

BELMONT ICE RINK PROJECT NARRATIVE

December 2023

Introduction

The Municipal Skating Rink Building Committee (MSRBC) has been tasked by the Select Board to handle the design and construction of the new municipal ice rink facility. The current Skip Vigliolo Skating Rink, situated at 297 Concord Avenue, was initially constructed in 1971 as an open-air facility spanning approximately 28,800 square feet. In the early 1980s, the rink underwent enclosure to facilitate year-round skating. It serves as the home rink for the Belmont High School Marauders Hockey teams and is also open for recreational use by residents through the Town's Parks and Rec Dept.

There were many challenges to the design and completion of this project, including issues of available finances – this took a few tries to pass at Town Meeting and costs were cut to bring the project to a budget that meet unspoken criteria of taxpayers. The project also has challenges in that it is a “political island” of a parcel meaning that the MSRBC was charged with developing this parcel and no other portions of the contiguous land surrounding. That means issues like parking were eliminated from the work of the MSRBC along with site development, landscaping, site lighting, and other areas. The need to replace the building is and remains pressing on all fronts, however the limits of this project were predetermined by parties outside of and above the MSRBC. Thus, meeting all Planning Board criteria while managing all surrounding parcels in a way that aligns with Town wide decisions has been challenging in a few ways. Since this project is a “Replacement In Kind” of the existing rink and the White Field House, items outside of this immediate parcel remain for a future committee to determine and develop further as the Town decides to fund those efforts of development.

Existing Conditions

The overall “High School campus” parcel is approximately 56.86 acres in size, with the “Rink Parcel” for the Belmont Ice Rink being the limits of work depicted on the site plans. Plans EX-101 show the entire site including land use and topographic features. There were no wetland resource areas identified on or within jurisdictional buffers for the Rink Parcel (“the site”).

Adjacent to Belmont Ice Rink, the project is bounded by the High School / Harris Field to the east and existing playing fields used for soccer and baseball to the west. The MBTA train tracks are parallel to the north property line and approximately 25 feet from the rear of the proposed Rink building.

The rink's primary access is from Concord Street via the existing parking lot / jug handle off Concord.

The existing developed site consists of the rink building and the White Memorial Fieldhouse, with surrounding walkways, landscaped areas, parking, and athletic fields.

Regional Context

The site is within the zoning for General Residence, while surrounded by Single Residential C to the north and south, the Local Business district on the west, and the High School to the immediate east.

Proposed Project

The proposed 40,000-square-foot rink facility will take the place of the current 29,000-square-foot rink and the approximately 9,000-square-foot White Fieldhouse. It is our understanding that this categorizes the project as a "replacement in kind" for the existing outdated facilities on-site.

Zoning (Overall High School Capus Parcel(s))

	REQUIRED	EXISTING	PROPOSED
Lot Area	5,000 SF	2,477,257 SF	NO CHANGE
Lot Frontage	50'	4,079' +/-	NO CHANGE
Lot Coverage	30% MAX	Unknown	0.4% MORE
Open Space	40% MIN	Unknown	NA
Front Setback	20'	73.8'	123' +/-
Side Setback	10'	444.4'	420' +/-
Side Setback	10'	2,500 +/-	2,500 +/-
Rear Setback	20'	77.8	23'
Building Height	33' MAX	36.4'	30.3'

Neighborhood & Abutter Impact

The proposed project is expected to have minimal effect on the abutters and neighborhood as it is basically a "replacement in kind" to the existing facilities. The hours of operation are to be defined by the Town Facilities and Recreation Departments and any local board or department overseeing use and operation of this Municipal Rink. While the hours of operation have not yet been defined based on this setup, the expectation is that these hours will be defined prior to a Certificate of Occupancy being issued.

The number of planned seats is 204 spectators (which is line with the 200+ seats in the exiting rink), with four dressing and four HS locker rooms for an additional 50 players at any given time. Therefore, the maximum number of occupants in the building for any hockey event is likely to be around 250 people. The existing rink and fieldhouse are also used as backup for High School functions, that is anticipated to continue in the future and the infrastructure required for that will be the rough the overall HS campus facilities.

The anticipated number of events depends on user groups as defined by Town Departments who will be overseeing operations and functions of the rink facility. It is not the jurisdiction of this applicant to determine or schedule those events, the Select Board and Parks and Recreation Dept will determine

that number in the future, however the overall campus site from an educational and athletic perspective is basically used all year round exclusive of holidays.

