TECHNICAL SPECIFICATIONS
GENERAL SPECIFICATIONS FOR CLEARING & GRUBBING

1 SCOPE OF WORK

Work under this Contract shall consist of furnishing all labour, materials, equipment and appliances necessary and required to completely cutting, removing and disposing of all materials such as trees, bushes, shrubs, stumps, roots, grass, weeds, rubbish, top organic soil, etc. to an average depth of 150 mm in thickness, Which in the opinion of the Engineer are unsuitable for incorporation in the works, from the area of road land containing road embankment, drains, cross-drainage structures and such other areas as may be specified on the drawings or by the Engineer. It shall include necessary excavation; backfilling of pits resulting of pits resulting from uprooting of trees and stumps to required compaction, handling, salvaging, and disposal of cleared materials with all leads and lifts. Clearing and grubbing shall be performed in advance of earthwork operations and in accordance with the requirements of these Specifications described hereinafter and as specified in the Bill of Quantities and/or shown on the Engineering drawings attached herewith.

2 SPECIFICATIONS

2.1 Work under this Contract shall be carried out strictly in accordance with latest amended upto date PWD/ CPWD/ MORTH Specifications for all civil & road works in addition to technical specifications attached with the tender.

2.2 Items not covered under these specifications due to any ambiguity or misprints, or additional works, the work shall be carried out as per specifications for Buildings, roads, sanitary, plumbing, sewerage works of PWD/ CPWD/ MORTH specifications with all the latest amendments as applicable.

2.3 Works not covered under para 2.1 and 2.2 will be carried out with the latest amendments or relevant Indian Standards Specifications or codes of practice and, if not available as per British Standards Specifications or codes of practice or unified plumbing code of U.S.A. The decision of the Engineer-in-Charge will be final and binding.

2.4 The work shall be carried out strictly as specified in Bill of Quantities and technical specifications. In case of any ambiguity, the details of the particular item as given in Bill of Quantities shall supersede the details in specifications.

2.5 I.S. Codes referred shall mean latest I.S. Codes amended upto date.
3. **Preservation of Property/Amenities**

Roadside trees, shrubs, any other plants, pole lines, fences, signs, monuments, buildings, pipelines, sewers and all highway facilities within or adjacent to the highway which are not to be disturbed shall be protected from injury or damage. The Contractor shall provide and install at his own cost, suitable safeguards approved by the Engineer for this purpose. During clearing and grubbing, the Contractor shall take all adequate precautions against soil erosion, water pollution, etc., and where required, undertake additional works to that effect vide Clause 306. Before start of operations, the Contractor shall submit to the Engineer for approval, his work plan including the procedure to be followed for disposal of waste materials, etc., and the schedules for carrying out temporary and permanent erosion control works as stipulated in Clause 306.3 of MORTH Spesification.

4. **Methods, Tools and Equipment**

Only such methods, tools and equipment as are approved by the Engineer and which will not affect any property to be preserved shall be adopted for the Work. If the area has thick vegetation/roots/trees, a crawler or pneumatic tyred dozer of adequate capacity may be used for clearance purposes. The dozer shall have ripper attachments for removal of tree stumps. All trees, stumps, etc., falling within excavation and fill lines shall be cut to such depth below ground level that in no case these fall within 500 mm of the bottom of the subgrade. Also, all vegetation such as roots, under-growth, grass and other deleterious matter unsuitable for incorporation in the embankment/subgrade shall be removed between fill lines to the satisfaction of the Engineer. All branches of trees extending above the roadway shall be trimmed as directed by the Engineer.

All excavations below the general ground level arising out of the removal of trees, stumps, etc., shall be filled with suitable material and compacted thoroughly so as to make the surface at these points conform to the surrounding area. Anti-hills both above and below the ground, as are liable to collapse and obstruct free subsoil water flow shall be removed and their workings, which may extend to several meters, shall be suitably treated.

5. **Disposal of Materials**

All materials arising from clearing and grubbing operations shall be taken over and shall be disposed of by the Contractor at suitable disposal sites with all leads and lifts. The disposal shall be in accordance with local, State and Central regulations.

6. **Measurements for Payment**
Clearing and grubbing for site area, road embankment, drains and cross-drainage structures shall be measured on area basis in terms of hectares. Cutting of trees upto 300 mm in girth and removal of their stumps, including removal of stumps upto 300 mm in girth left over after trees have been cut by any other agency, and trimming of branches of trees extending above the roadway and backfilling to the required compaction shall be considered incidental to the clearing and grubbing operations.

7. Rates

7.1 The Contract unit rates for the various items of clearing and grubbing shall be payment in full for carrying out the required operations including full compensation for all labour, materials, tools, equipment and incidentals necessary to complete the work. These will also include removal of stumps of trees less than 300 mm girth excavation and back-filling to required density, where necessary, and handling, giving credit towards salvage value disposing of the cleared materials with all lifts and leads. Clearing and grubbing done in excess of 150 mm by the Contractor shall be made good by the Contractor at his own cost as per MORTH Clause 301.3.3 to the satisfaction of the Engineer prior to taking up earthwork. Where clearing and grubbing is to be done to a level beyond 150 mm, due to site considerations, as directed by the Engineer, the extra quantity shall be measured and paid separately.