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COMMERCIAL FACILITY, CARRINGTON PRELIMINARY CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

COMMERCIAL FACILITY, CARRINGTON PRELIMINARY CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

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Project no. 318001066
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Description The report describes environmental management approaches to mitigate

environmental or amenity impacts from the commercial development at 65

Denison Street and 46 Fitzroy Street, Carrington

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Preliminary Waste Management Plan

1. INTRODUCTION

Ramboll Australia Pty Ltd (Ramboll) was commissioned by Port of Newcastle Operations Pty Limited as Trustee for the Port of Newcastle Operations Trust (Port of Newcastle) to prepare a preliminary construction environmental management plan (CEMP) for a proposed four-storey commercial development (the project) at Lot 33 DP 1078910 65 Denison Street and 46 Fitzroy Street, Carrington New South Wales (NSW) (the site). A site locality plan is presented as **Figure 1** and a site features plan is presented as **Figure 2**, **Appendix 1**.

1.1 Purpose

The purpose of this preliminary CEMP is to provide strategies to manage and control the environmental aspects of the project during pre-construction and construction. It also provides the overall framework for the system and procedures to ensure environmental impact is minimised and legislative requirements are fulfilled. This includes the preparation of environmental sub-plans, which detail how environmental issues are managed through construction.

This preliminary CEMP has been prepared in general accordance with the relevant legislation and industry standards, with reference to the NSW Environment Protection Authority (EPA), Environmental Planning and Assessment Act 1979 (EP&A Act), Environmental Planning and Assessment Regulation 2000 (EP&A Regulations), Protection of the Environment Operations Act 1997 (PoEO Act) and Department of Infrastructure, Planning and Natural Resources Guideline for preparation of environmental management plans.

This preliminary CEMP and sub plans are preliminary only and will need to be revised to comply with the Conditions of Approval for the project with consideration to concurrence reports form other agencies and any other approval, licence or permit required.

1.2 Site Description

The site is located at 65 Denison Street and 46 Fitzroy Street, Carrington, which comprises one lot being Lot 33 in Deposited Plan (DP) 1078910. Site details are summarised in **Table 1-1**.

Table 1-1: Site Identification

Information	Description
Street Address:	46 Fitzroy Street, Newcastle
Identifier:	Lot 33 DP1078910
Local Government:	City of Newcastle
Owner:	Port of Newcastle Operations Pty Limited as Trustee for the Port of Newcastle Operations Trust
Current Site Use:	Vacant land

1.3 Current Site Use

The site is a largely vacant 8,684 square metre parcel of flat land with a concrete slab and security fencing remaining from previous development. The site is bounded by Denison Street to the east and Fitzroy Street to the west. Marsden Street, a gravel road, sits behind the residences on the western side of Denison Street and finishes immediately north of the site. However, access to the site from this road is restricted by a fence.

Three trees are located within the site. There are 26 trees situated along the south-western boundary on the adjoining neighbouring commercial property, and five trees within the road verge along the Fitzroy Street boundary of the site. The remainder of the site is covered by a remnant concrete slab and areas of maintained grass.

A powerline easement traverses the Fitzroy Street frontage of the site including three power poles. A Hunter Water sewer line runs along the northern boundary. There is a Hunter Water water line located in both Fitzroy Street and Denison Street and an abandoned water line entering the site from the north east corner that terminates at approximately the centre of the site.

Surrounding land use includes:

- North: the Hi-Vis Group sign shop is situated north of the site on Fitzroy Street, and a residential dwelling is situated north of the site on Denison Street
- East: residential development is east of Denison Street and is bounded by Smart Street to the south
- South: the Thales Newcastle building, which is a ship repair, maintenance and dockyard management facility. Development further south of the site includes a mix of residential and industrial development
- West: development along Fitzroy Street, west of the site, includes a mix of light industrial and commercial premises.

Throsby Creek is located approximately 150m west of the site, separated by the industrial development along Fitzroy Street. It is a highly modified drainage network that collects stormwater from the major part of central Newcastle and conveys it to Newcastle Harbour (City of Newcastle, 2004).

