



City of North Bay Community Centre Market Sounding Report

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ACKNOWLEDGEMENTS

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1.0 Introduction

1.1 Proposed Project and Background

The North Bay Community Centre project (Project) is a Greenfield new arena project that will be located adjacent to, and integrated into, the existing Omischl Sports Field Complex opened in 2011, at 1099 Lakeshore Drive in North Bay, Ontario. The new arena is expected to include two (2) ice pads, a community room, food services area, as well as a heated lobby area with views of the ice pads. The arena is expected to provide convenient and barrier free circulation for arena users and staff. Patrons are expected to have easy access to the service counter, food services area, public washrooms, heated lobby and spectator area via comfortable barrier free paths of travel.

The new facility is expected to have the capacity to accommodate approximately 250 spectators per ice pad and maintain ice in all seasons. The building envelope and mechanical systems are critical and require careful consideration as they must be designed to meet the Canadian Green Building Council (CaGBC) Zero Carbon Building (ZCB) – Design Standard (version 2). Achieving this designation is a minimum requirement for the success of this Project. Consideration is given to tournament use and the hosting of trade show type events, specifically, egress requirements for such events. Access to all equipment and systems in the mechanical, electrical, ice re-surfacer and ice plant areas should allow for easy maintenance and repairs when needed and provide suitable space for safe and uncongested circulation.

Environmental Site Considerations

Fricorp Ecological Services provided an environmental site assessment to assess the potential impacts of the Project as currently designed on Eastern Hog-nosed snake, Blanding's Turtle and SAR bats protected under the Endangered Species Act, 2007 (ESA). The MECP reviewed the Project information and indicated that, should Project activities remain unchanged, authorization is not required under the ESA. As a result of this assessment the City of North Bay (City) will ensure that the Project follows mitigation measures and other best management practices being implemented as part of the Project to ensure that unanticipated impacts to identified Species at Risk (SAR) species and their habitat do not occur. The City will continue to monitor for SAR activity during site development to document changes, if there should be any. Should the footprint of the Project be changed there may be a need to revisit the current assessments, including a need to undertake indigenous consultations.

Architectural and Engineering Firm

The City initiated a Request for Proposal (RFP) process in 2019 to select the architectural and engineering firms to help complete detailed cost analysis of environmental, geotechnical, and other civil infrastructure requirements and prepare the design, tendering for the construction. The RFP was awarded to MacLennan Jaunkalns Miller Architects Ltd. and North Bay's Mitchell Jensen Architects later that year.

The City is open to reviewing the form of engagement for the design team associated with this Project whether that is retaining the current Architecture firm or engaging a different team as part of a Progressive-Design-Build (PDB). It is important that this Project is delivered within the schedule identified and maintains the current budget while considering the Functional Program and priority areas.

Project Cost Estimates

The City of North Bay had a third-party Class A estimate completed in November 2022. As a result of the RFT that was issued Council reviewed the Project and has committed to an inclusive budget of Fifty-Two Million (\$52,000,000.00). The budget is the complete cost to deliver the Project including all consultants, construction, and internal costs.

Key Milestone Dates

The City of North Bay has identified the following key milestone dates that will inform the feasibility of the Project:

- a. Construction Drawings: September 2024 (to meet V2 design requirements for the GICB program). If this deadline is not met, the Project will be required to meet the CaGBC V3 Design standard.
- b. Substantial Completion: 2025 (to coincide with the City's 100th celebration)

2.0 Market Sounding

2.1 Approach

Colliers Project Leaders (Colliers) was engaged by the City to conduct a market sounding for the Project. The purpose of the market sounding was to solicit feedback, gather information, knowledge and perspectives from interested parties to assist the City in determining how to proceed with this Project. The market sounding explored potential procurement options as well as factors that may impact schedule and budget adherence.

Colliers and the City scheduled a kick off meeting on Friday October 20, 2023 to discuss Project background and expectations of the market sounding process. The kick off meeting discussion detailed procurement objectives, timelines, key documentation for review and scheduling weekly progress meetings. Subsequent to this meeting, the City provided all relevant procurement and Project documentation for Colliers' review. In addition to the documentation provided by the City, Colliers undertook independent research to obtain current market information and leading practices.

To facilitate the market sounding discussions, a document (see Appendix 1) was prepared by Colliers, reviewed, and approved by the City of North Bay, and circulated to participants in advance of the discussions. This document included a high-level Project summary, Project scope, budget and timeline, potential procurement options, and the participant questions. Feedback provided by participants is based on the information included in the market sounding document (see Appendix 1).

