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March 16, 2018

Town of Riverview
30 Honour House Court
Riverview, NB E1B 3Y9

Attention: Mr. Colin Smith, CAO

VIA EMAIL

Dear Mr. Smith, not budgeted

**Re: Byron Dobson Arena Phase 2 - Facilities Upgrade and Improvement
Package GC2 (TOR 18-40) - Upper Rink Renovations (GC2)
Rink Floor and Dasher Boards Package
Tender Evaluation and Letter of Recommendation
MCW Project No. 11-17-286**

Introduction

The tenders have closed for the work for Upper Rink Renovations (Package GC2) for the Byron Dobson Arena, Riverview, New Brunswick.

The following is a summary of the tenders and our recommendation.

1. Scope of the Work

The scope of work of this tender generally includes:

1. Work of this contract includes general construction services related to the demolition and reconstruction of the Upper Rink floor complete with new dasher boards; and ventilation upgrades to the refrigeration machine room.
2. Demolition to the Upper Rink floor includes:
 - Non-destructive disassembly of the existing dasher board system components to be handed over to owner. General contractor to coordinate with project manager and Town of Riverview to determine exact list of components to be handed over to owner. Dispose of all remaining dasher board materials not requested by owner.



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ENVIRONMENTAL FOOTPRINT

- All saw cutting, concrete removals and excavation of the existing rink floor and subgrade materials as identified on drawings and prepare for new floor.
- Saw cutting and concrete removals of the Zamboni room floor and prepare concrete for new concrete floor; including removal of floor drain and replace with new.
- Removal and dispose of all demolition materials and removed subgrade materials in accordance with environmental and municipal guidelines.
- Contractor to assume excavation down to 4'-0" below rink floor and re-build with new material.
- Removal, temporary installation and re-instatement of underground column tie-rods.

3. New rink floor in the Upper Rink area:

- Preparation of the excavated area for the new rink floor assembly. All excavation, backfill and compaction by general contractor.
- Provide all materials, equipment, tools and labour to build-up new rink floor assembly as indicated on drawings.
- Retain the services of a reputable Refrigeration Contractor with rink floor experience for the installation of the new rink floor, which includes:
 - Drainage, disconnection and removal of the existing brine headers in the trench;
 - Supply and installation of frost protection piping (trenching and backfill by General Contractor);
 - New defrost piping headers in trench and pressure test;
 - New brine piping, pipe supports and piping insulation in existing header trench and connect to exiting piping (steel support frame by General Contractor);
 - Supply & installation of new buried headers and piping;
 - New rink floor brine piping and support chairs (wire mesh, rebar and anchors by General Contractor);
 - New slab temperature sensor and associated wiring;
 - Pressure testing and assistance with concrete pour.
 - Cleaning of new piping and chemical treatment of new brine charge. Include temporary installations as required to permit cleaning of new piping without draining complete system.
 - Fill new refrigeration piping with new brine charge and purge air out of system.
 - Note: Start-up of the Refrigeration Plant and Slab Pull Down shall be executed by current Refrigeration Service Contractor (Black and McDonald) using cash allowance in Tender Form.
- Painting of permanent rink floor layout on new floor slab as outlined on drawings.
- Patching of existing concrete slab not being removed to smooth surface ready to accept new rubber floor protective mats.

- General contractor to provide for removal and disposal of existing rubber protective matting and installation of new protective rubber floor matting around Upper Rink and in players/penalty/timekeepers boxes by professional flooring company.

General contractor to remove 8' of plywood sheeting inside finish from the outside wall behind players/penalty/timekeepers boxes and replace with new plywood sheeting (2x 4' rows) painted to match.

4. New dasher boards for Upper Rink:

- General contractor to retain services of a reputable dasher board manufacturer with installation and service capabilities; references and supplemental information required as outlined in specifications.
- Supply and install new dasher board system as outlined in the tender documents; including but not limited to: new dasher boards, players/penalty/timekeepers boxes, protective glass/netting, all gates, hardware, spare parts and accessories (benches, tables, etc...).
- New dasher board system to be engineered and stamped by professional structural engineer in accordance with loading performance specifications.
- General contractor to provide framing or elevated floors and walking platforms in players/penalty/timekeepers boxes as per system specifications
- Board manufacturer installation foreman to coordinate and assist General contractor with location of anchors and concrete pour.
- General contractor to fabricate access ramps to access rink floor.

5. Refrigeration machine room ventilation:

- Remove existing refrigeration room exhaust fan and remove associated ductwork to extent shown on drawings.
- Patch outside wall to match existing wall construction and finishes.
- Supply and install wall-mounted exhaust fan and associated ductwork in new location.
- Electrical modifications and reconnect controls to existing.

6. Modifications electrical includes:

- Removal of surface mounted electrical around perimeter of existing Upper Rink dasher boards.
- Removal of cast in place or underground electrical associated with removals to the extent made possible from concrete and sub-grade removals.
- Temporary removal and support of electrical distribution to remain near timekeepers box to permit wall sheeting replacement and painting.

