




CONSTRUCTION WASTE MANAGEMENT SUB-PLAN

St Marys Intermodal

Pacific National

SSD 7308

Rev #	Name	Organisation	Signed	Date
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Amendment Record Sheet

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This document was prepared for the sole use by McMahon Services Group and the regulatory agencies that are directly involved in this project, the only intended beneficiaries of our work. No other party should rely on the information contained herein without the prior written consent of McMahon Services Group 2017.

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Glossary/Abbreviations

Abbreviation	Expanded Text
ASS	Acid Sulphate Soils
CEMP	Construction Environmental Management Plan
CoC	Conditions of Consent
CSWMSP	Construction Soil and Water Management Sub-Plan
CWMSP	Construction Waste Management Sub-Plan
DPIE	NSW Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)
EPA	Environmental Protection Authority
EPL	Environmental Protection License
ESCP	Erosion and Sediment Control Plan
FERSP	Flood Emergency Response Sub-Plan
Minister, the	Minister for Planning and Public Spaces (or delegate)
OEH	Office of Environment and Heritage
POEO Act	The Protection of the Environment Operations Act 1997
Project, the	St Marys Intermodal Project
REMM	Revised Environment Management Measures
SSD	State Significant Development
WARR Act	Waste Avoidance and Resource Recovery Act 2001 (NSW)

1. Introduction

1.1. Background

The St Marys Freight Hub EIS (Urbanco 2019) assessed the impacts of construction and operation of the Project on resource use and waste management, within Section 6.6 (Waste management plan).

The EIS identified the potential for resource consumption and impacts of waste generation requiring waste minimisation and management during construction of the Project. This was typically associated with the generation of construction and demolition waste, vegetation waste, packaging materials and liquid wastes. All wastes would be managed using the hierarchy approach of waste avoidance and resource recovery before consideration of waste disposal.

The EIS concluded that any potential impacts regarding waste generation and resource recovery could be managed by standard mitigation and management measures described in this Construction Waste Management Sub-plan (CWMSMP or Plan).

Please refer to Section 2 of the CEMP for the Project Description.

1.2. Context

This CWMSMP forms part of the Construction Environmental Management Plan (CEMP) for the St Marys Intermodal Project (the Project).

This CWMSMP has been prepared to address the requirements of the Minister's Conditions of Consent (CoC), the St Marys Freight Hub Environmental Impact Statement (EIS), the Revised Management and Mitigation Measures (RMMM) listed in the St Marys Freight Hub Response to Submissions Report, *Environmental Management Plan Guideline: Guideline for Infrastructure Projects* (DPIE, April 2020) and all applicable guidance and legislation.

Construction will not commence until the CEMP is approved by the Planning Secretary.

1.3. Scope

The scope of this Plan is to describe how McMahon Services proposes to manage waste and resource recovery during construction of the Project. Operational waste management measures do not fall within the scope of this Plan and therefore are not included within the processes contained within this Plan.

2. Purpose and Objectives

2.1. Purpose

The purpose of this Plan is to describe how McMahon proposes to manage waste during construction of the Project. This Plan also explores relevant aspects of resource recovery and management requirements for the Project.

2.2. Environmental Objectives

The key objective of this CWMSP is to ensure all CoC, RMMMs and other requirements relevant to waste management are described, scheduled and assigned responsibility as outlined in:

- The EIS prepared for St Mary's Intermodal,
- The response to submissions prepared for St Mary's Intermodal,
- Conditions of Consent granted to the Project on 7 May 2020,
- Modification 2 SSD 7308 approved 21 September 2020
- Modification 3 SSD-7308 approved 29 October 2020
- Modification 4 SSD-7308 approved 17 December 2020
- Modification 1 SSD-7308 approved 29 January 2021
- All relevant legislation and other requirements described in Section 3.1 of this Plan.

A Construction Waste Management Plan (dated 6/07/2020 Version 2.0) was submitted as part of the application documentation for MOD-1. This document is in addition to this CWMSP and has been integrated into this document.

2.3. Environmental Performance Outcomes and Targets

The desired environmental performance outcome for waste management, as outlined and addressed in the EIS, is that all wastes generated during the construction of the Project are effectively minimised, stored, handled, treated, reused, recycled and/or disposed of lawfully and in a manner that protects environmental values.

To achieve this outcome, McMahon will undertake the following, as identified in Table 1.

Table 1 Performance outcomes

No.	Requirement	Document Reference
1	Impacts to be minimised through mitigation measures implemented to address the relevant CoC and the safeguards detailed in the EIS, REMMs and all other relevant legislation and requirements	CoC A1, RMMMs
2	All waste generated during construction will be secured and maintained within designated waste storage areas at all times and to not leave the site onto neighbouring public or private properties.	C27
3	All waste generated during construction will be assessed, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).	C28
4	The quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations for the duration of construction will all be recorded.	C30

3. Environmental Requirements

3.1. Relevant Legislation

3.1.1. Legislation

Legislation relevant to waste and resource management for this project includes:

- Environmentally Hazardous Chemicals Act 1985
- Protection of the Environment Operations Act 1997 (NSW)
- Protection of the Environment Operations (Waste) Regulation 2014 (NSW);
- Waste Avoidance and Resource Recovery Act 2001 (NSW); and
- Work Health and Safety Act 2011 (NSW).
- NSW Waste Avoidance and Resource Recovery Act 2001

Relevant provisions of the above legislation are explained in the legal and compliance tracking register included in Annexure A of the CEMP.

3.1.2. Guidelines and Standards

The main guidelines, specifications and policy documents relevant to this plan include:

- NSW Waste and Resource Recovery Strategy 2014-21 (EPA, 2014),
- Waste Classification Guidelines (EPA 2014),
- AS2601: 2001 The Demolition of Structures,
- Code of Practice for the Safe Removal of Asbestos 2nd Edition (National Occupational Health and Safety Commission 2005a),
- Code of Practice for the Management and Control of Asbestos in Workplaces (National Occupational Health and Safety Commission 2005b),
- National Environment Protection (assessment of site contamination) Measure 1999, and
- Storing and Handling Liquids: Environmental Protection – Participants Manual (NSW Department of Environment and Climate Change (DECC) 2007).

