Sustainability Management Plan

Sydney Metro Western Sydney Airport Station Boxes and Tunnelling Works

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Document approval

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Details of Revision Amendments

Document Control

The Project Director is responsible for ensuring that this plan is reviewed and approved. The Project Sustainability Manager is responsible for updating this plan to reflect changes to construction, legal and other requirements, as required.

Amendments

Any revisions or amendments must be approved by the Project Director and/or client before being distributed / implemented.

Revision Details

Revision	Details
A.01	Internal review of Sustainability Management Plan
A	Submission to TfNSW
B	In response to Sydney Metro comments
C	In response to Sydney Metro comments
D	In response to Sydney Metro comments
00	Approved revision (Shared for Information – Transmittal acceptance sent SMWSASBT-SMD-TX-001303)
01	Annual review
02	In response to Sydney Metro comments
03	In response to Sydney Metro comments

Compliance

General Specification 5.1.7 Sustainability Management Plan			CEMF SMP requirements	Design	Construction
Contract Reference	**Requirements**	**Addressed**			
a.	The SBT Contractor must submit a Sustainability Management Plan to the Principal for Review in accordance with Table 3. [SM-WSA-SBT-GS-2786]	This Plan	N/A		
b.	The Sustainability Management Plan must address and detail: [SM-WSA-SBT-GS-2787]	This Plan	N/A		
i.	the relevant requirements of the Sydney Metro Environment and Sustainability Statement of Commitment and the Sydney Metro Sustainability Plan; [SM-WSA-SBT-GS-2788]	Section 4 Part B - Element 11	SMP1	•	•
ii.	a sustainability policy statement; [SM-WSA-SBT-GS-2789]	Section 4 Annexure A	SMP2	•	•
iii.	the sustainability management team structure, including: [SM-WSA-SBT-GS-2790]	Section 5	SMP3	•	•
A.	the SBT Contractor's personnel's Authority and roles of the SBT Contractor's personnel; [SM-WSA-SBT-GS-2791]	Section 5			
B.	lines of responsibility and communication; [SM-WSA-SBT-GS-2792]				
C.	minimum skill levels of each role; and [SM-WSA-SBT-GS-2793]				

General Specification 5.1.7 Sustainability Management Plan			CEMF SMP requirements	Design	Construction
Contract Reference	**Requirements**	**Addressed**			
D.	interfaces with the overall Project organisation structure; [SM-WSA-SBT-GS-2794]				
iv.	how sustainability initiatives will be identified and integrated into the design of the Project Works; [SM-WSA-SBT-GS-2795]	Section 6.2.2	SMP4	•	
v.	the carbon and Energy mitigation measures as detailed in the environmental approval documentation that are applicable to the Project Works; [SM-WSA-SBT-GS-2796]	Section 10.2 Part B – Element 9 Part B – Element 10	SMP5	•	•
vi.	the low carbon strategies and initiatives that will be implemented to minimise the carbon emissions; [SM-WSA-SBT-GS-2797]	Section 10.2.2	SMP6	•	•
vii.	the energy efficiency strategies and initiatives that will be implemented to minimise energy use; [SM-WSA-SBT-GS-2798]	Section 10.2.2	SMP7	•	•
viii.	support innovative and cost-effective approaches to Energy efficiency, low carbon / renewable energy sources and Energy procurement; [SM-WSA-SBT-GS-2799]	Section 10.2.2	SMP8	•	•
ix.	the strategies and initiatives that will be implemented to enhance the biodiversity; [SM-WSA-SBT-GS-2800]	Section 10.4	SMP 9	•	

General Specification 5.1.7 Sustainability Management Plan			CEMF SMP requirements	Design	Construction
Contract Reference	**Requirements**	**Addressed**			
x.	the processes and methodologies for assurance, monitoring, auditing, corrective action, continuous improvement and reporting on sustainability performance; [SM-WSA-SBT-GS-2801]	Section 8.3	SMP 10		•
xi.	the process for compliance record generation and management; [SM-WSA-SBT-GS-2802]	Section 3	SMP 11		•
xii.	the processes and methodologies which will be used to achieve the required scores under rating systems identified in section 2.8.2; [SM-WSA-SBT-GS-2803]	Section 9	SMP 12	•	•
xiii.	the strategy and methodology for incorporating climate change adaption in designs in response to the climate change risks and baseline adaptation measures allocated to the Project Works; [SM-WSA-SBT-GS-2804]	Section 10.1	SMP 13	•	
xiv.	the strategies and initiatives that will be implemented to minimise overall water use, maximise the availability and use of non-potable water sources; [SM-WSA-SBT-GS-2805]	Section 10.3	SMP 14	•	•
xv.	estimates of the quantity of potable water which will be consumed during	Section 10.3	SMP 15	•	

General Specification 5.1.7 Sustainability Management Plan			CEMF SMP requirements	Design	Construction
Contract Reference	**Requirements**	**Addressed**			
	construction; [SM-WSA-SBT-GS-2806]				
xvi.	estimates of the quantity of water from non-potable sources which will be consumed during construction; [SM-WSA-SBT-GS-2807]	Section 10.3	SMP 16	•	
xvii.	the strategy to reduce material use throughout the Project life-cycle; [SM-WSA-SBT-GS-2808]	Section 10.2.3	SMP 17	•	•
xviii.	the strategies and initiatives that will be implemented to maximise the use of recycled materials; [SM-WSA-SBT-GS-2809]	Section 10.2.3	SMP 18	•	•
xix.	the strategies and initiatives to recycle and reuse materials onsite; [SM-WSA-SBT-GS-2810]	Section 10.2.4	SMP 19	•	•
xx.	the strategies and initiatives to prioritise the use of materials with a lower embodied impact; [SM-WSA-SBT-GS-2811]	Section 10.2.3	SMP 20	•	•
xxi.	estimates of the Portland cement reduction which will be achieved in concrete (averaged across all mixes), compared to a reference case; [SM-WSA-SBT-GS-2812]	Section 10.2.3.1	SMP 21	•	
xxii.	the strategies and initiatives to prioritise the use of low volatile organic compound (VOC), low emission	Section 10.2.3	SMP 22	•	•

General Specification 5.1.7 Sustainability Management Plan			CEMF SMP requirements	Design	Construction
Contract Reference	**Requirements**	**Addressed**			
	materials; [SM-WSA-SBT-GS-2813]				
xxiii.	the use of sustainably sourced and certified timber and wood products; [SM-WSA-SBT-GS-2814]	Section 10.2.3	SMP 23	•	•
xxiv.	the development of deconstruction plans to enable recycling and reuse at end-of-life; [SM-WSA-SBT-GS-2815]	Section 10.2.4	SMP 24	•	
xxv.	estimates of fuel consumption; [SM-WSA-SBT-GS-2816]	Section 10.2.1 Figure 6	SMP 25	•	
xxvi.	estimates of electricity consumption; [SM-WSA-SBT-GS-2817]	Section 10.2.1 Figure 6	SMP 26	•	
xxvii.	estimates of 'Scope 1', 'Scope 2', 'Scope 3' and total carbon emissions (Carbon Emission Targets) that incorporates direct and indirect emissions associated with electricity and fuel consumption, on-site process emissions and embodied emissions for all main materials used; [SM-WSA-SBT-GS-2818]	Section 10.2.1 Figure 6	SMP 27	•	•
xxviii.	reporting of carbon and Energy will be undertaken in accordance with the National Greenhouse and Energy Reporting Act 2007; [SM-WSA-SBT-GS-2819]	Section 7.1	SMP 28		•
xxix.	the strategy and initiatives to influence Subcontractors and	Section 6.4	SMP 29		•

General Specification 5.1.7 Sustainability Management Plan			CEMF SMP requirements	Design	Construction
Contract Reference	**Requirements**	**Addressed**			
	materials suppliers to adopt sustainability objectives in their works and procurement; [SM-WSA-SBT-GS-2820]				
xxx.	a Sustainable Procurement Policy that must, as a minimum, include: [SM-WSA-SBT-GS-2821]	Section 6.4	SMP 30		•
A.	the processes and procedures that will be used to provide environmental and social improvement; [SM-WSA-SBT-GS-2822]				
B.	the responsibilities of the SBT Contractor's personnel with respect to the implementation of the policy; [SM-WSA-SBT-GS-2823]				
C.	compliance record generation and management; [SM-WSA-SBT-GS-2824]				
D.	the processes and environmental and social criteria that will be used for the selection of Subcontractors; [SM-WSA-SBT-GS-2825]				
E.	the processes that will be used to ensure ethical sourcing of labour and materials; [SM-WSA-SBT-GS-2826]				
F.	local sourcing; and [SM-WSA-SBT-GS-2827]				
G.	where equipment, materials or labour are procured from locations				

General Specification 5.1.7 Sustainability Management Plan			CEMF SMP requirements	Design	Construction
Contract Reference	**Requirements**	**Addressed**			
	outside Australia, the processes that will be used to ensure human rights impacts and risks are identified and mitigated as well as processes to ensure compliance with modern slavery, and modern slavery reporting; [SM-WSA-SBT-GS-2828]				
xxxi.	the retention of records detailing the consideration of sustainability in the procurement of all materials; and [SM-WSA-SBT-GS-2829]	Section 3 Section 6.4	SMP 31		•
xxxii.	a Community Benefits Implementation Plan that must, as a minimum, include: [SM-WSA-SBT-GS-2830]	Section 10.5 Community Benefits Implementation Plan	N/A	•	
A.	community needs analysis and how this has been informed through input from the local community and stakeholders; [SM-WSA-SBT-GS-2831]				
B.	methodology for the development of community benefit initiatives and legacy community benefit initiatives to add value to the communities in which it is working; [SM-WSA-SBT-GS-2832]				
C.	a monitoring and evaluation methodology to demonstrate the outputs and tangible outcomes achieved, including key performance indicators;				

General Specification 5.1.7 Sustainability Management Plan			CEMF SMP requirements	Design	Construction
Contract Reference	**Requirements**	**Addressed**			
	and [SM-WSA-SBT-GS-2833]				
D.	a community benefit initiative impact register template which would include details of initiatives submitted for Review and approval by the Principal and the date approval is granted by the Principal to undertake the initiative. [SM-WSA-SBT-GS-2834]				
CSSI 10051 Conditions of Approval					
E. E100	A Sustainability Plan must be prepared to achieve an Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability rating of +75 (Version 1.2) (or equivalent level of performance using a demonstrated equivalent rating tool) or a 5-Star Green Star rating (or equivalent level of performance using a demonstrated equivalent rating tool).	Sections 2 and 9.	N/A	N/A	N/A
F. E101	The Sustainability Plan must be submitted to the Planning Secretary for information within six (6) months of the date of this approval and must be implemented throughout construction and operation. *Note: Nothing in this condition prevents the Proponent from preparing separate*	Sections 2 and 9.	N/A	N/A	N/A

General Specification 5.1.7 Sustainability Management Plan			CEMF SMP requirements	Design	Construction
Contract Reference	**Requirements**	**Addressed**			
	Sustainability Strategies *for the construction and operational stages of the CSSI.*				
G.	A Water Reuse Strategy must be prepared, which sets out options for the reuse of collected stormwater and groundwater during construction and operation. The Water Reuse Strategy must include, but not be limited to: (a) evaluation of reuse options; (b) details of the preferred reuse option(s), including volumes of water to be reused, proposed reuse locations and/or activities, proposed treatment (if required), and any additional licences or approvals that may be required; (c) measures to avoid misuse of recycled water as potable water; (d) consideration of the public health risks from water recycling; and (e) time frame for the implementation of the preferred reuse option(s). *The Water Reuse Strategy must be prepared based on best practice and advice sought from relevant agencies, as required. The Strategy must be*		N/A	N/A	N/A

General Specification 5.1.7 Sustainability Management Plan			CEMF SMP requirements	Design	Construction
Contract Reference	**Requirements**	**Addressed**			
	applied during construction. Justification must be provided to the Planning Secretary if it is concluded that no reuse options prevail. A copy of the Water Reuse Strategy must be made publicly available. Note: Nothing in this condition prevents the Proponent from preparing separate Water Reuse Strategies for the construction and operational stages of the CSSI				

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Part A: Overview

1. Introduction

1.1. Project overview

The Project forms part of the broader Sydney Metro network. It involves the construction and operation of a new 23km metro rail line from the existing Sydney Trains suburban T1 Western Line (at St Marys) in the north and the Aerotropolis (at Bringelly) in the south. The alignment includes tunnels and civil structures, including a viaduct, bridges, and surface and open-cut troughs between the two tunnel sections (Figure 1).

The Project will be delivered through several works packages including the Station Boxes and Tunnelling Works (SBT Works), which includes the design and construction of:

- Two sections of twin tunnels with a combined length of approximately 9.8km, plus associated portal structures, one from Orchard Hills to St Marys and the other under Western Sydney International (WSI) airport to the new Aerotropolis Station
- Excavations at either end to enable trains to turn back, and stub tunnels to enable future extensions
- Station box excavations with temporary ground support for four stations at St Marys, Orchard Hills, Airport Terminal and Aerotropolis
- Excavations for two intermediate services facilities, one in each of the tunnel sections at Claremont and Bringelly.

1.2. SBT Works objectives

The project objectives as determined by Sydney Metro:

- Achieve successful and timely completion of the Project

Provide the tunnel infrastructure required for conveying passenger rolling stock over a 120-year Design Life between St Marys and Western Sydney Aerotropolis

- Deliver SBT Works in a collaborative and cooperative manner to ensure the timely and effective delivery of the overall Project
- Minimise impacts on the environment, including but not limited to noise and vibration, air quality, traffic and transport, heritage, waste, water and energy management and embodied environmental impacts
- Maximise opportunities in relation to social sustainability, including workforce development and local procurement
- Minimise disruption, delay and inconvenience to the affected public, road and public transport users, adjacent businesses and stakeholders (including WSA Co and WPCA) and the community during the performance of the SBT Contractor's activities
- Achieve a value-for-money outcome when viewed on the basis of effective risk management, certainty of delivery and whole-of-life cost
- Progressively hand over the completed Portions of the SBT Works by the applicable Dates for Substantial Completion and in accordance with the requirements of the D&C Deed (including the SBT Specification) such that the Project is operational by the WSI airport opening which is targeted for 24 December 2026.

1.3. SBT Works scope

The construction methodology for the SBT Works entails:

- Utility works including removal, diversion, protection and connection to SBT worksites
- Local area works including provision of site accesses and some road upgrades

- Site establishment works including:
  - Fencing
  - Installation of environmental mitigation measures including erosion and sediment controls, noise barriers and acoustic enclosures
  - Clearing and grubbing of existing vegetation
  - Demolition of existing buildings and structures
  - Site levelling and drainage works
  - Establishment of internal access roads, hardstand areas and onsite parking
  - Erection of demountable buildings including offices and amenities
  - Other ancillary facilities including the erection of sheds, establishment of materials laydown and stockpiling areas and Tunnel Boring Machine (TBM) support works including spoil conveyors.
- Supply, store and install TBM concrete segments
- Construction of station, shaft and dive excavations predominately completed by piling and excavators with rippers and hammers. Roadheaders will also be used at St Marys and Aerotropolis to complete the stub tunnels
- Construction of mainline tunnels using four TBMs, as follows:
  - Two earth pressure balance TBMs will be launched from Orchard Hills and tunnel north to St Marys a distance of approximately 4.3km, including traversing the Claremont Shaft. The TBMS will be retrieved from the St Mary's station box.
  - Two double shield TBMs will be launched from the Airport Dive and tunnel south, traverse the Airport Terminal station box and shaft, where tunnelling will stop and the conveyor and backend equipment will be demobilised from the Airport Dive and re-established at the Airport Terminal Shaft. The TBMs will then recommence tunnelling, including traversing the Bringelly Shaft, and will be retrieved from the Aerotropolis station box (5.5km from the Airport Dive, with 2.5km of the southern tunnels located within NSW).
  - Cross passages will be constructed using concrete saws and excavators with hammers.

It is anticipated that the shaft and station excavations will be completed in advance of TBM tunnel construction. The TBMs will be delivered via oversize heavy vehicles to Orchard Hills and the Airport Dive site and retrieved from St Marys and Aerotropolis, subject to relevant approvals.

The SBT Works do not include any surface works between the northern and southern tunnel sections, which are to be undertaken by another contractor.

Tunnelling, including station box, shaft and dive excavation and associated support activities such as the operation of the precast facility, will occur 24 hours a day, seven days a week. Utility and local area works that cannot be completed during standard daytime hours due to Road Occupancy Licence or utility authority requirements will also be undertaken out of hours.

Completed sections of the SBT Works, including established construction worksites, will be progressively handed over to Sydney Metro to enable follow-on contractors to commence works.

An overview of works at each SBT worksite is provided in Table 1.

Table 1: SBT Worksite overview

Jurisdiction	Worksite	Indicative scope of works
NSW	St Marys	• Demolition of existing industrial premises • Offices, amenities, car parking and access roads • Piling and station box excavation using rippers and rock hammers • Stub tunnel excavation using roadheaders • TBM retrieval.

Jurisdiction	Worksite	Indicative scope of works
NSW	Claremont Meadows	• Offices, amenities, car parking and access roads • Piling and services facility shaft excavation using ripper and rock hammers • Construction of part of the cast-in-situ permanent shaft • Cross passage construction support • Invert construction support (subject to Sydney Metro approval).
NSW	Orchard Hills	• Demolition of existing buildings and removal of septic tanks • Offices, amenities, car parking and access roads • Lansdown Road temporary diversion and construction of the permanent road bridge • Piling and portal, station box and dive excavation using rippers and rock hammers • Construction of cast-in-situ permanent portal structure • TBM assembly, launch and tunnelling support works • Cross passage construction support.
On-Airport	Airport Portal Dive Structure	• Offices, amenities, car parking and access roads • Piling and portal excavation using rippers and rock hammers • Open cut dive excavation using rippers and rock hammers • Construction of cast-in-situ permanent dive structure • TBM assembly, launch and tunnelling support works • Cross passage construction support.
On-Airport	Airport Terminal and TBM shaft	• Offices, amenities car parking and access roads • Piling, station box and shaft excavation using rippers and rock hammers • TBM re-launch and tunnelling support works • Cross passage construction support.
On-Airport	FS01 - Primary Spoil Receival	• Access road • Earthworks in accordance with Sydney Metro Specifications.
NSW	Bringelly	• Offices, amenities, car parking and access roads • Piling and services facility shaft using rippers and rock hammers • Construction of part of the cast-in-situ permanent shaft • Cross passage construction support • Invert construction support (subject to Sydney Metro approval).
NSW	Aerotropolis	• Offices, amenities, car parking and access roads • Piling and station box excavation using rippers and rock hammers • Stub tunnel excavation using roadheaders • TBM retrieval

Note: Worksites in grey are within the boundary of the Western Sydney International (On-Airport) and regulated under the *Commonwealth Airports Act 1996*.

Figure 1: Overview of SBT Works

2. Plan overview

2.1. Plan purpose and objectives

The purpose of this Sustainability Management Plan (SMP) (SMWSASBT-CPG-1NL-NL000-EV-PLN-000001) is to describe how CPB Contractors Ghella, (CPBG) Joint Venture will consider and apply sustainability aspects during design and construction throughout the delivery of the Sydney Metro Western Sydney Airport (SMWSA) Station Box and Tunnel (SBT) Works (the Project).

In doing so, this Plan addresses the relevant sustainability requirements related to the Environmental Mitigation Measures, the Project Planning Approval, applicable legislation, and contractual requirements, including the Project Deed, General and Particular Specification.

For CPBG, sustainability is about ensuring the long-term success of our projects, people, communities and ecosystems by integrating environmental, social, economic and governance factors into our decision making. CPBG is committed to pursuing sustainability initiatives that aim to achieve net positive environmental, social, economic and community benefits that are consistent with technical design and construction requirements.

This Plan outlines CPBG's approach to managing sustainability to enable the Project to:

- Fulfil the Project's sustainability requirements
- Identify and act on the sustainability-related opportunities and risks associated with the design, construction and operation of the Project to achieve sustainability outcomes
- Create value and benefit from sustainability
- Identify actions to achieve an Excellent Infrastructure Sustainability (IS) Rating (minimum score of 75) under the 'Infrastructure Sustainability Council (ISC) v1.2 Rating for "design" and "as-built".

This Plan has been prepared with regards to Sydney Metro Environment and Sustainability Statement of Commitment and the Sydney Metro Western Sydney Airport Sustainability Plan.

2.2. Plan structure

This Plan is based on three parts which outline our approach to managing sustainability on the Project. The structure of the CSMP is set out below.

Table 2: SMP structure

Part A: Overview	• Introduction • Context and Objectives • Leadership, Collaboration and Support • Embedding sustainability • Sustainability Reporting and Information Management • Evaluation and Improvement • ISC Rating Strategy • Key Sustainability initiatives
Part B: Implementation	• Element 1: CPB Management System • Element 2: General Specifications • Element 3: Particular Specifications • Element 4: Conditionals of Approvals • Element 5: EIS Measures
Part C: Annexures	• Sustainability and Environment Policy • Procurement Policy • IS Rating Credit Target and Score – Design • IS Rating Credit Target and Score – As-built

2.3. Interface with other plans

This SMP is part of an integrated set of Project Plans. The table below outlines key sustainability items/content addressed within other relevant Plans.

