



13 August 2021

**Construction Environment Management Plan
Construction and Demolition Waste Management Plan
Site Management Plan**

**North Sydney Public School Upgrade
Department of Education**

making the **difference**

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Education
School Infrastructure

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DRIVE\ADMINISTRATION\EMPLOYEES\ALICE AMIATU-ABBAY\TARINI P\DRAFT_CONSTRUCTION ENVIRONMENT MANAGEMENT PLAN
AND SITE MANAGEMENT PLAN 210813_AAA.DOCX

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1 Introduction

This Construction Environment Management Plan (CEMP), Construction and Demolition Waste Management Plan (CDWMP) and Site Management Plan (SMP) has been prepared to outline the environmental protection measures to be implemented by the main contractor during the construction of the North Sydney Public School upgrades. This document has been prepared in support of State Significant Development Application (SSDA) to address the relevant SEARs for SSD-11869481, being:

- General requirements - detail the construction process including timing;
- General requirements- details on how the school would continue to operate during construction activities, including proposed site management and mitigation measures to ensure safety of users;
- SEAR 13- assess impacts of staging where it is proposed and detail how construction works, and operations would be managed to ensure public safety and amenity on and surrounding the site; and
- SEAR 18- identify, quantify and classify the likely waste streams to be generated during construction and implementation measures

This document aims to set out a clear protocol for the works associated with the development in line with Department of Education's (DoE) commitment to ensuring a safe work site for all personnel, as well as set out measures to minimize the disruption to the surrounding residences and businesses.

1.1 Objective of the CEMP:

- Ensure environmental safeguards are considered by the main contractor;
- Ensure all relevant environmental legislation requirements are considered;
- Ensure that works are managed to reduce adverse impacts on the environment; and any other objectives of the CEMP specific to the project.

1.2 Objective of the WMP:

- Ensure waste during demolition and construction of North Sydney Public School upgrade is managed throughout the construction process in line with their corporate standard practices and for site specific requirements.

1.3 Objective of the SMP:

- Ensure the Site set-up and maintenance allows for the completion of works in a safe, efficient and accountable manner, whilst allowing the school to safely continue operation;
- Ensure the Site set-up and maintenance allows for the effective restriction and management of all personnel access;
- Ensure the contractor maintains a safe working environment for all construction personnel and visitors;
- Ensure the contractor considers all necessary emergency plans and procedures to mitigate hazards, risks and accidents;
- Ensure the contractor minimizes the disruption (in particular noise) caused by works to surrounding activities;
- Ensure the contractor inducts all construction personnel on how to adhere to the protocols outlined within this plan.

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2 Project Detail

2.1 The Site

North Sydney Public School (Figure 01) is located at 192 Pacific Highway, North Sydney and is situated within the North Sydney Council Local Government Area. The school site has frontages to Pacific Highway, McHatton St and Bay Road. The site is legally described as Lot 1 in DP 183591 and Lot 1 in DP 184559.



Figure 01: North Sydney Public School Site

2.2 Project Description

This SSDA seeks consent for alterations and additions to the existing North Sydney Public School. The proposal entails:

- Demolition of the existing hall (building B), haven building (building C) and 6 temporary buildings;
- Construction of a three storey building comprising:
 - staff administration rooms;
 - 16 homebases
 - a new library;
 - hall;
 - out of school hours care facilities;
 - covered outdoor learning area;
 - bicycle parking and end of trip facilities for staff; and
 - services, amenities and access.
- New entry gate and forecourt from Bay Road;
- Internal refurbishment of building G ground floor from the existing library to 3 homebases;
- Capacity for an increase in student numbers from 869 to 1,012;
- Capacity for an increase in staff numbers from 80 to 87; and

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- Associated tree removal, landscaping and excavation.

The proposal maintains:

- The gates and fence of former Crows Nest House including the entrance from Pacific Highway and Bay Road;
- Existing gate along McHatton Street;
- The outdoor play area to the east of Building A;
- Existing covered outdoor learning area adjacent to Building A;
- The basketball courts and staff carpark in the western portion of the site;
- The significant tree planting on all school boundaries;
- Buildings A, D and F noting minor internal refurbishments are being undertaken outside of the SSDA scope of work (exempt development) to improve student amenities and canteen; and
- Building G noting ground floor internal refurbishment is proposed in the SSDA.

