

# Belmont Ice Rink

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## Feasibility Study

July 6th, 2022



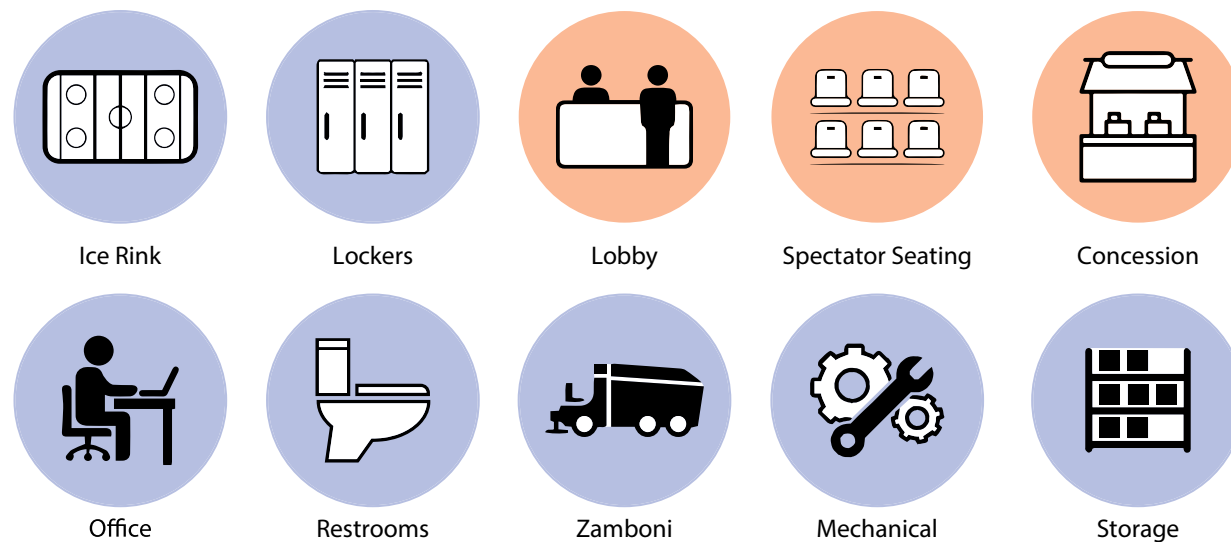




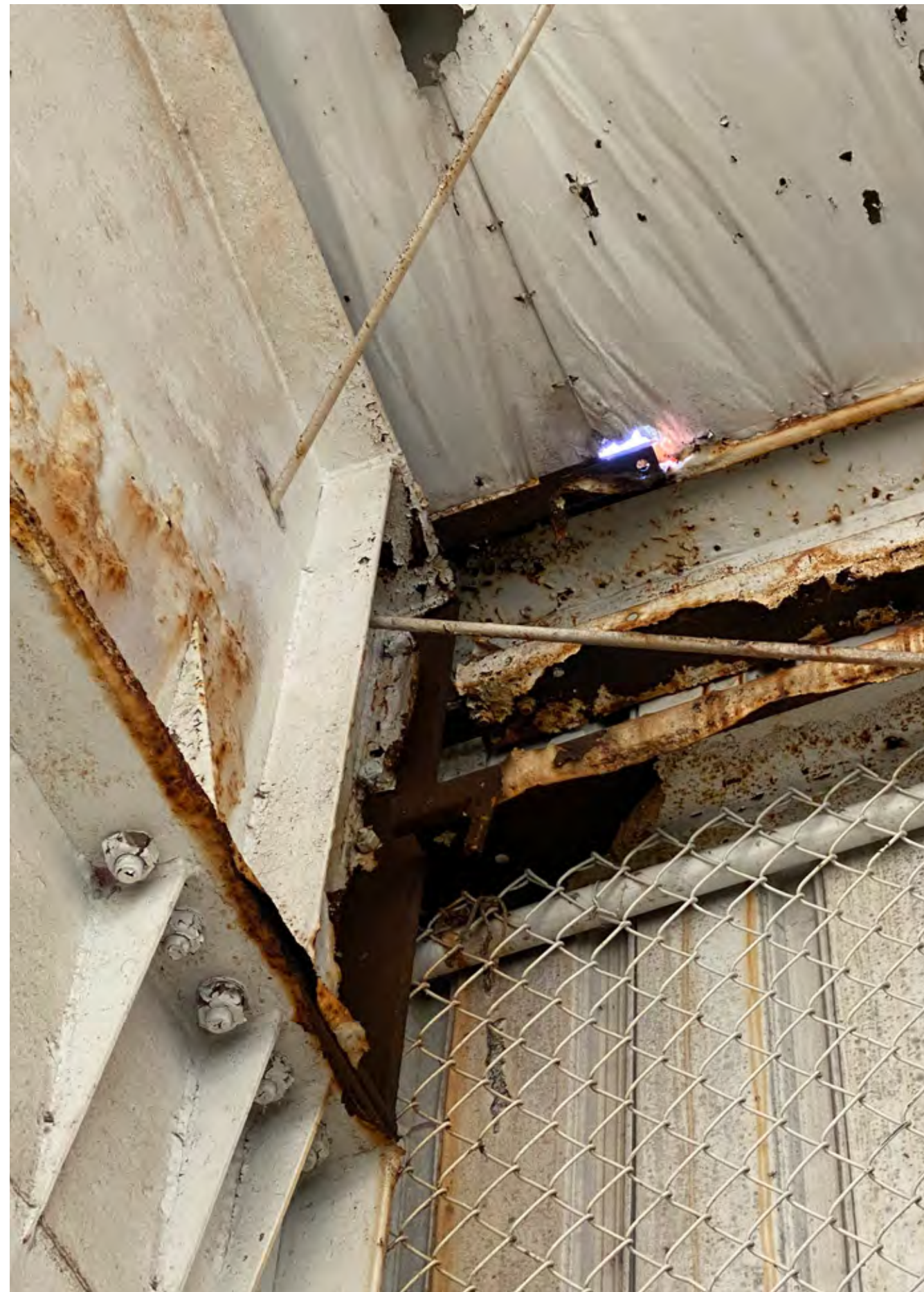
# Skip Viglirolo Skating Rink

Built in 1969  
Completed in 1971

Thousands of young people participate in Youth  
Hockey programs  
High School Varsity and JV Hockey programs  
Middlesex League titles  
Appearances at MIAA Division I state tournaments  
Champions 2020



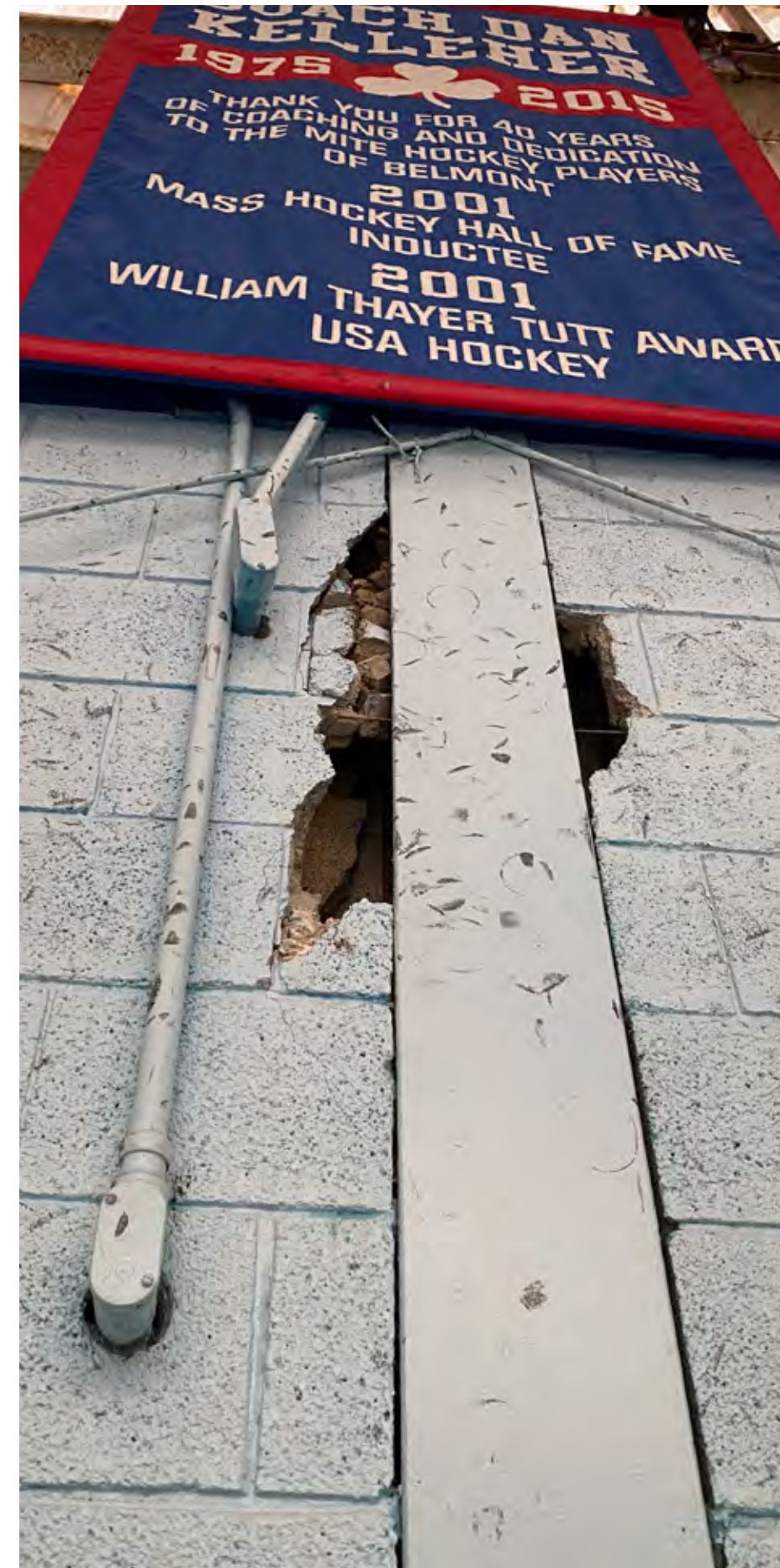




## Deficiencies

- Building not insulated
- Roof leaks
- Rusted structure





## Deficiencies

- Envelope compromised
- Energy inefficiency
- Non-ADA compliant
- Non-MAAB compliant
- Walls crumbling