Table 3: Project Plan Interfacing

Management Plan	Sustainability items/content addressed
Construction Environmental Management Plan	Sets out governance, monitoring, reporting, auditing and corrective action processes applicable to sustainability
Design Management Plan	Sets out the design management process including detailing the value engineering process, which will be utilised to ensure that all requirements, including sustainability requirements, are embedded in the design
Risk Management Plan	Sets out the risk management approach and procedures to be applied to the SBT Works delivery.
Quality Plan	Outlines reporting and auditing requirements for the SBT Works.
Communications Strategy	Sets out the framework for community and stakeholder liaison and engagement for the SBT Works
Procurement Plan	Details how CPBG will manage procurement and tender processes during the SBT Works.
Waste Management CEMP Sub-plan	Sets out the waste management and reuse strategy to be adopted for the SBT Works
Spoil Management Plan	Annexure C of the Construction Management Plan sets out the spoil management and reuse strategy to be adopted for the SBT Works
Contamination CEMP Sub-plan	Details strategies to be applied to manage contamination during the SBT Works.
Groundwater CEMP Sub-plan	Details strategies to be applied to minimise water usage and manage groundwater resources during the SBT Works.
Soil and Surface Water CEMP Sub-plan	Details strategies to be applied to minimise water usage, manage soil and surface water and maximise water reuse during the SBT Works.
Water Reuse Strategy	Details water re-use options for the construction and operation phases of the SBT Works
Hydrology and Flooding Report	Documents flood modelling has been undertaken to develop the design of the temporary and permanent works
Heritage Management Sub-plan	Details management strategies to minimise impacts on Aboriginal and historic heritage items and archaeology
Flora and Fauna CEMP Sub-plan	Details management strategies to minimise impacts on flora and fauna
Noise and Vibration CEMP Sub-plan	Details assessment protocols and management strategies for minimising construction noise and vibration including ground borne vibration
Air Quality Management Procedure	Details management strategies to minimise dust and emissions from plant and equipment during construction

Management Plan	Sustainability items/content addressed
On-Airport Rail Sustainability Plan	Demonstrates how key objectives and initiatives will be implemented during the Project life-cycle.
On-Airport Aboriginal Cultural Heritage CEMP Sub-Plan	Details management approach, requirements, and strategies for Aboriginal related matters during construction
On-Airport Air Quality CEMP Sub-Plan	Details management strategies to minimise dust and emissions from plant and equipment during construction
On-Airport Biodiversity CEMP Sub-Plan	Details management strategies to minimise impacts on flora and fauna
On-Airport European and Other Heritage CEMP Sub-Plan	Details management strategies to minimise impacts on European and other heritage related items
On-Airport Noise and Vibration CEMP Sub-Plan	Details assessment protocols and management strategies for minimising construction noise and vibration including ground borne vibration
On-Airport Soil and Water CEMP Sub-Plan	Details strategies to be applied to minimise water usage, manage soil and surface water and maximise water reuse during construction
On-Airport Traffic and Access CEMP Sub-Plan	Details management of traffic and access impacts through mitigation measures during construction.
On-Airport Visual and Landscape CEMP Sub-Plan	Details the management approach for managing visual and landscape related matters during construction.
On-Airport Waste and Resources CEMP Sub-Plan	Details the management approach and requirements for managing waste and resource related matters during construction.
Workforce Development Management and Industry Participation Plan	Detail workforce development and social procurement targets and management systems and measure to be implemented across the SBT Works Worksite
Occupational Health, Hygiene and Wellness Management Plan	Outline the process to manage occupational health, hygiene and wellness risks and associated exposure monitoring
Community Communication Strategy	Outlines CPBG approach to managing communications for the SBT Works and meeting community and stakeholder obligations
Community Benefits Implementation Plan	Outline the results of the community needs analysis and the methodology to identify initiatives to add value to the communities whilst conducting the SBT Works and leaving lasting legacies.

2.4. Plan compliance, review, and updates

This Plan identifies how CPBG will comply with the sustainability related requirements. Part B details all requirements and how they will be met.

This Plan will be reviewed annually by the Sustainability Manager to assess the adequacy of the SMP and overall performance against Project sustainability requirements, targets and objectives.

Updates will be made to the Plan, when new elements of the Project Works not covered by the existing SMP commence, or as required for changes in construction sequencing or methodology.

Updates will also take into consideration corrective actions including lessons learnt and improvement/enhancement opportunities identified as the results of:

- audits undertaken,
- communication, participation and consultation, including from external stakeholders,
- performance of the Project,
- extent to which the objectives and targets have been met,
- Changes to legislation,
- Actions management reviews, and recommendations for improvement,
- Feedback from stakeholders.

3. Project Management System

CPBG adopts the CPB Contractors Project Management System (PMS). The PMS has been specifically tailored to ensure compliance with Sydney Metro's contract requirements.

'The Way We Operate' guides the way the Project will be managed to meet Sydney Metro and other stakeholder requirements. This framework is detailed further in the PMP.

The PMS comprises the following:

- A policy is a statement of strategic intent and commitment and defines the minimum mandatory requirements that CPBG expects all levels of the organisation to comply with
- The PMP outlines how the Project will be managed and it is supported by a suite of functional management plans
- Procedures and work instructions specify how to undertake and control specific activities. They also list accountable roles and the tools and knowledge to be used. Where appropriate and approved by the respective Business Unit functional manager, project specific procedures may be produced to reflect specific project circumstances
- Tools are preformatted documents such as forms and templates that are required to be completed as part of a procedure
- Knowledge documents are reference material to provide context, additional information or guidance to a policy or procedure
- Business applications are the software tools used to manage our business and support our operations.

3.1. The Safety Essentials

The Safety Essentials set out the minimum, non-negotiable requirements to manage Safety Essential related tasks. The Safety Essentials are a suite of controls for critical safety risks that have been identified through data analysis that would have given rise to the potential for serious injury, if they were not understood and had appropriate controls in place.

The Safety Essentials support and reinforce the PMS – they do not replace it. Refer to the Project Health and Safety Management Plan for additional information.

3.2. Certifications

This SMP has been developed to be supported by a suite of CPB Contractors Management System governance components that form the Sustainability Management System. This aims to foster an integrated approach to sustainability across functions and ensure third party certifications are maintained. The CPB Contractors Management System has been developed to ensure compliance with the following external certifications:

- ISO 9001:2015 Quality Management
- ISO 14001:2015 Environment Management
- AS/NZS 4801:2001 Occupational Health & Safety
- OHSAS 18001:2007 Occupational Health & Safety
- Office of Federal Safety Commission (OFSC)

3.3. Sustainability assurance system

The SMP forms the basis of the Project Sustainability Assurance Framework. The assurance framework, which will ensure that any data reported is supported by robust systems, incorporates the following:

- Sustainability Procedures and Policies,
- Sustainability Requirements and Initiatives,

- Objectives/Targets,
- Structure, Responsibility and Resources,
- Corrective and Preventive Action,
- Training and Awareness,
- Document control, and
- Strategies for continuous improvement.

An excel-based Sustainability Management Tool assists the management of implementing the Project's sustainability requirements and targeted IS Rating credits. It includes IS scorecards, a compliance matrix, evidence tracking, progress updates, and reporting dashboards. The management tool enables CPBG to track compliance with the Project sustainability policy, objectives and targets, and the Project Company's appointed sustainability targets and the IS rating tool.

4. Policy, objectives and targets

CPBG's Sustainability and Environment Policy set out the principles for delivering the SBT Works Project to maximise environmental, social, and economic benefits while minimising impacts. Refer to **Annexure A** for the Sustainability and Environment Policy.

The Policy has a strong focus on continual improvement, industry uplift, and leaving a lasting positive legacy. The Policy was established during Project start-up and has been endorsed by the Project Director. It will remain applicable throughout the lifecycle of the Project.

To ensure successful implementation of the Sustainability and Environment Policy, CPBG has established sustainability objectives and targets that embed our Policy commitments. All CPBG staff and workforce, including all subcontractors working on the Project, must work under the Sustainability and Environment Policy and associated objectives and work towards achieving targets.

This policy, objectives and targets has been prepared with consideration to parent company policy, and Sydney Metro Environment and Sustainability Statement of Commitment.

4.1.1. Sustainability objectives

The key sustainability objectives for the SBT Works Project are:

- Maximise efficiencies to reduce our footprint in relation to energy, water, materials, and waste
- Mitigate pollution and avoid environmental harm in accordance with environmental requirements
- Protect, promote and enhance heritage values through appropriate design, planning, and management controls
- Achieve net positive benefits for the environment and community and leave a positive legacy
- Contribute to industry uplift by building an engaged, diverse, and highly skilled workforce
- Drive sustainable procurement processes and influence subcontractors and suppliers to adopt sustainable practices and initiatives
- Demonstrate industry-leading sustainability performance by driving innovation, encouraging critical thinking, and building on a culture of continual improvement.

4.1.2. Key targets for sustainability

Sustainability targets are derived from the General and Particular Specification (detailed in Part B Element 2 and 3), and in particular, the sustainability targets listed in Section 2.8.1 (b).

Please note, sustainability targets related to social sustainability such as workforce development, social procurement, and community benefits, are detailed in other management Plans.

4.2. Sustainability milestones

Table 4 details the key sustainability milestones.

Table 4 Sustainability Milestones

Description	Requirement	Required timing	Date
Project Award			21 December 2021
Submission of the Sustainability Management Plan	General Specification 5.1.7 (a)	60 Business Days from the date of this D&C Deed	9 March 2022

Description	Requirement	Required timing	Date
Sustainability Design report - Combined Stage 1 & 2 Design completion **	n/a		28th October 2022
Sustainability Design report Stage 3 Design **	n/a		14th December 2023
Submission of IS Design Rating score (round 1)	n/a	n/a	9th May 2023
Verification of IS Design Rating score	General Specification 2.8.2 (c)	Within three months of final design packages being AFC Design Documentation	*February 2024
Preliminary construction start date			30th May 2022
Construction start date			10th October 2022
Construction completion			*December 2024
Submission of As Built rating submission (round 1)	n/a	n/a	*August2024
Verification of IS As Built Rating score	General Specification 2.8.2 (e)	n/a	*January 2025

* Indicates an indicative/target date

** relates to when majority and/or significant packages for sustainability have completed design stage.

4.3. Project compliance requirements

Compliance requirements relating to the content of this Sustainability Management Plan are listed in the front of this Plan. Compliance requirements relating to project sustainability performance are included in the Compliance Matrices in Part B of this Plan.

4.3.1. Legislation and regulatory requirements

The key legislation relevant to sustainability management includes:

- Environmental Planning and Assessment Act 1979 (EP&A Act)
- Protection of the Environment Administration Act 1991 (PEA Act)
- Protection of the Environment Operations Act 1997 (POEO Act)
- National Greenhouse and Energy Reporting (NGER) Act 2007 (Cth)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth)

The principles of Ecologically Sustainable Development (ESD) are outlined in the Protection of the Environment Administration Act 1991 (PEA Act). ESD is development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends on. The principles of ESD have been an integral consideration throughout the development of the Project. The PEA Act recognises that ESD requires the effective integration of economic, social and environmental considerations in decision-making processes. Refer to the Construction Environmental Management Plan for further details of the relevant legislation.

4.3.2. Sustainability guideline and tools

Table 5 details external guidelines used regularly for sustainability management on the SBT Works.

Table 5: Tools and Guidelines

Guideline and tools	Description
Sydney Metro	
Sydney Metro Environment and Sustainability Statement of Commitment	Details Sydney Metro's commitments to environment and sustainability.
Sydney Metro WSA Sustainability Plan	Outlines key focus areas and initiatives for the Sydney Metro WSA Project and demonstrates how sustainability is integrated and underpins core objectives for Sydney Metro Greater West. This plan satisfies the E101 of the Conditions of Approval (10051).
SMWSA Climate Change Risk Assessment Report	Summarises the climate change risk assessment carried out for Sydney Metro Western Sydney Airport.
Sydney Metro IS Implementation Plan (v6)	Outlines the approach to applying an IS Rating on the Sydney Metro Western Sydney Airport Project and defining the general scope of works.
Sydney Metro monthly sustainability reporting guidance	Provides guidance on requirement monthly reporting consumption data.
Infrastructure Sustainability Council (ISC)	
Infrastructure Sustainability Council (ISC) - Infrastructure Sustainability (IS) v1.2 Rating Tool	The IS Rating Tool evaluates sustainability initiatives and impacts of infrastructure projects, and is a guide for sustainable design, procurement, construction and operation.
IS v1.2 Technical Manual	The Technical Manual describes rating process and mandatory credit criteria and levels/targets.
IS Materials Calculator IS Materials Calculator Guideline	A calculator used to determine embodied greenhouse gas emissions (CO2-e) and life cycle impact of products used in the construction of infrastructure projects. The calculation includes transport distances for the delivery of construction materials and waste composition emissions.
IS v1.2 Scorecard – Design and As Built	The IS rating tool scorecard (Excel spreadsheet) facilitates self-assessment against the IS Rating and summary of credits claimed which is submitted to ISC for independent verification.
Other	
Environmental Impact Statement:	The Environmental Impact Statement (EIS) is a publicly available document that provides information on a project, including its environmental impacts and mitigation measures, and is used to inform development consent decisions.
Sydney Metro – Western Sydney Airport Submissions Report	Details mitigation measures which have been added, removed, or changed since exhibition of the EIS.
Supply Chain Sustainability School	Various sustainable procurement related resources & tools. http://www.supplychainschool.org.au/
National Greenhouse Account Factors	The National Greenhouse Accounts (NGA) Factors provide methods that help companies and individuals estimate greenhouse gas emissions. Factors will be used to Scope 1 and Scope 2 emissions. National Greenhouse Accounts Factors (industry.gov.au)

Guideline and tools	Description
US EPA air emission standards	Sets limits on certain air pollutants, including setting limits on how much can be in the air anywhere in the United States. Relevant to on-road diesel plant and equipment
Climate change adaptation for settlements and infrastructure – A risk-based approach (AS 5334-2013)	Provides principles and generic guidelines on the management of the risks that settlements and infrastructure face from the impacts of climate change.

5. Leadership and Collaboration

5.1. Project Leadership Sustainability Responsibilities

The project leadership will promote the integration of sustainability at all functional management levels and create a culture where everyone acknowledges their role in achieving the project sustainability objectives. Figure 2 details the Project organisation chart related to sustainability to show the team structure, authority, and communication lines.

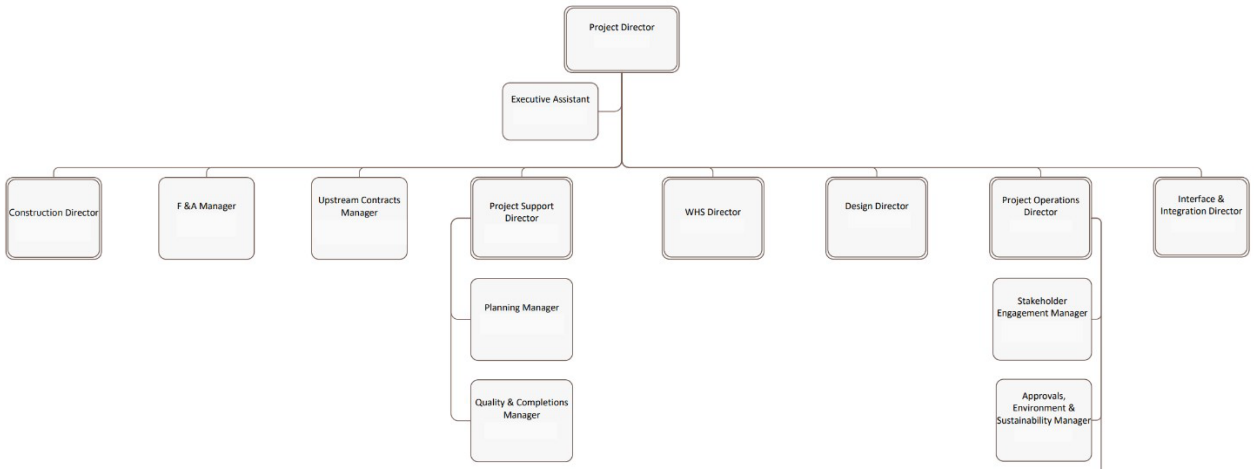

Figure 2: Project Directorate chart

The table below outlines the general sustainability responsibilities for leadership roles and functional leads across the Project. Please note, the Sustainability Team roles and responsibilities are further addressed in Section 5.2.

Table 6: Project Leadership and Functional Leads sustainability responsibility

Position	Responsibility
Project Director	• Manage the delivery of the SBT Works, including overseeing the implementation of sustainability initiatives and progress. • Act as Contractor's Representative.
Project Operations Director	• Oversee the development and implementation of all sustainability initiatives and progress.
Interface and Integration Director	• Oversee the development and implementation of all sustainability initiatives for the SBT Works. • Regularly liaise with the Environment and Sustainability Manager and Sustainability Manager to identify key risks and opportunities related to the Project.
Environment, Approvals and Sustainability Manager	• Oversee the development and implementation of all environment and sustainability initiatives for the SBT Works. • Represent sustainability on the senior leadership team Regularly liaise with the Sustainability Manager to identify key risks and opportunities related to the Project. Develop and manage the Environment, Approvals and Sustainability Team.

Position	Responsibility
Commercial Manager, and F&A Manager, and Upstream Commercial Contracts Manager	• Ensure relevant sustainability requirements are considered in the procurement of materials and services and are included in agreements with subcontractors and suppliers.
Design Director and Manager(s)	• Ensure relevant sustainability requirements are addressed in design development.
Workforce Development and Industry Participation Manager	• Develop and implement strategies, programs, and initiatives to achieve the SBT Works workforce targets • Work with subcontractors and suppliers to ensure they meet sustainability requirements.
Stakeholder and Community Engagement Manager	• Communicate sustainability initiatives to the surrounding community and encourage community buy-in.
Construction Director	• Manage the delivery of the construction process in relation to sustainability across all worksites, in conjunction with the Sustainability Manager.
Project Support Director, and Quality and Systems Manager	• Oversee the development and implementation of the project risk and opportunity management system, including capture of sustainability risks and opportunities • Ensure relevant sustainability requirements are addressed in project quality processes.

5.2. Project Sustainability Roles and Responsibilities

The Sustainability Manager in conjunction with sustainability support roles, will work collaboratively to provide a proactive approach to managing sustainability. Figure 3 demonstrates the environment and sustainability team structure. Table 7 highlights the roles, responsibilities, and minimum levels of competency for sustainability resources on the Project.

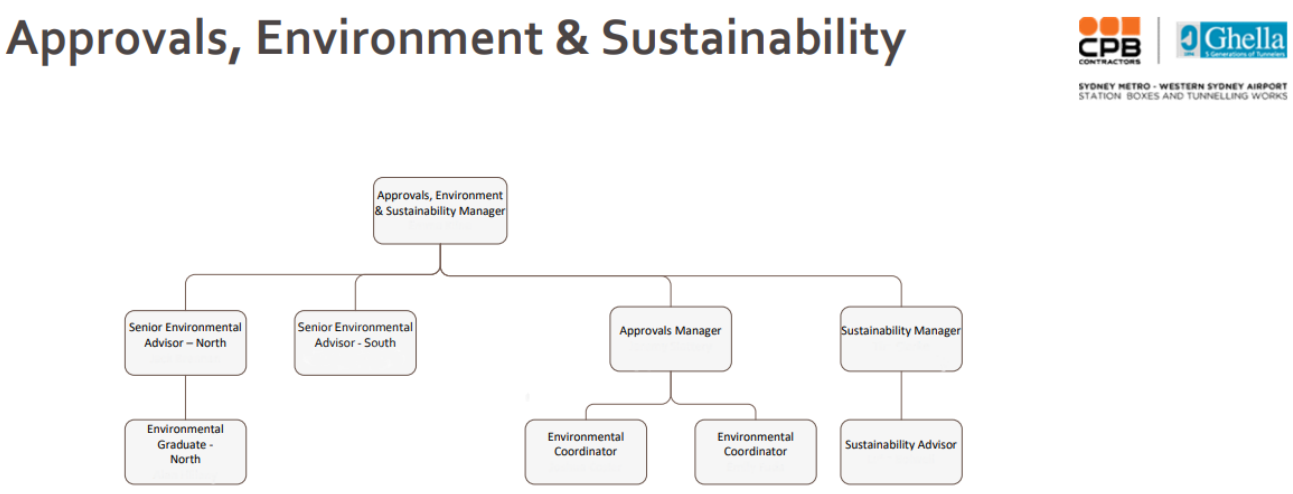

Figure 3: Approvals, Environment, and Sustainability Team

Table 7: Project Sustainability Key Roles, Responsibilities and Competencies.