3 Construction Environment Management Plan

3.1 Demolition

3.1.1 Existing buildings

This SSDA scope of work includes the demolition and removal of the following buildings on site:

- Lady Hay Hall
- Haven Building
- Temporary Demountables

Following removal, the main contractor will be required to undertake further site assessment to assess possible contamination of these areas.

3.2 Geotechnical

3.2.1 Investigation outcome

Tetra Tech Coffey Pty Ltd (Coffey) were engaged to undertake geotechnical investigations. As a result of Covid-19 and the lockdown, Coffey have only been able to undertake a desktop review to date.

Coffey had previously conducted geotechnical and contamination investigations at the North Sydney Public School, however, at the time of this investigation, it was proposed that the new building would be located within the playground area to the north of the existing School Hall. As a result, no borehole investigations were carried out within the current development footprint.

Coffey have been requested to undertake borehole investigations within the current development footprint to ascertain and confirm the soil landscapes. These investigative works are due to commence on 30 August '21, in line with the easing Covid-19 restrictions issued by NSW Public Health.

For more detailed information refer to Geotechnical Report for North Sydney Public School prepared by Tetra Tech Coffey Pty Ltd (Coffey) dated 13 August 2021

3.2.2 Excavation works

An estimated 7,000 tonne of materials will be excavated from the site to allow for the development of the new building. The excavation works will occur along the southern boundary (Bay Road) of the site.

The classification of the excavated materials will be confirmed following borehole drilling undertaken by Coffey in the current development footprint.

Upon contract award, the main contractor is required to undertake a detailed property condition report for the neighbouring buildings to reduce exposure to possible damage claims as a result of the

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construction work. Furthermore, the main contractor is to undertake a more detailed assessment in relation to excavated material reuse.

3.2.3 Groundwater and dewatering

Reference to the NSW Water All Groundwater Map (2021) indicates there are no registered groundwater bores within 500 m of site. Furthermore, Groundwater was not encountered at 225-235 Pacific Highway investigations during borehole drilling undertaken by Coffey in 2019.

The main contractor is to carry out further groundwater testing and provide a de-watering management plan in order to determine an appropriate method of disposal if groundwater pumping and disposal is required during construction and on completion of the structure.

3.2.4 Pavement condition assessment

Given the significant increase of heavy vehicle traffic on local roads particularly during the bulk earthworks, consideration should be given to the condition of the roads. The developer/contractor could be liable for the repair of roads that are perceived to have been damaged during construction.

The main contractor is required to provide a pavement condition assessment prior to the commencement of any work to document the existing condition of the pavements.

3.3 Contamination

3.3.1 Phase 1 Site Contamination Assessment

Tetra Tech Coffey Pty Ltd (Coffey) have prepared a Preliminary Phase 1 Site Contamination Assessment for the proposed development site.

Soil samples analysed from limited investigations completed within the site identified hydrocarbon compounds in fill which could pose an unacceptable health risk to the current/future site users and workers conducting future development and/or subsurface maintenance works.

Potential asbestos containing material and lead paint are suspected within some structures within the development area. Weathering of such materials typically results in the deposition of these materials in shallow surface soils surrounding each structure. Whilst it is noted that asbestos was not identified during previous investigations or recent walkover, this does not conclude the absence of such materials within shallow soil. The following recommendations are provided regarding the future development of the site:

- Undertake further site assessment following the demolition of the buildings, floor slabs and pavements to assess possible contamination in these areas;
- Further evaluate potential risks to ecological receptors in relation to hydrocarbon compounds in soil;
- Assess the need for further work based on the conditions encountered following demolition.

3.3.2 Limitations of investigation

Investigations included characterising the Site into Areas of Environmental Concern (AEC), in which the potential for contamination was identified and nominated Chemicals of Concern that might be associated with those activities. Samples were collected from the boreholes and from surface soils in areas with the potential of contamination.

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As such, the preliminary Phase 1 investigations are limited by the existing buildings on the site, the main contractor is required to undertake further soil sampling prior to commencement of works.