- Disconnect and remove electrical wiring and conduit associated with existing refrigeration room exhaust fan and extent circuit to new roof mounted exhaust fan location; reconnect new fan and test rotation.

The budget for the work is:

Measure	Cost
Upper Rink Floor Slab and Headers	\$1,200,000
Total	\$1,200,000

In addition to the original scope of work of replacing the Upper Rink refrigerated floor slab and dasher boards, in consultation with the Town of Riverview, the following items were added to the scope of work as detailed above:

- Refrigeration machine room exhaust fan relocation to address code minimum clearances to building air intakes.
- Replacement of Lower Rink header brackets due to corrosion and poor condition.

2. Tender Process

MCW Maricor prepared the technical drawings and specifications. MCW provided the contract requirements and general conditions ('front-end') specifications based on the Town of Riverview front end tender documents. The information was advertise and made available publically. There was a non-mandatory bidders meeting held at the site. Four Addenda were issued.

The Tenders were received at the Town Hall of Town of Riverview on March 15, 2018 and opened in public immediately after the close.

The Bidders were as follows:

1. Avondale Construction Ltd.
2. Bay Construction + Management Inc.
3. Edgeline Construction Limited
4. MFA Construction

3. Tender Results

The summary of Tender responses from the Bidders and the Lump Sum bids were submitted as follows:

- | | |
|---------------------------------------|-----------------------------|
| 1. Avondale Construction Ltd. | \$1,049,000.00 + HST |
| 2. Bay Construction + Management Inc. | \$1,095,000.00 + HST |
| 3. Edgeline Construction Limited | \$1,263,420.00 + HST |
| 4. MFA Construction | (rejected) |

The detailed Tender results are in the attached Tender Evaluation spreadsheet.

4. Tender Analysis

Price – There were three qualified bids that complied with the tender requirements.

Rejected Bid – There was one bid that was rejected due to numerous issues with the bid documents:

- Two tender forms submitted with conflicting pricing;
- Company resolution form not properly signed;

Schedule – The required construction completion date is August 31, 2018. All bidders matched the required schedule.

Cash Allowance – All three compliant bids carried the cash allowance for the pre-tendered Refrigeration start-up services.

Approved Sub-contractors and Suppliers – All three considered tenderers carried listed and approved sub-contractor and supplier for the Refrigeration and Dasher Boards supply and installation services. All three compliant bids carried the same Refrigeration and Dasher Boards suppliers:

- Refrigeration: Cimco Refrigeration
- Dasher Boards: Athletica Sports Systems

Unit Price for Additional Excavation (if required) – The overall low bidder on the lump sum work also had the low unit price for additional excavation. Unit prices for additional excavation, fill and compaction were as follows:

- | | |
|---------------------------------------|-----------------------------------|
| 1. Avondale Construction Ltd. | \$50.00 + HST / cubic yard |
| 2. Bay Construction + Management Inc. | \$60.00 + HST / cubic yard |
| 3. Edgeline Construction Limited | \$97.00 + HST / cubic yard |

Contractor Experience and Supervision – The experience profile and job supervisor experience for the low bidder is adequate for this project.

5. Tender Analysis

Budget Comparison

The total budget for the work is \$1,200,000 plus HST.

The recommended scope of work and comparison to construction cost budget with the low bidder is as follows:

Base Award Recommendation

Recommended Award Pricing	Budget	Cost	Variance (\$)	Variance (%)
1. Upper Rink - Demolition of exiting slab, rink floor, brine headers and mains		\$668,000.00		
2. Upper Rink – Removal and installation of new dasher boards & glass		\$212,000.00		
3. Refrigeration machine room exhaust fan relocation		\$13,000.00		
4. Lower Rink – Replacement of brine header and mains supports in trench		\$8,080.00		
4. Overhead, profit, management, supervision and safety		\$144,000.00		
4. Cash Allowance for pre-tendered refrigeration start-up services		\$3,920.00		
5. Recommended Award Pricing	\$1,200,000.00	\$1,049,000.00	(\$151,000.00)	(12.6%)
			Under budget	

The price for the recommended work is (\$151,000) or (12.6%) under the budget. The current scope of this Tender Approval is covered by the current budget; taking into account that \$21,080 of additional work is included

6. Tender Recommendation

The low responsive Bidder and the recommendation for award is as follows:

Avondale Construction Ltd. \$1,049,000.00 + HST

We recommend the work be awarded to **Avondale Construction Ltd.**

Please review this evaluation and recommendation at your earliest convenience. Please contact me if you have any questions or comments.

Sincerely,

MCW Maricor



Frederic Desjardins; P.Eng., LEED AP
Mechanical Engineer - Associate

Attachments (1):

1. Tender Analysis from MCW Maricor dated March 16, 2018 (1 pages)
2. Original tender documents (returned)

Copy: MCW Maricor – Carman Travis
MCW Maricor – Ryan Trenholm
MCW Maricor – Dave Knickle
MCW Maricor – Munjung Choi-Osmond
Town of Riverview – Gerry Cole