

Wentworth Health Service Redevelopment

# Preliminary Construction Management Plan



Prepared by: Health Infrastructure May, 2023

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#### 1 INTRODUCTION

This preliminary Construction Management Plan (the Plan) has been prepared for the main construction works for the Wentworth Health Service Redevelopment. It has been prepared to inform a Review of Environmental Factors which will assess the potential environmental impacts of the proposal.

The Plan will form the guidelines and principles for the final Construction Management Plan that will be produced by the Main Contractor.

#### 1.1 PROPOSED WORKS

The works associated with the Plan relate to the following anticipated construction works

- Site Establishment and environmental controls;
- Construction of safety hoardings;
- Civil and earthworks;
- Site remediation;
- Construction and commissioning of new development;
- Landscaping; and
- Demolition of existing structures.

#### 1.2 STAGING

It is intended the above works will be delivered in three (3) milestones with a construction duration of approximately 24 months commencing in late 2023

The anticipated construction stages are generally described as follows:

- Stage 1A Main construction works.
- Stage 1B Demolition of existing hospital building.
- Stage 2 Construction of new access road.

#### 1.3 CONSTRUCTION MANAGEMENT PLAN COMPONENTS

The Plan covers the following areas of management:

- The operations of site management when undertaking the works:
  - o Facilities
  - Legislative requirements
  - Hours of construction works
  - Public hoardings
- Mitigation to minimise amenity and environmental impacts:
  - Noise
  - Dust management

- Odour control
- Protection of trees and vegetation to be retained
- Vibration management
- Soil and erosion control
- Traffic / pedestrian management for the duration of the work
- Civil Works Management
- Waste Management:
  - Storage of dangerous goods
  - Hazardous materials management
- Minor services disconnections
- Communication with Stakeholders

#### 1.4 PLANT EQUIPMENT AND MATERIALS

The following plant and equipment may be used for the works:

- Bulldozers, backhoes and earthmoving equipment
- Articulated and fixed trucks
- Mobile cranes (if applicable)
- Fork lifts
- General power tools

It is anticipated that primary construction materials will be sourced by the Main Contractor utilising suppliers from nearby major towns and cities including Adelaide, Melbourne and Wagga Wagga. Estimated quantities of raw materials are outlined as follows:

Concrete: 477m3

Steel: 48t CFC: 725m2 Glazing: 195m2

Roof Sheeting: 1992m2 Partitions: 2703m2

Ceilings Plasterboard: 1231m2

Floor Vinyl: 1330m2 Carpet: 133m2

Pre-fabricated and specialist construction materials are to be delivered from the closest manufacturer including windows and façade components. The selected suppliers will be awarded by the Main Contractor based on a market tender and logistics. Finishes, fixtures and equipment are also anticipated to be bulk delivered to site from the relevant distribution centres in Melbourne and Adelaide.

#### 1.5 CONSULTATION

Written notification will be provided to all likely and potentially affected receivers prior to

commencement of any works on site. This will include local residents and hospital staff. Consultation will be undertaken with the Local Health District and NSW Ambulance Service (including Air Ambulance) regarding potential construction and operational impacts. The manner of notification will be confirmed in the Communications Plan produced by the Main Contractor and in association with Health Infrastructure.

#### 1.6 COMPLAINTS MANAGEMENT SYSTEMS

Complaints may include any interaction with a community member or stakeholder who expresses dissatisfaction with the project, services or staff member's actions during the project.

To ensure that complaints are managed consistently the following information is required to help resolve the complaint quickly and effectively.

- Complainant contact details
- Description of complaint
- The requested remedy/action
- Due date for response
- Immediate action (if any)

All complaints are to be referred to NSW Health Infrastructure for entry into the Complaints Register and management of outcomes.

#### 2 OPERATIONS OF SITE MANAGEMENT

The works will be undertaken under the supervision of a Main Contractor.

All statements and proposals documented in this Plan will be reviewed at the time of contract award for the works to ensure alignment with proposed preferred methodologies and sequencing developments.

#### 2.1 LEGISLATIVE REQUIREMENTS

The works will be undertaken in accordance with legislative requirements and as specified in the tender documents related to the awarding of the Main Contract.

