



Waste, Recycling and Spoil Management Plan C2B

Line-wide Works Contract Sydney Metro City & Southwest

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Document Approval

	SHEQ	Project Director
Signature:		
20/09/2023	C Godwin	A Wullemin

Details of Revision Amendments

Document Control

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

Amendments

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

Revision Details

Revision	Date	Prepared by	Details
A	12/11/2019	V Tavares	Issued for review. This version of the Sub-Plan addresses compliance requirements under CSSI 7400 and CSSI 8256 Planning Approvals as per the Sydney Metro Staging reports.
B	17/12/2019	V Tavares	Updated to address comments from Sydney Metro, ER and stakeholder consultation.
00	21/02/2020	A Taylor	Updated to address comments from DPE.
01	29/10/2020	K Truscott	Scheduled review Updates to Section 1.7 Revision and Update, Section 2.2 Compliance Requirements, Section 6.7 Waste Tracking and Reporting, Element 3 Auditing, Review and Improvement, Appendix C3 Waste Disposal and Spoil Reuse Sites
02	23/04/2021	M Billings	Scheduled Review Updates to sections 2.3 Guidelines and Standards, 6.6.3 Waste and Spoil Transportation and Disposal and 6.7 Waste Tracking and Reporting Added EPL 21423 Waste-related conditions to Element 4 – Project Specific Requirements Appendix C3 Waste Disposal and Spoil Reuse Sites
03	30/09/2021	K Truscott	Scheduled review of plan and procedures Appendix C3 Waste Disposal and Spoil Reuse Sites
04	12/08/2022	K Truscott	Scheduled review of plan and procedures Update to Table 3 - Summary of LW scope for Portions 2, 3 and 4 Update to Appendix C3 Waste Disposal and Spoil Reuse Sites
05	30/06/2023	N Nasser	Scheduled review Update to 6.3.1 – updated to reference salvageable item management in more detail, in response to recent Independent Audit finds Update to Appendix C3 Waste Disposal and Spoil Reuse Sites
06	20/09/2023	T McCormick	Updated to address Sydney Metro and ER comments Update to Section 1.5.2 –Staging Reports update Update to Section 1.5.3 – Interface update Update to Section 3.1 – inclusion of “or delegate” Update to 6.3.1 – to address ER comments Update to Section 6.3.4 – minor amendment.

			<p>Update to Appendix C3 – Waste Disposal and Spoil Reuse Sites – RRO sites updated, item 16 update, VENM reference removed from item 65 and item 66 updated, ENM reference removed from Item 73</p> <p>Update to Element 3 – 3.3 – requirement to report NCRs</p> <p>Update to Glossary / Abbreviations – Resource Recovery Order (RRO)</p>
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WRSMSP Compliance Matrix

SSI 8256 – Conditions of Approval		
Condition No.	Requirement	Reference
C3	The CEMP Sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan and be consistent with the CEMF and CEMP referred to in Condition C1: (c) Waste and spoil - Relevant council(s)	This Sub-Plan Section 1.6 Appendix C2
C4	The CEMP Sub-plans must be prepared in accordance with the CEMF.	Section 2.2 Element 4:
C5	Details of all information requested by an agency to be included in a CEMP Sub-plan as a result of consultation, including copies of all correspondence from those agencies, must be provided with the relevant CEMP Sub-Plan	Appendix C2
C6	Any of the CEMP Sub-plans may be submitted along with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before Construction	Section 1.6
C7	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER must be implemented for the duration of Construction. Where Construction of the CSSI is staged, Construction of a stage must not commence until the CEMP and CEMP Sub-plans for that stage have been approved by the Planning Secretary"	Section 1.6

Sydney Metro Construction Environmental Management Framework		
Condition No.	Requirement	Reference
3.4 a	Subject to Section 3.3(b) and Section 3.2(b) the Principal Contractor will prepare issue-specific environmental sub plans to the CEMP and SMP which address each of the relevant environmental impacts at a particular site or stage of the project. Issue specific sub plans will include: i. Spoil management; xii. Waste management and recycling	This Sub-Plan
6.2 a	Principal Contractors will develop and implement a Spoil Management Plan for their scope of works. The Spoil Management Plan will include as a minimum:	This Sub-Plan
6.2 a (i)	The spoil mitigation measures as detailed in the environmental approval documentation;	Section 6 Element 4:

Sydney Metro Construction Environmental Management Framework		
Condition No.	Requirement	Reference
6.2 a (ii)	The responsibilities of key project personnel with respect to the implementation of the plan;	Section 3
6.2 a (iii)	Procedures and methodologies for the haulage and disposal locations, storage and stockpiling arrangements, including those for virgin excavated natural material, contaminated and unsuitable material;	Section 6 Appendix C2
6.2 a (iv)	Procedures for the testing, excavation, classification, handling and reuse of spoil;	Section 6 Appendix C1 - Spoil Classification Reuse and Recycling Procedure
6.2 a (v)	Measures that will be implemented to both reduce spoil quantities and maximise the beneficial reuse of spoil which will be generated during the performance of the TSE Contractor's Activities, including how spoil generation is minimised through the design development process;	Section 6.4
6.2 a (vi)	Details, links or references to where traffic movements in relation to spoil are described, and measures that will be implemented to minimise traffic and noise impacts associated with haulage and disposal of spoil;	Section 6.6.3 CNVMP (SMCSWLWC-SYC-1NL-PM-PLN-000032)
6.2 a (vii)	Quantities for reuse of spoil within the Construction Site, for beneficial reuse of spoil off site and for spoil disposal;	Section 4
6.2 a (viii)	Processes and procedures for the management of the environmental and social impacts of spoil transfer and reuse;	Section 6 CCS-LW (SMCSWLWC-SYC-1NL-PM-PLN-000027)
6.2 a (ix)	A register of spoil receipt sites that includes the site or project name, location, capacity, site owner and which tier the site is classified as under the spoil reuse hierarchy;	Section 4 Appendix C3
6.2 a (x)	Spoil management monitoring requirements; and	Element 2: Element 3:
6.2 (xi)	Compliance record generation and management.	Section 6.7 Element 2:
17.2 a	Principal Contractors will develop and implement a Waste Management and Recycling Plan which will include as a minimum:	This Sub-Plan
17.2 a (i)	The waste management and recycling mitigation measures as detailed in the environmental approval documentation;	Section 6 Element 4:

Sydney Metro Construction Environmental Management Framework		
Condition No.	Requirement	Reference
17.2 a (ii)	The responsibilities of key project personnel with respect to the implementation of the plan;	Section 3
17.2 a (iii)	Waste management and recycling monitoring requirements;	Element 2:
17.2 a (iv)	A procedure for the assessment, classification, management and disposal of waste in accordance with the Waste Classification Guidelines (DECC, 2008); and	Section 6 Appendix C1 - Waste Management and Recycling Procedure
17.2 a (v)	Compliance record generation and management.	Section 6.7 Element 2:

Note: Additional relevant Project Planning Approval, Revised Environmental Mitigation Measures, Construction Environmental Management Framework and EPL requirements are included in Element 4.

Glossary / Abbreviations

Abbreviations	Definition
Approved Plan	Means a plan approved in accordance with the Conditions of Approval for the Sydney Metro City and Southwest project.
ASS	Acid Sulphate Soils
BPS	Bulk Power Supply
C2B	Chatswood to Bankstown
C2S	Chatswood to Sydenham
CCS-LW	Community Communications Strategy Line-wide Work
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CIMIC	Construction Infrastructure Mining & Concessions
CoA	Conditions of Approval as per State Significant Infrastructure Planning Approvals as issue by the NSW Department of Planning and Environment, relevant staging reports and as listed in Schedule E3 of the Line-wide Works Contract, (ITC 600)
CPB	CPB Contractors Pty Limited
DPI	Department of Primary Industries (including Agriculture NSW, Fisheries NSW and NSW Office of Water)
DPE	NSW Department of Planning & Environment
EIS	Environmental Impact Statement
EMS	Environmental Management System (integrated as part of the PMS)
ENM	Excavated Natural Material
Environment and Sustainability Policy	Statement by an organisation of its intention and principles for environmental and sustainability performance.
Environmental aspect	Defined by AS/NZS ISO 14001:2004 as an element of an organization's activities, products or services that can interact with the environment.
Environmental impact	Defined by AS/NZS ISO 14001:2004 as any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects.
Environmental incident	An occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, and land) or an adverse environmental impact has occurred or is likely to have occurred.
Environmental Issue	An occurrence or set of circumstances where Environmental Harm or Non-compliance could occur if not rectified.
Environmental Non-Compliance (NC)	A breach of an Environmental Requirement originating from Planning Approvals, Environment Protection Licenses, lease agreements, and other requirements documented in environmental management plans.
Environmental objective	Defined by AS/NZS ISO 14001:2004 as an overall environmental goal, consistent with the Environment Policy, that an organisation sets Line-wide to achieve.
Environmental target	Defined by AS/NZS ISO 14001:2004 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
Environmental team	Members of LW environmental team including sub-contractors authorised by the Environment and Sustainability Manager to work on environmental issues related to the Project

Abbreviations	Definition
EP&A Act	Environmental Planning and Assessment Act 1979
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
ER	The Environmental Representative for the CSSI(s).
ERP	Emergency Response Plan
ESCP	Erosion and Sediment Control Plan
GSW	General Solid Waste
Hold Point	Activities which are not to proceed without objective review and approval by the nominated authority.
IC	Independent Certifier
ISCA	Infrastructure Sustainability Council of Australia
LW	Line-wide (contract scope under ITC 0600)
PASS	Potential Acid Sulphate Soils
PMS	Project Management System
POEO Act	Protection of the Environment Operations Act 1997 (NSW)
POEO Waste Regulation	Protection of the Environment Operations (Waste) Regulation 2014 (NSW)
RAP	Remediation Action Plan
REMM	Revised Environmental Mitigation Measures
S2B	Sydenham to Bankstown
SC Project Environmental Representative	Refers to Systems Connect Environment and Sustainability Manager or someone delegated by him to perform a task, release a hold point or approve a document
SEP	Site Environment Plan
SM	Sydney Metro
SMCSW	Sydney Metro City & Southwest
SMNW	Sydney Metro North West
SMTF	Sydney Metro Train Facility (formerly known as Rapid Transit Rail Facility)
SMTF South	Sydney Metro Train Facility South
Spoil	All material generated by excavation into the ground
SSI 5931	Approval of Application SSI 5931 provided for construction and operation of The Rapid Transit Rail Facility, now known as the Sydney Metro Train Facility (SMTF)
SSI 7400	Approval of application SSI 7400 provides for construction and operation of a metro line approximately 16.5 kilometers long (of which approximately 15.5 is in underground rail tunnels) between Chatswood and Sydenham (C2S) including construction of a tunnel under Sydney Harbour, links with the existing rail network, seven metro stations and associated ancillary infrastructure. The proposal is declared as Critical State Significant Infrastructure (CSSI)
SSI 8256	Approval of application SSI 8256 provides for construction and operation of a metro line, approximately 13 kilometres long between Marrickville and Bankstown (S2B), including ten metro stations and associated infrastructure
SWMS	Safe Work Method Statement
SWTC	Scope of works and technical criteria

Abbreviations	Definition
TfNSW	Transport for New South Wales
UGL	UGL Engineering Pty Limited
VENM	Virgin Excavated Natural Material is natural material (such as clay, gravel, sand, soil and rock) that: (a) is not mixed with any other type of waste; and (b) has been excavated from areas of land that are not contaminated.
WARR	Waste Avoidance and Resource Recovery Act 2001 (NSW)
WRAPP	NSW Government's Waste Reduction and Purchasing Policy
WRSMSP	Waste, Recycling and Spoil Management Sub-Plan (this Sub-Plan)
RRO	Resource Recovery Order

PART A - OVERVIEW

1. Plan Overview

1.1 Purpose

The purpose of the Waste, Recycling and Spoil Management Sub-Plan (this Sub-Plan) is to describe how Systems Connect will manage spoil and waste generation, disposal and recycling throughout the delivery of the Sydney Metro City & Southwest (SMCSW) Line-wide (LW) Works between Chatswood and Bankstown (C2B). Line-wide (LW) also referred to as the project, will be delivered by Systems Connect (a CPB Contractors and UGL Engineering joint venture).

This Sub-Plan has been prepared to address the requirements of relevant Minister for Planning's Conditions of Approval (CoA), including CSSI 7400 and CSSI 8256, the Revised Environmental Mitigation Measures (REMMs), applicable legislation, the Environmental Impact Statements (EIS), contractual requirements including Schedule C1 Scope of Works and Technical Criteria (SWTC) of ITC 600, the Sydney Metro Construction Environment Management Framework (CEMF) and the LW Works' Environment Protection Licences. Further details about the above-mentioned compliance requirements are provided in section 2 and in the Construction Environmental Management Plan – C2B (SMCSWLWC-SYC-1NL-PM-PLN-000033).

1.2 Background

The LW Works will generate a number of different types of waste and spoil during the civil construction works. Potential impacts from waste and spoil generation will require management and mitigation in accordance with relevant state legislation and government policies.