3.3.3 Contamination management

In addition to the above, further contamination management measures to be employed include:

- Stockpiles of spoil from inside the Site are to be kept separate;
- Further contamination testing is required including site validation by an independent contamination specialist;
- If asbestos is identified by an independent contamination specialist following removal of the existing ground slabs, asbestos removal must be completed by a licensed asbestos removal officer, the area is to be barricaded off by the main contractor's personnel and independent validation testing is required following removal.
- Any contaminated material would be classified first and then disposed of in accordance with the NSW Environmental Protection Authority requirements. Safe work method statements and appropriate practices are to be implemented;
- Major spills that can have an impact on the surrounding environment shall be promptly reported to the appropriate Emergency Authorities in accordance with an incident management plan or emergency spill procedure and shall be contained, collected and disposed of in accordance with the Authorities directives and applicable regulatory requirements;
- Subcontractors must be strongly encouraged to purchase non-toxic or less hazardous products that will not (or have less impact) harm the wellbeing of people and the surrounding environment;
- Construction vehicles to be well maintained to avoid fuel and oil leakages;
- Re-fuelling of piling plant to take place a minimum of 50m away from drainage lines. Trucks and general vehicles to be refuelled at service stations;
- Ensure that the Site is secure with security fencing;
- There shall be no unauthorised storage of fuel or oils;
- Undertake works according to Australian Standard AS 1940-1993: The Storage and Handling of Flammable and Combustible Liquids;
- Undertake works according to Australian Standard AS/NZS 4452:1997: The Storage and Handling of Toxic Substances;
- A construction compound shall be appropriately secured and shall be made safe to the public;
- The site compound shall include a site office, meal and wash sheds, toilet facilities, storage for fuel, oil, chemical and other materials, waste/rubbish facilities and shall display emergency procedure signs;
- On-site domestic waste and sullage facilities shall be provided at the construction compound;
- Designated appropriate area for parking that will minimise any impact upon the environment;
- Designate appropriate areas for plant maintenance and repairs, stockpiles, storage, that will minimise any impact upon the environment.

3.4 Air Quality & Dust Control

The two main impacts to air quality are dust emissions from stockpile and earthworks, and vehicle/ machinery use causing air pollution. The following management measures are to be implemented:

- Excavation and construction work performed within the Site is to comply with Work Health and Safety Regulation 2017 and a project specific safe work method statement that includes provisions for possible contamination and asbestos issues;

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- Stabilising all disturbed/ exposed surfaces and stockpiles as soon as practicable;
- NSW Environment Protection Authority best management practices are to be implemented for minimising off-site dust impacts from the project;
- Loose materials transported in trucks travelling on public roads are to be covered with an enviro-tarp;
- Tailgates of all vehicles transporting materials on public roads are to be securely fixed;
- Construction work will be regularly monitored and water carts or hand held water sprays are to be used to suppress dust as required;
- Contractor is to stabilise all unsealed construction access routes through use of coarse aggregates;
- Map and develop a work method procedure for all known areas of Hazardous Materials (Hazardous substance report);
- If asbestos is found in soil, removal is to be completed by a licensed asbestos removal officer, this is to be barricaded off by the main contractors personnel and then removed by a licensed operator.

3.5 Water Quality

3.5.1 Stormwater retention and silt control

Assessment is to be made of the site ground water catchments. Temporary dish drains may be established to direct water runoff. The drains will have straw bales and gravel to retain silt at intermittent points. At any discharge point to the site stormwater system the pit lids are to be covered with shade cloth filter fabric.

3.5.2 Sediment and erosion control

Water has the potential to enter the site from two sources; rainfall and water ingress from subterranean or surface sources.

The ingress of subterranean or surface water together with rainfall into the area of the excavation, will be removed by a system of de-watering pumps placed around the perimeter of the excavation site. A preliminary Erosion and Sediment Control Plan has been prepared and documents inlet pit protections, sediment fencing, and a stabilised site entry.

The main contractors dewatering management plan is to detail how water is removed from the excavation, tested and treated (if necessary) before discharge to the stormwater system.

For more detailed information refer to Preliminary Sediment and Erosion Control Plan for North Sydney Public School prepared by Aurecon dated 13 August 2021.

The main contractor is to provide an updated sediment and erosion control plan prior to commencement of construction on site.

3.5.3 Chemical, water and soil pollution control

Fuelling, maintenance and cleaning of vehicles and construction plant will not be carried out in areas from which fuel or oil may be discharged to street gutters or storm water drainage systems.

Dry methods of spillage clean-up will be used wherever possible. Oil contaminated storm water and/or soil will be disposed of to a licensed disposal site.

Should the use of pesticides be necessary, they will be contained within areas such that there can be no contamination of run-off water.