#### These will include:

- Protection of the Environment Operations Act and Regulations
- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA) Environmentally Hazardous Chemicals Act 1985
- Protection of the Environment Administration Act and Regulations
- Occupational Health and Safety Act 2000 and relevant codes of practice and Standards
- Resource and Recovery Act 2001
- Environmental Planning and Assessment Act 1979
- Heritage Act 1997
- Local Government Act 1993
- Occupational Health and Safety Act 1983
- Soil Conservation Act 1983.

#### 2.2 HOURS OF OPERATION

The following hours of operation are proposed for the works:

- Monday to Friday ...... 7:00AM to 6:00PM
- Saturdays ...... 8:00AM to 1:00PM
- Sundays and Public Holidays..... No works.

It is not envisaged that the construction works will require work to be undertaken out of normal working hours. Exceptions may be required for the delivery and removal of heavy machinery to minimise impacts on other road users.

#### 2.3 PUBLIC AND PROPERTY PROTECTION

Appropriate hoarding / fencing (as specified in Australian Standards and WorkCover requirements) and safety barriers will be installed to the entire work areas prior to commencement of the works. Site Hoardings will be erected around the perimeter of the

Wentworth Health Service – Preliminary Construction Management Plan

site and maintained to prevent public access. Site signage will provide 24-hour emergency contact details including contact name and telephone number.

Construction vehicle access / egress gates / Signage will be installed.

These public and property protection measures will be reviewed at the time of contract award for the works to ensure alignment with proposed preferred methodologies and sequencing developments and to ensure that the safety of the general public is maintained at all times during the works.

#### **3 ENVIRONMENT AND AMENITY**

The Main Contractor undertaking the works will be required to prepare a comprehensive Environmental Management Plan (EMP) in accordance with the Ecologists Report prior to the issue of a Construction Certificate to ensure that all elements of the plan meet all statutory requirements as well as NSW Health Infrastructure's requirements.

The following specific environmental management principles will be implemented on site:

#### 3.1 ECOLOGY

Before starting work, a physical vegetation clearing boundary at the approved clearing limit is to be demarcated and implemented. The delineation of such a boundary may include the use of temporary fencing, parawebbing or similar.

All personnel working on site will be made aware of the environmental sensitivities of the site and safeguards/mitigations to be implemented, e.g., site induction and 'toolbox' style briefings. This includes all native vegetation, potential threatened flora and fauna, Key Fish Habitat and Protected Riparian Land.

Stockpiling materials and equipment and parking vehicles would be avoided within the dripline (extent of foliage cover) of any tree.

#### 3.2 NOISE AND VIBRATION

The contractor will be required to provide noise monitoring where possible during the works and comply with legislative requirements. Consideration will be given to minimising noise and vibration during the spring when birds are nesting, and at dawn/dusk when birds are leaving/returning to their roosts.

Management of noise emissions from the site will be consistent with requirements of the *Interim Construction Noise Guideline*, and relevant Australian Standards. A Construction Noise Management Plan will be prepared which will specify performance requirements for the contractor. No machine work will be permitted outside the normal working hours set unless appropriate written approval has been obtained.

The noise and vibration from the use of any plant equipment and / or building services associated with the works will not give rise to an offensive noise as defined under the provisions of the Interim Construction Noise Guideline, EPA and Australian Standards.

As part of the noise mitigation treatment for the project, the Main Contractor will be responsible for the management, checking of compliance maintenance regimes and statutory supervision of all equipment, such as making sure all trucks and machinery involved in the works are checked for defective exhaust systems and general servicing. Wentworth Health Service – Preliminary Construction Management Plan

The Main Contractor will be responsible for producing a detailed Dilapidation report of the adjoining buildings and surrounding infrastructure prior to a works commencing.

#### 3.3 DUST & AIR QUALITY

The Principal Contractor undertaking the Works will be required to submit for approval to the Principal a comprehensive Environmental Management Plan (EMP) to ensure compliance with all statutory requirements as well as NSW Health's requirements.

Management of dust prevention and air quality on site will form part of the EMP.

The environmental performance of the Principal Contractor will be monitored throughout the Works with the following specific environmental management principles implemented on site:

- Dust management
- Erosion and sediment controls

Mitigation strategies for the above will be documented in the EMP and the contractor will be responsible for taking all reasonable steps to minimize dust or reduced air quality generated during the works and affecting current and adjacent occupants.