Key Roles, Responsibilities and Authority	(Minimum) Competency Levels	Lines of responsibility and communication	interfaces with Project;
Sustainability Manager			
• Accountable for the sustainability performance of the SBT Works. • Lead the creation of a consultative and proactive culture that ensures sustainable innovation and continual improvement as a driver of work behaviours • Develop and implement the Sustainability Management System for the SBT Works • Review and ensure the continual improvement of the Sustainability Plan • Manage the development, implementation, assessment and verification of sustainability measures for the SBT Works • Provide advice to the Managers and functional leads to facilitate sustainable design and construction • Manage the sustainability induction and training program in consultation with the People and Culture Manager to ensure that relevant project personnel are suitably trained and possess the necessary skills to undertake their designated sustainability responsibilities • Assist the Commercial Manager to ensure sustainable procurement and that subcontractors fulfil their sustainability obligations • Report on the progress of sustainability initiatives and targets and ensure any required actions are initiated • Liaise with Sydney Metro, the Independent Certifier, Follow-on Contractors and ISCA to discuss sustainability performance and ensure continual improvement • Assist the Stakeholder and Community Engagement Manager in developing and implementing community education strategies with respect to sustainability.	• University qualification in environmental science and/or sustainability or equivalent • Minimum of five years' experience in managing sustainability for major linear civil projects • In-depth knowledge of current and emerging sustainability issues, practices and processes • Understanding of whole-of-business issues as they apply to sustainability systems at all levels.	• Report to the Approvals, Environment & Sustainability Manager • Principal's Representative's and Independent Certifier's primary contact for sustainability matters • Primary stakeholder contact for sustainability matters.	• Communicate sustainability requirements to Project leadership and functional leads • Lead sustainability workshops and forums • Attend environment, design and construction meetings as required.
Sustainability Coordinator			

Key Roles, Responsibilities and Authority	(Minimum) Competency Levels	Lines of responsibility and communication	interfaces with Project;
• Accountable for administration and reporting of sustainability performance for the SBT Works. • Assist the sustainability manager in the development and implementation of the Sustainability Management System • Assist the sustainability manager in implementing the sustainability induction program • Assist CPBG JV staff with sustainability inquiries • Assist in the development and implementation of site sustainability initiatives • Undertake sustainability monitoring and inspections • Assist the sustainability manager in reporting and auditing.	• University qualification in environmental science and/or sustainability or equivalent.	Report to the Sustainability Manager.	• Attend environment, sustainability, design and construction meetings as required. • Attend sustainability workshops and forums when required.
Approvals, Environment & Sustainability Manager			
Support the effective implementation environmental and sustainability management systems, strategies, and initiatives across the project to ensure all objectives and targets are met Monitor and report sustainability progress throughout the project delivery A member of the senior management team Has central responsibility for managing sustainability and responsible for achieving the IS Rating	Experience in environment and sustainability design, construction, and management Strong partnering, leadership, and governance skills Strong skills and experience in leading sustainability achievements. Experience in design, construction, and engineering management	Report to the Project Operations Director	Attend environment, sustainability, design and construction meetings as required. Attend and represent sustainability at the Senior Management Level
Project Operations Director			
Monitor and report sustainability progress throughout the project delivery A member of the senior management team Has central responsibility for managing sustainability and responsible for achieving the IS Rating	Strong skills and experience in leading sustainability achievements. Experience in design, construction, and engineering management	Report to the Project Director	Attend and represent sustainability at the Senior Management Level

5.3. Collaboration

CPBG will also work collaboratively with numerous external sustainability personnel and stakeholders. Table 8 lists external sustainability resources and responsibilities.

Table 8: External Sustainability Key Roles, Responsibilities and Competencies

Roles	Responsibilities	Communication
ISP/ sustainability reviewer	Reviews the Project's sustainability performance and makes recommendations for improvement. Acts independently and objectively, challenging conventional thinking Conduct Man-3 and Man-4 reviews and audits	Refer to Section 9.1.1
ISC Case Manager	ISC staff member assigned to the project/asset once Registration is completed. The Case Manager is the first point of the contact for the Assessor and provides support to the Assessor and other members of the project/asset management team throughout the rating process.	
Verifiers (2)	Independent specialists assigned to projects/assets during the Assessment stage provide independent verification of the weightings assessment, Base case proposal and the verification of IS submission.	
Technical Steering Committee	Sub-committee of the ISC Board Govern the rating process and are primarily responsible for certifying the achievement of a rating performance level, providing governance of tool development projects, and reviewing of TCs and CIRs.	
Sydney Metro Sustainability Representative	Work collaboratively with the Sustainability Manager to facilitate ongoing reporting, knowledge sharing and continual improvement to achieve sustainability objectives and targets, include the IS Rating Host quarterly sustainability forums	Fortnightly meetings
Independent Certifier	Review the Sustainability Management Plan and provide requirements and recommendations where applicable in accordance with the general and particular specifications	Refer to the Community Communication Strategy
Environmental Representative (ER)	Independently oversee compliance with the Project Planning Approval and be the principal point of advice on the environmental performance of the works -Refer to the CEMP for further details	
Parent Companies	Submission of NGER's data (CPB) Facilitate education and knowledge sharing between projects	
Council and agencies	• Refer to Communication Strategy	
Community Stakeholders	• Refer to Communication Strategy	

6. Integrating Sustainability

By its nature, sustainability involves the integration of multiple disciplines. The sustainability requirements have been integrated with the wider Project Program, including processes, procedures and workstreams.

Sustainability considers social, economic and environmental performance over the short, medium and long term, and there are many ways that sustainability can be applied to projects. For projects to be truly sustainable, a holistic strategic focus and early planning are essential. Sustainability cannot be approached as an 'add-on' initiative - it requires an integrated approach that encompasses the whole-of-project lifecycle. A clear, flexible, and adaptable high-level process to drive innovation and guide the incorporation of sustainability is required for the successful delivery of the SBT Works.

CPBG's proven management strategy for achieving maximum sustainability outcomes on the SBT Works is illustrated in Figure 4 and will be implemented on the SBT Works.

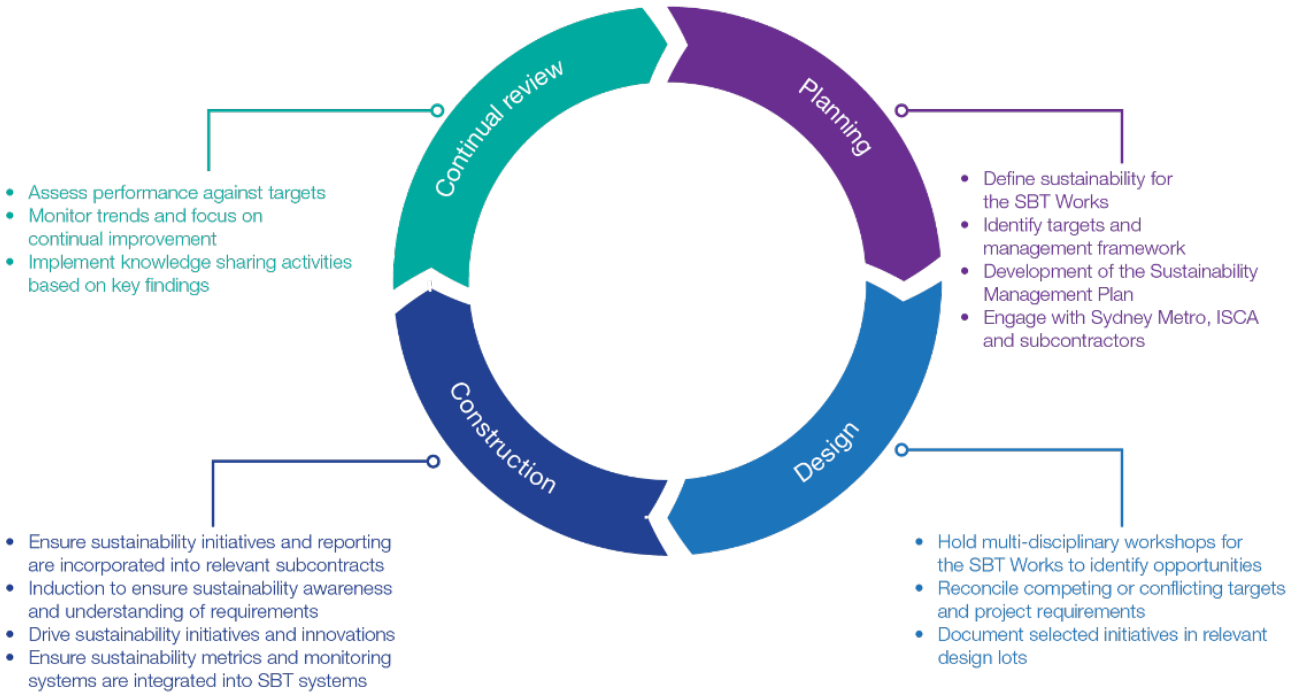

Figure 4: Embedding sustainability principles throughout the lifecycle of the SBT Works

6.1. Assess Sustainability Risks and Opportunities

Sustainability risks and opportunities will be assessed/captured using the Project's Risk management approach, as detailed in the Risk Management Plan.

In terms of sustainability, risk and opportunity assessment will consider direct and (where possible) indirect risks and opportunities across the project (design, construction), including consideration of:

- Governance risks and opportunities
- Economic and financial risks and opportunities
- Environmental risks and opportunities
- Social risks and opportunities

A multidisciplinary team including the Sustainability Manager, Design Manager and Construction Manager will participate in the risk and opportunity assessment processes. The identification of

treatment/implementation options for sustainability risks/opportunities will be captured via risk and opportunity documents/processes, which may include:

- Overall Project Risk and/or Opportunity Register
- Sustainability and Innovation Opportunity Register
- Work Pack Risk Registers
- Climate Change Risk Assessment
- Options Reports

Actions to treat sustainability related risks and opportunities will be identified and address where appropriate:

- The sustainability risks and their treatment/s
- The sustainability opportunities and their implementation option/s
- The selected treatment/implementation options and the reasons for selecting the treatment/implementation option
- Resources required to implement treatment/implementation options
- Timing and schedule
- Reporting and monitoring requirements
- Persons responsible for implementing, measurement, monitoring, and reporting

Risks will be documented in the Risk Register (as described in the Risk Management Plan). Review of the sustainability risk and opportunity assessment will be undertaken throughout the Project to ensure the identification, communication and monitoring of risks/opportunities and associated treatments are relevant. The table below details key timing, milestones for risk identification and review.

Table 9: Sustainability Risk and Opportunity Identification Activities

Project Phase	Activity to identify risk and opportunity	Responsibility
Commencement / Design	• Sustainability requirements and expectations briefing • Multidisciplinary sustainability design workshops • Climate Change Risk Assessment workshop	Sustainability Manager Sustainability Coordinator Design Manager Construction Manager
During Preliminary construction	Tool Box talks and project meetings	Sustainability Manager Sustainability Coordinator Construction Manager
Prior to Construction	Sustainable Procurement assessment to identify socio-economic opportunities for workforce engagement and environmentally responsible supplier/material selection	Sustainability Manager Sustainability Coordinator Procurement Manager
During Construction	Tool Box talks and project meetings	Sustainability Manager Sustainability Coordinator Construction Manager
Ongoing	Review and monitor status of actions within Risk and Opportunity Registers throughout the project Review and monitor status of actions within Climate Change Risk Assessment throughout project	Sustainability Manager Sustainability Coordinator Risk Manager

6.2. Sustainability Appraisal

CPBG will use a sustainability impact assessment process to review sustainability. This method allows financial and non-financial aspects to be considered.

Financial review includes the whole of life costing, where appropriate, to highlight the total costs and potential benefits of the initiative across its life cycle relevant to the SBT Works scope. Financial review will also review financial risks and potential impacts associated with program.

The non-financial review takes into consideration safety, environment, community, stakeholder, workforce, supply chain and any other consideration. This also consider factors such as scope restriction or compliance requirements.

6.2.1. Assess Options for Significant Decisions

The definition and threshold of significant decisions will change throughout project delivery. Typically, significant decisions are characterised by at least two of the following:

variations from a business-as-usual (BAU) approach (typically defined within the EIS or tender design)
high cost
high risk within the Project Wide risk assessment
may result in program variations

Significant decision will be referred to the Steering Committee for review. The Sustainability Manager will assist the Steering Committee in the sustainability appraisal of significant decisions.

6.2.2. Initiatives and innovation

CPBG will document sustainability initiatives using the Sustainability Initiatives and Opportunity Register. The purpose of this register is to identify and document all initiatives implemented and considered during project delivery. Key sustainability initiatives will be reported within the Monthly Report more information refer to Section 7.1.

6.3. Integrating Sustainability in Design

Integrating the sustainability requirements into the design process is critical to achieving the Project's sustainability targets and creating whole life value for key stakeholders. The Project's Sustainability Manager will meet regularly with the Design Director (or delegate), and other relevant design leads to discuss and document initiatives implemented during design that relate to sustainability requirements, implications, and benefits.

The Sustainability Manager will prepare a Sustainability Requirements Register, which will outline the project sustainability requirements for design/construction elements and packages. Relevant requirements are to be included in the Design Reports.

Design Reports will be reviewed to ensure the identified initiatives have been implemented and detailed project sustainability requirements. Impacts from implemented opportunities, such as material or operational energy reductions, will be calculated as part of the IS resource credits (Energy, Water, Materials).

Sustainability performance related to design will be reported in the Sustainable Design Report, see Section 7.1

Identified sustainability opportunities will be documented as sustainability initiatives as per Section 6.2.2.

6.4. Sustainable Procurement

CPBG has adopted CPB Contractors' procurement process and systems for the delivery of the SBT Works. CPBG's Procurement Policy cascades from the CIMIC Group Procurement Policy which along with the CPB Contractors' procurement procedures, tools and knowledge resources form the basis of the Project's procurement approach in line with ISO20400:2017 Sustainable Procurement Guidance. CPBG has developed to Sustainable Procurement Policy, shown in **Appendix B**, which demonstrates the Project's commitment to sustainable procurement processes.

6.4.1. Procurement Process

The procurement process that will be implemented on the SBT Works Project is detailed in the Procurement Plan. The following provides an overview of how sustainability considered and incorporated into in the procurement process. This process aims to maximise environmental and social consideration and improvement throughout the procurement process.

6.4.1.1. Review of Procurement Schedule:

The Procurement Schedule is a live document and central to the management of the timely delivery of all goods and services for CPBG.

This Procurement Schedule outlines, amongst other things, details on each package to be met (including nature of work, type of agreement, and tenderer identities) and timing requirements pertaining to when the various stages of the procurement process are to be reached. With respect to each package, timing is from completion of design documentation through to executed agreements. This schedule has also been used to identify suppliers with high-impact works in regards to sustainability. This is defined as having scope/s of works likely to have an impact on the overall achievement of the sustainability targets.

The Sustainability Manager has reviewed the procurement schedule and identified the following as high-impact suppliers:

Waste haulage
Batching plant
Electricity supply
Water treatment plant
Concrete and shotcrete supply
Demolition works
Steel supply
Piling and civil subcontractors

The Procurement Team will use the schedule to ensure that all parties in the development of specifications, work packages and tendering documentation can be effectively co-ordinated, allowing time for engagement with the supply chain. The Procurement team will work closely with the Sustainability Team to ensure sustainability aspects are adequately managed.

6.4.1.2. Subcontractor Pack

All contracts refer to the Subcontractor Pack which includes environment and sustainability objectives and targets in plain English. The Subcontractor Pack – Environment and Sustainability will also be included in all tender requests to set out environment and sustainability systems and targets. All suppliers must agree to the requirements. The subcontractor pack includes the Environment and Sustainability Policy, and targets.

6.4.1.3. Request for Quotation

Tenders accepted within the prequalification can be invited to tender and request for quotation submitted. The tender is provided the Subcontractor Pack and is required to comply with all elements.

6.4.1.4. Questionnaire

CPBG uses a questionnaire to gather information and ensures all subcontractors and suppliers meet the minimal requirements. This involves subcontractors and suppliers completing multidisciplinary questionnaires, which includes environment and sustainability, and a review for modern slavery (see Section 6.4.2). Reviews are carried out by representatives from the Commercial and Procurement Team, in consultation with the Project's Approvals, Environment& Sustainability Manager and/or Sustainability Manager as required.

When suppliers are identified as high-impact suppliers, further information and/or evaluation criteria may be requested from the Sustainability Team. Tender interviews may be conducted for high impact suppliers if deemed necessary.

This step is also used to engage with potential suppliers to explain sustainability requirements and expectations and help stimulate innovation.

6.4.1.5. Tender evaluation and recommendation

Once all tender responses are received, CPBG will analyse and document the details of each submission. The analysis will consider each offer from an overall technical, timeframe, and commercial viewpoint, as well as non-financial aspects.

The Contract Manager will coordinate with the respective design and construction staff to analyse and assess tenders in accordance with the Procurement Plan and Subcontractor Pack. Analysis of results will be documented in a Tender Analysis sheet and processed for tender selection. The analysis will include environmental and social criteria. Performance criteria will be based on the Subcontractor's;

Confirmation work under CPBG systems, in particular submission of monthly reports
Effectiveness of management systems for environment and social aspects
Awareness of environment legislation and sustainability knowledge
Previous performance including awards or commendations from previous clients
Drive to ensure industry best practice and drive initiatives and innovation
Commitment to ensure ethical sourcing of labour and materials
Ability to contribute to workforce development, industry participation targets or interactions with local markets
It is noted that not all criteria will be related to all packages. Package scope will be taken into consideration when reviewing environmental and social criteria.

Where a subcontract has been identified as a high-impact supplier, the Approvals, Environment and Sustainability Manager, or the Sustainability Manager will be directly involved to evaluate sustainability performance. This may include specific and unique environment and sustainability consideration and criteria. Feedback will be provided to the commercial and will form part of the evaluation process. This will be detailed in the tender evaluation documentation.

6.4.1.6. Contracts

Contracts include requirements to comply with the Subcontractor Pack, including Environment and Sustainability requirements. Where suppliers are identified as a high-impact subcontractor, additional environment and sustainability requirements may be incorporated into the contract, where relevant.

The Subcontractor Pack include the requirement for all subcontractors to provide reports (in the form required by CPBG JV):

(a) energy production and energy usage;

(b) material usage;

(c) water usage; and

(d) waste production, in connection with their Project-related activities.

6.4.1.7. Performance monitoring

Performance of subcontractor is monitored throughout their engagement on the Project. Monitoring processes are dependent on the type of subcontract, and this is detailed in the Subcontractor Pack. Sustainability monitoring and assurance processes include;

review of sustainability reporting in accordance with sustainability objectives and targets,
work activities inspection and,
compliance audit with applicable Project management plans, processes and procedures.
Corrective action will be issued to the subcontractor where identified. This may include;

- inspection/audit actions,
- information requests for sustainability reports, and/or
- evidence of compliance\ certification.

Corrective actions that remain unresolved will be escalated to the Procurement and Commercial team for management. Unresolved corrective actions, or where a subcontractor fails to carry out corrective action(s), will be treated as breaches in their contract and CPBG may exercise their rights in respect of default.

6.4.1.8. Rewarding Sustainability Performance of Suppliers and Subcontractors

Once suppliers and subcontractors have been engaged CPBG will recognise and/or reward the sustainability performance of suppliers by:

Recognition and involvement at Subcontractor Forums
Considering their sustainability performance in the assessment of additional tender packages for CPBG
Considering sustainability innovations identified by subcontractors or suppliers.
Considering sustainability performance in After Action Improvement Reviews which aim to capture lessons learnt and are shared with Parent Companies to assist in improving future performance on other relevant projects.
Positive feedback within CPB's procurement system to improve uptake on other projects

6.4.2. Human Rights and Modern Slavery

CPBG will implement CIMIC Group Policies including the commitments for actively avoiding human rights violations, abiding by the human rights and civil liberties included in the Universal Declaration of Human Rights, the International Labour Organisation (ILO) and the ten principles of the United Nations Global Compact.

Further information can be found on the CIMIC Joint Modern Slavery Statement, which is publicly available (https://modernslaveryregister.gov.au/statements/file/71eddadd-72cf-469d-af02-6f05d24b3be1/). See Section 7.1 for further information on reporting requirements

The CIMIC Group's Code of Conduct and the Dealing with Third Parties Policy, in addition to CPBG's Sustainability Policy, requires specific due diligence to be undertaken regarding risks associated with modern slavery.

