

Public Realm

Master Specification

PR-LS-M4 Maintenance of Native Grasses

Document Information

K Net Number:	14278305
Document Version	1
Document Date:	20/09/2019

DEPARTMENT FOR
INFRASTRUCTURE
AND TRANSPORT



Government of South Australia

Department for Infrastructure
and Transport

Document Amendment Record

Version	Change Description	Date	Endorsement record (KNet ref.)
1	Transfer from Part L80 Maintenance of Native Grasses	20/09/19	

Document Management

This document is the Property of the Department for Infrastructure and Transport and contains information that is confidential to the Department. It must not be copied or reproduced in any way without the written consent of the Department. This is a controlled document and it will be updated and reissued as approved changes are made.

Contents

Public Realm		
Contents		2
PR-LS-M4 Maintenance of Native Grasses		4
1	General	4
2	Replacement of Defective, Damaged or Dead Plants	4
3	Watering of Plants	4
4	Weed Control	5
5	SLASHING	5
6	Pest / Disease Control	6
7	Maintenance of Marker Stakes	6
8	Maintenance of Tree Guards	6
9	Maintenance of Weed Mats	6
10	Maintenance of Mulch	6
11	Follow-up Fertiliser	7
12	Removal of Marker Stakes and Tree Guards	7
13	Hold Points	7

PR-LS-M4 Maintenance of Native Grasses

1 General

- 1.1 This Part specifies the requirements for maintenance of native grasses. It includes replacement of defective, damaged or dead plants, watering of plants, weed control, slashing, pest / disease control, maintenance of marker stakes and tree guards, maintenance of weed mats and mulch, follow-up fertiliser, and removal of marker stakes and tree guards.
- 1.2 The Contractor shall be responsible for maintenance for the period stated in the Contract.
- 1.3 Maintenance shall mean the continued care of native grasses within the Extent of Works area indicated on the Drawings or in the Design Report to promote healthy and vigorous growth by implementing accepted horticultural practices, as well as rectifying any defects that become apparent in the works under normal conditions and according to the season.
- 1.4 The following Clauses describe maintenance work appropriate for normal conditions. The Contractor shall perform various operations to suit seasonal and/or other conditions affecting the condition of the Extent of Works area indicated on the Drawings or in the Design Report.
- 1.5 The Contractor shall nominate when treatments are considered necessary and shall obtain the approval of the Principal prior to proceeding with the treatment.
- 1.6 All clauses of this Part apply unless otherwise specified in the Contract Scope or Requirements.
- 1.7 Where a specification differs between the Drawing and the Design Report, the Drawing shall take precedence.
- 1.8 If not specified in the Drawings or Design Report, the clauses in this Part shall be followed.
- 1.9 Where required under the Controlled Substances Act 1984, and the Controlled Substances (Pesticides) Regulations 2017, employees undertaking pest control work shall hold a current Pest Management Technician's License.

2 Replacement of Defective, Damaged or Dead Plants

- 2.1 All replacement of native grasses shall be carried out in accordance with Part PR-LS-C2 "Planting" of this Specification and shall be approved by the Principal.
- 2.2 Where plants within the Extent of Works area indicated on the Drawings or in the Design Report have become damaged, defective or have died as a result of the Contractor's operations or negligence, they shall be replaced with the same species and provenance, within a 12 month period after the propagation of suitable species and installed when climatic conditions are appropriate. Replacement plants shall be established to healthy vigorous growth, at the Contractor's expense.
- 2.3 Where the plants have become damaged, defective or have died as a result of vandalism, they shall be replaced immediately with plants of the same species and provenance and shall be established to healthy vigorous growth, at the Principal's expense, and subject to approval by the Principal.

3 Watering of Plants

- 3.1 It shall be the Contractor's responsibility to ensure that all plants maintain growth and are free from water stress at all times. Water stress may include the lack of appropriate available water or an oversupply of water.
- 3.2 Water shall be of adequate quality.
- 3.3 Hand Watering
 - a) Following planting and initial watering, each plant shall receive a minimum of 10 litres of clean potable water according to the following schedule:

- i) At both urban and rural sites, and unless directed otherwise by the Principal, summer active grasses shall receive one watering per month during summer, viz. from November to April.
- ii) At urban sites, and unless directed otherwise by the Principal, winter active grasses shall receive two waterings per month during summer, viz. from September to May.
- iii) At rural sites, and unless directed otherwise by the Principal, winter active grasses shall receive one watering per month during summer, viz. from September to May.
- iv) If sufficient rainfall is considered to have fallen to maintain soil moisture for the continued growth and health of young plants, the Contractor shall seek approval from the Principal to alter the frequency of watering to reflect seasonal conditions.

3.4 Irrigation System

- i) If an irrigation system has been installed as part of the Contract, the Contractor shall use the system to water the native grass plants to maintain good health and growth.
- ii) The irrigation system shall be used to water native grasses in the following manner, unless directed otherwise by the Principal:
- iii) Summer active grasses shall receive two waterings of 1 hour duration per month during summer, viz. from November to April.
- iv) Winter active grasses shall receive two waterings of 1 hour duration per month during summer, viz. from September to May.
- v) It shall be the Contractor's responsibility to ensure that the irrigation system is fully operational at all times and that all plants are receiving the correct amount of water.

