

PRELIMINARY CONSTRUCTION MANAGEMENT PLAN

New Ultimo Pyrmont Public School

October 2017

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1.0 INTRODUCTION

1.1 Executive Summary

A new primary school in Ultimo is being built to meet the strategic directions of the NSW Government and the School Infrastructure NSW (SI NSW), and meet projected demands for primary school teaching and facilities of inner city of Sydney.

The current school has limited capacity to expand due to site constraints and current building designs. Therefore, it will be demolished, to enable a new school to be built in its place. The children and teaching staff will be relocated temporarily to enable demolition of the existing school and construction of the new school.

This report addresses the construction of the new school only. It does not address either the 'temporary school' or 'demolition and site preparation' works as these works are addressed via separate documents and approval processes.

1.2 Objective & Purpose

This 'Preliminary Construction Management Report' is prepared to define excavation, tree removal, construction and handover activities required to deliver the project as well as provide an overview of management requirements. The successful construction contractor will be required to prepare a detailed 'Construction Management Plan' prior to commencement of works.

The aim is to ensure all activities are properly facilitated, integrated and coordinated so as to deliver certainty to the objectives of the project for SI NSW. This report:

1. Introduces the project
2. Identifies existing conditions, constraints and features
3. Describes scope of works, limits and exclusions
4. Outlines key activities
5. Describes contractor site management requirements
6. Outlines broad environmental management considerations
7. Commissioning and handover requirements.

1.3 Brief Scope of Works

Due to the sloping nature of the site, the proposed school is a multi-storey facility with 5 levels. Construction of the multi-storey school is expected to take 12-16 months to complete. The school includes:

- 30 home bases with quiet spaces and practical activity areas
- Large multi-level library space
- Lower, middle and upper level play grounds and basketball court
- Multi-purpose assembly hall
- Large open 'Covered Outdoor Learning Area' (COLA)
- Staff administration and support spaces
- Canteen
- Outside of Hours School Care (OOSH) facilities
- Early childcare facility - shell only to be constructed. (Tenancy will be let to a private service provider)
- Loading and services area with direct access to stretcher lift servicing all building levels.

1.4 Contractor Deliverables

The contractor shall provide the following project specific deliverables. These include but are not limited to:

- a) Detailed 'Construction Management Plan'
- b) Dilapidation assessment survey / reports (before and after works)
- c) Tree assessment, protection and arborist on site
- d) Acoustic and vibration monitoring and report
- e) Time lapse camera footage from day 1 of construction.
- f) 'As built' survey and documentation, and

- g) Any other reports or plans as required by SI NSW (e.g. WHS Management Plan, Quality Assurance Management Plan, etc.).

2.0 EXISTING CONDITIONS, CONSTRAINTS & FEATURES

2.1 Overview

The existing site is owned by SI NSW and is approximately 0.54 hectares. It is bounded by Wattle Street (an RMS road), Quarry Street and Jones Street (both City of Sydney local roads). The Quarry Street boundary includes a footbridge for pedestrian access to Wentworth Park. The footbridge is a City of Sydney asset designed to standards. A residential development bounds the site to the south-east.

Site topography falls approximately 15m in the East / West directions, from Jones Street in the East (level +18m) to Wattle Street in the West (level +3m).

A purpose built temporary school is currently being constructed within Wentworth Park. An amendment to Sydney Regional Environmental Plan (SREP 26) has made this permissible until December 2019. The current school population of approximately 300 students and associated teaching and support staff will occupy this facility from 2018. The temporary school comprises a series of demountable units with interconnecting decks, canopies and play areas and will be decommissioned once the new school is ready for occupation.

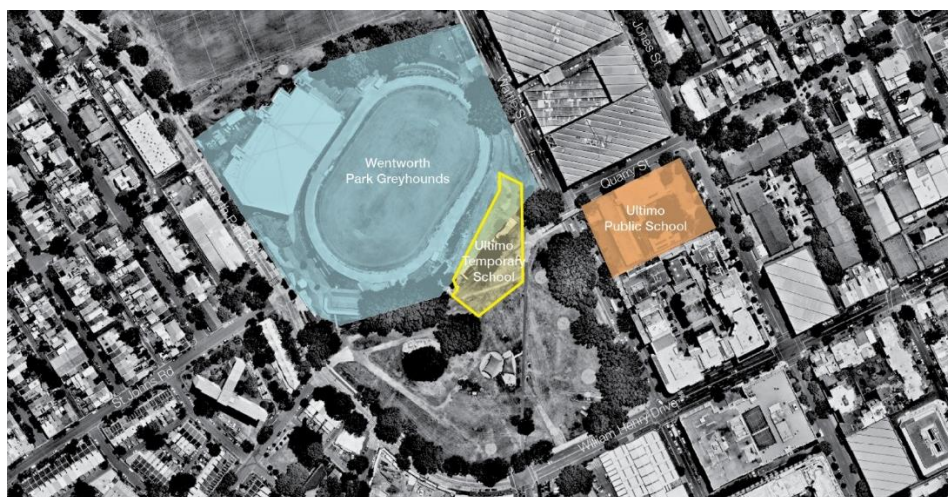
The existing school will be demolished prior to award of the construction contract. Demolition will include buildings, other structures, several trees, services relocation, minor excavation, basic site preparation works and additional investigations required. No major excavation or early works will be undertaken due to planning approvals limits. A number of retaining walls will remain in place to ensure stability of the site and retained trees.

