Specification (Measurement)

Transport and Main Roads Specifications
MRS16 Landscape and Revegetation Works

July 2017
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1 Introduction

This Specification applies to the construction of landscape and revegetation treatments in roadworks. This Specification shall be read in conjunction with MRS01 Introduction to Specifications, and other Specifications as appropriate.

This Specification forms part of the Transport and Main Roads Specifications Manual.

2 Measurement of work

2.1 Standard Work Items

In accordance with the provisions of Clause 2.1.3 of MRS01 Introduction to Specifications, the Standard Work Items incorporated in this Specification are listed in Table 2.1.

Table 2.1 – Standard Work Items

<table>
<thead>
<tr>
<th>Standard Item No.</th>
<th>Description</th>
<th>Unit of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>50601</td>
<td>Preparation of a Soil Management Plan – Construction – Form A</td>
<td>lump sum</td>
</tr>
<tr>
<td>50602P</td>
<td>Topsoil sampling and testing – Form C (Provisional Quantity)</td>
<td>set of tests</td>
</tr>
<tr>
<td>50606P</td>
<td>Manufactured site topsoil sampling and testing – Form D (Provisional Quantity)</td>
<td>set of tests</td>
</tr>
<tr>
<td>50610P</td>
<td>Subsoil sampling and testing – Form E (Provisional Quantity)</td>
<td>set of tests</td>
</tr>
<tr>
<td>50614P</td>
<td>Drainage basin soil sampling and testing – Form F (Provisional Quantity)</td>
<td>set of tests</td>
</tr>
<tr>
<td>50651P</td>
<td>Manufactured site topsoil (Provisional Quantity, if ordered)</td>
<td>m³</td>
</tr>
<tr>
<td>50655P</td>
<td>Manufactured site mulch (Provisional Quantity, if ordered)</td>
<td>m³</td>
</tr>
<tr>
<td>50659</td>
<td>Harvesting of site seed material [description]</td>
<td>lump sum</td>
</tr>
<tr>
<td>50660</td>
<td>Harvesting of site plant material [description]</td>
<td>lump sum</td>
</tr>
<tr>
<td>50701P</td>
<td>Amelioration agent – agricultural lime, dolomite and / or gypsum (Provisional Quantity, if ordered) [agricultural lime, agricultural dolomite, agricultural gypsum]</td>
<td>tonne</td>
</tr>
<tr>
<td>50705P</td>
<td>Amelioration agent – organic soil conditioner (Provisional Quantity, if ordered)</td>
<td>m³</td>
</tr>
<tr>
<td>50709P</td>
<td>Imported topsoil (Provisional Quantity, if ordered)</td>
<td>m³</td>
</tr>
<tr>
<td>50713P</td>
<td>Imported mulch (Provisional Quantity, if ordered) [description]</td>
<td>m³</td>
</tr>
<tr>
<td>50751P</td>
<td>Application of knock-down herbicide (Provisional Quantity)</td>
<td>m²</td>
</tr>
<tr>
<td>50755P</td>
<td>Manual removal of weeds (Provisional Quantity, if ordered) [description]</td>
<td>lump sum</td>
</tr>
<tr>
<td>50759P</td>
<td>Application of target herbicide (Provisional Quantity, if ordered) [description]</td>
<td>m²</td>
</tr>
<tr>
<td>Standard Item No.</td>
<td>Description</td>
<td>Unit of Measurement</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
<td>---------------------</td>
</tr>
<tr>
<td><strong>Landscape and Revegetation – Ground Preparation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50801</td>
<td>Installation of ameliorants to subsoil</td>
<td>m²</td>
</tr>
<tr>
<td>50802</td>
<td>Ripping, cultivation, roughening</td>
<td>m²</td>
</tr>
<tr>
<td>50803</td>
<td>Installation of topsoil [depth]</td>
<td>m²</td>
</tr>
<tr>
<td><strong>Landscape and Revegetation – Seeding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50851</td>
<td>Seed Mix – Grassland Mix [mix name]</td>
<td>kg</td>
</tr>
<tr>
<td>50852</td>
<td>Seed Mix – Woodland / Forest Mix [mix name]</td>
<td>kg</td>
</tr>
<tr>
<td>50853</td>
<td>Installation of drill seeding [mix name]</td>
<td>m²</td>
</tr>
<tr>
<td>50854</td>
<td>Installation of broadcast seeding [mix name]</td>
<td>m²</td>
</tr>
<tr>
<td>50855</td>
<td>Installation of hydromulch – standard [mix name]</td>
<td>m²</td>
</tr>
<tr>
<td>50856</td>
<td>Installation of hydromulch - bonded fibre matrix [mix name]</td>
<td>m²</td>
</tr>
<tr>
<td>50858</td>
<td>Installation of hydro-compost [mix name]</td>
<td>m³</td>
</tr>
<tr>
<td>50859</td>
<td>Installation of straw mulching [mix name]</td>
<td>m³</td>
</tr>
<tr>
<td>50860</td>
<td>Installation of organics blanket [mix name]</td>
<td>m²</td>
</tr>
<tr>
<td>50861</td>
<td>Installation of seeded organic mesh and emulsion [mix name]</td>
<td>m²</td>
</tr>
<tr>
<td><strong>Landscape and Revegetation Works - Turfing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50901</td>
<td>Installation of turf [description]</td>
<td>m²</td>
</tr>
<tr>
<td><strong>Landscape and Revegetation Works - Planting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50951</td>
<td>Installation of planting [description]</td>
<td>container</td>
</tr>
<tr>
<td><strong>Landscape and Revegetation - Hardscape</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51001</td>
<td>Installation of concrete planting bed edging</td>
<td>m</td>
</tr>
<tr>
<td>51002</td>
<td>Installation of irrigation system</td>
<td>lump sum</td>
</tr>
<tr>
<td><strong>Landscape and Revegetation – Establishment and Monitoring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51051</td>
<td>Establishment Period</td>
<td>lump sum</td>
</tr>
<tr>
<td>51052P</td>
<td>Establishment Period Watering (Provisional Quantity)</td>
<td>lump sum</td>
</tr>
<tr>
<td>51056</td>
<td>Monitoring Period [duration]</td>
<td>lump sum</td>
</tr>
<tr>
<td>51057P</td>
<td>Monitoring Period Watering (Provisional Quantity)</td>
<td>lump sum</td>
</tr>
</tbody>
</table>

