



4 décembre 2014/ December 4, 2014

Document : **CMH-2276**

## **ADDENDUM NO. 1**

---

### **Building Operations Services for the Canadian Museum of History and the Canadian war Museum**

**I.- Important Note: Please be advised that the closing date has changed to December 11, 2014 at 2:00P.M. instead of December 9, 2014.**

**Please use the revised Presentation form hereby attached.**

#### **II.- Questions and Answers**

- 1. In reference to Section 7.1-Schedule of Works, is the Contractor required to staff a building operator on site at the CMH, 24-7 ? And if so, should there not be a cost category listed in the Unit Rates Form for this labour category ?*

*The rate for the staff in question is shown as Stationary engineers. See attached a revised Form 3; Unit rate Form. CMH must be manned with an operator 24/7 and CWM must be manned with an operator from 07:00 to 19:00 hrs. The CMH must be supervised with a Class 3A Operating Engineer and the CWM must be supervised with a Class 4 Operating Engineer.*

- 2. In reference to section 9-Reporting, is the Contractor to provide separate reporting for the CMH and CWM ?*

*Yes, there should be separate reports for each museum.*

- 3. In reference to section 14-Invoices and Payment, is the Contractor to invoice services separately for CMH and CWM in accordance with each respective provincial billing requirements ?*

*Yes, please invoice separately for each museum.*

- 4. In reference to article 15.7.1.6, are any costs relating to CMMS licenses or upgrades to be included under the Yearly Fixed Fee or are these to be considered under the Flow-Through budget ?*

*CMMS costs are to be included in the yearly Fixed Fee.*

5. Will the CMH be providing additional information on current staffing levels and current salaries considering Section 77 (Old Bill 7) of the Ontario Employment Standards Act that pertains to successor rights for the current staff that would become the responsibility of the new Contractor and the information that the current employer has to release under this Act ?

*In the event of a change in company providing the services covered under this RFP, any payments resulting from Section 77 due to a change in service providers will be covered by the museum.*

6. In reference to Appendix B-Key Performance Indicators, can the Client provide any details of previous holdbacks with the incumbent ?

*No*

7. In reference to Appendix C - CMW-FMO and Base Building M&E-Office Equipment, is the listed hardware to be transferred to the Contractor ?

*The hardware will be transferred to the care of the contractor but will be owned by the museum.*

8. Can the Client confirm if an office space will be provided to Contractor, including phone line and internet connection ?

*Office space will be provided to the contractor as well as telephone lines at a cost of 16\$ per month per phone line to the contractor, handset included. These costs are part of the fixed fee and may change over time. Internet connections are the responsibility of the contractor. Installation and connection are to be coordinated with the Museum.*

9. Can the Client confirm which software is currently used for utility management ?

*Utilities are recorded manually from meters on a regular interval.*

10. Can the Client confirm which building automation systems (BAS) are in place at the CMH and CWM ?

*The CMH uses Regulvar and the CWM uses ALC. Regulvar uses a Delta Web viewer for the operator interface and ALC uses WebCTRL for the operator interface.*

11. Are any parking spaces provided to the Contractor's personnel ?

*Parking access is currently provided at a rate of 75\$ per parking space per month. This rate may be subject to increases over time.*

12. Can the Client provide a 3 year history of utilities (electricity and natural gas) spend for the CMH and CWM ?

*Yes, costs for Gas are detailed below for each museum and paid directly by the museum, domestic water costs are very little and not shown.*

**2013-2014**

**CWM**

**Hydro \$977,675.02**

**Gas \$137,005.39**

**CMH**

**Hydro \$1,561,019.54**

**Gas \$159,308.16**

**2012-2013**

**CWM**

**Hydro ~\$800,000**

**Gas ~\$120,000**

**CMH**

**Hydro \$1,569,600.24**

**Gas \$251,302.27**

**2011-2012**

**CWM**

**Hydro \$716,746.01**

**Gas \$125,780.76**

**CMH**

**Hydro \$1,628,334.07**

**Gas \$364,677.22**

**13. Can the Client provide the classification for each power plant according to the Loi sur les machines fixes (or TSSA classification for the CWM) ?**

**See the attached picture for the TSSA Certification of the CWM. The certification is not available for the plant at CMH.**

**14. In reference to article 41, in the Annex 2-General Terms and Conditions, would the Client consider a higher maximum deductible premium amount instead of the current \$2,500 ? In order to reduce the cost of the insurance coverage premium, we suggests an amount of \$25,000 instead of \$2,500.**

**The museum will accept a higher maximum deductible of 5,000\$ for which the successful proponent will be responsible for.**

**15. In the Appendix A , there is mention of a Building System Technician however this trade does not appear in the Bid Form 3-Units Rates Form, could you please provide clarifications on this issue ?**

**See answer to question 1.**

**16. Are the salaries of lead technicians currently employed by the incumbent included in the flow through budget ?**

**Yes.**

**17. Could we obtain a 24 month history of service requests generated from the CMMS (i.e number of requests per month, type, etc.)**

**See Work Order spreadsheets for each museum attached.**

**18. Could the Client provide us with the number of permanent building occupants for each Building ?**

**The number of permanent building occupants is approximately 350 for CHM and 50 for CWM. These occupancies are subject to fluctuation depending on seasonal visitor volume and special events.**

19. Considering the incumbent does not have to consider a transition cost, could the Client consider isolating the transition costs from the management fee ?

