## Part 1 General

### 1.1 RELATED SECTIONS

.1 Section 31 23 10 – Excavating, Trenching and Backfilling.

### 1.2 REFERENCES

.1 Canadian Federal Legislation

- .1 Canadian Environmental Protection Act (CEPA), 1988.
- .2 Canadian Environmental Assessment Act (CEAA), 1995.
- .3 Transportation of Dangerous Goods Act (TDGA), 1992.
- .4 Motor Vehicle Safety Act (MVSA), 1995.

.2 United States Environmental Protect Agency

- .1 CFR 86.098-10, Emission Standards for 1998 and Later Model Year Otto-Cycle Heavy Duty Engines and Vehicles.
- .2 CFR 86.098-11, Emission Standards for 1998 and Later Model Year Diesel Heavy Duty Engines and Vehicles.

.3 New Brunswick Department of Transportation and Infrastructure Standard Specifications (most recent version):

- .1 NBDTI Standard Specification Item 106 – Common Excavation
- .2 NBDTI Standard Specification Item 425 – Removal of Underground Structures
- .3 NBDTI Standard Specification Item 511 – Removal of Guide Posts
- .4 NBDTI Standard Specification Item 513 – Removal of Guide Rail

.4 Definitions:

- .1 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 improperlyWaste 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.
- .2 Waste Management Coordinator (WMC): contractor representative responsible for supervising waste management activities as well as coordinating related, required submittal and reporting requirements.
- .3 Waste Reduction Workplan (WRW): written report which addresses opportunities for reduction, reuse, or recycling of materials.
- .4 Health Canada/Workplace Hazardous Materials Information System (WHMIS)

.1 Material Safety Data Sheets (MSDS).

.5 Transport 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 Section 01 32 16.07 - Construction Progress Schedules - Bar (GANTT) Chart to:

.1 Verify project requirements.

.2

.2 Arrange for site visit with Departmental Representative to examine existing site conditions adjacent to demolition work, prior to start of Work.

.3 Hold project meetings every week.

.4 Ensure key personnel, site supervisor, project manager, subcontractor representatives and WMC attend.

.5 Reporting Requirements: WMC to complete.

.6 WMC must provide written report on status of waste diversion activity at each meeting.

.7 Departmental Representative will provide written notification of change of meeting schedule established upon contract award 24 hours prior to scheduled meeting.

.2 Scheduling: meet project time lines without compromising specified minimum rates of material diversion.

.1 Notify Departmental Representative in writing when unforeseen delay[s] occur.

## 1.4 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 Waste Reduction Workplan:

.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 Name and address of waste facilities.

.4 Certificates:

.1 Submit copies of certified weigh bills and receipts from authorized disposal sites and reuse and recycling facilities for material removed from site on weekly basis.

.2 Written authorization from Departmental Representative is required to deviate from receiving organizations listed in Waste Reduction Workplan.

.5 Sustainable Design Submittals:

.1 Construction Waste Management:

.1 Submit project Waste Reduction Workplan highlighting recycling and salvage requirements.

.2 Submit calculations on end-of-project recycling rates, salvage rates, and landfill rates demonstrating construction wastes were recycled or salvaged.

## 1.5 DELIVERY, STORAGE AND HANDLING

.1 Perform all work in accordance with Section 01 35 43 - Environmental Procedures.

.2 Storage 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 Represent and at no cost to Owner.

.3 Remove and store materials to be salvaged, in manner to prevent damage.

## 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 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.

.6 Protect trees, plants and foliage on site and adjacent properties where indicated.

## 1.7 REGULATORY REQUIREMENTS

.1 Ensure all work is performed in compliance with CEPA, CEAA, TDGA, MVSA and all applicable provincial regulations.

**1.8 SCHEDULING**

.1 Ensure project time lines are met without compromising specified minimum rates of material diversion. Notify Departmental Representative in writing of delays.

**Part 2 Products**

**2.1 EQUIPMENT**

.1 Equipment and heavy machinery used to meet or exceed all applicable emission requirements operate in compliance with EPA CFR 86.098-10 and EPA CFR 86.098-11 and MVSA.

