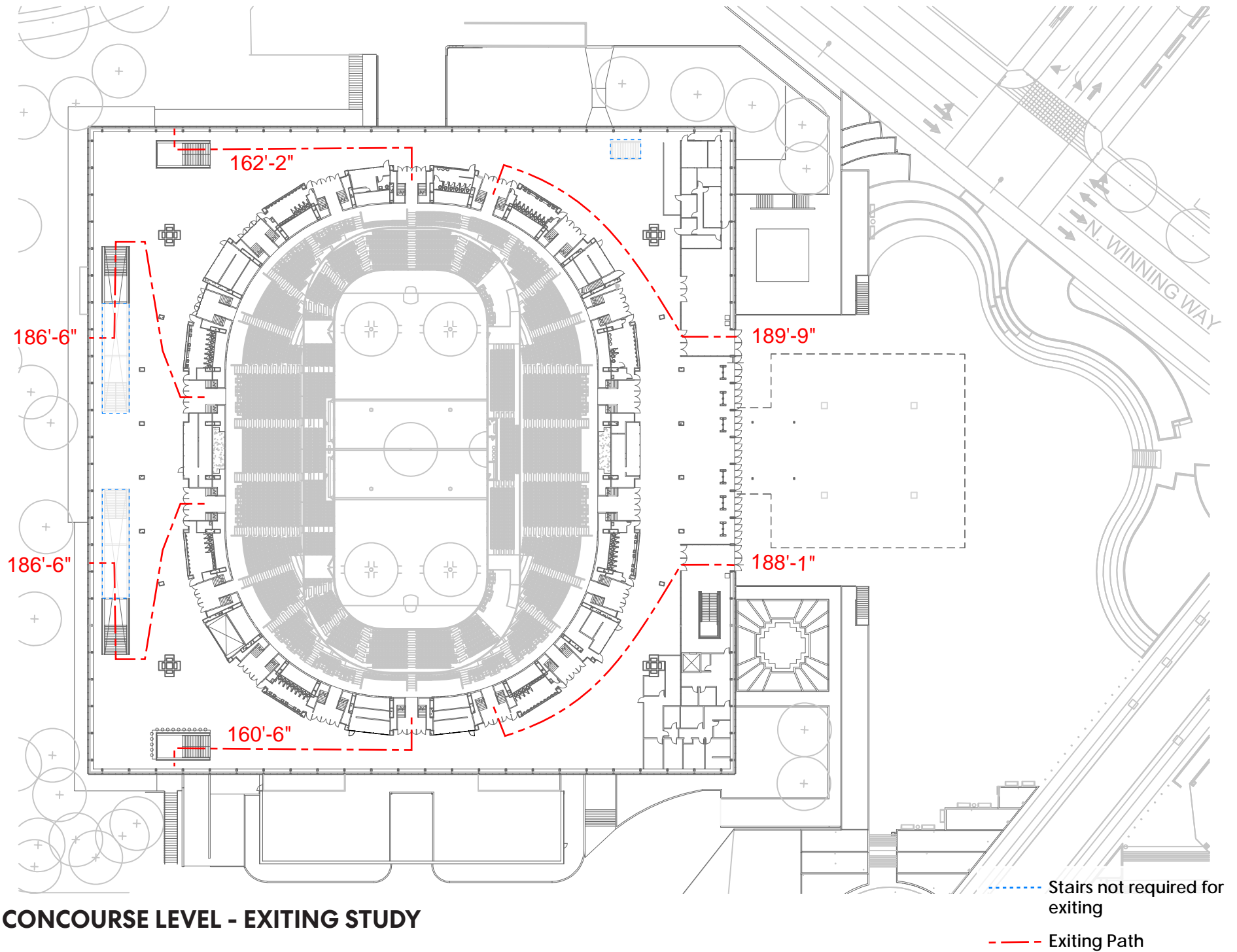
The diagram on the facing page illustrates the travel distance to each exit. Distances under 200 feet are compliant.

Three stairway egress points may be removed and infilled to create additional useable space on the concourse. Although all stair infills could happen at the same time, their implementation is tied to specific master plan packages.

In the northeast corner, the stair near the ticket office is planned to be removed with the addition of a new stair and elevator in the Conference Masterplan package. Prior to the new stair, the existing opening provides useful access to and from the east side of the event level.

On the west, two of the four stairway access points can be removed. The preferred approach will depend on the final design of the west concourse upgrades.

As an example, the central access points are shown to be removed in the diagram on the facing page. This creates a larger floor surface at the center of the west concourse and pushes egress circulation to the corners. Alternatively, the outer access points could be removed creating larger floor surfaces at the corners.



## CONCOURSE LEVEL - EXITING STUDY



# Masterplan Packages

## Patron Experience

### Open the Concourse

Returning the concourse to its original openness and simplicity, the partitions in the northeast and southeast corners will be removed. To accommodate this, the existing programming will be relocated or eliminated.

The main function at the northeast corner of the existing concourse is the box office and ticket offices. In previous years, the box office was given a prominent location at the main entry. However, as the need for paper ticketing has declined, the important real estate that this function occupies is being reconfigured toward functions that elevate the patron experience during the event.

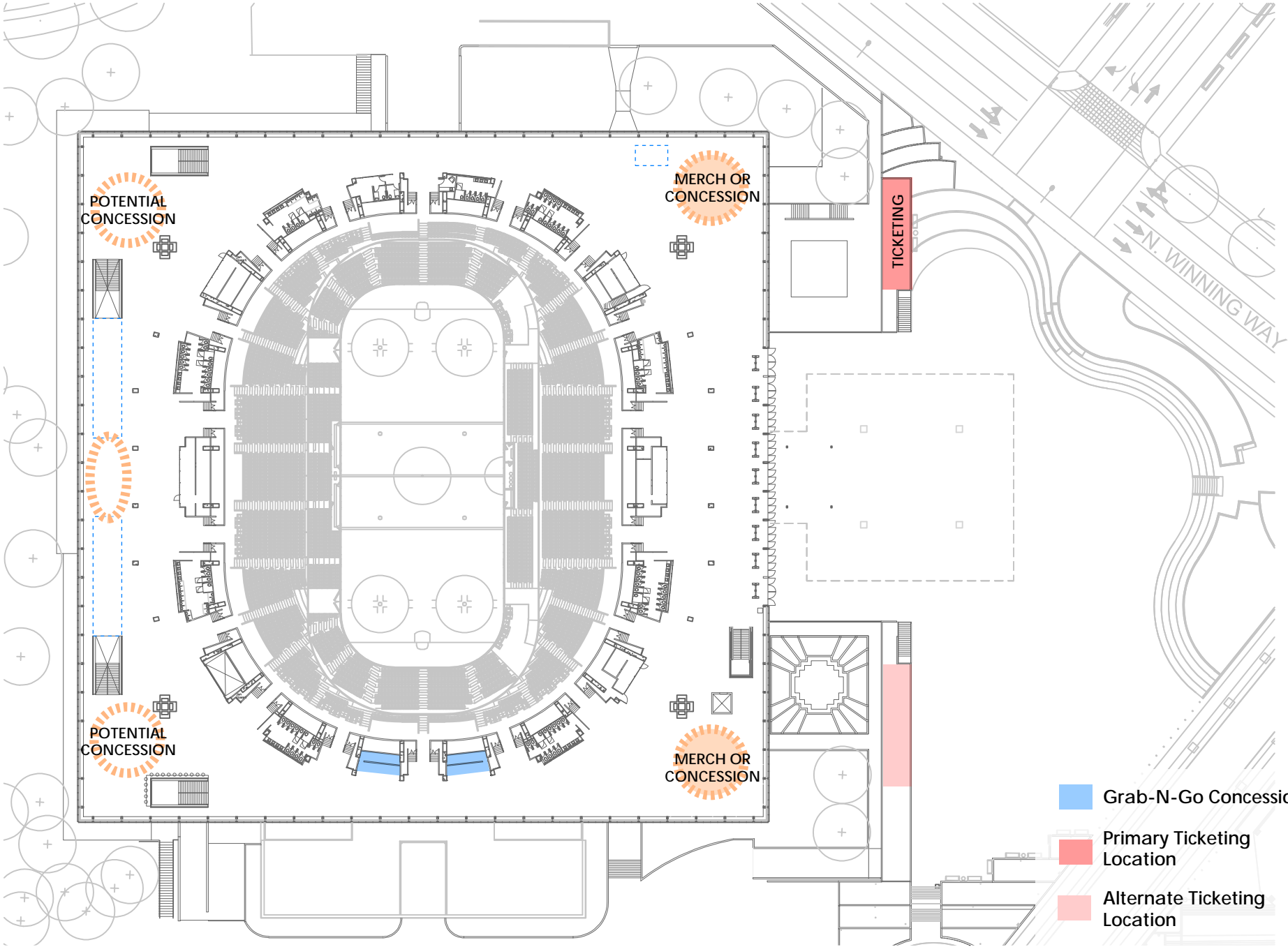
Even with the transition to digital and touchless ticketing, it is too soon for the standard box office to go away completely. Therefore, the ticketing function is proposed to be moved to a location on the entry plaza which is both highly visible and off of the concourse. Critical ticket support spaces would be located with the box office and the remaining ticket offices would be located in the lower level of the arena.

