Belmont Skating Rink

Feasibility Study

July 20th, 2022

AERIAL VIEW

TGAS
THE GALANTE ARCHITECTURE STUDIO

Current Day Belmont Skating Rink

BELMONT
INCORPORATED 1859

Program Overview

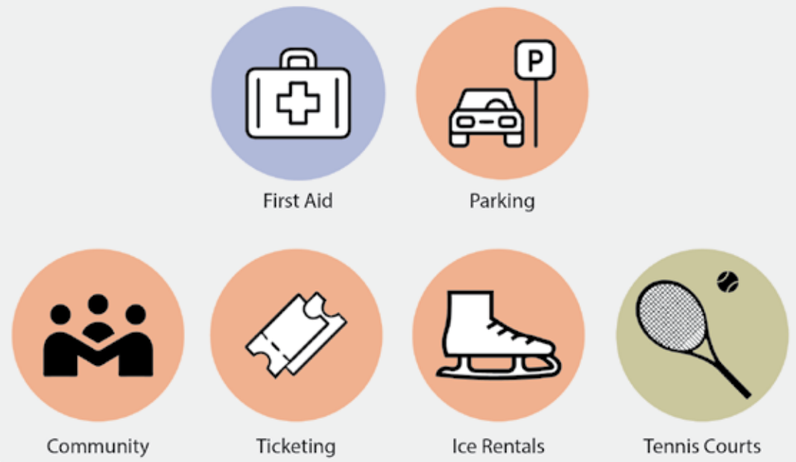
EXISTING PROGRAM

SKIP VIGLIROLO ICE RINK

WHITE FIELD HOUSE

NEW PROGRAM

OPTIONAL



SUMMARY

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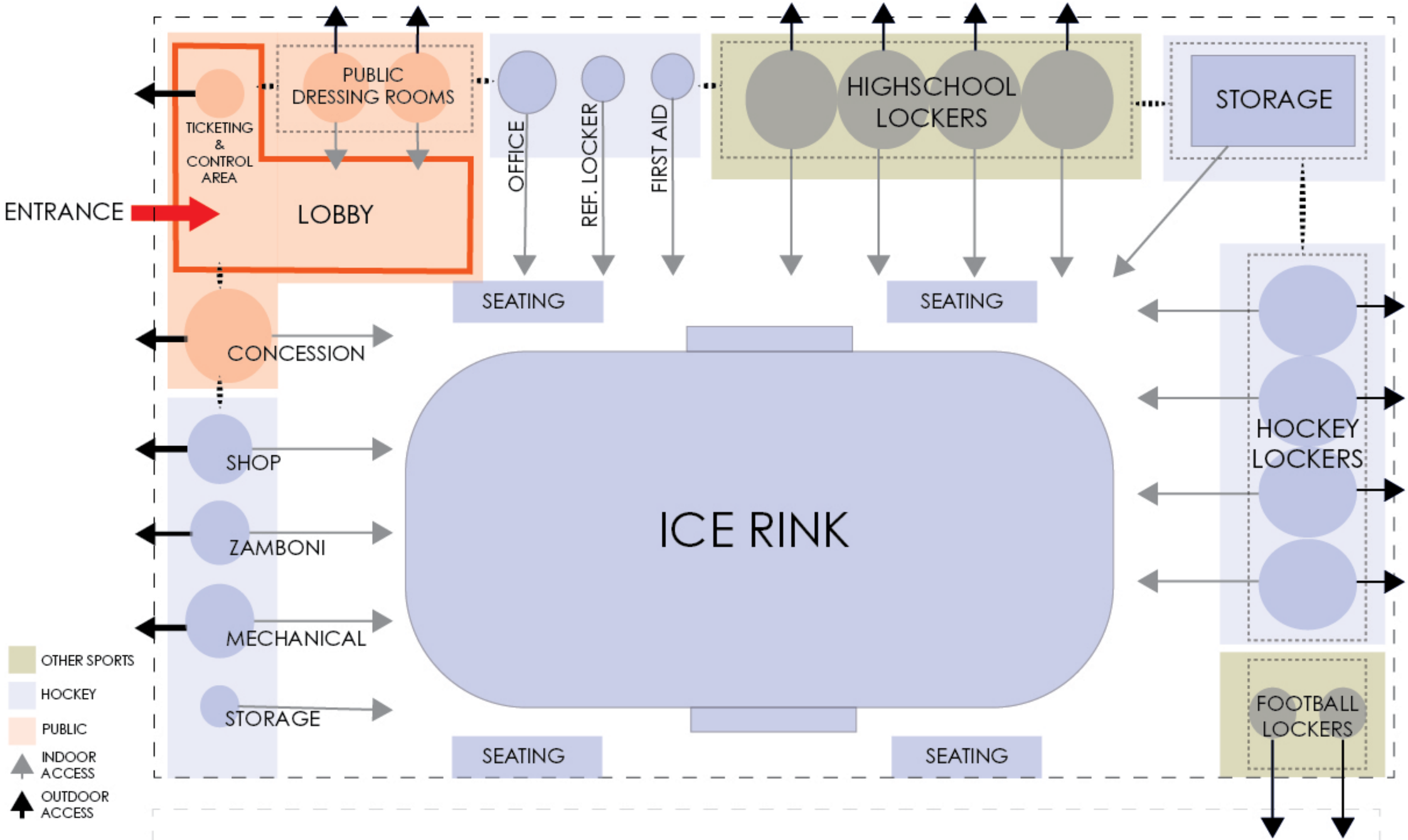
Program



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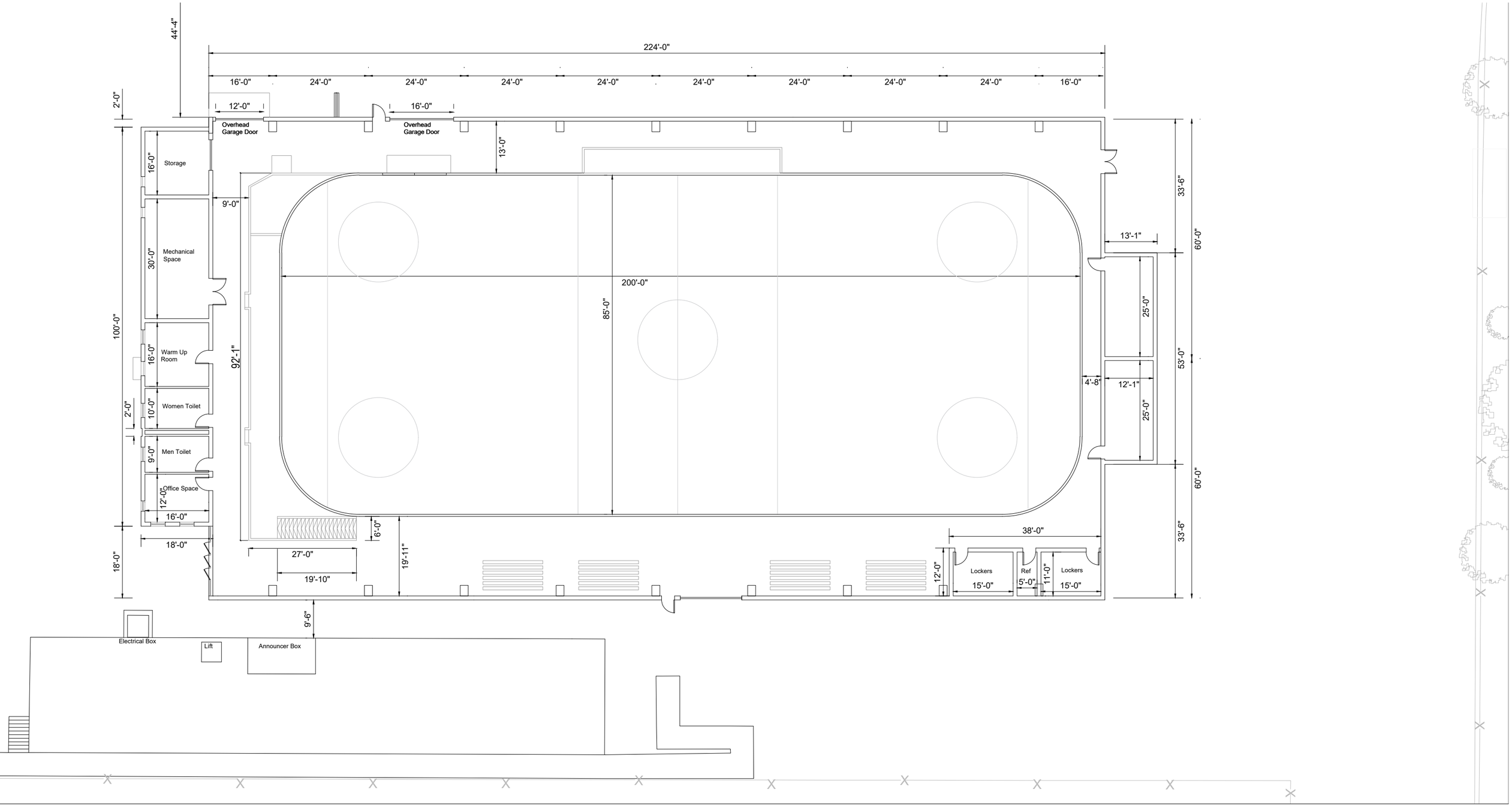
Required Program

SITE OPTION

Renovate and Expand



CURRENT STATE

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Existing Floor Plan ± 29,600 sf

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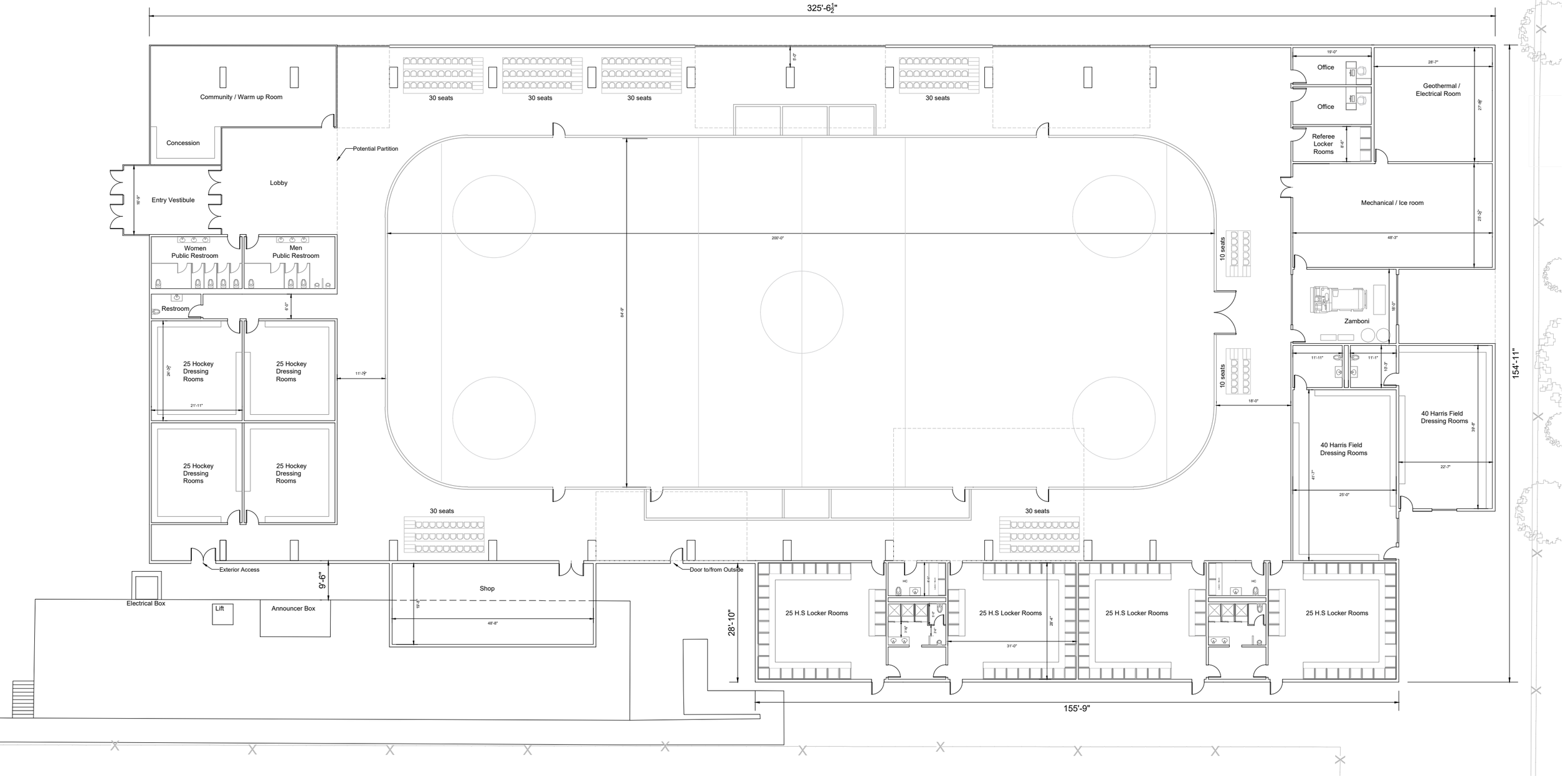