.2 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.

**3.2 REMOVAL OF HAZARDOUS WASTES**

.1 Remove contaminated or dangerous materials defined by authorities having jurisdiction including but not limited to creosote hardwood box culverts and asphalt impregnated asbestos-coated metal pipes, relating to environmental protection, from site and dispose of in safe manner to minimize danger at site or during disposal.

**3.3 REMOVAL OPERATIONS**

.1 Remove items where indicated.

.2 Do not disturb items designated to remain in place.

.3 Salvage:

.1 Items to be salvaged:

.1 All road signs shall be salvaged for reinstallation under Section 10 14 53 – Traffic Signage. Salvaged signs shall be transported to a location within Kouchibouguac National Park as identified by the Departmental Representative.

.2 Guide posts shall be salvaged and used for offset blocks under Section 34 71 13.21 – Vehicle Guide Posts.

.3 Guide rail shall be salvaged for reinstallation under Section 34 71 13.25 – Vehicle W-Beam Guide Rail at the following locations:

Kouchibouguac River Bridge (K450), Rankin Brook Bridge (R020), Claire Fontaine River Bridge (F530) and Portage River Bridge (P750).

.2 Dismantle items containing materials for salvage and stockpile salvaged materials at locations as indicated.

.3 Base and sub-base granular materials shall be salvaged for use as borrow elsewhere in the work.

.4 Excavated material which is acceptable as embankment material shall be salvaged and used as embankment material elsewhere in the work.

.4 Disposal of Material:

.1 Dispose of materials not designated for salvage or reuse on site as instructed by Departmental Representative.

.5 Backfill:

.1 Backfill in areas as indicated and in accordance with Section 31 23 33.01 - Excavating, Trenching and Backfilling.

**3.4 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.

**3.5 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.

**3.6 RESTORATION**

.1 Restore areas and existing works outside areas of demolition to match condition of adjacent, undisturbed areas.

.2 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.

**3.7 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 Waste Management: separate waste materials for reuse or recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

.1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

## 3.8 PROTECTION

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

**END OF SECTION**

## Part 1 General

### 1.1 RELATED REQUIREMENTS

.1 Section 32 12 16 – Asphalt Paving.

### 1.2 REFERENCES

.1 New Brunswick Department of Transportation and Infrastructure Standard Specifications (most recent version):

.1 NBDTI Standard Specification Item 208 – Cold Milling – Asphalt Concrete

## Part 2 Products

### 2.1 EQUIPMENT

.1 Use cold milling, planning or grinding equipment with automatic grade controls capable of operating from stringline, and capable of removing all or part of pavement surface to depths or grades indicated.

## Part 3 Execution

### 3.1 PREPARATION

.1 Prior to beginning removal operation, inspect and verify with Departmental Representative areas, depths and lines of asphalt pavement to be removed.

### 3.2 REMOVAL

.1 Remove existing asphalt pavement to lines and grades established by Departmental Representative in field.

.1 The Contractor shall remove the asphalt pavement in uniform thickness to reduce aggregate gradation changes due to variable proportions of existing base and surface mixes.

.2 Use equipment and methods of removal and hauling which do not damage or disturb underlying pavement.

.3 Prevent contamination of removed asphalt pavement by topsoil, underlying gravel or other materials.

.4 Suppress dust generated by removal process.

.5 The lanes shall be completed to same location at the end of each day.

.6 The height of RAP stockpiles shall be a maximum of 3m.

.7 No loader, crawler tractors or other heavy equipment is permitted to travel on the RAP stockpile.

## 3.3 FINISH TOLERANCES

.1 Finished surfaces in areas where asphalt pavement has been removed to be within ±5 mm of grade specified but not uniformly high or low.

## 3.4 CLEANING

.1 Leave Work area clean at end of each day.

.2 Sweep remaining asphalt pavement surfaces clean of debris resulting from removal operations using rotary power brooms and hand brooming as required.

**END OF SECTION**