Construction works shall be delivered while maintaining drop-off and pick-up functions for the school while it operates from Wentworth Park. The contractor will be responsible for some limited scope for transfer of services from the temporary facility in Wentworth Park to the new school to ensure continuity of services for operational requirements. Aside from this, the demolition and decommissioning of the temporary school will be undertaken by a separate contractor.

2.2 Site Location

For context, the image below shows:

- Ultimo Public School location in orange.
- Wentworth Park location in blue, and
- Temporary school location in yellow.



The school address is;
Ultimo Primary School
Quarry St, Ultimo
NSW 2007

Lot 101 in DP1105527

Figure 1 – Location of Ultimo School and Wentworth Park



Figure 2 – Aerial view of Ultimo Primary School

2.3 Interfaces & Stakeholders

A number of third parties are associated with these works and may require further consultation, approvals or interface agreements during completion of the works, including but not limited to:

- RMS / TfNSW
- City of Sydney
- Owners' Corporation for adjacent residential development 'Acacia Gardens'
- Ultimo Public School (housed within the temporary school on Wentworth Park)
- Wentworth Park Sporting Complex Trust
- Sydney Water
- Ausgrid
- Jemena
- Telstra

2.4 Referenced Documents

This document shall be read in conjunction with the suite of documents (reports and drawings) prepared for the purpose of seeking approval from the 'State Significant Development, Development Application (SSD DA). These include but are not limited to the following reports:

Item	Document title	Number, Revision, Date	Author
1	Quantity Survey	Issue 3.0, 23 Oct 2017	Mitchell Brandtman
2	Secretary's Environmental Assessment Requirements (SEARs)	SSD 7503, 7 March 2016	NSW Department of Planning & Environment
3	Site Survey	11842801001, Revision 01, 16 August 2017 11842801002, Revision 00, 27 July 2017 11842801004, Revision 01, 25 August 2017	Cardno
4	Geotechnical Investigation *	30361SB rpt, Revision 1, 24 October 2017	JK Geo-technics
5	Preliminary Environmental Site Assessment (contamination) **	E30361KH rpt, Revision 2, 24 October 2017	Environmental Investigation Services

6	Hazmat Report	C107477 : J140648, October 2017	Greencap
7	Transport Assessment (including outline Construction Traffic Management Plan)	New Ultimo Pyrmont Public School – State Significant Development DA, Revision C, 25 October 2017	ARUP
8	Services Infrastructure and Integrated Water Management Plan	Revision E, 20 October 2017	JHA
9	Arboricultural Impact Assessment	RTC-13917, 23 October 2017	Raintree Consulting
10	Heritage Impact Statement and Archaeological Assessment	SH1059, Revision 02, 06 October 2017	Urbis
11	Flood Report, Stormwater Concept Plan, and Sediment and Erosion Control Plan	Revision E, 23 October 2017	TTW
12	Architectural Design Statement	Revision 2, 23 October 2017	DesignInc & Lacoste + Stevenson & bmc2
13	Landscape Design Statement	24 October 2017	DesignInc & Lacoste + Stevenson & bmc2
14	Ecologically Sustainable Development Report	Revision G, 20 October 2017	JHA
15	Summary of Consultation	Revision D, 20 October 2017	HKA Global
16	Wind Assessment	WD766-01F02, Revision 1, 24 October 2017	WindTech
17	Acoustic & Vibration Assessment	Revision G , 24 October 2017	JHA
18	Construction & Operational Waste Management Plan	Revision 5, 24 October 2017	Foresight Environmental
19	BCA Compliance Report	106876-BCA-r9, Revision 9, 24 October 2017	BCA Logic
20	Access Report	106876-Access-r5, Revision 5, 24 October 2017	BCA Logic
21	Structural Report	23 October 2017	TTW
22	Fire Engineering Report	SY170214, Revision R1.3, 23 October 2017	Defire
23	Environmental Impact Statement (EIS), State Significant Development, Development Application (SSD DA)	SSD 7503, October 2017	Roberts Day

* Note: Additional Geo-technical testing will be undertaken by the demolition contractor and will supplement the existing report.