PROPOSED

Renovate and Expand - Ground Floor Plan ± 45,950 sf

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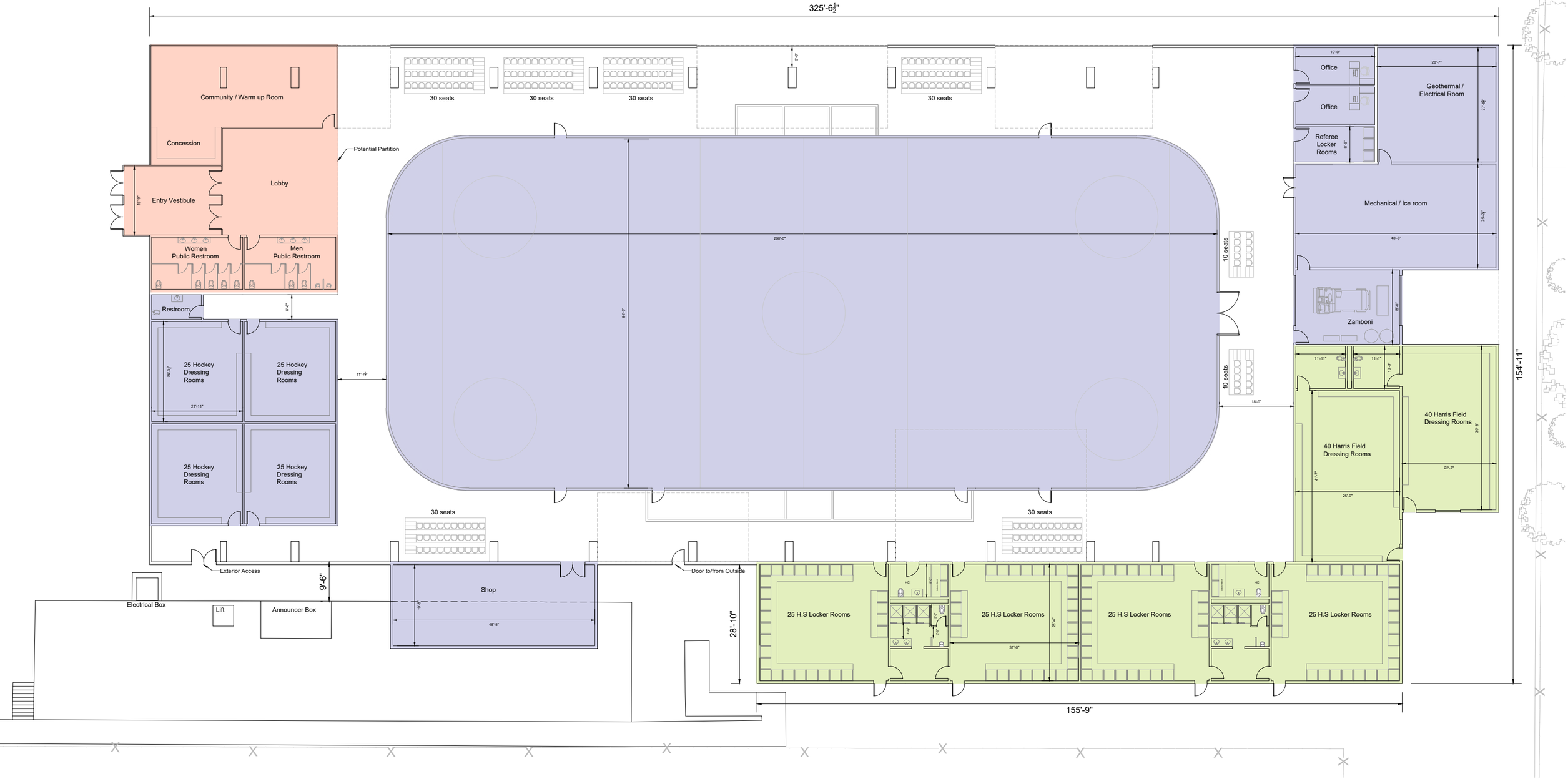
BELMONT INCORPORATED 1859



PROPOSED

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Renovate and Expand - Program Plan

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Site and Field Layout

EXISTING

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Existing Field Site Plan

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OPTION

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Existing Field Site Plan with Renovate and Expand

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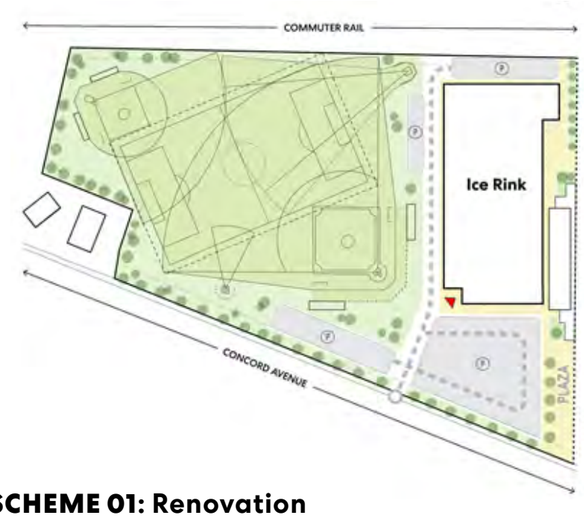
SITE DESIGN STUDIES

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 spliting 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.

Previous School Committee Vote

PRECEDENT STUDY

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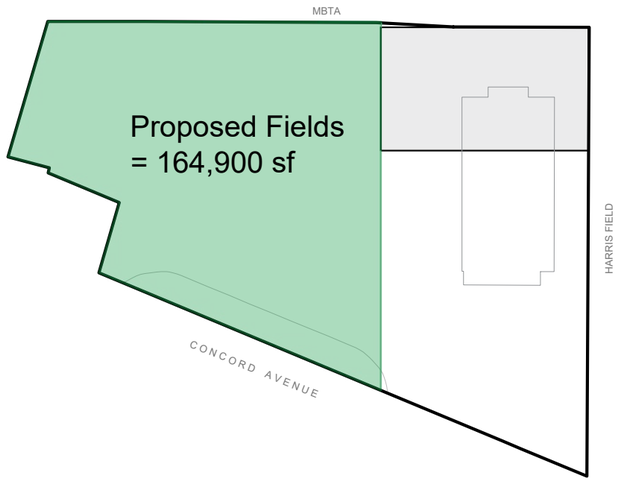
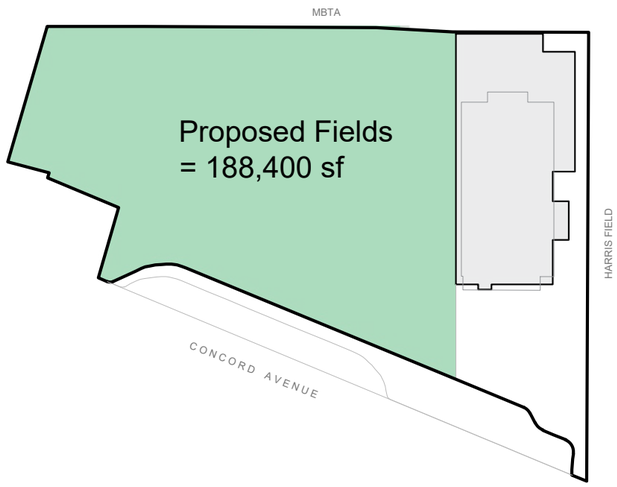
Previous School Committee Vote

Existing Fields

Perkins and Will
(Previous Vote)



TGAS
(Current Proposal)



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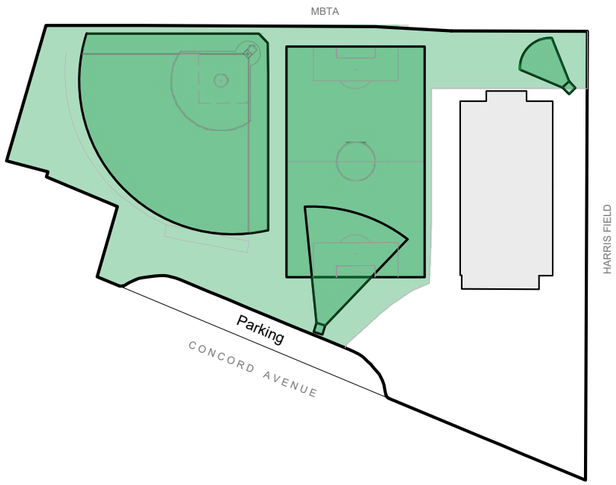
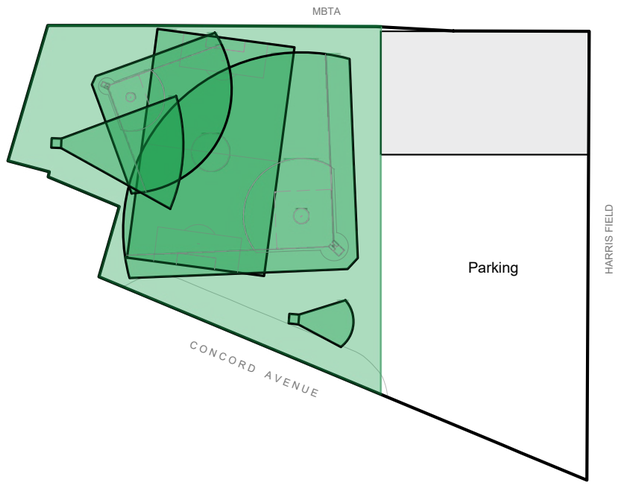
Field Square Footage Comparison

COMPARISON STUDY

Existing Fields

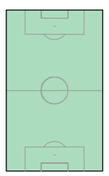


Perkins and Will
(Previous Vote)

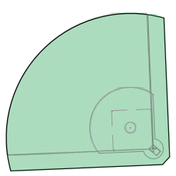


TGAS
(Current Proposal)

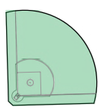
Field Program



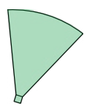
Soccer Field
180' x 300'



Baseball Field
300' Foul Line
300' Center Field



Softball Field
Fast Pitch
185'-235' Foul Line
185'-350' Center Field



Discus

Shot Put

Field Layout Comparison - Pending Study

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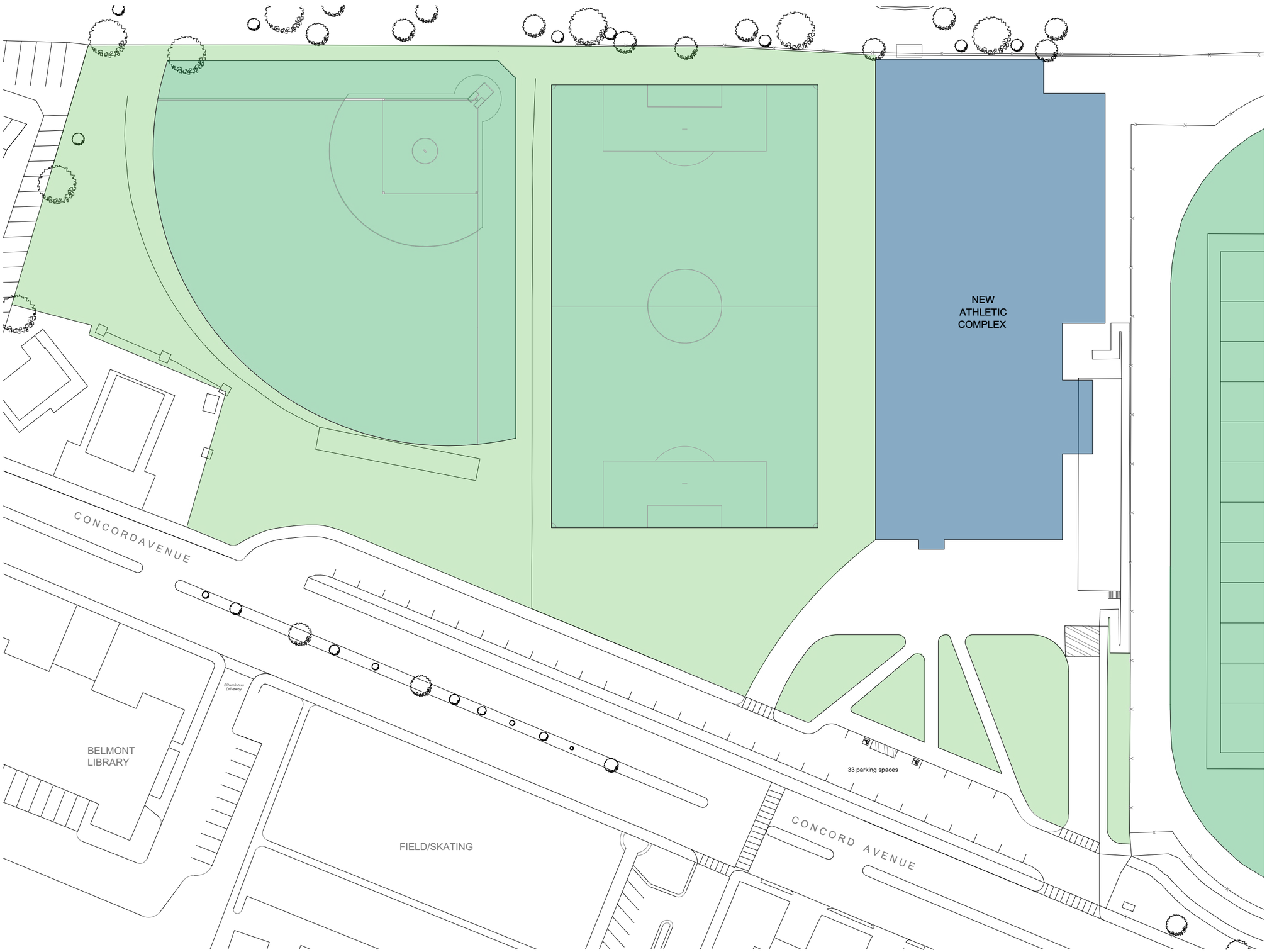
OPTIONS

Parking

Site Layout



PARKING

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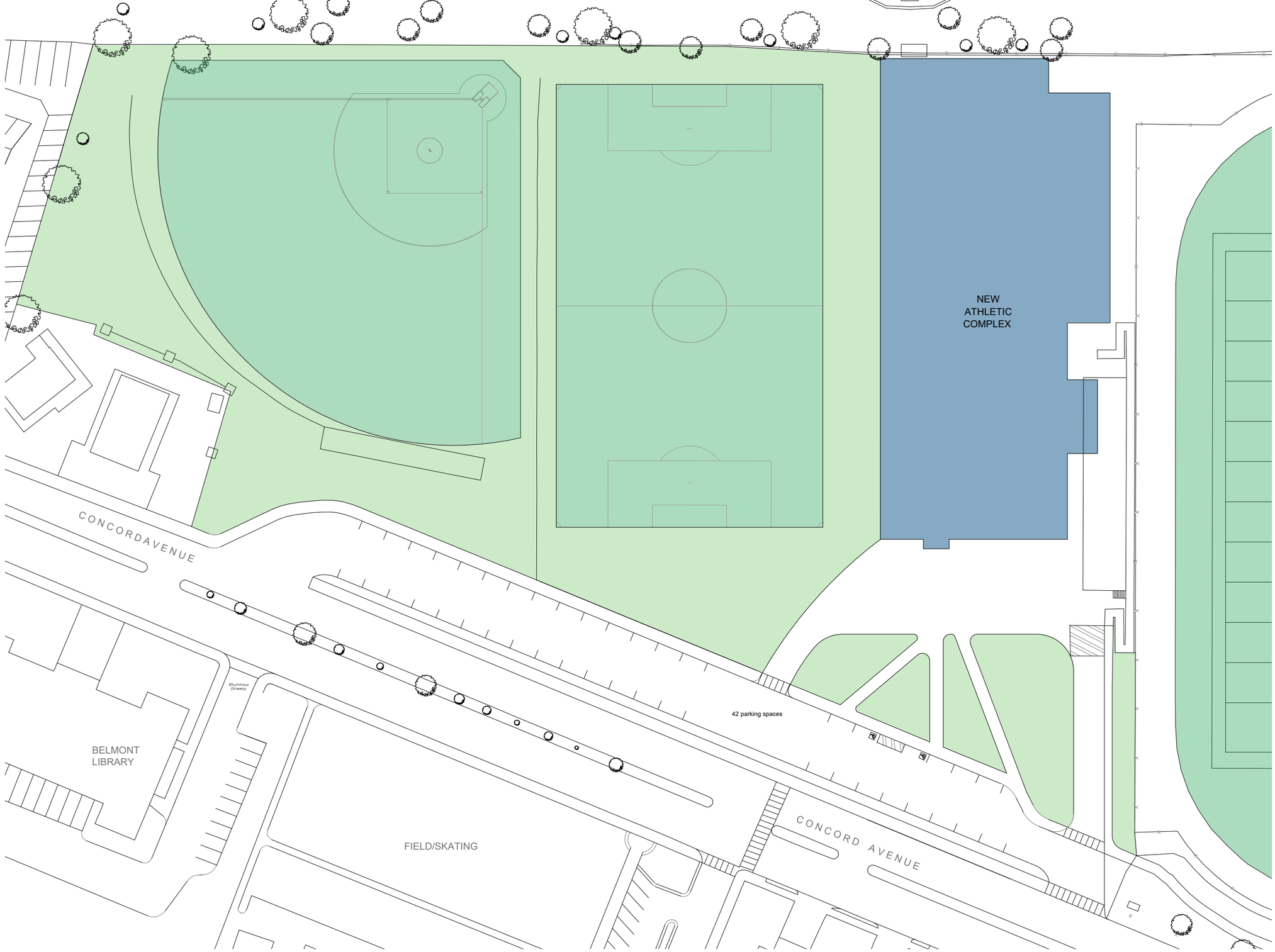
Expanded Jughandle - 33 Parking Spaces