Supply chain due diligence includes the screening of third parties (including vendors, suppliers and business partners) against a range of risk factors and indicators, which include:

- Sanctions, watch-lists, adverse litigation, and Politically-Exposed-People (PEP) lists

Adverse media (print media and social media) in any jurisdictions in which CIMIC operates
Financial information including company ownership, structure, credit rating and financial strength
Potential for modern slavery, bribery, and corruption to occur in particular industries and countries

As part of prequalification and onboarding, all suppliers must also complete a Third Party Anti-Bribery and Business Integrity Declaration in which they disclose (among other things) whether they (or any of their subcontractors or suppliers) have:

- Been subject to or received any prosecutions, regulatory notices, tendering restrictions, sanction notices, litigation or arbitration concerning allegations of fraud, bribery, ethical-business practices or corruption, modern slavery, or breaches of the human rights of employees or contractors, or environmental or safety breaches or any similar or associated laws or regulations

Used modern slavery, human trafficking or forced or child labour anywhere
A compliance management program (i.e. policies, procedures, training, whistle-blower protection) to ensure compliance with business integrity laws and regulations (i.e. bribery and corruption, fraud, modern slavery legislation and or any other associated laws or regulations)

Suppliers are also required to make certain assurances, such as that they will not use any payments which they receive from CPBG in violation of any modern slavery, anti-bribery, anti-money laundering, trade sanctions, terrorist financing or other similar laws and regulations.

CIMIC also conduct Human Rights Impact Assessments (HRIA) of its operations including CPB Contractor activities. Locations are chosen based on risk assessments, which included:

- the size of each location's workforce as a portion of the overall international workforce the size of the Group's business in each location each location's ranking in the Global Slavery Index; and
- internal evaluation of potential risks when reviewed against the HRCA Quick Check.

Information regarding HRIA are presented in the CIMIC Annual Report.

6.5. Workforce development and Industry Participation

CPBG is committed to participating in the development of an inclusive and diverse supply chain. This includes developing the workforce and uplifting supply chains. The Workforce Development and Industry Participation Plan proposes how CPBG will:

i. respond to State and Commonwealth requirements including but not limited to:
   a. NSW Aboriginal Participation in Construction Policy
   b. NSW Infrastructure Skills Legacy Program
   c. Australian Jobs Act – Australian Industry Participation Plan
   d. Western Sydney City Deal
ii. Implement a Indigenous Participation Plan, supporting the National Partnerships Agreement Proposed appropriately skilled key personnel to support delivery of the workforce development and industry participation requirements;
iii. Implementation approach, processes and systems to ensure delivery and reporting of workforce development and industry participation priority areas:
   a. Jobs and Industry Participation;
   b. Skills Development;
   c. Diversity and Inclusion including Aboriginal Participation; and
   d. Inspiring Future Talent.

The plan also details CPBG's specific targets around;

- Women in non-traditional trades and occupation

Aboriginal Participation
Young people
Under represented groups, included returned services person, refugees and asylum seeks and long term unemployed or underemployed persons.
Local jobs
Social Enterprises.
Refer to the Workforce Development and Industry Participation Plan for further information.

6.6. Integrating Sustainability in Construction

Integrating the sustainability requirements into the construction process is critical to achieving the Project's sustainability targets and creating whole-of-life value for key stakeholders. The Project's Sustainability Team will conduct meetings with the Project Director (or delegate), and other relevant construction leads to discuss and document initiatives implemented at key construction phases that relate to sustainability requirements, implications, and/or benefits.

The Sustainability Team will prepare a 'Sustainability Requirements Register', which will outline the project sustainability requirements for construction elements. This register will be reviewed as part of detailed sustainability inspection described in Section 8.2.

Impacts from implemented opportunities, such as material or operational energy reductions, will be calculated as part of the IS resource credits (energy, water, materials). Identified sustainability opportunities will be documented as sustainability initiatives as per Section 6.2.2.

Section 6.4 and Section 6.7 are also relevant in detailing how sustainability is embedded into construction processes.

6.7. Training Requirements

Sustainability training requirements will be identified and documented within the Project training matrix for each role, including competency, needs, and capability. Further details are provided in the Workforce Development Management and Industry Participation Plan.

CPBG will provide additional training and education on sustainability aspects for the SBT Works Project staff and workforce, as detailed the table below.

Table 10: Sustainability Training completed on the SBT Works

Training	Description	Indicative participates
Project induction	Address Project-specific sustainability issues, including sustainability objectives and targets and sustainability expectations of employees and subcontractors. Induction materials will be reviewed at least annually and amended where necessary to reflect changes to Project sustainability issues.	All personnel, subcontractors and visitors will undergo an induction before commencing work on-site
Project Sustainability Training	The Project will deliver (internally or externally facilitated) sustainability training to improve awareness of sustainability aspects across the SBT Works. Training will be developed for specific disciplines which have interactions with sustainability.	Where needed
Multidisciplinary sustainability initiatives workshops	Workshops will be completed at key design phases to improve sustainability consideration within the design	Design Team

Training	Description	Indicative participates
Sustainability toolbox talks	Toolbox talks targeted around relevant sustainability initiatives and ideas generation will be rolled out across the worksites to communicate key messages, reinforce requirements, and seek feedback.	Construction Team
ISC Infrastructure Sustainability Accredited Professional Training (ISAP)	Relevant project staff will be encouraged to complete ISC's ISAP training, particularly personnel within the Environment and Sustainability Team and other relevant functional areas	Where needed
High Impact Suppliers Sustainability Training	Improves sustainability awareness across the SBT high impact supply chain to improve sustainability outcomes on the SBT works and beyond. Delivery of training will be varied dependent on supplier/subcontractor existing knowledge. Training may include Training provided through the Supply Chain School (or equivalent), Internal workshops to discuss constraints and drive innovation	Subcontractors identified as High Impacts in Section 6.4.1

6.7.1. Knowledge sharing

CPBG is committed to enhancing sustainability culture and raising awareness about sustainability principles and initiatives throughout the SBT Works and beyond. As such, CPBG will ensure knowledge sharing is carried out regularly with the project team, parent companies, key stakeholders, and the wider infrastructure industry.

The Sustainability Manager (or delegate) will participate in relevant forums for sharing knowledge across the industry. Where appropriate, sustainability case studies will be generated by the project for internal and external communications as appropriate. Knowledge sharing will be captured and documented in the Knowledge Sharing Register.

Knowledge sharing processes are iterative and evolve as the Project progresses. Key examples of knowledge sharing initiatives that may be adopted by CPBG are shown in Table 11.

Table 11: Examples of sustainability knowledge sharing initiatives

Audience	Knowledge Sharing Initiatives
Internal	Induction Sustainability toolbox talks Sustainability workshops
Parent Organisation	CPB Sustainability and Environment Network – developed as a forum for information sharing related to environment and sustainability risk, opportunity, constraints and success on Project. Where relevant, CPBG will share updates, lessons learnt, key achievements and challenges with the network to facilitate learning and capability building across CPB IS project teams.
Sydney Metro	Sydney Metro Sustainability Forums – CPBG will attend the quarterly forums hosted by Sydney Metro and collaborate in regard to: – progress updates – sustainability performance information – present sustainability lessons learned; and

Audience	Knowledge Sharing Initiatives
	– provide other information as reasonably requested
Key Stakeholders	Community consultation
Wider Industry	Industry Conference and Workshops – The Approval, Environment and Sustainability Manager, Sustainability Manager, and/or other relevant personnel may present on sustainability initiatives, and lessons learnt at relevant industry conferences Case Studies – CPBG will work collaboratively with Industry to prepare case studies to document specific sustainability initiatives, and lessons learnt. Sydney Metro Annual Report

7. Sustainability Reporting and Information Management

7.1. Sustainability Reporting Requirements

Table 12 describes the required reporting for sustainability on the SBT Works.

Table 12: CPBG sustainability reporting requirements

Reporting Requirement	Description	Frequency
Client		
Progress report	A sustainability section will be included within the "Environment Management" section. Which, as a minimum, will discuss: A. a summary of performance in meeting sustainability requirements and targets, which includes the identification of areas of actual or potential non-compliance; and B. data on resource consumption, carbon emissions, waste recycling and disposal, spoil management and concrete mixes in the form of a completed Sydney Metro Sustainability Reporting Template	Monthly on the first Business Day of each calendar month
Quarterly Sustainability Report	Each report is to include the following: A. an executive summary B. the SBT Contractor's performance against the sustainability requirements of this D&C Deed, including compliance with the Sustainability Management Plan and performance against sustainability targets C. the status of the implementation of the sustainability strategies, targets and initiatives identified in the Sustainability Management Plan; D. details of where the climate change risk assessment have influenced the design and construction for the Project Works and Temporary Works; E. details of greenhouse gas reduction initiatives which have been implemented in the design and construction of the Project Works and Temporary Works; F. life cycle assessments undertaken, and details of environmental impact reduction initiatives which have been implemented in the design and construction of the Project Works and Temporary Works; G. compliance with sustainable procurement requirements; H. corrective actions taken where non-conformances with sustainability requirements have been identified; I. compliance with all relevant NSW and Australian modern slavery legislation; and J. a copy of the community benefit initiative impact register and the status of the implementation of the community benefit initiatives and "legacy" community benefit initiatives.	Quarterly from the date of this D&C Deed until the Date of Completion of the last Portion to achieve Completion
Climate Change Impact Assessment Report	The Climate Change Impact Assessment Report must: A. be prepared in accordance with the guidance and requirements included in the TfNSW Climate Risk Assessment Guidelines (SD-081); B. document all project specific amendments to the climate change risk framework; and	With design documentation at each Design Stage and again prior to the Date of Completion of the

Reporting Requirement	Description	Frequency
	C. identify, assess, and demonstrate how risk adaptation measures, including baseline risk adaptation measures, have been and will be implemented to mitigate risk levels For more information see Section 10.1	last Portion to achieve Completion
Greenhouse Gas Inventory Report	The Greenhouse Gas Inventory Report must include data relating to emissions associated with electricity and fuel consumption, on-site process emissions and embodied emissions for all materials used in the SBT Works For more information see Section 10.2.1	With design documentation at each Design Stage Prior to the Date of Completion of the last Portion to achieve Completion six-monthly basis during construction
Air Emissions Workbook	Inventory of non-road diesel powered vehicles used for the SBT Contractor's Activities and reporting of engine conformity with United States Environmental Protection Agency (US EPA) Tier 4 or European Union Stage V exhaust emission standard and the fitting of any exhaust after-treatment devices	Annually during construction
IS Submission	Copies of documents which are submitted to the Infrastructure Sustainability Council (ISC) in relation to the Infrastructure Sustainability (IS) ratings for information, excluding commercial or confidential information.	After verification of Design and As Built IS Rating
Sustainable Design Report	Sustainable Design Report must include; A. a compliance table which shows the status of the compliance with sustainability requirements which are addressed in design; B. evidence of how the sustainable design initiatives achieve the targets; C. a graphical representation of the achievement of targets D. illustrations of key sustainability initiatives; E. evidence to show where climate change mitigation and adaptation measures or changes have been implemented in the design; F. scoring achieved using the ISCA IS Rating Scheme 'design' rating including supporting completed scorecards G. demonstration of progress toward achieving ISCA Ene-1, Ene-2, Mat-1, Wat-1 and Wat-2 credits; H. performance against design-related sustainability targets; I. life cycle assessments and evidence of how these have informed design, materials selection and materials sourcing to minimise life cycle environmental impacts; J. details of where low carbon initiatives have been implemented in the design and construction of the Project Works and Temporary Works; K. initiatives which have been implemented to minimise the embodied carbon emissions of concrete mixes which will be used in Project Works and Temporary Works; L. updates on sustainable procurement activities; and	With Design Documentation at the completion of Combined Design Stage 1 & 2 and Design Stage 3

Reporting Requirement	Description	Frequency
	M. a demonstration and description of innovative sustainable design initiatives.	
Australian Steel	Report the percentage of steel which is manufactured in Australia	As requested
Water Balance Study	Identifies the sources, uses and estimated quantities of potable and non-potable water which will be either created or used in the performance of the SBT Works	With Design Documentation at the completion of Combined Design Stage 1 & 2 and Design Stage 3
Deconstruction Plan	Describe the strategy and provide information to support the deconstruction and disassembly of infrastructure constructed as part of the SBT Works.	Within 3 months of completion of site establishment activities At the completion of Combined Design Stage 1 & 2 and Design Stage 3 Reviewed annually
Legislation		
NGERS Reporting	CPBG is required to report sustainability data to CPB Contractors and CIMIC to fulfil reporting requirements under the National Greenhouse and Energy Reporting Scheme (NGERS)	Annual
Commonwealth Modern Slavery Act	Companies with revenue above $100 million per annum are required need to report a Modern Slavery Statement. This is covered under CIMIC's Modern Slavery Statement	Annual
IS Rating related		
Ene-Model	As detailed in the IS Technical Manual v1.2, the Ene-Model will compare estimated and actual consumption of energy and associated greenhouse gas emissions	As Built IS Rating
Mat-1 Calculator	As detailed in the IS Technical Manual v1.2,	As Built IS Rating
Water Balance study	As detailed in the IS Technical Manual v1.2, the Water balance study will demonstrate the total and monthly water usage.	As Built IS Rating

7.2. Sustainability Data Capture

To meet the reporting requirement detailed above (Section 7.1), in regards consumption of resources (energy, water and materials) and the generation of waste, CPBG will develop an online data capture system to manage the reporting requirements. All data procured by CPBG and its subcontractors is entered into using an electronic form, and the data is stored in an online database. The system includes automatic calculations which amalgamate and distribute data in line with the different requirements and categories used in each reporting process. This prevents the need to enter data into multiple systems and removes the risk of errors associated with double handling of data.

This system allows for increased efficiency, reliability and validity of the sustainability data collection process and enables CPBG to easily:

- Enter data directly into the reporting system minimises the risk of errors and eliminates double handling associated with transposing written information
- Track data collected from across the SBT Worksites and reported by subcontractors
- Review and validate data, including the ability to pin-point potential errors
- Collate reported data to fulfil client and parent company reporting requirements
- Use of set formulas to collate and calculate data for various reporting outputs creates a consistent, automated method that reduces the risk of human error.

Table 13 shows *high material* resources, and the source of information used to monitor and capture consumption during the Project.

Table 13: Sustainability data capture source

Resource Type		Source/s
Resource	Fuel	Project invoices Subcontractor monthly reports
	Energy	Project invoices Mains meter reads
	Gas	Project invoices Mains meter reads
	Other (LPG, oil, grease solvents, acetylene)	Project invoices Subcontractor monthly reports Site tracking register
Water	Potable water	Project invoices Water meter reads Subcontractor monthly reports
	Non-potable water	Water meter reads Modelled consumption estimates (where water meter reads are unavailable) Subcontractor monthly reports
	Water discharge	Water meter reads Modelled estimates (where water meter reads are unavailable)
Waste	Construction waste	Waste tracking register Subcontractor monthly reports
	Office waste	Subcontractor monthly reports
Materials	Concrete	Subcontractor monthly reports
	Steel	Subcontractor monthly reports Project invoices Site tracking registers
	Road base	
	Other materials (timber, aggregates, glass, plastic, etc)	

7.3. Sustainability Items Reported by other Functions

Sustainability aspects reported by other functions are listed in Table 14:

Table 14: Sustainability Items Reported by Other Functions

Sustainability Target, Requirement, Risk, & Opportunity	Function	Reporting
Environment Pollution	Environment	Monthly Progress Report
Environment and Sustainability Inspections	Environment	Monthly Progress Report
Environment and Sustainability Risk	Risk Management	Monthly Progress Report
Workforce Development and Industry Participation	HR	Monthly Progress Report
Proposed community benefit	Community	Community benefit initiative approval to proceed request form

8. Evaluation and improvements

8.1. Audits and Review

Audits, inspections, and reviews will be undertaken where required to achieve targeted rating scheme credit requirements and evaluate project performance associated with sustainability. Table 15 highlights an indicative list of audits.

Table 15 : CPBG required sustainability audit

Name	Detail	Timing/ Frequency
Client Required		
Sustainability Management Plan Audit	Audit of the Sustainability Management Plan	Annually
IS Rating relevant*		
Design ISP Review (Man-3 Review)	Review of IS Submission process and Sustainability Management System	Quarterly during design
Construction ISP Review (Man-3 Review)		Six monthly during construction
Design External Sustainability Audit (Man-4 Audit)	Audit which covers environment and social issues related to the SBT Works. This may include; - Sustainability Management Plan - Construction Environment Management Plan and sub-plans - Community Management Plan - Workforce Development and Industry Participation Plan - Audit aspects should be selected to cover the "material" components to works: Scope and justification will be included in audit reports	Once during design
Construction Internal Sustainability Audit (Man-4 Audit)		3 per year
Construction External Sustainability Audit (Man-4 Audit)		Annual
Energy & Carbon Monitoring and Modelling (Ene-1 Audit)	Audit of energy and carbon monitoring and modelling	Once during Design and Once during Construction
Waste Handling and Disposal to destination (Was-1 Audit)	Waste Handling Audit	6 monthly during construction
Stakeholder audit	Sta-3 and Sta-4 audit	Annual

*Audit/Review is desired, but not contractually required

The Sustainability Manager (or delegate) will prepare an Audit and Review Schedule to identify required actions, frequency, and responsibilities throughout design and construction. Audits will be conducted in accordance with the Quality Management Plan.

All persons conducting audits and reviews will be required to confirm they meet the requirements outlined within applicable project requirements or IS rating tools. This may include identification of qualifications and/or meeting the relevant thresholds of the IS Rating "Suitably Qualified Professional".

Audit and non-conformance findings will be managed in line with CPB Management System MSID-2-265 Manage Product or Service Non-conformance procedure.

8.2. Inspections

Sustainability compliance monitoring on site will be undertaken using two types of sustainability inspections, which will be carried out throughout the delivery of the Project. These inspections are:

1. Weekly environment and sustainability inspections, which will be carried out by personnel in the CPBG Environment and Sustainability Team. This process is detailed in the CEMP. The sustainability component of the inspection will focus on initiatives to reduce both environmental and social impacts and, where required, actions may be raised to address any issues identified.
2. Quarterly detailed sustainability inspections, which are predominately carried out by the Sustainability Team to assess the implementation of sustainability initiatives and compliance with sustainability requirements at the SBT Works Project.

8.3. Sustainability Performance Review

Sustainability performance will be reviewed monthly by the CPBG Senior Leadership Team (SLT) and reported in the Monthly Sustainability Progress Reporting (refer to Section 7.1).

In addition, sustainability performance will be presented formally, at least annually, to the Senior Leadership Team.

CPBG will investigate methods to report sustainability performance to key stakeholders during construction. This will enable stakeholder feedback. Methods of delivery may include:

Presentations during interface meetings;
Sustainability information included in community newsletters and notifications;
Annual sustainability performance report prepared and published online (publicly available).

9. IS Rating Strategy

CPBG's approach to achieving an excellent Design and As Built Infrastructure Sustainability (IS) Rating under version 1.2 of the Infrastructure Sustainability Council (ISC) rating scheme is detailed in this section. This section acts as an *IS Rating Management Plan*. It identifies potential credits and targets that may be implemented as a pathway to the IS rating. The credits and targets may be subject to change during project delivery.

9.1. Roles and Responsibility

The Sustainability Manager will be an Infrastructure Sustainability Accredited Professional (ISAP) and the principal participant on the Project team responsible for managing and delivering sustainability on the Project. The Sustainability Coordinator will be the IS Assessor.

The implementation of sustainability strategies on an infrastructure project requires participation by key representatives from all functional areas across the project. This is particularly true for the development of an IS Design rating submission, which covers multiple project aspects and requires input from personnel across the Project team.

Input will be sought across the entire SBT Works project team to respond to the IS Credits where required. This will be documented in the weighting assessment.

9.1.1. Consultation and engagement with ISC

Consultation with ISC is essential in achieving a successful IS rating. IS roles and responsibility are detailed in Section 5.3.

CPBG will arrange regular IS Progress meetings with the assigned Project Case Manager. The purpose of these meetings will be to allow transparency and knowledge share between ISC and the Project. The key content of these meetings will include:

Updates on construction progress and sustainability performance on the Project
Requirements of Technical Clarification (TC) or Credit Interpretation Requests (CIR)
Discussion regarding the development of the Weightings Assessment and Base Case documents
Discussion regarding technical guidance on sustainability performance and the IS rating scheme.
Guidance on best practice approaches to achieve an IS Rating.

9.1.2. Consultation Sydney Metro

Whilst the IS Rating is the responsibility of CPBG, there are components which will require deliverables and information to be provided by Sydney Metro. Additionally, CPBG acknowledges that the Project's IS Rating will have overlap with follow-on contractors. Further information will be provided to identify IS credit collaboration (or ownership).

Consultation with Sydney Metro throughout the IS Rating process is valuable in achieving a successful IS rating for the Project and the wider program rating for Sydney Metro - Western Sydney Airport, in particularly communication of interfacing IS Credits. Communication and consultation will be conducted as detailed in Section 5.3

9.2. Registration and Assessment Process

Table 16 details the IS process and timing for achieving an IS rating and has been developed to support the milestones detailed in Section 4.2.

