


Project Controls

Master Specification

PC-ST1 Sustainability in Design

Document Information

K Net Number:	13945528
Document Version:	1
Document Date:	02/05/2019
Responsible Officer:	



DEPARTMENT OF
PLANNING, TRANSPORT
AND INFRASTRUCTURE



Government of South Australia

Department of Planning,
Transport and Infrastructure

Document Amendment Record

Version	Change Description	Date	Endorsement record (KNet ref.)
1	Initial Issue	02/05/2019	

Document Management

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

Contents

Contents	3
PC-ST1 Sustainability in Design	4
1 General	4
2 Sustainability Objectives	4
3 Sustainable Materials	4
4 Socially Sustainable Procurement	4
5 Minimum Sustainability Requirements	5
6 Sustainability Plan	5
7 Estimation of Impacts	5
8 Identification of Sustainability Initiatives	5
9 Implementation of Sustainability Initiatives	6
10 Performance measurement	6
11 Infrastructure Sustainability (IS) Rating	6

PC-ST1 Sustainability in Design

1 General

- 1.1 This Part specifies the requirements for understanding impacts and investigating and implementing initiatives to improve sustainability through design.
- 1.2 Where the Contract Documents specify that the project is to obtain a rating under the Infrastructure Sustainability Council of Australia (ISCA) rating scheme, Clause 11 "Infrastructure Sustainability (IS) Rating" applies, and Clauses 2 to 10 do not apply.
- 1.3 Where the Contract Documents do not specify that the project will obtain a rating under the ISCA rating scheme, Clauses 2 to 10 apply and Clause 11 "Infrastructure Sustainability (IS) Rating" does not apply.

2 Sustainability Objectives

- 2.1 The Contractor's design methodology must be undertaken to maximise the achievement of the following sustainability objectives:
 - a) minimise the generation of greenhouse gases across the full asset lifecycle;
 - b) minimise waste generated during construction across the full asset lifecycle;
 - c) minimise use of mains water across the full asset lifecycle through demand reduction strategies and through use of captured rainwater and recycled water;
 - d) minimise materials' lifecycle impacts across the full asset lifecycle;
 - e) mitigate sustainability risks and drive improved sustainability performance in the project's supply chains;
 - f) protect and where possible enhance water quality, using WSUD principles;
 - g) avoid mobilisation of contaminants and where feasible, remediate contaminated land;
 - h) minimise the destruction / disturbance of native flora and amenity vegetation and where possible improve biodiversity outcomes;
 - i) conserve places of cultural value within and adjacent development sites;
 - j) design assets to minimise future maintenance, repair, re-engineering and / or replacement costs, having regard to future climate change impacts;
 - k) enhance the amenity of project sites and surrounding areas with urban design and landscaping;
 - l) contribute to improved community wellbeing by identifying and responding to community needs, and engaging effectively with local communities and relevant stakeholders;
 - m) design assets to facilitate and encourage greater use of public transport and active transport modes, including cycling and walking as well as facilitating use of sustainable low occupancy low / zero emission vehicles;
 - n) design assets to facilitate private sector investment and contribute to local prosperity;
 - o) recognise and promote the role of smart technology and infrastructure in achieving sustainability outcomes.

3 Sustainable Materials

- 3.1 The Contractor shall apply the principles of the waste hierarchy to the project, in accordance with DPTI Sustainability Manual part 8.1. The outcomes must be recorded in the Sustainability Plan.

4 Socially Sustainable Procurement

- 4.1 The Contractor shall, in accordance with DPTI Sustainability Manual part 9:

- a) provide evidence of a formal commitment to address sustainability risks and opportunities in the supply chain;
 - b) review the project / asset's supply chains to identify material social sustainability risks and opportunities; and
 - c) implement procurement actions to mitigate material social sustainability risks and realise social sustainability opportunities.
- 4.2 Outcomes shall be recorded in the Sustainability Plan.

5 Minimum Sustainability Requirements

- 5.1 The Principal has nominated Minimum Sustainability Requirements for the asset in the Contract Documents. The Contractor may choose to nominate higher or additional Minimum Sustainability Requirements in the Sustainability Returnable Schedule.
- 5.2 The Contractor shall achieve the Minimum Sustainability Requirements specified in the Contract Documents, unless the Principal has accepted alternative Minimum Requirements nominated by the Contractor in the Sustainability Returnable Schedule.
- 5.3 The Minimum Sustainability Requirements shall be achieved within the Contract Sum. The Contractor shall not rely on discretionary sustainability initiatives (as described in Clause 9 "Implementation of Sustainability Initiatives") to achieve the Minimum Sustainability Requirements.

6 Sustainability Plan

- 6.1 The Contractor shall prepare a Preliminary Sustainability Plan which complies with the requirements in DPTI Sustainability Manual part 5. Submission of the Preliminary Sustainability Plan shall constitute a **Hold Point**.
- 6.2 The Contractor shall, on a six-monthly basis following acceptance of the Preliminary Sustainability Plan and until submission of the Final Sustainability Plan, submit Sustainability Progress Reports to the Principal, in accordance with DPTI Sustainability Manual part 5.
- 6.3 The Contractor shall prepare a Final Sustainability Plan which complies with the requirements in DPTI Sustainability Manual part 5.

