PROJECT TITLE

Burlington, Ontario
Canada Centre for Inland Waters – CCIW
867 Lakeshore Road, Burlington, ON L7R-4A6

Library Renovation
Project Number R.061475.001

Addendum No. 2, dated 2014-01-29

This addendum shall form part of the documents referred to in the "Bid and Acceptance Form - Lump Sum.

This addendum is eight pages in length and consists of two parts: Contract Amendments (Drawings/ Specification) and Bidder questions.

Part I – Contract Amendments (Drawings and Specifications)

SPECIFICATIONS

1 Sections 10 56 26 – MOBILE SHELVING STORAGE

.1 Article 1.2 REFERENCES, paragraph 1.2.5, revise to read "Mobile Shelving – Mobile shelving most comply with HRSDC Fire Protection Design Requirements.

.2 Article 1.6 DESIGN CRITERIA, paragraph 1.6.3, revise third sentence to read "Provide sheet metal gables between each bay of shelves"

.3 Article 1.6 DESIGN CRITERIA, add paragraph 1.6.3.3 "Bay of shelves, width and depth as per drawing layout – Shelves are 305mm (12 inches) deep single faced or 610mm (24 inches) and 915mm (36 inches) wide"

.4 Article 2.1 MATERIALS, delete paragraph 2.1.11 entirely.

.5 Article 2.2 FABRICATION, paragraph 2.2.5.1, revise to read "All end panels (Including those covering drive shaft and chains) are full height and width of the uprights. All end panels shall be steel 0.9mm thick"

.6 Article 2.2 FRABICATION, delete paragraphs 2.2.5.2 and 2.2.5.3 entirely.

.7 Article 2.2 FABRICATION, paragraph 2.2.6.3, revise to read "A 'Safety Space' is provided between all carriages by the use of 50mm carriage bumpers; this provides an overall 100mm gap between carriages as per HRSDC fire protection design requirements"

Part II – Bidders questions

BIDDERS QUESTIONS

Question 1:
Regarding the HDMS for the new Library at EC Burlington, we have noticed that the engineering spec on page 641 of the Architectural Specifications names only one HDMS vendor. We would like to have this changed to specific weight loads tolerated. All vendors should have similar weight loads and equal opportunity.

Answer 1:
HDMS vendor information noted in the structural report was written for reference and data provided to structural consultant during the feasibility study conducted for this project. All other HDMS vendors who meet the specifications for the proposed HDMS system are welcome to bid.

Question 2:
With regards to the specifications for the HDMS (pg 237-244) the specification is proprietary only allowing one manufacturer to meet spec. We would like the spec to be changed to a performance spec allowing for other vendors to bid. It should be noted that given the lengths of the carriages in the design the spec provided is really for carriages much smaller in size. Given the size and weight of the system we strongly recommend using 1,000 lbs per foot carriages. Regarding the rail we also strongly recommend using grouted rail in this application for better precision and long lasting quality. If not specified, these items should at least be allowed…Our factory engineers would not approve a system this size otherwise.
Please see the attached performance specification.

Answer 2:
HDMS vendors will be allowed to use:

1. Grouted rail system – Precisely leveled, anchored and supported with 8000 psi grout. Grout most be non-corrosive, non-metallic and non-shrink. Grout most be worked under rail, any voids completely filled and trimmed up sides flush with the rail.
2. Carriages with 1,000 lbs per foot capacity – 125mm (5 inches) wheels per specs.

Question 3:
A couple other notes are that the systems will need fire walls to meet code. This can be accomplished by adding full steel back panels on the fixed units on the end of each module giving some separation between modules. You also may want to add safety sweeps considering this will be accessed by multiple users, some potentially unfamiliar with safe practices.

Answer 3:
Based on the review from HRSDC, fire walls are not required. The fire protection approach for the proposed HDMS system layout utilizes an ordinary hazard group 2 classification for sprinklers in the library space.
Mechanical Safety Sweeps – Provide costing for this safety feature as a separate price item. A decision to include this safety feature will be made once all tenders are received.

Question 4:
This system is to be installed in a Federal Government building for a Federal Government department, as such the shelving design is subject to the HRSDC Mobile Shelving Fire Protection Design Requirements. To our knowledge, this requirement is not mentioned in any of the specification documents. We recommend that this requirement be mentioned.