**No, the fixed fee will not be isolated from the management fee.**

20. Is providing and replacing the necessary tools and equipment to perform services included in the flow through budget?

**Yes, these items are included in the flow through budget.**

21. Could you indicate the breakdown of the flow through budget: labour, materials, sub-contracting?

**Our annual reports from the previous year give us a distribution of 72.7% of the budget for labour, 13.4% for materials and 13.7% for sub-contracting.**

22. Are the costs of CMMS updates covered by the museums?

**The costs of updates are covered by the Contractor.**

23. For new contractors, there is a transition period from March 1 to 31, as indicated in Article 5.6. To put all bidders on equal footing, we think that costs related to this period should not be included in the overhead (Article 15.7.1.7).

**Transition expenses must be included in the overhead.**

24. The RFP documents state that overhead must include social benefits to employees, statutory holiday pay, PPE, etc.... If the regulations or legislation were to change (e.g. increase in employment insurance or retirement contributions), could the overhead be indexed accordingly?

**The overhead must include a provision of your choice for this type of risk.**

25. Are wages for employees working on statutory holidays invoiced at regular hours or double time?

**They follow provincial employment legislation.**

26. Are the employees of the current contractor governed by a collective agreement?

**With exception to management and administrative support, all employees at the Canadian War Museum are unionized. Employees at the Canadian Museum of History are not unionized.**

27. For parking, are the access cards name based (one per employee) or can they be used by multiple users?

**Parking cards are assigned to an employee and cannot be used by multiple users.**

28. Is this an ISO certified site or is there a requirement the proponent to be certified or its subcontractors?

**There are no ISO requirements at this point for either the site or their subcontractors.**

29. What and who has the liability for the fourth party contractors that are contracted by the museum and that the proponent supervises after hours or in emergency situation or supervises directly?

**The liability for contractors under museum owned contracts lies with the museum.**

30. Please provide all Bill 7 information from the Canadian War Museum Site

**Please refer to the answer of question 5.**

31. How many 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> class engineers are currently needed by the current proponent?

**Please refer to the rfp requirements and the answer to question 1 for onsite staffing requirements. It is up the bidder to determine the number of staff required to ensure the scope of work is delivered.**

32. What is the current inventory for consumables and spare parts and who pays for replacement? What is the current worth? How does it get transitioned?

**The museum pays for replacement of spare parts under the flow-through budget while respecting item 5.5 in the RFP document. The successful proponent will be given access to the spare parts inventory and documentation during the transition period. The management of the inventory of spare parts will get transitioned on April 1<sup>st</sup> 2015.**

33. Item 2.5: deals with environmental controls. When will the parameters be released and what would the procedures be for incursions?

**The successful proponent will have access to the parameters and procedures during the transition period.**

34. Item 2.8 states that the Contractor will remove and replace any equipment that is found to be unsafe or worn. At who's cost?

**After agreement between the contractor and the museum, the cost will be part of the flow-through budget while respecting item 5.5 in the RFP document.**

**35.** Under 3.2.1.3.4., when will the third party vendor list be released?

**Parking equipment contractor is LC logic.**

**36.** Under 3.2.1.3.6., who carries the indemnity for the “loaned” equipment?

**The museum.**

**37.** Under 3.2.1.3.8., when will we be provided the hazardous waste facts and figures?

**Details will be made available during the transition period. The cost of disposal is typically less than 5,000\$ per year.**

**38.** Under 3.2.2.4., when will re-lamping volumes be released.

**Last year we spent 2841 hours on relamping for both buildings, 2261 hours at CMH and 580 hours at the CWM.**

**39.** Considering the bidder is to structure an appropriate operation and maintenance team to meet the requirements of the CMH-CWM, could the Client please provide us with the current scope of work currently undertaken by the controls provider ? We would like to have a better understanding of the current implication of this vendor with day-to-day operations so that we can adjust our organizational chart accordingly.

**The controls provider is responsible for parts and labours service of all control equipments including sensors, actuators, controllers and computer systems. Initial troubleshooting and electro-mechanical elements of systems such as valves and dampers are the responsibility of the successful proponent. Further details will be available during the transition period.**

**40.** Will the documents for the technical proposal that are attached to our proposal be counted as part of the maximum 100 pages in this section?

**Yes.**

**41.** Can our complete health and safety plan as required in the RFP be placed in an appendix to our proposal?

**No, it must be part of the technical proposal. The safety plan should be specific to cultural institutions such as the CMH and the CWM where the primary focus is to preserve artifacts and provide them for public access and display.**

**42.** Can our quality assurance program as required in the RFP be placed in an appendix to our proposal?

**The Museum requires it to be part of your technical proposal.**

**43.** Do we need to install external connections for internet access, or will we share the museums' connections? If we share the museums' connections, how much will the monthly bill be?