Historical aerial photographs indicate the site was reclaimed prior to 1954 and was predominantly used for warehousing and commercial facilities. From historical photographs, it appears these facilities have evolved over the years from a series of shed like structures in earlier years (at least from 1954 to 1966), to one large shed (around 1975 to 1981), to two distinct shed/warehouse structures (from around 1987 to 2017) (GHD, 2021).

The warehouses were demolished in January 2018 and all infrastructure was removed (GHD, 2021). A concrete slab remains at the site (eastern portion of the site).

1.3.1 Geotechnical observations

The site is within a mine subsidence district and as such a referral to the Subsidence Advisory NSW is required under the *Coal Mine Subsidence Compensation Act 2017*.

A geotechnical and mine subsidence assessment has been undertaken and recommendations are included for designing for residual subsidence. Final design for mine subsidence would be in accordance with the consultation and approval conditions of Subsidence Advisory NSW.

1.3.2 Soil Observations

The site has not been reported as a contaminated site on the NSW Environment Protection Authority Public Register (NSW Environment Proection Authority, 2021).

A detailed contamination assessment of the site was undertaken by GHD. The assessment concluded that the site is suitable for the project (GHD, 2021). Soil results were below the adopted human health assessment criteria for commercial/industrial land use. Soil was analysed

for presence/absence of asbestos at seven locations. No asbestos was identified in soil across the site.

A hot spot was identified in the eastern portion of the site (BH4). Contamination in this hotspot is limited to the upper 0.5 metres of the soil and the hotspot is not considered to be an issue given the commercial/industrial land use proposed for the site.

The type and extent of controls described within this CEMP, in particular the waste management of any material required to be taken off site, may require refinement based on outcomes of detailed design and construction methodology and would be incorporated into the final Head Contractor's CEMP.

1.4 Vegetation and trees

An Arboricultural Impact Assessment has been prepared for the 34 trees located on and adjoining the site at 46 Fitzroy St, Carrington. Of the 34 trees, 27 trees are recommended for preservation. These are subject to levels of encroachment ranging from nil to 43 per cent of the respective Tree Protection Zones and up to 28 per cent of the Structural Root Zones. To facilitate their retention the building has been designed with a setback of 2.5 metres along the southern boundary and includes the use of permeable paving within the trees' protection zones. Management measures for construction are outlined in **Section 3.**

1.5 Operation of the CEMP

The requirements of this CEMP apply to the construction activities at 46 Fitzroy Street Carrington. This CEMP and sub plans are preliminary only and will need to be revised to comply with the Conditions of Approval for the project. The Head Contractor will be responsible for preparing a detailed CEMP consistent with this plan as outlined in **Table 2-1**.

The detailed CEMP will remain in place until construction is completed and an occupation certificate is issued for the commercial building.

2. MANAGEMENT FRAMEWORK

2.1 Roles and Responsibilities

All site personnel (including Port of Newcastle and their contractors) have responsibility for protecting human health and the environment. The key roles and responsibilities for this preliminary CEMP are presented in **Table 2-1**. **Table 2-1** forms a preliminary list of responsibilities that may be revised in the Head contractor's detailed CEMP. Port of Newcastle is ultimately responsible for developing a process to ensure the CEMP is implemented for works on site.