** Note: Additional contamination testing will be undertaken by the demolition contractor to supplement the existing report.

3.0 CONSTRUCTION SCOPE, LIMITS & INCLUSIONS

3.1 Planning Constraints - Overview

Prior to commencement of construction, demolition and site preparation works including some tree removal will have been completed and approved as Complying Development (demolition) and Exempt Development (trees) enabling the handover of a clean site to the construction contractor. The approval of new construction works will be via a 'State Significant Development, Development Approval (SSD DA).

Construction Works to be approved SSD DA **include:**

- Site establishment works including hoardings
- Bulk earthworks
- Major excavation including shoring and stabilisation works
- Construction works
- Augmentation of new services
- Installation of substation
- Demolition of existing retaining walls (kept in place from demolition to ensure site stability)
- Demolition of existing deep footings i.e. deep piles. (kept in place from demolition due to limits of planning approvals)
- Tree removal
- Tree pruning
- All other works necessary to complete the project.

3.2 Existing Site Constraints - Overview

The site will be handed over to the construction contractor in a clear state. Works already completed by the demolition contractor will include:

- Demolition of existing structures including footings and foundations
- Site preparation works
- Minor excavation and earthworks such as for services trenching
- Minor construction works such as shoring works to stabilise the site
- Service capping and redirections
- Installation of temporary hoarding required for demolition phase.
- Demolition of existing shallow footings and foundations
- If during demolition areas of the site become destabilised, temporary shoring or other stabilisation methods may have been implemented to make the site safe.

Controls and other measure implemented by the demolition contractor that may remain on place may include:

- Stormwater and sediment and erosion control measures
- Temporary hoardings
- Acoustic hoardings
- Tree protection measures
- Dust control measures
- Time lapse cameras.

Other existing features and constraints in place will include:

- Existing pedestrian footbridge that to be retained, protected and maintain operability throughout construction.
- Existing school drop-off and pick-up along Quarry Street it to be maintained from Monday to Friday between the hours of 8am-9.30am and 2.30 – 3.30pm, during school terms.

3.3 Existing Tree Constraints

A number of site trees (maximum 13) will remain after demolition of the existing buildings and site preparation. Approval for removal of these site tree and one council tree is required by the SSD DA. All remaining council street trees are to be retained and protected and where noted in the Arboricultural Report several require pruning. Approval for pruning is also required via the SSD DA.

3.4 Underground Structures and Services

Services capping and redirection and shallow excavations will be undertaken during the 'demolition and site preparation' stage. However, as the scope and depth of excavation during demolition is limited by planning constraints (no greater than 3.0m) and tree protection requirements, the following underground infrastructure may remain on site for capping, removal or redirection by the construction contractor:

- Water
- Gas
- Electricity
- Sewer and foul water
- Telecommunications
- Piled foundations
- Manholes
- Basements.

3.5 Existing Traffic Constraints

Traffic constraints include the following, refer to the Construction Traffic Management Plan prepared by ARUP, for more detail.

- Signalised intersection at Wattle and Quarry Street, with pedestrian traffic controls
- Pedestrian Crossing on Jones Street near Quarry Street
- Parking and speed limitations to surrounding road network
- Bus set down on Jones Street retained for ongoing school drop-off and pick-up
- Driveway cross-over on Wattle Street to existing school car park (cross-over location changes in proposed design).

3.6 Existing Acoustic Constraints

Acoustic data logging has been undertaken for the site with consideration of the receivers and generators of noise for demolition and construction phases of the project. Noise mitigation measures are required during excavation and construction, refer to the acoustic and vibration assessment prepared by JHA.

It includes the requirement to mitigate and manage noise generated by construction, by erecting prior to demolition and earthworks of a temporary sound barrier wall along the south-east boundary to separate the site to the adjacent residential development. The demolition contractor shall be responsible for installation of this acoustic hoarding and it shall remain in place for the construction contractor.

3.7 Existing Adjacent Buildings, Structures & Facilities

The site is constrained by:

- Adjacent residential building "Acacia Gardens" to the south-east of the site
- Pedestrian footbridge providing access from Quarry Street to Wentworth Park
- Signalised intersection at Wattle and Quarry Street.

4.0 KEY ACTIVITIES

The existing school site will be made available to the construction contractor in a relatively clear state. Refer to architectural drawing DA-1005 'Post Demolition Plan' showing site conditions that will be handed over to the construction contractor. Subject to timing, a handover meeting will be arranged between the demolition and construction contractors to agree conditions.

