

SECTION 3 – CLEARING AND GRUBBING

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SECTION 3 - CLEARING AND GRUBBING

3.1 DESCRIPTION

This section covers the requirements for site clearing and grubbing and for the management of the materials generated.

Clearing and grubbing is the removal and proper disposal within specified limits of:

- (a) vegetation such as trees, tree stumps, tree roots, logs, brush, grass, weeds and decayed vegetable matter; and
- (b) refuse such as pole stumps, rubbish dumps and sawdust piles and all other objectionable matter resting on or protruding from the surface of the original ground; and
- (c) obstructions such as concrete paving and foundations from all kerbs, kerbs and channels, concrete edgings, drainage pits, foundations, fences and old or disused structures within the specified area which will conflict or interfere with construction.

3.2 LIMITS OF WORK

(a) General

Unless otherwise specified, the limits of clearing and grubbing shall be:

- (i) the whole width between the outside edges of any batters, including any roundings, together with a further horizontal distance of 1 metre beyond the outside edges of batters but not beyond the road reserve boundary or, where catch drains are required, to the outside edges of catch drains;
- (ii) not more than the width required for completion of the work under the Contract.

HP Prior to the commencement of any clearing and grubbing, the Contractor shall peg the extent of the area to be cleared and conduct a joint inspection with the Superintendent to identify vegetation to be retained and protected. No clearing work or any type of disturbance outside this area shall be carried out without the prior approval of the Superintendent.

(b) Protection of Existing Vegetation

Existing trees, shrubs, native grasses and groundcovers and other areas of existing vegetation marked as 'to be protected and/or retained' on the Drawings or as directed by the Superintendent shall be protected by temporary fencing and incorporated into the works by the Contractor.

No earthworks, travel of equipment or storage compounds shall be established within 5 metres of the drip line of mature trees of trunk diameter greater than 200 mm.

Construction of table drains within the drip line of roadside trees shall be undertaken with no disturbance beyond the line of the table drain and no damage to the canopy of the trees.

(c) Protective Fencing

Protective fencing shall consist of, as a minimum, star pickets with three strands of wire (top, middle and bottom) and parawebbing.

(d) Salvage of Vegetation

Notwithstanding the requirements of clause 3.6 below, the Contractor shall co-operate with Frankston City Council by co-ordinating works under the Contract with activities involving the salvage of timber from felled trees, removal of plants for transplanting and the collection of cuttings and available seed from areas of native vegetation on the site.

3.3 CLEARING

Unless otherwise specified, the area within the specified limits shall be cleared of all vegetation, refuse and obstructions down to natural surface.

Trees shall be brought down in such manner as to avoid danger to personnel and traffic or damage to other trees, shrubs, structures or property outside the area being cleared or designated to be retained within the area being cleared.

Tree branches extending over the carriageway shall be trimmed to provide a clearance of at least 6 m above the carriageway surface. All cuts on trees shall be made flush with the trunk so as to leave no stubs. Where whole branches or long stubs 50 mm or more in diameter are to be removed, the Contractor shall use the three cut method which requires:

- (a) the under cut;
- (b) the upper cut (further away from the trunk than (a) above) to remove the branch; and
- (b) the final trim cut which is to be cut close to the main trunk but outside the branch collar.

All timber, scrub and debris shall become the property of the Contractor, and shall be disposed of as specified below. If so desired, the Contractor may stack surplus timber in such manner as to be convenient for removal as firewood by others.

3.4 GRUBBING

In areas where excavation will be made, all vegetation, refuse and obstructions shall be totally grubbed or grubbed to a depth of not less than 0.3 m below the subgrade and batters, whichever is the lesser treatment.

In areas to be covered by embankments, all vegetation, refuse and obstructions shall be grubbed to a depth of not less than 0.3 m below the stripped surface or not less than 0.6 m below the finished surface of the subgrade, whichever is the lesser treatment. In areas to be covered by embankments exceeding 1 m in height, foundations may remain if located or cut off not more than 0.4 m above the natural surface but not less than 1 m below subgrade.

Pits which are no longer required shall be removed or broken back to a depth not less than 0.3 m below the finished surface of the subgrade. Remaining pipe openings shall be sealed with concrete. Any remnants of pits shall be backfilled with material and compacted to a density ratio of not less than 95%. The calculation of density ratio shall be based on Standard compactive effort.

Holes resulting from grubbing shall be backfilled with material similar to the surrounding material and compacted to the same degree as the surrounding material.

3.5 CLEARING AND GRUBBING AT BRIDGE AND CULVERT SITES

Unless otherwise shown on the drawings, trees and stumps within 10 m of any portion of a proposed bridge, or proposed culvert having a waterway area greater than 6m², shall be cleared and grubbed together with any trees beyond these limits which could fall on or block these structures. The Superintendent may direct that certain trees within the above limits shall be retained for conservation reasons.

Clearing and grubbing at bridge and culvert sites shall conform to the other relevant requirements of this section.

3.6 REMOVAL AND DISPOSAL OF MATERIALS

(a) General

Unless otherwise specified any salvageable materials shall become the property of the Contractor. Works under the Contract shall be carried out to wherever possible re-use materials generated from clearing and grubbing operations within the works area. Any materials which cannot be re-used on site shall be removed from the site.

Disposal of material by burning on site or burying of materials on site shall only be carried out when permitted by the relevant authorities and approved by the Superintendent.

The roadway and adjacent areas shall be left with a neat and tidy appearance free from unsightly debris.

(b) Trees

Tree trunks and large branches shall be removed from the site.

Small tree branches, shrubs and leaves, excluding noxious weeds, shall be disposed of by chipping and mulching to form mulch.

(c) Concrete, Bituminous and other Recyclable Materials

The Contractor shall dispose of salvaged concrete, bituminous materials of size greater than 50 mm and other recyclable materials at approved recycling establishments.

3.7 SURVEY MARKS

During clearing and grubbing operations, care shall be taken not to disturb any bench marks, survey or level pegs. Any survey pegs lost as a result of the Contractor's carelessness shall be replaced at the Contractor's expense.

3.8 DAMAGE TO PROPERTY

Any damage to fences, buildings, grass, cultivation or other property caused by or arising from the execution of work under this section shall be repaired immediately by the Contractor to a condition at least equal to that existing before damage and no additional payment will be made for this work.