PARKING

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Expanded Jughandle - 42 Parking Spaces

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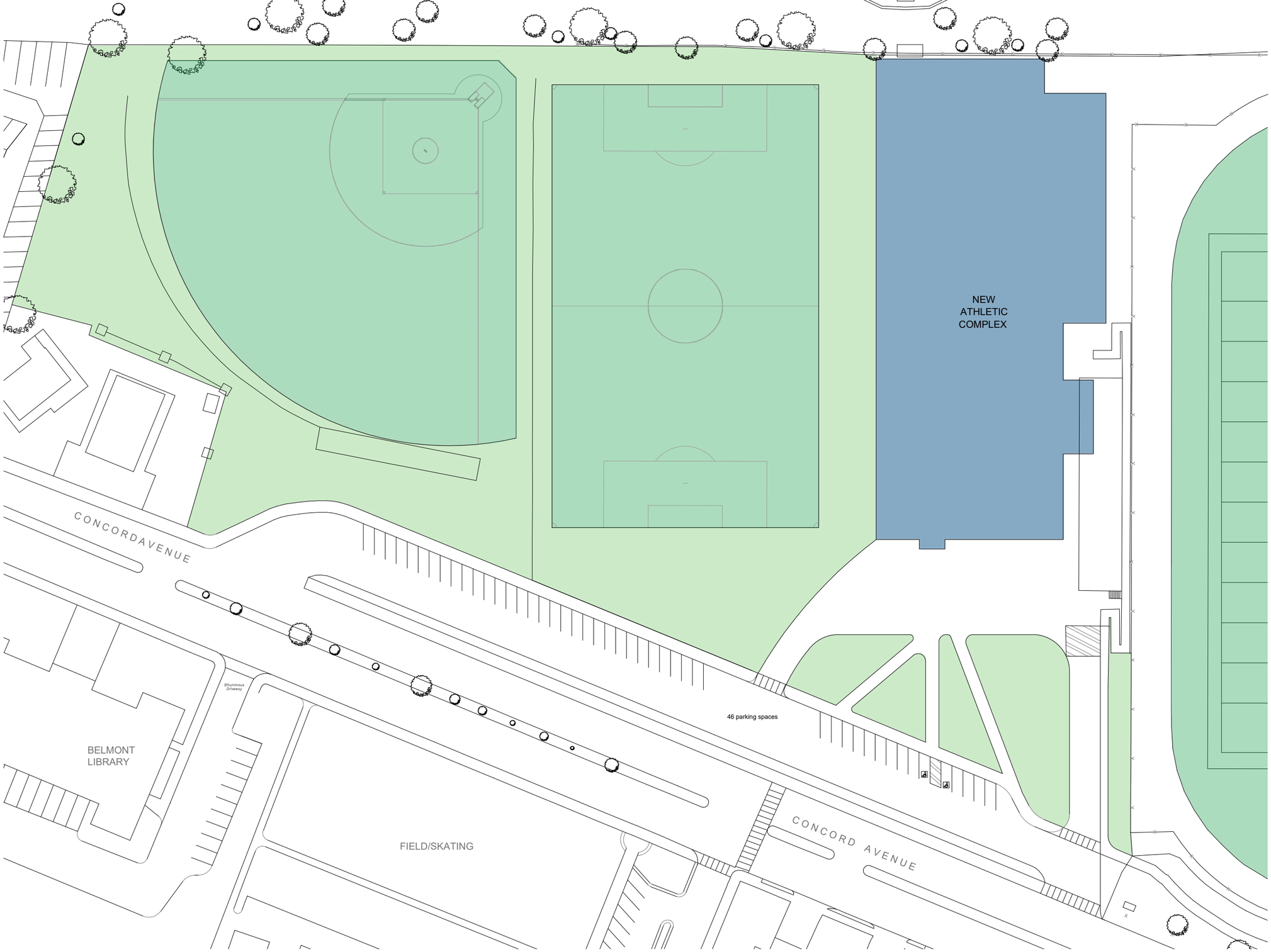

PARKING

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Expanded Jughandle - 46 Parking Spaces

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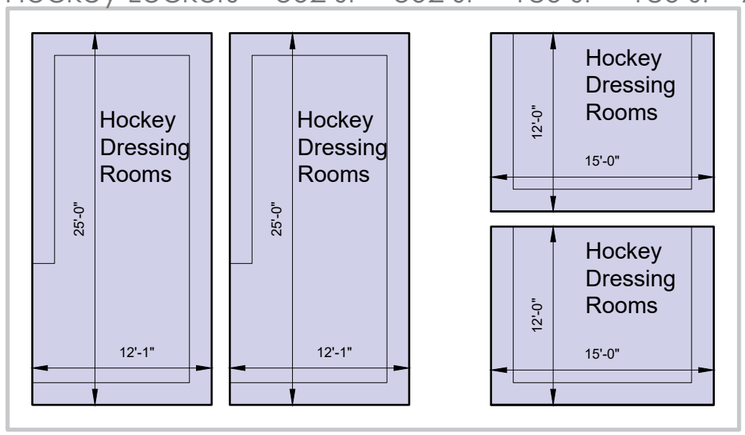
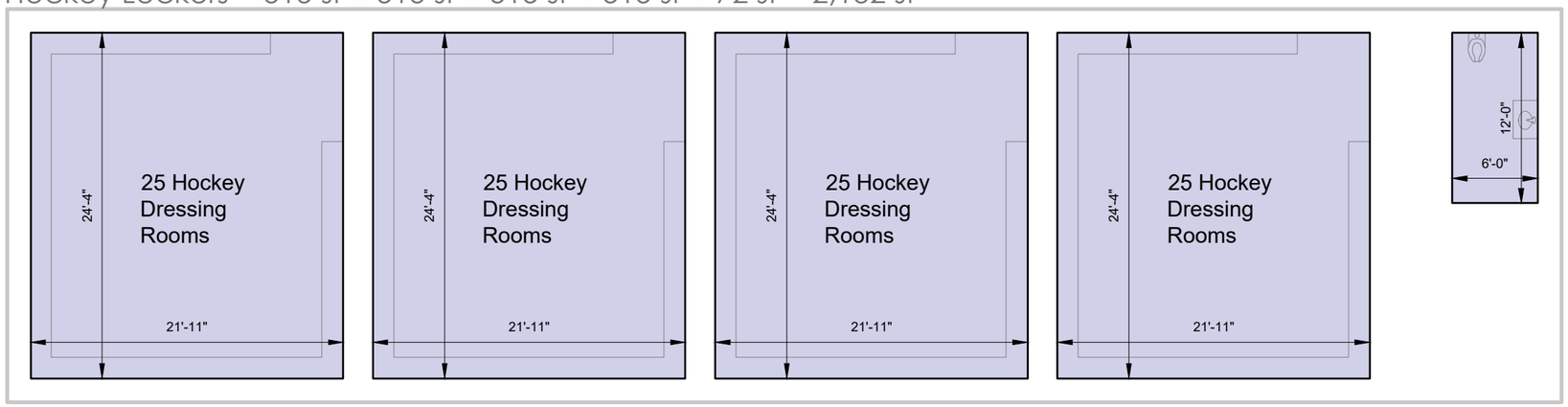
Existing (Viglirolo)

Hockey Lockers = 302 sf + 302 sf + 180 sf + 180 sf= 964 sf



Proposed

Hockey Lockers = 515 sf + 515 sf + 515 sf + 515 sf + 72 sf = 2,132 sf



Existing Viglirolo Hockey Dressing Rooms = 964 sf
Proposed Hockey Dressing Rooms = 2,132 sf

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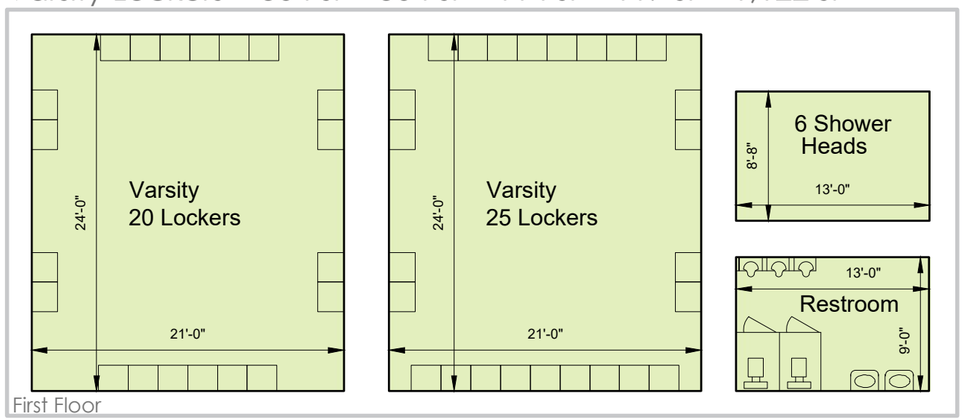
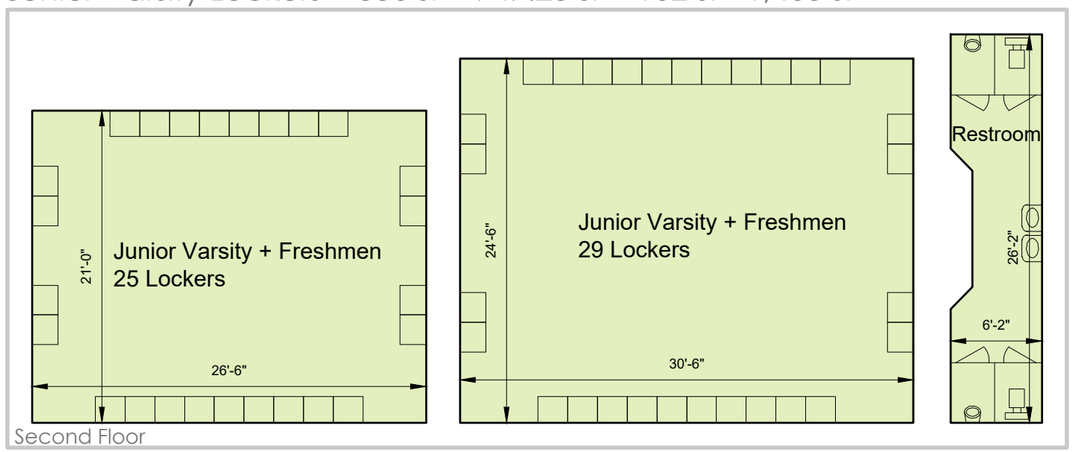
Existing (WFH)

Varsity Lockers = 504 sf + 504 sf + 114 sf + 117 sf = 1,122 sf



First Floor

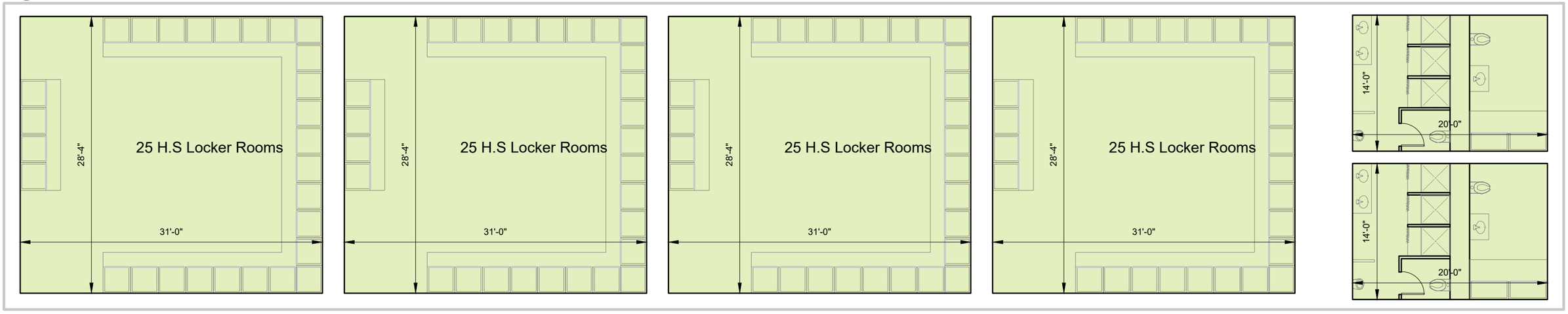
Junior Varsity Lockers = 556 sf + 747.25 sf + 162 sf= 1,465 sf



Second Floor

Proposed

High School Locker Rooms = 880 sf + 880 sf + 880 sf +880 sf + 280 sf + 280 sf = 4,080 sf



COMPARISON

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Existing WFH High School Lockers = 2,587 sf
Proposed High School Lockers = 4,080 sf

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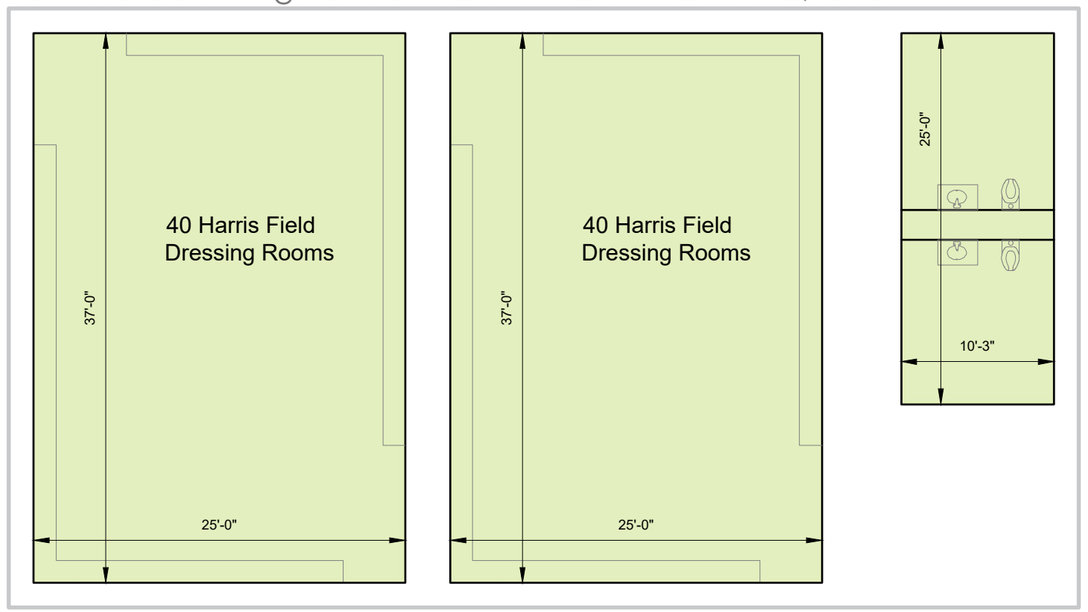
Existing (WFH)