# James White Memorial Field House

Built in 1932

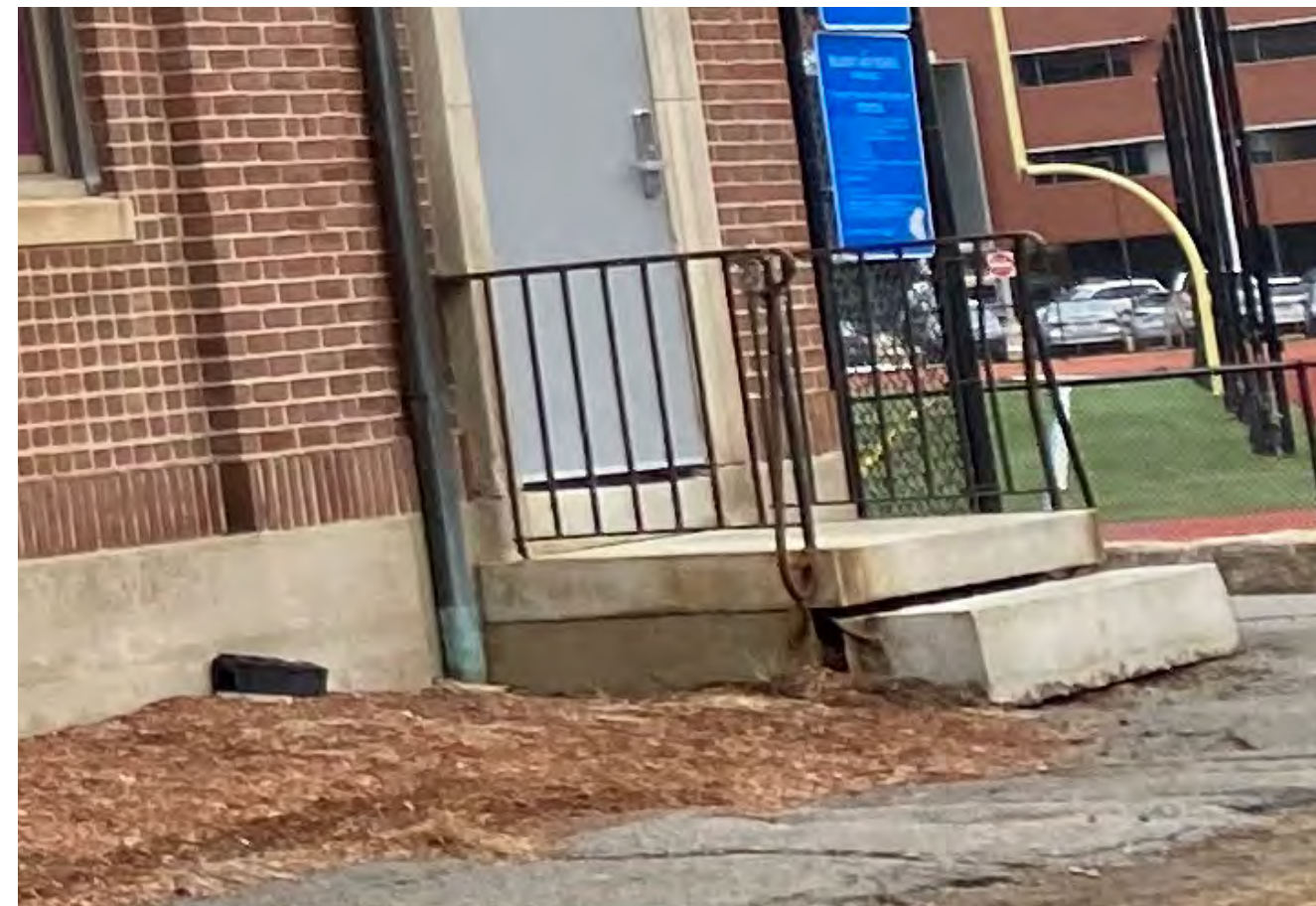




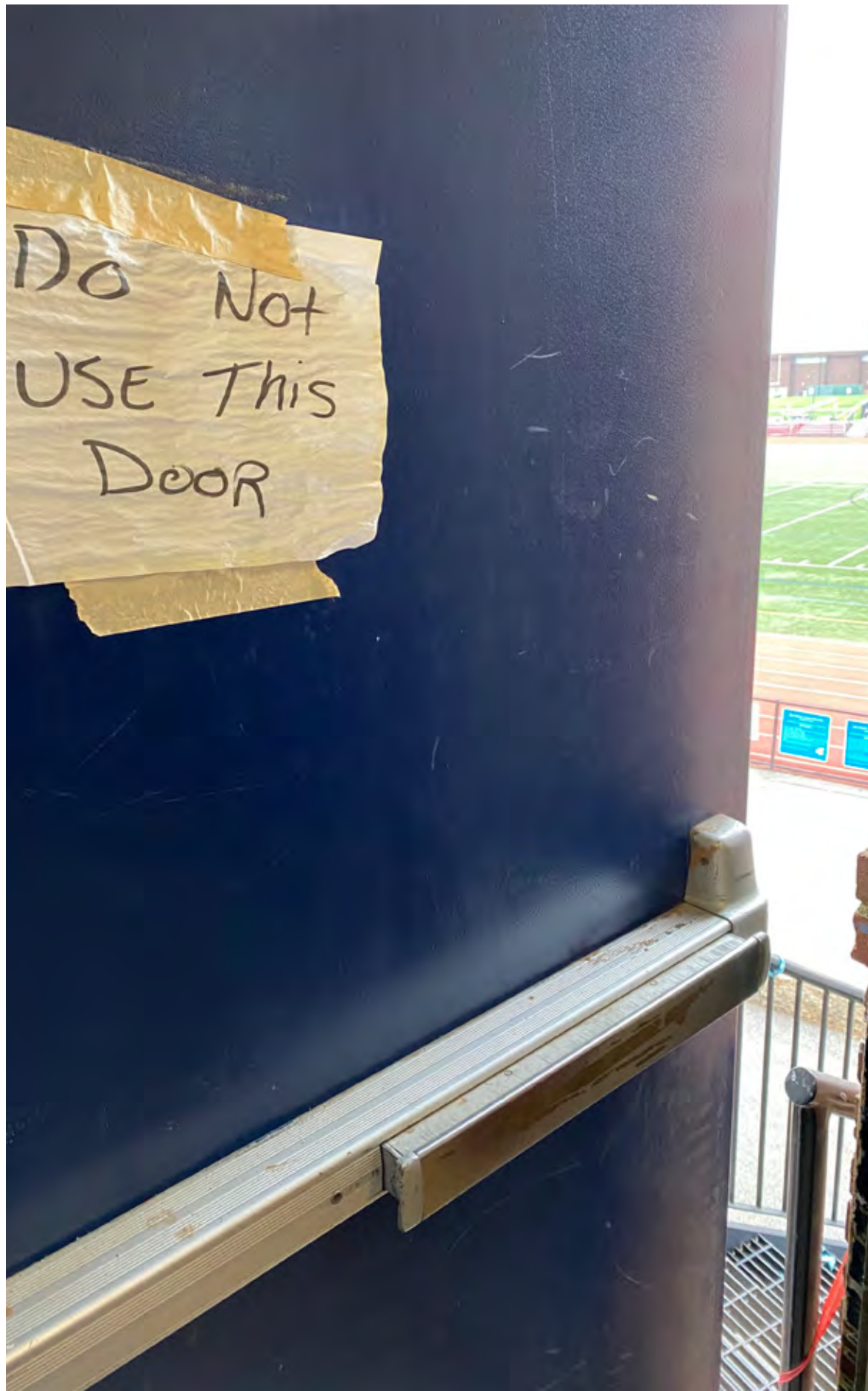


## Deficiencies

- Extensive cracked masonry
- Roof failure
- Broken glass windows
- Non-ADA compliant
- Hazardous entry