The southeast corner of the existing concourse includes offices and merchandising space. The offices are proposed to be relocated to the event level and the merchandising will be incorporated into new kiosks on the concourse.

### Upgraded Food and Beverage

As indicated in the diagram on the facing page, each of the four corners of the concourse will be available for concession kiosks as well as merchandising. These kiosks may be permanent or portable depending on the desired programming of space and the food and beverage being offered.

Many of the existing built-in concessions have been recently renovated, however the two at the center of south concourse create a circulation pinch-point due to their queuing lines. These belly-up concessions are proposed to be converted into Grab-N-Go or frictionless concessions in order to minimize current queuing back up issues.



**CONCOURSE LEVEL - PROPOSED MASTER PLAN PACKAGE - PATRON EXPERIENCE**

- Grab-N-Go Concessions
- Primary Ticketing Location
- Alternate Ticketing Location
- Proposed Concessions
- Stair Infill

## Masterplan Packages

### Patron Experience

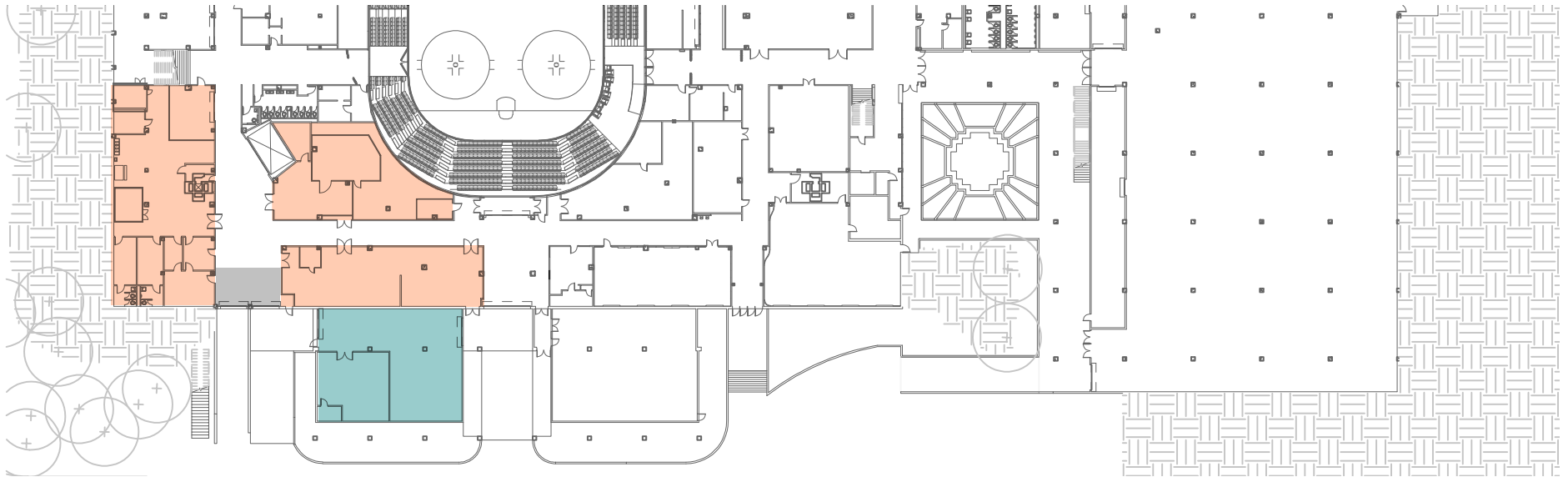
#### Kitchen/Commissary

Much of the existing kitchen does not meet code. A full renovation in-place would require the kitchen to be off-line during the construction and the new trash enclosure requires access from the loading area. To accommodate this, the kitchen is relocated east of its current position and expanded to incorporate storage and prep needs. This opens the loading area for increased marshalling and temporary storage. The new location is also located closer to the meeting rooms providing better service access.

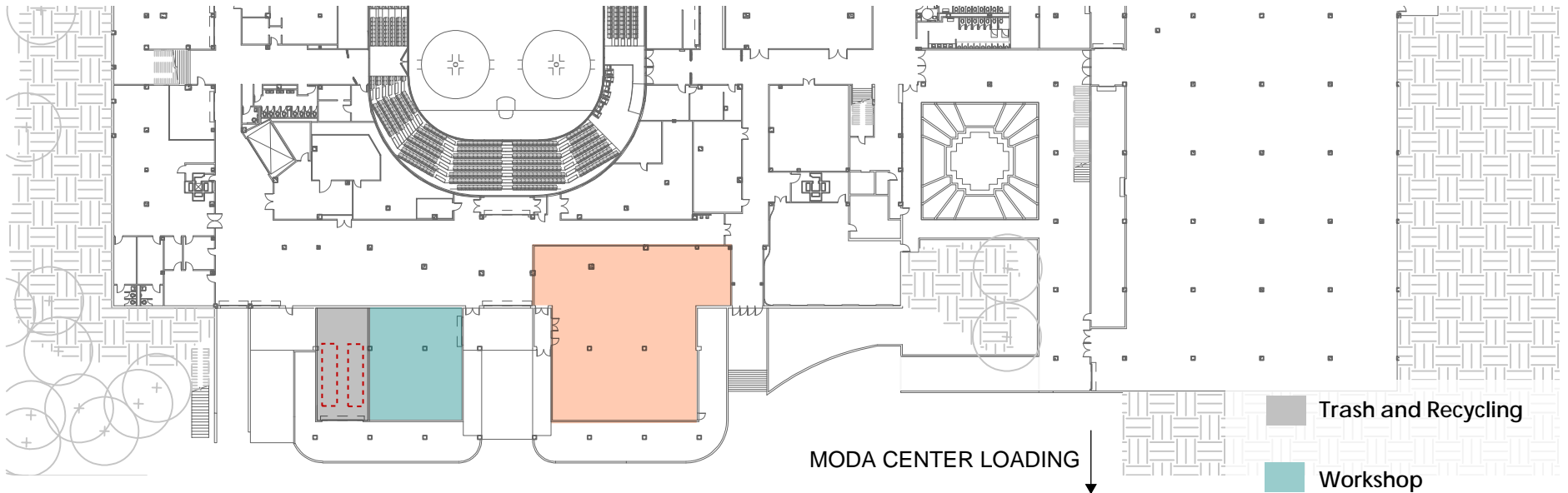
The new kitchen location displaces storage and the Simpson meeting room, however the consolidation of the commissary functions will free up additional areas for relocating building storage. Because the existing Simpson meeting room is located within the back of house zone, it is not planned to be included in the new conference center design and can be repurposed for the new kitchen

#### Trash Enclosure

The trash and recycling dumpsters are required to be enclosed. From conversations with the building operators, it became clear that the enclosure needs to be as far from the Moda center loading as possible due to access conflicts. The new trash enclosure will be located within the existing building footprint in the existing workshop area. This will require excavating the existing floor at the trash enclosure to facilitate at-grade access for the dumpsters.



**EVENT LEVEL - EXISTING**



**EVENT LEVEL - PATRON EXPERIENCE - PROPOSED**

# **Masterplan Package:** Arena Enhancements

## Overview

The Arena Enhancements package incorporates upgrades that support events at the VMC. These are necessary for both VMC staff and traveling acts to promote operational efficiency and to ensure that the venue has adequate infrastructure to host a variety of shows. This package includes upgrades to Loading, Rigging, Bowl Curtains and Audio/Visual.

In addition to back-of-house upgrades, this package also includes replacement of the existing telescopic seating platforms with new, modern seats and platforms that complete the desired seating upgrade.

### Work within this package will include the following scope items:

- B.01.d - New Retractable Seating Platforms
- B.04.b - Replace/Update Scoreboard
- A.01.a - Increase Rigging Capacity
- A.03 - Improve Catwalks
- B.04.c - New Arena Audio System
- B.06 - Improve Bowl Acoustics
- B.05 - Replace / Upgrade Bowl Curtaining Systems
- A.02 - Seismic Improvements
- NS.02 - New 3-Bay Loading Dock
- NS.03 - New Shore Power