The construction contractor will be required to complete the following key actions:

1. Investigations including dilapidation assessment, archaeological monitoring (a 'watching brief') and other searches
2. Site establishment, including installation of hoardings, make the site safe
3. Tree protection (where required) and tree removal – as identified in Arboricultural report
4. Site asbestos and hazardous material removal –refer to preliminary reports and new reports will be available following the demolition contractors scope
5. Demolition, bulk excavation, shoring and stabilisation works
6. Construct new development in accordance with contract documents.

4.1 Dilapidation Assessment

At commencement and completion of the works, the construction contractor is responsible to undertake a dilapidation assessment of all immediately adjacent structures including but not limited to:

- Residential development "Acacia Gardens"
- Pedestrian Footbridge
- Footpaths and any other City of Sydney infrastructure
- Condition assessment of site and council trees (by an appropriately qualified arborist)
- Any other structures that may be impacted by the works (such as adjacent buildings, roads, other structures, services, utilities and surrounding landscape).

The contractor shall submit the dilapidation condition report to the Project Manager. The contractor shall assume liability for any damage that occurs as a direct result of the construction works under their control. Access will need to be arranged through the owners' corporation for adjacent residential buildings.

Once construction works are complete a close out survey is required to confirm if any elements have been affected by the works.

4.2 Archaeological monitoring

As recommended in the Heritage Impact Statement and Archaeological Assessment, archaeological monitoring is required during excavation works that occur within the area identified as having historical archaeological potential (lower level of the site adjacent Wattle Street.) Contractor is to ensure all appropriate measure are in place for this activity in accordance with the guidelines and policies noted in this report.

4.3 Investigations – Survey & Services Searches

Prior to any works commencing on site, the contractor is to ensure all known services and underground structures have been located and identified. A plan is to be developed to confirm what services are to remain in place (if any) and what are to be removed or relocated. Any long lead items, or services requiring 3rd party input need to be highlighted and approvals, notifications or request submitted in line with the appropriate protocols and time frames.

For any demolition or excavation works, or works near known services, the correct 'dial before you dig' and permit protocols must be in place.

4.4 Site Mobilisation & Establishment

When mobilising the site, the following preparation works may need to be carried out. Some of the following may have been left in place by the demolition contractor, however will need to be checked they are still fit for intended use, are safely maintained and in good working order.

- Re-alignment / checking of hoardings and security measures; replace temporary hoarding with permanent hoardings where required
- Stormwater and environmental controls in place
- Access / egress points are adequate
- Traffic control measures
- Drop-off / pick-up points for parents and children suitably maintained and accessible
- Welfare facilities established
- Hardstands and loading / unloading points established
- Retaining walls and temporary / permanent earth retaining systems (if relevant) are in place and adequate
- Install minimum 1x time lapse camera. (Subject to timing between completion of demolition and commencement of construction, the contractor may be able to retain the camera installed for demolition.

4.5 Tree Protection & Removal

Contractor shall:

- Install tree protection measures for all trees being retained during construction – predominantly council verge trees and may also include up to three (3) site trees.
- Remove trees noted as requiring or potentially requiring removal (site and council trees)
- Prune any trees identified for pruning in the arborist report.
- Implement on going monitoring and inspection as outlined in Arboricultural report.

4.6 Remove Site Asbestos & Contaminated Material

As most structures will already be removed, the removal of asbestos and other contaminated material will be limited to any in-ground contaminants as discovered during demolition works.

A preliminary Hazmat was prepared for the site in October 2015 by Greencap. The demolition contractor is engaged to undertake additional testing which will be included within the contract documents for construction. A Stage 2 contamination report and RAP will be made available to the contractor.

4.7 Earthworks - Demolition, Excavation and Site Stabilisation

As depth of excavation is limited for the demolition contract, further bulk excavation works shall be the responsibility of the construction contractor. Due to the nature of the building and the complexity of the site, the excavation may need to be staged to enable the temporary support of batters and cut profile.

Stabilisation and shoring strategies shall also be implemented. Any removal of spoil from site must be controlled and managed in line with the waste management plan. Any areas where fill is required, this needs to be installed, compacted and offered up for inspection in line with the relevant ITP's.

Any known services within the site (not already capped or removed by the demolition contractor) will need to be located and either capped if redundant, protected or relocated as per the Civil Engineering / Utilities Report and 'As Built' survey prepared by the demolition contractor.

At all stages of the excavation works, the stormwater management plan and sediments controls must be in place in case of inclement weather or unforeseen spills on site. A permit to dig must accompany all excavation works or any works where breaking ground is necessary.

Demolition works will be limited to retaining walls left in place after demolition for stabilisation and site safety purpose. Refer to 'Post Demolition Plan' showing site handover conditions.