This Sub-Plan is based on the comprehensive assessment and analysis work performed for the two EIS that cover LW scope between C2B. The EIS identified potential waste streams to be generated during the civil construction works including:

- Spoil from general earthworks activities and trenching works.
- Green waste from the clearing and grubbing of vegetation.
- General construction waste including concrete waste, timber formwork, scrap metal, steel, cable and packaging materials.
- General waste from office and crib rooms including general non-recyclable and putrescible waste (such as food waste from rubbish bins), recyclable wastes such as plastics and aluminium cans, office waste including paper, plastics and printer cartridges.
- Waste from operation and maintenance of vehicles and machinery including adhesives, lubricants, waste fuels and oils, engine coolant, batteries, hoses and tyres.
- Wastewater from other sources including dust suppression and wash down and sewage/grey water from construction compounds (managed through the Construction Soil, Water and Groundwater Management Plan - SMCSWLWC-SYC-1NL-PM-PLN-000372).

Waste management on LW will be prioritised according to the principles of the resource management hierarchy embodied in the *Waste Avoidance and Resource Recovery Act 2001* (WARR Act).

1.3 Objectives and Targets

Systems Connect's objectives for management of waste, recycling and spoil during delivery of LW Works are aligned with the CEMF which states that the following management objectives will apply to construction:

- Minimise waste throughout the project life-cycle.
- Waste management strategies will be implemented in accordance with the WARR Act 2001
- management hierarchy as follows:
 - Avoidance of unnecessary resource consumption;
 - Resource recovery (including reuse, reprocessing, recycling and energy recovery);

- Disposal.
- Demonstrate best practice waste management processes as measured by the Infrastructure Sustainability Council of Australia's (ISCA) Infrastructure Sustainability (IS) Rating Tool Version 1.2.
- Minimise spoil generation where possible.
- The project will mandate 100% reuse or recycling (on or off site) of reusable spoil.
- Spoil will be managed with high consideration to minimising adverse traffic and transport related issues.
- Potential contamination of land or water from contaminated spoil will be avoided.
- Spoil will be managed with consideration of the impacts on residents and other sensitive receivers.
- Site contamination will be effectively managed to limit the potential risk to human health and the environment.

Based on the project requirements detailed in Section 2 of this Sub-Plan and in the CEMP, the findings of project risk management processes and the potential impacts to the community, the following targets have been set. Any deviance from the targets will result in Project Management immediately implementing corrective actions.

Table 1 - Waste Management LW targets

Metric/Measure	Objective	Timeframe	Accountability
% of waste quantified in waste management reports	100%	At all times	Environment and Sustainability Manager
% of regulated/hazardous wastes for which transfer certificates are retained	100%	At all times	Environment and Sustainability Manager
Number of enforcement notices and penalties received from regulators and/or client	Zero	At all times	Environment and Sustainability Manager
Recycle or reuse of inert and non-hazardous construction and demolition recyclable waste, excluding spoil	95%	At all times	Environment and Sustainability Manager
Recycle or reuse of office waste	60%	At all times	Environment and Sustainability Manager
Beneficial reuse of reusable spoil (on or offsite)	100%	At all times	Environment and Sustainability Manager

1.4 Plan structure

Table 2 - Plan structure

Plan Structure	Details
Part A: Overview	<p>This Part defines:</p> <p>Section 1 Purpose, Background, Objectives, Structure, Applicability, Consultation, Plan Revision and Update and Related Documents</p> <p>Section 2 Legal and other requirements</p> <p>Section 3 Roles and responsibilities</p> <p>Section 4 Waste Streams and Spoil Classification</p> <p>Section 5 Aspects and Impacts</p> <p>Section 6 Waste and Spoil Management Strategy</p>
Part B: Implementation	<p>This section outlines in detail the key processes and systems to support implementation of environmental management outcomes for the project:</p> <p>Element 1. Training</p> <p>Element 2. Monitoring and Reporting</p> <p>Element 3. Auditing, Review and Improvement</p> <p>Element 4. Project Specific Requirements</p>
Part C: Appendices	<p>C1 – Waste and Spoil Procedures</p> <p>C2 – Agency Consultation Records</p> <p>C3 – Waste Disposal Locations</p> <p>C4 – Spoil Reuse Locations</p> <p>C5 – Written confirmation from waste disposal sites of the waste types legally accepted</p>

1.5 Plan applicability Staging and Interface

1.5.1 Applicability

This Waste, Recycling and Spoil Management Sub-Plan is applicable to Portions 2, 3 and 4 of LW, which includes all works associated with the corridor from Chatswood to Bankstown (C2B). It is not applicable to Portion 1, SMTF expansion works. The SMTF expansion works have a separate series of Construction Environmental Management Plans and are approved under Planning Approval SSI 5931. An overview of LW scope and portions is provided in the CEMP C2B (SMCSWLWC-SYC-1NL-PM-PLN-000033).

Table 3 below provides a summary of the scope of works covered under each Portion.

Table 3 - Summary of LW scope for Portions 2, 3 and 4

LW Portions	Scope
Portion 2 – SMTF South (LW are Principal Contractor)	<p>Construction of Sydney Metro Trains Facility South, in Marrickville, including:</p> <ul style="list-style-type: none"> • Civil works • Track system comprising stabling, shunting and maintenance roads • Infrastructure maintenance facilities including a maintenance workshop, siding, materials storage facilities and parking • Train maintenance facilities • Overhead wiring for new track systems • Mechanical, hydraulic and electrical services for the facility • Administration buildings • Groundwater treatment plant

LW Portions	Scope
Portion 3 – Chatswood to Sydenham tunnels and stations works (LW are Principal Contractor for Northern Dive, Artarmon Substation, BPS routes, tunnels, Sydenham Station and a small area within Barangaroo site)	<p>Tunnel and station works including the systems, services and building works within, and required for operation of the tunnels, Barangaroo crossover cavern, trackway and the Southern Dive.</p> <p>Open Northern Dive works including civil, structural and track systems work to incorporate SMCSW with SMNW systems.</p> <p>Construction of Artarmon bulk supply infeed substation.</p> <p>Bulk Power Supply works including cable routes of 33kV feeders from:</p> <ul style="list-style-type: none"> • Ausgrid's Willoughby Sub-Transmission Substation to the Artarmon bulk supply infeed substation • Ausgrid's Surry Hills Sub-Transmission Substation to the bulk supply infeed substation within Waterloo Station
Portion 4 – Sydenham to Bankstown works (LW are Principal Contractors for Substation sites and BPS routes)	<p>Bulk Power Supply works including cable routes of 33kV feeders from Ausgrid's Canterbury Sub-Transmission Substation to the Campsie bulk supply infeed substation.</p> <p>Southwest corridor power works from Sydenham to Bankstown, including:</p> <ul style="list-style-type: none"> • a HV Reticulation System • a Traction Power System • a Power Control System • an Earthing and Bonding System, Electrolysis Control Measures and Lightning Protection

1.5.2 Staging

In order to address the staged nature of SMCSW project, Sydney Metro has developed two Staging Reports:

- Chatswood to Sydenham Staging Report (May 2021)
- Sydenham to Bankstown Upgrade Staging Report (June 2023)

The latest versions of the Staging Reports are available on the Sydney Metro Website Document Library.

Each Staging Report defines the Conditions of Approval (CoA), Revised Environmental Management Mitigation Measures (REMM's) and the Construction Environmental Management Framework (CEMF) requirements that are applicable to the Line-wide stage of works, with responsibility shared between Sydney Metro and Systems Connect as per the Deed. If a requirement is applicable or partially applicable, in the Staging Report and Deed, it is included in the Element 4: table of Project Specific Requirements and addressed in this Sub-Plan.

The EIS assessments addressed all potential project impacts at all Project stages, including impacts during tunnel and station excavation and construction, being completed by other contractors. These activities will be in varying stages of completion at each worksite, by the time LW Works commence at each location (in accordance with the Staging Reports).

1.5.3 Interface

This Sub-Plan is applied when Systems Connect is the Principal Contractor at any SMCSW site. When Systems Connect is not the Principal Contractor, they will conduct their activities in accordance with the Principal Contractors' Regulatory and contractual obligations.

Systems Connect will liaise and work with other SMCSW delivery contractors to plan and carry out all works, aiming to achieve this objective and ensure any potential cumulative impacts are managed and harm to the environment does not occur.

1.6 Agency Consultation

Planning Approval consultation obligations, in line with the staging reports, are outlined in Table 4 below. As outlined in the referred table, the development of this Sub-Plan required consultation

with relevant local Councils under SSI 8256. Relevant local Councils potentially affected by LW Works between Sydenham to Bankstown (S2B) include:

- Canterbury Bankstown Council
- Inner West Council

This sub-plan will be submitted to the Planning Secretary at least one month before commencement of construction, be approved prior to commencement of works and be implemented for the duration.

All comments received from agencies and Systems Connect's response to these comments are included in Appendix C2.

Table 4 – Sub-Plan Agencies Consultation according with Staging Reports

Plan	SSI	Contractor's Internal Review & Approval	Sydney Metro Review	Government Agency / Stakeholder Consultation	Relevant Councils	ER Review & Endorsement
Integrated in Waste, Recycling and Spoil Management Sub-Plan	7400	✓	✓	•		
	8256	✓	✓	✓	✓	✓

1.7 Revision and Update

The document review process ensures that environmental documentation including this Sub-Plan is updated as appropriate for the specific works that are occurring on-site. Review and update of this plan must also be done at least every 6 months, in accordance with EPL 21423 condition O5.2. This includes the management review process described in Element 3.

This Management Plan was developed to address the waste, recycling and spoil compliance requirements throughout LW Works between C2B and it will be updated as the project progresses through each Portion.

Amendments would typically include those that:

- Are editorial in nature e.g. staff and agency/authority name changes
- Do not increase the magnitude of impacts on the environment when considered individually or cumulatively
- Do not compromise the ability of the Project to meet approval or legislative requirements
- Do not result in new environmental impacts.

Details of the plans and procedures revisions that will occur to address Planning Approval compliance requirements, across the delivery of all portions of LW, are provided in the project CEMPs.

Minor amendments to the Waste, Recycling and Spoil Management Sub-Plan will be submitted to the Environmental Representative (ER) and Sydney Metro for review and approval.

Where the change will have the potential to result in an additional environmental or community impact that the ER cannot approve, then the plan would be submitted to DPE for review and approval.

Where necessary amendments to this Sub-Plan will also be provided to relevant stakeholders for review and comment and/or forwarded for approval.

1.8 Related Documents

This document is a Sub-Plan of the Construction Environmental Management Plan - C2B (SMCSWLWC-SYC-1NL-PM-PLN-000033). Table 5 shows the interrelationships with other project plans and documents:

Table 5 - Related Management Plans and documents

Document	Description
Construction Soil, Water and Groundwater Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000372)	Describes the strategy for classification and management of contaminated soil and stockpile.
Sustainability Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000024)	This plan sets out the sustainability targets and management framework for the LW Works including material reuse, waste minimisation and management throughout the design and construction phases.
Air Quality Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000373)	Plan includes procedures for mitigation of air quality impacts to sensitive receivers resulting from construction waste and spoil stockpiling.
Ancillary Facilities Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000380)	Sets out stockpile and waste storage locations.
Project Health and Safety Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000010)	Includes management of asbestos and other hazardous materials and management of potential impacts on the workforce.
Construction Noise and Vibration Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000371)	Includes measures to mitigate noise impacts from Waste, Spoil and Recycling Management such as waste storage and collection.
Site-specific progressive Erosion and Sediment Control Plans	Will be progressively prepared for LW Worksites and will include control measures to prevent contamination of land and water from erosion and sedimentation resulting from waste, spoil and recycling management.
Site Environmental Plans	Include locations for waste storage and stockpiling within worksites.
Waste Management and Recycling Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000399)	Lists all the steps to manage and classify waste on site.
Spoil Classification, Reuse and Recycling Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000461)	Lists all the steps to classify and reuse spoil on site as well as required record keeping.

2. Legal and Other Requirements

2.1 Legislation

The key legislation relevant to waste, recycling and spoil management includes:

- Environmental Planning and Assessment Act 1979
- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations (Waste) Regulation 2014
- Waste Avoidance and Resource Recovery Act 2001

Refer to the Construction Environmental Management Plan – C2B (SMCSWLWC-SYC-1NL-PM-PLN-000033) for further details of the relevant legislation.

2.2 Compliance Requirements

Line-wide Works C2B have been assessed and approved via a number of applications under the Environmental Planning and Assessment Act 1979 (EP&A Act) and are classified as Critical State Significant Infrastructure:

- SSI 7400. Sydney Metro City & Southwest Chatswood to Sydenham and
- SSI 8256. Sydney Metro City & Southwest Sydenham to Bankstown.

Detailed environmental assessments have been carried out to gain the necessary planning approvals.

Element 4: Project Specific Requirements, includes the key compliance requirements for air quality management which are applicable to the LW Works. Requirements are drawn from Conditions of Approvals, Revised Environmental Mitigation Measures and the Sydney Metro Construction Environmental Management Framework (CEMF).

This plan will also deliver compliance with the Systems Connect EMS, contractual requirements including Schedule C1 Scope of Works and Technical Criteria (SWTC) of ITC 600 and any Environmental Protection License (EPL) issued to the Project. The EPA issued EPL 21423 to the Project on 31 July 2020 for the scheduled activity “Railway activities - railway infrastructure construction”, which applies to certain prescribed premises between Chatswood Dive Site and Sydenham Dive Site.