3.2. Minister's Conditions of Consent

The requirements of the Planning Consent relevant to this plan are shown in Table 2 with cross reference to indicate where each requirement is addressed within this plan.

This CEMP is the overarching document in the environmental management system for the St Marys Intermodal Project. It is applicable to all staff and sub-contractors associated with the construction of the Project.

Additional conditions of relevance to work under the CEMP, and where this plan addresses the condition, is included in Annexure A.

Table 2 CoC Requirements for this plan

CoC No.	Requirement	Document Reference	How Addressed
	In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and, if prevention is not reasonable and feasible, minimise any material harm to the environment that may result from the construction and operation of the development.	Section 2.3	Measures addressed in section 6 of this plan outline how McMahon propose to minimise material harm to the environment.
B6	<p>Unexpected Contamination Procedure</p> <p>Prior to the commencement of earthworks, the Applicant must prepare an unexpected contamination procedure to ensure that potentially contaminated material is appropriately managed. The procedure must form part of the CEMP in accordance with condition B11 and where any material identified as contaminated is to be disposed off-site, the disposal location and results of testing submitted to the Planning Secretary prior to its removal from the site.</p>	Section 5.6 Section 6	This procedure is located in the Construction Environmental Management Plan. Control measures have been identified to describe how McMahon propose to manage this during construction
B11	<p>Prior to commencement of construction, the Applicant must submit a Construction Environmental Management Plan (CEMP) to the Certifier and to the Planning Secretary for approval. The CEMP must include, but not be limited to, the following:</p> <ul style="list-style-type: none"> a) Details of: <ul style="list-style-type: none"> (i) Hours of work; (ii) 24-hour contact details of site manager (iii) Management of dust and odour to protect the amenity of the neighbourhood; (iv) Stormwater control and discharge; (v) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site; (vi) groundwater management plan including measures to prevent groundwater contamination; (vii) external lighting in compliance with AS 4282-2019 Control of the obtrusive effects of outdoor lighting; (viii) community consultation and complaints handling; b) Construction Traffic and Pedestrian Management Sub-Plan (see condition B13); c) Construction Noise and Vibration Management Sub-Plan (see condition B14); d) Construction Waste Management Sub-Plan (see condition B15); e) Construction Soil and Water Management Sub-Plan (see condition B16); 	Section 2.3, Table 1 Performance outcomes	This plan has been prepared in accordance with this condition and describes how McMahon propose to manage waste during construction of the Project.

	<ul style="list-style-type: none"> f) Biodiversity Management Sub-Plan (see condition B17); g) Flood Emergency Response Sub-Plan (see condition B18); h) an unexpected finds protocol for contamination and associated communications procedure; i) an unexpected finds protocol for Aboriginal and non-Aboriginal heritage and associated communications procedure; j) waste classification (for materials to be removed) and validation (for materials to remain) be undertaken to confirm the contamination status in these areas of the site; and sustainability measures and practices to be implemented during the construction process. 		
B12	The Applicant must not commence construction of the development until the CEMP is approved by the Planning Secretary.	Section 1.2	Construction will not commence until the CEMP is approved by the Planning Secretary.
B15	<p>The Construction Waste Management Sub-Plan (CWMSP) must address, but not be limited to, the following:</p> <ul style="list-style-type: none"> a) detail the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations; and b) removal of hazardous materials, particularly the method of containment and control of emission of fibres to the air, and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of construction. 	This plan	This CWMSP has been prepared in accordance with this condition and describes how McMahon propose to manage waste during construction.
B39	<p>The Applicant must ensure that:</p> <ul style="list-style-type: none"> a) internal roads, driveways and parking (including grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) associated with the Development are constructed and maintained in accordance with the latest versions of AS 2890.1 – 2004, AS 2890.6-2009 and AS 2890.2 – 2002 for heavy vehicle usage; b) a minimum of 62 light vehicle on-site car parking spaces and 7 on-site truck parking spaces for use during operation of the development and designed in accordance with the latest versions of AS 2890.1 and AS 2890.6; c) the required sight lines around the driveway entrances and exits are not to be compromised by street trees, landscaping, fencing or signposting; d) the swept path of the longest construction vehicle entering and exiting the site in association with the new work, as well as manoeuvrability through the site, must be in accordance with the latest version of AS 2890.2; 	Section 6	Mitigation measures have been developed to ensure waste materials are not placed in public car spaces.

	<p>e) the layout of the site must be designed to ensure heavy vehicles associated with the operation of the intermodal terminal can be accommodated on site in the event of an incident blocking access to Forrester Road/ Glossop Street/Great Western Highway to avoid queuing on public roads;</p> <p>f) the layout of the site shall be designed so that heavy vehicles are not required to select reverse gear;</p> <p>g) heavy vehicles and bins associated with the development do not park or stand on local roads or footpaths in the vicinity of the site;</p> <p>h) all vehicles are wholly contained on site before being required to stop;</p> <p>i) all vehicles must enter and leave the site in a forward direction;</p> <p>j) all loading and unloading of materials is carried out on site;</p> <p>k) the proposed turning areas in the car park are kept clear of any obstacles, including parked cars, at all times;</p> <p>l) all car spaces are to be sealed/line marked and dedicated for parking of vehicles only and not be used for storage of materials/products/waste materials; and</p> <p>m) the safety of vehicles and pedestrians accessing adjoining properties, where shared vehicle pedestrian access occurs, is to be addressed.</p> <p>Detailed plans demonstrating compliance with condition B39(a)-(m) shall be prepared in consultation with TfNSW and to the satisfaction of the Certifier.</p>		
C27	All waste generated during construction must be secured and maintained within designated waste storage areas at all times and must not leave the site onto neighbouring public or private properties.	Section 5.5, 6	Control measures have been identified to describe how McMahon propose to manage this during construction.
C28	All waste generated during construction must be assessed, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).	Section 4.1	The waste classification procedure has been outlined.
C29	The Applicant must ensure that concrete waste and rinse water are not disposed of on the site and are prevented from entering any natural or artificial watercourse or Council's stormwater system.	Section 6	Control measures have been identified to describe how McMahon propose to manage this during construction

C30	The Applicant must record the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations for the duration of construction.	Section 5.2	Records will be kept in the form of a Waste Tracking Register as described in this section.
C31	The Applicant must ensure that the removal of hazardous materials, particularly the method of containment and control of emission of fibres to the air, and disposal at an approved waste disposal facility is in accordance with the requirements of the relevant legislation, codes, standards and guidelines.	Section 5.5, 6	Control measures have been identified to describe how McMahon propose to manage this during construction

3.3. Revised Environmental Management and Mitigation Measures

Please refer to Annexure B for a list of environmental management and mitigation measures.