## Masterplan Packages

### Arena Enhancements

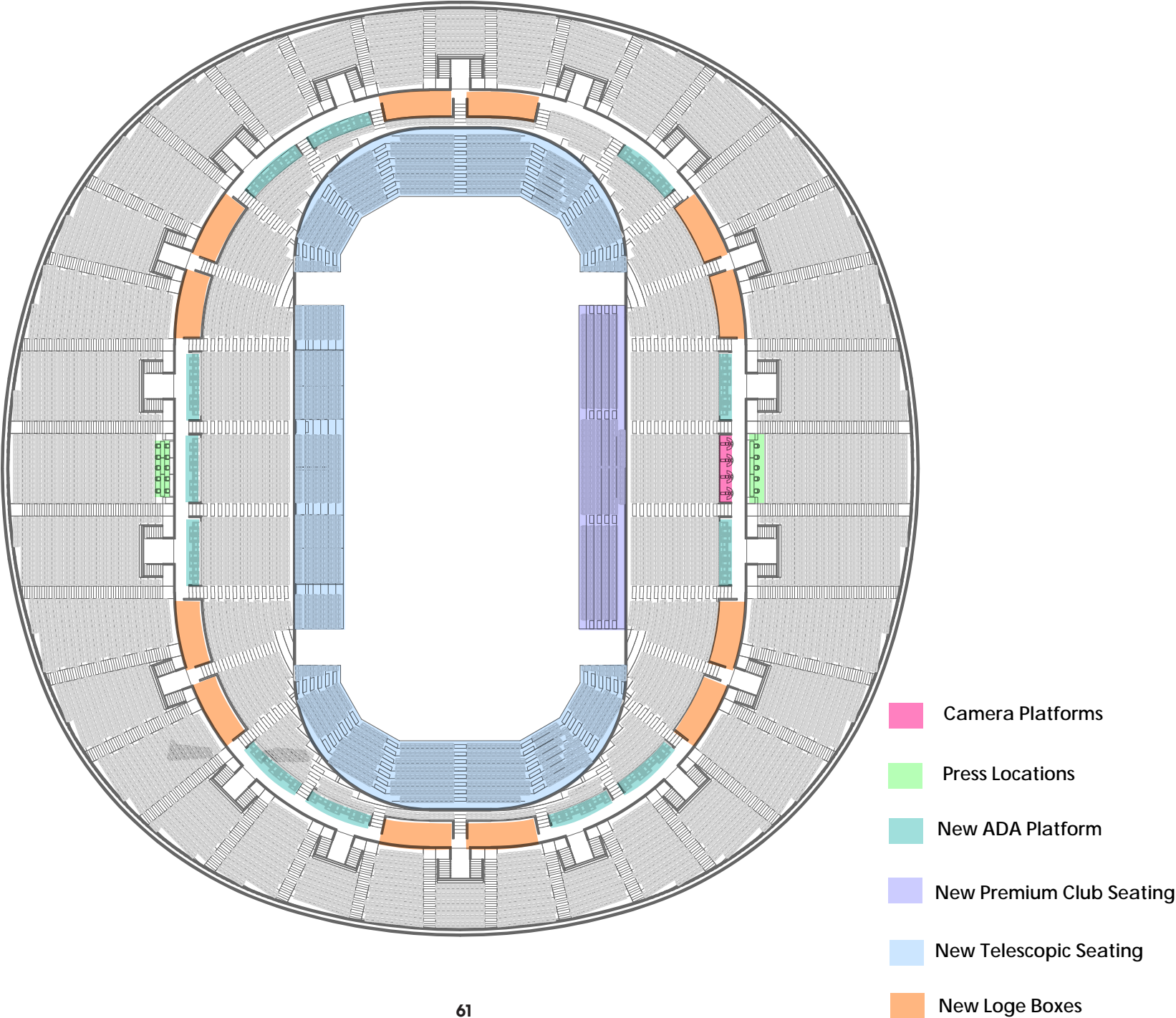
#### Telescopic Seating

The current telescopic seating is beyond its useful life and should be replaced with a modern product. This will address a number of existing deficiencies.

The existing seating consists of individual folding chairs on portable telescopic platforms. This requires significant storage for both the platforms and the individual chairs. Modern seating platforms may be anchored to the wall and include fixed seating which greatly reduces set-up and take-down.

The new telescopic seating will be provided with corner wedges in addition to straight sections. This increases the number of desirable seats close to the event floor and provides corner seats for hockey which are preferred by some spectators.

The new seating may include padded seats and backs, cupholders, and will average 21 inches in width. On the east, the seating may also be associated with a private club (refer to the Conference Masterplan Package).

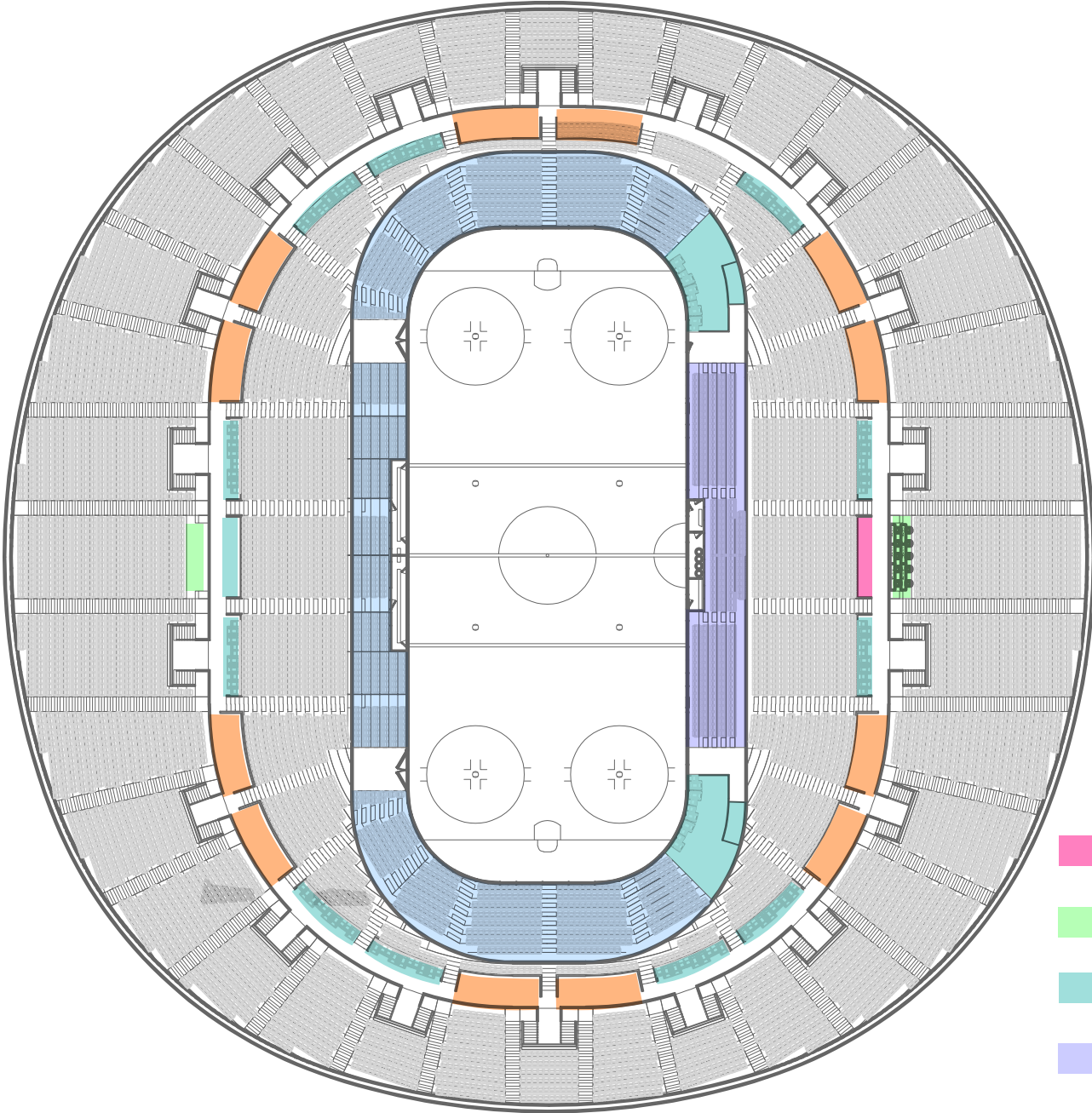




# Masterplan Packages

## Arena Enhancements

Seating Capacities - Hockey Layout	
	Proposed Seating Capacity
<b>Bowl Seating</b>	
New Bowl Seating (Upper Bowl)	5,412
New Bowl Seating (Lower Bowl)	2,162
New WC Accessible Seats	60
New Companion Seats	60
<b>Bowl Seating Total</b>	<b>7,694</b>
<b>Loge Boxes</b>	
Loge Seats (ADA included)	144
<b>Loge Boxes Seating Total</b>	<b>144</b>
<b>Telescopic Seating</b>	
Seats	1,264
<b>Telescopic Seating Total</b>	<b>1,264</b>
<b>Floor Seats - Hockey Layout (Platforms)</b>	
Seats	0
WC Accessible Seats	10
Companion Seats	10
<b>Floor Seating Total</b>	<b>20</b>
<b>Total Seating Capacity (Including ADA)</b>	<b>9,122</b>
<b>Accessible Seating Totals (Wheelchair + Companion)*</b>	<b>70+70</b>
*Additional WC and companion seating can be accommodated in Loge Boxes	



- Camera Platforms
- Press Locations
- New ADA Platform
- New Premium Club Seating
- New Telescopic Seating
- New Loge Boxes