2.3 Guidelines and Standards

Additional guidelines and standards relating to the management of waste and recycling include:

- Waste Classification Guidelines, Part 1: Classifying Waste (EPA November 2014)
- NSW Government's Waste Reduction and Purchasing Policy
- Environmental Best Practice Guidelines for Concreting Contractors (DEC 2004)
- Local government guidelines for waste/recycling as appropriate
- Australian Dangerous Goods Code 7th Edition (ADG7) (National Transport Commission, October 2011)
- TfNSW Standard Requirements TSR E1 – Environmental Management
- General resource recovery exemptions under Part 9, Clause 91 and 92 of the Protection of the Environment Operations (Waste) Regulation 2014
- Government Resource Efficiency Policy (GREP)
- Construction and demolition waste: a management toolkit (EPA, 2019)

Additional guidelines and standards relating to the management of spoil include:

- Waste Classification Guidelines, Part 1: Classifying Waste (EPA, November 2014)
- Waste Classification Guidelines, Part 4: Acid Sulphate Soils (DECC August 2009)
- Australian and New Zealand Guidelines for Assessment and Management of Contaminated Sites (ANZECC/NHMRC 1992)
- Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (EPA 1998)

- Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (EPA 1997a)
- Contaminated Sites: Sampling Design Guidelines (EPA 1995b)
- Acid Sulfate Soil Manual (NSW Acid Sulphate Soil Management Advisory Committee 1998)

3. Roles and Responsibilities

3.1 Systems Connect team

The roles and responsibilities of key Systems Connect personnel with respect to waste, spoil and recycling are outlined in Table 6.

Table 6 - Roles and Responsibilities

Role	Responsibility for construction waste, spoil and recycling management
Project Director	<ul style="list-style-type: none"> Manage the delivery of the LW including overseeing implementation of waste and spoil management; Act as Contractor's Representative.
Environment and Sustainability Manager (or delegate)	<ul style="list-style-type: none"> Oversee the preparation, approval and implementation of this Plan; Oversee the implementation of all waste and spoil management initiatives including coordinating Systems Connect's response to complaints; Manage the ongoing compliance with conditions of approval.
Stakeholder and Community Relations Manager	<ul style="list-style-type: none"> Manage notifications and consultation relating to waste and spoil management; Liaise with the Environment and Sustainability Manager in responding to and resolving waste and spoil related complaints.
Human Resources Manager	<ul style="list-style-type: none"> Ensure provision of appropriate training in waste and spoil management for relevant project personnel in conjunction with the Environment and Sustainability Manager
Commercial Manager	<ul style="list-style-type: none"> Ensure sufficient resources are allocated to waste and spoil management
Engineering Manager	<ul style="list-style-type: none"> Ensure relevant waste and spoil management and mitigation measures are addressed and incorporated in design development
Safety Manager	<ul style="list-style-type: none"> Ensure relevant waste and spoil management approvals and control measures are addressed in relevant safety documents
Construction Manager	<ul style="list-style-type: none"> Manage the delivery of the construction process across all sites in relation to waste and spoil management and in compliance with this Plan in conjunction with the Environment and Approvals Manager
Construction Area Managers	<ul style="list-style-type: none"> Manage construction waste and spoil management for their work activity in conjunction with the Environment and Approvals Manager, Project Environment and Sustainability Manager and Implement and ensure compliance with this Plan
Site Superintendents	<ul style="list-style-type: none"> Construction delivery in relation to waste and spoil management in conjunction with the Environment and Approvals Manager, Safety Manager, Environment and Sustainability Manager and Environment Coordinator. Implement and ensure compliance with this Plan Direct construction personnel to carry out actions to ensure compliance with this plan
Environment Coordinators	<ul style="list-style-type: none"> Assist the Environment and Approvals Manager and Construction Area Managers in implementing this Plan Oversee traffic management training including inductions, toolbox talks and specific technical training on monitoring waste and spoil management Monitoring and reporting on waste and spoil management compliance

Role	Responsibility for construction waste, spoil and recycling management
	<ul style="list-style-type: none"> Manage, review and continual improvement of this Plan
Project Engineers Site Engineers Site Supervisors	<ul style="list-style-type: none"> Implement and monitor onsite waste and spoil management compliance measures including all required mitigation measures in conjunction with environmental coordinators and Assist the Construction Area Managers and Site Superintendents in implementing this Plan.

3.2 Collaboration with Sydney Metro and other Stakeholders

The Environment Representative (ER) and the Independent Certifier (IC) have roles that include overseeing waste, recycling and spoil management.

Systems Connect will provide Sydney Metro, the ER and IC with:

- This Sub-Plan for review
- Waste and recycling data will be provided through monthly reporting and audits of this Plan. Refer to the Sustainability Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000024) for further details on reporting.

Where updates to this Sub-Plan are required to address the requirements of the LW EPL (as per Element 4 – Project Specific Requirements), including the addition of approved waste receipt sites in Appendixes C3 and C5, these updates will be managed in accordance with Section 1.7.

Systems Connect will work collaboratively with Sydney Metro, the ER and IC to ensure all reasonable and feasible waste and recycling processes are implemented.

3.3 Specialist Consultants

Waste classification and contamination consultants, specialising in the fields of contamination management and materials identification, have been engaged to undertake contamination assessments, complete waste classifications and provide advice on contamination management. They will also prepare Remediation Action Plans (RAP) where required. This subject is also addressed in the Construction Soil, Water and Groundwater Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000372).

4. Waste Streams and Spoil Classification

4.1 Overview of Waste Streams

The following waste streams and respective waste classifications have been identified for LW between C2B, as listed in Table 7. Each waste type represents an opportunity to apply the waste hierarchy. Prior to reuse on site or disposal off site, all materials used will be classified in accordance with the Waste Classification Guidelines, Part 1. No waste would be permitted to be received on site, unless permitted by the EPL.

Table 7 - Expected waste streams and respective classification

Waste Stream	Waste Classification
Rubble, rock, sand, asphalt, road base, concrete	General Solid Waste (not putrescible)
Green waste	General Solid Waste (not putrescible) / Exempt Waste
Timber waste / off cuts	General Solid Waste (not putrescible)
General recyclables (glass, cans, paper, cardboard)	General Solid Waste (not putrescible)
Metal waste/ off cuts (i.e. steel reinforcement)	General Solid Waste (not putrescible)
Wire waste / off cuts	General Solid Waste (not putrescible)
PVC waste/ off cuts (e.g. piping and conduits)	General Solid Waste (not putrescible)
Waste oil	Liquid Waste
Non-destructive Digging Waste	Liquid Waste
Potentially contaminated spoil	Depends on contamination levels. Maybe be classed as General Solid Waste or Restricted Solid Waste or Hazardous Waste.
Potentially contaminated water (i.e. septic)	Depends on contamination levels. Maybe be classed as Liquid Waste or Hazardous Liquid Waste.
Asbestos	Special Waste (Asbestos Waste)
Food waste, sanitary products	General Solid Waste (Putrescible)
General mixed construction waste	General Solid Waste (not putrescible)
Waste tyres	Special Waste

Based on previous project data, estimations of waste expected to be generated during the LW C2B are outlined in Table 8.

Table 8 - Waste estimates for LW Works Chatswood to Bankstown

Waste Stream	Estimate of Quantities (tonnes)	Dispose or Recycle
General mixed construction waste	8,864	Recycle (90%)
Concrete	3,750	Recycle

Waste Stream	Estimate of Quantities (tonnes)	Dispose or Recycle
Timber/ Wood	1,820	Recycle
Hazardous Waste	1,101	Dispose
Liquid Waste	1,601	Dispose/ Recycle
Metals	950	Recycle
Asphalt	445	Recycle
Paper/ Cardboard	330	Recycle
Plastic	110	Recycle
Oils and Lubricants	22	Recycle
Tyres	4.8	Recycle
Solvents	1.1	Dispose
Glass	1.5	Recycle
Co-mingled Recyclables	0.5	Recycle
TOTAL	19,001	

4.2 Spoil Volumes

The total volume of spoil to be produced at each construction site (precinct or work area) or group of sites for a particular type of works has been calculated using the information available from the environmental and design documents. Following completion of a comprehensive site survey, the volume of each spoil type and the potential for beneficial reuse both on and off site will be refined as part of the detailed design process. Initial spoil volumes expected are displayed in Table 9 below.

Table 9 - Spoil estimates for LW between C2B

Site	Spoil estimate (tonnes)	Activities	Management Strategy
Northern Connection	15,000	Earthworks to connect the SMNW to the SMCSW, including pilling and excavation within the rail corridor for retaining walls and northern connection dive. Installation of in ground services (drainage and combined services routes).	Reuse or recycle
Tunnels, Northern and Southern Dive	2400	Excavation works for the Northern and Southern dives. Tunnel fit outs and station works are expected to generate neglectable spoil quantities.	Reuse or recycle
SMTF South	0	Not expected to generate spoil as the construction area would have been capped by previous contractor. Limited excavations beyond engineered fill at this site.	Reuse or recycle

Site	Spoil estimate (tonnes)	Activities	Management Strategy
BPS routes (Artarmon, Surry Hills and Campsie)	2,667	Excavation of trenches from the existing Ausgrid Substations to the rail corridor will be required as part of the power supply works.	Reuse or recycle
Southwest corridor traction substations	2275	Site preparation works for the traction substations along the southwest corridor.	Reuse or recycle
TOTAL	22,342	-	-

It is expected that the spoil material on the project will predominantly be a mixture of topsoil, VENM (Virgin Excavated Natural Material), ENM (Excavated Natural Material) and GSW (General Solid Waste).

5. Aspects and Impacts

The key aspects and impacts in relation to the management of waste and spoil during the LW Works are listed in Table 10 below.

Table 10 – Summary of waste and spoil aspects and potential impacts

Aspects	Potential impacts
Construction materials	<ul style="list-style-type: none"> Recyclable waste incorrectly directed to landfill Excessive waste directed to landfill Over use of materials
Contamination	<ul style="list-style-type: none"> Contamination of soil, surface and/or groundwater from the inappropriate storage, transport and disposal of wastes Spoil generated during earthworks requiring treatment/disposal Previously unidentified contaminated spoil may impact on construction activities or environmentally sensitive areas
Design Specifications	<ul style="list-style-type: none"> Limitations on opportunities to minimise spoil generation Limitations on percentage of materials able to be reused on the project
Erosion	<ul style="list-style-type: none"> Increased erosion potential as a result of spoil excavation and management
Litter	<ul style="list-style-type: none"> Waste not placed in appropriate bins resulting in litter Waste (litter) entering environment outside of the project sites
Land use	<ul style="list-style-type: none"> Licensing and approval requirements may impact on availability of potential beneficial reuse sites
Noise	<ul style="list-style-type: none"> Disturbance of sensitive receivers as a result of noise associated with waste and spoil management
Pests	<ul style="list-style-type: none"> An increase in vermin from the incorrect storage, handling and disposal of putrescible waste from construction compounds
Soil and water	<ul style="list-style-type: none"> Pollution from the incorrect storage, handling and disposal of waste Salinity of spoil from deep excavations may limit spoil reuse opportunities Sediment laden runoff from incorrectly stored spoil stockpiles
Community	<ul style="list-style-type: none"> Odour created from incorrect waste storage in ancillary facility Visual amenity degraded by litter Dust or sediment from unmanaged waste or spoil Cumulative impacts of aspects associated with spoil management generate complaints
Sustainability	<ul style="list-style-type: none"> Distance to beneficial reuse or disposal sites increases the carbon footprint Availability of suitable reuse sites decreases volume for beneficial reuse
Weed management	<ul style="list-style-type: none"> Potential for spread of weeds during spoil movement.
Air Quality	<ul style="list-style-type: none"> Dust from stockpiles, haul trucks and access roads may reduce air quality.

6. Waste and Spoil Management Strategy

Controls that are adequate to ensure compliance and to reduce risk to the lowest acceptable rating achievable are planned before any relevant works commence. Reduction of the waste is the first preference of control, followed by reuse and recycling. The management strategy applied on this project is detailed in the sections below.

The following aspect specific procedures have been developed to support waste, spoil and recycling management processes during construction. The procedures will be available at all sites during construction works, at all times:

- Waste Management and Recycling Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000399)
- Spoil Classification Reuse and Recycling Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000461)

6.1 Waste Hierarchy

During delivery of the LW Works waste will be prioritised according to the principles of a resource management hierarchy embodied in the WARR Act. As listed below:

1. Avoidance of unnecessary resource consumption
2. Resource Recovery (including reuse, reprocessing, recycling and energy recovery)
3. Disposal.

Incorporation of the Waste Classification Guidelines in the process for materials classification prior to despatching the waste offsite will ensure that all materials are correctly managed and that the maximum quantities of materials will be available for reuse and recycling either on or off site. Use of the guideline will also ensure that waste is directed to the correct facility for processing.

6.2 Waste and Spoil Classification

All liquid and non-liquid waste generated on the site must be assessed and classified. Waste Classification will be undertaken in accordance with Waste Classification Guidelines, Part 1: Classifying Waste (EPA November 2014).

