Urban Design Brief

Larry Robinson Arena (Metcalfe Community Centre) Expansion

(In response to the specific Urban Design Brief Terms of Reference provided by City of Ottawa)

Project Description

The design intent for the new LEED certified addition at Larry Robinson Arena takes its design cue from the distinctive form and design that the existing building presents. However, it also provides its own new form “of its time” by using striking colours and materiality to serve as contrast the monolithic colour pattern and texture of the existing buildings concrete block wall exterior.

The cues taken for the design of the new addition come from the projecting concrete block "fin" walls which are very prominent in the three-dimensional form of the existing building. This existing design element provided the ideal way to tie the new addition into the existing building while still allowing the new addition to create a new expression to the northern face of the existing concrete block wall exterior. This architectural design approach also allows for the existing building exterior to stay "as is" with the understanding that the scope of work for this project did not provide budget allowances to address any renovations for the existing building exterior.

By creatively incorporating the “fin wall” motif and then adding new colour and materiality as contrast, the new addition works very well in both complimenting and enhancing the expression of the existing building.

The existing exterior block wall of the arena is pervasive in terms of materiality, colour and texture. With the placement of the one storey addition along the northern wall of the arena, it creates a new architectural expression via layered elements in front of the existing expanse through the use of prefinished metallic silver siding, offset charcoal metal siding featured on an additional plane in front of the silver siding along with the final cladding element of bright metallic composite metal cladding around the new entry area to signify its location.

The final element to the design is the introduction of vibrant colour tinting to the glass of the horizontal daylight glazing which are then intersected by vertical aluminum stripes to provide yet another element of visual interest to the new design.

The raised parapet wall of the new charcoal feature wall near the new entry also provide a functional element by allowing the screening new roof top equipment which will be located there. Finally, the blue and teal tint to the daylighting glazing provides a striking feature colour detail and will provide cheerful daylighting at the clerestory level within the new change rooms which will enhance the overall user experience. The colours of the clerestory glazing take their cue from the teal and blue City of Ottawa colours.

The main planning intent of the project is to relocate existing change rooms that are currently very small and not provided with appropriate shower and washroom areas along with basic barrier free amenities. Further, the existing change rooms are located directly within the existing lobby which is not a recommended placement due to the proximity of players and spectators needing to pass one another throughout the day leading to general congestion and the potential for conflict due to proximity. With this in mind, the city required the design to provide modern, spacious change rooms in the new addition away from the existing lobby and that also to provide barrier free access to and within all amenities

The new addition houses these four main change rooms, plus 2 alternate needs change rooms and a dedicated referees change room. All of these rooms are served by a generous “hockey-sized” corridor running west to east along the northern wall of the existing facility and allows for players to have two access points to the rink that are separate from one another. The new change rooms have also been designed to meet the intent of Hockey Canada’s newly developed change room policy statement. With similar intend the renovation within the existing lobby was developed to provide the same barrier free access for the various amenities located there including the public washrooms and the new community meeting room located at the south end of the lobby.

The new public washrooms are larger than the existing facilities and the design has also provided for the addition of a universal washroom to compliment the main washrooms. The new meeting room has been designed to hold 50 people, and this renovation also provides for a new office that has a supervisory view towards the new north entry. This view will always be available via the provision of new doors that will always be held open on magnetic locks unless released via a fire alarm.

The landscape design focusses on preserving the existing tree canopy and minimizing impact on the critical root zones. Additional trees are to be added to help extend the tree canopy, specifically at the front of the building. The new plantings are drought resistant and do not require irrigation after establishment. Species selections are made tailored to the site conditions and indigenous species are used wherever feasible, with second selection made for horticultural varieties of indigenous species, and non-native only in a limited palette.

Landscape design focusses on the building entrances (existing and the proposed) plus foundation plantings. Enhanced precast paver entrance courtyards with seating and plantings direct visitors to the entrance and allow for user interactions.