2.2 Procurement Options

Following discussions between Colliers and the City on various procurement methods, two potential procurement options were selected for this Project, Design Bid Build (DBB) and Progressive Design Build (PDB).

Design Bid Build (DBB)

DBB is the traditional method of project delivery where the Owner has separate contracts with a prime design consultant (architect or engineer) and a general contractor. The Owner engages the design consultant to design the facility and produce design documents. The design consultant maintains limited oversight of the construction work. A general contractor is later contracted to construct the facility in accordance with the requirements of the design documents.

DBB was selected as this was the current method used for the Project and offered efficiencies utilizing the current design while exploring value engineering opportunities. The current design team is familiar with the Project and site intricacies and DBB potentially offers the ability to continue with the existing design team and maintain the current Project knowledge.

Progressive Design Build (PDB)

PDB is a form of early contractor involvement that can help reduce risk to all parties involved. It introduces additional steps that enable the Owner and Design-Builder to collaborate and progressively develop a design solution before jumping directly into detailed design and construction. In some cases, a target price may be introduced by the Owner. The progressive delivery approach enables the Owner, the final design consultants, and the contractor the ability to collaborate to refine the Project design, better mitigate known risks and reduce overall Project risks.

PDB was explored as a potential option that would provide greater process collaboration while including mechanisms to drive schedule and budget two key factors for the City. The potential of a re-design was well suited to the PDB method as the Design-Build partner would be engaged early on allowing for greater visibility and discussion to facilitate a successful re-design should the City go that route.

2.3 Participants

Colliers and the City of North Bay developed a list of market sounding participants that were understood to have experience in developing, designing, and building community centre/arena projects. A total of fifteen (15) contractor and architecture/design firms were identified, with the goal of engaging with approximately 7-10 companies. Some participants were selected based on their previous participation in the various procurement stages of the Project while others were selected for their industry expertise and locale.

One (1) participant declined to participate citing conflict of interest, and one (1) participant did not respond despite repeated attempts on Collier's behalf to contact them.

Virtual interviews took place between November 14 - 23, 2023. In total there were thirteen (13) separate interviews. The up to 60-minute interviews were facilitated by Colliers and attended by relevant key representatives from the invited organizations.

List of Participants (in alphabetical order)		
1. Aquicon	6. Ellis Don	11. MacLennan Jaunkalns Miller Architects / Mitchell Jensen
2. Architecture49 Inc.	7. Integrated Structures	12. McDonald Brothers
3. Ball Construction	8. JL Richards & Associates	13. Venasse Building Group
4. Bertrand Wheeler Architecture	9. Lea Architecture	
5. Chandos	10. M. Sullivan & Son	

2.4 Key Findings

2.4.1 GENERAL

The market sounding responses to the Project were positive overall. All participants indicated their interest in pursuing this Project if there is a change in procurement method. Participants did indicate that the current budget and schedule would be difficult to achieve and presented challenges in the successful delivery of the Project.

All participants expressed their interest for more information regarding procurement timelines once the City has developed clear Project priorities (e.g. schedule vs cost vs Net Zero design standard) and subsequent internal City refinement and due diligence regarding Project budget and schedule.

Most participants had relevant experience with the design and building of community centres/arenas. Three (3) out of the thirteen (13) participants were firms that typically deliver projects with a budget of around \$10 Million. One of the participants had large social infrastructure experience with hospitals and long-term care facilities but noted that for an arena project of this nature their involvement is best suited as part of a collaborative team and not as the prime contractor. One of the participants did not have direct comparable experience to community centres/arenas but provided general insights into project delivery methodologies.

OTHER PROJECTS IN THE SAME TIMELINE / MARKET CAPACITY

Participants indicated that at this time they did not foresee any market capacity issues that would impact their ability to deliver the Project, based on the proposed schedule, or within a year of the proposed Project end date. Participants indicated that they had the capacity within their companies to take on the Project, and that there should be sufficient supply in the labour market and with regards to materials. They did caution that the market response may be negatively impacted by the fact that this Project had been unsuccessfully tendered in the past and given the Project's high visibility in the City, and public critique that this Project has garnered to date, as this would be seen as potential risks to be managed. Participants did note that the City's openness to a change in procurement methodology does signal a willingness to proceed with the Project in a way that is more inviting and engaging to the market.

One participant highlighted a slow down in residential development which could open capacity for other builds. Participants did share that the market, labour force, and material availability and cost, has not returned to pre-Covid capacity. Multiple participants indicated that a well organized and experienced team would be more successful in predicting and adjusting to market capacity.

