




Preliminary Construction Management Plan – West Campus Medical Gas Compound

RPAH Redevelopment

Project number:	N01075
Document number:	RPA-PMT-CPB-MPL-EW7-000032
Revision date:	06/03/2024
Revision	C

Document Approval

Rev.	Date	Prepared by	Reviewed by	Approved by	Remarks
A	05/02/2024	D. Ji	P. Nott	S. Garzo	
Signature:					
B	15/02/2024		P. Nott	S. Garzo	
Signature:					
C	06/03/2023		P. Nott	S. Garzo	
Signature:					
Signature:					

Details of Revision Amendments

Document Control

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

Amendments

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

Revision Details

Revision	Details
A	Drafted for the REF
B	Updated following Architectus review
C	Updated following TSA review

Contents

Contents

1. Purpose	4
2. Introduction	4
2.1 Overview and Proposed Works	4
3. Key Participants / Stakeholders	6
4. Indicative Programme	6
5. Operating Hours and Contacts	7
5.1 Proposed Site Working Hours	7
5.2 Contact Details	7
5.3 Complaints / Concerns	7
6. Construction Methodology	8
7. Construction Activities	9
8. Business Continuity Principles	10
9. Site Management	11
9.1 Legislative and Regulatory Requirements	11
9.2 Site Fencing, Public and Property Protection	11
9.3 Disruption Notices	12
9.4 Site Access and Accommodation	12
10. Traffic Management	13
11. Work Health and Safety	14
11.1 General	14
11.2 Design	14
11.3 WHS Management Plan	14
11.4 Incident Reporting	14
12. Environmental Health and Safety	14
12.1 Environmental Impacts	14
12.2 Incident Reporting	14
12.3 Noise and Vibration Management	14
12.4 Odour/ Fumes Control	15
12.5 Waste Management and Recycling Principles	15
13. Infection Control Management	16
14. Services Diversions	16
15. Dilapidation Report	16

1. Purpose

This Preliminary Construction Management Plan has been prepared to support a Review of Environmental Factors (REF) on behalf of Health Infrastructure for the package of works outlined in Section 2.1 as part of the Royal Prince Alfred (RPA) Hospital Redevelopment.

This Plan has been drafted to outline preliminary parameters for site management practices during construction and is intended to provide sufficient information to support the REF, prior to planning approval, design finalisation and engagement of specialised subcontractors.

It is noted that it is the responsibility of the Contractor to prepare detailed Environmental and Site Management Plans in accordance with the REF, for approval and implementation during construction.

2. Introduction

2.1 Overview and Proposed Works

The proposed activity is part of a suite of campus wide infrastructure upgrades to occur in the near future.

The proposed activity comprises alterations and additions to the Capital Infrastructure and Engineering (CI & E) building loading dock located off Rochester Street in the RPA Hospital West Campus. Specifically, the works are to establish a reconfigured and expanded Medical Gas Compound (MGC) comprising the following works:

- Demolition work, inclusive of removal of existing trees, fences, door, walls, and railings to the extent required for the new works;
- Excavation of landscaped area;
- Removal/relocation of the existing diesel tank;
- Existing road surface to be saw cut and reinstated for new fill point;
- Installation of a new oxygen tank;
- Removal of redundant services;
- New MGC enclosure comprising fire rated walls, security fencing, and doors to house new oxygen tank (30kL) and new vaporisers;
- Upgrade to ramp, landing, walls, and security fencing within the compound;
- New oxygen pipe distribution system infrastructure within confines of MGC area.

2.2 Site and Locality Description

The RPA campus is located in Sydney's inner west suburb of Camperdown. It is situated between Sydney University to the east and the residential area of Camperdown to the west. The campus is divided by Missenden Road, which runs north to south dividing the campus into two distinct portions, called East Campus and West Campus. The northern boundary of the campus is defined by the Queen Elizabeth II Rehabilitation Centre and the southern extent of the campus is defined by Carillon Avenue.



Figure 1. RPA Hospital Campus

RPA incorporates a diverse range of operations including research, education, student housing, acute quaternary health services, as well as healthcare in both private and public domains. The larger precinct is defined by the Sydney Innovation Precinct for Health Education Research (SIPfHER) and is identified as an innovation and economic development zone for NSW.