Where spoil is proposed to be taken off site, classification of spoil will be undertaken in accordance with the Waste Classification Guidelines, Part 1: Classifying Waste (NSW EPA, November 2014). Procedures for sampling, testing and analysis of spoil will be as per the guidelines, and any applicable general exemption under the Protection of the Environment Operations (Waste) Regulation 2014. The spoil typology will be classified as follows:

- Virgin Excavated Natural Material (VENM) – VENM may require additional analysis to determine specific characteristics prior to acceptance for use at some sites. Specific analysis parameters will be determined in consultation with the intended receiver prior to removal from site
- Excavated natural material (ENM) – Material that does not meet the definition of VENM will be assessed in accordance with the General Exemption 'Excavated natural material exemption 2012'
- Waste material as defined in clause 49 of Schedule 1 of the Protection of the Environment Operations Act 1997 (POEO Act):
 - Special waste
 - Liquid waste
 - Hazardous waste
 - Restricted solid waste
 - General solid waste (putrescible)
 - General solid waste (non-putrescible)

Any material that has not been previously classified and is unexpectedly encountered during excavation will be managed in accordance with the Unexpected Finds Soil Contamination and Asbestos Procedure and the Waste Classification Guidelines noted above.

6.3 Waste Avoidance and Minimisation

6.3.1 Reuse and Recycling Initiatives

To ensure the highest percentage of construction waste is re-used or recycled, Systems Connect will engage with subcontractors to emphasise System Connect's waste management and diversion targets. Mixed construction waste will be sorted for recyclables. Office waste (paper, cardboard and comingled recycling) will be contained separately from other waste materials.

Site facilities and existing assets will be reused where practical between LW teams throughout the duration of the Project. Office waste receptacles i.e. printer cartridges, paper and cardboard, mixed recyclables, coffee pods etc. will be provided to maximise office waste recycling. Materials such as (noise hoarding, site fencing, and so on) will be reused or shared, between sites and between construction contractors where feasible and reasonable.

Where feasible and reasonable, any items or infrastructure that are salvageable will initially be reused on the Project or offered to Sydney Trains for reuse elsewhere. Otherwise, any salvageable items may be offered for sale or reuse to any relevant parties. Where applicable, the Dispose of Plant, Assets and Equipment Procedure (available on the Project Intranet) will be implemented, and the Plant Asset Sale or Disposal Requisition form will be used.

Cleared/removed vegetation will be beneficially used either on or off the project where possible (e.g. for habitat, chipped for mulch and reused). Topsoil stripped from the site will be stockpiled for future beneficial reuse opportunities in landscaping.

Systems Connect will continue to investigate opportunities for recycling and reuse of other non-putrescible general solid wastes, other than construction and demolition waste, and office waste. This may include onsite reuse of green waste, and recycling of items such as soft plastics, used oil, cigarette butts, and disposable ear plugs. Spoil reuse opportunities will be sought and maximised, targeting 100% reuse of reusable spoil generated during delivery of the LW Works.

6.3.2 Purchasing and Procurement

Reusability and capacity for recycling will be considered in the selection of construction materials and other products purchased for the LW project. Bulk purchases will be preferred to minimise packaging received on site and precise quantities will be ordered to prevent ordering an excess of materials.

6.3.3 Hazardous Waste

As per the EPA's Waste Classification Guidelines the following waste types (other than special waste or liquid waste) have been pre-classified by the EPA as 'hazardous waste':

- Containers, having previously contained a substance of Class 1, 3, 4, 5 or 8 within the meaning of the Transport of Dangerous Goods Code, or a substance to which Division 6.1 of the Transport of Dangerous Goods Code applies, from which residues have not been removed by washing or vacuuming
- Coal tar or coal tar pitch waste (being the tarry residue from the heating, processing or burning of coal or coke) comprising of more than 1% (by weight) of coal tar or coal tar pitch waste
- Lead-acid or nickel-cadmium batteries (being waste generated or separately collected by activities carried out for business, commercial or community services purposes)
- Lead paint waste arising otherwise than from residential premises or educational or child care institutions
- Any mixture of the wastes referred to above.

Systems Connect will endeavour to avoid the production of hazardous waste. This will involve implementing strategies such as:

- Avoiding the procurement and use of hazardous chemicals where benign alternatives are available
- Where use of hazardous chemicals cannot be avoided, they are to be procured in sizes and types of container that will minimize material losses
- Minimising the risk of spills and leaks through implementation of adequate controls.

6.3.4 Salvageable Items

CSSI 8256 CoA E73 requires that:

Any items or infrastructure that are salvageable must be identified in the relevant CEMP Subplan (Condition C3).

Note: reuse of items may include signal boxes, indicators, ballast or other rail infrastructure. These items should be offered to Sydney Trains or reuse.

The scope of work being completed by Systems Connect does not include any demolition of rail infrastructure. At the time of drafting this plan no items of rail infrastructure have been identified for salvage.

6.4 Spoil Reuse Opportunities

6.4.1 Reuse Hierarchy

The spoil reuse hierarchy adopted for the LW Works is as listed below. The target for spoil recycling or reuse on the Project is 100%.

1. Reuse within the Project
 - reuse as construction material as fill or for landscaping and urban design
 - reuse for restoration of contaminated sites
2. Environmental works (off site)
 - reuse for restoration works on identified environmental initiatives
3. Reuse on other development projects
 - reuse as construction material on projects within a viable distance of the site
4. Offsite land restoration
 - reuse to fill disused facilities, e.g. mines and quarries, to enable either future development or ecological rehabilitation
5. Landfill management
 - reuse to cap completed landfill cells.

Spoil would be reused on site in accordance with the National Environment Protection Council (NEPC) - National Environment Protection (Assessment of Site Contamination) Amended Measure No.1 2013 (NEPAM, 2013). These investigation levels are derived from toxicity of substances and estimated exposure of humans to the soil under various land use scenarios.

6.4.2 Identification of Possible Reuse Opportunities

This section documents the detailed assessment and evaluation Systems Connect has undertaken for spoil reuse opportunities for LW:

- Consideration of likely spoil characteristics
- Identification of possible reuse sites within the approved construction footprint
- Screening of possible reuse opportunities – this assessment considered the following criteria:
 - spoil management hierarchy
 - distance from the work sites for off-site reuse options
 - land use, Planning Approval status and relevant licence conditions
 - availability of sites to accept spoil from the LW sites
 - practicality of the method of reuse
 - cost

6.4.3 Reducing Excess Spoil During Design and Construction

The design review process has been used to:

- Minimise the quantity of material requiring excavation to accommodate the design footprints

- Identify the location of spoil suitable for reuse on site
- Identify opportunities to maximise reuse of site-won spoil
- Maximise the quantity of spoil available for reuse on site
- Identify areas of contamination that may be avoided or require additional management measures
- Identify opportunities and locations for reuse of spoil off site.

The current calculations show a small surplus of material across the LW sites, so the above measures will reduce the requirement for costly importation of materials. Material will only be removed from site if it is contaminated above the site criteria limits and cannot be reused on site or otherwise deemed to be unsuitable for any on-site re-use.

During construction further assessment will be carried out to:

- Identify the location of spoil suitable for reuse on site
- Identify opportunities to maximise reuse of site-won spoil
- Maximise the quantity of spoil available for reuse on site
- Identify areas of contamination that may be avoided or require additional management measures
- Identify opportunities and locations for reuse of spoil off site.

6.5 Spoil Importation

Any spoil imported would be tested in accordance with the Protection of the Environment Operations (Waste) Regulation (2014) to ensure it meets the relevant site criteria and classifications requirements:

- VENM
- Recycled materials from the Sydney Trains rail corridor or the Sydney Trains recycling facility or materials that meet the EPA's Resource Recovery Exemptions.

This will be verified by the Environment and Sustainability Manager or delegate prior to the importation of material.

6.6 Storage, Transportation and Disposal

6.6.1 On-site Storage of Waste

On-site storage of waste will be managed in accordance with the Protection of the Environment Operations (Waste) Regulation (2014). Waste and recyclables will be held on site in designated areas and storage containers. Materials will be disposed of in containers/ bins and collected on a regular basis. Vermin proof bins will be utilised on site where needed. A good standard of housekeeping will be maintained throughout construction. Regular inspections by the Environment and Sustainability Team, Safety Team and the wider construction delivery teams will be undertaken to ensure a high standard is maintained.

Waste classified as 'special waste' or 'hazardous waste' (EPA, 2014) will be carefully segregated (or excavated and placed as separate stockpiles) at demarcated and contained locations. These areas would be appropriately bunded and stockpiles would be covered with anchored geotextile or impermeable plastic sheeting. Where practicable hazardous waste will be stored in an appropriate container (e.g. a waste skip). Should the hazardous waste have the potential to produce contaminated leachate, the material will be stored in an area with an appropriate leachate collection system. Further details are contained within the site-specific Contamination Assessments (where applicable).

Waste fuel, oils and other liquid wastes will be stored in well ventilated, bunded areas prior to removal by licenced waste contractors. Where material has been classified as compensable contamination the extent of the material (or stockpile) will be labelled on-site and training provided on management requirements for the material.

Waste generated outside the site will not be received at the site for storage, treatment, processing, reprocessing, or disposal on the site unless expressly permitted under an EPL.

6.6.2 Storage and Stockpiling of Spoil

Different types of spoil will be segregated as far as practicable and stored separately to prevent mixing and cross-contamination.

All stockpiles will be managed in accordance with the requirements of the 'Blue Book' to prevent erosion and minimise the potential for pollution. Water based organic polymers will be used for short term control of risks associated with erosion and pollution.

Stockpiles would be located away from sensitive receivers, where feasible and reasonable, and protected from the elements through barriers, covering or establishing a cover crop.

Spoil that is to be stockpiled for an extended period will be managed to prevent erosion and minimise the potential for pollution. Typically, water-based polymers or vegetative stabilisation will be used. Stockpiles must not be placed in drainage lines, channels or paths.

Stockpiling locations for each worksite will be selected and developed in accordance with the Construction Ancillary Facilities Management Plan, Site Environment Plans (SEPs) and the ESCPs. Stockpiles located on land outside the Construction Site are subject to the land owner's and occupier's written consent, compliance with the law, consent of relevant Authorities and compliance with the CoA, REMMs and CEMF requirements for ancillary facilities, air quality, soil and water management.

Materials which are not suitable for incorporation in the LW would be removed from the Construction Site and disposed of at a construction waste recycling facility, or alternatively re-cycled, to the maximum extent possible.

Where practical, contaminated material will be removed directly to a licensed facility. Where contaminated material is stored on site, stockpiles will be segregated and isolated in accordance with relevant health, safety and environmental regulations, codes and guidelines. Spoil that is classified as special waste (containing asbestos) will be stockpiled on site in accordance with the relevant regulations and codes of practice prior to disposal to a licensed facility by a licensed contractor.

Systems Connect will ensure all spoil and fill are suitable for their proposed end use, based on the relevant EPA guidelines and exemptions set out in the Protection of the Environment Operations (Waste) Regulation (2014).

6.6.3 Waste and Spoil Transportation and Disposal

All waste required to be disposed of offsite will be undertaken by licenced contractors and taken to facilities licenced to accept that waste. Contractors will be required to report waste quantities to Systems Connect for tracking and sustainability requirements. Specialist licenced waste contractors may only be used when removing 'special waste' or 'hazardous waste' in accordance with the Protection of the Environment Operations (Waste) Regulation 2014. All waste disposal facilities must be licenced to accept that waste type.

Appendix C3 lists the location of licensed waste disposal and spoil reuse sites to be used by LW Works sites and details of the Environment Protection Licences held by the waste disposal company. Where there are changes to waste disposal locations used during the LW Works, Appendix C3 will be updated.

Excavated material suitable for re-use within the premises may be transported from one part of the premises or the Sydney Trains rail corridor or Sydney Trains recycling facility to another part of the premises by road in accordance with regulatory requirements.

LW worksites are not expected to generate large volumes of spoil, minimising the quantity and frequency of spoil haulage. Haulage routes associated with the movement of waste and spoil will be described in the site-specific Construction Traffic Management Plans.

From time to time material may be transported from site in accordance with Waste Recovery Orders and the requirements of this plan.

The following conditions apply to managing haulage:

- Truck loads would be covered, and tailgates secured prior to trucks leaving the worksite to prevent spreading of waste, dust or contamination.

- Road surfaces subject to the tracking of material by vehicles leaving the premises are monitored and cleaned as required.

Systems Connect is committed to managing any traffic impacts to protect affected residential and business amenity and will undertake consultation to inform road users and the community of the Project's traffic impact mitigation measures. Consultation will include notifications relating to traffic, noise, and waste and spoil management to sensitive receivers in the areas surrounding the LW worksites. Further details on community notifications can be found in the CCS-LW (SMCSWLWC-SYC-1NL-PM-PLN-000027) and the CNVMP (SMCSWLWC-SYC-1NL-PM-PLN-000032).