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3.5.4 Water quality management for the site

Prior to construction:

- Provide a secure, bunded area for the storage of fuel, oil and other chemicals within the site compound;
- Provide a suitable spill kit onsite for emergency spills of fuel, oil or other chemicals;
- The Contractors Site Management Plan is to display an emergency spill procedure in a prominent position adjacent to the fuel/chemical storage area;
- Prepare an incident management plan or emergency spill procedure.

During construction:

- Avoid the discharge of site stormwater into local drainage system where practical or adequately filter and treat prior to leaving the site;
- No "dirty water" to be pumped into stormwater drains at anytime;
- Maintain a register of all hazardous substances stored on the site;
- Regularly inspect and maintain construction vehicles to avoid fuel and oil leakages;
- Inspect and maintain bunded areas regularly and after rain events;
- Service all portaloo facilities regularly;
- Provide a nominated facility for washing concrete plant such as mixers and pumps, to prevent alkalinity from concrete contaminating stormwater run-off exiting the worksite;
- Contain all runoff from saw cutting and concreting activities to ensure it does not enter stormwater or a waterway.

3.6 Noise and Vibration Control

3.6.1 Noise

Construction is a noise generating activity. The contractor will assess the noise and vibration levels in line with its developed construction methodology and specific items of plant and equipment used on site and determine the acceptable monitoring and mitigation measures based on statutory guidelines, as well as consider the mitigation and monitoring recommendations made within the Acoustic Assessment Report by Marshall Day Acoustics and in consultation with DoE.

Prior to commencing on site the contractor, if required will complete a Safe Work Method Statement (SWMS) and advise of potential noise implications. There will be appropriate safety equipment made available for all personnel in the area or anyone who requests it.

As part of above, surrounding neighbours on Bay Road located south of the site may need to be informed of the scope of works, their duration and likely noise levels, based on consultation with DoE. All noise complaints from local residents must be recorded and reported to DoE.

3.6.2 Vibration

Construction processes that involve heavy equipment, demolition (existing slab on-ground and bitumen pavement) and/or impact drilling will be evident. If the process has the potential to affect client personnel and surrounding neighbours/ businesses, an evaluation and recommendations will be made to minimise this impact.

During construction:

- Construction activities would be undertaken in accordance with Australian Standard AS2436-2010 Guide to Noise Control on Construction, Maintenance and Demolition Sites;
- Construction hours will be from 7am to 6pm Monday to Friday, and 8am to 1pm on Saturdays;

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- Work will not be permitted on Sundays and public holidays;
- The contractor is to use the best available techniques not entailing excessive cost to meet Department of Environment and Climate Change (EPA) construction noise requirements as far as practicable;
- Any unnecessary noise will be avoided when carrying out manual operations and when operating plant;
- Any equipment not in use for extended periods during construction work will be switched off;
- Good relations with people living and working in the vicinity of the construction site will be established at the beginning of the project and be maintained throughout the project. Any complaints will be registered, and then addressed;
- The quietest suitable plant reasonably available will be selected for each work activity;
- Regular maintenance of plant and machinery will be undertaken to minimise noise emissions;
- Suitable notification, including hours of works, anticipated duration and complaints hotline phone number, will be provided to communities and stakeholders who are likely to be directly impacted by construction;
- In the event complaints regarding noise impacts arise, noise monitoring should be considered to be undertaken at selected receivers;
- Where noise monitoring indicates significant impacts the hours of operation of major noise generating plant and equipment may be rescheduled in consultation with affected stakeholders;
- In the event complaints regarding vibration impact arise, vibration monitoring should be considered to be undertaken at selected receivers.

4 Construction and Demolition Waste Management Plan

The main contractor will be required under the Contract to prepare a Construction and Demolition Waste Management Plan (CDWMP) with practices to be adopted to during the demolition of existing slab on ground, and during the construction of the proposed development. The CDWMP is to describe how the contractor will manage waste produced by themselves and their sub-contractors throughout the construction process in line with their corporate standard practices and for the site specific requirements.