**The internet connections must be your own, and you will need to plan for costs for this purpose.**

**44.** Do we need to install external connections for telephones, or will we share the museums' connections? If we share the museums' telephone systems, do you have phones available, and what are the monthly use, rental costs?

**The telephone system provided by the museum costs 16 dollars per month per telephone. These prices are subject to change at any time.**

**45.** Do we need to pay rent to the museums for our management staff to use the facilities? If yes, what is the monthly cost?

**No, there are no rental fees for the management staff's offices, but management activities in the offices must be directly related to duties under this contract only.**

**46.** Form 1 – the Proposal Form lists only the CMH; as we understood it, the CWM is included. Please confirm.

**Yes, the CWM is included.**

**47.** Does the furniture (tables, chairs, bookshelves, lockers, etc.) used by the current contractor belong to the museums? If yes, is there a rental cost? If yes, what is the monthly cost please?

**They belong to the museum and there are no rental fees.**

**48.** Can we have the proposal forms in Word or Excel format please?

**Yes, they will be provided.**

**49.** Can we have the number of technical and management employees currently employed at the museums for the year 2014–2015, including their occupation or position, who are included in the fixed fee of the current contractor?

**The current contract does not have a fixed fee for these items.**

**50.** Page 39, 15.7.1.4 Management Fees: We have understood that these fees are part of the yearly fixed fee?

**Yes, this item is part of the yearly fixed price.**

**51.** Item 15.7.1.7 on page 40 needs to be revised to account for the situation of the current contractor who is under contract until March 31, 2015. What are your instructions on this subject?

**No, this item does not need to be revised, either for the current contractor or any other contractor.**

**52.** Proposal lists a requirement for licensed operators as follows:  
CMH requires Operating Engineer Class 3A 24/7  
CWM requires Operating Engineer Class 4A 12 hours a day 7 days a week.

**This times shown above refer to supervision (ie plant chief) and not necessarily the license of the operator.**

- a. What is a Class 3A and 4A? There are 3rd and 4th Class Engineers and Class A and Class B Refrigeration Operators are listed in both the Technical Standards and Safety Authority ( TSSA) and La Régie du bâtiment du Québec (RBQ) acts but there is no listing of a 3A or a 4A.

**The class 3A and 4A should be treated as 3rd and 4th Class Operating Engineers for Ontario.**

- b. What is the plant registration as defined by TSSA and RBQ? Can we have a copy of both registration certificates which specify licensing levels required by the operating engineer and the attendance requirements for the facility? If you are unable to provide a certificate, please specify attendance requirements for each facility?

**Please refer to question 13 for plant classification. Attendance requirements for Operating Engineers is specified in the RFP.**

- c. Do plants at CMH and CWM have guarded status? Can the operators leave the plant area and perform work throughout the facilities?

**The plants have guarded status. Plant operators can leave the plant area for minor tasks.**

**53.** Why is there a need for hourly pricing for 1st and 2nd Class Operating Engineers?

**They are requested based on possible future needs. The unit rates as shown in the addendum have been updated to reflect some changes.**

**54.** Please confirm that costs referred to in 15.7.1.6 are not referencing an on-site office?

**The museum requires an on-site office but does require that all tasks are performed there.**

**55..** Will the payment of the Yearly fixed fee begin on March 1st, 2015 (beginning of the Transition Period) or on the April 1st, 2015 Contract Commencement date.

**No payments will be made until after April 1st 2015 and are subject to Part II: Article 5 of the RFP.**

**56.** Please provide a summary of demand service requests and preventative maintenance from the last year in excel format.

**See answer to question 17. The attachment will also be provided in excel format.**

**57.** Please confirm the following relating to Financial Proposal:

i) Flow through budget only includes direct salaries/base hourly rates paid to employees who are providing hands on work.

**See diagram provided during the site visit for clarification below.**

ii) The HR costs of these hands on employees is captured in the management, profit and overhead.

**Yes**

iii) The HR costs include the following: Canadian Pension Plan (CPP), Employment Insurance (EI), Provincial Health Tax (EHT), and Provincial Workers Compensation Boards.