Table 16 : IS Rating process

Rating Deliverable	Description	Responsibility	Required timing	Completed
ISC Registration	Involves registration of interest to ISC and fee schedule and payment of a rating agreement.	Assessor	At project commencement	2nd May 2022
Weightings Assessment	Highlights the materiality of rating credits in the context of the project.	Assessor/ IS verifier	Preparation and assessment throughout Design.	28th September 2022
Base Case Proposal	Sets out the project scope and boundaries, and proposes business as usual (BAU) assumptions to be used in resource use modelling for ISC credits Ene-1, Wat-1, Wat-2, and Mat-1.	Assessor/ IS verifier	Verification prior to Design rating submission	2nd March 2023
Design Rating Round 1 (R1) Submission	Involves the self-assessment of sustainability performance during the design phase of the SBT Works Project.	Assessor	Submitted at design completion	9th May 2023
Design Rating Verification (R1)	Independent verification of sustainability performance during the design phase of the SBT Works Project.. The Project receives verification comments.	IS Verifiers	Typically 4-6 weeks	13th June 2023
Design Rating Round 2 (R2) Submission	Design rating submission with updated response to resolve verification comments.	Assessor	Typically 1-2 months after round 1 verification comments	18th December 2023
Design Rating Verification	Independent verification and certification of sustainability performance during the design phase of the SBT Works Project.	IS Verifiers	Typically 4-6 weeks	27th February 2024
As Built Rating R1 Submission	Involves the self-assessment of sustainability performance during construction of the SBT Works Project.	Assessor	At construction competition	
As Built Rating Verification R1	Independent verification of sustainability performance during the as-built phase of the SBT Works Project. The Project receives verification comments.	IS Verifiers	Typically, 4-6 weeks	
As Built Rating R2 Submission	As-built rating submission with updated response to resolve verification comments.	Assessor	Typically, 1-2 months after round 1 verification comments	
As Built Rating Verification	Independent verification and certification of sustainability performance during construction of the SBT Works Project.	IS Verifiers	Typically, 4-6 weeks	

9.2.1. Establishment Period

The IS guideline enables an establishment period at the start of the design or construction phases for establishing management systems. Audits/monitoring/review of these management systems therefore do not need to be undertaken during this establishment period. CPBG has determined that the SBT Works design establishment period will conclude when the Sustainability Management Plan has formally been approved by the Independent Certifier. The construction establishment period will conclude on CEMP approval is received and Construction commences.

9.3. IS Target Score

In line with the requirements of Condition E115 of the Project Planning Approval and SWTC Appendix D.5, CPBG is targeting an ISC rating score of at least 75 for Design and As Built. This aligns with the 'Leading' rating level.

Annexure D of this Plan detail the target and stretch IS rating target levels and scores for each credit for the Design and As Built. Note, the sustainability weightings assessment and targeted scores are subject to change during project delivery.

10. Key Sustainability Initiatives

10.1. Climate change

In collaboration with SM - WSA, CPBG will develop a comprehensive response through design and management strategies to climate change risk, in order to reduce the potential impacts and ensure resilience to shocks and stresses.

SM - WSA has prepared an overarching Climate Change Risk Assessment (CCRA) report (SMWSAEDS-SMD-SWD-SB-RPT-006005). This Report considers a holistic review of the climate risk to the Sydney Metro Western Sydney Airport. This report assesses climate change risk in accordance with the TfNSW Climate Risk Assessment Guidelines, informed by:

- Australian Standard: AS 5334-2013: Climate Change Adaptation for Settlements and Infrastructure: A Risk-Based Approach (Standards Australia, 2013).
- Climate Change Impacts & Risk Management: A Guide for Business and Government (Australian Greenhouse Office, 2006).
- Infrastructure Sustainability Rating Tool v1.2 Technical Manual: Cli 1-Climate Risk Management (ISCA, 2015).

It is noted this report will inform the IS Rating Cli-1 and Cli-2 Credits.

CPBG has prepared a Climate Change Risk Assessment Report (SMWSASBT-CPG-SWD-SW000-SB-RPT-295018) to

- Describe how CPBG has assessed and mitigated climate change risks relevant to the design, construction, and operation of the SBT Works.
- Assist in the communication of the climate change risk assessment to affected stakeholders
- Meet the Climate Change (Cli-1 and Cli-2) credit requirements within the Infrastructure Sustainability Council's (ISC) Technical Manual Version 1.2.

A summary of the findings of the report is shown in the below table.

Table 17: Climate change risks by risk rating (inherent and residual) across the Sydney Metro Western Sydney Airport

Risk ID	Inherent risk	Residual Risk
A -Very High	0	0
B - High	0	0
C - Medium	13	0
D - Low	4	14
E - Very Low	0	3
Total	**17**	**17**

CPBG has ensured all climate change risks classified as "extreme", "high", and "medium", include treatment and/or adaptation measures to mitigate such that all residual risks are classified as "low", relevant to the SBT Works scope (as detailed in GS 3.4.2 (a)).

10.2. Energy Efficiency and Greenhouse Gas Emissions Strategy

This section includes the energy efficiency and greenhouse gas emissions strategy that identifies processes and methods to: (1) improve energy efficiency; and (2) reduce greenhouse gas (GHG) emissions for the construction, including embodied carbon.

CPBG has adopted an energy management hierarchy (Figure 5) in approaching energy and GHG management. This approach has been introduced early in the design development process and will be revisited at each of the key delivery phases to ensure any new opportunities to improve energy performance are investigated.

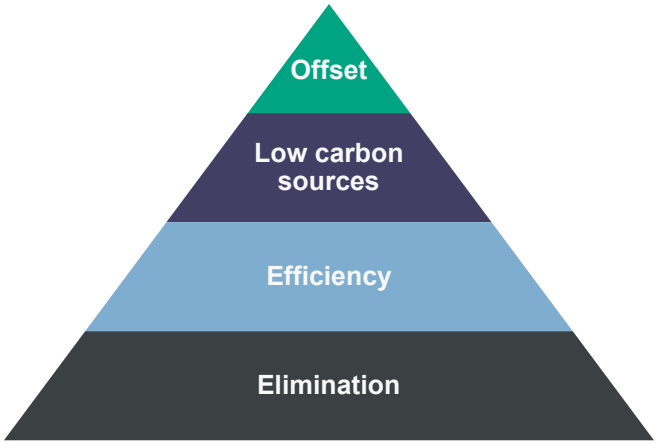

Figure 5 : Energy management Hierarchy

The options analysis will be conducted to ensure whole-of-life costs and benefits are examined. Refer to Section 6.1 for further details on the processes for the identification of opportunities.

10.2.1. Carbon Modelling

CPBG has categorised the carbon emissions as defined by the NGER legislation and National Greenhouse Accounts Factors (2020).

Table 18: Carbon emissions scope classifications

Scope	Definition	SBT aspect
1	Emissions produced within the boundary of an organisation as a result of the organisation's activity	Fuel products procured by CPBG and consumed on the SBT Works premised area
		Fuel products procured by the subcontractor and consumed on the SBT Works premised area
		Emissions associated with vegetation clearing
2	Emissions produced through the generation of the electricity purchased and consumed by an organisation	Energy (electricity) consumed onsite as part of the SBT Works
3	Emissions produced outside the project's boundary, which are produced a result of the organisation's activity	Embodied carbon associated with the materials used on the SBT Works
		Fuel burnt transporting products or waste to/from the SBT Works premised area
		Emissions associated with the off-site disposal of waste generated from on the SBT Works premised area
		Indirect emissions associated with the extraction, production and transport of the fuel burned at the

		generations and the indirect emissions attributable to the electricity lost in the delivery in the transmission and distribution network.
		Indirect emissions attributable to the extraction, production and transport of burnt fossil fuels

Carbon and energy modelling is used to understand the carbon footprint. Knowledge from similar previous project highlight that aspects of project delivery that contribute to the greatest proportion of energy use and GHG emissions are:

- Tunnel excavation (Scope 2, electricity)
- Surface excavation and bulk excavation of temporary civil structures (Scope 1, diesel-powered plant)
- Material consumption, predominately concrete, and steel (Scope 3 emissions)
- Waste transportation and disposal (Scope 3 emissions).

CPBG has completed a preliminary carbon model to estimate, Scope 1, Scope 2, Scope 3, and total carbon emissions. The estimated results for construction are summarised in Figure 6.

Source	Emissions* (tCO_2e)	Proportion (%)
Fuels	18,517	9%
Electricity	64,112	30%
Materials	130,544	61%
Waste	353	0%
Land	1,540	1%
Gases	-	0%
Water	469	0%
Commute	-	0%
Other	-	0%
Total	**215,536**	

Figure 6 - Carbon Tool (Stage 3) Results

CPBG have updated the carbon model throughout the design and construction period. CPBG will use the carbon model to develop the:

ISC IS Energy Model, which captures Scope 1, 2, and 3 emissions (excluding embodied carbon associated with materials) which compares against a BAU design;
A GHG inventory report using the Carbon Estimate and Reporting Tool (CERT), and
ISC IS Material Calculator, which captures the embodied carbon associated with materials and compares against a BAU design.

This information from the carbon model will be used to drive initiatives and innovation to reduce embodied carbon associated with high-impact aspects of the Project.

10.2.2. Fuel and Energy

The below table summarises the carbon and energy management strategies and initiatives that may be implemented for high consumption activities on the Project.

Table 19: Potential initiatives, related to energy and fuel consumption

Material	Initiative
Energy	Utilise of energy-efficient equipment – The construction methodology uses a range of energy efficient systems, including variable speed drives, power factor correction, efficient fans, pumps, compressors and energy-efficient lighting in site compound and tunnelling areas.
	Reduce or eliminate energy use through the refinement of work activities – using prefabricated assets where possible
	Procure sustainable site facilities to reduce energy consumption
	Investigate opportunities to use renewable energy during construction
	use of new and regularly serviced equipment and plant on site to maximise fuel efficiency
	Use of electrical plant and equipment (in replacement of fuel-powered)
	Automation of plant and equipment maximise efficiency
Fuel	Procure plant compliance to European Union or US EPA air emissions standards for all non-road diesel plant and equipment to maximise fuel efficiency
	Procure excavators and mobile cranes with European Union Stage V or US EPA Tier 4 exhaust air emissions standards for plant onsite for more than three months
	Implement a plant maintenance program to ensure all vehicles, plant, and equipment i. selected and operated for optimum energy efficiency; ii. not left idling when not in use; iii. fitted with catalytic converters, diesel particulate filters or equivalent devices where reasonable and feasible; and iv. well maintained and serviced in accordance with relevant equipment maintenance documentation to reduce emissions due to poor engine performance.
	Adopt the use of alternative fuels, where available and practicable
	Use of new and regularly serviced equipment and plant on site to maximise fuel efficiency
	Implement of an idling reduction policy for plant and equipment
	Prioritise local suppliers and waste disposal site to minimisation of fuel consumption
Offset	Offset 100% of all Scope 1 and Scope 2 emissions through one or a combination of the following: i purchase of large-scale generation certificates; ii purchase Australian Carbon Credit Units (ACCUs); and/or iii purchase of renewable Energy from an Australian Government Accredited renewable energy supplier.

10.2.3. Materials

The Project will place a significant demand on a range of resources, including both primary and secondary materials that have undergone some degree of offsite processing. This demand has the potential to create a resource depletion risk. As such, CPBG has a sustainability objective to maximise efficiencies to reduce our carbon footprint in relation to energy, water, materials, and

waste. To manage this risk, CPBG will adopt the materials management hierarchy shown in Figure 6 during the Project.

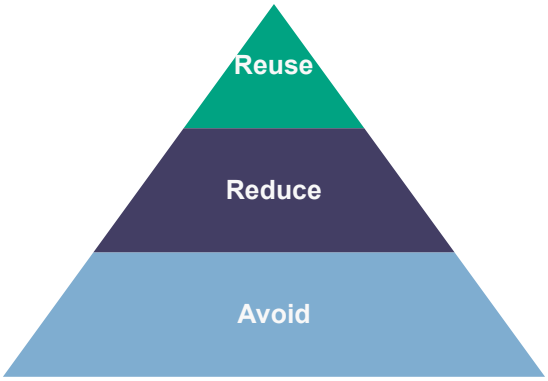

Figure 7 : Material management hierarchy

Material selections will take into consideration life cycle analysis within design and construction using ISO 14044. The following table outlines CPBG's approach to sustainably manage materials used during the delivery of the SBT Works Project where appropriate.

Table 20: Potential initiatives related to materials consumption

Aspect	Initiative
Concrete	Minimise the quantity of Portland cement in concrete mix designs and using supplementary cementitious material (e.g. fly ash, slag, silica), where possible, while still meeting other Design requirements. See Section 10.2.3.1
	Reduce quantities through value engineering initiatives identified during design development
	Enforce maximum cementitious content targets within concrete used for civil and structures. See Section 10.2.3.1
	Achieve a concrete mix design for the precast segments with a maximum carbon footprint of 270kg CO2-e / m3
	Ensure recycled aggregate is used in non-structural concrete, where feasible
	Ensure tunnel annular grouting mix with a maximum cementitious material of greater than 50% fly ash replacement or with a carbon footprint of no more than 250 kg CO2e/m3
	Investigate geopolymer concrete for non-structural applications, where practicable
Steel	Reduce steel reinforcement quantities through use of steel fibre reinforcement or plastic fibre reinforcement (e.g. in shotcrete), while still meeting other Design requirements
	Use of recycled or reused steel where possible
	Source reinforcing steel (rebar and mesh) from suppliers who use electric arc furnaces which adopt energy-reducing processes such as Polymer Injection Technology (PIT), to reduce the embodied energy per unit
	Ensure suppliers are members of the World Steel Association (WSA) Climate Assessment Program (CAP)
	Prioritise Australian manufactured steel products, ensuring that at least 50% Australian steel
	Reduce quantities through value engineering initiatives identified during design development

Aspect	Initiative
Timber	Implement the Forest Certification Scheme (FSC) procurement policy. Sourcing timber from FSC sources certified suppliers, or where it can be shown it is impractical to source timber using the FSC scheme, will be sourced from Forestry Corporation NSW managed schemes which can provide Chain of Custody using PEFC certification
	Reuse of formwork that can be reused onsite without diminished performance, or easily repurposed without the need for off-site treatment or processing, will be used as a preference.
General	Provide for asset reuse, where appropriate. This approach removes and/or minimises the need to procure various items of equipment through reuse of existing plant and facilities
	Support the circular economy through the use of post-consumer, post-industrial recycled material or waste materials, including crushed glass, recycled aggregate, tyre-derived aggregate and recycled materials for noise attenuation devices
Surface coating	Ensure low volatile organic compound paints, finishes, sealants and adhesives, and zero formaldehyde emission composite wood products are used onsite
	Ensure all surface coatings comply with the Australian Paint approval scheme

10.2.3.1. Concrete

Concrete represents a considerable amount of the Project's carbon footprint and therefore particular consideration is undertaken to ensure sustainable outcomes.

There is a full range of concrete mixes proposed for use on the Project, all of which will require trial mixing and performance testing prior to use. They include the following:

- 25MPa concrete will be used for track base slab
- 32MPa concrete will be used for temporary concrete
- 40MPa concrete is the minimum strength nominated in the General and Particular Specification for all permanent concrete
- 50MPa concrete will be used for precast tunnel lining segments.
- 65MPa if required.

CPBG will work collaboratively to;

1. reduce the overall quantity of cementitious material, and
2. use supplementary cementitious materials for Portland cement replacement (maximum cementitious and supplementary cementitious material targets within cement products are shown in Table 22).

This method will reduce the overall embodied carbon associated with concrete. Success will be measured using two metrics which aim to achieve:

a) a minimum 35% reduction in the embodied carbon associated, compared to equivalent conventional structures;

b) a minimum of 35% of Portland cement will be replaced by supplementary cementitious material, measured as a weighted average across all concrete mixes used for the SBT Contractor's Activities.

Table 21: Maximum cementitious and supplementary cementitious material within cement products

Type	Thickness (mm)	Water/ cementitious ratio	Strength (MPa)	Supplementary cementitious replacement (minimum)	Maximum cementitious content (kg/m^3)	*Maximum embodied Carbon (kg CO2e/m^3)
Ready mix concrete	> 500	< 0.4	<= 25 MPa	50% fly ash, or 70% slag	310	154.07
			32 MPa		360	178.92
			40 MPa		420	208.74
			50 MPa		450	223.65
			65 MPa		500	248.5
	< 500	n/a	<= 25 MPa	30% fly ash, or 55% slag,	Same as concrete elements thicker than 500 mm and where the design water/cementitious ratio is less than 0.40	
			32 MPa			
			40 MPa			
			50 MPa			
			65 MPa			
	> = 500	> 0.4	Same as concrete elements less than or equal to 500 mm in thickness			
	n/a	n/a	Above 65	Performance-based assessment to be complete to optimise cementitious content and supplementary material		
Precast Segment	n/a	n/a	50	n/a	450	270
Tunnel Annular Grout	n/a	n/a	n/a	50% fly ash		250

*A triple blend can be used if the embodied carbon footprint can be demonstrated to be lower than the benchmark. Where required the embodied carbon will be calculated using the following calculation:

Embodied Carbon = [kg cement per cubic metre of cementitious material x 0.982] + [kg fly ash per cubic metre of cementitious material x 0.012] + [kg slag per cubic metre of cementitious material x 0.187]

Silica Fume will be considered a supplementary cementitious material, and this can be included in the embodied carbon calculation. Since the IS Calculator and LCI index does not have a carbon factor for silica fume, the carbon factor for fly ash is used as a suitable proxy.

10.2.4. Waste

Waste management is an essential aspect of sustainability on the SBT Works. The Waste CEMP Sub-plan details CPBG's management practices in relation to waste. A focus will be on minimising waste associated with excavation works and maximising recycling and/or reuse potential.

The following table outlines CPBG's approach to sustainably manage waste during the delivery of the Project where appropriate.

Table 22: Potential initiatives related to waste generation

Material	Initiative
Construction and Demolition Waste	recycle or alternatively beneficially reuse at least 95% of inert and non-hazardous construction and demolition waste
	Investigation of best practice approach to utilise existing asset where feasible and practicable, including removal of unnecessary work activities and option-engineering
	Ensure the highest percentage of demolition and construction waste is reused or recycled
	Recycled hardstand materials use for temporary works, if possible, and existing hardstand areas will be maintained for use
	Investigation opportunities to reuse/recycle green waste onsite or through donations to local community groups
	Provide separate bins for storage of specialist waste streams such as oils,
	Ensure site layouts allow for sufficient on-site storage space for the safe storage of recyclable waste and general waste
Spoil	ensure 100% of reusable spoil is beneficially reused in accordance with the spoil reuse hierarchy identified in the environmental documents and is not disposed to landfill
	Spoil reuse opportunities will be sought and maximised, targeting 100% reuse of reusable spoil generated during delivery of the Works. This may involve seeking Resource Recovery Exemptions
	Use site won materials onsite when feasible and practicable
	Ensure 100% of topsoil will be reused
Office Waste	recycle or alternatively beneficially reuse at least 60% of office waste
	Implement office recycling programs onsite
	Ensure that co-mingle bins are adjacent to all general waste bins
	Provide separate bins for storage of specialist waste streams, including electrical and electronic waste, and equipment waste
	Reduce single use office items, where practicable
	Communicate recycling statistics to ensure share responsibility

Additionally, CPBG will promote the circular economy through the use of post-consumer, post-industrial recycled material or waste materials (see Section 10.2.3).

For more information regarding waste management, refer to the Waste Management Sub-Plan.

CPBG have also prepared a Deconstruction Plan (SMWSASBT-CPG-SWD-SW000-SB-PLN-202135). The Deconstruction Plan provides information and support for any potential deconstruction and disassembly of infrastructure constructed as part of the Project. The purpose of this plan is to communicate deconstruction options for the end of life which minimise waste to landfill in the future, for both CPBG and follow-on contractors. See Section 7.1 for information on frequency.

10.2.5. Monitoring and reporting carbon and energy

CPBG will monitor carbon, including energy, fuel, material, and waste consumption/generation, through environmental and sustainability inspections and monthly client reporting detailed in Section 7.1 and the modelling processes detailed in Section 10.2.1.

10.3. Water Management

One of CPBG's key sustainability objectives is to maximise efficiencies to reduce our footprint, in relation to water during design and construction. CPBG is committed to minimising water demand and using alternative water sources to potable water. The Water Reuse Strategy adopted for the SBT Works will support sustainable consumption of water during delivery and is based on the following three principles:

1. Reduce the volume of water required during delivery, to the greatest extent practicable,
2. Replace potable water with sustainable non-potable sources, where feasible, and
3. Monitor and measure water consumption during delivery.

A preliminary Water Balance Study was conducted during tender to analyse the water needs of the SBT Works and identify opportunities for potable water replacement and for minimising water needs. The aim of this Study is to understand the aspects of the SBT Works' water demand that may have high materiality. The methodology for the Water Balance modelling will be prepared in line with the ISC v1.2 Technical Manual and contract performance targets, Level 2 Wat-1 and level 1.5 Wat-2 credits.

