



Addendum / Addenda

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Project Description / Description de projet Halifax Roofing Replacement/ Remplacement de la toiture à Halifax		
Solicitation No./ No de sollicitation 20-58044	Project No./N ^o de projet HFX01-5848	W.O. No./N ^o d'ordre de travail A1-011344-10
Project Engineer / Ingénieur de projet Barry O'Brien		Date August 25, 2020
<p>Notice: This addendum shall form part of the tender documents and all conditions shall apply and be read in conjunction with the original plans and specifications.</p>		<p>Nota: Cet addenda fait partie intégrale des dossiers d'appel d'offres; toutes les conditions énoncées doivent être lues et appliquées en conjonction avec les plans et les devis originaux.</p>

Please see below items pertaining to the tender package for the planned renovations at the National Research Council Canada at 1411 Oxford St., Halifax. These items shall be considered as a (Change, Addition, Deletion, or Clarification) to the tender documents and shall form part of the tender.

This Addendum shall be attached to the tender documents at the time of submission and shall be signed by the same person who is signing for the proponent's tender

1. General Clarifications - Reference: Additional Tender Specifications

- a. These specifications are to be followed in their entirety when dealing with any lead containing coatings encountered under the roof in Phase 1. The Q-deck in the penthouse mechanical room contains lead paint in this section of the roof.
- b. A copy of the testing for Hazardous Substances will be posted as an attachment.

Part 1 General

1.1 SUMMARY

- .1 Comply with requirements of this Section when performing following Work:
 - .1 Removal or disturbance of lead-containing coatings or materials with non-powered hand tool, other than manual scraping and sanding on steel deck.

1.2 RELATED REQUIREMENTS

- .1 Section 02 82 00.01 Asbestos Abatement - Minimum Precautions.
- .2 Section 02 82 00.02 Asbestos Abatement - Intermediate Precautions.

1.3 REFERENCE STANDARDS

- .1 Province of Nova Scotia
 - .1 Occupational Health and Safety Act - NS Reg 52/2013.
 - .2 Nova Scotia Dangerous Goods Management Regulations N.S. Reg. 57/2016.
 - .3 Municipal Solid Waste Landfill Guidelines.
 - .4 Lead in the Workplace: A Guide to Working with Lead (Code of Practice), September 18, 2015.
- .2 Canadian Environmental Protection Act, 1999 (CEPA 1999)
 - .1 Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (SOR/2005-149).
 - .2 Regulations Amending the Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (SOR/2016-273).
- .3 Environmental Abatement Council of Ontario (EACO)
 - .1 Lead Guideline for Construction, Renovation, Maintenance or Repair, October 2014.
- .4 Transport Canada (TC)
 - .1 Transportation of Dangerous Goods Act, 1992 (TDGA).
- .5 Health Canada
 - .1 Workplace Hazardous Materials Information System (WHMIS), Safety Data Sheets (SDS).
 - .2 Workplace Health and Public Safety Program (WHPSP) - Lead in Paint, Dust & Soil Guideline, version VI, August, 2006.
- .6 Government of Canada
 - .1 Canada Labour Code (R.S.C., 1985, c. L-2).
 - .2 Canada Occupational Health and Safety Regulations (SOR/86-304).
- .7 Canadian Hazardous Products Act
 - .1 Surface Coatings Materials Regulation, - SOR /2005-109 (2010).