## Deficiencies

- Compromised egress
- Non-ADA compliant
- Equipment obsolete



# Program Overview



## EXISTING PROGRAM

### SKIP VIGLIROLO ICE RINK



### WHITE FIELD HOUSE

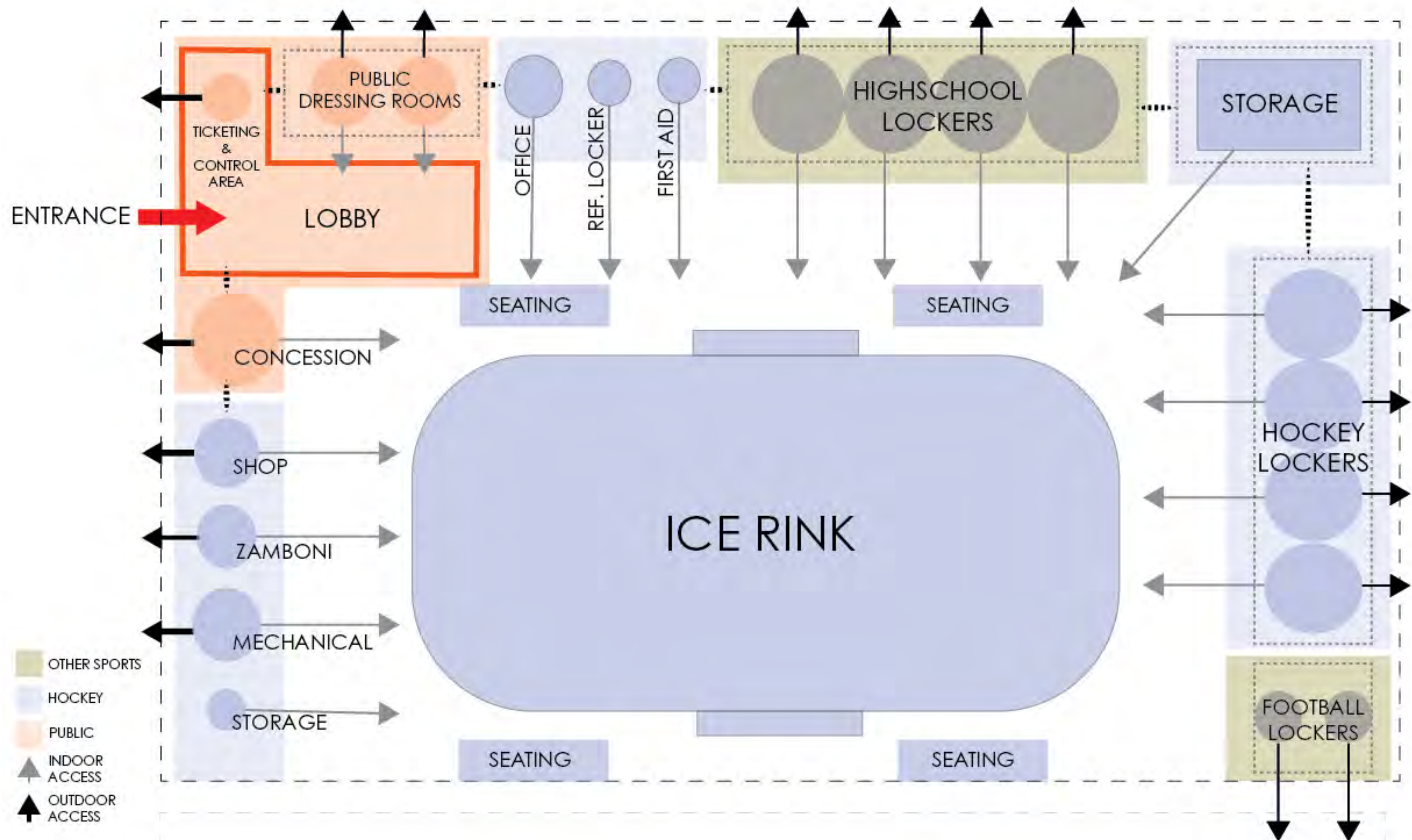


## NEW PROGRAM

### OPTIONAL







# SUMMARY

Program



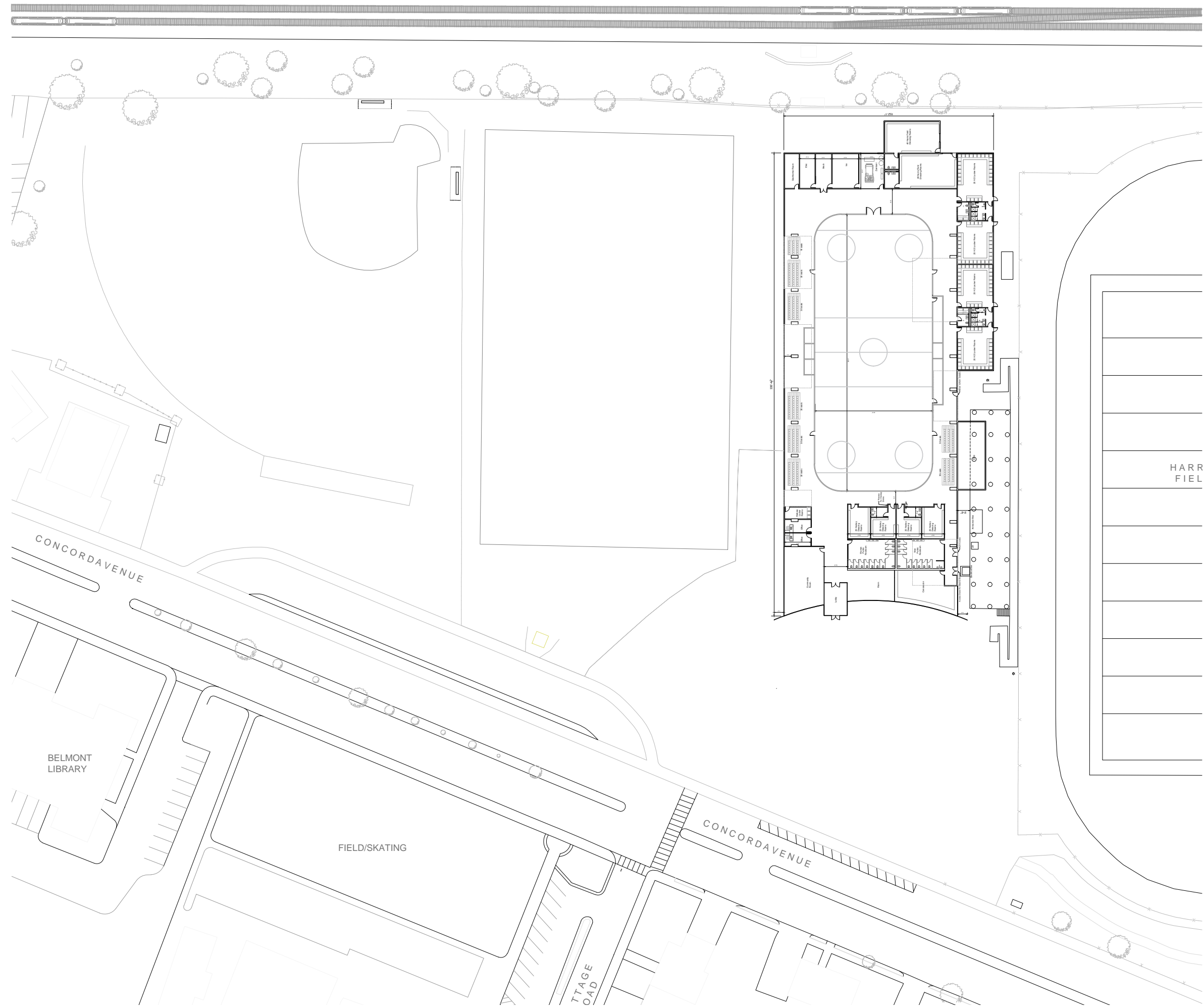


# Site and Field Layout







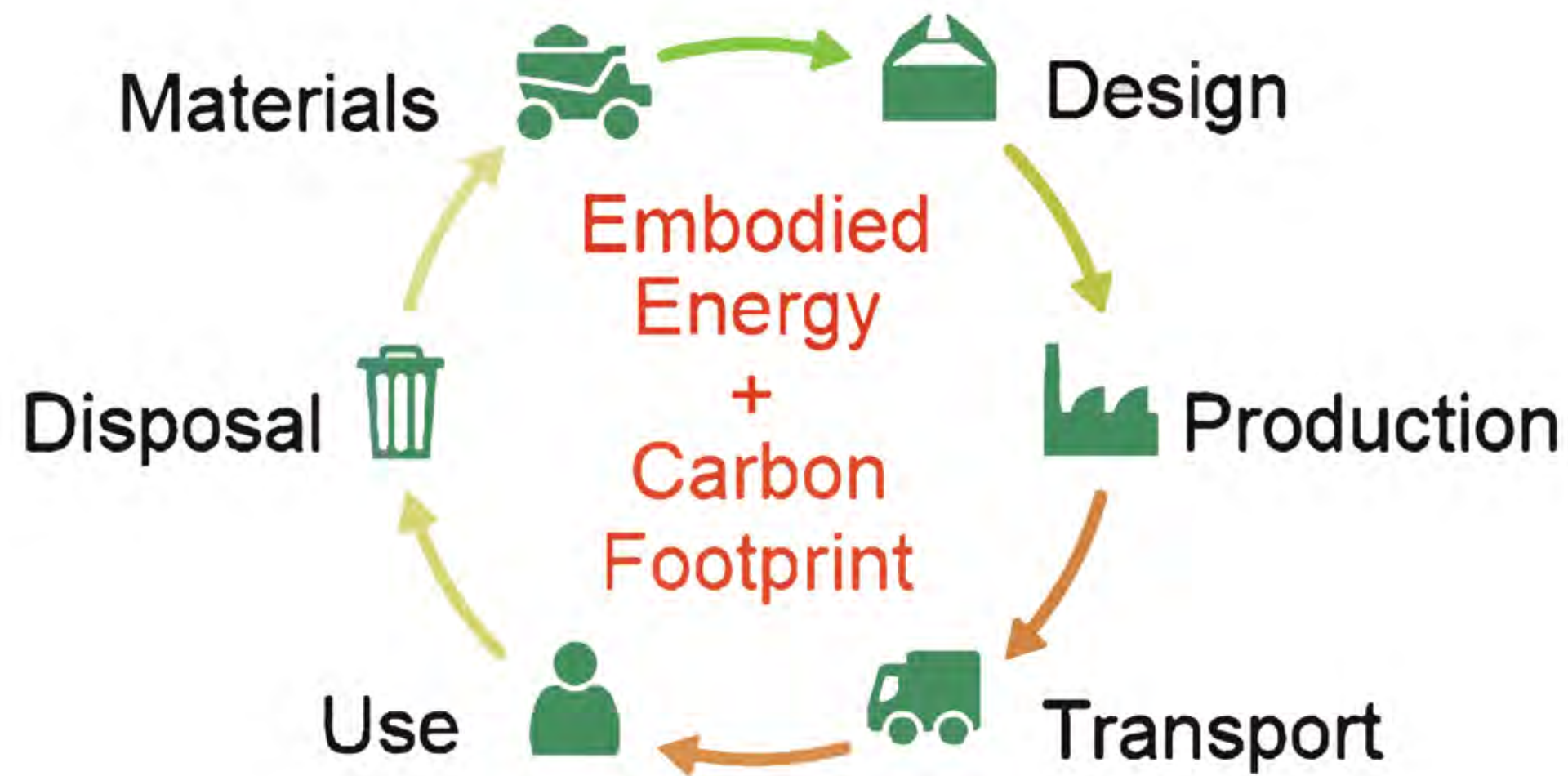




# Net-Zero Energy Goal

Potential for Town Wide Net Zero Approach







Embodied Energy









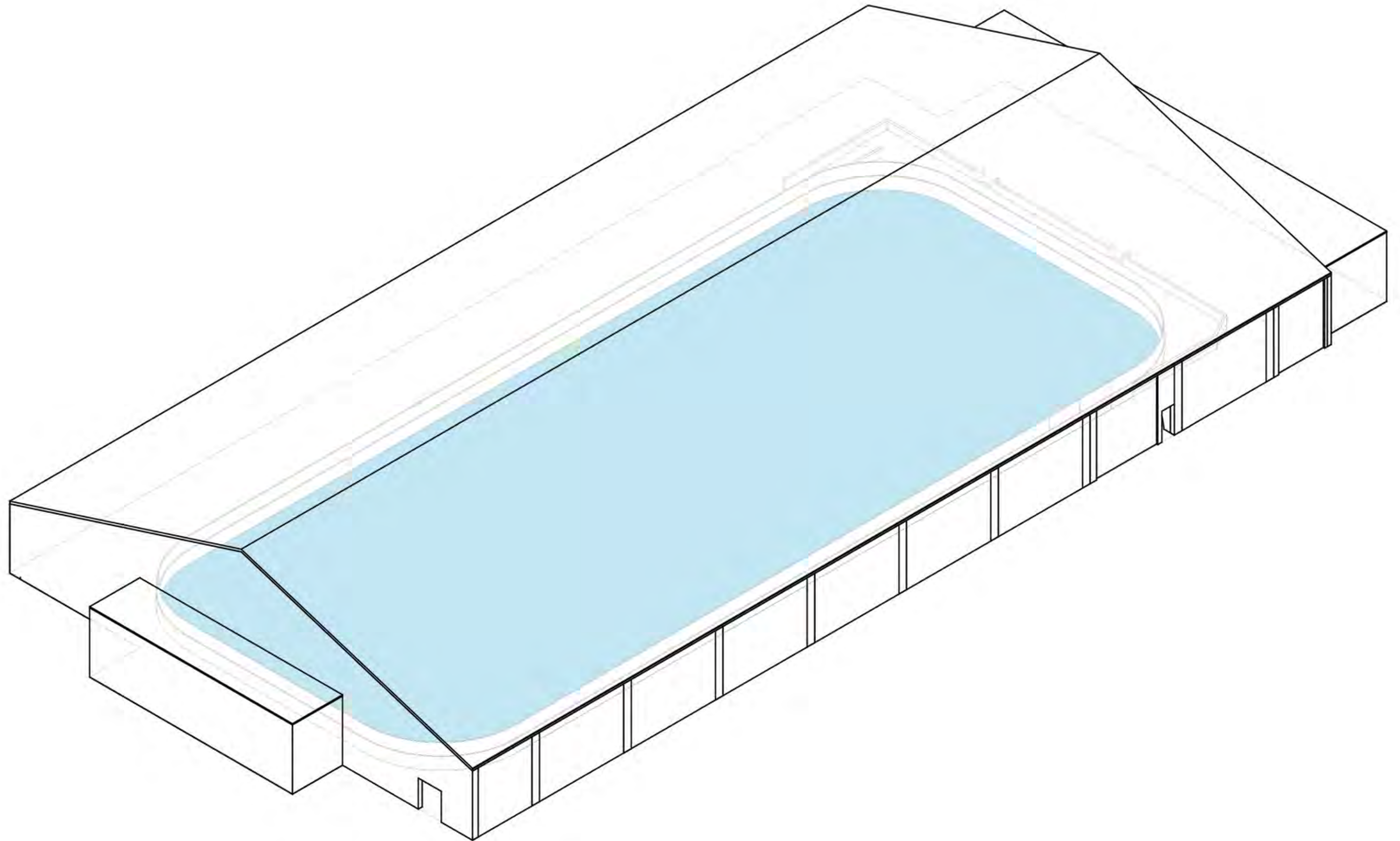




ATTENTION  
ALL HOCKEY PLAYERS  
MUST DRESS IN  
LOCKER ROOMS

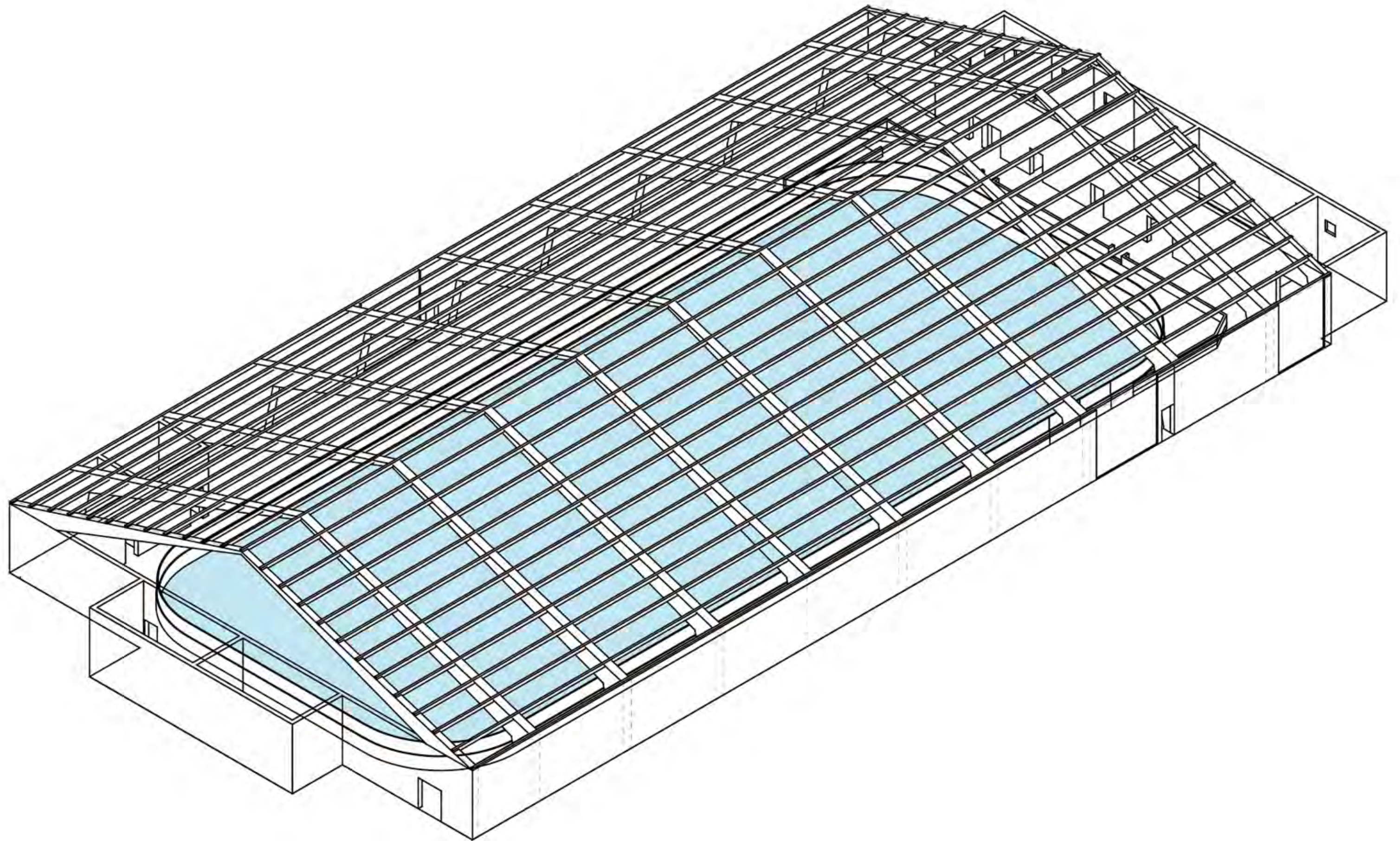
BELMONT  
PLATINUM  
AVERY,  
DOOLEY &  
NOONE, LLP  
ATTORNEYS AT LAW  
THE DAY STATE  
FEDERAL SAVINGS  
Available Foundation  
HARRIS &  
MURPHY,  
LLP  
GOSSELIN  
LAW  
JAMES W.  
FLETT  
CO.  
DUMPSTERS  
617-999-1307  
MORTGAGE  
NETWORK  
PE  
FRE  
Coast