3.4. Consultation

The CoC do not require the project to undertake consultation with agencies during the development of this Plan. Refer to Section 5 of the CEMP for consultation requirements relating to the CEMP and all other sub-plans. The Plan will be made publicly available on the Project website.

4. Environmental Aspects and Impacts

4.1. Classification of waste streams

Waste classification will be undertaken in accordance with the Waste Classification Guidelines (EPA 2014). Part 1 of the Waste Classification Guidelines (EPA 2014) identifies six classes of waste: Special, Liquid, Hazardous, Restricted Solid, General Solid (putrescible) and General Solid (non-putrescible) and describes a six-step process to classifying waste. Sampling and testing requirements for the waste streams are detailed below.

Waste Classification Process (Part 1, of the Waste Classification Guidelines EPA, 2014)

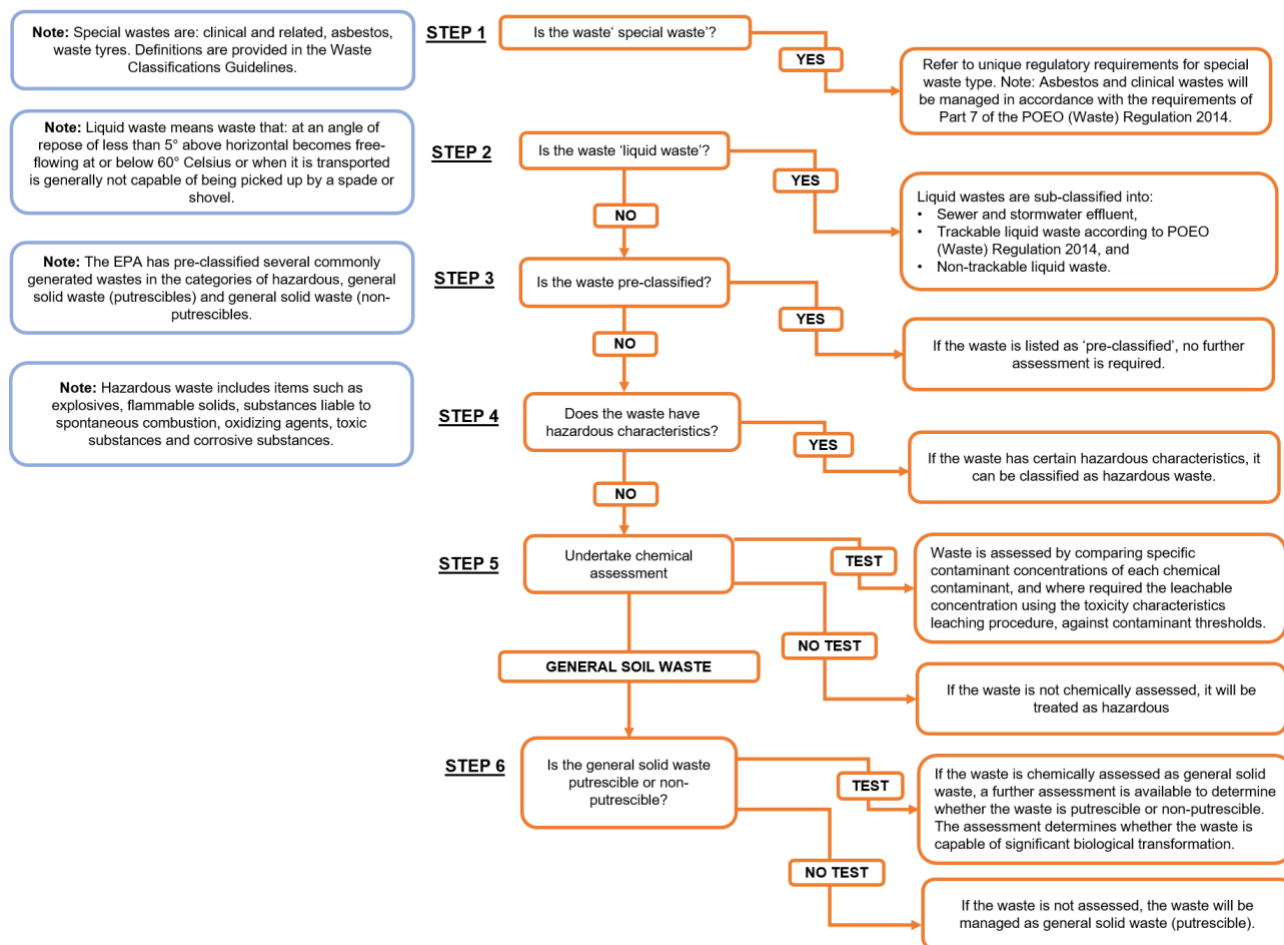


Figure 1 Waste classification process

4.2. Project specific waste streams

The construction related waste streams listed in Table 3 are expected to be generated during construction of the project.