Project Statistics

Gross Floor Area [two floors]:		**3.864 m^2 [41,591 ft^2]**
Floor Area breakdown per use:	**Rink**	**2,015 m^2 [21,689 ft^2]**
	Change rooms	**731 m^2 [7,868 ft^2]**
	Ground Floor Community Centre	**559 m^2 [6,017 ft^2]**
	Second Floor Community Centre	**559 m^2 [6,017 ft^2]**
Vehicle and bicycle parking:	**107 spaces, 5 handicap, 1 loading, 4 bicycle stalls**	
Building Height:	**8.15 m [26.7 ft]**	

Lot coverage:	**15.2% [lot area 2.15 ha]**

Artistic rendering looking southeast towards the new addition

Image above is a general artistic impression only subject to change

Artistic rendering at proposed widening of sidewalk area for sitting & staging area for proposed statue honouring Larry Robinson

Image above is a general artistic impression only subject to change

Artistic rendering of proposed location for future Art in Public Spaces installment – Concept 1

Image above is a general artistic impression only subject to change. Mural shown above is also for general interest only and was produced to show proposed location for installation only. Original photo credit – Metcalfe Agricultural Society

Artistic rendering of proposed location for future Art in Public Spaces installment – Concept 2 (reduced scale/size of art piece)

Image above is a general artistic impression only subject to change. 3D Mural shown above is also for general interest only and was produced to show proposed location for installation only. Original photo credit – Metcalfe Agricultural Society

Design Directives

In response to design directives given by the city of Ottawa and associated stakeholders, the new addition has been located along the northern side of the existing building facing the north side parking lot. This location is the most logical location in terms of efficiency of planning and related to the largest unobstructed area of property on the site. The overall design was intended to compliment the existing building exterior design motifs and materiality. As per the image above the original expression of form and materials can be seen expressed in the new addition.

In discussion with both the city and the landscape architect, it has further been proposed to provide a widening of the sidewalk near the new entry, to develop a convenient sitting area for a bench for patrons to enjoy and to provide a pleasing surround for a proposed future statue honouring the namesake of the building; Larry Robinson. The soft landscaping areas as proposed by the landscape architect will be appropriately selected hardy shrubs and similar plantings to add a layer of interest in front of the building and to soften the look of existing expanse of hardscape materials. It must be noted that the plantings in the renderings shown above do not represent the specific landscape design and are only added to suggest the effect and general aesthetic effect of the plantings. There is also a new tree planting suggested in new landscaped area by the curving and expanded sidewalk. This new tree is proposed to provide some shade and also to provide a colourful screening of the large monotone existing block wall behind it.

At the direction of the city the interior of the new addition and renovation has been developed to utilize long lasting durable materials and details suitable for the rigours of a municipal arena. Of particular importance to the city was the use of high-quality skate resistant rubber flooring with extra thick wear layer. This flooring selection will be utilized throughout the new addition and even in the public areas that are being renovated in and around the existing lobby.

As a main design directive provided by the city of Ottawa and associated stakeholders, the new addition will provide for barrier free access to all required spaces and amenities to meet stated City of Ottawa requirements as documented in the City of Ottawa Barrier Free Design Guidelines and other regulatory requirements including the Ontario Building Code.

Supporting architectural description of project regarding urban design:

Architectural Demolition

- The existing facility structure will remain intact. (Refer to the previously prepared structural design brief for further information regarding considerations to allow the new addition to be incorporated with the existing building, if required).

- Demolition and removals of the existing facility will be concentrated in the following areas;
    - Complete demolition of the existing change rooms and washrooms located in the existing main lobby on the ground floor to allow for the various renovations identified in the RFP. Certain existing interior block walls are anticipated to be affected by the requirements of the newly renovated layouts noted above.
    - Portions of the existing bleacher seating area to accommodate additional barrier free wheelchair viewing areas.
    - Portions of the existing bleacher seating handrails and guardrails to provide better access to seating areas and comply with updated regulatory requirements for barrier free access.
    - Modifications to the existing barrier free access ramp railing on its western most side to incorporate tempered/ safety glass infill panels along its entire length to its termination point at the dasher boards.
    - Modifications to the existing bleacher dasher board system to accommodate a new players gate off the ice surface at the east end of the rink:

- Modification to existing northern exterior wall to accommodate new entry doors directly into the existing lobby at the western end of the building. Another new opening will be provided in this wall further to the east to allow for the creation of a required fire rated vestibule from the proposed exit corridor into the existing service areas under the cast-in-place concrete bleachers. The existing opening that contains the existing double door going into the service areas will be filled in to suit. Any modifications to the existing access doors to the various storage areas under the bleachers must be compliant to OBC requirements.

