

Part 1 General

1.1 SECTION INCLUDES

- .1 Methods for removal of existing asphalt pavement.

1.2 RELATED SECTIONS

- .1 Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

1.3 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .2 Divert unused asphalt materials from landfill to local quarry or facility approved by the Departmental Representative.

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 the Departmental Representative areas, depths and lines of asphalt pavement to be removed.

3.2 PROTECTION

- .1 Protect existing pavement not designated for removal. In event of damage, immediately replace or make repairs to approval of the Departmental Representative at no additional cost.

3.3 EXECUTION

- .1 Remove all existing asphalt pavement located within project limit.
- .2 Use cold milling equipment.
- .3 Prevent contamination of removed asphalt pavement by topsoil, underlying gravel or other materials.
- .4 Provide for suppression of dust generated by removal process.

- .5 Stockpile reclaimed asphalt concrete needed for making of the shoulders.
- .6 Care shall be taken not to contaminate or consolidate the reclaimed asphalt concrete stockpile.
 - .1 The height of the reclaimed asphalt concrete not to exceed 3 m to limit consolidation of the stockpiled material and no loaders, crawler tractors, trucks or other equipment is permitted to travel on the stockpile.
- .7 Dispose of unused asphalt materials.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Methods and procedures for demolition of existing culverts.

1.2 RELATED SECTIONS

- .1 Section 01 33 00 - Submittal Procedures.
- .2 Section 01 35 29.06 - Health and Safety Requirements.
- .3 Section 01 35 43 - Environmental Procedures.
- .4 Section 01 56 00 - Temporary Barriers and Enclosures.
- .5 Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

1.3 REFERENCES

- .1 Canadian Standards Association (CSA International).
 - .1 CSA S350-M1980(R1998), Code of Practice for Safety in Demolition of Structures.
- .2 Department of Justice Canada (Jus).
 - .1 Canadian Environmental Assessment Act (CEAA), 1992, c. 37.
 - .2 Canadian Environmental Protection Act (CEPA), 1999, c. 33.
 - .1 SOR/2003-2, On-Road Vehicle and Engine Emission Regulations.
 - .3 Transportation of Dangerous Goods Act (TDGA), 1992, c. 34.
- .3 U.S. Environmental Protection Agency (EPA)/Code of Federal Regulations (CFR), Title 40 - Protection of Environment, Chapter 1, Subchapter C - AIR, Part 86 - CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES.
 - .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.

1.4 DEFINITIONS

- .1 Hazardous Materials: dangerous substances, dangerous goods, hazardous commodities and hazardous products, may include but not limited to: 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 Waste Reduction Workplan (WRW): written report which addresses opportunities for reduction, reuse, or recycling of materials. WRW is based on information acquired from WA.

1.5 SUBMITTALS

- .1 Submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 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.
 - .5 Name and address of waste facilities.
- .3 Submit one (1) copy of certified receipts from authorized disposal sites and reuse and recycling facilities for material removed from site upon request of the Departmental Representative.
 - .1 Written authorization from the Departmental Representative is required to deviate from facilities listed in Waste Reduction Workplan.
- .4 Where required by authorities having jurisdiction, submit for approval drawings, diagrams or details showing sequence of demolition work and supporting structures and underpinning.

1.6 QUALITY ASSURANCE

- .1 Regulatory Requirements: Ensure Work is performed in compliance with CEPA, CEAA, TDGA and applicable Provincial/Territorial and Municipal regulations.
- .2 Meetings:
 - .1 Prior to start of Work arrange for site visit with the Departmental Representative to examine existing site conditions adjacent to demolition work.
 - .2 Hold project meetings bi-weekly.
 - .3 Ensure key personnel attend.
 - .4 The Departmental Representative will provide written notification of change to meeting schedule established upon contract award 24 hours prior to scheduled meeting.

1.7 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management And Disposal.
- .2 Divert excess materials from landfill to site approved by the Departmental Representative.

1.8 ENVIRONMENTAL PROTECTION

- .1 Ensure Work is done in accordance with Section 01 35 43 - Environmental Procedures.

- .2 Ensure that demolition work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.
- .3 Fires and burning of waste or materials is not permitted on site.
- .4 Do not bury rubbish waste materials.
- .5 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.
- .6 Do not pump water containing suspended materials into watercourses, storm or sanitary sewers, or onto adjacent properties.
- .7 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with authorities having jurisdiction.
- .8 Protect trees, plants and foliage on site and adjacent properties where indicated.
- .9 Cover or wet down dry materials and waste to prevent blowing dust and debris.

Part 2 Products

2.1 EQUIPMENT

- .1 Equipment and heavy machinery to:
 - .1 On-road vehicles to meet applicable emission requirements as prescribed in CEPA-SOR/2003-2, On-Road Vehicle and Engine Emission Regulations.
 - .2 Off-road vehicles to meet applicable emission requirements as prescribed in 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 Do Work in accordance with Section 01 35 29.06 - Health and Safety Requirements.
- .2 Remove rodent and vermin as required by the Departmental Representative.

3.2 SAFETY CODE

- .1 Do demolition work in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.

3.3 DEMOLITION

- .1 Demolish the cross wood culvert located at stationing 1+412;
- .2 Demolish the wood culverts installed in side ditches at stationing's 1+592 and 1+780.
- .3 Remove and dispose of demolished materials except where noted otherwise and in accordance with authorities having jurisdiction. The demolition materials such as wood may be creosote-impregnated and should be disposed of as "Creosote-Impregnated Waste Materials".

3.4 REMOVAL FROM SITE

- .1 Dispose of materials in accordance with applicable regulations.
 - .1 Disposal facilities must be those approved of and listed in Waste Reduction Workplan.
 - .2 Written authorization from the Departmental Representative is required to deviate from disposal facilities listed in Waste Reduction Workplan.

END OF SECTION