A base case model will be developed for the IS Design Submission, and the As Built modelling will be developed from water performance data to ensure that the total water demand, reductions, and replacement of non-potable water are reflective of the SBT construction activities. The water demands for the project are made up from the following aspects:

- Plant operations
- Site amenities
- Grout production
- Underground maintenance
- Aboveground construction support

The table below details potential water minimisation and replacement initiatives on the SBT Works.

Table 23: Potential initiatives related to water management

Initiative type	Initiative
Minimisation	Use of efficient water practices during construction activities, tunnelling, and site establishment, including efficient misting systems (conveyors, station box excavation, shaft excavation), fog cannons, efficient hoses (e.g. trigger nozzles)
	Maintaining handstand and installing acoustic sheds reducing the requirement for dust suppression

	Installation of water-efficient fixtures and fittings in the showers, basins and waterless urinals
	Installation of wheel wash systems
	Inclusion of water minimisation practices into the construction methodology statements
	Procure sustainable site facilities to reduce energy consumption
Replacement	Procurement of TBM's which allow recirculation of TBM cooling water
	Installation of rainwater tanks on site facilities and acoustics sheds to allow for rainwater harvest for tunnelling support activities and site facilities to use rainwater
	Ensure the reuse at least 80% of concrete production operation water into concrete production at onsite or offsite batching plants
	Installation of infrastructure to allow water treatment plant water to be reused for tunnelling support activities and site facilities to use rainwater, where feasible

10.3.1. Monitoring and reporting of water use

During construction, CPBG will monitor the use of water from both potable and non-potable sources. Water use will be monitored using meter reads, invoices or estimations (e.g. for recirculation systems). Data will be captured and reported as per reporting requirements, see Section 7.1.

10.4. Environment Management Systems

Environment management is a core pillar of sustainability management. CPBG has committed to mitigating pollution, avoiding environmental harm according to environmental requirements, and achieving net positive benefits for the environment and community whilst leaving a positive legacy.

The Construction Environment Management Plan (CEMP) is the overarching document that details the environmental systems and how CPBG will achieve environmental management objectives. The CEMP includes a range of documents that support environmental management practices and initiatives across the Project.

10.4.1. Biodiversity Conservation

Overall, the SMWSA Project has been designed to avoid biodiversity impacts, where possible, by providing tunnels, bridges and viaducts over key riparian and vegetated areas and ensuring these structures are designed to maintain fauna connectivity. The scope of the SBT Works being primarily tanked underground tunnel will have a limited impact on biodiversity. Table 26 identifies potential biodiversity conservation initiatives which will be further investigated and implemented, where practical and feasible. The potential impacts of biodiversity conservation and management approaches are further detailed in the Flora and Fauna Management Plan.

Table 24: Potential initiatives, biodiversity enhancement and conservation management

Initiative type,	Initiative
Onsite	Above ground activities will be conducted to minimise clearing required
	Allow Sydney Metro site access for seed collection
	Installation of nest boxes

	Participate in World Environment Day and Threatened Species Day
	Conduct toolbox talks on biodiversity awareness and enhancement strategies.
Offsite	Implement a biodiversity-related initiative as a community benefit (pending community support)
	Donate cleared vegetation and structures to local community groups for reuse where available

CPBG will continue to identify and investigate initiatives related to biodiversity enhancement and conservation management during the SBT Works.

10.4.2. Heritage Management

CPBG is committed to protecting, promoting, and enhancing heritage values through appropriate design, planning, and management controls. CPBG's approach to heritage management is detailed in the Heritage CEMP Sub-plan.

10.5. Community consultant and benefit

Social sustainability is about identifying impacts (both positive and negative) that affect people and their community. CPBG will ensure the Project will leave a positive legacy through effective and comprehensive community engagement. This is detailed in the Community Benefits Implementation Plan. The Community Benefits Implementation Plan includes specific objectives and targets, such as:

implement at least 10 community benefit initiatives which target identified community needs in each of the following categories which provide demonstrable and tangible benefits to local community groups during construction and beyond construction.
engage at least five Social Enterprises or community benefit organisations as part of its Supply Chain for the Project Works.

Part B: Implementation

Part B of this Plan explains how sustainability requirements and targets will be met during the SBT Works. Compliance with all elements of these systems and tools is required to minimise the likelihood of causing unauthorised harm, maximise the uptake of sustainability and meet contractual requirements.

The Sustainability Elements are:

Element 1: CPB Management Elements
Element 2: General Specifications
Element 3: Particular Specifications
Element 4: Conditions of Approval
Element 5: EIS Measures

Element 1 CPB Management Elements

Expectations	Required actions (refer to Part A for all actions/details)	Responsible / Key Contributor	Deliverables
Context and objectives			
Identify project context, objectives, targets and requirements	Establish Sustainability Policy applicable for the project Identify project key contract requirements and targets Identify project Legislation and Regulatory Requirements Identify project key stakeholders Establish project external sustainability related resources if required Integrate sustainability elements into other functional management plans	**Sustainability Manager** Project Manager/Director	Details included in SMP Section 2 and Section 4
Assess sustainability materiality	Assess Sustainability Materiality	**Sustainability Manager** Project Manager Design manager Engineering Manager Construction Manager Risk Manager Stakeholder/Social Inclusion Manager Workforce Manager Approvals, Environment and Sustainability Manager Commercial Manager	External to SMP: IS Scorecard

Expectations	Required actions (refer to Part A for all actions/details)	Responsible / Key Contributor	Deliverables
Leadership, collaboration, and support			
Define sustainability roles, responsibilities and competencies	Define project leadership sustainability responsibilities Define sustainability team roles, responsibilities and competencies Define rating scheme associated roles and responsibilities	Project Manager/Director **Sustainability Manager**	Details included in SMP Section 5.
Identify and facilitate sustainability training opportunities	Include sustainability training requirements in training matrix. All resources to deliver the training including personnel, equipment, funding and materials, will be allocated in the Project budget Unless already completed, sustainability team staff will complete the ISC Accredited training course and exam within 6 months of project commencement or when the course is next offered Industry sustainability training courses including ISC Accredited training courses will be offered to functional leads and project leadership roles where appropriate	**Sustainability Manager** HR Manager	Details included in SMP Section 6.7 External to SMP: Training Matrix Training records Position Descriptions
	The project induction will address appropriate Project-specific sustainability issues		
	The Project will deliver (internally or externally facilitated) mandatory sustainability training opportunities as relevant to project team members including key functional leads which may include Environment manager, Procurement Manager, Commercial Manager and Design Manager.		
	Undertake training evaluation and review		
Risk and opportunity assessment			
Assess Sustainability Risks and Opportunities	A multidisciplinary team including the Sustainability Manager, Design Manager and Construction Manager will participate in the risk and opportunity assessment processes. The identification of treatment/implementation options for sustainability	**Sustainability Manager** Project Manager Design Manager	External to SMP: Project Wide Risk Register

Expectations	Required actions (refer to Part A for all actions/details)	Responsible / Key Contributor	Deliverables
	risks/opportunities will be captured via risk and opportunity documents/processes which may include: Overall Project Risk and/or Opportunity Register Sustainability and Innovation Opportunity Register Climate Change Risk Assessment Options Reports The Risk and Opportunity assessment will consider direct (and indirect where possible) risks and opportunities for the full project lifecycle (design, construction and operations) including consideration of: Governance risks and opportunities Economic and financial risks and opportunities Environmental risks and opportunities Social risks and opportunities Where risks and opportunities are assessed separately from the projects overall risk and opportunity assessment, then: Any risks rated as extreme, very high or high (or equivalent scale) must be included in the projects overall risk register or appropriate functional risk register Any opportunities rated as extreme, very high or high (or equivalent scale) must be included in the projects overall opportunity register. Treatment/implementation options will be identified and implemented so that there are no residual extreme, high or very high risks.	Engineering Manager Construction Manager Risk Manager Stakeholder/Social Inclusion Manager Workforce Manager Sustainability Manager Commercial Manager	Sustainability and Innovation Opportunity Register
	The Sustainability Manager will maintain a Sustainability and Innovation Opportunity Register or similar to capture ideas and initiatives that may lead to sustainable outcomes. The Sustainability and Innovation Opportunity Register will qualitatively assess individual opportunities based on Governance, Economic, Social and	**Sustainability Manager**	External to SMP:

Expectations	Required actions (refer to Part A for all actions/details)	Responsible / Key Contributor	Deliverables
	Environmental benefits. The Register will be used to track the status and responsibility for progressing sustainability and innovation opportunities.		Sustainability and Innovation Opportunity Register
Assess sustainability impacts	The Sustainability Manager will assist the project team assess feasible options/alternatives where appropriate for high impact/significant project related initiatives. High impact/significant initiatives will be defined by the project team and may include initiatives associated with high materiality, high cost or high impact initiatives. The options/alternatives will include a credible range of high level options. Feasibility of high impact/significant project related initiatives will initially be assessed using a qualitative assessment to score the relative merit of each option followed by a detailed assessment where required to justify and communicate benefits and costs. The Whole of Life costs of key/significant project initiatives will be considered over the assets lifecycle to assist decision making. Whole of life costing will consider where appropriate and feasible the total costs and potential benefits of the initiative across its life cycle.	**Sustainability Manager** Commercial Manager Engineering Manager Design Manager Construction Manager	Refer Section 6.1 for more details. External to SMP: Options Assessment
Sustainable Procurement			
Identify Material procurement scopes/packages	The Sustainability Manager will engage early with the Procurement Team and Commercial Team to understand the procurement process specific to this project and identify the key packages/scopes associated with high materiality sustainability topics.	**Sustainability Manager** Commercial Manager Procurement Manager	Refer Section 6.4.1 for more details.
Incorporate sustainability performance specifications (requirements) in subcontractor and supplier contract documents	The Sustainability Manager will develop a set of Sustainability Performance Specifications to clearly articulate the performance requirements associated with selected high materiality design/construction packages and/or technical disciplines to achieve the sustainability requirements/targets. The Sustainability Performance Specification will be included in relevant design, construction and procurement contract documentation. The Sustainability Performance Specifications and/or supply agreements will include the supplier/subcontractors reporting requirements.	**Sustainability Manager** Procurement Manager	External to SuMP: Sustainability Performance Specification / Sustainability Guidance Pack

Expectations	Required actions (refer to Part A for all actions/details)	Responsible / Key Contributor	Deliverables
	The Procurement Manager will include Sustainability Performance Specifications (requirements) in Request for Quotation packages outlining sustainability performance and targets associated with selected high materiality packages.		
Incorporate sustainability considerations in subcontractor and supplier prequalification	The Procurement Manager will use the Request for Quotation to invite suppliers to identify project-specific opportunities/risks that may contribute to sustainability performance. The [Procurement Manager] will request suppliers complete CPB Contractors' Prequalification Questionnaire to confirm details of their sustainability and environmental policies/strategies and their implementation, objectives and recent achievements and incidents.	Procurement Manager **Sustainability Manager**	External to SuMP: Pre-qualification questionnaire
Consider environmental, social and financial aspects in tender evaluation	The Procurement Manager and Sustainability Manager will evaluate selected suppliers prior to contract award using CPB Contractors supplier evaluation process, which assigns at least 30% of weighting to an index of non-financial criteria which may include sustainability, environment, safety and innovation.	Procurement Manager **Sustainability Manager** Project/Site Engineer	External to SuMP: Tender Evaluation
Ensure supply chain partners report periodically on sustainability performance	The Commercial Manager will ensure suppliers and subcontractors provide applicable reporting as required with progress claims.	Commercial Manager	External to SuMP: Monthly Environment and Sustainability Reports
Review subcontractor/supplier performance	The Sustainability Manager and Construction Manager will monitor and/or audit suppliers and subcontractors to verify commitments made in tender documents and identify areas of risk and identify areas for improvement. Regular feedback will be provided to celebrating success and collaboratively resolving non-conformances. Where appropriate, Suppliers' actual delivery performance post award will be assessed in accordance with the CIMIC Group Procurement Procedure.	**Sustainability Manager** Construction Manager	External to SuMP: Audit / Inspection Report
Integrating sustainability in Design and Construction			
Allocate appropriate resources and costs for sustainability	The Construction and Commercial Directors will ensure that sufficient cost provisions for resources are included in design and construction phases to ensure clear	Commercial Manager Construction Director	External to SMP:

Expectations	Required actions (refer to Part A for all actions/details)	Responsible / Key Contributor	Deliverables
	accountability for contributing to the achievement of sustainability requirements/targets. The Sustainability Manager will advise the Commercial Manager of indicative Rating Scheme costs (registrations etc), cost uplift or savings associated with potential sustainability initiatives and any additional sustainability cost/benefit considerations.	**Sustainability Manager**	Functional Management Plans Design Plans Construction Plans
Integrate sustainability in design	During design, The Sustainability Manager will identify sustainability opportunities and agree responsibilities with relevant design packages leads. The Sustainability Manager and Design Manager will define and agree on specific records and documentation required during the design phase to evidence and achieve the project sustainability requirements/targets (e.g. a table which could be included in the design report for each design package). The Sustainability Manager will: Be provided updates to Design Schedules and progress reports to assist identify upcoming design review gateways for relevant design packages. Provide input at specified design review gateways for material design packages. Ensure that sustainability impacts are captured in the design process. E.g. include a sustainability section in template. The Design Manager will add Sustainability as an ongoing agenda item for relevant meetings and/or establishment of a dedicated sustainability in design meeting. The Sustainability Manager will undertake a review of proposed design changes for sustainability initiatives. The review will include an evaluation of client, stakeholder, quality, environmental, community, safety, cost and program impacts.	**Sustainability Manager** Design Manager	Refer Section 6.2.2 for more details. External to SMP: Functional Management Plans Design Plans Sustainability and Innovation Opportunity Register
Integrate sustainability in construction	During Construction: The Sustainability Manager will identify sustainability opportunities and agree responsibilities with relevant construction lot leads.	**Sustainability Manager** Construction Manager	External to SMP: Functional Management Plans

Expectations	Required actions (refer to Part A for all actions/details)	Responsible / Key Contributor	Deliverables
	The Sustainability Manager and Construction Manager will define and agree on specific input into the Construction Plans and key construction planning controls/documents/processes (e.g. Work Packs and Construction Area Plans) as relevant to evidence and achieve the project sustainability requirements/targets. The Sustainability Manager will: Be provided construction/procurement schedules and progress reports to enable input and review Provide input at specified construction review gateways for material packages. The Construction Manager will add Sustainability as an ongoing agenda item for relevant meetings and/or establishment of a dedicated sustainability in construction meeting.		Construction Plans
Prepare a register of sustainability requirements and responsibilities	The Sustainability Manager will prepare a 'Sustainability Requirements Register' which will outline the project sustainability requirements and determine which functional leads/design and construction packages are associated with and responsible for the delivery of individual requirements.	**Sustainability Manager**	External to SMP: Sustainability Requirements Register Design Reports
Reporting, communication and information management			
Project sustainability performance reported Monthly	A monthly sustainability report will be prepared by the Sustainability Manager for the Support Services Director. Information to be provided to the Business Unit Sustainability Manager upon request includes: Rating Scheme progress Evidence submitted Credit Summary Forms Weighting Assessment Verification summary spreadsheet / scorecard	**Sustainability Manager** Support Services Director	Refer to Section 7.1 for more information. External to SMP: Sustainability Report

Expectations	Required actions (refer to Part A for all actions/details)	Responsible / Key Contributor	Deliverables
Supply chain performance is tracked and reported	Key supply chain providers will be required to report periodically on sustainability performance metrics as required by contract requirements and CPB Reporting Procedures.	**Sustainability Manager** Commercial Manager Procurement Manager	External to SMP: Monthly Sustainability Report
Sustainability rating scheme actions are managed	The project will utilise a Sustainability Action Management Tool such as/or similar to the CPB Contractors/EIC Activities IS Sustainability Action Management (SAM) Tool for projects with a Sustainability Rating Scheme.	**Sustainability Manager**	External to SMP: Rating Scheme Management tracking tool and progress reports
Project documents are managed and stored	Relevant documents and records must be stored and managed using the designated electronic document management system. The following Systems apply: • Energy consumption, water consumption and waste generation data will be reported in JDE and Synergy (supporting evidence will be stored in within the designated doc management system) • Incident reports and corrective actions will be stored and managed using Synergy. • Risk registers will be retained in excel spreadsheet and/or an applicable Risk Management System. Copies of risk registers will be saved to the designated electronic document management system periodically. • The Project network drive (K: Drive) will be used to store working documents only. Final versions of key documents to be retained such as monthly reports, programme, etc. are to be stored on the designated electronic document management system. • Final copies of sustainability ratings, case studies, certificates etc. must be saved to the CPB Contractors Sustainability Shared Drive.	**Sustainability Manager**	External to SMP: Sustainability Rating Submissions
Sustainability knowledge is captured and shared	Project sustainability knowledge, case studies and lessons learnt will be captured and shared as appropriate with CPB Contractors staff/projects.	**Sustainability Manager** Communications Manager	External to SMP: Lessons Learnt Reports

Expectations	Required actions (refer to Part A for all actions/details)	Responsible / Key Contributor	Deliverables
	The Sustainability Manager (or appropriate personnel) will participate in the CPB Contractors Bi-Monthly Sustainability Network which has been developed as a forum for sharing knowledge across CIMIC and CPB Contractors projects. Any external project communication must be approved by the Project, Client, CPB Contractors Communications Manager and CIMIC prior to release of any information.		
Evaluation and improvement			
Sustainability performance is reviewed targeting continuous improvement	The Sustainability Management Plan will be reviewed annually by the Sustainability Manager to assess the adequacy of the Sustainability Management Plan and overall performance against Project sustainability requirements, targets and objectives. Applicable findings of the review will be incorporated into the Sustainability Management Plan and/or the CPB Sustainability Management System.	**Sustainability Manager** Project Manager Business Unit Sustainability Manager CPB Contractors Group Sustainability Manager	Refer to Section 8 for more details. External to SMP: Project Audit Schedule Audit/Review Reports
Sustainability audits, review and inspections are scheduled	The Sustainability Manager will prepare a Review and Audit schedule or include requirements in the project audit schedule to identify required actions, frequency and responsibilities throughout design and construction including IS Rating requirements.		
Sustainability audits, review and inspections are undertaken	Audits, inspections and reviews are undertaken as scheduled and where required to achieve targeted rating scheme credit requirements.		