4.8 Construction - Overview

Contractor shall construct all new works in accordance with the contract documents. This includes but is not limited to:

- Reinforced concrete and structural steel
- Façade, glazing and external envelope screens and barriers and netting
- Mechanical, Electrical, Comms & Data, Gas, Hydraulic and Vertical Transportation services
- Fitout – loose furniture, fixtures, fittings & equipment
- Landscaping, including planting, hardscape, external street furniture and play equipment etc.
- All other items necessary to complete the works.

4.9 Reinforced Concrete and Structural Steel Works

All concrete works will require pre-pour and post-pour inspections to be carried out in line with the approved ITP's. This is to confirm all quality assurance criteria are satisfied in relation to reinforcement installation, cover, cleanliness and any cast in items required. Prior to placing concrete, additional temporary works inspections may be required on formwork, falsework or shoring to confirm they have been constructed in line with the relevant temporary works designs or installation guides. Striking of formwork and falsework should also be accompanied by a permit to strike to ensure concrete has gained sufficient strength to support itself.

Following the placing of concrete, correct curing processes must be in place to ensure a quality finish is achieved. All sampling, concreting and delivery records must be kept to be including in the quality records.

Structural steel should be designed, fabricated and delivered in line with an approved ITP, and have stringent hold point at all stages of works. Offsite quality inspections should be carried out on any large steel items prior to being delivered to site to ensure compliance with design and ITP procedures. Any defects in fabrication or protection systems should be identified and rectified prior to accepting steelwork to site.

All installation of structural steel should be carried out by competent, qualified steel erectors, and be signed off at all stages of works.

All lifting should be carried out via an approved lift plan, with all complex lifts being pre-planned and briefed to all operatives involved in the works.

5.0 CONSTRUCTION & SITE MANAGEMENT

5.1 Management Approach, Sign-off and Handover

HKA acts on behalf of the School Infrastructure NSW (SI NSW) and co-ordinate input from construction project managers, designers, consultants, contractors, community groups, stakeholders, authorities and agencies involved in, or affected by the works. HKA liaise directly with school staff and parent / teacher groups in relation to project matters.

The construction contractor engaged to deliver the new school will liaise directly with HKA as the client's representative during construction. All management plans and communication activities will be reviewed for adequacy and consistency by HKA. Design changes during construction may also need to be signed off by relevant technical stakeholders. The contractor shall liaise with HKA to obtain sign-off where required.

All works carried out by or access granted to third parties shall be managed by the construction contractor. It is the responsibility of the contractor to ensure all necessary approvals, training, inductions, qualifications and certifications required by 3rd parties are in place prior to them commencing works on site.

At completion of the works, the contractor will return the site to SI NSW. A handover meeting will be arranged between the contractor and SI NSW including relevant technical representatives who will be responsible for asset management. The contractor will be required to handover all warranties, operational manuals and risk assessments including residual safety risks requiring operational procedures to be implemented.

5.2 Construction Methodology

The contractor shall prepare a Construction Management Plan including Work Method Statements detailing the methodology for works outlined in this document and all associated drawings and reports. It should detail all elements of the works including, but not limited to:

- Demolition, excavation and construction sequence
- Stability designs to ensure safety during construction
- Plant requirements
- Temporary access requirements
- Temporary work requirements (if any)
- Material handling / sorting processes
- Waste management
- Hazardous material management
- Dust, noise and vibration management
- Site layout
- Welfare requirements and
- Emergency arrangements
- Reporting procedures.

The contractor should prepare a detailed Risk Assessment to support the works described in the above Work Method Statement. Reference should be made to the Safety Risk Register provided with the contract documents. This shall include both Project Risks, Design Safety Risks and Construction Risks.

5.3 Approvals & Permits

The construction contractor is responsible for obtaining all relevant approvals to complete the works and not already granted within the SSD DA approval. These may include but not limited to:

- Hoarding applications
- Construction Certification or Section 109R Crown Certification as determined by the Private Certifying Authority (PCA)
- Sydney Water approvals for services relocations and connections
- Other services connections and installations including Level 3 Electrical for substation
- Arborist certifications
- City of Sydney and RMS approvals

- If any archaeological relics discovered, approval by Aboriginal community and Office of Environment and Heritage (OEH)
- Any other approvals deemed necessary from specialist consultant advice.

Any dangerous works, or those that require a specific type of control must be accompanied with a permit. The types of works requiring permits will be identified in the contractors Method Statement and Risk Assessment. These may include, but not be limited to the following works;

- Demolition
- Hot Works
- Excavation or breaking ground
- Electrical works or works requiring electricity to be isolated
- Lifting
- 'Work at height' systems (access platforms / scaffolds etc.)
- Excavations / earthwork stability inspections / permits
- 3rd party site access
- Temporary works.