Management procedures, to be undertaken by the Contractor, will include:

- Ensure measures to prevent tracking of soil onto roadways outside of the site. These may include the provision of measures such as a shaker grid, wheel wash facilities, hosing and general manual cleaning.
- Ensure all trucks leaving and entering the site have their loads covered.
- Undertake construction activities in a manner that minimizes dust including emission of windblown or traffic generated dust.
- To control dust generation water will be sprayed where necessary at the source of origin and surrounding areas to prevent airborne dust particles migrating into the surrounding environment. Management of dust prevention is to be developed by the Principal Contractor and agreed by the project stakeholders.
- Stabilization of bare soil to prevent dust and erosion. This may include use of mulch or other cover precautions including weather monitoring.
- Ensure land stabilization works are carried out progressively on site to minimize exposed surfaces.
- Develop contingency plans to prevent any foreseeable impacts from dust.
- Ensure that dust or odour emissions do not adversely affect the health or visual amenity of the WHS or the surrounding communities.
- Ensure compliance with State and Local regulatory requirements in relation to dust management.

For works immediately adjacent the live Hospital environment, measures will be put in place to separate the construction works from the hospital operations to reduce the impacts of dust.

#### 3.4 HAZARDOUS MATERIALS

Prior to any construction works, a Hazardous Management Plan (HMP) will be prepared for the site in consultation with nominated project stakeholders to manage the removal or treatment of hazardous material. The HMP will include removal control plans for any Synthetic Mineral Fibre (SMF), Polychlorinated Biphenyl (PCB), Lead Containing Paint and an Asbestos Removal Control Plan as appropriate. These control plans will be developed by specialist hazardous materials contractors and will detail such items as:

- The design, installation and testing of an appropriate enclosure to prevent asbestos fibre release during construction and removal;
- Using & Maintaining RPE (Respiratory Protective Equipment);
- Management of entering & leaving the removal area;
- Decontamination of the removal work area including tools and persons;
- Transport & disposal of asbestos waste; and
- Negative pressure units / dust suppression techniques to be employed (sizing and strategy for these units will be determined by the accredited demolition/hazardous materials removal contractor and will be included within the HMP).

Specialist Class A licensed contractors will be used to remove material classified as hazardous in the HMP. These materials will be removed separately first and disposed of in accordance with EPA requirements and statutory requirements. If identified hazardous material is to be removed by a qualified Occupational Hygienist. Certification must be provided that identified hazardous material has been removed from the building.

#### 3.5 ODOUR CONTROL

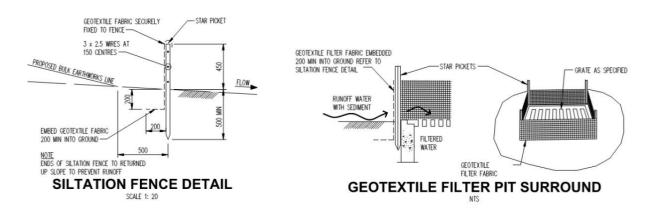
In terms of the construction activity for the site, it is expected that odour problems will be minimal. All plant and machinery involved in the works will be regularly serviced and checked for exhaust emissions and catalytic converters.

#### 3.6 STORMWATER RUNOFF

The existing site stormwater drainage is believed to have limited functionality, with a grated pit located near the south-west corner of the levee bank. It is assumed that discharge via a culvert to the Darling River captures the existing site stormwater. This system will remain in place to capture the existing buildings and paved areas outside of the construction zone.

Within the relevant construction zone of the project, an erosion and sediment control plan is to be implemented in accordance with NSW's Managing Urban Stormwater, Soils and Construction "Blue Book" to prevent sediment laden stormwater from Discharging into the Darling River or run-off to the riparian zone. Stormwater controls will be detailed in Wentworth Health Service – Preliminary Construction Management Plan

accordance with relevant regulatory authority guidelines. Examples of erosion and sediment control measures that shall be implement during constructed area show in the figure below.



Stormwater grate inlets surrounding works areas will be covered with geotextile fabric to allow water to enter into drains while retaining sediments. Controls will be implemented to manage runoff from the site to the riparian zone including all drainage control devices to be regularly checked during and immediately following heavy rainfall periods. Any remedial work required to maintain the effectiveness of controls will be undertaken as a priority.