Standard Work Items common to all landscape and revegetation treatments (seeding, turfing and planting) should be nominated in the Schedule of Rates:

- 50601 Preparation of a Soil Management Plan – Construction – Form A
- 50602P Topsoil sampling and testing – Form C (Provisional Quantity)
- 50606P Manufactured site topsoil sampling and testing – Form D (Provisional Quantity)
- 50610P Subsoil sampling and testing – Form E (Provisional Quantity)
- 50751P Application of knock-down herbicide (Provisional Quantity)
2.2 Work Operations

2.2.1 Landscape and Revegetation – Sampling and Testing

Item 50601 Preparation of a Soil Management Plan – Construction – Form A

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and

b) preparation and updating of the Soil Management Plan - Construction in accordance with Clause 5.2.1 of MRTS16 Landscape and Revegetation Works.

Item 50602P Topsoil sampling and testing – Form C (Provisional Quantity)

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications

b) sampling in accordance with Clause 8.1.2.1 of MRTS16 Landscape and Revegetation Works

c) testing in accordance with Clause 8.1.2.2 of MRTS16 Landscape and Revegetation Works

d) completion of Form C – Topsoil Testing

e) analysis of test results and determination of recommendations, and

f) preparation of Form B – Soil Assessment Report.

A quantity allowance should be based on the minimum required testing frequency of two tests per 500 m³ of topsoil.
Item 50606P  Manufactured site topsoil sampling and testing – Form D (Provisional Quantity)

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) sampling in accordance with Clause 8.1.2.1 of MRTS16 Landscape and Revegetation Works
c) testing in accordance with Clause 8.1.2.2 of MRTS16 Landscape and Revegetation Works
d) completion of Form D – Manufactured Site Topsoil Compliance Testing
e) analysis of test results and determination of recommendations, and
f) preparation of Form B – Soil Assessment Report.

A quantity allowance should be based on the minimum required testing frequency of two tests per 500 m³ of stockpiled stripped site topsoil.

Item 50610P  Subsoil sampling and testing – Form E (Provisional Quantity)

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) sampling in accordance with Clause 8.1.1.1 of MRTS16 Landscape and Revegetation Works
c) testing in accordance with Clause 8.1.1.2 of MRTS16 Landscape and Revegetation Works
d) completion of Form E – Subsoil Testing
e) analysis of test results and determination of recommendations, and
f) preparation of Form B – Soil Assessment Report.