Exterior Enclosure

- **Walls above grade**: Exterior walls as follows;
  - Paint finished (interior side) 190mm concrete block
  - Membrane air barrier
  - 125mm semi rigid insulation
  - 25mm air space

  Exterior veneer under review to suit design concept. Current consideration being give to a combination of the following materials:

  - Profiled exterior grade factory pre-finished corrugated metal siding including feature raised “fin” wall elements at the east and west ends of the building echoing the most prominent design element of the existing building. Metal siding will be enhanced by feature vertical pre-finished metal “stripes” to provide visual contrast and interest as seen against the horizontal lines of the field siding element.

- Daylighting clerestory glazing elements will be placed within the metal siding along the north exterior wall of the addition providing natural light into the change rooms. The daylighting glazing is also required to be bird friendly to alleviate unintended bird strikes.

- Feature composite metal panel system highlighting the new entry vestibule and connecting corridor into the existing lobby

- The raised parapet of the feature raised wall at the western end is intended to provide some amount of screening for the roof top equipment that will be located there (subject to the requirements for placement by the mechanical engineers). The design will also address access to any mechanical equipment that may be located in proximity to the raised parapet features.

- **Windows and Entrances**

  - **Curtain Wall (CW)**: As indicated on the plans and building elevations, the CW framing systems will be utilized on the new addition were required and are proposed as follows:

  - This system will be an engineered, thermally broken, 50 or 64mm wide aluminum curtain wall system c/w pre-finished matching aluminum snap caps to suit.

  - All framing will have standard anodized finishes.

  - Infill of the curtain wall will be a combination of the following:

- Insulated Thermal Units: 1" thick double glazed thermal units, with low E coating and gas filled space between the glazing panes. Glazing thermal units will provide performance as per regulatory requirements including but not limited to OBC and LEED, complying with ASHRAE Standard 90.1-LEED Prerequisite Minimum Energy Performance and LEED Credit Optimize Energy Performance.
- Glass will be tempered inner and outer (up to 3000mm above grade).
- All vision glass will to be tinted.
- Spandrel units if required by the design, will be insulated bent metal back pans and faced with a single layer of heat strengthened glass with opacifier coating to the inner surface.
- Aluminum Entrance Doors will be thermally broken aluminum doors with insulating glass units as described above.
- Aluminum sills will be extruded aluminum, minimum 3mm (1/8") thick, factory finished in colour and finish to match aluminum framing.

