

## **PART 1        GENERAL**

### **1.1            RELATED REQUIREMENTS**

- .1        Not used.

### **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 PCB's, 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.
  - .3        Waste Audit (WA): detailed inventory of materials in building. Indicates quantities of reuse, recycling and landfill.
    - .1        Involves quantifying by volume/weight amounts of materials and wastes generated during construction, demolition, deconstruction, or renovation project.
    - .2        Indicates quantities of reuse, recycling and landfill.
  - .4        Waste Management Coordinator (WMC): contractor representative responsible for supervising waste management activities as well as coordinating related, required submittal and reporting requirements.
  - .5        Waste Reduction Workplan (WRW): written report which addresses opportunities for reduction, reuse, or recycling of materials. WRW is based on information acquired from WA.
- .2        References:
  - .1        Canadian Council of Ministers of the Environment (CCME)
  - .2        Department of Justice Canada (Jus)
    - .1        Canadian Environmental Assessment Act.
    - .2        Canadian Environmental Protection Act.
  - .3        Health Canada/Workplace Hazardous Materials Information System (WHMIS)
    - .1        Material Safety Data Sheets (MSDS).
  - .4        Transports Canada (TC)
    - .1        Transportation of Dangerous Goods Act, 1992 (TDGA), c. 34.

### **1.3 ADMINISTRATIVE REQUIREMENTS**

- .1 Site Meetings:
  - .1 Convene pre-demolition meeting one week prior to beginning work of this Section in accordance with Section 01 32 16.06 - Construction Progress Schedule - Critical Path Method (CPM) Section [01 32 16.07 - Construction Progress Schedules - Bar (GANTT) Chart to:
    - .1 Verify project requirements.
    - .2 Review installation and substrate conditions.
    - .3 Co-ordination with other building subtrades.
  - .2 Arrange for site visit with Departmental Representative to examine existing site conditions adjacent to demolition work, prior to start of Work.
  - .3 Ensure key personnel, site supervisor, project manager, subcontractor representatives and WMC attend.
  - .4 Reporting Requirements: WMC to complete.
  - .5 WMC must provide written report on status of waste diversion activity at each meeting.
- .2 Scheduling: meet project time lines without compromising specified minimum rates of material diversion.
  - .1 Notify Departmental Representative in writing when unforeseen delays occur.
- .3 Health and safety:
  - .1 Comply with occupational health and safety construction regulations in accordance with Section 01 35 29 – Health and Safety.

### **1.4 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Shop Drawings:
  - .1 Submit for approval drawings, diagrams or details showing sequence of demolition work and supporting structures and underpinning, where required by authorities having jurisdiction.
- .3 Hazardous Materials:
  - .1 Provide description of Hazardous Materials and Notification of Filing with proper authorities prior to beginning of Work as required.
- .4 Waste Reduction Plan:
  - .1 Prior to beginning of Work on site submit detailed Waste Reduction Workplan in accordance with Section 01 74 21 - Construction/Demolition Waste Management And Disposal and indicate.
    - .1 Descriptions of and anticipated quantities of materials to be salvaged reused, recycled and landfilled.
    - .2 Schedule of selective demolition.
    - .3 Number and location of dumpsters.
    - .4 Anticipated frequency of tippage.

**1.4 ACTION AND INFORMATIONAL SUBMITTALS (cont'd)**

- .5 Certificates:
  - .1 Submit copies of certified weigh bills from authorized disposal sites and reuse and recycling facilities for material removed from site.
  - .2 Written authorization from Departmental Representative is required to deviate from facilities listed in Waste Reduction Workplan.

**1.5 QUALITY ASSURANCE**

- .1 Regulatory Requirements: ensure Work is performed in compliance with CEPA, CEEA, TDGA, applicable Provincial/Territorial regulations.

**1.6 DELIVERY, STORAGE AND HANDLING**

- .1 Store and manage hazardous materials in accordance with Section 01 35 43 - Environmental Procedures.
- .2 Entreposage and protection
  - .1 Protect in accordance with Section 31 23 33.01 - Excavating, Trenching and Backfilling.
  - .2 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.
  - .3 Remove and store materials to be salvaged, in manner to prevent damage.
  - .4 Store and protect in accordance with requirements for maximum preservation of material.
  - .5 Handle salvaged materials as new materials.

**1.7 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 and wildlife, or contribute to excess air and noise pollution.
  - .3 Do not dispose of waste of volatile materials including but not limited to, mineral spirits, oil, petroleum based lubricants, or toxic cleaning solutions into watercourses, storm or sanitary sewers.
    - .1 Ensure proper disposal procedures are maintained throughout the project.
  - .4 Do not pump water containing suspended materials into watercourses, storm or sanitary sewers or onto adjacent properties.
  - .5 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authorities and as directed by Departmental Representative.
  - .6 Protect trees, plants and foliage on site and adjacent properties where indicated.