Table 2-1: Roles and Responsibilities

Role	Responsibility
Port of Newcastle Project Manager	 Maintain ultimate responsibility for the implementation of the detailed CEMP Ensure any site workers and contractors engaged in activities at the site are inducted on the requirements of the detailed CEMP To engage contractors and consultants as required for construction Prepare and implement a community communications strategy and a complaints and enquiries procedure Review effectiveness of the CEMP following any incident or any other event that suggests the CEMP is ineffective Track all management of the revisions and amendments, and ensure amendments are communicated to all stakeholders Undertake corrective actions to rectify non-conformances or complaints (in conjunction with WHS Representative) Undertake all stakeholder management including liaison with regulatory bodies and follow-up of all external complaints
Head Contractor/Site Manager	 Preparation of a detailed and project specific CEMP in accordance with project approval, conditions of consent, this preliminary CEMP and any other relevant authority requirements or policies To engage contractors and consultants as required for construction Ensure any site workers, contractors and consultants engaged in activities at the site are inducted on the requirements of the detailed CEMP To ensure compliance to the requirements of the detailed CEMP through surveillance and monitoring of contractors completing construction Review effectiveness of the CEMP following any incident or any other event that suggests the CEMP is ineffective Responsible for revisions and amendments to the CEMP if site conditions change To implement controls to mitigate risks associated with exposure of members of the public to hazards associated with the construction
Contractor Work Health Safety and Environment (WHSE) Representative	 Implement detailed CEMP controls during all construction work at the site Undertake monitoring and reporting requirements outlined in the detailed CEMP Immediate reporting of all non-conformances or complaints or concerns regarding the implementation of the detailed CEMP Undertake corrective actions to rectify non-conformances or complaints (in conjunction with Site Supervisor) Provide advice on environmental issues and incidents as necessary Update the detailed CEMP as necessary

Role	Responsibility
All site personnel	 Implement controls in the detailed CEMP as relevant to their site duties Report any non-conformances with this plan to the Head Contractor's Site Manager

2.2 Legislative and Regulatory Framework

This preliminary CEMP has been prepared to address the requirements of relevant legislation and codes. The key pieces of legislation applicable to this CEMP are:

- 1. Environmental Planning and Assessment Act 1979
- 2. Protection of the Environment Operations Act 1997
- 3. Protection of the Environment Operations (Waste) Regulation 2014
- 4. Contaminated Land Management Act 1997

The key codes of practice and guidelines are:

- 1. Department of Infrastructure, Planning and Natural Resources *Guideline for preparation of environmental management plans*
- 2. Managing Urban Stormwater: Soils and Construction Volume 1, 4th Edition (known as the Bluebook)

2.3 Periodic Review

The CEMP must be reviewed annually from date of issue or when:

- 1. requested by a representative from Port of Newcastle
- 2. changes to land use occur

2.4 Non-Compliance and Corrective Actions

Where non-compliances and/or corrective actions are identified these must be communicated to the Head Contractor's Site Manager and the PoN Project Manager. Corrective actions should be administered by the Head Contractor's Site Manager. Where a non-compliance with controls listed in **Table 3-1** is identified, corrective action must be implemented immediately.

2.5 Complaints

Community complaints are considered environmental incidents and are investigated and documented accordingly.

Investigations and management will be conducted in accordance with **Table 2-1**, including provision of feedback to the complainant. Corrective actions will be documented and regularly reviewed until completion and signed off.

2.6 Record Keeping

The Head Contractor shall keep records of the inductions, monitoring and inspections as required in **Section 4**, corrective actions and reports prepared for the Site. These records should be evaluated and used for completing the review of the CEMP.

3. MANAGEMENT ACTIVITIES

3.1 Construction and Environmental management measures

A detailed CEMP will be prepared by the Head Contractor post DA approval to align with the specific requirements of the consent. The overarching principles that the Head Contractor would adhere to are provided in **Table 3-1**.