LOCAL EXPERIENCE/TRADE CAPACITY

Local experience was a common theme throughout the market capacity conversations. All participants indicated that there is potential for cost savings through engaging local trades for certain scope however did not provide clarity on which areas. Participants further outlined that the prime contractor, mechanical and electrical trades would need to be well experienced with significant labour force to be able to meet the requirements of an arena project of this nature. Participants highlighted that there is a trade off between cost savings and skill level when utilizing local experience and that an adept prime contractor can efficiently leverage the appropriate local balance for the Project. One participant noted that local trades may be reticent to work with larger firms as there is concern regarding payment timeliness, and the efforts required to develop strong working relationships. It was suggested that partnerships, or the right team mix, would entice local trades to engage.

Some participants expressed the willingness to utilize local trades to support certain aspects of Project delivery, some indicated that they would need to engage with non-local trades for the larger mechanical and electrical scope of work citing the specialized nature of this type of trade for arena construction.

2.4.2 DESIGN AND SPATIAL REQUIREMENTS

Participants indicated that conceptually the common design approach for a twin pad arena is side by side. Participants noted that to effectively find budget and schedule savings there would need to be time to collaboratively review the design to make meaningful suggestions for what may work. There was concern regarding the timeframe for a potential redesign, however, participants indicated that the PDB method could provide some efficiencies in the redesign as the team would be engaged earlier.

All participants, having reviewed the market sounding package, felt that the functional program was in line with the typical two pad arena expectations and that there were not any specific areas that could be removed to achieve significant cost savings. Ten (10) of the thirteen (13) participants did note potentially removing the walking track but indicated that the associated cost savings would not be significant (in the range of approximately \$1M). One participant framed their comments regarding the walking track as a cost versus overall value item. If the community will derive high value from a walking track, then the cost can be justified.

Some suggestions from participants for cost optimization included:

- Side by side layout to shrink footprint and reduce exterior building envelope.
- Reassess deep foundations. It can be costly to make foundations work on soft soil, minimize depth of footings where possible.
- Potentially move location closer to Lakeshore Drive.
- Simplify interior finishes.
- Pre-Engineered structure.

Multiple Participants discussed the use of pre-engineered structures and the associated cost savings. Within the discussions around pre-engineered structures, it was indicated that it is unclear if these structures would meet the Net Zero requirements. It was stated that pieces of the structure may meet Net Zero requirements, but there may be higher costs associated to customize a pre-engineered system. One participant stated that any long span steel structure with concrete foundation will likely not meet the V3 Net Zero requirements. This was further explained by the participant that there is no precedent for pre-engineered systems meeting the Net Zero requirements (see the Canadian Green Building Council (CaGBC) Zero Carbon Building – Design Standard section for further details).

2.4.3 PROCUREMENT

Participants, contractors and architects/designers supported Progressive-Design-Build as an appropriate method of procurement for the construction of this Project (see PDB section below for rationale).

DESIGN-BID-BUILD (DBB)

Participants stated that the DBB method for this Project would not yield optimal results given the budget and schedule constraints. It was stated that based on the previous procurement for this Project that proceeding without a change in process would not be an attractive opportunity. All participants indicated that the risk transfer under a DBB for a project of this size and complexity presented a higher cost premium. One participant explained that unknowns such as environmental and site conditions under a DBB would have to be priced higher to cover for the unknown cost which can inflate the overall bid price. Colliers notes that this work may already be complete by the City and would likely be available to bidders so that this factor could be appropriately costed. Under a PDB the contractor would be engaged earlier and would be part of environmental and soil assessments and can provide pricing in real time.

Three (3) out of the thirteen (13) participants noted that typically their firms do not go after projects of this size and value that are traditional DBB as the level of effort required to respond and the associated risk transfer in the contractual process, including related to supply chain and complexity of the mechanical and electrical systems, does not make it an attractive opportunity.

Several participants indicated that if going DBB then the timeline would extend beyond 2025, and to achieve the expected budget there would need to be considerable compromises in design aesthetics. It was suggested that a new prequalification would ideally need to be completed to proceed with a DBB, as well as undertaking value engineering/re-design to be able to go back out to market.

PROGRESSIVE-DESIGN-BUILD (PDB)

All participants agreed that the most suitable method for delivering this Project of the two options would be PDB, one participant mentioned Construction Management as an option. The most common rationale provided for choosing the PDB method was the collaborative nature of the Agreement and the early involvement of all key stakeholders. Participants could not confirm that the PDB method would yield

project completion in 2025 but it was noted that using PDB would give all parties involved the incentive and visibility to drive the Project to completion.