Answer 4:
The requirement was referenced in specification section 10 56 26. A revision has also been made to that particular paragraphs and is part of this addendum.

Question 5:
The specifications in some sections recommend system configurations that are in conflict with the HRSDC Mobile Shelving Fire Protection Design Requirements. We recommend that the HRSDC Fire requirements take precedence to the tender system specifications.

Answer 5:
Refer to answer 3 and 4 – Included in this addendum.

Question 6:
Specifically, the HRSDC Mobile Shelving Fire Protection Design Requirements requires systems in buildings with sprinklers to not exceed a floor space of 70 M2 without the use of fire stops. As such we have attached a drawing that shows our recommendation for the placement of back panels and system closure panels to create compartments for the systems through the use of steel panels. Our recommendation would be to have these suggestions confirmed with HRSDC to ensure that the appropriate fire design is applied to these system layouts.

Answer 6:
Refer to first paragraph, answer 3 – Included in this addendum

Question 7:
The specification for the system is for a modular carriage, rail and floor system. These systems have carriages that exceed the capabilities of these types of systems. We recommend allowing the use of grouted rail systems with 5" carriages. The drawings show the profile of a grouted rail system.

Answer 7:
Refer to answer 2 – Included in this addendum

Question 8:
The specifications make mention in separate spots of requiring the use of metal end panels and laminate end panels. End panels are done differently depending upon the system manufacturer and are purely aesthetic for the most part. We recommend that laminate or metal end panels are acceptable. It should be noted that the use of metal end panels supports the HRSDC fire requirements by assisting to create the system "fire compartments" described earlier.

Answer 8:
All end panels will be steel – Clarification included in this addendum

Question 9:
The specifications and drawings have systems with carriages that are 33 feet in length. The only safety mechanism present in the specifications is a requirement for handle locks on each handle that must be able to be engaged from the user outside of the system. There is no "in aisle" safety mechanism that a user can engage from within the aisle in the event that another user starts to move the system. With carriages this long, it does not allow a user a reasonable assurance of being able to exit the system if another user starts to move the system. Each carriage of this length (33 feet) will weigh in excess of 10 000 pounds when fully loaded. We recommend that the carriages be equipped with mechanical safety sweeps. These can be engaged by the user from within the aisle and because they are mechanical in nature, do not require power. If these are not required for the system, we recommend that they be requested as an optional price to be sent to the General Contractors so that they can be considered by the client. In many cases, systems of this size are powered systems which always feature safety systems that can be triggered from within the aisle.

Answer 9:
Refer to answer 3 – Included in this addendum

Question 10:
The drawings appear to indicate that 4 dividers are required per shelf, please confirm.

Answer 10:
Provide ONLY 3 dividers per shelf

Question 11:
The drawings seem to indicate the use of back to back shelving (shelves are independently adjustable on each side of a carriage). Please confirm back to back shelves or full depth shelves. A full depth shelf is the same shelf on both sides of the carriage with a divider permanently mounted in the middle of the shelf, thus the usability and adjustability of these shelves is considerably less than full depth shelves. Back to Back shelves are a small additional cost versus full depth shelves; however the amount of adjustment, usability and future flexibility in our opinion far outweighs the small cost differential. In library settings we almost always find shelves that are adjustable independently in double depth configurations, thus we recommend requiring back to back shelves. We do request clarification on this to ensure that the desired solution is quoted and supplied.

Answer 11:
Provide full depth shelves

Question 12:
Although not mentioned in the specifications, it should be noted that in most cases the HDMS supplier supplies the system floor with unfinished plywood. Typically the general contractor will supply the floor finish as part of their contract.

Answer 12:
Floor finish on HDMS raised floor to be supplied by General Contractor.

Question 13:
The shelving specified for this project is specified as four post. This is not consistent with the type and style of shelving that is currently in use at this library space or in other Environment Canada library spaces that we have had experience with. The current shelving is cantilever (back to back for double sided configurations) with 9” deep shelves. This tender calls for 12”/24” depth four post shelving. We would recommend using 11” cantilever shelving (configured back to back). This would provide the same carriage footprint that is shown in the system layouts and provide a shelving system with what is consistent in both this library and most libraries in the industry.

Answer 13:
4 post shelving system have been selected for this project.