4.1 During Construction and Demolition

- All waste disposal would occur in accordance with Work Health and Safety Regulation 2017, Protection of Environment Operations Act 1997 and associated regulations and the NSW Environmental Protection Authority;
- Waste Classification Guidelines 2014;
- All wastes generated by the project would be beneficially reused, recycled or directed to a waste facility lawfully permitted to accept the materials; and
- Construction areas for the proposal will be maintained in a clean and tidy state at all times;
- The workforce will use temporary 'portaloo' toilet facilities on site;
- Waste management practices for the proposal will follow the resource management hierarchy principles embodied in the Waste Avoidance and Resource Recovery Act 2001;
- Excess concrete will be transported off-site for recycling;
- No burning or burying of wastes will be permitted on site;
- All non-recyclable waste will be disposed of at legally operating waste disposal sites;
- Cleaning out of batched concrete mixing plant will not be permitted within the construction area;

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- Littering or dumping of unwanted waste or disposal of surplus construction materials including bitumen, asphalt or concrete, or permitting such activities on any land on or around the site, is not permitted;
- Appropriate receptacles must be provided for the depositing of litter and other waste materials, and their contents disposed off site at a suitable waste disposal station on a regular basis;
- The disposal of chemical, fuel and lubricant containers, solid and liquid wastes must be in accordance with the requirements of NSW Environmental Protection Authority;
- Hazardous and Industrial waste must be transported in accordance with the waste tracking requirements outlined in the Protection of the Environment Operations Act 1997;
- Waste will be handled and stored in an environmentally safe manner;
- Waste will be stored in containers which are well maintained and suitably labelled;
- The work site would be left clean and free of debris and other rubbish at the end of the works;
- All wastes would be securely stored to minimise the risk of pollutants escaping;
- Waste management practices for the proposal would follow the resource management hierarchy principles embodied in the Waste Avoidance and Resource Recovery Act 2001;
- If any contaminated material (for example ASS and asbestos) were encountered during excavation for the footings or trenches, work would cease, the site secured and a safe work method statement(s) and appropriate practices would be implemented;
- Any excess non-contaminated spoil following construction can be respread on site in a manner so it is unlikely to wash away during rain events or removed off site for disposal in accordance with NSW Environmental Protection Authority;
- Environmental induction to address resource and waste management and recycling issues;
- Separate bins to be provided on site and staff instructed to place materials for recycling in appropriate bins including paper and cardboard, glass, plastics and metals;
- Remove refuse potentially containing food scraps. All rubbish that is brought into the area must be removed;
- Dirty water (as a result of erosion and sedimentation) to be reused on site if possible for dust suppression, re-vegetation etc;
- Regular maintenance of all machinery to be undertaken to ensure energy efficiency;
- The contractor is required to provide details on suitable waste management procedures and to assume the responsibility for the appropriate disposal of any waste generated;
- A daily inspection shall be carried out to ensure the work site is left in a rubbish free state.

4.2 Post Construction

The contractor is to ensure that the site is cleared of any construction waste / debris, equipment, bins/skips and other building materials on completion of the works. Handover of the site will not be accepted until the site is considered safe and free of hazards (including waste).

For more detailed information refer to Construction and Demolition Waste Management Plan for North Sydney Public School prepared by Elephant's Foot dated 19 August 2021.

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5 Site Management Plan

5.1 Site Layout

Site accommodation will be established prior to construction works commencing. A draft layout of the proposed accommodation is attached in appendix A. The layouts at this stage are preliminary and subject to the change by the awarded contractor and to be agreed with Department of Education prior to installing any site accommodation and amenities facilities.

In addition, the main contractor will ensure that the site is set up with the following prior to the commencement of any works:

- Signage which clearly sets out access, health & safety, contact details and public information;
- Temporary utilities for the works are in place and functional (such as electricity, water);
- Temporary facilities and equipment for the works are in place and functional (such as Portaloo's, air conditioning, drinking water, security systems, external and internal lighting);
- Maintenance, cleaning and medical equipment is in place and functional.

5.2 Traffic Management

Ason Group have prepared a Construction Traffic Management Plan for the proposed development. The following includes a summary of requirements for the main contractor.

5.2.1 Access

5.2.1.1 Construction Personnel

Construction vehicles accessing the site are expected to travel in a forward-in and forward-out direction to / from the work zone on Bay Road. The proposed work zone is to temporarily replace the 1/4P parking area on Bay Road per Figure 02: Bay Road Work Zone.



Figure 02: Bay Road Work Zone

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All construction vehicle loading / unloading is proposed to take place within the work zone with some construction vehicles permitted to park within the work zone when deliveries are not scheduled.