Table 3-1: General environmental management Measures

Category	General Requirements
Erosion and sediment control	 As a minimum, erosion and sediment controls for the Works shall be designed, installed and maintained in accordance with the requirements of Managing Urban Stormwater: Soils and Construction "The Blue Book" 2004 (4th edition) and Volume 2A: Installation of Services These measures would be documented in a Sediment and Erosion Control Plan as part of the Head Contractor's detailed CEMP The erosion and sediment control measures would include sediment fencing placed on the perimeter of any earthworks areas. Sediment controls will be installed at stormwater grate inlets immediately adjacent to the site Should external surface run-off flow into works areas, it may need to be diverted to reduce potential for erosion and sediment transportation. All erosion and sediment control measures will be checked weekly and after heavy rainfall and maintained/ repaired if required
Hot spot management	 In-situ waste classification undertaken at the site reported soils on the Site as General Solid Waste with the exception of soils around BH04 (on the eastern portion). Contamination in this hotspot is limited to the upper 0.5 metres of the soil and the hotspot is not considered to be an issue given the intended commercial land use proposed for the site. Further sampling may be required in this area to confirm and possibly reduce this waste classification if soils are required to be removed from site. The Head Contractor's CEMP will detail the management measures required for material excavated within this area if required following detailed design and development of a construction methodology.
Stockpile management	 All material stockpiled will have appropriate erosion sediment control devices installed around them Stockpiles will be placed so that any slump of the stockpile will not affect erosion and sediment control measures Materials of different waste classifications would be placed in separate stockpiles with clear signage
Traffic management	 A construction traffic management plan will be prepared by the Head Contractor prior to works commencing on site. This overview of construction traffic impacts associated with construction activity aims to protect the safety of all workers and road users in the vicinity of the construction sites. The key principles are: To identify the need for adequate and compliant traffic management requirements along the surrounding road network

Category	General Requirements
	 To provide for continuous, safe and efficient movement of traffic for general public and construction workers To restrict construction vehicle movements to designated routes to/ from the site and to prioritise these as required: To establish a safe pedestrian environment at all times To maintain current levels of parking amenity within the precinct To inform the Head Contractor and set the ground rules for managing construction traffic. Pedestrian and vehicular passage to and around the site will be maintained, or
	 alternate routes determined where necessary, and be defined by clear signage. Temporary hoarding appropriate to the interaction between pedestrians and construction works (as per WorkCover requirements and Australian Standards) will be constructed to prevent unauthorised access to the Site. These hoardings and fences will be staged to allow access to in-use areas during the Works.
Noise and Vibration	 Construction activities would be undertaken during standard construction hours prescribed under the Interim Construction Noise Guidelines 2009 (Department of Environment and Climate Change 2009) (ICNG) and the Draft Construction Noise Guideline (NSW EPA 2020): 7:00am to 6:00pm Monday to Friday 8:00am to 1:00pm Saturday No construction works on Sunday or public holidays. if hammering is to occur, a hammer no larger than small 300kg (5 to 12t excavator) would be utilised. Vibratory rolling would not exceed the <50 kN (1-2 tonne) specification when in close proximity to the nearest residences.
Vegetation management	 A suitably qualified arborist would be engaged to supervise tree protection measures and works within the tree protection zones of the retained trees Vegetation protection should be in accordance with Australian Standard 4970-2009, Protection of Trees on Development Sites. Where branch pruning works are required, works should be carried out in accordance with Australia Standard AS 4373-2007 Pruning of Amenity Trees and the works are to be undertaken by an experienced and qualified arborist Plant and equipment brought onto site must be cleaned and free of deleterious material, mud and other material that may harbour weed seeds.
Waste management	 The waste management plan (WMP) (refer to Appendix 2) will be implemented All waste generated during construction would be appropriately separated, collected in designated skip bins and removed from site by a licenced contractor on a regular basis for disposal at a licensed facility specific to the waste type.
Community	 The Head Contractor will be required to maintain a community liaison officer for the duration of the project This officer will be contactable by both a mobile phone and email and the contact details will be clearly advertised on site hoardings, community updates.

Category	General Requirements
	 Disruptions to local services will be managed through the process of Disruption Notices. For such stoppages, the disruption notice will describe the applicable works, timetable, issues and contingency plans. Disruption notices may be required between 48 hours and 3 weeks prior to commencing works dependent upon the nature of the works. Community complaints to be dealt with in accordance with Port of Newcastle Complaint Handling Procedure.
Facilities	amenities will be provided on site for construction employees, including portable toilets, portable lunch room, site office and general waste disposal
Administrative controls - Machinery Operators	 Where machinery is floated to site a staging area must be established within a clean area of the site where loading and unloading from the float can safely occur. At completion of works all soil must be removed such that machinery is free of site materials when entering the staging area for loading.

Unexpected finds protocol - Contamination

While asbestos was not identified at the site and an asbestos clearance has been provided by HAZMAT in December 2017, unexpected finds of asbestos may still occur during development (GHD, 2021). These will be managed in accordance with an unexpected finds protocol prepared by the Head Contractor prior to works commencing on site.