Question 14:
The specification calls for modular carriages and rails. This is not advisable for this design for the systems. Modular carriages are designed for smaller systems that may need to be reconfigured or moved. This is not the desired design for these systems, thus this is not the correct system design for these systems. In the space, there is currently a grouted rail system installed in a back room which is consistent with the type of grouted rail system that we are reccomending. For this design, systems of this size and weight need to be grouted rail systems. In addition, modular carriages are not consistent with the specifications and system requirements outlined in the structural report contained within the tender.

Answer 14:
HDMS vendors who prefer the use of grouted rails will be allowed to do so. Refer to answer 2 – Included this addendum.

Question 15:
Montel is unable to provide costing for the design for this project based on the layout in the tender in combination with the requirement that the systems are modular for that layout. We are unaware of any additional manufacturer s with the exception of Tab that can supply this product with the specified carriage lengths of 30 and 33 feet and it is questionable at 21 feet in length. Furthermore, with Montel's extensive experience in this field, we highly recommend against the use of Modular systems in this application. We believe the inclusion of modular high density systems to be sole sourcing this type of high density storage system based on the current design of the system layout. The system's layout and design for this project is easily accomplished using grouted rail and associated carraiges.

Answer 15:
HDMS vendors who prefer the use of grouted rails will be allowed to do so. Refer to answer 2 – Included this addendum.

Question 16:
With other typical High Density storage applications that we have been involved with through PWGSC and other departments at the federal government, these systems almost always are based on the use of 4-post shelving for those systems. In all of those cases, the application for those systems has been to store files or bankers boxes in an office setting. This has been in these cases the appropriate use of 4 post shelving.

Answer 16:
4 post shelving system have been selected for this project.

Question 17:
Section 10 56 26: point 1.2, references:
Mobile shelving - Fire protection design requirements, which requires to keep a distance of 100mm between cabinets when closed while point 2.2, talks about a distance of 19mm. Could you please clarify?

Answer 17:
100mm is required – See also clarification provided on the specification revisions included in this addendum.

Question 18:
Section 10 56 26: point 1.7.
They are asking for a bay (a single shelve), as a sample, do you need it to be sent with the offer?

Answer 18:
This will only be required for the awarded bidder

Question 19:
Section 10 56 26: point 1.6.
They mention that the carriage should be designed to support a min load of 1491 Kg/m, while in point 2.2. They say that design load is 317 Kg/m, could you please clarify?

Answer 19:
Minimum design load for grouted rails shall be 1491 kg/m (1000 lbs per linear foot)
Minimum design load for modular system shall be 317 kg/ft (700 lbs per linear foot)

Question 20:
Section 10 56 26: point 2.1.
In Materials, they mention about Anchoring and Grouting Mortar, while in point 2.2, they state that the track will require no attachment in any manner to the building floor, completely anchorless, which makes us think that they need a modular design with no anchoring or grout. Could you clarify that please?

Answer 20:
HDMS vendors have the option to supply either a modular system or grouted rail system.

Question 21:
Section 10 56 26: point 2.2.2
1. Modular floor, they require plywood subfloor. In case they need a modular system, our modular system is equipped with aluminum subfloor instead of wood, will this be acceptable for them
2. Our Ramp is Aluminum also, is this acceptable we well
3. Please confirm that all the system should be powder coated with textured finish.

Answer 21:
1. Aluminum subfloor instead of wood – would be acceptable, as long as it offers a smooth surface for installation of finish resilient sheet flooring.
2. Aluminum ramp is acceptable – As long as it offers a smooth surface for installation of finish resilient sheet flooring and a stainless steel threshold as per drawings.
3. Finishes as per specifications

Question 22:
Section 10 56 26: point 2.2.3
They ask for a welded carriage, usually our carriages are bolted, is this acceptable for them?

Answer 22:
Bolted is acceptable

Question 23:
Section 10 56 26: point 2.2.5
1. They ask for end panels, as high pressure laminate covered, while we supply metal powder coated end panels. Is this acceptable

Answer 23:
Steel end panels are required – See also clarification provided on the specification revisions included in this addendum.

Question 24:
1. Please check if the abrasion test ASTM D4060 (which we already have) could replace the required ASTM D968

Answer 24:
Use abrasion test ASTM D968 per specifications

END OF ADDENDUM No.2