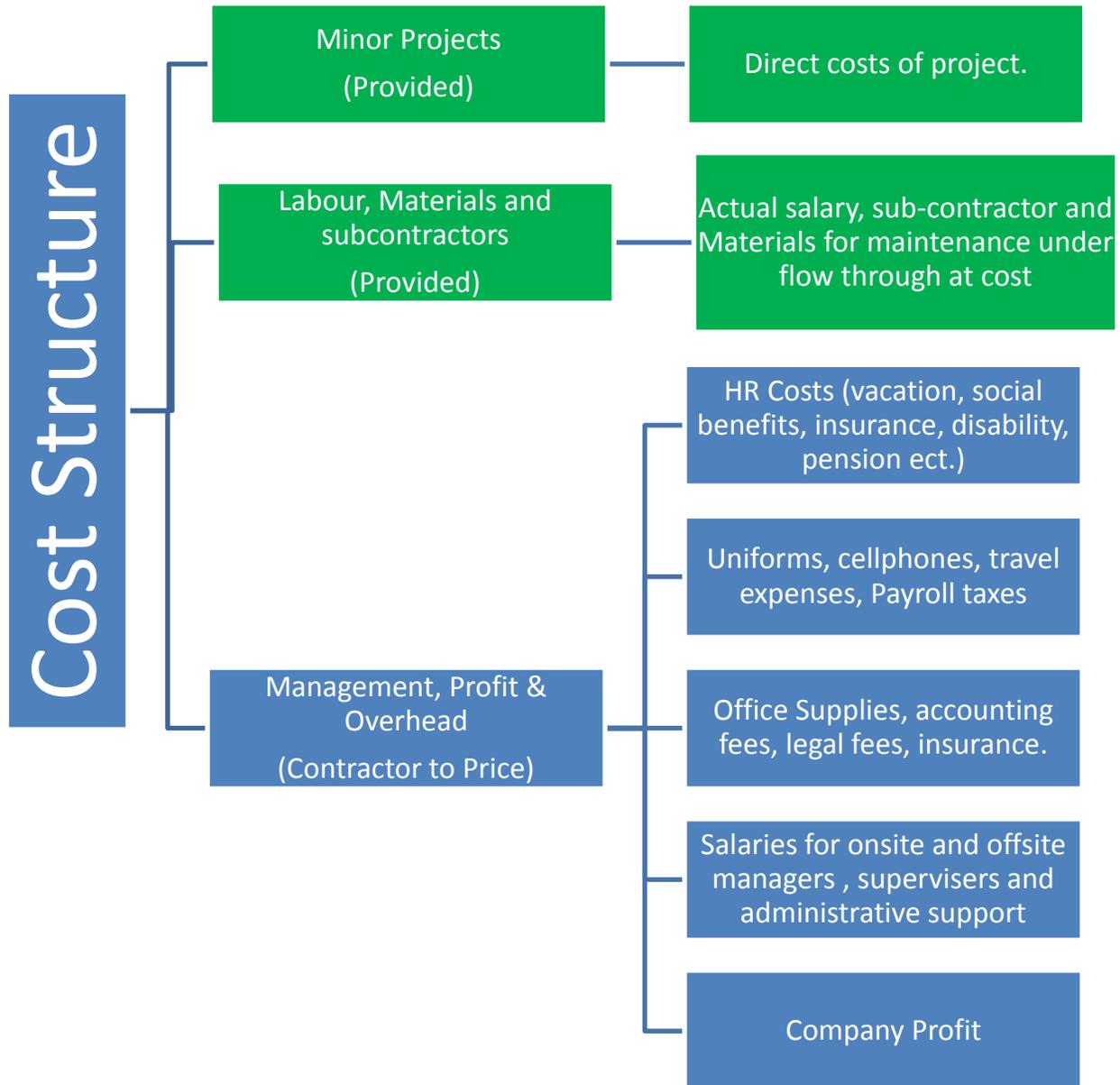
**Yes**

iv) In addition, being carried in the management, profit and overhead are vacation and statutory holiday pay and deductions by the Contractor for employees such as pension, health/dental benefit premiums, LTD premiums, etc.

**Yes**

*Example: BO1 is paid a base hourly rate of \$25. This amount is the only part of employee compensation carried in the flow through budget. All other staffing and HR costs defined above forms part of management, profit and overhead: vacation, benefits, and pension, etc.*

**Yes**



58. Can you provide a cost breakdown by category including direct labour cost, materials, and subcontractors for the flow through budget?

No. See attached work order numbers and hours breakdown.

59. What is your current CMMS System at the CMH and the CWM? Is it integrated with JD Edwards? Who bears the cost of monthly CMMS licensing, support, and maintenance releases? If a CMMS is integrated with JDE, what JDE functionality/modules are used? Could we have an example of current monthly and yearly reports?

**JD Edwards is the CMMS System. The cost of ownership and operation is part of the successful proponents fixed fee. The successful proponent, if choosing to continue with a JD Edwards platform, should provide the necessary modules to ensure the reporting and billing requirements of the RFP are satisfied.**

60. Could you provide a copy of the current organizational structure for both the CWM and CMH and how the service provider would interrelate to each department complete with staffing model?

**Current organizational layout of contractor staff is not available as the scope of work from the existing contract to the new model has changed. Museum staff organizational structure relevant to operations will be provided during the transition period. Interaction with security, conservation, special events groups and other administrative staff will be required.**

61. Could you provide a list of current positions held by the incumbent service provider?

**No, please refer to the answer to questions 60.**

62. Do you have the History of Number of Service Calls by month or day or other info you can give us?

**See answer to question 17.**

63. Appendix A talks about a Building System Technician, but this position is not among those in the Hourly Rates table.

**See answer to question 1.**

64. List of Bidders, will it be published?

**The list was read in front of everyone during site visit, it will not be published because of privacy issues.**

65. Service calls, how are they being received, screened or escalated; how do we receive service calls.

**Emergency calls will most often be given by phone call from security, regular service calls are delivered via email.**

66. Evaluation grid – there is a difference between versions, French version asks for Resumes of all personnel, English version just for resumes of managers and supervisors.