6.7 Waste tracking and reporting

All waste disposal undertaken by licenced contractors will be tracked by the receipt of waste disposal dockets. Quantities and types of wastes and the reuse or disposal will be collated in a Waste Tracking Register. The Waste Tracking Register will include the following information:

- Date transported
- Haulage contractor
- Material type
- Waste classification
- Quantity
- Waste receipt location
- Truck registration
- Docket numbers (haulage, receipt, weighbridge)

Waste dockets associated with removal and disposal of waste (including spoil) from the LW sites are to be retained and referenced in the Waste Tracking Register. Where available, soil classification reports are also to be retained. In addition, waste reporting requirements (including reporting of spoil reuse and recycling statistics) are addressed in the Sustainability Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000024).

Systems Connect will supply data on waste and recycling to Sydney Metro in the agreed Sustainability Reporting template and within an agreed timeframe. Reporting will be undertaken with a one-month lag to ensure the accuracy of data. Data will be maintained within the CPB management system reporting tool (Synergy).

Systems Connect will conduct audits of waste receipt sites in line with the requirements of ISCA credit Was-1 Waste Management. This will include auditing of waste generated by Systems Connect during delivery of the Works to its final destination. Audits will be conducted six-monthly from the commencement of construction and receipt sites will be selected for auditing based on the significant waste streams being generated by Systems Connect at the time.

PART B - IMPLEMENTATION

1. Elements and Expectations

Part B of this Plan explains how the impacts of waste and spoil production during the LW will be minimised and managed. Compliance with all elements is always required to minimise the likelihood of causing unauthorised environmental harm and maximise the uptake of opportunities to reduce environmental impact.

Part B contains the following:

- **Environmental Elements and Expectations:** These describe what is required of Systems Connect to implement the objectives of the Environment and Sustainability Policy Statement:
 - **Element** – Key aspects for managing this function in delivering the LW Works
 - **Intent** – A one-line statement describing the overall purpose of the Element
 - **Expectation** – The outcomes achieved as part of each Element.
- **Requirements:** These are the specific actions required to demonstrate compliance with the Elements and Expectations.
- **Responsibility and Key Contributor:** Designation of responsibility for achieving compliance with the stated Expectation. Key contributors assist/contribute to achieving compliance.
- **Deliverables:** Tangible outcomes produced to demonstrate compliance with the environmental Elements and Expectations.

Element 1: Training

Systems Connect will ensure that LW personnel can competently perform their duties and meet environmental obligations.

Expectations	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Deliverables
1.1 All personnel have completed an induction containing relevant environmental information before they are authorised to work on the Project	<p>Induction presentation will include:</p> <ul style="list-style-type: none"> Waste segregation practices and disposal Spoil classification and management An outline of waste classification guidelines and legislative requirements Requirements for waste tracking Procedures for waste management Importance of appropriately managing waste 	<p>Human Resources Manager</p> <p>Project Environment and Sustainability Manager</p> <p>Environmental Coordinators</p>	<p>Induction presentation</p> <p>Induction records</p>
1.2 Toolbox talks are used to reinforce key management requirements and lessons learnt	<p>Toolbox talks will be held regularly during site establishment and construction. They will reinforce and reiterate information from inductions and site-specific management practices.</p> <p>Toolbox talks will be undertaken on the following procedures:</p> <ul style="list-style-type: none"> Waste Management and Recycling Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000399) Spoil Classification Reuse and Recycling Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000461) 	<p>Project Environment and Sustainability Manager</p> <p>Site Supervisors</p> <p>Environmental Coordinators</p>	<p>Toolbox records</p>

Element 2: Monitoring and Reporting

All staff, employees and subcontractors will actively drive complaint environmental performance of LW .

Expectations	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Deliverables
2.1 Worksites are regularly inspected to ensure the adequacy of controls	<p>Systems Connect will regularly review the worksites to ensure compliance with this Sub-Plan. A regular inspection program that covers on waste and spoil management will be conducted as follows:</p> <ul style="list-style-type: none"> Details of daily inspections undertaken by the Site Supervisor will be logged in their respective site diaries. Weekly inspection of onsite waste, recycling and spoil management processes will be undertaken. Weekly inspections will be documented in Systems Connects electronic system. 	<p>Project Environment and Sustainability Manager</p> <p>Environmental Coordinator</p> <p><i>Superintendents</i></p> <p><i>Site Supervisors</i></p>	<p>Environment Inspection Reports</p> <p>Site Diary entries</p>
2.2 Waste and spoil tracking	<p>Waste removed from the worksite will be appropriately tracked from 'cradle to grave' using waste tracking dockets where required.</p> <p>Spoil reused on site will be tracked via a Material Tracking Form.</p>	<p>Project Sustainability Manager</p> <p>Superintendents</p>	<p>Tracking Dockets</p> <p>Waste Tracking Register</p> <p>Material Tracking Forms</p>
2.3 Waste reporting	<p>As outlined in section 6.7, waste and spoil data is collected on the project to allow monthly reporting of the following:</p> <ul style="list-style-type: none"> The quantity of each type of waste sent to landfill; The quantity of each type of waste recycled; The quantity of each type of waste/spoil reused; The quantity of each type of hazardous/regulated waste generated on the project and: <ul style="list-style-type: none"> Its method of treatment and disposal The location of treatment and disposal Copies of records confirming the legal transport, treatment and disposal Measurement of any reduction in waste generation that has been achieved <p>The quantity of waste in each solid waste stream is measured by weight and liquid waste stream by volume, with records provided by the waste transport contractor. Alternative measures may only be used when an economical alternative is not available. All relevant information is included in the project environmental monthly report.</p>	<p>Project Sustainability Manager</p>	<p>Monthly Sustainability Reports</p>

Element 3: Auditing, Review and Improvement

Systems Connect will continually improve its environmental systems and environmental performance by monitoring and reviewing their effectiveness.

Expectations	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Deliverables
3.1 Audits are undertaken to ensure compliance with the requirements of this Plan	Audits will be performed in accordance with the CEMP (SMCSWLWC-SYC-1NL-PM-PLN-000033) and the requirements set in this Sub-Plan. Following an audit, this Sub-Plan and associated documents or procedures will be updated if required. Procedures for corrective actions are addressed in the CEMP.	Project Environment and Sustainability Manager Environmental Coordinators Project Sustainability Manager	Audit Reports Corrective Action Reports Non-compliance and Incident Reports
3.2 Waste auditing to final destination must be undertaken six-monthly during construction	Waste Tracking Audit In order to achieve ISCA credit Was-1 Waste Management, auditing to final destination must be undertaken at least six-monthly for construction. Final destination means at least to a waste facility where the waste is transformed into another product or material or into landfill. The audit should: <ul style="list-style-type: none"> • Include physical/visual verification of waste destinations • Focus on the significant waste streams only • Each audit may cover only one significant waste stream as long as the full set is covered during the construction rating period • 'Significant' waste streams are to be justified taking into account the volume and nature of the wastes. 	Environment and Sustainability Manager Sustainability and/or Environmental Coordinators	Six-monthly audit reports from the start of construction
3.3 All non-compliances are reported and actioned	A waste and spoil non-compliance can generally be defined as a failure to comply with: <ul style="list-style-type: none"> • Relevant environmental legislation • Project Planning Approvals • Environmental Protection Licences • Deed • Waste, Spoil and Recycling Management Sub-Plan and related documents Corrective and Preventative Actions may also be raised in accordance with the Construction Environmental Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000033). All non-compliances are to be reported as per the Sydney Metro Environment Incident and Non-compliance Reporting Procedure.	Project Environment and Sustainability Manager Project Sustainability Manager Environmental Coordinators	Audit Reports Corrective Action Reports

Element 4: Project Specific Requirements

Planning Approval SSI 7400 – Chatswood to Sydenham CoA

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
E106	Waste generated during construction and operation is to be dealt with in accordance with the following priorities:	Section 6.1	Environment and Sustainability Manager Sustainability Manager	During construction
E106 (a)	waste generation is to be avoided and where avoidance is not reasonably practicable, waste generation is to be reduced;	Section 6.1	Environment and Sustainability Manager Sustainability Manager	During construction
E106 (b)	where avoiding or reducing waste is not possible, waste is to be re-used, recycled, or recovered; and	Section 6.1	Environment and Sustainability Manager Sustainability Manager	During construction
E106 (d)	where re-using, recycling or recovering waste is not possible, waste is to be treated or disposed of.	Section 6.1	Environment and Sustainability Manager Sustainability Manager	During construction

Planning Approval SSI 8256 – Sydenham to Bankstown CoA

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
E73	Any items or infrastructure that are salvageable must be identified in the relevant CEMP Subplan (Condition C3). Note: reuse of items may include signal boxes, indicators, ballast or other rail infrastructure. These items should be offered to Sydney Trains or reuse.	Section 6.3.1	Environment and Sustainability Manager Project Engineers Site Superintendent	Before and during construction
E74	The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the Protection of the Environment Operations Act 1997, under the Protection of the Environment Operations (Waste) Regulation 2014, and orders or exemptions made under the regulation.	Section 6.6.1	Environment and Sustainability Manager Site Superintendent	During construction
E75	Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, or to any other place that can lawfully accept such waste.	Section 6.6.3	Environment and Sustainability Manager Site Superintendent	During construction
E76	All waste must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.	Section 6.2 Section 6.7	Environment and Sustainability Manager Site Superintendent	During construction

Planning Approval SSI 7400 – Chatswood to Sydenham (REMMs)

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
WM1	All waste would be assessed, classified, managed and disposed of in accordance with the NSW Waste Classification Guidelines.	Section 6.2	Environment and Sustainability Manager	During construction

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
WM2			Site Superintendent	
	100 per cent of spoil that can be reused would be beneficially reused in accordance with the project spoil reuse hierarchy.	Section 6.4	Environment and Sustainability Manager Construction Manager	During construction
WM3	A recycling target of at least 90 per cent would be adopted for the project.	Section 1.3	Environment and Sustainability Manager Sustainability Manager	During construction
WM4	Construction waste would be minimised by accurately calculating materials brought to the site and limiting materials packaging.	Section 6.3.2	Environment and Sustainability Manager Site Superintendent	Before and during construction

Planning Approval SSI 8256 – Sydenham to Bankstown (REMMs)

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
WM1	Detailed design would include measures to minimise excess spoil generation. This would include a focus on optimising the design to minimise spoil volumes, and the reuse of material on-site.	Section 6.4.3	Environment and Sustainability Manager Site Superintendent	During design and pre-construction
WM2	A recycling target of at least 90 per cent would be adopted.	Section 1.3	Environment and Sustainability Manager Construction Manager	Before and during construction
WM3	Spoil would be managed in accordance with the spoil management hierarchy.	Section 6.4.1	Environment and Sustainability Manager	During construction

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
			Sustainability Manager	
WM4	Target 100 per cent reuse of reusable spoil.	Section 6.4	Environment and Sustainability Manager Construction Manager	During construction
WM5	Construction waste would be minimised by accurately calculating materials brought to the site and limiting materials packaging.	Section 6.3.2	Environment and Sustainability Manager Site Superintendent	Before and during construction
WM6	All waste would be assessed, classified, managed and disposed of in accordance with the Waste Classification Guidelines (EPA, 2014).	Section 6.2	Environment and Sustainability Manager Site Superintendent	During construction
WM7	Waste segregation bins would be located at various locations within the project area, if space permits, to facilitate segregation and prevent cross contamination.	Section 6.6.1	Environment and Sustainability Manager Site Superintendent	During construction

Construction Environmental Management Framework

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
6.1 a	The following spoil management objectives will apply to the construction of the project:	Refer to below items		
6.1 a (i)	Minimise spoil generation where possible;	Section 1.3 Section 6.4.3	Engineering Manager Area Manager Design Manager	Design Construction
6.1 a (ii)	The project will mandate 100% reuse or recycling (on or off-site) of usable spoil;	Section 1.3	Area Manager	Design

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
6.1 a		Section 6.4.1	Environment and Sustainability Manager Sustainability Manager	Construction
	6.1 a (iii) Spoil will be managed with consideration to minimizing adverse traffic and transport related issues;	Section 1.3 Section 6.6.3 Construction Traffic Management Plans	Area Manager Site Supervisors Environmental Coordinator	Construction
	6.1 a (iv) Spoil will be managed to avoid contamination of land or water;	Section 1.3 Section 6.6.2 Soil, Water and Groundwater Management Sub- Plan (SMCSWLWC-SYC-1NL-PM-PLN-000372)	Environment and Sustainability Manager Environmental Coordinator Area Manager Site Supervisors	Construction
	6.1 a (v) Spoil will be managed with consideration of the impacts on residents and other sensitive receivers; and	Section 1.3 Section 6.6.2 Air Quality Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000373)	Environment and Sustainability Manager Environment Coordinator Site Supervisor	Construction
	6.1 a (vi) Site contamination will be effectively managed to limit the potential risk to human health and the environment.	Section 6.6.2 Soil, Water and Groundwater Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000372) Project Health and Safety Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000010)	Environment and Sustainability Manager Environmental Coordinator Site Supervisors	Construction
6.2 b	Spoil management measures will be included in regular inspections undertaken by the Contractor, and compliance records will be retained. These will include:	Element 2:		

