

**Part 1 General**

**1.1 RELATED REQUIREMENTS**

- .1 Section 02 81 01 Hazardous Materials.
- .2 Section 02 83 10 Lead-Based Paint Abatement – Minimum Precautions

**1.2 REFERENCES**

- .1 Definitions:
  - .1 Demolition: rapid destruction of building following removal of hazardous materials.
  - .2 Hazardous Materials: dangerous substances, dangerous goods, hazardous commodities and hazardous products, may include but not limited to: asbestos lead leachate toxic paint, mercury, metal impacted soil, PCBs, CFC's, HCFC's poisons, corrosive agents, flammable substances, ammunition, explosives, radioactive substances, or other material that can endanger human health or well being or environment if handled improperly.
- .2 Reference Standards:
  - .1 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
    - .1 Material Safety Data Sheets (MSDS).
  - .2 Transport Canada (TC)
    - .1 Transportation of Dangerous Goods Act, 1992 (TDGA), c. 34.
- .3 Stantec Consulting Limited
  - .1 Limited Hazardous Building Materials Assessment, Machias Seal Island Lighthouse, Charlotte County, New Brunswick LL# 6, DFRP# 03984, and RPIS# MD00190 (Appendix 2).

**1.3 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Hazardous Materials:
  - .1 Provide description of Hazardous Materials and Notification of Filing with proper authorities prior to beginning of Work as required.
- .3 Certificates:
  - .1 Submit weigh bills from authorized disposal sites and reuse and recycling facilities for material removed from site upon request of Departmental Representative.
  - .2 Written authorization from Departmental Representative is required to deviate from facilities listed in Waste Management Plan.

#### **1.4 QUALITY ASSURANCE**

- .1 Regulatory Requirements: ensure Work is performed in compliance with CEPA, CEEA, TDGA, and applicable Provincial/Territorial regulations.
- .2 Site Meetings.
  - .1 Verify project requirements.
  - .2 Review site conditions.
  - .3 Discuss demolition requirements with Departmental Representatives.

#### **1.5 DELIVERY, STORAGE AND HANDLING**

- .1 Perform work, store and manage hazardous materials in accordance with Section 01 35 43 - Environmental Procedures.
- .2 Storage and Protection.
  - .1 Protect existing items designated to remain and items designated for salvage. In event of damage to such items, immediately replace or make repairs to approval of Departmental Representative and at no cost to Departmental Representative.
  - .2 Remove and store materials to be salvaged, in manner to prevent damage.
  - .3 Store and protect in accordance with requirements for maximum preservation of material.
- .3 Waste Management and Disposal.
  - .1 Divert excess materials from landfill to site approved by Departmental Representative.
  - .2 Separate for recycling and place in designated containers any metal waste in accordance with Waste Management Plan.
  - .3 Place materials defined as hazardous or toxic in designated containers with approved protection of ground surface through the use of tarps.
  - .4 Handle and dispose of hazardous materials in accordance with CEPA, TDGA, regional and municipal regulations.
  - .5 Ensure emptied containers are sealed and stored safely.
  - .6 Remove materials that cannot be salvaged for reuse or recycling and dispose of in accordance with applicable codes at licensed facilities.

#### **1.6 SITE CONDITIONS**

- .1 Site Environmental Requirements.
  - .1 Perform work in accordance with Section 01 35 43 - Environmental Procedures.
  - .2 Ensure that selective demolition work does not adversely affect adjacent watercourses, groundwater, bird habitat and other wildlife, or contribute to excess air and noise pollution.
  - .3 Do not dispose of waste materials including but not limited to, metal impacted soil, mercury wastes, mineral spirits, oil, petroleum based lubricants, or toxic cleaning solutions into soil and/or watercourses.
    - .1 Ensure proper disposal procedures are maintained throughout the project.

- .4 Do not pump water containing suspended materials into soil and/or watercourses.
  - .5 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authorities.
  - .6 Protect plants and foliage on site and adjacent properties where indicated.
  - .7 Place soil that is removed from around the exterior light tower footprint and place on tarp in an approved laydown area and cover with tarp (or equivalent) to reduce potential runoff and fugitive emissions from contaminated soil. Once the restoration activities have been completed, return soil to its original location and condition.
- .2 Existing Conditions.
- .1 Metal impacted soil is present around the light tower (See Appendix 1).
  - .2 Identify all U/G services that may be encountered when excavating soil from around the light tower.
  - .3 Remove contaminated or hazardous materials as directed by Departmental Representative from site, prior to start of demolition Work, and dispose of at designated disposal facilities in safe manner in accordance with TDGA and other applicable regulatory requirements.
  - .4 List of hazardous materials (beyond impacted soil that is to stay on site):
    - .1 Lead-based and lead leachate toxic paint chips and residue removed from building.

## **1.7 SCHEDULING**

- .1 Employ necessary means to meet project time lines.
  - .1 Notify Departmental Representative in writing when unforeseen delays occur.

## **Part 2 Execution**

### **2.1 PREPARATION**

- .1 Inspect site with Departmental Representative and verify extent and location of items designated for removal, disposal, alternative disposal, recycling, salvage and items to remain.
- .2 Locate and protect utilities. Preserve active utilities traversing site in operating condition.
- .3 Notify and obtain approval of utility companies before starting demolition.
- .4 Disconnect and Cap Designated Mechanical Services.
  - .1 Natural Gas Supply Lines: none existing.
  - .2 Sewer and Water Lines: not to be disturbed.
  - .3 Other Underground Services (including fuel and generator lines from fuel storage building): not to be disturbed.
- .5 Complete mock-up of exterior coating removal prior to proceeding with the work. Obtain Heritage Approval from Departmental Representative. Mock-up to demonstrate:
  - .1 Retention of board formed finish

- .2 Protection of adjacent surfaces

## **2.2 REMOVAL OF HAZARDOUS WASTES**

- .1 Remove contaminated or dangerous materials defined by authorities having jurisdiction, relating to environmental protection, from site and dispose of in safe manner to minimize danger at site or during disposal.

## **2.3 REMOVAL OPERATIONS**

- .1 Remove items as indicated.
- .2 Do not disturb items designated to remain in place.
- .3 Disposal of Material:
  - .1 Dispose of materials not designated for salvage or reuse on site at authorized facilities approved in Waste Reduction Work Plan.

## **2.4 REMOVAL FROM SITE**

- .1 Remove stockpiled material as directed by Departmental Representative, when it interferes with operations of project.
- .2 Remove stockpiles of like materials by alternate disposal option once collection of materials is complete.
- .3 Transport material designated for alternate disposal using approved haulers, facilities, receiving organizations listed in Waste Management Plan and in accordance with applicable regulations.
  - .1 Written authorization from Departmental Representative is required to deviate from haulers, facilities, receiving organizations listed in Waste Management Plan.
- .4 Dispose of materials not designated for alternate disposal in accordance with applicable regulations.
  - .1 Disposal Facilities: approved and listed in Waste Management Plan.
  - .2 Written authorization from Departmental Representative is required to deviate from disposal facilities listed in Waste Management Plan.

## **2.5 PROTECTION**

- .1 Repair damage to adjacent materials or property caused by selective site demolition.

**END OF SECTION**