Harris Field Dressing Rooms = 925 sf + 925 sf + 257 sf= 2,107 sf



Proposed Harris Field Lockers = 2,107 sf

EXISTING

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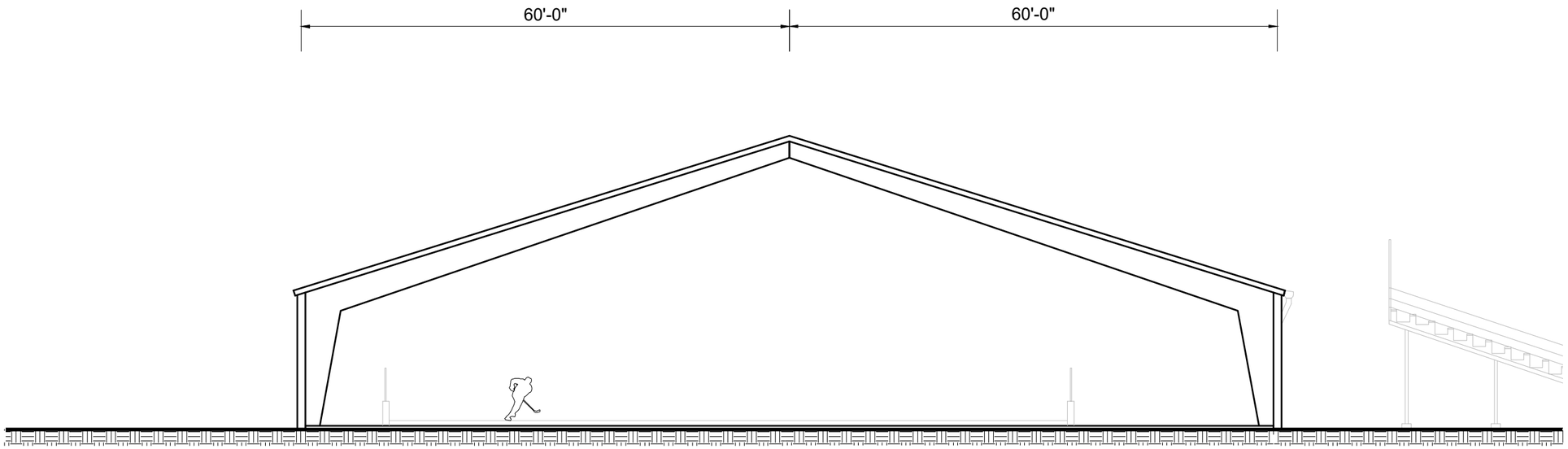
Maximize Efficiency



CURRENT STATE

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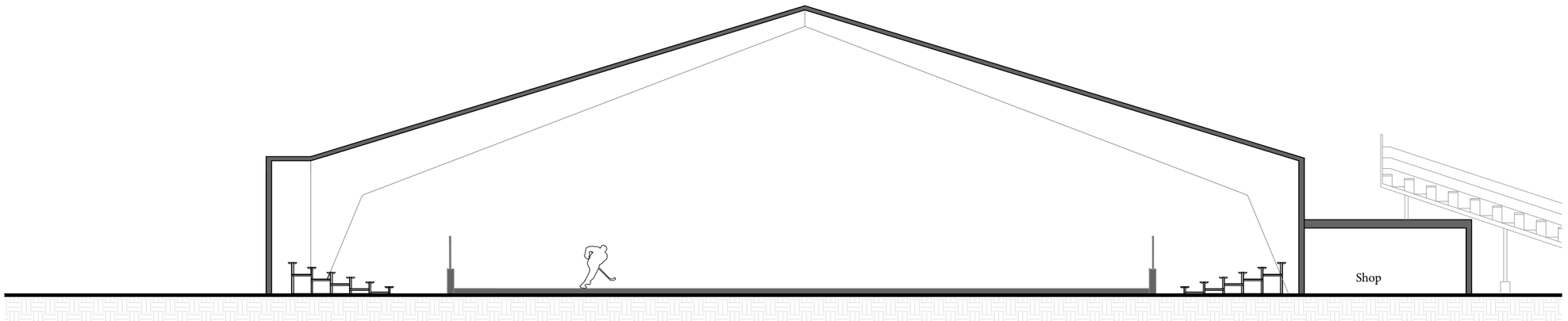
Existing Section



PROPOSED

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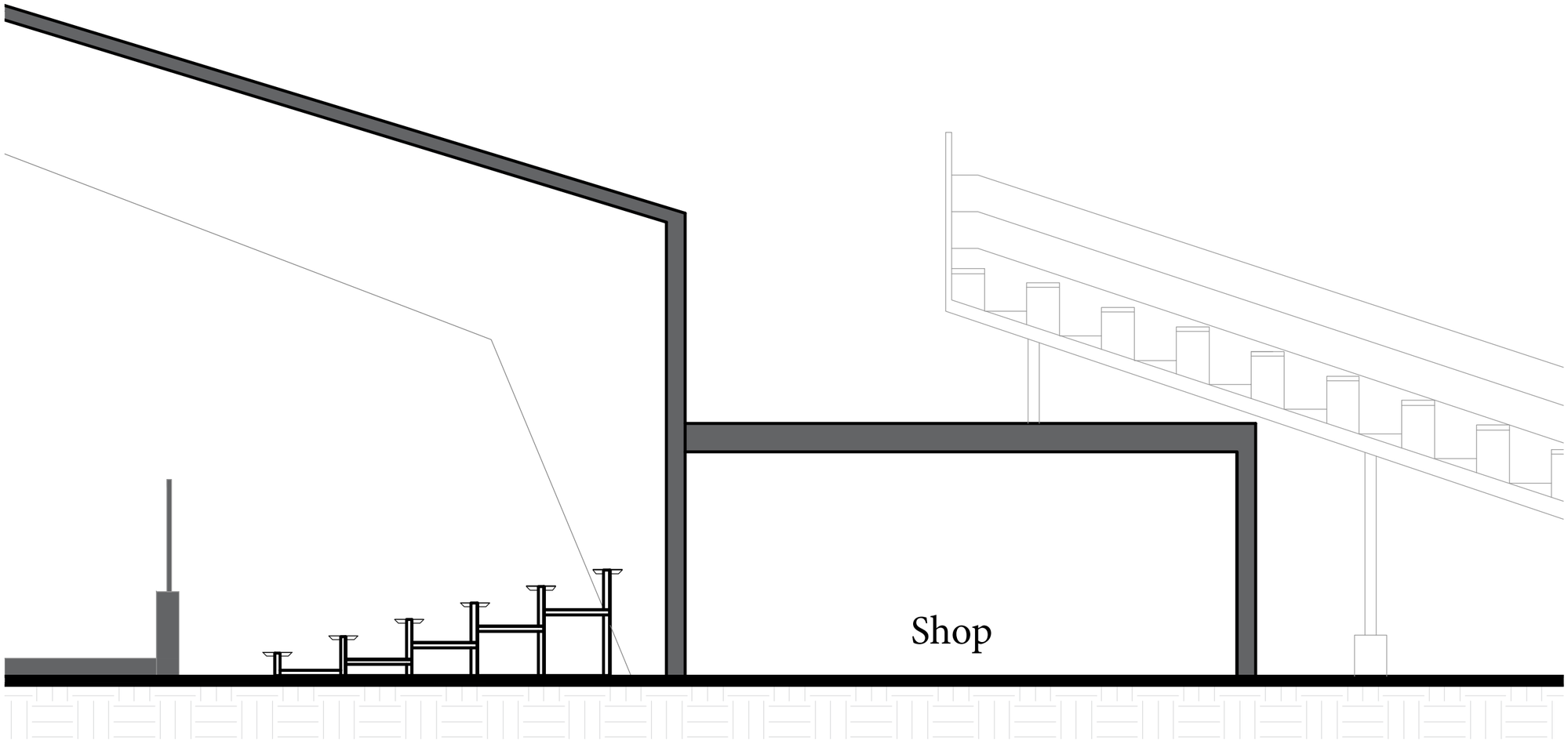
Renovate and Expand - Conceptual Section



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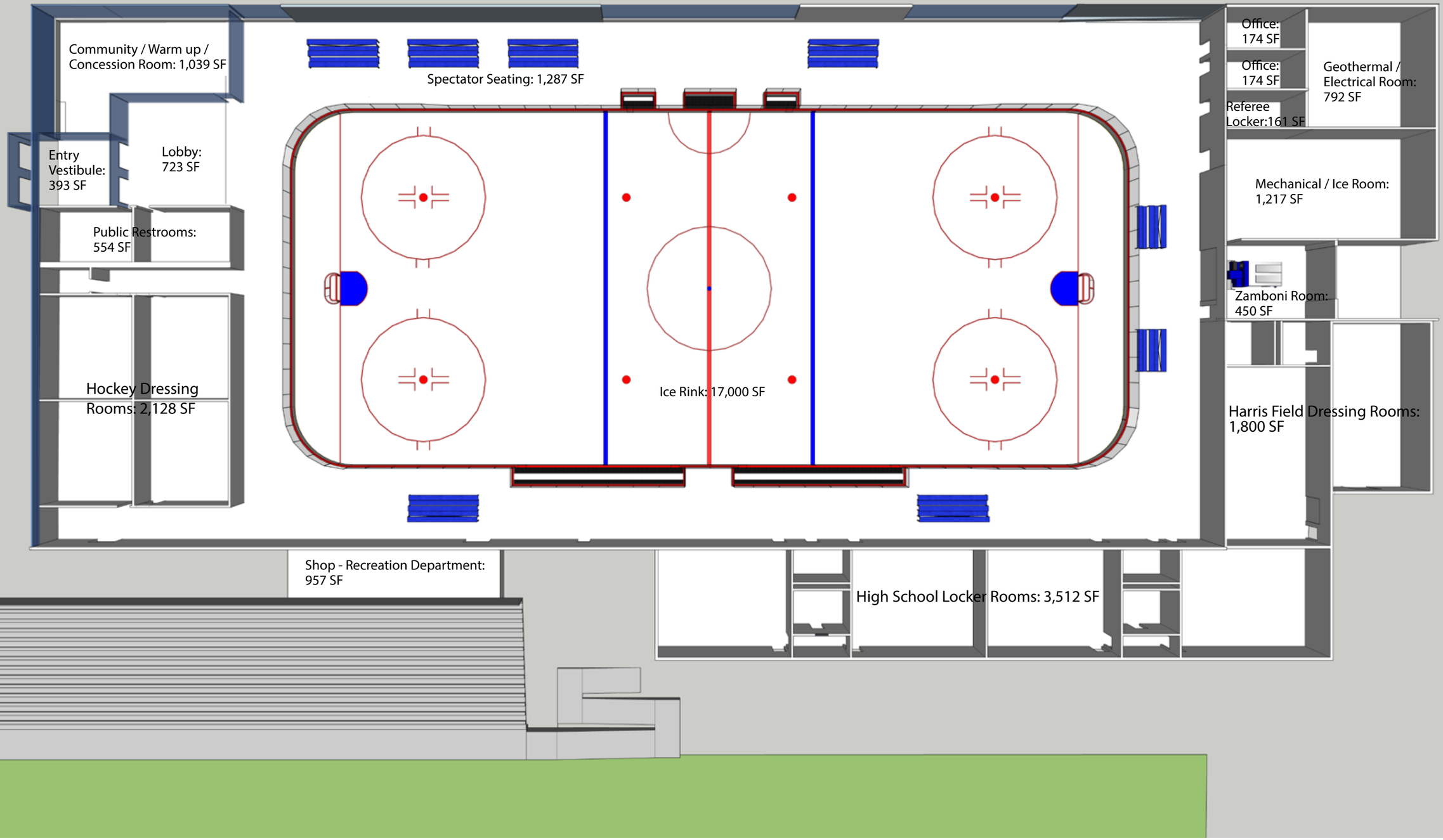
Maximize Efficiency



CONCEPTUAL

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Gross Square Feet / Room

CONCEPTUAL

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Conceptual Views

CONCEPTUAL

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Conceptual Views

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Exterior Aerial View

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INCORPORATED 1859

CONCEPTUAL

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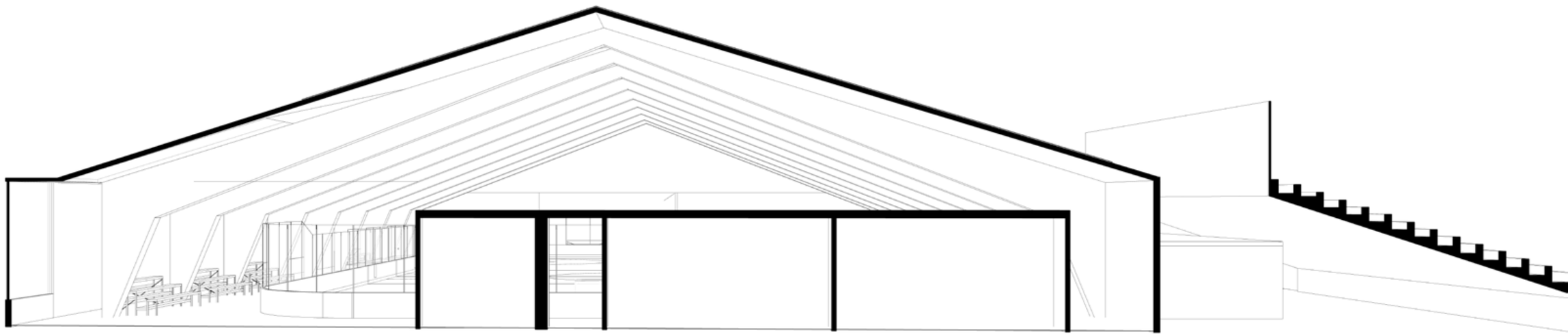
Interior Aerial View