Participants did note that should the City proceed with a PDB for this Project that all parties need to be aligned with Project objectives and priorities, and how to achieve those within the desired updated budget and schedule. There was concern that if there is not early alignment and agreement that the approval process can get bogged down and any potential schedule efficiencies may be impacted.

It was noted that it is important to properly develop the Request for Proposal (RFP) for a PDB to ensure that the right team is engaged. Participants shared some concern regarding the current design and the process to move to a PDB. It was widely stated that the value of a PDB arrangement is eroded if there is not flexibility given to the team for re-design and amendment. Three (3) out of the thirteen (13) participants did outline the involvement of a PDB scope and design advocate to assist the City in developing the RFP document. Participants indicated that four (4) to six (6) months for re-design would be sufficient. PDB could potentially find efficiencies in the schedule to shorten the duration.

There was mixed commentary regarding continued involvement of the existing design team in a PDB scenario. Some participants noted that it is possible to have the existing design team remain as an advisor to the City. Participants did share a concern that having the existing design team remain as advisor could potentially create an adversarial environment that could impact decision-making and approvals.

2.4.4 FINANCE

All participants indicated that the current budget of \$52,000,000.00 was likely insufficient given the current design and Net Zero energy requirements. While some cost saving efficiencies suggestions were provided (refer to 2.4.2 Design and Spatial Requirements for details), the overall commentary was that even with a redesign, the Net Zero requirements will drive the cost higher and likely above the budget. The full impact to cost and schedule was unknown.

BUDGET

Participants provided a range of square foot cost for arenas however the range was so varied that they do not provide an accurate estimate. The majority of square foot costing was qualified with statements regarding pre-covid pricing and that the costs did not include any incorporation of energy efficiency requirements which would likely drive costs upwards by a minimum of 20%. To provide an order of magnitude, the facility in Milton cost \$52M pre-covid, a 130,000 square foot facility with twin ice pads, aquatics centre, multi purpose activity rooms, active living fitness studio and library, without V2 standard requirements, whereas the City of Guelph South End Community Centre, a 160,000 square foot facility with twin ice pads, aquatic centre, double gymnasium, walking track and multipurpose room cost \$115M post covid with energy requirements that aren't as rigorous as the V2 standard. One (1) participant noted that the Peterborough Arena that is currently being constructed, with an anticipated completion in Fall 2024, has an anticipated budget of \$65M for a 100,000 square foot facility with twin ice pads, walking track, community space, office leased space, library and designed for future expansion. It was noted by the participant that the Peterborough Arena does not have the same site complexities or Net Zero requirements as the North Bay Arena, however, is comparable to the local trade market capacity and capability.

The commentary even went as far as to suggest that there has not been an arena of this size and with these energy requirements procured in the post covid environment. Given the wide range of data provided, Colliers is not able to validate any costing. Two (2) of the thirteen (13) participants did indicate

that using the PDB method can allow for early and more frequent cost estimating and validation that can offer some budget assurance.

2.4.5 CONSTRUCTION

All participants felt that the 2025 timeline for completion was aggressive. Four (4) of the thirteen (13) participants indicated that going the PDB route may allow for schedule efficiencies but even then, meeting 2025 will be tight.

LENGTH OF TIME

Most participants agreed that construction would range from sixteen (16) to twenty (20) months from start to finish. If the Project proceeds as a PDB, the timeline would need to consider the re-design and approvals process which as noted above is estimated at four (4) to six (6) months. Participants noted that the procurement for a PDB partner would need to be completed in early 2024. Two (2) of the participants suggested that the City may wish to amend the target for the Centennial to having a groundbreaking in 2025 as this would likely be more achievable than opening the facility in 2025.

2.4.6 CANADIAN GREEN BUILDING COUNCIL (CAGBC) ZERO CARBON BUILDING – DESIGN STANDARD

There was a knowledge gap with the participants in understanding of the CaGBC design standards. Three (3) of the participants had specific knowledge and could provide insight. The other ten (10) participants provided commentary from a general energy efficiency standpoint. One (1) of the three (3) participants that had knowledge of the standards indicated that the Project was the first of its kind to be designed to the CaGBC design standards and as such no precedents exist. Given the current timelines for the Project it may be the second of its kind to meet these standards by the time it reaches construction. There were no concerns raised with regards to meeting the V2 standard, however, it was mentioned that this is likely not achievable given the procurement and design timelines under either model. Ten (10) participants were unclear as to the level of detail required to meet the September 2024 deadline and what the difference in standards would be, if any.