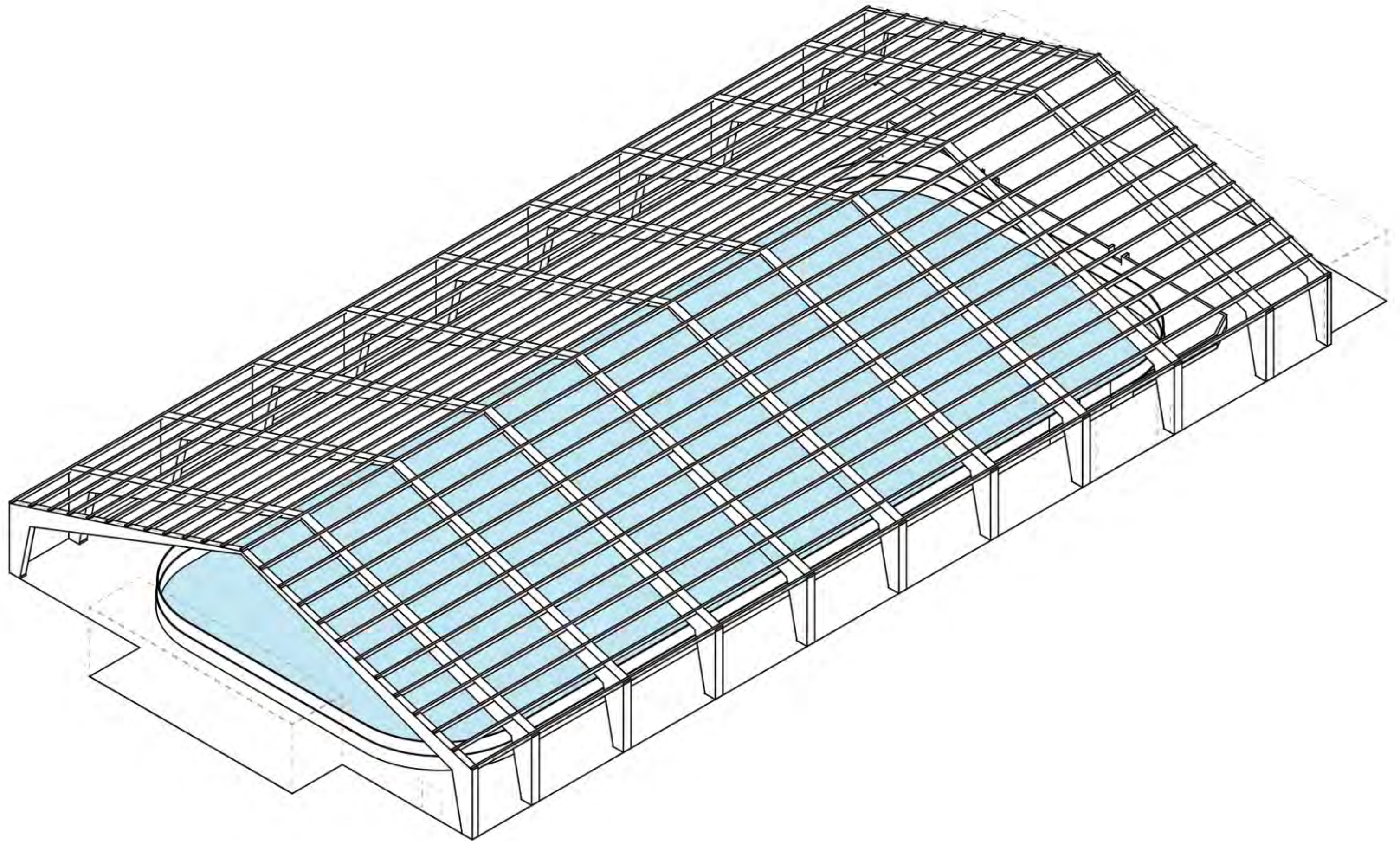
Roof





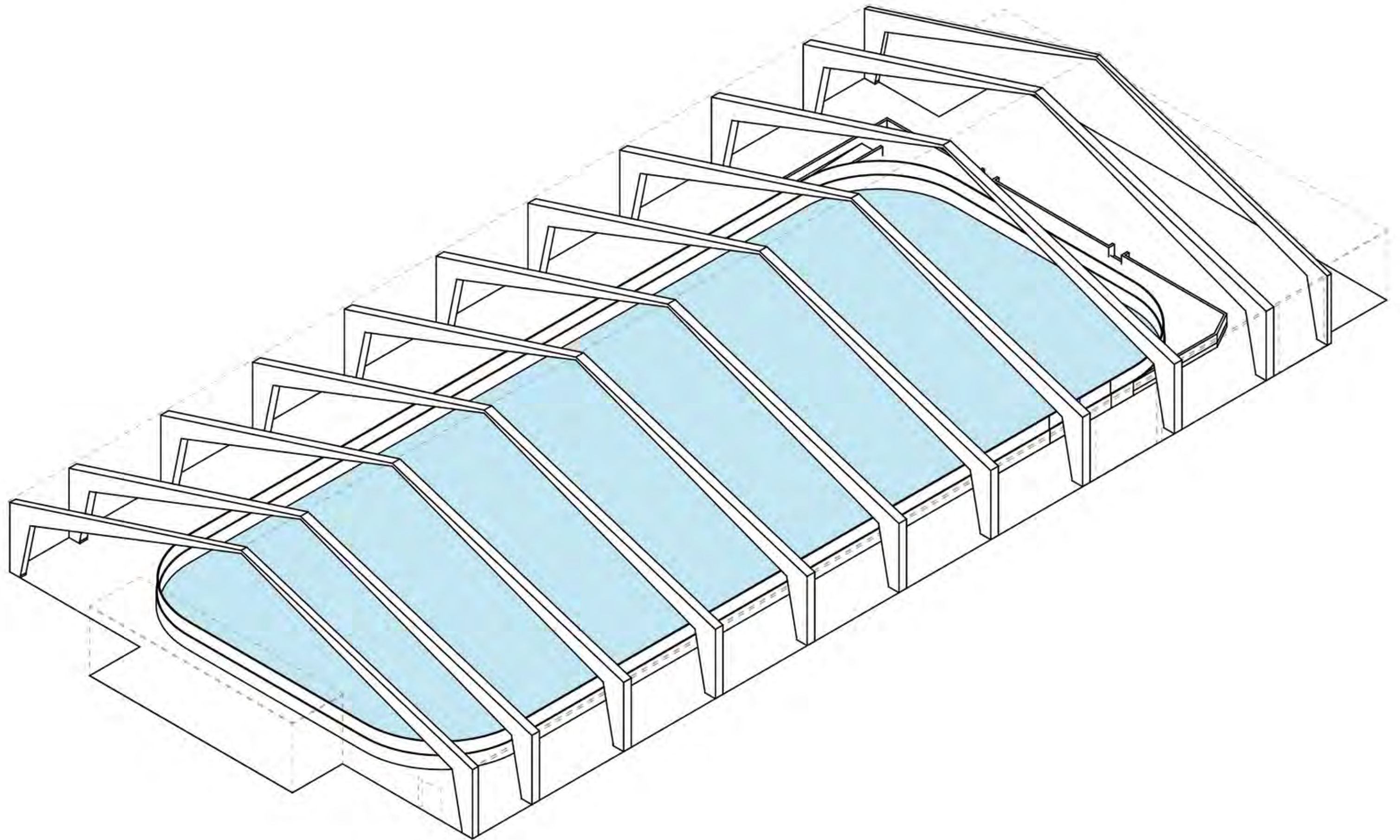
Wall Envelope





Purlins

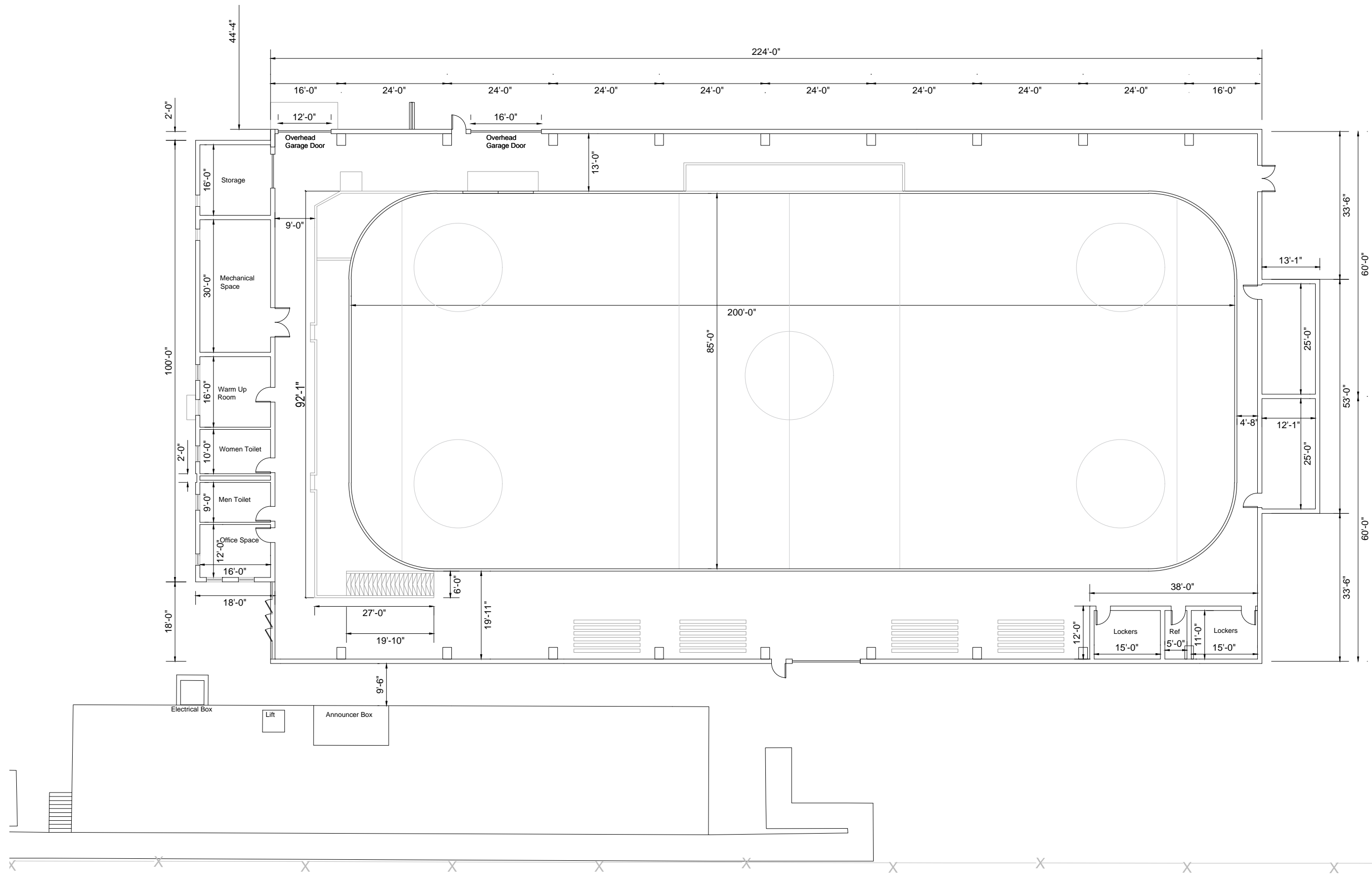






Renovate and Expand





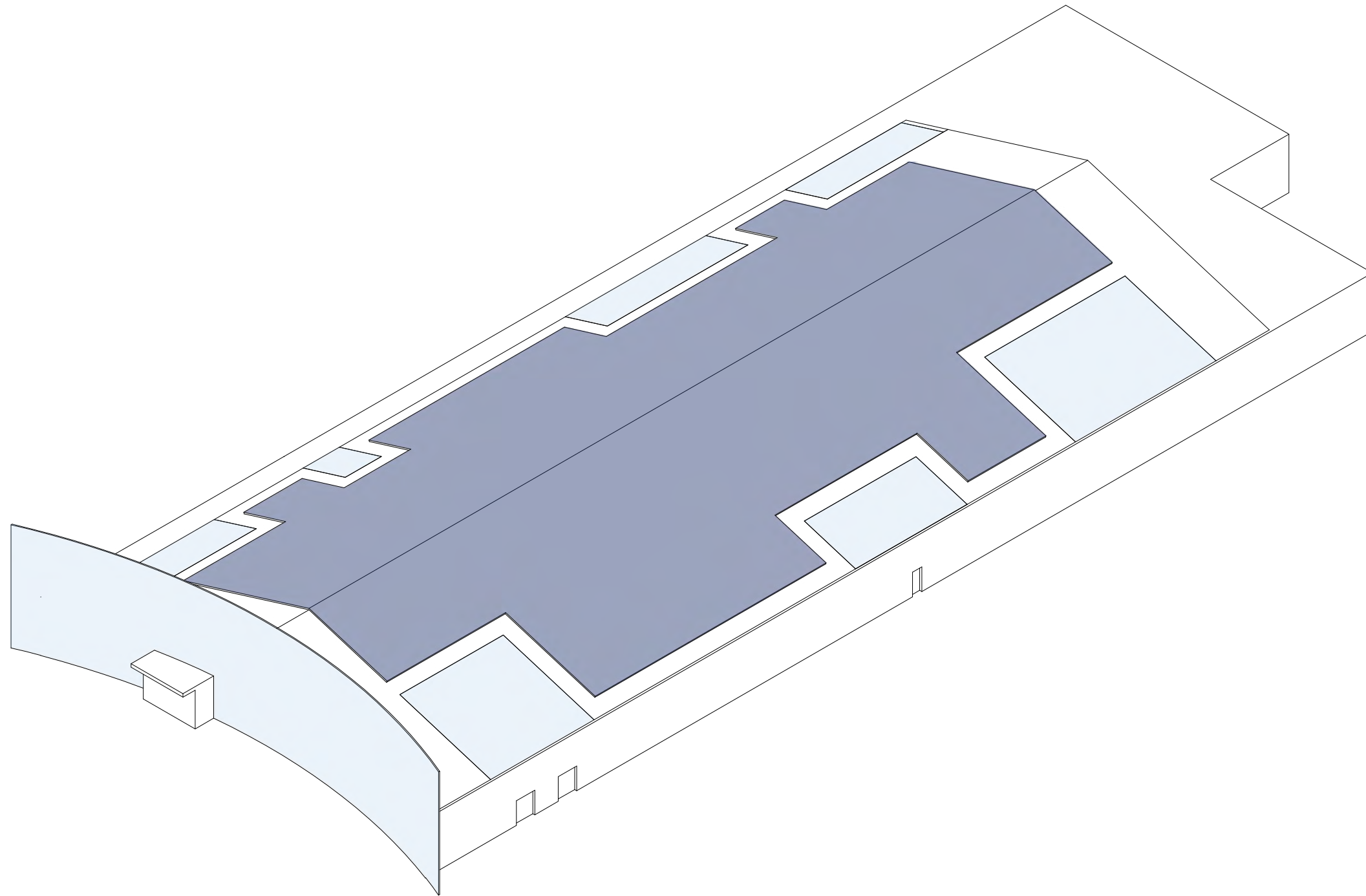






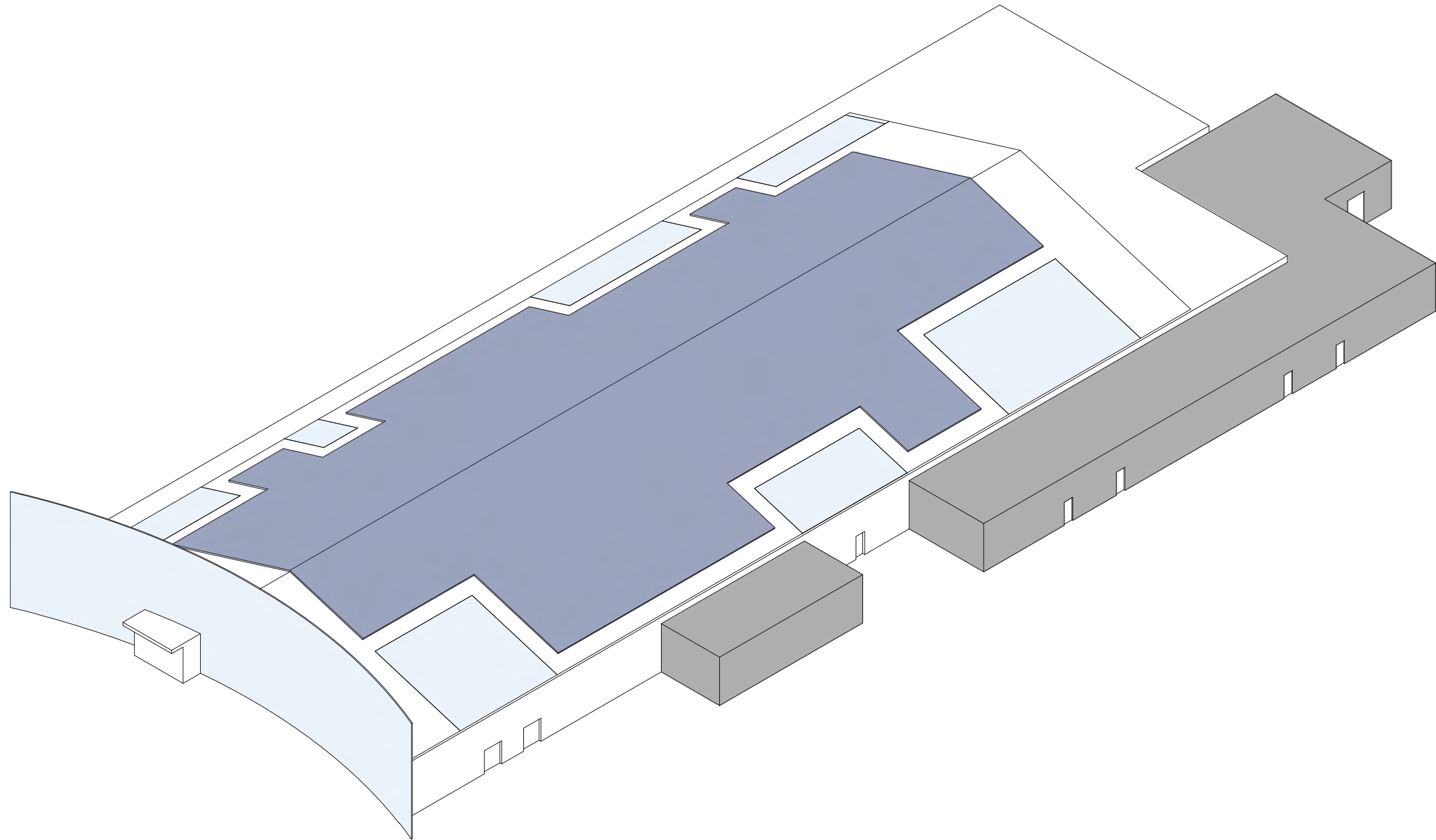






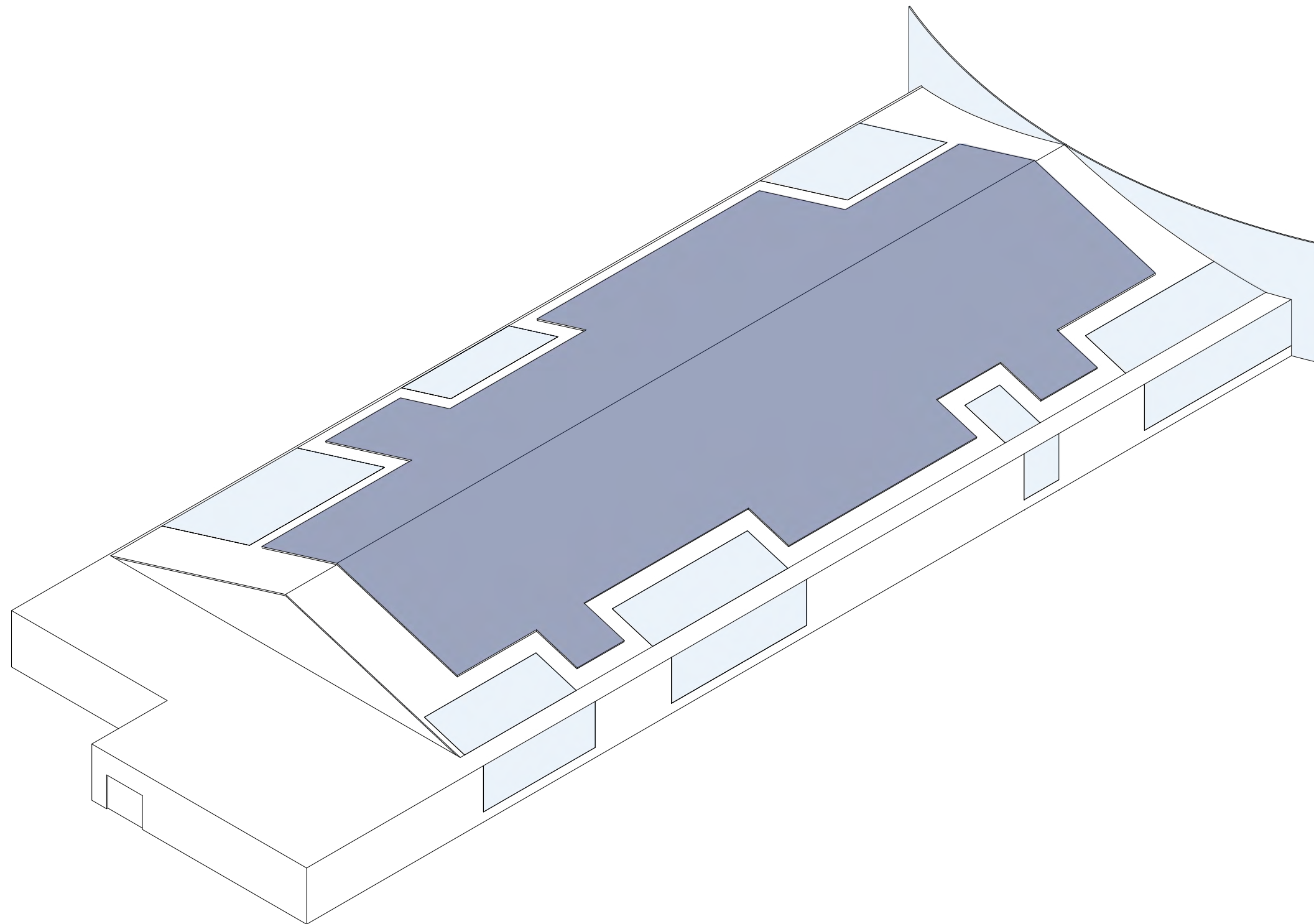
Renovate and Expand by Phases - Phase 1