BELMONT
INCORPORATED 1859



CONCEPTUAL

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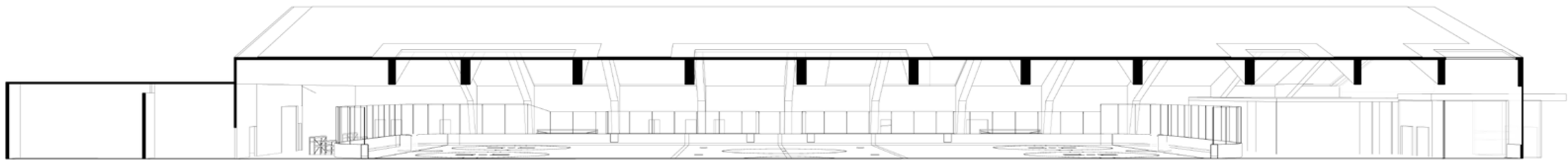
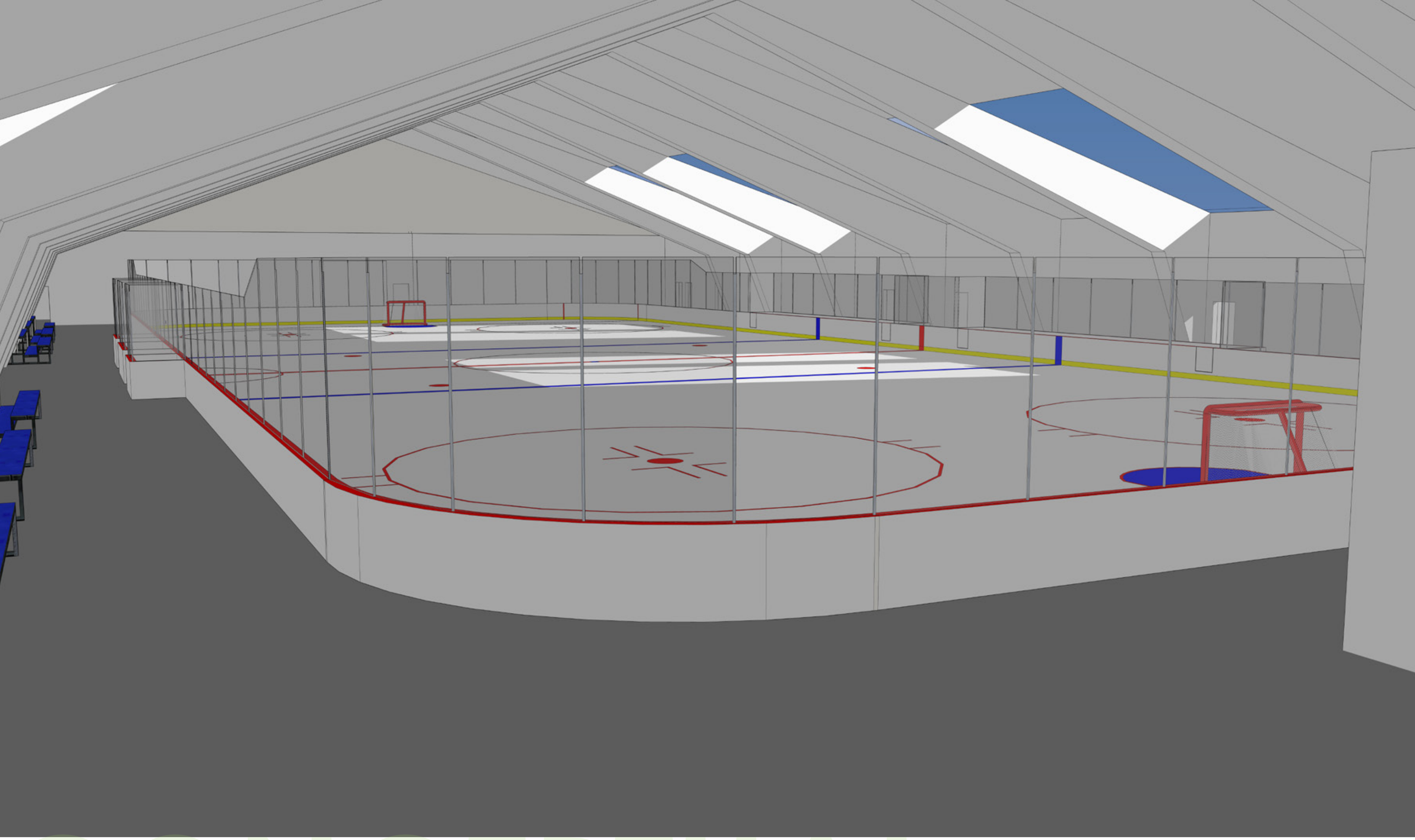
Transversal Section



Longitudinal Section



CONCEPTUAL

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Interior Views

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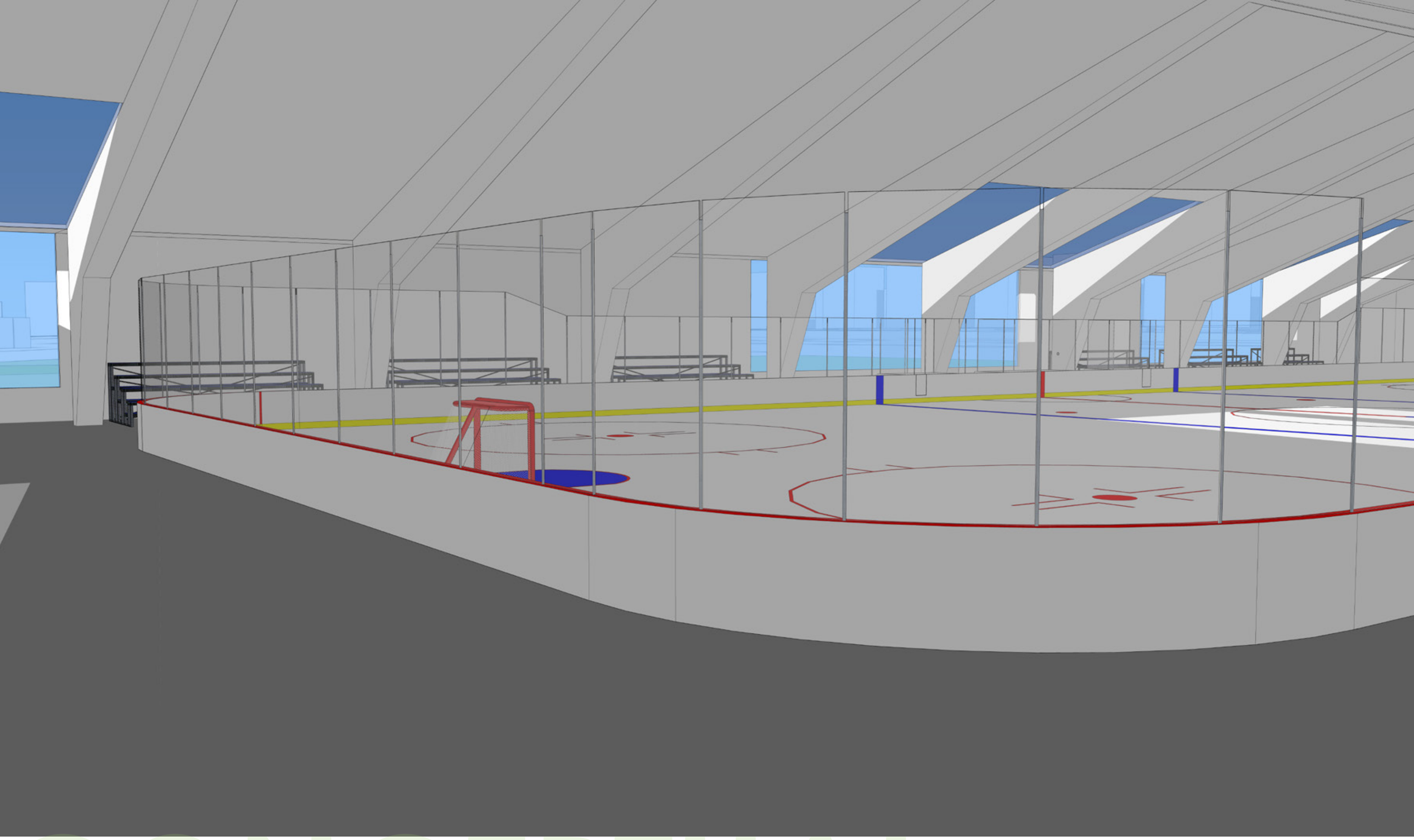

CONCEPTUAL

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Interior Views

BELMONT
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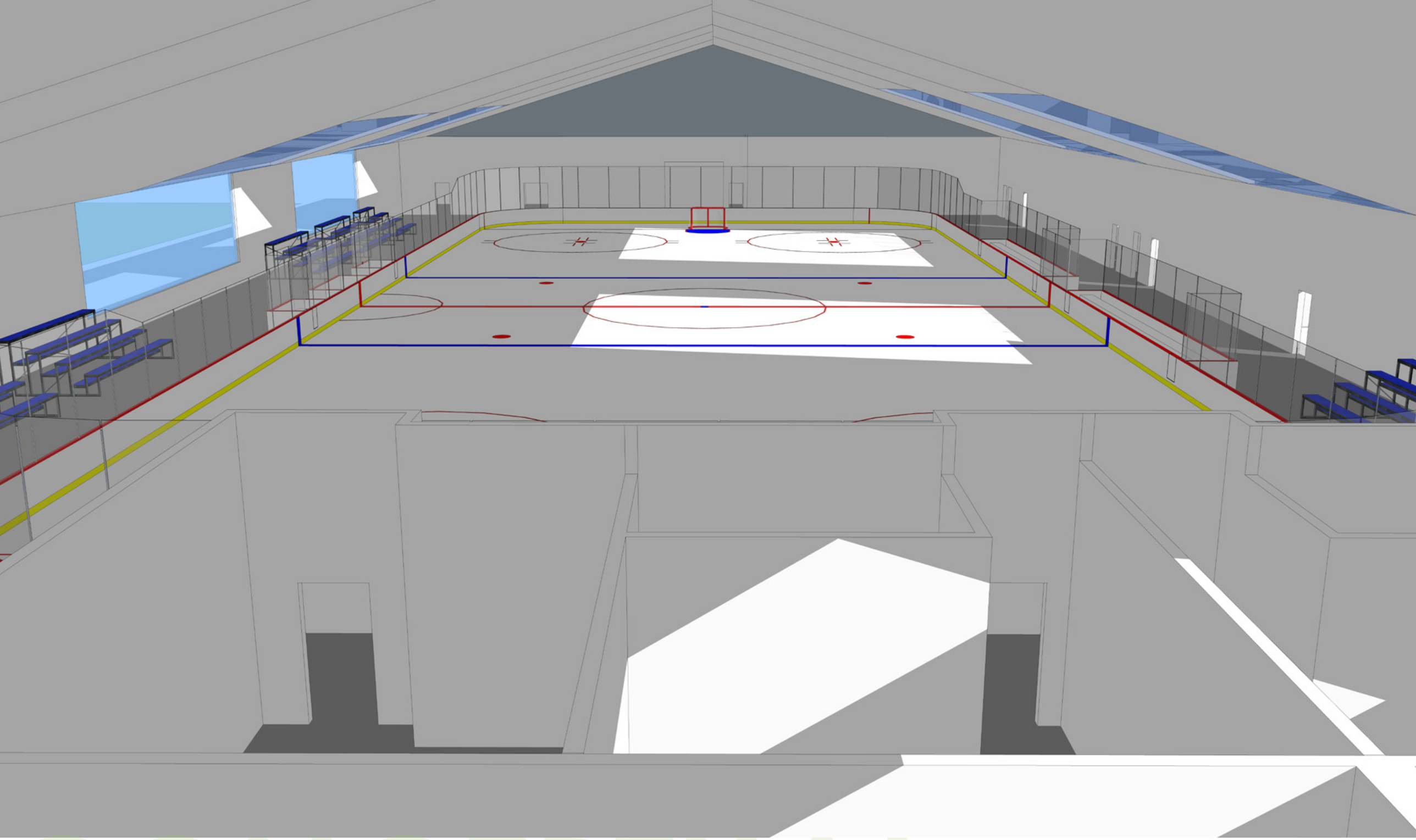