A quantity allowance should be based on two tests per 500 m length of roadway.
A higher quantity allowance should be considered on sites with large and / or multiple hills, ridges, cuts / fill batters and water courses.
A lower quantity allowance should be considered on sites with a consistently flat, landform.

Item 50614P  Drainage basin soil sampling and testing – Form F (Provisional Quantity)

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) sampling in accordance with Clause 8.1.1.1 of MRTS16 Landscape and Revegetation Works
c) testing in accordance with Clause 8.1.1.2 of MRTS16 Landscape and Revegetation Works
d) completion of Form F – Drainage Basin Soil Testing
e) analysis of test results and determination of recommendations, and
f) preparation of Form B – Soil Assessment Report.
A quantity allowance should be based on one test per drainage basin to be vegetated.

### 2.2.2 Landscape and Revegetation – Site Won Materials

**Item 50651P** Manufactured site topsoil (Provisional Quantity, if ordered)

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*, and
- b) amelioration and screening stockpiled site topsoil in accordance with Clause 8.2.1 of MRTS16 *Landscape and Revegetation Works*.

**Payment Note:** Payment for stripping, stockpiling, sampling and testing, and supply of amelioration agents is included under separate Standard Work Items.

Where it is intended site won topsoil is to be used, ensure Standard Work Item 32003P Stripping of topsoil (Provisional Quantity as directed) is scheduled.

When Standard Work Item 50651P Manufactured site topsoil (Provisional Quantity, if ordered) is scheduled, the following interdependent Standard Work Items should be nominated in the Schedule of Rates:

- a) testing:
  - 50602P Topsoil sampling and testing – Form C (Provisional Quantity)
  - 50606P Manufactured site topsoil sampling and testing – Form D (Provisional Quantity)
- b) amelioration agents:
  - 50701P Amelioration agent – agricultural lime, dolomite and / or gypsum (Provisional Quantity, if ordered)
  - 50705P Amelioration agent – organic soil conditioner (Provisional Quantity, if ordered)

**Item 50655P** Manufactured site mulch (Provisional Quantity, if ordered)

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*, and
- b) manufacture and stockpiling in accordance with Clause 8.2.2 of MRTS16 *Landscape and Revegetation Works*.

Where vegetation exists on site and it is intended to process for use as mulch in permanent landscape works or temporary erosion and sediment control works, ensure MRTS04 *General Earthworks* Annexure specifies the retention of adequate quantities of suitable material.

Material may be used for planting areas or for erosion and sediment control.
**Item 50659  Harvesting of site seed material [description]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) obtaining permits, where required in accordance with Clause 5.3.2 of MRTS16 *Landscape and Revegetation Works*, supply of all materials

c) preparation of a Seed Harvesting Proposal in accordance with Clause 5.3.2 of MRTS16 *Landscape and Revegetation Works*, and

d) activities in accordance with the Seed Harvesting Proposal and Clause 8.2.3.1 of MRTS16 Landscape and Revegetation Works.

**Item 50660  Harvesting of site plant material [description]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) obtaining permits, where required in accordance with Clause 5.3.4 of MRTS16 *Landscape and Revegetation Works*, supply of all materials

c) preparation of a Plant Harvesting Proposal in accordance with Clause 5.3.4 of MRTS16 *Landscape and Revegetation Works*, and

d) activities in accordance with the Plant Harvesting Proposal and Clause 8.2.3.2 of MRTS16 Landscape and Revegetation Works.

**Payment Note:** Payment for planting site harvested plant material is included under Standard Work Item 50951.

### 2.2.3 Landscape and Revegetation – Imported Materials

**Item 50701P  Amelioration agent – agricultural lime, dolomite and / or gypsum (Provisional Quantity, if ordered) [agricultural lime, agricultural dolomite, agricultural gypsum]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) supply and storage of amelioration agents:

   i. agricultural lime, and / or

   ii. agricultural dolomite, and / or

   iii. agricultural gypsum.
A quantity allowance for the supply of amelioration agents (lime, dolomite, gypsum) should be:

- **Subsoil**
  - 1.5 kg of chemical amelioration agent per m$^2$ of areas to be treated with a vegetation treatment (1.5 kg / m$^2$)

- **Topsoil**
  - 5 kg of chemical amelioration agent per m$^3$ of stripped site topsoil (5 kg / m$^3$)

The actual type and quantity of amelioration agent to be applied is determined through sampling and testing the subsoil and topsoil.

**Item 50705P  Amelioration agent – organic soil conditioner (Provisional Quantity, if ordered)**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and

b) supply and storage of organic soil conditioner.