Table 3 Waste types and quantities

Waste Type	Waste Classification	Estimated Volume	Segregation Areas /	
			Containers Commonly Available	Re-use/Recycling/ Disposal Method
Concrete Wastes (solids)	General solid waste (non-putrescible)	5m3	10m3 bins	Reused in temporary works or site levelling where practicable, or sent off-site to recycling
Liquid wastes from concrete washout	Liquid waste	10m3	Dedicated washout facility	Solids (slurry) to recycling On-site recycling of waste water if possible.
Scrap metal	General solid waste (non-putrescible)	<5m3	10m3 bins	Off-site recycling
Organic food scraps	General solid waste (putrescible)	<5m3	240L bins	On-site compost heap/bin or Off-site to landfill with other non-recyclable municipal waste
Food packaging	General solid waste (non-putrescible)	<5m3	240L bins	Off-site to landfill
Cans/Bottles	General solid waste (non-putrescible)	<5m3	240L bins	Off-site recycling
Paper and/or other office based recyclables	General solid waste (non-putrescible)	<5m3	240L bins	Off-site recycling
Asphalt	General solid waste (non-putrescible)	10-20m3	10m3 bins	Reused in temporary works or site levelling where practicable, or sent off-site for recycling
Green waste	General solid waste (putrescible)	30-50m3	Wood chipped (trucks)	Green waste to be chipped and utilized on-site
Timber	General solid waste (non-putrescible)	<5m3	10m3 bins	Off-site for recycling
Excavated spoil	General solid waste (putrescible/non-putrescible)	30,000m3	Stockpiles	To be reused onsite exemption or license, or disposal to landfill
Liquid wastes from wet trades (paint, dry walls, renderers, tilers etc)	Liquid waste	<1m3	Dedicated washout device/plant/facility Treatment system.	Off-site to landfill
Sediment controls	General solid waste (non-putrescible)	<5m3	Stored on site	Reuse controls where possible on other sites

Waste Type	Waste Classification	Estimated Volume	Segregation Areas /	
			Containers Commonly Available	Re-use/Recycling/ Disposal Method
Sediment build up behind erosion and sediment control structures	General solid waste (non-putrescible)	<5m3	Keep behind control structures until they are at capacity	Respread on site, unless obvious contamination with hydrocarbons or other chemicals evident by sight
Drums and containers (empty and containing residue)	General solid waste (non-putrescible)	<1m3	Stored in bunded areas.	Taken off-site by licensed contractor for suitable rinsing and disposal at licensed landfill
Waste oil, grease, lubricants	General solid waste (non-putrescible)	<1m3	Sealed drums/containers in bunded area	Off-site recycling by licensed oil recycler
Oily rags and filters	General solid waste (non-putrescible)	<1m3	200L (or thereabouts) bins	Off-site to landfill
Used spill management materials such as absorbent pads/booms, used absorbent materials, used to mop up oil spills/ contaminated dirt from dripping machinery or other hydrocarbon/chemical sources	Hazardous waste	<1m3	Bins and/or tnaks suitably bunded	Taken off-site to landfill
Printer cartridges	General solid waste (non-putrescible)	<1m3	Bins provided (capacity 20-25 standard cartridges)	Off-site recycling
Waste Generated through MOD 1 rail siding refurbishment package				
Rail	General solid waste (non-putrescible)	5,600m	Rail storage area	Good rail to be identified and marked for future use
Excavated spoil	General solid waste (putrescible/ non-putrescible)	23,000m ³	Stockpiles	Utilise as much as possible for fill material during construction. Any waste spoil to be stockpiled on site with adequate erosion control
Timber sleepers	General solid waste (non-putrescible)	3,800	Sleeper storage area	Good and bad sleepers are to be stockpiled separately. Good timber sleepers to be used for future works.

Waste Type	Waste Classification	Estimated Volume	Segregation Areas /	Re-use/Recycling/ Disposal Method
			Containers Commonly Available	
Concrete sleepers	General solid waste (non-putrescible)	600	Sleeper storage area	All concret sleepers taken out of existing track to be reused

4.3. Impacts

The impacts associated with construction waste management include:

- Generation of domestic waste from construction personnel and ancillary facilities,
- Generation of spoil from surface excavation works,
- Generation of hazardous waste from demolition and excavation activities,
- Consumption of non-renewable resources such as energy, diesel and other chemicals, and
- Greenhouse gas emissions due to consumption of energy or fuels from non-renewable resources.

These impacts will be managed through the implementation of the mitigation measures detailed in Section 6.

5. Waste management

5.1. Waste management hierarchy

To achieve the waste management outcomes, the Project will adopt waste management strategies in accordance with the waste hierarchy and requirements identified in the CoC, EIS, Response to Submissions, *NSW Waste Avoidance and Resource Recovery Act 2001* (WARR Act) and the *NSW Waste Avoidance and Resource Recovery Strategy 2014-21* (EPA 2014).

Waste generated during construction of the Project will be managed in accordance with the preferences listed in Figure 2 below.

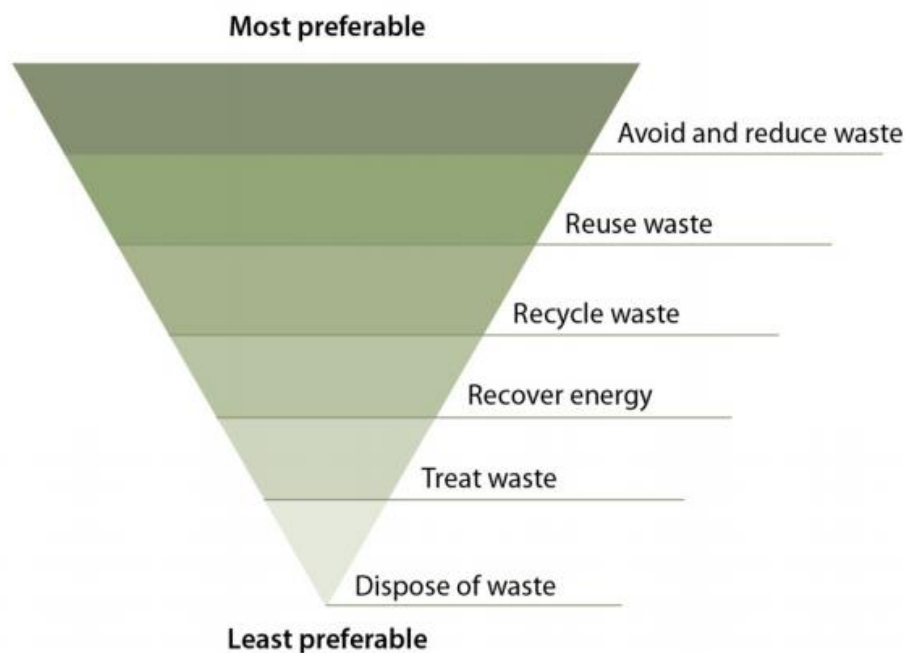


Figure 2 Waste management hierarchy (*NSW Waste Avoidance and Resource Recovery Strategy 2014-21* (EPA,2014))