CONCEPTUAL

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Interior Views

BELMONT
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Interior Views

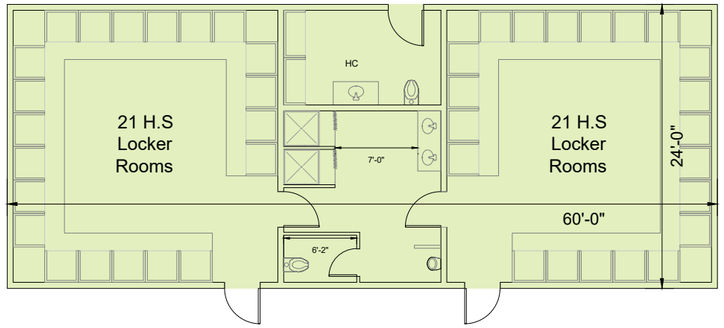
BELMONT
INCORPORATED 1859

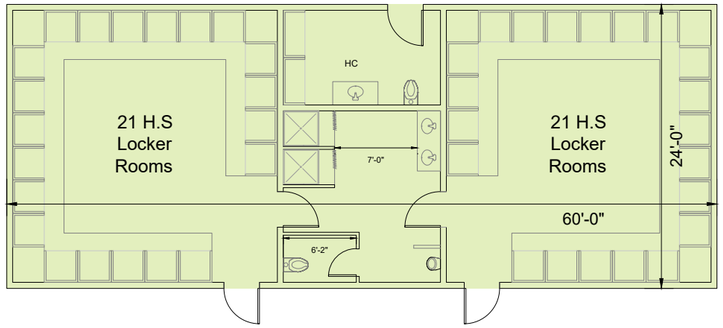
OPTION

Renovate and Expand Modular Trailers

High School Sports

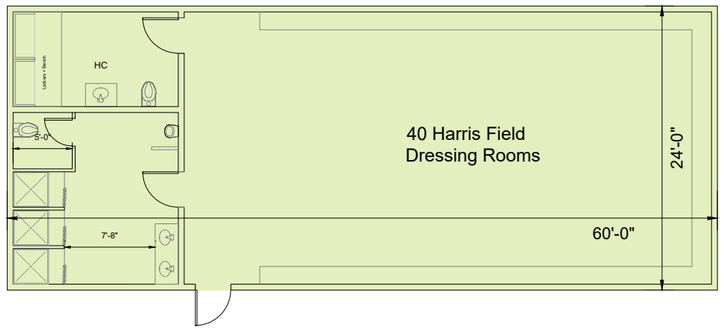
Double Wide Trailer = 1,440 sf

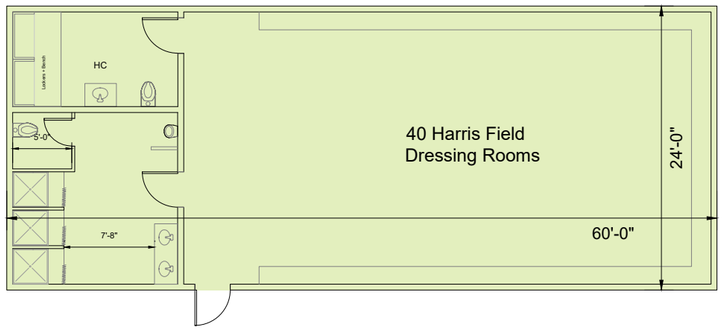




Harris Field Sports

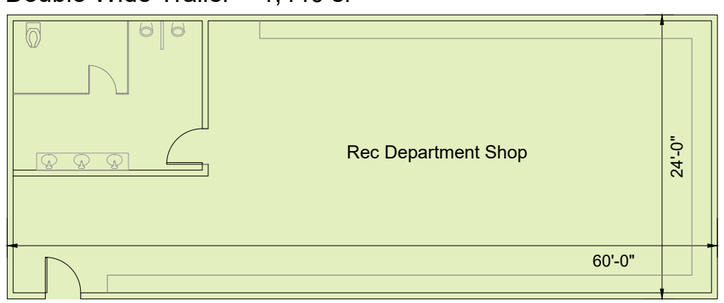
Double Wide Trailer = 1,440 sf





Rec Department

Double Wide Trailer = 1,440 sf



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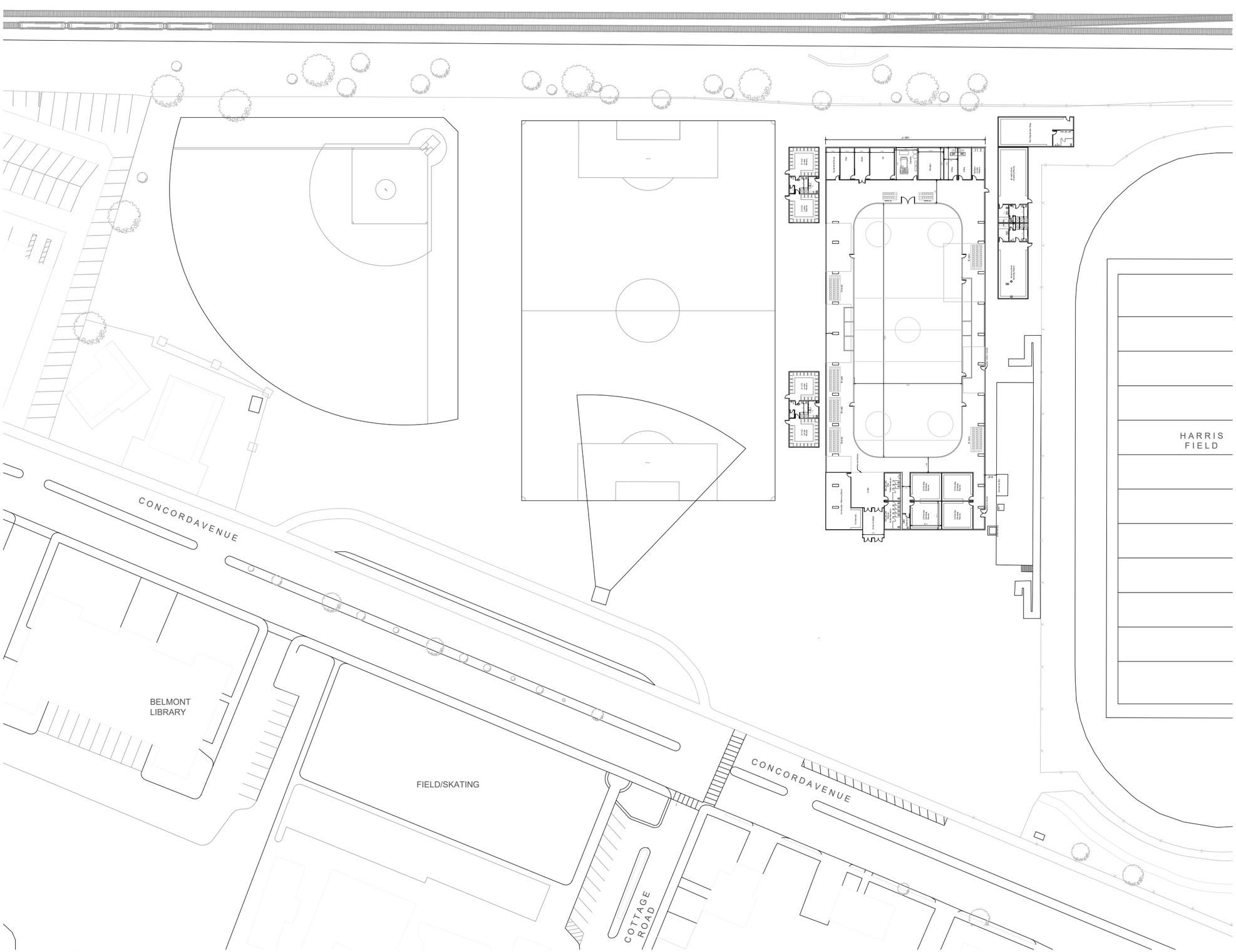
Modular Trailers Plans



PROPOSED

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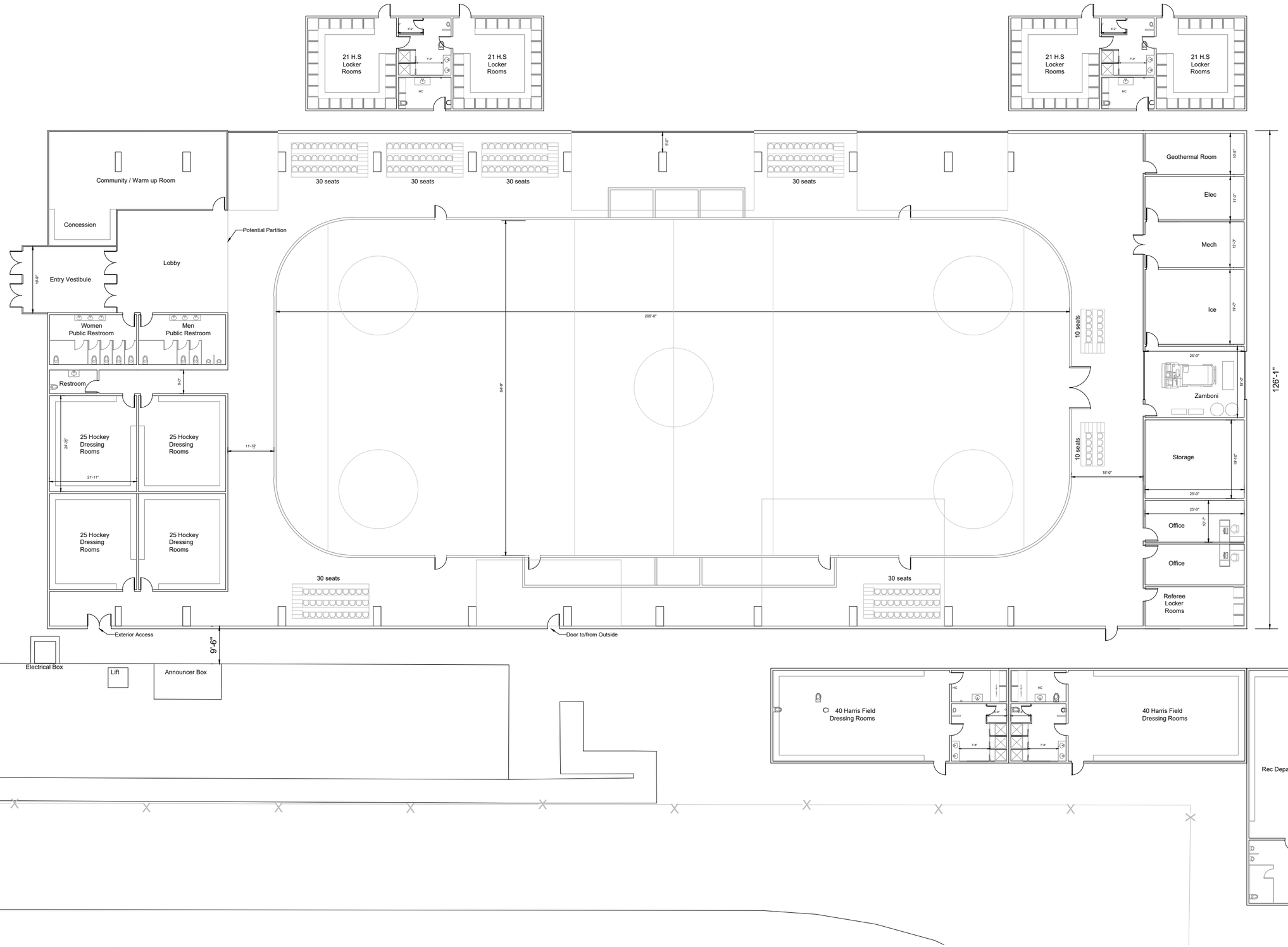
Renovate and Expand Site Plan - with Modular Trailers



PROPOSED

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Renovate and Expand Plan - with Modular Trailers

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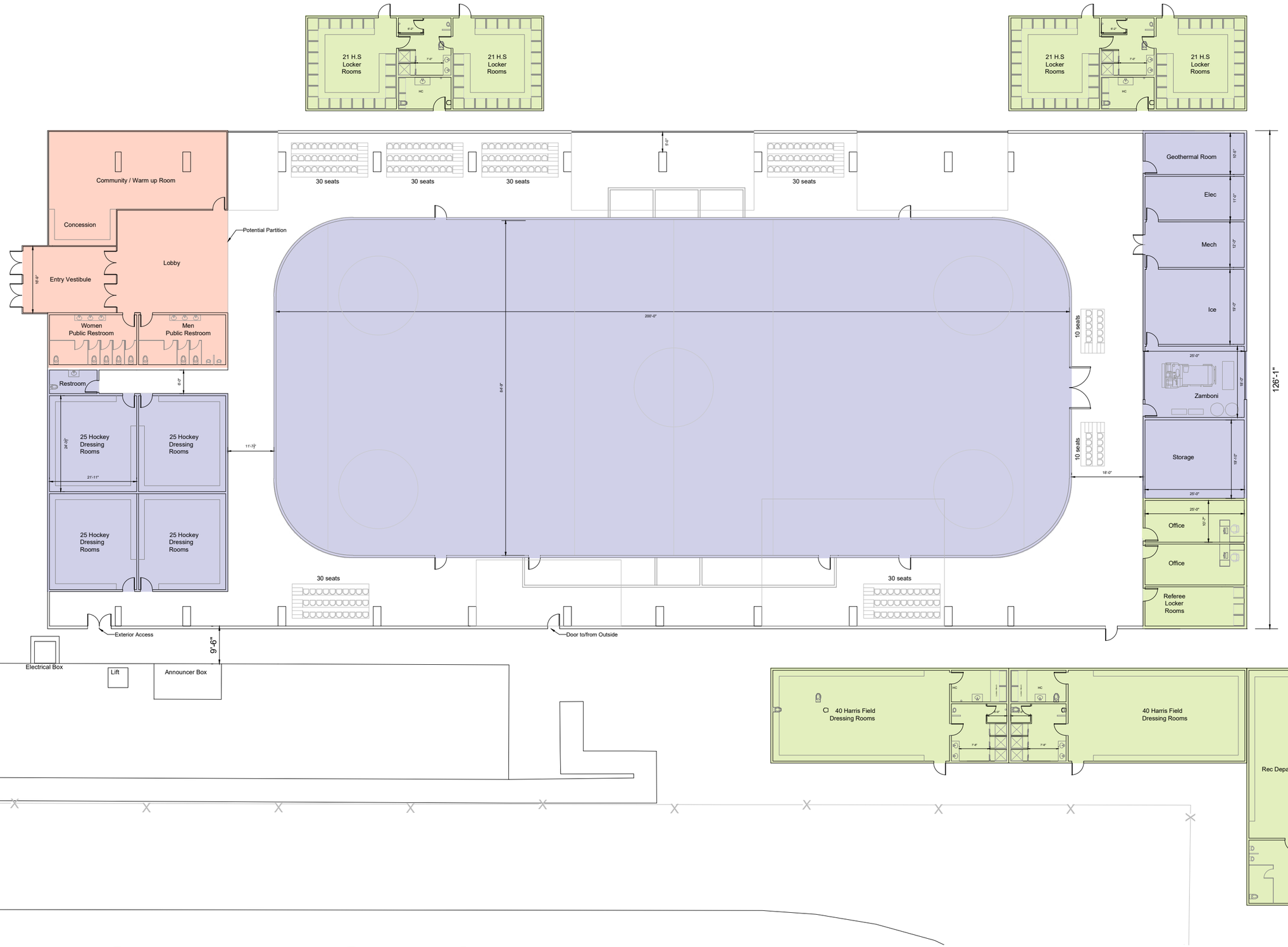

PROPOSED

Renovate and Expand Plan - with Modular Trailers

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BELMONT INCORPORATED 1859

Net-Zero Energy Goal

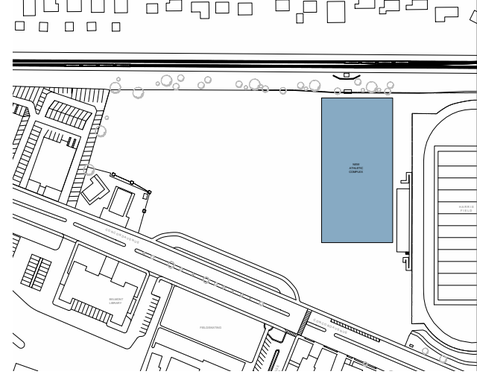
Potential for Town Wide Net Zero Approach

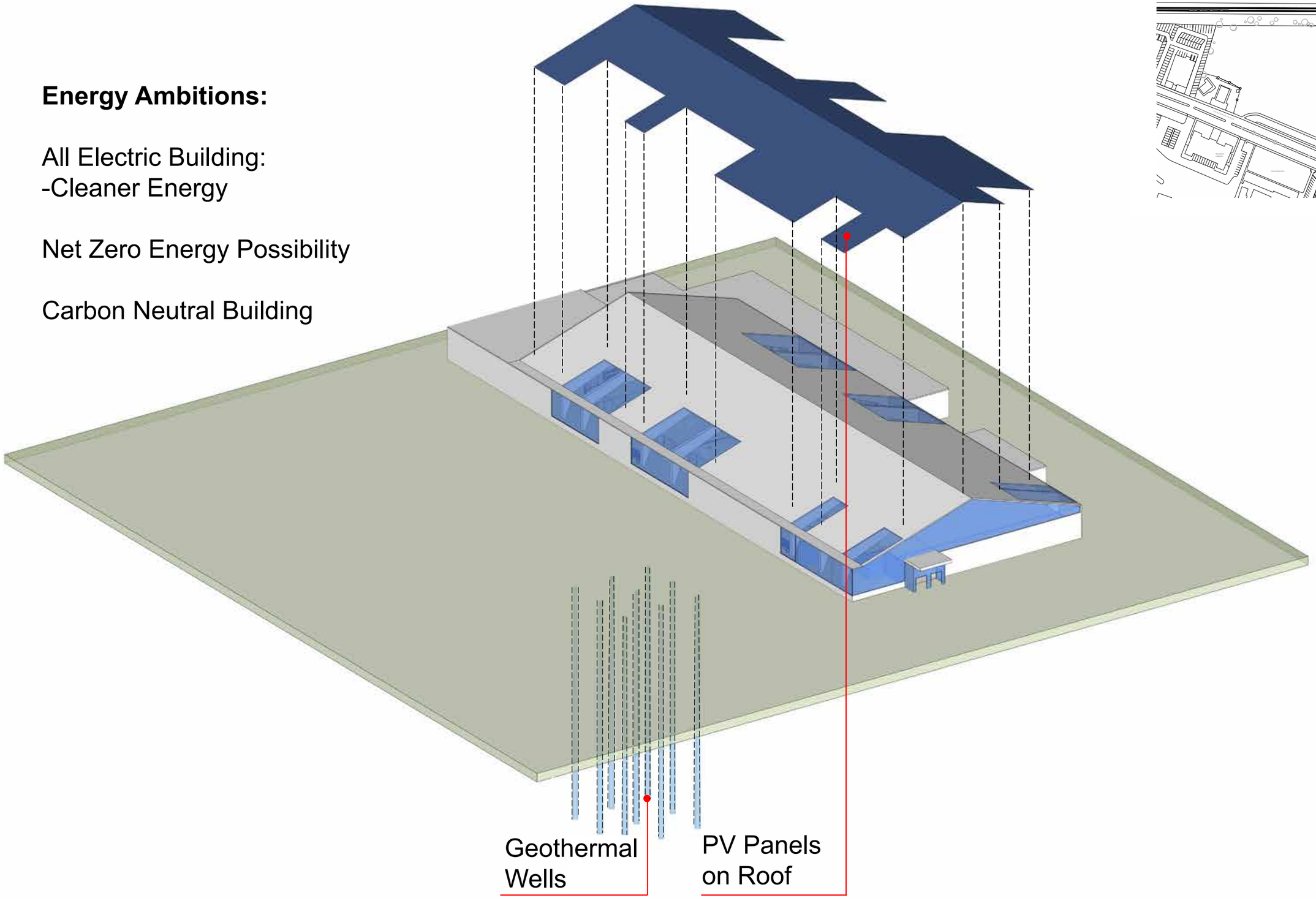
Energy Ambitions:

All Electric Building:
-Cleaner Energy

Net Zero Energy Possibility

Carbon Neutral Building





Net-Zero Energy Goal

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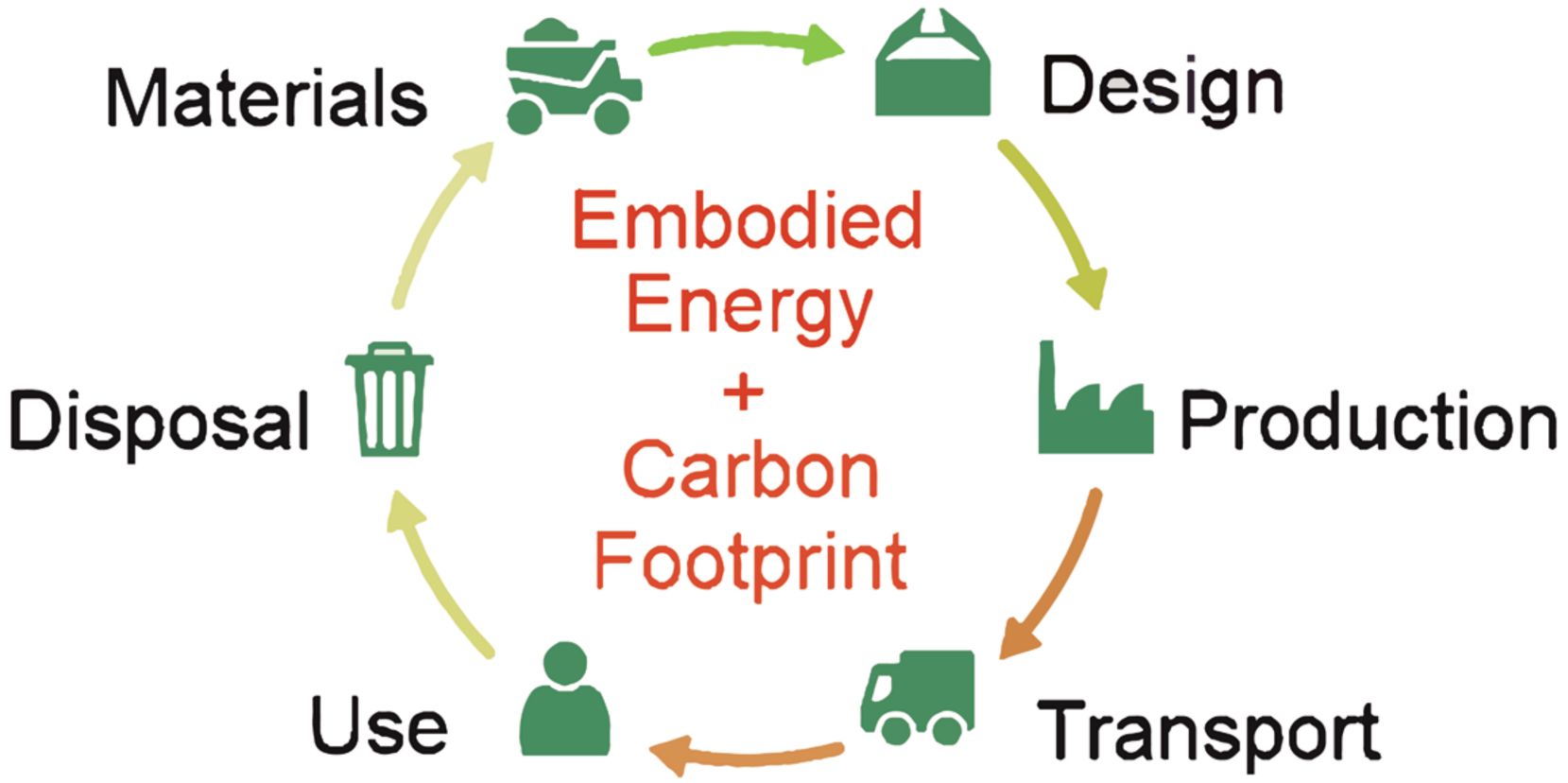
Embodied Energy

RE novate
RE - use
RE cycle



Energy

EXISTING MATERIAL

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Exterior

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Bents

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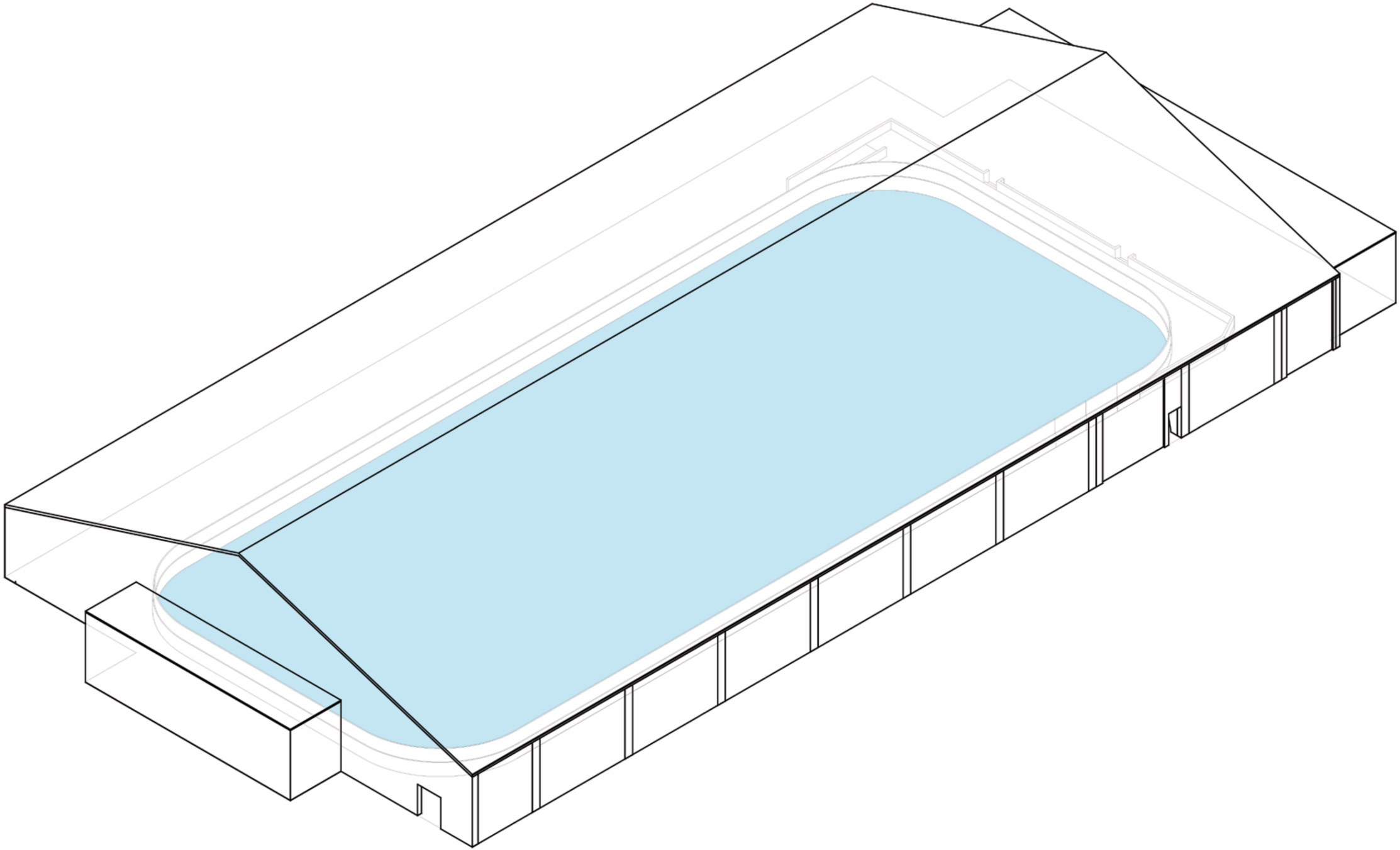
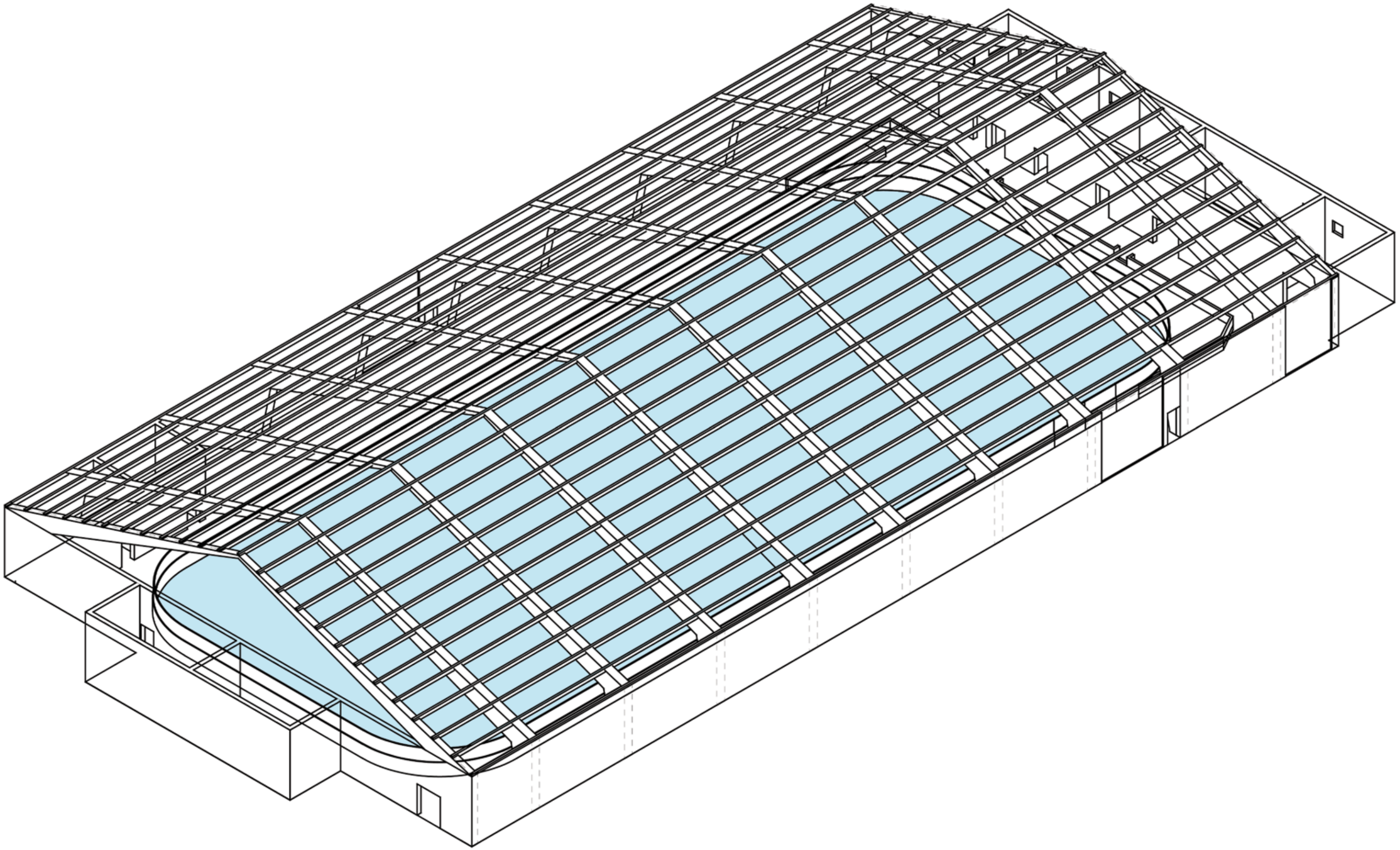
Purlins