Access to the work zone will be managed via construction scheduling set by the incumbent contractor to ensure no queuing or parking on local streets occur. Work zone access is stopped during school drop off / pick up hours (7:30am to 9:00am, and between 1:30pm to 3:00pm on school days) and work zone cleared by 1/4P parking for student pick up / drop off. In addition, the pedestrian entry of Bay Rd, will be a dedicated entry into the construction zone. Staff and students will be redirected to enter the site through McHatton St during the construction period. The school community will be made aware in advance and pedestrians will be directed to alternate entry points.

The bus stop on Bay Road accommodates one regular route and three school routes shown in Figure 02: Bay Road Work Zone. As the work zone will be cleared for pick up / drop off, the school bus routes will not be affected by construction traffic. The work zone proposed is situated clear of the existing bus zone so access to the bus stop will not be affected and construction vehicle drivers will be briefed to prioritise bus egress.

The existing kiss and drop zone on McHatton Street will not be affected by construction traffic per the route proposed in Figure 03: Construction Vehicle Haulage Routes.



Figure 03: Construction Vehicle Haulage Routes

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5.2.1.2 Emergency Vehicles and Personnel

Construction works will not affect access for emergency vehicles and personnel during the course of the project. However if in the event that a particular construction activity affects the access path, the contractor will ensure suitable alternative access is maintained at all times for emergency vehicles.

5.2.1.3 Deliveries

All deliveries of material to site will be carried out in between approved hours of work and all material movements will be carried out in accordance with the contractor's material handling procedures and the main contractors Construction Traffic Management Plan (CTMP).

5.2.1.4 Site Visitation

Visitations by non-construction personnel (such as DoE staff) will not be permitted unless prior arrangements have been made with and approved by the contractor's site supervisor or appropriate representative. If access is granted, visitors must be accompanied by a representative of the contractor, have undertaken any relevant site inductions and be wearing appropriate PPE.

Visitors wishing to gain access to the construction site on a regular basis during the course of the project will undertake the site induction and obtain an Industry White card.

5.3 Communications

5.3.1 Information

The contractor is to provide a communications plan which outlines their methodology of informing and responding to the community during construction. DoE webpage will host details of the project as construction progresses. The webpage hosts a DoE email address should any visitors choose to leave a message.

Prior to Construction the main contractor is to:

- Prepare an induction procedure for all personnel (including subcontractors) attending the site. The induction is to address all environmental issues relevant to the activities that could be undertaken by the personnel. Personnel are not to be allowed to enter the site until the induction has been completed. A record is to be kept of all inductions;
- Display appropriate signage providing the contractors name and contact number / email address for the community to lodge any concerns;
- Erect signs and barriers around work sites to eliminate the possibility of personnel injuries or placing the public at risk;
- Inform the local residents via letter box drop a minimum of 48 hour prior to any construction activities outside standard operating hours;
- Establish a community complaints and emergency information hotline.

5.4 Stakeholder Consultation

5.4.1 Stakeholder identification

Key stakeholders involved within the scheme include:

- Department of Education
- North Sydney Public School staff and Students
- North Sydney Council

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- Local community businesses, residents (adjoining property owners in particular)
- Transport NSW
- Other relevant statutory and utility authorities

5.4.2 Communication Strategy

The contractor shall take all reasonable measures to liaise, inform and involve each of the above stakeholders, in relation to their level of interest and investment in the scheme.

An open, accountable and recordable communication and consultation strategy should be employed and managed by the contractor throughout the project lifecycle.

The aim of such a strategy is to create public awareness of the proposed development and garner favourable public opinion, develop effective working relationships to ensure the smooth progress of the developments deliverables, manage any complaints in a professional manner and efficiently keep all stakeholders informed of progress.

5.5 Safety Protocol

5.5.1 General site safety conditions

The contractor will develop and maintain a Safety Management Plan, which clearly outlines procedures for construction personnel. Details of this plan will be posted at the staff / office notice board and available at all times for reference by site personnel. This will be developed in line with recommendations made within the Construction Traffic Management Plan.

The contractor will ensure that all construction personnel have valid White Cards (including any other applicable ID cards) and are inducted prior to commencement of any works on site.

PPE will be worn by all personnel at all times whilst on site, and will not be permitted to enter otherwise. The extent of PPE to be worn will be in line with the contractor's standards of practice and take into account the nature of the works.