#### **4 TRAFFIC MANAGEMENT**

As part of the final Construction Management Plan, the Main Contractor will be required to submit a Traffic and Pedestrian Management Plan for approval prior to commencement of the works.

#### **4.1 CONSTRUCTION ENTRY / EXIT**

It is proposed that construction traffic will enter and exit from Hospital Road for the duration of the works with peak movements occurring during the import of fill material and stockpiling of cut material.

Detailed haulage and delivery routes are yet to be determined, however, as a general principle, heavy vehicles will be restricted to arterial and sub-arterial transport routes. Use of suburban streets in the Wentworth township will be avoided as far as practicable.

Appropriate traffic management procedures will be implemented and include consultation with Wentworth Shire Council and Wentworth Health Service staff.

#### 4.2 PEDESTRIAN PROTECTION

Pedestrian and vehicle 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.

#### 4.3 PARKING

Onsite parking is to be provided for construction personnel for the Wentworth Health Service Redevelopment site.

# **5 CIVIL MANAGEMENT** 5.1 EARTHWORKS

One of the considerations for the selection of the final building level was the earthworks material cut and fill balance. Another consideration is the required batter both in cut and fill

The bulk earthworks for the proposed development and associated infrastructure are detailed in the Civil Engineering Drawings. The bulk excavation level for the main building is approximately 0.6m below existing ground level (RL33.46m AHD).

Approximate volumes of cut and fill for stages 1A and 1B are 3,130m3 and 10,660m3 respectively. As the ACM and GSW is proposed for containment on-site, the fill material is required to be imported to ensure suitable for structural fill. Stage 2 is estimated to require approximately 210m3 of cut and 120m3 of fill. All road base material will be imported to site where deemed appropriate by the geotechnical engineer. Additionally, any material not suitable as engineered fill will be relocated to stockpiles.

Opportunities are being explored to minimize the handling of excavated material due to the potential presence of ACM and other hazardous materials identified following demolition of existing structures.

Any material to be imported will be by tipper trucks with tipping dog that can carry approximately 32 tonnes. This would result in approximately 150 truck loads required to import fill material.

Refer to Figure 1 and Figure 2 below for overall main work bulk earthworks plan (stages 1A, 1B and 2 combined).

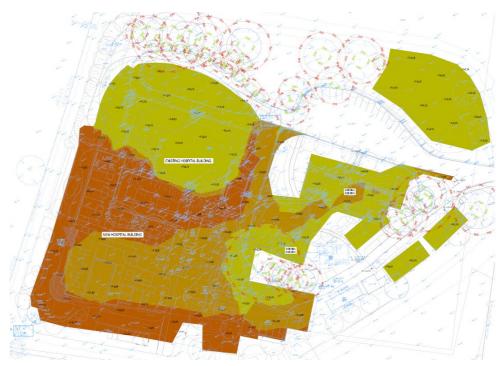


Figure 1 – Cut Plan (Intermediate stage only) -1.3m -0.1m.



Figure 2 – Fill Plan (Final levels) 0 - 2.04m.

#### **6 WASTE MANAGEMENT**

#### **6.1 WASTE MANAGEMENT / RECYCLING PRINCIPLES**

Where possible any material waste generated from the works will be recycled.

A formal Construction Waste Management Plan will be produced by the Main Contractor prior to works commencing. All material that cannot be recycled or reused will be disposed to an approved landfill facility. Waste will be minimised and that generated will be separated to maximise recycling. The highest waste production will be during the construction of the structure.

#### **6.2 STORAGE OF DANGEROUS GOODS**

Dangerous goods (such as petrol, diesel, oxy-acetylene, oils, etc.) will be stored in a lockable compound with sufficient ventilation in accordance with relevant codes of practice and standards. Material safety data sheets on all flammable and potentially harmful liquids will be provided by the contractor undertaking the works.