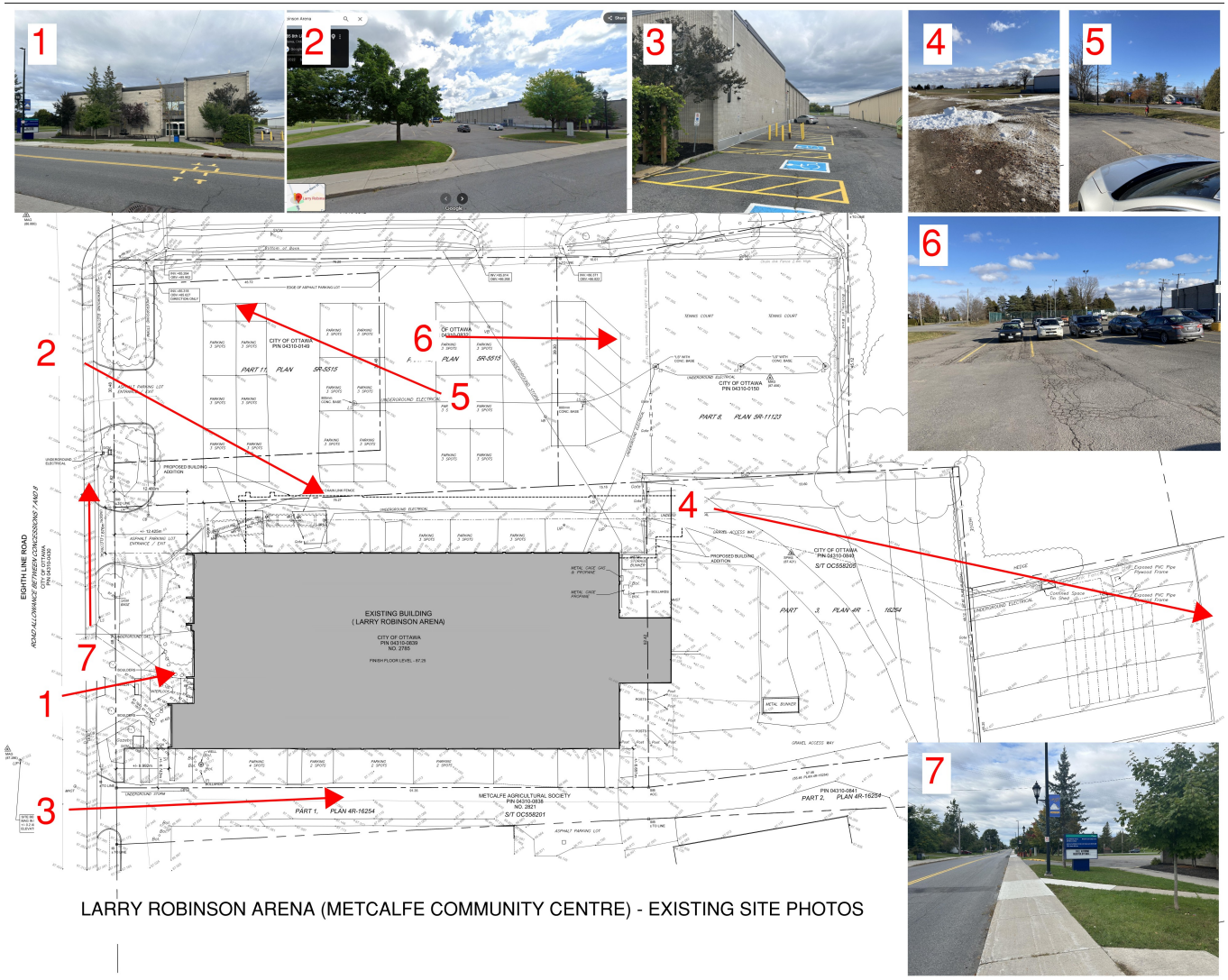
- **Punch Windows -** Any new windows will be come are intended to come with thermally broken curtainwall perimeter frames and with double glazed insulating glass units at 25mm in overall thickness and developed with performance standards that meet required regulatory performance characteristics. As an optional price consideration special translucent, high insulation value, "Solara" glazing units along the new northern exterior walls may be completed in conjunction with the Energy Modeler if deemed to contribute to the overall energy performance of the addition, and if the project budget will allow (to be confirmed at a later date). These high-performance insulated glazing types still provide diffused natural light into change rooms but also provide a significantly higher R-value than a full vision glazing unit.

- **Roof Covering – New Addition** – typically comprised of the following assembly and also required to be provided with a required fire resistance rating as determined by the Ontario Building Code (design listed below subject to change):
  - 2 ply SBS modified bituminous roofing system on:
  - 152mm polyisocyanurate rigid board insulation (two layers of 76mm) c/w tapered insulation and/or sloped roof steel structure to create slope to drain and drainage wells at roof drains.
  - 8mil poly roof vapour barrier on
  - 1/2" roof sheathing on
  - Roof structure

- **Parapets:** Currently assumed to be constructed of wood framing, filled with batt type insulation, covered with exterior grade sheathing to receive fully adhered mod bit membrane flashings. Parapet cap flashing to be prefinished metal flashings, colours to vary around the perimeter of the building to match/compliment the adjacent exterior cladding material.