Element 2 General Specifications

Ref	Requirement	How it is address
2.8.1 (a)	The SBT Contractor must ensure that sustainability is addressed throughout the performance of the SBT Contractor's Activities and that sustainability is embedded into the design and construction of the Project Works.	This Pan
2.8.1 (b)	The SBT Contractor must meet the following sustainability targets:	n/a
	achieve at least a 25% reduction in greenhouse gas emissions from the project baseline greenhouse gas footprint, to be determined using TNSW's Carbon Estimate and Reporting Tool (CERT) or an alternative system agreed with the Principal;	See Section 7.1 & Section 10.2.1
	reuse at least 80% of concrete production operation water into concrete production at onsite or offsite batching plants for all concrete used in the performance of the SBT Contractor's Activities;	Section 10.3
	use a maximum of 717,634 kilolitres of water from potable water mains in the performance of SBT Contractor's Activities;	Section 10.3 Water reuse strategy
	ensure a minimum of 50% of water used in the performance of the SBT Contractor's Activities is sourced from non-potable sources;	Section 10.3 Water reuse strategy
	achieve a tunnel segment concrete mix maximum cementitious material carbon footprint of 270 kg CO_2e/m^3, which equates to a 50 MPa mix with 48% slag replacement and a maximum of 450 kg/m^3 of cementitious material. An alternative mix composition may be proposed and agreed with the Principal provided it meets the required carbon footprint;	Section 10.2.3.1
	source at least 50% Australian steel, including concrete reinforcing;	Section 10.2.3
	recycle or alternatively beneficially reuse at least 95% of inert and non-hazardous construction and demolition waste;	Section 10.2.4
	recycle or alternatively beneficially reuse at least 60% of office waste;	Section 10.2.4
	ensure 100% of reusable spoil is beneficially reused in accordance with the spoil reuse hierarchy identified in the environmental documents and is not disposed to landfill;	Section 10.2.4
	utilise at least two (2) recycled materials or products excluding steel, spoil, and concrete constituents in the performance of the SBT Contractor's Activities;	Section 10.2.3

Ref	Requirement	How it is address
	target zero major pollution incidents; and	Section 10.4
	undertake five (5) multidisciplinary sustainability initiatives workshops during the detailed design process.	Section 6.7
2.8.2 (a)	The SBT Contractor must allow for and address sustainability objectives and sustainability requirements in:	n/a
	design briefings for all personnel involved in the preparation of Design Documentation;	Section 6.3
	the Design Documentation;	Section 6.3 Section 7
	Project Plans for the design, delivery and management, of the SBT Contractor's Activities; and	Section 6
	Construction Site inductions.	Section 6.7
2.8.2 (b)	The SBT Contractor must register with the Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability (IS) Rating Scheme to use the IS rating tool in consultation with the Principal.	Section 9.2
2.8.2 (c)	The SBT Contractor must achieve a verified "design" rating score of at least 75 points, using the ISCA IS rating tool version 1.2 "Design and As Built" for the design of the Project Works and Temporary Works within three months of the final design package being AFC Design Documentation.	Section 9
2.8.2 (d)	In achieving the "design" rating, the SBT Contractor must, as a minimum, achieve the following levels using the ISCA IS rating tool version 1.2	Annexure D
	Level 2.33 for credit Ene-1 'Energy and carbon monitoring and reduction' demonstrating a greenhouse gas emissions reduction of 20% below a base case footprint;	Section 10.2
	Level 1 for credit Ene-2 'Use of renewable energy' to fully investigate opportunities for use of renewable energy;	Section 10.2.2
	Level 2 for credit Wat-1 'Water use monitoring and reduction', demonstrating a reduction in water use of 10% compared to a base case footprint;	Section 10.3
	Level 1.5 for credit Wat-2 'Replace potable water', demonstrating that at least 50% of water used is from non-potable sources;	Section 10.3 Water Reuse Strategy

Ref	Requirement	How it is address
	Level 2 for credit Mat-1 ‘Materials lifecycle impact measurement and reduction’, demonstrating a 15% reduction in materials lifecycle impacts compared to a base case footprint;	Section 10.2.3
	Level 2 for credit Pro-1 ‘Commitment to sustainable procurement’; and	Section 6.4
	Level 3 for credit Pro-2 ‘Identification of suppliers’.	Section 6.4
2.8.2 (e)	The SBT Contractor must achieve a verified “as built” rating score of at least 75 points, using the ISCA IS rating tool version 1.2 “Design and As Built” for the construction of the Project Works and Temporary Works.	Section 9
2.8.2 (f)	In achieving the “as built” rating, the SBT Contractor must, as a minimum, achieve the following levels using the ISCA IS Rating Scheme version 1.2:	Annexure D
	Level 2.33 for credit Ene-1 'Energy and carbon monitoring and reduction' demonstrating a greenhouse gas emissions reduction of 20% below a base case footprint;	Section 10.2
	Level 1 for credit Ene-2 ‘Use of renewable energy' to fully investigate opportunities for use of renewable energy;	Section 10.2.2
	Level 2 for credit Wat-1 'Water use monitoring and reduction', demonstrating a reduction in water use of 10% compared to a base case footprint;	Section 10.3
	Level 1.5 for credit Wat-2 'Replace potable water', demonstrating that at least 50% of water used is from non-potable sources;	Section 10.3 Water Reuse Strategy
	Level 2 for credit Mat-1 'Materials lifecycle impact measurement and reduction', demonstrating a 15% reduction in materials lifecycle impacts compared to a base case footprint;	Section 10.2.3
	Level 2 for credit Pro-1 ‘Commitment to sustainable procurement’;	Section 6.4
	Level 3 for credit Pro-2 ‘Identification of suppliers’;	Section 6.4
	Level 3 for credit Pro-3 ‘Supplier evaluation and contract award’; and	Section 6.4
	Level 2 for credit Pro-4 ‘Managing supplier performance’.	Section 6.4

Ref	Requirement	How it is address
2.8.2 (g)	The SBT Contractor must develop, implement and maintain governance structures, processes and systems that ensure integration of all sustainability considerations, initiatives and reporting during the SBT Contractor's Activities.	Section 6
2.8.2 (h)	The SBT Contractor must participate in sustainability forums, hosted by the Principal on a quarterly basis and:	Section 6.7
	present progress updates;	
	present sustainability performance information;	
	present sustainability lessons learned; and	
	provide other information as reasonably requested.	
2.8.3 (a)	The SBT Contractor must undertake greenhouse gas assessment and reporting which covers the SBT Contractor's Activities.	See Section 7.1 & Section 10.2.1
2.8.3 (b)	The greenhouse gas assessment and reporting must be conducted in accordance with the requirements of:	
	TfNSW's Carbon Estimate and Reporting Tool (CERT) <https://www.transport.nsw.gov.au/industry/doing-business-transport/sustainability-at-transport>; or	
	an alternative system agreed with the Principal.	
2.8.3 (c)	All reports required to be produced under the greenhouse gas assessment and reporting system must be provided to the Principal for Review with the appropriate Design Documentation and on a six-monthly basis during construction.	
2.8.4 (a)	The SBT Contractor must offset 100% of the all Scope 1 and Scope 2 emissions, as defined in National Greenhouse and Energy Reporting (NGER), released in carrying out the SBT Contractor's Activities through one or a combination of the following:	Section 10.2.1
	purchase of large-scale generation certificates;	
	purchase Australian Carbon Credit Units (ACCUs); and/or	
	purchase of renewable Energy from an Australian Government Accredited renewable energy supplier.	
2.8.5 (a)	The SBT Contractor must identify and implement initiatives for biodiversity impact reduction as part of the Sustainability Report.	Section 7.1& Section 10.4.1

Ref	Requirement	How it is address
2.8.5 (b)	The SBT Contractor must minimise clearance of vegetation, particularly native vegetation.	Section 10.4.1
2.8.6 (a)	The SBT Contractor must develop, implement, and maintain a sustainable procurement policy and processes that are consistent with ISO 20400 Sustainable Procurement - guidance, and are documented in the SBT Contractor's Sustainability Management Plan.	Annexure B
2.8.6 (b)	The SBT Contractor must demonstrate and implement a process for identifying and providing sustainability training to High Impact Suppliers and document in the SBT Contractor's Sustainability Management Plan.	Section 6.4.1
2.8.6 (c)	Where a high risk is identified under (a), the SBT Contractor must ensure the supplier's operations are in compliance with:	Section 6.4.2
	all relevant laws and regulations local to that country;	
	the International Labour Organization's Fundamental Conventions; and	
	the "Ten Principles" of the UN Global Compact.	
2.8.6 (d)	The SBT Contractor must comply with all relevant NSW and Australian modern slavery legislation and provide the Principal with a copy of any reporting relevant to the Project Works.	Section 6.4.2
2.8.6 (e)	The SBT Contractor must record the percentage of steel sourced from Australian manufacturers and make this information available to the Principal upon request.	Section 7.1
2.8.7 (a)	The SBT Contractor must implement at least 10 community benefit initiatives which target identified community needs in each of the following categories which provide demonstrable and tangible benefits to:	Section 10.5 Community Benefit Strategy
	local community groups during the period of construction period; and	
	the broader local community beyond the construction period to leave a lasting legacy.	
2.8.7 (b)	The SBT Contractor must engage at least five Social Enterprises or community benefit organisations as part of its Supply Chain for the Project Works.	Section 10.5 Community Benefit Strategy
2.8.7 (c)	The SBT Contractor must submit each proposed community benefit initiative and proposed "legacy" community benefit initiative for the Principal's review and approval.	Section 10.5

Ref	Requirement	How it is address
		Community Benefit Strategy
5.2.4 (a)	From the date of this D&C Deed until the Date of Completion of the last Portion to achieve Completion, the SBT Contractor must provide a quarterly sustainability report to the Principal.	Section 7.1
5.2.4 (b)	The report must be in such format as is required by the Principal. Each sustainability report is to include the following:	Section 7.1
	an executive summary;	
	the SBT Contractor's performance against the sustainability requirements of this D&C Deed, including compliance with the Sustainability Management Plan and performance against sustainability targets;	
	the status of the implementation of the sustainability strategies, targets and initiatives identified in the Sustainability Management Plan;	
	details of where the climate change risk assessment have influenced the design and construction for the Project Works and Temporary Works;	
	details of greenhouse gas reduction initiatives which have been implemented in the design and construction of the Project Works and Temporary Works;	
	life cycle assessments undertaken, and details of environmental impact reduction initiatives which have been implemented in the design and construction of the Project Works and Temporary Works;	
	compliance with sustainable procurement requirements;	
	corrective actions taken where non-conformances with sustainability requirements have been identified;	
	compliance with all relevant NSW and Australian modern slavery legislation; and	
	a copy of the community benefit initiative impact register and the status of the implementation of the community benefit initiatives and "legacy" community benefit initiatives.	

Element 3 Particular Specifications

Ref	Requirement	How is it addressed
3.4.1 (a)	The SBT Contractor must, as a minimum, achieve the Infrastructure Sustainability Council of Australia ratings, identified in the General Specification.	Section 9
3.4.1 (b)	The SBT Contractor must ensure that sustainability requirements are addressed throughout the performance of the SBT Contractor's Activities and that sustainable practices are embedded into the construction of the Project Works and the Temporary Works.	This Plan
3.4.2 (a)	The SBT Contractor must:	Section10.1
	use the project climate change framework provided to inform design to ensure the Project Works are resilient to the effects of climate change over the relevant Design Life;	
	undertake a review of the project climate change framework in respect to the Project Works, which includes the following:	
	climate change risk assessment;	
	climate change projections;	
	risk allocation; and	
	baseline adaptation measures;	
	as appropriate, provide written request to the Principal's Representative to amend any part of the climate change risk framework applicable to the Project Works;	
	not amend the project climate change framework without prior approval from the Principal's Representative;	
	demonstrate the project climate change framework is used as an input to inform Design Documentation;	
	develop all necessary adaptation measures that comprehensively address risks classified as "extreme", "high" and "medium" during the Design Life of the Project Works using AS/NZS ISO 31000:2009 Risk management – Principles and guidelines;	
	implement measures to mitigate all climate change risks classified as "extreme", "high", and "medium" in (vi) above, such that all residual risks are classified as "low";	
	describe in the Design Documentation how mitigation measures have been implemented; and	

Ref	Requirement	How is it addressed
	adopt a climate change factor which is the greater of 19.7% or as determined in accordance with Australian Rainfall and Runoff (ARR) 2019, based upon Representative Concentration Pathway RCP8.5. This climate change factor must be included in all annual exceedance probability calculations used for design purposes.	
3.4.3 (a)	The SBT Contractor must ensure that all vehicles, plant and equipment, are:	Section 10.2.2
	selected and operated for optimum energy efficiency;	
	not left idling when not in use;	
	fitted with catalytic converters, diesel particulate filters or equivalent devices where reasonable and feasible; and	
	well maintained and serviced in accordance with relevant equipment maintenance documentation to reduce emissions due to poor engine performance.	
3.4.3 (b)	The SBT Contractor must investigate the feasibility of opportunities for using onsite sources of renewable energy during the SBT Contractor's Activities.	Section 10.2.2
3.4.3 (c)	The results of the feasibility assessment must be documented in the first sustainability report as defined in section 5.2.4 (Sustainability Report) of the General Specification.	Section 7.1
3.4.3 (d)	The SBT Contractor must implement all opportunities for onsite sources of renewable energy which will achieve a cost-benefit ratio greater than 1 during the SBT Contractor's Activities.	Section 10.2.2
3.4.4.1 (a)	The SBT Contractor must undertake a water balance study and submit it to the Principal's Representative, at the commencement of Combined Design Stage 1 & 2 and again prior to the commencement of Project Works and Temporary Works, that identifies the sources, uses and estimated quantities of potable and non-potable water which will be either created or used in the performance of the SBT Contractor's Activities.	Section 7.1
3.4.4.1 (b)	The SBT Contractor must ensure that the water balance study in (a) above identifies initiatives to reduce water demand and use non-potable water, which must be adopted in order to achieve both the sustainability ratings and the performance the targets set out in the section 2.8 (Sustainability) of the General Specification.	Section 10.3
3.4.4.1 (c)	The SBT Contractor must minimise water demand including total water consumption and potable water consumption during the design and construction phase by:	Section 10.3

Ref	Requirement	How is it addressed
	using water efficient controls, fixtures and fittings;	
	harvesting rainwater wherever available;	
	using water from recycled water networks where available;	
	collecting, treating and reusing stormwater and wastewater; and	
	metering and sub-metering water use.	
3.4.4.1 (d)	The SBT Contractor must not use potable water as a substitute for non-potable water where on-site or local sources of non-potable water are suitable for the SBT Contractor's Activities and are available.	Section 10.3 Water Reuse Strategy
3.4.4.1 (e)	The SBT Contractor must ensure that all construction equipment requiring water are selected taking into account the water efficiency of the equipment and associated construction methodology.	Section 10.3
3.4.4.1 (f)	The SBT Contractor must ensure that water efficient construction methods are described in all construction method statements to be applied by the SBT Contractor.	Section 10.3
3.4.4.1 (g)	The SBT Contractor must meter the water supplied for the SBT Contractor's Activities from both recycled water networks and potable sources in order to report against the targets set out in the General Specification and in the Particular Specification.	Section 10.3 Water Reuse Strategy
3.4.4.1 (h)	For water used in onsite and offsite concrete batching plants which supply the SBT Contractor's Activities:	Section 10.3
	i. the SBT Contractor must endeavour to ensure that a portion of offsite and onsite batching plant concrete production operation water is recycled and incorporated into concrete production, provided it meets the relevant Codes and Standards; and	
	the SBT Contractor must pass requirements relating to concrete production operation water down through its supply chain.	
3.4.4.2 (a)	The SBT Contractor must identify and implement waste minimisation initiatives and material selection strategies to minimise the embodied carbon and lifecycle impacts of waste and materials associated with the SBT Contractor's Activities.	Section 10.2.4

Ref	Requirement	How is it addressed
3.4.4.2 (b)	The SBT Contractor must:	Waste Management Sub-Plan
	i. minimise the generation of waste; and	
	demonstrate through design refinement, construction planning and construction methods, waste minimisation, recycling and resource recovery.	
3.4.4.2 (c)	The SBT Contractor must ensure that at least 95% by mass of inert and non-hazardous construction waste, excluding spoil, and at least 60% by mass of office waste is recycled or alternatively beneficially reused.	
3.4.4.2 (d)	The SBT Contractor must identify and implement opportunities for recycling and reuse of non-putrescible general solid wastes, other than construction and demolition waste and office waste, during the SBT Contractor's Activities.	
3.4.4.2 (e)	The SBT Contractor must investigate packaging take-back arrangements with suppliers and implement these where feasible.	
3.4.4.2 (f)	The SBT Contractor must use compostable or reusable temporary erosion control devices where practicable.	
3.4.4.2 (g)	The SBT Contractor must avoid the production of hazardous waste where practicable.	
3.4.4.2 (h)	The SBT Contractor must implement the following waste management measures during the SBT Contractor's Activities:	
	i. provide co-mingled recycling bins adjacent to all general waste bins;	
	provide separate bins for storage of specialist waste streams, including oil, electrical and electronic waste, and equipment waste; and	
	provide sufficient on-site storage space for the safe storage of recyclable waste and general waste prior to collection for treatment and disposal.	
3.4.4.3 (a)	The SBT Contractor must identify and implement material selection strategies to minimise the embodied carbon and lifecycle impacts of waste and materials associated with the SBT Contractor's Activities.	Section 10.2.3
3.4.4.3 (b)	The SBT Contractor must undertake life-cycle assessments in accordance with ISO 14044 to assist in selection of the most appropriate low-impact materials for the SBT Contractor's Activities.	Section 10.2.1

Ref	Requirement	How is it addressed
3.4.4.3 (c)	The SBT Contractor must ensure that the life-cycle assessments described in (b) are undertaken before the completion of Combined Design Stage 1 & 2, and the results of the life cycle assessments are included in its Design Documentation for Combined Design Stage 1 & 2.	Section 10.2.1
3.4.4.3 (d)	The SBT Contractor must demonstrate that it has achieved a minimum 15% reduction in the environmental footprint of the materials used for the SBT Contractor's Activities, compared to a business-as-usual case, using:	Section 10.2.1
	i. a methodology agreed with the Principal's Representative; or	
	the materials calculator included in the Infrastructure Sustainability Council of Australia IS Rating Scheme available at https://isca.org.au/resources/57-infrastructure-sustainability-resources/downloads/873-is-materials-calculator-v1-2.	
3.4.4.3 (e)	The SBT Contractor must reduce materials use through materials avoidance and reduction strategies and minimise construction materials volumes through design refinement, construction planning and construction methods.	Section 6 Section 10.2.3
3.4.4.3 (f)	The SBT Contractor must minimise embodied carbon and lifecycle impacts by using, where practicable:	Section 6.3 Section 10.2.3
3.4.4.3 (i)	blended cement that contains waste industrial products such as fly ash and ground granulated blast furnace slag;	
3.4.4.3 (ii)	low carbon concrete including geopolymer concrete where feasible;	
3.4.4.3 (iii)	aggregate containing recovered products such as glass, plastic and concrete;	
3.4.4.3 (iv)	recycled steel, including in concrete reinforcing; and	
3.4.4.3 (v)	spoil generated on-site.	
3.4.4.3 (g)	At least 35% of portland cement will be replaced by supplementary cementitious material, measured as a weighted average across all concrete mixes used for the SBT Contractor's Activities.	Section 10.2.3.1
3.4.4.3 (h)	The SBT Contractor must use recycled and recyclable materials where possible, without compromise to the structural integrity, longevity and visual quality of materials and structures.	Section 10.2.3
3.4.4.3 (i)	The SBT Contractor must use reusable formwork where practicable.	

Ref	Requirement	How is it addressed
3.4.4.3 (j)	The SBT Contractor must source the materials for the Project Works and Temporary Works in accordance with the following requirements:	
	i. concrete must be sourced from members of:	
	Cement Concrete & Aggregates Australia; or	
	a “similar” association or organisation by agreement with the Principal’s Representative;	
	steel must be sourced from suppliers that:	
	are certified under the Australian Certification Authority for Reinforcing and Structural Steels; or	
	a “demonstrated equivalent” association or organisation, where agreed by the Principal’s Representative;	
	steel must be sourced from steelmakers with an ISO 14001:2015 Environmental management certified Environmental Management System;	
	fabricated steel products must be in accordance with AS 5131:2016 Structural steelwork – Fabrication and erection and certified through the National Structural Steelwork Compliance Scheme; and	
	polyvinyl chloride must be compliant with the Green Building Council of Australia (GBCA) Best Practice Guidelines for polyvinyl chloride (PVC) in the built environment.	
3.4.4.3 (k)	All timber products for the Project Works and Temporary Works must be sourced from either:	
	i. re-used timber;	
	post-consumer recycled timber;	
	Forest Stewardship Council (FSC) certified timber sourced within Australia; or	
	Programme for the Endorsement of Forest Certification (PEFC) certified timber sourced within Australia.	
3.4.4.4 (a)	The SBT Contractor must use low volatile organic compounds (VOC) paints, finishes, sealants and adhesives and zero or low formaldehyde emission composite wood products (as defined in the Green Star Design and As Built Sydney Metro Rating Tool) for the SBT Contractor’s Activities.	