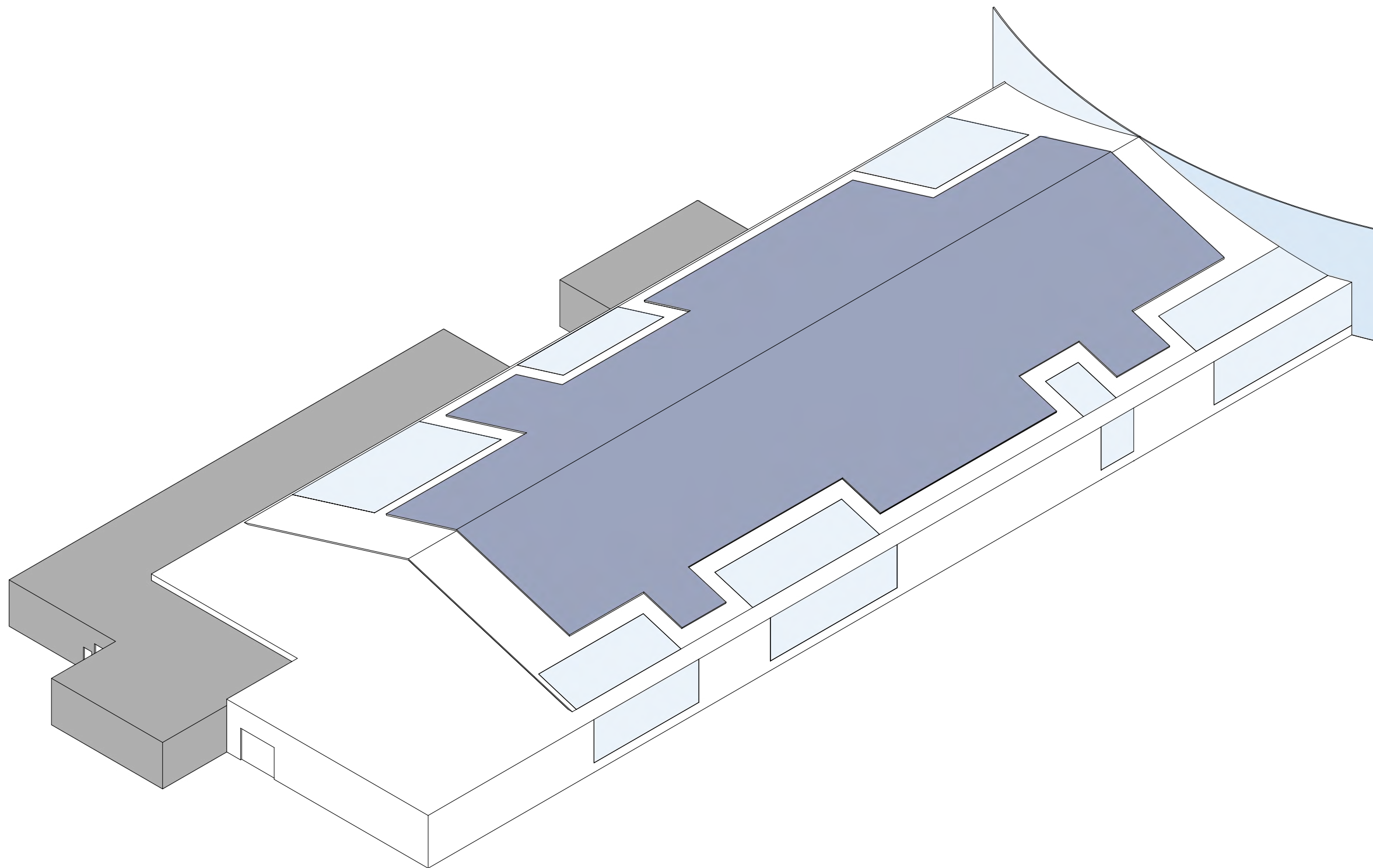
Renovate and Expand by Phases - Phase 2



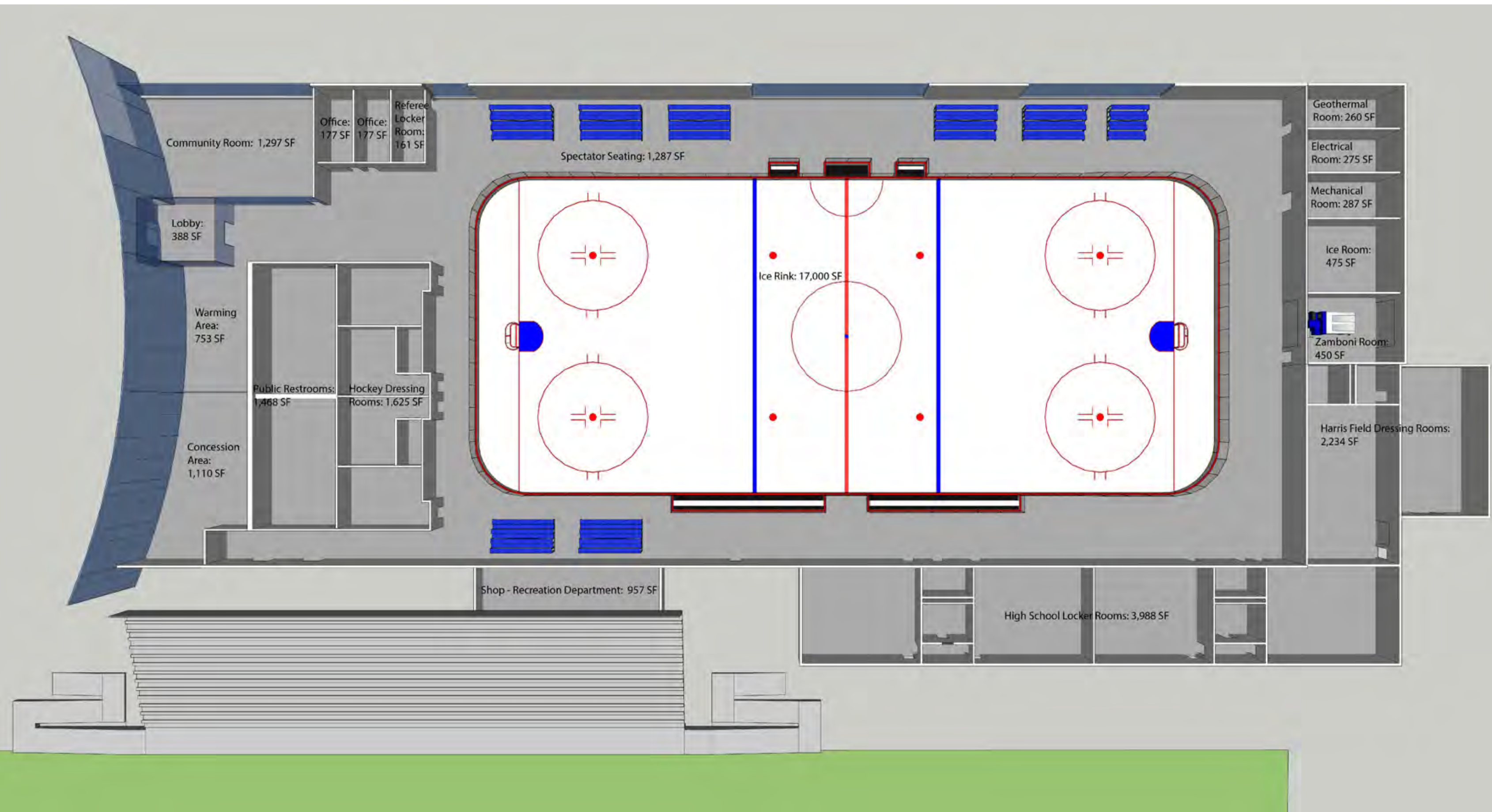


Renovate and Expand by Phases - Phase 1





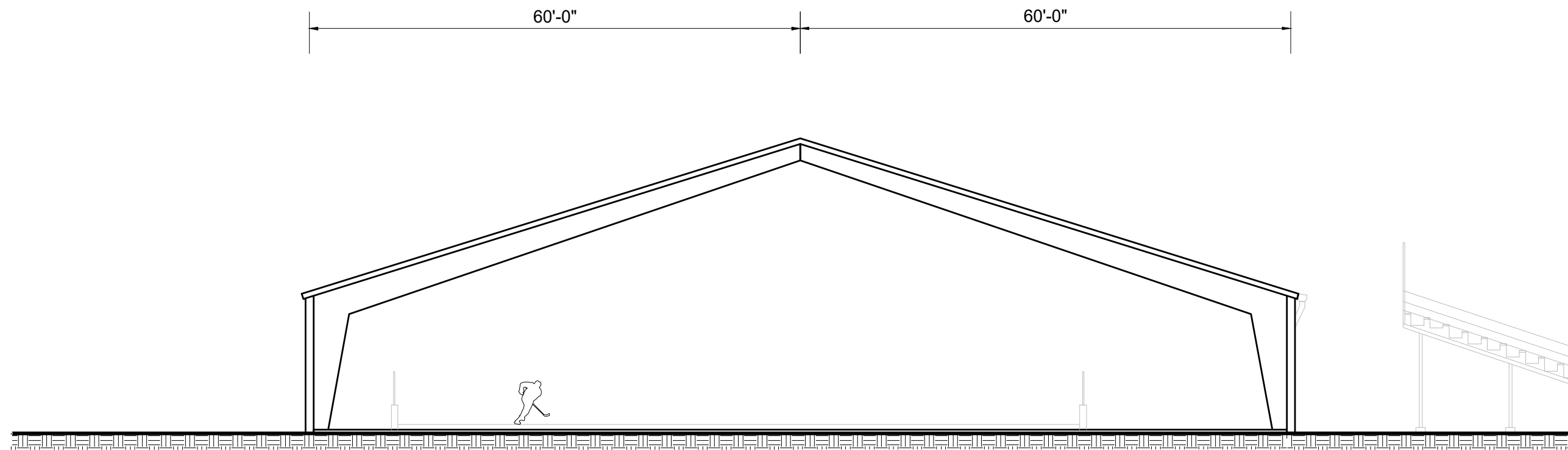






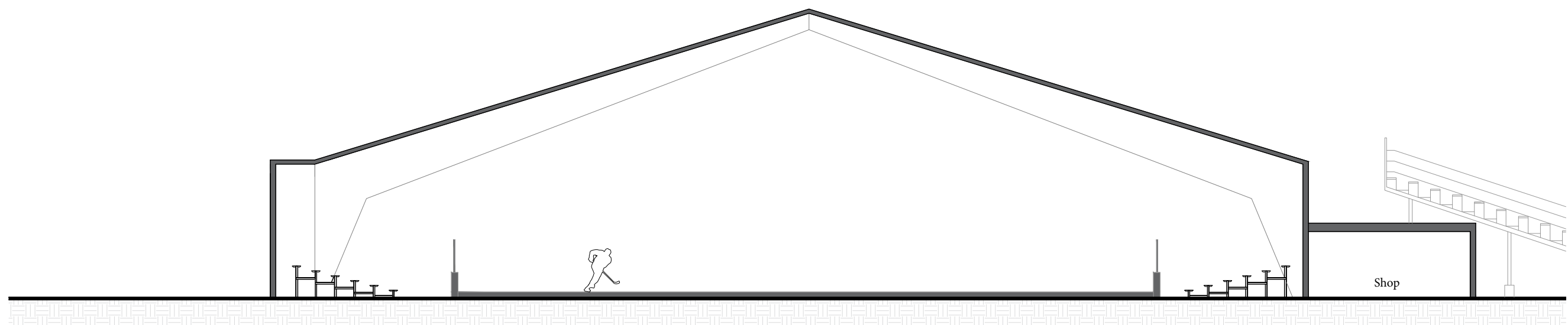






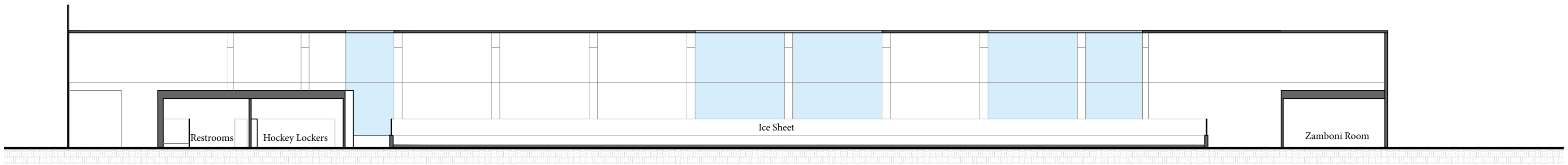
Existing Section





Renovate and Expand - Conceptual Section