5.2. Avoid and reduce waste

Primarily the Project will minimise the production of waste materials in the construction phase through avoidance and reduction of waste. The following measures will be implemented to avoid and reduce waste;

- Ensuring that the necessary planning is undertaken to enable efficient management of the delivery and storage of materials, to avoid spoilage of materials,
- Wherever possible, establishing agreements with suppliers for 'take back' arrangements for packaging/pallets/drums,
- Procurement of materials with minimal packaging, or are pre-cut or fabricated, indicative of reduced waste generation (e.g. modular building with components pre-fabricated)
- Ensuring correct types and quantities of materials are ordered, essentially avoiding excess material waste through quantity take offs from detailed design(s) and/or specification(s),

- Materials which do not have significant 'cradle to grave' waste and environmental impacts will be used to ensure waste is managed sustainably throughout the construction lifecycle (e.g. elimination of concrete walls and use of cladding enclosure for wash bay facility)
- Ensure that stored supplies are properly protected from the weather, and
- All major subcontractors will be required to provide details on their waste minimisation measures

5.3. Reuse

Where possible, the Company will ensure materials are re-used, preferably on site, or offsite for effective waste management. This will be implemented through:

- Identification of waste streams and products with opportunities for re-use
- Implementation of systems for segregation and storage of re-usable items or materials (e.g. stockpiles of excavated material)
- Identify potential use of re-usable items through effective communication with stakeholders followed by contract management procedures to enable re-use

All waste materials intended for re use or to remain on site will be validated through the waste classification process in Figure 1.

5.4. Recycling

The Company will identify recyclable waste products that will be produced on site and thereafter: re-used, preferably on site, or offsite for effective waste management. This will be implemented through:

- Waste separation and segregation of recyclable material(s)
 - Bins to be provided on site with appropriate colouring for respective waste
 - Bins to be located on site to maximise recovery of reusable/recyclable materials
 - Clear signage to ensure separation of recyclable materials
- Processing of material for recycling either on-site or offsite
- Maximise the usage of recycled products in asphalt and concrete production
- Recycled pavement materials will be utilised in the pavement construction

5.5. Waste handling and storage

Where waste is required to be handled and stored onsite prior to either onsite reuse or offsite recycling/disposal, it will be stored in accordance with Clause 42 (Schedule 1) of the POEO Act.

The following handling and storage measures will apply:

- Spoil, topsoil and mulch are to be stockpiled on site in allocated areas, and mitigation measures for dust control and surface water management will be implemented as per this plan and the CSWMSP.
- Liquid wastes are to be stored in appropriate containers in bunded areas until transported off site. Bunded areas will have the capacity to hold 110 per cent of the liquid waste volume for bulk storage or 120 per cent of the volume of the largest container for smaller packaged storage,
- The excavation, handling, management and temporary storage of asbestos containing material will be undertaken in accordance with procedures detailed in the Intermin Environmental Management

Plan (Annexure G of CEMP), Remediation Action Plan (Annexure J of the CEMP), Unexpected Contamination Procedure (Appendix L of CEMP) and associated Communications Procedure. Asbestos waste will be disposed of off site by authorised contractors at a licenced facility and the NSW EPA WasteLocate system will be used to track asbestos waste.

- It is unlikely acid sulphate soils will be identified onsite. If identified acid sulfate soils (ASS) is identified it will be managed in accordance with the Unexpected Contamination Procedure contained in Annexure L of the CEMP,
- The excavation, handling and temporary storage of waste material that is identified as being contaminated will be undertaken in accordance with the procedures detailed in the CEMP and the Work Health and Safety Regulation 2001 (NSW). Contaminated material will be stockpiled and stored in a suitable hardstand or lined areas and segregated from uncontaminated material onsite to prevent cross-contamination. Contaminated material will be disposed of off site by authorised contractors at a licenced facility,
- Hazardous substances, dangerous goods and hazardous materials will not be stored on site except in small volumes within a well-ventilated, area with cover. The store will have a concrete sealed or equivalent impervious floor with bunding, isolated drainage (if required), signage and be secured,
- Hazardous waste will be managed by appropriately qualified and licensed contractors, in accordance with the requirements of the *Environmentally Hazardous Chemicals Act 1985* and the EPA waste disposal guidelines,
- Recyclable and non-recyclable wastes will be stored in appropriately covered receptacles (e.g. bins or skips) on site and contractors will be commissioned to regularly remove/empty the bins to approved disposal or recycling facilities, and
- All waste generated during construction will be secured and maintained within designated waste storage areas at all times and will not leave the site onto neighbouring public or private properties.

5.6. Disposal

Wastes and spoil that are unable to be reused or recycled on site will be disposed of offsite to an appropriately licenced waste management facility or spoil management site following classification. The disposal of any waste including spoil generated from the construction of the Project is to be in accordance with the POEO Act and the WARR Act.

Demolition and building waste shall be transported and tracked as per legislation requirements, becoming landfill. Metals shall be transported to a metal recycler for processing into reusable materials. Concrete and masonry waste generated from the works shall be transported to a concrete recycler for processing and re-used as other materials. All combustible materials shall be transported to a timber recycling depot also for processing into further usable materials.

Any excavated materials that are classified as restricted solid or hazardous waste shall be tracked prior to transporting to an appropriately licensed waste facility by obtaining a "consignment approval" from the receiving facility and completing a waste transport certificate.

The client shall be notified and provided with the completed waste tracking documentation within 48 hours of the restricted or hazardous waste being disposed of.