A medical kit will be kept on site in an easily accessible location, with at least one member of the contractor team trained in CPR on site at all times.

5.5.2 Key site risks

- Undertaking site works while the school is operational
- Damaging the heritage fence or heritage buildings during construction
- Safety of staff, students, parents and local community that are traversing through or around the site, in proximity of construction works
- Demolition of existing buildings on site
- Excavation and removal of materials

5.5.3 Emergency procedures

In the event of an emergency situation, which includes (but is not limited to) the following:

- Emergency evacuation
- Fire
- Flooding
- Gas leak
- Mains power failure

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- Explosions - Bomb threat
- Chemical spill
- Construction accident
- Medical emergency
- Theft
- Criminal or accidental damage

The contractor will be responsible to ensure that all construction personnel associated with the works are evacuated from the work site in accordance with the contractor's Safety Management Plan. On evacuation of the work site, the contractor's representative will notify DoE, advise of the status of the site and any further emergency procedures required.

The contractor will ensure that an Evacuation Plan, emergency exit routes and rallying points are displayed appropriately within the work site to assist construction personnel evacuating in the event of an emergency. This will also form part of all site inductions.

5.6 Insurance

The contractor will ensure all necessary insurances to undertake all works associated with the proposed development. This will be made available to DoE on award of contract.

5.7 Work Permits

The contractor will ensure that no works proceed until the relevant works permits and safety procedures have been obtained, in accordance with the associated statutory guidelines. The contractor will make these permits available on request to relevant authorities and keep copies on site and accessible at all times.

5.8 Smoking, Drugs & Alcohol Policy

A no smoking on site policy will be in effect on site which the contractor will enforce at all times amongst all construction personnel. This includes site offices and subcontractor's facilities. The use or being under the influence of drugs and alcohol while on site is strictly forbidden.

5.9 Adjoining Property

The site is surrounded by local residences on both Bay Road and McHatton St. There are also local businesses located on the corner of Bay Road and Pacific Highway.

The contractor will induct, and regularly promote, all construction personnel to behave in a manner that does not disrupt the daily operations of the surrounding businesses and is respectful of surrounding residences. The Main Contractor will be encouraged to project a professional work place as a representation of Department of Education.

In addition, DoE and the Main Contractor will circulate regular communication to properties within close proximity of the site, to make them aware as to the works that will be occurring and the extent of impact it will have on the neighbouring properties.

5.10 Site Security

The contractor will secure the boundaries of the site for the duration of works using temporary hoardings to be designed and installed in accordance with AS 4687-2007 Temporary Fencing and Hoardings. Shade cloth will be placed on the temporary fencing to help minimize dust and present a clean and well-managed site.

Appropriate signage will be displayed at all access points to the site warning staff, visitors and the general public that an area which is fenced and/or hoarded off is a construction site.

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All access points allowing entry to the construction site will be locked at all times with the exception of the main entry gate to the site which will remain open (ajar) during normal working hours. All entries to site will be notified to the site supervisor, with records kept of delivery times.

The contractor will implement an Emergency Site Access Procedure, with emergency site access maintained at all times.

5.11 Site Parking and Signage

A proposal covering the extent and design of pedestrian / visitor directional signage will be developed by the contractor in accordance with the contractor's management plans and systems and submitted to North Sydney Council for approval. This should be developed in line with the Traffic Impact Assessment recommendations prepared by Ason Group.

The contractor will install statutory / Council required signage to the entry of the site with relevant 24 hours site contractor details, insurances etc. for public notification.

The contractor will ensure that all construction vehicles remain within the site, on allocated parking areas, and that all personnel are inducted on the 'site parking' policy. Refer to Construction Traffic Management Plan prepared by Ason Group for the proposed parking arrangements for construction workers, which is to be developed in consultation with the Local Authority to establish relevant permits for road parking, signalling and traffic management.

5.12 Site Maintenance

5.12.1 Waste removal

The contractor will remove from the site all rubbish resulting from the works. Rubbish will be handled in a manner so as to confine the materials, minimize dust emissions and allow easy disposal.

Refer to Section 4 of this report *Construction and Demolition Waste Management Plan*.

5.12.2 Road and site cleaning

The contractor will ensure that the surrounding public roads are cleared of any materials resulting from the works in particular sand, rocks and other cleared material / debris resulting from demolition activities from the site that may fall off trucks as they leave site.