## Renovate and Expand - Conceptual Section









**TGAS** CONCEPTUAL  
THE GALANTE ARCHITECTURE STUDIO

Conceptual Views





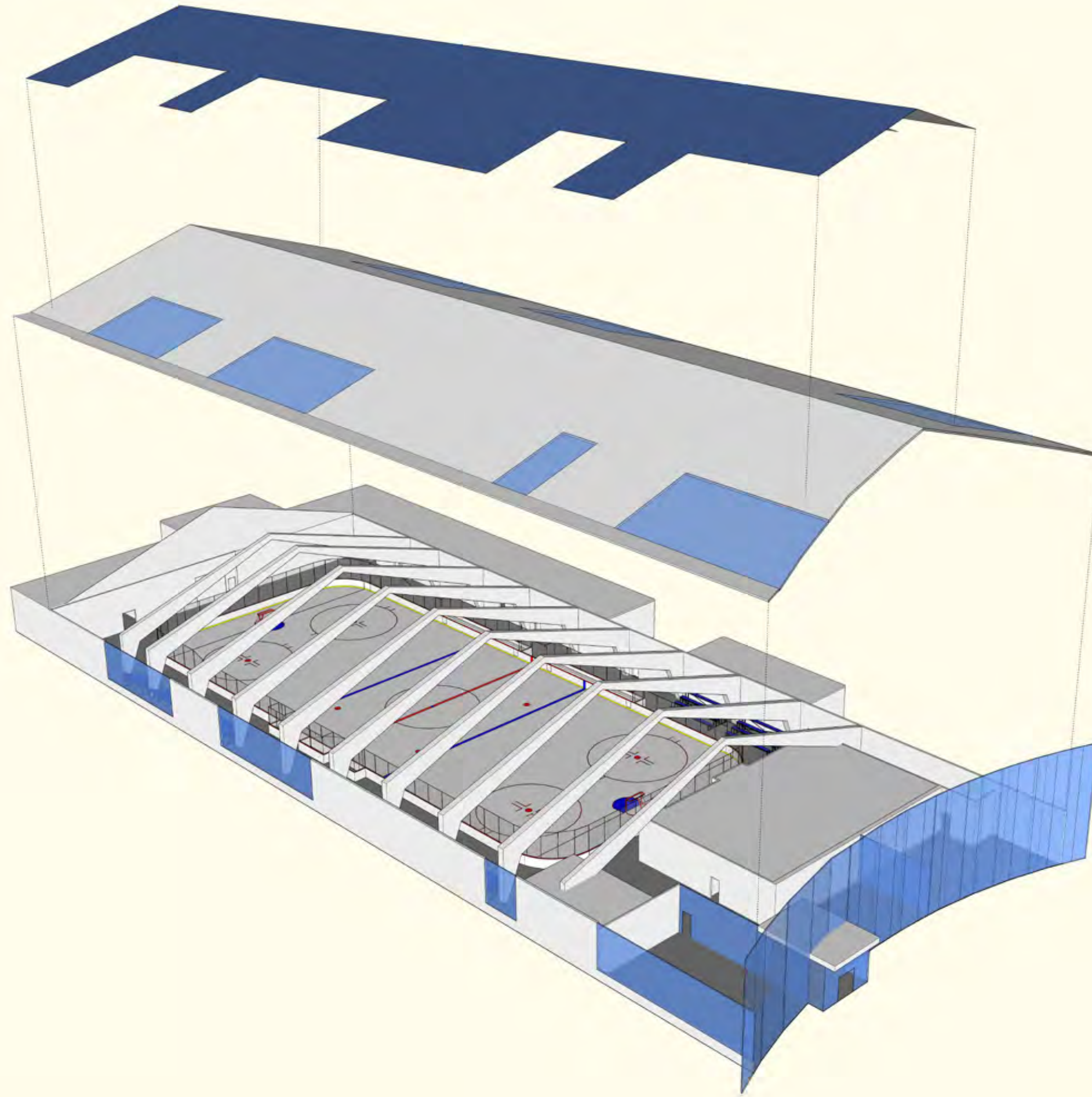


Exterior Ariel View



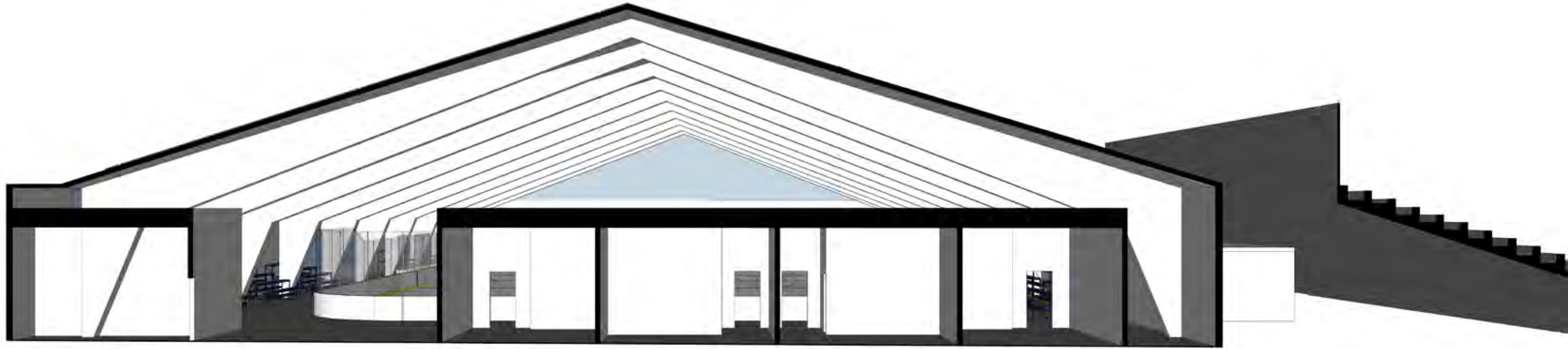






Axon View









Longitudinal Section





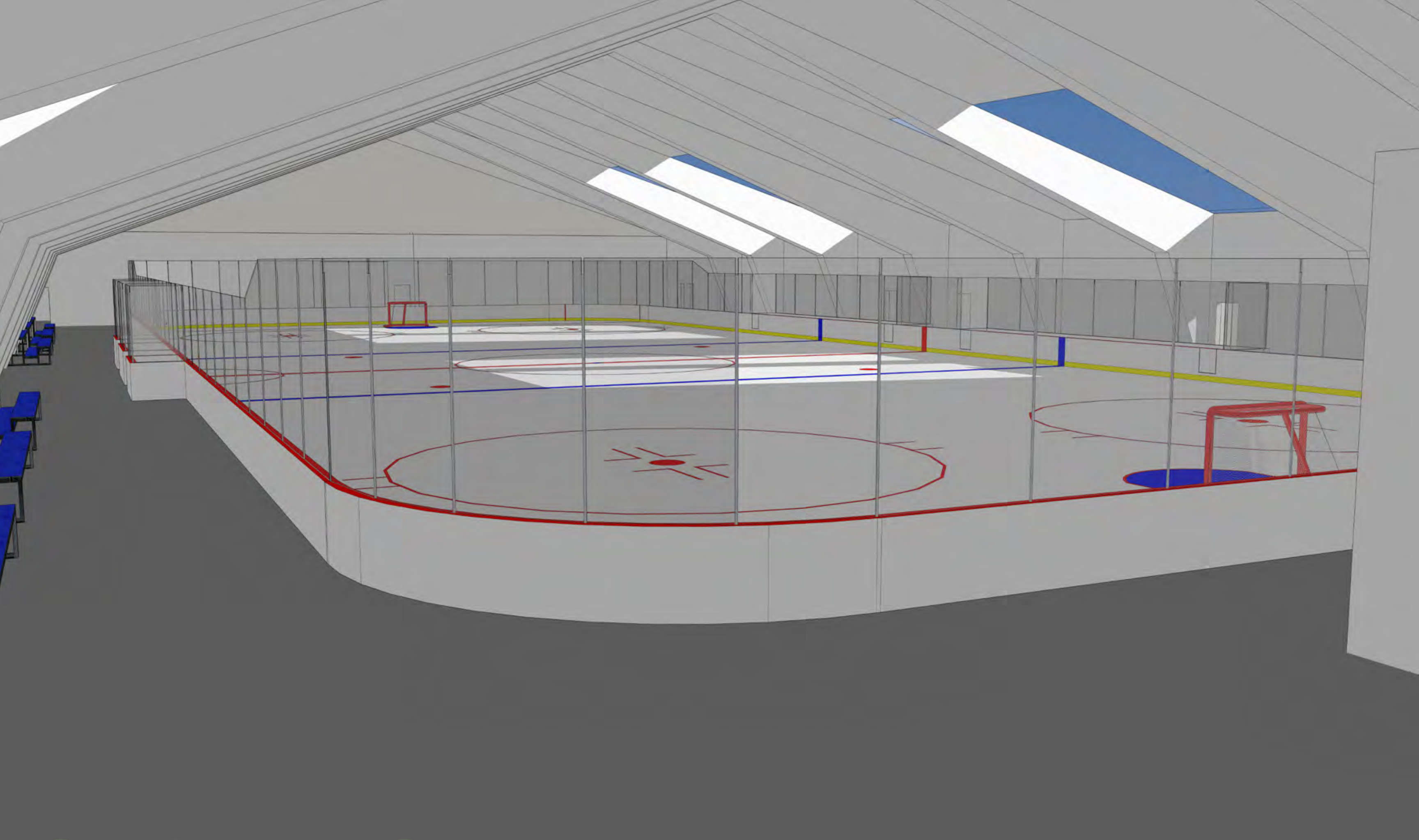
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CONCEPTUAL