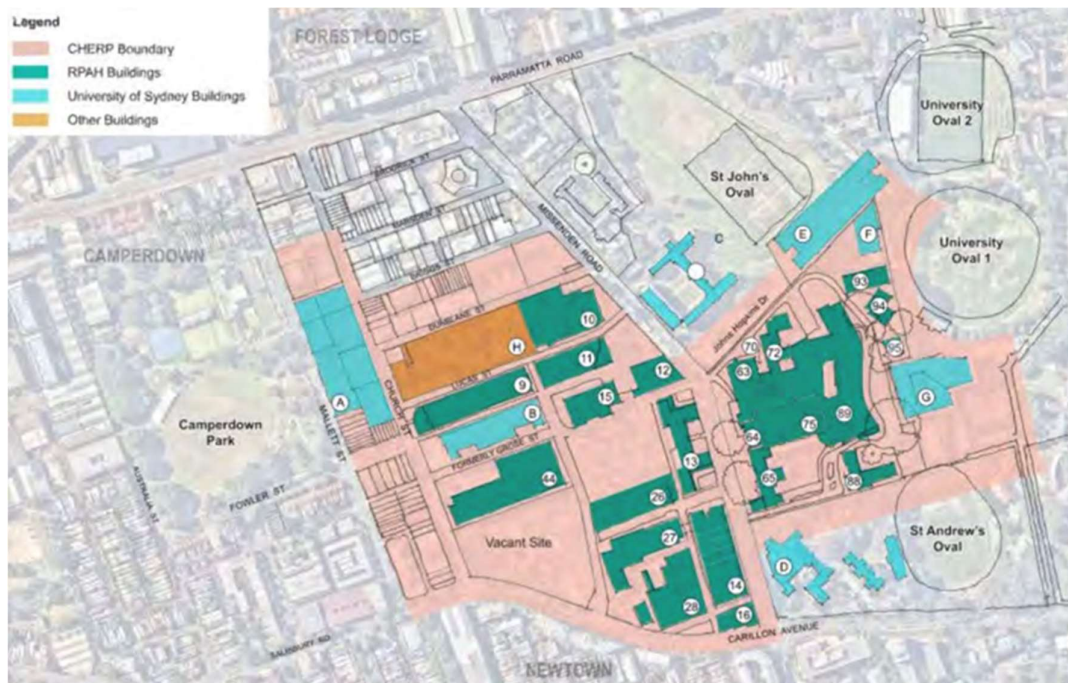


Figure 2. RPA Hospital Buildings in relation to the SIPfHER

3. Key Participants / Stakeholders

The Project Organisational chart is as follows:

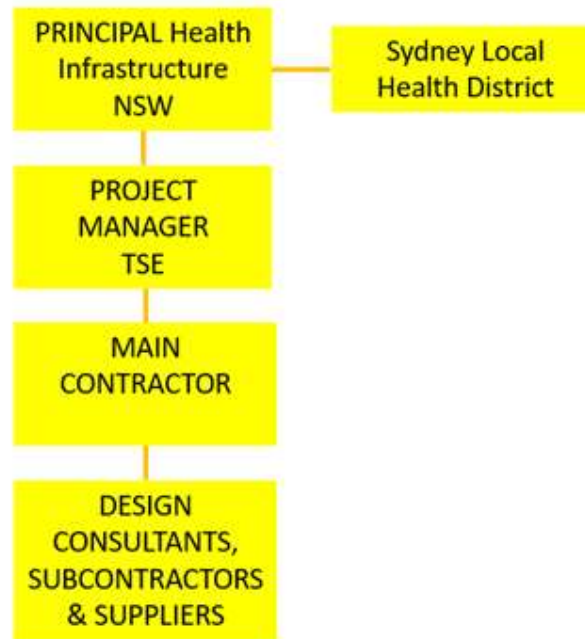


Figure 3 Project Organisational Structure

4. Indicative Programme

An indicative programme for the Works outlined in Section 2.1 is noted below. The Contractor will provide a detailed programme.