In the event that a potential asbestos containing material is encountered works in this area will cease and the protocol will be implemented.

Unexpected finds protocol - Aboriginal Heritage

In the event of the discovery of a potential Aboriginal heritage item within the Site, all works in the vicinity of the item would stop immediately and an archaeologist would be contacted to determine the significance of the object(s) and the appropriate management response. Any confirmed Aboriginal heritage items would be registered on the AHIMS database.

Site Restoration

At the date of completion of the works, the Head Contractor shall remove all plant, machinery, gear, rubbish, temporary offices and structures and disconnect appropriate temporary services including sanitary conveniences, mess rooms, sheds, hoarding, protective covers and coatings.

The contractor will make good any damage to adjoining properties, pathways, pavements, roadways, gutters and fencing caused by the Works.

3.2 Communications and Notifications

The following stakeholders are identified and should be engaged with/notified of site works and controls as appropriate:

- 1. Department of Planning, Industry and Environment
- 2. City of Newcastle Council
- 3. Occupants of commercial and industrial premises and residents and along Denison Street and Fitzroy Street
- 4. Subsidence Advisory NSW
- 5. Hunter Water Corporation (as provider of existing potable water and sewer supply to the site)
- 6. Ausgrid (as the local energy authority for the site)

- 7. Jemena Gas (as the gas distribution authority for the site)
- 8. NBN Co (as the primary communications provider for the site)
- 9. Telstra (as the custodian of an underground communication service running through the site)
- 10. Environment Protection Authority

4. MONITORING AND VERIFICATION RECOMMENDATIONS

Monitoring to determine if the controls described within this plan are implemented will include completion of project reporting forms and project documentation together with required checklists that will be produced by the responsible position prior to construction and in accordance with the development consent. Requirements will be defined in the Head contractor's CEMP.

Monitoring required for the project may include but not be limited to:

- 1. Carrying out regular site inspections to ensure environmental controls and required processes are being implemented effectively and maintained.
- 2. Inspections of erosion and sediment controls will be undertaken regulary, prior to forecast adverse weather and after more than 10mm of rain in a 24 hour period.
- 3. Reporting on the performance and progress of this project must be completed in accordance with the Contract for Works.
- 4. Findings and outcomes from any external and internal inspections are completed as per the requirement set in the detailed CEMP.
- 5. Records of the environmental site inspections and incident investigations are to be retained by managers and supervisors.

5. LIMITATIONS

This document is issued in confidence to Port of Newcastle for the purposes of informing management of risks to construction workers and members of the public associated with the construction of a commercial building at 46 Fitzroy Street Carrington, NSW. It should not be used for any other purpose.

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6. REFERENCES

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 $sources/electricity\#:\sim: text=There\%20 is\%20 no\%20 established\%20 evidence, proximity\%2\ C\%20 causes\%20 any\%20 health\%20 effects. \& text=The\%20 figure\%20 below\%20 shows\%20 a, powerlines\%20 and$