**1.7 SITE CONDITIONS (cont'd)**

**.2 Existing Conditions:**

- .1** Remove contaminated or hazardous materials as defined by authorities having jurisdiction 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.

**PART 2 PRODUCT**

**2.1 EQUIPMENT**

- .1** Leave machinery running only while in use, except where extreme temperatures prohibit shutting machinery down.

**PART 3 EXECUTION**

**3.1 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** Sewer and Water Lines: remove to property line as directed by Departmental Representative and securely plug to form watertight seal.
  - .2** Other Underground Services: remove and dispose of as indicated and as directed by Departmental Representative.

**3.2 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** Remove items as indicated.
- .3** Do not disturb items designated to remain in place.
- .4** Removal of pavements, curbs and gutters:
  - .1** Square up adjacent surfaces to remain in place by saw cutting or other method approved by Departmental Representative.
  - .2** Protect adjacent joints and load transfer devices.
  - .3** Protect underlying and adjacent granular materials.
  - .4** Cut granite edging where there are transition and changes in elevation.

### **3.2 REMOVAL OF HAZARDOUS WASTES (cont'd)**

- .5 To remove pipes buried under existing pavement, dig to a minimum depth of 300 mm beneath pipe invert.
- .6 Remove as many trees and shrubs designated on site by Departmental Representative during demolition.
  - .1 Obtain written approval of Departmental Representative prior to removal of trees and shrubs not designated.
- .7 Sell, donate, or dispose of trees to be healthy and marketable.
  - .1 Grind, chip, or shred other vegetation for mulching and composting, or use as mill pulp or process fuel.
- .8 Stockpile topsoil for final grading and landscaping:
  - .1 Provide erosion control and seeding if not immediately used.
- .9 Salvage:
  - .1 Dismantle items containing materials for salvage and stockpile salvaged materials at locations as indicated.
  - .2 Deliver gate at bottom of Gilmour Hill to be removed for trail to NBCC. Fill holes left by hinges with material similar to posts.
  - .3 Remove bronze plaque at bottom of Gilmour Hill and relocated as indicated by Departmental Representative. Lay stone level to match existing surroundings over 300 mm granular base compacted to 95% PM.
- .10 Disposal:
  - .1 Dispose of materials not designated for salvage or reuse on site at authorized facilities approved in Waste Reduction Workplan as instructed by Departmental Representative.
  - .2 Trim disposal areas to approval of Departmental Representative.
- .11 Backfill:
  - .1 Backfill in areas as indicated and in accordance with Section 31 23 33.01 - Excavating, Trenching and Backfilling.

### **3.3 STOCKPILING**

- .1 Label stockpiles, indicating material type and quantity.
- .2 Designate appropriate security resources/measures to prevent vandalism, damage and theft.
- .3 Locate stockpiled materials convenient for use in new construction to eliminate double handling wherever possible.
- .4 Stockpile materials designated for alternate disposal in location which facilitates removal from site and examination by potential end markets, and which does not impede disassembly, processing, or hauling procedures.
- .5 Deposit the garbage removed and not relocated to the Operational Centre Parks Canada 501 boulevard Forillon.
- .6 Deposit the stones steps removed and not relocated to the Operational Centre Parks Canada 501 boulevard Forillon.

### **3.4 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 Reduction Workplan and in accordance with applicable regulations.
- .4 Dispose of materials not designated for alternate disposal in accordance with applicable regulations.
  - .1 Disposal Facilities: approved and listed in Waste Reduction Workplan.
  - .2 Written authorization from Departmental Representative is required to deviate from disposal facilities listed in Waste Reduction Workplan.

### **3.5 RESTORATION**

- .1 Restore areas and existing works outside areas of demolition to conditions that existed prior to beginning of Work and to match condition of adjacent, undisturbed areas.
- .2 Restore areas designated by Departmental Representative used for site access, storage, office trailers and parking.
- .3 Use soil treatments and procedures which are not harmful to health, are not injurious to plants, and do not endanger wildlife, adjacent water courses or ground water.

### **3.6 CLEANING**

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
  - .1 Leave Work area clean at end of each day.
  - .2 Remove debris, trim surfaces and leave work site clean, upon completion of Work
  - .3 Use cleaning solutions and procedures which are not harmful to health, are not injurious to plants, and do not endanger wildlife, adjacent water courses or ground water.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

### **3.7 PROTECTION**

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

**END OF SECTION**