

**PART 1 - GENERAL****1.1 REFERENCES** .1

## Definitions:

.1 Hazardous Materials: dangerous substances, dangerous goods, hazardous commodities and hazardous products, include but not limited to: poisons, corrosive agents, flammable substances, ammunition, explosives, radioactive substances, or materials that endanger human health or environment if handled improperly.

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## Reference Standards:

.1 Canadian Environmental Protection Act (CEPA)

.1 CCME PN 1326-Latest Edition, Environmental Code of Practice for Aboveground and Underground Storage Tank Systems for Petroleum Products and Allied Petroleum Products.

.2 CSA International

.1 CSA S350-Latest Edition, Code of Practice for Safety in Demolition of Structures.

.3 Department of Justice Canada (Jus)

.1 Canadian Environmental Assessment Act (CEAA), 1995, c. 37.

.2 Canadian Environmental Protection Act (CEPA), 1999, c. 33.

.1 SOR/2003-2, On-Road Vehicle and Engine Emission Regulations.

.2 SOR/2006-268, Regulations Amending the On-Road Vehicle and Engine Emission Regulations.

.3 Transportation of Dangerous Goods Act (TDGA), 1992, c. 34.

.4 Underwriters' Laboratories of Canada (ULC)

.1 CAN/ULC-S660-[08], Standard for Nonmetallic Underground Piping for Flammable and Combustible Liquids.

.2 ULC/ORD-C58.15-[1992], Overfill Protection Devices for Flammable Liquid Storage Tanks.

.3 ULC/ORD-C58.19-[1992], Spill Containment Devices for Underground Flammable Liquid Storage Tanks.

.5 U.S. Environmental Protection Agency (EPA)

.1 EPA CFR 86.098-10, Emission standards for 1998 and later model year Otto-cycle heavy-duty engines and vehicles.

.2 EPA CFR 86.098-11, Emission standards for 1998 and later model year diesel heavy-duty engines and vehicles.

.3 EPA 832/R-92-005, Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices.

**1.2 ADMINISTRATIVE REQUIREMENTS** .1

## Pre-Installation Meetings:

.1 Convene pre-installation meeting 1 week prior to beginning work of this Section with Departmental Representative - Project Meetings to:

.1 Verify project requirements.

.2 Verify existing site conditions adjacent to demolition work.

.3 Co-ordination with other construction subtrades.

.2 Hold project meetings every week.

.3 Ensure site supervisor and project manager, subcontractor representatives attend.

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- 1.2 ADMINISTRATIVE REQUIREMENTS (Cont'd) .1 (Cont'd)
- .4 Departmental Representative will provide written notification of change to meeting schedule established upon contract award 24 hours prior to scheduled meeting.
- .2 Scheduling:
- .1 Employ necessary means to meet project time lines without compromising specified minimum rates of material diversion.
    - .1 In event of unforeseen delay notify Departmental Representative in writing.
- 1.3 ACTION AND INFORMATIONAL SUBMITTALS .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Shop Drawings:
- .1 Submit for review and approval demolition drawings, diagrams or details showing sequence of demolition work and supporting structures and underpinning.
  - .2 Submit demolition drawings stamped and signed by professional engineer registered or licensed in Province of Ontario, Canada.
- 1.4 QUALITY ASSURANCE .1 Regulatory Requirements: Ensure Work is performed in compliance with CEPA, and applicable Provincial and Municipal regulations.
- 1.5 SITE CONDITIONS .1 Environmental protection:
- .1 Fires and burning of waste or materials is not permitted on site.
  - .2 Do not bury rubbish waste materials.
  - .3 Do not dispose of waste or 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 project.
  - .4 Do not pump water containing suspended materials into watercourses, storm or sanitary sewers, or onto adjacent properties.
  - .5 Protect trees, plants and foliage on site and adjacent properties where indicated.
  - .6 Prevent extraneous materials from contaminating air beyond application area, by providing temporary enclosures during demolition work.
  - .7 Cover or wet down dry materials and waste to prevent blowing dust and debris. Control dust on all temporary roads.
- 1.6 EXISTING CONDITIONS .1 If material resembling spray or trowel applied asbestos or other designated substance be encountered in course of demolition, stop work, take preventative measures and notify Departmental Representative immediately. Proceed only after receipt of written instructions have been received from Departmental Representative.
- .1 Remove, protect and store salvaged items as directed by Departmental Representative. Salvage items as identified by Departmental Representative. Deliver to Departmental Representative as directed.

**PART 2 - PRODUCTS**

- 2.1 EQUIPMENT .1 Equipment and heavy machinery:
- .1 On-road vehicles to:CEPA-SOR/2003-2, On-Road Vehicle and Engine Emission Regulations and CEPA-SOR/2006-268, Regulations Amending the On-Road Vehicle and Engine Emission Regulations.
  - .2 Off-road vehicles to: EPA CFR 86.098-10 and EPA CFR 86.098-11.
- .2 Leave machinery running only while in use, except where extreme temperatures prohibit shutting machinery down.