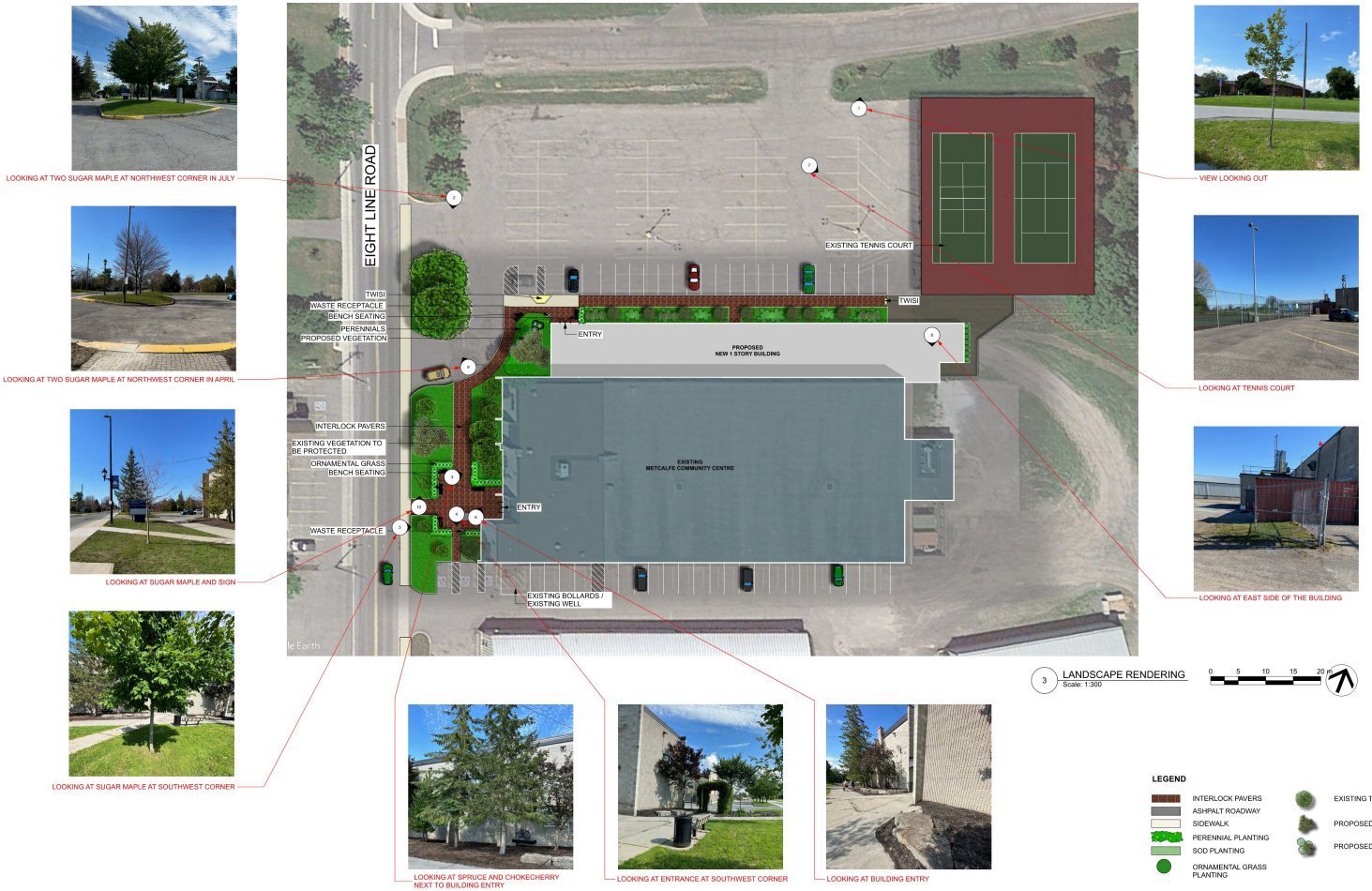
- **Projections** –Architectural Feature Canopy element on new north access would be constructed as per the following:
  - Poured concrete foundation.
  - structural support system to suit, clad with feature composite metal panel system.
  - Fascia canopy fascia and soffit will be constructed of metal composite cladding material on light gauge framing secured to the canopy structural support system. Canopy soffit intended to have recessed feature lighting to provide safe lighting levels for entrants into the building.
  - Parapets will be constructed of wood framing, clad in exterior grade sheathing, capped with prefinished metal flashings.
  - Roofing as described above in the Roofing System section.