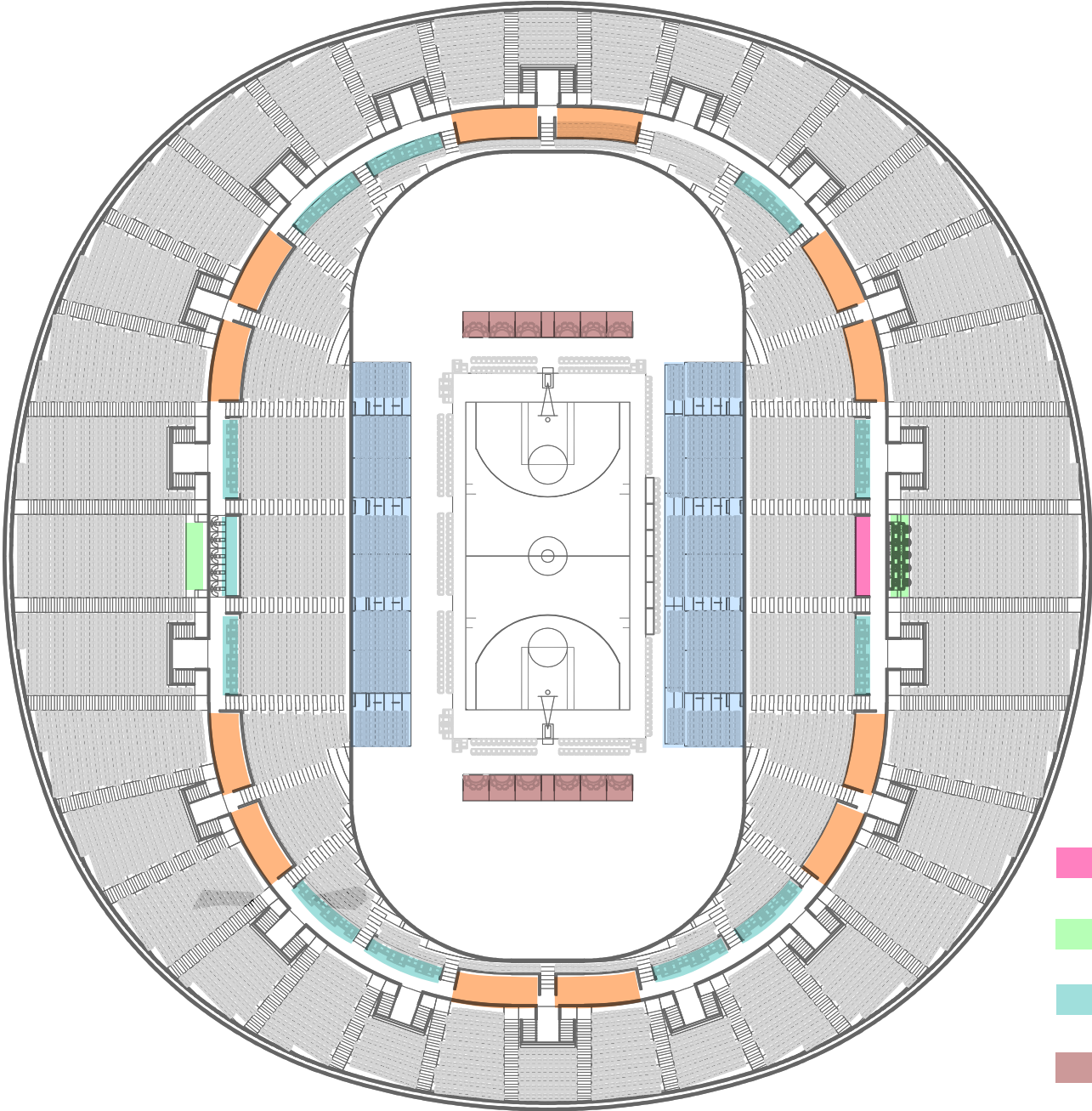
PROPOSED HOCKEY LAYOUT

# Masterplan Packages

## Arena Enhancements

Seating Capacities - Basketball Layout	
	Proposed Seating Capacity
<b>Bowl Seating</b>	
New Bowl Seating (Upper Bowl)	5,412
New Bowl Seating (Lower Bowl)	2,162
New WC Accessible Seats	60
New Companion Seats	60
<b>Bowl Seating Total</b>	<b>7,694</b>
<b>Loge Boxes</b>	
Loge Seats (ADA Included)	144
<b>Loge Boxes Seating Total</b>	<b>144</b>
<b>Telescopic Seating</b>	
Seats	756
<b>Telescopic Seating Total</b>	<b>756</b>
<b>Floor Seats - Basketball Layout</b>	
Seats (includes tables)	294
WC Accessible Seats	8
Companion Seats	8
<b>Floor Seating Total</b>	<b>310</b>
<b>Total Seating Capacity (Including ADA)</b>	<b>8,904</b>
<b>Accessible Seating Totals (Wheelchair + Companion)*</b>	<b>68+68</b>

\*Additional WC and companion seating can be accommodated in Loge Boxes



- Camera Platforms
- Press Locations
- New ADA Platform
- New Banquet Seating
- New Telescopic Seating
- New Loge Boxes

PROPOSED BASKETBALL LAYOUT

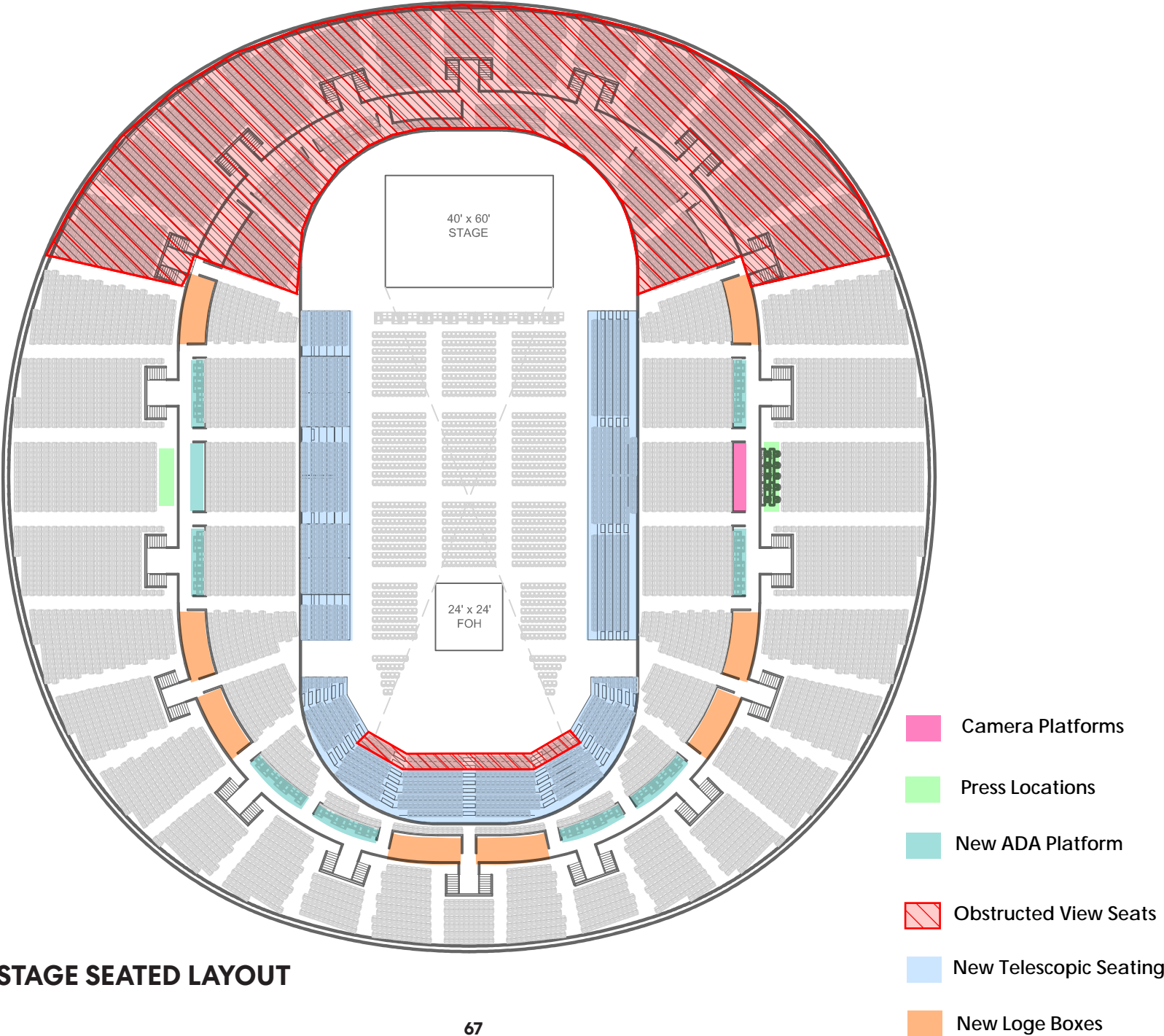
# Masterplan Packages

## Arena Enhancements

Seating Capacities - End Stage Seated Layout	
	Proposed Seating Capacity
<b>Bowl Seating</b>	
New Bowl Seating (Upper Bowl)	4,186
New Bowl Seating (Lower Bowl)	1,776
New WC Accessible Seats	45
New Companion Seats	45
<b>Bowl Seating Total</b>	<b>6,052</b>
<b>Loge Boxes</b>	
Loge Seats (ADA Included)	96
<b>Loge Boxes Seating Total</b>	<b>96</b>
<b>Telescopic Seating</b>	
Seats	974
<b>Telescopic Seating Total</b>	<b>974</b>
<b>Floor Seats - End Stage Seated Layout</b>	
Seats	1,086
WC Accessible Seats	15
Companion Seats	15
<b>Floor Seating Total</b>	<b>1,116</b>
<b>Total Seating Capacity (Including ADA)</b>	<b>8,238</b>
<b>Accessible Seating Totals (Wheelchair + Companion)*</b>	<b>60+60</b>