## 7 APPENDIX A – STAGING STRATEGY





MostynCopper
PROJECT MANAGER
MOSTYN COPPER

Taylor Thomson Whitting
STRUCTURE + CIVIL
TTW

STEENSEN VARMING
ELECTRICAL + MECHANICAL
STEENSEN VARMING

HYDRAULIC + FIRE WARREN SMITH CONSULTING ENGINEERS

Issu	e			
No.	Date	Description	Dwn	Chkd
1	20.12.22	Ref Issue	AK	PR
2	03.04.2023	Ref Issue	AK	PR

NRRS\*

+61 2 9922 2344

Nominated Architect:
Andrew Duffin NSW 5602
NBRS & Partners Pty Ltd VIC 51197

nbrs.com.au
ABN 16 002 247 565

WENTWORTH HSR

at 24 Hospital Rd Wentworth NSW 2648 for Health Infrastructure

Drawing Title
DEMOLITION PLAN - STAGE 1A

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MostynCopper
PROJECT MANAGER
MOSTYN COPPER

Taylor
Thomson
Whitting
STRUCTURE + CIVIL
TTW

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Warren

HYDRAULIC + FIRE
WARREN SMITH CONSULTING ENGINEERS

 Issue

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 1
 20.12.22
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 2
 03.04.2023
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NBRS\*

+61 2 9922 2344

Nominated Architect:
Andrew Duffin NSW 5602
NBRS & Partners Pty Ltd VIC 51197

nbrs.com.au 5602 7 Ltd VIC 51197 ABN 16 002 247 565

WENTWORTH HSR

at
24 Hospital Rd
Wentworth NSW 2648
for
Health Infrastructure

Drawing Title
DEMOLITION PLAN - STAGE 1B

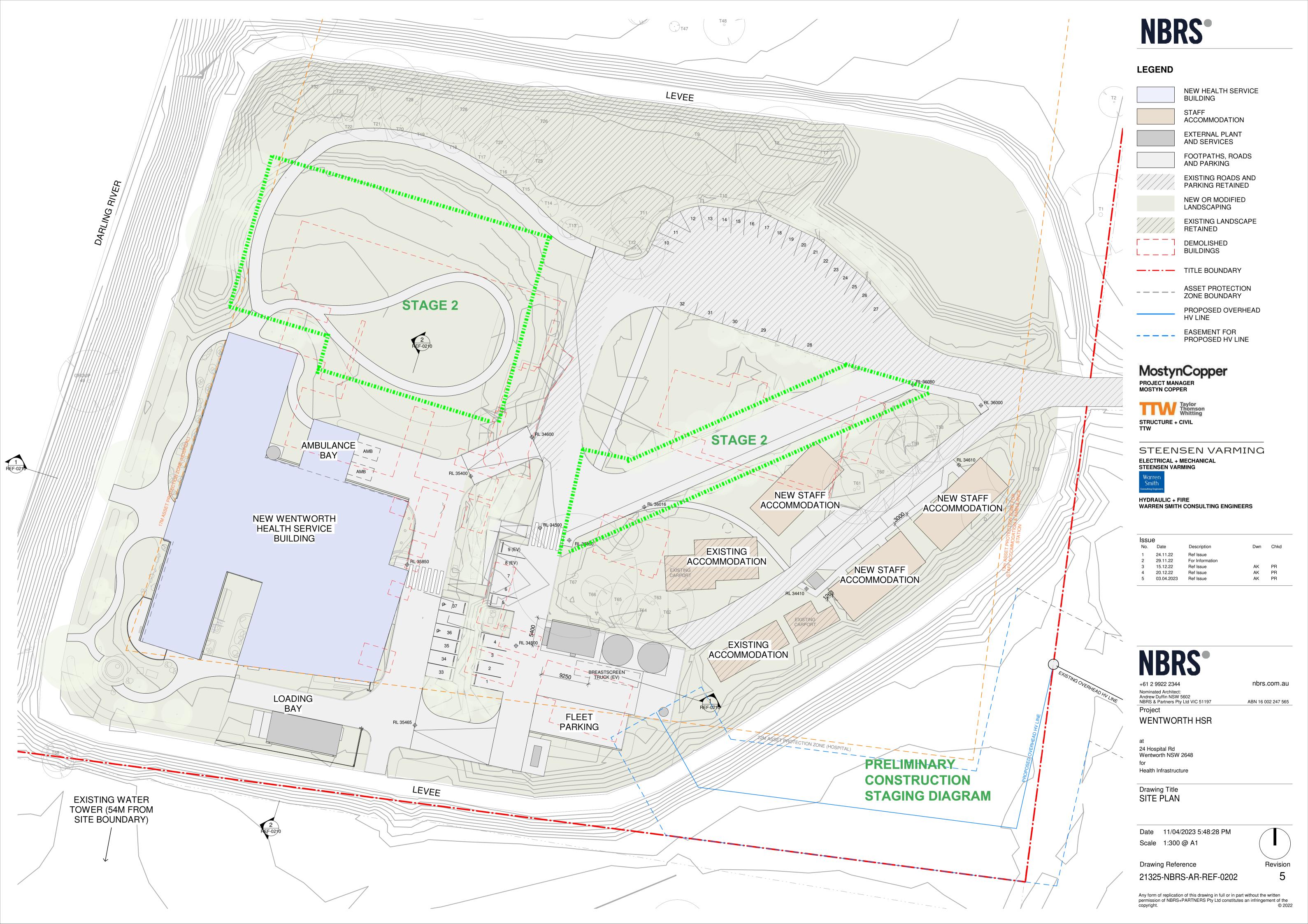
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Drawing Reference