Ref	Requirement	How is it addressed
3.4.4.4 (b)	All surface coatings used by the SBT Contractor must comply with the Australian Paint Approval Scheme (APAS) volatile organic compounds limits.	
3.4.4.5 (a)	The SBT Contractor must identify and implement initiatives to both reduce spoil quantities which will be generated during the performance of the SBT Contractor's Activities and beneficially reuse 100% of reusable spoil, including topsoil.	Section 10.2.4 Waste Management Sub-Plan
3.4.4.5 (b)	Beneficial reuse of spoil must be in accordance with the following spoil reuse hierarchy, in order of preference:	
	i. within the project;	
	environmental works;	
	other development projects (including within the WSI site in accordance with section 4.2.5);	
	land restoration; and	
	landfill management.	
3.4.4.5 (c)	Where spoil cannot be classified as either virgin excavated natural material (VENM) or excavated natural material (ENM), the SBT Contractor must determine the feasibility of beneficial reuse by characterising the spoil against the specific contaminant concentration (SCC) and toxicity characteristics leaching procedure (TCLP) values in Tables 1 and 2 of the NSW Environment Protection Authority (EPA) Waste Classification Guidelines Part 1 (2014). Where contamination meets the requirements for General Solid Waste the SBT Contractor must seek receivers who are able to re-use or recycle spoil that meets the General Solid Waste thresholds as outlined in the NSW EPA Waste Classification Guidelines (2014) (as updated from time to time). Alternatively, the SBT Contractor may apply to the EPA for a Resource Recovery Order or Exemption granted under the Protection of the Environment Operations (Waste) Regulation 2014.	
3.4.4.5 (d)	The SBT Contractor must utilise appropriate site-won materials onsite.	
3.4.4.5 (e)	The SBT Contractor must ensure that landscape mounding and gabion wall features use site-won materials if they meet the D&C Deed requirements.	
3.4.4.6 (a)	The SBT Contractor must undertake any landscaping and revegetation works as soon as practicable.	
3.4.5.1 (a)	The SBT Contractor must identify and implement pollution control initiatives and target zero major pollution incidents.	Section 10.4

Ref	Requirement	How is it addressed
3.4.5.1 (b)	The SBT Contractor must ensure that all excavators and mobile cranes used for the SBT Contractor's Activities, which are onsite for more than three (3) months, comply with United States Environmental Protection Agency (US EPA) Tier 4 or European Union Stage V exhaust emission standards.	Section 10.2.2
3.4.5.1 (c)	Where the SBT Contractor can demonstrate equipment specified at section 3.4.5.1 (b) cannot be sourced or retrofitted with exhaust after-treatment devices to meet the requirements of section 3.4.5.1 (b), the SBT Contractor must provide details of the exhaust emissions for that equipment compared to the United States Environmental Protection Agency (US EPA) Tier 4 or European Union Stage V exhaust emission standards to the Principal for review and approval prior to use of the equipment.	
3.4.5.2 (a)	The SBT Contractor must adopt an integrated approach to urban water cycle management and design to minimise construction phase impacts on stormwater quality. This includes consideration of stormwater management within site facilities.	Section 10.4
3.4.5.2 (b)	The SBT Contractor's integrated approach must achieve:	Section 10.3
	i. a reduction in potable water demand through:	
	the use of rainwater or greywater where a reticulated reuse system is not available; and	
	the use of water efficient appliances and fittings;	
	a reduction in wastewater generation;	
	stormwater quality targets which are suitable for either reuse or discharge into local streams and waterways;	
	a maximum use of stormwater in the urban landscape; and	
	the water quality targets identified in section 3.4.5.3 (Stormwater Quality).	
3.4.5.3 (a)	For new drainage infrastructure, the SBT Contractor must demonstrate how its design achieves a general percentage reduction in urban stormwater pollutants compared with pollutants at the date of the D&C Deed in accordance with the following:	N/A SBT works involves no drainage infrastructure
	i. litter - retention of litter greater than 50 mm for flows up to 25% of the 1 year average recurrence interval (ARI) peak flow;	
	coarse sediment - retention of sediment coarser than 0.125 mm for flows up to 25% of the 1 year ARI peak flow;	
	oil and grease - in areas with concentrated hydrocarbon deposition, no visible oils for flows up to 25% of the 1 year ARI peak flow;	

Ref	Requirement	How is it addressed
	suspended solids - 85% retention of the average load;	
	total phosphorus - 65% retention of the average load; and	
	total nitrogen - 45% retention of the average annual load.	
3.4.6 (a)	The SBT Contractor must ensure that, where reasonable and feasible, any temporary site facilities provided by the SBT Contractor incorporate:	Section 10.2.2
	i. energy efficient lighting schemes and light emitting diode (LED) light fittings with effective lighting control to eliminate the energy consumption from lighting during inactive periods;	
	plug-in electrical equipment which complies with the requirements of the Equipment Energy Efficiency Program (E3) “Minimum Energy Performance Standards” and has at least a five (5) star Energy Rating Label;	
	high performance thermal insulation in all walls (R2.0), ceilings (R3.0) and floors that optimise thermal performance;	
	natural daylighting;	
	natural ventilation;	
	rainwater harvesting;	Section 10.3
	water efficient fixtures, fittings and controls;	Section 10.3
	air conditioning refrigerants with low or zero global warming potential;	Section 10.2.2
	crime prevention through environmental design principles	
	occupancy based controls for air-conditioning units to eliminate operation when the facility is not occupied;	
	low volatile organic compounds (VOC) paints, adhesives, sealants and carpets where applicable;	Section 10.2.3
	the use of Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC) certified timber; and	
	the use of door-closers on all external doors as well as weather seals at all doors and windows (to air-conditioned spaces).	

Ref	Requirement	How is it addressed
3.4.6 (b)	Any security and warning lighting used by the SBT Contractor must be installed so that light is not directed at neighbouring properties or in such a way that light reflects onto structures or neighbouring properties.	Construction Environment Management Plan
3.4.7 (a)	The SBT Contractor must prepare and submit a report named the “Climate Change Impact Assessment Report” to the Principal's Representative with the Design Documentation at each Design Stage and again prior to the Date of Completion of the last Portion to achieve Completion.	Section 7.1
3.4.7 (b)	The Climate Change Impact Assessment Report must:	
	i. be prepared in accordance with the guidance and requirements included in the TfNSW Climate Risk Assessment Guidelines (SD-081);	
	document all project specific amendments to the climate change risk framework; and	
	identify, assess and demonstrate how risk adaptation measures, including baseline risk adaptation measures, have been and will be implemented to mitigate risk levels.	
3.4.7 (c)	The SBT Contractor must prepare and submit a report titled the “Greenhouse Gas Inventory Report” to the Principal’s Representative, using the TfNSW’s Carbon Estimate and Reporting Tool (CERT) or an alternative agreed system, with the Design Documentation at each Design Stage, annually thereafter and again prior to the Date of Completion of the last Portion to achieve Completion.	
3.4.7 (d)	The Greenhouse Gas Inventory Report must include data relating to emissions associated with electricity and fuel consumption, on-site process emissions and embodied emissions for all materials used in the SBT Contractor’s Activities.	
3.4.7 (e)	The SBT Contractor must provide to the Principal’s Representative, an annual inventory of non-road diesel powered vehicles used for the SBT Contractor’s Activities and reporting of engine conformity with United States Environmental Protection Agency (US EPA) Tier 4 or European Union Stage V exhaust emission standard and the fitting of any exhaust after-treatment devices.	
3.4.7 (f)	The SBT Contractor must provide to the Principal’s Representative copies of documents which are submitted to the Infrastructure Sustainability Council of Australia (ISCA) in relation to the Infrastructure Sustainability (IS) ratings for information.	
3.4.7 (g)	The SBT Contractor must:	
	prepare and submit a report named the “Sustainable Design Report” to the Principal’s Representative with the Design Documentation at the completion of Combined Design Stage 1 & 2 and Design Stage 3, which includes:	

Ref	Requirement	How is it addressed
	A. a compliance table which shows the status of the compliance with sustainability requirements which are addressed in design;	
	evidence of how the sustainable design initiatives achieve the targets;	
	a graphical representation of the achievement of targets;	
	illustrations of key sustainability initiatives;	
	evidence to show where climate change mitigation and adaptation measures or changes have been implemented in the design;	
	scoring achieved using the ISCA IS Rating Scheme 'design' rating including supporting completed scorecards;	
	demonstration of progress toward achieving ISCA Ene-1, Ene-2, Mat-1, Wat-1 and Wat-2 credits;	
	performance against design-related sustainability targets;	
	life cycle assessments and evidence of how these have informed design, materials selection and materials sourcing to minimise life cycle environmental impacts;	
	details of where low carbon initiatives have been implemented in the design and construction of the Project Works and Temporary Works;	
	initiatives which have been implemented to minimise the embodied carbon emissions of concrete mixes which will be used in Project Works and Temporary Works;	
	updates on sustainable procurement activities; and	
	a demonstration and description of innovative sustainable design initiatives.	

Element 4 Conditional of Approval

Ref	Requirement	Reference
E100	A Sustainability Plan must be prepared to achieve an Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability rating of +75 (Version 1.2) (or equivalent level of performance using a demonstrated equivalent rating tool) or a 5-Star Green Star rating (or equivalent level of performance using a demonstrated equivalent rating tool).	Section 9
E101	The Sustainability Plan must be submitted to the Planning Secretary for information within six (6) months of the date of this approval and must be implemented throughout construction and operation. Note: Nothing in this condition prevents the Proponent from preparing separate Sustainability Strategies for the construction and operational stages of the CSSI.	Sydney Metro WSA Sustainability Plan (see Section 4.3.2)
E102	A Water Reuse Strategy must be prepared, which sets out options for the reuse of collected stormwater and groundwater during construction and operation. The Water Reuse Strategy must include, but not be limited to: a. evaluation of reuse options; b. details of the preferred reuse option(s), including volumes of water to be reused, proposed reuse locations and/or activities, proposed treatment (if required), and any additional licences or approvals that may be required; c. measures to avoid misuse of recycled water as potable water; d. consideration of the public health risks from water recycling; and e. time frame for the implementation of the preferred reuse option(s). The Water Reuse Strategy must be prepared based on best practice and advice sought from relevant agencies, as required. The Strategy must be applied during construction. Justification must be provided to the Planning Secretary if it is concluded that no reuse options prevail. A copy of the Water Reuse Strategy must be made publicly available.	Water Reuse Strategy

Element 5 EIS Measures

Ref	Requirement	Reference
SUS1	A Sustainability Plan would be developed and implemented during construction of the project. The Sustainability Plan would identify the sustainability, climate change and greenhouse gas objectives, initiatives and targets which would be implemented during further design development and construction of the project. The Sustainability Plan would be developed to be consistent with the Western Sydney Airport Sustainability Plan for on-airport works The Sustainability Plan would also inform the preparation of Sustainability Management Plans for each off-airport construction work package	Section 4
SUS2	Protect sensitive construction equipment from the effects of extreme weather, such as direct exposure to the sun on extreme heat days and flooding	Section 10.1
SUS3	Address climate change impacts in emergency management procedures for the construction of the project, such as consideration of impacts of flash flooding on evacuation procedures	Section 10.1
GHG1	Carry out an iterative process of greenhouse gas assessments and design refinement prior to construction to identify opportunities to minimise greenhouse gas emissions Performance would be measured in terms of a percentage reduction in greenhouse gas emissions, and assessed against business as usual project benchmark verified by Infrastructure Sustainability Council of Australia or equivalent independent industry body	Section 10.2.1

Annexures

Annexure A Environment and Sustainability Policy

SYDNEY METRO - WESTERN SYDNEY AIRPORT
STATION BOXES AND TUNNELLING WORKS

Environment and Sustainability Policy

This Policy sets out the environment and sustainability commitments for CPB Contractors Ghella (CPBG) Joint Venture on the Station Box and Excavation (SBT) Works of the Sydney Metro Western Sydney Airport project. Excellence in environmental and sustainability management is integral to how CPBG works. CPBG will integrate environmental, social and governance factors into the decision-making process to maximise short and long-term stakeholder value, seek competitive advantage, and contribute to safe and healthier employees, communities and ecosystems.

By working collaboratively with subcontractors, consultants, suppliers and Sydney Metro, CPBG will:

- Demonstrate environmental and sustainability leadership through implementing co-ordinated and transparent decision making;
- Promote a culture of shared responsibility for environmental and sustainability outcomes;
- Meet or exceed applicable legislation and other regulatory requirements;
- Identify, assess and manage risks to the environment;
- Develop our people and provide resources to enable us to meet our objectives and performance criteria and deliver a workforce legacy that benefits individuals, the construction industry and communities;
- Improve our energy, water and resource use efficiency, and take all reasonable and practicable steps to minimise pollution and reduce waste and other adverse environmental effects;
- Value cultural heritage and respect traditional landowner groups;
- Improve knowledge, awareness and skills of our employees related to environmental and sustainability requirements and practices;
- Embed procurement and supply chain principles and objectives outlined in the Sustainable Procurement Policy to seek opportunities within the supply chain to drive innovation and create mutual value;
- Pursue environment and sustainability initiatives and programs to achieve net positive benefits for the environment and community and embed requirements that are consistent with technical design solutions;
- Strive to achieve leading industry practice and develop, implement and maintain management systems and practices that meet the requirements of AS/NZS ISO 14001;
- Regularly monitor, review and evaluate our performance to ensure continuous improvement in the way CPBG works;
- Fully and transparently investigate environmental incidents to identify all causal factors and actions taken to prevent a recurrence;
- Engage with Sydney Metro, the communities CPBG works within and other stakeholders on environment and sustainability aspects.

This Policy is consistent with the CPB Contractors' and Ghella policies and systems.

The Project Director and Sustainability Manager will be responsible for upholding this policy and embedding sustainability into the Project. All staff, sub-contractors and suppliers will be required to abide by this Policy and the associated processes. Compliance records will be documented and any non-conformances with this Policy will be addressed.

[redacted]

Sustainability Manager	Environment and Sustainability Manager	Project Director

Annexure B Sydney Metro Environment and Sustainability Statement of Commitment

Sydney Metro Commitment			CPBG Commitment
No.	**Sustainability Objectives**	**Action**	**Related CPBG Sustainability Policy Commitment**
1	**Sydney Metro is committed to:**	Minimising our impacts and leaving a positive environmental and social legacy;	Achieve net positive benefits for the environment and community and leave a positive legacy
2		Delivering a resilient asset and service for our customers;	
3		Collaborating with stakeholders to innovate and drive sustainable outcomes; and	
4		Embedding sustainability into our activities;	
5	**Leave an environmental and social legacy**	Protect the environment, prevent pollution and comply with legal and other requirements.	Meet or exceed applicable legislation and other regulatory requirements
6		Manage resources and waste efficiently, exploring opportunities to minimise waste, use recycled and low impact materials and reduce our environmental footprint.	Improve our energy, water and resource use efficiency, and take all reasonable and practicable steps to minimise pollution and reduce waste and other adverse environmental effects
7		Promote a diverse and inclusive workforce and supply chain, build capability and capacity within industry, and increase Aboriginal participation.	Develop our people and provide resources to enable us to meet our objectives and performance criteria and deliver a workforce legacy which benefits individuals, the construction industry and communities
8		Responsibly minimise environmental and social risks in our supply chain.	Implement sustainable procurement initiatives that provide environmental and social improvement and meet the requirements of the BS8903 Principles and Framework for Procuring Sustainably
9		Create liveable places that are well integrated and promote active and sustainable transport.	Pursue sustainability initiatives and programs to achieve net positive benefits for the environment and community and embed requirements that are consistent with technical design solutions

Sydney Metro Commitment			CPBG Commitment
No.	**Sustainability Objectives**	**Action**	**Related CPBG Sustainability Policy Commitment**
10		Conserve and enhance the natural environment and our built and cultural heritage.	Value cultural heritage and respect traditional land owner groups
11		Work collaboratively with delivery partners to provide social benefits to the communities in which we work.	Engage with Sydney Metro, the communities CPBG JV works within and other stakeholders on sustainability and protection.
12	**Drive resilience**	Tackle climate change and contribute to the NSW Government target of net zero emissions.	Improve our energy, water and resource use efficiency, and take all reasonable and practicable steps to minimise pollution and reduce waste and other adverse environmental effects
13		Deliver Sydney Metro assets and operations that are resilient to a changing climate, and work with stakeholders to proactively respond to emerging challenges and opportunities.	
14		Promote the greening of our cities to help combat the 'urban heat island' effect.	
15	**Collaborate to deliver sustainable outcomes**	Align with and respond to Transport for NSW policy and other NSW Government priorities.	Engage with Sydney Metro, the communities CPBG JV works within and other stakeholders on sustainability and protection.
16		Establish and maintain positive relationships with communities and stakeholders to harness local knowledge and maximise opportunities to add value across the project lifecycle.	
17		Collaborate and consult with Aboriginal stakeholders to understand how we can best respect and celebrate Aboriginal cultural values including Designing with Country.	
18		Provide industry leadership by setting benchmarks, encouraging innovation, and driving continual improvement with our delivery partners.	Strive to achieve leading industry practice and develop, implement and maintain management systems and practices that meet the requirements of AS/NZS ISO 14001

Sydney Metro Commitment			CPBG Commitment
No.	**Sustainability Objectives**	**Action**	**Related CPBG Sustainability Policy Commitment**
19		Increase environmental awareness amongst staff and customers to drive more sustainable behaviours.	Promote a culture of shared responsibility for environmental and sustainability outcomes
20	**Embed sustainability**	Establish robust objectives and targets that are measurable and take into account whole-of-life considerations.	Demonstrate environmental and sustainability leadership through implementing co-ordinated and transparent decision making
21		Maintain an environmental management system that is integrated into our projects and continually improved to enhance environmental performance.	Strive to achieve leading industry practice and develop, implement and maintain management systems and practices that meet the requirements of AS/NZS ISO 14001
22		Apply effective assurance processes to monitor environment and sustainability performance including ensuring accountability, incentivising beyond compliance behaviours, and implementing corrective actions as required.	Regularly monitor, review and evaluate our performance to ensure continuous improvement in the way CPBG JV works
23		Embed sustainability considerations into key project decisions across the project lifecycle.	Promote a culture of shared responsibility for environmental and sustainability outcomes
24		Provide appropriate training and resources to meet our obligations and commitments.	Improve knowledge, awareness and skills of our employees related to environmental and sustainability requirements and practices
25		Publicly report on sustainability performance.	Engage with Sydney Metro, the communities CPBG JV works within and other stakeholders on sustainability and protection.

Annexure C CPBG Sustainable Procurement Policy

SYDNEY METRO - WESTERN SYDNEY AIRPORT
STATION BOXES AND TUNNELLING WORKS

Sustainability Procurement Policy

This policy sets out the sustainable procurement commitments for CPB Contractors Ghella (CPBG) Joint Venture on the Station Box and Excavation (SBT) Works of the Sydney Metro Western Sydney Airport project. Excellence in sustainability management is integral to how CPBG works. CPBG will integrate sustainable procurement into the decision-making process to maximise opportunities within the supply chain to drive innovation and create mutual value.

By working collaboratively with subcontractors, consultants, suppliers and Sydney Metro,

CPBG will:

- Strive to achieve leading industry practice and develop, implement and maintain management systems and practices that meet the requirements of ISO2400:2018 Sustainable Procurement – Guidance;
- Integrate environmentally, socially and economically responsible sourcing and governance factors into the projects operating and procurement processes;
- Seek opportunities to collaborate with the supply chain to drive innovation and create mutual value;
- Inform potential suppliers of the project's sustainability requirements and embed sustainable procurement requirements and penalties into contract documents;
- Ensure sustainability is considered in the supplier selection process;
- Monitor key supply chain partners by requiring partners to periodically report against sustainability performance metrics and record compliance with project requirements;
- Where possible, procure services and materials locally to reduce transport emissions, support local businesses and provide jobs and upskilling of the local labour forces;
- Provide sustainability training to high impact suppliers;
- Ensure that where suppliers are sourced from developing countries, the supplier's operations are in compliance with all relevant laws and regulations, the International Labour Organization's Fundamental Contentions and the "Ten Principle's" of the UN Global Compact;
- Embed initiatives aimed at improving participation of local businesses and small and medium enterprises (SME) in the Workforce Development and Industry Participation Strategy;
- Encourage, recognise and reward initiatives and innovations that achieve the best sustainability outcomes and drive positive change in the supply chain.

This Policy is consistent with the CPB Contractors' and Ghella policies and systems.

The Project Director, Procurement Manager and Sustainability Manager will be responsible for upholding this policy and embedding sustainability into the procurement process. All staff, sub-contractors and suppliers will be required to abide by this policy and the associated processes. Compliance records will be documented and any non-conformances with this Policy will be addressed.

[redacted]

Environment and Sustainability Manager | Commercial Manager | Project Director

Annexure D IS Rating Credit Target and Score

Note: The sustainability weightings and targets within the table are subject to change during project delivery

Credit	Materiality Score	Targeted Level	Target Score	Targeted Level	Target Score
		Design		As-Built	
Man-1	2	3	0.97	3	0.84
Man-2	2	2	0.97	2	0.84
Man-3	2	2	0.97	2	0.84
Man-4	2	2	0.97	2	0.84
Man-5	2	2	0.65	2	0.56
Man-6	2	3	2.18	3	1.89
Man-7	2	0	0	01	0.93
Pro-1	2	3	1.21	3	1.05
Pro-2	2	3	1.21	3	1.05
Pro-3	2	As Built only		3	1.05
Pro-4	2	As Built only		2	0.7
Cli-1	4	3	4.85	3	4.2
Cli-2	4	3	4.85	3	4.2
Ene-1	3	3	13.09	3.0	11.33
Ene-2	3	1.8	1.31	1.7	1.07
Wat-1	3	2.6	5.67	2	3.78
Wat-2	3	1.8	2.12	1,5	1.57
Mat-1	4	2.33	9.04	2	6.72
Mat-2	4	As Built only		1	0.56
Dis-1	3	2	2.30	2	1.99
Dis-2	3	3	3.45	3	2.99
Dis-3	2	3	2.30	3	1.99
Dis-4	2	3	2.30	2	1.33
Dis-5	2	1	0.97	1	0.84
Lan-1	2	3	2.42	1.67	1.17
Lan-2	2	3	0.97	2	0.56
Lan-3	4	3	3.88	2	2.24

Credit	Materiality Score	Targeted Level	Target Score	Targeted Level	Target Score
		Design		As-Built	
Lan-4	3	0	0	1	0.94
Was-1	3	2	2.91	2	2.52
Was-2	3	As Built only		2	2.94
Was-3	Scoped Out				
Eco-1	Scoped Out				
Eco-2	Scoped Out				
Hea-1	2	3	2.42	2	1.4
Hea-2	2	2	2.42	2	2.1
Her-1	3	3	3.64	2	2.4
Her-2	3	As Built only		3	2.88
Sta-1	3	3	1.82	3	1.57
Sta-2	3	3	1.82	2	1.05
Sta-3	3	2	1.82	2	1.57
Sta-4	3	2	1.82	2	1.75
Urb-1	Scoped Out				
Urb-2	Scoped Out				
Inn-1	2	10	10	6	6
			97.32		**85**