The discovery of unexpected contaminated land or asbestos will be managed and disposed of in accordance with the Unexpected Finds Protocol for Contamination and Associated Communications Procedure in the CEMP. Any contaminated waste will be handled, separated, contained, managed and disposed of to prevent

migration and further contamination. Where any material for disposal off-site is identified as contaminated, the disposal location and results of testing will be submitted to the Planning Secretary prior to its removal from site.

5.7. Waste Tracking

Off-site waste will be tracked in accordance with the EPA online waste tracking system. The NSW EPA Waste Locate system will be used to track asbestos waste and waste tyres, whilst the online waste tracking system developed by EPA will be utilised to track all other trackable waste.

In addition to this, a waste tracking and disposal form will be used to track each truckload of waste detailing;

- Destination
- Material type
- Material classification
- Date
- Time
- Truck identification

This form is located in Annexure C and will be the responsibility of the Environmental Manager on site.

All waste generated during construction that is to be disposed of will be classified in accordance with the Waste Classification Guidelines (EPA 2014), with appropriate records and disposal dockets retained for audit purposes. In accordance with CoC 30 the quantities of each waste type generated during construction, and the proposed reuse, recycling and disposal locations for the duration of construction are to be recorded in a Waste Tracking Register.

6. Environmental Control Measures

Table 4 Environmental Control Measures

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Reference	Evidence
W1	Waste will be segregated between recyclable and non-recyclable waste. Wherever possible, packaging will be avoided or minimised. Waste will not leave the site or be stored on neighbouring public or private properties (including public car spaces).	Site Inspection Record SWI 152 - Environmental Management Waste And Recycling	Construction	Environment Manager/ Supervisor	C27	Site Insepction Records
W2	All waste generated during construction will be assessed, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).	Waste Disposal Form	Construction	Environment Manager	C28	Waste Disposal Form, Delivery Dockets
W3	Concrete waste and rinse water will be retained in the washout container and allowed to evaporate, leaving only the hardened cementitious solids to be recycled.	SWMS	Prior to Construction	Environment Manager/ Supervisor	C29	SWMS
W4	A Waste Tracking Register will be maintained until the construction completion date, to record the type, amount and location of waste reused, recycled, stockpiled and disposed of.	Waste Tracking Register	Construction	Environment Manager/ Supervisor	C30	Waste Tracking Register
W5	Hazardous substances, dangerous goods and hazardous materials will not be stored on site except in small volumes within a well-ventilated, area with cover. The store will have a concrete sealed or equivalent impervious floor with bunding, isolated drainage (if required), signage and be secured.	SWI 123 – Handling Hazardous Substances	Construction	Environment Manager	C31	Site Inspection Records
W6	All staff and subcontractors will receive a site induction and ongoing toolbox talks that will detail waste and resource management measures (including the waste management hierarchy).	Induction	Prior to construction	Environment Manager	RMMM, best practice	Induction Records
W7	Waste management measures from this plan will be included in relevant Safe Work Method Statements (SWMS) to be developed prior to the commencement of specific activities.	SWMS	Prior to Construction	Supervisor	Best practice	SWMS

CONSTRUCTION WASTE MANAGEMENT SUB-PLAN

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Reference	Evidence
W8	Where possible and fit for purpose, spoil will be beneficially reused as part of the Project before alternative spoil disposal options are pursued. Spoil reuse opportunities will be reviewed and updated during detailed design and Project construction.	N/A	Construction	Environment Manager/ Supervisor	Best practice	Daily Pre-start
W9	The discovery of unexpected contaminated land or asbestos will be managed and disposed of in accordance with the Unexpected Finds Protocol for Contamination and Associated Communications Procedure in the CEMP. Any contaminated waste will be handled, separated, contained, managed and disposed of to prevent migration and further contamination.	Unexpected Finds Protocol for Contamination and Associated Communications Procedure SWI 0300 – Asbestos Management – Discovery of Asbestos	Prior to Construction	Environment Manager/ Supervisor	Best practice	Unexpected Finds Protocol for Contamination and Associated Communications Procedure
W10	Where practicable construction water will either be reused on site wherever feasible and opportunities for the reuse of treated water would be considered in preference to disposal as liquid waste.	Waste Tracking Register	Construction	Environment Manager/ Supervisor	Best practice	Waste Tracking Register
W11	Any servicing of plant and equipment will be performed in accordance with a risk assessment and within an appropriate onsite servicing area supported by immediately accessible spill controls and waste storage. Maintenance records will be readily available for inspection.	Plant risk assessment	Construction	Environment Manager/ Supervisor	Best practice	Plant risk assessment, plant maintenance records
W12	The client shall be notified and provided with the completed waste tracking documentation within 48 hours of the restricted or hazardous waste being disposed of.	Waste Tracking Register Notification	Construction	Environment Manager/ Supervisor	Best practice	Waste Tracking Register
W13	Where any material identified as contaminated is to be disposed off-site, the disposal location and results of testing will be submitted to the Planning Secretary prior to its removal from the site.	Testing results Disposal location	Construction	Environment Manager	CoC B6	Waste Tracking Register

CONSTRUCTION WASTE MANAGEMENT SUB-PLAN

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Reference	Evidence
W14	Early identification and reporting of hazardous waste. Reporting of any suspicious activities o involved stakeholders (waste generator, transporter, or receiver) to including handling waste unlawfully or illegally dumping waste through the Environment Line 131 555.	Testing results	Construction	Environment Manager	MOD 1	Reporting
W15	Ensure hazardous waste is transported to a place that can be lawfully accepted under Section 143 of the Protection of the Environment Operations Act 1997. Keep accurate written records of hazardous waste transport such as: <ul style="list-style-type: none"> Who transported the waste (company name, ABN, vehicle registration and driver details, date and time of transport, description of waste), Copies of waste dockets/receipts from the waste facility (date and time of delivery name and address of the facility, its BN, contact person). 	Waste tracking register	Construction	Environment Manager	MOD 1	Waste tracking records

7. Compliance Management

7.1. Roles and Responsibilities

The McMahon team's organisational structure and overall roles and responsibilities are outlined in Section 4 of the CEMP. Specific responsibilities for the implementation of environmental controls are detailed in Section 6 of this Plan.