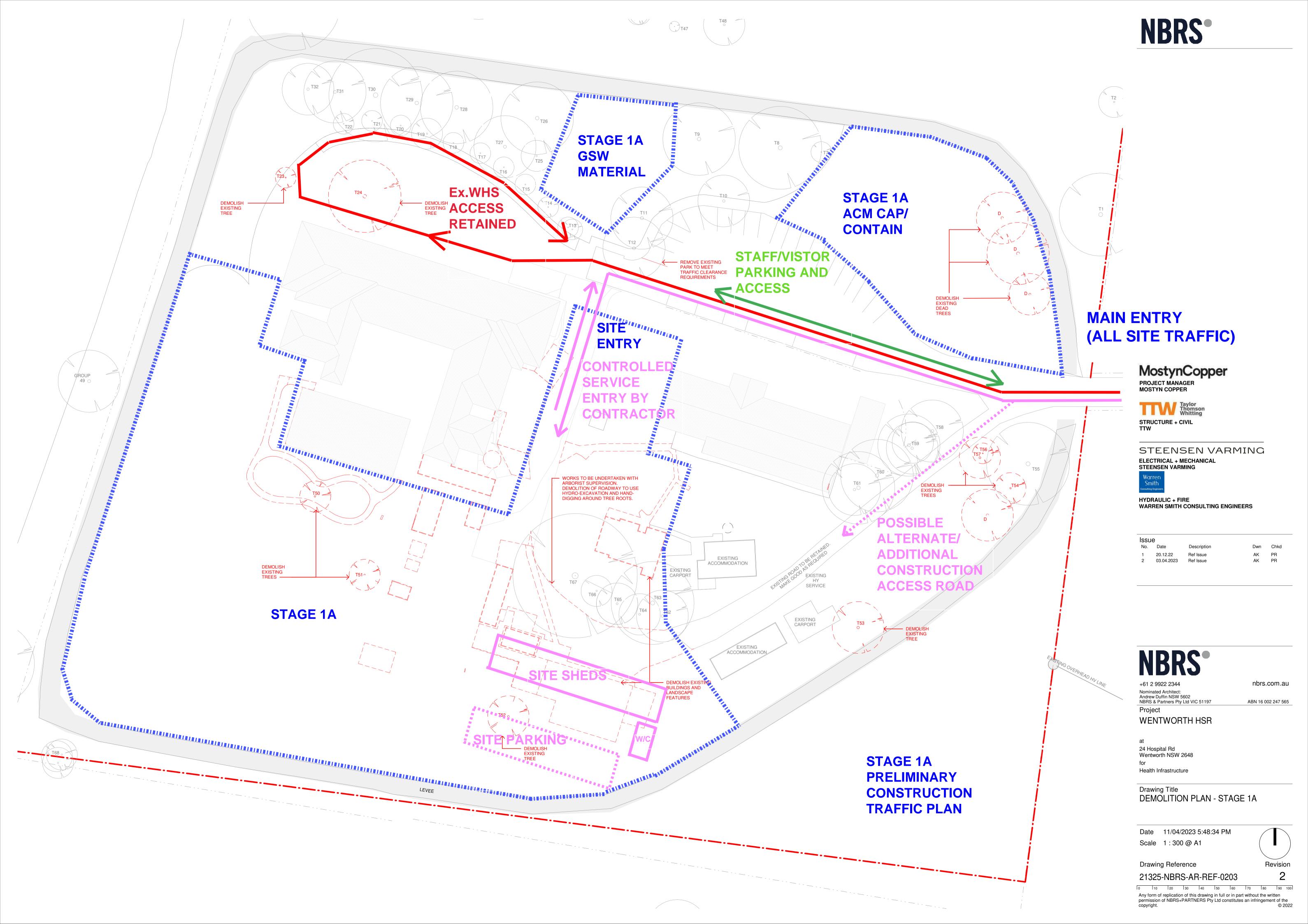
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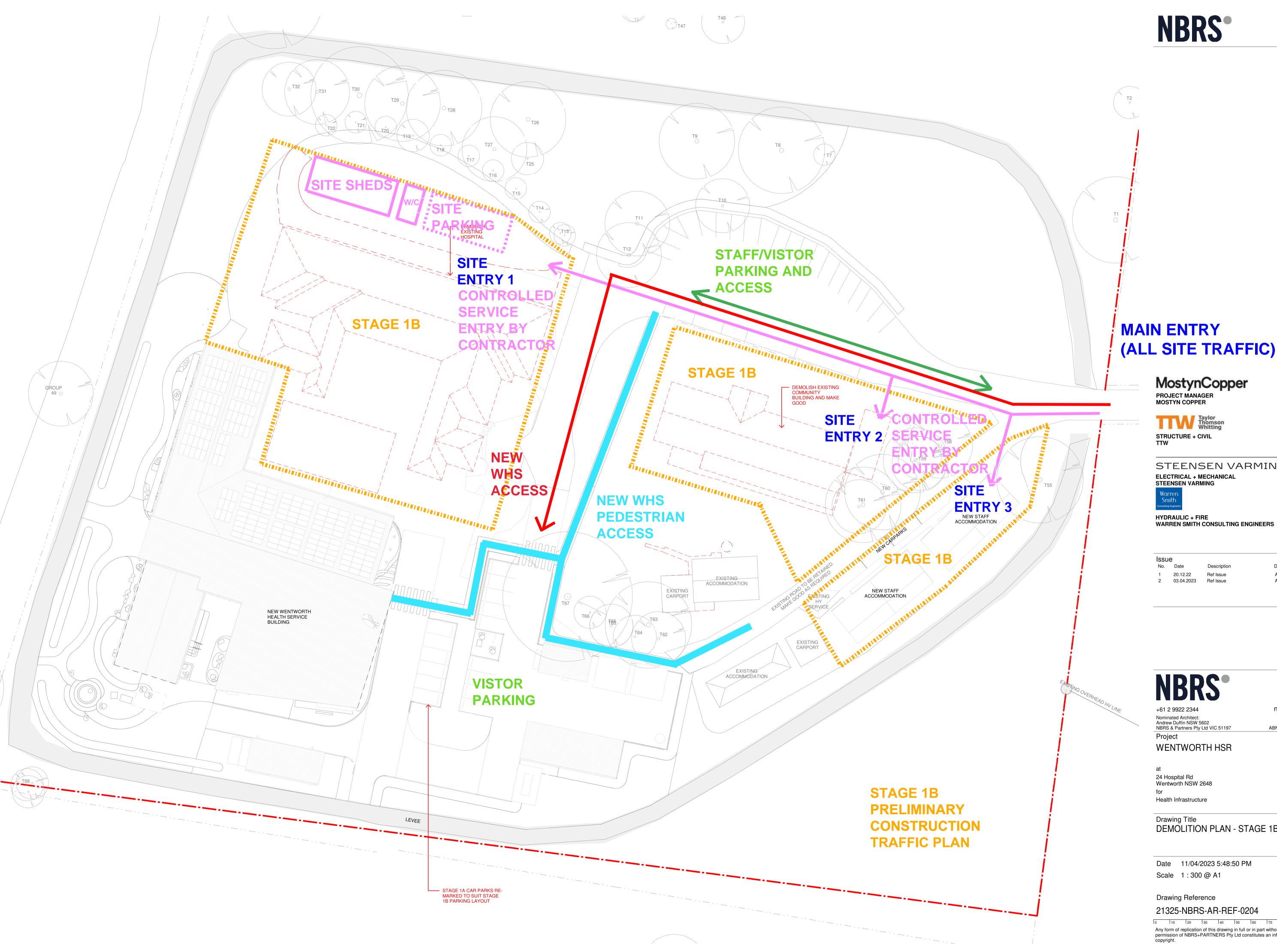
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## 8 APPENDIX B - TRAFFIC MANAGEMENT