\*Additional WC and companion seating can be accommodated in Loge Boxes





PROPOSED END STAGE SEATED LAYOUT

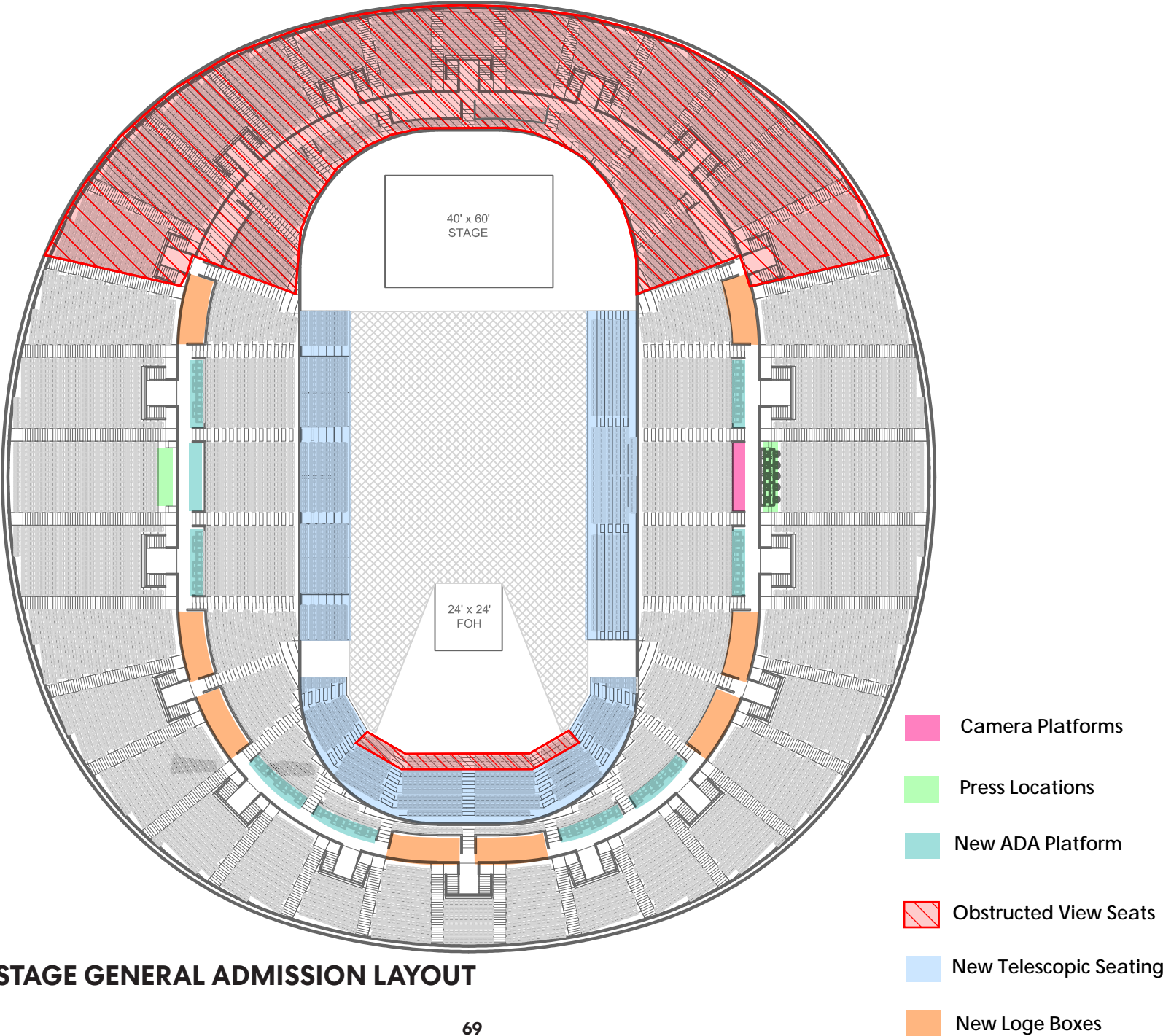
# Masterplan Packages

## Arena Enhancements

Seating Capacities - End Stage General Admission Layout	
	Proposed Seating Capacity
<b>Bowl Seating</b>	
New Bowl Seating (Upper Bowl)	4,186
New Bowl Seating (Lower Bowl)	1,776
New WC Accessible Seats	45
New Companion Seats	45
<b>Bowl Seating Total</b>	<b>6,052</b>
<b>Loge Boxes</b>	
Loge Seats (Includes ADA)	96
<b>Loge Boxes Seating Total</b>	<b>96</b>
<b>Telescopic Seating</b>	
Seats	974
<b>Telescopic Seating Total</b>	<b>974</b>
<b>Floor Seats - End Stage GA Layout</b>	
Standing Room (5sf / Person)	2,056
WC Accessible Seats	20
Companion Seats	20
<b>Floor Seating Total</b>	<b>2,096</b>
<b>Total Seating Capacity (Including ADA)*</b>	<b>9,218</b>
<b>Accessible Seating Totals (Wheelchair + Companion)**</b>	<b>65+65</b>

\*Seating capacity will be restricted by code to 9,200 occupants

\*\*Additional WC and companion seating can be accommodated in Loge Boxes



PROPOSED END STAGE GENERAL ADMISSION LAYOUT



## Masterplan Packages

### Arena Enhancements

#### Operational Support

##### Curtaining

Replace the perimeter bowl curtain with a complete new system that includes new fabric, cable supports and motors. The system will be constructed of multiple sections that can be raised and lowered independently to allow for custom arrangements that highlight views or block unwanted light.

Additional partial-house curtains are proposed that would reduce the seating area to the desired capacity to accommodate a variety of potential shows.

##### Rigging

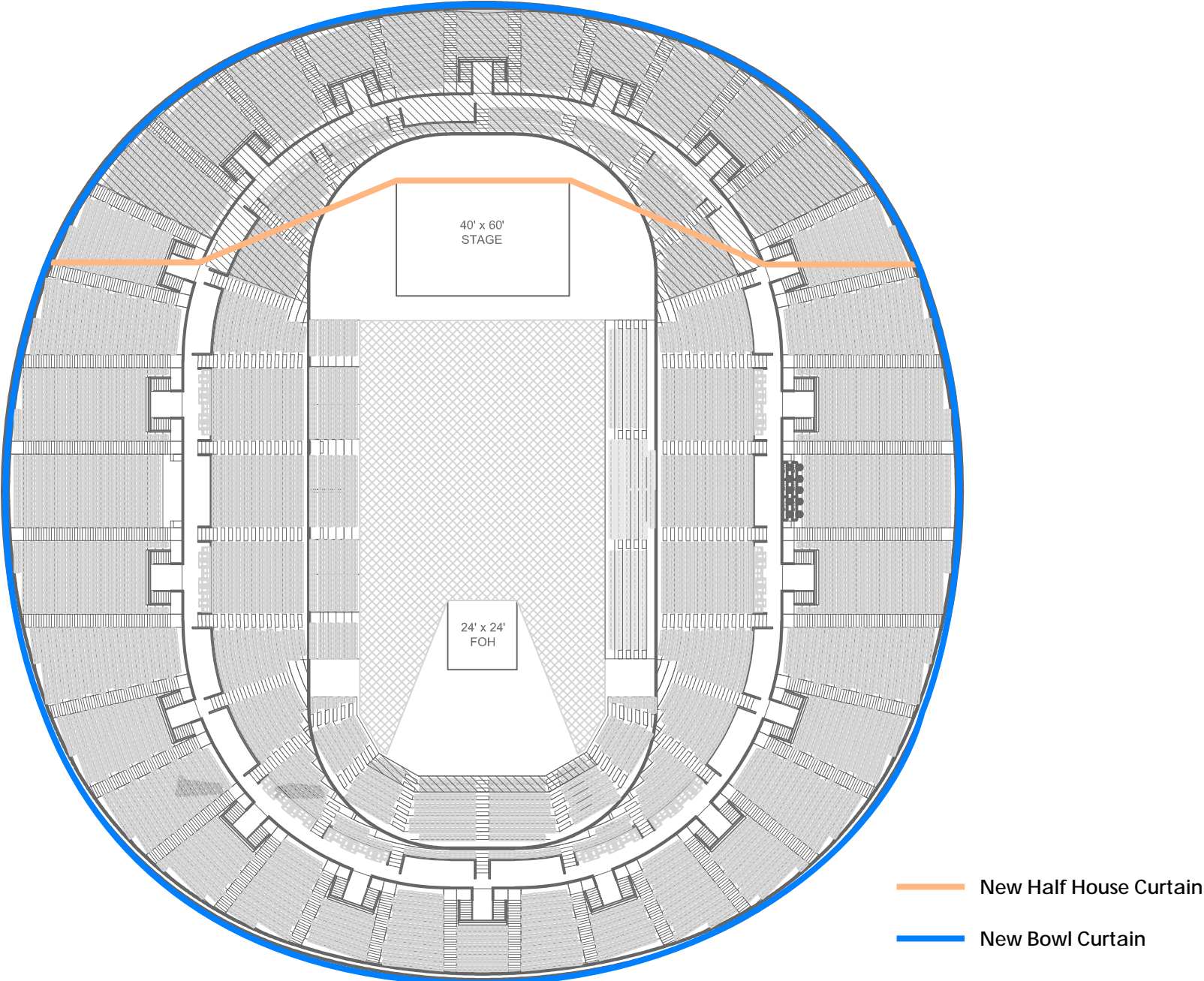
Also critical to a modern arena is the ability to hang substantial loads from the roof structure. The current capacity is inadequate for many of the desired shows. By adding steel to the existing roof members, the rigging capacity can be increased to meet current standards.