**Resumes are only required for managers and supervisors.**

67. Is there a preference about the language for the submission?

**No, submissions can be on either official language.**

68. Controls and Chillers are under separate contracts; there is a holdback and penalties, but we do not have the full governance on the work of controls and those other contractors, how does this work?

**These contracts are managed and tracked by the successful proponent. If deliverables on these contracts are not met the successful proponent is to advise the Museum for action. Holdback and penalties only apply to the successful proponent if they fail to provide proper contract supervision within their sphere of governance.**

**69.** About subcontractors, what need to be under a sub?

**The bidders are to suggest an organizational strategy that meets the scope of the RFP. Services can be subcontracted based on the abilities of in house staff.**

**70.** Which class of engineer are required for each building? Any requirements for a chief engineer? any licensing required?

**See answer to question 1.**

**71.** Can we have copies of the operation certificates of both plants? As well as the classification.

**See answer to question 13.**

**72.** Since this is a flow through contract; how many staff must be onsite?

**The museum will not dictate the onsite staffing levels unless explicitly stated in the RFP. Staff levels should be based on successful delivery of the scope of work and will be evaluated accordingly in the technical submission.**

**73.** Can we have the breakdown of the flow through budget?

**Funds should be allocated based on the scope of work in the RFP. The answer to question 17 should provide additional insight.**

**74.** Regarding Small Projects, can they be performed by the on staff people?

**Minor projects can be completed by in-house staff, the flow-through model for the direct cost of labour, materials and subcontractors applies.**

**75.** Transition, the incumbent has no transition and mobilization cost but this cost is to be included in the fixed fee, we ask this to be excluded.

**See answer to question 19.**

**76.** Who own the lifts?

**The lifts are owned by the museum. Lift rentals may be required for certain tasks and these costs are charged to the flow through.**

**77.** Work access and working hours?

**Anything causing an impact on visitors must be performed outside of public opening hours. This includes special events outside normal operating hours.**

**78.** Rules, are we working under Federal or Provincial rules?  
(We must comply with whichever rules/codes/bylaws are applicable, cascade down from municipal/provincial/federal)

**The contractor operates under provincial legislation. The facilities themselves are subject to federal rules (ie, National Building Code of Canada)**

**79.** Do we have to maintain an RBQ number? Which kind of RBQ permit? Which kind of security clearance?

**Proper licensing is always required. Security clearance is tied to individuals, not companies. The security clearance is provided by the museum and clearance is at the discretion of security personnel. The clearance is similar to Reliability status in the federal government.**

**80.** Is a BCR going to be shared for the transition plan? And are annual reports issued by incumbent contractor up to date and to be shared with the winning bidder?

**The BCR and annual reports by the current contractor will be made available during the transition period.**

**81.** Is painting and touch-ups part of our mandate?

**Yes.**

**82.** Is parking available for employees?

**See answer to question 11.**

**83.** Fixed fee, the price to fill in does not include the flow through?

**No, only your fixed fee, do not add the other columns.**

**84.** Is a sound technician/audiovisual personnel required?

**Qualified technicians are required to perform daily preventative and corrective maintenance.**

**85.** Who pays for CME (JD Edwards) system license? Is it yours?

**See answer to question 59. The museum owns the data in the system only.**

**PAGE DE PRESENTATION REVISE  
REVISED COMPETITION ID PAGE**

**Musée canadien  
de l'histoire**

100, rue Laurier  
Gatineau (Québec)  
K1A 0M8

**Canadian Museum of  
History**

100 Laurier Street  
Gatineau, Quebec  
K1A 0M8

---

Nom de la compagnie/Company Name

Toutes les soumissions doivent porter la date et l'heure à laquelle elles ont été livrées et doivent être acheminées à la boîte à soumissions située au **quai d'expédition/réception de l'édifice de l'administration du Musée canadien de l'histoire (porte N-4 accessible par le Parc Jacques-Cartier)**, 100, rue Laurier, Gatineau (Québec), Canada.

All bids are to be delivered and stamped with the date and time of remittance at the bid box located at the **Shipping/Receiving of the Administration Building at the Canadian Museum of History (door N-4 accessed from Jacques-Cartier Park)**, located at 100 Laurier Street, Gatineau, Quebec, Canada.