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
6.2 b (i)	Records detailing the beneficial re-use of spoil either within the project or at off-site locations; and	Section 6.4 Element 2:	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction
6.2 b (ii)	Waste docket for any spoil disposed of to landfill sites.	Section 6.7 Element 2: Waste Tracking Register	Environment and Sustainability Manager Environmental Coordinator Site Engineer Site Supervisors	Construction
6.3 a	Examples of spoil mitigation measures include:			
6.3 a (i)	Implementing the spoil re-use hierarchy;	Section 6.4.1	Environment and Sustainability Manager Environmental Coordinator Area Manager Engineering Manager Site Supervisor	Design Construction
6.3 a (ii)	Handling spoil to minimise potential for air or water pollution; and	Section 6.6.2	Environment and Sustainability Manager Environmental Coordinator Site Supervisor	Construction
6.3 a (iii)	Minimise traffic impacts associated with spoil removal.	Section 6.6.3 Construction Traffic Management Plans	Area Manager Site Supervisor	Construction

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
			Traffic Engineer Environment Coordinator	
17.1 a	The following waste objectives will apply to construction:			
17.1 a (i)	Minimise waste throughout the project life-cycle; and	Section 1.3 Section 6.3 Sustainability Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000024)	Environment and Sustainability Manager Sustainability Manager Area Manager Design Manager Engineering Manager	Design Construction
17.1 a (ii)	Waste management strategies will be implemented in accordance with the Waste Avoidance and Resource Recovery Act 2001 management hierarchy as follows: <ul style="list-style-type: none"> • Avoidance of unnecessary resource consumption; • Resource recovery (including reuse, reprocessing, recycling and energy recovery); and • Disposal. 	Section 1.3 Section 6.1	Environment and Sustainability Manager Environmental Coordinator Area Manager Engineering Manager Site Supervisors	Construction
17.1 b	Targets for the recovery, recycling or reuse of construction waste, and beneficial reuse of spoil will be provided by the Principal Contractor.	Section 1.3	Environment and Sustainability Manager Sustainability Manager	Pre Construction
17.2 b	Principal Contractors will undertake the following waste monitoring as a minimum:			
17.2 b (i)	Weekly inspections will include checking on the waste storage facilities on site; and	Element 2:	Environmental Coordinator Site Supervisor Project Engineer	Construction

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
17.2 b (ii)	All waste removed from the site will be appropriately tracked from 'cradle to grave' using waste tracking dockets.	Section 6.7 Element 2: Waste Tracking Register	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction
17.2 c	Principal Contractors will report all necessary waste and purchasing information to TfNSW as required for TfNSW to fulfil their WRAPP reporting requirements.	Element 2: Sustainability Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000024)	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction
17.2 d	Compliance records will be retained by the Principal Contractors in relation to waste management including records of inspections and waste dockets for all waste removed from the site.	Section 6.7 Element 2:	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction
17.3 a	Examples of waste management and recycling mitigation measures include:			
17.3 a (i)	All waste materials removed from the sites will be directed to an appropriately licensed waste management facility;	Section 6.6.3	Environment and Sustainability Manager Environmental Coordinator Site Supervisors	Construction
17.3 a (ii)	The use of raw materials (noise hoarding, site fencing, etc...) will be reused or shared, between sites and between construction contractors where feasible and reasonable; and	Section 6.3.1	Area Manager Engineering Manager Site Superintendent Project Engineer	Construction
17.3 a (iii)	Recyclable wastes, including paper at site offices, will be stored separately from other wastes.	Section 6.6.1	Environmental Coordinator	Construction

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
			Site Supervisors	

EPL 21423

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
O5.1	Waste Management			
O5.1(a)	An estimate of the quantities of each waste type that will be generated on the premises for the duration of the proposed works	Section 4	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction
O5.1(b)	A summary of the waste classification for each type of waste that may be generated at the premises for the duration of the project in accordance with the Waste Classification Guidelines Part 1: Classifying waste (EPA, 2014);	Section 4	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction
O5.1(c)	the source location(s) for all waste likely to be generated at the premises;	Section 1.5.1. Table 3	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction
O5.1(d)	the addresses and facility and business names of destination location(s) for all waste generated and transported off the premises for any purpose (including recycling, reuse, processing, treatment and disposal);	Appendix C3	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
O5.1(e)	details of all waste received on the premises or transported off the premises that is subject to a Resource Recovery Order and/or Exemption, and the procedures that will be implemented to ensure that the waste meets the requirements of the Order and/or Exemption;	Section 6.5 and 6.6 Appendix C1	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction
O5.1(f)	details of the documentation and record keeping that will be implemented to demonstrate where all waste from the Premises is disposed of;	Section 6.7	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction
O5.1(g)	details on the procedures that the licensee will implement to ensure that all waste is being managed, transported, reused, recycled or disposed in a lawful manner.	Appendix C1	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction
O5.1 Note 1,2,3	<p>1. The licensee must consider the guidance in Construction and demolition waste: a management toolkit (EPA, 2019) when preparing and implementing the CWMP.</p> <p>2. If the licensee proposes to hold any of the above information within other internal systems, this must be outlined in the plan.</p> <p>3. The procedures that the licensee will implement to ensure lawful waste management may include:</p> <p>a) desktop investigations (such as contacting reuse, recycling or disposal facilities directly, reviewing waste disposal dockets, reviewing exemption requirements against particular loads of waste, reviewing environment protection licenses) and/or</p> <p>b) site inspections to reuse, recycling or disposal locations.</p>	<p>1. Section 2.3</p> <p>2. Element 2 and Section 6.7</p> <p>3. Appendix C1</p> <p>3a. Element 3</p> <p>3b. Element 2 and Section 6.6.1</p>	Environment and Sustainability Manager Environmental Coordinator	Construction
O5.2	The licensee must review and update the CWMP at a minimum of every 6 months to:	Section 1.7		
O5.2(a)	reflect any changes in the waste quantities, waste types and waste disposal destinations	Section 1.7 Refer to details of revision and amendments		

No.	Requirement	How we will meet the Expectations (minimum requirements)	Responsibility Key Contributor	Timing
O5.2(b)	update any other changes as a result of the review process	Section 1.7 Refer to details of revision and amendments	Environment and Sustainability Manager	Construction
O5.2 Note	All reviews must be documented as part of the CWMP.	Section 1.7 Refer to details of revision and amendments	Environment and Sustainability Manager	Construction
O5.3	The licensee must not cause, permit or allow any waste generated:			
O5.3 (a)	Outside the premises to be received at the premises, except for recycled materials from Sydney Trains rail corridor (EPL 12208) or Sydney Trains recycling facility (EPL 7515) or Virgin Excavated Natural Material or materials that meet the EPA's Resource Recovery Exemptions;	Section 6.5 & 6.6	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction
O5.3 (b)	At the premises to be land applied at the premises, except as permitted in Condition O5.4			
O5.4	Excavated material suitable for re-use within the premises may be transported from one part of the premises or the Sydney Trains rail corridor or Sydney Trains recycling facility to another part of the premises by road.	Section 6.5 & 6.6	Environment and Sustainability Manager Environmental Coordinator Site Engineer	Construction

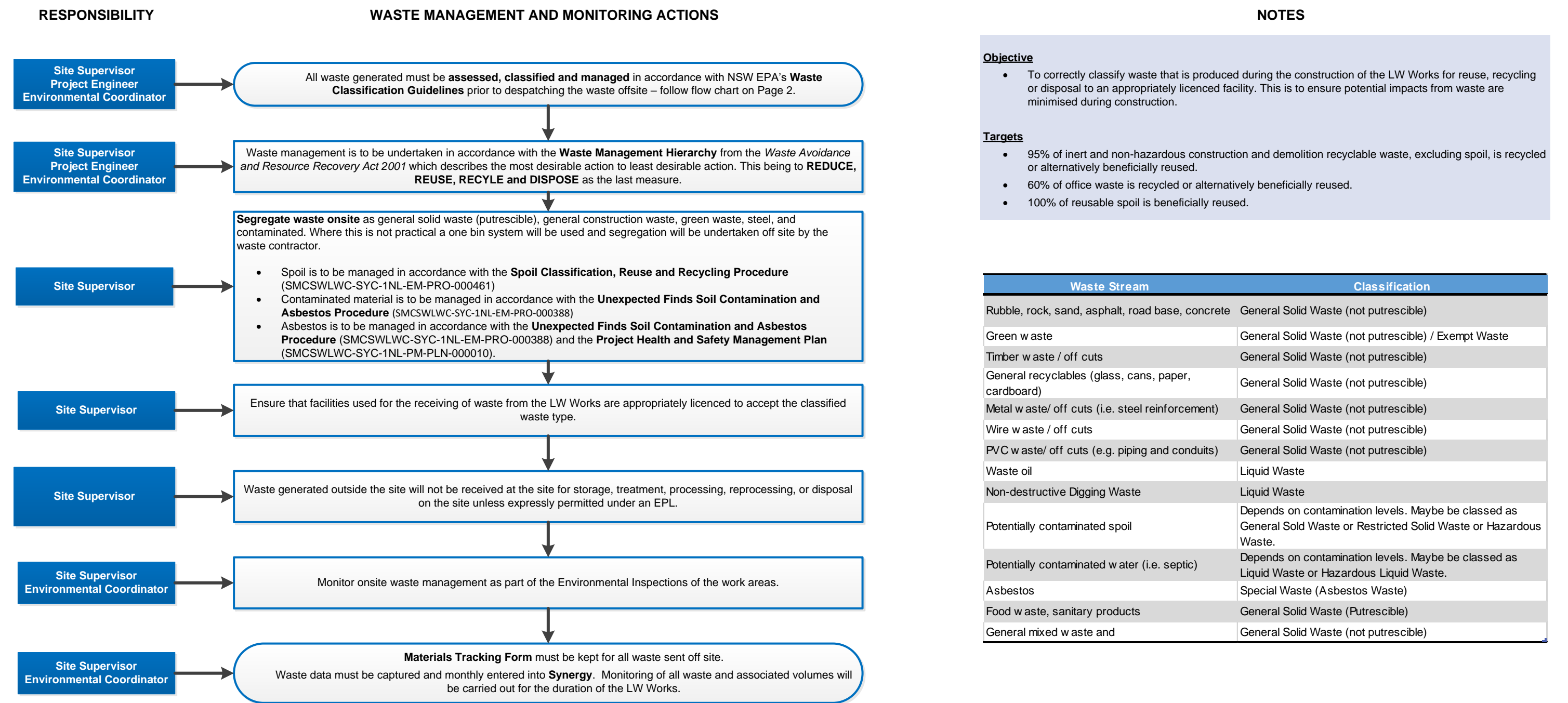
PART C – APPENDICES

Appendix C1 – Waste and Spoil Procedures

SMCSWLWC-SYC-1NL-EM-PRO-000399-00-Waste Management and Recycling Procedure

SMCSWLWC-SYC-1NL-EM-PRO-000461-00-Spoil Classification Reuse and Recycling Procedure

WASTE MANAGEMENT AND RECYCLING PROCEDURE



Waste Stream	Classification
Rubble, rock, sand, asphalt, road base, concrete	General Solid Waste (not putrescible)
Green waste	General Solid Waste (not putrescible) / Exempt Waste
Timber waste / off cuts	General Solid Waste (not putrescible)
General recyclables (glass, cans, paper, cardboard)	General Solid Waste (not putrescible)
Metal waste/ off cuts (i.e. steel reinforcement)	General Solid Waste (not putrescible)
Wire waste / off cuts	General Solid Waste (not putrescible)
PVC waste/ off cuts (e.g. piping and conduits)	General Solid Waste (not putrescible)
Waste oil	Liquid Waste
Non-destructive Digging Waste	Liquid Waste
Potentially contaminated spoil	Depends on contamination levels. Maybe be classed as General Solid Waste or Restricted Solid Waste or Hazardous Waste.
Potentially contaminated water (i.e. septic)	Depends on contamination levels. Maybe be classed as Liquid Waste or Hazardous Liquid Waste.
Asbestos	Special Waste (Asbestos Waste)
Food waste, sanitary products	General Solid Waste (Putrescible)
General mixed waste and	General Solid Waste (not putrescible)