A quantity allowance for the supply of organic soil conditioner to ameliorate topsoils should be:

- 0.1 m$^3$ of organic soil conditioner per m$^3$ of stripped site topsoil (0.1 m$^3$ / m$^3$).

The actual quantity of amelioration agent to be applied is determined through sampling and testing the topsoil.

**Item 50709P  Imported topsoil (Provisional Quantity, if ordered)**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and

b) supply and storage of imported topsoil.

**Item 50713P  Imported mulch (Provisional Quantity, if ordered) [description]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and

b) supply and storage of imported mulch.

**2.2.4 Landscape and Revegetation – Weed Control**

**Item 50751P  Application of knock-down herbicide (Provisional Quantity)**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications

b) obtaining permits, where required in accordance with Clause 8.3 of MRTS16 Landscape and Revegetation Works, and

c) handling and application of knock-down herbicide as part of ground preparation in accordance with Clause 8.3 of MRTS16 Landscape and Revegetation Works.
A quantity allowance should be based on 10% of the total area of vegetation treatments. This quantity allowance generally relates to treatment at the edge of disturbed areas beyond the cut and fill batters. Newly constructed cut and fill batters are typically weed free. Biosecurity weeds are managed under MRS51 Environmental Management.

**Item 50755P Manual removal of weeds (Provisional Quantity, if ordered) [description]**

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and
- b) manual removal and disposal of weeds as part of ground preparation in accordance with Clause 8.3 of MRTS16 Landscape and Revegetation Works.

**Item 50759P Application of target herbicide (Provisional Quantity, if ordered) [description]**

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- b) obtaining permits, where required in accordance with Clause 8.3 of MRTS16 Landscape and Revegetation Works, and
- c) handling and application of specific target herbicide as part of ground preparation in accordance with Clause 8.3 of MRTS16 Landscape and Revegetation Works.

### 2.2.5 Landscape and Revegetation – Ground Preparation

**Item 50801 Installation of ameliorants to subsoil**

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and
- b) installation of amelioration agent on subsoil prior to ground preparation in accordance with Clause 8.4.1.1 of MRTS16 Landscape and Revegetation Works.

**Item 50802 Ripping, cultivation, roughening**

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- b) ripping and cultivation of compacted subsoil areas ≤ 1:4, in accordance with Clause 8.4.1.2 of MRTS16 Landscape and Revegetation Works
- c) cultivation of subsoil in areas ≤ 1:4, in accordance with Clause 8.4.1.3 of MRTS16 Landscape and Revegetation Works, and
- d) roughening of subsoil in areas > 1:4, in accordance with Clause 8.4.1.4 of MRTS16 Landscape and Revegetation Works.
Item 50803  Installation of topsoil [depth]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and
b) installation of topsoil in accordance with Clause 8.4.2.1 of MRTS16 Landscape and Revegetation Works.

2.2.6 Landscape and Revegetation – Seeding

Item 50851  Seed Mix – Grassland Mix [mix name]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) supply of a Seed Supply Proposal in accordance with Clause 5.3.1 of MRTS16 Landscape and Revegetation Works
c) supply of seed mix in accordance with Clause 7.4.9 and Clause 7.4.9.1 of MRTS16 Landscape and Revegetation Works, and
d) activities in accordance with the Seed Supply Proposal

Item 50852  Seed Mix – Woodland / Forest Mix [mix name]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) supply of a Seed Supply Proposal in accordance with Clause 5.3.1 of MRTS16 Landscape and Revegetation Works
c) supply of seed mix in accordance with Clause 7.4.9 and Clause 7.4.9.2 of MRTS16 Landscape and Revegetation Works, and
d) activities in accordance with the Seed Supply Proposal.

Item 50853  Installation of drill seeding [mix name]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and
b) installation in accordance with Clause 8.5.1.1 of MRTS16 Landscape and Revegetation Works.

Payment Note: Payment for supply of materials (amelioration agents, topsoil), ground preparation (installation of amelioration agents to subsoil, ripping, cultivation, roughening and installation of topsoil), and supply of the seed mix is included under separate Standard Work Items.
Item 50854  Installation of broadcast seeding [mix name]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and
b) installation in accordance with Clause 8.5.1.2 of MRTS16 Landscape and Revegetation Works.

Payment Note: Payment for supply of materials (amelioration agents, topsoil), ground preparation (installation of amelioration agents to subsoil, ripping, cultivation, roughening and installation of topsoil), and supply of the seed mix is included under separate Standard Work Items.