Milestone	Construction Duration	Indicative Program
Western Campus Medical Gas Compound Alterations and Additions	20 weeks	May – September 2024

5. Operating Hours and Contacts

5.1 Proposed Site Working Hours

Due to the nature of the scope, the work is proposed to be completed with extended working hours as below:

Day	Standard Construction Hours	Proposed Construction Hours
Mon-Fri	7am to 6pm	7am to 6pm + OOHW as required for access
Saturday	8am to 1pm	7am to 1pm + OOHW as required for access
Sunday and Public Holiday	No work	No work other than OOHW as required for access

Some works such as connecting and disconnecting services and works that are considered disruptive may need to be completed during certain hours, beyond the limitations above, to ensure minimal impact on hospital operations. These works are to be planned in consultation with stakeholders and subject to Disruption Notice applications to ensure all aspects of the works are clearly understood by all parties to minimise disruption.

5.2 Contact Details

The Principal Contractor will identify the key points of contact that will be co-coordinating all on site construction related activities. Key points of contact at this stage are:

Alasdair Dunlop: Senior Project Manager, TSA Management

Email address: alsadair.dunlop@tsamgt.com

5.3 Complaints / Concerns

Complaints or concerns that residents, hospital users/staff or members of the public have with the site or any construction-related activity should be raised with the Project Manager.

6. Construction Methodology

This plan has been compiled for a REF application to provide a high-level overview of the delivery of the works. The plan will be further developed by the Principal Contractor as part of detailed site planning prior to commencing works. The CMP will then remain a 'live' document reflecting the site delivery parameters for the duration of the project. The Plan covers the below areas of management.

- Business Continuity Principles;
- The operations of site management when undertaking the works;
- Traffic/pedestrian management for the duration of the works;
- Work Health and Safety;
- Environmental Health and Safety;
- Infection Control Management;
- Services diversions;
- Air Quality;
- Dilapidation report.

7. Construction Activities

The works will take place in one distinct zone, being the western campus medical gas compound.

The works will be isolated from general hospital operations and should have minimal impact on other activities. There will be a coordinated shutdown and changeover to commission the new oxygen cylinder.

Any services shutdowns and other works that may have an impact on hospital operations will be coordinated closely with the LHD through the Disruption Notice process described in Section 9.3, to ensure that the impact on the hospital is minimised.

A construction zone will be established on Rochester Street to complete the majority of the works in establishing the new oxygen vessel. Deliveries will be managed to ensure minimal impact on hospital vehicle and pedestrian traffic.

Works within the existing compound will be staged and coordinated to minimise impact on the hospital operations.

Cranage for the installation of the new oxygen vessel will require significant coordination and closure of Rochester Street.

It is anticipated that up to 15 workers will be onsite during the peak construction period.

8. Business Continuity Principles

The Works will be undertaken within a live health care environment. The Contractor will be responsible for the staging and sequencing of construction works in order to minimise the impact to the existing operations of the RPA Hospital and greater campus.

Key principles include:

- The works will be taking place in an operating hospital environment for the duration of the works. Enable hospital operations on the RPA Hospital campus to continue to operate at full capacity during the construction works
- Separation of construction works from hospital operations to ensure:
 - The safety of hospital staff, patients and visitors
 - Segregation of construction activities to minimise impacts to hospital operations including departments above and below proposed works
- The hospital operations shall not be disrupted through the works. This shall be completed through the staging and sequencing of works in order to maintain hospital operations at all times.
- Early Notice of Disruptions – where disruptions such as noise, vibration, dust, services shutdowns, closure of pedestrian or vehicle paths/ access points, etc. are necessary, early notice must be provided to the Principal in accordance with the Disruption Notice process. The Contractor will provide minimum 10 working days' notice of disruption, however, shall socialise disruptions well in advance. Consultation will occur with the Principal, RPA/SLHD and all other relevant stakeholders to confirm an acceptable time/date/methodology for disruptions. Disruptions may be required to be completed outside of normal working hours.
- Infection Control – ensure the infection control of the hospital is maintained. This includes external construction works on the campus and any locations of construction in the existing hospital environment. The infection control of existing facilities must not be compromised by construction works. Refer Section 13 of this document for more on Infection Control Management.
- Provision of temporary services/ measures to support disruptions – where major disruptions are required such as service shut downs, or change of entry points, temporary arrangements such as alternative entry points, back up services, etc. shall be provided to the satisfaction of the Principal/ SLHD to facilitate the continued operation of the hospital. Refer Section 14 of this document for more on services diversions.
- Maintaining the compliance of all existing facilities during the works interface or connection with existing buildings or engineering system will be required. The Contractor must ensure the compliance and occupation of all existing facilities is maintained at all times.
- Maintain compliant access and egress pathways and if unable to do so, develop alternative pathways and the related documentation and notification of changes (e.g. update egress maps if fire/ evacuation pathways are altered).