7.2. Training

All personnel, including employees, contractors and utility staff working on site will undergo site induction training relating to waste management issues. The induction training will address elements related to waste management including:

- Existence and requirements of this Sub-plan,
- Existence and requirements of other management plans and guidelines such as the Unexpected Contamination and Associated Communications Procedure,
- Relevant legislation and guidelines,
- Roles and responsibilities for waste management,
- Incident response, management and reporting,
- Waste reporting requirements,
- Requirements of the waste hierarchy,
- Waste/recycle storage requirements,
- Energy and resource use efficiency best practices, and
- Expectations for targets relevant to waste and resource management.

Targeted training in the form of toolbox talks or specific training will also be provided to personnel with a key role in waste management.

Signage will also be placed around the site to ensure all staff and contractors are aware of waste storage areas of the site.

Further details regarding staff induction and training are outlined in Section 5.1 of the CEMP.

7.3. Monitoring and Inspections

Compliance with the requirements of this WMP, its implementation and effectiveness will be monitored through:

- Regular inspections of worksite and activities,
- McMahon Environmental Inspections which occur weekly (or more depending on works/weather conditions),
- Compliance Tracking Report (6 monthly).

Requirements and responsibilities in relation to inspections are documented in Section 9 of the CEMP. Regular monitoring and inspections will be carried out during construction in accordance with Section 9 of

the CEMP. Inspection and monitoring requirements relevant to waste management for the Project are identified in Table 5.

Table 5 Inspection and monitoring requirements relevant to waste management

Item	Frequency	Standards	Records	Responsibility
Environment site inspections including traffic and parking arrangements, air quality, erosion and sediment controls, new / modified hazards / risks	Weekly	Weekly Environmental Inspection Checklist	Completed inspection checklist	Environment Manager
Plant / equipment inspections including maintenance and emissions	Regularly or in accordance with manufacturer's specifications	POEO Act	Plant and vehicle inspection logs	Labourer/ Supervisor
Pre and post rainfall inspections	Prior to and following rainfall events >20mm	Pre and post Rainfall inspection checklist	Completed inspection checklist	Environment Manager

7.4. Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this Plan, CoC, RMMs and other relevant approvals, licenses and guidelines.

Audit requirements are detailed in Section 13 of the CEMP.

7.6. Reporting

Reporting requirements are documented in Section 12 and 13 of the CEMP.

8. Review and Improvement

8.1. Corrective and Preventative Actions

Corrective and preventative actions that will be applied to this plan are outlined in Section 15 of the CEMP.

8.2. Review and Revision

The review and revision process for the CEMP and sub-plans (including this plan) is outlined in Section 16 of the CEMP.

Annexure A Other Conditions of Consent relevant to this Plan

Table 6 Other Conditions of Consent relevant to this Plan

CoC No.	Requirement	Document Reference																																				
A2	<p>The development may only be carried out:</p> <p>(a) in compliance with the conditions of this consent;</p> <p>(b) in accordance with all written directions of the Planning Secretary;</p> <p>(c) generally in accordance with the EIS and Response to Submissions;</p> <p>(d) in accordance with the Development Layout in Appendix 1;</p> <p>(e) in accordance with the revised management and mitigation measures in Appendix 3;</p> <p>(f) in accordance with the approved plans in the table below:</p> <table><tr><th colspan="4">Architectural Drawings prepared by Kit Handley Architects Pty Ltd</th></tr><tr><th>Dwg No.</th><th>Rev</th><th>Name of Plan</th><th>Date</th></tr><tr><td>A101</td><td>1</td><td>Proposed Site & Roof Plan</td><td>17/04/20</td></tr><tr><td>A102</td><td>1</td><td>Proposed G & L1 Floor Plan</td><td>17/04/20</td></tr><tr><td>A103</td><td>1</td><td>Proposed Electrical Plan</td><td>17/04/20</td></tr><tr><td>A104</td><td>1</td><td>Proposed Elevations</td><td>17/04/20</td></tr><tr><td>A105</td><td>1</td><td>Proposed Elevation & Sections</td><td>17/04/20</td></tr><tr><td>A106</td><td>1</td><td>Proposed Group 1 Furniture Plans</td><td>17/04/20</td></tr><tr><td>A107</td><td>1</td><td>Proposed Group 2 & 3 FF&E</td><td>17/04/20</td></tr></table> <p>(g) in accordance with modification application SSD-7308-Mod-2 and supporting documentation;</p> <p>(h) in accordance with modification application SSD-7308-Mod-3 and supporting documentation;</p> <p>(i) in accordance with modification application SSD-7308-Mod-4 and supporting documentation; <u>and</u></p> <p><u>(j) in accordance with modification application SSD-7308-Mod-1 and supporting documentation.</u></p>	Architectural Drawings prepared by Kit Handley Architects Pty Ltd				Dwg No.	Rev	Name of Plan	Date	A101	1	Proposed Site & Roof Plan	17/04/20	A102	1	Proposed G & L1 Floor Plan	17/04/20	A103	1	Proposed Electrical Plan	17/04/20	A104	1	Proposed Elevations	17/04/20	A105	1	Proposed Elevation & Sections	17/04/20	A106	1	Proposed Group 1 Furniture Plans	17/04/20	A107	1	Proposed Group 2 & 3 FF&E	17/04/20	Section 2.1
Architectural Drawings prepared by Kit Handley Architects Pty Ltd																																						
Dwg No.	Rev	Name of Plan	Date																																			
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A103	1	Proposed Electrical Plan	17/04/20																																			
A104	1	Proposed Elevations	17/04/20																																			
A105	1	Proposed Elevation & Sections	17/04/20																																			
A106	1	Proposed Group 1 Furniture Plans	17/04/20																																			
A107	1	Proposed Group 2 & 3 FF&E	17/04/20																																			
A9	The Applicant must comply with all relevant prescribed conditions of development consent under Part 6, Division 8A of the EP&A Regulation.	Section 3.2																																				
A11	<p>Where conditions of this consent require consultation with an identified party, the Applicant must:</p> <p>a) consult with the relevant party prior to submitting the subject document for information or approval; and</p> <p>b) provide details of the consultation undertaken including:</p> <p>(i) the outcome of that consultation, matters resolved and unresolved; and</p> <p>(ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.</p>	Section 3.4																																				
A20	References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent.	Section 3.1																																				