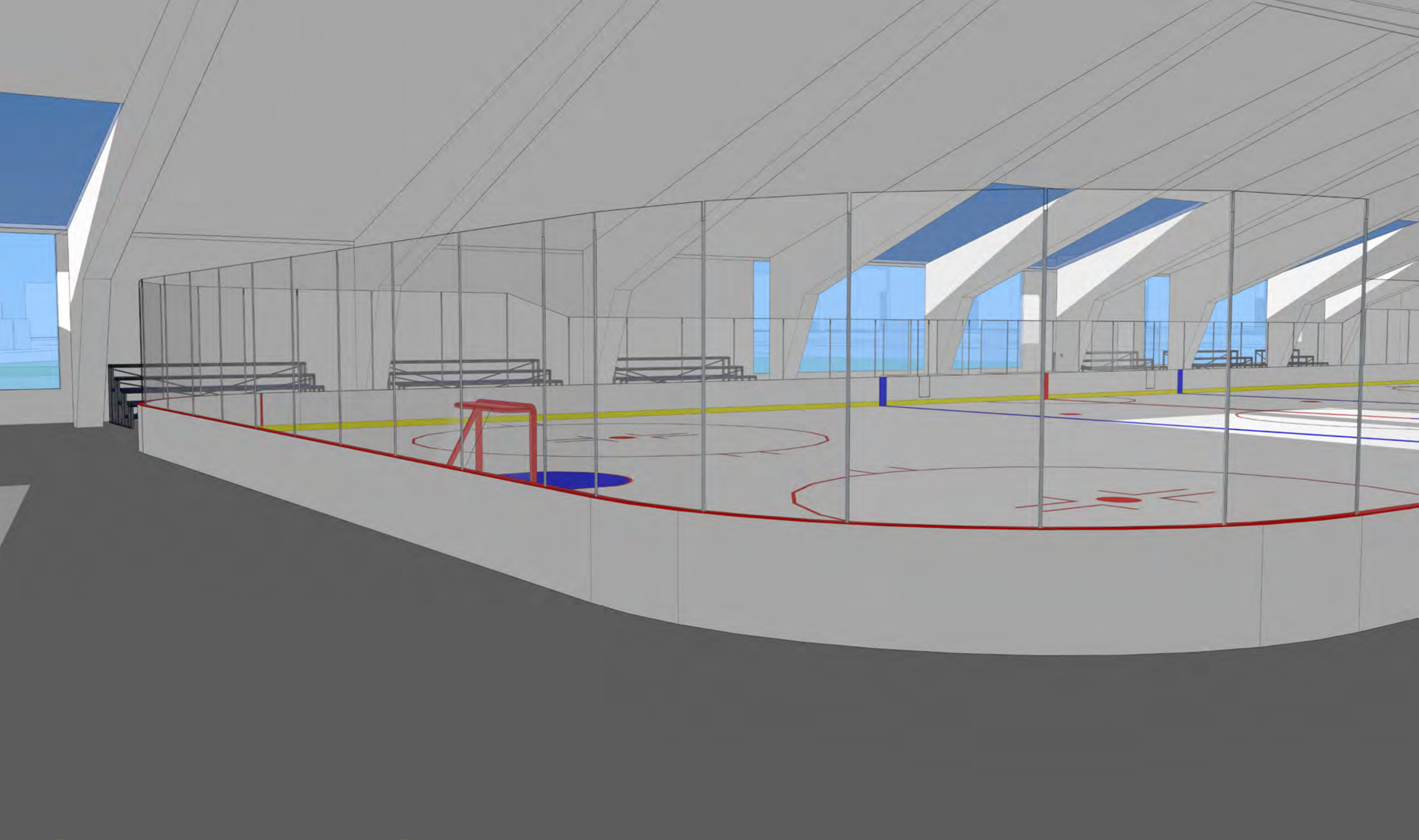
Section



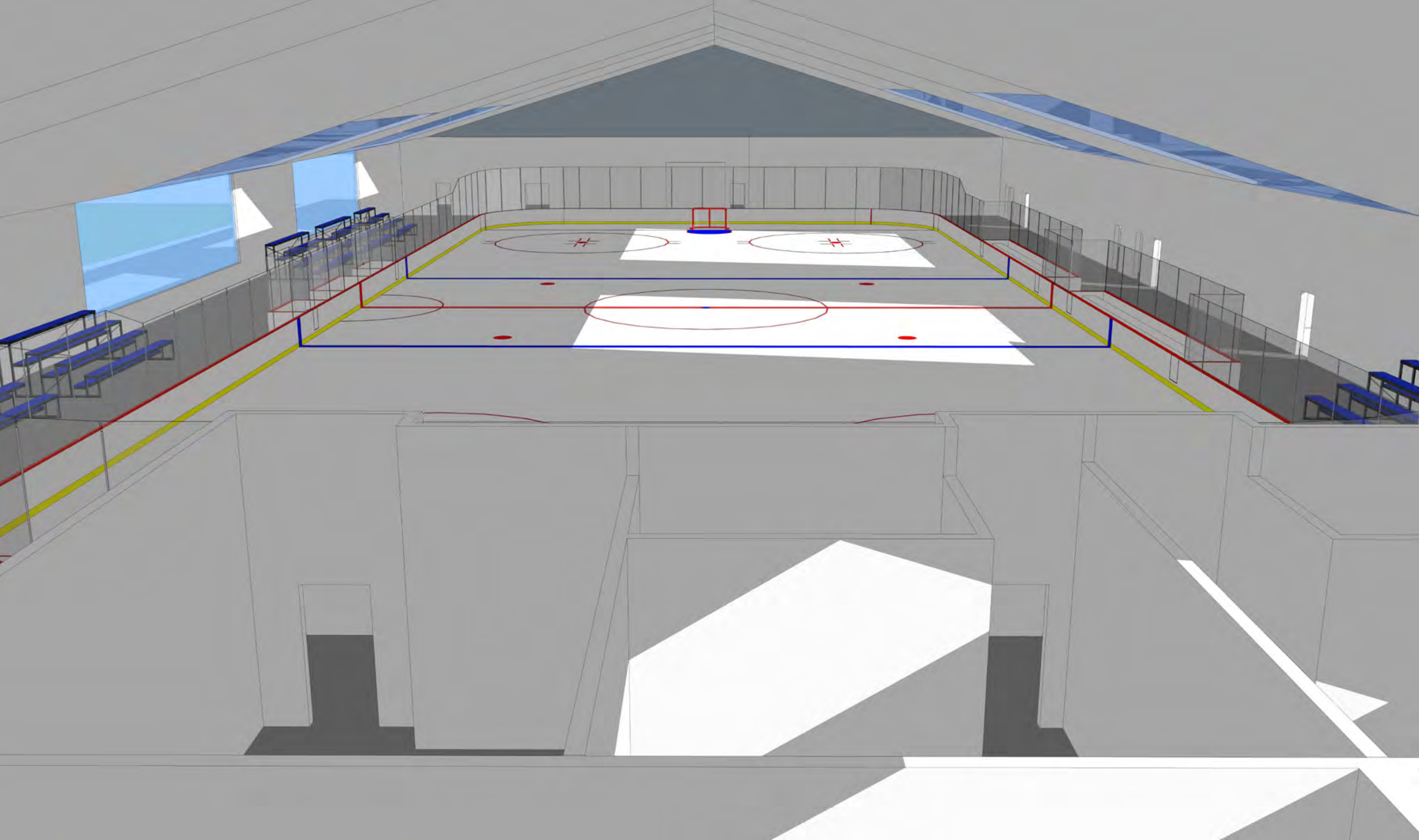




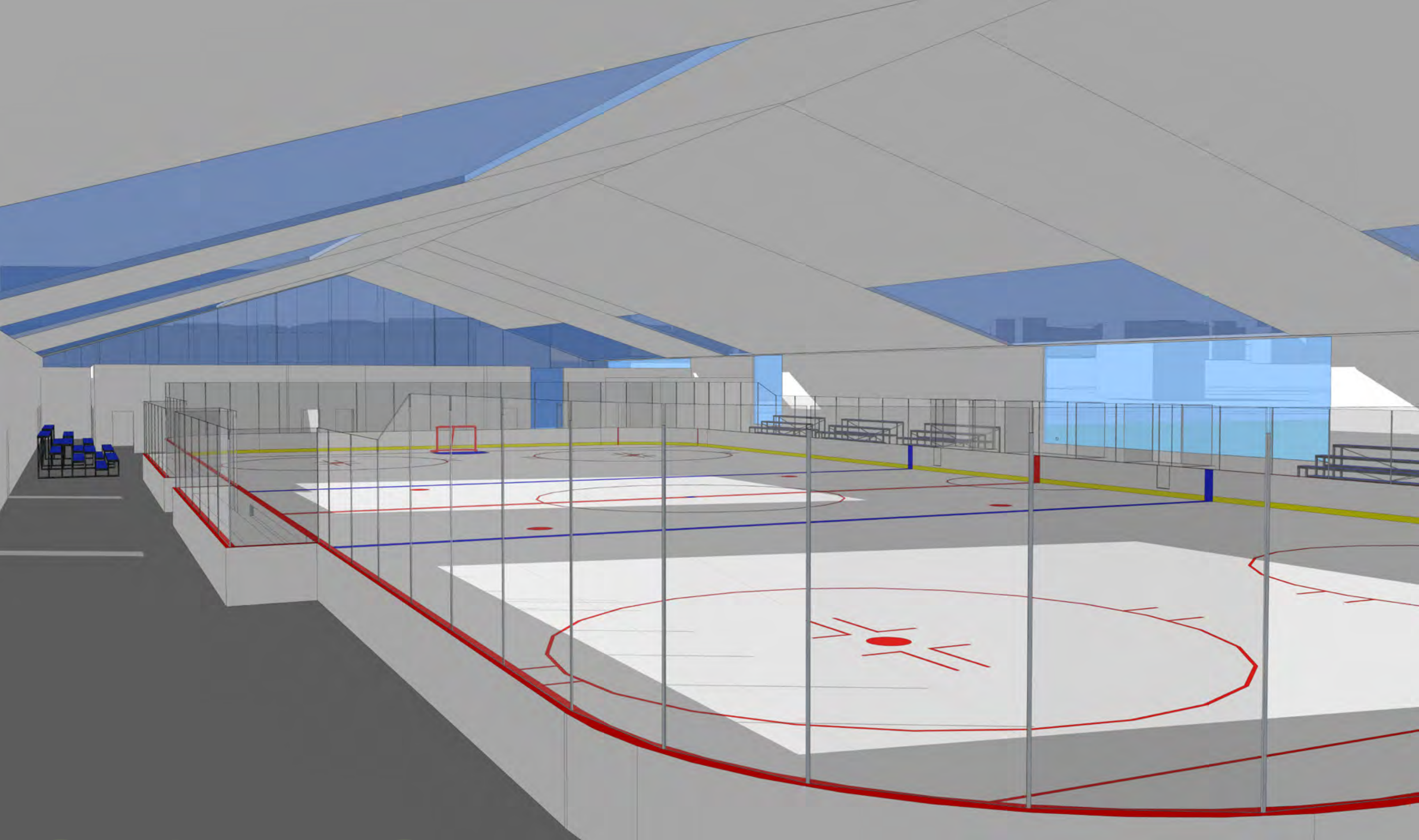














# Parking Regulations

## Analysis and Site Layout



## 1. Parking per Hockey Game

### a. Players:

18 Players / team x 2 teams = 36 Players

Per code: 1 parking space per 2 person participant capacity

$$\frac{36 \text{ players}}{2 \text{ per each}} = \mathbf{18 \text{ Player Parking Spaces}}$$

### b. Administration

2 Referees + 2 Coaches + 2 Office = 6 Officials

Per code: 1 parking space per 2 person participant capacity

$$\frac{6 \text{ officials}}{2 \text{ per each}} = \mathbf{3 \text{ Administration Parking Spaces}}$$

### c. Spectators

200 Spectators

Per Code: 1 parking space per 3 person spectator capacity

$$\frac{200 \text{ spectators}}{3 \text{ per each}} = \mathbf{67 \text{ Spectator Parking Spaces / Game}}$$

### d. Total ( a + b + c )

18 Player Parking Spaces + 3 Administration Parking Spaces + 67 Spectator Parking Spaces

$$= \mathbf{88 \text{ Required Parking Spaces / Hockey Game}}$$



## 2. Parking per High School Games - ASSUMED

- i. Baseball or Softball: 2 teams of 9 players each. The number of players may vary from **15-20 players (per team) + total 3 umpires and 2 coaches**
- ii. Soccer: 2 teams of **11 players (per team) + 4 referees**, the head referee, two assistant referees and a fourth official.
- iv. Shot put: ?
- v. Discus: ?

Assuming the biggest number of people per game is Baseball:

### a. Players:

20 Players / team x 2 teams = 40 Players

Per code: 1 parking space per 2 person participant capacity

$$\frac{40 \text{ players}}{2 \text{ per each}} = \mathbf{20 \text{ Player Parking Spaces}}$$

### b. Administration

3 Umpires + 2 Coaches = 5 Officials

Per code: 1 parking space per 2 person participant capacity

$$\frac{5 \text{ officials}}{2 \text{ per each}} = \mathbf{3 \text{ Administration}}$$

### c. Spectators

??

### d. Total ( a + b + c )

20 Player Parking Spaces + 3 Administration Parking Spaces

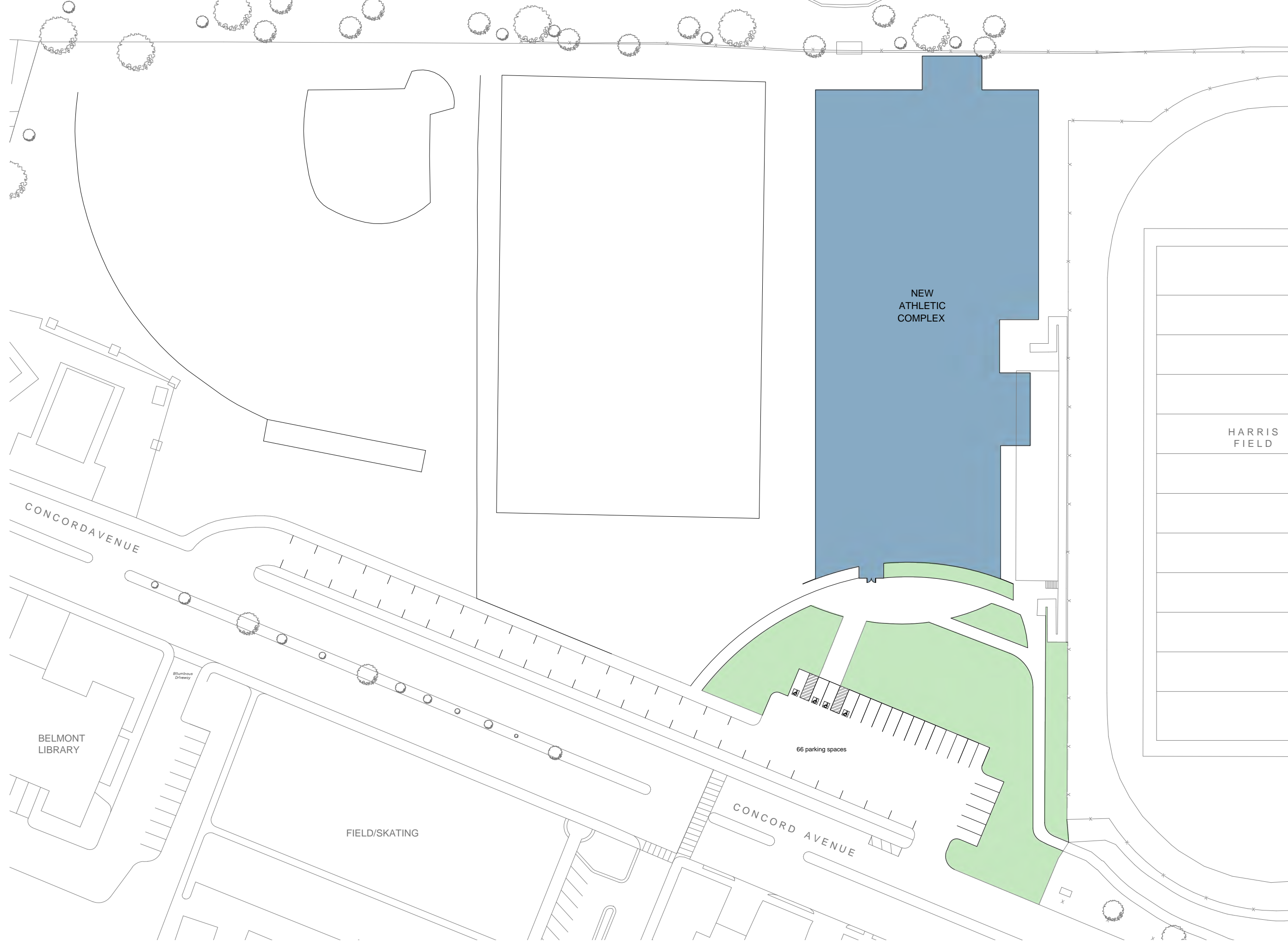
**= 23 Required Parking Spaces / High School Game**