9. Site Management

The works will be undertaken by a Principal Contractor. All statements and proposals documented in this Preliminary Construction Management Plan will be further detailed, following REF approval, design finalisation, and engagement of specialised subcontractors, to ensure alignment with the proposed methodologies and construction staging of the Contractor. This includes details of site layout, and logistics, construction zones, plant equipment and machinery.

9.1 Legislative and Regulatory Requirements

The Works will be undertaken in accordance with the following legislative requirements and any others that must be complied with, as required:

- National Construction Code 2022 comprising the Building Code of Australia;
- Applicable Australian Standards;
- Protection of the Environment Operations Act 1997 and Regulations;
- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA);
- Environmentally Hazardous Chemicals Materials Act 1985;
- Protection of the Environment Administration Act 1991 and Regulations;
- Work, Health and Safety Act 2011 and relevant codes of practice and Standards;
- Work Health and Safety Regulation 2017;
- Code of Practice for the Safe Removal of Asbestos (NOHSC:2002(1998));
- Resource and Recovery Act 2001;
- Environmental Planning and Assessment Act 1979;
- Heritage Act 1977;
- Local Government Act 1993;
- Soil Conservation Act 1938;
- Biodiversity Conservation Act 2016;
- Australian Standard 4970-2009: Protection of Trees on Development Sites

9.2 Site Fencing, Public and Property Protection

The general principle is to separate construction areas of work from the public, hospital staff and visitors. Where there is a cross-over, this will be managed to ensure safety of all persons and equipment.

Appropriate hoarding/fencing (as specified in Australian Standards and SafeWork NSW requirements) will be installed to prevent public and staff access and to maintain security for the various areas of the works.

Site Notices will be erected at the boundary of the site. The site notices will include details of; Principal Contractor details, name of Site Manager and 24-hour contact number, approved hours of work, and details of the Principal and other appropriate stakeholders. Safety related statutory signage will also be erected on the boundary of the site in accordance with WorkCover requirements.

Site, precinct information and pedestrian signage and any temporary pedestrian measures required will be installed and maintained for the duration of the Works.

These public and property protection measures will be reviewed prior to site establishment at this location and during regular PCG meetings, to ensure alignment with proposed preferred methodologies and construction stage and to ensure that the safety of the public and staff is maintained at all times during the works.

Potential nuisance will be minimised to the occupiers of adjacent areas of the Hospital. Typically, works will be hoarded off and completely segregated from public interaction. When interacting with adjacent spaces, the Contractor will ensure strict compliance with pre agreed operational methodologies.

9.3 Disruption Notices

Any planned disruptions to hospital operations will be managed through the process of Disruption Notices (DNs). For such stoppages, the DN will describe the applicable works, timetable, issues and risk management plans.

DNs are submitted by the contractor to the Project Manager and SLHD stakeholders for approval in advance of works commencing (minimum ten days).

The Contractor shall (in consultation with the Project Manager) provide positive planning and communication through this process, including establishing a “Disruption and Shutdown Approval” process with an agreed format and regular meetings, communicated formally via email.

The Contractor shall give the Principal sufficient written notice of any operational service and infrastructure interruption or significantly noisy works (such as use jackhammers etc on Site), relating to or arising from the Works. The Contractor’s responsibility or obligation to comply with all relevant codes will remain unaffected by the giving of any such notice.