5.4 Hours of Work

Hours of works through the course of the project will be as per those detailed in the consent. Proposed typical working hours will be:

- Monday to Friday 07:00am to 17:00pm
- Saturday, 07:00am to 15:00pm
- Sundays and public holidays – No works.

Applications for 'out of hours' works will be considered on a case by case basis. All out of hours application will need to be approved by the relevant authority. It is foreseeable that some works will need to be undertaken outside of normal working hours to minimise impacts to pedestrians, vehicle traffic or in the interest of safety. Reasons for out of hours work may include the following:

- Emergencies
- Works create hazardous environment
- Plant break down have delayed works
- Extended hours should not impact the surrounding community.
- Delivery of large plant or materials
- Movement of oversized vehicles
- Lifting of large items
- Construction immediately adjacent public areas
- Works requiring temporary shut down or isolation of services/utilities.

All after-hours works will be subject to the Communication Management Plan. Consultation with the City of Sydney Council will occur prior to any works being scheduled. All businesses and surrounding residents will be given notification via email of all the proposed after hours works prior to the works commencing which will include details of the works and the time to undertake each activity.

5.5 Site Security

The site will be secured using appropriate fences and/or hoardings conforming to typical design requirements, with access gates manned by qualified security guards/traffic control officers. The site will be secured at all times to ensure no unauthorised access is possible and manned by a security guard during 'out of hours'.

The orientation, alignment, finish, structural stability and any information banners fixed to the outside of the hoarding need to be detailed by the main contractor, approved by the project manager and School Infrastructure NSW and comply with City of Sydney requirements (where applicable).

It will be the responsibility of the contractor to inspect and ensure the hoardings are adequate for their intended use and maintained in good working order.

All visitors and new starters will be required to report to the site office upon arrival. Prior to accessing the worksite, all new starters must attend a site induction. A log will be kept in the site office to record everyone who comes to and from site.

Prior to commencing works on site, all subcontractors will be required to submit a project specific Safety Management Plan. This plan will be reviewed by the Managing Contractor for compliance with the overall Project Safety Plan.

5.6 Supervisor Responsibilities

On a day to day basis, prior to works commencing, the contractors supervisor shall;

- Carry out a daily pre-start briefing with all site operatives
- Inspect all signs, hoardings and security gates and rectify any issues
- Inspect all accesses and egresses and ensure they are clear and free from construction plant and materials
- Carry out a safety walk around the job.

During the hours of work, the supervisor shall;

- Attend to issues as they occur
- Ensure works are carried out in a safe manner
- Report any issues to the project manager or other parties as required in a timely manner.

5.7 Incident Management

The contractor shall promptly notify the Project Manager, and where applicable WorkCover NSW, and provide a written report following the occurrence of any incident or accident that;

- Results in death or personal injury
- Results in lost time
- Has the potential to cause injury or death (i.e. collapse of temporary works, failure of lifting equipment).

In the case of an accident witnessed or reported, from which legal proceedings may arise, the contractor must;

- Notify the Project Manager as soon as possible
- Record the times, location, weather conditions, plant in use, and other factors that may be useful
- Record who was on site and what they were doing
- Take photos of the work area and then quarantine the site.

5.8 Record Keeping

Construction contractor is to keep accurate records of daily activities and any significant departures or additions in the project diary. An ITP shall be prepared and approved prior to starting a new item of works and quality records shall be completed in accordance with the requirements outlined in the ITP to ensure compliance.

5.9 Signage

Signage to be erected should include, but may not be limited to

- Pedestrian / vehicle access signage
- Visitor directional signage
- Emergency procedures and information signage
- Site rules and construction information signage
- Signage and banners on the exterior of the hoarding; exterior signage must be pre-approved by the Project Manager, SI NSW and/or City of Sydney as applicable) prior to erecting.

5.10 Traffic and Plant Movements

A Transport Assessment has been prepared by Arup including an 'Outline Construction Traffic Management Plan' that addresses requirements for vehicle movements during construction. It includes:

- Deliveries
- Access Points (vehicle & pedestrian)
- Truck movements
- Walkways
- Road Closures
- Parking
- Emergency vehicles (access and parking).

Out of hours movements may be required for oversized or awkward loads. This will need to be in advance prior to deliveries as outlined in section 5.3 above.

The current Wattle Street pedestrian crossing must remain in operation throughout the construction phase.

5.11 Waste Management

The majority of demolition works will be completed prior to construction commencing. Following is a list of some materials that may remain after demolition for removal and disposal by the construction contractor. The contractor should refer to the 'Construction & Operation Waste Management Plan' (prepared by Foresight Environment) for appropriate control and disposal measures. The Environmental Site Assessments and Geo-Technical Assessments should also be read in conjunction.