On completion of the works, the contractor will also ensure that the site is cleared of any building materials and is left in a tidy and safe condition.

5.12.3 Daily maintenance tasks

Prior to work commencement:

- The contractor's supervisor is to carry out the following operations before work starts to ensure acceptable safety at all times:
- Daily pre-start toolbox talk with subcontractors;
- Inspect all signs and devices, rectifying any defects, as well as inspecting the safety and effectiveness of the site set up in general;
- Inspect all emergency and pedestrian paths and ensure they are clear of any obstructions;
- Make any programmed adjustments to the site management provisions for the day;
- Clean and maintain the site in accordance with the stipulations of details of the contractors standard of practice.

During Construction Work Hours, the contractor's supervisor shall:

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- Immediately attend to any hazards to construction personnel or members of the public;
- Maintain signs, barriers, access paths throughout working hours;
- Carry out regular checks to ensure safety equipment and measures are functioning as required;
- Ensure all site vehicles (deliveries in particular) are adhering to the Construction Traffic Management Plan.

5.13 Record Keeping

5.13.1 Site quality assurance and daily records

The contractor will keep adequate records of daily activities and any significant departures or additions in a Project Diary. An Inspection and Test Plan (ITP) shall also be developed and administered to ensure compliance with the management plans.

5.13.2 Incident / accident management and reporting

Incident Management: The contractor will develop and maintain an incident plan in order to minimise disruptions and provide a clear and simple guideline for disruptive events. The Contractor's Incident Management Plans are to be implemented on the project upon award of the Contractor.

Accident Management: The Contractors will promptly notify DoE (through written report) of the occurrence of the following incidents and accidents:

- Accidents involving death or personal injury;
- Accidents involving lost time;
- Incidents with accident potential (for example equipment failure, slides, cave-ins and near misses).

In the case of accidents, either witnessed or reported, involving Council staff or members of the public or from which legal proceedings might arise:

- Record the actual type, size and location of signs and devices in use at the time of the accident;
- Notify DoE as soon as possible;
- Take photographs of the arrangement for subsequent reporting. A file will be kept including any relevant information

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Appendix A: Construction Management Site Plan

CONSTR. MANAGEMENT LEGEND

- EXISTING BUILDINGS
- PROPOSED BUILDINGS (SSDA) EXISTING
- BUILDING REFURBISHMENT
- CONSTRUCTION ZONE
LAYOUT OF AREA TO BE DETERMINED BY
BUILDER (INDICATIVE AREA SHOWN)
- BUILDERS COMPOUND
- COUNCIL EXCLUSION ZONE
- TEMPORARY BUILDING
- EXISTING TREES
TREES TO BE REMOVED DUE TO
PROPOSED BUILDING WORKS
- PROPOSED TREE
- STRUCTURAL ROOT ZONE
- TPZ - TREE PROTECTION ZONE
- NOTE: ALL EXISTING TREES THAT ARE TO BE
RETAINED WITHIN THE STAGE 1 WORKS ZONE TO
HAVE TRUNK/BRANCH WRAPPING AND SOIL
PROTECTION TO ARBORIST SPECIFICATION.
- GEOTEXTILE INLET FILTER
- SEDIMENT CONTROL FENCING
- STORMWATER DRAINAGE
- MESH & GRAVEL INLET FILTER

REV.	DESCRIPTION	DATE	INIT.
A	Draft SSDA Issue	13/08/2021	BN
B	Draft SSDA Issue	16/08/2021	BN
C	Draft SSDA Set - SINSW Review	18/08/2021	BN

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NSW DEPARTMENT OF
EDUCATION

PROJECT
NORTH SYDNEY PUBLIC
SCHOOL

ADDRESS
BAY ROAD
WAVERTON, NSW

**CONSTRUCTION
ENVIRONMENTAL
MANAGEMENT PLAN**

FIGURED DIMENSIONS TAKE PRECEDENCE OVER
SCALE DIMENSIONS. CONTRACTORS MUST VERIFY
ALL DIMENSIONS ON SITE BEFORE COMMENCING
ANY WORK OR MAKING SHOP DRAWINGS.

PROJECT NUMBER
7068WA01

DIRECTOR
JW

CHECKED

DRAWING NUMBER
SD-1102

REVISION
C

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**PLAN
CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN**
SCALE: 1:500