##### Video Board

An important improvement for multi-use functionality in the arena is the ability to maintain an unobstructed space above the event floor. The current video board installation limits the ability to move it out of the way, hindering non-sport events such as concerts. To correct this, the existing support beam will

be removed and replaced with a new hoist and video board. This will allow the equipment to nest into the existing roof structure providing a clear and open event space.

In addition to the video board replacement, upgrades to the audio system are proposed and this infrastructure will be connected to the life safety notification systems in package II.a (Seating Bowl and Code Required Improvements).



GENERAL ADMISSION EVENT LAYOUT - OPERATIONAL SUPPORT

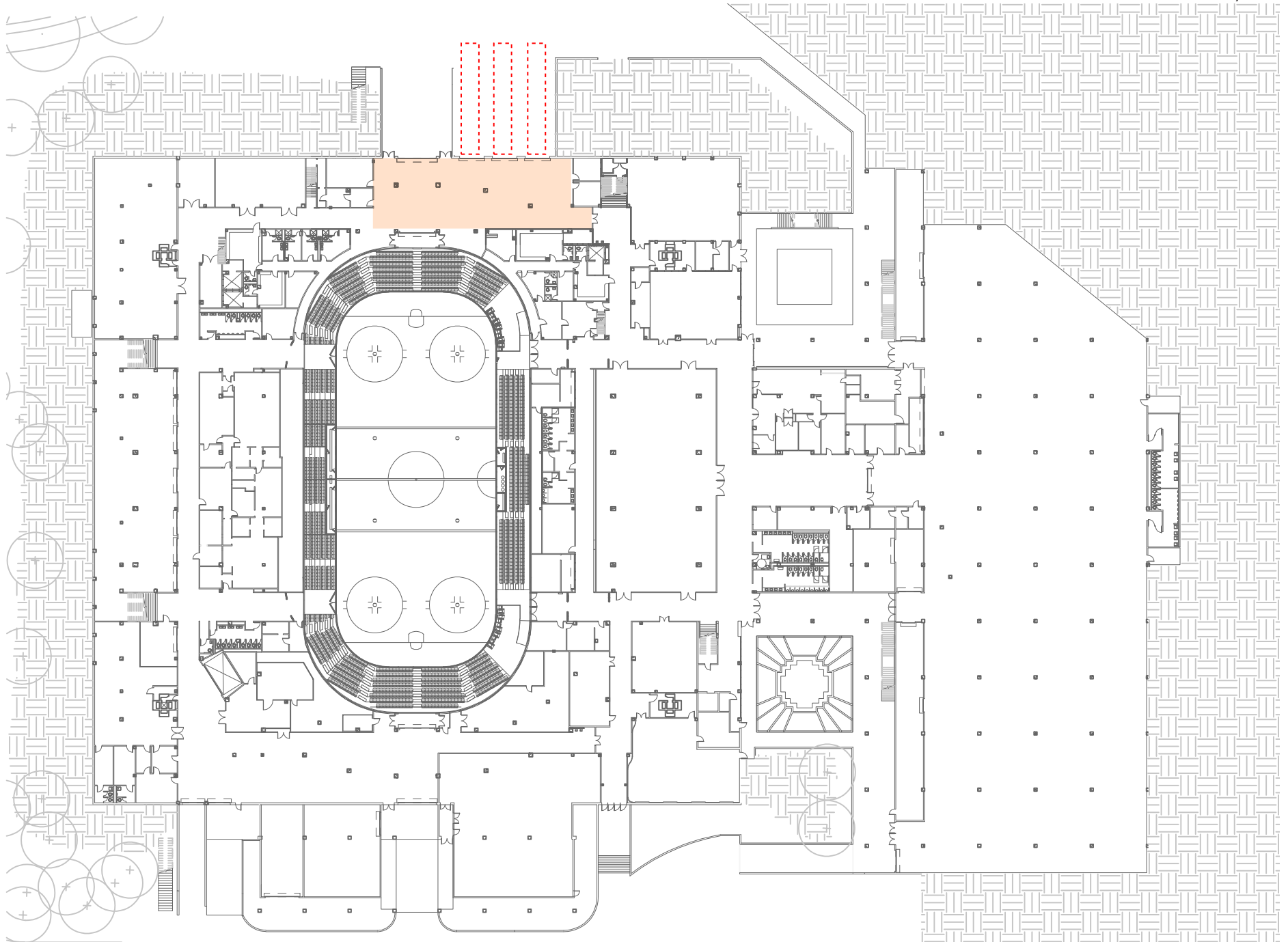
## Masterplan Packages

### Arena Enhancements


#### Loading

Efficient loading and unloading is critical for the VMC to draw the maximum number and type of shows. This includes roadway access, adequate docking points, sufficient staging and maneuvering space within the loading area, and electrical power accessible to buses and trucks parked in the loading area.

The masterplan proposes adding a minimum of three new sunken loading docks on the north side in addition to retaining the existing flat-floor access. Regrading the existing lot and adjusting buried utilities will be necessary to achieve the desired layout.



**EVENT LEVEL - PROPOSED MASTER PLAN PACKAGE - ARENA ENHANCEMENTS**

 New Loading Dock

# **Masterplan Package:** Conference Center

## Overview

The existing meeting rooms on the event level will be renovated into a true conference center. A key strategy to achieve this is to create a central prefunction space that receives and orients visitors. It provides necessary circulation to each of the meeting rooms and support spaces such as restrooms and concessions.

The kitchen move and upgrades in the Patron Experience package are also important support elements for the conference center proposal.

### Work within this package will include the following scope items:

- EL.10.b - Create a Central Prefunction Space connecting the Meeting Rooms
- EL.10.e - Renovate the Meeting Rooms
- EL.10.d - Upgrade the Central Meeting Room to a Multi-Use Environment
- EL.10.c - Add Food Service
- EB.16 - Consolidate Office Functions
- EL.10.b - Increase Access to the Event Level
- EL.11.b - New Access and Walkways to Exhibit Hall and Memorial Gardens

## Masterplan Packages

### Conference Center

#### Event Center

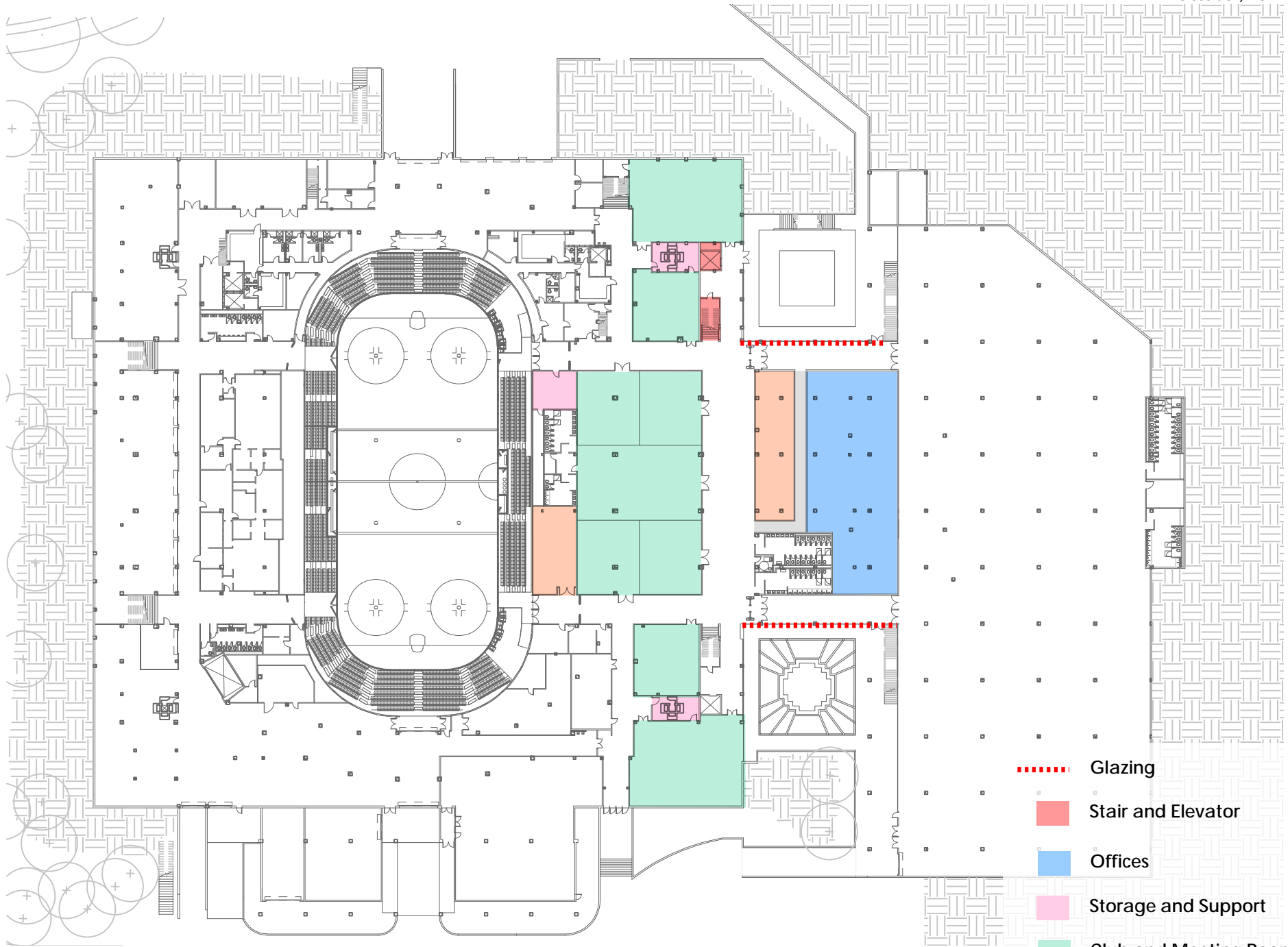
This project will prioritize five meeting rooms that are easily accessed and that offer a variety of sizes. These are the US Plywood Meeting Room, the Fountain Meeting Room, Georgia Pacific Meeting Room, International Paper Meeting Room, and Weyerhaeuser Meeting Room