- Reinforced Concrete
- Masonry
- Green waste
- Earthworks spoil
- Drainage, gullies and guttering materials
- Latent hazardous materials not detailed in the HAZMAT report or in the geotechnical site investigation or underground hazardous material unable to be removed during demolition works.

5.12 Welfare Facilities

The contractor must ensure adequate welfare facilities are available for the duration of the works. These should conform to standards set out by WH&S regulations and include as a minimum; toilets, hot and cold running water and adequate facilities to rest and eat food.

Fire points are to be located around the site in accordance with the safety plan as developed by the contractor.

5.13 Smoking Policy

Dedicated smoking areas should be established for operatives who smoke. Smoking to be permitted during break hours only or at the discretion of the main contractor supervisor. At NO TIME should operatives be allowed to smoke outside the hoarding of the premises while dressed in work clothes or whilst waiting to enter the site. All litter is to be contained within the smoking area which is to be kept in a clean state. The smoking point is to be erected in a location as not to affect any non-smokers or member of the public.

5.14 Parent Drop off Locations

There is a Bus Stop located adjacent to the existing school in Jones Street which is provided specifically for School Services operating between 8:00-9:30am and 3:00-4:00pm, Monday to Friday. This must remain open and in working order during the times stated above for the duration of the project.

Quarry Street will remain operational as the pick-up and drop-off location for children arriving by car. The school will implement a procedure for managing this to suit before and after school requirements including escorting of children to and from the temporary school in Wentworth Park via the existing Pedestrian footbridge. Any hoardings out in place should allow for adequate access including circulation clearances for prams and strollers.

5.15 Communication and Consultation Strategy

A Community and Stakeholder Management Strategy has been developed for the entire project by HKA. The contractor shall allocate a liaison responsible to attend stakeholder meetings and communicate proactively with stakeholders and community to address any comments and concerns. The contractor will be required to provide reports and documents for review by HKA and SI NSW prior to publication.

Consultation objectives include:

- Establish and maintain relationships with key stakeholders
- Develop general public awareness and knowledge of the project
- Ensure key stakeholders are kept informed of and are satisfied with upcoming activities, project progress and status
- Proactively mitigate the impact of the construction activities on surrounding areas by understanding the main stakeholders' needs and taking necessary actions to respond to them.

Likely issues of concern to community stakeholders may include:

- Contamination and environmental remediation
- Construction vehicle traffic and construction parking arrangements,
- Construction staff
- Restrictions / alterations to pedestrian traffic flow
- Protection of existing trees.

Consistent with procedures to date, the stakeholder management process for the construction phase will involve the following:

- An initial consultation session to be held before construction commences
- Notice letters to be sent to surrounding properties, advising project specific details such as commencement date, duration, contact details, site safety and public protection
- Contractor monthly reports issued to the Project Manager for inclusion in stakeholder updates via the project website, eNews and school newsletter
- Contractor to implement a register of all stakeholder contact information and concerns and will be reviewed at monthly meetings.

6.0 ENVIRONMENTAL MANAGEMENT

6.1 General

The objective of this section is to identify key environmental factors to be managed. The specialist reports (referenced in Section 2.4 of this report) should be read in conjunction and provide specific details to be adhered to by the construction contractor. The contractor will be required to provide a detailed environmental management plan prior to commencement of works and for implementation during construction.

6.2 Trees

Arboricultural report identifies three site trees that have potential to be retained within the footprint of the proposed development. These are tree 24, 25, and 26. These trees are to be approved for removal as part of the SSD DA as they may not have sufficient space. These will continue to be assessed during the design development and demolition and construction stages. The arborist will provide ongoing monitoring and advice with regard to their retention.

These site trees and all retained council street trees are to be protected as per the recommendations of the Arboricultural report and complying with noted Australian Standards and with City of Sydney tree protection specifications. The arborist is required to be actively involved during construction to --monitor and assess works in and around these trees including within the Tree Protection Zone (TPZ) and the Structural Root Zone (SRZ). The contractor is to ensure all required hold points are implemented. The Arborist/s appointed must hold the relevant qualifications as described in the Arboricultural report.

6.3 Noise and Vibration Management

Noise management will generally be in accordance with the NSW EPA environmental noise management criteria. All plant shall be regularly maintained and log books kept ensuring no excess noise emissions. Where it is practical, electric machinery will be used in lieu of mechanical devices.

The contractor will be responsible for ensuring theirs and all 3rd parties are managing noise and vibration in accordance with their project specific management plan.

6.4 Dust Management

Dust control measures will be implemented as required, and will be in accordance with NSW Workplace health and safety regulations and Environmental Protection Act.

