

## **1 General**

### **1.1 RELATED REQUIREMENTS**

- .1 Section 32 01 90.33 - Tree and Shrub Preservation.

### **1.2 DEFINITIONS**

- .1 Clearing consists of cutting off trees and brush vegetative growth to not more than 150 mm above ground and disposing of felled trees, previously uprooted trees and stumps, and surface debris.
- .2 Close cut clearing consists of cutting off standing trees, brush, scrub, roots, stumps and embedded logs, removing at, or close to, existing grade and disposing of fallen timber and surface debris.
- .3 Clearing isolated trees consists of cutting off to not more than 150 mm above ground of designated trees, and disposing of felled trees and debris.
- .4 Underbrush clearing consists of removal from treed areas of undergrowth, deadwood, and disposing of fallen timber and surface debris.
- .5 Grubbing consists of excavation and disposal of stumps and roots boulders and rock fragments of specified size to not less than specified depth below existing ground surface.

### **1.3 STORAGE AND PROTECTION**

- .1 Prevent damage to fencing, trees, landscaping, natural features, bench marks, existing pavement, utility lines, site appurtenances, water courses, root systems of trees which are to remain.

### **1.4 WASTE MANAGEMENT AND DISPOSAL**

- .1 All removed trees must be limbed, and bucked in 1200 mm length and transported and stockpiled/disposed at the Marmot Pit. The pit is located on Hwy 93A approximately 20 km north of the project site near the intersection with the Icefield Parking lot.
- .2 All waste such as brush, limbs, dead trees, stumps and other vegetation will be chipped, transported and disposed of at the Landfill. The contractor will take the possession of the waste.

## **2 Products**

### **2.1 NOT USED**

- .1 Not Used.

### **3 Execution**

#### **3.1 PREPARATION**

- .1 Tree and vegetation clearing will be subject restrictions under the MBCA, SARA, and Wildlife Act.
- .2 Owner will hire and pay for a certified biologist and perform a nesting sweep prior to commencement of the tree clearing.
- .3 Department Representative will mark-out the clearing limits.
- .4 Inspect site and verify with Departmental Representative, items designated to remain.
- .5 Locate and protect utility lines, if present: preserve in operating condition active utilities traversing site.
  - .1 Notify Departmental Representative immediately of damage to or when unknown existing utility lines are encountered.
- .6 Notify utility Department Representative before starting clearing and grubbing.
- .7 Protect all trees, shrubs and vegetation to remain in place as identified in Section 32 01 90.33 Tree and Shrub Preservation.
- .8 Keep roads and walks free of dirt and debris.

#### **3.2 CLEARING**

- .1 For clearing follow the MBCA, SARA, and Wildlife Act.
- .2 Clearing includes cutting of trees into sections and satisfactory disposal of trees and other vegetation designated for removal, including downed timber, snags, brush, and rubbish occurring within cleared areas.
- .3 Clear as directed by Departmental Representative, by cutting at height of not more than 150 mm above ground. In areas to be subsequently grubbed, height of stumps left from clearing operations to be not more than 500 mm above ground surface.
- .4 Remove branches from cleared trees.
- .5 Cut trees into 1200 mm length, no greater, and dispose at the Marmot Pit.
- .6 Cut off branches and cut down trees overhanging area cleared as directed by Departmental Representative.
- .7 Cut off unsound branches on trees designated to remain as directed by Departmental Representative.

#### **3.3 ISOLATED TREES**

- .1 Cut off isolated trees as directed by Departmental Representative at height of not more than 150 mm above ground surface.
- .2 Grub out isolated tree stumps and transport to location specified by the Department Representative.
- .3 Prune individual trees if directed by the Department Representative.

- .4 Trim trees designated to be left standing within cleared areas of dead branches 40 mm or more in diameter; and trim branches to heights as indicated.
- .5 Cut limbs and branches to be trimmed close to bole of tree or main branches.
- .6 Paint cuts more than 3 cm in diameter with approved tree wound paint.

### **3.4 UNDERBRUSH CLEARING**

- .1 Clear underbrush from areas as directed by the Department Representative at ground level.

### **3.5 GRUBBING**

- .1 Remove and dispose of all roots, matted roots, and stumps from indicated grubbing areas.
- .2 Grub out all stumps and roots to not less than 200 mm below ground surface.
- .3 Grub out visible rock fragments and boulders, greater than 1 m<sup>3</sup>.

### **3.6 REMOVAL AND DISPOSAL**

- .1 Take possession of all cleared and grubbed materials.
- .2 Cleared and Grubbed materials to be transported to the Marmot Pit for disposal or retained by the Contractor and transported outside of Jasper National Park.
- .3 Cut timber and other vegetation to sizes required for transportation.

### **3.7 FINISHED SURFACE**

- .1 Leave ground surface to approval of Departmental Representative.

### **3.8 CLEANING**

- .1 On completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.

**END OF SECTION**