Item 50855  Installation of hydromulch – standard [mix name]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) installation of a sample area in accordance with Clause 8.5.1 of MRTS16 Landscape and Revegetation Works, and
c) installation in accordance with Clause 8.5.1.3 of MRTS16 Landscape and Revegetation Works.

Payment Note: Payment for supply of materials (amelioration agents, topsoil), ground preparation (installation of amelioration agents to subsoil, ripping, cultivation, roughening and installation of topsoil), and supply of the seed mix is included under separate Standard Work Items.

Item 50856  Installation of hydromulch - bonded fibre matrix [mix name]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) installation of a sample area in accordance with Clause 8.5.1 of MRTS16 Landscape and Revegetation Works, and
c) installation in accordance with Clause 8.5.1.4 of MRTS16 Landscape and Revegetation Works.

Payment Note: Payment for supply of materials (amelioration agents, topsoil), ground preparation (installation of amelioration agents to subsoil, ripping, cultivation, roughening and installation of topsoil), and supply of the seed mix is included under separate Standard Work Items.

Item 50858  Installation of hydro-compost [mix name]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) installation of a sample area in accordance with Clause 8.5.1 of MRTS16 Landscape and Revegetation Works, and
c) installation in accordance with Clause 8.5.1.5 of MRTS16 Landscape and Revegetation Works.
Item 50859  Installation of straw mulching [mix name]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications

b) installation of a sample area in accordance with Clause 8.5.1 of MRTS16 Landscape and Revegetation Works, and

c) installation in accordance with Clause 8.5.1.6 of MRTS16 Landscape and Revegetation Works.

Payment Note: Payment for supply of materials (amelioration agents, topsoil), ground preparation (installation of amelioration agents to subsoil, ripping, cultivation, roughening and installation of topsoil), and supply of the seed mix is included under separate Standard Work Items.

Item 50860  Installation of organics blanket [mix name]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications

b) installation of a sample area in accordance with Clause 8.5.1 of MRTS16 Landscape and Revegetation Works, and

c) installation in accordance with Clause 8.5.1.7 of MRTS16 Landscape and Revegetation Works.

Payment Note: Payment for supply of materials (amelioration agents, topsoil), ground preparation (installation of amelioration agents to subsoil and ripping, cultivation, roughening), and supply of the seed mix is included under separate Standard Work Items.

Item 50861  Installation of seeded organic mesh and emulsion [mix name]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications

b) installation of a sample area in accordance with Clause 8.5.1 of MRTS16 Landscape and Revegetation Works, and

c) installation in accordance with Clause 8.5.1.8 of MRTS16 Landscape and Revegetation Works.

Payment Note: Payment for supply of materials (amelioration agents, topsoil), ground preparation (installation of amelioration agents to subsoil, ripping, cultivation, roughening and installation of topsoil), and supply of the seed mix is included under separate Standard Work Items.

2.2.7 Landscape and Revegetation – Turfing

Item 50901  Installation of turf [description]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and
b) installation in accordance with Clause 8.5.2 of MRTS16 Landscape and Revegetation Works.

Payment Note: Payment for supply of materials (amelioration agents, topsoil) and ground preparation (installation of amelioration agents to subsoil, ripping, cultivation, roughening and installation of topsoil), is included under separate Standard Work Items.

2.2.8 Landscape and Revegetation – Planting

Item 50951 Installation of planting [description]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications

b) supply of a Plant Supply Proposal in accordance with Clause 5.3.3 of MRTS16 Landscape and Revegetation Works

c) activities in accordance with the Plant Supply Proposal

d) installation of planting containers < 25 L in accordance with Clause 8.5.3.1 or MRTS16 Landscape and Revegetation Works, and

e) installation of planting containers ≥ 25 L in accordance with Clause 8.5.3.2 of MRTS16 Landscape and Revegetation Works.

Payment Note: Payment for supply of materials (amelioration agents, topsoil, mulch) and ground preparation (installation of amelioration agents to subsoil, ripping, cultivation, roughening and installation of topsoil), is included under separate Standard Work Items.

2.2.9 Landscape and Revegetation – Hardscape

Item 51001 Installation of concrete planting bed edging

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and

b) installation in accordance with Clause 8.6.1 of MRTS16 Landscape and Revegetation Works.