Expanded Jughandle - 56 Parking Spaces



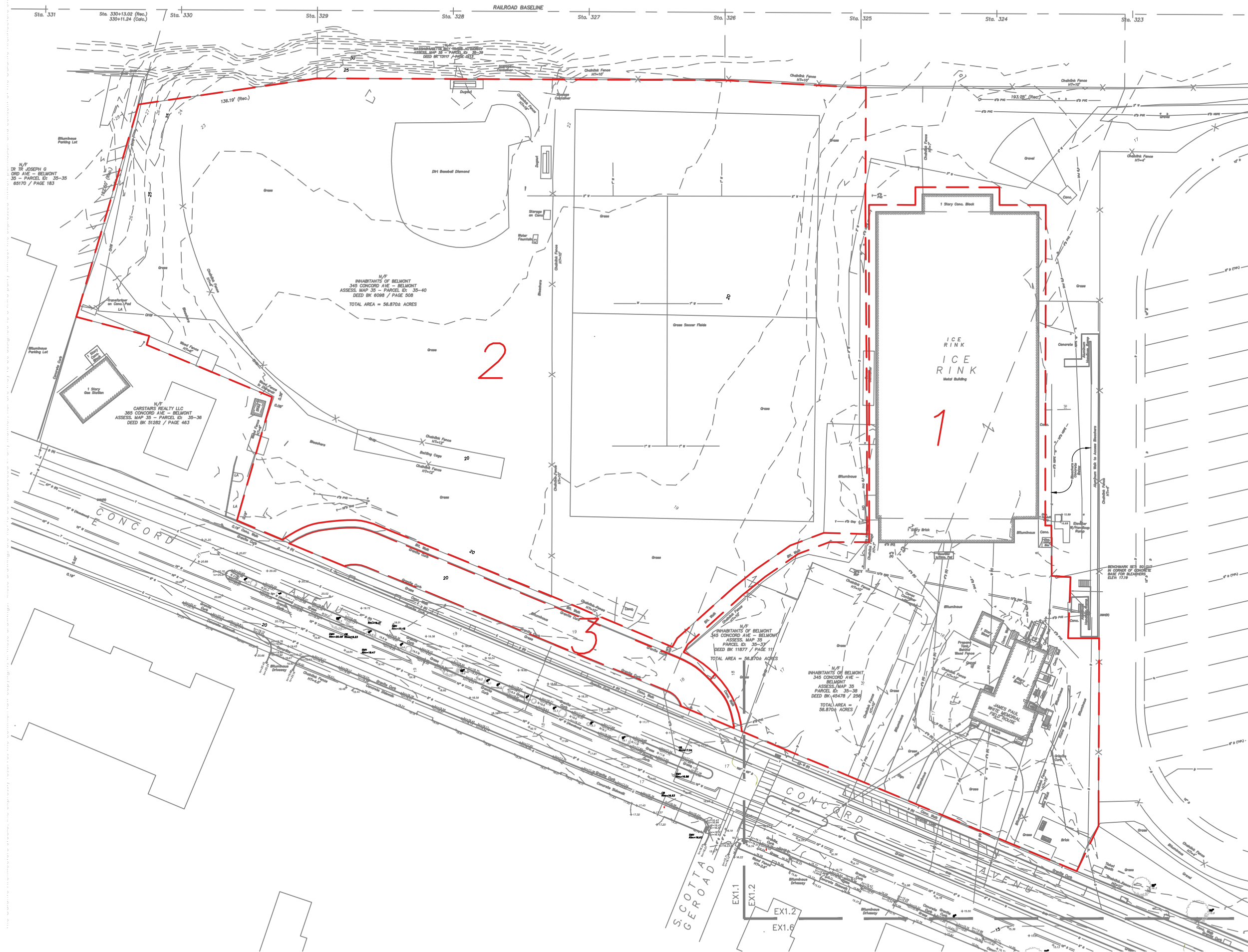


Expanded Jughandle and Addition - 66 Parking Spaces

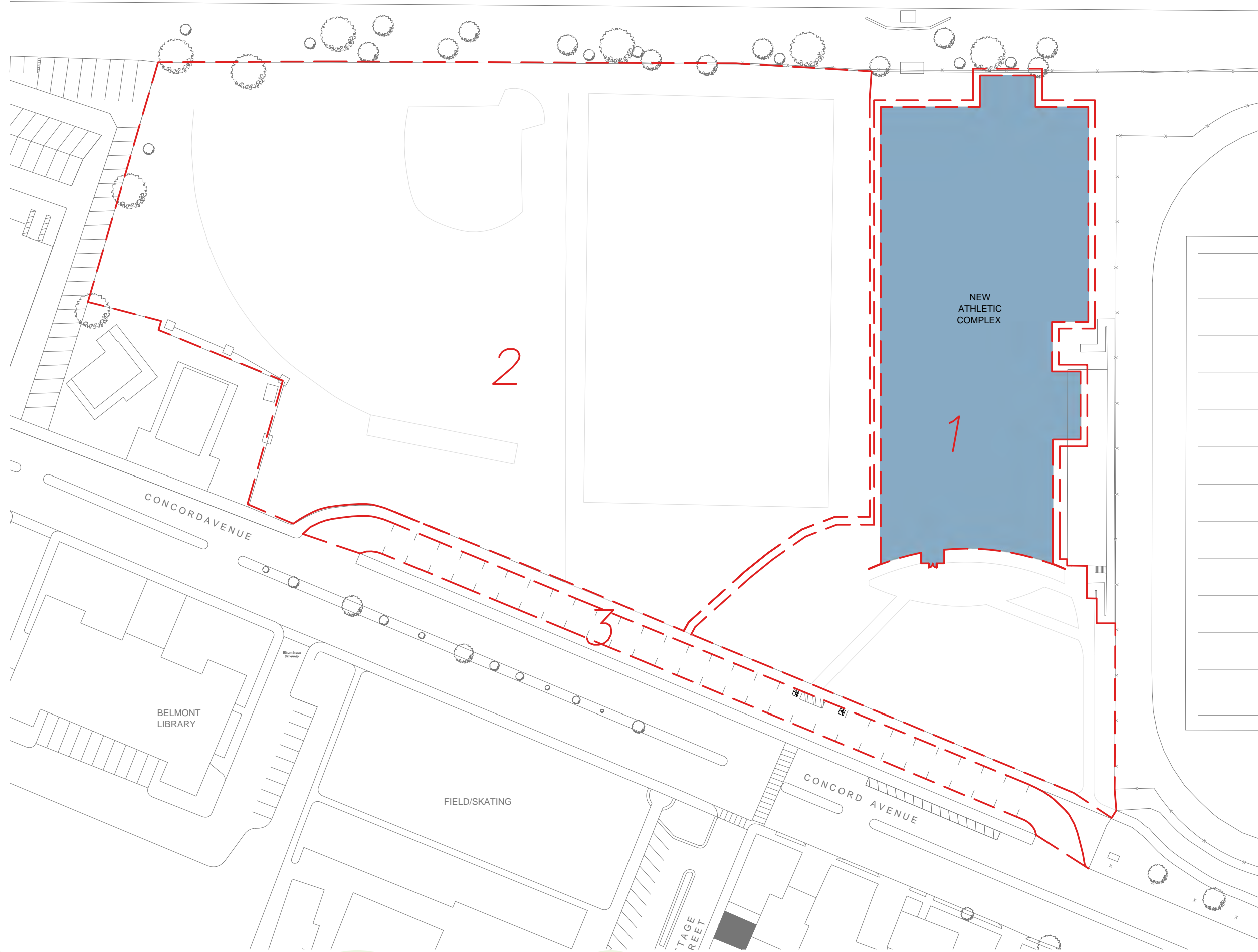


# Areas to Consider







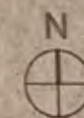




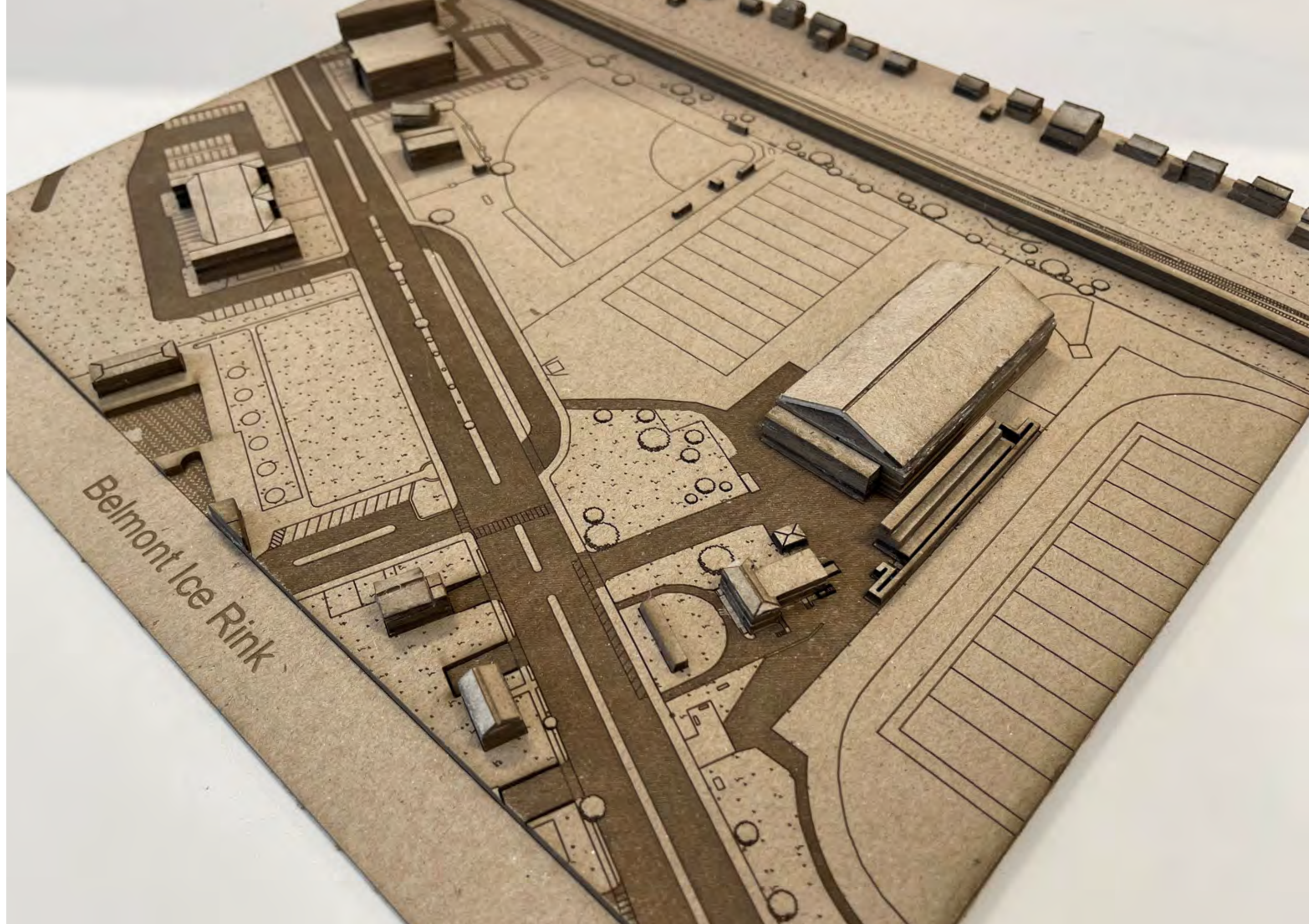


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Belmont Ice Rink



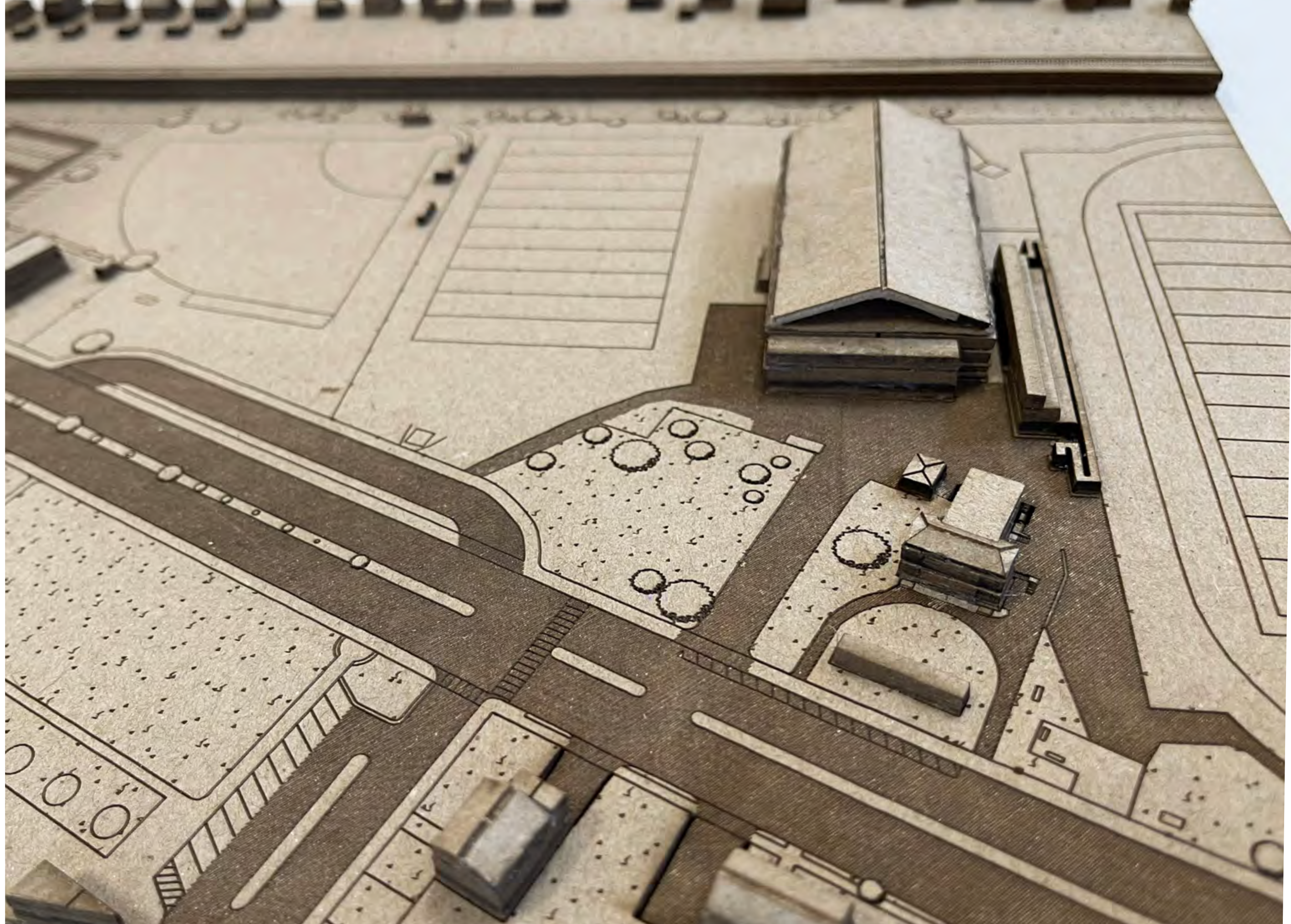




# PHYSICAL MODEL

Existing Conditions





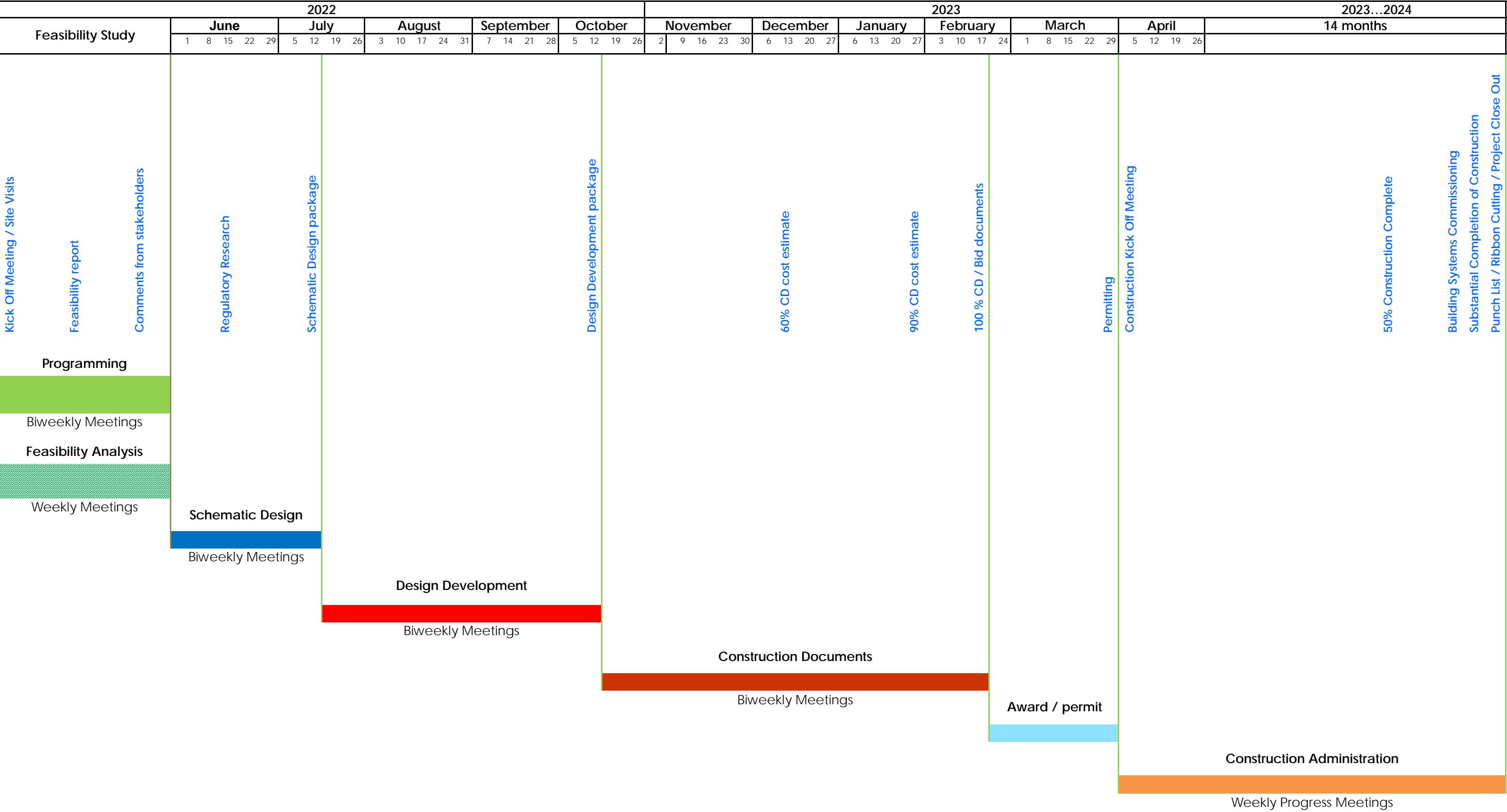
# PHYSICAL MODEL

Existing Conditions



Schedule







# Next Steps

- Public Meeting
- School Committee
- Cost Estimate
- Select Board Meeting
- Planning Board Meeting



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SITE DESIGN STUDIES

Overview



SCHEME 01: Renovation

The first concept required expanding the existing rink to the west and north while splitting parking lots located to the south and to the north connected by a service drive. The softball and baseball fields are positioned to the edge of the remaining site with the soccer field overlapping the two outfields.



SCHEME 02: New Construction (East)  
**PREFERRED SCHEME**

The second concept located a new rink to the north-east corner of the site allowing for a single parking lot while maximizing the available field area. Similar to Scheme 01, The softball and baseball fields are positioned to the edge of the remaining site with the soccer field overlapping the two outfields, but in a north-south orientation.



SCHEME 03: New Construction (West)

The third concept located a new rink to the north-west corner of the site and required splitting parking lots to the south and to the north connected by a service drive. The softball and baseball fields are positioned to the edge of the remaining site with the soccer field overlapping the two outfields.