The largest, the Georgia Pacific Meeting Room, will be upgraded to a multi-use environment that can be used as a club for sporting events and concerts. It will connect directly to restrooms and food service to provide an appropriate level of service. It will also have direct access to new telescopic seating.

The remaining four meeting rooms will be renovated with new lighting, finishes and A/V systems.

Increasing access to the event level will assist visibility and expedite patron entry/exit. Therefore, a second stair and elevator are planned at the north side of the concourse - mirroring the existing vertical circulation.

A new concession area will anchor the east side of the prefunction space, which combined with the renovated restroom in package II.a, provides a central location for visitor services. To accomplish this, the existing offices will be reconfigured such that the central access to the Exhibit Hall is removed and relocated to the edges adjacent to the Memorial Gardens. The existing exterior walkways will be enclosed with glass walls and doors opening onto the Memorial gardens to maximize the visibility and connection to the gardens.



- - - - - Glazing
- Stair and Elevator
- Offices
- Storage and Support
- Club and Meeting Rooms
- Food Service / Concessions

## EVENT LEVEL - PROPOSED MASTER PLAN PACKAGE - CONFERENCE CENTER



# Masterplan Package: Envelope

## Overview

The curtainwall exterior is a signature element and part of the VMC's historic designation. The original glazing and framing system is beyond its useful life and is in need of upgrades to its thermal and moisture performance.

Any new materials that replace the existing must conform to the historic appearance. This includes both the curtainwall assembly and the fascia panels that cap the facades. Custom glazing and framing that replicate the existing proportions and appearance have been developed and will deliver significant operational benefits by increasing comfort and reducing HVAC loads.

An alternate approach of refurbishing the existing system is also being considered, due to the sensitivity of the historic appearance. It is estimated, though, that this option will not deliver significant construction cost savings, will compromise the overall performance of the system, and reduce expected utility cost benefits.

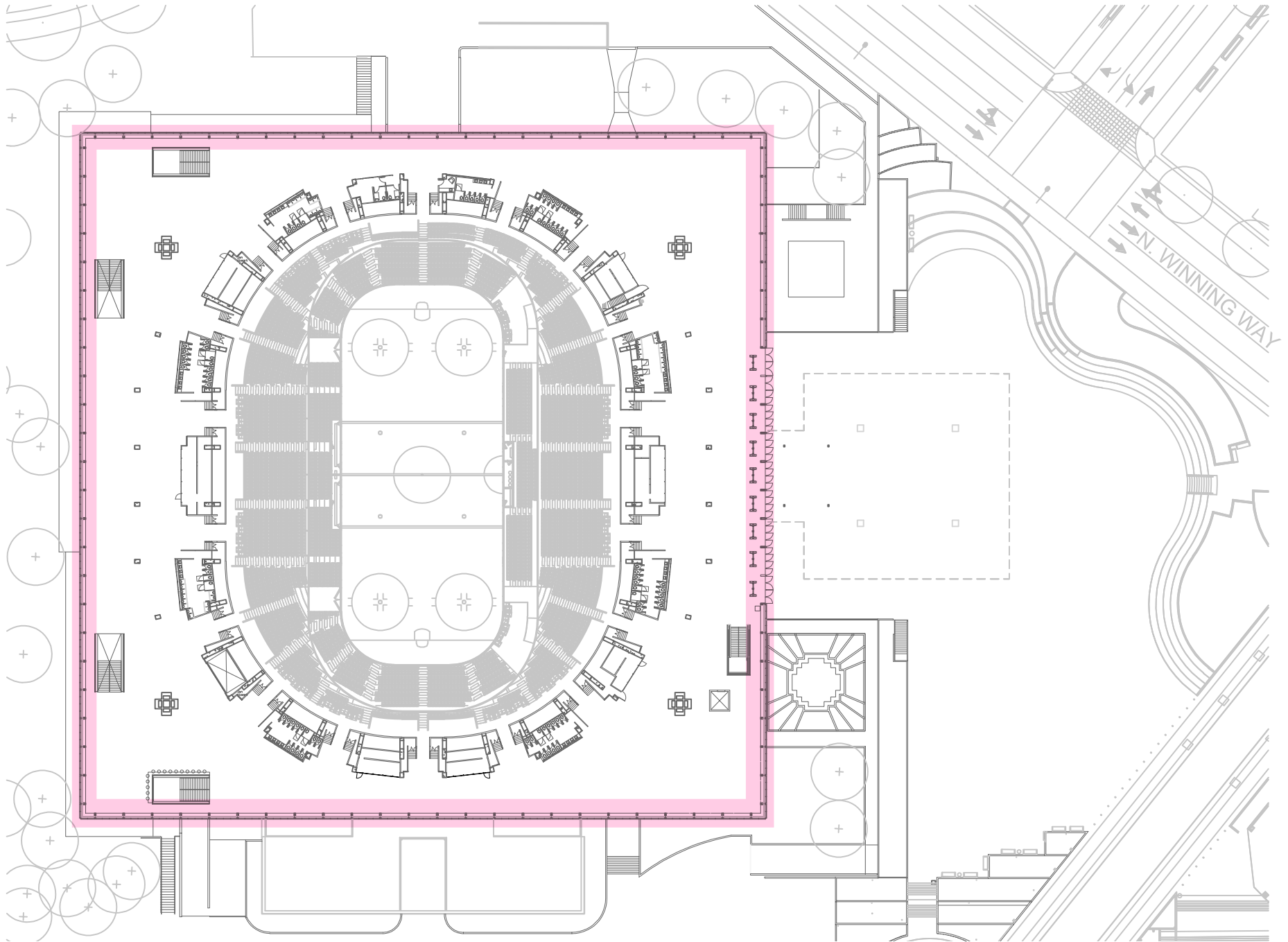
### **Work within this package will include the following scope items:**

- BE.02.a - Replace or Refurbish Glass Curtain Wall System
- BE.02.a - Replace Plywood Fascia

## Masterplan Packages

### Envelope





**CONCOURSE LEVEL - PROPOSED MASTER PLAN PACKAGE - ENVELOPE**

 Exterior Envelope

# **Masterplan Package:** Public Spaces

## Overview

It is the goal of this masterplan to enhance the public spaces that surround the VMC by developing accessible connections, by supporting community and programmed events, and by highlighting the history and culture of the area.

Although maximizing the perimeter development directly benefits the VMC, a well-functioning arena also requires adequate access and staging areas for servicing the building and to accommodate traveling shows. The immediate site area, which is partially shared with the Moda Center, must be preserved and potentially expanded to ensure that the VMC can support the maximum number and types of events.

Creating successful public space requires careful planning and collaboration with community stakeholders. Although that engagement process will occur at a future point, the masterplan highlights three specific areas of importance with regard to the VMC:

**Memorial Gardens** Strengthen the connection of these signature spaces to the arena and the public. This includes adding transparency to the perimeter walls to view to and from the event level interior, and upgrading the circulation to allow for visitors of all abilities to access the memorials even during off hours.

**Entry Plaza** Activate the plaza with new amenities to strengthen existing use and increase revenue opportunities. Create a public space that welcomes visitors while retaining operational flexibility.