The overall impact on open spaces is one of improvement. The immediate areas within the “Rink Parcel” on all four sides of the existing rink and on at least three sides of the White Fieldhouse have fallen into disrepair, with drainage problems, overgrown conditions, debris piles, etc. The proposed project will clean up and improve all these conditions while consolidating operations under one roof of a “sports facility”. This consolidation allows for upgrades to the immediate surrounding open spaces, improved accessible pedestrian safety and walking paths, code-compliant emergency vehicle access to both the rink and Harris Field, and related other elements. Thus, the project will result in an improved condition for the open spaces for the “rink parcel” than currently exists.

Access Points to the Building

Vehicular Access / Parking:

This project is truly a replacement of the existing facilities, and as thus the parking was part of a wider Town direction and decisions for the “campus” parking. Currently no additional parking, other than what is on-site presently is being proposed, as the “jug handle” has roughly 30 spaces and there are two Accessible Spaces for sporting events on Concord Avenue. This will be stated in our waiver list.

This project will significantly enhance emergency access, introducing proposed vehicular access meeting National Fire width requirements to the rink site for emergency vehicles. This improvement also extends to better safety access for Harris Field, occasional maintenance trucks, and trash removal vehicles. To manage both vehicular and pedestrian traffic, secure fencing encompassing the entire site, aligned with existing fence lines, and two lockable vehicular gates set back from the street will be implemented. These gates ensure access without disrupting surrounding traffic. The planned rink building features an overhead door primarily designed for bringing out the electric Zamboni (ice-making equipment) for occasional service. This door, outlined in the architectural plans, could also serve for loading if deemed necessary. The access plans are currently undergoing final review in collaboration with the Fire Department, Police Department, and other relevant town departments.

Pedestrian Access:

The primary entrance of the building is situated on the south side, in close proximity to Concord Ave. Pedestrians can conveniently reach the building through walkways connecting from the “jug handle” parking lot, the main driveway (utilized for maintenance and first responders), and Harris Field's grandstands. It's worth noting that all entrances are designed to be compliant with both MAAB (Massachusetts Architectural Access Board) and ADA (Americans with Disabilities Act) standards, ensuring accessibility for everyone.

Building

The building is designed for the efficiency of the Town as a pre-engineered metal building package. That is to say, the fully accessible facility is proposed as a slab on grade with perimeter walls up to approximately 3 feet high of durable materials including concrete and concrete masonry units. On

top of this a pre-engineered metal building is proposed. The building has an insulated metal panel exterior package, with gable ends, facing Concord Avenue and the MBTA tracks to the North. Photovoltaic systems are designed to be along the pitched roof portion of the facility. Near the MBTA tracks is a flat roof portion of building with mechanical equipment set there, partially concealed by enclosures.

The interior of the building, including the ice sheet, is fully accessible to all within the guidelines of 521 CMR. Bleacher seating is provided with ramps and stairs. Egress doors are either at grade or provided access to with ramps. The building meets the energy code as it is wrapped with Insulated Metal Panels around the perimeter. Further, it has light transmitting elements that allows filtered natural light to enter the facility, while maintaining the thermal envelope.

There is one overhead door that is primarily for bringing the electric Zamboni (ice making equipment) outside for occasional service. This overhead door, as shown on the plans facing east to Harris Field and the fire lane along that side of the facility, may also be used for loading if / as necessary.

Signage

The project is proposing only signage on the building façade, with no free-standing signage proposed at this point. If any free-standing sign is proposed in the future, the applicant understands they would need to return to the Planning Board for that application.

The building signage will meet Town requirements and be submitted to the Planning Board for approval. We understand the suggested approvable signage would include something like metal cut, pin mounted, back lit letters that are similar to other recent town focused development nearby. The design intent of this project is to align with that type of signage.

Landscape

The proposed project as per the direction / charge of the MSRBC does not include additional landscaping for the restoration of the rink site. All disturbed areas will be planted with loam and grass seed to match surrounding areas. Removal of trees (shown on the Demo & Soil Erosion Plan) and other small shrubs has been discussed and approved by the Town Tree Warden.