7 Estimation of Impacts

- 7.1 The Contractor shall estimate whole of life greenhouse gas emissions for the asset in accordance with DPTI Sustainability Manual part 6.
- 7.2 The Contractor shall estimate whole of life waste volumes from the asset in accordance with DPTI Sustainability Manual part 6.
- 7.3 The Contractor shall estimate whole of life water use from the asset in accordance with DPTI Sustainability Manual part 6.
- 7.4 The Contractor shall estimate materials lifecycle impacts from the asset in accordance with DPTI Sustainability Manual part 6.

8 Identification of Sustainability Initiatives

- 8.1 The Contractor is encouraged to identify sustainability initiatives during the tender process. Contractor-nominated sustainability initiatives identified during the tender process should be submitted in the Sustainability Returnable Schedule in accordance with DPTI Sustainability Manual part 7.2.
- 8.2 The Contractor must undertake at least one workshop to identify sustainability initiatives (additional to any initiatives identified during the tender process and submitted in the Sustainability Returnable Schedule) to be further developed and implemented for the contract. The workshop must:

- a) be held at the earliest available opportunity and no later than 1 month of tender award, or as otherwise agreed by the Principal;
 - b) involve all relevant Contractors' design and construction personnel and Principal's personnel and other relevant stakeholders;
 - c) be facilitated by a suitably qualified professional with specific experience in undertaking sustainability assessments for major construction projects.
- 8.3 The workshop may take place as part of the 30% preliminary design workshop.
- 8.4 The Contractor shall document initiatives including but not limited to reducing greenhouse gas emissions, water use, waste disposed to landfill and materials' lifecycle impacts, in accordance with DPTI Sustainability Manual part 8.

9 Implementation of Sustainability Initiatives

- 9.1 The following sustainability initiatives shall be non-discretionary sustainability initiatives:
- a) sustainability initiatives specified in Contract Documents;
 - b) sustainability initiatives nominated by the Contractor in the Sustainability Returnable Schedule and accepted by the Principal;
 - c) sustainability initiatives identified by the Contractor in accordance with Clause 8.2 ("Identification of Sustainability Initiatives") with a payback period less than the construction duration.
- 9.2 The Contractor shall implement all non-discretionary sustainability initiatives, unless directed otherwise by the Superintendent.
- 9.3 Sustainability initiatives identified by the Contractor in accordance with Clause 8 "Identification of Sustainability Initiatives" which are not non-discretionary sustainability initiatives shall be discretionary sustainability initiatives. Costs associated with implementation of discretionary sustainability opportunities shall not be included in the Contract Sum.
- 9.4 The Contractor shall submit discretionary sustainability initiatives to the Principal as soon as practicable for consideration.
- 9.5 Upon request from the Superintendent, the Contractor shall implement any discretionary sustainability initiatives submitted by the Contractor. Work carried out under this Clause may constitute a Variation to the Contract.

10 Performance measurement

- 10.1 For each sustainability initiative incorporated into the design, the Contractor shall keep a record of implementation costs and outcomes (in terms of actual reductions / improvements achieved). This shall be presented in the final sustainability plan.

11 Infrastructure Sustainability (IS) Rating

- 11.1 The Contractor shall undertake the following tasks in accordance with the current version of the Infrastructure Sustainability Council of Australia (ISCA): IS Technical Manual:
- a) register the project with the Infrastructure Council of Australia (ISCA) for a Design Rating (and As Built Rating if specified in the Contract Documents) under the IS rating scheme;
 - b) undertake a kick-off workshop with ISCA and representatives from DPTI and the project team;
 - c) undertake a Materiality Assessment and seek verification from ISCA;
 - d) prepare a Base Case Proposal for the project utilising the Reference Design (or other design agreed with the Principal) and seek verification from ISCA;
 - e) register any potential innovations with ISCA;

- f) complete the IS rating tool scorecard in accordance with the requirements of the current IS Technical Manual;
 - g) obtain a Design Rating within 3 months of completion of 100% design, unless otherwise agreed in writing with the Principal.
 - 11.2 The Principal has nominated Minimum Sustainability Requirements for the asset in the Contract Documents, including a minimum IS rating score for the project and minimum levels to be achieved for specified credits. The Contractor may choose to nominate higher Minimum Sustainability Requirements in the Sustainability Returnable Schedule.
 - 11.3 The Contractor shall achieve the Minimum Sustainability Requirements specified in the Contract Documents, unless:
 - a) the Principal has accepted alternative Minimum Requirements nominated by the Contractor in the Sustainability Returnable Schedule (in which case these alternative requirements shall be achieved); or
 - b) appropriate justification is provided to and approved by the Principal as to why the Minimum Sustainability Requirements are not able to be achieved.
 - 11.4 The Minimum Sustainability Requirements shall be achieved within the Contract Sum.
 - 11.5 Where the Contract Documents specify Sustainability Initiatives, the Contractor shall implement these initiatives within the Contract Sum.
 - 11.6 The Contractor is encouraged to identify additional sustainability initiatives during the tender process. Contractor-nominated sustainability initiatives identified during the tender process should be submitted in the Sustainability Returnable Schedule in accordance with DPTI Sustainability Manual part 7.2.
 - 11.7 For each sustainability initiative incorporated into the design, the Contractor must keep a record of implementation costs and outcomes (in terms of actual reductions / improvements achieved). This shall be provided to the Principal at 100% design.
-