Item 51002 Installation of irrigation system

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications

b) design and documentation of the irrigation system in accordance with Clause 8.6.2.1 of MRTS16 Landscape and Revegetation Works

c) installation and commissioning in accordance with Clause 8.6.2.2 of MRTS16 Landscape and Revegetation Works

d) documentation and warranties in accordance with Clause 8.6.2.3 of MRTS16 Landscape and Revegetation Works, and

e) training the Principal’s nominated representatives in the setup and operation of the system.
2.2.10 Landscape and Revegetation – Establishment and Monitoring

Item 51051 Establishment Period

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) establishment period in accordance with Clause 9.1 of MRTS16 Landscape and Revegetation Works, and
c) establishment period operations in accordance with Clause 9.1.1 of MRTS16 Landscape and Revegetation Works.

Payment Note: Payment for watering is included under Standard Work Item 51052P.

Item 51052P Establishment Period Watering (Provisional Quantity)

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and
b) watering in accordance with Clause 9.1.1.1 of MRTS16 Landscape and Revegetation Works.

Item 51056 Monitoring Period [duration]

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
b) monitoring period in accordance with Clause 9.2 or MRTS16 Landscape and Revegetation Works, and
c) monitoring period operations in accordance with Clause 9.2.1 of MRTS16 Landscape and Revegetation Works.

Payment Note: Payment for watering is included under Standard Work Item 51057P.

Item 51057P Monitoring Period Watering (Provisional Quantity)

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and
b) watering in accordance with Clause 9.2.1.1 of MRTS16 Landscape and Revegetation Works.

3 Payment

3.1 Management of stockpiles of site and imported topsoil

Payment for the management of stockpiles of site topsoil and imported topsoil is included under the Standard Work Item 32003P Stripping of Topsoil (Provisional Quantity, as directed) – MRTS04.

3.2 Installation of topsoil

Where topsoil has been installed and subsequently disturbed by the Contractor, the topsoil shall be restored to the specified depths and profiles at the Contractor’s cost.

No additional payment shall be made for the corrective actions required to topsoil due to delay in the installation of vegetation treatments.
3.3 **Seed supply proposal and seed harvesting proposal**

No separate payment shall be made for the preparation of proposals. Payment for the preparation of proposals is included under the relevant Work Item.

3.4 **Plant supply proposal and plant harvesting proposal**

No separate payment shall be made for the preparation of proposals. Payment for the preparation of proposals is included under the relevant Work Item.

3.5 **Non-potable water management plan and associated testing**

No separate payment shall be made for the preparation of the management plan or associated testing. Payment for the preparation of the management plan and associated testing is included under the relevant Work Item.

3.6 **Replacing installed works damaged by herbicide overspray**

Where vegetation treatments are poisoned due to overspray with herbicides, the Contractor shall reinstall the area in accordance with this Specification. No additional payment shall be made for replacement work for works damaged by herbicide overspray.

3.7 **Replacing installed works damaged by construction works**

Where landscape works are damaged by construction works, the Contractor shall reinstall the area in accordance with this Specification. No additional payment shall be made for replacement work for works damaged by construction works.

3.8 **Payment for Establishment Period**

Provided the Contractor is fulfilling all their obligations, payment for Standard Work Item 51051 shall be:

a) the first two payments shall each comprise 40% of the tendered amount, and

b) the balance of monies owed to the Contractor for Standard Work Item 51051 is payable following the completion of the Establishment Period and issue of the Certificate of Completion of the Establishment Period for all Lots.

3.9 **Payment for Establishment Period Watering**

Provided the Contractor is fulfilling all their obligations, payment for Standard Work Item 51052P shall be:

a) the first two payments shall each comprise 40% of the tendered amount, and

b) the balance of monies owed to the Contractor for Work Item 51052P is payable following the completion of the Establishment Period and issue of the Certificate of Completion of the Establishment Period for all Lots.
3.10 Payment for Monitoring Period

Provided that the Contractor is fulfilling all their obligations, payment for Work Item 51056 shall be as follows:

a) monthly pro-rata payments of the tendered amount until the total payments comprise 90% of the tendered amount, and

b) the balance of monies owed to the Contractor for Work Item 51056 is payable following the issue of the Certificate of Completion of the Monitoring Period.

3.11 Payment for Monitoring Period Watering

Provided that the Contractor is fulfilling all their obligations, payment for Work Item 51057P shall be as follows:

a) monthly pro-rata payments of the tendered amount until the total payments comprise 90% of the tendered amount, and

b) the balance of monies owed to the Contractor for Work Item 51057P is payable following the issue of the Certificate of Completion of the Monitoring Period.