9.4 Site Access and Accommodation

Site access is to be controlled by the Principal Contractor at all times.

Suitable site accommodation will be established nearby, in consultation with SLHD, and will be sure to minimise the impact on Rochester Rd and the existing compound operations.

10. Traffic Management

Prior to construction works commencing, the Principal Contractor will develop a Construction Pedestrian and Traffic Management Plan which will detail how traffic, pedestrian and cyclist access will be managed during the construction works.

Traffic flows and vehicle/pedestrian separation are a major consideration and pedestrian routes are to be maintained throughout construction. Traffic control personnel will be provided by the Principal Contractor during operating hours, or as advised by the Principal Contractor within their Construction Pedestrian and Traffic Management Plan.

Key issues for traffic, pedestrian and cyclist management during construction to be considered in the Construction Pedestrian and Traffic and Management Plan include, but is not limited to:

- Provide safe and uninterrupted access for pedestrians and vehicles accessing the construction site, hospital site;
- Ensure maximum safety of site personnel, pedestrians, cyclists, commuters, and drivers;
- Minimise environmental nuisance and impact as a result of construction traffic;
- Ensure construction traffic does not unduly interrupt existing traffic flows on the local road network;
- Safe operation of buses and other transport services during construction in adjacent roads;
- Have no vehicles arrive at the site, without prior arrangement, outside the approved working hours;
- Encourage site workers to utilise local public transport system and car sharing wherever possible;
- Timely and effective implementation of traffic management measures;
- Maintain access at all times for hospital and stakeholder's deliveries.

Pedestrian and vehicular movements into and around the site will be maintained, or alternate routes determined where necessary, and be defined by clear signage. Where necessary, physical traffic management personnel will be used to guide pedestrians and vehicles safely. The contractor may be required to plan for night works.

Temporary hoarding appropriate to the interaction between pedestrians and construction works (as per relevant codes and standards) will be constructed to prevent unauthorised access to the construction site. These hoardings and fences may be staged to allow for appropriate construction methodologies to be planned.

Deliveries to within the site will be managed through the existing road within the hospital as agreed with the Project Manager and SLHD. Relevant management controls to be implemented as required.

Materials will be staged and stored in such a way to promote a clear and safe work site. At all times, materials are to be stored safely within the work area or site compound. While loading and unloading vehicles, it will be clearly stated that vehicles must not obstruct roads, driveways and paths of egress from surrounding buildings or fire protection equipment.

11. Work Health and Safety

11.1 General

The Contractor is responsible for the construction work at all times until the work is completed under the Contract and is engaged as principal contractor and manager and controller of the premises for the construction work under Clauses 293 and 298 of the Work Health and Safety Regulations (NSW) 2017 (WHS Regulations). The Contractor is authorised to exercise such authority of the person conducting a business or undertaking that is commissioning the construction project as is necessary to enable it to discharge the responsibilities of principal contractor and manager and controller of premises imposed by the Work Health and Safety Act (NSW) (WHS Act) and Chapter 6 of the WHS Regulations.

The Contractor will maintain accreditation under the Australian Government Building and Construction WHS Accreditation Scheme (the Scheme) established by the Building and Construction Industry Improvement Act 2005 (BCII Act) while building work (as defined in section 5 of the BCII Act) is carried out. The Contractor must comply with all conditions of Scheme accreditation.

11.2 Design

The Contractor will consider Safety in Design while completing the detailed design, and complete a handover to the Construction team prior to design finalisation.

11.3 WHS Management Plan

A Project WHS Management Plan NSW Government Work Health and Safety Management Systems and Auditing Guidelines 5th Edition (WHSMS Guidelines) and WHS Regulation will be implemented prior to commencing works.

11.4 Incident Reporting

Compliance with the WHS Act 2011 regarding incident reporting protocols will be maintained. The Principal will be notified immediately of any WHS Incidents.

12. Environmental Health and Safety

12.1 Environmental Impacts

A Construction Environmental Management Plan (CEMP) that complies with environmental legislation will be developed by the Principal Contractor. The CEMP will describe the environmental strategy, methods, controls, and requirements for the execution of the Works. It will stand alone as the master document for site environmental activities.