**PROJECT NO. CMH-2276: Building Operations Services for the Canadian Museum of History and the Canadian war Museum**

**PROJET NO. CMH-2276: Services d'opération des bâtiments pour le Musée canadien de l'histoire et la Musée canadien de la guerre**

**DATE ET HEURE DE FERMETURE : le 11 décembre, 2014 à 14:00  
CLOSING DATE & TIME: December 11, 2014 at 2:00 PM**

**Paulo Muleiro**

Section des contrats/ Contracts Section

Services financiers et administratifs/ Financial & Administrative Services

**PAGE D'IDENTIFICATION - IDENTIFICATION PAGE**

**S.V.P. joindre à votre enveloppe/paquet –  
Please affix to your envelope/pack**

## Revised Form 3 – Unit Rates Form

To be completed as per section 15.7.2.1 of the Annex 1

Rates (\$ per hour) for CMH (Quebec)

Trade	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
<b>Stationary engineer 4<sup>th</sup> class</b>					
Regular time					
overtime					
stat holiday					
<b>Stationary engineer 3rd class</b>					
Regular time					
overtime					
stat holiday					
<b>Stationary engineer 2<sup>nd</sup> class</b>					
Regular time					
overtime					
stat holiday					
<b>Stationary engineer 1<sup>st</sup> class</b>					
Regular time					
overtime					
stat holiday					
<b>Electrician</b>					
Regular time					
overtime					
stat holiday					
<b>Mechanic / Millright</b>					
Regular time					
overtime					
stat holiday					
<b>Handyman</b>					
Regular time					
overtime					
stat holiday					
<b>AV Technician</b>					
Regular time					
overtime					
stat holiday					
<b>Building Systems Technician</b>					
Regular time					
overtime					
stat holiday					
<b>Relamper</b>					
Regular time					
overtime					
stat holiday					

Rates (\$ per hour) for the CWM (Ontario)

Trade	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
<b>Stationnary engineer 4<sup>th</sup> class</b>					
Regular time					
overtime					
stat holiday					
<b>Stationnary engineer 3rd class</b>					
Regular time					
overtime					
stat holiday					
<b>Electrician</b>					
Regular time					
overtime					
stat holiday					
<b>Mechanic / Millright</b>					
Regular time					
overtime					
stat holiday					
<b>Handyman</b>					
Regular time					
overtime					
stat holiday					
<b>AV Technician</b>					
Regular time					
overtime					
stat holiday					
<b>Building Systems Technician</b>					
Regular time					
overtime					
stat holiday					
<b>Relamper</b>					
Regular time					
overtime					
stat holiday					

**Work Order Summary 2013-14**

Canadian Museum Of History		Canadian War Museum			
Work order description	Quantity of WOs	Quantity of hours of Labour	Work order description	Quantity of WOs	Quantity of hours of Labour
Preventive maintenance			Preventive maintenance		
A/V Maintenance	1		A/V Maintenance	18	
Boiler inspection	1		Carpentry	45	
Carpentry	6		Door Hardware	48	
Door Hardware	24		Elevator / Escalator	72	
Exhibit Lighthing / Relamping	13		Exhibit Lighting / Relamping	5	
Exterior lighting / Relamping	10		Fire and Life Safety	104	
Fire and Life Safety	171		General Building Exterior	24	
General Building Exterior	92		General Building Interior	36	
General Building Interior	180		General Electrical	426	
General Electrical	2063		Health and Safety	100	
Health and Safety	45		HVAC	416	
HVAC	2773		Intercom System	228	
Ladder Inspection	11		Millrighting	537	
Millrighting	281		Overhead doors	12	
Plant operations	83		Pest Control	12	
Plumbing	50		Plant operations	65	
Public Address System	1		Plumbing	3	
Security Systems	105		Roads and Parking	4	
Theatrical Systems	20		Security Systems	140	
<b>Total</b>	<b>5930</b>	<b>12398</b>	Theatrical Systems	4	
Corrective maintenance			UPS maintenance		
A/V Maintenance	37		Waste Recycle / Removal	12	
Base-building lighting / Relampin	187		Windows and drapery	1	
Boiler inspection	0		<b>Total</b>	<b>2324</b>	<b>3991</b>
Carpentry	272		Corrective maintenance		
Door Hardware	259		A/V Maintenance	36	
Elevator / Escalator	15		Ballast replacement	133	
Entrance / Exit Gates	15		Base-building lighting / Relampin	76	
Exhibit Lighthing / Relamping	37		batteries	2	
Exterior lighting / Relamping	26		Carpentry	19	
Fire and Life Safety	6		chemical testing	7	
Flooring	54		Exhibit Lighting / Relamping	37	
General building exterior	145		exterior furnishings	7	
General building interior	224		exterior lighting	4	
General Electrical	380		Exterior lighting / Relamping	15	
Health & Safety Meeting	19		flooring	16	
High Voltage maintenance	1		General building exterior	54	
HVAC	102		General maintenance	9	
Lifts	16		Health & Safety	3	
Millrighting	314		Health and Safety	72	
On call	12		HVAC	36	
Operational Support	3		intercom systems	1	
Overhead doors	1		interior furnishings	12	
Painting	84		Landscaping	14	
Pest Control	27		lifts	10	
Plant operations	25		Millrighting	258	
Plumbing	327		On call	28	
Public Address System	8		Operational Support	20	
Roads and Parking	1		other mech equipment	37	
Security systems	59		overhead doors	4	
Signs	33		painting	32	
Theatrical Systems	3		plant operations	153	
training	14		Plumbing	57	
Upholstery repairs	67		Public Address System	2	
Windows and drapery	15		roads and parking	13	
<b>Total</b>	<b>2788</b>	<b>10638</b>	security systems	173	
Tenant Request			signs	11	
Base-building lighting / Relampin	90		snow removal	5	
Carpentry	145		suoolies and material	3	
Door Hardware	124		Theatrical Systems	15	
Elevator / Escalator	11		training	26	
Entrance / Exit Gates	9		Training	5	
			waste	7	