**PART 3 - EXECUTION**

- 3.1 PREPARATION .1 Temporary Erosion and Sedimentation Control:
- .1 Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to: requirements of authorities having jurisdiction, that complies with EPA 832/R-92-005 or requirements of authorities having jurisdiction, whichever is more stringent.
  - .2 Inspect, repair, and maintain erosion and sedimentation control measures during demolition.
  - .3 Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal after completion of demolition work.
- .2 Protection of in-place conditions:
- .1 Prevent movement, settlement or damage of adjacent structures, services, walks, paving, trees, landscaping, adjacent grades properties parts of existing building to remain.
    - .1 Provide bracing, shoring as required.
    - .2 Repair damage caused by demolition as directed by Departmental Representative.
  - .3 Support affected structures and, if safety of structure being demolished or adjacent structures or services appears to be endangered, take preventative measures, stop Work and immediately notify Departmental Representative.
  - .4 Prevent debris from blocking surface drainage system, elevators, mechanical and electrical systems which must remain in operation.
- 3.2 DEMOLITION .1 Remove contaminated or dangerous materials as 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 Prior to start of Work remove contaminated or hazardous materials as defined by authorities having jurisdiction and as directed by Departmental Representative from site and dispose of at designated disposal facilities in safe manner and in accordance with TDGA and other applicable requirements.
- .3 Demolish parts of structures.
- .4 To permit construction as indicated.

**3.2 DEMOLITION**  
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- .5 Remove existing equipment, services, and obstacles where required for refinishing or making good of existing surfaces, and replace as work progresses.
- .6 At end of each day's work, leave Work in safe and stable condition.
  - .1 Protect interiors of parts not to be demolished from exterior elements at all times.
- .7 Demolish to minimize dusting. Keep materials wetted as directed by Departmental Representative.
- .8 Demolish masonry and concrete walls in pieces.
- .9 Remove concrete structural slab as indicated.
- .10 Contain fibrous materials to minimize release of airborne fibres while being transported within facility.
- .11 Remove and dispose of demolished materials except where noted otherwise and in accordance with authorities having jurisdiction.
- .12 Use natural lighting to do Work where possible.
  - .1 Shut off lighting except those required for security purposes at end of each day.

**PART 1 – GENERAL**

- 1.1 REQUIREMENTS INCLUDED .1 Requirements and limitations for cutting and patching the Work, and making good.
- 1.2 RELATED WORK .1 Individual Sections: cutting and patching incidental to work of the particular section. Advance notification to other sections required.
- .2 Drawings and notes on drawings, including printed notes specifically referring to "cutting, patching and making good".
- 1.3 SUBMITTALS .1 Submit written request in advance of cutting or alteration which affects:
- .1 Structural integrity of any element of Project.
- .2 Integrity of weather exposed or moisture resistant elements.
- .3 Efficiency, maintenance, or safety of any operational element.
- .4 Visual qualities of sight exposed elements.
- .2 Include in request:
- .1 Identification of Project.
- .2 Location and description of affected work.
- .3 Statement on necessity for cutting or alteration.
- .4 Description of proposed work, and products to be used.
- .5 Alternatives to cutting and patching.
- .6 Written permission of affected separate contractor.
- .7 Date and time work will be executed.
- 1.4 GENERAL .1 All cutting and patching required for the work shall be performed by trades skilled in the application of materials being altered.
- .2 Carry out all cutting and patching required for the work of this contract as outlined in the scope of work and/or detailed in the contract documents. Repair all wall and floor surfaces where items have been removed. Make good all finishes. Repaint damaged surfaces.
- .3 Execute cutting, fitting, and patching, including excavation and fill, to complete the work.
- .4 Fit the several parts together, to integrate with other work.
- .5 Uncover work to install ill timed work.
- .6 Remove and replace defective and non conforming work.
- .7 Remove samples of installed work for testing.

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- .8 Provide openings in non structural elements of work for penetrations of mechanical and electrical work.
- 1.5 INSPECTION
- .1 Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- .2 After uncovering, inspect conditions affecting performance of work.
- .3 Beginning of cutting or patching means acceptance of existing conditions.
- 1.6 PREPARATION
- .1 Provide supports to assure structural integrity of surroundings; devices and methods to protect other portions of project from damage.
- .2 Provide protection from elements for areas which may be exposed by uncovering work; maintain excavations free of water.
- 1.7 PERFORMANCE
- .1 Execute work by methods to avoid damage to other work, and which will provide proper surfaces to receive patching and finishing.
- .2 Use material to match existing.
- .3 For a change in material submit request for substitution.
- .4 Employ original installer to perform cutting and patching for weather exposed and moisture resistant elements, and sight exposed surfaces.
- .5 Cut rigid materials using masonry saw or core drill. Pneumatic or impact tools not allowed without prior approval.
- .6 Restore work with new products in accordance with requirements of Contract Documents.
- .7 Fit work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- .8 At penetration of fire rated wall, ceiling, or floor construction, completely seal voids with the specified fire rated material, full thickness of the construction element.
- .9 Refinish surfaces to match adjacent finishes: For continuous surfaces refinish to nearest intersection; for an assembly, refinish entire unit.