1.4 DEFINITIONS

- .1 HEPA vacuum: High Efficiency Particulate Air filtered vacuum equipment with a filter system capable of collecting and retaining fibres greater than 0.3 microns in any direction at 99.97% efficiency.
- .2 Authorized Visitors: Engineers, Consultants or Consultant and/or Owners, and representatives of regulatory agencies.
- .3 Polyethylene: polyethylene sheeting or rip-proof polyethylene sheeting with tape along edges, around penetrating objects over cuts and tears, and elsewhere as required to provide protection and isolation. For protection of underlying surfaces from damage and to prevent lead dust entering in clean area.
- .4 Sprayer: garden reservoir type sprayer or airless spray equipment capable of producing mist or fine spray. Must be appropriate capacity for scope of work.
- .5 Action level: employee exposure, without regard to use of respirators, to airborne concentration of lead of 50 micrograms per cubic metre of air (50 ug/m³) calculated as 8-hour time-weighted average (TWA). Minimum precautions for lead abatement are based on airborne lead concentrations less than 0.05 milligrams per cubic metre of air within Work Area.
- .6 Competent person: individuals capable of identifying existing lead hazards in workplace and taking corrective measures to eliminate them.

1.5 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit proof of Contractor's General and Environmental Liability Insurance.
- .2 Quality Control:
 - .1 Submit proof satisfactory to Owner that workers have had instruction on hazards of lead exposure, respirator use, dress, entry and exit from Work Area, and aspects of work procedures and protective measures.
 - .2 Submit proof that supervisory personnel have attended lead abatement course, of not less than two days duration, approved by Owner. Minimum of one supervisor for every ten workers.
 - .3 Submit Worker's Compensation Board status.

1.6 QUALITY ASSURANCE

- .1 Regulatory Requirements: comply with Federal, Provincial, and local requirements pertaining to lead paint, provided that in case of conflict among those requirements or with these specifications more stringent requirement applies. Comply with regulations in effect at time Work is performed.
- .2 Health and Safety:
 - .1 Safety Requirements: worker and Authorized Visitor protection.
 - .1 Protective equipment and clothing to be worn by workers and visitors in Work Area include:

- .1 NIOSH approved respirator (provided by employer) with assigned protection factor of 10 or greater, acceptable to Authority having jurisdiction, and equipped with P-100 particulate filters. Suitable for lead dust exposure in Work Area. The respirator to be fitted so that there is an effective seal between the respirator and the worker's face, unless the respirator is equipped with a hood or helmet. The respirator to be cleaned, disinfected and inspected after use on each shift, or more often if necessary, when issued for the exclusive use of one worker, or after each use when used by more than one worker. The respirator to have damaged or deteriorated parts replaced prior to being used by a worker; and, when not in use, to be stored in a convenient, clean and sanitary location. The employer to establish written procedures regarding the selection, use and care of respirators, and a copy of the procedures to be provided to and reviewed with each worker who is required to wear a respirator. A worker not to be assigned to an operation requiring the use of a respirator unless he or she is physically able to perform the operation while using the respirator. Provide sufficient filters so workers can install new filters following disposal of used filters and before re-entering contaminated areas.
 - .2 Disposable type protective clothing that does not readily retain or permit skin contamination. Protective clothing to be provided by the employer and worn by every worker who enters the Work Area. The protective clothing shall consist of coveralls with head covering and full body covering that fits snugly at the ankles, wrists and neck, in order to prevent contaminant from reaching the garments and skin under the protective clothing. Include suitable footwear. Coveralls to be repaired or replaced if torn.
 - .3 Gloves that do not readily retain or permit skin contamination.
- .2 Requirements for workers:
- .1 Put on respirator with new filters or reusable filters and protective clothing before entering Work Area.
 - .2 Remove gross contamination from clothing before leaving Work Area. Place contaminated protective clothing in receptacles for disposal. Exit the Work Area and wipe/clean exterior of respirator before removing the respirator.
- .3 Eating, drinking, chewing, and smoking are not permitted in Work Area.
- .4 Ensure workers wash hands and face when leaving Work Area.
- .5 Authorized Visitor Protection:
- .1 Provide protective clothing and approved respirators to Authorized Visitors to Work Areas.
 - .2 Instruct Authorized Visitors in use of protective clothing, respirators and procedures.

- .3 Instruct Authorized Visitors in proper procedures to be followed in entering into and exiting from Work Area.