Exhibit Lighthing / Relamping	23		windows and drapery	1	
Exterior lighting / Relamping	2		<b>Total</b>	<b>1413</b>	<b>4712</b>
Fire and Life Safety	6				
Flooring	23		Tenant Request		
General building exterior	24		A/V Maintenance	1	
General building interior	52		Base Lighting/Relamping	25	
General Electrical	86		Carpentry	12	
Health and Safety	7		Door Hardware	50	
HVAC	157		Exhibit Lighting/Relamping	34	
Lifts	1		Fire and Life Safety	1	
Millrighting	125		Flooring	9	
On call	0		General building exterior	12	
Overhead doors	1		General building interior	40	
Painting	5		General Electrical	33	
Pest Control	14		health and safety	12	
Plant operations	80		HVAC	5	
Plumbing	179		Millrighting	26	
Public Address System	3		on call	12	
Roads and Parking	1		Operational Support	1	
Security systems	87		Overhead doors	1	
Signs	20		Painting	13	
Theatrical Systems	1		Pest Control	4	
training	0		Plant operations	52	
Upholstery repairs	0		Plumbing	28	
Windows and drapery	6		Public Address System	1	
<b>Total</b>	<b>1282</b>	<b>2391</b>	Security systems	59	
			snow removal	3	
Added Value work			Special Events Support CWM	0	
A/V Maintenance	2		Theatrical Systems	0	
Base-Building Lighting/Relamping	2		training	1	
Carpentry	4		Windows and drapery	5	
Entrance / Exit Gates	10		<b>Total</b>	<b>440</b>	<b>828</b>
Exhibit Lighting/Relamping	4				
General building exterior	7		Added Value work		
General building interior	4		A / V Maintenance	1	
General Electrical	16		Carpentry	3	
HVAC	3		Door Hardware / Locksmith	1	
Lifts	1		Exhibit Lighting / Relamping	8	
Millrighting	20		Exterior Furnishings	1	
On call	1		Exterior Lighting Xmas	1	
Security systems	32		Flooring	4	
Signs	1		General Building Exterior	2	
Supplies & Materials	1		General Building Interior	8	
Theatrical Systems	2		General Electrical	107	
<b>Total</b>	<b>110</b>	<b>957</b>	Health & Safety	3	
			Intercom Systems	0	
			Interior Furnishings	5	
			Interior Furnishings	3	
			Lifts	0	
			Millrighting	3	
			Operational Support	1	
			Overhead Doors	1	
			Painting	1	
			Plant Operations	10	
			Plumbing	4	
			Security Systems	14	
			Snow Removal	0	
			<b>Total</b>	<b>181</b>	<b>384</b>

**Work Order Summary 2012-13**

Canadian Museum Of History

Work order description	Quantity of WOs	Quantity of hours of Labour
<b>Preventive maintenance</b>		
A/V Maintenance	29	
Boiler inspection		
Carpentry	13	
Door Hardware	40	
Exhibit Relamping & Lighting	22	
Exterior Relamping & Lighting	15	
Fire and Life Safety	205	
Flooring	11	
General Building Exterior	98	
General Building Interior	240	
General Electrical	4171	
Health and Safety	19	
HVAC	6000	
Management	2	
Millrighting	684	
PA System	1	
Plant operations	85	
Plumbing	111	
Security Systems	361	
Theatrical Systems	77	
<b>Total</b>	<b>12184</b>	<b>10798.3</b>

Corrective maintenance

A/V Maintenance	44	
Ballast Replacement	46	
Base-building lighting / Relamping	237	
Boiler inspection		
Carpentry	458	
Chem Testing	3	
Door Hardware	309	
Elec IR Scan	4	
Elevator / Escalator	13	
Entrance / Exit Gates	12	
Exhibit Lighthing / Relamping	49	
Exterior Lighting	2	
Exterior lighting / Relamping	1	
Exterior lighting / Relamping	30	
Fire and Life Safety	6	
Flooring	70	
Flora Maintenance	1	
General building exterior	136	
General building interior	206	
General Electrical	408	
Health and Safety	12	
High Voltage maintenance		
HVAC	108	
Interior Furnishings	1	
Lifts	3	
Millrighting	416	
On call	8	
Operational Support	8	
Overhead doors	1	
Painting	104	
Pest Control	25	
Plant operations	64	
Plumbing	407	
Public Address System	8	
Roads and Parking	1	
SE Operation External	1	
Security systems	39	
Signs	41	
Special Event Support	1	
Special Events Support CMC	5	
Theatrical Systems	13	
training	2	
training	3	
Upholstery repairs	20	
Windows and drapery	17	
<b>Total</b>	<b>3343</b>	<b>12827.6</b>