Roof



EXISTING STRUCTURE

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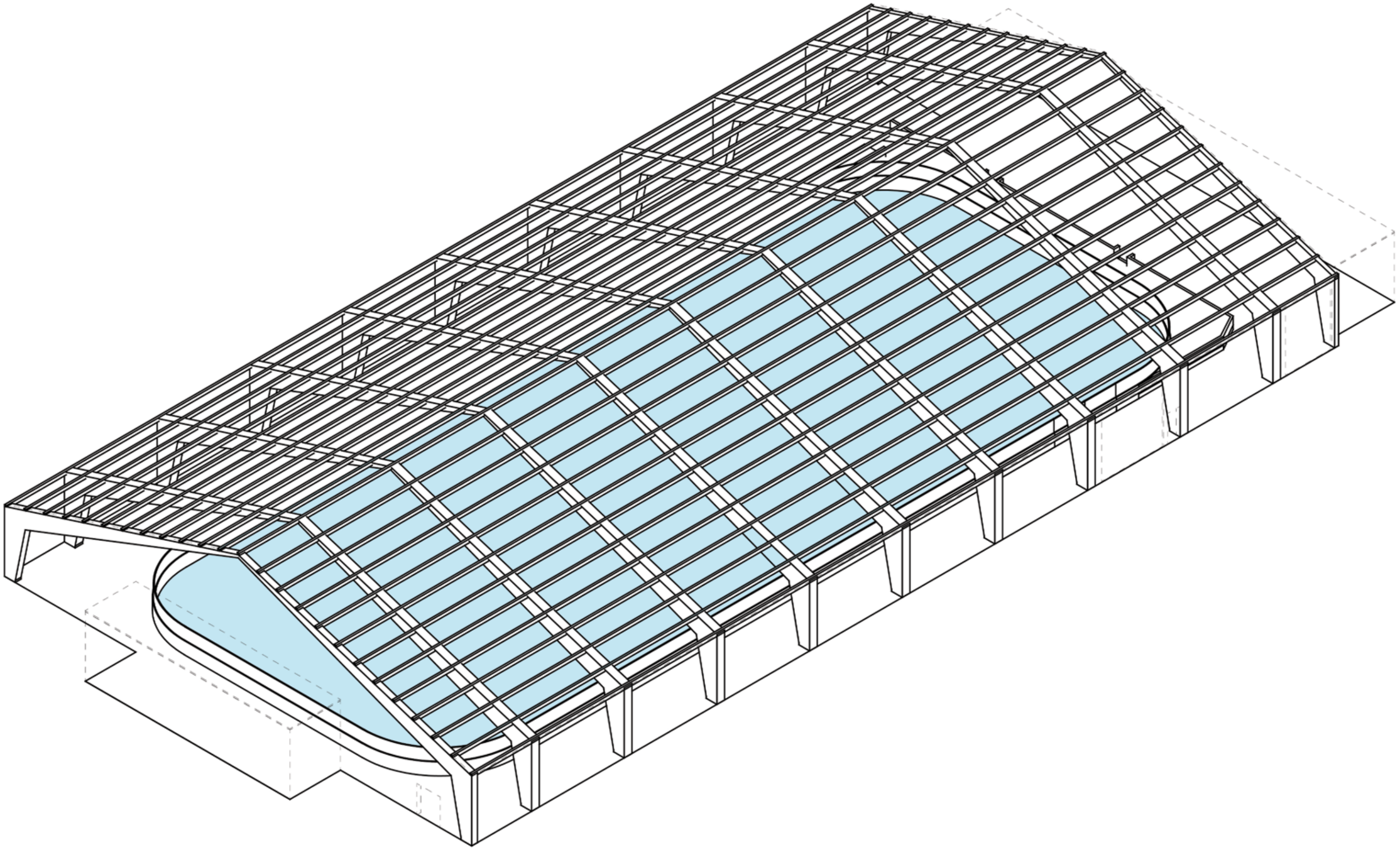
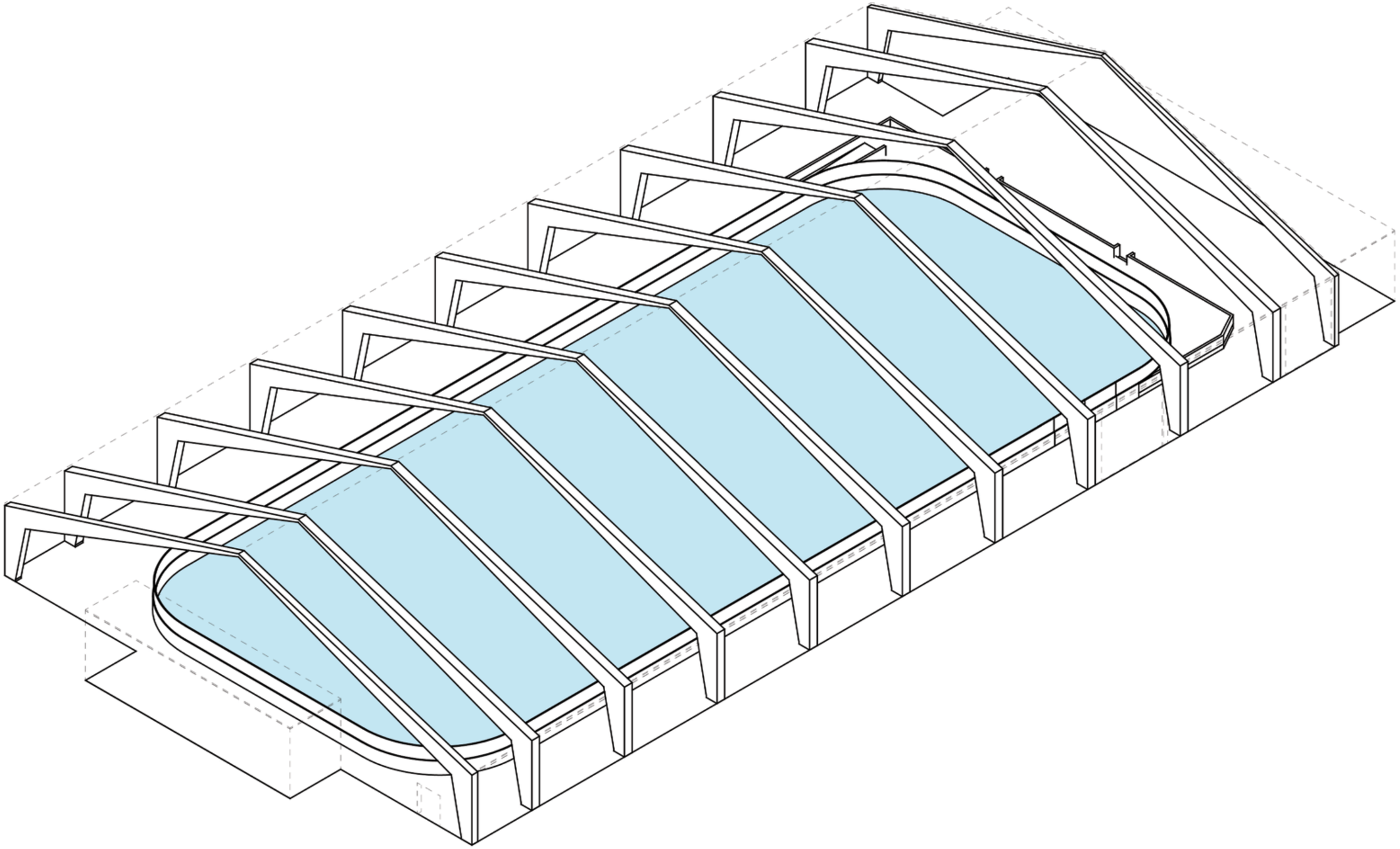
Wall Envelope



Purlins



EXISTING STRUCTURE

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Bents

BELMONT
INCORPORATED 1859

Building Renovation / Re-use

- Structural steel bents

- Roof purlins

- Foundations (with modifications)

- Harvesting other materials for re-use
  . Masonry

- Recycle all unusable materials

Design Solutions

- Renovation and Expanding Skating Rink
  . Renovate, Reuse, Recycle

- Design Sustainable Skating Rink
  . All Electric
  . Energy Efficient
  . Fossil Fuel Free
  . Net-Zero Focused

- Fields remain functional

- Consider Conceptual Design of Fields

- Consider Conceptual Design of Parking

SCOPE

Areas to Consider

PHYSICAL MODEL

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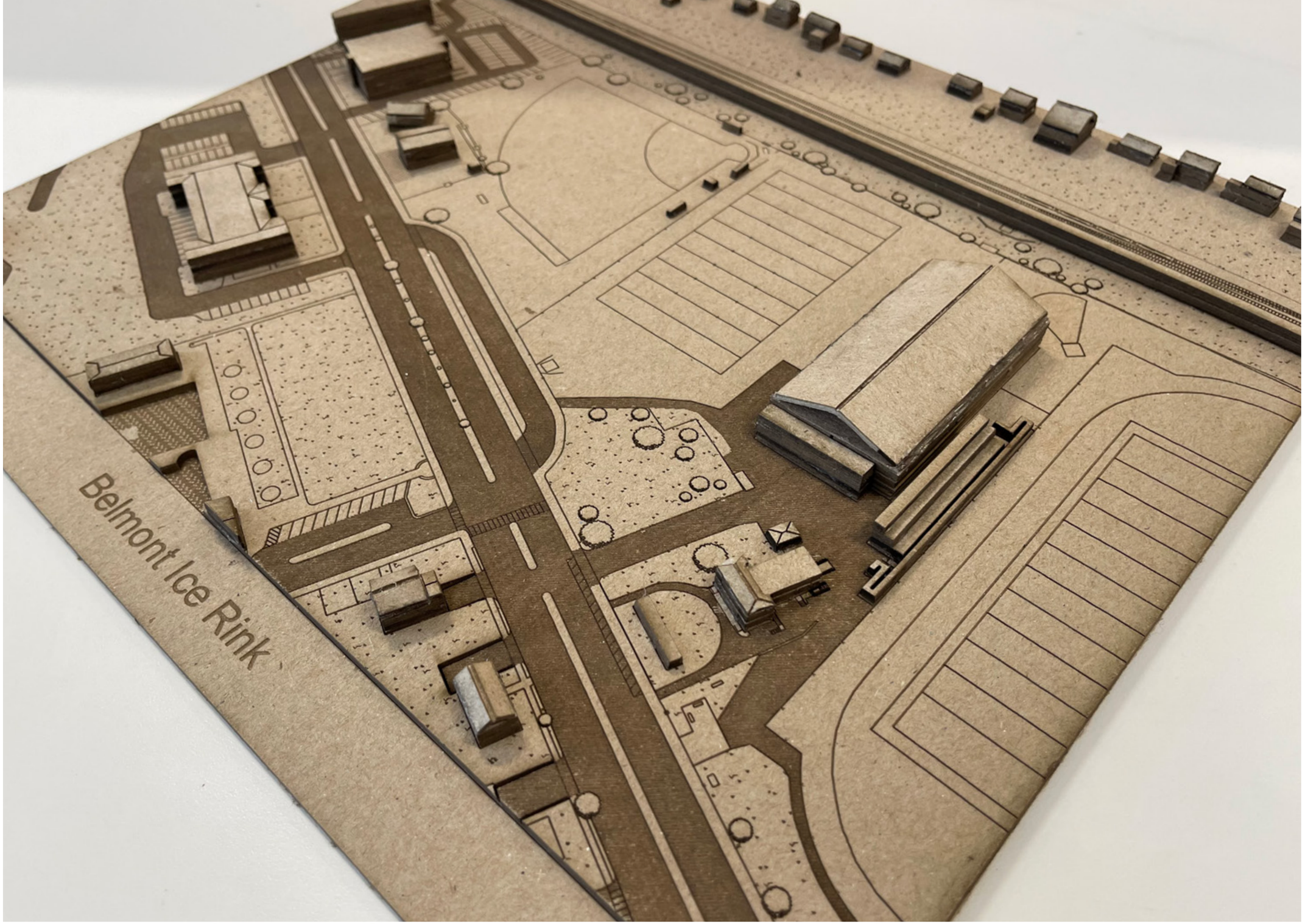
Existing Conditions

BELMONT
INCORPORATED 1859



PHYSICAL MODEL

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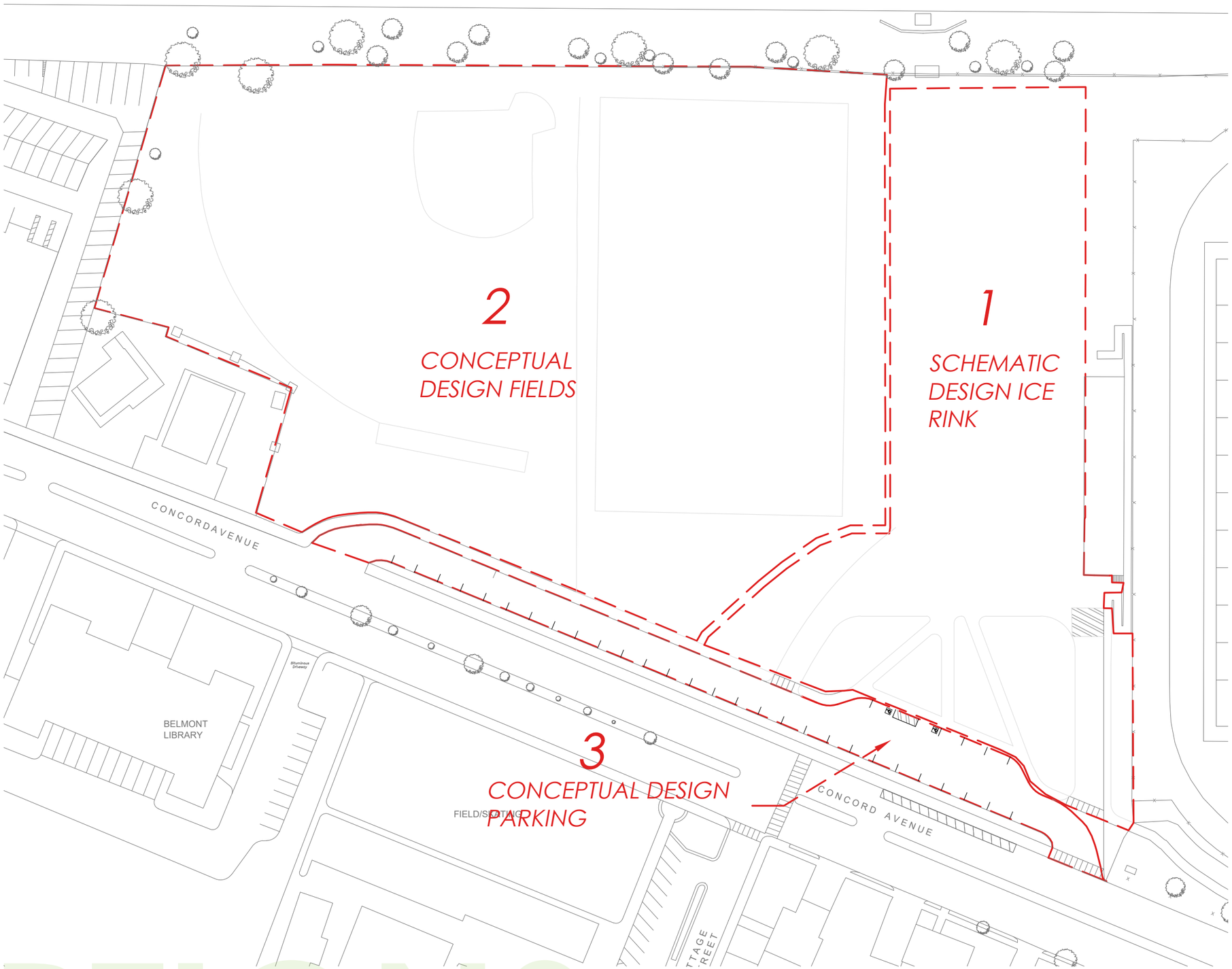
Existing Conditions



OPTIONS

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Areas to Consider

Schedule

Town of Belmont

Ice Rink / Athletic Complex

Potential Project Schedule

Feasibility Study	2022					2023						2023…2024
	June	July	August	September	October	November	December	January	February	March	April	14 months
	1 8 15 22 29	5 12 19 26	3 10 17 24 31	7 14 21 28	5 12 19 26	2 9 16 23 30	6 13 20 27	6 13 20 27	3 10 17 24	1 8 15 22 29	5 12 19 26	

Kick Off Meeting / Site Visits

Feasibility report

Comments from stakeholders

Regulatory Research

Schematic Design package

Design Development package

60% CD cost estimate

90% CD cost estimate

100 % CD / Bid documents

Permitting

Construction Kick Off Meeting

50% Construction Complete

Building Systems Commissioning

Substantial Completion of Construction

Punch List / Ribbon Cutting / Project Close Out

Programming

Biweekly Meetings

Feasibility Analysis

Weekly Meetings

Schematic Design

Biweekly Meetings

Design Development

Biweekly Meetings

Construction Documents

Biweekly Meetings

Award / permit

Construction Administration

Weekly Progress Meetings

The Galante Architecture Studio, Inc.
617 576 2500

5/17/2022

SCHEDULE

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Miss Only One Season of Ice Time

BELMONT INCORPORATED 1859

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