4 Weed Control

- 4.1 The Contractor shall maintain a weed-free environment to assist with native grass establishment and survival.
- 4.2 Unless specified otherwise in the Drawings or Design Report, weeds shall be controlled by the Contractor before they reach maturity and are able to reproduce.
- 4.3 Weeds within tree guards or within the plants structure shall be hand-pulled. Disturbance to the soil shall be minimised.
- 4.4 Appendix 1: Maintenance of Native Grasses Schedule shall be completed by the Contractor as required during the Contract period recommending preferred methods of weed control for the specific project, and chemicals and application rates to be used.
- 4.5 Herbicides shall be used according to the manufacturer's recommended rates. Any off-target damage shall be rectified by the Contractor.

5 Slashing

- 5.1 The Contractor shall slash the grass sward and remove the cut thatch in accordance with the Clauses in this Specification.
- 5.2 If seed is to be collected from the native grasses, requirements will be outlined in the Drawings or the Design Report.
- 5.3 Maintenance Requirements by Species
 - a) Group 1: Summer Active Grasses (C4 Grasses)
 - i) *Aristida* sp. Cut to 150mm in December / January to remove seed heads and thatch.
 - ii) *Chloris* sp. Cut to 100-150mm in December/January to remove seed heads (or later if seeding is not a problem at the location).
 - iii) *Enneapogon* sp. Cut to 100-150 mm in December/January to remove seed heads (or later if seeding is not a problem at the location).
 - iv) *Themeda* sp. Cut to 150-200 mm in February/March to remove seed heads and thatch.

- v) *Eragrostis* sp. Cut to 100 mm in November/December to remove seed heads and thatch.
- b) Group 2: Winter Active Grasses (C3 Species)
 - i) *Neurachne* sp. Low growing grass – slashing may not be needed.
 - ii) *Austrostipa* sp. Cut to 150-200 mm in December/January to remove seed heads and thatch.
 - iii) *Rytidosperma* sp. Cut to 100-150 mm in November to January to remove seed heads and thatch.
 - iv) *Microleana* sp. Generally low growing grass. Cut to 50-100 mm in May to December with line trimmer or mower.

6 Pest / Disease Control

- 6.1 Insect pests, fungus and disease shall be controlled by means of appropriate treatment.
- 6.2 The Contractor is responsible for ensuring pests, fungus and diseases are controlled by means of appropriate treatments during the maintenance period.
- 6.3 All chemicals shall be used in accordance with the manufacturer's recommendations and shall be approved by the Principal. Any off-target damage shall be made good by the Contractor at the Contractor's expense.
- 6.4 Appendix 1: Maintenance of Native Grasses Schedule shall be completed by the Contractor as required during the Contract period recommending preferred methods of pest/disease control for the specific project, and chemicals and application rates to be used.

7 Maintenance of Marker Stakes

- 7.1 Where marker stakes within the Contract area have become damaged or defective as a result of the Contractor's operations, they shall be replaced immediately by the Contractor with the same type of marker stake.
- 7.2 Where the marker stakes within the Contract area have become damaged or defective as a result of vandalism, they shall be replaced at the Principal's expense, and subject to approval by the Principal.

8 Maintenance of Tree Guards

- 8.1 Where tree guards within the Contract area have become damaged or defective as a result of the Contractor's operations, they shall be replaced immediately by the Contractor with the same type of tree guard which shall be assembled and installed around the plant in accordance with the manufacturer's instructions.
- 8.2 Where the tree guards within the Contract area have become damaged or defective as a result of vandalism, they shall be replaced at the Principal's expense, and subject to approval by the Principal.

9 Maintenance of Weed Mats

- 9.1 Where the weed mats within the Contract area have become damaged or defective as a result of the Contractor's operations, they shall be replaced immediately with the same type of weed mat.
- 9.2 Where the weed mats within the Contract area have become damaged or defective as a result of vandalism, they shall be replaced at the Principal's expense, and subject to approval by the Principal.

10 Maintenance of Mulch

- 10.1 The Contractor shall re-mulch with the mulch specified in the Drawings or Design Report throughout the Maintenance Period.
- 10.2 Where native grasses have been mass planted, mulch shall be maintained at a depth of 20 mm within the whole planting area.

- 10.3 Where native grasses have been planted amongst other vegetation, mulch around individual planting holes shall be maintained at a depth of 20 mm and a diameter of 500 mm.

11 Follow-up Fertiliser

- 11.1 The Contractor shall apply follow-up application(s) of fertiliser if specified in the Drawings or Design Report.
- 11.2 Fertilisers shall be placed around the base of the native grass plant in close proximity to the mulch or soil and shall not come into contact with the foliage of the plant during application.
- 11.3 Refer to the Drawings or Design Report for the fertiliser types and application rates.

12 Removal of Marker Stakes and Tree Guards

- 12.1 Tree guards and marker stakes shall be removed at the end of the Maintenance Period or as directed by the Principal.

13 Hold Points

- 13.1 The following is a summary of Hold Points referenced in this Part:

Table PR-LS-M4 13-1 Hold Points

Ref.	Hold Point	Response Time
x.x	Asf th dlfbjs	10 Working Days
x.x	Asf th dlfbjs	10 Working Days
x.x	Asf th dlfbjs	24 hours
x.x	Asf th dlfbjs	6 Weeks

Appendix 1: Maintenance of Native Grasses Schedule

METHOD:

.....

.....

.....

.....

.....

HERBICIDE DETAILS:

DESCRIPTION	APPLICATION RATE	
Chemicals to be used for Broadleaf Weeds	Rate per litre	
Chemicals to be used for Foliar Spray	Rate per litre	
Chemicals to be used for herbaceous weed control, if applicable	Rate per litre water	Litres per hectare

PESTICIDE DETAILS:

DESCRIPTION (Chemicals to be used for Pest/Disease Control)	APPLICATION RATE per litre

.....
Contractor's signature

.....
Date