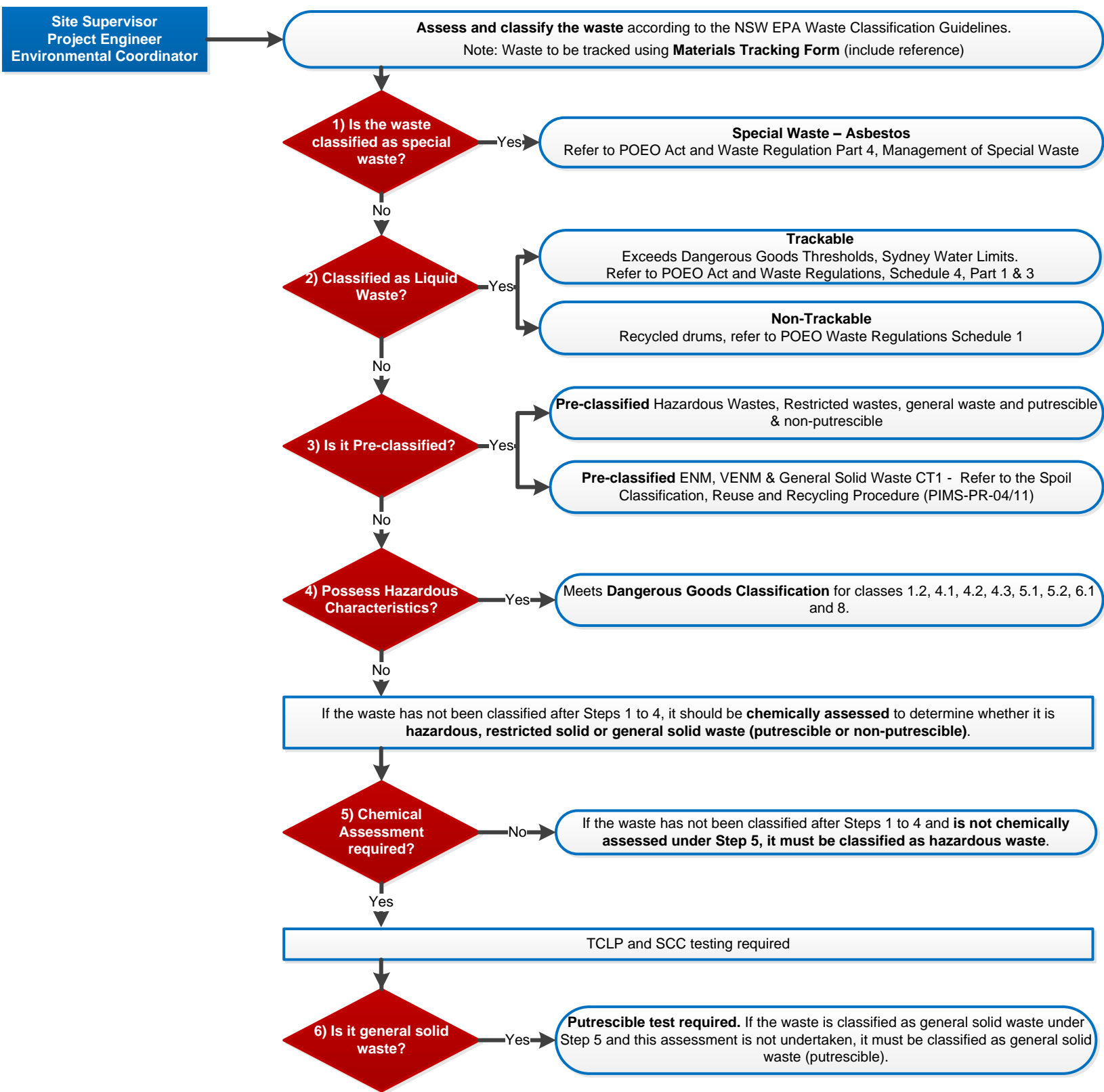
WASTE MANAGEMENT AND RECYCLING PROCEDURE



RESPONSIBILITY

WASTE CLASSIFICATION PROCESS

NOTES



1) Special Waste

'Special waste' is a class of waste that has unique regulatory requirements. Special waste means any of the following:

- clinical and related waste
- asbestos waste
- waste tyres
- anything classified as special waste under an EPA gazettal notice.

2) Liquid Waste

Liquid waste means any waste (other than special waste) that:

- has an angle of repose of less than 5 degrees above horizontal
- becomes free-flowing at or below 60 degrees Celsius or when it is transported
- is generally not capable of being picked up by a spade or shovel
- is classified as liquid waste under an EPA gazettal notice.

3) Pre-Classified Waste

Some commonly generated waste types have been pre-classified as hazardous waste, general solid waste (putrescible) or general solid waste (non-putrescible). These pre-classifications are contained in the definitions of those classifications in Schedule 1 of the POEO Act.

All currently gazetted special, liquid and pre-classified wastes are listed on the EPA website at: <https://www.epa.nsw.gov.au/your-environment/waste/industrial-waste>

4) Hazardous Characteristics

If a waste has not been classified under Steps 1–3, it must be classified as 'hazardous waste' if it is a dangerous good under any of the following classes or divisions of the Transport of Dangerous Goods Code:

- Class 1: Explosives
- Class 2: Gases (compressed, liquefied or dissolved under pressure)
- Division 4.1: Flammable solids (excluding garden waste, natural organic fibrous material and wood waste, and all physical forms of carbon such as activated carbon and graphite)
- Division 4.2: Substances liable to spontaneous combustion (excluding garden waste, natural organic fibrous material and wood waste, and all physical forms of carbon such as activated carbon and graphite)
- Division 4.3: Substances which when in contact with water emit flammable gases
- Class 5: Oxidising agents and organic peroxides
- Division 6.1: Toxic substances
- Class 8: Corrosive substances.

6) Putrescible or Non-putrescible Waste

General solid waste may only be classified as non-putrescible if:

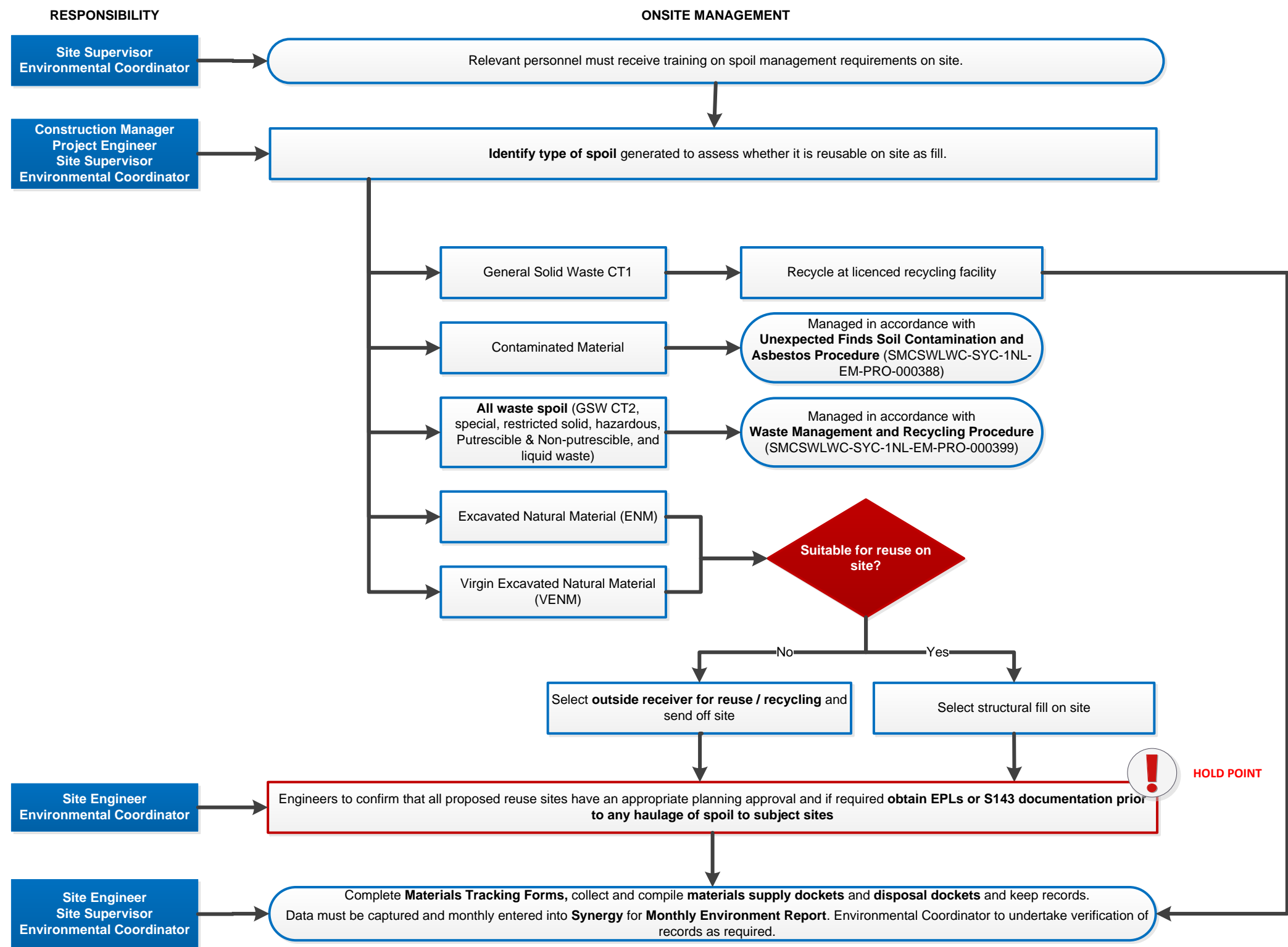
- it does not readily decay under standard conditions, does not emit offensive odours and does not attract vermin or other vectors (such as flies, birds and rodents), or
- it has a specific oxygen uptake of less than 1.5 milligrams O₂ per hour per gram of total organic solids at 20 degrees Celsius, or
- it is such that, during composting (for the purpose of stabilisation), the mass of volatile solids in the organic waste has been reduced by at least 38%, or
- it has been treated by composting for at least 14 days, during which time the temperature of the organic waste must have been greater than 40 degrees Celsius and the average temperature greater than 45 degrees Celsius.

Non-putrescible materials typically do not:

- readily decay under standard conditions
- emit offensive odours
- attract vermin or other vectors (such as flies, birds and rodents).

For further details refer to the NSW EPA's **Waste Classification Guidelines**.

SPOIL CLASSIFICATION, REUSE AND RECYCLING PROCEDURE



Notes:

Where ENM or VENM does not meet criteria for a specific use it may be used as General Fill. ENM or VENM that meets criteria for a specific use but is surplus to requirements may also be used as General Fill.

ENM reuse offsite is subject to the requirements of "The excavated natural material exemption 2014" under the provisions of the Protection of the Environment Operations (Waste) Regulation 2014 – General Exemption under Part 9, Clause 91 and 92.

VENM reuse is subject to the sampling, testing and certification requirements of the receiving site or facility.

Protected or 'No-Go' Areas

If works in these areas are required, obtain a Permit to Enter Protected or 'No-Go' Areas

Appendix C2 – Agency Consultation Records

Document Title:

Waste, Recycling and Spoil Management Sub-Plan -
C2B Rev 00

Stakeholder	Raised By	Date	Comment No.	Document reference	Topic	Stakeholder comment	Project team response	Amendment made, Y/N?	Section	Closed out
Inner West Council	Alistair Hyde Page	5/12/2019	11	Section 3	Contacts	Will the names and contact details of relevant roles be given to Council (Section 3) or will all correspondence be through you?	MB - All correspondence between Council and the project will be via the approved process.	N	N/A	Y
Inner West Council	Alistair Hyde Page	5/12/2019	12	Element 2	Reporting	How will Monthly Sustainability Reports (Implementation Element 2), Audit Reports and Incident Reports (Implementation Element 2) be communicated to Council? (Newsletter, email updates?)	MB - The Project is not required to provide reports to Council (except those reports required for consultation under the CSSI Conditions of Approval). Updates on project status can be provided via the regular meeting schedule and via the project newsletter	N	N/A	N
Inner West Council	Alistair Hyde Page	5/12/2019	13	Appendix C3 and C4	Waste disposal, Spoil Reuse and Truck Movements	Will Waste Disposal Locations (Appendix C3), Spoil Reuse Locations (Appendix C4) and Truck Movement estimates communicated to Council at a later stage?	MB - RE waste disposal locations: During detailed planning of each work area appropriate licensed waste facilities will be identified. This information will updated in Appendix C3 of the Sub Plan with each periodic review of the document. RE Spoil reuse: Following completion of detailed design and during planning of each work area appropriate any spoil reuse areas will be identified. This information will updated in Appendix C4 of the Sub Plan with each periodic review of the document. Note. The need for spoil reuse areas beyond the construction impact boundary is not likely to be required. Re truck movements: estimates of truck movements associate with any work site are included in the Site Construction Traffic management Plans. CTMPs are provide to Council for review via the TTLG.	N	N/A	Y
Canterbury-Bankstown City Council	Alvin Fung	4/12/2019	N/A	N/A	N/A	We have reviewed and have no further comments on the following plans: 3. Construction Waste Spoil and Recycling Management Plan	N/A	N/A	N/A	N/A

Inner West Council	Alistair Hyde Page	16/12/2019	N/A	N/A	N/A	Thanks for taking me through the project at our last meeting and for your email response to my queries. My questions have been addressed, I will contact you if there are any more.	Noted.	N/A	N/A	N/A
*Note: Comment received between reissue to Sydney Metro and submission to DPE for approval.										