# (ALL SITE TRAFFIC)

STEENSEN VARMING

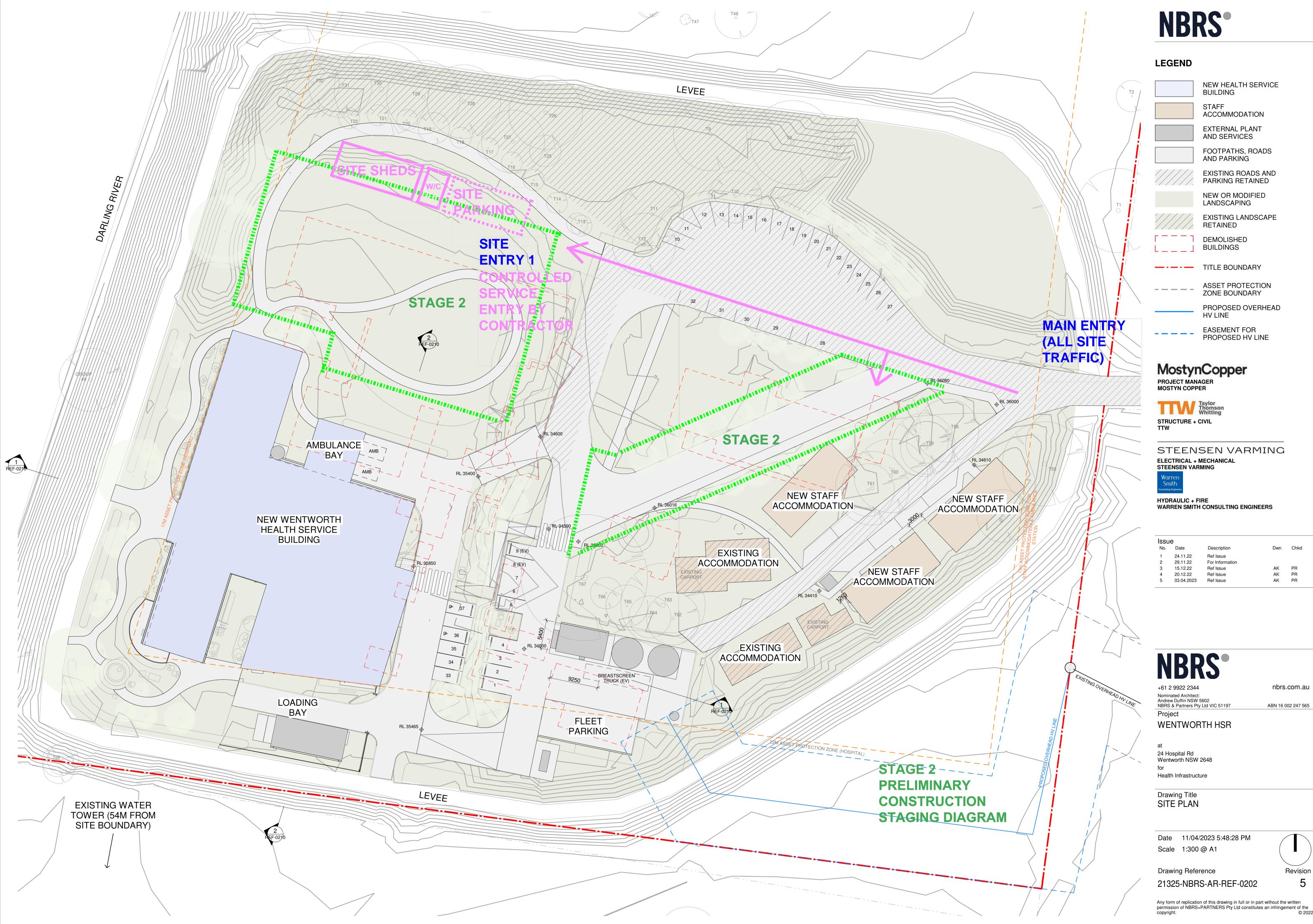
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DEMOLITION PLAN - STAGE 1B

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