Site Utilities

The proposed site shall be serviced by underground utilities which are currently available and used by the existing rink and fieldhouse. Included with this application is the Site utility plan (C-3.0) and Site Electrical Plan that depict the proposed utilities for the project. The 8" water line for the new rink facility will connect off of the existing water main in Concord Ave, with the building being serviced by a 4" domestic and a 6" fire protection. Sanitary sewer for the proposed building is split, with a gravity line exiting from the south face of the building and a force main/ pump station at the

north face of the building. These components will connect to the existing sanitary line on site, ultimately tying into the municipal sanitary sewer situated within Concord Ave. Storm drainage will consist of roof drains for the building and a reconfigured drainage collection system with added stormwater treatment and management as detailed below. The electrical services will be fed from a new transformer.

Stormwater

The stormwater management strategy for this project is designed to address and alleviate the peak stormwater runoff rate resulting from the construction of the proposed Ice Rink facility. This management is achieved through the implementation of an underground detention system. The comprehensive stormwater management system, meeting with the latest bylaws to the greatest extent feasible, will be outlined in a subsequent submission to the Town Engineer and the Town's Peer Reviewer after the Site Plan receives approval from the Planning Board.

Following soil testing on-site, it became evident that due to the challenging nature of poor soils (HSG "D") and a high groundwater table, on-site infiltration was not viable. Stormwater runoff is effectively captured through catch basins, water quality units with catch basin inlets, and directed to the detention system. Additionally, the building's roof leaders contribute to the system. The detention system incorporates an outlet control structure to regulate and throttle the stormwater leaving the site. To enhance stormwater treatment and improve its resulting water quality, the runoff passes through a jellyfish system designed to remove phosphorus, nitrogen, and Total Suspended Solids (TSS). This approach significantly enhances the overall stormwater treatment before it exits the site.

Refuse

Waste disposal for the project is slated to be handled by incorporating a small (10-yard) dumpster on-site, positioned adjacent to the Harris Field fence and behind the bleachers. The strategic placement of this dumpster aims to keep it out of view from the public way. This location has undergone review and approval by the Director of Facilities, and it is clearly depicted on the site plan. To maintain a visually unobtrusive appearance, the dumpster will be effectively screened through the implementation of a dumpster enclosure.

Demolition & Construction Logistics

The attached logistics plans remain relevant to outline the team's approach to access/egressing the site and site parking during construction. This plan will be updated as necessary if any further development of the site requirements come to light. For example, roadway prep/pavement and storm drainage installation may alter the approach to site parking/material staging depending on the size, location, and timing. The intent of the approach is to schedule these activities (when possible) during summer months while school is not in session. At this time, the high school parking lot has been discussed as an opportunity to park workers and allow site development to take place. This plan is predicated on material availability and construction sequencing.

Land Between Rink and Concord Avenue Abatement for White Field House has started, with demolition slated to begin when abatement is completed. Upon completion of demolition, SKA has been directed to use onsite soil to fill void left by foundation demolition. Upon completion of this work and award to a sitework contractor, this area will be prepared for temporary contractor parking as outlined in the logistics plan included with this submission.

Soil Erosion and Sediment Control Plan

The objectives of the Soil Erosion and Sediment Control Plan are to control erosion at its source during construction activities, by applying temporary control structures, minimizing the runoff from areas of disturbance, and de-concentrating and distributing stormwater runoff through natural vegetation before discharging to critical zones such as streams or wetlands. Soil erosion control does not begin with the perimeter sediment trap. It begins at the source of the sediment the disturbed land areas and extends down to the control structure.

The erosion control devices will remain in place until all exposed areas have been stabilized with vegetation or impervious surfaces. The objective of the Soil Erosion & Sediment Control Plan that will be enacted on site is to control the vulnerability of the soil to the erosion process or the capability of moving water to detach soil particles during the construction phase(s).

- A. The Contractor shall submit a copy of the SWPPP and accompanying erosion and sediment control plan prior to commencing work.
- B. The Contractor shall implement all soil erosion and sediment control devices prior to excavation within the site.
- C. The following erosion control principles shall apply to the land grading and construction phases:
 - Stripping of vegetation, grading, or other soil disturbance shall be done in a manner which will minimize soil erosion.
 - Whenever feasible, natural vegetation shall be retained and protected.
 - The extent of area which is exposed and free of vegetation and duration of its exposure shall be kept within practical limits.
 - Temporary seeding, mulching, or other suitable stabilization measures shall be used to protect exposed critical areas during prolonged construction or other land disturbance.
 - Sediment shall be retained on-site.
 - Erosion control devices shall be installed as early as possible in the construction sequence prior to the start of grubbing and earthwork operations and excavation work.