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APPENDIX 1 FIGURES

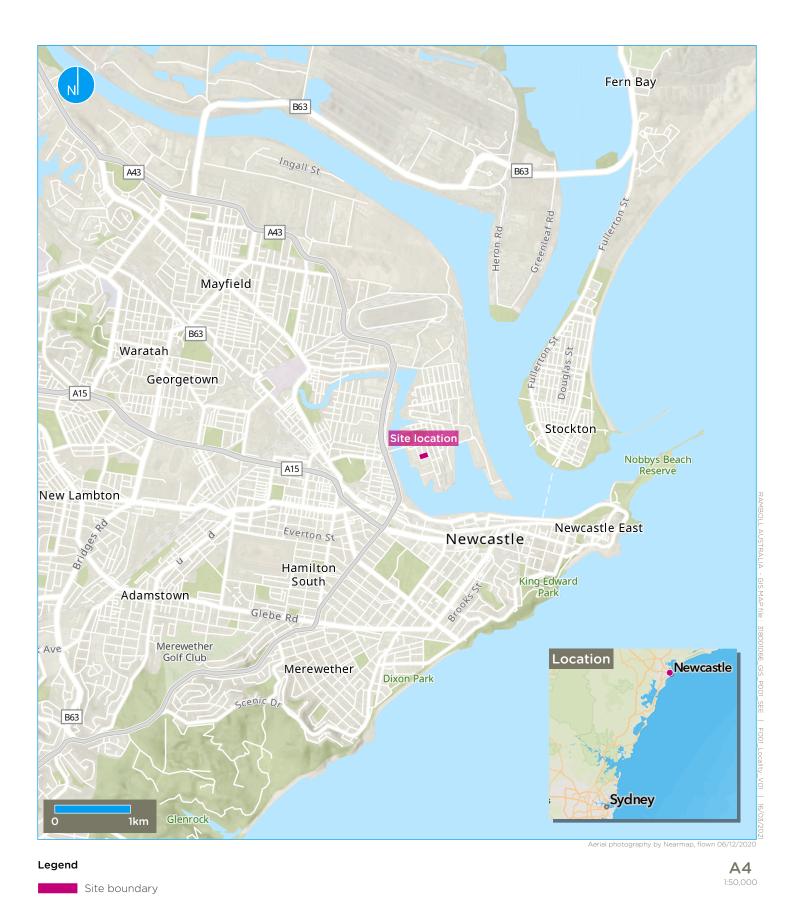
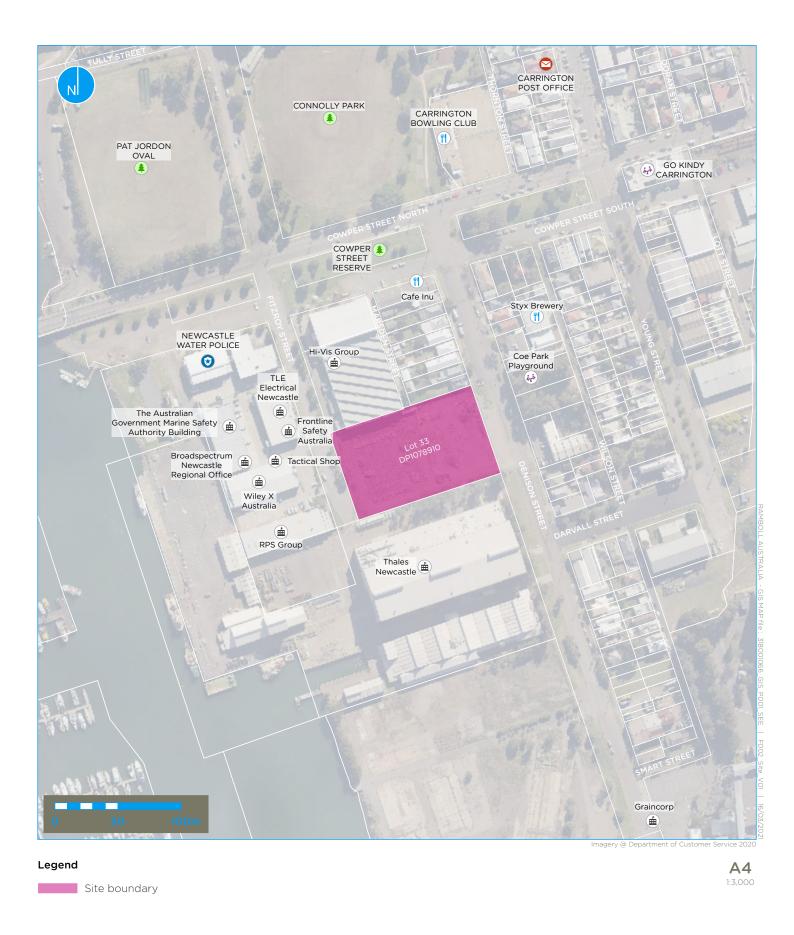


Figure 1-1: Site locality



APPENDIX 2 PRELIMINARY WASTE MANAGEMENT PLAN