Site, Context & Analysis – Existing Site Condition Photos



LARRY ROBINSON ARENA (METCALFE COMMUNITY CENTRE) - EXISTING SITE PHOTOS

Site, Context & Analysis – Existing Site Landscape Photos & proposed landscape desgin concept overlay



LARRY ROBINSON ARENA - SCHEMATIC LANDSCAPE CONCEPT

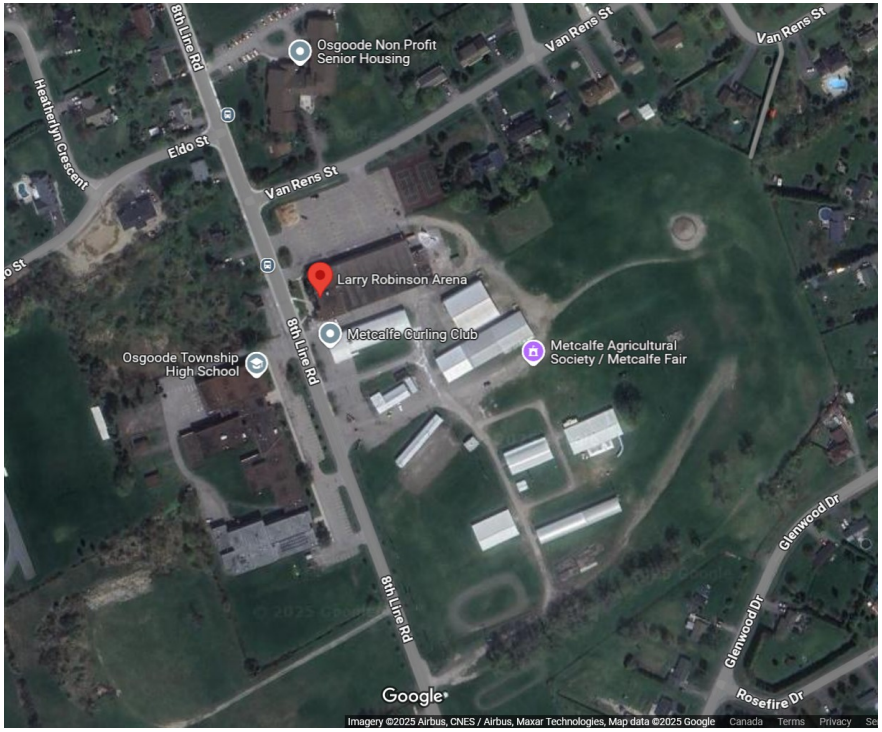
Ruhland & Associates Ltd
N45 ARCHITECTURE INC.
Ottawa APRIL 2024

Site, Context & Analysis – Perspective image to site

Built and natural heritage assets on site and adjacent area

- Located at 2785 8th Line Rd, in Metcalfe, Ontario, the Larry Robinson Arena (Metcalfe Community Centre) is a significant venue for the annual Metcalfe Fair which takes place in October and is hosted by the Metcalfe Agricultural Society. The fair has been held annually since 1856 and is an important regional agricultural fair

Larry Robinson Arena & Fair Grounds (image from Google)



Entrance Column to Fair Grounds

Key uses, destinations, and spatial elements in the surrounding area

- Larry Robinson Arena serves as a key amenity for the village of Metcalfe and surrounding areas and is used as a winter ice sports facility, but also as a key venue for the destination event of the Metcalfe Fair. The arena also has a 2nd level community hall that can accommodate 200 people and is available for rental. The arena is named in honour of Larry Robinson who was raised in nearby Marvelville and was an NHL All Star defenceman for the Montreal Canadiens.

- The facility is located adjacent to the Metcalfe Curling Club on the south side of the rink property and is bounded on the northeast corner by publicly available tennis courts. Further to the east and south lie the Metcalfe Fair Grounds which are also available for public use with various parklike settings, grandstand, pavilions, halls, and rings some of which are set up as special event facilities during the fall fair. Directly to the west of the arena lies the Osgoode Township High School and students are provided with multiple access points throughout the site and directly to the building.

- For the surrounding facilities as well as residents of the village, the arena serves as a central hub not only to the fall fair where it is used to host agricultural displays and livestock related events, but also within the rink for numerous activities on a day to day basis through the use of the rink surface itself along with daily use of the canteen by students and patrons as well as the community hall as a rental facility.

Massing of the proposed development in the existing context

New Addition: Massing view looking southeast from 8th Line Road (new addition in foreground and existing arena shown beyond in simple light grey tone)

The Larry Robinson Arena (Metcalfe Community Centre) Addition Urban Design Brief is signed by Robert Matthews N45 Architecture Inc., Partner in Charge

ROBERT MATTHEWS B.Arch., OAA, FRAIC Partner, N45 Architecture Inc.