Contractor to ensure dust caused by the works are kept to a minimum. Measures that may be employed include to aid this might include:

- Site Perimeter – A 1.8m sheeted hoarding will be provided in all areas where external works are occurring.
- Demolition – All trucks removing materials from site will be loaded whilst inside the site perimeter, with loads covered before exiting. Water down working surfaces as required and minimise stock piling.
- Site – Maintain a high level of housekeeping to minimise likelihood of windblown dust.

6.5 Storm Water and Sediment Control Management

A stormwater and sediment control plan will be developed by the contractor and will be implemented prior to works commencing and kept in place after the works have been complete.

This will ensure that stormwater run-off from the development does not enter adjoining properties, and that all water that enters the council stormwater system does not contain silt or other contaminants. Contractor to refer to civil engineering reports detailing control method. Diligent housekeeping shall be implemented to minimise risk of debris being washed into pits.

6.6 Asbestos Removal

Although the majority of demolition will be completed prior to construction. There may be some residual or latent asbestos materials on sight. If asbestos is found, then the contractor will ensure the following;

- In accordance with the National Occupational Health and Safety Commission's Guide to the Control of Asbestos Hazards in Building and Structures [NOHSC:2002(1988)], appropriate warning signs will be placed on the asbestos materials identified.
- All removal procedures should be undertaken by an experienced appropriately licensed removal contractor in accordance with the National Occupational Health and Safety Commission's Code of Practice for the Safe Removal of Asbestos [NOHSC: 2002 (2005)].
- Monitoring for airborne asbestos in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC:3003(2005)] will be carried out during any removal operations in accordance with Clause 50 and 51 of the WorkCover 2001 OH&S Regulation requirements.
- At the end of removal operations all surfaces in the subject area, such as frames, floor / ground, etc., will be vacuumed then wet wiped. An industrial High Efficiency Particulate Air (HEPA) vacuum cleaner will be used. Spreading of dust into clean areas or outside the subject areas will be prevented.
- A clearance inspection should be carried out after the removal operations are completed in accordance with WorkCover and NOHSC requirements.

The contractor will provide skips primarily for use of Asbestos material and separated from all other site waste.

7.0 APPENDIX A – SURROUNDING CONDITIONS

The following photos show existing surrounding conditions that will affect construction activities:



Photo 1 - Existing condition – neighbouring apartments on Wattle Street



Photo 2 - Existing condition – View looking east on Quarry Street



Photo 3 - Existing condition – View looking west on Quarry Street (pedestrian bridge)



Photo 4 - Existing condition – View from Jones Street looking west along the boundary with neighbouring apartments

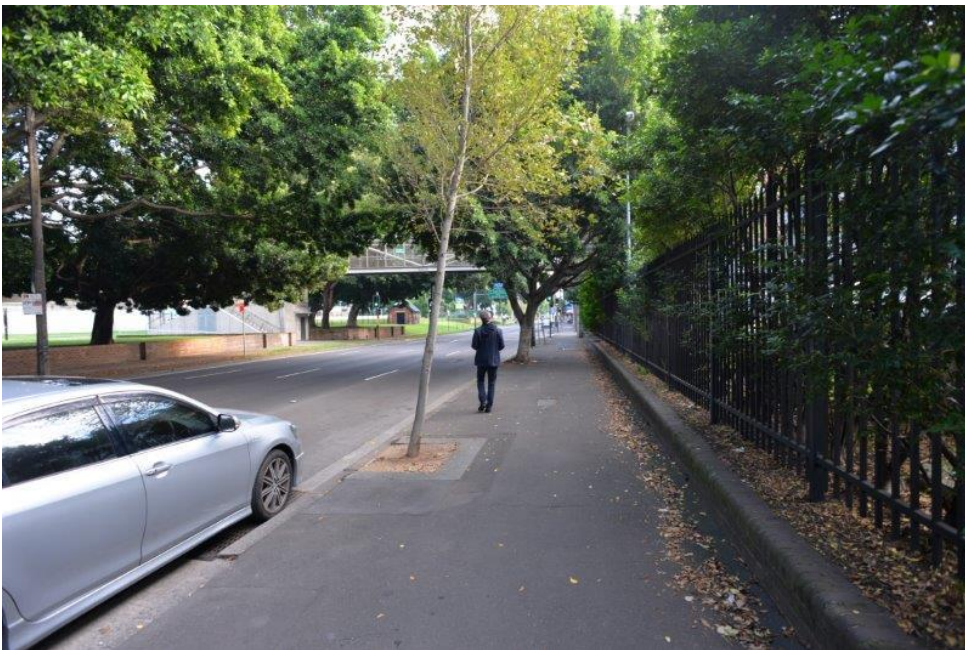


Photo 5 - Existing condition – View looking north along Wattle Street



Photo 6 - Existing condition – View looking south west at the corner of Jones and Quarry Street