**Rose Quarter** Consider current and future development opportunities to maximize the VMC's location within this unique district. Continue to share resources and programming with the Moda Center to create a dynamic hub of activity.

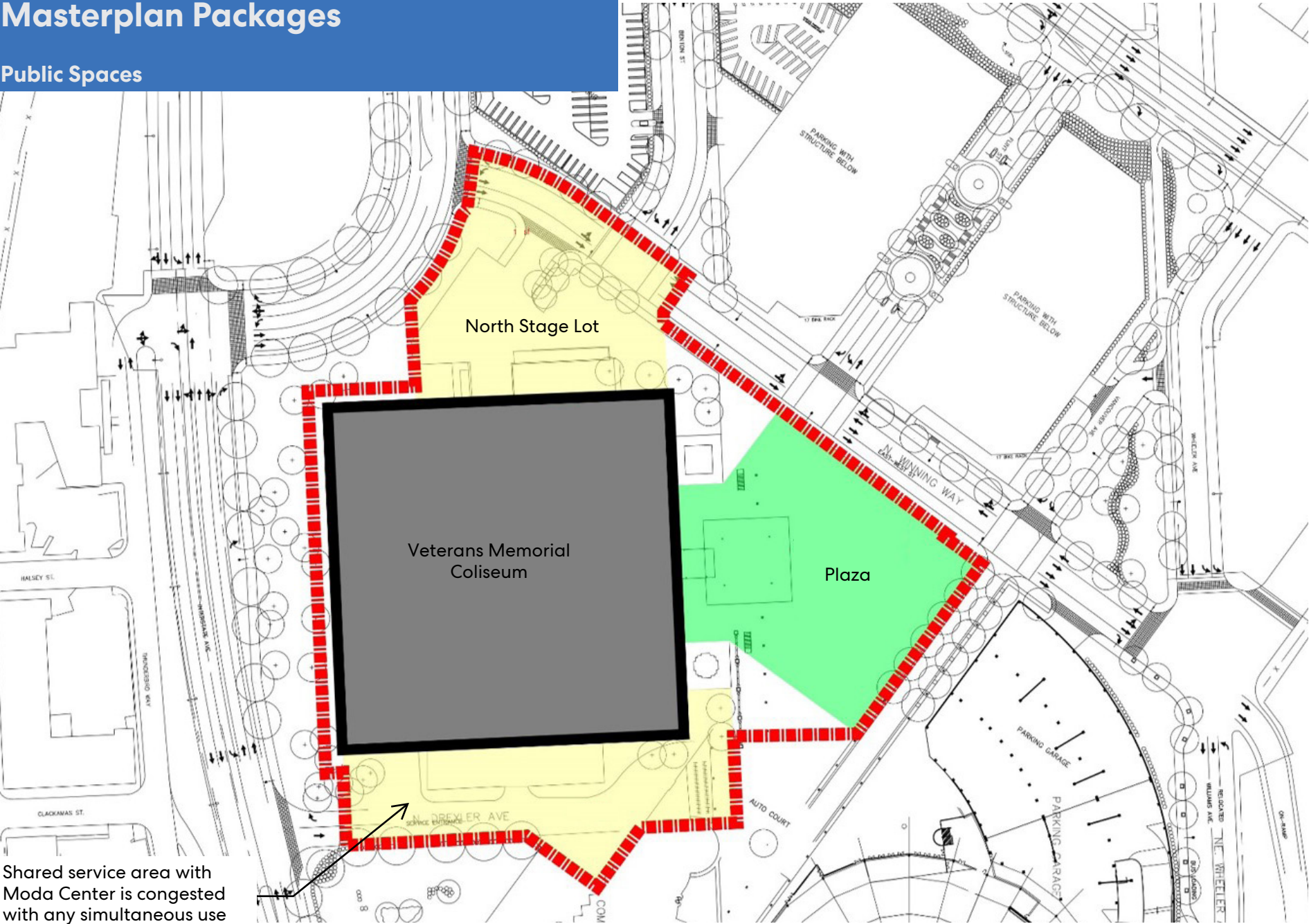
## Work within this package will include the following scope items:

- M.01 - Renovate Memorial Gardens
- P.03.a - Repair Existing Entry Pagoda
- P.03.c - Add Glass Roof Canopy Above Entry Doors
- P.04 - Plaza Repairs and Waterproofing
- P.05 - Plaza Improvements

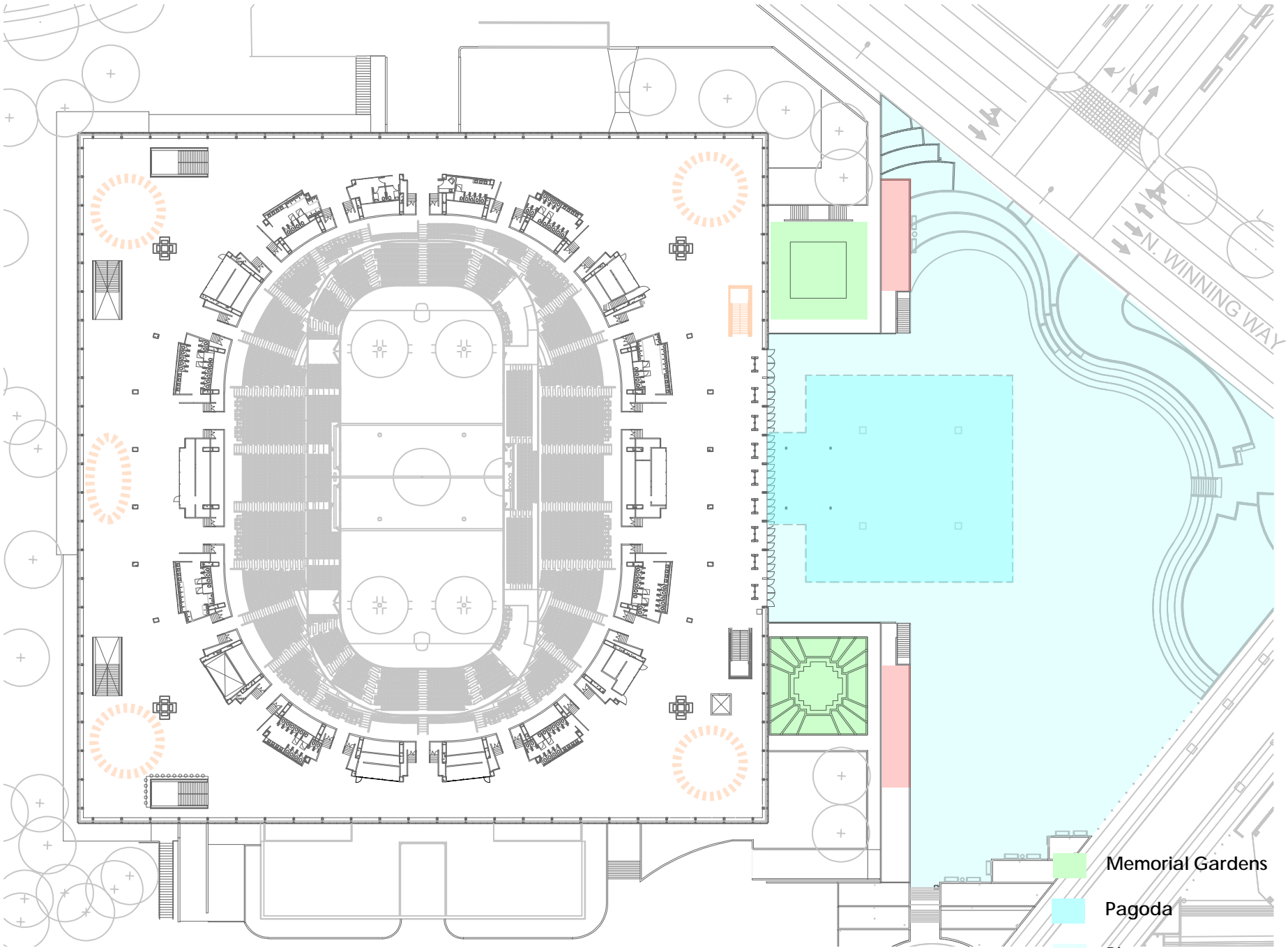


Masterplan Packages

Public Spaces



Shared service area with  
Moda Center is congested  
with any simultaneous use



**CONCOURSE LEVEL - PROPOSED MASTER PLAN PACKAGE - PUBLIC SPACES**

- Memorial Gardens
- Pagoda
- Plaza
- Ticketing Options



## Estimate of Probable Cost

### Seating Bowl and Code Required Improvements Only

It is anticipated that any of the work proposed under the Masterplan Packages would not occur for several years. Given the volatility of the current construction pricing and the constantly changing market conditions, predicting cost estimates five years or more into the future imposes a high degree of uncertainty. In addition, it is not known how the work would be packaged and phased, introducing even more uncertainty. For these reasons, cost estimates at this time are of limited value, and should be viewed as order-of-magnitude allowances. Any work that is to proceed beyond the next five years will need to be re-evaluated and the costs will need to be estimated at that time. For additional cost information, please refer to the Appendix Section in Volume II under Cost Estimates.

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