1.7 WASTE MANAGEMENT AND DISPOSAL

- .1 All lead-containing waste shall be placed into Regular Waste Containers until Lead Leachate analysis is received.
- .2 The disposal of the lead-containing waste will be dependent of lead leachate analytical results.

1.8 EXISTING CONDITIONS

- .1 Refer to the REVISED Limited Hazardous Buildings Materials Assessment Report, 1411 Oxford Street, Halifax, Nova Scotia prepared by Pinchin Ltd., dated August 18, 2020 for details on lead-containing paint present in the building.
- .2 Notify Owner of paints/coatings discovered during Work and not apparent from drawings, specifications, or report pertaining to Work. Do not disturb such material pending instructions from the Owner.

1.9 SCHEDULING

- .1 Hours of Work: perform work during normal working hours.

Part 2 Products

2.1 MATERIALS

- .1 FR polyethylene: 0.15 mm (6-mil) woven fibre reinforced fabric bonded both sides with polyethylene
- .2 Polyethylene 0.15 mm (6-mil) thick unless otherwise specified; in sheet size to minimize joints.
- .3 Tape: fibreglass - reinforced duct tape suitable for sealing polyethylene under dry conditions and wet conditions using amended water.
- .4 Slow-drying sealer: non-staining, clear, water - dispersible type that remains tacky on surface for at least 8 hours and designed for purpose of trapping residual lead paint residue.
- .5 Regular Waste Container: an impermeable 0.15 mm thick sealable polyethylene waste bag (pending Lead Leachate results).

Part 3 Execution

3.1 SUPERVISION

- .1 Approved Supervisor must remain within Work Area during disturbance, removal, or other handling of lead-containing paints.

3.2 PREPARATION

- .1 Work Area:
 - .1 Shut off and isolate HVAC system to prevent dust dispersal into other building areas.
 - .2 Pre-clean fixed casework and equipment within Work Area using HEPA vacuums and cover with polyethylene sheeting sealed with tape. Alternatively, remove any non-fixed items from the Work Area after pre-cleaning.
 - .3 Clean Work Area using HEPA vacuum. If not practicable, use wet cleaning method. Do not use methods that raise dust, such as dry sweeping, or vacuuming using other than HEPA vacuum.
 - .4 Seal off openings with polyethylene sheeting and seal with tape.
 - .5 Maintain emergency and fire exits from Work Areas, or establish alternative exits satisfactory to Authority having jurisdiction.

3.3 LEAD ABATEMENT

- .1 Removal/disturbance of lead-containing coatings is to be conducted with non-powered hand tools, if lead-containing paint is to be removed by more aggressive activities, other than manual scraping and sanding, then more stringent procedures will need to be followed (i.e. Intermediate Abatement procedures should be implemented).
- .2 After completion of removal work, wet sponge surface from which lead-containing paint has been removed to remove visible material. During this Work keep surfaces damp.
- .3 After wet sponging to remove visible dust apply continuous coat of slow drying sealer to exposed surfaces/edges. Do not disturb Work Area for 8 hours with no entry, activity, ventilation or disturbance during this period.

3.4 INSPECTION

- .1 Perform inspection to confirm compliance with specification and governing authority requirements. Deviations from these requirements not approved in writing by Owner will result in work stoppage, at no cost to Owner.
- .2 Owner will inspect work for:
 - .1 Adherence to specific procedures and materials.
 - .2 Final cleanliness and completion.
 - .3 Should lead-containing dust leakage from Work Area occur, Owner may order Work shutdown. No additional costs will be allowed by Contractor for additional labour or materials required to provide specified performance level.

3.5

FINAL CLEANUP

- .1 Place dust and any generated waste in sealed, impermeable 0.15 mm thick sealable polyethylene waste bag (pending Lead Leachate results).
- .2 Perform final thorough clean-up of Work Areas and adjacent areas affected by Work using HEPA vacuum.
- .3 The disposal of the lead-containing waste will be dependent of results.

END OF SECTION