Appendix C3 – Waste Disposal and Spoil Reuse Sites

No.	Waste Disposal / Spoil Reuse Site Details	Spoil Reuse Hierarchy Priority Ranking	Street Address	Waste Types Accepted	EPL No.
1.	Baker Group, Penrith	N/A	Lugard Street, Penrith NSW 2750	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	EPL No. 12348
2.	Bingo Recycling Centre, Alexandria	N/A	76-82 Burrows Road, Alexandria NSW 2015	General Solid Waste (GSW)	EPL No. 4679
3.	Bingo Recycling Centre, Artarmon	N/A	10 McLachlan Ave, Artarmon NSW 2064	General Solid Waste (GSW)	EPL No. 20763
4.	Bingo Recycling Centre, Auburn	N/A	3-5 Duck Street, Auburn NSW 2144	General Solid Waste (GSW)	EPL No. 10935
5.	Bingo Recycling Centre, Eastern Creek (Genesis)	N/A	Honeycomb Drive, Eastern Creek NSW 2766	General Solid Waste (GSW)	EPL No. 20121
6.	Bingo Recycling Centre, Greenacre	N/A	35 Wentworth St, Greenacre NSW 2190	General Solid Waste (GSW)	EPL No. 20847
7.	Bingo Recycling Centre, Kembla Grange	N/A	50 Wyllie Road, Kembla Grange NSW 2526	General Solid Waste (GSW)	EPL No. 20601
8.	Bingo Recycling Centre, Mortdale	N/A	20 Hearne Street, Mortdale NSW 2223	General Solid Waste (GSW)	EPL No. 20622
9.	Bingo Recycling Centre, Revesby	N/A	37-51 Violet Street, Revesby NSW 2212	General Solid Waste (GSW)	EPL No. 20607
10.	Bingo Recycling Centre, Tomago	N/A	29 Laverick Avenue, Tomago NSW 2322	General Solid Waste (GSW)	EPL No. 20585
11.	Dravin, Schofields	N/A	North Street, Schofields NSW 2762	Virgin Excavated Natural Material (VENM) General solid Waste (GSW)	EPL No. 4578

12.	Veolia, Horsley park	5	Walgrove Road, Horsley Park, NSW 2175	General Solid Waste (GSW) Special Waste (Asbestos and tyres) Virgin Excavated Natural Material (VENM) Foundry Sands Spent filter sand medium Soils	EPL No. 11584 EPL No. 20339
13.	MET Recycling, Silverwater	N/A	134 Carnarvon St, Newton St N, Silverwater NSW 2128	General Solid Waste (GSW)	EPL No. 20948
14.	Suez, Lucas Heights	N/A	Little Forest Rd, Lucas Heights NSW 2234	Excavated Natural Material (ENM)	EPL No. 5065
15.	Suez, Eastern Creek	N/A	Wallgrove Rd, Eastern Creek NSW 2766	Excavated Natural Material (ENM)	EPL No. 12517
16.	Nepean Business Park	N/A	Penrith, NSW 2750	Recovered Aggregate	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
17.	RRO Site	N/A	15 Colonel Pye Drive, Cobbitty NSW 2570	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
18.	RRO Site	N/A	440 Cawdor Road, Cawdor NSW 2570	Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
19.	Camellia Recycling Facility	N/A	14 Thackeray Street Camellia, NSW 2142	Concrete and bitumen	EPL No. 6664

20.	Redirect Recycling Pty Ltd	N/A	48 Industry Road, Vineyard NSW 2765	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	EPL No. 5487
21.	Bulk Recovery Solutions Pty Ltd	N/A	16 Kerr Road, Ingleburn NSW 2565	Waste storage - other types of waste Recovery of general waste	EPL No. 20797
22.	Rock and Dirt Recycling	N/A	306 Racecourse Road, South Windsor NSW 2756	Recovery of general waste Waste storage - other types of waste	EPL No. 4849
23.	Aussie Skips Recycling Pty Ltd	N/A	Unit 5, 84-108 Madeline St, Strathfield South, NSW 2136	Recovery of general waste Waste storage - other types of waste	EPL No. 20885
24.	Recycling Parks Pty Ltd	N/A	16-23 Clifton Avenue, Kemps Creek, NSW 2178	Waste storage - other types of waste	EPL No. 12901
25.	Breen Resources	N/A	Captain Cook Drive, Kurnell NSW 2231	General Waste	EPL No. 4608
26.	Sydney Trains	N/A	Worth Street Gate 1, Chullora NSW 2190	General Waste	EPL No. 7515
27.	Hi Quality St Marys TSE-31	N/A	37 Lee Holm Rd, St Marys, NSW 2760	Concrete General Waste	EPL No. 5857
28.	Penrith Business Park TSE-154	N/A	Lot 310, Lugard St, Penrith, NSW 2750	Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption

29.	Vales Point Power Station Rutleys Road Manning Point	N/A	Rutleys Road, Mannering Park NSW	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
30.	Kemps Creek	N/A	Hi Quality Quarry, PO Box 42, Kemps Creek, NSW 2178	General Waste	EPL No. 20593
31.	Wollondilly Shire Council	N/A	510 Bobs Range Road, Orangeville NSW 2570	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
32.	JW Landscapes	N/A	215 Hawkesbury Valley Way Clarendon NSW 2756	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
33.	Boral Widemere Recycling	N/A	Widemere Recycling 38 Widemere Road, Wetherill Park, NSW, 2164	Recovery of general waste, any general waste recovered Waste storage - other types of waste	EPL No. 11815
34.	Sell & Parker	N/A	45 Tattersall Road Blacktown NSW 2148	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste Scrap metal processing	EPL No. 11555
35.	Sims group Australia holdings limited	N/A	Sims Group Limited 43 Ashford Ave, Milperra, NSW, 2214	Scrap metal processing	EPL No. 2207
36.	DIAL-A-DUMP (EC) Pty Ltd	N/A	Genesis Recycling Facility Honeycomb Drive, Eastern Creek, NSW, 2766	Composting and Recovery of general waste Waste storage - other types of waste	EPL No. 20121
37.	Breen Resources Pty Ltd	N/A	Breen Recycling Facility Captain Cook Drive, Kurnell, NSW, 2231	Waste storage - other types of waste Recovery of general waste	EPL No. 20697

38.	Boral Resources (NSW) Pty Ltd	N/A	Boral Concrete 88 Reserve road, Artarmon, NSW, 2064	Concrete works	EPL No. 1236
39.	PF Formation Pty Ltd	N/A	97 and 113 Old Telegraph Road, Maroota, NSW 2756	Virgin Excavated Natural Material (VENM)	EPL No. 21046
40.	SUEZ Recycling & Recovery Pty Ltd	N/A	Crozier Road, Belrose, NSW 2085	General Solid Waste (GSW)	EPL No. 13312
41.	RRO Site	N/A	1432-1436 Camden Valley Way, Leppington, NSW 2179	Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
42.	RRO Site	N/A	44 Mileham Avenue, Baulkham Hills, NSW 2153	Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
43.	RRO Site	N/A	Skyline Crescent, Leppington NSW, 2179	Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
44.	The Austral Brick Co Pty Ltd	N/A	738-780 Wallgrove Road, Horsley Park, NSW 2175	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	EPL No. 546
45.	Bingo Eastern Creek Landfill	N/A	1 Kangaroo Ave, Eastern Creek NSW 2766	Waste disposal by application to land Waste storage - other types of waste	EPL No. 13426
46.	RRO Site	N/A	992 Greendale Road, Greendale NSW 2745	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption

47.	RRO Site	N/A	7 Hinkler Road, Brighton Le Sands, NSW 2216	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
48.	Cleanaway St Marys	N/A	42-46 Charles Street, St Marys, NSW 2760	Contaminated soil treatment Non-thermal treatment of hazardous and other waste Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	EPL No. 20271
49.	Demast	N/A	7 Long Street, Smithfield, NSW 2164	Non-thermal treatment of liquid waste Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	EPL No. 20875
50.	RRO Site	N/A	70 Irwins Road, East Kurrajong, NSW 2758	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
51.	Glenfield Waste Services	N/A	Cambridge Ave, Glenfield, NSW 2167	Non-thermal treatment of general waste Waste disposal by application to land Waste storage - other types of waste	EPL No. 4614
52.	RRO Site	N/A	572 Grose Vale Road, Grose Vale NSW 2753	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
53.	North West Recycling Centre	N/A	132 Burfitt Road, Riverstone, NSW 2765	Green waste Composting	EPL No. 11620
54.	RRO Site	N/A	80 Dietz Lane, Oakdale, NSW 2570	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption

55.	RRO Site	N/A	410 The Northern Road, Oran Park, NSW 2570	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
56.	Suez recycling and discovery Kemps Creek	N/A	1725 Elizabeth Drive, Kemps Creek, NSW 2178	Composting Recovery of general waste Waste storage - other types of waste	EPL No. 12889
57.	Cleanaway Pty Ltd	N/A	85-87 Quarry Road, Erskine Park, NSW 2759	General Solid Waste (Putrescible & Non-putrescible)	EPL No. 20986
58.	Aussie Skips Recycling Pty Ltd	N/A	13 Bellfrog Street, Greenacre NSW 2190	Excavated Natural Material (ENM) General Solid Waste (GSW)	EPL No. 21389
59.	Metro Trains Sydney Pty Ltd	N/A	Sydney Metro, Rouse Hill, NSW 2155	Excavated Natural Material (ENM)	EPL No. 21247
60.	AUSSIE SKIPS RECYCLING PTY LTD	N/A	13 Bellfrog Street, Greenacre, NSW 2190	General Solid Waste (Recyclable)	EPL No. 21389
61.	EBH ENVIRONMENTAL SERVICES PTY LTD	N/A	60 Donaldson Street, WYONG, NSW 2259	General Solid Waste	EPL No. 20675
62.	Eco Cycle Materials	N/A	155 Newton Road, Wetherill Park, NSW 2164	General Solid Waste (Recyclable)	EPL 10699
63	RRO Site	N/A	140 Ashwood Road, Wilton. NSW 2571	Virgin Excavated Natural Material (VENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption

64	RRO Site	N/A	30 Skipton Lane, Prestons, NSW 2170	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
65	Bluescope Steel	N/A	Five Island Roads, Port Kembla NSW 2505,	The Port Kembla Steelworks Excavated Material Exemption/Order 2020	EPL 6092
66	Clean & Green Organics	N/A	769 The Northern Road, Bringelly, NSW 2556	Organics (Recycled Garden and Green Vegetation)	EPL 11539
67	RRO Site	N/A	Moorebank Ave Moorebank, NSW 2170 (Lot 1 DP1197707, Lot 100 DP1049508, Lot 101 DP1049508, Lot 2 DP1197707, Part Lot 3 DP1197707, Part Anzac Rd and Moorebank Ave public road reserves)	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
68	RRO Site	N/A	50 Raby Road, Gledswood Hills, NSW 2557 (Lot 1178 DP1208873, Lot 1175 DP1208873, Lot 293 DP708154, Lot 2 DP1173813)	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
69	RRO Site	N/A	1/121 and 2/121 Raby Road Leppington, NSW 2179 (Lot 1 SP37300, Lot 2 SP37300)	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
70	RRO Site	N/A	165 River Road, Tahmoor, NSW 2573	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
71	Australian Native Landscapes	N/A	210 Martin Road, Badgerys Creek, NSW 2555	Virgin Excavated Natural Material (VENM)	EPL 4625
72	RRO site	N/A	9 Isaac Smith Road, Daceyville, NSW 2032	Virgin Excavated Natural Material (VENM) Excavated Natural Material (ENM)	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption

73	Suez Lucas Heights Waste and Recycling Centre	N/A	New Illawarra Road, Lucas Heights, NSW 2234	Virgin Excavated Natural Material (VENM)	EPL 12520
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Tristan McCormick
Environmental Advisor
Line Wide Works Project
Systems Connect
Level 3, 116 Miller Street
NORTH Sydney NSW 2060.

03 October 2023

Ref: 170108(m) WRSMP C2B Rev 5 & 6

Dear Tristan

RE: Approval of Minor Amendments to Waste, Recycling and Spoil Management Plan C2B Revisions 5 and 6

Thank you for providing, for Environmental Representative (ER) review and approval in accordance with MCoA A24 (j) of SSI 15_7400 and MCoA A26 (i) of SSI 8256, the amended Waste, Recycling and Spoil Management Plan C2B (WRSMP) titled *Waste, Recycling and Spoil Management Plan C2B* document number SMCSWLWC-SYC-1NL-PM-PLN-000374 Revisions 5 and 6 dated 30/06/2023 and 20/09/2023.

As an approved ER for the Sydney Metro City and Southwest Project, I have reviewed the following proposed minor amendments, as a consequence of the scheduled review of the plan and procedures. The following sections/tables of the WRSMP are being amended under this RfMA and summarised below:

- a) Minor updates to address SM/ER comments on scheduled review (refer associated comments register)
- b) Update to Glossary / Abbreviations – Resource Recovery Order (RRO)
- c) Update to Section 1.5.2 - Staging Reports
- d) Update to Section 1.5.3 – Interface
- e) Update to Section 3.1 – Inclusion of “or delegate”
- f) Update to 6.3.1 – To reference salvageable item management in more detail, in response to recent IEA finds
- g) Update to Section 6.3.4 – To reference appropriate planning approval
- h) Update to Appendix C3 – Waste Disposal and Spoil Reuse Sites - item #16, items #62 to #73 and WRO to RRO within Table
- i) Update to Element 3 – 3.3 – Requirement to report NCRs

In my opinion, the proposed changes are minor amendments as defined in Section 1.5 of the Construction Environmental Management Plan – Chatswood to Bankstown.

On this basis, I approve the amended *Waste, Recycling and Spoil Management Plan C2B* Revision 6 (dated 20 September 2023) for implementation.

Yours sincerely



Swathi Gowda
Environmental Representative – Sydney Metro, City and Southwest