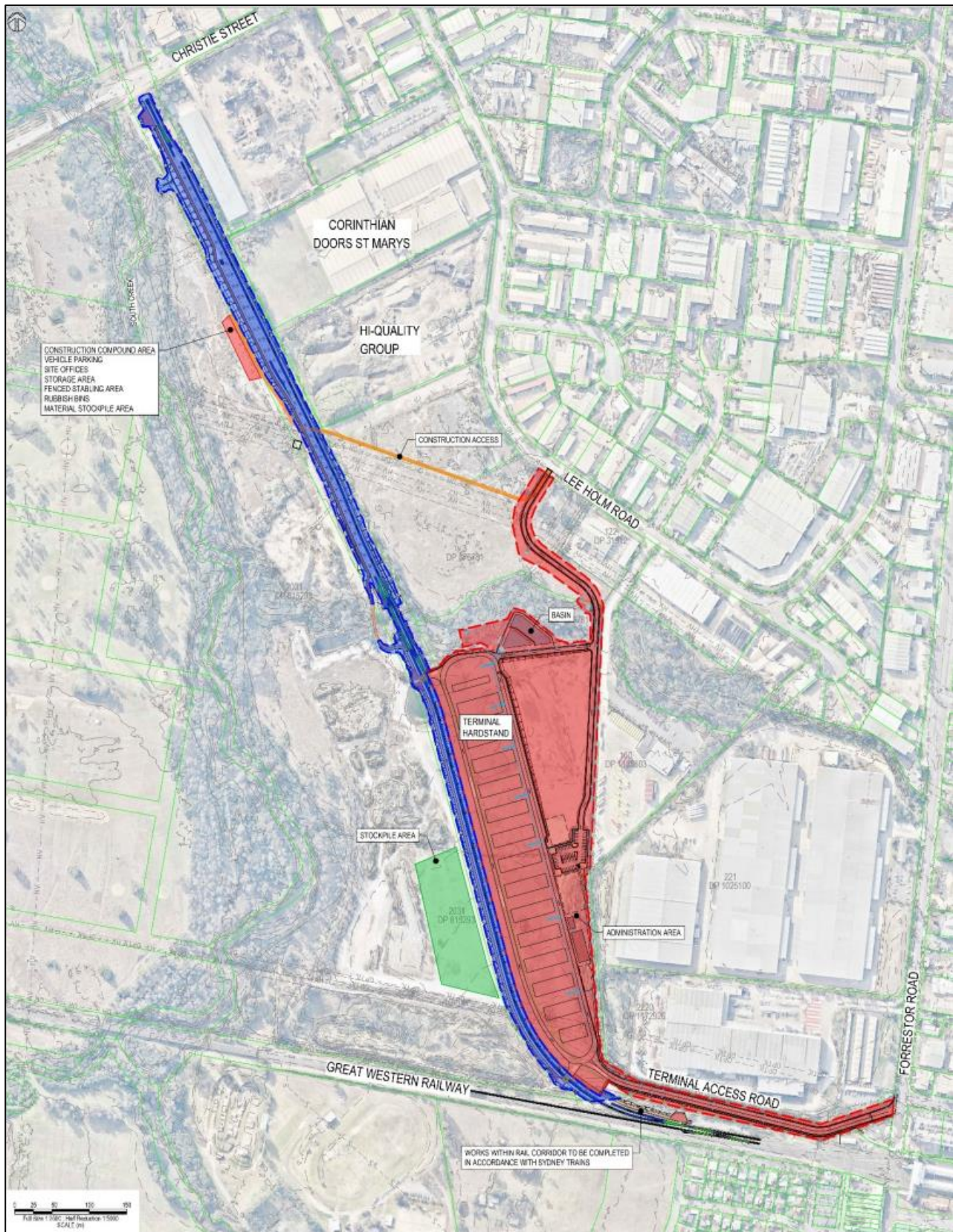
A21	Consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.	Section Error! Reference source not found.
A22	Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, Site audit report and independent auditing.	Section 7.3 Section 7.4 Section 7.5
A24	The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Section 7.2
B10	Management plans required under this consent must be prepared in accordance with relevant guidelines, including but not limited to the <i>Environmental Management Plan Guideline: Guideline for Infrastructure Projects</i> (DPIE, April 2020).	Section 1.2
C8	The Applicant must carry out the construction of the development in accordance with the most recent version of the approved CEMP (including Sub-Plans).	Section Error! Reference source not found.

Annexure B Revised Management and Mitigation Measures relevant to this plan

Table 7 Revised Management and Mitigation Measures relevant to this plan

Requirement	Updated Measures	Application	Document Reference
1. General Project Commitments			
All practical and reasonable measures to prevent and/or mitigate significant adverse impacts on the environmental will be implemented.	No change.	Construction and Operation	Section 6
All practical and reasonable measures to protect human health and safety for staff, visitors, contractors, construction workers and the general public will be implemented.	No change.	Construction and Operation	Section 6
2. General Management			
Inductions of contractors and construction workers will include management and mitigation measures outlined in this Table where relevant.	No change.	Construction	Section 7.2
Management during the construction cycle will monitor potential environmental impacts (i.e. noise, dust, Aboriginal and non-Aboriginal heritage, erosion and sediment control, etc.) to ensure impacts on the environment are minimised.	No change.	Construction	Section 5
3. Waste Management			
<p>A Construction Waste Management Plan is to be prepared by the contractor prior to commencing construction works and will include waste management requirements on the following:</p> <ul style="list-style-type: none"> • roles and accountabilities • review and amendment • waste management objectives • waste mitigation measures • waste containment and storage • disposal methods 	No change.	Pre-construction	This Plan

Annexure C Site Location and Layout



Annexure D Waste Disposal Form

Date	Transport Company Name/Driver's Name	Waste Classification	Weight/m3	Waste Originator Name/Address	Waste Reciever License Number	Disposal Docket No.