Three (3) participants indicated an estimated potential twenty percent (20%) cost premium associated with meeting the CaGBC design standard. This cost premium cannot be validated and was expressed given participants limited experience with V2/V3 standards, as such it may be undervalued. Participants noted that there would be a cost premium associated with the CaGBC standard, regardless of whether it is V2 or V3. It was indicated that given the timeline it would be easier to just move to the V3 standard and contemplate those requirements and costs up front to avoid redesign down the road to meet V3 standards as the selection of building materials and designs solutions will need to meet the V3 standards. It is very important to note that the level of experience with the CaGBC standard was low among participants and commentary provided may not be reflective of the actual impacts of the design standard.

2.4.7 OTHER

ATTRACTIVE BUSINESS OPPORTUNITY

All participants agreed that this Project is attractive to them. Most participants stated that they were aware of this Project prior to the market sounding interview request and were interested in learning more of the details as they evolve. Participants commonly indicated that the political nature of the Project and the attention it has garnered to date potentially adds risk to the Project.

SPECIFIC FACTORS THAT WOULD CAUSE COMPANIES NOT TO BID

Participants stated several factors that could/would cause them not to bid on this Project when it came to market. These factors are:

- Procurement model chosen - the majority of participants indicated they would not engage if this went out to the market as a DBB
- Unclear procurement documentation
- Risk transfer allocation
- Evaluation criteria and ensuring consideration for partnerships and local experience

2.4.8 ADDITIONAL COMMENTS

All participants stated the importance of the City setting and aligning on key Project objectives such as budget, schedule and energy standards. While there was strong support for a collaborative procurement model, there was concern that lack of alignment among stakeholders could significantly delay the approval and design process. It was recommended that the City explore permits and potential construction phasing to coordinate early work to support the schedule expectation.

2.5 Conclusion

There was a good level of engagement from participants, and the market sounding interviews provided an opportunity to engage the market in the next steps for this Project. It was clear that budget, schedule and Net Zero design standards are significant competing factors in the completion of the Project. To solicit good market response and move the Project forward the City will need to align on the expectations. If budget is the key driving factor, then there will need to be considerable concessions made with respect to schedule (longer duration), design (simpler), and Net Zero design standards (lower standards may not be possible as government funding would be at risk). Participants were clear that the budget and schedule as currently conceived are aggressive and present significant constraint to both the City and the potential contractor to deliver the Project successfully.

Feedback received from the thirteen (13) participants indicated that they are interested in this Project. Market capacity and strength for this Project is good. At this time, it appears that there are no significant projects in the pipeline that will conflict with participants desire to respond to the procurement. It was clear that participants felt that is important for the City to set clear Project objectives and be aligned prior to engaging the market. The strength of a collaborative procurement model is realized when all stakeholders are aligned on objectives. There can be significant schedule inefficiencies when stakeholders are not aligned, and approvals process are delayed.

Participants stated that PDB is their preferred procurement option. Using the PDB model would promote early team involvement to set expectations and work towards aligned goals. The PDB method increases the probability of meeting the schedule, would necessitate potential design changes (additional time for design could be made up in construction methodologies), allows the City to have a fixed price after design, and creates a collaborative environment that can potentially aide in the community buy in and opinion. The required Net Zero design standards can be developed early in the process and establish expectations up front for any potential re-design. Under the PDB model the City would issue a single RFP for a design-build partner. Part of this RFP would be the inclusion of interviews to ensure the right experience and team is being selected. Given the budget and schedule constraints it is important that an experienced design build partner in arena construction be selected to provide the highest probability of success of the Project. The City should look to issue an RFP for PDB partner in early 2024 with

anticipated award in early spring to potentially meet the V2 design standard timeline. Once a PDB partner is on board discussion regarding early permits and milestone/construction phasing can begin to set schedule expectations. Going forward with the PDB method will be a new process for the City and there will be a need for some additional time and effort to create an RFP for issuance to the market. At a minimum to engage in PDB, the City will have to develop new contract documents (CCDC14), develop financial submission structure to speak to the PDB structure and milestone off ramp as well as creating a robust technical qualification section to ensure the appropriate design build partner with the right arena experience is engaged.

Participants stated that the DBB method for this Project would not yield optimal results given the budget and schedule constraints. In addition, to utilize the DBB model significant changes would be required to the current design to avoid the appearance of bid shopping to the market. To meaningfully re-design and include all applicable design standards the Project would have best been issued in early fall 2023 to potentially meet the 2025 completion target. To facilitate a new DBB process it would be recommended to re-issue a contractor prequalification to address the current market capacity and experience. The timeline for this process can be lengthy as it would be recommended to engage in two separate procurements, prequalification followed by tender. Realistically under the DBB the second procurement process for tender may not be ready for the market until closer to fall 2024.

Appendix 1 MARKET SOUNDING PACKAGE