Tenant Request

Ballast Replacement	2
Base-building lighting / Relamping	82
Carpentry	145
Door Hardware	126
Elevator / Escalator	11
Entrance / Exit Gates	9
Exhibit Lighthing / Relamping	32

Canadian War Museum

Work order description	Quantity of WOs	Quantity of hours of Labour
<b>Preventive maintenance</b>		
A/V Maintenance	18	
Door Hardware / Locksmith	49	
Elevator / Escalator	72	
Exhibit Lighthing / Relamping	5	
General Building Exterior	24	
General Building Interior	38	
General Electrical	422	
Generator Maintenance	48	
Health & Safety	215	
HVAC	411	
Intercom Systems	228	
Millrighting	525	
Overhead Doors	12	
Pest Control	12	
Plant Operations	117	
Plumbing	1	
Road & Parking	3	
Security Systems	142	
Theatrical Systems	3	
UPS Maintenance	22	
Waste Recycle / Removal	12	
Windows & Drapery	1	
<b>Total</b>	<b>2380</b>	<b>3825.8</b>

Corrective maintenance

A/V Maintenance	12
Ballasts replacements	57
Base-building lighting / Relampir	64
Carpentry	22
Chemical Testing	6
Door Hardware / Locksmith	39
Elevator / Escalator	1
Exhibit Lighthing / Relamping	43
Exterior Lighting (Xmas)	1
Exterior lighting / Relamping	13
Flooring	18
General Building Exterior	68
General Building Interior	152
General Electrical	116
Generator Maintenance	10
Health & Safety	59
High Voltage Maintenance	1
HVAC	32
Landscaping	6
Lifts	1
Millrighting	185
On Call	2
Operational Support	108
Overhead Doors	3
Painting	32
Pest Control	3
Plant Operations	83
Plumbing	48
SE Operation Internal CWM	4
Security Systems	180
Signs	15
Special Events Support CWM	18
Theatrical Systems	2
Training	12
<b>Total</b>	<b>1416</b>

Tenant Request

A/V Maintenance	2
Ballasts replacements	15
Base Lighting/Relamping	19
Batteries	1
Carpentry	27
Door Hardware / Locksmith	75
Entrance/Exit Gates	6
Exhibit Lighting/Relamping	15
Exterior Furnishings	3
Fire & Life Safety	1
Flooring	6
General Building Exterior	15
General Building Interior	61
General Electrical	44
Generator Maintenance	1
Health & Safety	9





Technical Standards and Safety Authority

# Ontario Certificate of Registration of a Plant

Issued in accordance with the *Technical Standards and Safety Act*  
Operating Engineers Regulation

Name of Plant User : CANADIAN WAR MUSEUM

Plant Known as : CANADIAN WAR MUSEUM

Plant Location : 1 VIMY PLACE, OTTAWA, ONTARIO - K1R 1C2

Plant Type Classification : LOW TEMPERATURE WATER PLANT

PLANT ENERGY INSTALLATION	NUMBER OF UNITS AND RATING PER PLANT CODE												ATTENDED UNITS ENERGY RATING	UNATTENDED UNITS ENERGY RATING	NUMBER OF UNITS SEALED	Max Safety Valve Setting of H.W. Temp				
	NO	CODE	TOTAL RATING	NO	CODE	TOTAL RATING	NO	CODE	TOTAL RATING	NO	CODE	TOTAL RATING				P	T	P	T	
BOILERS	2	B30	3924	2	B14	1460							3924	1460			P	15	T	221
STEAM PRIME MOVERS																	P-			
COMPRESSORS																	P-			
REFRIGERATION	2	R1	477	1	R3	238								716			P-	230		

L.V. Boilers Accumulator : Gal = \_\_\_\_\_ L.V. Boilers Economizers : No. of - \_\_\_\_\_ Total Gal = \_\_\_\_\_

Burner Output Reduced: Boiler No. - \_\_\_\_\_ Total Rating Reduced From : \_\_\_\_\_ To : \_\_\_\_\_

Tubes Blocked: Boiler No. - \_\_\_\_\_ Number of Tubes Blocked in Each Boiler : \_\_\_\_\_ Total Rating Reduced From : \_\_\_\_\_ To : \_\_\_\_\_

Units Interlocked: \_\_\_\_\_

Maintenance Program Required for: \_\_\_\_\_

Special Conditions: GUARDED

Total Plant Energy Rating = 5622 KW  
 Attended Plant Energy Rating = 3924 KW  
 Chief Operating Engineer/Operator Required: Operating Engineer 4th Class - 8 Hr/Day  
 Shift Operating Engineer/Operator Required: \_\_\_\_\_  
 Assistant Shift Operating Engineer/Operator Acceptable: \_\_\_\_\_

R-9750

REGISTRATION NUMBER

ISSUED AT TORONTO, ONTARIO, THIS 25 DAY OF MAY MONTH 2005 YEAR

AUTHORIZED SIGNATURE: \_\_\_\_\_



ISSUED BY THE CHIEF OFFICER