The primary aim and objective of the CEMP will be to provide a framework of procedures to minimise the impacts of the construction of the project on the environment. The environmental performance of the contractor will be monitored throughout the Works.

12.2 Incident Reporting

Ensure compliance with the notification and other requirements of the Protection of the Environment Operations Act 1997 (NSW) (POEO Act).

The Principal will be immediately notified of any pollution incident that may cause material harm to the environment, providing evidence that notification requirements of the POEO Act have been met, where applicable.

Details of any waste removed from the Site and not disposed of at a lawful facility will be reported immediately.

When requested, the Contractor will provide an incident investigation report, including identification of the cause of the incident and corrective actions taken, in the form directed.

12.3 Noise and Vibration Management

Noise from the construction site shall be managed in line with the requirements of the Interim Construction Noise Guidelines, EPA and Australian Standards. No machine work will occur outside the approved working hours set unless approval has been given through the DN and project OOHWA process.

As part of noise mitigation for the project, the contractor will be responsible for the management, checking of compliant maintenance regimes and statutory supervision of all equipment.

Guidelines for operational limits, identification of at-risk receivers and implementation of mitigation measures will be provided in a project Construction Noise and Vibration Management Plan. The objectives of the Construction Noise and Vibration Management Plan will be to:

- Ensure that the resultant noise levels from construction works are mitigated in line with the requirements outlined within the NSW DECC Interim Construction Noise Guideline;
- Ensure all equipment is appropriately selected and operated based upon the noise and vibration impacts of the plant;
- Ensure that construction works are monitored and controlled as to limit resultant vibration levels at surrounding vibration sensitive receivers to levels in line with relevant applicable guidelines and regulations; and
- Ensure construction methodologies adopted minimise the impact of noise, dust and vibration.

Reasonable and feasible mitigation methods (having regard to the use and operation of existing health facilities in close proximity to the *Site*) of noise and vibration control will be implemented throughout the construction process to ensure that the noise levels emanating from the Site during the Works are minimised.

12.4 Odour/ Fumes Control

Any potential odours, fumes/smoke associated with demolition and construction for the site will be assessed and minimised.

12.5 Waste Management and Recycling Principles

The Contractor will be required to recycle and reuse materials where possible. The contractor will be required to arrange for the sorting and recycling of waste materials and packaging to ensure maximum recycling is achieved. The contractor will be committed to achieving compliance with the EPA guidelines.

13. Infection Control Management

Infection prevention and control strategies must be implemented throughout the hospital campus that are consistent with national guidelines, including the availability of hand gels, ready access to personal protective equipment and attention to finishes.

The Contractor will develop an Infection Control Management Plan to ensure that all members of the construction team have a full appreciation of the project, the risks of infection posed by construction activities and how to manage these risks. The Infection Control Management Plan will outline the Contractor's approach to identifying any infection control risks and details the measures required to address the risk of infection resulting from the construction works.

The Contractor will regularly consult with the Principal to identify any infection control measures required to address the risk of infection resulting from the construction works.

14. Services Diversions

During the works, services diversions will be undertaken. In general, the following principles must be followed when diverting services:

- Any required services diversions/disruptions will be undertaken with full coordination, development and input with relevant HI, SLHD and authority stakeholders and will only proceed with approval, via a Disruption Notice process and appropriate consultation with the relevant service providers.
- Impacts on the hospital will be kept to the absolute minimum, which may result in 'Out of Hours' work.
- At all-times patient care will be paramount and staff and visitor safety, access and security maintained.

15. Dilapidation Report

Prior to commencing the works onsite and at completion, the Principal Contractor will generate a Pre and Post Dilapidation Report. It is the Contractor's responsibility to ensure the report considers all areas reasonably impacted by the works. At a minimum the reports will consider the following areas:

- Infrastructure and services within reasonable proximity to the works; and
- Property, Buildings, or structures within reasonable proximity to the works including site sheds. This includes but is not limited to existing taxi rank, existing grass area adjacent ambulance bay and hospital street corridor adjacent works zones.

The full extent of the Dilapidation reports will be agreed with the Principal prior to investigations proceeding.